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THE ENCYCLOPÆDIA BRITANNICA

A DICTIONARY OF ARTS, SCIENCES, LITERATURE AND GENERAL INFORMATION

ELEVENTH EDITION

VOLUME XV SLICE II

Jacobites to Japan (part)

Articles in This Slice

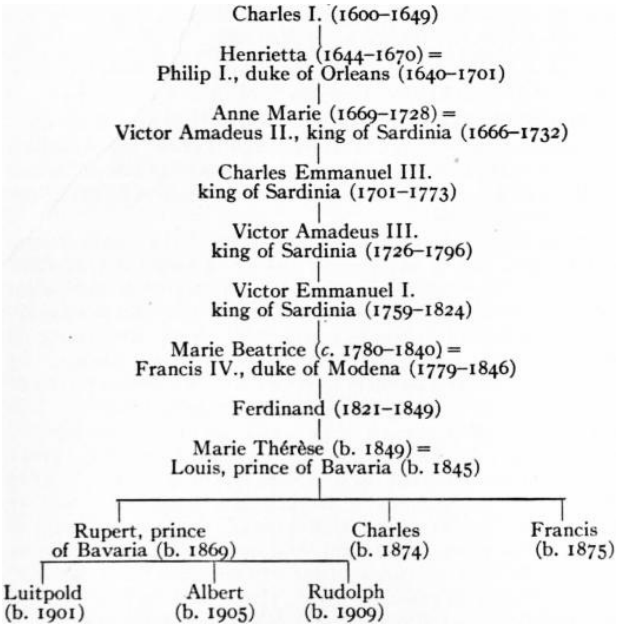
JACOBITES (from Lat. *Jacobus*, James), the name given after the revolution of 1688 to the adherents, first of the exiled English king James II., then of his descendants, and after the extinction of the latter in 1807, of the descendants of Charles I., *i.e.* of the exiled house of Stuart. 119

The history of the Jacobites, culminating in the risings of 1715 and 1745, is part of the general history of England (*q.v.*), and especially of Scotland (*q.v.*), in which country they were comparatively more numerous and more active, while there was also a large number of Jacobites in Ireland. They were recruited largely, but not solely, from among the Roman Catholics, and the Protestants among them were often identical with the Non-Jurors. Owing to a variety of causes Jacobitism began to lose ground after the accession of George I. and the suppression of the revolt of 1715; and the total failure of the rising of 1745 may be said to mark its end as a serious political force. In 1765 Horace Walpole said that "Jacobitism, the concealed mother of the latter (*i.e.* Toryism), was extinct," but as a sentiment it remained for some time longer, and may even be said to exist to-day. In 1750, during a strike of coal workers at Elswick, James III. was proclaimed king; in 1780 certain persons walked out of the Roman Catholic Church at Hexham when George III. was prayed for; and as late as 1784 a Jacobite rising was talked about. Northumberland was thus a Jacobite stronghold; and in Manchester, where in 1777 according to an American observer Jacobitism "is openly professed," a Jacobite rendezvous known as "John Shaw's Club" lasted from 1733 to 1892. North Wales was another Jacobite centre. The "Cycle of the White Rose"—the white rose being the badge of the Stuarts—composed of members of the principal Welsh families around Wrexham, including the Williams-Wynns of Wynnstay, lasted from 1710 until some time between 1850 and 1860. Jacobite traditions also lingered among the great families of the Scottish Highlands; the last person to suffer death as a Jacobite was Archibald Cameron, a son of Cameron of Lochiel, who was executed in 1753. Dr Johnson's Jacobite sympathies are well known, and on the death of Victor Emmanuel I., the ex-king of Sardinia, in 1824, Lord Liverpool wrote to Canning saying "there are those who think that the ex-king was the lawful king of Great Britain." Until the accession of King Edward VII. finger-bowls were not placed upon the royal dinner-table, because in former times those who secretly sympathized with the Jacobites were in the habit of drinking to the king *over the water*. The romantic side of Jacobitism was stimulated by Sir Walter Scott's *Waverley*, and many Jacobite poems were written during the 19th century.

The chief collections of Jacobite poems are: Charles Mackay's *Jacobite Songs and Ballads of Scotland, 1688-1746, with Appendix of Modern Jacobite Songs* (1861); G. S. Macquoid's *Jacobite Songs and Ballads* (1888); and *English Jacobite Ballads*, edited by A. B. Grosart from the Towneley manuscripts (1877).

Upon the death of Henry Stuart, Cardinal York, the last of James II.'s descendants, in 1807, the rightful occupant of the British throne according to legitimist principles was to be found among the descendants of Henrietta, daughter of Charles I., who married Philip I., duke of Orleans. Henrietta's daughter, Anne Marie (1669-1728), became the wife of Victor Amadeus II., duke of Savoy, afterwards king of Sardinia; her son was King Charles Emmanuel III., and her grandson Victor Amadeus III. The latter's son, King Victor Emmanuel I., left no sons, and his eldest daughter, Marie Beatrice, married Francis IV., duke of Modena, whose son Ferdinand (d. 1849) left an only daughter, Marie Thérèse (b. 1849). This lady, the wife of Prince Louis of Bavaria, was in 1910 the senior member of the Stuart family, and according to the legitimists the rightful sovereign of Great Britain and Ireland. 120

Table showing the succession to the crown of Great Britain and Ireland according to Jacobite principles.



Among the modern Jacobite, or legitimist, societies perhaps the most important is the "Order of the White Rose," which has a branch in Canada and the United States. The order holds that sovereign authority is of divine sanction, and that the execution of Charles I. and the revolution of 1688 were national crimes; it exists to study the history of the Stuarts, to oppose all democratic tendencies, and in general to maintain the theory that kingship is independent of all parliamentary authority and popular approval. The order, which was instituted in 1886, was responsible for the Stuart exhibition of 1889, and has a newspaper, the *Royalist*. Among other societies with similar objects in view are the "Thames Valley Legitimist Club" and the "Legitimist Jacobite League of Great Britain and Ireland."

See *Historical Papers relating to the Jacobite Period*, edited by J. Allardyce (Aberdeen, 1895-1896); James Hogg, *The Jacobite Relics of Scotland* (Edinburgh, 1819-1821); and F. W. Head, *The Fallen Stuarts* (Cambridge, 1901). The marquis de Ruvigny has compiled *The Jacobite Peerage* (Edinburgh, 1904), a work which purports to give a list of all the titles and honours conferred by the kings of the exiled House of Stuart.

(A. W. H.*)

JACOBS, CHRISTIAN FRIEDRICH WILHELM

(1764-1847), German classical scholar, was born at Gotha on the 6th of October 1764. After studying philology and theology at Jena and Göttingen, in 1785 he became teacher in the gymnasium of his native town, and in 1802 was appointed to an office in the public library. In 1807 he became classical tutor in the lyceum of Munich, but, disgusted at the attacks made upon him by the old Bavarian Catholic party, who resented the introduction of "north German" teachers, he returned to Gotha in 1810 to take charge of the library and the numismatic cabinet. He remained in Gotha till his death on the 30th of March 1847. Jacobs was an extremely successful teacher; he took great interest in the affairs of his country, and was a publicist of no mean order. But his great work was an edition of the Greek Anthology, with copious notes, in 13 volumes (1798-1814), supplemented by a revised text from the Codex Palatinus (1814-1817). He published also notes on Horace, Stobaeus, Euripides, Athenaeus and the *Iliaca* of Tzetzes; translations of Aelian (*History of Animals*); many of the Greek romances; Philostratus; poetical versions of much of the Greek Anthology; miscellaneous essays on classical subjects; and some very successful school books. His translation of the political speeches of Demosthenes was undertaken with the express purpose of rousing his country against Napoleon, whom he regarded as a second Philip of Macedon.

See E. F. Wüstemann, *Friderici Jacobsii laudatio* (Gotha, 1848); C. Bursian, *Geschichte der classischen Philologie in Deutschland*; and the appreciative article by C. Regel in *Allgemeine deutsche Biographie*.

JACOBS CAVERN,

a cavern in latitude 36° 35′ N., 2 m. E. of Pineville, McDonald county, Missouri, named after its discoverer, E. H. Jacobs, of Bentonville, Arkansas. It was scientifically explored by him, in company with Professors Charles Peabody and Warren K. Moorehead, in 1903. The results were published in that year by Jacobs in the *Benton County Sun*; by C. N. Gould in *Science*, July 31, 1903; by Peabody in the *Am. Anthropologist*, Sept. 1903; and in the *Am. Journ. Archaeology*, 1904; and by Peabody and Moorehead, 1904, as *Bulletin I.* of the Dept. of Archaeology in Phillips Academy, Andover, Mass., in the museum of which are exhibits, maps and photographs.

Jacobs Cavern is one of the smaller caves, hardly more than a rock-shelter, and is entirely in the "St Joe Limestone" of the sub-carboniferous age. Its roof is a single flat stratum of limestone; its walls are well marked by lines of stratification; dripstone also partly covers the walls, fills a deep fissure at the end of the cave, and spreads over the floor, where it mingles with an ancient bed of ashes, forming an ash-breccia (mostly firm and solid) that encloses fragments of sandstone, flint spalls, flint implements, charcoal and bones. Underneath is the true floor of the cave, a mass of

homogeneous yellow clay, one metre in thickness. It holds scattered fragments of limestone, and is itself the result of limestone degeneration. The length of the opening is over 21 metres; its depth 14 metres, and the height of roof above the undisturbed ash deposit varied from 1 m. 20 cm. to 2 m. 60 cm. The bone recess at the end was from 50 cm. to 80 cm. in height. The stratum of ashes was from 50 cm. to 1 m. 50 cm. thick.

The ash surface was staked off into square metres, and the substance carefully removed in order. Each stalactite, stalagmite and pilaster was measured, numbered, and removed in sections. Six human skeletons were found buried in the ashes. Seven-tenths of a cubic metre of animal bones were found: deer, bear, wolf, raccoon, opossum, beaver, buffalo, elk, turkey, woodchuck, tortoise and hog; all contemporary with man's occupancy. Three stone metates, one stone axe, one celt and fifteen hammer-stones were found. Jacobs Cavern was peculiarly rich in flint knives and projectile points. The sum total amounts to 419 objects, besides hundreds of fragments, cores, spalls and rejects, retained for study and comparison. Considerable numbers of bone or horn awls were found in the ashes, as well as fragments of pottery, but no "ceremonial" objects.

The rude type of the implements, the absence of fine pottery, and the peculiarities of the human remains, indicate a race of occupants more ancient than the "mound-builders." The deepest implement observed was buried 50 cm. under the stalagmitic surface. Dr. Hovey has proved that the rate of stalagmitic growth in Wyandotte Cave, Indiana, is .0254 cm. annually; and if that was the rate in Jacobs Cavern, 1968 years would have been needed for the embedding of that implement. Polished rocks outside the cavern and pictographs in the vicinity indicate the work of a prehistoric race earlier than the Osage Indians, who were the historic owners previous to the advent of the white man.

(H. C. H.)

JACOBSEN, JENS PETER (1847-1885), Danish imaginative writer, was born at Thisted in Jutland, on the 7th of April 1847; he was the eldest of the five children of a prosperous merchant. He became a student at the university of Copenhagen in 1868. As a boy he showed a remarkable turn for science, particularly for botany. In 1870, although he was secretly writing verses already, Jacobsen definitely adopted botany as a profession. He was sent by a scientific body in Copenhagen to report on the flora of the islands of Anholt and Læsö. About this time the discoveries of Darwin began to exercise a fascination over him, and finding them little understood in Denmark, he translated into Danish *The Origin of Species* and *The Descent of Man*. In the autumn of 1872, while collecting plants in a morass near Ordrup, he contracted pulmonary disease. His illness, which cut him off from scientific investigation, drove him to literature. He met the famous critic, Dr Georg Brandes, who was struck by his powers of expression, and under his influence, in the spring of 1873, Jacobsen began his great historical romance of *Marie Grubbe*. His method of composition was painful and elaborate, and his work was not ready for publication until the close of 1876. In 1879 he was too ill to write at all; but in 1880 an improvement came, and he finished his second novel, *Niels Lyhne*. In 1882 he published a volume of six short stories, most of them written a few years earlier, called, from the first of them, *Mogens*. After this he wrote no more, but lingered on in his mother's house at Thisted until the 30th of April 1885. In 1886 his posthumous fragments were collected. It was early recognized that Jacobsen was the greatest artist in prose that Denmark has produced. He has been compared with Flaubert, with De Quincey, with Pater; but these parallelisms merely express a sense of the intense individuality of his style, and of his untiring pursuit of beauty in colour, form and melody. Although he wrote so little, and crossed the living stage so hurriedly, his influence in the North has been far-reaching. It may be said that no one in Denmark or Norway has tried to write prose carefully since 1880 whose efforts have not been in some degree modified by the example of Jacobsen's laborious art.

His *Samlede Skrifter* appeared in two volumes in 1888; in 1899 his letters (*Breve*) were edited by Edvard Brandes. In 1896 an English translation of part of the former was published under the title of *Siren Voices: Niels Lyhne*, by Miss E. F. L. Robertson.

(E. G.)

JACOB'S WELL, the scene of the conversation between Jesus and the "woman of Samaria" narrated in the Fourth Gospel, is described as being in the neighbourhood of an otherwise unmentioned "city called Sychar." From the time of Eusebius this city has been identified with Sychem or Shechem (modern Nablus), and the well is still in existence 1½ m. E. of the town, at the foot of Mt Gerizim. It is beneath one of the ruined arches of a church mentioned by Jerome, and is reached by a few rough steps. When Robinson visited it in 1838 it was 105 ft. deep, but it is now much shallower and often dry.

For a discussion of Sychar as distinct from Shechem see T. K. Cheyne, art. "Sychar," in *Ency. Bibl.*, col. 4830. It is possible that Sychar should be placed at Tulūl Balātā, a mound about ½ m. W. of the well (*Palestine Exploration Fund Statement*, 1907, p. 92 seq.); when that village fell into ruin the name may have migrated to 'Askar, a village on the lower slopes of Mt Ebal about 1¾ m. E.N.E. from Nablus and ½ m. N. from Jacob's Well. It may be noted that the difficulty is not with the location of the well, but with the identification of Sychar.

JACOBUS DE VORAGINE (*c.* 1230-*c.* 1298), Italian chronicler, archbishop of Genoa, was born at the little village of Varazze, near Genoa, about the year 1230. He entered the order of the friars preachers of St Dominic in 1244, and besides preaching with success in many parts of Italy, taught in the schools of his own fraternity. He was provincial of Lombardy from 1267 till 1286, when he was removed at the meeting of the order in Paris. He also represented his own province at the councils of Lucca (1288) and Ferrara (1290). On the last occasion he was one of the four delegates charged with signifying Nicholas IV.'s desire for the deposition of Munio de Zamora, who had been master of the order

from 1285, and was deprived of his office by a papal bull dated the 12th of April 1291. In 1288 Nicholas empowered him to absolve the people of Genoa for their offence in aiding the Sicilians against Charles II. Early in 1292 the same pope, himself a Franciscan, summoned Jacobus to Rome, intending to consecrate him archbishop of Genoa with his own hands. He reached Rome on Palm Sunday (March 30), only to find his patron ill of a deadly sickness, from which he died on Good Friday (April 4). The cardinals, however, "propter honorem Communis Januae," determined to carry out this consecration on the Sunday after Easter. He was a good bishop, and especially distinguished himself by his' efforts to appease the civil discords of Genoa. He died in 1298 or 1299, and was buried in the Dominican church at Genoa. A story, mentioned by the chronicler Echard as unworthy of credit, makes Boniface VIII., on the first day of Lent, cast the ashes in the archbishop's eyes instead of on his head, with the words, "Remember that thou art a Ghibelline, and with thy fellow Ghibellines wilt return to naught."

Jacobus de Voragine left a list of his own works. Speaking of himself in his *Chronicon januense*, he says, "While he was in his order, and after he had been made archbishop, he wrote many works. For he compiled the legends of the saints (*Legendae sanctorum*) in one volume, adding many things from the *Historia tripartita et scholastica*, and from the chronicles of many writers." The other writings he claims are two anonymous volumes of "Sermons concerning all the Saints" whose yearly feasts the church celebrates. Of these volumes, he adds, one is very diffuse, but the other short and concise. Then follow *Sermones de omnibus evangeliis dominicalibus* for every Sunday in the year; *Sermones de omnibus evangeliis, i.e.* a book of discourses on all the Gospels, from Ash Wednesday to the Tuesday after Easter; and a treatise called "*Marialis*, qui totus est de B. Maria compositus," consisting of about 160 discourses on the attributes, titles, &c., of the Virgin Mary. In the same work the archbishop claims to have written his *Chronicon januense* in the second year of his pontificate (1293), but it extends to 1296 or 1297. To this list Echard adds several other works, such as a defence of the Dominicans, printed at Venice in 1504, and a *Summa virtutum et vitiorum Guillelmi Peraldi*, a Dominican who died about 1250. Jacobus is also said by Sixtus of Siena (*Biblioth. Sacra*, lib. ix.) to have translated the Old and New Testaments into his own tongue. "But," adds Echard, "if he did so, the version lies so closely hid that there is no recollection of it," and it may be added that it is highly improbable that the man who compiled the Golden Legend ever conceived the necessity of having the Scriptures in the vernacular.

His two chief works are the *Chronicon januense* and the *Golden Legend* or *Lombardica hystoria*. The former is partly printed in Muratori (*Scriptores Rer. Ital.* ix. 6). It is divided into twelve parts. The first four deal with the mythical history of Genoa from the time of its founder, Janus, the first king of Italy, and its enlarger, a second Janus "citizen of Troy", till its conversion to Christianity "about twenty-five years after the passion of Christ." Part v. professes to treat of the beginning, the growth and the perfection of the city; but of the first period the writer candidly confesses he knows nothing except by hearsay. The second period includes the Genoese crusading exploits in the East, and extends to their victory over the Pisans (*c.* 1130), while the third reaches down to the days of the author's archbishopric. The sixth part deals with the constitution of the city, the seventh and eighth with the duties of rulers and citizens, the ninth with those of domestic life. The tenth gives the ecclesiastical history of Genoa from the time of its first known bishop, St Valentine, "whom we believe to have lived about 530 A.D.," till 1133, when the city was raised to archiepiscopal rank. The eleventh contains the lives of all the bishops in order, and includes the chief events during their pontificates; the twelfth deals in the same way with the archbishops, not forgetting the writer himself.

The *Golden Legend*, one of the most popular religious works of the middle ages, is a collection of the legendary lives of the greater saints of the medieval church. The preface divides the ecclesiastical year into four periods corresponding to the various epochs of the world's history, a time of deviation, of renovation, of reconciliation and of pilgrimage. The book itself, however, falls into five sections:—(*a*) from Advent to Christmas (*cc.* 1-5); (*b*) from Christmas to Septuagesima (6-30); (*c*) from Septuagesima to Easter (31-53); (*d*) from Easter Day to the octave of Pentecost (54-76); (*e*) from the octave of Pentecost to Advent (77-180). The saints' lives are full of puerile legend, and in not a few cases contain accounts of 13th-century miracles wrought at special places, particularly with reference to the Dominicans. The last chapter but one (181), "De Sancto Pelagio Papa," contains a kind of history of the world from the middle of the 6th century; while the last (182) is a somewhat allegorical disquisition, "De Dedicatione Ecclesiae."

The *Golden Legend* was translated into French by Jean Belet de Vigny in the 14th century. It was also one of the earliest books to issue from the press. A Latin edition is assigned to about 1469; and a dated one was published at Lyons in 1473. Many other Latin editions were printed before the end of the century. A French translation by Master John Bataillier is dated 1476; Jean de Vigny's appeared at Paris, 1488; an Italian one by Nic. Manerbi (? Venice, 1475); a Bohemian one at Pilsen, 1475-1479, and at Prague, 1495; Caxton's English versions, 1483, 1487 and 1493; and a German one in 1489. Several 15th-century editions of the *Sermons* are also known, and the Mariale was printed at Venice in 1497 and at Paris in 1503.

For bibliography see Potthast, *Bibliotheca hist. med. aev.* (Berlin, 1896), p. 634; U. Chevalier, *Répertoire des sources hist. Bio.-bibl.* (Paris, 1905), *s.v.* "Jacques de Voragine."

JACOTOT, JOSEPH (1770-1840), French educationist, author of the method of "emancipation intellectuelle," was born at Dijon on the 4th of March 1770. He was educated at the university of Dijon, where in his nineteenth year he was chosen professor of Latin, after which he studied law, became advocate, and at the same time devoted a large amount of his attention to mathematics. In 1788 he organized a federation of the youth of Dijon for the defence of the principles of the Revolution; and in 1792, with the rank of captain, he set out to take part in the campaign of Belgium, where he conducted himself with bravery and distinction. After for some time filling the office of secretary of the "commission d'organisation du mouvement des armées," he in 1794 became deputy of the director of the Polytechnic school, and on the institution of the central schools at Dijon he was appointed to the chair of the "method of sciences," where he made his first experiments in that mode of tuition which he afterwards developed more fully. On the central schools being replaced by other educational institutions, Jacotot occupied successively the chairs of mathematics and of Roman law until the overthrow of the empire. In 1815 he was elected a representative to the chamber of deputies; but after the second restoration he found it necessary to quit his native land, and, having taken up his residence at Brussels, he was in 1818 nominated by the Government teacher of the French language at the university of Louvain, where he perfected into a system the educational principles which he had already practised with success in France. His method was not only adopted in several institutions in Belgium, but also met with some approval in France, England, Germany and Russia. It was based on three principles: (1) all men have equal intelligence; (2) every man has received from God the faculty of being able to instruct himself; (3) everything is in everything. As regards (1) he maintained that it is only in the will to use their intelligence that men differ; and his own process, depending on (3), was to give any one learning a language for the first time a short passage of a few lines, and to encourage the pupil to study, first the words, then the letters, then the grammar, then the meaning, until a single paragraph became the occasion for learning an entire literature. After the revolution of 1830 Jacotot returned to France, and he died at Paris on the 30th of July 1840.

His system was described by him in *Enseignement universel, langue maternelle*, Louvain and Dijon, 1823—which passed through several editions—and in various other works; and he also advocated his views in the *Journal de l'émancipation intellectuelle*. For a complete list of his works and fuller details regarding his career, see *Biographie de J. Jacotot*, by Achille Guillard (Paris, 1860).

JACQUARD, JOSEPH MARIE (1752-1834), French inventor, was born at Lyons on the 7th of July 1752. On the death of his father, who was a working weaver, he inherited two looms, with which he started business on his own account. He did not, however, prosper, and was at last forced to become a lime-burner at Bresse, while his wife supported herself at Lyons by plaiting straw. In 1793 he took part in the unsuccessful defence of Lyons against the troops of the Convention; but afterwards served in their ranks on the Rhône and Loire. After seeing some active service, in which his young son was shot down at his side, he again returned to Lyons. There he obtained a situation in a factory, and employed his spare time in constructing his improved loom, of which he had conceived the idea several years previously. In 1801 he exhibited his invention at the industrial exhibition at Paris; and in 1803 he was summoned to Paris and attached to the Conservatoire des Arts et Métiers. A loom by Jacques de Vaucanson (1700-1782), deposited there, suggested various improvements in his own, which he gradually perfected to its final state. Although his invention was fiercely opposed by the silk-weavers, who feared that its introduction, owing to the saving of labour, would deprive them of their livelihood, its advantages secured its general adoption, and by 1812 there were 11,000 Jacquard looms in use in France. The loom was declared public property in 1806, and Jacquard was rewarded with a pension and a royalty on each machine. He died at Oullins (Rhône) on the 7th of August 1834, and six years later a statue was erected to him at Lyons (see WEAVING).

JACQUERIE, THE, an insurrection of the French peasantry which broke out in the Île de France and about Beauvais at the end of May 1358. The hardships endured by the peasants in the Hundred Years' War and their hatred for the nobles who oppressed them were the principal causes which led to the rising, though the immediate occasion was an affray which took place on the 28th of May at the village of Saint-Leu between "brigands" (militia infantry armoured in brigandines) and countryfolk. The latter having got the upper hand united with the inhabitants of the neighbouring villages and placed Guillaume Karle at their head. They destroyed numerous châteaux in the valleys of the Oise, the Brèche and the Thérain, where they subjected the whole countryside to fire and sword, committing the most terrible atrocities. Charles the Bad, king of Navarre, crushed the rebellion at the battle of Mello on the 10th of June, and the nobles then took violent reprisals upon the peasants, massacring them in great numbers.

See Simeon Luce, *Histoire de la Jacquerie* (Paris, 1859 and 1895).

(J. V.*)

JACTITATION (from Lat. *jactitare*, to throw out publicly), in English law, the maliciously boasting or giving out by one party that he or she is married to the other. In such a case, in order to prevent the common reputation of their marriage that might ensue, the procedure is by suit of jactitation of marriage, in which the petitioner alleges that the respondent boasts that he or she is married to the petitioner, and prays a declaration of nullity and a decree putting the respondent to perpetual silence thereafter. Previously to 1857 such a proceeding took place only in the ecclesiastical courts, but by express terms of the Matrimonial Causes Act of that year it can now be brought in the probate, divorce and admiralty division of the High Court. To the suit there are three defences: (1) denial of the boasting; (2) the truth of the representations; (3) allegation (by way of estoppel) that the petitioner acquiesced in the boasting of the respondent. In *Thompson* v. *Rourke*, 1893, Prob. 70, the court of appeal laid down that the court will not make a decree in a jactitation suit in favour of a petitioner who has at any time acquiesced in the assertion of the respondent that they were actually married. Jactitation of marriage is a suit that is very rare.

JADE, or JAHDE, a deep bay and estuary of the North Sea, belonging to the grand-duchy of Oldenburg, Germany. The bay, which was for the most part made by storm-floods in the 13th and 16th centuries, measures 70 sq. m., and has communication with the open sea by a fairway, a mile and a half wide, which never freezes, and with the tide gives access to the largest vessels. On the west side of the entrance to the bay is the Prussian naval port of Wilhelmshaven. A tiny stream, about 14 m. long, also known as the Jade, enters the head of the bay.

JADE, a name commonly applied to certain ornamental stones, mostly of a green colour, belonging to at least two distinct species, one termed nephrite and the other jadeite. Whilst the term jade is popularly used in this sense, it is now usually restricted by mineralogists to nephrite. The word jade[1] is derived (through Fr. *le jade* for *l'ejade*) from Span. *ijada* (Lat. *ilia*), the loins, this mineral having been known to the Spanish conquerors of Mexico and Peru under the name of *piedra de ijada* or *yjada* (colic stone). The reputed value of the stone in renal diseases is also suggested by the term nephrite (so named by A. G. Werner from Gr. νεφρός, kidney), and by its old name *lapis nephriticus*.

Jade, in its wide and popular sense, has always been highly prized by the Chinese, who not only believe in its medicinal value but regard it as the symbol of virtue. It is known, with other ornamental stones, under the name of *yu* or *yu-chi* (yu-stone). According to Professor H. A. Giles, it occupies in China the highest place as a jewel, and is revered as "the quintessence of heaven and earth." Notwithstanding its toughness or tenacity, due to a dense fibrous structure, it is wrought into complicated forms and elaborately carved. On many prehistoric sites in Europe, as in the Swiss lake-dwellings, celts and other carved objects both in nephrite and in jadeite have not infrequently been found; and as no kind of jade had until recent years been discovered *in situ* in any European locality it was held, especially by Professor L. H. Fischer, of Freiburg im Breisgau, Baden, that either the raw material or the worked objects must have been brought by some of the early inhabitants from a jade locality probably in the East, or were obtained by barter, thus suggesting a very early trade-route to the Orient. Exceptional interest, therefore, attached to the discovery of jade in Europe, nephrite having been found in Silesia, and jadeite or a similar rock in the Alps, whilst pebbles of jade have been obtained from many localities in Austria and north Germany, in the latter case probably derived from Sweden. It is, therefore, no longer necessary to assign the old jade implements to an exotic origin. Dr A. B. Meyer, of Dresden, always maintained that the European jade objects were indigenous, and his views have become generally accepted. Now that the mineral characters of jade are better understood, and its identification less uncertain, it may possibly be found with altered peridotites, or with amphibolites, among the old crystalline schists of many localities.

Nephrite, or true jade, may be regarded as a finely fibrous or compact variety of amphibole, referred either to actinolite or to tremolite, according as its colour inclines to green or white. Chemically it is a calcium-magnesium silicate, $CaMg_3(SiO_3)_4$. The fibres are either more or less parallel or irregularly felted together, rendering the stone excessively tough; yet its hardness is not great, being only about 6 or 6.5. The mineral sometimes tends to become schistose, breaking with a splintery fracture, or its structure may be horny. The specific gravity varies from 2.9 to 3.18, and is of determinative value, since jadeite is much denser. The colour of jade presents various shades of green, yellow and grey, and the mineral when polished has a rather greasy lustre. Professor F. W. Clarke found the colours due to compounds of iron, manganese and chromium. One of the most famous localities for nephrite is on the west side of the South Island of New Zealand, where it occurs as nodules and veins in serpentine and talcose rocks, but is generally found as boulders. It was known to the Maoris as *pounamu*, or "green stone," and was highly prized, being worked with great labour into various objects, especially the club-like implement known as the *mere*, or *pattoo-pattoo*, and the breast ornament called *hei-tiki*. The New Zealand jade, called by old writers "green talc of the Maoris," is now worked in Europe as an ornamental stone. The green jade-like stone known in New Zealand as *tangiwai* is bowenite, a translucent serpentine with enclosures of magnesite. The mode of occurrence of the nephrite and bowenite of New Zealand has been described by A. M. Finlayson (*Quart. Jour. Geol. Soc.*, 1909, p. 351). It appears that the Maoris distinguished six varieties of jade. Difference of colour seems due to variations in the proportion of ferrous silicate in the mineral. According to Finlayson, the New Zealand nephrite results from the chemical alteration of serpentine, olivine or pyroxene, whereby a fibrous amphibole is formed, which becomes converted by intense pressure and movement into the dense nephrite.

Nephrite occurs also in New Caledonia, and perhaps in some of the other Pacific islands, but many of the New Caledonian implements reputed to be of jade are really made of serpentine. From its use as a material for axe-heads, jade is often known in Germany as *Beilstein* ("axe-stone"). A fibrous variety, of specific gravity 3.18, found in New Caledonia, and perhaps in the Marquesas, was distinguished by A. Damour under the name of "oceanic jade."

Much of the nephrite used by the Chinese has been obtained from quarries in the Kuen-lun mountains, on the sides of the Kara-kash valley, in Turkestan. The mineral, generally of pale colour, occurs in nests and veins running through hornblende-schists and gneissose rocks, and it is notable that when first quarried it is comparatively soft. It appears to have a wide distribution in the mountains, and has been worked from very ancient times in Khotan. Nephrite is said to occur also in the Pamir region, and pebbles are found in the beds of many streams. In Turkestan, jade is known as *yashm* or *yeshm*, a word which appears in Arabic as *yeshb*, perhaps cognate with ἴασπις or jasper. The "jasper" of the ancients may have included jade. Nephrite is said to have been discovered in 1891 in the Nan-shan mountains in the Chinese province of Kan-suh, where it is worked. The great centre of Chinese jade-working is at Peking, and formerly the industry was active at Su-chow Fu. Siberia has yielded very fine specimens of dark green nephrite, notably from the neighbourhood of the Alibert graphite mine, near Batugol, Lake Baikal. The jade seems to occur as a rock in part of the Sajan mountain system. New deposits in Siberia were opened up to supply material for the tomb of the tsar Alexander III. A gigantic monolith exists at the tomb of Tamerlane at Samarkand. The occurrence of the Siberian jade has been described by Professor L. von Jaczewski.

Jade implements are widely distributed in Alaska and British Columbia, being found in Indian graves, in old shell-heaps and on the sites of deserted villages. Dr G. M. Dawson, arguing from the discovery of some boulders of jade in the Fraser river valley, held that they were not obtained by barter from Siberia, but were of native origin; and the locality was afterwards discovered by Lieut. G. M. Stoney. It is known as the Jade Mountains, and is situated north of Kowak river, about 150 miles from its mouth. The study of a large collection of jade implements by Professor F. W. Clarke and Dr G. P. Merrill proved that the Alaskan jade is true nephrite, not to be distinguished from that of New Zealand.

Jadeite is a mineral species established by A. Damour in 1863, differing markedly from nephrite in that its relation lies with the pyroxenes rather than with the amphiboles. It is an aluminium sodium silicate, $NaAl(SiO_3)_2$, related to spodumene. S. L. Penfield showed, by measurement, that jadeite is monoclinic. Its colour is commonly very pale, and white jadeite, which is the purest variety, is known as "camphor jade." In many cases the mineral shows bright patches of apple-green or emerald-green, due to the presence of chromium. Jadeite is much more fusible than nephrite, and is rather harder (6.5 to 7), but its most readily determined character is found in its higher specific gravity, which ranges from 3.20 to 3.41. Some jadeite seems to be a metamorphosed igneous rock.

The Burmese jade, discovered by a Yunnan trader in the 13th century, is mostly jadeite. The quarries, described by Dr F. Noetling, are situated on the Uru river, about 120 m. from Mogaung, where the jadeite occurs in serpentine, and is partly extracted by fire-setting. It is also found as boulders in alluvium, and when these occur in a bed of laterite they acquire a red colour, which imparts to them peculiar value. According to Dr W. G. Bleeck, who visited the jade country of Upper Burma after Noetling, jadeite occurs at three localities in the Kachin Hills—Tawmaw, Hweka and Mamon. The jadeite is known as *chauk-sen*, and is sent either to China or to Mandalay, by way of Bhamo, whence Bhamo has come erroneously to be regarded as a locality for jade. Jadeite occurs in association with the nephrite of Turkestan, and possibly in some other Asiatic localities. In certain cases nephrite is formed by the alteration of jadeite, as shown by Professor J. P. Iddings. The Chinese *feits'ui*, sometimes called "imperial jade," is a beautiful green stone, which seems generally to be jadeite, but it is said that in some cases it may be chrysoprase. It is named from its resemblance in colour to the plumage of the kingfisher. The resonant character of jade has led to its occasional use as a musical stone.

In Mexico, in Central America and in the northern part of South America, objects of jadeite are common. The Kunz

votive adze from Oaxaca, in Mexico, is now in the American Museum of Natural History, New York. At the time of the Spanish conquest of Mexico amulets of green stone were highly venerated, and it is believed that jadeite was one of the stones prized under the name of *chalchihuitl*. Probably turquoise was another stone included under this name, and indeed any green stone capable of being polished, such as the Amazon stone, now recognized as a green feldspar, may have been numbered among the Aztec amulets. Dr Kunz suggests that the chalchihuitl was jadeite in southern Mexico and Central America, and turquoise in northern Mexico and New Mexico. He thinks that Mexican jadeite may yet be discovered in places (*Gems and Precious Stones of Mexico*, by G. F. Kunz: Mexico, 1907).

Chloromelanite is Damour's name for a dense, dark mineral which has been regarded as a kind of jade, and was used for the manufacture of celts found in the dolmens of France and in certain Swiss lake-dwellings. It is a mineral of spinach-green or dark-green colour, having a specific gravity of 3.4, or even as high as 3.65, and may be regarded as a variety of jadeite rich in iron. Chloromelanite occurs in the Cyclops Mountains in New Guinea, and is used for hatchets or agricultural implements, whilst the sago-clubs of the island are usually of serpentine. Sillimanite, or fibrolite, is a mineral which, like chloromelanite, was used by the Neolithic occupants of western Europe, and is sometimes mistaken for a pale kind of jade. It is an aluminium silicate, of specific gravity about 3.2, distinguished by its infusibility. The *jade tenace* of J. R. Haüy, discovered by H. B. de Saussure in the Swiss Alps, is now known as saussurite. Among other substances sometimes taken for jade may be mentioned prehnite, a hydrous calcium-aluminium silicate, which when polished much resembles certain kinds of jade. Pectolite has been used, like jade, in Alaska. A variety of vesuvianite (idocrase) from California, described by Dr. G. F. Kunz as californite, was at first mistaken for jade. The name jadeolite has been given by Kunz to a green chromiferous syenite from the jadeite mines of Burma. The mineral called bowenite, at one time supposed to be jade, is a hard and tough variety of serpentine. Some of the common Chinese ornaments imitating jade are carved in steatite or serpentine, while others are merely glass. The *pâte de riz* is a fine white glass. The so-called "pink jade" is mostly quartz, artificially coloured, and "black jade," though sometimes mentioned, has no existence.

An exhaustive description of jade will be found in a sumptuous work, entitled *Investigations and Studies in Jade* (New York, 1906). This work, edited by Dr G. F. Kunz, was prepared in illustration of the famous jade collection made by Heber Reginald Bishop, and presented by him to the Metropolitan Museum of Art, New York. The work, which is in two folio volumes, superbly illustrated, was printed privately, and after 100 copies had been struck off on American hand-made paper, the type was distributed and the material used for the illustrations was destroyed. The second volume is a catalogue of the collection, which comprises 900 specimens arranged in three classes: mineralogical, archaeological and artistic. The important section on Chinese jade was contributed by Dr S. W. Bushell, who also translated for the work a discourse on jade—*Yü-shuo* by T'ang Jung-tso, of Peking. Reference should also be made to Heinrich Fischer's *Nephrit und Jadeit* (2nd ed., Stuttgart, 1880), a work which at the date of its publication was almost exhaustive.

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(F. W. R.*)

1 The English use of the word for a worthless, ill-tempered horse, a "screw," also applied as a term of reproach to a woman, has been referred doubtfully to the same Spanish source as the O. Sp. *ijadear*, meaning to pant, of a broken-winded horse.

JAEN, an inland province of southern Spain, formed in 1833 of districts belonging to Andalusia; bounded on the N. by Ciudad Real and Albacete, E. by Albacete and Granada, S. by Granada, and W. by Cordova. Pop. (1900), 474,490; area, 5848 sq. m. Jaen comprises the upper basin of the river Guadalquivir, which traverses the central districts from east to west, and is enclosed on the north, south and east by mountain ranges, while on the west it is entered by the great Andalusian plain. The Sierra Morena, which divides Andalusia from New Castile, extends along the northern half of the province, its most prominent ridges being the Loma de Chiclana and the Loma de Ubeda; the Sierras de Segura, in the east, derive their name from the river Segura, which rises just within the border; and between the last-named watershed, its continuation the Sierra del Pozo, and the parallel Sierra de Cazorla, is the source of the Guadalquivir. The loftiest summits in the province are those of the Sierra Magina (7103 ft.) farther west and south. Apart from the Guadalquivir the only large rivers are its right-hand tributaries the Jándula and Guadalimar, its left-hand tributary the Guadiana Menor, and the Segura, which flows east and south to the Mediterranean.

In a region which varies so markedly in the altitude of its surface, the climate is naturally unequal; and, while the bleak, wind-swept highlands are only available as sheep-walks, the well-watered and fertile valleys favour the cultivation of the vine, the olive and all kinds of cereals. The mineral wealth of Jaen has been known since Roman times, and mining is an important industry, with its centre at Liná res. Over 400 lead mines were worked in 1903; small quantities of iron, copper and salt are also obtained. There is some trade in sawn timber and cloth; esparto fabrics, alcohol and oil are manufactured. The roads, partly owing to the development of mining, are more numerous and better kept than in most Spanish provinces. Railway communication is also very complete in the western districts, as the main line Madrid-Cordova-Seville passes through them and is joined south of Liná res by two important railways—from Algeciras and Malaga on the south-west, and from Almería on the south-east. The eastern half of Jaen is inaccessible by rail. In the western half are Jaen, the capital (pop. (1900), 26,434), with Andujar (16,302), Baeza (14,379), Bailen (7420), Liná res (38,245), Martos (17,078) and Ubeda (19,913). Other towns of more than 7000 inhabitants are Alcalá la Real, Alcaudete, Arjona, La Carolina and Porcuna, in the west; and Cazorla, Quesada, Torredonjimeno, Villacarillo and Villanueva del Arzobispo, in the east.

JAEN, the capital of the Spanish province of Jaen, on the Liná res-Puente Genil railway, 1500 ft. above the sea. Pop. (1900), 26,434. Jaen is finely situated on the well-wooded northern slopes of the Jabalcuz Mountains, overlooking the picturesque valleys of the Jaen and Guadalbullon rivers, which flow north into the Guadalquivir. The hillside upon which the narrow and irregular city streets rise in terraces is fortified with Moorish walls and a Moorish citadel. Jaen is an episcopal see. Its cathedral was founded in 1532; and, although it remained unfinished until late in the 18th century, its main characteristics are those of the Renaissance period. The city contains many churches and convents, a library, art galleries, theatres, barracks and hospitals. Its manufactures include leather, soap, alcohol and linen; and it was formerly celebrated for its silk. There are hot mineral springs in the mountains, 2 m. south.

The identification of Jaen with the Roman Aurinx, which has sometimes been suggested, is extremely questionable. After the Moorish conquest Jaen was an important commercial centre, under the name of Jayyan; and ultimately became

capital of a petty kingdom, which was brought to an end only in 1246 by Ferdinand III. of Castille, who transferred hither the bishopric of Baeza in 1248. Ferdinand IV. died at Jaen in 1312. In 1712 the city suffered severely from an earthquake.

JAFARABAD, a state of India, in the Kathiawar agency of Bombay, forming part of the territory of the nawab of Janjira; area, 42 sq. m.; pop. (1901), 12,097; estimated revenue, £4000. The town of Jafarabad (pop. 6038), situated on the estuary of a river, carries on a large coasting trade.

JAFFNA, a town of Ceylon, at the northern extremity of the island. The fort was described by Sir J. Emerson Tennent as "the most perfect little military work in Ceylon—a pentagon built of blocks of white coral." The European part of the town bears the Dutch stamp more distinctly than any other town in the island; and there still exists a Dutch Presbyterian church. Several of the church buildings date from the time of the Portuguese. In 1901 Jaffna had a population of 33,879, while in the district or peninsula of the same name there were 300,851 persons, nearly all Tamils, the only Europeans being the civil servants and a few planters. Coco-nut planting has not been successful of recent years. The natives grow palmyras freely, and have a trade in the fibre of this palm. They also grow and export tobacco, but not enough rice for their own requirements. A steamer calls weekly, and there is considerable trade. The railway extension from Kurunegala due north to Jaffna and the coast was commenced in 1900. Jaffna is the seat of a government agent and district judge, and criminal sessions of the supreme court are regularly held. Jaffna, or, as the natives call it, Yalpannan, was occupied by the Tamils about 204 B.C., and there continued to be Tamil rajahs of Jaffna till 1617, when the Portuguese took possession of the place. As early as 1544 the missionaries under Francis Xavier had made converts in this part of Ceylon, and after the conquest the Portuguese maintained their proselytizing zeal. They had a Jesuit college, a Franciscan and a Dominican monastery. The Dutch drove out the Portuguese in 1658. The Church of England Missionary Society began its work in Jaffna in 1818, and the American Missionary Society in 1822.

JÄGER, GUSTAV (1832-), German naturalist and hygienist, was born at Bürg in Württemberg on the 23rd of June 1832. After studying medicine at Tübingen he became a teacher of zoology at Vienna. In 1868 he was appointed professor of zoology at the academy of Hohenheim, and subsequently he became teacher of zoology and anthropology at Stuttgart polytechnic and professor of physiology at the veterinary school. In 1884 he abandoned teaching and started practice as a physician in Stuttgart. He wrote various works on biological subjects, including *Die Darwinsche Theorie und ihre Stellung zu Moral und Religion* (1869), *Lehrbuch der allgemeinen Zoologie* (1871-1878), and *Die Entdeckung der Seele* (1878). In 1876 he suggested an hypothesis in explanation of heredity, resembling the germ-plasm theory subsequently elaborated by August Weismann, to the effect that the germinal protoplasm retains its specific properties from generation to generation, dividing in each reproduction into an ontogenetic portion, out of which the individual is built up, and a phylogenetic portion, which is reserved to form the reproductive material of the mature offspring. In *Die Normalkleidung als Gesundheitsschutz* (1880) he advocated the system of clothing associated with his name, objecting especially to the use of any kind of vegetable fibre for clothes.

JÄGERNDORF (Czech, *Krnov*), a town of Austria, in Silesia, 18 m. N.W. of Troppau by rail. Pop. (1900), 14,675, mostly German. It is situated on the Oppa and possesses a château belonging to Prince Liechtenstein, who holds extensive estates in the district. Jägerndorf has large manufactories of cloth, woollens, linen and machines, and carries on an active trade. On the neighbouring hill of Burgberg (1420 ft.) are a church, much visited as a place of pilgrimage, and the ruins of the seat of the former princes of Jägerndorf. The claim of Prussia to the principality of Jägerndorf was the occasion of the first Silesian war (1740-1742), but in the partition, which followed, Austria retained the larger portion of it. Jägerndorf suffered severely during the Thirty Years' War, and was the scene of engagements between the Prussians and Austrians in May 1745 and in January 1779.

JAGERSFONTEIN, a town in the Orange Free State, 50 m. N.W. by rail of Springfontein on the trunk line from Cape Town to Pretoria. Pop. (1904), 5657—1293 whites and 4364 coloured persons. Jagersfontein, which occupies a pleasant situation on the open veld about 4500 ft. above the sea, owes its existence to the valuable diamond mine discovered here in 1870. The first diamond, a stone of 50 carats, was found in August of that year, and digging immediately began. The discovery a few weeks later of the much richer mines at Bultfontein and Du Toits Pan, followed

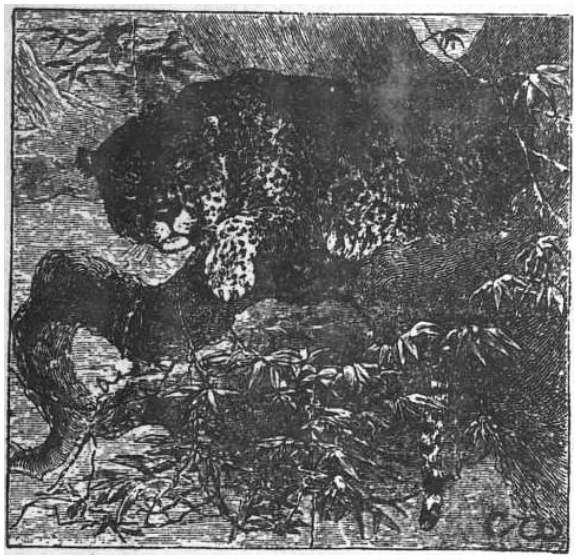
by the great finds at De Beers and Colesberg Kop (Kimberley) caused Jagersfontein to be neglected for several years. Up to 1887 the claims in the mine were held by a large number of individuals, but coincident with the efforts to amalgamate the interest in the Kimberley mines a similar movement took place at Jagersfontein, and by 1893 all the claims became the property of one company, which has a working arrangement with the De Beers corporation. The mine, which is worked on the open system and has a depth of 450 ft., yields stones of very fine quality, but the annual output does not exceed in value £500,000. In 1909 a shaft 950 ft. deep was sunk with a view to working the mine on the underground system. Among the famous stones found in the mine are the "Excelsior" (weighing 971 carats, and larger than any previously discovered) and the "Jubilee" (see DIAMOND). The town was created a municipality in 1904.

Fourteen miles east of Jagersfontein is Boomplaats, the site of the battle fought in 1848 between the Boers under A. W. Pretorius and the British under Sir Harry Smith (see ORANGE FREE STATE: *History*).

JAGO, RICHARD (1715-1781), English poet, third son of Richard Jago, rector of Beaudesert, Warwickshire, was born in 1715. He went up to University College, Oxford, in 1732, and took his degree in 1736. He was ordained to the curacy of Snitterfield, Warwickshire, in 1737, and became rector in 1754; and, although he subsequently received other preferments, Snitterfield remained his favourite residence. He died there on the 8th of May 1781. He was twice married. Jago's best-known poem, *The Blackbirds*, was first printed in Hawkesworth's *Adventurer* (No. 37, March 13, 1753), and was generally attributed to Gilbert West, but Jago published it in his own name, with other poems, in R. Dodsley's *Collection of Poems* (vol. iv., 1755). In 1767 appeared a topographical poem, *Edge Hill, or the Rural Prospect delineated and moralized*; two separate sermons were published in 1755; and in 1768 *Labour and Genius, a Fable*. Shortly before his death Jago revised his poems, and they were published in 1784 by his friend, John Scott Hylton, as *Poems Moral and Descriptive*.

See a notice prefixed to the edition of 1784; A. Chalmers, *English Poets* (vol. xvii., 1810); F. L. Colvile, *Warwickshire Worthies* (1870); some biographical notes are to be found in the letters of Shenstone to Jago printed in vol. iii. of Shenstone's *Works* (1769).

JAGUAR (*Felis onca*), the largest species of the *Felidae* found on the American continent, where it ranges from Texas through Central and South America to Patagonia. In the countries which bound its northern limit it is not frequently met with, but in South America it is quite common, and Don Felix de Azara states that when the Spaniards first settled in the district between Montevideo and Santa Fé, as many as two thousand were killed yearly. The jaguar is usually found singly (sometimes in pairs), and preys upon such quadrupeds as the horse, tapir, capybara, dogs or cattle. It often feeds on fresh-water turtles; sometimes following the reptiles into the water to effect a capture, it inserts a paw between the shells and drags out the body of the turtle by means of its sharp claws. Occasionally after having tasted human flesh, the jaguar becomes a confirmed man-eater. The cry of this great cat, which is heard at night, and most frequently during the pairing season, is deep and hoarse in tone, and consists of the sound *pu, pu*, often repeated. The female brings forth from two to four cubs towards the close of the year, which are able to follow their mother in about fifteen days after birth. The ground colour of the jaguar varies greatly, ranging from white to black, the rosette markings in the extremes being but faintly visible. The general or typical coloration is, however, a rich tan upon the head, neck, body, outside of legs, and tail near the root. The upper part of the head and sides of the face are thickly marked with small black spots, and the rest of body is covered with rosettes, formed of rings of black spots, with a black spot in the centre, and ranged lengthwise along the body in five to seven rows on each side. These black rings are heaviest along the back. The lips, throat, breast and belly, the inside of the legs and the lower sides of tail are pure white, marked with irregular spots of black, those on the breast being long bars and on the belly and inside of legs large blotches. The tail has large black spots near the root, some with light centres, and from about midway of its length to the tip it is ringed with black. The ears are black behind, with a large buff spot near the tip. The nose and upper lip are light rufous brown. The size varies, the total length of a very large specimen measuring 6 ft. 9 in.; the average length, however, is about 4 ft. from the nose to root of tail. In form the jaguar is thick-set; it does not stand high upon its legs; and in comparison with the leopard is heavily built; but its movements are very rapid, and it is fully as agile as its more graceful relative. The skull resembles that of the lion and tiger, but is much broader in proportion to its length, and may be identified by the presence of a tubercle on the inner edge of the orbit. The species has been divided into a number of local forms, regarded by some American naturalists as distinct species, but preferably ranked as sub-species or races.



The Jaguar (*Felis onca*).

JAGUARONDI, or Yaguarondi (*Felis jaguarondi*), a South American wild cat, found in Brazil, Paraguay and Guiana, ranging to north-eastern Mexico. This relatively small cat, uniformly coloured, is generally of some shade of brownish-grey, but in some individuals the fur has a rufous coat, while in others grey predominates. These cats are said by Don Felix de Azara to keep to cover, without venturing into open places. They attack tame poultry and also young fawns. The names jaguarondi and eyra are applied indifferently to this species and *Felis eyra*.

JAHANABAD, a town of British India in Gaya district, Bengal, situated on a branch of the East Indian railway. Pop. (1901), 7018. It was once a flourishing trading town, and in 1760 it formed one of the eight branches of the East India Company's central factory at Patna. Since the introduction of Manchester goods, the trade of the town in cotton cloth has almost entirely ceased; but large numbers of the Jolaha or Mahommedan weaver caste live in the neighbourhood.

JAHANGIR, or Jehangir (1569-1627), Mogul emperor of Delhi, succeeded his father Akbar the Great in 1605. His name was Salim, but he assumed the title of Jahangir, "Conqueror of the World," on his accession. It was in his reign that Sir Thomas Roe came as ambassador of James I., on behalf of the English company. He was a dissolute ruler, much addicted to drunkenness, and his reign is chiefly notable for the influence enjoyed by his wife Nur Jahan, "the Light of the World." At first she influenced Jahangir for good, but surrounding herself with her relatives she aroused the jealousy of the imperial princes; and Jahangir died in 1627 in the midst of a rebellion headed by his son, Khurram or Shah Jahan, and his greatest general, Mahabat Khan. The tomb of Jahangir is situated in the gardens of Shahdera on the outskirts of Lahore.

JĀḤIẒ (Abū 'Uthmān 'Amr Ibn Bahr ul-Jāḥiẓ; *i.e.* "the man the pupils of whose eyes are prominent") (d. 869), Arabian writer. He spent his life and devoted himself in Basra chiefly to the study of polite literature. A Mu'tazilite in his religious beliefs, he developed a system of his own and founded a sect named after him. He was favoured by Ibn uz-Zaiyāt, the vizier of the caliph Wāthiq.

His work, the *Kitāb ul-Bayān wat-Tabyīn*, a discursive treatise on rhetoric, has been published in two volumes at Cairo (1895). The *Kitāb ul-Mahāsin wal-Addād* was edited by G. van Vloten as *Le Livre des beautés et des antithèses* (Leiden, 1898); the *Kitāb ul-Bu-halā*. *Le Livre des avares*, ed. by the same (Leiden, 1900); two other smaller works, the *Excellences of the Turks* and the *Superiority in Glory of the Blacks over the Whites*, also prepared by the same. The *Kitāb ul-Ḥayawān,* or "Book of Animals," a philological and literary, not a scientific, work, was published at Cairo (1906).

(G. W. T.)

JAHN, FRIEDRICH LUDWIG (1778-1852), German pedagogue and patriot, commonly called *Turnvater* ("Father of Gymnastics"), was born in Lanz on the 11th of August 1778. He studied theology and philology from 1796 to 1802 at Halle, Göttingen and Greifswald. After Jena he joined the Prussian army. In 1809 he went to Berlin, where he became a teacher at the Gymnasium zum Grauen as well as at the Plamann School. Brooding upon the humiliation of his native land by Napoleon, he conceived the idea of restoring the spirits of his countrymen by the development of their physical and moral powers through the practice of gymnastics. The first *Turnplatz*, or open-air gymnasium, was opened by him at Berlin in 1811, and the movement spread rapidly, the young gymnasts being taught to regard themselves as members of a kind of gild for the emancipation of their fatherland. This patriotic spirit was nourished in no small degree by the writings of Jahn. Early in 1813 he took an active part at Breslau in the formation of the famous corps of Lützow, a battalion of which he commanded, though during the same period he was often employed in secret service. After the war he returned to Berlin, where he was appointed state teacher of gymnastics. As such he was a leader in the formation of the student *Burschenschaften* (patriotic fraternities) in Jena.

A man of democratic nature, rugged, honest, eccentric and outspoken, Jahn often came into collision with the reactionary spirit of the time, and this conflict resulted in 1819 in the closing of the *Turnplatz* and the arrest of Jahn himself. Kept in semi-confinement at the fortress of Kolberg until 1824, he was then sentenced to imprisonment for two years; but this sentence was reversed in 1825, though he was forbidden to live within ten miles of Berlin. He therefore took up his residence at Freyburg on the Unstrut, where he remained until his death, with the exception of a short period in 1828, when he was exiled to Cölleda on a charge of sedition. In 1840 he was decorated by the Prussian government with the Iron Cross for bravery in the wars against Napoleon. In the spring of 1848 he was elected by the district of Naumburg to the German National Parliament. Jahn died on the 15th of October 1852 in Freyburg, where a monument was erected in his honour in 1859.

Among his works are the following: *Bereicherung des hochdeutschen Sprachschatzes* (Leipzig, 1806), *Deutsches Volksthum* (Lübeck, 1810), *Runenblätter* (Frankfort, 1814), *Neue Runenblätter* (Naumburg, 1828), *Merke zum deutschen Volksthum* (Hildburghausen, 1833), and *Selbstvertheidigung* (Vindication) (Leipzig, 1863). A complete edition of his works appeared at Hof in 1884-1887. See the biography by Schultheiss (Berlin, 1894), and *Jahn als Erzieher*, by Friedrich (Munich, 1895).

JAHN, JOHANN (1750-1816), German Orientalist, was born at Tasswitz, Moravia, on the 18th of June 1750. He studied philosophy at Olmütz, and in 1772 began his theological studies at the Premonstratensian convent of Bruck, near Znaim. Having been ordained in 1775, he for a short time held a cure at Mislitz, but was soon recalled to Bruck as professor of Oriental languages and Biblical hermeneutics. On the suppression of the convent by Joseph II. in 1784, Jahn took up similar work at Olmütz, and in 1789 he was transferred to Vienna as professor of Oriental languages, biblical archaeology and dogmatics. In 1792 he published his *Einleitung ins Alte Testament* (2 vols.), which soon brought him into trouble; the cardinal-archbishop of Vienna laid a complaint against him for having departed from the traditional teaching of the Church, *e.g.* by asserting Job, Jonah, Tobit and Judith to be didactic poems, and the cases of demoniacal possession in the New Testament to be cases of dangerous disease. An ecclesiastical commission reported that the views themselves were not necessarily heretical, but that Jahn had erred in showing too little consideration for the views of German Catholic theologians in coming into conflict with his bishop, and in raising difficult problems by which the unlearned might be led astray. He was accordingly advised to modify his expressions in future. Although he appears honestly to have accepted this judgment, the hostility of his opponents did not cease until at last (1806) he was compelled to accept a canonry at St Stephen's, Vienna, which involved the resignation of his chair. This step had been preceded by the condemnation of his *Introductio in libros sacros veteris foederis in compendium redacta*, published in 1804, and also of his *Archaeologia biblica in compendium redacta* (1805). The only work of importance, outside the region of mere philology, afterwards published by him, was the *Enchiridion Hermeneuticae* (1812). He died on the 16th of August 1816.

Besides the works already mentioned, he published *Hebräische Sprachlehre für Anfänger* (1792); *Aramäische od. Chaldäische u. Syrische Sprachlehre für Anfänger*(1793); *Arabische Sprachlehre* (1796); *Elementarbuch der hebr. Sprache* (1799); *Chaldäische Chrestomathie* (1800); *Arabische Chrestomathie* (1802); *Lexicon arabico-latinum chrestomathiae accommodatum* (1802); an edition of the Hebrew Bible (1806); *Grammatica linguae hebraicae* (1809); a critical commentary on the Messianic passages of the Old Testament (*Vaticinia prophetarum de Jesu Messia*, 1815). In 1821 a collection of *Nachträge* appeared, containing six dissertations on Biblical subjects. The English translation of the *Archaeologia* by T. C. Upham (1840) has passed through several editions.

JAHN, OTTO (1813-1869), German archaeologist, philologist, and writer on art and music, was born at Kiel on the 16th of June 1813. After the completion of his university studies at Kiel, Leipzig and Berlin, he travelled for three years in France and Italy; in 1839 he became privatdocent at Kiel, and in 1842 professor-extraordinary of archaeology and philology at Greifswald (ordinary professor 1845). In 1847 he accepted the chair of archaeology at Leipzig, of which he was deprived in 1851 for having taken part in the political movements of 1848-1849. In 1855 he was appointed professor of the science of antiquity, and director of the academical art museum at Bonn, and in 1867 he was called to succeed E. Gerhard at Berlin. He died at Göttingen, on the 9th of September 1869.

The following are the most important of his works: 1. Archaeological: *Palamedes* (1836); *Telephos u. Troilos* (1841); *Die Gemälde des Polygnot* (1841); *Pentheus u. die Mänaden* (1841); *Paris u. Oinone* (1844); *Die hellenische Kunst* (1846); *Peitho, die Göttin der Überredung* (1847); *Über einige Darstellungen des Paris-Urteils* (1849); *Die Ficoronische Cista* (1852); *Pausaniae descriptio arcis Athenarum* (3rd ed., 1901); *Darstellungen griechischer Dichter auf Vasenbildern* (1861). 2. Philological: Critical editions of Juvenal, Persius and Sulpicia (3rd ed. by F. Bücheler, 1893); Censorinus

(1845); Florus (1852); Cicero's *Brutus* (4th ed., 1877); and *Orator* (3rd ed., 1869); the *Periochae* of Livy (1853); the *Psyche et Cupido* of Apuleius (3rd ed., 1884; 5th ed., 1905); Longinus (1867; 3rd ed. by J. Vahlen, 1905). 3. Biographical and aesthetic: *Üeber Mendelssohn's Paulus* (1842); *Biographie Mozarts*, a work of extraordinary labour, and of great importance for the history of music (3rd ed. by H. Disters, 1889-1891; Eng. trans. by P. D. Townsend, 1891); *Ludwig Uhland* (1863); *Gesammelte Aufsätze über Musik* (1866); *Biographische Aufsätze* (1866). His *Griechische Bilderchroniken* was published after his death, by his nephew A. Michaelis, who has written an exhaustive biography in *Allgemeine Deutsche Biographie*, xiii.; see also J. Vahlen, *Otto Jahn* (1870); C. Bursian, *Geschichte der classischen Philologie in Deutschland*.

JAHRUM, a town and district of Persia in the province of Fars, S.E. of Shiraz and S.W. of Darab. The district has thirty-three villages and is famous for its celebrated *sháhán* dates, which are exported in great quantities; it also produces much tobacco and fruit. The water supply is scanty, and most of the irrigation is by water drawn from wells. The town of Jahrum, situated about 90 m. S.E. of Shiraz, is surrounded by a mud-wall 3 m. in circuit which was constructed in 1834. It has a population of about 15,000, one half living inside and the other half outside the walls. It is the market for the produce of the surrounding districts, has six caravanserais and a post office.

JAINS, the most numerous and influential sect of heretics, or nonconformists to the Brahmanical system of Hinduism, in India. They are found in every province of upper Hindustan, in the cities along the Ganges and in Calcutta. But they are more numerous to the west—in Mewar, Gujarat, and in the upper part of the Malabar coast—and are also scattered throughout the whole of the southern peninsula. They are mostly traders, and live in the towns; and the wealth of many of their community gives them a social importance greater than would result from their mere numbers. In the Indian census of 1901 they are returned as being 1,334,140 in number. Their magnificent series of temples and shrines on Mount Abu, one of the seven wonders of India, is perhaps the most striking outward sign of their wealth and importance.

The Jains are the last direct representatives on the continent of India of those schools of thought which grew out of the active philosophical speculation and earnest spirit of religious inquiry that prevailed in the valley of the Ganges during the 5th and 6th centuries before the Christian era. For many centuries Jainism was so overshadowed by that stupendous movement, born at the same time and in the same place, which we call Buddhism, that it remained almost unnoticed by the side of its powerful rival. But when Buddhism, whose widely open doors had absorbed the mass of the community, became thereby corrupted from its pristine purity and gradually died away, the smaller school of the Jains, less diametrically opposed to the victorious orthodox creed of the Brahmans, survived, and in some degree took its place.

Jainism purports to be the system of belief promulgated by Vaddhamāna, better known by his epithet of Mahā-vīra (the great hero), who was a contemporary of Gotama, the Buddha. But the Jains, like the Buddhists, believe that the same system had previously been proclaimed through countless ages by each one of a succession of earlier teachers. The Jains count twenty-four such prophets, whom they call Jinas, or Tīrthankaras, that is, conquerors or leaders of schools of thought. It is from this word Jina that the modern name Jainas, meaning followers of the Jina, or of the Jinas, is derived. This legend of the twenty-four Jinas contains a germ of truth. Mahā-vīra was not an originator; he merely carried on, with but slight changes, a system which existed before his time, and which probably owes its most distinguishing features to a teacher named Pārṣwa, who ranks in the succession of Jinas as the predecessor of Mahā-vīra. Pārṣwa is said, in the Jain chronology, to have been born two hundred years before Mahā-vīra (that is, about 760 B.C.); but the only conclusion that it is safe to draw from this statement is that Pārṣwa was considerably earlier in point of time than Mahā-vīra. Very little reliance can be placed upon the details reported in the Jain books concerning the previous Jinas in the list of the twenty-four Tīrthankaras. The curious will find in them many reminiscences of Hindu and Buddhist legend; and the antiquary must notice the distinctive symbols assigned to each, in order to recognize the statues of the different Jinas, otherwise identical, in the different Jain temples.

The Jains are divided into two great parties—the *Digambaras*, or Sky-clad Ones, and the *Svetāmbaras*, or the White-robed Ones. The latter have only as yet been traced, and that doubtfully, as far back as the 5th century after Christ; the former are almost certainly the same as the Nigaṇṭhas, who are referred to in numerous passages of the Buddhist Pāli Piṭakas, and must therefore be at least as old as the 6th century B.C. In many of these passages the Nigaṇṭhas are mentioned as contemporaneous with the Buddha; and details enough are given concerning their leader Nigaṇṭha Nāta-putta (that is, the Nigaṇṭha of the Jñātṛika clan) to enable us to identify him, without any doubt, as the same person as the Vaddhamāna Mahā-vīra of the Jain books. This remarkable confirmation, from the scriptures of a rival religion, of the Jain tradition is conclusive as to the date of Mahā-vīra. The Nigaṇṭhas are referred to in one of Asoka's edicts (*Corpus Inscriptionum*, Plate xx.). Unfortunately the account of the teachings of Nigaṇṭha Nāta-putta given in the Buddhist scriptures are, like those of the Buddha's teachings given in the Brahmanical literature, very meagre.

Jain Literature.—The Jain scriptures themselves, though based on earlier traditions, are not older in their present form than the 5th century of our era. The most distinctively sacred books are called the forty-five Āgamas, consisting of eleven Angas, twelve Upangas, ten Pakiṇṇakas, six Chedas, four Mūla-sūtras and two other books. Devaddhi Gaṇin, who occupies among the Jains a position very similar to that occupied among the Buddhists by Buddhaghosa, collected the then existing traditions and teachings of the sect into these forty-five Āgamas. Like the Buddhist scriptures, the earlier Jain books are written in a dialect of their own, the so-called Jaina Prākrit; and it was not till between A.D. 1000 and 1100 that the Jains adopted Sanskrit as their literary language. Considerable progress has been made in the publication and elucidation of these original authorities. But a great deal remains yet to be done. The oldest books now in the possession of the modern Jains purport to go back, not to the foundation of the existing order in the 6th century B.C., but only to the time of Bhadrabahu, three centuries later. The whole of the still older literature, on which the revision then made was based, the so-called *Pūrvas*, have been lost. And the existing canonical books, while preserving a great deal that was probably derived from them, contain much later material. The problem remains to sort out the older from the later, to distinguish between the earlier form of the faith and its subsequent developments, and to collect the numerous data for the general, social, industrial, religious and political history of India. Professor Weber gave a fairly full and carefully-

drawn-up analysis of the whole of the more ancient books in the second part of the second volume of his *Catalogue of the Sanskrit MSS. at Berlin*, published in 1888, and in vols. xvi. and xvii. of his *Indische Studien*. An English translation of these last was published first in the *Indian Antiquary*, and then separately at Bombay, 1893. Professor Bhandarkar gave an account of the contents of many later works in his *Report on the Search for Sanskrit MSS.*, Bombay, 1883. Only a small beginning has been made in editing and translating these works. The best *précis* of a long book can necessarily only deal with the more important features in it. And in the choice of what should be included the *précis*-writer will often omit the points some subsequent investigator may most especially want. All the older works ought therefore to be edited and translated in full and properly indexed. The Jains themselves have now printed in Bombay a complete edition of their sacred books. But the critical value of this edition, and of other editions of separate texts printed elsewhere in India, leaves much to be desired. Professor Jacobi has edited and translated the *Kalpa Sūtra*, containing a life of the founder of the Jain order; but this can scarcely be older than the 5th century of our era. He has also edited and translated the *Āyāranya Sutta* of the Svetambara Jains. The text, published by the Pali Text Society, is of 140 pages octavo. The first part of it, about 50 pages, is a very old document on the Jain views as to conduct, and the remainder consists of appendices, added at different times, on the same subject. The older part may go back as early as the 3rd century B.C., and it sets out more especially the Jain doctrine of *tapas* or self-mortification, in contradistinction to the Buddhist view, which condemned asceticism. The rules of conduct in this book are for members of the order. Dr Rudolf Hoernle edited and translated an ancient work on the rules of conduct for laymen, the *Uvāsaga Dasāo*.[1] Professor Leumann edited another of the older works, the *Aupapātika Sūtra*, and a fourth, entitled the *Dasa-vaikālika Sātra*, both of them published by the German Oriental Society. Professor Jacobi translated two more, the *Uttarādhyāyana* and the *Sūtra Kritānga*.[2] Finally Dr Barnett has translated two others in vol. xvii. of the *Oriental Translation Fund* (new series, London, 1907). Thus about one-fiftieth part of these interesting and valuable old records is now accessible to the European scholar. The sect of the Svetambaras has preserved the oldest literatures. Dr Hoernle has treated of the early history of the sect in the *Proceedings of the Asiatic Society of Bengal* for 1898. Several scholars—notably Bhagvanlāl Indrajī, Mr Lewis Rice and Hofrath Bühler[3]—have treated of the remarkable archaeological discoveries lately made. These confirm the older records in many details, and show that the Jains, in the centuries before the Christian era, were a wealthy and important body in widely separated parts of India.

Jainism.—The most distinguishing outward peculiarity of Mahā-vīra and of his earliest followers was their practice of going quite naked, whence the term *Digambara*. Against this custom, Gotama, the Buddha, especially warned his followers; and it is referred to in the well-known Greek phrase, *Gymnosophist*, used already by Megasthenes, which applies very aptly to the Niganṭhas. Even the earliest name Niganṭha, which means "free from bonds," may not be without allusions to this curious belief in the sanctity of nakedness, though it also alluded to freedom from the bonds of sin and of transmigration. The statues of the Jinas in the Jain temples, some of which are of enormous size, are still always quite naked; but the Jains themselves have abandoned the practice, the Digambaras being sky-clad at meal-time only, and the Svetāmbaras being always completely clothed. And even among the Digambaras it is only the recluses or *Yatis*, men devoted to a religious life, who carry out this practice. The Jain laity—the *Srāvakas*, or disciples—do not adopt it.

The Jain views of life were, in the most important and essential respects, the exact reverse of the Buddhist views. The two orders, Buddhist and Jain, were not only, and from the first, independent, but directly opposed the one to the other. In philosophy the Jains are the most thorough-going supporters of the old animistic position. Nearly everything, according to them, has a soul within its outward visible shape—not only men and animals, but also all plants, and even particles of earth, and of water (when it is cold), and fire and wind. The Buddhist theory, as is well known, is put together without the hypothesis of "soul" at all. The word the Jains use for soul is *jīva*, which means life; and there is much analogy between many of the expressions they use and the view that the ultimate cells and atoms are all, in a more or less modified sense, alive. They regard good and evil and space as ultimate substances which come into direct contact with the minute souls in everything. And their best-known position in regard to the points most discussed in philosophy is *Syād-vāda*, the doctrine that you may say "Yes" and at the same time "No" to everything. You can affirm the eternity of the world, for instance, from one point of view, and at the same time deny it from another; or, at different times and in different connexions, you may one day affirm it and another day deny it. This position both leads to vagueness of thought and explains why Jainism has had so little influence over other schools of philosophy in India. On the other hand, the Jains are as determined in their views of asceticism (*tapas*) as they were compromising in their views of philosophy. Any injury done to the "souls" being one of the worst of iniquities, the good monk should not wash his clothes (indeed, the most austere will reject clothes altogether), nor even wash his teeth, for fear of injuring living things. "Subdue the body, chastise thyself, weaken thyself, just as fire consumes dry wood." It was by suppressing, through such self-torture, the influence on his soul of all sensations that the Jain could obtain salvation. It is related of the founder himself, the Mahā-vīra, that after twelve years' penance he thus obtained Nirvāna (Jacobi, *Jaina Sūtras*, i. 201) before he entered upon his career as a teacher. And through the rest of his life, till he died at Pāvā, shortly before the Buddha, he followed the same habit of continual self-mortification. The Buddha, on the other hand, obtained Nirvāna in his 35th year, under the Bo tree, after he had abandoned penance; and through the rest of his life he spoke of penance as quite useless from his point of view.

There is no manual of Jainism as yet published, but there is a great deal of information on various points in the introductions to the works referred to above. Professor Jacobi, who is the best authority on the history of this sect, thus sums up the distinction between the Mahā-vīra and the Buddha: "Mahā-vīra was rather of the ordinary class of religious men in India. He may be allowed a talent for religious matters, but he possessed not the genius which Buddha undoubtedly had.... The Buddha's philosophy forms a system based on a few fundamental ideas, whilst that of Mahā-vīra scarcely forms a system, but is merely a sum of opinions (*pannattis*) on various subjects, no fundamental ideas being there to uphold the mass of metaphysical matter. Besides this ... it is the ethical element that gives to the Buddhist writings their superiority over those of the Jains. Mahā-vīra treated ethics as corollary and subordinate to his metaphysics, with which he was chiefly concerned."

Additional Authorities.—Bhadrabāhu's *Kalpa Sūtra*, the recognized and popular manual of the Svetāmbara Jains, edited with English introduction by Professor Jacobi (Leipzig, 1879); Hemacandra's "Yoga S'āstram," edited by Windisch, in the *Zeitschrift der deutschen morg. Ges.* for 1874; "Zwei Jaina Stotra," edited in the *Indische Studien*, vol. xv.; *Ein Fragment der Bhagavatī*, by Professor Weber; *Mémoires de l'Académie de Berlin* (1866); *Nirayāvaliya Sutta*, edited by Dr Warren, with Dutch introduction (Amsterdam, 1879); *Over de godsdienstige en wijsgeerige Begrippen der Jainas*, by Dr Warren (his doctor-dissertation, Zwolle, 1875); *Beiträge zur Grammatik des Jaina-prākrit*, by Dr Edward Müller (Berlin, 1876); Colebrooke's *Essays*, vol. ii. Mr J. Burgess has an exhaustive account of the Jain Cave Temples (none older than the 7th century) in Fergusson and Burgess's *Cave Temples in India* (London, 1880).

See also Hopkins' *Religions of India* (London, 1896), pp. 280-96, and J. G. Bühler *On the Indian Sect of the Jainas*, edited by J. Burgess (London, 1904).

(T. W. R. D.)

1 Published in the *Bibliotheca Indica*, Calcutta, 1888.

2 These two, and the other two mentioned above, form vols. i. and ii. of his *Jaina Sutras*, published in the *Sacred Books of the East* (1884, 1895).

3 The *Hatthi Gumphā* and three other inscriptions at Cuttack (Leyden, 1885); *Sravana Belgola* inscriptions (Bangalore, 1889); *Vienna Oriental Journal*, vols. ii.-v.; *Epigraphia Indica*, vols. i-vii.

JAIPUR, or Jeypore, a city and native state of India in the Rajputana agency. The city is a prosperous place of comparatively recent date. It derives its name from the famous Maharaja Jai Singh II., who founded it in 1728. It is built of pink stucco in imitation of sandstone, and is remarkable for the width and regularity of its streets. It is the only city in India that is laid out in rectangular blocks, and it is divided by cross streets into six equal portions. The main streets are 111 ft. wide and are paved, while the city is lighted by gas. The regularity of plan, and the straight streets with the houses all built after the same pattern, deprive Jaipur of the charm of the East, while the painted mud walls of the houses give it the meretricious air of stage scenery. The huge palace of the maharaja stands in the centre of the city. Another noteworthy building is Jai Singh's observatory. The chief industries are in metals and marble, which are fostered by a school of art, founded in 1868. There is also a wealthy and enterprising community of native bankers. The city has three colleges and several hospitals. Pop. (1901), 160,167. The ancient capital of Jaipur was Amber.

The State of Jaipur, which takes its name from the city, has a total area of 15,579 sq. m. Pop. (1901), 2,658,666, showing a decrease of 6% in the decade. The estimated revenue is £430,000, and the tribute £27,000. The centre of the state is a sandy and barren plain 1,600 ft. above sea-level, bounded on the E. by ranges of hills running north and south. On the N. and W. it is bounded by a broken chain of hills, an offshoot of the Aravalli mountains, beyond which lies the sandy desert of Rajputana. The soil is generally sandy. The hills are more or less covered with jungle trees, of no value except for fuel. Towards the S. and E. the soil becomes more fertile. Salt is largely manufactured and exported from the Sambhar lake, which is worked by the government of India under an arrangement with the states of Jaipur and Jodhpur. It yields salt of a very high quality. The state is traversed by the Rajputana railway, with branches to Agra and Delhi.

The maharaja of Jaipur belongs to the Kachwaha clan of Rajputs, claiming descent from Rama, king of Ajodhya. The state is said to have been founded about 1128 by Dhula Rai, from Gwalior, who with his Kachwahas is said to have absorbed or driven out the petty chiefs. The Jaipur house furnished to the Moguls some of their most distinguished generals. Among them were Man Singh, who fought in Orissa and Assam; Jai Singh, commonly known by his imperial 129
title of Mirza Raja, whose name appears in all the wars of Aurangzeb in the Deccan; and Jai Singh II., or Sawai Jai Singh, the famous mathematician and astronomer, and the founder of Jaipur city. Towards the end of the 18th century the Jats of Bharatpur and the chief of Alwar each annexed a portion of the territory of Jaipur. By the end of the century the state was in great confusion, distracted by internal broils and impoverished by the exactions of the Mahrattas. The disputes between the chiefs of Jaipur and Jodhpur had brought both states to the verge of ruin, and Amir Khan with the Pindaris was exhausting the country. By a treaty in 1818 the protection of the British was extended to Jaipur and an annual tribute fixed. In 1835 there was a serious disturbance in the city, after which the British government took measures to insist upon order and to reform the administration as well as to support its effective action; and the state has gradually become well-governed and prosperous. During the Mutiny of 1857 the maharaja assisted the British in every way that lay in his power. Maharaja Madho Singh, G.C.S.I., G.C.V.O., was born in 1861, and succeeded in 1882. He is distinguished for his enlightened administration and his patronage of art. He was one of the princes who visited England at the time of King Edward's coronation in 1902. It was he who started and endowed with a donation of 15 lakhs, afterwards increased to 20 lakhs, of rupees (£133,000) the "Indian People's Famine Fund." The Jaipur imperial service transport corps saw service in the Chitral and Tirah campaigns.

JAISALMER, or Jeysulmere, a town and native state of India in the Rajputana agency. The town stands on a ridge of yellowish sandstone, crowned by a fort, which contains the palace and several ornate Jain temples. Many of the houses and temples are finely sculptured. Pop. (1901), 7137. The area of the state is 16,062 sq. m. In 1901 the population was 73,370, showing a decrease of 37% in ten years, as a consequence of famine. The estimated revenue is about £6000; there is no tribute. Jaisalmer is almost entirely a sandy waste, forming a part of the great Indian desert. The general aspect of the country is that of an interminable sea of sandhills, of all shapes and sizes, some rising to a height of 150 ft. Those in the west are covered with *phog* bushes, those in the east with tufts of long grass. Water is scarce, and generally brackish; the average depth of the wells is said to be about 250 ft. There are no perennial streams, and only one small river, the Kakni, which, after flowing a distance of 28 m., spreads over a large surface of flat ground, and forms a lake or *jhil* called the Bhuj-Jhil. The climate is dry and healthy. Throughout Jaisalmer only rain-crops, such as *bajra*, *joar*, *moth*, *til*, &c., are grown; spring crops of wheat, barley, &c., are very rare. Owing to the scant rainfall, irrigation is almost unknown.

The main part of the population lead a wandering life, grazing their flocks and herds. Large herds of camels, horned cattle, sheep and goats are kept. The principal trade is in wool, *ghi*, camels, cattle and sheep. The chief imports are grain, sugar, foreign cloth, piece-goods, &c. Education is at a low ebb. Jain priests are the chief schoolmasters, and their teaching is elementary. The ruler of Jaisalmer is styled *maharawal*. The state suffered from famine in 1897, 1900 and other years, to such an extent that it has had to incur a heavy debt for extraordinary expenditure. There are no railways.

The majority of the inhabitants are Bhatti Rajputs, who take their name from an ancestor named Bhatti, renowned as a warrior when the tribe were located in the Punjab. Shortly after this the clan was driven southwards, and found a refuge in the Indian desert, which was thenceforth its home. Deorāj, a famous prince of the Bhatti family, is esteemed the real founder of the present Jaisalmer dynasty, and with him the title of *rāwal* commenced. In 1156 Jāisal, the sixth in succession from Deorāj, founded the fort and city of Jaisalmer, and made it his capital. In 1294 the Bhattis so enraged the emperor Alā-ud-din that his army captured and sacked the fort and city of Jaisalmer, so that for some time it was quite deserted. After this there is nothing to record till the time of Rāwal Sabal Singh, whose reign marks an epoch in Bhatti history in that he acknowledged the supremacy of the Mogul emperor Shāh Jahān. The Jaisalmer princes had now arrived at the height of their power, but from this time till the accession of Rāwal Mulrāj in 1762 the fortunes of the state rapidly declined, and most of its outlying provinces were lost. In 1818 Mulrāj entered into political relations with the British. Maharawal Salivahan, born in 1887, succeeded to the chief ship in 1891.

JAJCE (pronounced *Yaïtse*), a town of Bosnia, situated on the Pliva and Vrbas rivers, and at the terminus of a branch railway from Serajevo, 62 m. S.E. Pop. (1895), about 4000. Jajce occupies a conical hill, overlooking one of the finest waterfalls in Europe, where the Pliva rushes down into the Vrbas, 100 ft. below. The 14th century citadel which crowns this hill is said to have been built for Hrvoje, duke of Spalato, on the model of the Castel del' Uovo at Naples; but the resemblance is very slight, and although both *jajce* and *uovo* signify "an egg," the town probably derives its name from the shape of the hill. The ruined church of St Luke, said by legend to be the Evangelist's burial place, has a fine Italian belfry, and dates from the 15th century. Jezero, 5 m. W. of Jajce, contains the Turkish fort of Djöl-Hissar, or "the Lake-Fort." In this neighbourhood a line of waterfalls and meres, formed by the Pliva, stretches for several miles, enclosed by steep rocks and forest-clad mountains. The power supplied by the main fall, at Jajce, is used for industrial purposes, but the beauty of the town remains unimpaired.

From 1463 to 1528 Jajce was the principal outwork of eastern Christendom against the Turks. Venice contributed money for its defence, and Hungary provided armies; while the pope entreated all Christian monarchs to avert its fall. In 1463 Mahomet II. had seized more than 75 Bosnian fortresses, including Jajce itself; and the last independent king of Bosnia, Stephen Tomašević, had been beheaded, or, according to one tradition, flayed alive, before the walls of Jajce, on a spot still called *Kraljeva Polje*, the "King's Field." His coffin and skeleton are still displayed in St Luke's Church. The Hungarians, under King Matthias I., came to the rescue, and reconquered the greater part of Bosnia during the same year; and, although Mahomet returned in 1464, he was again defeated at Jajce, and compelled to flee before another Hungarian advance. In 1467 Hungarian bans, or military governors, were appointed to rule in north-west Bosnia, and in 1472 Matthias appointed Nicolaus Ujlaki king of the country, with Jajce for his capital. This kingdom lasted, in fact, for 59 years; but, after the death of Ujlaki, in 1492, its rulers only bore the title of *ban*, and of *vojvod*. In 1500 the Turks, under Bajazet II., were crushed at Jajce by the Hungarians under John Corvinus; and several other attacks were repelled between 1520 and 1526. But in 1526 the Hungarian power was destroyed at Mohács; and in 1528 Jajce was forced to surrender.

See Bräss, "Jajce, die alte Königstadt Bosniens," in *Deutsche geog. Blätter*, pp. 71-85 (Bremen, 1899).

JĀJPUR, or Jajpore, a town of British India, in Cuttack district, Bengal, situated on the right bank of the Baitarani river. Pop. (1901), 12,111. It was the capital of Orissa under the Kesari dynasty until the 11th century, when it was superseded by Cuttack. In Jājpur are numerous ruins of temples, sculptures, &c., and a large and beautiful sun pillar.

JAKOB, LUDWIG HEINRICH VON (1759-1827), German economist, was born at Wettin on the 26th of February 1759. In 1777 he entered the university of Halle. In 1780 he was appointed teacher at the gymnasium, and in 1791 professor of philosophy at the university. The suppression of the university of Halle having been decreed by Napoleon, Jakob betook himself to Russia, where in 1807 he was appointed professor of political economy at Kharkoff, and in 1809 a member of the government commission to inquire into the finances of the empire. In the following year he became president of the commission for the revision of criminal law, and he at the same time obtained an important office in the finance department, with the rank of counsellor of state; but in 1816 he returned to Halle to occupy the chair of political economy. He died at Lauchstädt on the 22nd of July 1827.

Shortly after his first appointment to a professorship in Halle Jakob had begun to turn his attention rather to the practical than the speculative side of philosophy, and in 1805 he published at Halle *Lehrbuch der Nationalökonomie*, in which he was the first to advocate in Germany the necessity of a distinct science dealing specially with the subject of national wealth. His principal other works are *Grundriss der allgemeinen Logik* (Halle, 1788); *Grundsätze der Polizeigesetzgebung und Polizeianstalten* (Leipzig, 1809); *Einleitung in das Studium der Staatswissenschaften* (Halle, 1819); *Entwurf eines Criminalgesetzbuchs für das russische Reich* (Halle, 1818) and *Staatsfinanzwissenschaft* (2 vols., Halle, 1821).

JAKOVA (also written Diakova, Gyakovo and Gjakovica), a town of Albania, European Turkey, in the vilayet of Kossovo; on the river Erenik, a right-hand tributary of the White Drin. Pop. (1905) about 12,000. Jakova is the chief town of the Alpine region which extends from the Montenegrin frontier to the Drin and White Drin. This region has never been thoroughly explored, or brought under effective Turkish rule, on account of the inaccessible character of its mountains and forests, and the lawlessness of its inhabitants—a group of two Roman Catholic and three Moslem tribes, known collectively as the Malsia Jakovs, whose official representative resides in Jakova.

JAKUNS, an aboriginal race of the Malay Peninsula. They have become much mixed with other tribes, and are found throughout the south of the peninsula and along the coasts. The purest types are straight-haired, exhibit marked Mongolian characteristics and are closely related to the Malays. They are probably a branch of the Pre-Malays, the “savage Malays” of A. R. Wallace. They are divided into two groups: (1) Jakuns of the jungle, (2) Jakuns of the sea or Orang Laut. The latter set of tribes now comprise the remnants of the pirates or “sea-gipsies” of the Malaccan straits. The Jakuns, who must be studied in conjunction with the other aboriginal peoples of the Malay Peninsula, the Semangs and the Sakais, are not so dwarfish as those. The head is round; the skin varies from olive-brown to dark copper; the face is flat and the lower jaw square. The nose is thick and short, with wide, open nostrils. The cheekbones are high and well marked. The hair has a blue-black tint, eyes are black and the beard is scanty. The Jakuns live a wild forest life, and in general habits much resemble the Sakai, being but little in advance of the latter in social conditions except where they come into close contact with the Malay peoples.

JALALABAD, or Jellalabad, a town and province of Afghanistan. The town lies at a height of 1950 ft. in a plain on the south side of the Kabul river, 96 m. from Kabul and 76 from Peshawar. Estimated pop., 4000. Between it and Peshawar intervenes the Khyber Pass, and between it and Kabul the passes of Jagdalak, Khurd Kabul, &c. The site was chosen by the emperor Baber, and he laid out some gardens here; but the town itself was built by his grandson Akbar in A.D. 1560. It resembles the city of Kabul on a smaller scale, and has one central bazaar, the streets generally being very narrow. The most notable episode in the history of the place is the famous defence by Sir Robert Sale during the first Afghan war, when he held the town from November 1841 to April 1842. On its evacuation in 1842 General Pollock destroyed the defences, but they were rebuilt in 1878. The town is now fortified, surrounded by a high wall with bastions and loopholes. The province of Jalalabad is about 80 m. in length by 35 in width, and includes the large district of Laghman north of the Kabul river, as well as that on the south called Ningrahar. The climate of Jalalabad is similar to that of Peshawar. As a strategical centre Jalalabad is one of the most important positions in Afghanistan, for it dominates the entrances to the Laghman and the Kunar valleys; commanding routes to Chitral or India north of the Khyber, as well as the Kabul-Peshawar road.

JALAP, a cathartic drug consisting of the tuberous roots of *Ipomaea Purga*, a convolvulaceous plant growing on the eastern declivities of the Mexican Andes at an elevation of 5000 to 8000 ft. above the level of the sea, more especially about the neighbourhood of Chiconquiaco, and near San Salvador on the eastern slope of the Cofre de Perote. Jalap has been known in Europe since the beginning of the 17th century, and derives its name from the city of Jalapa in Mexico, near which it grows, but its botanical source was not accurately determined until 1829, when Dr. J. R. Coxe of Philadelphia published a description and coloured figure taken from living plants sent him two years previously from Mexico. The jalap plant has slender herbaceous twining stems, with alternately placed heart-shaped pointed leaves and salver-shaped deep purplish-pink flowers. The underground stems are slender and creeping; their vertical roots enlarge and form turnip-shaped tubers. The roots are dug up in Mexico throughout the year, and are suspended to dry in a net over the hearth of the Indians’ huts, and hence acquire a smoky odour. The large tubers are often gashed to cause them to dry more quickly. In their form they vary from spindle-shaped to ovoid or globular, and in size from a pigeon’s egg to a man’s fist. Externally they are brown and marked with small transverse paler scars, and internally they present a dirty white resinous or starchy fracture. The ordinary drug is distinguished in commerce as Vera Cruz jalap, from the name of the port whence it is shipped.

Jalap (*Ipomaea Purga*); about half natural size.

Jalap has been cultivated for many years in India, chiefly at Ootacamund, and grows there as easily as a yam, often producing clusters of tubers weighing over 9 lb; but these, as they differ in appearance from the commercial article, have not as yet obtained a place in the English market. They are found, however, to be rich in resin, containing 18%. In Jamaica also the plant has been grown, at first amongst the cinchona trees, but more recently in new ground, as it was found to exhaust the soil.

Besides Mexican or Vera Cruz jalap, a drug called Tampico jalap has been imported for some years in considerable quantity. It has a much more shrivelled appearance and paler colour than ordinary jalap, and lacks the small transverse scars present in the true drug. This kind of jalap, the Purga de Sierra Gorda of the Mexicans, was traced by Hanbury to *Ipomaea simulans*. It grows in Mexico along the mountain range of the Sierra Gorda in the neighbourhood of San Luis de la Paz, from which district it is carried down to Tampico, whence it is exported. A third variety of jalap known as woody jalap, male jalap, or Orizaba root, or by the Mexicans as Purgo macho, is derived from *Ipomaea orizabensis*, a plant of Orizaba. The root occurs in fibrous pieces, which are usually rectangular blocks of irregular shape, 2 in. or more in diameter, and are evidently portions of a large root. It is only occasionally met with in commerce.

The dose of jalap is from five to twenty grains, the British Pharmacopeia directing that it must contain from 9 to 11% of the resin, which is given in doses of two to five grains. One preparation of this drug is in common use, the *Pulvis Jalapae Compositus*, which consists of 5 parts of jalap, 9 of cream of tartar, and 1 of ginger. The dose is from 20 grains to a drachm. It is best given in the maximum dose which causes the minimum of irritation.

The chief constituents of jalap resin are two glucosides—*convolvulin* and *jalapin*—sugar, starch and gum. Convolvulin constitutes nearly 20% of the resin. It is insoluble in ether, and is more active than jalapin. It is not used separately in medicine. Jalapin is present in about the same proportions. It dissolves readily in ether, and has a soft resinous consistence. It may be given in half-grain doses. It is the active principle of the allied drug *scammony*. According to Mayer, the formula of convolvulin is $C_{34}H_{50}O_{16}$, and that of jalapin $C_{31}H_{50}O_{16}$.

Jalap is a typical hydragogue purgative, causing the excretion of more fluid than scammony, but producing less stimulation of the muscular wall of the bowel. For both reasons it is preferable to scammony. It was shown by Professor Rutherford at Edinburgh to be a powerful secretory cholagogue, an action possessed by few hydragogue purgatives. The stimulation of the liver is said to depend upon the solution of the resin by the intestinal secretion. The drug is largely employed in cases of Bright’s disease and dropsy from any cause, being especially useful when the liver shares in the general venous congestion. It is not much used in ordinary constipation.

JALAPA, Xalapa, or Halapa, a city of the state of Vera Cruz, Mexico, 70 m. by rail N.W. of the port of Vera Cruz. Pop. (1900), 20,388. It is picturesquely situated on the slopes of the sierra which separates the central plateau from the *tierra caliente* of the Gulf Coast, at an elevation of 4300 ft., and with the Cofre de Perote behind it rising to a height of 13,419 ft. Its climate is cool and healthy and the town is frequented in the hot season by the wealthier residents of Vera Cruz. The city is well built, in the old Spanish style. Among its public buildings are a fine old church, a Franciscan convent founded by Cortez in 1556, and three hospitals, one of which, that of San Juan de Dios, dates from colonial times. The neighbouring valleys and slopes are fertile, and in the forests of this region is found the plant (jalap), which takes its name from the place. Jalapa was for a time the capital of the state, but its political and commercial importance has declined since the opening of the railway between Vera Cruz and the city of Mexico. It manufactures pottery and leather.

JALAUN, a town and district of British India, in the Allahabad division of the United Provinces. Pop. of town (1901), 8573. Formerly it was the residence of a Mahratta governor, but never the headquarters of the district, which are at Orai.

The District of Jalaun has an area of 1477 sq. m. It lies entirely within the level plain of Bundelkhand, north of the hill country, and is almost surrounded by the Jumna and its tributaries the Betwa and Pahuj. The central region thus enclosed is a dead level of cultivated land, almost destitute of trees, and sparsely dotted with villages. The southern portion presents almost one unbroken sheet of cultivation. The boundary rivers form the only interesting feature in Jalaun. The river Non flows through the centre of the district, which it drains by innumerable small ravines instead of watering. Jalaun has suffered much from the noxious *kans* grass, owing to the spread of which many villages have been abandoned and their lands thrown out of cultivation. Pop. (1901), 399,726, showing an increase of 1%. The two largest towns are Kunch (15,888), and Kalpi (10,139). The district is traversed by the line of the Indian Midland railway from Jhansi to Cawnpore. A small part of it is watered by the Betwa canal. Grain, oil-seeds, cotton and *ghi* are exported.

In early times Jalaun seems to have been the home of two Rajput clans, the Chandels in the east and the Kachwahas in the west. The town of Kalpi on the Jumna was conquered for the princes of Ghor as early as 1196. Early in the 14th century the Bundelas occupied the greater part of Jalaun, and even succeeded in holding the fortified post of Kalpi. That important possession was soon recovered by the Mussulmans, and passed under the sway of the Mogul emperors. Akbar's governors at Kalpi maintained a nominal authority over the surrounding district; and the Bundela chiefs were in a state of chronic revolt, which culminated in the war of independence under Chhatar Sal. On the outbreak of his rebellion in 1671 he occupied a large province to the south of the Jumna. Setting out from this basis, and assisted by the Mahrattas, he reduced the whole of Bundelkhand. On his death he bequeathed one-third of his dominions to his Mahratta allies, who before long succeeded in annexing the whole of Bundelkhand. Under Mahratta rule the country was a prey to constant anarchy and intestine strife. To this period must be traced the origin of the poverty and desolation which are still conspicuous throughout the district. In 1806 Kalpi was made over to the British, and in 1840, on the death of Nana Gobind Ras, his possessions lapsed to them also. Various interchanges of territory took place, and in 1856 the present boundaries were substantially settled. Jalaun had a bad reputation during the Mutiny. When the news of the rising at Cawnpore reached Kalpi, the men of the 53rd native infantry deserted their officers, and in June the Jhansi mutineers reached the district, and began their murder of Europeans. The inhabitants everywhere revelled in the licence of plunder and murder which the Mutiny had spread through all Bundelkhand, and it was not till September 1858 that the rebels were finally defeated.

JALISCO, Xalisco, or Guadalajara, a Pacific coast state of Mexico, of very irregular shape, bounded, beginning on the N., by the territory of Tepic and the states of Durango, Zacatecas, Aguas Calientes, Guanajuato, Michoacán, and Colima. Pop. (1900), 1,153,891. Area, 31,846 sq. m. Jalisco is traversed from N.N.W. to S.S.E. by the Sierra Madre, locally known as the Sierra de Nayarit and Sierra de Jalisco, which divides the state into a low heavily forested coastal plain and a high plateau region, part of the great Anáhuac table-land, with an average elevation of about 5000 ft., broken by spurs and flanking ranges of moderate height. The sierra region is largely volcanic and earthquakes are frequent; in the S. are the active volcanoes of Colima (12,750 ft.) and the Nevado de Colima (14,363 ft.). The *tierra caliente* zone of the coast is tropical, humid, and unfavourable to Europeans, while the inland plateaus vary from subtropical to temperate and are generally drier and healthful. The greater part of the state is drained by the Rio Grande de Lerma (called the Santiago on its lower course) and its tributaries, chief of which is the Rio Verde. Lakes are numerous; the largest are the Chapala, about 80 m. long by 10 to 35 m. wide, which is considered one of the most beautiful inland sheets of water in Mexico, the Sayula and the Magdalena, noted for their abundance of fish. The agricultural products of Jalisco include Indian corn, wheat and beans on the uplands, and sugar-cane, cotton, rice, indigo and tobacco in the warmer districts. Rubber and palm oil are natural forest products of the coastal zone. Stock-raising is an important occupation in some of the more elevated districts. The mineral resources include silver, gold, cinnabar, copper, bismuth, and various precious stones. There are reduction works of the old-fashioned type and some manufactures, including cotton and woollen goods, pottery, refined sugar and leather. The commercial activities of the state contribute much to its prosperity. There is a large percentage of Indians and mestizos in the population. The capital is Guadalajara, and other important towns with their populations in 1900 (unless otherwise stated) are: Zapotlanejo (20,275), 21 m. E. by N. of Guadalajara; Ciudad Guzmán (17,374 in 1895), 60 m. N.E. of Colima; Lagos (14,716 in 1895), a mining town 100 m. E.N.E. of Guadalajara on the Mexican Central railway; Tamazula (8783 in 1895); Sayula (7883); Autlán (7715); Teocaltiche (8881); Ameca (7212 in 1895), in a fertile agricultural region on the western slopes of the sierras; Cocula (7090 in 1895); and Zacoalco (6516). Jalisco was first invaded by the Spaniards about 1526 and was soon afterwards conquered by Nuño de Guzman. It once formed part of the reyno of Nueva Galicia, which also included Aguas Calientes and Zacatecas. In 1889 its area was much reduced by a subdivision of its coastal zone, which was set apart as the territory of Tepic.

JALNA, or Jaulna, a town in Hyderabad state, India, on the Godavari branch of the Nizam's railway, and 210 m. N.E. of Bombay. Pop. (1901), 20,270. Until 1903 it was a cantonment of the Hyderabad contingent, originally established in 1827. Its gardens produce fruit, which is largely exported. On the opposite bank of the river Kundlika is the trading town of Kadirabad; pop. (1901), 11,159.

JALPAIGURI, or Julpigoree, a town and district of British India, in the Rajshahi division of Eastern Bengal and Assam. The town is on the right bank of the river Tista, with a station on the Eastern Bengal railway about 300 m. due N. of Calcutta. Pop. (1901), 9708. It is the headquarters of the commissioner of the division.

The District of Jalpaiguri (organized in 1869) occupies an irregularly shaped tract south of Darjeeling and Bhutan and north of the state of Kuch Behar. It includes the Western Dwars, annexed from Bhutan after the war of 1864-1865. Area, 2,962 sq. m. Pop. (1901), 787,380, an increase of 16% in the decade. The district is divided into a "regulation" tract, lying towards the south-west, and a strip of country, about 22 m. in width, running along the foot of the Himalayas, and known as the Western Dwars. The former is a continuous expanse of level paddy fields, only broken by groves of bamboos, palms, and fruit-trees. The frontier towards Bhutan is formed by the Sinchula mountain range, some peaks of which attain an elevation of 6000 ft. It is thickly wooded from base to summit. The principal rivers, proceeding from west to east, are the Mahananda, Karatoya, Tista, Jaldhaka, Duduya, Mujnai, Tursa, Kaljani, Raidak, and Sankos. The most important is the Tista, which forms a valuable means of water communication. Lime is quarried in the lower Bhutan hills. The Western Dwars are the principal centre of tea cultivation in Eastern Bengal. The other portion of the district produces jute. Jalpaiguri is traversed by the main line of the Eastern Bengal railway to Darjeeling. It is also served by the Bengal Dwars railway.

JAMAICA, the largest island in the British West Indies. It lies about 80 m. S. of the eastern extremity of Cuba, between 17° 43′ and 18° 32′ N. and 76° 10′ and 78° 20′ W., is 144 m. long, 50 m. in extreme breadth, and has an area of 4207 sq. m. The coast-line has the form of a turtle, the mountain ridges representing the back. A mountainous backbone runs through the island from E. to W., throwing off a number of subsidiary ridges, mostly in a north-westerly or south-easterly direction. In the east this range is more distinctly marked, forming the Blue Mountains, with cloud-capped peaks and numerous bifurcating branches. They trend W. by N., and are crossed by five passes at altitudes varying from 3000 to 4000 ft. They culminate in Blue Mountain Peak (7360 ft.), after which the heights gradually decrease until the range is merged into the hills of the western plateau. Two-thirds of the island are occupied by this limestone plateau, a region of great beauty broken by innumerable hills, valleys and sink-holes, and covered with luxuriant vegetation. The uplands usually terminate in steep slopes or bluffs, separated from the sea, in most cases, by a strip of level land. On the south coast, especially, the plains are often large, the Liguanea plain, on which Kingston stands, having an area of 200 sq. m. Upwards of a hundred rivers and streams find their way to the sea, besides the numerous tributaries which issue from every ravine in the mountains. These streams for the most part are not navigable, and in times of flood they become devastating torrents. In the parish of Portland, the Rio Grande receives all the smaller tributaries from the west. In St Thomas in the east the main range is drained by the Plantain Garden river, the tributaries of which form deep ravines and narrow gorges. The valley of the Plantain Garden expands into a picturesque and fertile plain. The Black river flows through a level country, and is navigable by small craft for about 30 m. The Salt river and the Cabaritta, also in the south, are navigable by barges. Other rivers of the south are the Rio Cobre (on which are irrigation works for the sugar and fruit plantations), the Yallahs and the Rio Minho; in the north are the Martha Brae, the White river, the Great Spanish river, and the Rio Grande. Vestiges of intermittent volcanic action occur, and there are several medicinal springs. Jamaica has 16 harbours, the chief of which are Port Morant, Kingston, Old Harbour, Montego Bay, Falmouth, St Ann's Bay, Port Maria and Port Antonio.

Geology.—The greater part of Jamaica is covered by Tertiary deposits, but in the Blue Mountain and some of the other ranges the older rocks rise to the surface. The foundation of the island is formed by a series of stratified shales and conglomerates, with tuffs and other volcanic rocks and occasional bands of marine limestone. The limestones contain Upper Cretaceous fossils, and the whole series has been strongly folded. Upon this foundation rests unconformably a series of marls and limestones of Eocene and early Oligocene age. Some of the limestones are made of Foraminifera, together with Radiolaria, and indicate a subsidence to abyssal depths. Nevertheless, the higher peaks of the island still remained above the sea. Towards the middle of the Oligocene period, mountain folding took place on an extensive scale, and the island was raised far above its present level and was probably connected with the rest of the Greater Antilles and perhaps with the mainland also. At the same time plutonic rocks of various kinds were intruded into the deposits already formed, and in some cases produced considerable metamorphism. During the Miocene and Pliocene periods the island again sank, but never to the depths which it reached in the Eocene period. The deposits formed were shallow-water conglomerates, marls and limestones, with mollusca, brachiopoda, corals, &c. Finally, a series of successive elevations of small amount, less than 500 ft. in the aggregate, raised the island to its present level. The terraces which mark the successive stages in this elevation are well shown in Montego Bay and elsewhere. The remarkable depressions of the Cockpit country and the closed basin of the Hector river are similar in origin to swallow-holes, and were formed by the solution of a limestone layer resting upon insoluble rocks. The island produces a great variety of marbles, porphyrites, granite and ochres. Traces of gold have been found associated with some of the oxidized copper ores (blue and green carbonates) in the Clarendon mines. Copper ores are widely diffused but are very expensive to work; as are the lead and cobalt which are also found. Manganese iron ores and a form of arsenic occur.

Climate.—The climate is one of the island's chief attractions. Near the coast it is warm and humid, but that of the uplands is delightfully mild and equable. At Kingston the temperature ranges from 70.7° to 87.8° F., and this is generally the average of all the low-lying coast land. At Cinchona, 4907 ft. above the sea, it varies from 57.5° to 68.5°. The vapours from the rivers and the ocean produce in the upper regions clouds saturated with moisture which induce vegetation belonging to a colder climate. During the rainy seasons there is such an accumulation of these vapours as to cause a general coolness and occasion sudden heavy showers, and sometimes destructive floods. The rainy seasons, in May and October, last for about three weeks, although, as a rule no month is quite without rain. The fall varies greatly; while the annual average for the island is 66.3 in., at Kingston it is 32.6 in., at Cinchona 105.5 in., and at some places in the north-east it exceeds 200 in. The climate of the Santa Cruz Mountains is extremely favourable to sufferers from tubercular and rheumatic diseases. Excepting near morasses and lagoons, the island is very healthy, and yellow fever, once prevalent, now rarely occurs. In the early part of the 19th century, hurricanes often devastated Jamaica, but now, though they pass to the N.E. and S.W. with comparative frequency, they rarely strike the island itself.

Flora.—The flora is remarkable, showing types from North, Central, and South America, with a few European forms, besides the common plants found everywhere in the tropics. Of flowering plants there are 2180 distinct species, and of ferns 450 species, several of both being indigenous. The largeness of these numbers may be to some extent accounted for by differences of altitude, temperature and humidity. There are many beautiful flowers, such as the aloe, the yucca, the datura, the mountain pride and the *Victoria regia*; and the cactus tribe is well represented. The Sensitive Plant grows in pastures, and orchids in the woods. There are forest trees fit for every purpose; including the ballata, rosewood, satinwood, mahogany, lignum vitae, lancewood and ebony. The logwood and fustic are exported for dyeing. There are also the Jamaica cedar, and the silk cotton tree (*Ceiba Bombax*). Pimento (peculiar to Jamaica) is indigenous, and furnishes the allspice. The bamboo, coffee and cocoa are well known. Several species of palm abound,—the macaw, the fan palm, screw palm, and palmetto royal. There are plantations of coconut palm. The other noticeable trees and plants are the mango, the breadfruit tree, the papaw, the lacebark tree, and the guava. The *Palma Christi*, from which castor oil is made, is a very abundant annual. English vegetables grow in the hills, and the plains produce plantains, cocoa, yams, cassava, ochra, beans, pease, ginger and arrowroot. Maize and guinea-corn are cultivated, and the guinea-grass, accidentally introduced in 1750, is very valuable for horses and cattle,—so much so that pen-keeping or cattle farming is a highly profitable occupation. Among the principal fruits are the orange, shaddock, lime, grape or cluster fruit, pine-apple, mango, banana, grapes, melons, avocado pear, breadfruit, and tamarind.

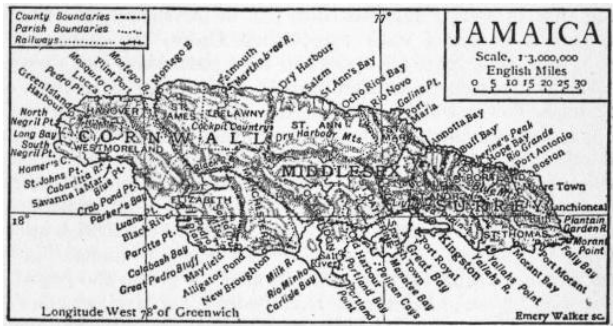
Fauna.—There are fourteen sorts of *lampyridae* or fireflies, besides the *elateridae* or lantern beetles. There are no venomous serpents, but numerous harmless snakes and lizards exist. The land-crab is considered a table delicacy, and the land-turtle also is eaten. The scorpion and centipede, though poisonous, are not very dangerous. Ants, sandflies and mosquitoes swarm in the lowlands. There are twenty different song-birds, and forty-three varieties of birds are presumed to be peculiar to the island. The sea and the rivers swarm with fish. Turtles abound, and the seal, the manatee and the crocodile are sometimes found. The coral reefs, with their varied polyps and anemones, the numerous alcyonarians and diverse coral-dwelling animals are readily accessible to the student, and the island is also celebrated for the number of species of its land-shells.

People.—The population of the island was estimated in 1905 at 806,690. Jamaica is rich in traces of its former Arawâk inhabitants. Aboriginal petaloid celts and other implements, flattened skulls and vessels are common, and images are sometimes found in the large limestone caverns of the island. The present inhabitants, of whom only 2% are white, include Maroons, the descendants of the slaves of the Spaniards who fled into the interior when the island was captured by the British; descendants of imported African slaves; mixed race of British and African blood; coolies from India; a few Chinese, and the British officials and white settlers. The Maroons live by themselves and are few in number, while the half-castes enter into trade and sometimes into the professions. The number of white inhabitants other than British is very small. A negro peasant population is encouraged, with a view to its being a support to the industries of the island; but, in many cases a field negro will not work for his employer more than four days a week. He may till his own plot of ground on one of the other days or not, as the spirit moves him, but four days' work a week will keep him easily. He has little or no care for the future. He has probably squatted on someone's land, and has no rent to pay. Clothes he need hardly buy, fuel he needs only for cooking, and food is ready to his hand for the picking. Unfortunately a widespread indulgence in predial larceny is a great hindrance to agriculture as well as to moral progress. But that habits of thrift are being inculcated is shown by the steady increase in the accounts in the government savings banks. That gross superstition is still prevalent is shown by the cases of *obeah* or witchcraft that come before the courts from time to time. Another indication of the status of the negro may be found in the fact that more than 60% of the births are illegitimate, a percentage that shows an unfortunate tendency to increase rather than diminish.

The capital, Kingston, stands on the south-east coast, and near it is the town of Port Royal. Spanish Town (pop. 5019), the former capital, is in the parish of St Catherine, Middlesex, 11¾ m. by rail west of Kingston. Since the removal of the seat of government to Kingston, the town has gradually sunk in importance. In the cathedral many of the governors of the island are buried. A marble statue of Rodney commemorates his victory over the count de Grasse off Dominica in 1782. Montego Bay (pop. 4803), on the north-west coast, is the second town on the island, and is also a favourite bathing resort. Port Antonio (1784) lies between two secure harbours on the north-east, and owes its prosperity mainly to the development of the trade in fruit, for which it is the chief place of shipment.

Industries.—Agricultural enterprise falls into two classes—planting and pen-keeping, *i.e.* the breeding of horses, mules, cattle and sheep. The chief products are bananas, oranges, coffee, sugar, rum, logwood, cocoa, pimento, ginger, coco-nuts, limes, nutmegs, pineapples, tobacco, grape-fruit and mangoes. There is a board of agriculture, with an experimental station at Hope; there is also an agricultural society with 26 branches throughout the colony. Bee-keeping is a growing industry, especially among the peasants. The land as a rule is divided into small holdings, the vast majority consisting of five acres and less. The manufactures are few. In addition to the sugar and coffee estates and cigar factories, there are tanneries, distilleries, breweries, electric light and gas works, ironfoundries, potteries and factories for the production of coconut oil, essential oils, ice, matches and mineral waters. There is an important establishment at Spanish Town for the production of logwood extract. The exports, more than half of which go to the United States, mostly comprise fruit, sugar and rum. The United States also contributes the majority of the imports. More than half the revenue of the colony is derived from import duties, the remainder is furnished by excise, stamps and licences. With the exception of that of the parish boards, there is no direct taxation.

Communications.—In 1900 an Imperial Direct West India Line of steamers was started by Elder, Dempster & Co., to encourage the fruit trade with England; it had a subsidy of £40,000, contributed jointly by the Imperial and Jamaican governments. Two steamers go round the island once a week, calling at the principal ports, the circuit occupying about 120 hours. A number of sailing "droghers" also ply from port to port. Jamaica has a number of good roads and bridle paths; the main roads, controlled by the public works department, encircle the island, with several branches from north to south. The parochial roads are maintained by the parish boards. A railway traverses the island from Kingston in the south-east to Montego Bay in the north-west, and also branches to Port Antonio and to Ewarton. Jamaica is included in the Postal Union and in the Imperial penny post, and there is a weekly mail service to and from England by the Royal Mail Line, but mails are also carried by other companies. The island is connected by cable with the United States via Cuba, and with Halifax, Nova Scotia via Bermuda.



There is a government savings bank at Kingston with branches throughout the island, and there are also branches of the Colonial Bank of London and the Bank of Nova Scotia. The coins in circulation are British gold and silver, but not bronze, instead of which local nickel is used. United States gold passes as currency. English weights and measures are used.

Administration, &c.—The island is divided into three counties, Surrey in the east, Middlesex in the centre, and Cornwall in the west, and each of these is subdivided into five parishes. The parish is the unit of local government, and has jurisdiction over roads, markets, sanitation, poor relief and waterworks. The management is vested in a parish board, the members of which are elected. The chairman or custos is appointed by the governor. The island is administered by a governor, who bears the old Spanish title of captain-general, assisted by a legislative council of five *ex officio* members, not more than ten nominated members, and fourteen members elected on a limited suffrage. There is also a privy council of three *ex officio* and not more than eight nominated members. There is an Imperial garrison of about 2000 officers and men, with headquarters at Newcastle, consisting of Royal Engineers, Royal Artillery, infantry and four companies of the West India Regiment. There is a naval station at Port Royal, and the entrance to its harbour is strongly fortified. In addition there is a militia of infantry and artillery, about 800 strong.

Previous to 1870 the Church of England was established in Jamaica, but in that year a disestablishment act was passed which provided for gradual disendowment. It is still the most numerous body, and is presided over by the bishop of Jamaica, who is also archbishop of the West Indies. The Baptists, Wesleyans, Presbyterians, Moravians and Roman Catholics are all represented; there is a Jewish synagogue at Kingston, and the Salvation Army has a branch on the island. The Church of England maintains many schools, a theological college, a deaconesses' home and an orphanage. The Baptists have a theological college; and the Roman Catholics support a training college for teachers, two industrial schools and two orphanages. Elementary education is in private hands, but fostered, since 1867, by government grants; it is free but not compulsory, although the governor has the right to compel the attendance of all children from 6 to 14 years of age in such towns and districts as he may designate. The teachers in these schools are for the most part trained in the government-aided training colleges of the various denominations. For higher education there are the University College and high school at Hope near Kingston, Potsdam School in St Elizabeth, the Mico School and Wolmer's Free School in Kingston, founded (for boys and girls) in 1729, the Montego Bay secondary school, and numerous other endowed and self-supporting establishments. The Cambridge Local Examinations have been held regularly since 1882.

History.—Jamaica was discovered by Columbus on the 3rd of May 1494. Though he called it Santiago, it has always been known by its Indian name Jaymaca, "the island of springs," modernized in form and pronunciation into Jamaica. Excepting that in 1505 Columbus once put in for shelter, the island remained unvisited until 1509, when Diego, the discoverer's son, sent Don Juan d'Esquivel to take possession, and thenceforward it passed under Spanish rule. Sant' Iago de la Vega, or Spanish Town, which remained the capital of the island until 1872, was founded in 1523. Sir Anthony Shirley, a British admiral, attacked the island in 1596, and plundered and burned the capital, but did not follow up his victory. Upon his retirement the Spaniards restored their capital and were unmolested until 1635, when the island was again raided by the British under Colonel Jackson. The period of the Spanish occupation is mainly memorable for the annihilation of the gentle and peaceful Arawâk Indian inhabitants; Don Pedro d'Esquivel was one of their cruellest oppressors. The whole island was divided among eight noble Spanish families, who discouraged immigration to such an extent that when Jamaica was taken by the British the white and slave population together did not exceed 3000. Under the vigorous foreign policy of Cromwell an attempt was made to crush the Spanish power in the West Indies, and an expedition under Admirals Penn and Venables succeeded in capturing and holding Jamaica in 1655. The Spanish were entirely expelled in 1658. Their slaves then took to the mountains, and down to the end of the 18th century the disaffection of these Maroons, as they were called, caused constant trouble. Jamaica continued to be governed by military authority until 1661, when Colonel D'Oyley was appointed captain-general and governor-in-chief with an executive council, and a constitution was introduced resembling that of England. He was succeeded in the next year by Lord Windsor, under whom a legislative council was established. Jamaica soon became the chief resort of the buccaneers, who not infrequently united the characters of merchant or planter with that of pirate or privateer. By the Treaty of Madrid, 1670, the British title to the island was recognized, and the buccaneers were suppressed. The Royal African Company was formed in 1672 with a monopoly of the slave trade, and from this time Jamaica was one of the greatest slave marts in the world. The sugar-industry was introduced about this period, the first pot of sugar being sent to London in 1673. An attempt was made in 1678 to saddle the island with a yearly tribute to the Crown and to restrict the free legislature. The privileges of the legislative assembly, however, were restored in 1682; but not till 46 years later was the question of revenue settled by a compromise by which Jamaica undertook to settle £8000 (an amount afterwards commuted to £6000) per annum on the Crown, provided that English statute laws were made binding in Jamaica.

During these years of political struggle the colony was thrice afflicted by nature. A great earthquake occurred in 1692, when the chief part of the town of Port Royal, built on a shelving bank of sand, slipped into the sea. Two dreadful hurricanes devastated the island in 1712 and 1722, the second of which did so much damage that the seat of commerce had to be transferred from Port Royal to Kingston.

The only prominent event in the history of the island during the later years of the 18th century, was the threatened invasion by the French and Spanish in 1782, but Jamaica was saved by the victory of Rodney and Hood off Dominica. The last attempt at invasion was made in 1806, when the French were defeated by Admiral Duckworth. When the slave trade was abolished the island was at the zenith of its prosperity; sugar, coffee, cocoa, pimento, ginger and indigo were being produced in large quantities, and it was the dépôt of a very lucrative trade with the Spanish main. The anti-slavery agitation in Great Britain found its echo in the island, and in 1832 the negroes revolted, believing that emancipation had been granted. They killed a number of whites and destroyed a large amount of valuable property. Two years later the Emancipation Act was passed, and, subject to a short term of apprenticeship, the slaves were free. Emancipation left the planters in a pitiable condition financially. The British government awarded them compensation at the rate of £19 per slave, the market value of slaves at the time being £35, but most of this compensation went into the hands of the planters' creditors. They were left with over-worked estates, a poor market and a scarcity of labour. Nor was this the end of their misfortunes. During the slavery times the British government had protected the planter by imposing a heavy differential duty on foreign sugar; but on the introduction of free trade the price of sugar fell by one-half and reduced the profits of the already impoverished planter. Many estates, already heavily mortgaged, were abandoned, and the trade of the island was at a standstill. Differences between the executive, the legislature, and the home government, as to the means of retrenching the public expenditure, created much bitterness. Although some slight improvement marked the administration of Sir Charles Metcalfe and the earl of Elgin, when coolie immigration was introduced to supply the scarcity and irregularity of labour and the railway was opened, the improvement was not permanent. In 1865 Edward John Eyre became governor. Financial affairs were at their lowest ebb and the colonial treasury showed a deficit of £80,000. To meet this difficulty new taxes were imposed and discontent was rife among the negroes. Dr Underhill, the secretary of a Baptist organization known as the British Union, wrote to the colonial secretary in London, pointing out the state of affairs. This letter became public in Jamaica, and in the opinion of the governor added in no small measure to the popular excitement. On the 11th of October 1865 the negroes rose at Morant Bay and murdered the custos and most

of the white inhabitants. The slight encounter which followed filled the island with terror, and there is no doubt that many excesses were committed on both sides. The assembly passed an act by which martial law was proclaimed, and the legislature passed an act abrogating the constitution.

The action of Governor Eyre, though generally approved throughout the West Indies, caused much controversy in England, and he was recalled. A prosecution was instituted against him, resulting in an elaborate exposition of martial law by Chief Justice Cockburn, but the jury threw out the bill and Eyre was discharged. He was succeeded in the government of Jamaica by Sir Henry Storks, and under the crown colony system of government the state of the island made slow but steady progress. In 1868 the first fruit shipment took place from Port Antonio, the immigration of coolies was revived, and cinchona planting was introduced. The method of government was changed in 1884, when a new constitution, slightly modified in 1895, was granted to the island.

In the afternoon of the 14th of January 1907 a terrible earthquake visited Kingston. Almost every building in the capital and in Port Royal, and many in St Andrews, were destroyed or seriously injured. The loss of life was variously estimated, but probably exceeded one thousand. Among those killed was Sir James Fergusson, 6th baronet (b. 1832). The principal shock was followed by many more of slighter intensity during the ensuing fortnight and later. On the 17th of January assistance was brought by three American war-ships under Rear-Admiral Davis, who however withdrew them on the 19th, owing to a misunderstanding with the governor of the island, Sir Alexander Swettenham, on the subject of the landing of marines from the vessels with a view to preserving order. The incident caused considerable sensation, and led to Sir A. Swettenham's resignation in the following March, Sir Sydney Olivier, K.C.M.G., being appointed governor. Order was speedily restored; but the destructive effect of the earthquake was a severe check to the prosperity of the island.

See Bryan Edwards, *History of the West Indies* (London, 1809, and appendix, 1819); P. H. Gosse, *Journal of a Naturalist in Jamaica* (London, 1851) and *Birds of Jamaica* (1847); *Jamaica Handbook* (London, annual); Bacon and Aaron, *New Jamaica* (1890); W. P. Livingstone, *Black Jamaica* (London, 1900), F. Cundall, *Bibliotheca Jamaicensis*. (Kingston, 1895), and *Studies in Jamaica History* (1900); W. J. Gardner, *History of Jamaica* (New York, 1909). For geology, see R. T. Hill, "The Geology and Physical Geography of Jamaica," *Bull. Mus. Com. Zool. Harvard*, xxxiv. (1899).

JAMAICA, formerly a village of Queens county, Long Island, New York, U.S.A., but after the 1st of January 1898 a part of the borough of Queens, New York City. Pop. (1890) 5361. It is served by the Long Island railroad, the lines of which from Brooklyn and Manhattan meet here and then separate to serve the different regions of the island.[1] King's Park (about 10 acres) comprises the estate of John Alsop King (1788-1867), governor of New York in 1857-1859, from whose heirs in 1897 the land was purchased by the village trustees. In South Jamaica there is a race track, at which meetings are held in the spring and autumn. The headquarters of the Queens Borough Department of Public Works and Police are in the Jamaica town-hall, and Jamaica is the seat of a city training school for teachers (until 1905 one of the New York State normal schools). For two guns, a coat, and a quantity of powder and lead, several New Englanders obtained from the Indians a deed for a tract of land here in September 1655. In March 1657 they received permission from Governor Stuyvesant to found a town, which was chartered in 1660 and was named Rustdorp by Stuyvesant, but the English called it Jamaica; it was rechartered in 1666, 1686 and 1788. The village was incorporated in 1814 and reincorporated in 1855. In 1665 it was made the seat of justice of the north riding; in 1683-1788 it was the shire town of Queens county. With Hempstead, Gravesend, Newtown and Flushing, also towns of New England origin and type, Jamaica was early disaffected towards the provincial government of New York. In 1669 these towns complained that they had no representation in a popular assembly, and in 1670 they protested against taxation without representation. The founders of Jamaica were mostly Presbyterians, and they organized one of the first Presbyterian churches in America. At the beginning of the War of Independence Jamaica was under the control of Loyalists; after the defeat of the Americans in the battle of Long Island (27th August 1776) it was occupied by the British; and until the end of the war it was the headquarters of General Oliver Delancey, who had command of all Long Island.

1 In June 1908 the subway lines of the interborough system of New York City were extended to the Flatbush (Brooklyn) station of the Long Island railroad, thus bringing Jamaica into direct connexion with Manhattan borough by way of the East river tunnel, completed in the same year.

JAMB (from Fr. *jambe*, leg), in architecture, the side-post or lining of a doorway or other aperture. The jambs of a window outside the frame are called "reveals." Small shafts to doors and windows with caps and bases are known as "jamb-shafts"; when in the inside arris of the jamb of a window they are sometimes called "scoinsons."

JAMES (a variant of the name Jacob, Heb. יעקב, one who holds by the heel, outwitter, through O. Fr. *James*, another form of *Jacques*, *Jaques*, from Low Lat. *Jacobus*; cf. Ital. *Jacopo* [Jacob], *Giacomo* [James], Prov. *Jacme*, Cat. *Jaume*, Cast. *Jaime*), a masculine proper name popular in Christian countries as having been that of two of Christ's apostles. It has been borne by many sovereigns and other princes, the most important of whom are noticed below, after the heading devoted to the characters in the New Testament, in the following order: (1) kings of England and Scotland, (2) other kings in the alphabetical order of their countries, (3) the "Old Pretender." The article on the Epistle of James in the New Testament follows after the remaining biographical articles in which James is a surname.

JAMES (Gr. Ἰάκωβος, the Heb. *Ya'akob* or Jacob), the name of several persons mentioned in the New Testament.

1. James, the son of Zebedee. He was among the first who were called to be Christ's immediate followers (Mark i. 19 seq.; Matt. iv. 21 seq., and perhaps Luke v. 10), and afterwards obtained an honoured place in the apostolic band, his name twice occupying the second place after Peter's in the lists (Mark iii. 17; Acts i. 13), while on at least three notable occasions he was, along with Peter and his brother John, specially chosen by Jesus to be with him (Mark v. 37; Matt. xvii. i, xxvi. 37). This same prominence may have contributed partly to the title "Boanerges" or "sons of thunder" which, according to Mark iii. 17, Jesus himself gave to the two brothers. But its most natural interpretation is to be found in the impetuous disposition which would have called down fire from heaven on the offending Samaritan villagers (Luke ix. 54), and afterwards found expression, though in a different way, in the ambitious request to occupy the places of honour in Christ's kingdom (Mark x. 35 seq.). James is included among those who after the ascension waited at Jerusalem (Acts i. 13) for the descent of the Holy Ghost on the day of Pentecost. And though on this occasion only his name is mentioned, he must have been a zealous and prominent member of the Christian community, to judge from the fact that when a victim had to be chosen from among the apostles, who should be sacrificed to the animosity of the Jews, it was on James that the blow fell first. The brief notice is given in Acts xii. 1, 2. Eusebius (*Hist. Eccl.* ii. 9) has preserved for us from Clement of Alexandria the additional information that the accuser of the apostle "beholding his confession and moved thereby, confessed that he too was a Christian. So they were both led away to execution together; and on the road the accuser asked James for forgiveness. Gazing on him for a little while, he said, 'Peace be with thee,' and kissed him. And then both were beheaded together."

> The later, and wholly untrustworthy, legends which tell of the apostle's preaching in Spain, and of the translation of his body to Santiago de Compostela, are to be found in the *Acta Sanctorum* (July 25), vi. 1-124; see also Mrs Jameson's *Sacred and Legendary Art*, i. 230-241.

2. James, the son of Alphaeus. He also was one of the apostles, and is mentioned in all the four lists (Matt. x. 3; Mark iii. 18; Luke vi. 15; Acts i. 13) by this name. We know nothing further regarding him, unless we believe him to be the same as James "the little."

3. James, the little. He is described as the son of a Mary (Matt, xxvii. 56; Mark xv. 40), who was in all probability the wife of Clopas (John xix. 25). And on the ground that Clopas is another form of the name Alphaeus, this James has been thought by some to be the same as 2. But the evidence of the Syriac versions, which render Alphaeus by *Chalphai*, while Clopas is simply transliterated *Kleopha*, makes it extremely improbable that the two names are to be identified. And as we have no better ground for finding in Clopas the Cleopas of Luke xxiv. 18, we must be content to admit that James the little is again an almost wholly unknown personality, and has no connexion with any of the other Jameses mentioned in the New Testament.

4. James, the father of Judas. There can be no doubt that in the mention of "Judas of James" in Luke vi. 16 the ellipsis should be supplied by "the son" and not as in the A.V. by "the brother" (cf. Luke iii. 1, vi. 14; Acts xii. 2, where the word ἀδελφός is inserted). This Judas, known as Thaddaeus by Matthew and Mark, afterwards became one of the apostles, and is expressly distinguished by St John from the traitor as "not Iscariot" (John xiv. 22).

5. James, the Lord's brother. In Matt. xiii. 55 and Mark vi. 3 we read of a certain James as, along with Joses and Judas and Simon, a "brother" of the Lord. The exact nature of the relationship there implied has been the subject of much discussion. Jerome's view (*de vir. ill.* 2), that the "brothers" were in reality cousins, "sons of Mary the sister of the Lord's mother," rests on too many unproved assumptions to be entitled to much weight, and may be said to have been finally disposed of by Bishop Lightfoot in his essay on "The Brothers of the Lord" (*Galatians*, pp. 252 sqq., *Dissertations on the Apostolic Age*, pp. 1 sqq.). Even however if we understand the word "brethren" in its natural sense, it may be applied either to the sons of Joseph by a former wife, in which case they would be the step-brothers of Jesus, or to sons born to Joseph and Mary after the birth of Jesus. The former of these views, generally known as the *Epiphanian* view from its most zealous advocate in the 4th century, can claim for its support the preponderating voice of tradition (see the catena of references given by Lightfoot, *loc. cit.*, who himself inclines to this view). On the other hand the *Helvidian* theory as propounded by Helvidius, and apparently accepted by Tertullian (cf. *adv. Marc.* iv. 29), which makes James a brother of the Lord, as truly as Mary was his mother, undoubtedly seems more in keeping with the direct statements of the Gospels, and also with the after history of the brothers in the Church (see W. Patrick, *James the Brother of the Lord*, 1906, p. 5). In any case, whatever the exact nature of James's antecedents, there can be no question as to the important place which he occupied in the early Church. Converted to a full belief in the living Lord, perhaps through the special revelation that was granted to him (1 Cor. xv. 7), he became the recognized head of the Church at Jerusalem (Acts xii. 17, xv. 13, xxi. 18), and is called by St Paul (Gal. ii. 9), along with Peter and John, a "pillar" of the Christian community. He was traditionally the author of the epistle in the New Testament which bears his name (see James, Epistle of). From the New Testament we learn no more of the history of James the Lord's brother, but Eusebius (*Hist. Eccl.* ii. 23) has preserved for us from Hegesippus the earliest ecclesiastical traditions concerning him. By that authority he is described as having been a Nazarite, and on account of his eminent righteousness called "Just" and "Oblias." So great was his influence with the people that he was appealed to by the scribes and Pharisees for a true and (as they hoped) unfavourable judgment about the Messiahship of Christ. Placed, to give the greater publicity to his words, on a pinnacle of the temple, he, when solemnly appealed to, made confession of his faith, and was at once thrown down and murdered. This happened immediately before the siege. Josephus (*Antiq.* xx. 9, 1) tells that it was by order of Ananus the high priest, in the interval between the death of Festus and the arrival of his successor Albinus, that James was put to death; and his narrative gives the idea of some sort of judicial examination, for he says that along with some others James was brought before an assembly of judges, by whom they were condemned and delivered to be stoned. Josephus is also cited by Eusebius (*Hist. Eccl.* ii. 23) to the effect that the miseries of the siege were due to divine vengeance for the murder of James. Later writers describe James as an ἐπίσκοπος (Clem. Al. *apud* Eus. *Hist. Ecc.* ii. 1) and even as an ἐπίσκοπος ἐπισκόπων (Clem. *Hom., ad init.*). According to Eusebius (*Hist. Eccl.* vii. 19) his episcopal chair was still shown at Jerusalem at the time when Eusebius wrote.

Bibliography.—In addition to the relevant literature cited above, see the articles under the heading "James" in Hastings's *Dictionary of the Bible* (Mayor) and *Dictionary of Christ and the Gospels* (Fulford), and in the *Encycl. Biblica* (O. Cone); also the introductions to the Commentaries on the Epistle of James by Mayor and Knowling. Zahn has an elaborate essay on *Brüder und Vettern Jesu* ("The Brothers and Cousins of Jesus") in the *Forschungen zur Geschichte des neutestamentlichen Kanons*, vi. 2 (Leipzig, 1900).

(G. Mi.)

JAMES I. (1566-1625), king of Great Britain and Ireland, formerly king of Scotland as James VI., was the only child of Mary Queen of Scots, and her second husband, Henry Stewart Lord Darnley. He was born in the castle of Edinburgh on the 19th of June 1566, and was proclaimed king of Scotland on the 24th of July 1567, upon the forced abdication of his mother. Until 1578 he was treated as being incapable of taking any real part in public affairs, and was kept in the castle of Stirling for safety's sake amid the confused fighting of the early years of his minority.

The young king was a very weakly boy. It is said that he could not stand without support until he was seven, and although he lived until he was nearly sixty, he was never a strong man. In after life he was a constant and even a reckless rider, but the weakness in his legs was never quite cured. During a great part of his life he found it necessary to be tied to the saddle. When on one occasion in 1621 his horse threw him into the New River near his palace of Theobalds in the neighbourhood of London, he had a very narrow escape of being drowned; yet he continued to ride as before. At all times he preferred to lean on the shoulder of an attendant when walking. This feebleness of body, which had no doubt a large share in causing certain corresponding deficiencies of character, was attributed to the agitations and the violent efforts forced on his mother by the murder of her secretary Rizzio when she was in the sixth month of her pregnancy. The fact that James was a bold rider, in spite of this serious disqualification for athletic exercise, should be borne in mind when he is accused of having been a coward.

The circumstances surrounding him in boyhood were not favourable to the development of his character. His immediate guardian or foster-father, the earl of Mar, was indeed an honourable man, and the countess, who had charge of the nursing of the king, discharged her duty so as to win his lasting confidence. James afterwards entrusted her with the care of his eldest son, Henry. When the earl died in 1572 his place was well filled by his brother, Sir Alexander Erskine. The king's education was placed under the care of George Buchanan, assisted by Peter Young, and two other tutors. Buchanan, who did not spare the rod, and the other teachers, who had more reverence for the royal person, gave the boy a sound training in languages. The English envoy, Sir Henry Killigrew, who saw him in 1574, testified to his proficiency in translating from and into Latin and French. As it was very desirable that he should be trained a Protestant king, he was well instructed in theology. The exceptionally scholastic quality of his education helped to give him a taste for learning, but also tended to make him a pedant.

James was only twelve when the earl of Morton was driven from the regency, and for some time after he can have been no more than a puppet in the hands of intriguers and party leaders. When, for instance, in 1582 he was seized by the faction of nobles who carried out the so-called raid of Ruthven, which was in fact a kidnapping enterprise carried out in the interest of the Protestant party, he cried like a child. One of the conspirators, the master of Glamis, Sir Thomas Lyon, told him that it was better "bairns should greet [children should cry] than bearded men." It was not indeed till 1583, when he broke away from his captors, that James began to govern in reality.

For the history of his reign reference may be made to the articles on the histories of England and Scotland. James's work as a ruler can be divided, without violating any sound rule of criticism, into black and white—into the part which was a failure and a preparation for future disaster, and the part which was solid achievement, honourable to himself and profitable to his people. His native kingdom of Scotland had the benefit of the second. Between 1583 and 1603 he reduced the anarchical baronage of Scotland to obedience, and replaced the subdivision of sovereignty and consequent confusion, which had been the very essence of feudalism, by a strong centralized royal authority. In fact he did in Scotland the work which had been done by the Tudors in England, by Louis XI. in France, and by Ferdinand and Isabella in Spain. It was the work of all the strong rulers of the Renaissance. But James not only brought his disobedient and intriguing barons to order—that was a comparatively easy achievement and might well have been performed by more than one of his predecessors, had their lives been prolonged—he also quelled the attempts of the Protestants to found what Hallam has well defined as a "Presbyterian Hildebrandism." He enforced the superiority of the state over the church. Both before his accession to the throne of England (1603) and afterwards he took an intelligent interest in the prosperity of his Scottish kingdom, and did much for the pacification of the Hebrides, for the enforcement of order on the Borders, and for the development of industry. That he did so much although the crown was poor (largely it must be confessed because he made profuse gifts of the secularized church lands), and although the armed force at his disposal was so small that to the very end he was exposed to the attacks of would-be kidnappers (as in the case of the Gowrie conspiracy of 1600), is proof positive that he was neither the mere poltroon nor the mere learned fool he has often been called.

James's methods of achieving ends in themselves honourable and profitable were indeed of a kind which has made posterity unjust to his real merits. The circumstances in which he passed his youth developed in him a natural tendency to craft. He boasted indeed of his "king-craft" and probably believed that he owed it to his studies. But it was in reality the resource of the weak, the art of playing off one possible enemy against another by trickery, and so deceiving all. The marquis de Fontenay, the French ambassador, who saw him in the early part of his reign, speaks of him as cowed by the violence about him. It is certain that James was most unscrupulous in making promises which he never meant to keep, and the terror in which he passed his youth sufficiently explains his preference for guile. He would make promises to everybody, as when he wrote to the pope in 1584 more than hinting that he would be a good Roman Catholic if helped in his need. His very natural desire to escape from the poverty and insecurity of Scotland to the opulent English throne not only kept him busy in intrigues to placate the Roman Catholics or anybody else who could help or hinder him, but led him to behave basely in regard to the execution of his mother in 1587. He blustered to give himself an air of courage, but took good care to do nothing to offend Elizabeth. When the time came for fulfilling his promises and half-promises, he was not able, even if he had been willing, to keep his word to everybody. The methods which had helped him to success in Scotland did him harm in England, where his reign prepared the way for the great civil war. In his southern kingdom his failure was in fact complete. Although England accepted him as the alternative to civil war, and although he was received and surrounded with fulsome flattery, he did not win the respect of his English subjects. His undignified personal appearance was against him, and so were his garrulity, his Scottish accent, his slovenliness and his toleration of disorders in his court, but, above all, his favour for handsome male favourites, whom he loaded with gifts and caressed with demonstrations of affection which laid him open to vile suspicions. In ecclesiastical matters he offended many, who contrasted his severity and rudeness to the Puritan divines at the Hampton Court conference (1604) with his politeness to the Roman Catholics, whom he, however, worried by fits and starts. In a country where the authority of the state had been firmly established and the problem was how to keep it from degenerating into the mere instrument of a king's passions, his insistence on the doctrine of divine right aroused distrust and hostility. In itself, and in its origin, the doctrine was nothing more than a necessary assertion of the independence of the state in face of the "Hildebrandism" of Rome and Geneva alike. But when Englishmen were told that the king alone had indefeasible rights, and that all the

privileges of subjects were revocable gifts, they were roused to hostility. His weaknesses cast suspicion on his best-meant schemes. His favour for his countrymen helped to defeat his wise wish to bring about a full union between England and Scotland. His profusion, which had been bad in the poverty of Scotland and was boundless amid the wealth of England, kept him necessitous, and drove him to shifts. Posterity can give him credit for his desire to forward religious peace in Europe, but his Protestant subjects were simply frightened when he sought a matrimonial alliance with Spain. Sagacious men among his contemporaries could not see the consistency of a king who married his daughter Elizabeth to the elector palatine, a leader of the German Protestants, and also sought to marry his son to an infanta of Spain. The king's subservience to Spain was indeed almost besotted. He could not see her real weakness, and he allowed himself to be befooled by the ministers of Philip III. and Philip IV. The end of his scheming was that he was dragged into a needless war with Spain by his son Charles and his favourite George Villiers, duke of Buckingham, just before his death on the 5th of March 1625 at his favourite residence, Theobalds.

James married in 1589 Anne, second daughter of Frederick II., king of Denmark. His voyage to meet his bride, whose ship had been driven into a Norwegian port by bad weather, is the only episode of a romantic character in the life of this very prosaic member of a poetic family. By this wife James had three children who survived infancy: Henry Frederick, prince of Wales, who died in 1612; Charles, the future king; and Elizabeth, wife of the elector palatine, Frederick V.

Not the least of James's many ambitions was the desire to excel as an author. He left a body of writings which, though of mediocre quality as literature, entitle him to a unique place among English kings since Alfred for width of intellectual interest and literary faculty. His efforts were inspired by his preceptor George Buchanan, whose memory he cherished in later years. His first work was in verse, *Essayes of a Prentise in the Divine Art of Poesie* (Edin. Vautrollier, 1584), containing fifteen sonnets, "Ane Metaphoricall invention of a tragedie called Phoenix," a short poem "Of Time," translations from Du Bartas, Lucan and the Book of Psalms ("out of Tremellius"), and a prose tract entitled "Ane short treatise, containing some Reulis and Cautelis to be observit and eschewit in Scottis Poesie." The volume is introduced by commendatory sonnets, including one by Alexander Montgomerie. The chief interest of the book lies in the "Treatise" and the prefatory sonnets "To the Reader" and "Sonnet decifring the perfyte poete." There is little originality in this youthful production. It has been surmised that it was compiled from the exercises written when the author was Buchanan's pupil at Stirling, and that it was directly suggested by his preceptor's *De Prosodia* and his annotations on Vives. On the other hand, it shows intimate acquaintance with the critical reflections of Ronsard and Du Bellay, and of Gascoigne in his *Notes of Instruction* (1575). In 1591 James published *Poeticall Exercises at Vacant Houres*, including a translation of the *Furies* of Du Bartas, his own *Lepanto*, and Du Bartas's version of it, *La Lepanthe*. His *Daemonologie*, a prose treatise denouncing witchcraft and exhorting the civil power to the strongest measures of suppression, appeared in 1599. In the same year he printed the first edition (seven copies) of his *Basilikon Doron*, strongly Protestant in tone. A French edition, specially translated for presentation to the pope, has a disingenuous preface explaining that certain phrases (*e.g.* "papistical doctrine") are omitted, because of the difficulty of rendering them in a foreign tongue. The original edition was, however, translated by order of the suspicious pope, and was immediately placed on the Index. Shortly after going to England James produced his famous *Counterblaste to Tobacco* (London, 1604), in which he forsakes his Scots tongue for Southern English. The volume was published anonymously. James's prose works (including his speeches) were collected and edited (folio, 1616) by James Montagu, bishop of Winchester, and were translated into Latin by the same hand in a companion folio, in 1619 (also Frankfort, 1689). A tract, entitled "The True Law of Free Monarchies," appeared in 1603; "An Apology for the Oath of Allegiance" in 1607; and a "*Déclaration du Roy Jacques I. ... pour le droit des Rois*" in 1615. In 1588 and 1589 James issued two small volumes of *Meditations* on some verses of (*a*) Revelations and (*b*) 1 Chronicles. Other two "meditations" were printed posthumously.

See T. F. Henderson, *James I. and VI.* (London, 1904); P. Hume Brown, *History of Scotland*, vol. ii. (Edinburgh and Cambridge, 1902); and Andrew Lang, *History of Scotland*, vol. ii. (Edinburgh, 1902) and *James VI. and the Gowrie Mystery* (London, 1902); *The Register of the Privy Council of Scotland* (Edinburgh, 1877, &c.), vols. ii. to xiii.; S. R. Gardiner, *History of England 1603-1642* (London, 1883-1884). A comprehensive bibliography will be found in the *Cambridge Modern Hist.* iii. 847 (Cambridge, 1904).

For James's literary work, see Edward Arber's reprint of the *Essayes and Counterblaste* ("English Reprints," 1869, &c.); R. S. Rait's *Lusus Regius* (1900); G. Gregory Smith's *Elizabethan Critical Essays* (1904), vol. i., where the *Treatise* is edited for the first time; A. O. Meyer's "Clemens VIII. und Jacob I. von England" in *Quellen und Forschungen* (Preuss. Hist. Inst.), VII. ii., for an account of the issues of the *Basilikon Doron*; P. Hume Brown's *George Buchanan* (1890), pp. 250-261, for a sketch of James's association with Buchanan.

JAMES II. (1633-1701), king of Great Britain and Ireland, second surviving son of Charles I. and Henrietta Maria, was born at St James's on the 15th of October 1633, and created duke of York in January 1643. During the Civil War James was taken prisoner by Fairfax (1646), but contrived to escape to Holland in 1648. Subsequently he served in the French army under Turenne, and in the Spanish under Condé, and was applauded by both commanders for his brilliant personal courage. Returning to England with Charles II. in 1660 he was appointed lord high admiral and warden of the Cinque Ports. Pepys, who was secretary to the navy, has recorded the patient industry and unflinching probity of his naval administration. His victory over the Dutch in 1665, and his drawn battle with De Ruyter in 1672, show that he was a good naval commander as well as an excellent administrator. These achievements won him a reputation for high courage, which, until the close of 1688, was amply deserved. His private record was not as good as his public. In December 1660 he admitted to having contracted, under discreditable circumstances, a secret marriage with Anne Hyde (1637-1671), daughter of Lord Clarendon, in the previous September. Both before and after the marriage he seems to have been a libertine as unblushing though not so fastidious as Charles himself. In 1672 he made a public avowal of his conversion to Roman Catholicism. Charles II. had opposed this project, but in 1673 allowed him to marry the Catholic Mary of Modena as his second wife. Both houses of parliament, who viewed this union with abhorrence, now passed the Test Act, forbidding Catholics to hold office. In consequence of this James was forced to resign his posts. It was in vain that he married his daughter Mary to the Protestant prince of Orange in 1677. Anti-Catholic feeling ran so high that, after the discovery of the Popish Plot, he found it wiser to retire to Brussels (1679), while Shaftesbury and the Whigs planned to exclude him from the succession. He was lord high commissioner of Scotland (1680-1682), where he occupied himself in a severe persecution of the Covenanters. In 1684 Charles, having triumphed over the Exclusionists, restored James to the office of high admiral by use of his dispensing power.

James ascended the throne on the 16th of February 1685. The nation showed its loyalty by its firm adherence to him during the rebellions of Argyll in Scotland and Monmouth in England (1685). The savage reprisals on their suppression, in especial the "Bloody Assizes" of Jeffreys, produced a revulsion of public feeling. James had promised to defend the

existing Church and government, but the people now became suspicious. James was not a mere tyrant and bigot, as the popular imagination speedily assumed him to be. He was rather a mediocre but not altogether obtuse man, who mistook tributary streams for the main currents of national thought. Thus he greatly underrated the strength of the Establishment, and preposterously exaggerated that of Dissent and Catholicism. He perceived that opinion was seriously divided in the Established Church, and thought that a vigorous policy would soon prove effective. Hence he publicly celebrated Mass, prohibited preaching against Catholicism, and showed exceptional favour to renegades from the Establishment. By undue pressure he secured a decision of the judges, in the test case of *Godden* v. *Hale* (1687), by which he was allowed to dispense Catholics from the Test Act. Catholics were now admitted to the chief offices in the army, and to some important posts in the state, in virtue of the dispensing power of James. The judges had been intimidated or corrupted, and the royal promise to protect the Establishment violated. The army had been increased to 20,000 men and encamped at Hounslow Heath to overawe the capital. Public alarm was speedily manifested and suspicion to a high degree awakened. In 1687 James made a bid for the support of the Dissenters by advocating a system of joint toleration for Catholics and Dissenters. In April 1687 he published a Declaration of Indulgence—exempting Catholics and Dissenters from penal statutes. He followed up this measure by dissolving parliament and attacking the universities. By an unscrupulous use of the dispensing power he introduced Dissenters and Catholics into all departments of state and into the municipal corporations, which were remodelled in their interests. Then in April 1688 he took the suicidal step of issuing a proclamation to force the clergy and bishops to read the Declaration in their pulpits, and thus personally advocate a measure they detested. Seven bishops refused, were indicted by James for libel, but acquitted amid the indescribable enthusiasm of the populace. Protestant nobles of England, enraged at the tolerant policy of James, had been in negotiation with William of Orange since 1687. The trial of the seven bishops, and the birth of a son to James, now induced them to send William a definite invitation (June 30, 1688). James remained in a fool's paradise till the last, and only awakened to his danger when William landed at Torbay (November 5, 1688) and swept all before him. James pretended to treat, and in the midst of the negotiations fled to France. He was intercepted at Faversham and brought back, but the politic prince of Orange allowed him to escape a second time (December 23, 1688).

At the end of 1688 James seemed to have lost his old courage. After his defeat at the Boyne (July 1, 1690) he speedily departed from Ireland, where he had so conducted himself that his English followers had been ashamed of his incapacity, while French officers had derided him. His proclamations and policy towards England during these years show unmistakable traces of the same incompetence. On the 17th of May 1692 he saw the French fleet destroyed before his very eyes off Cape La Hogue. He was aware of, though not an open advocate of the "Assassination Plot," which was directed against William. By its revelation and failure (February 10, 1696) the third and last serious attempt of James for his restoration failed. He refused in the same year to accept the French influence in favour of his candidature to the Polish throne, on the ground that it would exclude him from the English. Henceforward he neglected politics, and Louis of France ceased to consider him as a political factor. A mysterious conversion had been effected in him by an austere Cistercian abbot. The world saw with astonishment this vicious, rough, coarse-fibred man of the world transformed into an austere penitent, who worked miracles of healing. Surrounded by this odour of sanctity, which greatly edified the faithful, James lived at St Germain until his death on the 17th of September 1701.

The political ineptitude of James is clear; he often showed firmness when conciliation was needful, and weakness when resolution alone could have saved the day. Moreover, though he mismanaged almost every political problem with which he personally dealt, he was singularly tactless and impatient of advice. But in general political morality he was not below his age, and in his advocacy of toleration decidedly above it. He was more honest and sincere than Charles II., more genuinely patriotic in his foreign policy, and more consistent in his religious attitude. That his brother retained the throne while James lost it is an ironical demonstration that a more pitiless fate awaits the ruler whose faults are of the intellect, than one whose faults are of the heart.

By Anne Hyde James had eight children, of whom two only, Mary and Anne, both queens of England, survived their father. By Mary of Modena he had seven children, among them being James Francis Edward (the Old Pretender) and Louisa Maria Theresa, who died at St Germain in 1712. By one mistress, Arabella Churchill (1648-1730), he had two sons, James, duke of Berwick, and Henry (1673-1702), titular duke of Albemarle and grand prior of France, and a daughter, Henrietta (1667-1730), who married Sir Henry Waldegrave, afterwards Baron Waldegrave; and by another, Catherine Sedley, countess of Dorchester (1657-1717), a daughter, Catherine (d. 1743), who married James Annesley, 5th earl of Anglesey, and afterwards John Sheffield, duke of Buckingham and Normanby.

BIBLIOGRAPHY.—*Original Authorities*: J. S. Clarke, *James II. Life* (London, 1816); James Macpherson, *Original Papers* (2 vols., London, 1775); Gilbert Burnet, *Supplement to History*, ed. H. C. Foxcroft (Oxford, 1902); Earl of Clarendon and Earl of Rochester, *Correspondence*, vol. ii. (London, 1828); John Evelyn, *Diary and Correspondence and Life*, edited by Bray and Wheatley (London, 1906); Sir John Reresby, *Memoirs*, ed. A. Ivatt (1904); *Somers Tracts*, vols, ix.-xi. (London, 1823). *Modern Works*: Lord Acton, *Lectures on Modern History*, pp. 195-276 (London, 1906); Moritz Brosch, *Geschichte von England*, Bd. viii. (Gotha, 1903); Onno Klopp, *Der Fall des Hauses Stuart*, Bde. i.-ix. (Vienna, 1875-1878); L. von Ranke, *History of England*, vols, iv.-vi. (Oxford, 1875); and Allan Fea, *James II. and his Wives* (1908).

JAMES I. (1394-1437), king of Scotland and poet, the son of King Robert III., was born at Dunfermline in July 1394. After the death of his mother, Annabella Drummond of Stobhall, in 1402, he was placed under the care of Henry Wardlaw (d. 1440), who became bishop of St Andrews in 1403, but soon his father resolved to send him to France. Robert doubtless decided upon this course owing to the fact that in 1402 his elder son, David, duke of Rothesay, had met his death in a mysterious fashion, being probably murdered by his uncle, Robert, duke of Albany, who, as the king was an invalid, was virtually the ruler of Scotland. On the way to France, however, James fell into the hands of some English sailors and was sent to Henry IV., who refused to admit him to ransom. The chronicler Thomas Walsingham, says that James's imprisonment began in 1406, while the future king himself places it in 1404; February 1406 is probably the correct date. On the death of Robert III. in April 1406 James became nominally king of Scotland, but he remained a captive in England, the government being conducted by his uncle, Robert of Albany, who showed no anxiety to procure his nephew's release. Dying in 1420, Albany was succeeded as regent by his son, Murdoch. At first James was confined in the Tower of London, but in June 1407 he was removed to the castle at Nottingham, whence about a month later he was taken to Evesham. His education was continued by capable tutors, and he not only attained excellence in all manly sports, but became perhaps more cultured than any other prince of his age. In person he was short and stout, but well-proportioned and very strong. His agility was not less remarkable than his strength; he excelled in all athletic feats which demanded suppleness of limb and quickness of eye. As regards his intellectual attainments he is reported to have

been acquainted with philosophy, and it is evident from his subsequent career that he had studied jurisprudence; moreover, besides being proficient in vocal and instrumental music, he cultivated the art of poetry with much success. When Henry V. became king in March 1413, James was again imprisoned in the Tower of London, but soon afterwards he was taken to Windsor and was treated with great consideration by the English king. In 1420, with the intention of detaching the Scottish auxiliaries from the French standard, he was sent to take part in Henry's campaign in France; this move failed in its immediate object and he returned to England after Henry's death in 1422. About this time negotiations for the release of James were begun in earnest, and in September 1423 a treaty was signed at York, the Scottish nation undertaking to pay a ransom of 60,000 marks "for his maintenance in England." By the terms of the treaty James was to wed a noble English lady, and on the 12th of February 1424 he was married at Southwark to Jane, daughter of John Beaufort, earl of Somerset, a lady to whom he was faithful through life. Ten thousand marks of his ransom were remitted as Jane's dowry, and in April 1424 James and his bride entered Scotland.

With the reign of James I., whose coronation took place at Scone on the 21st of May 1424, constitutional sovereignty may be said to begin in Scotland. By the introduction of a system of statute law, modelled to some extent on that of England, and by the additional importance assigned to parliament, the leaven was prepared which was to work towards the destruction of the indefinite authority of the king, and of the unbridled licence of the nobles. During the parliament held at Perth in March 1425 James arrested Murdoch, duke of Albany, and his son, Alexander; together with Albany's eldest son, Walter, and Duncan, earl of Lennox, who had been seized previously; they were sentenced to death, and the four were executed at Stirling. In a parliament held at Inverness in 1427 the king arrested many turbulent northern chiefs, and his whole policy was directed towards crushing the power of the nobles. In this he was very successful. Expeditions reduced the Highlands to order; earldom after earldom was forfeited; but this vigour aroused the desire for revenge, and at length cost James his life. Having been warned that he would never again cross the Forth, the king went to reside in Perth just before Christmas 1436. Among those whom he had angered was Sir Robert Graham (d. 1437), who had been banished by his orders. Instigated by the king's uncle, Walter Stewart, earl of Atholl (d. 1437), and aided by the royal chamberlain, Sir Robert Stewart, and by a band of Highlanders, Graham burst into the presence of James on the night of the 20th of February 1437 and stabbed the king to death. Graham and Atholl were afterwards tortured and executed. James had two sons: Alexander, who died young, and James II., who succeeded to the throne; and six daughters, among them being Margaret, the queen of Louis XI. of France. His widow, Jane, married Sir James Stewart, the "black knight of Lorne," and died on the 15th of July 1445.

During the latter part of James's reign difficulties arose between Scotland and England and also between Scotland and the papacy. Part of the king's ransom was still owing to England; other causes of discord between the two nations existed, and in 1436 these culminated in a short war. In ecclesiastical matters James showed himself merciless towards heretics, but his desire to reform the Scottish Church and to make it less dependent on Rome brought him into collision with Popes Martin V. and Eugenius IV.

James was the author of two poems, the *Kingis Quair* and *Good Counsel* (a short piece of three stanzas). The *Song of Absence*, *Peblis to the Play* and *Christis Kirk on the Greene* have been ascribed to him without evidence. *The Kingis Quair* (preserved in the Selden MS. B. 24 in the Bodleian) is an allegorical poem of the *cours d'amour* type, written in seven-lined Chaucerian stanzas and extending to 1379 lines. It was composed during James's captivity in England and celebrates his courtship of Lady Jane Beaufort. Though in many respects a Chaucerian *pastiche*, it not rarely equals its model in verbal and metrical felicity. Its language is an artificial blend of northern and southern (Chaucerian) forms, of the type shown in *Lancelot of the Laik* and the *Quair of Jelusy*.

BIBLIOGRAPHY.—The contemporary authorities for the reign of James I. are Andrew of Wyntoun, *The Orygynale Cronykil of Scotland*, edited by D. Laing (Edinburgh, 1872-1879); and Walter Bower's continuation of John of Fordun's *Scotichronicon*, edited by T. Hearne (Oxford, 1722). See also J. Pinkerton, *History of Scotland* (1797); A. Lang, *History of Scotland*, vol. i. (1900); and G. Burnett, *Introduction to the Exchequer Rolls of Scotland* (Edinburgh, 1878-1901). *The Kingis Quair* was first printed in the *Poetical Remains of James the First*, edited by William Tytler (1783). Later editions are Morison's reprint (Perth, 1786); J. Sibbald's, in his *Chronicle of Scottish Poetry* (1802, vol. i.); Thomson's in 1815 and 1824; G. Chalmers's, in his *Poetic Remains of some of the Scottish Kings* (1824); Rogers's *Poetical Remains of King James the First* (1873); Skeat's edition published by the Scottish Text Society (1884). An attempt has been made to dispute James's authorship of the poem, but the arguments elaborated by J. T. T. Brown (*The Authorship of the Kingis Quair*, Glasgow, 1896) have been convincingly answered by Jusserand in his *Jacques I^er d'Écosse fut-il poète? Étude sur l'authenticité du cahier du roi* (Paris, 1897, reprinted from the *Revue historique*, vol. lxiv.). See also the full correspondence in the *Athenaeum* (July-Aug. 1896 and Dec. 1899); W. A. Neilson, *Origins and Sources of the Court of Love* (Boston, 1899) pp. 152 &c., 235 &c.; and Gregory Smith, *Transition Period* (1900), pp. 40, 41.

JAMES II. (1430-1460), king of Scotland, the only surviving son of James I. and his wife, Jane, daughter of John Beaufort, earl of Somerset, was born on the 16th of October 1430. Crowned king at Holyrood in March 1437, shortly after the murder of his father, he was at first under the guardianship of his mother, while Archibald, 5th earl of Douglas, was regent of the kingdom, and considerable power was possessed by Sir Alexander Livingstone and Sir William Crichton (d. 1454). When about 1439 Queen Jane was married to Sir James Stewart, the knight of Lorne, Livingstone obtained the custody of the young king, whose minority was marked by fierce hostility between the Douglases and the Crichtons, with Livingstone first on one side and then on the other. About 1443 the royal cause was espoused by William, 8th earl of Douglas, who attacked Crichton in the king's name, and civil war lasted until about 1446. In July 1449 James was married to Mary (d. 1463), daughter of Arnold, duke of Gelderland, and undertook the government himself; and almost immediately Livingstone was arrested, but Douglas retained the royal favour for a few months more. In 1452, however, this powerful earl was invited to Stirling by the king, and, charged with treachery, was stabbed by James and then killed by the attendants. Civil war broke out at once between James and the Douglases, whose lands were ravaged; but after the Scots parliament had exonerated the king, James, the new earl of Douglas, made his submission. Early in 1455 this struggle was renewed. Marching against the rebels James gained several victories, after which Douglas was attainted and his lands forfeited. Fortified by this success and assured of the support of the parliament and of the great nobles, James, acting as an absolute king, could view without alarm the war which had broken out with England. After two expeditions across the borders, a truce was made in July 1457, and the king employed the period of peace in strengthening his authority in the Highlands. During the Wars of the Roses he showed his sympathy with the Lancastrian party after the defeat of Henry VI. at Northampton by attacking the English possessions to the south of Scotland. It was while conducting the siege of Roxburgh Castle that James was killed, through the bursting of a cannon, on the 3rd of August 1460. He left three sons, his successor, James III., Alexander Stewart, duke of Albany, and John Stewart, earl of Mar (d. 1479); and two daughters. James, who is sometimes called "Fiery Face," was a vigorous and popular prince, and,

although not a scholar like his father, showed interest in education. His reign is a period of some importance in the legislative history of Scotland, as measures were passed with regard to the tenure of land, the reformation of the coinage, and the protection of the poor, while the organization for the administration of justice was greatly improved.

JAMES III. (1451-1488), king of Scotland, eldest son of James II., was born on the 10th of July 1451. Becoming king in 1460 he was crowned at Kelso. After the death of his mother in 1463, and of her principal supporter, James Kennedy, bishop of St Andrews, two years later, the person of the young king, and with it the chief authority in the kingdom, were seized by Sir Alexander Boyd and his brother Lord Boyd, while the latter's son, Thomas, was created earl of Arran and married to the king's sister, Mary. In July 1469 James himself was married to Margaret (d. 1486), daughter of Christian I., king of Denmark and Norway, but before the wedding the Boyds had lost their power. Having undertaken the government in person, the king received the submission of the powerful earl of Ross, and strengthened his authority in other ways. But his preference for a sedentary and not for an active life and his increasing attachment to favourites of humble birth diminished his popularity, and he had some differences with his parliament. About 1479, probably with reason both suspicious and jealous, James arrested his brothers, Alexander, duke of Albany, and John, earl of Mar; Mar met his death in a mysterious fashion at Craigmillar, but Albany escaped to France and then visited England, where in 1482 Edward IV. recognized him as king of Scotland by the gift of the king of England. War broke out with England, but James, made a prisoner by his nobles, was unable to prevent Albany and his ally, Richard, duke of Gloucester (afterwards Richard III.), from taking Berwick and marching to Edinburgh. Peace with Albany followed, but soon afterwards the duke was again in communication with Edward, and was condemned by the parliament after the death of the English king in April 1483. Albany's death in France in 1485 did not end the king's troubles. His policy of living at peace with England and of arranging marriages between the members of the royal families of the two countries did not commend itself to the turbulent section of his nobles; his artistic tastes and lavish expenditure added to the discontent, and a rebellion broke out. Fleeing into the north of his kingdom James collected an army and came to terms with his foes; but the rebels, having seized the person of the king's eldest son, afterwards James IV., renewed the struggle. The rival armies met at the Sauchieburn near Bannockburn, and James soon fled. Reaching Beaton's Mill he revealed his identity, and, according to the popular story, was killed on the 11th of June 1488 by a soldier in the guise of a priest who had been called in to shrive him. He left three sons—his successor, James IV.; James Stewart, duke of Ross, afterwards archbishop of St Andrews, and John Stewart, earl of Mar. James was a cultured prince with a taste for music and architecture, but was a weak and incapable king. His character is thus described by a chronicler: "He was ane man that loved solitude, and desired nevir to hear of warre, bot delighted more in musick and policie and building nor he did in the government of the realme."

JAMES IV. (1473-1513), king of Scotland, eldest son of James III., was born on the 17th of March 1473. He was nominally the leader of the rebels who defeated the troops of James III. at the Sauchieburn in June 1488, and became king when his father was killed. As he adopted an entirely different policy with the nobles from that of his father, and, moreover, showed great affability towards the lower class of his subjects, among whom he delighted to wander incognito, few if any of the kings of Scotland have won such general popularity, or passed a reign so untroubled by intestine strife. Crowned at Scone a few days after his accession, James began at once to take an active part in the business of government. A slight insurrection was easily suppressed, and a plot formed by some nobles to hand him over to the English king, Henry VII., came to nothing. In spite of this proceeding Henry wished to live at peace with his northern neighbour, and soon contemplated marrying his daughter to James, but the Scottish king was not equally pacific. When, in 1495, Perkin Warbeck, pretending to be the duke of York, Edward IV.'s younger son, came to Scotland, James bestowed upon him both an income and a bride, and prepared to invade England in his interests. For various reasons the war was confined to a few border forays. After Warbeck left Scotland in 1497, the Spanish ambassador negotiated a peace, and in 1502 a marriage was definitely arranged between James and Henry's daughter Margaret (1489-1541). The wedding took place at Holyrood in August 1503, and it was this union which led to the accession of the Stewart dynasty to the English throne.

About the same time James crushed a rebellion in the western isles, into which he had previously led expeditions, and parliament took measures to strengthen the royal authority therein. At this date too, or a little earlier, the king of Scotland began to treat as an equal with the powerful princes of Europe, Maximilian I., Louis XII. and others; sending assistance to his uncle Hans, king of Denmark, and receiving special marks of favour from Pope Julius II., anxious to obtain his support. But his position was weakened when Henry VIII. followed Henry VII. on the English throne in 1509. Causes of quarrel already existed, and other causes, both public and private, soon arose between the two kings; sea-fights took place between their ships, while war was brought nearer by the treaty of alliance which James concluded with Louis XII. in 1512. Henry made a vain effort to prevent, or to postpone, the outbreak of hostilities; but urged on by his French ally and his queen, James declared for war, in spite of the counsels of some of his advisers, and (it is said) of the warning of an apparition. Gathering a large and well-armed force, he took Norham and other castles in August 1513, spending some time at Ford Castle, where, according to report, he was engaged in an amorous intrigue with the wife of its owner. Then he moved out to fight the advancing English army under Thomas Howard, earl of Surrey. The battle, which took place at Flodden, or more correctly, at the foot of Brankston Hill, on Friday the 9th of September 1513, is among the most famous and disastrous, if not among the most momentous, in the history of Scotland. Having led his troops from their position of vantage, the king himself was killed while fighting on foot, together with nearly all his nobles; there was no foundation for the rumour that he had escaped from the carnage. He left one legitimate child, his successor James V., but as his gallantries were numerous he had many illegitimate children, among them (by Marion Boyd) Alexander Stewart, archbishop of St Andrews and chancellor of Scotland, who was killed at Flodden, and (by Janet Kennedy) James Stewart, earl of Moray (d. 1544). One of his other mistresses was Margaret Drummond (d. 1501).

James appears to have been a brave and generous man, and a wise and energetic king. According to one account, he was possessed of considerable learning; during his reign the Scottish court attained some degree of refinement, and Scotland counted in European politics as she had never done before. Literature flourished under the royal patronage,

education was encouraged, and the material condition of the country improved enormously. Prominent both as an administrator and as a lawgiver, the king by his vigorous rule did much to destroy the tendencies to independence which existed in the Highlands and Islands; but, on the other hand, his rash conduct at Flodden brought much misery upon his kingdom. He was specially interested in his navy. The tournaments which took place under his auspices were worthy of the best days of chivalry in France and England. James shared to the full in the superstitions of the age which was quickly passing away. He is said to have worn an iron belt as penance for his share in his father's death; and by his frequent visits to shrines, and his benefactions to religious foundations, he won a reputation for piety.

JAMES V. (1512-1542), king of Scotland, son of James IV., was born at Linlithgow on the 10th of April 1512, and became king when his father was killed at Flodden in 1513. The regency was at first vested in his mother, but after Queen Margaret's second marriage, with Archibald Douglas, 6th earl of Angus, in August 1514, it was transferred by the estates to John Stewart, duke of Albany. Henceforward the minority of James was disturbed by constant quarrels between a faction, generally favourable to England, under Angus, and the partisans of France under Albany; while the queen-mother and the nobles struggled to gain and to regain possession of the king's person. The English had not followed up their victory at Flodden, although there were as usual forays on the borders, but Henry VIII. was watching affairs in Scotland with an observant eye, and other European sovereigns were not indifferent to the possibility of a Scotch alliance. In 1524, when Albany had retired to France, the parliament declared that James was fit to govern, but that he must be advised by his mother and a council. This "erection" of James as king was mainly due to the efforts of Henry VIII. In 1526 Angus obtained control of the king, and kept him in close confinement until 1528, when James, escaping from Edinburgh to Stirling, put vigorous measures in execution against the earl, and compelled him to flee to England. In 1529 and 1530 the king made a strong effort to suppress his turbulent vassals in the south of Scotland; and after several raids and counter-raids negotiations for peace with England were begun, and in May 1534 a treaty was signed. At this time, as on previous occasions, Henry VIII. wished James to marry his daughter Mary, while other ladies had been suggested by the emperor Charles V.; but the Scottish king, preferring a French bride, visited France, and in January 1537 was married at Paris to Madeleine, daughter of King Francis I. Madeleine died soon after her arrival in Scotland, and in 1538 James made a much more important marriage, being united to Mary (1515-1560), daughter of Claude, duke of Guise, and widow of Louis of Orleans, duke of Longueville. It was this connexion, probably, which finally induced James to forsake his vacillating foreign policy, and to range himself definitely among the enemies of England. In 1536 he had refused to meet Henry VIII. at York, and in the following year had received the gift of a cap and sword from Pope Paul III., thus renouncing the friendship of his uncle. Two plots to murder the king were now discovered, and James also foiled the attempts of Henry VIII. to kidnap him. Although in 1540 the English king made another attempt to win the support, or at least the neutrality, of James for his religious policy, the relations between the two countries became very unfriendly, and in 1542 Henry sent an army to invade Scotland. James was not slow to make reprisals, but his nobles were angry or indifferent, and on the 25th of November 1542 his forces were easily scattered at the rout of Solway Moss. This blow preyed upon the king's mind, and on the 14th of December he died at Falkland, having just heard of the birth of his daughter. His two sons had died in infancy, and his successor was his only legitimate child, Mary. He left several bastards, among them James Stewart, earl of Murray (the regent Murray), Lord John Stewart (1531-1563) prior of Coldingham, and Lord Robert Stewart, earl of Orkney (d. 1592).

Although possessing a weak constitution, which was further impaired by his irregular manner of life, James showed great vigour and independence as a sovereign, both in withstanding the machinations of his uncle, Henry VIII., and in opposing the influence of the nobles. The persecutions to which heretics were exposed during this reign were due mainly to the excessive influence exercised by the ecclesiastics, especially by David Beaton, archbishop of St Andrews. The king's habit of mingling with the peasantry secured for him a large amount of popularity, and probably led many to ascribe to him the authorship of poems describing scenes in peasant life, *Christis Kirk on the Grene*, *The Gaberlunzie Man* and *The Jolly Beggar*. There is no proof that he was the author of any of these poems, but from expressions in the poems of Sir David Lindsay, who was on terms of intimacy with him, it appears that occasionally he wrote verses.

JAMES I., the Conqueror (1208-1276), king of Aragon, son of Peter II., king of Aragon, and of Mary of Montpellier, whose mother was Eudoxia Comnena, daughter of the emperor Manuel, was born at Montpellier on the 2nd of February 1208. His father, a man of immoral life, was with difficulty persuaded to cohabit with his wife. He endeavoured to repudiate her, and she fled to Rome, where she died in April 1213. Peter, whose possessions in Provence entangled him in the wars between the Albigenses and Simon of Montfort, endeavoured to placate the northern crusaders by arranging a marriage between his son James and Simon's daughter. In 1211 the boy was entrusted to Montfort's care to be educated, but the aggressions of the crusaders on the princes of the south forced Peter to take up arms against them, and he was slain at Muret on the 12th of September 1213. Montfort would willingly have used James as a means of extending his own power. The Aragonese and Catalans, however, appealed to the pope, who forced Montfort to surrender him in May or June 1214. James was now entrusted to the care of Guillen de Monredon, the head of the Templars in Spain and Provence. The kingdom was given over to confusion till in 1216 the Templars and some of the more loyal nobles brought the young king to Saragossa. At the age of thirteen he was married to Leonora, daughter of Alphonso VIII. of Castile, whom he divorced later on the ground of consanguinity. A son born of the marriage, Alphonso, was recognized as legitimate, but died before his father, childless. It was only by slow steps that the royal authority was asserted, but the young king, who was of gigantic stature and immense strength, was also astute and patient. By 1228 he had so far brought his vassals to obedience, that he was able to undertake the conquest of the Balearic Islands, which he achieved within four years. At the same time he endeavoured to bring about a union of Aragon with Navarre, by a contract of mutual adoption between himself and the Navarrese king, Sancho, who was old enough to be his grandfather. The scheme broke down, and James abstained from a policy of conquest. He wisely turned to the more feasible course of extending his dominions at the expense of the decadent Mahommedan princes of Valencia. On the 28th of September 1238 the town of Valencia surrendered, and the whole territory was conquered in the ensuing years. Like all the princes of his house, James took part in the politics of southern France. He endeavoured to form a southern state on both sides of the Pyrenees, which should counterbalance the power of France north of the Loire. Here also his policy failed against

physical, social and political obstacles. As in the case of Navarre, he was too wise to launch into perilous adventures. By the Treaty of Corbeil, with Louis IX., signed the 11th of May 1258, he frankly withdrew from conflict with the French king, and contented himself with the recognition of his position, and the surrender of antiquated French claims to the overlordship of Catalonia. During the remaining twenty years of his life, James was much concerned in warring with the Moors in Murcia, not on his own account, but on behalf of his son-in-law Alphonso the Wise of Castile. As a legislator and organizer he occupies a high place among the Spanish kings. He would probably have been more successful but for the confusion caused by the disputes in his own household. James, though orthodox and pious, had an ample share of moral laxity. After repudiating Leonora of Castile he married Yolande (in Spanish Violante) daughter of Andrew II. of Hungary, who had a considerable influence over him. But she could not prevent him from continuing a long series of intrigues. The favour he showed his bastards led to protest from the nobles, and to conflicts between his sons legitimate and illegitimate. When one of the latter, Fernan Sanchez, who had behaved with gross ingratitude and treason to his father, was slain by the legitimate son Pedro, the old king recorded his grim satisfaction. At the close of his life King James divided his states between his sons by Yolande of Hungary, Pedro and James, leaving the Spanish possessions on the mainland to the first, the Balearic Islands and the lordship of Montpellier to the second—a division which inevitably produced fratricidal conflicts. The king fell very ill at Alcira, and resigned his crown, intending to retire to the monastery of Poblet, but died at Valencia on the 27th of July 1276.

King James was the author of a chronicle of his own life, written or dictated apparently at different times, which is a very fine example of autobiographical literature. A translation into English by J. Forster, with notes by Don Pascual de Gayangos, was published in London in 1883. See also *James I. of Aragon*, by F. Darwin Swift (Clarendon Press, 1894), in which are many references to authorities.

JAMES II. (*c.* 1260-1327), king of Aragon, grandson of James I., and son of Peter III. by his marriage with Constance, daughter of Manfred of Beneventum, was left in 1285 as king of Sicily by his father. In 1291, on the death of his elder brother, Alphonso, to whom Aragon had fallen, he resigned Sicily and endeavoured to arrange the quarrel between his own family and the Angevine House, by marriage with Blanca, daughter of Charles of Anjou, king of Naples.

JAMES II. (1243-1311), king of Majorca, inherited the Balearic Islands from his father James I. of Aragon. He was engaged in constant conflict with his brother Pedro III. of Aragon, and in alliance with the French king against his own kin.

JAMES III. (1315-1349), king of Majorca, grandson of James II., was driven out of his little state and finally murdered by his cousin Pedro IV. of Aragon, who definitely reannexed the Balearic Islands to the crown.

JAMES (James Francis Edward Stuart) (1688-1766), prince of Wales, known to the Jacobites as James III. and to the Hanoverian party as the Old Pretender, the son and heir of James II. of England, was born in St James's Palace, London, on the 10th of June 1688. The scandalous story that he was a supposititious child, started and spread abroad by interested politicians at the time of his birth, has been completely disproved, and most contemporary writers allude to his striking family likeness to the Royal Stuarts. Shortly before the flight of the king to Sheerness, the infant prince together with his mother was sent to France, and afterwards he continued to reside with his father at the court of St Germain. On the death of his father, on the 16th of September 1701, he was immediately proclaimed king by Louis XIV. of France, but a fantastic attempt to perform a similar ceremony in London so roused the anger of the populace that the mock pursuivants barely escaped with their lives. A bill of attainder against him received the royal assent a few days before the death of William III. in 1702, and the Princess Anne, half-sister of the Pretender, succeeded William on the throne. An influential party still, however, continued to adhere to the Jacobite cause; but an expedition from Dunkirk planned in favour of James in the spring of 1708 failed of success, although the French ships under the comte de Fourbin, with James himself on board, reached the Firth of Forth in safety. At the Peace of Utrecht James withdrew from French territory to Bar-le-Duc in Lorraine. A rebellion in the Highlands of Scotland was inaugurated in September 1715 by the raising of the standard on the braes of Mar, and by the solemn proclamation of James Stuart, "the chevalier of St George," in the midst of the assembled clans, but its progress was arrested in November by the indecisive battle of Sheriffmuir and by the surrender at Preston. Unaware of the gloomy nature of his prospects, the chevalier landed in December 1715 at Peterhead, and advanced as far south as Scone, accompanied by a small force under the earl of Mar; but on learning of the approach of the duke of Argyll, he retreated to Montrose, where the Highlanders dispersed to the mountains, and he embarked again for France. A Spanish expedition sent out in his behalf in 1719, under the direction of Alberoni, was scattered by a tempest, only two frigates reaching the appointed rendezvous in the island of Lewis.

In 1718 James had become affianced to the young princess Maria Clementina Sobieski, grand-daughter of the warrior king of Poland, John Sobieski. The intended marriage was forbidden by the emperor, who in consequence kept the

princess and her mother in honourable confinement at Innsbruck in Tirol. An attempt to abduct the princess by means of a ruse contrived by a zealous Jacobite gentleman, Charles Wogan, proved successful; Clementina reached Italy in safety, and she and James were ultimately married at Montefiascone on the 1st of September 1719. James and Clementina were now invited to reside in Rome at the special request of Pope Clement XI., who openly acknowledged their titles of British King and Queen, gave them a papal guard of troops, presented them with a villa at Albano and a palace (the Palazzo Muti in the Piazza dei Santi Apostoli) in the city, and also made them an annual allowance of 12,000 crowns out of the papal treasury. At the Palazzo Muti, which remained the chief centre of Jacobite intriguing, were born James's two sons, Charles Edward (the Young Pretender) and Henry Benedict Stuart. James's married life proved turbulent and unhappy, a circumstance that was principally due to the hot temper and jealous nature of Clementina, who soon after Henry's birth in 1725 left her husband and spent over two years in a Roman convent. At length a reconciliation was effected, which Clementina did not long survive, for she died at the early age of 32 in February 1735. Full regal honours were paid to the Stuart queen at her funeral, and the splendid but tasteless monument by Pietro Bracchi (1700-1773) in St Peter's was erected to her memory by order of Pope Benedict XIV.

His wife's death seems to have affected James's health and spirits greatly, and he now began to grow feeble and indifferent, so that the political adherents of the Stuarts were gradually led to fix their hopes upon the two young princes rather than upon their father. Travellers to Rome at this period note that James appeared seldom in public, and that much of his time was given up to religious exercises; he was *dévot à l'excès*, so Charles de Brosses, an unprejudiced Frenchman, informs us. It was with great reluctance that James allowed his elder son to leave Italy for France in 1744; nevertheless in the following year, he permitted Henry to follow his brother's example, but with the news of Culloden he evidently came to regard his cause as definitely lost. The estrangement from his elder and favourite son, which arose over Henry's adoption of an ecclesiastical career, so embittered his last years that he sank into a moping invalid and rarely left his chamber. With the crushing failure of the "Forty-five" and his quarrel with his heir, the once-dreaded James soon became a mere cipher in British politics, and his death at Rome on the 2nd of January 1766 passed almost unnoticed in London. He was buried with regal pomp in St Peter's, where Canova's famous monument, erected by Pius VII. in 1819, commemorates him and his two sons. As to James's personal character, there is abundant evidence to show that he was grave, high-principled, industrious, abstemious and dignified, and that the unflattering portrait drawn of him by Thackeray in *Esmond* is utterly at variance with historical facts. Although a fervent Roman Catholic, he was far more reasonable and liberal in his religious views than his father, as many extant letters testify.

See Earl Stanhope, *History of England and Decline of the Last Stuarts* (1853); *Calendar of the Stuart Papers at Windsor Castle*; J. H. Jesse, *Memories of the Pretenders and their Adherents* (1845); Dr John Doran, *"Mann" and Manners at the Court of Florence* (1876); *Relazione della morte di Giacomo III., Rè d'Inghilterra*; and Charles de Brosses, *Lettres sur l'Italie* (1885).

(H. M. V.)

JAMES, DAVID (1839-1893), English actor, was born in London, his real name being Belasco. He began his stage career at an early age, and after 1863 gradually made his way in humorous parts. His creation, in 1875, of the part of Perkyn Middlewick in Our Boys made him famous as a comedian, the performance obtaining for the piece a then unprecedented run from the 16th of January 1875 till the 18th of April 1879. In 1885 he had another notable success as Blueskin in *Little Jack Sheppard* at the Gaiety Theatre, his principal associates being Fred Leslie and Nellie Farren. His song in this burlesque, "Botany Bay," became widely popular. In the part of John Dory in *Wild Oats* he again made a great hit at the Criterion Theatre in 1886; and among his other most successful impersonations were Simon Ingot in *David Garrick*, Tweedie in *Tweedie's Rights*, Macclesfield in *The Guv'nor*, and Eccles in *Caste*. His unctuous humour and unfailing spirits made him a great favourite with the public. He died on the 2nd of October 1893.

JAMES, GEORGE PAYNE RAINSFORD (1799-1860), English novelist, son of Pinkstan James, physician, was born in George Street, Hanover Square, London, on the 9th of August 1799. He was educated at a private school at Putney, and afterwards in France. He began to write early, and had, according to his own account, composed the stories afterwards published as *A String of Pearls* before he was seventeen. As a contributor to newspapers and magazines, he came under the notice of Washington Irving, who encouraged him to produce his *Life of Edward the Black Prince* (1822). *Richelieu* was finished in 1825, and was well thought of by Sir Walter Scott (who apparently saw it in manuscript), but was not brought out till 1829. Perhaps Irving and Scott, from their natural amiability, were rather dangerous advisers for a writer so inclined by nature to abundant production as James. But he took up historical romance writing at a lucky moment. Scott had firmly established the popularity of the style, and James in England, like Dumas in France, reaped the reward of their master's labours as well as of their own. For thirty years the author of *Richelieu* continued to pour out novels of the same kind though of varying merit. His works in prose fiction, verse narrative, and history of an easy kind are said to number over a hundred, most of them being three-volume novels of the usual length. Sixty-seven are catalogued in the British Museum. The best examples of his style are perhaps *Richelieu* (1829); *Philip Augustus* (1831); *Henry Masterton*, probably the best of all (1832); *Mary of Burgundy* (1833); *Darnley* (1839); *Corse de Léon* (1841); *The Smuggler* (1845). His poetry does not require special mention, nor does his history, though for a short time during the reign of William IV. he held the office of historiographer royal. After writing copiously for about twenty years, James in 1850 went to America as British Consul for Massachusetts. He was consul at Richmond, Virginia, from 1852 to 1856, when he was appointed to a similar post at Venice, where he died on the 9th of June 1860.

James has been compared to Dumas, and the comparison holds good in respect of kind, though by no means in respect of merit. Both had a certain gift of separating from the picturesque parts of history what could without much difficulty be worked up into picturesque fiction, and both were possessed of a ready pen. Here, however, the likeness ends. Of purely literary talent James had little. His plots are poor, his descriptions weak, his dialogue often below even a fair average, and he was deplorably prone to repeat himself. The "two cavaliers" who in one form or another open most of his books have passed into a proverb, and Thackeray's good-natured but fatal parody of *Barbazure* is likely to outlast *Richelieu* and *Darnley* by many a year. Nevertheless, though James cannot be allowed any very high rank among novelists, he had a genuine narrative gift, and, though his very best books fall far below *Les trois mousquetaires* and *La reine Margot*, there

is a certain even level of interest to be found in all of them. James never resorted to illegitimate methods to attract readers, and deserves such credit as may be due to a purveyor of amusement who never caters for the less creditable tastes of his guests.

His best novels were published in a revised form in 21 volumes (1844-1849).

JAMES, HENRY (1843-), American author, was born in New York on the 15th of April 1843. His father was Henry James (1811-1882), a theological writer of great originality, from whom both he and his brother Professor William James derived their psychological subtlety and their idiomatic, picturesque English. Most of Henry's boyhood was spent in Europe, where he studied under tutors in England, France and Switzerland. In 1860 he returned to America, and began reading law at Harvard, only to find speedily that literature, not law, was what he most cared for. His earliest short tale, "The Story of a Year," appeared in 1865, in the *Atlantic Monthly*, and frequent stories and sketches followed. In 1869 he again went to Europe, where he subsequently made his home, for the most part living in London, or at Rye in Sussex. Among his specially noteworthy works are the following: *Watch and Ward* (1871); *Roderick Hudson* (1875); *The American* (1877); *Daisy Miller* (1878); *French Poets and Novelists* (1878); *A Life of Hawthorne* (1879); *The Portrait of a Lady* (1881); *Portraits of Places* (1884); *The Bostonians* (1886); *Partial Portraits* (1888); *The Tragic Muse* (1890); *Essays in London* (1893); *The Two Magics* (1898); *The Awkward Age* (1898); *The Wings of the Dove* (1902); *The Ambassadors* (1903); *The Golden Bowl* (1904); *English Hours* (1905); *The American Scene* (1907); *The High Bid* (1909); *Italian Hours* (1909).

As a novelist, Henry James is a modern of the moderns both in subject matter and in method. He is entirely loyal to contemporary life and reverentially exact in his transcription of the phase. His characters are for the most part people of the world who conceive of life as a fine art and have the leisure to carry out their theories. Rarely are they at close quarters with any ugly practical task. They are subtle and complex with the subtlety and the complexity that come from conscious preoccupation with themselves. They are specialists in conduct and past masters in casuistry, and are full of variations and shadows of turning. Moreover, they are finely expressive of *milieu*; each belongs unmistakably to his class and his race; each is true to inherited moral traditions and delicately illustrative of some social code. To reveal the power and the tragedy of life through so many minutely limiting and apparently artificial conditions, and by means of characters who are somewhat self-conscious and are apt to make of life only a pleasant pastime, might well seem an impossible task. Yet it is precisely in this that Henry James is pre-eminently successful. The essentially human is what he really cares for, however much he may at times seem preoccupied with the *technique* of his art or with the mask of conventions through which he makes the essentially human reveal itself. Nor has "the vista of the spiritual been denied him." No more poignant spiritual tragedy has been recounted in recent fiction than the story of Isabel Archer in *The Portrait of a Lady*. His method, too, is as modern as his subject matter. He early fell in love with the "point of view," and the good and the bad qualities of his work all follow from this literary passion. He is a very sensitive impressionist, with a technique that can fix the most elusive phase of character and render the most baffling surface. The skill is unending with which he places his characters in such relations and under such lights that they flash out in due succession their continuously varying facets. At times he may seem to forget that a character is something incalculably more than the sum of all its phases; and then his characters tend to have their existence, as Positivists expect to have their immortality, simply and solely in the minds of other people. But when his method is at its best, the delicate phases of character that he transcribes coalesce perfectly into clearly defined and suggestive images of living, acting men and women. Doubtless, there is a certain initiation necessary for the enjoyment of Mr James. He presupposes a cosmopolitan outlook, a certain interest in art and in social artifice, and no little abstract curiosity about the workings of the human mechanism. But for speculative readers, for readers who care for art in life as well as for life in art, and for readers above all who want to encounter and comprehend a great variety of very modern and finely modulated characters, Mr James holds a place of his own, unrivalled as an interpreter of the world of to-day.

For a list of the short stories of Mr Henry James, collections of them in volume form, and other works, see bibliographies by F. A. King, in *The Novels of Henry James*, by Elisabeth L. Cary (New York and London, 1905), and by Le Roy Phillips, *A Bibliography of the Writings of Henry James* (Boston, Mass., 1906). In 1909 an *édition de luxe* of Henry James's novels was published in 24 volumes.

JAMES, JOHN ANGELL (1785-1859), English Nonconformist divine, was born at Blandford, Dorsetshire, on the 6th of June 1785. At the close of his seven years' apprenticeship to a linen-draper at Poole he decided to become a preacher, and in 1802 he went to David Bogue's training institution at Gosport. A year and a half later, on a visit to Birmingham, his preaching was so highly esteemed by the congregation of Carr's Lane Independent chapel that they invited him to exercise his ministry amongst them; he settled there in 1805, and was ordained in May 1806. For several years his success as a preacher was comparatively small; but he jumped into popularity about 1814, and began to attract large crowds wherever he officiated. At the same time his religious writings, the best known of which are *The Anxious Inquirer* and *An Earnest Ministry*, acquired a wide circulation. James was a typical Congregational preacher of the early 19th century, massive and elaborate rather than original. His preaching displayed little or nothing of Calvinism, the earlier severity of which had been modified in Birmingham by Edward Williams, one of his predecessors. He was one of the founders of the Evangelical Alliance and of the Congregational Union of England and Wales. Municipal interests appealed strongly to him, and he was also for many years chairman of Spring Hill (afterwards Mansfield) College. He died at Birmingham on the 1st of October 1859.

A collected edition of James's works appeared in 1860-1864. See *A Review of the Life and Character of J. Angell James* (1860), by J. Campbell, and *Life and Letters of J. A. James* (1861), edited by his successor, R. W. Dale, who also contributed a sketch of his predecessor to *Pulpit Memorials* (1878).

JAMES, THOMAS (*c.* 1573-1629), English librarian, was born at Newport, Isle of Wight. He was educated at Winchester and New College, Oxford, and became a fellow of New College in 1593. His wide knowledge of books, together with his skill in deciphering manuscripts and detecting literary forgeries, secured him in 1602 the post of librarian to the library founded in that year by Sir Thomas Bodley at Oxford. At the same time he was made rector of St Aldate's, Oxford. In 1605 he compiled a classified catalogue of the books in the Bodleian Library, but in 1620 substituted for it an alphabetical catalogue. The arrangement in 1610, whereby the Stationers' Company undertook to supply the Bodleian Library with every book published, was James's suggestion. Ill health compelled him to resign his post in 1620, and he died at Oxford in August 1629.

JAMES, WILLIAM (d. 1827), English naval historian, author of the *Naval History of Great Britain from the Declaration of War by France in 1793 to the Accession of George IV.*, practised as a proctor in the admiralty court of Jamaica between 1801 and 1813. He was in the United States when the war of 1812 broke out, and was detained as a prisoner, but escaped to Halifax. His literary career began by letters to the *Naval Chronicle* over the signature of "Boxer." In 1816 he published *An Inquiry into the Merits of the Principal Naval Actions between Great Britain and the United States*. In this pamphlet, which James reprinted in 1817, enlarged and with a new title, his object was to prove that the American frigates were stronger than their British opponents nominally of the same class. In 1819 he began his *Naval History*, which appeared in five volumes (1822-1824), and was reprinted in six volumes (1826). It is a monument of painstaking accuracy in all such matters as dates, names, tonnage, armament and movements of ships, though no attempt is ever made to show the connexion between the various movements. James died on the 28th of May 1827 in London, leaving a widow who received a civil list pension of £100.

An edition of the *Naval History* in six volumes, with additions and notes by Capt. F. Chamier, was published in 1837, and a further one in 1886. An edition epitomized by R. O'Byrne appeared in 1888, and an *Index* by C. G. Toogood was issued by the Navy Records Society in 1895.

JAMES, WILLIAM (1842-1910), American philosopher, son of the Swedenborgian theologian Henry James, and brother of the novelist Henry James, was born on the 11th of January 1842 at New York City. He graduated M.D. at Harvard in 1870. Two years after he was appointed a lecturer at Harvard in anatomy and physiology, and later in psychology and philosophy. Subsequently he became assistant professor of philosophy (1880-1885), professor (1885-1889), professor of psychology (1889-1897) and professor of philosophy (1897-1907). In 1899-1901 he delivered the Gifford lectures on natural religion at the university of Edinburgh, and in 1908 the Hibbert lectures at Manchester College, Oxford. With the appearance of his *Principles of Psychology* (2 vols., 1890), James at once stepped into the front rank of psychologists as a leader of the physical school, a position which he maintained not only by the brilliance of his analogies but also by the freshness and unconventionality of his style. In metaphysics he upheld the idealist position from the empirical standpoint. Beside the *Principles of Psychology*, which appeared in a shorter form in 1892 (*Psychology*), his chief works are: *The Will to Believe* (1897); *Human Immortality* (Boston, 1898); *Talks to Teachers* (1899); *The Varieties of Religious Experience* (New York, 1902); *Pragmatism—a New Name for some Old Ways of Thinking* (1907); *A Pluralistic Universe* (1909; Hibbert lectures), in which, though he still attacked the hypothesis of absolutism, he admitted it as a legitimate alternative. He received honorary degrees from Padua (1893), Princeton (1896), Edinburgh (1902), Harvard (1905). He died on the 27th of August 1910.

JAMES OF HEREFORD, HENRY JAMES, 1ST BARON (1828-), English lawyer and statesman, son of P. T. James, surgeon, was born at Hereford on the 30th of October 1828, and educated at Cheltenham College. A prizeman of the Inner Temple, he was called to the bar in 1852 and joined the Oxford circuit, where he soon came into prominence. In 1867 he was made "postman" of the court of exchequer, and in 1869 became a Q.C. At the general election of 1868 he obtained a seat in parliament for Taunton as a Liberal, by the unseating of Mr Serjeant Cox on a scrutiny in March 1869, and he kept the seat till 1885, when he was returned for Bury. He attracted attention in parliament by his speeches in 1872 in the debates on the Judicature Act. In 1873 (September) he was made solicitor-general, and in November attorney-general, and knighted; and when Gladstone returned to power in 1880 he resumed his office. He was responsible for carrying the Corrupt Practices Act of 1883. On Gladstone's conversion to Home Rule, Sir Henry James parted from him and became one of the most influential of the Liberal Unionists: Gladstone had offered him the lord chancellorship in 1886, but he declined it; and the knowledge of the sacrifice he had made in refusing to follow his old chief in his new departure lent great weight to his advocacy of the Unionist cause in the country. He was one of the leading counsel for *The Times* before the Parnell Commission, and from 1892 to 1895 was attorney-general to the prince of Wales. From 1895 to 1902 he was a member of the Unionist ministry as chancellor for the duchy of Lancaster, and in 1895 he was made a peer as Baron James of Hereford. In later years he was a prominent opponent of the Tariff Reform movement, adhering to the section of Free Trade Unionists.

JAMES, EPISTLE OF, a book of the New Testament. The superscription (Jas. i. 1) ascribes it to that pre-eminent "pillar" (Gal. ii. 9) of the original mother church who later came to be regarded in certain quarters as the "bishop of bishops" (Epist. of James to Clement, *ap. Clem. Hom.* Superscription). As such he appears in a position to address an encyclical to "the twelve tribes of the dispersion"; for the context (i. 18, v. 7 seq.) and literary relation (cf. 1 Pet. i. 1, 3, 23-25) prove this to be a figure for the entire new people of God, without the distinction of carnal birth, as Paul had described "the Israel of God" (Gal. vi. 16), spiritually begotten, like Isaac, by the word received in faith (Gal. iii. 28 seq., iv. 28; Rom. ix. 6-9, iv. 16-18). This idea of the spiritually begotten Israel becomes current after 1 Pet., as appears in John i. 11-13, iii. 3-8; Barn. iv. 6, xiii. 13; 2 Clem. ii. 2, &c.

The interpretation which takes the expression "the twelve tribes" literally, and conceives the brother of the Lord as sending an epistle written in the Greek language throughout the Christian world, but as addressing Jewish Christians only (so *e.g.* Sieffert, s.v. "Jacobus im N.T." in Hauck, *Realencykl.* ed. 1900, vol. viii.), assumes not only such divisive interference as Paul might justly resent (cf. Gal. ii. 1-10), but involves a strange idea of conditions. Were worldliness, tongue religion, moral indifference, the distinctive marks of the Jewish element? Surely the rebukes of James apply to conditions of the whole Church and not sporadic Jewish-Christian conventicles in the Greek-speaking world, if any such existed.

It is at least an open question whether the superscription (connected with that of Jude) be not a later conjecture prefixed by some compiler of the catholic epistles, but of the late date implied in our interpretation of ver. 1 there should be small dispute. Whatever the currency in classical circles of the epistle as a literary form, it is irrational to put first in the development of Christian literature a general epistle, couched in fluent, even rhetorical, Greek, and afterwards the Pauline letters, which both as to origin and subsequent circulation were a product of urgent conditions. The order consonant with history is (1) Paul's "letters" to "the churches of" a province (Gal. i. 2; 2 Cor. i. 1); (2) the address to "the elect of the dispersion" in a group of the Pauline provinces (1 Pet. i. 1); (3) the address to "the twelve tribes of the dispersion" everywhere (Jas. i. 1; cf. Rev. vii. 2-4). James, like 1 John, is a homily, even more lacking than 1 John in every epistolary feature, not even supplied with the customary epistolary farewell. The superscription, if original, compels us to treat the whole writing as not only late but pseudonymous. If prefixed by conjecture, to secure recognition and authority for the book, even this was at first a failure. The earliest trace of any recognition of it is in Origen (A.D. 230) who refers to it as "said to be from James" (φερομένη ἡ Ἰακώβου Ἐπιστολή), seeming thus to regard ver. 1 as superscription rather than part of the text. Eusebius (A.D. 325) classifies it among the disputed books, declaring that it is regarded as spurious, and that not many of the ancients have mentioned it. Even Jerome (A.D. 390), though personally he accepted it, admits that it was "said to have been published by another in the name of James." The Syrian canon of the Peshitta was the first to admit it.

Modern criticism naturally made the superscription its starting-point, endeavouring first to explain the contents of the writing on this theory of authorship, but generally reaching the conclusion that the two do not agree. Conservatives as a rule avoid the implication of a direct polemic against Paul in ii. 14-26, which would lay open the author to the bitter accusations launched against the interlopers of 2 Cor. x.-xiii., by dating before the Judaistic controversy. Other critics regard the very language alone as fatal to such a theory of date, authorship and circle addressed. The contents, ignoring the conflict of Jew and Gentile, complaining of worldiness and tongue-religion (cf. 1 John iii. 17 seq. with James ii. 14-16) suggest a much later date than the death of James (A.D. 62-66). They also require a different character in the author, if not also a different circle of readers from those addressed in i. 1.

The prevalent conditions seem to be those of the Greek church of the post-apostolic period, characterized by worldiness of life, profession without practice, and a contentious garrulity of teaching (1 John iii. 3-10, 18; 1 Tim. i. 6 seq., vi. 3-10; 2 Tim. iii. 1-5, iv. 3 seq.). The author meets these with the weapons commanded for the purpose in 1 Tim. vi. 3, but quite in the spirit of one of the "wise men" of the Hebrew wisdom literature. His gospel is completely denationalized, humanitarian; but, while equally universalistic, is quite unsympathetic towards the doctrine and the mysticism of Paul. He has nothing whatever to say of the incarnation, life, example, suffering or resurrection of Jesus, and does not interest himself in the doctrines of Christ's person, which were hotly debated up to this time. The absence of all mention of Christ (with the single exception of ii. 1, where there is reason to think the words ἡμῶν Ἰησοῦ Χριστοῦ interpolated) has even led to the theory, ably but unconvincingly maintained by Spitta, that the writing is a mere recast of a Jewish moralistic writing like the *Two Ways*. The thoughts are loosely strung together: yet the following seems to be the general framework on which the New Testament preacher has collected his material.

1. The problem of evil (i. 1-19a). Outward trials are for our development through aid of divinely given "wisdom" (2-11). Inward (moral) trials are not to be imputed to God, the author of all good, whose purpose is the moral good of his creation (12-19a; cf. 1 John i. 5).

2. The righteousness God intends is defined in the eternal moral law. It is a product of deeds, not words (i. 19b-27).

3. The "royal law" of love is violated by discrimination against the poor (ii. 1-13); and by professions of faith barren of good works (14-26).

4. The true spirit of wisdom appears not in aspiring to teach, but in goodness and meekness of life (ch. iii.). Strife and self-exaltation are fruits of a different spirit, to be resisted and overcome by humble prayer for more grace (iv. 1-10).

5. God's judgment is at hand. The thought condemns censoriousness (iv. 11 et seq.), presumptuous treatment of life (13-17), and the tyranny of the rich (v. 1-6). It encourages the believer to patient endurance to the end without murmuring or imprecations (7-12). It impels the church to diligence in its work of worship, care and prayer (13-18), and in the reclamation of the erring (19-20).

The use made by James of earlier material is as important for determining the *terminus a quo* of its own date as the use of it by later writers for the *terminus ad quem*. Acquaintance with the evangelic tradition is apparent. It is conceived, however, more in the Matthaean sense of "commandments to be observed" (Matt. xxviii. 20) than the Pauline, Markan and Johannine of the drama of the incarnation and redemption. There is no traceable literary contact with the synoptic gospels. Acquaintance, however, with some of the Pauline epistles "must be regarded as incontestably established" (O. Cone, *Ency. Bibl.* ii. 2323). Besides scattered reminiscences of Romans, 1 Corinthians and Galatians, enumerated in the article referred to, the section devoted to a refutation of the doctrine of "justification by faith apart from works" undeniably presupposes the Pauline terminology. Had the author been consciously opposing the great apostle to the Gentiles he would probably have treated the subject less superficially. What he really opposes is the same ultra-Pauline moral laxity which Paul himself had found occasion to rebuke among would-be adherents in Corinth (1 Cor. vi. 12; viii. 1-3, 11, 12; x. 23 seq., 32 seq.) and which appears still more marked in the pastoral epistles and 1 John. In rebuking it James unconsciously retracts the misapplied Pauline principle itself. To suppose that the technical terminology of Paul, including even his classic example of the faith of Abraham, could be employed here independently of Rom. ii. 21-23, iii. 28, iv. 1; Gal. ii. 16, iii. 6, is to pass a judgment which in every other field of literary criticism would be at once repudiated. To imagine it current in pre-Pauline Judaism is to misconceive the spirit of the synagogue.[1] To make James

the coiner and Paul the borrower not only throws back James to a date incompatible with the other phenomena, but implies a literary polemic tactlessly waged by Paul against the head of the Jerusalem church. Acquaintance with Hebrews is only slightly less probable, for James ii. 25 adds an explication of the case of Rahab also, cited in Heb. xi. 31 along with Abraham as an example of justification by faith only, to his correction of the Pauline scriptural argument. The question whether James is dependent on 1 Peter or conversely is still actively disputed. As regards the superscription the relation has been defined above. Dependence on Revelation (A.D. 95) is probable (cf. i. 12 and ii. 5 with Rev. ii. 9, 10 and v. 9 with Rev. iii. 20), but the contacts with Clement of Rome (A.D. 95-120) indicate the reverse relation. James iv. 6 and v. 20 = 1 Clem. xlix. 5 and xxx. 2; but as both passages are also found in 1 Peter (iv. 8, v. 5), the latter may be the common source. Clement's further development of the cases of Abraham and Rahab, however, adding as it does to the demonstration of James from Scripture of their justification "by works and not by faith only," that the particular good work which "wrought with the faith" of Abraham and Rahab to their justification was "hospitality" (1 Clem, x.-xii.) seems plainly to presuppose James. Priority is more difficult to establish in the case of Hermas (A.D. 120-140), where the contacts are undisputed (cf. James iv. 7, 12 with Mand. xii, 5, 6; Sim. ix. 23).[2]

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The date (A.D. 95-120) implied by the literary contacts of James of course precludes authorship by the Lord's brother, though this does not necessarily prove the superscription later still. The question whether the writing as a whole is pseudonymous, or only the superscription a mistaken conjecture by the scribe of Jude 1 is of secondary importance. A date about 100-120 for the substance of the writing is accepted by the majority of modern scholars and throws real light upon the author's endeavour. Pfleiderer in pointing out the similarities of James and the *Shepherd* of Hermas declares it to be "certain that both writings presuppose like historical circumstances, and, from a similar point of view, direct their admonitions to their contemporaries, among whom a lax worldly-mindedness and unfruitful theological wrangling threatened to destroy the religious life."[3] Holtzmann has characterized this as "the right visual angle" for the judgment of the book. Questions as to the obligation of Mosaism and the relations of Jew and Gentile have utterly disappeared below the horizon. Neither the attachment to the religious forms of Judaism, which we are informed was characteristic of James, nor that personal relation to the Lord which gave him his supreme distinction are indicated by so much as a single word. Instead of being written in Aramaic, as it would almost necessarily be if antecedent to the Pauline epistles, or even in the Semitic style characteristic of the older and more Palestinian elements of the New Testament we have a Greek even more fluent than Paul's and metaphors and allusions (i. 17, iii. 1-12) of a type more like Greek rhetoric than anything else in the New Testament. Were we to judge by the contacts with Hebrews, Clement of Rome and Hermas and the similarity of situation evidenced in the last-named, Rome would seem the most natural place of origin. The history of the epistle's reception into the canon is not opposed to this; for, once it was attributed to James, Syria would be more likely to take it up, while the West, more sceptical, if not better informed as to its origin, held back; just as happened in the case of Hebrews.

It is the author's conception of the nature of the gospel which mainly gives us pause in following this pretty general disposition of modern scholarship. With all the phenomena of vocabulary and style which seem to justify such conceptions as von Soden's that c. iii. and iv. 11-v. 6 represent excerpts respectively from the essay of an Alexandrian scribe, and a triple fragment of Jewish apocalypse, the analysis above given will be found the exponent of a real logical sequence. We might almost admit a resemblance in form to the general literary type which Spitta adduces. The term "wisdom" in particular is used in the special and technical sense of the "wise men" of Hebrew literature (Matt. xxiii. 34), the sense of "the wisdom of the just" of Luke i. 17. True, the mystical sense given to the term in one of the sources of Luke, by Paul and some of the Church fathers, is not present. While the gospel is pre-eminently the divine gift of "wisdom," "wisdom" is not personified, but conceived primarily as a system of humanitarian ethics, i. 21-25, and only secondarily as a spiritual effluence, imparting the regenerate disposition, the "mind that was in Christ Jesus," iii. 13-18. And yet for James as well as for Paul Christ is "the wisdom of God." The difference in conception of the term is similar to that between Ecclesiasticus and the Wisdom of Solomon. Our author, like Paul, expects the hearers of the word to be "a kind of first-fruits to God of his creation." (i. 18 cf. 1 Pet. i. 23), and bids them depend upon the gift of grace (i. 5, iv. 5 seq.), but for the evils of the world he has no remedy but the patient endurance of the Christian philosopher (i. 2-18). For the faithlessness (διψυχία i. 6-8; cf. *Didache* and Hermas), worldliness (ii. 1-13) and hollow profession (ii. 14-26) of the church life of his time, with its "theological wrangling" (iii. 1-12), his remedy is again the God-given, peaceable spirit of the Christian philosopher (iii. 13-18), which is the antithesis of the spirit of self-seeking and censoriousness (iv. 1-12), and which appreciates the pettiness of earthly life with its sordid gains and its unjust distribution of wealth (iv. 13-v. 6). This attitude of the Christian stoic will maintain the individual in his patient waiting for the expected "coming of the Lord" (v. 7-11); while the church sustains its official functions of healing and prayer, and reclamation of the erring (v. 13-20).[4] For this conception of the gospel and of the officially organized church, our nearest analogy is in Matthew, or rather in the blocks of precepts of the Lord which after subtraction of the Markan narrative framework are found to underlie our first gospel. It may be mere coincidence that the material in Matthew as well as in the *Didache* seems to be arranged in five divisions, beginning with a commendation of the right way, and ending with warnings of the judgment, while the logical analysis of James yields something similar; but of the affinity of spirit there can be no doubt.

The type of ethical thought exemplified in James has been called Ebionite (Hilgenfeld). It is clearly manifest in the humanitarianism of Luke also. But with the possible exception of the prohibition of oaths there is nothing which ought to suggest the epithet. The strong sense of social wrongs, the impatience with tongue-religion, the utter ignoring of ceremonialism, the reflection on the value and significance of "life," are distinctive simply of the "wisdom" writers. Like these our author holds himself so far aloof from current debate of ceremonial or doctrine as to escape our principal standards of measurement regarding place and time. Certain general considerations, however, are fairly decisive. The prolonged effort, mainly of English scholarship, to vindicate the superscription, even on the condition of assuming priority to the Pauline epistles, grows only increasingly hopeless with increasing knowledge of conditions, linguistic and other, in that early period. The moralistic conception of the gospel as a "law of liberty," the very phrase recalling the expression of Barn. ii., "the new law of Christ, which is without the yoke of constraint," the conception of the church as primarily an ethical society, its functions already officially distributed, suggest the period of the *Didache*, Barnabas and Clement of Rome. Independently of the literary contacts we should judge the period to be about A.D. 100-120. The connexions with the Pauline epistles are conclusive for a date later than the death of James; those with Clement and Hermas are perhaps sufficient to date it as prior to the former, and suggest Rome as the place of origin. The connexions with wisdom-literature favour somewhat the Hellenistic culture of Syria, as represented for example at Antioch.

The most important commentaries on the epistle are those of Matt. Schneckenburger (1832), K. G. W. Theile (1833), J. Kern (1838), G. H. Ewald (1870), C. F. D. Erdmann (1881), H. v. Soden (1898), J. B. Mayor (1892) and W. Patrick (1906). The pre-Pauline date is championed by B. Weiss (*Introd.*), W. Beyschlag (Meyer's *Commentary*), Th. Zahn (*Introd.*), J. B. Mayor and W. Patrick. J. V. Bartlet (*Ap. Age*, pp. 217-250) pleads for it, and the view is still common among English interpreters. F. K. Zimmer (*Z. w. Th.*, 1893) showed the priority of Paul, with many others. A. Hilgenfeld (*Einl.*) and A. C. McGiffert (*Ap. Age*) place it in the period of Domitian; Baur (*Ch. History*), Schwegler (*Nachap. Zeitalt.*), Zeller, Volkmar (*Z. w. Th.*), Hausrath (*Ap. Age*), H. J. Holtzmann (*Einl.*), Jülicher (*Einl.*), Usteri (St. *u. Kr.*, 1889), W. Brückner (*Chron.*), H. v. Soden (*Handcomm.*) and A. Harnack (*Chron.*) under Hadrian. A convenient synopsis of results will be found in J. Moffat, *Historical New Test.*[2] (pp. 576-581), and in the articles *s.v.* "James" in *Encycl. Bibl.* and the Bible Dictionaries.

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(B. W. B.)

1 Nothing adduced by Lightfoot (*Comm. on Gal.* Exc. "The faith of Abraham") justifies the unsupported and improbable assertion that the quotation James ii. 21 seq. "was probably in common use among the Jews to prove that orthodoxy of doctrine sufficed for salvation" (Mayor, s.v. "James, Epistle of" in Hasting's *Dict. Bible*, p. 546).

2 On the contacts in general see Moffat, *Hist. N.T.*[2] p. 578, on relation to Clem. R. see Bacon, "Doctrine of Faith in Hebrews, James and Clement of Rome," in *Jour. of Bib. Lit.*, 1900, pp. 12-21.

3 *Das Urchristenthum*, 868, quoted by Cone, *loc. cit.*

4 The logical relation of v. 12 to the context is problematical. Perhaps it may be accounted for by the order of the compend of Christian ethics the writer was following. Cf. Matt. v. 34-37 in relation to Matt. v. 12 (cf. ver. 10) and vi. 19 sqq. (cf. ver. 2, and iv. 13 seq.). The non-charismatic conception of healing, no longer the "gift" of some layman in the community (1 Cor. xii. 9 seq.) but a function of "the elders" (1 Tim. iv. 14), is another indication of comparatively late date.

JAMESON, ANNA BROWNELL (1794-1860), British writer, was born in Dublin on the 17th of May 1794. Her father, Denis Brownell Murphy (d. 1842), a miniature and enamel painter, removed to England in 1798 with his family, and eventually settled at Hanwell, near London. At sixteen years of age Anna became governess in the family of the marquis of Winchester. In 1821 she was engaged to Robert Jameson. The engagement was broken off, and Anna Murphy accompanied a young pupil to Italy, writing in a fictitious character a narrative of what she saw and did. This diary she gave to a bookseller on condition of receiving a guitar if he secured any profits. Colburn ultimately published it as *The Diary of an Ennuyée* (1826), which attracted much attention. The author was governess to the children of Mr Littleton, afterwards Lord Hatherton, from 1821 to 1825, when she married Robert Jameson. The marriage proved unhappy; when, in 1829, Jameson was appointed puisne judge in the island of Dominica the couple separated without regret, and Mrs Jameson visited the Continent again with her father.

The first work which displayed her powers of original thought was her *Characteristics of Women* (1832). These analyses of Shakespeare's heroines are remarkable for delicacy of critical insight and fineness of literary touch. They are the result of a penetrating but essentially feminine mind, applied to the study of individuals of its own sex, detecting characteristics and defining differences not perceived by the ordinary critic and entirely overlooked by the general reader. German literature and art had aroused much interest in England, and Mrs Jameson paid her first visit to Germany in 1833. The conglomerations of hard lines, cold colours and pedantic subjects which decorated Munich under the patronage of King Louis of Bavaria, were new to the world, and Mrs Jameson's enthusiasm first gave them an English reputation.

In 1836 Mrs Jameson was summoned to Canada by her husband, who had been appointed chancellor of the province of Toronto. He failed to meet her at New York, and she was left to make her way alone at the worst season of the year to Toronto. After six months' experiment she felt it useless to prolong a life far from all ties of family happiness and opportunities of usefulness. Before leaving, she undertook a journey to the depths of the Indian settlements in Canada; she explored Lake Huron, and saw much of emigrant and Indian life unknown to travellers, which she afterwards embodied in her *Winter Studies and Summer Rambles*. She returned to England in 1838. At this period Mrs Jameson began making careful notes of the chief private art collections in and near London. The result appeared in her *Companion to the Private Galleries* (1842), followed in the same year by the *Handbook to the Public Galleries*. She edited the *Memoirs of the Early Italian Painters* in 1845. In the same year she visited her friend Ottilie von Goethe. Her friendship with Lady Byron dates from about this time and lasted for some seven years; it was brought to an end apparently through Lady Byron's unreasonable temper. A volume of essays published in 1846 contains one of Mrs Jameson's best pieces of work, *The House of Titian*. In 1847 she went to Italy with her niece and subsequent biographer (*Memoirs*, 1878), Geraldine Bate (Mrs Macpherson), to collect materials for the work on which her reputation rests—her series of *Sacred and Legendary Art*. The time was ripe for such contributions to the traveller's library. The *Acta Sanctorum* and the *Book of the Golden Legend* had had their readers, but no one had ever pointed out the connexion between these tales and the works of Christian art. The way to these studies had been pointed out in the preface to Kugler's *Handbook of Italian Painting* by Sir Charles Eastlake, who had intended pursuing the subject himself. Eventually he made over to Mrs Jameson the materials and references he had collected. She recognized the extent of the ground before her as a mingled sphere of poetry, history, devotion and art. She infected her readers with her own enthusiastic admiration; and, in spite of her slight technical and historical equipment, Mrs. Jameson produced a book which thoroughly deserved its great success.

She also took a keen interest in questions affecting the education, occupations and maintenance of her own sex. Her early essay on *The Relative Social Position of Mothers and Governesses* was the work of one who knew both sides; and in no respect does she more clearly prove the falseness of the position she describes than in the certainty with which she predicts its eventual reform. To her we owe the first popular enunciation of the principle of male and female co-operation in works of mercy and education. In her later years she took up a succession of subjects all bearing on the same principles of active benevolence and the best ways of carrying them into practice. Sisters of charity, hospitals, penitentiaries, prisons and workhouses all claimed her interest—all more or less included under those definitions of "the communion of love and communion of labour" which are inseparably connected with her memory. To the clear and temperate forms in which she brought the results of her convictions before her friends in the shape of private lectures—published as *Sisters of Charity* (1855) and *The Communion of Labour* (1856)—may be traced the source whence later reformers and philanthropists took counsel and courage.

Mrs Jameson died on the 17th of March 1860. She left the last of her *Sacred and Legendary Art* series in preparation. It was completed, under the title of *The History of Our Lord in Art*, by Lady Eastlake.

JAMESON (or Jamesone), GEORGE (*c.* 1587-1644), Scottish portrait-painter, was born at Aberdeen, where his father was architect and a member of the guild. After studying painting under Rubens at Antwerp, with Vandyck as a fellow pupil, he returned in 1620 to Aberdeen, where he was married in 1624 and remained at least until 1630, after which he took up his residence in Edinburgh. He was employed by the magistrates of Edinburgh to copy several portraits

of the Scottish kings for presentation to Charles I. on his first visit to Scotland in 1633, and the king rewarded him with a diamond ring from his own finger. This circumstance at once established Jameson's fame, and he soon found constant employment in painting the portraits of the Scottish nobility and gentry. He also painted a portrait of Charles, which he declined to sell to the magistrates of Aberdeen for the price they offered. He died at Edinburgh in 1644.

JAMESON, LEANDER STARR (1853-), British colonial statesman, son of R. W. Jameson, a writer to the signet in Edinburgh, was born at Edinburgh in 1853, and was educated for the medical profession at University College Hospital, London (M.R.C.S. 1875; M.D. 1877). After acting as house physician, house surgeon and demonstrator of anatomy, and showing promise of a successful professional career in London, his health broke down from overwork in 1878, and he went out to South Africa and settled down in practice at Kimberley. There he rapidly acquired a great reputation as a medical man, and, besides numbering President Kruger and the Matabele chief Lobengula among his patients, came much into contact with Cecil Rhodes. In 1888 his influence with Lobengula was successfully exerted to induce that chieftain to grant the concessions to the agents of Rhodes which led to the formation of the British South Africa Company; and when the company proceeded to open up Mashonaland, Jameson abandoned his medical practice and joined the pioneer expedition of 1890. From this time his fortunes were bound up with Rhodes's schemes in the north. Immediately after the pioneer column had occupied Mashonaland, Jameson, with F. C. Selous and A. R. Colquhoun, went east to Manicaland and was instrumental in securing the greater part of that country, to which Portugal was laying claim, for the Chartered Company. In 1891 Jameson succeeded Colquhoun as administrator of Rhodesia. The events connected with his vigorous administration and the wars with the Matabele are narrated under RHODESIA. At the end of 1894 "Dr Jim" (as he was familiarly called) came to England and was fêted on all sides; he was made a C.B., and returned to Africa in the spring of 1895 with enhanced prestige. On the last day of that year the world was startled to learn that Jameson, with a force of 600 men, had made a raid into the Transvaal from Mafeking in support of a projected rising in Johannesburg, which had been connived at by Rhodes at the Cape (see RHODES and TRANSVAAL). Jameson's force was compelled to surrender at Doornkop, receiving a guarantee that the lives of all would be spared; he and his officers were sent to Pretoria, and, after a short delay, during which time sections of the Boer populace clamoured for the execution of Jameson, President Kruger on the surrender of Johannesburg (January 7) handed them over to the British government for punishment. They were tried in London under the Foreign Enlistment Act in May 1896, and Dr Jameson was sentenced to fifteen months' imprisonment at Holloway. He served a year in prison, and was then released on account of ill health. He still retained the affections of the white population of Rhodesia, and subsequently returned there in an unofficial capacity. He was the constant companion of Rhodes on his journeys up to the end of his life, and when Rhodes died in May 1902 Jameson was left one of the executors of his will. In 1903 Jameson came forward as the leader of the Progressive (British) party in Cape Colony; and that party being victorious at the general election in January-February 1904, Jameson formed an administration in which he took the post of prime minister. He had to face a serious economic crisis and strenuously promoted the development of the agricultural and pastoral resources of the colony. He also passed a much needed Redistribution Act, and in the session of 1906 passed an Amnesty Act restoring the rebel voters to the franchise. Jameson, as prime minister of Cape Colony, attended the Colonial conference held in London in 1907. In September of that year the Cape parliament was dissolved, and as the elections for the legislative council went in favour of the Bond, Jameson resigned office, 31st of January 1908 (see CAPE COLONY: *History*). In 1908 he was chosen one of the delegates from Cape Colony to the intercolonial convention for the closer union of the South African states, and he took a prominent part in settling the terms on which union was effected in 1909. It was at Jameson's suggestion that the Orange River Colony was renamed Orange Free State Province.

JAMESON, ROBERT (1774-1854), Scottish naturalist and mineralogist, was born at Leith on the 11th of July 1774. He became assistant to a surgeon in his native town; but, having studied natural history under Dr John Walker in 1792 and 1793, he felt that his true province lay in that science. He went in 1800 to Freiberg to study for nearly two years under Werner, and spent two more in continental travel. In 1804 he succeeded Dr Walker as regius professor of natural history in Edinburgh university, and became perhaps the first eminent exponent in Great Britain of the Wernerian geological system; but when he found that theory untenable, he frankly announced his conversion to the views of Hutton. As a teacher, Jameson was remarkable for his power of imparting enthusiasm to his students, and from his class-room there radiated an influence which gave a marked impetus to the study of geology in Britain. His energy also, by means of government aid, private donation and personal outlay, amassed a great part of the splendid collection which now occupies the natural history department of the Royal Scottish Museum in Edinburgh. In 1819 Jameson, with Sir David Brewster, started the *Edinburgh Philosophical Journal*, which after the tenth volume remained under his sole conduct till his death, which took place in Edinburgh on the 19th of April 1854. His bust now stands in the hall of the Edinburgh University library.

Jameson was the author of *Outline of the Mineralogy of the Shetland Islands and of the Island of Arran* (1798), incorporated with *Mineralogy of the Scottish Isles* (1800); *Mineralogical Description of Scotland*, vol. i. pt. 1. (Dumfries, 1805); this was to have been the first of a series embracing all Scotland; *System of Mineralogy* (3 vols., 1804-1808; 3rd ed., 1820); *Elements of Geognosy* (1809); *Mineralogical Travels through the Hebrides, Orkney and Shetland Islands* (2 vols., 1813); and *Manual of Mineralogy* (1821); besides a number of occasional papers, of which a list will be found in the *Edinburgh New Philosophical Journal* for July 1854, along with a portrait and biographical sketch of the author.

JAMESTOWN, a city and the county-seat of Stutsman county, North Dakota, U.S.A., on the James River, about 93

m. W. of Fargo. Pop. (1900), 2853, of whom 587 were foreign-born; (1905) 5093; (1910) 4358. Jamestown is served by the Northern Pacific railway, of which it is a division headquarters. At Jamestown is St John's Academy, a school for girls, conducted by the Sisters of St Joseph. The state hospital for the insane is just beyond the city limits. The city is the commercial centre of a prosperous farming and stock-raising region in the James River valley, and has grain-elevators and flour-mills. Jamestown was first settled in 1873, near Fort Seward, a U.S. military post established in 1872 and abandoned in 1877, and was chartered as a city in 1883.

JAMESTOWN, a city of Chautauqua county, New York, U.S.A., at the S. outlet of Chautauqua Lake, 68 m. S. by W. of Buffalo. Pop. (1900), 22,892, of whom 7270 were foreign-born, mostly Swedish; (1910 census) 31,297. It is served by the Erie and the Jamestown, Chautauqua & Lake Erie railways, by electric lines extending along Lake Chautauqua to Lake Erie on the N. and to Warren, Pennsylvania, on the S., and by summer steamboat lines on Lake Chautauqua. Jamestown is situated among the hills of Chautauqua county, and is a popular summer resort. There is a free public library. A supply of natural gas (from Pennsylvania) and a fine water-power combine to render Jamestown a manufacturing centre of considerable importance. In 1905 the value of its factory products was $10,349,752, an increase of 33.9% since 1900. The city owns and operates its electric-lighting plant and its water-supply system, the water, of exceptional purity, being obtained from artesian wells 4 m. distant. Jamestown was settled in 1810, was incorporated in 1827, and was chartered as a city in 1886. The city was named in honour of James Prendergast, an early settler.

JAMESTOWN, a former village in what is now James City county, Virginia, U.S.A., on Jamestown Island, in the James River, about 40 m. above Norfolk. It was here that the first permanent English settlement in America was founded on the 13th of May 1607, that representative government was inaugurated on the American Continent in 1619, and that negro servitude was introduced into the original thirteen colonies, also in 1619. In Jamestown was the first Anglican church built in America. The settlement was in a low marshy district which proved to be unhealthy; it was accidentally burned in January 1608, was almost completely destroyed by Nathaniel Bacon in September 1676, the state house and other buildings were again burned in 1698, and after the removal of the seat of government of Virginia from Jamestown to the Middle Plantations (now Williamsburg) in 1699 the village fell rapidly into decay. Its population had never been large: it was about 490 in 1609, and 183 in 1623; the mortality was always very heavy. By the middle of the 19th century the peninsula on which Jamestown had been situated had become an island, and by 1900 the James River had worn away the shore but had hardly touched the territory of the "New Towne" (1619), immediately E. of the first settlement; almost the only visible remains, however, were the tower of the brick church and a few gravestones. In 1900 the association for the preservation of Virginia antiquities, to which the site was deeded in 1893, induced the United States government to build a wall to prevent the further encroachment of the river; the foundations of several of the old buildings have since been uncovered, many interesting relics have been found, and in 1907 there were erected a brick church (which is as far as possible a reproduction of the fourth one built in 1639-1647), a marble shaft marking the site of the first settlement, another shaft commemorating the first house of burgesses, a bronze monument to the memory of Captain John Smith, and another monument to the memory of Pocahontas. At the head of Jamestown peninsula Cornwallis, in July 1781, attempted to trick the Americans under Lafayette and General Anthony Wayne by displaying a few men on the peninsula and concealing the principal part of his army on the mainland; but when Wayne discovered the trap he made first a vigorous charge, and then a retreat to Lafayette's line. Early in the Civil War the Confederates regarded the site (then an island) as of such strategic importance that (near the brick church tower and probably near the site of the first fortifications by the original settlers) they erected heavy earthworks upon it for defence. (For additional details concerning the early history of Jamestown, see VIRGINIA: *History*.)

The founding at Jamestown of the first permanent English-speaking settlement in America was celebrated in 1907 by the Jamestown tercentennial exposition, held on grounds at Sewell's Point on the shore of Hampton Roads. About twenty foreign nations, the federal government, and most of the states of the union took part in the exposition.

See L. G. Tyler, *The Cradle of the Republic: Jamestown and James River* (Richmond, 2nd ed., 1906); Mrs R. A. Pryor, *The Birth of the Nation: Jamestown, 1607* (New York, 1907); and particularly S. H. Yonge, *The Site of Old "James Towne," 1607-1698* (Richmond, 1904), embodying the results of the topographical investigations of the engineer in charge of the river-wall built in 1900-1901.

JĀMĪ (NŪR-ED-DIN 'ABD-UR-RAḤMAN IBN AḤMAD) (1414-1492), Persian poet and mystic, was born at Jām in Khorasan, whence the name by which he is usually known. In his poems he mystically utilizes the connexion of the name with the same word meaning "wine-cup." He was the last great classic poet of Persia, and a pronounced mystic of the Sūfic philosophy. His three *diwans* (1479-1401) contain his lyrical poems and odes; among his prose writings the chief is his *Bahāristān* ("Spring-garden") (1487); and his collection of romantic poems, *Haft Aurang* ("Seven Thrones"), contains the *Salāmān wa Absāl* and his *Yūsuf wa Zalīkha* (Joseph and Potiphar's wife).

On Jāmī's life and works see V. von Rosenzweig, *Biographische Notizen über Mewlana Abdurrahman Dschami* (Vienna, 1840); Gore Ouseley, *Biographical Notices of Persian Poets* (1846); W. N. Lees, *A Biographical Sketch of the Mystic Philosopher and Poet Jami* (Calcutta, 1859); E. Beauvois *s.v.* Djami in *Nouvelle Biographie générale*; and H. Ethé in Geiger and Kuhn's *Grundriss der iranischen Philologie*, ii. There are English translations of the *Bahāristān* by E. Rehatsek (Benares, 1887) and Sorabji Fardunji (Bombay, 1899); of *Salāmān wa Absāl* by Edward FitzGerald (1856, with a notice of Jāmī's life); of *Yūsuf wa Zalīkha* by R. T. H. Griffith (1882) and A. Rogers (1892); also selections in English by F.

Hadland Davis, *The Persian Mystics: Jāmī* (1908). (See also PERSIA: *Literature*.)

JAMIESON, JOHN (1759-1838), Scottish lexicographer, son of a minister, was born in Glasgow, on the 3rd of March 1759. He was educated at Glasgow University, and subsequently attended classes in Edinburgh. After six years' theological study, Jamieson was licensed to preach in 1789 and became pastor of an Anti-burgher congregation in Forfar; and in 1797 he was called to the Anti-burgher church in Nicolson Street, Edinburgh. The union of the Burgher and Anti-burgher sections of the Secession Church in 1820 was largely due to his exertions. He retired from the ministry in 1830 and died in Edinburgh on the 12th of July 1838.

Jamieson's name stands at the head of a tolerably long list of works in the *Bibliotheca britannica*; but by far his most important book is the laborious and erudite compilation, best described by its own title-page: *An Etymological Dictionary of the Scottish Language; illustrating the words in their different significations by examples from Ancient and Modern Writers; shewing their Affinity to those of other Languages, and especially the Northern; explaining many terms which though now obsolete in England were formerly common to both countries; and elucidating National Rites, Customs and Institutions in their Analogy to those of other nations; to which is prefixed a Dissertation on the Origin of the Scottish Language*. This appeared in 2 vols., 4to, at Edinburgh in 1808, followed in 1825 by a *Supplement*, in 2 vols., 4to, in which he was assisted by scholars in all parts of the country. A revised edition by Longmuir and Donaldson was issued in 1879-1887.

JAMIESON, ROBERT (*c.* 1780-1844), Scottish antiquary, was born in Morayshire. In 1806 he published a collection of *Popular Ballads and Songs from Tradition, Manuscript and Scarce Editions*. Two pleasing lyrics of his own were included. Scott, through whose assistance he received a government post at Edinburgh, held Jamieson in high esteem and pointed out his skill in discovering the connexion between Scandinavian and Scottish legends. Jamieson's work preserved much oral tradition which might otherwise have been lost. He was associated with Henry Weber and Scott in *Illustrations of Northern Antiquities* (1814). He died on the 24th of September 1844.

JAMKHANDI, a native state of India, in the Deccan division of Bombay, ranking as one of the southern Mahratta Jagirs. Area, 524 sq. m. Pop. (1901), 105,357; estimated revenue, £37,000; tribute, £1300. The chief is a Brahman of the Patwardhan family. Cotton, wheat and millet are produced, and cotton and silk cloth are manufactured, though not exported. The town of JAMKHANDI, the capital, is situated 68 m. E. of Kolhapur. Pop. (1901), 13,029.

JAMMU, or JUMMOO, the capital of the state of Jammu and Kashmir in Northern India, on the river Tavi (Ta-wi), a tributary of the Chenab. Pop. (1901), 36,130. The town and palace stand upon the right bank of the river; the fort overhangs the left bank at an elevation of 150 ft. above the stream. The lofty whitened walls of the palace and citadel present a striking appearance from the surrounding country. Extensive pleasure grounds and ruins of great size attest the former prosperity of the city when it was the seat of a Rajput dynasty whose dominions extended into the plains and included the modern district of Sialkot. It was afterwards conquered by the Sikhs, and formed part of Ranjit Singh's dominions. After his death it was acquired by Gulab Singh as the nucleus of his dominions, to which the British added Kashmir in 1846. It is connected with Sialkot in the Punjab by a railway 16 m. long. In 1898 the town was devastated by a fire, which destroyed most of the public offices.

The state of Jammu proper, as opposed to Kashmir, consists of a submontane tract, forming the upper basin of the Chenab. Pop. (1901), 1,521,307, showing an increase of 5% in the decade. A land settlement has recently been introduced under British supervision.

JAMNIA (Ἰαμνία or Ἰαμνεία), the Greek form of the Hebrew name Jabneel—*i.e.* "God causeth to build" (Josh. xv. 11)—or Jabneh (2 Chron. xxvi. 6), the modern Arabic YEBNA, a town of Palestine, on the border between Dan and Judah, situated 13 m. S. of Jaffa, and 4 m. E. of the seashore. The modern village stands on an isolated sandy hillock, surrounded by gardens with olives to the north and sand-dunes to the west. It contains a small crusaders' church, now a mosque. Jamnia belonged to the Philistines, and Uzziah of Judah is said to have taken it (2 Chron. xxvi. 6). In Maccabean times Joseph and Azarias attacked it unsuccessfully (1 Macc. v. 55-62; 2 Macc. xii. 8 seq. is untrustworthy). Alexander

Jannaeus subdued it, and under Pompey it became Roman. It changed hands several times, is mentioned by Strabo (xvi. 2) as being once very populous, and in the Jewish war was taken by Vespasian. The population was mainly Jewish (Philo, *Leg. ad Gaium*, § 30), and the town is principally famous as having been the seat of the Sanhedrin and the religious centre of Judaism from A.D. 70 to 135. It sent a bishop to Nicaea in 325. In 1144 a crusaders' fortress was built on the hill, which is often mentioned under the name Ibelin. There was also a Jabneel in Lower Galilee (Josh. xix. 33), called later Caphar Yama, the present village Yemma, 8 m. S. of Tiberias; and another fortress in Upper Galilee was named Jamnia (Josephus, *Vita*, 37). Attempts have been made to unify these two Galilean sites, but without success.

JAMRUD, a fort and cantonment in India, just beyond the border of Peshawar district, North-West Frontier Province, situated at the mouth of the Khyber Pass, 10½ m. W. of Peshawar city, with which it is connected by a branch railway. It was occupied by Hari Singh, Ranjit Singh's commander in 1836; but in April 1837 Dost Mahommed sent a body of Afghans to attack it. The Sikhs gained a doubtful victory, with the loss of their general. During the military operations of 1878-79 Jamrud became a place of considerable importance as the frontier outpost on British territory towards Afghanistan, and it was also the base of operations for a portion of the Tirah campaign in 1897-1898. It is the headquarters of the Khyber Rifles, and the collecting station for the Khyber tolls. Pop. (1901), 1848.

JAMS AND JELLIES. In the article FOOD PRESERVATION it is pointed out that concentrated sugar solution inhibits the growth of organisms and has, therefore, a preservative action. The preparation of jams and jellies is based upon that fact. All fresh and succulent fruit contains a large percentage of water, amounting to at least four-fifths of the whole, and a comparatively small proportion of sugar, not exceeding as a rule from 10 to 15%. Such fruit is naturally liable to decomposition unless the greater proportion of the water is removed or the percentage of sugar is greatly increased. The jams and jellies of commerce are fruit preserves containing so much added sugar that the total amount of sugar forms about two-thirds of the weight of the articles. All ordinary edible fruit can be and is made into jam. The fruit is sometimes pulped and stoned, sometimes used whole and unbroken; oranges are sliced or shredded. For the preparation of jellies only certain fruit is suitable, namely such as contains a peculiar material which on boiling becomes dissolved and on cooling solidifies with the formation of a gelatinous mass. This material, often called pectin, occurs mainly in comparatively acid fruit like gooseberries, currants and apples, and is almost absent from strawberries and raspberries. It is chemically a member of the group of carbohydrates, is closely allied with vegetable gums abundantly formed by certain sea-weeds and mosses (agar-agar and Iceland moss), and is probably a mixture of various pentoses. Pentoses are devoid of food-value, but, like animal gelatine, with which they are in no way related, can form vehicles for food material. Some degree of gelatinization is aimed at also in jams; hence to such fruits as have no gelatinizing power an addition of apple or gooseberry juice, or even of Iceland moss or agar-agar, is made. Animal gelatin is very rarely used.

The art of jam and jelly making was formerly domestic, but has become a very large branch of manufacture. For the production of a thoroughly satisfactory conserve the boiling-down must be carried out very rapidly, so that the natural colour of the fruit shall be little affected. Considerable experience is required to stop at the right point; too short boiling leaves an excess of water, leading to fermentation, while over-concentration promotes crystallization of the sugar. The manufactured product is on that account, as a rule, more uniform and bright than the domestic article. The finish of the boiling is mostly judged by rule of thumb, but in some scientifically conducted factories careful thermometric observation is employed. Formerly jams and jellies consisted of nothing but fruit and sugar; now starch-glucose is frequently used by manufacturers as an ingredient. This permits of the production of a slightly more aqueous and gelatinous product, alleged also to be devoid of crystallizing power, as compared with the homemade article. The addition of starch-glucose is not held to be an adulteration. Aniline colours are very frequently used by manufacturers to enhance the colour, and the effect of an excess of water is sought to be counteracted by the addition of some salicylic acid or other preservative. There has long been, and still exists to some extent, a popular prejudice in favour of sugar obtained from the sugar-cane as compared with that of the sugar-beet. This prejudice is absolutely baseless, and enormous quantities of beet-sugar are used in the boiling of jam. Adulteration in the gross sense, such as a substantial addition of coarse pulp, like that of turnips or mangolds, very rarely occurs; but the pulp of apple and other cheap fruit is often admixed without notice to the purchaser. The use of colouring matters and preservatives is discussed at length in the article ADULTERATION.

(O. H.*)

JANESVILLE, a city and the county-seat of Rock County, Wisconsin, U.S.A., situated on both sides of the Rock river, 70 m. S.W. of Milwaukee and 90 m. N.W. of Chicago. Pop. (1900), 13,185, of whom 2409 were foreign-born; (1910 census), 13,894. It is served by the Chicago & North-Western and the Chicago, Milwaukee & St Paul railways, and by electric lines connecting with Madison and Beloit, Wis., and Rockford, Illinois. The Rock river is not commercially navigable at this point, but furnishes valuable water-power for manufacturing purposes. The city is picturesquely situated on bluffs above the river. Janesville is the centre of the tobacco trade of the state, and has various manufactures. The total value of the city's factory product in 1905 was $3,846,038, an increase of 20.8% since 1900. Its public buildings include a city hall, court house, post office, city hospital and a public library. It is the seat of a school for the blind, opened as a private institution in 1849 and taken over by the state in 1850, the first charitable institution controlled by the state, ranking as one of the most successful of its kind in the United States. The first settlement was made here about 1834. Janesville was named in honour of Henry F. Janes, an early settler, and was chartered as a city in 1853.

JANET, PAUL (1823-1899), French philosophical writer, was born in Paris on the 30th of April 1823. He was professor of moral philosophy at Bourges (1845-1848) and Strassburg (1848-1857), and of logic at the lycée Louis-le-Grand, Paris (1857-1864). In 1864 he was appointed to the chair of philosophy at the Sorbonne, and elected a member of the academy of the moral and political sciences. He wrote a large number of books and articles upon philosophy, politics and ethics, on idealistic lines: *La Famille, Histoire de la philosophie dans l'antiquité et dans le temps moderne, Histoire de la science politique, Philosophie de la Révolution Française*, &c. They are not characterized by much originality of thought. In philosophy he was a follower of Victor Cousin, and through him of Hegel. His principal work in this line, *Théorie de la morale*, is little more than a somewhat patronizing reproduction of Kant. He died in October 1899.

JANGIPUR, or Jahangirpur, a town of British India, in Murshidabad district, Bengal, situated on the Bhagirathi. Pop. (1901), 10,921. The town is said to have been founded by the Mogul emperor Jahangir. During the early years of British rule it was an important centre of the silk trade, and the site of one of the East India Company's commercial residencies. Jangipur is now best known as the toll station for registering all the traffic on the Bhagirathi. The number of boats registered annually is about 10,000.

JANIN, JULES GABRIEL (1804-1874), French critic, was born at St Étienne (Loire) on the 16th of February 1804, and died near Paris on the 19th of June 1874. His father was a lawyer, and he was well educated, first at St Étienne, and then at the lycée Louis-le-Grand in Paris. He betook himself to journalism very early, and worked on the *Figaro*, the *Quotidienne*, &c., until in 1830 he became dramatic critic of the *Journal des Débats*. Long before this, however, he had made a considerable literary reputation, for which indeed his strange novel *L'Âne mort et la femme guillotinée* (1829) would have sufficed. *La Confession* (1830), which followed, was less remarkable in substance but even more so in style; and in *Barnave* (1831) he attacked the Orleans family. From the day, however, when Janin became the theatrical critic of the *Débats*, though he continued to write books indefatigably, he was to most Frenchmen a dramatic critic and nothing more. He was outrageously inconsistent, and judged things from no general point of view whatsoever, though his judgment was usually good-natured. Few journalists have ever been masters of a more attractive fashion of saying the first thing that came into their heads. After many years of *feuilleton* writing he collected some of his articles in the work called *Histoire de la littérature dramatique en France* (1853-1858), which by no means deserves its title. In 1865 he made his first attempt upon the Academy, but was not successful till five years later. Meanwhile he had not been content with his *feuilletons*, written persistently about all manner of things. No one was more in request with the Paris publishers for prefaces, letterpress to illustrated books and such trifles. He travelled (picking up in one of his journeys a curious windfall, a country house at Lucca, in a lottery), and wrote accounts of his travels; he wrote numerous tales and novels, and composed many other works, of which by far the best is the *Fin d'un monde et du neveu de Rameau* (1861), in which, under the guise of a sequel to Diderot's masterpiece, he showed his great familiarity with the late 18th century. He married in 1841; his wife had money, and he was always in easy circumstances. In the early part of his career he had many quarrels, notably one with Félix Pyat (1810-1889), whom he prosecuted successfully for defamation of character. For the most part his work is mere improvisation, and has few elements of vitality except a light and vivid style. His *Œuvres choisies* (12 vols., 1875-1878) were edited by A. de la Fitzelière.

A study on Janin with a bibliography was published by A. Piédagnel in 1874. See also Sainte-Beuve, *Causeries du lundi*, ii. and v., and Gustave Planche, *Portraits littéraires*.

JANISSARIES (corrupted from Turkish *yeni chéri*, new troops), an organized military force constituting until 1826 the standing army of the Ottoman empire. At the outset of her history Turkey possessed no standing army. All Moslems capable of bearing arms served as a kind of volunteer yeomanry known as *akinjis*; they were summoned by public criers, or, if the occasion required it, by secret messengers. It was under Orkhan that a regular paid army was first organized: the soldiers were known as *yaya* or *piyadé*. The result was unsatisfactory, as the Turcomans, from whom these troops were recruited, were unaccustomed to fight on foot or to submit to military discipline. Accordingly in 1330, on the advice of Chendéréli Kara Khalil, the system known as *devshurmé* or forced levy, was adopted, whereby a certain number of Christian youths (at first 1000) were every year taken from their parents and, after undergoing a period of apprenticeship, were enrolled as *yeni chéri* or new troops. The venerable saint Haji Bektash, founder of the Bektashi dervishes, blessed the corps and promised them victory; he remained ever after the patron saint of the janissaries.

At first the corps was exclusively recruited by the forced levy of Christian children, for which purpose the officer known as *tournaji-bashi*, or head-keeper of the cranes, made periodical tours in the provinces. The fixed organization of the corps dates only from Mahommed II., and its regulations were subsequently modified by Suleiman I. In early days all Christians were enrolled indiscriminately; later those from Albania, Bosnia and Bulgaria were preferred. The recruits while serving their apprenticeship were instructed in the principles of the faith by *khojas*, but according to D'Ohsson (vii. 327) they were not obliged to become Moslems.

The entire corps, commanded by the aga of the janissaries, was known as the *ojak* (hearth); it was divided into *ortas* or units of varying numbers; the *oda* (room) was the name given to the barracks in which the janissaries were lodged. There were, after the reorganization of Suleiman I., 196 ortas of three classes, viz. the *jemaat*, comprising 101 ortas, the *beuluk*, 61 ortas, and the *sekban*, or *seimen*, 34 ortas; to these must be added 34 ortas of *ajami* or apprentices. The strength of the orta varied greatly, sometimes being as low as 100, sometimes rising considerably beyond its nominal war strength of 500. The distinction between the different classes seems to have been principally in name; in theory the jemaat, or *yaya beiler*, were specially charged with the duty of frontier-guards; the *beuluks* had the privilege of serving as the sultan's guards and of keeping the sacred banner in their custody.

Until the accession of Murad III. (1574) the total effective of the janissaries, including the ajami or apprentices, did not exceed 20,000. In 1582 irregularities in the mode of admission to the ranks began. Soon parents themselves begged to have their children enrolled, so great were the privileges attaching to the corps; later the privilege of enlistment was restricted to the children or relatives of former janissaries; eventually the regulations were much relaxed, and any person was admitted, only negroes being excluded. In 1591 the ojak numbered 48,688 men. Under Ibrahim (1640-1648) it was reduced by Kara Mustafa to 17,000; but it soon rose again, and at the accession of Mahommed IV. (1648), the accession-bakshish was distributed to 50,000 janissaries. During the war of 1683-1698 the rules for admission were suspended, 30,000 recruits being received at one time, and the effective of the corps rising to 70,000; about 1805 it numbered more than 112,000; it went on increasing until the destruction of the janissaries, when it reached 135,000. It would perhaps be more correct to say that these are the numbers figuring on the pay-sheets, and that they doubtless largely exceed the total of the men actually serving in the ranks.

Promotion to the rank of warrant officer was obtained by long or distinguished service; it was by seniority up to the rank of *odabashi*, but odabashis were promoted to the rank of *chorbaji* (commander of an orta) solely by selection. Janissaries advanced in their own orta, which they left only to assume the command of another. Ortas remained permanently stationed in the fortress towns in which they were in garrison, being displaced in time of peace only when some violent animosity broke out between two companies. There were usually 12 in garrison at Belgrade, 14 at Khotin, 16 at Widdin, 20 at Bagdad, &c. The commander was frequently changed. A new chorbaji was usually appointed to the command of an orta stationed at a frontier post; he was then transferred elsewhere, so that in course of time he passed through different provinces.

In time of peace the janissary received no pay. At first his war pay was limited to one aspre per diem, but it was eventually raised to a minimum of three aspres, while veterans received as much as 29 aspres, and retired officers from 30 to 120. The aga received 24,000 piastres per annum; the ordinary pay of a commander was 120 aspres per diem. The aga and several of his subordinates received a percentage of the pay and allowance of the troops; they also inherited the property of deceased janissaries. Moreover, the officers profited largely by retaining the names of dead or fictitious janissaries on the pay-rolls. Rations of mutton, bread and candles were furnished by the government, the supply of rice, butter and vegetables being at the charge of the commandant. The rations would have been entirely inadequate if the janissaries had not been allowed, contrary to the regulations, to pursue different callings, such as those of baker, butcher, glazier, boatman, &c. At first the janissaries bore no other distinctive mark save the white felt cap. Soon the red cap with gold embroidery was substituted. Later a uniform was introduced, of which the distinctive mark was less the colour than the cut of the coat and the shape of the head-dress and turban. The only distinction in the costume of commanding officers was in the colour of their boots, those of the beuluks being red while the others were yellow; subordinate officers wore black boots.

The fundamental laws of the janissaries, which were very early infringed, were as follows: implicit obedience to their officers; perfect accord and union among themselves; abstinence from luxury, extravagance and practices unseemly for a soldier and a brave man; observance of the rules of Haji Bektash and of the religious law; exclusion from the ranks of all save those properly levied; special rules for the infliction of the death-penalty; promotion to be by seniority; janissaries to be admonished or punished by their own officers only; the infirm and unfit to be pensioned; janissaries were not to let their beards grow, not to marry, nor to leave their barracks, nor to engage in trade; but were to spend their time in drill and in practising the arts of war.

In time of peace the state supplied no arms, and the janissaries on service in the capital were armed only with clubs; they were forbidden to carry any arm save a cutlass, the only exception being at the frontier-posts. In time of war the janissaries provided their own arms, and these might be any which took their fancy. However, they were induced by rivalry to procure the best obtainable and to keep them in perfect order. The banner of the janissaries was of white silk on which verses from the Koran were embroidered in gold. This banner was planted beside the aga's tent in camp, with four other flags in red cases, and his three horse-tails. Each orta had its flag, half-red and half-yellow, placed before the tent of its commander. Each orta had two or three great caldrons used for boiling the soup and pilaw; these were under the guard of subordinate officers. A particular superstition attached to them: if they were lost in battle all the officers were disgraced, and the orta was no longer allowed to parade with its caldrons in public ceremonies. The janissaries were stationed in most of the guard-houses of Constantinople and other large towns. No sentries were on duty, but rounds were sent out two or three times a day. It was customary for the sultan or the grand vizier to bestow largess on an orta which they might visit.

The janissaries conducted themselves with extreme violence and brutality towards civilians. They extorted money from them on every possible pretext: thus, it was their duty to sweep the streets in the immediate vicinity of their barracks, but they forced the civilians, especially if rayas, to perform this task or to pay a bribe. They were themselves subject to severe corporal punishments; if these were to take place publicly the ojak was first asked for its consent.

At first a source of strength to Turkey as being the only well-organized and disciplined force in the country, the janissaries soon became its bane, thanks to their lawlessness and exactions. One frequent means of exhibiting their discontent was to set fire to Constantinople; 140 such fires are said to have been caused during the 28 years of Ahmed III.'s reign. The janissaries were at all times distinguished for their want of respect towards the sultans; their outbreaks were never due to a real desire for reforms of abuses or of misgovernment, but were solely caused to obtain the downfall of some obnoxious minister.

The first recorded revolt of the janissaries is in 1443, on the occasion of the second accession of Mahommed II., when they broke into rebellion at Adrianople. A similar revolt happened at his death, when Bayazid II. was forced to yield to their demands and thus the custom of the accession-bakshish was established; at the end of his reign it was the janissaries who forced Bayazid to summon Prince Selim and to hand over the reins of power to him. During the Persian campaign of Selim I. they mutinied more than once. Under Osman II. their disorders reached their greatest height and led to the dethronement and murder of the sultan. It would be tedious to recall all their acts of insubordination. Throughout Turkish history they were made use of as instruments by unscrupulous and ambitious statesmen, and in the 17th century they had become a praetorian guard in the worst sense of the word. Sultan Selim III. in despair endeavoured to organize a properly drilled and disciplined force, under the name of *nizam-i-jedid*, to take their place; for some time the janissaries regarded this attempt in sullen silence; a curious detail is that Napoleon's ambassador Sebastiani strongly dissuaded the sultan from taking this step. Again serving as tools, the janissaries dethroned Selim III.

and obtained the abolition of the nizam-i-jedid. But after the successful revolution of Bairakdar Pasha of Widdin the new troops were re-established and drilled: the resentment of the janissaries rose to such a height that they attacked the grand vizier's house, and after destroying it marched against the sultan's palace. They were repulsed by cannon, losing 600 men in the affair (1806). But such was the excitement and alarm caused at Constantinople that the nizam-i-jedid, or *sekbans* as they were now called, had to be suppressed. During the next 20 years the misdeeds and turbulence of the janissaries knew no bounds. Sultan Mahmud II., powerfully impressed by their violence and lawlessness at his accession, and with the example of Mehemet Ali's method of suppressing the Mamlukes before his eyes, determined to rid the state of this scourge; long biding his time, in 1825 he decided to form a corps of regular drilled troops known as *eshkenjis*. A *fetva* was obtained from the Sheikh-ul-Islam to the effect that it was the duty of Moslems to acquire military science. The imperial decree announcing the formation of the new troops was promulgated at a grand council, and the high dignitaries present (including certain of the principal officers of the janissaries who concurred) undertook to comply with its provisions. But the janissaries rose in revolt, and on the 10th of June 1826, began to collect on the Et Meidan square at Constantinople; at midnight they attacked the house of the aga of janissaries, and, finding he had made good his escape, proceeded to overturn the caldrons of as many ortas as they could find, thus forcing the troops of those ortas to join the insurrection. Then they pillaged and robbed throughout the town. Meanwhile the government was collecting its forces; the ulema, consulted by the sultan, gave the following fetva: "If unjust and violent men attack their brethren, fight against the aggressors and send them before their natural judge!" On this the sacred standard of the prophet was unfurled, and war was formally declared against these disturbers of order. Cannon were brought against the Et Meidan, which was surrounded by troops. Ibrahim Aga, known as Kara Jehennum, the commander of the artillery, made a last appeal to the janissaries to surrender; they refused, and fire was opened upon them. Such as escaped were shot down as they fled; the barracks where many found refuge were burnt; those who were taken prisoner were brought before the grand vizier and hanged. Before many days were over the corps had ceased to exist, and the janissaries, the glory of Turkey's early days and the scourge of the country for the last two centuries, had passed for ever from the page of her history.

See M. d'Ohsson, *Tableaux de l'empire ottoman* (Paris, 1787-1820); Ahmed Vefyk, *Lehjé-i-osmanié* (Constantinople, 1290-1874); A. Djévad Bey, *État militaire ottoman* (Constantinople, 1885).

JANIUAY, a town of the province of Iloilo, Panay, Philippine Islands, on the Suague river, about 20 m. W.N.W. of Iloilo, the capital. Pop. (1903), 27,399, including Lambúnao (6661) annexed to Janiuay in 1903. The town commands delightful views of mountain and valley scenery. An excellent road connects it with Pototan, about 10 m. E. The surrounding country is hilly but fertile and well cultivated, producing rice, sugar, tobacco, vegetables (for the Iloilo market), hemp and Indian corn. The women weave and sell beautiful fabrics of pina, silk, cotton and abaca. The language is Panay-Visayan. Janiuay was founded in 1578; it was first established in the mountains and was subsequently removed to its present site.

JANJIRA, a native state of India, in the Konkan division of Bombay, situated along the coast among the spurs of the Western Ghats, 40 m. S. of Bombay city. Area, 324 sq. m. Pop. (1901), 85,414, showing an increase of 4% in the decade. The estimated revenue is about £37,000; there is no tribute. The chief, whose title is Nawab Sahib, is by descent a Sidi or Abyssinian Mahommedan; and his ancestors were for many generations admirals of the Mahommedan rulers of the Deccan. The state, popularly known as Habsan (= Abyssinian), did not come under direct subordination to the British until 1870. It supplies sailors and fishermen, and also fire-wood, to Bombay, with which it is in regular communication by steamer.

The Nawab of Janjira is also chief of the state of Jafarabad (*q.v.*).

JAN MAYEN, an arctic island between Greenland and the north of Norway, about 71° N. 8° W. It is 34 m. long and 9 in greatest breadth, and is divided into two parts by a narrow isthmus. The island is of volcanic formation and mountainous, the highest summit being Beerenberg in the north (8350 ft.). Volcanic eruptions have been observed. Glaciers are fully developed. Henry Hudson discovered the island in 1607 and called it Hudson's Tutches or Touches. Thereafter it was several times observed by navigators who successively claimed its discovery and renamed it. Thus, in 1611 or the following year whalers from Hull named it Trinity Island; in 1612 Jean Vrolicq, a French whaler, called it Île de Richelieu; and in 1614 Joris Carolus named one of its promontories Jan Meys Hoek after the captain of one of his ships. The present name of the island is derived from this, the claim of its discovery by a Dutch navigator, Jan Mayen, in 1611, being unsupportable. The island is not permanently inhabited, but has been frequently visited by explorers, sealers and whalers; and an Austrian station for scientific observations was maintained here for a year in 1882-1883. During this period a mean temperature of 27.8° F. was recorded.

JANSEN, CORNELIUS (1585-1638), bishop of Ypres, and father of the religious revival known as Jansenism, was born of humble Catholic parentage at Accoy in the province of Utrecht on the 28th of October 1585. In 1602 he entered the university of Louvain, then in the throes of a violent conflict between the Jesuit, or scholastic, party and the followers of Michael Baius, who swore by St Augustine. Jansen ended by attaching himself strongly to the latter party, and presently made a momentous friendship with a like-minded fellow-student, Du Vergier de Hauranne, afterwards abbot of Saint Cyran. After taking his degree he went to Paris, partly to recruit his health by a change of scene, partly to study Greek. Eventually he joined Du Vergier at his country home near Bayonne, and spent some years teaching at the bishop's college. All his spare time was spent in studying the early Fathers with Du Vergier, and laying plans for a reformation of the Church. In 1616 he returned to Louvain, to take charge of the college of St Pulcheria, a hostel for Dutch students of theology. Pupils found him a somewhat choleric and exacting master and academic society a great recluse. However, he took an active part in the university's resistance to the Jesuits; for these had established a theological school of their own in Louvain, which was proving a formidable rival to the official faculty of divinity. In the hope of repressing their encroachments, Jansen was sent twice to Madrid, in 1624 and 1626; the second time he narrowly escaped the Inquisition. He warmly supported the Catholic missionary bishop of Holland, Rovenius, in his contests with the Jesuits, who were trying to evangelize that country without regard to the bishop's wishes. He also crossed swords more than once with the Dutch Presbyterian champion, Voetius, still remembered for his attacks on Descartes. Antipathy to the Jesuits brought Jansen no nearer Protestantism; on the contrary, he yearned to beat these by their own weapons, chiefly by showing them that Catholics could interpret the Bible in a manner quite as mystical and pietistic as theirs. This became the great object of his lectures, when he was appointed regius professor of scriptural interpretation at Louvain in 1630. Still more was it the object of his *Augustinus*, a bulky treatise on the theology of St Augustine, barely finished at the time of his death. Preparing it had been his chief occupation ever since he went back to Louvain. But Jansen, as he said, did not mean to be a school-pedant all his life; and there were moments when he dreamed political dreams. He looked forward to a time when Belgium should throw off the Spanish yoke and become an independent Catholic republic on the model of Protestant Holland. These ideas became known to his Spanish rulers, and to assuage them he wrote a philippic called the *Mars gallicus* (1635), a violent attack on French ambitions generally, and on Richelieu's indifference to international Catholic interests in particular. The *Mars gallicus* did not do much to help Jansen's friends in France, but it more than appeased the wrath of Madrid with Jansen himself; in 1636 he was appointed bishop of Ypres. Within two years he was cut off by a sudden illness on the 6th of May 1638; the *Augustinus*, the book of his life, was published posthumously in 1640.

Full details as to Jansen's career will be found in Reuchlin's *Geschichte von Port Royal* (Hamburg, 1839), vol. i. See also *Jansénius* by the Abbés Callawaert and Nols (Louvain, 1893).

(ST C.)

JANSENISM, the religious principles laid down by Cornelius Jansen in his *Augustinus*. This was simply a digest of the teaching of St Augustine, drawn up with a special eye to the needs of the 17th century. In Jansen's opinion the church was suffering from three evils. The official scholastic theology was anything but evangelical. Having set out to embody the mysteries of faith in human language, it had fallen a victim to the excellence of its own methods; language proved too strong for mystery. Theology sank into a branch of dialectic; whatever would not fit in with a logical formula was cast aside as useless. But average human nature does not take kindly to a syllogism, and theology had ceased to have any appreciable influence on popular religion. Simple souls found their spiritual pasture in little mincing "devotions"; while robuster minds built up for themselves a natural moralistic religion, quite as close to Epictetus as to Christianity. All these three evils were attacked by Jansen. As against the theologians, he urged that in a spiritual religion experience, not reason, must be our guide. As against the stoical self-sufficiency of the moralists, he dwelt on the helplessness of man and his dependence on his maker. As against the ceremonialists, he maintained that no amount of church-going will save a man, unless the love of God is in him. But this capacity for love no one can give himself. If he is born without the religious instinct, he can only receive it by going through a process of "conversion." And whether God converts this man or that depends on his good pleasure. Thus Jansen's theories of conversion melt into predestination; although, in doing so, they somewhat modify its grimness. Even for the worst miscreant there is hope—for who can say but that God may yet think fit to convert him? Jansen's thoughts went back every moment to his two spiritual heroes, St Augustine and St Paul, each of whom had been "the chief of sinners."

Such doctrines have a marked analogy to those of Calvin; but in many ways Jansen differed widely from the Protestants. He vehemently rejected their doctrine of justification by faith; conversion might be instantaneous, but it was only the beginning of a long and gradual process of justification. Secondly, although the one thing necessary in religion was a personal relation of the human soul to its maker, Jansen held that that relation was only possible in and through the Roman Church. Herein he was following Augustine, who had managed to couple together a high theory of church authority and sacramental grace with a strongly personal religion. But the circumstances of the 17th century were not those of the 5th; and Jansen landed his followers in an inextricable confusion. What were they to do, when the outward church said one thing, and the inward voice said another? Some time went by, however, before the two authorities came into open conflict. Jansen's ideas were popularized in France by his friend Du Vergier, abbot of St Cyran; and he dwelt mainly on the practical side of the matter—on the necessity of conversion and love of God, as the basis of the religious life. This brought him into conflict with the Jesuits, whom he accused of giving absolution much too easily, without any serious inquiry into the dispositions of their penitent. His views are expounded at length by his disciple, Antoine Arnauld, in a book on *Frequent Communion* (1643). This book was the first manifestation of Jansenism to the general public in France, and raised a violent storm. But many divines supported Arnauld; and no official action was taken against his party till 1649. In that year the Paris University condemned five propositions from Jansen's *Augustinus*, all relative to predestination. This censure, backed by the signatures of eighty-five bishops, was sent up to Rome for endorsement; and in 1653 Pope Innocent X. declared all five propositions heretical.

This decree placed the Jansenists between two fires; for although the five propositions only represented one side of Jansen's teaching, it was recognized by both parties that the whole question was to be fought out on this issue. Under the leadership of Arnauld, who came of a great family of lawyers, the Jansenists accordingly took refuge in a series of legal tactics. Firstly, they denied that Jansen had meant the propositions in the sense condemned. Alexander VII. replied (1656) that his predecessor had condemned them in the sense intended by their author. Arnauld retorted that the church might be infallible in abstract questions of theology; but as to what was passing through an author's mind it knew no more than any one else. However, the French government supported the pope. In 1656 Arnauld was deprived of his degree, in spite of Pascal's *Provincial Letters* (1656-1657), begun in an attempt to save him (see PASCAL; CASUISTRY). In 1661 a formulary, or solemn renunciation of Jansen, was imposed on all his suspected followers; those who would not

sign it went into hiding, or to the Bastille. Peace was only restored under Clement IX. in 1669.

This peace was treated by Jansenist writers as a triumph; really it was the beginning of their downfall. They had set out to reform the Church of Rome; they ended by having to fight hard for a doubtful foothold within it. Even that foothold soon gave way. Louis XIV. was a fanatic for uniformity, civil and religious; the last thing he was likely to tolerate was a handful of eccentric recluses, who believed themselves to be in special touch with Heaven, and therefore might at any moment set their conscience up against the law. During the lifetime of his cousin, Madame de Longueville, the great protectress of the Jansenists, Louis stayed his hand; on her death (1679) the reign of severity began. That summer Arnauld, who had spent the greater part of his life in hiding, was forced to leave France for good.

Six years later he was joined in exile by Pasquier Quesnel who succeeded him as leader of the party. Long before his flight from France Quesnel had published a devotional commentary—*Réflexions morales sur le Nouveau Testament*—which had gone through many editions without exciting official suspicion. But in 1695 Louis Antoine de Noailles, bishop of Châlons, was made archbishop of Paris. He was known to be very hostile to the Jesuits, and at Châlons had more than once expressed official approval of Quesnel's *Réflexions*. So the Jesuit party determined to wreck archbishop and book at the same time. The Jansenists played into their hands by suddenly raising (1701) in the Paris divinity school the question whether it was necessary to accept the condemnation of Jansen with interior assent, or whether a "respectful silence" was enough. Very soon ecclesiastical France was in a blaze. In 1703 Louis XIV. wrote to Pope Clement XI., proposing that they should take joint action to make an end of Jansenism for ever. Clement replied in 1705 with a bull condemning respectful silence. This measure only whetted Louis's appetite. He was growing old and increasingly superstitious; the affairs of his realm were going from bad to worse; he became frenziedly anxious to propitiate the wrath of his maker by making war on the enemies of the Church. In 1711 he asked the pope for a second, and still stronger bull, that would tear up Jansenism by the roots. The pope's choice of a book to condemn fell on Quesnel's *Réflexions*; in 1713 appeared the bull *Unigenitus*, anathematizing no less than one-hundred-and-one of its propositions. Indeed, in his zeal against the Jansenists the pope condemned various practices in no way peculiar to their party; thus, for instance, many orthodox Catholics were exasperated at the heavy blow he dealt at popular Bible reading. Hence the bull met with much opposition from Archbishop de Noailles and others who did not call themselves Jansenists. In the midst of the conflict Louis XIV. died (September 1715); but the freethinking duke of Orleans, who succeeded him as regent, continued after some wavering to support the bull. Thereupon four bishops appealed against it to a general council; and the country became divided into "appellants" and "acceptants" (1717). The regent's disreputable minister, Cardinal Dubois, patched up an abortive truce in 1720, but the appellants promptly "re-appealed" against it. During the next ten years, however, they were slowly crushed, and in 1730 the *Unigenitus* was proclaimed part and parcel of the law of France. This led to a great quarrel with the judges, who were intensely Gallican in spirit (see Gallicanism), and had always regarded the *Unigenitus* as a triumph of ultramontanism. The quarrel dragged indefinitely on through the 18th century, though the questions at issue were really constitutional and political rather than religious.

Meanwhile the most ardent Jansenists had followed Quesnel to Holland. Here they met with a warm welcome from the Dutch Catholic body, which had always been in close sympathy with Jansenism, although without regarding itself as formally pledged to the *Augustinus*. But it had broken loose from Rome in 1702, and was now organizing itself into an independent church (see Utrecht). The Jansenists who remained in France had meanwhile fallen on evil days. Persecution usually begets hysteria in its victims; and the more extravagant members of the party were far advanced on the road which leads to apocalyptic prophecy and "speaking with tongues." About 1728 the "miracles of St Médard" became the talk of Paris. This was the cemetery where was buried François de Pâris, a young Jansenist deacon of singularly holy life, and a perfervid opponent of the *Unigenitus*. All sorts of miraculous cures were believed to have been worked at his tomb, until the government closed the cemetery in 1732. This gave rise to the famous epigram:

De par le roi, défense à Dieu
De faire miracle en ce lieu.

On the miracles soon followed the rise of the so-called Convulsionaries. These worked themselves up, mainly by the use of frightful self-tortures, into a state of frenzy, in which they prophesied and cured diseases. They were eventually disowned by the more reputable Jansenists, and were severely repressed by the police. But in 1772 they were still important enough for Diderot to enter the field against them. Meanwhile genuine Jansenism survived in many country parsonages and convents, and led to frequent quarrels with the authorities. Only one of its latter-day disciples, however, rose to real eminence; this was the Abbé Henri Grégoire, who played a considerable part in the French Revolution. A few small Jansenist congregations still survive in France; and others have been started in connexion with the Old Catholic Church in Holland.

Literature.—For the 17th century see the *Port Royal* of Sainte-Beuve (5th ed., Paris, 1888) in six volumes. See also H. Reuchlin, *Geschichte von Port Royal* (2 vols., Hamburg, 1839-1844), and C. Beard, *Port Royal* (2 vols., London, 1861). No satisfactory Roman Catholic history of the subject exists, though reference may be made to Count Joseph de Maistre's *De l'église gallicane* (last ed., Lyons, 1881). On the Jansenism of the 18th century no single work exists, though much information will be found in the *Gallican Church* of Canon Jervis (2 vols., London, 1872). For a series of excellent sketches see also Seche, *Les Derniers Jansénistes* (3 vols., Paris, 1891). A more detailed list of books bearing on the subject will be found in the 5th volume of the *Cambridge Modern History*; and J. Paquier's *Le Jansénisme* (Paris, 1909) may also be consulted.

(St C.)

JANSSEN, or Jansen (sometimes Johnson), CORNELIUS (1593-1664), Flemish painter, was apparently born in London, and baptized on the 14th of October 1593. There seems no reason to suppose, as was formerly stated, that he was born at Amsterdam. He worked in England from 1618 to 1643, and afterwards retired to Holland, working at Middelburg, Amsterdam, The Hague and Utrecht, and dying at one of the last two places about 1664. In England he was patronized by James I. and the court, and under Charles I. he continued to paint the numerous portraits which adorn many English mansions and collections. Janssen's pictures, chiefly portraits, are distinguished by clear colouring, delicate touch, good taste and careful finish. He generally painted upon panel, and often worked on a small scale, sometimes producing replicas of his larger works. A characteristic of his style is the very dark background, which throws the carnations of his portraits into rounded relief. In all probability his earliest portrait (1618) was that of John Milton as a boy of ten.

JANSSEN, JOHANNES (1820-1891), German historian, was born at Xanten on the 10th of April 1829, and was educated as a Roman Catholic at Münster, Louvain, Bonn and Berlin, afterwards becoming a teacher of history at Frankfort-on-the-Main. He was ordained priest in 1860; became a member of the Prussian Chamber of Deputies in 1875; and in 1880 was made domestic prelate to the pope and apostolic pronotary. He died at Frankfort on the 24th of December 1891. Janssen was a stout champion of the Ultramontane party in the Roman Catholic Church. His great work is his *Geschichte des deutschen Volkes seit dem Ausgang des Mittelalters* (8 vols., Freiburg, 1878-1894). In this book he shows himself very hostile to the Reformation, and attempts to prove that the Protestants were responsible for the general unrest in Germany during the 16th and 17th centuries. The author's partisanship led to some controversy, and Janssen wrote *An meine Kritiker* (Freiburg, 1882) and *Ein zweites Wort an meine Kritiker* (Freiburg, 1883) in reply to the *Janssens Geschichte des deutschen Volkes* (Munich, 1883) of M. Lenz, and other criticisms.

The *Geschichte*, which has passed through numerous editions, has been continued and improved by Ludwig Pastor, and the greater part of it has been translated into English by M. A. Mitchell and A. M. Christie (London, 1896, fol.). Of his other works perhaps the most important are: the editing of *Frankfurts Reichskorrespondenz, 1376-1519* (Freiburg, 1863-1872); and of the *Leben, Briefe und kleinere Schriften* of his friend J. F. Böhmer (Leipzig, 1868); a monograph, *Schiller als Historiker* (Freiburg, 1863); and *Zeit- und Lebensbilder* (Freiburg, 1875).

See L. Pastor, *Johannes Janssen* (Freiburg, 1893); F. Meister, *Erinnerung an Johannes Janssen* (Frankfort, 1896); Schwann, *Johannes Janssen und die Geschichte der deutschen Reformation* (Munich, 1892).

JANSSEN, PIERRE JULES CÉSAR (1824-1907), French astronomer, was born in Paris on the 22nd of February 1824, and studied mathematics and physics at the faculty of sciences. He taught at the lycée Charlemagne in 1853, and in the school of architecture 1865-1871, but his energies were mainly devoted to various scientific missions entrusted to him. Thus in 1857 he went to Peru in order to determine the magnetic equator; in 1861-1862 and 1864, he studied telluric absorption in the solar spectrum in Italy and Switzerland; in 1867 he carried out optical and magnetic experiments at the Azores; he successfully observed both transits of Venus, that of 1874 in Japan, that of 1882 at Oran in Algeria; and he took part in a long series of solar eclipse-expeditions, *e.g.* to Trani (1867), Guntoor (1868), Algiers (1870), Siam (1875), the Caroline Islands (1883), and to Alcosebre in Spain (1905). To see the eclipse of 1870 he escaped from besieged Paris in a balloon. At the great Indian eclipse of 1868 he demonstrated the gaseous nature of the red prominences, and devised a method of observing them under ordinary daylight conditions. One main purpose of his spectroscopic inquiries was to answer the question whether the sun contains oxygen or not. An indispensable preliminary was the virtual elimination of oxygen-absorption in the earth's atmosphere, and his bold project of establishing an observatory on the top of Mont Blanc was prompted by a perception of the advantages to be gained by reducing the thickness of air through which observations have to be made. This observatory, the foundations of which were fixed in the snow that appears to cover the summit to a depth of ten metres, was built in September 1893, and Janssen, in spite of his sixty-nine years, made the ascent and spent four days taking observations. In 1875 he was appointed director of the new astrophysical observatory established by the French government at Meudon, and set on foot there in 1876 the remarkable series of solar photographs collected in his great *Atlas de photographies solaires* (1904). The first volume of the *Annales de l'observatoire de Meudon* was published by him in 1896. He died at Paris on the 23rd of December 1907.

See A. M. Clerke, *Hist. of Astr. during the 19th Century* (1903); H. Macpherson, *Astronomers of To-Day* (1905).

JANSSENS (or Jansens), VICTOR HONORIUS (1664-1739), Flemish painter, was born at Brussels. After seven years in the studio of an obscure painter named Volders, he spent four years in the household of the duke of Holstein. The next eleven years Janssens passed in Rome, where he took eager advantage of all the aids to artistic study, and formed an intimacy with Tempesta, in whose landscapes he frequently inserted figures. Rising into popularity, he painted a large number of cabinet historical scenes; but, on his return to Brussels, the claims of his increasing family restricted him almost entirely to the larger and more lucrative size of picture, of which very many of the churches and palaces of the Netherlands contain examples. In 1718 Janssens was invited to Vienna, where he stayed three years, and was made painter to the emperor. The statement that he visited England is based only upon the fact that certain fashionable interiors of the time in that country have been attributed to him. Janssen's colouring was good, his touch delicate and his taste refined.

JANSSENS (or Jansens) VAN NUYSSEN, ABRAHAM (1567-1632), Flemish painter, was born at Antwerp in 1567. He studied under Jan Snellinck, was a "master" in 1602, and in 1607 was dean of the master-painters. Till the appearance of Rubens he was considered perhaps the best historical painter of his time. The styles of the two artists are not unlike. In correctness of drawing Janssens excelled his great contemporary; in bold composition and in treatment of

the nude he equalled him; but in faculty of colour and in general freedom of disposition and touch he fell far short. A master of chiaroscuro, he gratified his taste for strong contrasts of light and shade in his torchlights and similar effects. Good examples of this master are to be seen in the Antwerp museum and the Vienna gallery. The stories of his jealousy of Rubens and of his dissolute life are quite unfounded. He died at Antwerp in 1632.

JANUARIUS, ST, or San Gennaro, the patron saint of Naples. According to the legend, he was bishop of Benevento, and flourished towards the close of the 3rd century. On the outbreak of the persecution by Diocletian and Maximian, he was taken to Nola and brought before Timotheus, governor of Campania, on account of his profession of the Christian religion. After various assaults upon his constancy, he was sentenced to be cast into the fiery furnace, through which he passed wholly unharmed. On the following day, along with a number of fellow martyrs, he was exposed to the fury of wild beasts, which, however, laid themselves down in tame submission at his feet. Timotheus, again pronouncing sentence of death, was struck with blindness, but immediately healed by the powerful intercession of the saint, a miracle which converted nearly five thousand men on the spot. The ungrateful judge, only roused to further fury by these occurrences, caused the execution of Januarius by the sword to be forthwith carried out. The body was ultimately removed by the inhabitants of Naples to that city, where the relic became very famous for its miracles, especially in counteracting the more dangerous eruptions of Vesuvius. Whatever the difficulties raised by his *Acta*, the cult of St Januarius, bishop and martyr, is attested historically at Naples as early as the 5th century (*Biblioth. hagiog. latina*, No. 6558). Two phials preserved in the cathedral are believed to contain the blood of the martyr. The relic is shown twice a year—in May and September. On these occasions the substance contained in the phial liquefies, and the Neapolitans see in this phenomenon a supernatural manifestation. The “miracle of St Januarius” did not occur before the middle of the 15th century.

A great number of saints of the name of Januarius are mentioned in the martyrologies. The best-known are the Roman martyr (festival, the 10th of July), whose epitaph was written by Pope Damasus (De Rossi, *Bullettino*, p. 17, 1863), and the martyr of Cordova, who forms along with Faustus and Martialis the group designated by Prudentius (*Peristephanon*, iv. 20) by the name of *tres coronae*. The festival of these martyrs is celebrated on the 13th of October.

See *Acta sanctorum*, September, vi. 761-891; G. Scherillo, *Esame di un codice greco pubblicato nel tomo secondo della bibliotheca casinensis* (Naples, 1876); G. Taglialatela, *Memorie storico-critiche del culto del sangue di S. Gennaro* (Naples, 1893), which contains many facts, but little criticism; G. Albini, *Sulla mobilità dei liquidi viscosi non omogenei* (*Società reale di Napoli, Rendiconti*, 2nd series, vol. iv., 1890); *Acta sanctorum*, October, vi. 187-193.

(H. De.)

JANUARY, the first month in the modern calendar, consisting of thirty-one days. The name (Lat. *Januarius*) is derived from the two-faced Roman god Janus, to whom the month was dedicated. As doorkeeper of heaven, as looking both into the past and the future, and as being essentially the deity who busied himself with the beginnings of all enterprises, he was appropriately made guardian of the fortunes of the new year. The consecration of the month took place by an offering of meal, salt, frankincense and wine, each of which was new. The Anglo-Saxons called January *Wulfmonath*, in allusion to the fact that hunger then made the wolves bold enough to come into the villages. The principal festivals of the month are: New Year’s Day; Feast of the Circumcision; Epiphany; Twelfth-Day; and Conversion of St Paul (see Calendar).

JANUS, in Roman mythology one of the principal Italian deities. The name is generally explained as the masculine form of Diana (Jana), and Janus as originally a god of light and day, who gradually became the god of the beginning and origin of all things. According to some, however, he is simply the god of doorways (*januae*) and in this connexion is the patron of all entrances and beginnings. According to Mommsen, he was “the spirit of opening,” and the double-head was connected with the gate that opened both ways. Others, attributing to him an Etruscan origin, regard him as the god of the vault of heaven, which the Etruscan arch is supposed to resemble. The rationalists explained him as an old king of Latium, who built a citadel for himself on the Janiculum. It was believed that his worship, which was said to have existed as a local cult before the foundation of Rome, was introduced there by Romulus, and that a temple was dedicated to him by Numa. This temple, in reality only an arch or gateway (*Janus geminus*) facing east and west, stood at the north-east end of the forum. It was open during war and closed during peace (Livy i. 19); it was shut only four times before the Christian era. A possible explanation is, that it was considered a bad omen to shut the city gates while the citizens were outside fighting for the state; it was necessary that they should have free access to the city, whether they returned victorious or defeated. Similarly, the door of a private house was kept open while the members of the family were away, but when all were at home it was closed to keep out intruders. There was also a temple of Janus near the theatre of Marcellus, in the forum olitorium, erected by Gaius Duilius (Tacitus, *Ann.* ii. 49), if not earlier.

The beginning of the day (hence his epithet Matutinus), of the month, and of the year (January) was sacred to Janus; on the 9th of January the festival called Agonia was celebrated in his honour. He was invoked before any other god at the beginning of any important undertaking; his priest was the Rex Sacrorum, the representative of the ancient king in his capacity as religious head of the state. All gateways, housedoors and entrances generally, were under his protection; he was the inventor of agriculture (hence Consivius, “he who sows or plants”), of civil laws, of the coining of money and of religious worship. He was worshipped on the Janiculum as the protector of trade and shipping; his head is found on the as, together with the prow of a ship. He is usually represented on the earliest coins with two bearded faces, looking in opposite directions; in the time of Hadrian the number of faces is increased to four. In his capacity as porter or

doorkeeper he holds a staff in his right hand, and a key (or keys) in his left; as such he is called Patulcius (opener) and Clusius (closer). His titles Curiatius, Patricius, Quirinus originate in his worship in the gentes, the curiae and the state, and have no reference to any special functions or characteristics. In late times, he is both bearded and unbearded; in place of the staff and keys, the fingers of his right hand show the number 300 (CCC.), those of his left the number of the remaining days of the year (LXV.). According to A. B. Cook (*Classical Review*, xviii. 367), Janus is only another form of Jupiter, the name under which he was worshipped by the pre-Latin (aboriginal) inhabitants of Rome; after their conquest by the Italians, Janus and Jana took their place as independent divinities by the side of the Italian Jupiter and Juno. He considers it probable that the three-headed Janus was a triple oak-god worshipped in the form of two vertical beams and a cross-bar (such as the *tigillum sororium*, for which see Horatii); hence also the door, consisting of two lintels and side-posts, was sacred to Janus. The three-headed type may have been the original, from which the two-headed and four-headed types were developed. J. G. Frazer (*The Early History of the Kingship*, pp. 214, 285), who also identifies Janus with Jupiter, is of opinion that Janus was not originally a doorkeeper, but that the door was called after him, not vice versa. *Janua* may be an adjective, *janua foris* meaning a door with a symbol of Janus close by the chief entrance, to serve as a protection for the house; then *janua* alone came to mean a door generally, with or without the symbol of Janus. The double head may have been due to the desire to make the god look both ways for greater protection. By J. Rhys (*Hibbert Lectures*, 1886, pp. 82, 94) Janus is identified with the three-faced (sometimes three-headed) Celtic god Cernunnus, a chthonian divinity, compared by Rhys with the Teutonic Heimdal, the warder of the gods of the under-world; like Janus, Cernunnus and Heimdal were considered to be the fons et origo of all things.

See S. Linde, *De Jano summo romanorum deo* (Lund, 1891); J. S. Speÿer, "Le Dieu romain Janus," in *Revue de l'histoire des religions* (xxvi., 1892); G. Wissowa, *Religion und Kultus der Römer* (1902); W. Deecke, *Etruskische Forschungen*, vol. ii.; W. Warde Fowler, *The Roman Festivals of the Period of the Republic* (1899), pp. 282-290; articles in W. H. Roscher's *Lexikon der Mythologie* and Daremberg and Saglio's *Dictionnaire des Antiquités*; J. Toutain, *Études de Mythologie* (1909). On other jani (arched passages) in Rome, frequented by business men and money changers, see O. Richter, *Topographie der Stadt Rom* (1901).

(J. H. F.)

JAORA, a native state of Central India, in the Malwa agency. It consists of two isolated tracts, between Ratlam and Neemuch Area, with the dependencies of Piplauda and Pant Piplauda, 568 sq. m. Pop. (1901), 84,202. The estimated revenue is £57,000; tribute, £9000. The chief, whose title is nawab, is a Mahommedan of Afghan descent. The state was confirmed by the British government in 1818 by the Treaty of Mandsaur. Nawab Mahommed Ismail, who died in 1895, was an honorary major in the British army. His son, Iftikhar Ali Khan, a minor at his accession, was educated in the Daly College at Indore, with a British officer for his tutor, and received powers of administration in 1906. The chief crops are millets, cotton, maize and poppy. The last supplies a large part of the Malwa opium of commerce. The town of Jaora is on the Rajputana-Malwa railway, 20 m. N. of Ratlam. Pop. (1901), 23,854. It is well laid out, with many good modern buildings, and has a high school and dispensary. To celebrate Queen Victoria's Diamond Jubilee, the Victoria Institute and a zenana dispensary were opened in 1898.

JAPAN, an empire of eastern Asia, and one of the great powers of the world. The following article is divided for convenience into ten sections:—I. Geography; II. The People; III. Language and Literature; IV. Art; V. Economic Conditions; VI. Government and Administration; VII. Religion; VIII. Foreign Intercourse; IX. Domestic History; X. The Claim of Japan.

I.—Geography

Position and Extent.

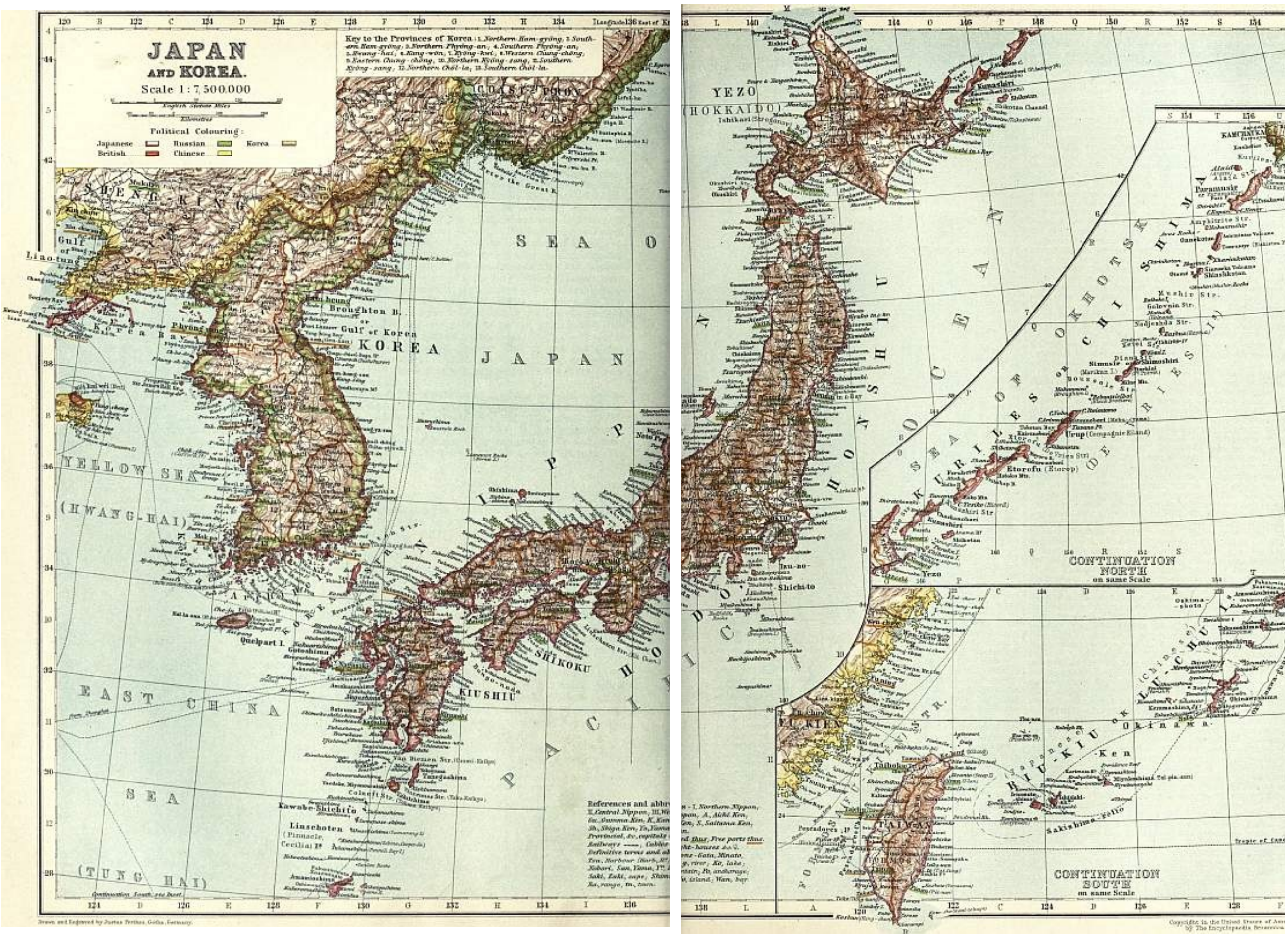
The continent of Asia stretches two arms into the Pacific Ocean, Kamchatka in the north and Malacca in the south, between which lies a long cluster of islands constituting the Japanese empire, which covers 37° 14′ of longitude and 29° 11′ of latitude. On the extreme north are the Kuriles (called by the Japanese *Chishima*, or the "myriad isles"), which extend to 156° 32′ E. and to 50° 56′ N.; on the extreme south is Formosa (called by the Japanese *Taiwan*), which extends to 122° 6′ E., and to 21° 45′ N. There are six large islands, namely Sakhalin (called by the Japanese *Karafuto*); Yezo or Ezo (which with the Kuriles is designated *Hokkaidō*, or the north-sea district); Nippon (the "origin of the sun"), which is the main island; Shikoku (the "four provinces"), which lies on the east of Nippon; Kiūshiū or Kyushu (the "nine provinces"), which lies on the south of Nippon, and Formosa, which forms the most southerly link of the chain. Formosa and the Pescadores were ceded to Japan by China after the war of 1894-1895, and the southern half of Sakhalin—the part south of 50° N.—was added to Japan by cession from Russia in 1905. Korea, annexed in August 1910, is separately noticed.

Coast-line.—The following table shows the numbers, the lengths of coast-line, and the areas of the various groups of islands, only those being indicated that have a coast-line of at least 1 *ri* (2½ m.), or that, though smaller, are inhabited; except in the case of Formosa and the Pescadores, where the whole numbers are given:—

	Number.	Length of coast in miles.	Area in square miles.
Nippon	1	4,765.03	99,373.57
Isles adjacent to Nippon	167	1,275.09	470.30
Shikoku	1	1,100.85	6,461.39
Isles adjacent to Shikoku	75	548.12	175.40
Kiūshiū	1	2,101.28	13,778.68
Isles adjacent to Kiūshiū	150	2,405.06	1,821.85
Yezo	1	1,423.32	30,148.41
Isles adjacent to Yezo	13	110.24	30.51
Sakhalin (Karafuto)	1	Unsurveyed	12,487.64

Sado	1	130.05	335.92
Okishima	1	182.27	130.40
Isles adjacent to Okishima	1	3.09	0.06
Awaji	1	94.43	217.83
Isles adjacent to Awaji	1	5.32	0.83
Iki	1	86.47	50.96
Isles adjacent to Iki	1	4.41	0.47
Tsushima	1	409.23	261.72
Isles adjacent to Tsushima	5	118.80	4.58
Riūkiū (or Luchu) Islands	55	768.74	935.18
Kuriles (Chishima)	31	1,496.23	6,159.42
Bonin (Ogasawara Islands)	20	174.65	26.82
Taiwan (Formosa)	1	731.31	13,429.31
Isles adjacent to Formosa	7	128.32	Not surveyed
Pescadores (Hoko-tō)	12	98.67	85.50
	——	————	————
Totals	549	18,160.98	173,786.75

If the various smaller islands be included, a total of over 3000 is reached, but there has not been any absolutely accurate enumeration.



(Click to enlarge left section.)
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It will be observed that the coast-line is very long in proportion to the area, the ratio being 1 m. of coast to every 9.5 in. of area. The Pacific Ocean, which washes the eastern shores, moulds their outline into much greater diversity than does the Sea of Japan which washes the western shores. Thus the Pacific sea-board measures 10,562 m. against 2887 m. for that of the Japan Sea. In depth of water, too, the advantage is on the Pacific side. There the bottom slopes very abruptly, descending precipitously at a point not far from the north-east coast of the main island, where soundings have shown 4655 fathoms. This, the deepest sea-bed in the world, is called the Tuscarora Deep, after the name of the United States' man-of-war which made the survey. The configuration seems to point to a colossal crater under the ocean, and many of the earthquakes which visit Japan appear to have their origin in this submarine region. On the other hand, the average depth of the Japan Sea is only 1200 fathoms, and its maximum depth is 3200. The east coast, from Cape Shiriya (Shiriyazaki) in the north to Cape Inuboye (Inuboesaki) near Tōkyō Bay, though abounding in small indentations, has only two large bays, those of Sendai and Matsushima; but southward from Tōkyō Bay to Cape Satta (Satanomisaki) in Kiūshiū there are many capacious inlets which offer excellent anchorage, as the Gulf of Sagami (Sagaminada), the Bays of Suruga (Surugawan), Ise (Isenumi) and Osaka, the Kii Channel, the Gulf of Tosa (Tosonada), &c. Opening into both the Pacific and the Sea of Japan and separating Shikoku and Kiūshiū from the main island as well as from each other, is the celebrated Inland Sea, one of the most picturesque sheets of water in the world. Its surface measures 1325 sq. m.; it has a length of 255 m. and a maximum width of 56 m.; its coast-lines aggregate 700 m.; its depth is nowhere more than 65 fathoms, and it is studded with islands which present scenery of the most diverse and beautiful character. There are four narrow avenues connecting this remarkable body of water with the Pacific and the Japan Sea; that on the west, called Shimonoseki Strait, has a width of 3000 yds., that on the south, known as Hayamoto Strait, is 8 m. across; and the two on the north, Yura and Naruto Straits, measure 3000 and 1500 yds. respectively. It need scarcely be said that these restricted approaches give little access to the storms which disturb the seas outside. More broken into bays and inlets than any other part of the coast is the western shore of Kiūshiū. Here three promontories—Nomo, Shimabara and Kizaki—enclose a large bay having on its shores Nagasaki, the great naval port of Sasebo, and other anchorages. On the south of Kiūshiū the Bay of Kagoshima has historical interest, and on the west are the bays of Ariakeno-ura and Yatsushiro. To

the north of Nagasaki are the bays of Hakata, Karatsu and Imari. Between this coast and the southern extremity of the Korean peninsula are situated the islands of Iki and Tsushima, the latter being only 30 m. distant from the peninsula. Passing farther north, the shoreline of the main island along the Japan Sea is found to be comparatively straight and monotonous, there being only one noteworthy indentation, that of Wakasa-wan, where are situated the naval port of Maizuru and the harbour of Tsuruga, the Japanese point of communication with the Vladivostok terminus of the Trans-Asian railway. From this harbour to Osaka Japan's waist measures only 77 m., and as the great lake of Biwa and some minor sheets of water break the interval, a canal may be dug to join the Pacific and the Sea of Japan. Yezo is not rich in anchorages. Uchiura (Volcano Bay), Nemuro (Walfisch) Bay and Ishikari Bay are the only remarkable inlets. As for Formosa, the peculiarity of its outline is that the eastern coast falls precipitously into deep water, while the western slopes slowly to shelving bottoms and shoals. The Pescadores Islands afford the best anchorage in this part of Japan.

Mountains.—The Japanese islands are traversed from north to south by a range of mountains which sends out various lateral branches. Lofty summits are separated by comparatively low passes, which lie at the level of crystalline rocks and schists constituting the original uplands upon which the summits have been piled by volcanic action. The scenery among the mountains is generally soft. Climatic agencies have smoothed and modified everything rugged or abrupt, until an impression of gentle undulation rather than of grandeur is suggested. Nowhere is the region of eternal snow reached, and masses of foliage enhance the gentle aspect of the scenery and glorify it in autumn with tints of striking brilliancy. Mountain alternates with valley, so that not more than one-eighth of the country's entire area is cultivable.

Fuji.

The king of Japanese mountains is Fuji-yama or Fuji-san (peerless mount), of which the highest point (Ken-ga-mine) is 12,395 ft. above sea-level. The remarkable grace of this mountain's curve—an inverted catenary—makes it one of the most beautiful in the world, and has obtained for it a prominent place in Japanese decorative art. Great streams of lava flowed from the crater in ancient times. The course of one is still visible to a distance of 15 m. from the summit, but the rest are covered, for the most part, with deep deposits of ashes and scoriae. On the south Fuji slopes unbroken to the sea, but on the other three sides the plain from which it rises is surrounded by mountains, among which, on the north and west, a series of most picturesque lakes has been formed in consequence of the rivers having been dammed by ashes ejected from Fuji's crater. To a height of some 1500 ft. the slopes of the mountain are cultivated; a grassy moorland stretches up the next 2500 ft.; then follows a forest, the upper edge of which climbs to an altitude of nearly 8000 ft., and finally there is a wide area of ashes and scoriae. There is entire absence of the Alpine plants found abundantly on the summits of other high mountains in Japan, a fact due, doubtless, to the comparatively recent activity of the volcano. The ascent of Fuji presents no difficulties. A traveller can reach the usual point of departure, Gotemba, by rail from Yokohama, and thence the ascent and descent may be made in one day by a pedestrian.

The Japanese Alps.

The provinces of Hida and Etchiu are bounded on the east by a chain of mountains including, or having in their immediate vicinity, the highest peaks in Japan after Fuji. Six of these summits rise to a height of 9000 ft. or upwards, and constitute the most imposing assemblage of mountains in the country. The ridge runs due north and south through 60 to 70 m., and has a width of 5 to 10 m. It is mostly of granite, only two of the mountains—Norikura and Tateyama—showing clear traces of volcanic origin. Its lower flanks are clothed with forests of beech, conifers and oak. Farther south, in the same range, stands Ontake (10,450 ft.), the second highest mountain in Japan proper (as distinguished from Formosa); and other remarkable though not so lofty peaks mark the same regions. This grand group of mountains has been well called the "Alps of Japan," and a good account of them may be found in The *Japanese Alps* (1896) by the Rev. W. Weston. On the summit of Ontake are eight large and several small craters, and there also may be seen displays of trance and "divine possession," such as are described by Mr Percival Lowell in *Occult Japan* (1895).

The Nikko Mountains.

Even more picturesque, though less lofty, than the Alps of Japan, are the Nikko mountains, enclosing the mausolea of the two greatest of the Tokugawa *shōguns*. The highest of these are Shirane-san (7422 ft.), Nantai-san (8169 ft.), Nyohô-zan (8100 ft.), and Omanago (7546 ft.). They are clothed with magnificent vegetation, and everywhere they echo the voices of waterfalls and rivulets.

Mountains of the North.

In the north of the main island there are no peaks of remarkable height. The best known are Chiokai-zan, called "Akita-Fuji" (the Fuji of the Akita province), a volcano 7077 ft. high, which was active as late as 1861; Ganju-san (6791 ft.), called also "Nambu-Fuji" or Iwate-zan, remarkable for the beauty of its logarithmic curves; Iwaki-san (5230 ft.), known as Tsugaru-Fuji, and said by some to be even more imposing than Fuji itself; and the twin mountains Gassan (6447 ft.) and Haguro-san (5600 ft.). A little farther south, enclosing the fertile plain of Aizu (Aizu-taira, as it is called) several important peaks are found, among them being Iide-san (6332 ft.); Azuma-yama (7733 ft.), which, after a long interval of quiescence, has given many evidences of volcanic activity during recent years; Nasu-dake (6296 ft.), an active volcano; and Bandai-san (6037 ft.). A terrible interest attaches to the last-named mountain, for, after having remained quiet so long as to lull the inhabitants of the neighbouring district into complete security, it suddenly burst into fierce activity on the 15th of July 1888, discharging a vast avalanche of earth and rock, which dashed down its slopes like an inundation, burying four hamlets, partially destroying seven villages, killing 461 people and devastating an area of 27 sq. m.

Mountains of Kōzuke, Kai and Shinano.

In the province of Kōzuke, which belongs to the central part of the main island, the noteworthy mountains are Asama-yama (8136 ft.), one of the best known and most violently active volcanoes of Japan; Akagi-san, a circular range of peaks surrounding the basin of an old crater and rising to a height of 6210 ft.; the Haruna group, celebrated for scenic beauties, and Myogi-san, a cluster of pinnacles which, though not rising higher than 3880 ft., offer scenery which dispels the delusion that nature as represented in the classical pictures (*bunjingwa*) of China and Japan exists only in the artist's imagination. Farther south, in the province of Kai (Kōshiu), and separating two great rivers, the Fuji-kawa and the Tenriu-gawa, there lies a range of hills with peaks second only to those of the Japanese Alps spoken of above. The principal elevations in this range are Shirane-san—with three summits, Nōdori (9970 ft.), Ai-no-take (10,200 ft.) and Kaigane (10,330 ft.)—and Hōōzan (9550 ft.). It will be observed that all the highest mountains of Japan form a species of belt across the widest part of the main island, beginning on the west with the Alps of Etchiu, Hida and Shinano, and ending on the east with Fuji-yama. In all the regions of the main island southward of this belt the only mountains of conspicuous altitude are Omine (6169 ft.) and Odai-gaharazan (5540 ft.) in Yamato and Daisen or Oyama (5951 ft.) in Hōki.

Mountains of Shikoku. Mountains of Kiūshiū.

The island of Shikoku has no mountains of notable magnitude. The highest is Ishizuchi-zan (7727 ft.), but there are several peaks varying from 3000 to 6000 ft.

Kiūshiū, though abounding in mountain chains, independent or connected, is not remarkable for lofty peaks. In the neighbourhood of Nagasaki, over the celebrated solfataras of Unzen-take (called also Onsen) stands an extinct volcano, whose summit, Fugen-dake, is 4865 ft. high. More notable is Aso-take, some 20 m. from Kumamoto; for, though the highest of its five peaks has an altitude of only 5545 ft., it boasts the largest crater in the world, with walls nearly 2000 ft. high and a basin from 10 to 14 m. in diameter. Aso-take is still an active volcano, but its eruptions during recent years have been confined to ashes and dust. Only two other mountains in Kiūshiū need be mentioned—a volcano (3743 ft.) on the island Sakura-jima, in the extreme south; and Kirishima-yama (5538 ft.), on the boundary of Hiūga, a mountain specially sacred in Japanese eyes, because on its eastern peak (Takachiho-dake) the god Ninigi descended as the forerunner of the first Japanese sovereign, Jimmu.

Among the mountains of Japan there are three volcanic ranges, namely, that of the Kuriles, that of Fuji, and that of Kirishima. Fuji is the most remarkable volcanic peak. The Japanese regard it as a sacred mountain, and numbers of pilgrims make the ascent in midsummer. From 500 to 600 ft. is supposed to be the depth of the crater.

Volcanoes.

There are neither sulphuric exhalations nor escapes of steam at present, and it would seem that this great volcano is permanently extinct. But experience in other parts of Japan shows that a long quiescent crater may at any moment burst into disastrous activity. Within the period of Japan's written history several eruptions are recorded the last having been in 1707, when the whole summit burst into flame, rocks were shattered, ashes fell to a depth of several inches even in Yedo (Tōkyō), 60 m. distant, and the crater poured forth streams of lava. Among still active volcanoes the following are the best known:—

Name of Volcano. Height in feet.	Remarks.
Tarumai (Yezo) 2969.	Forms southern wall of a large ancient crater now occupied by a lake (Shikotsu). A little steam still issues from several smaller cones on the summit of the ridge, as well as from one, called Eniwa, on the northern side.
Noboribetsu (Yezo) 1148.	In a state of continuous activity, with frequent detonations and rumblings. The crater is divided by a wooded rock-wall. The northern part is occupied by a steaming lake, while the southern part contains numerous solfataras and boiling springs.
Komagatake (Yezo) 3822.	The ancient crater-wall, with a lofty pinnacle on the western side, contains a low new cone with numerous steaming rifts and vents. In a serious eruption in 1856 the S.E. flank of the mountain and the country side in that direction were denuded of trees.
Esan 2067.	A volcano-promontory at the Pacific end of the Tsugaru Strait: a finely formed cone surrounded on three sides by the sea, the crater breached on the land side. The central vent displays considerable activity, while the rocky walls are stained with red, yellow and white deposits from numerous minor vents.
Agatsuma (Iwaki) 5230.	Erupted in 1903 and killed two geologists.
Bandai-san (Iwashiro) 6037.	Erupted in 1888 after a long period of quiescence. The outbreak was preceded by an earthquake of some severity, after which about 20 explosions took place. A huge avalanche of earth and rocks buried the Nagase Valley with its villages and inhabitants, and devastated an area of over 27 sq. m. The number of lives lost was 461; four hamlets were completely entombed with their inhabitants and cattle; seven villages were partially wrecked; forests were levelled or the trees entirely denuded of bark; rivers were blocked up, and lakes were formed. The lip of the fracture is now marked by a line of steaming vents.
Azuma-yama (Fukushima) 7733.	Long considered extinct, but has erupted several times since 1893, the last explosion having been in 1900, when 82 sulphur-diggers were killed or injured; ashes were thrown to a distance of 5 m., accumulating in places to a depth of 5 ft.; and a crater 300 ft. in diameter, and as many in depth, was formed on the E. side of the mountain. This crater is still active. The summit-crater is occupied by a beautiful lake. On the Fukushima (E.) side of the volcano rises a large parasitic cone, extinct.
Nasu (Tochigi) 6296.	Has both a summit and a lateral crater, which are apparently connected and perpetually emitting steam. At or about the main vents are numerous solfataras. The whole of the upper part of the cone consists of grey highly acidic lava. At the base is a thermal spring, where baths have existed since the 7th century.
Shirane (Nikko) 7422.	The only remaining active vent of the once highly volcanic Nikko district. Eruption in 1889.
Shirane (Kai) 10,330.	Eruption in 1905, when the main crater was enlarged to a length of 3000 ft. It is divided into three parts, separated by walls, and each containing a lake, of which the middle one emits steam and the two others are cold. The central lake, during the periods of eruption (which are frequent), displays a geyser-like activity. These lakes contain free sulphuric acid, mixed with iron and alum.
Unzen (Hizen) 4865.	A triple-peaked volcano in the solfatara stage, extinct at the summit, but displaying considerable activity at its base in the form of numerous fumaroles and boiling sulphur springs.
Aso-take (Higo) 5545.	Remarkable for the largest crater in the world. It measures 10 m. by 15, and rises almost symmetrically to a height of about 2000 ft., with only one break through which the river Shira flows. The centre is occupied by a mass of peaks, on the W. flank of which lies the modern active crater. Two of the five compartments into which it is divided by walls of deeply striated volcanic ash are constantly emitting steam, while a new vent displaying great activity has been opened at the base of the cone on the south side. Eruptions have been recorded since the earliest days of Japanese history. In 1884 the ejected dust and ashes devastated farmlands through large areas. An outbreak in 1894 produced numerous rifts in the inner walls from which steam and smoke have issued ever since.
Kaimon (Kagoshima Bay) 3041.	One of the most beautiful volcanoes of Japan, known as the Satsuma-Fuji. The symmetry of the cone is marred by a convexity on the seaward (S.) side. This volcano is all but extinct.
Sakura-jima (Kagomshima Bay) 3743.	An island-volcano, with several parasitic cones (extinct), on the N. and E. sides. At the summit are two deep craters, the southern of which emits steam. Grass grows, however, to the very edges of the crater. The island is celebrated for thermal springs, oranges and *daikon* (radishes), which sometimes grow to a weight of 70 lb.
Kiri-shima (Kagoshima Bay) 5538.	A volcanic range of which Takachiho, the only active cone, forms the terminal (S.E.) peak. The crater, situated on the S.W. side of the volcano, lies some 500 ft. below the summit-peak. It is of remarkably regular formation, and the floor is pierced by a number of huge fumaroles whence issue immense volumes of steam.
Izuno Oshima (Vries Island) (Izu) 2461.	The volcano on this island is called Mihara. There is a double crater, the outer being almost complete. The diameter of the outer crater, within which rises the modern cone to a height of 500 ft. above the surrounding floor, is about 2 m.; while the present crater, which displays incessant activity, has itself a diameter of ¼ m.
Asama (Ise) 8136.	The largest active volcano in Japan. An eruption in 1783, with a deluge of lava, destroyed an extensive forest and overwhelmed several villages. The present cone is the third, portions of two concentric crater rings remaining. The present crater is remarkable for the absolute perpendicularity of its walls, and has an immense depth—from 600 to 800 ft. It is circular, ¾ m. in circumference, with sides honeycombed and burned to a red hue.

Some of the above information is based upon Mr. C. E. Bruce-Mitford's valuable work (see *Geog. Jour.*, Feb. 1908, &c.).

Earthquakes.—Japan is subject to marked displays of seismic violence. One steadily exercised influence is constantly at work, for the shores bordering the Pacific Ocean are slowly though appreciably rising, while on the side of the Japan Sea a corresponding subsidence is taking place. Japan also experiences a vast number of petty vibrations not perceptible without the aid of delicate instruments. But of earthquakes proper, large or small, she has an exceptional abundance. Thus in the thirteen years ending in 1897—that is to say, the first period when really scientific apparatus for recording

purposes was available—she was visited by no fewer than 17,750 shocks, being an average of something over 3½ daily. The frequency of these phenomena is in some degree a source of security, for the minor vibrations are believed to exercise a binding effect by removing weak cleavages. Nevertheless the annals show that during the three centuries before 1897 there were 108 earthquakes sufficiently disastrous to merit historical mention. If the calculation be carried farther back—as has been done by the seismic disaster investigation committee of Japan, a body of scientists constantly engaged in studying these phenomena under government auspices,—it is found that, since the country's history began to be written in the 8th century A.D., there have been 2006 major disturbances; but inasmuch as 1489 of these occurred before the beginning of the Tokugawa administration (early in the 17th century, and therefore in an era when methods of recording were comparatively defective), exact details are naturally lacking. The story, so far as it is known, may be gathered from the following table:—

Date A.D.	Region.	Houses destroyed.	Deaths.
684	Southern part of Tosa	—	— (1)
869	Mutsu	—	— (2)
1361	Kiōto	—	—
1498	Tōkaidō	—	2,000(3)
1569	Bungo	—	700
1596	Kiōto	—	2,000
1605 (31/1)	Pacific Coast	—	5,000
1611 (27/9)	Aizu	—	3,700
1614 (2/12)	Pacific Coast (N.E.)	—	1,700
1662 (16/6)	Kiōto	5,500	500
1666 (2/2)	Pacific Coast (N.E.)	—	1,500
1694 (19/12)	Ugo	2,760	390
1703 (30/12)	Tōkyō	20,162	5,233
1707 (28/10)	Pacific Coast of Kiūshiū and Shikoku	29,000	4,900
1751 (20/5)	Echigo	9,100	1,700
1766 (8/3)	Hirosaki	7,500	1,335
1792 (10/2)	Hizen and Higo	12,000	15,000
1828 (18/2)	Echigo	11,750	1,443
1844 (8/5)	Echigo	34,000	12,000
1854 (6/7)	Yamato, Iga, Ise	5,000	2,400
1854 (23/12)	Tōkaidō (Shikoku)	60,000	3,000
1855 (11/11)	Yedo, (Tōkyō	50,000	6,700
1891 (28/10)	Mino, Owari	222,501	7,273
1894 (22/10)	Shōnai	8,403	726
1896 (15/6)	Sanriku	13,073	27,122
1896 (31/8)	Ugo, Rikuchu	8,996	209
1906 (12/2)	Formosa	5,556	1,228

(1) An area of over 1,200,000 acres swallowed up by the sea.
(2) Tidal wave killed thousands of people.
(3) Hamana lagoon formed.

In the capital (Tōkyō) the average yearly number of shocks throughout the 26 years ending in 1906 was 96, exclusive of minor vibrations, but during the 50 years then ending there were only two severe shocks (1884 and 1894), and they were not directly responsible for any damage to life or limb. The Pacific coast of the Japanese islands is more liable than the western shore to shocks disturbing a wide area. Apparent proof has been obtained that the shocks occurring in the Pacific districts originate at the bottom of the sea—the Tuscarora Deep is supposed to be the centre of seismic activity—and they are accompanied in most cases by tidal waves. It would seem that of late years Tajima, Hida, Kōzuke and some other regions in central Japan have enjoyed the greatest immunity, while Musashi (in which province Tōkyō is situated) and Sagami have been most subject to disturbance.

Plains.—Japan, though very mountainous, has many extensive plains. The northern island—Yezo—contains seven, and there are as many more in the main and southern islands, to say nothing of flat lands of minor dimensions. The principal are given in the following table:—

Name.		Situation.	Area.	Remarks.
Tokachi	plain	Yezo.	744,000 acres.	—
Ishikari	”	”	480,000 acres.	—
Kushiro	”	”	1,229,000 acres.	—
Nemuro	”	”	320,000 acres.	—
Kitami	”	”	230,000 acres.	—
Hidaka	”	”	200,000 acres.	—
Teshio	”	”	180,000 acres.	—
Echigo	”	Main Island.	Unascertained.	—
Sendai	”	”	”	—
Kwanto	”	”	”	In this plain lie the capital, Tōkyō, and the town of Yokohama. It supports about 6 millions of people.
Mino-Owari	”	”	”	Has 1½ million inhabitants.
Kinai	”	”	”	Has the cities of Osaka, Kiōto and Kobe, and 2½ million people.
Tsukushi	”	Kiūshiū.	”	The chief coalfield of Japan.

Rivers.—Japan is abundantly watered. Probably no country in the world possesses a closer network of streams, supplemented by canals and lakes. But the quantity of water carried seawards varies within wide limits; for whereas, during the rainy season in summer and while the snows of winter are melting in spring, great volumes of water sweep down from the mountains, these broad rivers dwindle at other times to petty rivulets trickling among a waste of pebbles and boulders. Nor are there any long rivers, and all are so broken by shallows and rapids that navigation is generally impossible except by means of flat-bottomed boats drawing only a few inches. The chief rivers are given in the following table:—

	Length in miles.	Source.	Mouth.

Ishikari-gawa	275	Ishikari-dake	Otaru.
Shinano-gawa	215	Kimpu-san	Niigata.
Teshio-gawa	192	Teshio-take	Sea of Japan.
Tone-gawa	177	Monju-zan, Kōzuke	Choshi (Shimosa).
Mogami-gawa	151	Dainichi-dake(Uzen)	Sakata.
Yoshino-gawa	149	Yahazu-yama (Tosa)	Tokushima (Awa).
Kitakami-gawa	146	Nakayama-dake (Rikuchiu)	Ishinomaki (Rikuzen).
Tenriu-gawa	136	Suwako (Shinano)	Tōtōmi Bay.
Go-gawa or Iwa-megawa	122	Maruse-yama (Bingo)	Iwami Bay.
Abukuma-gawa	122	Asahi-take (Iwashiro)	Matsushima Bay.
Tokachi-gawa	120	Tokachi-dake	Tokachi Bay.
Sendai-gawa	112	Kunimi-zan (Hiuga)	Kumizaki (Satsuma).
Oi-gawa	112	Shirane-san (Kai)	Suruga Bay.
Kiso-gawa	112	Kiso-zan (Shinano)	Bay of Isenumi.
Arakawa	104	Chichibu-yama	Tōkyō Bay.
Naga-gawa	102	Nasu-yama (Shimotsuke)	Naka-no-minato (Huachi).

Lakes and Waterfalls.—Japan has many lakes, remarkable for the beauty of their scenery rather than for their extent. Some are contained in alluvial depressions in the river valleys; others have been formed by volcanic eruptions, the ejecta damming the rivers until exits were found over cliffs or through gorges. Some of these lakes have become favourite summer resorts for foreigners. To that category belong especially the lakes of Hakone, of Chiuzenji, of Shōji, of Inawashiro, and of Biwa. Among these the highest is Lake Chiuzenji, which is 4375 ft. above sea-level, has a maximum depth of 93 fathoms, and empties itself at one end over a fall (Kegon) 250 ft. high. The Shōji lakes lie at a height of 3160 ft., and their neighbourhood abounds in scenic charms. Lake Hakone is at a height of 2428 ft.; Inawashiro, at a height of 1920 ft. and Biwa at a height of 328 ft. The Japanese associate Lake Biwa (Omi) with eight views of special loveliness (*Omi-no-hakkei*). Lake Suwa, in Shinano, which is emptied by the Tenriu-gawa, has a height of 2624 ft. In the vicinity of many of these mountain lakes thermal springs, with remarkable curative properties, are to be found.

(F. By.)

Geology.—It is a popular belief that the islands of Japan consist for the most part of volcanic rocks. But although this conception might reasonably be suggested by the presence of many active and extinct volcanoes, Professor J. Milne has pointed out that it is literally true of the Kuriles alone, partially true for the northern half of the Main Island and for Kiūshiū, and quite incorrect as applied to the southern half of the Main Island and to Shikoku. This authority sums up the geology of Japan briefly and succinctly as follows (in *Things Japanese*, by Professor Chamberlain): “The backbone of the country consists of primitive gneiss and schists. Amongst the latter, in Shikoku, there is an extremely interesting rock consisting largely of piedmontite. Overlying these amongst the Palaeozoic rocks, we meet in many parts of Japan with slates and other rocks possibly of Cambrian or Silurian age. Trilobites have been discovered in Rikuzen. Carboniferous rocks are represented by mountain masses of *Fusulina* and other limestones. There is also amongst the Palaeozoic group an interesting series of red slates containing Radiolaria. Mesozoic rocks are represented by slates containing *Ammonites* and *Monotis*, evidently of Triassic age, rocks containing *Ammonites Bucklandi* of Liassic age, a series of beds rich in plants of Jurassic age, and beds of Cretaceous age containing *Trigonia* and many other fossils. The Cainozoic or Tertiary system forms a fringe round the coasts of many portions of the empire. It chiefly consists of stratified volcanic tuffs rich in coal, lignite, fossilized plants and an invertebrate fauna. Diatomaceous earth exists at several places in Yezo. In the alluvium which covers all, the remains have been discovered of several species of elephant, which, according to Dr Edmund Naumann, are of Indian origin. The most common eruptive rock is andesite. Such rocks as basalt, diorite and trachyte are comparatively rare. Quartz porphyry, quartzless porphyry, and granite are largely developed.” Drs von Richthofen and Rein discuss the subject in greater detail. They have pointed out that in the mountain system of Japan there are three main lines. One runs from S.W. to N.E.; another from S.S.W. to N.N.E., and the third is meridional. These they call respectively the “southern schist range,” the “northern schist range,” and the “snow range,” the last consisting mainly of old crystalline massive rocks. The rocks predominating in Japan fall also into three groups. They are, first, plutonic rocks, especially granite; secondly, volcanic rocks, chiefly trachyte and dolerite; and thirdly, palaeozoic schists. On the other hand, limestone and sandstone, especially of the Mesozoic strata, are strikingly deficient. The strike of the old crystalline rocks follows, in general, the main direction of the islands (S.W. to N.E.). They are often overlain by schists and quartzites, or broken through by volcanic masses. “The basis of the islands consist of granite, syenite, diorite, diabase and related kinds of rock, porphyry appearing comparatively seldom. Now the granite, continuing for long distances, forms the prevailing rock; then, again, it forms the foundation for thick strata of schist and sandstone, itself only appearing in valleys of erosion and river boulders, in rocky projections on the coasts or in the ridges of the mountains.... In the composition of many mountains in Hondo (the main island) granite plays a prominent part.... It appears to form the central mass which crops up in hundreds of places towards the coast and in the interior. Old schists, free from fossils and rich in quartz, overlie it in parallel chains through the whole length of the peninsula, especially in the central and highest ridges, and bear the ores of Chū-goku (the central provinces), principally copper pyrites and magnetic pyrites. These schist ridges rich in quartz show, to a depth of 20 metres, considerable disintegration. The resulting pebble and quartz-sand is very unproductive, and supports chiefly a poor underwood and crippled pines with widely spreading roots which seek their nourishment afar. In the province of Settsu granite everywhere predominates, which may be observed also in the railway cuttings between Hiōgo and Osaka, as well as in the temples and walls of these towns. The waterfalls near Kobe descend over granite walls and the *mikageishi* (stone of Mikage), famous throughout Japan, is granite from Settsu.... In the hill country on the borders of Ise, Owari, Mikawa and Tōtōmi, on the one side, and Omi, Mino and Shinano, on the other, granite frequently forms dark grey and much disintegrated rock-projections above schist and diluvial quartz pebbles. The feldspar of a splendid pegmatite and its products of disintegration on the borders of Owari, Mino and Mikawa form the raw material of the very extensive ceramic industry of this district, with its chief place, Seto. Of granite are chiefly formed the meridional mountains of Shinano. Granite, diorite and other plutonic rocks hem in the winding upper valleys of the Kiso-gawa, the Saigawa (Shinano river) and many other rivers of this province, their clear water running over granite. Also in the hills bordering on the plain of Kwanto these old crystalline rocks are widely spread. Farther northwards they give way again, as in the south, to schists and eruptive rocks. Yet even here granite may be traced in many places. Of course it is not always a pure granite; even hablit and granite-porphyry are found here and there. Thus, for instance, near Nikkō in the upper valley of the Daiya-gawa, and in several other places in the neighbouring mountains, a granite-porphyry appears with large, pale, flesh-coloured crystals of orthoclase, dull triclinic felspar, quartz and hornblende.” “From the mine of Ichinokawa in Shikoku come the wonderful crystals of antimonite, which form such conspicuous objects in the mineralogical cabinets of Europe.” (Rein’s *Japan* and Milne in *Things Japanese*.) The above conditions suggest the presence of tertiary formations, yet only the younger groups of that formation appear to be developed. Nor is there any sign of moraines, glacier-scorings or other traces of the ice-age.

The oldest beds which have yielded fossils in any abundance belong to the Carboniferous System. The Trias proper is represented by truly marine deposits, while the Rhaetic beds contain plant remains. The Jurassic and Cretaceous beds are also in part marine and in part terrestrial. During the whole of the Mesozoic era Japan appears to have lain on or near the margin of the Asiatic continent, and the marine deposits are confined for the most part to the eastern side of the islands.

The igneous rocks occur at several geological horizons, but the great volcanic eruptions did not begin until the Tertiary period. The existing volcanoes belong to four separate arcs or chains. On the south is the arc of the Luchu islands, which penetrates into Kiū Shiū. In the centre there is the arc of the Izu-no-Shichito islands, which is continued into Hondo along the Fossa Magna. In North Hondo the great Bandai arc forms the axis of the island and stretches into Yezo (Hokkaidō). Finally in the east of Yezo rise the most westerly volcanoes of the Kurile chain. The lavas and ashes ejected by these volcanoes consist of liparite, dacite, andesite and basalt.

Structurally Japan is divided into two regions by a depression (the “Fossa Magna” of Naumann) which stretches across the island of Hondo from Shimoda to Nagano. The depression is marked by a line of volcanoes, including Fuji, and is in part buried beneath the products of their eruptions. It is supposed to be due to a great fault along its western margin. South and west of the Fossa Magna the beds are thrown into folds which run approximately parallel to the general direction of the coast, and two zones may be recognized—an outer, consisting of Palaeozoic and Mesozoic beds, and an inner, consisting of Archaean and Palaeozoic rocks, with granitic intrusions. Nearly along the boundary between the two zones lie the inland seas of south Japan. Towards the Fossa Magna the folds bend northwards.

North and east of the Fossa Magna the structure is concealed, to a very large extent, by the outpourings of the volcanoes which form so marked a feature in the northern part of Hondo. But the foundation on which the volcanoes rest is exposed along the east coast of Hondo (in the Kwanto, Abukuma and Kitakami hills), and also in the island of Yezo. This foundation consists of Archean, Palaeozoic and Mesozoic beds folded together, the direction of the folds being N. by W. to S. by E., that is to say, slightly oblique to the general direction of this part of the island. Towards the Fossa Magna the folds bend sharply round until they are nearly parallel to the Fossa itself.

(P. La.)

Secular Movement.

It has been abundantly demonstrated by careful observations that the east coasts of Japan are slowly rising. This phenomenon was first noticed in the case of the plain on which stands the capital, Tōkyō. Maps of sufficiently trustworthy accuracy show that in the 11th century Tōkyō Bay penetrated much more deeply in a northern direction than it does now; the point where the city’s main river (Sumida or Arakawa) enters the sea was considerably to the north of its present position, and low-lying districts, to-day thickly populated, were under water. Edmund Naumann was the discoverer of these facts, and his attention was first drawn to them by learning that an edible sea-weed, which flourishes only in salt water, is called Asakusa-nori, from the place (Asakusa) of its original provenance, which now lies some 3 m. inland. Similar phenomena were found in Sakhalin by Schmidt and on the north-east coast of the main island by Rein, and there can be little doubt that they exist at other places also. Naumann has concluded that “formerly Tōkyō Bay stretched further over the whole level country of Shimosa and Hitachi and northwards as far as the plain of Kwantō extends;” that “the mountain country of Kasusa-Awa emerged from it an island, and that a current ran in a north-westerly direction between this island and the northern mountain margin of the present plain toward the north-east into the open ocean.”

Mineral Springs.—The presence of so many active volcanoes is partially compensated by a wealth of mineral springs. Since many of these thermal springs possess great medicinal value, Japan may become one of the world’s favourite health-resorts. There are more than a hundred spas, some hot, some cold, which, being easily accessible and highly efficacious, are largely visited by the Japanese. The most noteworthy are as follows:—

Name of Spa.	Prefecture.	Quality.	Temp., F°.
Arima	Hiogo	Salt	100
Asama	Nagano	Pure	111—127
Asamushi	Aomori	Salt	134—168
Atami	Shizuoka	”	131—226
Beppu	Oita	Carbonic Acid	109—132
Bessho	Nagano	Pure or Sulphurous	108—113
Dogo	Ehime	Pure	70—110
Hakone	Kanagawa	Pure, Salt or Sulphurous	98—168
Higashi-yama	Fukushima	Pure or Salt	117—144
Ikao	Gumma	Salt	111—127
Isobe	”	”	Cold
Kusatsu	”	Sulphurous	127—148
Nasu	Tochigi	Sulphurous	162-172
Noboribetsu	Ishikari	”	125
Shibu	Nagano	Salt	98-115
Chiuzenji	Shizuoka	Carbonate of Soda and Sulphur	114-185
Takarazuka	Hiogo	Carbonic Acid	Cold
Ureshino	Saga	”	230
Unzen	Nagasaki	Sulphurous	158-204
Wagura	Ishikawa	Salt	180
Yamashiro	”	”	165
Yunoshima	Hiogo	”	104-134

Climate.—The large extension of the Japanese islands in a northerly and southerly direction causes great varieties of climate. General characteristics are hot and humid though short summers, and long, cold and clear winters. The equatorial currents produce conditions differing from those existing at corresponding latitudes on the neighbouring continent. In Kiūshiū, Shikoku and the southern half of the main island, the months of July and August alone are marked by oppressive heat at the sea-level, while in elevated districts a cool and even bracing temperature may always be found, though the direct rays of the sun retain distressing power. Winter in these districts does not last more than two months, from the end of December to the beginning of March; for although the latter month is not free from frost and even snow, the balminess of spring makes itself plainly perceptible. In the northern half of the main island, in Yezo and in the Kuriles, the cold is severe during the winter, which lasts for at least four months, and snow falls sometimes to great depths. Whereas in Tōkyō the number of frosty nights during a year does not average much over 60, the corresponding number in Sapporo on the north-west of Yezo is 145. But the variation of the thermometer in winter and summer being considerable—as much as 72° F. in Tōkyō—the climate proves somewhat trying to persons of weak constitution. On the other hand, the mean daily variation is in general less than that in other countries having the same latitude: it is greatest in January, when it reaches 18° F., and least in July, when it barely exceeds 9° F. The monthly variation is very great in March, when it usually reaches 43° F.

Meteorology.

During the first 40 years of the *Meiji* era numerous meteorological stations were established. Reports are constantly forwarded by telegraph to the central observatory in Tōkyō, which issues daily statements of the climatic conditions during the previous twenty-four hours, as well as forecasts for the next twenty-four. The whole country is divided into districts for meteorological purposes, and storm-warnings are issued when necessary. At the most important stations observations are taken every hour; at the less important, six observations daily; and at the least important, three observations. From the record of three decades the following yearly averages of temperature are obtained:—

	F°.
Taihoku (in Formosa)	71
Nagasaki (Kiūshiū)	60
Kōbe (Main Island)	59
Osaka (Main Island)	59
Okayama (Main Island)	58
Nagoya (Main Island)	58
Sakai (Main Island)	58
Tōkyō (Capital)	57
Kiōto (Main Island)	57
Niigata (Main Island)	55
Ishinomaki (Main Island)	52
Aomori (Main Island)	50
Sapporo (Yezo)	44

The following table affords data for comparing the climates of Peking, Shanghai, Hakodate, Tōkyō and San Francisco:—

	Longitude.	Latitude.	Mean Temp., F°.
Peking	116° 29′ E.	39° 57′ N.	53
Shanghai	121° 20′ E.	31° 12′ N.	59
Hakodate	140° 45′ E.	41° 46′ N.	47
Tōkyō	138° 47′ E.	35° 41′ N.	57
San Francisco	122° 25′ E.	37° 48′ N.	56

	Hottest Month.	Mean Temp. of Hottest Month.
Peking	July	80
Shanghai	”	84
Hakodate	August	71
Tōkyō	”	79
San Francisco	September	63

	Coldest Month.	Mean Temp. of Coldest Month.
Peking	January	22
Shanghai	”	26
Hakodate	”	28
Tōkyō	”	36
San Francisco	”	49

Rainfall.

There are three wet seasons in Japan: the first, from the middle of April to the beginning of May; the second, from the middle of June to the beginning of July; and the third, from early in September to early in October. The dog days (*doyō*) are from the middle of July till the second half of August. September is the wettest month; January the driest. During the four months from November to February inclusive only about 18% of the whole rain for the year falls. In the district on the east of the main island the snowfall is insignificant, seldom attaining a depth of more than four or five inches and generally melting in a few days, while bright, sunny skies are usual. But in the mountainous provinces of the interior and in those along the western coast, deep snow covers the ground throughout the whole winter, and the sky is usually wrapped in a veil of clouds. These differences are due to the action of the north-westerly wind that blows over Japan from Siberia. The intervening sea being comparatively warm, this wind arrives at Japan having its temperature increased and carrying moisture which it deposits as snow on the western faces of the Japanese mountains. Crossing the mountains and descending their eastern slopes, the wind becomes less saturated and warmer, so that the formation of clouds ceases. Japan is emphatically a wet country so far as quantity of rainfall is concerned, the average for the whole country being 1570 mm. per annum. Still there are about four sunny days for every three on which rain or snow falls, the actual figures being 150 days of snow or rain and 215 days of sunshine.

Wind.

During the cold season, which begins in October and ends in April, northerly and westerly winds prevail throughout Japan. They come from the adjacent continent of Asia, and they develop considerable strength owing to the fact that there is an average difference of some 22 mm. between the atmospheric pressure (750 mm.) in the Pacific and that (772 mm.) in the Japanese islands. But during the warm season, from May to September, these conditions of atmospheric pressure are reversed, that in the Pacific rising to 767 mm. and that in Japan falling to 750 mm. Hence throughout this season the prevailing winds are light breezes from the west and south. A comparison of the force habitually developed by the wind in various parts of the islands shows that at Suttsu in Yezo the average strength is 9 metres per second, while Izuhara in the island Tsushima, Kumamoto in Kiūshiū and Gifu in the east centre of the main island stand at the bottom of the list with an average wind velocity of only 2 metres. A calamitous atmospheric feature is the periodical arrival of storms called “typhoons” (Japanese *tai-fu* or “great wind”). These have their origin, for the most part, in the China Sea, especially in the vicinity of Luzon. Their season is from June to October, but they occur in other months also, and they develop a velocity of 5 to 75 m. an hour. The meteorological record for ten years ended 1905 shows a total of 120 typhoons, being an average of 12 annually. September had 14 of these phenomena, March 11 and April 10, leaving 85 for the remaining 9 months. But only 65 out of the whole number developed disastrous force. It is particularly unfortunate that September should be the season of greatest typhoon frequency, for the earlier varieties of rice flower in that month and a heavy storm does much damage. Thus, in 1902—by no means an abnormal year—statistics show the following disasters owing to typhoons: casualties to human life, 3639; ships and boats lost, 3244; buildings destroyed wholly or partially, 695,062; land inundated, 1,071,575 acres; roads destroyed, 1236 m.; bridges washed away, 13,685; embankments broken, 705 m.; crops damaged, 8,712,655 bushels. The total loss, including cost of repairs, was estimated at nearly 3 millions sterling, which may be regarded as an annual average.

Flora.—The flora of Japan has been carefully studied by many scientific men from Siebold downwards. Foreigners visiting Japan are immediately struck by the affection of the people for flowers, trees and natural beauties of every kind. In actual wealth of blossom or dimensions of forest trees the Japanese islands cannot claim any special distinction. The spectacles most admired by all classes are the tints of the foliage in autumn and the glory of flowering trees in the spring. In beauty and variety of pattern and colour the autumnal tints are unsurpassed. The colours pass from deep brown through purple to yellow and white, thrown into relief by the dark green of non-deciduous shrubs and trees. Oaks and wild prunus, wild vines and sumachs, various kinds of maple, the dōdan (*Enkianthus Japonicus* Hook.)—a wonderful bush which in autumn develops a hue of ruddy red—birches and other trees, all add multitudinous colours to the brilliancy of a spectacle which is further enriched by masses of feathery bamboo. The one defect is lack of green sward.

The grass used for Japanese lawns loses its verdure in autumn and remains from November to March a greyish-brown blot upon the scene. Spring is supposed to begin in February when, according to the old calendar, the new year sets in, but the only flowers then in bloom are the *camellia japonica* and some kinds of daphne. The former—called by the Japanese *tsubaki*—may often be seen glowing fiery red amid snow, but the pink (*otome tsubaki*), white (*shiro-tsubaki*) and variegated (*shibori-no-tsubaki*) kinds do not bloom until March or April. Neither the camellia nor the daphne is regarded as a refined flower: their manner of shedding their blossoms is too unsightly. Queen of spring flowers is the plum (*ume*). The tree lends itself with peculiar readiness to the skilful manipulation of the gardener, and is by him trained into shapes of remarkable grace. Its pure white or rose-red blossoms, heralding the first approach of genial weather, are regarded with special favour and are accounted the symbol of unassuming hardihood. The cherry (*sakura*) is even more esteemed. It will not suffer any training, nor does it, like the plum, improve by pruning, but the sunshine that attends its brief period of bloom in April, the magnificence of its flower-laden boughs and the picturesque flutter of its falling petals, inspired an ancient poet to liken it to the "soul of Yamato" (Japan), and it has ever since been thus regarded. The wild peach (*momo*) blooms at the same time, but attracts little attention. All these trees—the plum, the cherry and the peach—bear no fruit worthy of the name, nor do they excel their Occidental representatives in wealth of blossom, but the admiring affection they inspire in Japan is unique. Scarcely has the cherry season passed when that of the wistaria (*fuji*) comes, followed by the azalea (*tsutsuji*) and the iris (*shōbu*), the last being almost contemporaneous with the peony (*botan*), which is regarded by many Japanese as the king of flowers and is cultivated assiduously. A species of weeping maple (*shidare-momiji*) dresses itself in peachy-red foliage and is trained into many picturesque shapes, though not without detriment to its longevity. Summer sees the lotus (*renge*) convert wide expanses of lake and river into sheets of white and red blossoms; a comparatively flowerless interval ensues until, in October and November, the chrysanthemum arrives to furnish an excuse for fashionable gatherings. With the exception of the dog-days and the dead of winter, there is no season when flowers cease to be an object of attention to the Japanese, nor does any class fail to participate in the sentiment. There is similar enthusiasm in the matter of gardens. From the 10th century onwards the art of landscape gardening steadily grew into a science, with esoteric as well as exoteric aspects, and with a special vocabulary. The underlying principle is to reproduce nature's scenic beauties, all the features being drawn to scale, so that however restricted the space, there shall be no violation of proportion. Thus the artificial lakes and hills, the stones forming rockeries or simulating solitary crags, the trees and even the bushes are all selected or manipulated so as to fall congruously into the general scheme. If, on the one hand, huge stones are transported hundreds of miles from seashore or river-bed where, in the lapse of long centuries, waves and cataracts have hammered them into strange shapes, and if the harmonizing of their various colours and the adjustment of their forms to environment are studied with profound subtlety, so the training and tending of the trees and shrubs that keep them company require much taste and much toil. Thus the red pine (*aka-matsu* or *pinus densiflora*), which is the favourite garden tree, has to be subjected twice a year to a process of spray-dressing which involves the careful removal of every weak or aged needle. One tree occupies the whole time of a gardener for about ten days. The details are endless, the results delightful. But it has to be clearly understood that there is here no mention of a flower-garden in the Occidental sense of the term. Flowers are cultivated, but for their own sakes, not as a feature of the landscape garden. If they are present, it is only as an incident. This of course does not apply to shrubs which blossom at their seasons and fall always into the general scheme of the landscape. Forests of cherry-trees, plum-trees, magnolia trees, or *hiyaku-jikkō* (*Lagerstroemia indica*), banks of azalea, clumps of hydrangea, groups of camellia—such have their permanent places and their foliage adds notes of colour when their flowers have fallen. But chrysanthemums, peonies, roses and so forth, are treated as special shows, and are removed or hidden when out of bloom. There is another remarkable feature of the Japanese gardener's art. He dwarfs trees so that they remain measurable only by inches after their age has reached scores, even hundreds, of years, and the proportions of leaf, branch and stem are preserved with fidelity. The pots in which these wonders of patient skill are grown have to be themselves fine specimens of the ceramist's craft, and as much as £200 is sometimes paid for a notably well trained tree.

There exists among many foreign observers an impression that Japan is comparatively poor in wild-flowers; an impression probably due to the fact that there are no flowery meadows or lanes. Besides, the flowers are curiously wanting in fragrance. Almost the only notable exceptions are the *mokusei* (*Osmanthus fragrans*), the daphne and the magnolia. Missing the perfume-laden air of the Occident, a visitor is prone to infer paucity of blossoms. But if some familiar European flowers are absent, they are replaced by others strange to Western eyes—a wealth of *lespedeza* and *Indigo-fera*; a vast variety of lilies; graceful grasses like the eulalia and the *ominameshi* (*Patrina scabiosaefolia*); the richly-hued *Pyrus japonica*; azaleas, diervillas and deutzias; the *kikyo* (*Platycodon grandiflorum*), the *gibōshi* (*Funkia ovata*), and many another. The same is true of Japanese forests. It has been well said that "to enumerate the constituents and inhabitants of the Japanese mountain-forests would be to name at least half the entire flora."

According to Franchet and Savatier Japan possesses:—

	Families.	Genera.	Species.
Dicotyledonous plants	121	795	1934
Monocotyledonous plants	28	202	613
Higher Cryptogamous plants	5	38	196
Vascular plants	154	1035	2743

The investigations of Japanese botanists are adding constantly to the above number, and it is not likely that finality will be reached for some time. According to a comparison made by A. Gray with regard to the numbers of genera and species respectively represented in the forest trees of four regions of the northern hemisphere, the following is the case:—

Atlantic Forest-region of N. America	66 genera and 155 species.
Pacific Forest-region of N. America	31 genera and 78 species.
Japan and Manchuria Forest-region	66 genera and 168 species.
Forests of Europe	33 genera and 85 species.

While there can be no doubt that the luxuriance of Japan's flora is due to rich soil, to high temperature and to rainfall not only plentiful but well distributed over the whole year, the wealth and variety of her trees and shrubs must be largely the result of immigration. Japan has four insular chains which link her to the neighbouring continent. On the south, the Riūkiū Islands bring her within reach of Formosa and the Malayan archipelago; on the west, Oki, Iki, and Tsushima bridge the sea between her and Korea; on the north-west Sakhalin connects her with the Amur region; and on the north, the Kuriles form an almost continuous route to Kamchatka. By these paths the germs of Asiatic plants were carried over to join the endemic flora of the country, and all found suitable homes amid greatly varying conditions of climate and physiography.

Fauna.—Japan is an exception to the general rule that continents are richer in fauna than are their neighbouring islands. It has been said with truth that "an industrious collector of beetles, butterflies, neuroptera, &c., finds a greater number of species in a circuit of some miles near Tōkyō than are exhibited by the whole British Isles."

Of mammals 50 species have been identified and catalogued. Neither the lion nor the tiger is found. The true Carnivora

are three only, the bear, the dog and the marten. Three species of bears are scientifically recognized, but one of them, the ice-bear (*Ursus maritimus*), is only an accidental visitor, carried down by the Arctic current. In the main island the black bear (*kuma*, *Ursus japonicus*) alone has its habitation, but the island of Yezo has the great brown bear (called *shi-guma*, *oki-kuma* or *aka-kuma*), the "grisly" of North America. The bear does not attract much popular interest in Japan. Tradition centres rather upon the fox (*kitsune*) and the badger (*mujina*), which are credited with supernatural powers, the former being worshipped as the messenger of the harvest god, while the latter is regarded as a mischievous rollicker. Next to these comes the monkey (*saru*), which dwells equally among the snows of the north and in the mountainous regions of the south. *Saru* enters into the composition of many place-names, an evidence of the people's familiarity with the animal. There are ten species of bat (*komori*) and seven of insect-eaters, and prominent in this class are the mole (*mugura*) and the hedgehog (*hari-nezumi*). Among the martens there is a weasel (*itachi*), which, though useful as a rat-killer, has the evil repute of being responsible for sudden and mysterious injuries to human beings; there is a river-otter (*kawauso*), and there is a sea-otter (*rakko*) which inhabits the northern seas and is highly valued for its beautiful pelt. The rodents are represented by an abundance of rats, with comparatively few mice, and by the ordinary squirrel, to which the people give the name of tree-rat (*ki-nezumi*), as well as the flying squirrel, known as the *momo-dori* (peach-bird) in the north, where it hides from the light in hollow tree-trunks, and in the south as the *ban-tori* (or bird of evening). There are no rabbits, but hares (*usagi*) are to be found in very varying numbers, and those of one species put on a white coat during winter. The wild boar (*shishi* or *ii-no-shishi*) does not differ appreciably from its European congener. Its flesh is much relished, and for some unexplained reason is called by its vendors "mountain-whale" (*yama-kujira*). A very beautiful stag (*shika*), with eight-branched antlers, inhabits the remote woodlands, and there are five species of antelope (*kamo-shika*) which are found in the highest and least accessible parts of the mountains. Domestic animals have for representatives the horse (*uma*), a small beast with little beauty of form though possessing much hardihood and endurance; the ox (*ushi*) mainly a beast of burden or draught; the pig (*buta*), very occasionally; the dog (*inu*), an unsightly and useless brute; the cat (*neko*), with a stump in lieu of a tail; barndoor fowl (*niwa-tori*), ducks (*ahiro*) and pigeons (*hato*). The turkey (*shichi-mencho*) and the goose (*gachō*) have been introduced but are little appreciated as yet.

Although so-called singing birds exist in tolerable numbers, those worthy of the name of songster are few. Eminently first is a species of nightingale (*uguisu*), which, though smaller than its congener of the West, is gifted with exquisitely modulated flute-like notes of considerable range. The *uguisu* is a dainty bird in the matter of temperature. After May it retires from the low-lying regions and gradually ascends to higher altitudes as midsummer approaches. A variety of the cuckoo called *holotogisu* (*Cuculus poliocephalus*) in imitation of the sound of its voice, is heard as an accompaniment of the *uguisu*, and there are also three other species, the *kakkōdori* (*Cuculus canorus*), the *tsutsu-dori* (*C. himalayanus*), and the *masuhakari*, or *juichi* (*C. hyperythrus*). To these the lark, *hibari* (*Alauda japonica*), joins its voice, and the cooing of the pigeon (*hato*) is supplemented by the twittering of the ubiquitous sparrow (*suzume*), while over all are heard the raucous caw of the raven (*karasu*) and the harsh scream of the kite (*tombi*), between which and the raven there is perpetual feud. The falcon (*taka*), always an honoured bird in Japan, where from time immemorial hawking has been an aristocratic pastime, is common enough, and so is the sparrow-hawk (*hai-taka*), but the eagle (*washi*) affects solitude. Two English ornithologists, Blakiston and Pryer, are the recognized authorities on the birds of Japan, and in a contribution to the *Transactions of the Asiatic Society of Japan* (vol. x.) they have enumerated 359 species. Starlings (*muku-dori*) are numerous, and so are the wagtail (*sekirei*), the swallow (*tsubame*) the martin (*ten*), the woodchat (*mozu*) and the jay (*kakesu* or *kashi-dori*), but the magpie (*tōgarasu*), though common in China, is rare in Japan. Blackbirds and thrushes are not found, nor any species of parrot, but on the other hand, we have the hoopoe (*yatsugashira*), the red-breast (*komadori*), the bluebird (*ruri*), the wren (*miso-sazai*), the golden-crested wren (*itadaki*), the golden-eagle (*inu-washi*), the finch (*hiwa*), the longtailed rose-finch (*benimashiko*), the ouzel—brown (*akahara*), dusky (*tsugumi*) and water (*kawa-garasu*)—the kingfisher (*kawasemi*), the crake (*kuina*) and the tomtit (*kara*). Among game-birds there are the quail (*uzura*), the heathcock (*ezo-rachō*), the ptarmigan (*ezo-raichō* or *ezo-yama-dori*), the woodcock (hodo-shigi), the snipe (*ta-shigi*)—with two special species, the solitary snipe (*yama-shigi*) and the painted snipe (*tama-shigi*)—and the pheasant (*kiji*). Of the last there are two species, the *kiji* proper, a bird presenting no remarkable features, and the copper pheasant, a magnificent bird with plumage of dazzling beauty. Conspicuous above all others, not only for grace of form but also for the immemorial attention paid to them by Japanese artists, are the crane (*tsuru*) and the heron (*sagi*). Of the crane there are seven species, the stateliest and most beautiful being the *Grus japonensis* (*tanchō* or *tanchō-zuru*), which stands some 5 ft. high and has pure white plumage with a red crown, black tail-feathers and black upper neck. It is a sacred bird, and it shares with the tortoise the honour of being an emblem of longevity. The other species are the demoiselle crane (*anewa-zuru*), the black crane (*kuro-zuru* or *nezumi-zuru*, *i.e. Grus cinerea*), the *Grus leucauchen* (*mana-zuru*), the *Grus monachus* (*nabe-zuru*), and the white crane (*shiro-zuru*). The Japanese include in this category the stork (*kōzuru*), but it may be said to have disappeared from the island. The heron (*sagi*) constitutes a charming feature in a Japanese landscape, especially the silver heron (*shira-sagi*), which displays its brilliant white plumage in the rice-fields from spring to early autumn. The night-heron (*goi-sagi*) is very common. Besides these waders there are plover (*chidori*); golden (*muna-guro* or *ai-guro*); gray (*daizen*); ringed (*shiro-chidori*); spur-winged (*keri*) and Harting's sand-plover (*ikaru-chidori*); sand-pipers—green (*ashiro-shigi*) and spoon-billed (*hera-shigi*)—and water-hens (*ban*). Among swimming birds the most numerous are the gull (*kamome*), of which many varieties are found; the cormorant (*u*)—which is trained by the Japanese for fishing purposes—and multitudinous flocks of wild-geese (*gan*) and wild-ducks (*kamo*), from the beautiful mandarin-duck (*oshi-dori*), emblem of conjugal fidelity, to teal (*kogamo*) and widgeon (*hidori-gamo*) of several species. Great preserves of wild-duck and teal used to be a frequent feature in the parks attached to the feudal castles of old Japan, when a peculiar method of netting the birds or striking them with falcons was a favourite aristocratic pastime. A few of such preserves still exist, and it is noticeable that in the Palace-moats of Tōkyō all kinds of water-birds, attracted by the absolute immunity they enjoy there, assemble in countless numbers at the approach of winter and remain until the following spring, wholly indifferent to the close proximity of the city.

Of reptiles Japan has only 30 species, and among them is included the marine turtle (*umi-game*) which can scarcely be said to frequent her waters, since it is seen only at rare intervals on the southern coast. This is even truer of the larger species (the *shōgakubo*, *i.e. Chelonia cephalo*). Both are highly valued for the sake of the shell, which has always been a favourite material for ladies' combs and hairpins. By carefully selecting certain portions and welding them together in a perfectly flawless mass, a pure amber-coloured object is obtained at heavy cost. Of the fresh-water tortoise there are two kinds, the *suppon* (*Trionyx japonica*) and the *kame-no-ko* (*Emys vulgaris japonica*). The latter is one of the Japanese emblems of longevity. It is often depicted with a flowing tail, which appendix attests close observation of nature; for the *mino-game*, as it is called, represents a tortoise to which, in the course of many scores of years, confervae have attached themselves so as to form an appendage of long green locks as the creature swims about. Sea-snakes occasionally make their way to Japan, being carried thither by the Black Current (Kuro Shiwo) and the monsoon, but they must be regarded as merely fortuitous visitors. There are 10 species of land-snakes (*hebi*), among which one only (the *mamushi*, or *Trigonocephalus Blomhoffi*) is venomous. The others for the most part frequent the rice-fields and live upon frogs. The largest is the *aodaisho* (*Elaphis virgatus*), which sometimes attains a length of 5 ft., but is quite harmless. Lizards (*tokage*), frogs (*kawazu* or *kaeru*), toads (*ebogayeru*) and newts (*imori*) are plentiful, and much curiosity attaches to a giant salamander (*sansho-uwo*, called also *hazekai* and other names according to localities), which reaches to a length of 5 ft., and (according to Rein) is closely related to the *Andrias Scheuchzeri* of the Oeningen strata.

The seas surrounding the Japanese islands may be called a resort of fishes, for, in addition to numerous species which abide there permanently, there are migatory kinds, coming and going with the monsoons and with the great ocean streams that set to and from the shores. In winter, for example, when the northern monsoon begins to blow, numbers of denizens of the Sea of Okhotsk swim southward to the more genial waters of north Japan; and in summer the Indian Ocean and the Malayan archipelago send to her southern coasts a crowd of emigrants which turn homeward again at the

approach of winter. It thus falls out that in spite of the enormous quantity of fish consumed as food or used as fertilizers year after year by the Japanese, the seas remain as richly stocked as ever. Nine orders of fishes have been distinguished as the piscifauna of Japanese waters. They may be found carefully catalogued with all their included species in Rein's *Japan*, and highly interesting researches by Japanese physiographists are recorded in the Journal of the College of Science of the Imperial University of Tokyo. Briefly, the chief fish of Japan are the bream (*tai*), the perch (*suzuki*), the mullet (*bora*), the rock-fish (*hatatate*), the grunter (*oni-o-koze*), the mackerel (*saba*), the sword-fish (*tachi-uwo*), the wrasse (*kusabi*), the haddock (*tara*), the flounder (*karei*), and its congeners the sole (*hirame*) and the turbot (*ishi-garei*), the shad (*namazu*), the salmon (*shake*), the *masu*, the carp (*koi*), the *funa*, the gold fish (*kingyo*), the gold carp (*higoi*), the loach (*dojo*), the herring (*nishin*), the *iwashi*(*Clupea melanosticta*), the eel (*unagi*), the conger eel (*anago*), the coffer-fish (*hako-uwo*), the *fugu* (*Tetrodon*), the *ai* (*Plecoglossus altivelis*), the sayori (*Hemiramphus sayori*), the shark (same), the dogfish (*manuka-zame*), the ray (*e*), the sturgeon (*chō-zame*) and the *maguro* (*Thynnus sibi*).

The insect life of Japan broadly corresponds with that of temperate regions in Europe. But there are also a number of tropical species, notably among butterflies and beetles. The latter—for which the generic term in Japan is *mushi* or *kaichū*—include some beautiful species, from the "jewel beetle" (*tama-mushi*), the "gold beetle" (*kogane-mushi*) and the *Chrysochroa fulgidissima*, which glow and sparkle with the brilliancy of gold and precious stones, to the jet black *Melanauster chinensis*, which seems to have been fashioned out of lacquer spotted with white. There is also a giant nasicornous beetle. Among butterflies (*chōchō*) Rein gives prominence to the broad-winged kind (*Papilio*), which recall tropical brilliancy. One (*Papilio macilentus*) is peculiar to Japan. Many others seem to be practically identical with European species. That is especially true of the moths (*yachō*), 100 species of which have been identified with English types. There are seven large silk-moths, of which two only (*Bombyx mori* and *Antheraea yama-mai*) are employed in producing silk. Fishing lines are manufactured from the cocoons of the *genjiki-mushi* (*Caligula japonica*), which is one of the commonest moths in the islands. Wasps, bees and hornets, generically known as *hachi*, differ little from their European types, except that they are somewhat larger and more sluggish. The gad-fly (*abu*), the housefly (*hai*), the mosquito (*ka*), the flea (*nomi*) and occasionally the bedbug (called by the Japanese *kara-mushi* because it is believed to be imported from China), are all fully represented, and the dragon-fly (*tombō*) presents itself in immense numbers at certain seasons. Grasshoppers (*batta*) are abundant, and one kind (*inago*), which frequent the rice-fields when the cereal is ripening, are caught and fried in oil as an article of food. On the moors in late summer the mantis (*kama-kiri-mushi*) is commonly met with, and the cricket (*kūrogi*) and the cockroach abound. Particularly obtrusive is the cicada (*semi*), of which there are many species. Its strident voice is heard most loudly at times of great heat, when the song of the birds is hushed. The dragon-fly and the cicada afford ceaseless entertainment to the Japanese boy. He catches them by means of a rod smeared with bird-lime, and then tying a fine string under their wings, he flies them at its end. Spiders abound, from a giant species to one of the minutest dimensions, and the tree-bug is always ready to make a destructive lodgment in any sickly tree-stem. The scorpion (*sasori*) exists but is not poisonous.

Japanese rivers and lakes are the habitation of several—seven or eight—species of fresh-water crab (*kani*), which live in holes on the shore and emerge in the daytime, often moving to considerable distances from their homes. Shrimps (*kawa-ebi*) also are found in the rivers and rice-fields. These shrimps as well as a large species of crab—*mokuzō-gani*—serve the people as an article of food, but the small crabs which live in holes have no recognized *raison d'être*. In Japan, as elsewhere, the principal crustacea are found in the sea. Flocks of *lupa* and other species swim in the wake of the tropical fishes which move towards Japan at certain seasons. Naturally these migratory crabs are not limited to Japanese waters. Milne Edwards has identified ten species which occur in Australian seas also, and Rein mentions, as belonging to the same category, the "helmet-crab" or "horse-shoe crab" (*kabuto-gani*; *Limulus longispina* Hoeven). Very remarkable is the giant *Taka-ashi*—long legs (*Macrocheirus Kaempferi*), which has legs 1½ metres long and is found in the seas of Japan and the Malay archipelago. There is no lobster on the coasts of Japan, but there are various species of crayfish (*Palinurus* and *Scyllarus*) the principal of which, under the names of ise-ebi (*Palinurus japonicus*) and *kuruma-ebi* (*Penaeus canaliculatus*) are greatly prized as an article of diet.

Already in 1882, Dunker in his *Index Molluscorum Maris Japonici* enumerated nearly 1200 species of marine molluscs found in the Japanese archipelago, and several others have since then been added to the list. As for the land and fresh-water molluscs, some 200 of which are known, they are mainly kindred with those of China and Siberia, tropical and Indian forms being exceptional. There are 57 species of *Helix* (*maimaitsuburi*, *dedemushi*, *katatsumuri* or *kwagyū*) and 25 of Clausilia (*kiseru-gai* or pipe-snail), including the two largest snails in Japan, namely the *Cl. Martensi* and the *Cl. Yoko-hamensis*, which attain to a length of 58 mm. and 44 mm. respectively. The mussel (*i-no-kai*) is well represented by the species *numa-gai* (marsh-mussel), *karasu-gai* (raven-mussel), *kamisori-gai* (razor-mussel), *shijimi-no-kai* (*Corbicula*), of which there are nine species, &c. Unlike the land-molluscs, the great majority of Japanese sea-molluscs are akin to those of the Indian Ocean and the Malay archipelago. Some of them extend westward as far as the Red Sea. The best known and most frequent forms are the *asari* (*Tapes philippinarum*), the *hamaguri* (*Meretrix lusoria*), the *baka* (*Mactra sulcataria*), the *aka-gai* (*Scapharca inflata*), the *kaki* (oyster), the *awabi* (*Haliotis japonica*), the *sazae* (*Turbo cornutus*), the *hora-gai* (*Tritonium tritonius*), &c. Among the cephalopods several are of great value as articles of food, *e.g.* the *surume* (*Onychotheuthis Banksii*), the *tako* (octopus), the *shidako* (Eledone), the *ika* (Sepia) and the *tako-fune* (Argonauta).

Greeff enumerates, as denizens of Japanese seas, 26 kinds of sea-urchins (*gaze* or *uni*) and 12 of starfish (*hitode* or *tako-no-makura*). These, like the mollusca, indicate the influence of the Kuro Shiwo and the south-west monsoon, for they have close affinity with species found in the Indian and Pacific Oceans. For edible purposes the most valuable of the Japanese echinoderms is the sea-slug or *bêche de mer* (*namako*), which is greatly appreciated and forms an important staple of export to China. Rein writes: "Very remarkable in connexion with the starfishes is the occurrence of *Asterias rubens* on the Japanese coast. This creature displays an almost unexampled frequency and extent of distribution in the whole North Sea, in the western parts of the Baltic, near the Faroe Islands, Iceland, Greenland and the English coasts, so that it may be regarded as a characteristic North Sea echinoderm form. Towards the south this starfish disappears, it seems, completely; for it is not yet known with certainty to exist either in the Mediterranean or in the southern parts of the Atlantic Ocean. In others also *Asterias rubens* is not known—and then it suddenly reappears in Japan. *Archaster typicus* has a pretty wide distribution over the Indian Ocean; other *Asteridae* of Japan, on the other hand, appear to be confined to its shores."

Japan is not rich in corals and sponges. Her most interesting contributions are crust-corals (*Gorgonidae*, *Corallium*, *Isis*, &c.), and especially flint-sponges, called by the Japanese *hoshi-gai* and known as "glass-coral" (*Hyalonema sieboldi*). These last have not been found anywhere except at the entrance of the Bay of Tōkyō at a depth of some 200 fathoms.

II.—The People

Population.—The population was as follows on the 31st of December 1907:—

Population.	Males.	Females.	Totals.	Population per sq. m.
Japan proper	24,601,658	24,172,627	48,774,285	330
Formosa (Taiwan)	1,640,778	1,476,137	3,116,915	224
Sakhalin	7,175	3,631	10,806	0.1

Totals	26,249,611	25,652,395	51,902,006

The following table shows the rate of increase in the four quadrennial periods between 1891 and 1907 in Japan proper:—

Year.	Males.	Females.	Totals.	Average increase per cent.	Population per sq. m.
1891	20,563,416	20,155,261	40,718,677	1.09	272
1895	21,345,750	20,904,870	42,270,620	1.09	286
1899	22,330,112	21,930,540	44,260,652	1.14	299
1903	23,601,640	23,131,236	46,732,876	1.54	316
1907	24,601,658	24,172,627	48,774,285	1.13	330

The population of Formosa (Taiwan) during the ten-year period 1898-1907 grew as follows:—

Year.	Males.	Females.	Totals.	Average increase per cent.	Population per sq. m.
1898	1,307,428	1,157,539	2,464,967	—	182
1902	1,513,280	1,312,067	2,825,347	2.70	209
1907	1,640,778	1,476,137	3,116,915	2.37	224

According to quasi-historical records, the population of the empire in the year A.D. 610 was 4,988,842, and in 736 it had grown to 8,631,770. It is impossible to say how much reliance may be placed on these figures, but from the 18th century, when the name of every subject had to be inscribed on the roll of a temple as a measure against his adoption of Christianity, a tolerably trustworthy census could always be taken. The returns thus obtained show that from the year 1723 until 1846 the population remained almost stationary, the figure in the former year being 26,065,422, and that in the latter year 26,907,625. There had, indeed, been five periods of declining population in that interval of 124 years, namely, the periods 1738-1744, 1759-1762, 1773-1774, 1791-1792, and 1844-1846. But after 1872, when the census showed a total of 33,110,825, the population grew steadily, its increment between 1872 and 1898 inclusive, a period of 27 years, being 10,649,990. Such a rate of increase invests the question of subsistence with great importance. In former times the area of land under cultivation increased in a marked degree. Returns prepared at the beginning of the 10th century showed 2½ million acres under crops, whereas the figure in 1834 was over 8 million acres. But the development of means of subsistence has been outstripped by the growth of population in recent years. Thus, during the period between 1899 and 1907 the population received an increment of 11.6% whereas the food-producing area increased by only 4.4%. This discrepancy caused anxiety at one time, but large fields suitable for colonization have been opened in Sakhalin, Korea, Manchuria and Formosa, so that the problem of subsistence has ceased to be troublesome. The birth-rate, taking the average of the decennial period ended 1907, is 3.05% of the population, and the death-rate is 2.05. Males exceed females in the ratio of 2% approximately. But this rule does not hold after the age of 65, where for every 100 females only 83 males are found. The Japanese are of low stature as compared with the inhabitants of Western Europe: about 16% of the adult males are below 5 ft. But there are evidences of steady improvement in this respect. Thus, during the period of ten years between 1893 and 1902, it was found that the percentage of recruits of 5 ft. 5 in. and upward grew from 10.09 to 12.67, the rate of increase having been remarkably steady; and the percentage of those under 5 ft. declined from 20.21 to 16.20.

Towns.—There are in Japan 23 towns having a population of over 50,000, and there are 76 having a population of over 20,000. The larger towns, their populations and the growth of the latter during the five-year period commencing with 1898 were as follow:—

URBAN POPULATIONS

	1898.	1903.
Tōkyō	1,440,121	1,795,128
Osaka	821,235	988,200
Kiōto	353,139	379,404
Nagoya	244,145	284,829
Kobe	215,780	283,839
Yokohama	193,762	324,776
Hiroshima	122,306	113,545
Nagasaki	107,422	151,727
Kanazawa	83,595	97,548
Sendai	83,325	93,773
Hakodate	78,040	84,746
Fukuoka	66,190	70,107
Wakayama	63,667	67,908
Tokushima	61,501	62,998
Kumamoto	61,463	55,277
Toyama	59,558	86,276
Okayama	58,025	80,140
Otaru	56,961	79,746
Kagoshima	53,481	58,384
Niigata	53,366	58,821
Sakai	50,203	———
Sapporo	———	55,304
Kure	———	62,825
Sasebo	———	52,607

The growth of Kure and Sasebo is attributable to the fact that they have become the sites of large ship-building yards, the property of the state.

The number of houses in Japan at the end of 1903, when the census was last taken, was 8,725,544, the average number of inmates in each house being thus 5.5.

Physical Characteristics.—The best authorities are agreed that the Japanese people do not differ physically from their Korean and Chinese neighbours as much as the inhabitants of northern Europe differ from those of southern Europe. It is true that the Japanese are shorter in stature than either the Chinese or the Koreans. Thus the average height of the

Japanese male is only 5 ft. 3½ in., and that of the female 4 ft. 10½ in., whereas in the case of the Koreans and the northern Chinese the corresponding figures for males are 5 ft. 5¾ in. and 5 ft. 7 in. respectively. Yet in other physical characteristics the Japanese, the Koreans and the Chinese resemble each other so closely that, under similar conditions as to costume and coiffure, no appreciable difference is apparent. Thus since it has become the fashion for Chinese students to flock to the schools and colleges of Japan, there adopting, as do their Japanese fellow-students, Occidental garments and methods of hairdressing, the distinction of nationality ceases to be perceptible. The most exhaustive anthropological study of the Japanese has been made by Dr E. Baelz (emeritus professor of medicine in the Imperial University of Tōkyō), who enumerates the following sub-divisions of the race inhabiting the Japanese islands. The first and most important is the Manchu-Korean type; that is to say, the type which prevails in north China and in Korea. This is seen specially among the upper classes in Japan. Its characteristics are exceptional tallness combined with slenderness and elegance of figure; a face somewhat long, without any special prominence of the cheekbones but having more or less oblique eyes; an aquiline nose; a slightly receding chin; largish upper teeth; a long neck; a narrow chest; a long trunk, and delicately shaped, small hands with long, slender fingers. The most plausible hypothesis is that men of this type are descendants of Korean colonists who, in prehistoric times, settled in the province of Izumo, on the west coast of Japan, having made their way thither from the Korean peninsula by the island of Oki, being carried by the cold current which flows along the eastern coast of Korea. The second type is the Mongol. It is not very frequently found in Japan, perhaps because, under favourable social conditions, it tends to pass into the Manchu-Korean type. Its representative has a broad face, with prominent cheekbones, oblique eyes, a nose more or less flat and a wide mouth. The figure is strongly and squarely built, but this last characteristic can scarcely be called typical. There is no satisfactory theory as to the route by which the Mongols reached Japan, but it is scarcely possible to doubt that they found their way thither at one time. More important than either of these types as an element of the Japanese nation is the Malay. Small in stature, with a well-knit frame, the cheekbones prominent, the face generally round, the nose and neck short, a marked tendency to prognathism, the chest broad and well developed, the trunk long, the hands small and delicate—this Malay type is found in nearly all the islands along the east coast of the Asiatic continent as well as in southern China and in the extreme south-west of Korean peninsula. Carried northward by the warm current known as the Kuro Shiwo, the Malays seem to have landed in Kiūshiū—the most southerly of the main Japanese islands—whence they ultimately pushed northward and conquered their Manchu-Korean predecessors, the Izumo colonists. None of the above three, however, can be regarded as the earliest settlers in Japan. Before them all was a tribe of immigrants who appear to have crossed from north-eastern Asia at an epoch when the sea had not yet dug broad channels between the continent and the adjacent islands. These people—the Ainu—are usually spoken of as the aborigines of Japan. They once occupied the whole country, but were gradually driven northward by the Manchu-Koreans and the Malays, until only a mere handful of them survived in the northern island of Yezo. Like the Malay and the Mongol types they are short and thickly built, but unlike either they have prominent brows, bushy locks, round deep-set eyes, long divergent lashes, straight noses and much hair on the face and the body. In short, the Ainu suggest much closer affinity with Europeans than does any other of the types that go to make up the population of Japan. It is not to be supposed, however, that these traces of different elements indicate any lack of homogeneity in the Japanese race. Amalgamation has been completely effected in the course of long centuries, and even the Ainu, though the small surviving remnant of them now live apart, have left a trace upon their conquerors.

The typical Japanese of the present day has certain marked physical peculiarities. In the first place, the ratio of the height of his head to the length of his body is greater than it is in Europeans. The Englishman’s head is often one-eighth of the length of his body or even less, and in continental Europeans, as a rule, the ratio does not amount to one-seventh; but in the Japanese it exceeds the latter figure. In all nations men of short stature have relatively large heads, but in the case of the Japanese there appears to be some racial reason for the phenomenon. Another striking feature is shortness of legs relatively to length of trunk. In northern Europeans the leg is usually much more than one-half of the body’s length, but in Japanese the ratio is one-half or even less; so that whereas the Japanese, when seated, looks almost as tall as a European, there may be a great difference between their statures when both are standing. This special feature has been attributed to the Japanese habit of kneeling instead of sitting, but investigation shows that it is equally marked in the working classes who pass most of their time standing. In Europe the same physical traits—relative length of head and shortness of legs—distinguish the central race (Alpine) from the Teutonic, and seem to indicate an affinity between the former and the Mongols. It is in the face, however, that we find specially distinctive traits, namely, in the eyes, the eye-lashes, the cheekbones and the beard. Not that the eyeball itself differs from that of an Occidental. The difference consists in the fact that “the socket of the eye is comparatively small and shallow, and the osseous ridges at the brows being little marked, the eye is less deeply set than in the European. In fact, seen in profile, forehead and upper lip often form an unbroken line.” Then, again, the shape of the eye, as modelled by the lids, shows a striking peculiarity. For whereas the open eye is almost invariably horizontal in the European, it is often oblique in the Japanese on account of the higher level of the upper corner. “But even apart from obliqueness, the shape of the corners is peculiar in the Mongolian eye. The inner corner is partly or entirely covered by a fold of the upper lid continuing more or less into the lower lid. This fold often covers also the whole free rim of the upper lid, so that the insertion of the eye-lashes is hidden” and the opening between the lids is so narrowed as to disappear altogether at the moment of laughter. As for the eye-lashes, not only are they comparatively short and sparse, but also they converge instead of diverging, so that whereas in a European the free ends of the lashes are further distant from each other than their roots, in a Japanese they are nearer together. Prominence of cheekbones is another special feature, but it is much commoner in the lower than in the upper classes, where elongated faces may almost be said to be the rule. Finally, there is marked paucity of hair on the face of the average Japanese—apart from the Ainu—and what hair there is is nearly always straight. It is not to be supposed, however, that because the Japanese is short of stature and often finely moulded, he lacks either strength or endurance. On the contrary, he possesses both in a marked degree, and his deftness of finger is not less remarkable than the suppleness and activity of his body.

Moral Characteristics.—The most prominent trait of Japanese disposition is gaiety of heart. Emphatically of a laughter-loving nature, the Japanese passes through the world with a smile on his lips. The petty ills of life do not disturb his equanimity. He takes them as part of the day’s work, and though he sometimes grumbles, rarely, if ever, does he repine. Exceptional to this general rule, however, is a mood of pessimism which sometimes overtakes youths on the threshold of manhood. Finding the problem of life insolvable, they abandon the attempt to solve it and take refuge in the grave. It seems as though there were always a number of young men hovering on the brink of such suicidal despair. An example alone is needed finally to destroy the equilibrium. Some one throws himself over a cataract or leaps into the crater of a volcano, and immediately a score or two follow. Apparently the more picturesquely awful the manner of the demise, the greater its attractive force. The thing is not a product of insanity, as the term is usually interpreted; letters always left behind by the victims prove them to have been in full possession of their reasoning faculties up to the last moment. Some observers lay the blame at the door of Buddhism, a creed which promotes pessimism by begetting the anchorite, the ascetic and the shuddering believer in seven hells. But Buddhism did not formerly produce such incidents, and, for the rest, the faith of Shaka has little sway over the student mind in Japan. The phenomenon is modern: it is not an outcome of Japanese nature nor yet of Buddhist teaching, but is due to the stress of endeavouring to reach the standards of Western acquirement with grievously inadequate equipment, opportunities and resources. In order to support himself and pay his academic fees many a Japanese has to fall into the ranks of the physical labourer during a part of each day or

night. Ill-nourished, over-worked and, it may be, disappointed, he finds the struggle intolerable and so passes out into the darkness. But he is not a normal type. The normal type is light-hearted and buoyant. One naturally expects to find, and one does find, that this moral sunshine is associated with good temper. The Japanese is exceptionally serene. Irascibility is regarded as permissible in sickly children only: grown people are supposed to be superior to displays of impatience. But there is a limit of imperturbability, and when that limit is reached, the subsequent passion is desperately vehement. It has been said that these traits go to make the Japanese soldier what he is. The hardships of a campaign cause him little suffering since he never frets over them, but the hour of combat finds him forgetful of everything save victory. In the case of the military class—and prior to the Restoration of 1867 the term "military class" was synonymous with "educated class"—this spirit of stoicism was built up by precept on a solid basis of heredity. The *samurai* (soldier) learned that his first characteristic must be to suppress all outward displays of emotion. Pain, pleasure, passion and peril must all find him unperturbed. The supreme test, satisfied so frequently as to be commonplace, was a shocking form of suicide performed with a placid mien. This capacity, coupled with readiness to sacrifice life at any moment on the altar of country, fief or honour, made a remarkably heroic character. On the other hand, some observers hold that the education of this stoicism was effected at the cost of the feelings it sought to conceal. In support of that theory it is pointed out that the average Japanese, man or woman, will recount a death or some other calamity in his own family with a perfectly calm, if not a smiling, face. Probably there is a measure of truth in the criticism. Feelings cannot be habitually hidden without being more or less blunted. But here another Japanese trait presents itself—politeness. There is no more polite nation in the world than the Japanese. Whether in real courtesy of heart they excel Occidentals may be open to doubt, but in all the forms of comity they are unrivalled. Now one of the cardinal rules of politeness is to avoid burdening a stranger with the weight of one's own woes. Therefore a mother, passing from the chamber which has just witnessed her paroxysms of grief, will describe calmly to a stranger—especially a foreigner—the death of her only child. The same suppression of emotional display in public is observed in all the affairs of life. Youths and maidens maintain towards each other a demeanour of reserve and even indifference, from which it has been confidently affirmed that love does not exist in Japan. The truth is that in no other country do so many dual suicides occur—suicides of a man and woman who, unable to be united in this world, go to a union beyond the grave. It is true, nevertheless, that love as a prelude to marriage finds only a small place in Japanese ethics. Marriages in the great majority of cases are arranged with little reference to the feelings of the parties concerned. It might be supposed that conjugal fidelity must suffer from such a custom. It does suffer seriously in the case of the husband, but emphatically not in the case of the wife. Even though she be cognisant—as she often is—of her husband's extra-marital relations, she abates nothing of the duty which she has been taught to regard as the first canon of female ethics. From many points of view, indeed, there is no more beautiful type of character than that of the Japanese woman. She is entirely unselfish; exquisitely modest without being anything of a prude; abounding in intelligence which is never obscured by egoism; patient in the hour of suffering; strong in time of affliction; a faithful wife; a loving mother; a good daughter; and capable, as history shows, of heroism rivalling that of the stronger sex. As to the question of sexual virtue and morality in Japan, grounds for a conclusive verdict are hard to find. In the interests of hygiene prostitution is licensed, and that fact is by many critics construed as proof of tolerance. But licensing is associated with strict segregation, and it results that the great cities are conspicuously free from evidences of vice, and that the streets may be traversed by women at all hours of the day and night with perfect impunity and without fear of encountering offensive spectacles. The ratio of marriages is approximately 8.46 per thousand units of the population, and the ratio of divorces is 1.36 per thousand. There are thus about 16 divorces for every hundred marriages. Divorces take place chiefly among the lower orders, who frequently treat marriage merely as a test of a couple's suitability to be helpmates in the struggles of life. If experience develops incompatibility of temper or some other mutually repellent characteristic, separation follows as a matter of course. On the other hand, divorces among persons of the upper classes are comparatively rare, and divorces on account of a wife's unfaithfulness are almost unknown.

Concerning the virtues of truth and probity, extremely conflicting opinions have been expressed. The Japanese *samurai* always prided himself on having "no second word." He never drew his sword without using it; he never gave his word without keeping it. Yet it may be doubted whether the value attached in Japan to the abstract quality, truth, is as high as the value attached to it in England, or whether the consciousness of having told a falsehood weighs as heavily on the heart. Much depends upon the motive. Whatever may be said of the upper class, it is probably true that the average Japanese will not sacrifice expediency on the altar of truth. He will be veracious only so long as the consequences are not seriously injurious. Perhaps no more can be affirmed of any nation. The "white lie" of the Anglo-Saxon and the *hōben no uso* of the Japanese are twins. In the matter of probity, however, it is possible to speak with more assurance. There is undoubtedly in the lower ranks of Japanese tradesmen a comparatively large fringe of persons whose standard of commercial morality is defective. They are descendants of feudal days when the mercantile element, being counted as the dregs of the population, lost its self-respect. Against this blemish—which is in process of gradual correction—the fact has to be set that the better class of merchants, the whole of the artisans and the labouring classes in general, obey canons of probity fully on a level with the best to be found elsewhere. For the rest, frugality, industry and patience characterize all the bread-winners; courage and burning patriotism are attributes of the whole nation.

There are five qualities possessed by the Japanese in a marked degree. The first is frugality. From time immemorial the great mass of the people have lived in absolute ignorance of luxury in any form and in the perpetual presence of a necessity to economize. Amid these circumstances there has emerged capacity to make a little go a long way and to be content with the most meagre fare. The second quality is endurance. It is born of causes cognate with those which have begotten frugality. The average Japanese may be said to live without artificial heat; his paper doors admit the light but do not exclude the cold. His brazier barely suffices to warm his hands and his face. Equally is he a stranger to methods of artificial cooling. He takes the frost that winter inflicts and the fever that summer brings as unavoidable visitors. The third quality is obedience; the offspring of eight centuries passed under the shadow of military autocracy. Whatever he is authoritatively bidden to do, that the Japanese will do. The fourth quality is altruism. In the upper classes the welfare of the family has been set above the interests of each member. The fifth quality is a genius for detail. Probably this is the outcome of an extraordinarily elaborate system of social etiquette. Each generation has added something to the canons of its predecessor, and for every ten points preserved not more than one has been discarded. An instinctive respect for minutiae has thus been inculcated, and has gradually extended to all the affairs of life. That this accuracy may sometimes degenerate into triviality, and that such absorption in trifles may occasionally hide the broad horizon, is conceivable. But the only hitherto apparent evidence of such defects is an excessive clinging to the letter of the law; a marked reluctance to exercise discretion; and that, perhaps, is attributable rather to the habit of obedience. Certainly the Japanese have proved themselves capable of great things, and their achievements seem to have been helped rather than retarded by their attention to detail.

III.—Language and Literature

Language.—Since the year 1820, when Klaproth concluded that the Japanese language had sprung from the Ural-Altaic stock, philologists have busied themselves in tracing its affinities. If the theories hitherto held with regard to the origin of the Japanese people be correct, close relationship should exist between the Japanese and the Korean tongues, and possibly between the Japanese and the Chinese. Aston devoted much study to the former question, but although he proved that in construction the two have a striking similarity, he could not find any corresponding likeness in their

vocabularies. As far back as the beginning of the Christian era the Japanese and the Koreans could not hold intercourse without the aid of interpreters. If then the languages of Korea and Japan had a common stock, they must have branched off from it at a date exceedingly remote. As for the languages of Japan and China, they have remained essentially different throughout some twenty centuries in spite of the fact that Japan adopted Chinese calligraphy and assimilated Chinese literature. Mr K. Hirai has done much to establish his theory that Japanese and Aryan had a common parent. But nothing has yet been substantiated. Meanwhile an inquirer is confronted by the strange fact that of three neighbouring countries between which frequent communication existed, one (China) never deviated from an ideographic script; another (Korea) invented an alphabet, and the third (Japan) devised a syllabary. Antiquaries have sought to show that Japan possessed some form of script before her first contact with either Korea or China. But such traces of prehistoric letters as are supposed to have been found seem to be corruptions of the Korean alphabet rather than independent symbols. It is commonly believed that the two Japanese syllabaries—which, though distinct in form, have identical sounds—were invented by Kukai (790) and Kibi Daijin (760) respectively. But the evidence of old documents seems to show that these syllabaries had a gradual evolution and that neither was the outcome of a single scholar's inventive genius.

The sequence of events appears to have been this:—Japan's earliest contact with an over-sea people was with the Koreans, and she made some tentative efforts to adapt their alphabet to the expression of her own language. Traces of these efforts survived, and inspired the idea that the art of writing was practised by the Japanese before the opening of intercourse with their continental neighbours. Korea, however, had neither a literary nor an ethical message to deliver, and thus her script failed to attract much attention. Very different was the case when China presented her noble code of Confucian philosophy and the literature embodying it. The Japanese then recognized a lofty civilization and placed themselves as pupils at its feet, learning its script and deciphering its books. Their veneration extended to ideographs. At first they adapted them frankly to their own tongue. For example, the ideographs signifying *rice* or *metal* or *water* in Chinese were used to convey the same ideas in Japanese. Each ideograph thus came to have two sounds, one Japanese, the other Chinese—*e.g.* the ideograph for *rice* had for Japanese sound *kome* and for Chinese sound *bei*. Nor was this the whole story. There were two epochs in Japan's study of the Chinese language: first, the epoch when she received Confucianism through Korea; and, secondly, the epoch when she began to study Buddhism direct from China. Whether the sounds that came by Korea were corrupt, or whether the interval separating these epochs had sufficed to produce a sensible difference of pronunciation in China itself, it would seem that the students of Buddhism who flocked from Japan to the Middle Kingdom during the Sui era (A.D. 589-619) insisted on the accuracy of the pronunciation acquired there, although it diverged perceptibly from the pronunciation already recognized in Japan. Thus, in fine, each word came to have three sounds—two Chinese, known as the *kan* and the *go*, and one Japanese, known as the *kun*. For example:—

"KAN" SOUND.	"GO" SOUND.	JAPANESE SOUND.	MEANING.
Sei	*Jo*	*Koe*	Voice
Nen	*Zen*	*Toshi*	Year
Jinkan	*Ningen*	*Hito no aida*	Human being.

As to which of the first two methods of pronunciation had chronological precedence, the weight of opinion is that the kan came later than the *go*. Evidently this triplication of sounds had many disadvantages, but, on the other hand, the whole Chinese language may be said to have been grafted on the Japanese. Chinese has the widest capacity of any tongue ever invented. It consists of thousands of monosyllabic roots, each having a definite meaning. These monosyllables may be used singly or combined, two, three or four at a time, so that the resulting combinations convey almost any conceivable shades of meaning. Take, for example, the word "electricity." The very idea conveyed was wholly novel in Japan. But scholars were immediately able to construct the following:—

Lightning.	*Den.*	
Exhalation.	*Ki.*	
Electricity.	*Denki.*	
Telegram.	*Dempō.*	*Hō* = tidings.
Electric light.	*Dentō.*	*Tō* = lamp.
Negative electricity.	*Indenki.*	*In* = the negative principle.
Positive electricity.	*Yodenki.*	*Yo* = the positive principle.
Thermo-electricity.	*Netsudenki.*	*Netsu* = heat.
Dynamic-electricity.	*Ryūdo-denki.*	*Ryūdo* = fluid.
Telephone.	*Denwa.*	*Wa*= conversation.

Every branch of learning can thus be equipped with a vocabulary. Potent, however, as such a vehicle is for expressing thought, its ideographic script constitutes a great obstacle to general acquisition, and the Japanese soon applied themselves to minimizing the difficulty by substituting a phonetic system. Analysis showed that all the required sounds could be conveyed with 47 syllables, and having selected the ideographs that corresponded to those sounds, they reduced them, first, to forms called *hiragana*, and, secondly, to still more simplified forms called *katakana*.

Such, in brief, is the story of the Japanese language. When we come to dissect it, we find several striking characteristics. First, the construction is unlike that of any European tongue: all qualifiers precede the words they qualify, except prepositions which become postpositions. Thus instead of saying "the house of Mr Smith is in that street," a Japanese says "Smith Mr of house that street in is." Then there is no relative pronoun, and the resulting complication seems great to an English-speaking person, as the following illustration will show:—

JAPANESE.	ENGLISH.
Zenaku wo saiban suru tame no Virtue vice-judging sake of *mochiitaru yūitsu no hyojun wa* used unique standard *jiai no kōi tada* benevolence of conduct only *kore nomi.* this alone.	The unique standard which is used for judging virtue or vice is benevolent conduct solely.

It will be observed that in the above sentence there are two untranslated words, *wo* and *wa*. These belong to a group of four auxiliary particles called *te ni wo ha* (or *wa*), which serve to mark the cases of nouns, *te* (or *de*) being the sign of the instrumental ablative; *ni* that of the dative; *wo* that of the objective, and *wa* that of the nominative. These exist in the Korean language also, but not in any other tongue. There are also polite and ordinary forms of expression, often so different as to constitute distinct languages; and there are a number of honorifics which frequently discharge the duty of pronouns. Another marked peculiarity is that active agency is never attributed to neuter nouns. A Japanese does not say "the poison killed him" but "he died on account of the poison;" nor does he say "the war has caused commodities to

appreciate," but "commodities have appreciated in consequence of the war." That the language loses much force owing to this limitation cannot be denied: metaphor and allegory are almost completely banished.

The difficulties that confront an Occidental who attempts to learn Japanese are enormous. There are three languages to be acquired: first, the ordinary colloquial; second, the polite colloquial; and, third, the written. The ordinary colloquial differs materially from its polite form, and both are as unlike the written form as modern Italian is unlike ancient Latin. "Add to this," writes Professor B. H. Chamberlain, "the necessity of committing to memory two syllabaries, one of which has many variant forms, and at least two or three thousand Chinese ideographs, in forms standard and cursive—ideographs, too, most of which are susceptible of three or four different readings according to circumstance,—add, further, that all these kinds of written symbols are apt to be encountered pell mell on the same page, and the task of mastering Japanese becomes almost Herculean." In view of all this there is a strong movement in favour of romanizing the Japanese script: that is to say, abolishing the ideograph and adopting in its place the Roman alphabet. But while every one appreciates the magnitude of the relief that would thus be afforded, there has as yet been little substantial progress. A language which has been adapted from its infancy to ideographic transmission cannot easily be fitted to phonetic uses.

Dictionaries.—F. Brinkley, *An Unabridged Japanese-English Dictionary* (Tōkyō, 1896); Y. Shimada, *English-Japanese Dictionary*, (Tōkyō, 1897); *Webster's Dictionary, trans. into Japanese*, (Tōkyō, 1899); J. H. Gubbins, *Dictionary of Chinese-Japanese Words* (3 vols., London, 1889); J. C. Hepburn, *Japanese-English and English-Japanese Dictionary* (London, 1903); E. M. Satow and I. Masakata, *English-Japanese Dictionary* (London, 1904).

Literature.—From the neighbouring continent the Japanese derived the art of transmitting ideas to paper. But as to the date of that acquisition there is doubt. An authenticated work compiled A.D. 720 speaks of historiographers having been appointed to collect local records for the first time in 403, from which it is to be inferred that such officials had already existed at the court. There is also a tradition that some kind of general history was compiled in 620 but destroyed by fire in 645. At all events, the earliest book now extant dates from 712. Its origin is described in its preface. When the emperor Temmu (673-686) ascended the throne, he found that there did not exist any revised collection of the fragmentary annals of the chief families. He therefore caused these annals to be collated. There happened to be among the court ladies one Hiyeda no Are, who was gifted with an extraordinary memory. Measures were taken to instruct her in the genuine traditions and the old language of former ages, the intention being to have the whole ultimately dictated to a competent scribe. But the emperor died before the project could be consummated, and for twenty-five years Are's memory remained the sole depository of the collected annals. Then, under the auspices of the empress Gemmyō, the original plan was carried out in 712, Yasumaro being the scribe. The work that resulted is known as the *Kojiki* (*Record of Ancient Matters*). It has been accurately translated by Professor B. H. Chamberlain (*Transactions of the Asiatic Society of Japan*, vol. x.), who, in a preface justly regarded by students of Japan as an exegetical classic, makes the pertinent comment: "Taking the word Altaïc in its usual acceptation, viz. as the generic name of all the languages belonging to the Manchu, Mongolian, Turkish and Finnish groups, not only the archaic, but the classical, literature of Japan carries us back several centuries beyond the earliest extant documents of any other Altaïc tongue." By the term "archaic" is to be understood the pure Japanese language of earliest times, and by the term "classical" the quasi-Chinese language which came into use for literary purposes when Japan appropriated the civilization of her great neighbours. The *Kojiki* is written in the archaic form: that is to say, the language is the language of old Japan, the script, although ideographic, is used phonetically only, and the case-indicators are represented by Chinese characters having the same sounds. It is a species of saga, setting forth not only the heavenly beginnings of the Japanese race, but also the story of creation, the succession of the various sovereigns and the salient events of their reigns, the whole interspersed with songs, many of which may be attributed to the 6th century, while some doubtless date from the fourth or even the third. This *Kojiki* marks the parting of the ways. Already by the time of its compilation the influence of Chinese civilization and Chinese literature had prevailed so greatly in Japan that the next authentic work, composed only eight years later, was completely Chinese in style and embodied Chinese traditions and Chinese philosophical doctrines, not distinguishing them from their Japanese context. This volume was called the *Nihongi* (*Chronicles of Japan*). It may be said to have wholly supplanted its predecessor in popular favour, for the classic style—that is to say, the Chinese—had now come to be regarded as the only erudite script. The *Chronicles* re-traversed much of the ground already gone over by the *Record*, preserving many of the songs in occasionally changed form, omitting some portions, supplementing others, and imparting to the whole such an exotic character as almost to disqualify the work for a place in Japanese literature. Yet this was the style which thenceforth prevailed among the litterati of Japan. "Standard Chinese soon became easier to understand than archaic Japanese, as the former alone was taught in the schools, and the native language changed rapidly during the century or two that followed the diffusion of the foreign tongue and civilization" (Chamberlain). The neglect into which the *Kojiki* fell lasted until the 17th century. Almost simultaneously with its appearance in type (1644) and its consequent accessibility, there arose a galaxy of scholars under whose influence the archaic style and the ancient Japanese traditions entered a period of renaissance. The story of this period and of its products has been admirably told by Sir Ernest Satow ("Revival of Pure Shintō," *Proceedings of the Asiatic Society of Japan*, vol. iii.), whose essay, together with Professor Chamberlain's *Kojiki*, the same author's introduction to *The Classical Poetry of the Japanese*, and Mr W. G. Aston's *Nihongi*, are essential to every student of Japanese literature. To understand this 17th century renaissance, knowledge of one fact is necessary, namely, that about the year A. D. 810, a celebrated Buddhist priest, Kūkai, who had spent several years studying in China, compounded out of Buddhism, Confucianism and Shintō a system of doctrine called *Ryōbu Shintō* (Dual Shintō), the prominent tenet of which was that the Shintō deities were merely transmigrations of Buddhist divinities. By this device Japanese conservatism was effectually conciliated, and Buddhism became in fact the creed of the nation, its positive and practical precepts entirely eclipsing the agnostic intuitionalism of Shintō. Against this hybrid faith several Japanese scholars arrayed themselves in the 17th and 18th centuries, the greatest of them being Mabuchi and Motoori. The latter's *magnum opus*, *Kojikiden* (*Exposition of the Record of Ancient Matters*), declared by Chamberlain to be "perhaps the most admirable work of which Japanese erudition can boast," consists of 44 large volumes, devoted to elucidating the *Kojiki* and resuscitating the Shintō cult as it existed in the earliest days. This great work of reconstruction was only one feature of the literary activity which marked the 17th and 18th centuries, when, under Tokugawa rule, the blessing of long-unknown peace came to the nation. Iyeyasu himself devoted the last years of his life to collecting ancient manuscripts. In his country retreat at Shizuoka he formed one of the richest libraries ever brought together in Japan, and by will he bequeathed the Japanese section of it to his eighth son, the feudal chief of Owari, and the Chinese section to his ninth son, the prince of Kishū, with the result that under the former feudatory's auspices two works of considerable merit were produced treating of ancient ceremonials and supplementing the *Nihongi*. Much more memorable, however, was a library formed by Iyeyasu's grandson the feudal chief of Mito (1662-1700), who not only collected a vast quantity of books hitherto scattered among Shintō and Buddhist monasteries and private houses, but also employed a number of scholars to compile a history unprecedented in magnitude, the *Dai-Nihon-shi*. It consisted of 240 volumes, and it became at once the standard in its own branch of literature. Still more comprehensive was a book emanating from the same source and treating of court ceremonials. It ran to more than 500 volumes, and the emperor honoured the work by bestowing on it the title *Reigi Ruiten* (*Rules of Ceremonials*). These compilations together with the *Nihon Gwaishi* (*History of Japan Outside the Court*), written by Rai Sanyo and published in 1827, constituted the chief sources of historical knowledge before the Meiji era. Rai Sanyo devoted twenty years to the preparation of his 22 volumes and took his materials from 259 Japanese and Chinese works.

But neither he nor his predecessors recognized in history anything more than a vehicle for recording the mere sequence of events and their relations, together with some account of the personages concerned. Their volumes make profoundly dry reading. Vicarious interest, however, attaches to the productions of the Mito School on account of the political influence they exercised in rehabilitating the nation's respect for the throne by unveiling the picture of an epoch prior to the usurpations of military feudalism. The struggles of the great rival clans, replete with episodes of the most tragic and stirring character, inspired quasi-historical narrations of a more popular character, which often took the form of illuminated scrolls. But it was not until the Meiji era that history, in the modern sense of the term, began to be written. During recent times many students have turned their attention to this branch of literature. Works of wide scope and clear insight have been produced, and the Historiographers' section in the Imperial University of Tōkyō has been for several years engaged in collecting and collating materials for a history which will probably rank with anything of the kind in existence.

Poetry.

In their poetry above everything the Japanese have remained impervious to alien influences. It owes this conservation to its prosody. Without rhyme, without variety of metre, without elasticity of dimensions, it is also without known counterpart. To alter it in any way would be to deprive it of all distinguishing characteristics. At some remote date a Japanese maker of songs seems to have discovered that a peculiar and very fascinating rhythm is produced by lines containing 5 syllables and 7 syllables alternately. That is Japanese poetry (*uta* or *tanka*). There are generally five lines: the first and third consisting of 5 syllables, the second, fourth and fifth of 7, making a total of 31 in all. The number of lines is not compulsory: sometimes they may reach to thirty, forty or even more, but the alternation of 5 and 7 syllables is compulsory. The most attenuated form of all is the *hokku* (or *haikai*) which consists of only three lines, namely, 17 syllables. Necessarily the ideas embodied in such a narrow vehicle must be fragmentary. Thus it results that Japanese poems are, for the most part, impressionist; they suggest a great deal more than they actually express. Here is an example:—

Momiji-ha wo Kaze ni makasete Miru yori mo Hakanaki mono wa Inochi nari keri	More fleeting than the glint of withered leaf wind-blown, the thing called life.

There is no English metre with this peculiar cadence.

It is not to be inferred that the writers of Japan, enamoured as they were of Chinese ideographs and Chinese style, deliberately excluded everything Chinese from the realm of poetry. On the contrary, many of them took pleasure in composing versicles to which Chinese words were admitted and which showed something of the "parallelism" peculiar to Chinese poetry, since the first ideograph of the last line was required to be identical with the final ideograph. But rhyme was not attempted, and the syllabic metre of Japan was preserved, the alternation of 5 and 7 being, however, dispensed with. Such couplets were called *shi* to distinguish them from the pure Japanese *uta* or *tanka*. The two greatest masters of Japanese poetry were Hitomaro and Akahito, both of the early 8th century, and next to them stands Tsurayuki, who flourished at the beginning of the 10th century, and is not supposed to have transmitted his mantle to any successor. The choicest productions of the former two with those of many other poets were brought together in 756 and embodied in a book called the *Manyōshū* (*Collection of a Myriad Leaves*). The volume remained unique until the beginning of the 10th century, when (A.D. 905) Tsurayuki and three coadjutors compiled the *Kokinshū* (*Collection of Odes Ancient and Modern*), the first of twenty-one similar anthologies between the 11th and the 15th centuries, which constitute the *Niju-ichi Dai-shū (Anthologies of the One-and-Twenty Reigns)*. If to these we add the *Hyaku-ninshū* (*Hundred Odes by a Hundred Poets*) brought together by Teika Kyō in the 13th century, we have all the classics of Japanese poetry. For the composition of the *uta* gradually deteriorated from the end of the 9th century, when a game called *uta-awase* became a fashionable pastime, and aristocratic men and women tried to string together versicles of 31 syllables, careful of the form and careless of the thought. The *uta-awase*, in its later developments, may not unjustly be compared to the Occidental game of *bouts-rimés*. The poetry of the nation remained immovable in the ancient groove until very modern times, when, either by direct access to the originals or through the medium of very defective translations, the nation became acquainted with the masters of Occidental song. A small coterie of authors, headed by Professor Toyama, then attempted to revolutionize Japanese poetry by recasting it on European lines. But the project failed signally, and indeed it may well be doubted whether the Japanese language can be adapted to such uses.

Influence of Women in Japanese Literature.

It was under the auspices of an empress (Suiko) that the first historical manuscript is said to have been compiled in 620. It was under the auspices of an empress (Gemmyō) that the *Record of Ancient Matters* was transcribed (712) from the lips of a court lady. And it was under the auspices of an empress that the *Chronicles of Japan* were composed (720). To women, indeed, from the 8th century onwards may be said to have been entrusted the guardianship of the pure Japanese language, the classical, or Chinese, form being adopted by men. The distinction continued throughout the ages. To this day the spoken language of Japanese women is appreciably simpler and softer than that of the men, and to this day while the educated woman uses the hiragana syllabary in writing, eschews Chinese words and rarely pens an ideograph, the educated man employs the ideograph entirely, and translates his thoughts as far as possible into the mispronounced Chinese words without recourse to which it would be impossible for him to discuss any scientific subject, or even to refer to the details of his daily business. Japan was thus enriched with two works of very high merit, the *Genji Monogatari* (*c.* 1004) and the *Makura no Zōshi* (about the same date). The former, by Murasaki no Shikibu—probably a pseudonym—was the first novel composed in Japan. Before her time there had been many *monogatari* (narratives), but all consisted merely of short stories, mythical or quasi-historical, whereas Murasaki no Shikibu did for Japan what Fielding and Richardson did for England. Her work was "a prose epic of real life," the life of her hero, *Genji*. Her language is graceful and natural, her sentiments are refined and sober; and, as Mr Aston well says, her "story flows on easily from one scene of real life to another, giving us a varied and minutely detailed picture of life and society in Kiōto, such as we possess for no other country at the same period." The *Makura no Zōshi* (*Pillow Sketches*), like the *Genji Monogatari*, was by a noble lady—Sei Shōnagon—but it is simply a record of daily events and fugitive thoughts, though not in the form of a diary. The book is one of the most natural and unaffected compositions ever written. Undesignedly it conveys a wonderfully realistic picture of aristocratic life and social ethics in Kiōto at the beginning of the 11th century. "If we compare it with anything that Europe has to show at this period, it must be admitted that it is indeed a remarkable work. What a revelation it would be if we had the court life of Alfred's or Canute's reign depicted to us in a similar way?"

The Dark Age.

The period from the early part of the 14th century to the opening of the 17th is generally regarded as the dark age of Japanese literature. The constant wars of the time left their impress upon everything. To them is due the fact that the two principal works compiled during this epoch were, one political, the other quasi-historical. In the former, *Jinkōshōtō-ki* (*History of the True Succession of the Divine Monarchs*), Kitabatake Chikafusa (1340) undertook to prove that of the two sovereigns then disputing for supremacy in Japan, Go-Daigo was the rightful monarch; in the latter, *Taihei-ki* (*History of Great Peace*), Kojima (1370) devoted his pages to describing the events of contemporaneous history. Neither work can be said to possess signal literary merit, but both had memorable consequences. For the *Jinkōshōtō-ki*, by its strong advocacy of the mikado's administrative rights as against the usurpations of military feudalism, may be said to have sowed the seeds of Japan's modern polity; and the *Taihei-ki*, by its erudite diction, skilful rhetoric, simplification of old grammatical constructions and copious interpolation

of Chinese words, furnished a model for many imitators and laid the foundations of Japan's 19th-century style. The *Taihei-ki* produced another notable effect; it inspired public readers who soon developed into historical *raconteurs*; a class of professionals who are almost as much in vogue to-day as they were 500 years ago. Belonging to about the same period as the *Jinkōshōtō-ki*, another classic occupies a leading place in Japanese esteem. It is the *Tsure-zure-gusa* (*Materials for Dispelling Ennui*), by Kenkō-bōshi, described by Mr Aston as "one of the most delightful oases in Japanese literature; a collection of short sketches, anecdotes and essays on all imaginable subjects, something in the manner of Selden's *Table Talk*."

The Drama.

The so-called dark age of Japanese literature was not entirely unproductive: it gave the drama (*Nō*) to Japan. Tradition ascribes the origin of the drama to a religious dance of a pantomimic character, called *Kagura* and associated with Shintō ceremonials. The Nō, however, owed its development mainly to Buddhist influence. During the medieval era of internecine strife the Buddhist priests were the sole depositaries of literary talent, and seeing that, from the close of the 14th century, the Shintō mime (Kagura) was largely employed by the military class to invoke or acknowledge the assistance of the gods, the monks of Buddha set themselves to compose librettos for this mime, and the performance, thus modified, received the name of Nō. Briefly speaking, the Nō was a dance of the most stately character, adapted to the incidents of dramas "which embrace within their scope a world of legendary lore, of quaint fancies and of religious sentiment." Their motives were chiefly confined to such themes as the law of retribution to which all human beings are subjected, the transitoriness of life and the advisability of shaking off from one's feet the dust of this sinful world. But some were of a purely martial nature. This difference is probably explained by the fact that the idea of thus modifying the Kagura had its origin in musical recitations from the semi-romantic semi-historical narratives of the 14th century. Such recitations were given by itinerant Bonzes, and it is easy to understand the connexion between them and the Nō. Very soon the Nō came to occupy in the estimation of the military class a position similar to that held by the *tanka* as a literary pursuit, and the *gagaku* as a musical, in the Imperial court. All the great aristocrats not only patronized the Nō but were themselves ready to take part in it. Costumes of the utmost magnificence were worn, and the chiselling of masks for the use of the performers occupied scores of artists and ranked as a high glyptic accomplishment. There are 335 classical dramas of this kind in a compendium called the *Yōkyoka Tsūge*, and many of them are inseparably connected with the names of Kwanami Kiyotsugu (1406) and his son Motokiyo (1455), who are counted the fathers of the art. For a moment, when the tide of Western civilization swept over Japan, the Nō seemed likely to be permanently submerged. But the renaissance of nationalism (*kokusui hoson*) saved the venerable drama, and owing to the exertions of Prince Iwakura, the artist Hōsho Kuro and Umewaka Minoru, it stands as high as ever in popular favour. Concerning the five schools into which the Nō is divided, their characteristics and their differences—these are matters of interest to the initiated alone.

The Farce.

The Japanese are essentially a laughter-loving people. They are highly susceptible of tragic emotions, but they turn gladly to the brighter phases of life. Hence a need was soon felt of something to dispel the pessimism of the Nō, and that something took the form of comedies played in the interludes of the Nō and called *Kyōgen* (mad words). The Kyōgen needs no elaborate description: it is a pure farce, never immodest or vulgar.

The Theatre.

The classic drama Nō and its companion the Kyōgen had two children, the *Jōruri* and the *Kabuki*. They were born at the close of the 16th century and they owed their origin to the growing influence of the commercial class, who asserted a right to be amused but were excluded from enjoyment of the aristocratic Nō and the Kyōgen. The Jōruri is a dramatic ballad, sung or recited to the accompaniment of the *samisen* and in unison with the movements of puppets. It came into existence in Kiōto and was thence transferred to Yedo (Tōkyō), where the greatest of Japanese playwrights, Chikamatsu Monzaemon (1653-1724), and a musician of exceptional talent, Takemoto Gidayū, collaborated to render this puppet drama a highly popular entertainment. It flourished for nearly 200 years in Yedo, and is still occasionally performed in Osaka. Like the Nō the Jōruri dealt always with sombre themes, and was supplemented by the Kabuki (farce). This last owed its inception to a priestess who, having abandoned her holy vocation at the call of love, espoused dancing as a means of livelihood and trained a number of girls for the purpose. The law presently interdicted these female comedians (*onna-kabuki*) in the interests of public morality, and they were succeeded by "boy comedians" (*wakashu-kabuki*) who simulated women's ways and were vetoed in their turn, giving place to *yaro-kabuki* (comedians with queues). Gradually the Kabuki developed the features of a genuine theatre; the actor and the playwright were discriminated, and, the performances taking the form of domestic drama (*Wagoto* and *Sewamono*) or historical drama (*Aragoto* or *Jidaimono*), actors of perpetual fame sprang up, as Sakata Tōjurō and Ichikawa Danjinrō (1660-1704). Mimetic posture-dances (*Shosagoto*) were always introduced as interludes; past and present indiscriminately contributed to the playwright's subjects; realism was carried to extremes; a revolving stage and all mechanical accessories were supplied; female parts were invariably taken by males, who attained almost incredible skill in these simulations; a chorus—relic of the Nō—chanted expositions of profound sentiments or thrilling incidents; and histrionic talent of the very highest order was often displayed. But the *Kabuki-za* and its *yakusha* (actors) remained always a plebeian institution. No *samurai* frequented the former or associated with the latter. With the introduction of Western civilization in modern times, however, the theatre ceased to be tabooed by the aristocracy. Men and women of all ranks began to visit it; the emperor himself consented (1887) to witness a performance by the great stars of the stage at the private residence of Marquis Inouye; a dramatic reform association was organized by a number of prominent noblemen and scholars; drastic efforts were made to purge the old historical dramas of anachronisms and inconsistencies, and at length a theatre (the *Yuraku-za*) was built on purely European lines, where instead of sitting from morning to night witnessing one long-drawn-out drama with interludes of whole farces, a visitor may devote only a few evening-hours to the pastime. The Shosagoto has not been abolished, nor is there any reason why it should be. It has graces and beauties of its own. There remains to be noted the incursion of amateurs into the histrionic realm. In former times the actor's profession was absolutely exclusive in Japan. Children were trained to wear their fathers' mantles, and the idea that a non-professional could tread the hallowed ground of the stage did not enter any imagination. But with the advent of the new regimen in Meiji days there arose a desire for social plays depicting the life of the modern generation, and as these "croppy dramas" (*zampatsu-mono*)—so called in allusion to the European method of cutting the hair close—were not included in the repertoire of the orthodox theatre, amateur troupes (known as *sōshi-yakusha*) were organized to fill the void. Even Shakespeare has been played by these amateurs, and the abundant wit of the Japanese is on the way to enrich the stage with modern farces of unquestionable merit.

Literature of the Tokugawa Era.

The Tokugawa era (1603-1867), which popularized the drama, had other memorable effects upon Japanese literature. Yedo, the shōgun's capital, displaced Kiōto as the centre of literary activity. Its population of more than a million, including all sorts and conditions of men—notably wealthy merchants and mechanics—constituted a new audience to which authors had to address themselves; and an unparalleled development of mental activity necessitated wholesale drafts upon the Chinese vocabulary. To this may be attributed the appearance of a group of men known as *kangakusha* (Chinese scholars). The most celebrated among them were: Fujiwara Seikwa (1560-1619), who introduced his countrymen to the philosophy of Chu-Hi; Hayashi Rasan (1583-1657), who wrote 170 treatises on scholastic and moral subjects; Kaibara Ekken (1630-1714), teacher of a fine system of ethics; Arai Hakuseki (1657-1725), historian, philosopher, statesman and financier: and Muro Kiusō, the second great exponent of Chu-Hi's philosophy. "Japan owes a profound debt of gratitude to the *kangakusha* of that time. For their day and country they were emphatically the salt of earth." But naturally not all were believers in the same philosophy. The fervour of the followers of Chu-Hi (the orthodox school) could not fail to provoke opposition. Thus some arose who declared allegiance to the idealistic intuitionalism of Wang Yang-ming, and others advocated direct study of the works of Confucius and Mencius. Connected with this rejection of Chu-Hi were such

eminent names as those of Itō Junsai (1627-1718), Itō Tōgai (1617-1736), Ogyu Sōrai (1666-1728) and Dazai Shuntai (1679-1747). These Chinese scholars made no secret of their contempt for Buddhism, and in their turn they were held in aversion by the Buddhists and the Japanese scholars (*wagakusha*), so that the second half of the 18th century was a time of perpetual wrangling and controversy. The worshippers at the shrine of Chinese philosophy evoked a reactionary spirit of nationalism, just as the excessive worship of Occidental civilization was destined to do in the 19th century.

Apart from philosophical researches and the development of the drama, as above related, the Tokugawa era is remarkable for folk-lore, moral discourses, fiction and a peculiar form of poetry. This last does not demand much attention. Its principal variety is the *haikai*, which is nothing more than a *tanka* shorn of its concluding fourteen syllables, and therefore virtually identical with the *hokku*, already described. The name of Bashō is immemorially associated with this kind of lilliputian versicle, which reached the extreme of impressionism. A more important addition to Japanese literature was made in the 17th century in the form of children's tales (*Otogibanashi*). They are charmingly simple and graceful, and they have been rendered into English again and again since the beginning of the Meiji era. But whether they are to be regarded as genuine folk-lore or merely as a branch of the fiction of the age when they first appeared in book form, remains uncertain. Of fiction proper there was an abundance. The pioneer of this kind of literature is considered to have been Saikaku (1641-1693), who wrote sketches of everyday life as he saw it, short tales of some merit and novels which deal with the most disreputable phases of human existence. His notable successors in the same line were two men of Kiōto, named Jishō (1675-1745) and Kiseki (1666-1716). They had their own publishing house, and its name *Hachimonji-ya* (figure-of-eight store) came to be indelibly associated with this kind of literature. But these men did little more than pave the way for the true romantic novel, which first took shape under the hand of Santō Kyōden (1761-1816), and culminated in the works of Bakin, Tanehiko, Samba, Ikku, Shunsui and their successors. Of nearly all the books in this class it may be said that they deal largely in sensationalism and pornography, though it does not follow that their language is either coarse or licentious. The life of the virtuous Japanese woman being essentially uneventful, these romancists not unnaturally sought their female types among dancing-girls and courtesans. The books were profusely illustrated with woodcuts and chromoxylographs from pictures of the *ukiyoe* masters, who, like the playwright, the actor and the romancer, ministered to the pleasure of the "man in the street." Brief mention must also be made of two other kinds of books belonging to this epoch; namely, the *Shingaku-sho* (ethical essays) and the *Jitsuroku-mono* (true records). The latter were often little more than historical novels founded on facts; and the former, though nominally intended to engraft the doctrines of Buddhism and Shintō upon the philosophy of China, were really of rationalistic tendency.

The Meiji Era.

Although the incursions made into Chinese philosophy and the revival of Japanese traditions during the Tokugawa Epoch contributed materially to the overthrow of feudalism and the restoration of the Throne's administrative power, the immediate tendency of the last two events was to divert the nation's attention wholly from the study of either Confucianism or the *Record of Ancient Matters*. A universal thirst set in for Occidental science and literature, so that students occupied themselves everywhere with readers and grammars modelled on European lines rather than with the Analects or the *Kojiki*. English at once became the language of learning. Thus the three colleges which formed the nucleus of the Imperial University of Tōkyō were presided over by a graduate of Michigan College (Professor Toyama), a member of the English bar (Professor Hōzumi) and a graduate of Cambridge (Baron Kikuchi). If Japan was eminently fortunate in the men who directed her political career at that time, she was equally favoured in those that presided over her literary culture. Fukuzawa Yukichi, founder of the Keiō Gijuku, now one of Japan's four universities, did more than any of his contemporaries by writing and speaking to spread a knowledge of the West, its ways and its thoughts, and Nakamura Keiu laboured in the same cause by translating Smiles's *Self-help* and Mill's *Representative Government*. A universal geography (by Uchida Masao); a history of nations (by Mitsukuri Rinshō); a translation of *Chambers's Encyclopaedia* by the department of education; Japanese renderings of Herbert Spencer and of Guizot and Buckle—all these made their appearance during the first fourteen years of the epoch. The influence of politics may be strongly traced in the literature of that time, for the first romances produced by the new school were all of a political character: *Keikoku Bidan* (*Model for Statesmen*, with Epaminondas for hero) by Yano Fumio; *Setchūbai* (*Plum-blossoms in snow*) and *Kwakwan-ō* (*Nightingale Among Flowers*) by Suyehiro. This idea of subserving literature to political ends is said to have been suggested by Nakae Tokusuke's translation of Rousseau's *Contrat social*. The year 1882 saw *Julius Caesar* in a Japanese dress. The translator was Tsubouchi Shōyō, one of the greatest writers of the Meiji era. His *Shōsetsu Shinsui* (*Essentials of a Novel*) was an eloquent plea for realism as contrasted with the artificiality of the characters depicted by Bakin, and his own works illustrative of this theory took the public by storm. He also brought out the first literary periodical published in Japan, namely, the *Waseda Bungaku*, so called because Tsubouchi was professor of literature in the Waseda University, an institution founded by Count Okuma, whose name cannot be omitted from any history of Meiji literature, not as an author but as a patron. As illustrating the rapid development of familiarity with foreign authors, a Japanese retrospect of the Meiji era notes that whereas Macaulay's *Essays* were in the curriculum of the Imperial University in 1881-1882, they were studied, five or six years later, in secondary schools, and pupils of the latter were able to read with understanding the works of Goldsmith, Tennyson and Thackeray. Up to Tsubouchi's time the Meiji literature was all in the literary language, but there was then formed a society calling itself *Kenyūsha*, some of whose associates—as Bimyōsai—used the colloquial language in their works, while others—as Kōyō, Rōhan, &c.—went back to the classical diction of the Genroku era (1655-1703). Rōhan is one of the most renowned of Japan's modern authors, and some of his historical romances have had wide vogue. Meanwhile the business of translating went on apace. Great numbers of European and American authors were rendered into Japanese—Calderon, Lytton, Disraeli, Byron, Shakespeare, Milton, Turgueniev, Carlyle, Daudet, Emerson, Hugo, Heine, De Quincey, Dickens, Körner, Goethe—their name is legion and their influence upon Japanese literature is conspicuous. In 1888 a special course of German literature was inaugurated at the Imperial University, and with it is associated the name of Mori Ogai, Japan's most faithful interpreter of German thought and speech. Virtually every literary magnate of the Occident has found one or more interpreters in modern Japan. Accurate reviewers of the era have divided it into periods of two or three years each, according to the various groups of foreign authors that were in vogue, and every year sees a large addition to the number of Japanese who study the masterpieces of Western literature in the original.

Newspapers and Periodicals.

Newspapers, as the term is understood in the West, did not exist in old Japan, though block-printed leaflets were occasionally issued to describe some specially stirring event. Yet the Japanese were not entirely unacquainted with journalism. During the last decades of the factory at Deshima the Dutch traders made it a yearly custom to submit to the governor of Nagasaki selected extracts from newspapers arriving from Batavia, and these extracts, having been translated into Japanese, were forwarded to the court in Yedo together with their originals. To such compilations the name of *Oranda fusetsu-sho* (*Dutch Reports*) was given. Immediately after the conclusion of the first treaty in 1857, the Yedo authorities instructed the office for studying foreign books (*Bunsho torishirabe-dokoro*) to translate excerpts from European and American journals. Occasionally these translations were copied for circulation among officials, but the bulk of the people knew nothing of them. Thus the first real newspaper did not see the light until 1861, when a Yedo publisher brought out the *Batavia News*, a compilation of items from foreign newspapers, printed on Japanese paper from wooden blocks. Entirely devoid of local interest, this journal did not survive for more than a few months. It was followed, in 1864, by the *Shimbun-shi* (*News*), which was published in Yokohama, with Kishida Ginkō for editor and John Hiko for sub-editor. The latter had been cast away, many years previously, on the coast of the United States and had become a naturalized American citizen. He retained a knowledge of spoken Japanese, but the ideographic script was a sealed book to him, and his editorial part was limited to oral translations from American journals which the editor committed to writing. The *Shimbun-shi* essayed to collect domestic news as well as foreign. It was published twice a month and might possibly have created a demand for its wares had not the editor and sub-editor left for America after the issue of the 10th number. The example, however, had now been set. During the three years that separated the death of the *Shimbun-shi* from the birth of the Meiji era

(October 1867) no less than ten quasi-journals made their appearance. They were in fact nothing better than inferior magazines, printed from wood-blocks, issued weekly or monthly, and giving little evidence of enterprise or intellect, though connected with them were the names of men destined to become famous in the world of literature, as Fukuchi Genichiro, Tsūji Shinji (afterwards Baron Tsūji) and Suzuki Yuichi. These publications attracted little interest and exercised no influence. Journalism was regarded as a mere pastime. The first evidence of its potentialities was furnished by the *Kōko Shimbun* (*The World*) under the editorship of Fukuchi Genichiro and Sasano Dempei. To many Japanese observers it seemed that the restoration of 1867 had merely transferred the administrative authority from the Tokugawa Shōgun to the clans of Satsuma and Chōshū. The *Kōko Shimbun* severely attacked the two clans as specious usurpers. It was not in the mood of Japanese officialdom at that time to brook such assaults. The *Kōko Shimbun* was suppressed; Fukuchi was thrust into prison, and all journals or periodicals except those having official sanction were vetoed. At the beginning of 1868 only two newspapers remained in the field. Very soon, however, the enlightened makers of modern Japan appreciated the importance of journalism, and in 1871 the *Shimbun Zasshi* (*News Periodical*) was started under the auspices of the illustrious Kido. Shortly afterwards there appeared in Yokohama—whence it was subsequently transferred to Tōkyō—the *Mainichi Shimbun* (*Daily News*), the first veritable daily and also the first journal printed with movable types and foreign presses. Its editors were Numa Morikage, Shimada Saburo and Koizuka Ryū, all destined to become celebrated not only in the field of journalism but also in that of politics. It has often been said of the Japanese that they are slow in forming a decision but very quick to act upon it. This was illustrated in the case of journalism. In 1870 the country possessed only two quasi-journals, both under official auspices. In 1875 it possessed over 100 periodicals and daily newspapers. The most conspicuous were the *Nichi Nichi Shimbun* (*Daily News*), the *Yūbin Hōchi* (*Postal Intelligence*), the *Chōya Shimbun* (*Government and People News*), the *Akebono Shimbun* (*The Dawn*), and the *Mainichi Shimbun* (*Daily News*). These were called "the five great journals." The *Nichi Nichi Shimbun* had an editor of conspicuous literary ability in Fukuchi Genichirō, and the *Hōchi Shimbun*, its chief rival, received assistance from such men as Yano Fumio, Fujita Makichi, Inukai Ki and Minoura Katsundo. Japan had not yet any political parties, but the ferment that preceded their birth was abroad. The newspaper press being almost entirely in the hands of men whose interests suggested wider opening of the door to official preferment, nearly all editorial pens were directed against the government. So strenuous did this campaign become that, in 1875, a press law was enacted empowering the minister of home affairs and the police to suspend or suppress a journal and to fine or imprison its editor without public trial. Many suffered under this law, but the ultimate effect was to invest the press with new popularity, and very soon the newspapers conceived a device which effectually protected their literary staff, for they employed "dummy editors" whose sole function was to go to prison in lieu of the true editor.

Japanese journalistic writing in these early years of Meiji was marred by extreme and pedantic classicism. There had not yet been any real escape from the tradition which assigned the crown of scholarship to whatever author drew most largely upon the resources of the Chinese language and learning. The example set by the Imperial court, and still set by it, did not tend to correct this style. The sovereign, whether speaking by rescript or by ordinance, never addressed the bulk of his subjects. His words were taken from sources so classical as to be intelligible to only the highly educated minority. The newspapers sacrificed their audience to their erudition and preferred classicism to circulation. Their columns were thus a sealed book to the whole of the lower middle classes and to the entire female population. The *Yomiuri Shimbun* (*Buy and Read News*) was the first to break away from this pernicious fashion. Established in 1875, it adopted a style midway between the classical and the colloquial, and it appended the syllabic characters to each ideograph, so that its columns became intelligible to every reader of ordinary education. It was followed by the *Yeiri Shimbun* (*Pictorial Newspaper*), the first to insert illustrations and to publish *feuilleton* romances. Both of these journals devoted space to social news, a radical departure from the austere restrictions observed by their aristocratic contemporaries.

Era of Political Parties.

The year 1881 saw the nation divided into political parties and within measured distance of constitutional government. Thenceforth the great majority of the newspapers and periodicals ranged themselves under the flag of this or that party. An era of embittered polemics ensued. The journals, while fighting continuously against each other's principles, agreed in attacking the ministry, and the latter found it necessary to establish organs of its own which preached the German system of state autocracy. Editors seemed to be incapable of rising above the dead level of political strife, and their utterances were not relieved even by a semblance of fairness. Readers turned away in disgust, and journal after journal passed out of existence. The situation was saved by a newspaper which from the outset of its career obeyed the best canons of journalism. Born in 1882, the *Jiji Shimpō* (*Times*) enjoyed the immense advantage of having its policy controlled by one of the greatest thinkers of modern Japan, Fukuzawa Yukichi. Its basic principle was liberty of the individual, liberty of the family and liberty of the nation; it was always found on the side of broad-minded justice, and it derived its materials from economic, social and scientific sources. Other newspapers of greatly improved character followed the *Jiji Shimpō*, especially notable among them being the *Kokumin Shimbun*.

Commercial Journalism.

In the meanwhile Osaka, always pioneer in matters of commercial enterprise, had set the example of applying the force of capital to journalistic development. Tōkyō journals were all on a literary or political basis, but the *Osaka Asahi Shimbun* (*Osaka Rising Sun News*) was purely a business undertaking. Its proprietor, Maruyama Ryūhei, spared no expense to obtain news from all quarters of the world, and for the first time the Japanese public learned what stores of information may be found in the columns of a really enterprising journal. Very soon the Asahi had a keen competitor in the *Osaka Mainichi Shimbun* (*Osaka Daily News*) and these papers ultimately crushed all rivals in Osaka. In 1888 Maruyama established another *Asahi* in Tōkyō, and thither he was quickly followed by his Osaka rival, which in Tōkyō took the name of *Mainichi Dempō* (*Daily Telegraph*). These two newspapers now stand alone as purveyors of copious telegraphic news, and in the next rank, not greatly lower, comes the *Jiji Shimpō*.

With the opening of the diet in 1890, politics again obtruded themselves into newspaper columns, but as practical living issues now occupied attention, readers were no longer wearied by the abstract homilies of former days. Moreover, freedom of the press was at length secured. Already (1887) the government had voluntarily made a great step in advance by divesting itself of the right to imprison or fine editors by executive order. But it reserved the power of suppressing or suspending a newspaper, and against that reservation a majority of the lower house voted, session after session, only to see the bill rejected by the peers, who shared the government's opinion that to grant a larger measure of liberty would certainly encourage licence. Not until 1897 was this opposition fully overcome. A new law, passed by both houses and confirmed by the emperor, took from the executive all power over journals, except in cases of lèse majesté, and nothing now remains of the former arbitrary system except that any periodical having a political complexion is required to deposit security varying from 175 to 1000 *yen*. The result has falsified all sinister forebodings. A much more moderate tone pervades the writings of the press since restrictions were entirely removed, and although there are now 1775 journals and periodicals published throughout the empire, with a total annual circulation of some 700 million copies, intemperance of language, such as in former times would have provoked official interference, is practically unknown to-day. Moreover, the best Japanese editors have caught with remarkable aptitude the spirit of modern journalism. But a few years ago they used to compile laborious essays, in which the inspiration was drawn from Occidental textbooks, and the alien character of the source was hidden under a veneer of Chinese aphorisms. To-day they write terse, succinct, closely-reasoned articles, seldom diffuse, often witty; and generally free from extravagance of thought or diction. Incidentally they are hastening the assimilation of the written and the spoken languages (*genbun itchi*) which may possibly prelude a still greater reform, abolition of the ideographic script. Yet, with few exceptions, the profession of journalism is not remunerative. Very low rates of subscription, and almost prohibitory charges for advertising, are chiefly

to blame.[1] The vicissitudes of the enterprise may be gathered from the fact that, whereas 2767 journals and periodicals were started between 1889 and 1894 (inclusive), no less than 2465 ceased publishing. The largest circulation recorded in 1908 was about 150,000 copies daily, and the honour of attaining that exceptional figure belonged to the *Osaka Asahi Shimbun*.

(F. By.)

IV.—Japanese Art

Pictorial Art.

Painting and Engraving.—In Japanese art the impressionist element is predominant. Pictures, as the term is understood in Europe, can scarcely be said to have existed at any time in Japan. The artist did not depict emotion: he depicted the subjects that produce emotion. Therefore he took his motives from nature rather than from history; or, if he borrowed from the latter, what he selected was a scene, not the pains or the passions of its actors. Moreover, he never exhausted his subject, but was always careful to leave a wide margin for the imagination of the spectator. This latter consideration sometimes impelled him to represent things which, to European eyes, seem trivial or insignificant, but which really convey hints of deep significance. In short, Japanese pictures are like Japanese poetry: they do not supply thought but only awaken it. Often their methods show conventionalism, but it is conventionalism so perfect and free in its allurements that nature seems to suggest both the motive and the treatment. Thus though neither botanically nor ornithologically correct, their flowers and their birds show a truth to nature, and a habit of minute observation in the artist, which cannot be too much admired. Every blade of grass, each leaf and feather, has been the object of loving and patient study.

It has been rashly assumed by some writers that the Japanese do not study from nature. All their work is an emphatic protest against this supposition. It can in fact be shown conclusively that the Japanese have derived all their fundamental ideas of symmetry, so different from ours, from a close study of nature and her processes in the attainment of endless variety. A special feature of their art is that, while often closely and minutely imitating natural objects, such as birds, flowers and fishes, the especial objects of their predilection and study, they frequently combine the facts of external nature with a conventional mode of treatment better suited to their purpose. During the long apprenticeship that educated Japanese serve to acquire the power of writing with the brush the complicated characters borrowed from Chinese, they unconsciously cultivate the habit of minute observation and the power of accurate imitation, and with these the delicacy of touch and freedom of hand which only long practice can give. A hair’s-breadth deviation in a line is fatal to good calligraphy, both among the Chinese and the Japanese. When they come to use the pencil in drawing, they already possess accuracy of eye and free command of the brush. Whether a Japanese art-worker sets himself to copy what he sees before him or to give play to his fancy in combining what he has seen with some ideal in his mind, the result shows perfect facility of execution and easy grace in all the lines.

The beauties of the human form never appealed to the Japanese artist. Associating the nude solely with the performance of menial tasks, he deemed it worse than a solecism to transfer such subjects to his canvas, and thus a wide field of motive was closed to him. On the other hand, the draped figure received admirable treatment from his brush, and the naturalistic school of the 17th, 18th and 19th centuries reached a high level of skill in depicting men, women and children in motion. Nor has there ever been a Japanese Landseer. Sosen’s monkeys and badgers constitute the one possible exception, but the horses, oxen, deer, tigers, dogs, bears, foxes and even cats of the best Japanese artists were ill drawn and badly modelled. In the field of landscape the Japanese painter fully reached the eminence on which his great Chinese masters stood. He did not obey the laws of linear perspective as they are formulated in the Occident, nor did he show cast shadows, but his aerial perspective and his foreshortening left nothing to be desired. It has been suggested that he deliberately eschewed chiaroscuro because his pictures, destined invariably to hang in an alcove, were required to be equally effective from every aspect and had also to form part of a decorative scheme. But the more credible explanation is that he merely followed Chinese example in this matter, as he did also in linear perspective, accepting without question the curious canon that lines converge as they approach the spectator.

Decorative Art.

It is in the realm of decorative art that the world has chiefly benefited by contact with Japan. Her influence is second only to that of Greece. Most Japanese decorative designs consist of natural objects, treated sometimes in a more or less conventional manner, but always distinguished by delicacy of touch, graceful freedom of conception and delightfully harmonized tints. Perhaps the admiration which the Japanese artist has won in this field is due not more to his wealth of fancy and skilful adaptation of natural forms, than to his individuality of character in treating his subjects. There is complete absence of uniformity and monotony. Repetition without any variation is abhorrent to every Japanese. He will not tolerate the stagnation and tedium of a dull uniformity by mechanical reproduction. His temperament will not let him endure the labour of always producing the same pattern. Hence the repetition of two articles exactly like each other, and, generally, the division of any space into equal parts are instinctively avoided, as nature avoids the production of any two plants, or even any two leaves of the same tree, which in all points shall be exactly alike.

Plate I.

PAINTING

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FIG. 1.—MANJUSRI, DEITY OF WISDOM. Kosé School (13th century).

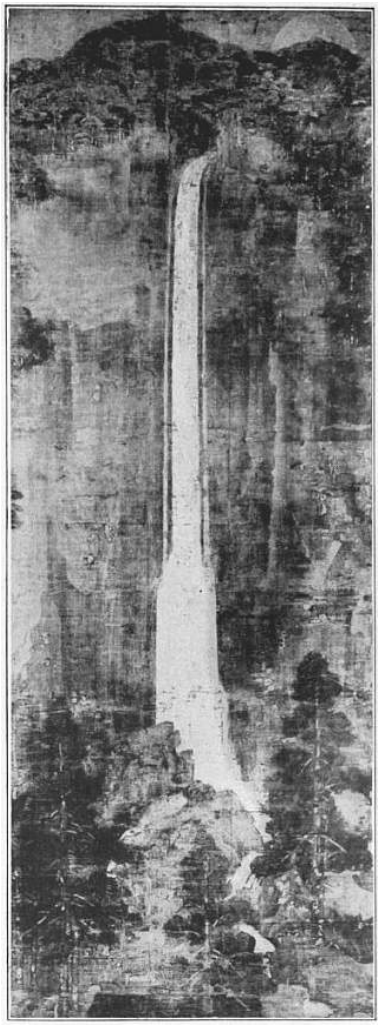

FIG. 2.—WATERFALL OF NACHI. Attributed to Kanaoka (9th century).

FIG. 3.—PORTRAIT OF THE PRIEST DAITO-KOKUSHI. Tosa School (14th century).

FIG. 4.—PRIESTS CARICATURED BY ANIMALS. By Toba Sojo (1053-1140).

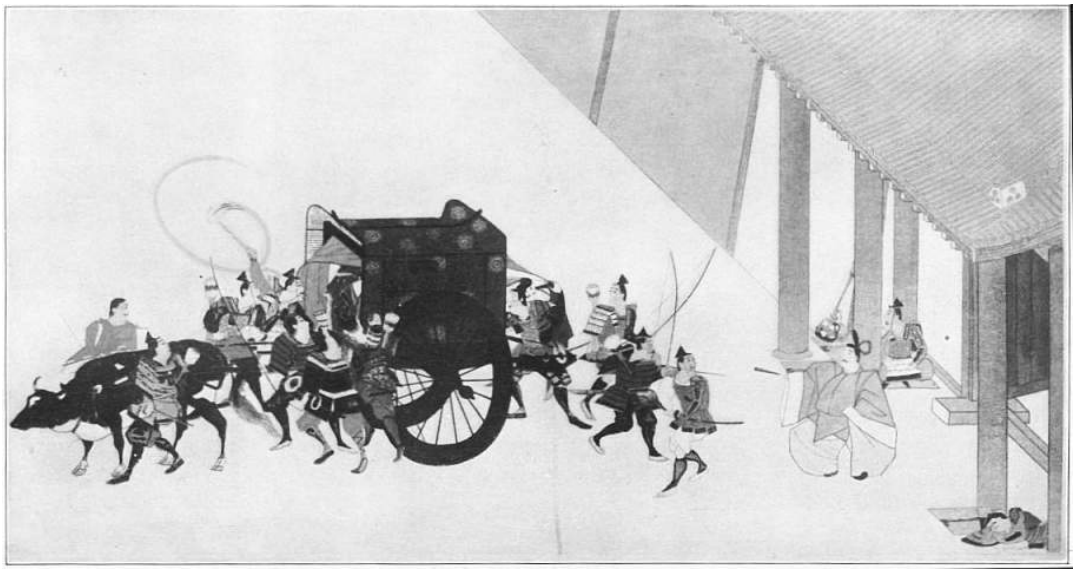

FIG. 5.—ESCAPE OF THE EMPEROR DISGUISED AS A WOMAN. Scene from the Civil War. By Keion (13th century).

The application of this principle in the same free spirit is the secret of much of the originality and the excellence of the decorative art of Japan. Her artists and artisans alike aim at symmetry, not by an equal division of parts, as we do, but rather by a certain balance of corresponding parts, each different from the other, and not numerically even, with an effect of variety and freedom from formality. They seek it, in fact, as nature attains the same end. If we take for instance the skins of animals that are striped or spotted, we have the best possible illustration of nature's methods in this direction. Examining the tiger or the leopard, in all the beauty of their symmetrical adornment, we do not see in any one example an exact repetition of the same stripes or spots on each side of the mesial line. They seem to be alike, and yet are all different. The line of division along the spine, it will be observed, is not perfectly continuous or defined, but in part suggested; and each radiating stripe on either side is full of variety in size, direction, and to some extent in colour and depth of shade. Thus nature works, and so, following in her footsteps, works the Japanese artist. The same law prevailing in all nature's creation, in the plumage of birds, the painting of butterflies' wings, the marking of shells, and in all the infinite variety and beauty of the floral kingdom, the lesson is constantly renewed to the observant eye. Among flowers the orchids, with all their fantastic extravagance and mimic imitations of birds and insects, are especially prolific in examples of symmetrical effects without any repetition of similar parts or divisions into even numbers.

The orchids may be taken as offering fair types of the Japanese artist's ideal in all art work. And thus, close student of nature's processes, methods, and effects as the Japanese art workman is, he ever seeks to produce humble replicas from his only art master. Thus he proceeds in all his decorative work, avoiding studiously the exact repetition of any lines and spaces, and all diametrical divisions, or, if these be forced upon him by the shape of the object, exercising the utmost ingenuity to disguise the fact, and train away the eye from observing the weak point, as nature does in like circumstances. Thus if a lacquer box in the form of a parallelogram is the object, Japanese artists will not divide it in two equal parts by a perpendicular line, but by a diagonal, as offering a more pleasing line and division. If the box be round, they will seek to lead the eye away from the naked regularity of the circle by a pattern distracting attention, as, for example, by a zigzag breaking the circular outline, and supported by other ornaments. A similar feeling is shown by them as colourists, and, though sometimes eccentric and daring in their contrasts, they never produce discords in their chromatic scale. They have undoubtedly a fine sense of colour, and a similarly delicate and subtle feeling for harmonious blending of brilliant and sober hues. As a rule they prefer a quiet and refined style, using full but low-toned colours. They know the value of bright colours, however, and how best to utilize them, both supporting and contrasting them with their secondaries and complementaries.

Division into Periods.

The development of Japanese painting may be divided into the following six periods, each signalized by a wave of progress. (1) From the middle of the 6th to the middle of the 9th century: the naturalization of Chinese and Chino-Buddhist art. (2) From the middle of the 9th to the middle of the 15th century: the establishment of great native schools under Kosé no Kanaoka and his descendants and followers, the pure Chinese school gradually falling into neglect. (3) From the middle of the 15th to the latter part of the 17th century: the revival of the Chinese style. (4) From the latter part of the 17th to the latter part of the 18th century: the establishment of a popular school. (5) From the latter part of the 18th to the latter part of the 19th century: the foundation of a naturalistic school, and the first introduction of European influence into Japanese painting; the acme and decline of the popular school. (6) From about 1875 to the present time: a period of transition.

Tradition refers to the advent of a Chinese artist named Nanriu, invited to Japan in the 5th century as a painter of the Imperial banners, but of the labours and influence of this man and of his descendants we have no record. The real beginnings of the study of painting and sculpture in their higher branches must be dated from the

First Period. introduction of Buddhism from China in the middle of the 6th century, and for three centuries after this event there is evidence that the practice of the arts was carried on mainly by or under the instruction of Korean and Chinese immigrants.

The paintings of which we have any mention were almost limited to representations of Buddhist masters of the Tang dynasty (618-905), notably Wu Tao-zu (8th century), of whose genius romantic stories are related. The oldest existing work of this period is a mural decoration in the hall of the temple of Horyū-ji, Nara, attributed to a Korean priest named Donchô, who lived in Japan in the 6th century; and this painting, in spite of the destructive effects of time and exposure, shows traces of the same power of line, colour and composition that stamps the best of the later examples of Buddhist art.

Second Period.

The native artist who crested the first great wave of Japanese painting was a court noble named Kosé no Kanaoka, living under the patronage of the emperor Seiwa (850-859) and his successors down to about the end of the 9th century, in the midst of a period of peace and culture. Of his own work few, if any, examples have reached us; and those attributed with more or less probability to his hand are all representations of Buddhist divinities, showing a somewhat formal and conventional design, with a masterly calligraphic touch and perfect harmony of colouring. Tradition credits him with an especial genius for the delineation of animals and landscape, and commemorates his skill by a curious anecdote of a painted horse which left its frame to ravage the fields, and was reduced to pictorial stability only by the sacrifice of its eyes. He left a line of descendants extending far into the 15th century, all famous for Buddhist pictures, and some engaged in establishing a native style, the *Wa-gwa-ryū*.

At the end of the 9th century there were two exotic styles of painting, Chinese and Buddhist, and the beginning of a native style founded upon these. All three were practised by the same artists, and it was not until a later period that each became the badge of a school.

Chinese Style.

The Chinese style (*Kara-ryū*), the fundamental essence of all Japanese art, has a fairly distinct history, dating back to the introduction of Buddhism into China (A.D. 62), and it is said to have been chiefly from the works of Wu Tao-zu, the master of the 8th century, that Kanaoka drew his inspiration. This early Chinese manner, which lasted in the parent country down to the end of the 13th century, was characterized by a virile grace of line, a grave dignity of composition, striking simplicity of technique, and a strong but incomplete naturalistic ideal. The colouring, harmonious but subdued in tone, held a place altogether secondary to that of the outline, and was frequently omitted altogether, even in the most famous works. Shadows and reflections were ignored, and perspective, approximately correct for landscape distances, was isometrical for near objects, while the introduction of a symbolic sun or moon lent the sole distinction between a day and a night scene. The art was one of imperfect evolution, but for thirteen centuries it was the only living pictorial art in the world, and the Chinese deserve the honour of having created landscape painting. The materials used were water-colours, brushes, usually of deer-hair, and a surface of unsized paper, translucid silk or wooden panel. The chief motives were landscapes of a peculiarly wild and romantic type, animal life, trees and flowers, and figure compositions drawn from Chinese and Buddhist history and Taoist legend; and these, together with the grand aims and strange shortcomings of its principles and the limited range of its methods, were adopted almost without change by Japan. It was a noble art, but unfortunately the rivalry of the Buddhist and later native styles permitted it to fall into comparative neglect, and it was left for a few of the faithful, the most famous of whom was a priest of the 14th century named Kawo, to preserve it from inanition till the great Chinese renaissance that lent its stamp to the next period. The reputed founder of Japanese caricature may also be added to the list. He was a priest named Kakuyū, but better known as the abbot of Toba, who lived in the 12th century. An accomplished artist in the Chinese manner, he amused himself and his friends by burlesque sketches, marked by a grace and humour that his imitators never equalled. Later, the motive of the Toba pictures, as such caricatures were called, tended to degenerate, and the elegant figures of Kakuyū were replaced by scrawls that often substituted indecency and ugliness for art and wit. Some of the old masters of the Yamato school were, however, admirable in their rendering of the burlesque, and in modern times Kyōsai, the last of the Hokusai school, outdid all his predecessors in the riotous originality of his weird and comic fancies. A new phase of the art now lives in the pages of the newspaper press.

Buddhist Style.

The Buddhist style was probably even more ancient than the Chinese, for the scheme of colouring distinctive of the Buddhist picture was almost certainly of Indian origin; brilliant and decorative, and heightened by a lavish use of gold, it was essential to the effect of a picture destined for the dim light of the Buddhist temple. The style was applied only to the representations of sacred personages and scenes, and as the traditional forms and attributes of the Brahmanic and Buddhist divinities were mutable only within narrow limits, the subjects seldom afforded scope for originality of design or observation of nature. The principal Buddhist painters down to the 14th century were members of the Kosé, Takuma and Kasuga lines, the first descended from Kanaoka, the second from Takuma Taméuji (ending 10th century), and the third from Fujiwara no Motomitsu (11th century). The last and greatest master of the school was a priest named Meicho, better known as Chō Densu, the Japanese Fra Angelico. It is to him that Japan owes the possession of some of the most stately and most original works in her art, sublime in conception, line and colour, and deeply instinct with the religious spirit. He died in 1427, at the age of seventy-six, in the seclusion of the temple where he had passed the whole of his days.

Native Style.

The native style, *Yamato* or *Wa-gwa-ryū*, was an adaptation of Chinese art canons to motives drawn from the court life, poetry and stories of old Japan. It was undoubtedly practised by the Kose line, and perhaps by their predecessors, but it did not take shape as a school until the beginning of the 11th century under Fujiwara no Motomitsu, who was a pupil of Kose no Kinmochi; it then became known as *Yamato-ryū*, a title which two centuries later was changed to that of *Tosa*, on the occasion of one of its masters, Fujiwara no Tsunetaka, assuming that appellation as a family name. The Yamato-Tosa artists painted in all styles, but that which was the speciality of the school, to be found in nearly all the historical rolls bequeathed to us by their leaders, was a lightly-touched outline filled in with flat and bright body-colours, in which verdigris-green played a great part. The originality of the motive did not prevent the adoption of all the Chinese conventions, and of some new ones of the artist's own. The curious expedient of spiriting away the roof of any building of which the artist wished to show the interior was one of the most remarkable of these. Amongst the foremost names of the school are those of Montomitsu (11th century), Nobuzane (13th century), Tsunetaka (13th century), Mitsunobu (15th and 16th centuries), his son Mitsushige, and Mitsuōki (17th century). The struggle between the Taira and Minamoto clans for the power that had long been practically abandoned by the Imperial line lasted through the 11th and the greater part of the 12th centuries, ending only with the rise of Yoritomo to the shōgunate in 1185. These internecine disturbances had been unfavourable to any new departure in art, except in matters appertaining to arms and armour, and the strife between two puppet emperors for a shadow of authority in the 14th century brought another distracting element. It was not until the triumph of the northern dynasty was achieved through the prowess of an interested champion of the Ashikaga clan that the culture of ancient Japan revived. The palace of the Ashikaga shōguns then replaced the Imperial court as the centre of patronage of art and literature and established a new era in art history.

Third Period.

Towards the close of the Ashikaga shōgunate painting entered on a new phase. Talented representatives of the Kose, Takuma and Tosa lines maintained the reputation of the native and Buddhist schools, and the long-neglected Chinese school was destined to undergo a vigorous revival. The initiation of the new movement is attributed to a priest named Jôsetsu, who lived in the early part of the 15th century, and of whom little else is known. It is not even certain whether he was of Chinese or Japanese birth; he is, however, believed by some

authorities to have been the teacher of three great artists—Shūbun, Sesshū and Kano Masanobu—who became the leaders of three schools: Shūbun, that of the pure Chinese art of the Sung and Yuan dynasties (10th and 13th centuries); Sesshū, that of a modified school bearing his name; and Masanobu, of the great Kano school, which has reached to the present day. The qualities of the new Chinese schools were essentially those of the older dynasties: breadth, simplicity, a daringly calligraphic play of brush that strongly recalled the accomplishments of the famous scribes, and a colouring that varied between sparing washes of flat local tints and a strength and brilliancy of decorative effort that rivalled even that of the Buddhist pictures. The motives remained almost identical with those of the Chinese masters, and so imbued with the foreign spirit were many of the Japanese disciples that it is said they found it difficult to avoid introducing Chinese accessories even into pictures of native scenery.

Sesshū (1421-1507) was a priest who visited China and studied painting there for several years, at length returning in 1469, disappointed with the living Chinese artists, and resolved to strike out a style of his own, based upon that of the old masters. He was the boldest and most original of Japanese landscape artists, leaving powerful and poetic records of the scenery of his own land as well as that of China, and trusting more to the sure and sweeping stroke of the brush than to colour. Shūbun was an artist of little less power, but he followed more closely his exemplars, the Chinese masters of the 12th and 13th centuries; while Kano Masanobū (1424-1520), trained in the love of Chinese art, departed little from the canons he had learned from Jōsetsu or Oguri Sōtan. It was left to his more famous son, Motonobu, to establish the school which bears the family name. Kano Motonobu (1477-1559) was one of the greatest Japanese painters, an eclectic of genius, who excelled in every style and every branch of his art. His variety was inexhaustible, and he remains to this day a model whom the most distinguished artists are proud to imitate. The names of the celebrated members of this long line are too many to quote here, but the most accomplished of his descendants was Tanyū, who died in 1674, at the age of seventy-three. The close of this long period brought a new style of art, that of the Kōrin school. Ogata Kōrin (1653-1716) is claimed by both the Tosa and Kano schools, but his work bears more resemblance to that of an erratic offshoot of the Kano line named Sōtatsu than to the typical work of the academies. He was an artist of eccentric originality, who achieved wonders in bold decorative effects in spite of a studied contempt for detail. As a lacquer painter he left a strong mark upon the work of his contemporaries and successors. His brother and pupil, Kenzan, adopted his style, and left a reputation as a decorator of pottery hardly less brilliant than Kōrin's in that of lacquer; and a later follower, Hōitsu (1762-1828), greatly excelled the master in delicacy and refinement, although inferior to him in vigour and invention. Down to the end of this era painting was entirely in the hands of a patrician caste—courtiers, priests, feudal nobles and their military retainers, all men of high education and gentle birth, living in a polished circle. It was practised more as a phase of aesthetic culture than with any utilitarian views. It was a labour of loving service, untouched by the spirit of material gain, conferring upon the work of the older masters a dignity and poetic feeling which we vainly seek in much of the later work. Unhappily, but almost inevitably, over-culture led to a gradual falling-off from the old virility. The strength of Meichō, Sesshū, Motonobu and Tanyū gave place to a more or less slavish imitation of the old Japanese painters and their Chinese exemplars, till the heirs to the splendid traditions of the great masters preserved little more than their conventions and shortcomings. It was time for a new departure, but there seemed to be no sufficient strength left within the charmed circle of the orthodox schools, and the new movement was fated to come from the masses, whose voice had hitherto been silent in the art world.

A new era in art began in the latter half of the 17th century with the establishment of a popular school under an embroiderer's draughtsman named Hishigawa Moronobu (*c.* 1646-1713). Perhaps no great change is ever entirely a novelty. The old painters of the Yamato-Tosa line had frequently shown something of the daily life around them, and one of the later scions of the school, named Iwasa Matahei, had even made a specialty of this class of motive; but so little is known of Matahei and his work that even his period is a matter of dispute, and the few pictures attributed to his pencil are open to question on grounds of authenticity. He probably worked some two generations before the time of Moronobu, but there is no reason to believe that his labours had any material share in determining the creation and trend of the new school.

Fourth Period: Popular School.

Moronobu was a consummate artist, with all the delicacy and calligraphic force of the best of the Tosa masters, whom he undoubtedly strove to emulate in style; and his pictures are not only the most beautiful but also the most trustworthy records of the life of his time. It was not to his paintings, however, that he owed his greatest influence, but to the powerful impulse he gave to the illustration of books and broadsides by wood-engravings. It is true that illustrated books were known as early as 1608, if not before, but they were few and unattractive, and did little to inaugurate the great stream of *ehon*, or picture books, that were to take so large a share in the education of his own class. It is to Moronobu that Japan owes the popularization of artistic wood-engravings, for nothing before his series of xylographic albums approached his best work in strength and beauty, and nothing since has surpassed it. Later there came abundant aid to the cause of popular art, partly from pupils of the Kano and Tosa schools, but mainly from the artisan class. Most of these artists were designers for books and broadsides by calling, painters only on occasion, but a few of them did nothing for the engravers. Throughout the whole of this period, embracing about a hundred years, there still continued to work, altogether apart from the men who were making the success of popular art, a large number of able painters of the Kano, Tosa and Chinese schools, who multiplied pictures that had every merit except that of originality. These men, living in the past, paid little attention to the great popular movement, which seemed to be quite outside their social and artistic sphere and scarcely worthy of cultured criticism. It was in the middle of the 18th century that the decorative, but relatively feeble, Chinese art of the later Ming period found favour in Japan and a clever exponent in a painter named Ryūrikyō. It must be regarded as a sad decadence from the old Chinese ideals, which was further hastened, from about 1765, by the popularity of the southern Chinese style. This was a weak affectation that found its chief votaries amongst literary men ambitious of an easily earned artistic reputation. The principal Japanese supporter of this school was Taigadō (1722-1775), but the volume of copies of his sketches, *Taigadō sansui juseki*, published about 1870, is one of the least attractive albums ever printed in Japan.

The fifth period was introduced by a movement as momentous as that which stamped its predecessor—the foundation of a naturalistic school under a group of men outside the orthodox academical circles. The naturalistic principle was by no means a new one; some of the old Chinese masters were naturalistic in a broad and noble manner, and their Japanese followers could be admirably and minutely accurate when they pleased; but too many of the latter were content to construct their pictures out of fragmentary reminiscences of ancient Chinese masterpieces, not presuming to see a rock, a tree, an ox, or a human figure, except through Chinese spectacles. It was a farmer's son named Okyō, trained in his youth to paint in the Chinese manner, who was first bold enough to adopt as a canon what his predecessors had only admitted under rare exceptions, the principle of an exact imitation of nature. Unfortunately, even he had not all the courage of his creed, and while he would paint a bird or a fish with perfect realism, he no more dared to trust his eyes in larger motives than did the most devout follower of Shūbun or Motonobu. He was essentially a painter of the classical schools, with the speciality of elaborate reproduction of detail in certain sections of animal life, but fortunately this partial concession to truth, emphasized as it was by a rare sense of beauty, did large service.

Fifth Period: Naturalistic School.

Okyō rose into notice about 1775, and a number of pupils flocked to his studio in Shijō Street, Kiōto (whence Shijō school). Amongst these the most famous were Goshun (1742-1811), who is sometimes regarded as one of the founders of the school; Sosen (1757-1821), an animal painter of remarkable power, but especially celebrated for pictures of monkey life; Shūhō, the younger brother of the last, also an animal painter; Rōsetsu (1755-1799), the best landscape painter of his school; Keibun, a younger brother of Goshun, and some later followers of scarcely less fame, notably Hoyen, a pupil of

Keibun; Tessan, an adopted son of Sosen; Ippō and Yōsai (1788-1878), well known for a remarkable set of volumes, the *Zenken kojitsu*, containing a long series of portraits of ancient Japanese celebrities. Ozui and Ojyu, the sons of Okyō, painted in the style of their father, but failed to attain great eminence. Lastly, amongst the associates of the Shijō master was the celebrated Ganku (1798-1837), who developed a special style of his own, and is sometimes regarded as the founder of a distinct school. He was, however, greatly influenced by Okyō's example, and his sons, Gantai, Ganryo, and Gantoku or Renzan, drifted into a manner almost indistinguishable from that of the Shijō school.

European School.

It remains only to allude to the European school, if school it can be called, founded by Kokan and Denkichi, two contemporaries of Okyō. These artists, at first educated in one of the native schools, obtained from a Hollander in Nagasaki some training in the methods and principles of European painting, and left a few oil paintings in which the laws of light and shade and perspective were correctly observed. They were not, however, of sufficient capacity to render the adopted manner more than a subject of curiosity, except to a few followers who have reached down to the present generation. It is possible that the essays in perspective found in the pictures of Hokusai, Hiroshige, and some of the popular artists of the 19th century, were suggested by Kokan's drawings and writings.

Sixth Period.

The sixth period began about 1875, when an Italian artist was engaged by the government as a professor of painting in the Engineering College at Tōkyō. Since that time some distinguished European artists have visited Japan, and several Japanese students have made a pilgrimage to Europe to see for themselves what lessons may be gained from Western art. These students, confronted by a strong reaction in favour of pure Japanese art, have fought manfully to win public sympathy, and though their success is not yet crowned, it is not impossible that an Occidental school may ultimately be established. Thus far the great obstacle has been that pictures painted in accordance with Western canons are not suited to Japanese interiors and do not appeal to the taste of the most renowned Japanese connoisseurs. Somewhat more successful has been an attempt—inaugurated by Hashimoto Gahō and Kawabata Gyokusho—to combine the art of the West with that of Japan by adding to the latter the chiaroscuro and the linear perspective of the former. If the disciples of this school could shake off the Sesshū tradition of strong outlines and adopt the Kano Motonobu revelation of modelling by mass only, their work would stand on a high place. But they, too, receive little encouragement. The tendency of the time is conservative in art matters.

A series of magnificent publications has popularized art and its best products in a manner such as could never have been anticipated. The *Kokka*, a monthly magazine richly and beautifully illustrated and edited by Japanese students, has reached its 223rd number; the *Shimbi Daikan*, a colossal album containing chromoxylographic facsimiles of celebrated examples in every branch of art, has been completed in 20 volumes; the masterpieces of Kōrin and Motonobu have been reproduced in similar albums; the masterpieces of the *Ukiyo-e* are in process of publication, and it seems certain that the Japanese nation will ultimately be educated to such a knowledge of its own art as will make for permanent appreciation. Meanwhile the intrepid group of painters in oil plod along unflinchingly, having formed themselves into an association (the *hakuba-kai*) which gives periodical exhibitions, and there are, in Tōkyō and Kiōto, well-organized and flourishing art schools which receive a substantial measure of state aid, as well as a private academy founded by Okakura with a band of seceders from the hybrid fashions of the Gahō system. Altogether the nation seems to be growing more and more convinced that its art future should not wander far from the lines of the past.

(W. An.; F. By.)

Engraving.

Although a little engraving on copper has been practised in Japan of late years, it is of no artistic value, and the only branch of the art which calls for recognition is the cutting of wood-blocks for use either with colours or without. This, however, is of supreme importance, and as its technique differs in most respects from the European practice, it demands a somewhat detailed description.

The wood used is generally that of the cherry-tree, *sakura*, which has a grain of peculiar evenness and hardness. It is worked plankwise to a surface parallel with the grain, and not across it. A design is drawn by the artist, to whom the whole credit of the production generally belongs, with a brush on thin paper, which is then pasted face downwards on the block. The engraver, who is very rarely the designer, then cuts the outlines into the block with a knife, afterwards removing the superfluous wood with gouges and chisels. Great skill is shown in this operation, which achieves perhaps the finest facsimile reproduction of drawings ever known without the aid of photographic processes. A peculiar but highly artistic device is that of gradually rounding off the surfaces where necessary, in order to obtain in printing a soft and graduated mass of colour which does not terminate too abruptly. In printing with colours a separate block is made in this manner for each tint, the first containing as a rule the mere lines of the composition, and the others providing for the masses of tint to be applied. In all printing the paper is laid on the upper surface of the block, and the impression rubbed off with a circular pad, composed of twisted cord within a covering of paper cloth and bamboo-leaf, and called the *baren*. In colour-printing, the colours, which are much the same as those in use in Europe, are mixed, with rice-paste as a medium, on the block for each operation, and the power of regulating the result given by this custom to an intelligent craftsman (who, again, is neither the artist nor the engraver) was productive in the best period of very beautiful and artistic effects, such as could never have been obtained by any mechanical device. A wonderfully accurate register, or successive superposition of each block, is got mainly by the skill of the printer, who is assisted only by a mark defining one corner and another mark showing the opposite side limit.

The origins of this method of colour-printing are obscure. It has been practised to some extent in China and Korea, but there is no evidence of its antiquity in these countries. It appears to be one of the few indigenous arts of Japan. But before accepting this conclusion as final, one must not lose sight of the fact that the so-called chiaroscuro engraving was at the height of its use in Italy at the same time that embassies from the Christians in Japan visited Rome, and that it is thus possible that the suggestion at least may have been derived from Europe. The fact that no traces of it have been discovered in Japan would be easily accounted for, when it is remembered that the examples taken home would almost certainly have been religious pictures, would have been preserved in well-known and accessible places, and would thus have been entirely destroyed in the terrible and minute extermination of Christianity by Hideyoshi at the beginning of the 17th century. Japanese tradition ascribes the invention of colour-printing to Idzumiya Gonshirō, who, about the end of the 17th century, first made use of a second block to apply a tint of red (*beni*) to his prints. Sir Ernest Satow states more definitely that "Sakakibara attributes its origin to the year 1695, when portraits of the actor Ichikawa Danjiuro, coloured by this process, were sold in the streets of Yedo for five cash apiece." The credit of the invention is also given to Torii Kiyonobu, who worked at about this time, and, indeed, is said to have made the prints above mentioned. But authentic examples of his work now remaining, printed in three colours, seem to show a technique too complete for an origin quite so recent. However, he is the first artist of importance to have produced the broadsheets—for many years chiefly portraits of notable actors, historical characters and famous courtesans—which are the leading and characteristic use to which the art was applied. Pupils, the chief of whom were Kiyomasa, Kiyotsume, Kiyomitsu, Kiyonaga and Kiyomine, carried on his tradition until the end of the 18th century, the three earlier using but few colours, while the works of the two last named show a technical mastery of all the capabilities of the process.

The next artist of importance is Suzuki Harunobu (worked *c.* 1760-1780), to whom the Japanese sometimes ascribe the invention of the process, probably on the grounds of an improvement in his technique, and the fact that he seems to have been one of the first of the colour-print makers to attain great popularity. Katsukawa Shunshō (d. 1792) must next be mentioned, not only for the beauty of his own work, but because he was the first master of Hokusai; then Yeishi (worked

c. 1781-1800), the founder of the Hosoda school; Utamaro (1754-1806), whose prints of beautiful women were collected by Dutchmen while he was still alive, and have had in our own day a vogue greater, perhaps, than those of any other of his fellows; and Toyokuni I. (1768-1825), who especially devoted himself to broadsheet portraits of actors and dramatic scenes. The greatest of all the artists of the popular school was, however, Hokusai (1760-1849). His most famous series of broadsheets is the *Thirty-six Views of Mount Fuji* (1823-1829), which, in spite of the conventional title, includes at least forty-six. His work is catalogued in detail by E. de Goncourt. At the beginning of the 19th century the process was technically at its greatest height, and in the hands of the great landscape artist, Hiroshige I., as well as the pupils of Toyokuni I.—Kunisada and Kuniyoshi—and those of Hokusai, it at first kept up an excellent level. But an undue increase in the number of blocks used, combined with the inferiority of the imported colours and carelessness or loss of skill in printing, brought about a rapid decline soon after 1840. This continued until the old traditions were well-nigh exhausted, but since 1880 there has been a distinct revival. The prints of the present day are cut with great skill, and the designs are excellent, though both these branches seem to lack the vigour of conception and breadth of execution of the older masters. The colours now used are almost invariably of cheap German origin, and though they have a certain prettiness—ephemeral, it is to be feared—they again can not compare with the old native productions. Among workers in this style, Yoshitoshi (d. *c.* 1898) was perhaps the best. Living artists in 1908 included Toshihide, Miyagawa Shuntei, Yoshiu Chikanobu—one of the elder generation—Tomisuka Yeishu, Toshikata and Gekko. Formerly the colour-print artist was of mean extraction and low social position, but he now has some recognition at the hands of the professors of more esteemed branches of art. This change is doubtless due in part to Occidental appreciation of the products of his art, which were formerly held in little honour by his own countrymen, the place assigned to them being scarcely higher than that accorded to magazine illustrations in Europe and America. But it is also largely due to his displays of unsurpassed skill in preparing xylographs for the beautiful art publications issued by the *Shimbi Shōin* and the *Kokka* company. These xylographs prove that the Japanese art-artisan of the present day was not surpassed by the greatest of his predecessors in this line.

(E. F. S.; F. By.)

Book Illustration.

The history of the illustrated book in Japan may be said to begin with the *Ise monogatari*, a romance first published in the 10th century, of which an edition adorned with woodcuts appeared in 1608. In the course of the 17th century many other works of the same nature were issued, including some in which the cuts were roughly coloured by hand; but the execution of these is not as good as contemporary European work. The date of the first use of colour-printing in Japanese book illustration is uncertain. In 1667 a collection of designs for *kimono* (garments) appeared, in which inks of several colours were made use of; but these were only employed in turn for single printings, and in no case were two of them used on the same print. It is certain, however, that the mere use of coloured inks must soon have suggested the combination of two or more of them, and it is probable that examples of this will be discovered much earlier in date than those known at present.

About the year 1680 Hishigawa Moronobu achieved a great popularity for woodcut illustration, and laid the foundations of the splendid school which followed. The names of the engravers who cut his designs are not known, and in fact the reputation of these craftsmen is curiously subordinated to that of the designers in all Japanese work of the kind. With Moronobu must be associated Okumura Masanobu, a little later perhaps in date, whose work is also of considerable value. During the ensuing thirty years numerous illustrated books appeared, including the earliest yet known which are illustrated by colour-printing. Nishikawa Sukenobu (1671-1751) illustrated a very large number of books, many of which were not published until after his death. With him may be associated Ichiō Shumboku (d. *c.* 1773) and Tsukioka Tange (1717-1786), the latter of whom made the drawings for many of the *meishō* or guide-books which form so interesting and distinctive a branch of Japanese illustration. The work of Tachibana Morikuni (1670-1748) is also of great importance. The books illustrated by the men of this school were mainly collections of useful information, guide-books, romances and historical and religious compilations; but much of the best of their work is to be found in the collections of pictorial designs, very often taken from Chinese sources, which were produced for the use of workers in lacquer, pottery and similar crafts. These, both for design and for skill of cutting, hold their own with the best work of European wood-cutting of any period. The development of the art of Japanese colour-printing naturally had its effect on book-illustration, and the later years of the 18th and the earlier of the 19th century saw a vast increase of books illustrated by this process. The subjects also now include a new series of landscapes and views drawn as seen by the designers, and not reproductions of the work of other men; and also sketches of scenes and characters of everyday life and of the folk-lore in which Japan is so rich. Among the artists of this period, as of all others in Japan, Hokusai (1760-1849) is absolutely pre-eminent. His greatest production in book-illustration was the *Mangwa*, a collection of sketches which cover the whole ground of Japanese life and legend, art and handicraft. It consists of fifteen volumes, which appeared at intervals from 1812 to 1875, twelve being published during his life and the others from material left by him. Among his many other works may be mentioned the *Azuma Asobi* (*Walks round Yedo*, 1799). Of his pupils, Hokkei (1780-1856) and Kyōsai were the greatest. Most of the artists, whose main work was the designing of broadsheets, produced elaborately illustrated books; and this series includes specimens of printing in colours from wood-blocks, which for technique have never been excelled. Among them should be mentioned Shunshō (*Seirō bijin awase kagami*, 1776); Utamaro (*Seirō nenjyū gyoji*, 1804); Toyokuni I. (*Yakusha kono teikishiwa*, 1801); as well as Harunobu Yeishi (*Onna sanjyu rokkasen*, 1798), Kitao Masanobu and Tachibana Minko, each of whom produced beautiful work of the same nature. In the period next following, the chief artists were Keisai Yeisen (*Keisai so-gwa*, 1832) and Kikuchi Yōsai (*Zenken kojitsu*), the latter of whom ranks perhaps as highly as any of the artists who confined their work to black and white. The books produced in the period 1880-1908 in Japan are still of high technical excellence. The colours are, unfortunately, of cheap European manufacture; and the design, although quite characteristic and often beautiful, is as a rule merely pretty. The engraving is as good as ever. Among the book-illustrators of our own generation must be again mentioned Kyōsai; Kōno Bairei (d. 1895), whose books of birds—the *Bairei hyakucho gwafu* (1881 and 1884) and *Yūaka-no-tsuki* (1889)—are unequalled of their kind; Imao Keinen, who also issued a beautiful set of illustrations of birds and flowers (*Keinen kwachō gwafu*), engraved by Tanaka Jirokichi and printed by Miki Nisaburō (1891-1892); and Watanabe Seitei, whose studies of similar subjects have appeared in *Seitei kwachō gwafu* (1890-1891) and the *Bijutsu sekai* (1894), engraved by Gotō Tokujirō. Mention should also be made of several charming series of fairy tales, of which that published in English by the *Kobunsha* in Tōkyō in 1885 is perhaps the best. In their adaptation of modern processes of illustration the Japanese are entirely abreast of Western nations, the chromo-lithographs and other reproductions in the *Kokka*, a periodical record of Japanese works of art (begun in 1889), in the superb albums of the *Shimbi Shōin*, and in the publications of Ogawa being of quite a high order of merit.

(E. F. S.; F. By.)

Plate III.

FIG. 6.—KWANNON, GODDESS OF MERCY. By Mincho or Cho Densu (1352-1431).

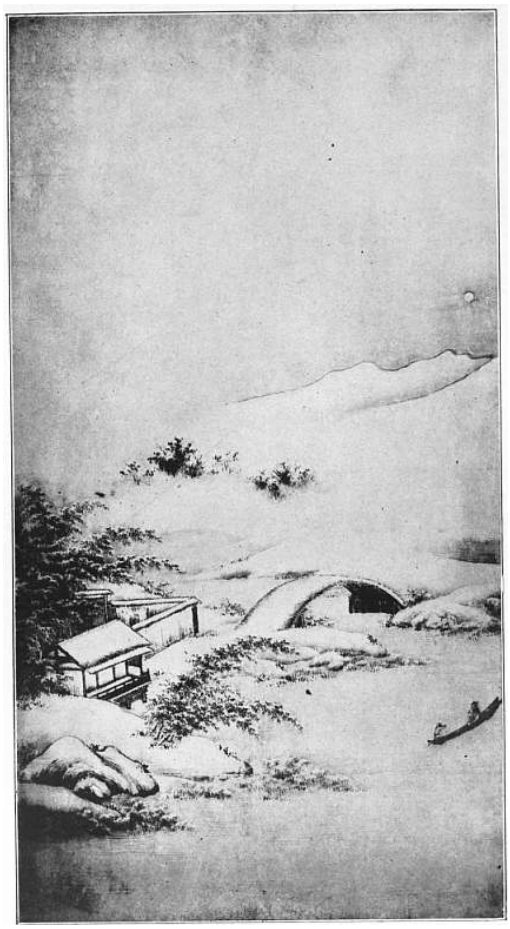

FIG. 7.—LANDSCAPE IN SNOW. By Kano Motonobu (1476-1559).

FIG. 8.—JUROJIN. By Sesshiu (1420-1506).

PLATE IV.

FIG. 9.—PLUM TREES AND STREAM—SCREEN ON GOLD GROUND. By Korin (1661-1716).

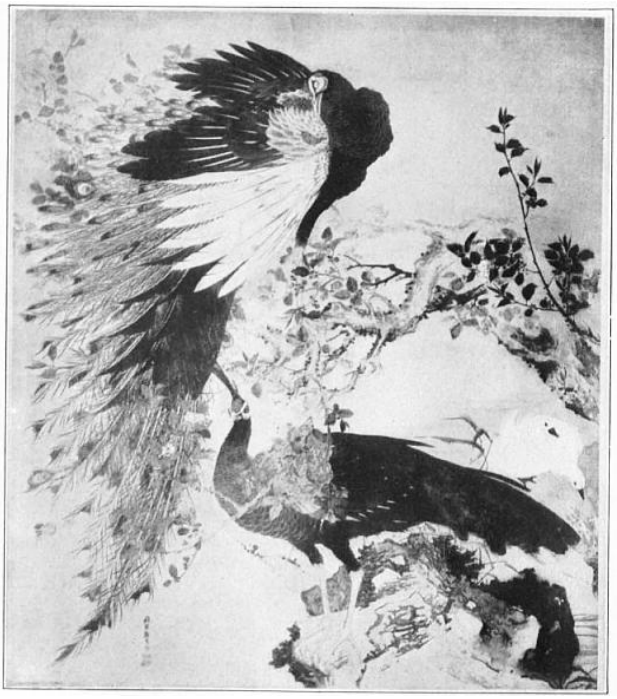

FIG. 10.—PEACOCKS. By Ganku (1749-1838).

Sculpture and Carving.—Sculpture in wood and metal is of ancient date in Japan. Its antiquity is not, indeed, comparable to that of ancient Egypt or Greece, but no country besides Japan can boast a living and highly developed art that has numbered upwards of twelve centuries of unbroken and brilliant productiveness. Setting aside rude prehistoric essays in stone and metal, which have special interest for the antiquary, we have examples of sculpture in wood and metal, magnificent in conception and technique, dating from the earliest periods of what we may term historical Japan; that is, from near the beginning of the great Buddhist propaganda under the emperor Kimmei (540-571) and the princely hierarch, Shōtoku Taishi (573-621). Stone has never been in favour in Japan as a material for the higher expression of the sculptor's art.

Historical Sketch.

The first historical period of glyptic art in Japan reaches from the end of the 6th to the end of the 12th century, culminating in the work of the great Nara sculptors, Unkei and his pupil Kwaikei. Happily, there are still preserved in the great temples of Japan, chiefly in the ancient capital of Nara, many noble relics of this period.

First Period.

The place of honour may perhaps be conferred upon sculptures in wood, representing the Indian Buddhists, Asangha and Vasabandhu, preserved in the Golden Hall of Kofuku-ji, Nara. These are attributed to a Kamakura sculptor of the 8th or 9th century, and in simple and realistic dignity of pose and grand lines of composition are worthy of comparison with the works of ancient Greece. With these may be named the demon lantern-bearers, so perfect in the grotesque treatment of the diabolical heads and the accurate anatomical forms of the sturdy body and limbs; the colossal temple guardians of the great gate of Tōdai-ji, by Unkei and Kwaikei (11th century), somewhat conventionalized, but still bearing evidence of direct study from nature, and inspired with intense energy of action; and the smaller but more accurately modelled temple guardians in the Saikondo, Nara, which almost compare with the "fighting gladiator" in their realization of menacing strength. The "goddess of art" of Akishino-dera, Nara, attributed to the 8th century, is the most graceful and least conventional of female sculptures in Japan, but infinitely remote from the feminine conception of the Greeks. The wooden portrait of Vimalakirtti, attributed to Unkei, at Kofuku-ji, has some of the qualities of the images of the two Indian Buddhists. The sculptures attributed to Jōchō, the founder of the Nara school, although powerful in pose and masterly in execution, lack the truth of observation seen in some of the earlier and later masterpieces.

The most perfect of the ancient bronzes is the great image of Bhaicha-djyaguru in the temple of Yakushi-ji, Nara, attributed to a Korean monk of the 7th century, named Giōgi. The bronze image of the same divinity at Hōryū-ji, said to have been cast at the beginning of the 7th century by Tori Busshi, the grandson of a Chinese immigrant, is of good

technical quality, but much inferior in design to the former. The colossal Nara Daibutsu (Vairocana) at Tōdai-ji, cast in 749 by a workman of Korean descent, is the largest of the great bronzes in Japan, but ranks far below the Yakushi-ji image in artistic qualities. The present head, however, is a later substitute for the original, which was destroyed by fire.

The great Nara school of sculpture in wood was founded in the early part of the 11th century by a sculptor of Imperial descent named Jōchō, who is said to have modelled his style upon that of the Chinese wood-carvers of the Tang dynasty; his traditions were maintained by descendants and followers down to the beginning of the 13th century. All the artists of this period were men of aristocratic rank and origin, and were held distinct from the carpenter-architects of the imposing temples which were to contain their works.

Sacred images were not the only specimens of glyptic art produced in these six centuries; reliquaries, bells, vases, incense-burners, candlesticks, lanterns, decorated arms and armour, and many other objects, showing no less mastery of design and execution, have reached us. Gold and silver had been applied to the adornment of helmets and breastplates from the 7th century, but it was in the 12th century that the decoration reached the high degree of elaboration shown us in the armour of the Japanese Bayard, Yoshitsunē, which is still preserved at Kasuga, Nara.

Wooden masks employed in the ancient theatrical performances were made from the 7th century, and offer a distinct and often grotesque phase of wood-carving. Several families of experts have been associated with this class of sculpture, and their designs have been carefully preserved and imitated down to the present day.

Second Period.

The second period in Japanese glyptic art extends from the beginning of the 13th to the early part of the 17th century. The great struggle between the Taira and Minamoto clans had ended, but the militant spirit was still strong, and brought work for the artists who made and ornamented arms and armour. The Miyōchins, a line that claimed ancestry from the 7th century, were at the head of their calling, and their work in iron breastplates and helmets, chiefly in *repoussé*, is still unrivalled. It was not until the latter half of the 15th century that there came into vogue the elaborate decoration of the sword, a fashion that was to last four hundred years.

The metal guard (*tsuba*), made of iron or precious alloy, was adorned with engraved designs, often inlaid with gold and silver. The free end of the hilt was crowned with a metallic cap or pommel (*kashira*), the other extremity next the tsuba was embraced by an oval ring (*fuchi*), and in the middle was affixed on each side a special ornament called the *menuki*, all adapted in material and workmanship to harmonize with the guard. The *kodzuka*, or handle of a little knife implanted into the sheath of the short sword or dagger, was also of metal and engraved with like care. The founder of the first great line of tsuba and menuki artists was Gotō Yūjō (1440-1512), a friend of the painter Kano Motonobu, whose designs he adopted. Many families of sword artists sprang up at a later period, furnishing treasures for the collector even down to the present day, and their labours reached a level of technical mastery and refined artistic judgment almost without parallel in the art industries of Europe. Buddhist sculpture was by no means neglected during this period, but there are few works that call for special notice. The most noteworthy effort was the casting by Ono Goroyémon in 1252 of the well-known bronze image, the Kamakura Daibutsu.

Third Period.

The third period includes the 17th, 18th and the greater part of the 19th centuries. It was the era of the artisan artist. The makers of Buddhist images and of sword ornaments carried on their work with undiminished industry and success, and some famous schools of the latter arose during this period. The Buddhist sculptors, however, tended to grow more conventional and the metal-workers more naturalistic as the 18th century began to wane. It was in connexion with architecture that the great artisan movement began. The initiator was Hidari Jingoro (1594-1652), at first a simple carpenter, afterwards one of the most famous sculptors in the land of great artists. The gorgeous decoration of the mausoleum of Iyeyasu at Nikkō, and of the gateway of the Nishi Hongwan temple at Kiōto, are the most striking instances of his handiwork or direction.

The pillars, architraves, ceilings, panels, and almost every available part of the structure, are covered with arabesques and sculptured figures of dragons, lions, tigers, birds, flowers, and even pictorial compositions with landscapes and figures, deeply carved in solid or open work—the wood sometimes plain, sometimes overlaid with pigment and gilding, as in the panelled ceiling of the chapel of Iyeyasu in Tōkyō. The designs for these decorations, like those of the sword ornaments, were adopted from the great schools of painting, but the invention of the sculptor was by no means idle. From this time the temple carvers, although still attached to the carpenters' guild, took a place apart from the rest of their craft, and the genius of Hidari Jingoro secured for one important section of the artisan world a recognition like that which Hishigawa Moronobu, the painter and book-illustrator, afterwards won for another.

A little later arose another art industry, also emanating from the masses. The use of tobacco, which became prevalent in the 17th century, necessitated the pouch. In order to suspend this from the girdle there was employed a kind of button or toggle—the *netsuke*. The metallic bowl and mouthpiece of the pipe offered a tempting surface for embellishment, as well as the clasp of the pouch; and the netsuke, being made of wood, ivory or other material susceptible of carving, also gave occasion for art and ingenuity.

The engravers of pipes, pouch clasps, and the metallic discs (*kagami-buta*) attached to certain netsuke, sprang from the same class and were not less original. They worked, too, with a skill little inferior to that of the Gotōs, Naras, and other aristocratic sculptors of sword ornaments, and often with a refinement which their relative disadvantages in education and associations render especially remarkable. The netsuke and the pipe, with all that pertained to it, were for the commoners what the sword-hilt and guard were for the gentry. Neither class cared to bestow jewels upon their persons, but neither spared thought or expense in the embellishment of the object they most loved. The final manifestation of popular glyptic art was the *okimono*, an ornament pure and simple, in which utility was altogether secondary in intention to decorative effect. Its manufacture as a special branch of art work dates from the rise of the naturalistic school of painting and the great expansion of the popular school under the Katsugawa, but the okimono formed an occasional amusement of the older glyptic artists. Some of the most exquisite and most ingenious of these earlier productions, such as the magnificent iron eagle in the South Kensington Museum, the wonderful articulated models of crayfish, dragons, serpents, birds, that are found in many European collections, came from the studios of the Miyōchins; but these were the play of giants, and were not made as articles of commerce. The new artisan makers of the okimono struck out a line for themselves, one influenced more by the naturalistic and popular schools than by the classical art, and the quails of Kamejo, the tortoises of Seimin, the dragons of Tōun and Tōryū, and in recent years the falcons and the peacocks of Suzuki Chokichi, are the joy of the European collector. The best of these are exquisite in workmanship, graceful in design, often strikingly original in conception, and usually naturalistic in ideal. They constitute a phase of art in which Japan has few rivals.

The present generation is more systematically commercial in its glyptic produce than any previous age. Millions of commercial articles in metal-work, wood and ivory flood the European markets, and may be bought in any street in Europe at a small price, but they offer a variety of design and an excellence of workmanship which place them almost beyond Western competition. Above all this, however, the Japanese sculptor is a force in art. He is nearly as thorough as his forefathers, and maintains the same love of all things beautiful; and if he cannot show any epoch-making novelty, he is at any rate doing his best to support unsurpassed the decorative traditions of the past.

History has been eminently careful to preserve the names and records of the men who chiselled sword furniture. The sword being regarded as the soul of the samurai, every one who contributed to its manufacture, whether as forger of the

Sword-making Families.

blade or sculptor of the furniture, was held in high repute. The Gotō family worked steadily during 14 generations, and its 19th century representative—Gotō Ichijō—will always be remembered as one of the family's greatest experts. But there were many others whose productions fully equalled and often excelled the best efforts of the Gotō. The following list gives the names and periods of the most renowned families:—

(It should be noted that the division by centuries indicates the time of a family's origin. In a great majority of cases the representatives of each generation worked on through succeeding centuries).

15th and 16th Centuries.

Miyōchin; Gotō; Umetada; Muneta; Aoki; Sōami; Nakai.

17th Century.

Kuwamura; Mizuno; Koichi; Nagayoshi;
Kuninaga; Yoshishige; Katsugi; Tsuji;
Muneyoshi; Tadahira; Shōami; Hosono;
Yokoya; Nara; Okada; Okamoto; Kinai; Akao;
Yoshioka; Hirata; Nomura; Wakabayashi; Inouye;
Yasui; Chiyo; Kaneko; Uemura; Iwamoto.

18th Century.

Gorobei; Shōemon; Kikugawa; Yasuyama; Noda; Tamagawa; Fujita; Kikuoka; Kizaemon; Hamano; Ōmori; Okamoto; Kashiwaya; Kusakari; Shichibei; Itō.

19th Century.

Natsuo; Ishiguro; Yanagawa; Honjo; Tanaka; Okano; Kawarabayashi; Oda; and many masters of the Ōmori, Hamano and Iwamoto families, as well as the five experts, Shuraku, Temmin, Ryūmin, Minjō and Minkoku.

(W. An.; F. By.)

Japanese Point of View.

There is a radical difference between the points of view of the Japanese and the Western connoisseur in estimating the merits of sculpture in metal. The quality of the chiselling is the first feature to which the Japanese directs his attention; the decorative design is the prime object of the Occidental's attention. With very rare exceptions, the decorative motives of Japanese sword furniture were always supplied by painters. Hence it is that the Japanese connoisseur draws a clear distinction between the decorative design and its technical execution, crediting the former to the pictorial artist and the latter to the sculptor. He detects in the stroke of a chisel and the lines of a graving tool subjective beauties which appear to be hidden from the great majority of Western dilettanti. He estimates the rank of a specimen by the quality of the chisel-work. The Japanese *kinzoku-shi* (metal sculptor) uses thirty-six principal classes of chisel, each with its distinctive name, and as most of these classes comprise from five to ten sub-varieties, his cutting and graving tools aggregate about two hundred and fifty.

The Field for Sculptured Decoration.

Scarcely less important in Japanese eyes than the chiselling of the decorative design itself is the preparation of the field to which it is applied. There used to be a strict canon with reference to this in former times. *Namako* (fish-roe) grounds were essential for the mountings of swords worn on ceremonial occasions, the *ishime* (stone-pitting) or *jimigaki* (polished) styles being considered less aristocratic.

Namako is obtained by punching the whole surface—except the portion carrying the decorative design—into a texture of microscopic dots. The first makers of namako did not aim at regularity in the distribution of these dots; they were content to produce the effect of millet-seed sifted haphazard over the surface. But from the 15th century the punching of the dots in rigidly straight lines came to be considered essential, and the difficulty involved was so great that namako-making took its place among the highest technical achievements of the sculptor. When it is remembered that the punching tool was guided solely by the hand and eye, and that three or more blows of the mallet had to be struck for every dot, some conception may be formed of the patience and accuracy needed to produce these tiny protuberances in perfectly straight lines, at exactly equal intervals and of absolutely uniform size. Namako disposed in straight parallel lines originally ranked at the head of this kind of work. But a new kind was introduced in the 16th century. It was obtained by punching the dots in intersecting lines, so arranged that the dots fell uniformly into diamond-shaped groups of five each. This is called *go-no-me-namako*, because of its resemblance to the disposition of chequers in the Japanese game of *go*. A century later, the *daimyō namako* was invented, in which lines of dots alternated with lines of polished ground. *Ishime* may be briefly described as diapering. There is scarcely any limit to the ingenuity and skill of the Japanese expert in diapering a metal surface. It is not possible to enumerate here even the principal styles of ishime, but mention may be made of the *zara-maki* (broad-cast), in which the surface is finely but irregularly pitted after the manner of the face of a stone; the *nashi-ji* (pear-ground), in which we have a surface like the rind of a pear; the *hari-ishime* (needle ishime), where the indentations are so minute that they seem to have been made with the point of a needle; the *gama-ishime*, which is intended to imitate the skin of a toad; the *tsuya-ishime*, produced with a chisel sharpened so that its traces have a lustrous appearance; the *ore-kuchi* (broken-tool), a peculiar kind obtained with a jagged tool; and the *gozamé*, which resembles the plaited surface of a fine straw mat.

Patina.

Great importance has always been attached by Japanese experts to the patina of metal used for artistic chiselling. It was mainly for the sake of their patina that value attached to the remarkable alloys *shakudo* (3 parts of gold to 97 of copper) and *shibuichi* (1 part of silver to 3 of copper). Neither metal, when it emerges from the furnace, has any beauty, shakudo being simply dark-coloured copper and shibuichi pale gun-metal. But after proper treatment[2] the former develops a glossy black patina with violet sheen, and the latter shows beautiful shades of grey with silvery lustre. Both these compounds afford delicate, unobtrusive and effective grounds for inlaying with gold, silver and other metals, as well as for sculpture, whether incised or in relief. Copper, too, by patina-producing treatment, is made to show not merely a rich golden sheen with pleasing limpidity, but also red of various hues, from deep coral to light vermilion, several shades of grey, and browns of numerous tones from dead-leaf to chocolate. Even greater value has always been set upon the patina of iron, and many secret recipes were preserved in artist families for producing the fine, satin-like texture so much admired by all connoisseurs.

Methods of Chiselling.

In Japan, as in Europe, three varieties of relief carving are distinguished—*alto* (*taka-bori*), mezzo (*chūniku-bori*) and *basso* (*usuniku-bori*). In the opinion of the Japanese expert, these styles hold the same respective rank as that occupied by the three kinds of ideographic script in caligraphy. High relief carving corresponds to the *kaisho*, or most classical form of writing; medium relief to the *gyōsho*, or semi-cursive style; and low relief to the *sōsho* or grass character. With regard to incised chiselling, the commonest form is *kebori* (hair-carving), which may be called engraving, the lines being of uniform thickness and depth. Very beautiful results are obtained by the kebori method, but incomparably the finest work in the incised class is that known as *kata-kiri-bori*. In this kind of chiselling the Japanese artist can claim to be unique as well as unrivalled. Evidently the idea of the great Yokoya experts, the originators of the style, was to break away from the somewhat formal monotony of ordinary engraving, where each line performs exactly the same function, and to convert the chisel into an artist's brush instead of

using it as a common cutting tool. They succeeded admirably. In the kata-kiri-bori every line has its proper value in the pictorial design, and strength and directness become cardinal elements in the strokes of the burin just as they do in the brushwork of the picture-painter. The same fundamental rule applied, too, whether the field of the decoration was silk, paper or metal. The artist's tool, be it brush or burin, must perform its task by one effort. There must be no appearance of subsequent deepening, or extending, or re-cutting or finishing. Kata-kiri-bori by a great expert is a delight. One is lost in astonishment at the nervous yet perfectly regulated force and the unerring fidelity of every trace of the chisel. Another variety of carving much affected by artists of the 17th century, and now largely used, is called *shishi-ai-bori* or *niku-ai-bori*. In this style the surface of the design is not raised above the general plane of the field, but an effect of projection is obtained either by recessing the whole space immediately surrounding the design, or by enclosing the latter in a scarped frame. Yet another and very favourite method, giving beautiful results, is to model the design on both faces of the metal so as to give a sculpture in the round. The fashion is always accompanied by chiselling *à jour* (*sukashi-bori*), so that the sculptured portions stand out in their entirety.

Inlaying.

Inlaying with gold or silver was among the early forms of decoration in Japan. The skill developed in modern times is at least equal to anything which the past can show, and the results produced are much more imposing. There are two principal kinds of inlaying: the first called *hon-zōgan* (true inlaying), the second *nunome-zōgan* (linen-mesh inlaying). As to the former, the Japanese method does not differ from that seen in the beautiful iron censers and vases inlaid with gold which the Chinese produced from the *Süen-tē* era (1426-1436). In the surface of the metal the workman cuts grooves wider at the base than at the top, and then hammers into them gold or silver wire. Such a process presents no remarkable features, except that it has been carried by the Japanese to an extraordinary degree of elaborateness. The nunome-zōgan is more interesting. Suppose, for example, that the artist desires to produce an inlaid diaper. His first business is to chisel the surface in lines forming the basic pattern of the design. Thus, for a diamond-petal diaper the chisel is carried across the face of the metal horizontally, tracing a number of parallel bands divided at fixed intervals by ribs which are obtained by merely straightening the chisel and striking it a heavy blow. The same process is then repeated in another direction, so that the new bands cross the old at an angle adapted to the nature of the design. Several independent chisellings may be necessary before the lines of the diaper emerge clearly, but throughout the whole operation no measurement of any kind is taken, the artist being guided entirely by his hand and eye. The metal is then heated, not to redness, but sufficiently to develop a certain degree of softness, and the workman, taking a very thin sheet of gold (or silver), hammers portions of it into the salient points of the design. In ordinary cases this is the sixth process. The seventh is to hammer gold into the outlines of the diaper; the eighth, to hammer it into the pattern filling the spaces between the lines, and the ninth and tenth to complete the details. Of course the more intricate the design the more numerous the processes. It is scarcely possible to imagine a higher effort of hand and eye than this *nunome-zōgan* displays, for while intricacy and elaborateness are carried to the very extreme, absolute mechanical accuracy is obtained. Sometimes in the same design we see gold of three different hues, obtained by varying the alloy. A third kind of inlaying, peculiar to Japan, is *sumi-zōgan* (ink-inlaying), so called because the inlaid design gives the impression of having been painted with Indian ink beneath the transparent surface of the metal. The difference between this process and ordinary inlaying is that for *sumi-zōgan* the design to be inlaid is fully chiselled out of an independent block of metal with sides sloping so as to be broader at the base than at the top. The object which is to receive the decoration is then channelled in dimensions corresponding to those of the design block, and the latter having been fixed in the channels, the surface is ground and polished until an intimate union is obtained between the inlaid design and the metal forming its field. Very beautiful effects are thus produced, for the design seems to have grown up to the surface of the metal field rather than to have been planted in it. Shibuichi inlaid with shakudo used to be the commonest combination of metals in this class of decoration, and the objects usually depicted were bamboos, crows, wild-fowl under the moon, peony sprays and so forth.

Wood-grained Grounds.

A variety of decoration much practised by early experts, and carried to a high degree of excellence in modern times, is *mokume-ji* (wood-grained ground). The process in this case is to take a thin plate of metal and beat it into another plate of similar metal, so that the two, though welded together, retain their separate forms. The mass, while still hot, is coated with *hena-tsuchi* (a kind of marl) and rolled in straw ash, in which state it is roasted over a charcoal fire raised to glowing heat with the bellows. The clay having been removed, another plate of the same metal is beaten in, and the same process is repeated. This is done several times, the number depending on the quality of graining that the expert desires to produce. The manifold plate is then heavily punched from one side, so that the opposite face protrudes in broken blisters, which are then hammered down until each becomes a centre of wave propagation. In fine work the apex of the blister is ground off before the final hammering. Iron was the metal used exclusively for work of this kind down to the 16th century, but various metals began thenceforth to be combined. Perhaps the choicest variety is gold graining in a shakudo field. By repeated hammering and polishing the expert obtains such control of the wood-grain pattern that its sinuosities and eddies seem to have developed symmetry without losing anything of their fantastic grace. There are other methods of producing *mokume-ji*.

Modern and Ancient Skill.

It has been frequently asserted by Western critics that the year (1876) which witnessed the abolition of sword-wearing in Japan, witnessed also the end of her artistic metal-work. That is a great mistake. The art has merely developed new phases in modern times. Not only are its masters as skilled now as they were in the days of the Gotō, the Nara, the Yokoya and the Yanagawa celebrities, but also their productions must be called greater in many respects and more interesting than those of their renowned predecessors. They no longer devote themselves to the manufacture of sword ornaments, but work rather at vases, censers, statuettes, plaques, boxes and other objects of a serviceable or ornamental nature. All the processes described above are practised by them with full success, and they have added others quite as remarkable.

Of these, one of the most interesting is called *kiribame* (insertion). The decorative design having been completely chiselled in the round, is then fixed in a field of a different metal, in which a design of exactly similar outline has been cut out. The result is that the picture has no blank reverse. For example, on the surface of a shibuichi box-lid we see the backs of a flock of geese chiselled in silver, and when the lid is opened, their breasts and the under-sides of their pinions appear. The difficulty of such work is plain. Microscopic accuracy has to be attained in cutting out the space for the insertion of the design, and while the latter must be soldered firmly in its place, not the slightest trace of solder or the least sign of junction must be discernible between the metal of the inserted picture and that of the field in which it is inserted. Suzuki Gensuke is the inventor of this method. He belongs to a class of experts called *uchimono-shi* (hammerers) who perform preparatory work for glyptic artists in metal. The skill of these men is often wonderful. Using the hammer only, some of them can beat out an intricate shape as truly and delicately as a sculptor could carve it with his chisels. Ōhori Masatoshi, an uchimono-shi of Aizu (d. 1897), made a silver cake-box in the form of a sixteen-petalled chrysanthemum. The shapes of the body and lid corresponded so intimately that, whereas the lid could be slipped on easily and smoothly without any attempt to adjust its curves to those of the body, it always fitted so closely that the box could be lifted by grasping the lid only. Another feat of his was to apply a lining of silver to a shakudo box by shaping and hammering only, the fit being so perfect that the lining clung like paper to every part of the box. Suzuki Gensuke and Hirata Sōkō are scarcely less expert. The latter once exhibited in Tōkyō a silver game-cock with soft plumage and surface modelling of the most delicate character. It had been made by means of the hammer only. Suzuki's kiribame process is not to be confounded with the *kiribame-zōgan* (inserted inlaying) of Tōyoda Kokō, also a modern artist. The gist of the latter method is that a design chiselled *à jour* has its outlines veneered with other metal which serves to emphasize them. Thus, having pierced a spray of flowers in a thin sheet of shibuichi, the artist fits a slender rim of gold, silver or shakudo to the petals, leaves and stalks, so that an effect is produced of transparent blossoms outlined in gold, silver or purple. Another modern achievement—also due to Suzuki Gensuke—is *maze-gane* (mixed metals). It is a singular conception, and

the results obtained depend largely on chance. Shibuichi and shakudo are melted separately, and when they have cooled just enough not to mingle too intimately, they are cast into a bar which is subsequently beaten flat. The plate thus obtained shows accidental clouding, or massing of dark tones, and these patches are taken as the basis of a pictorial design to which final character is given by inlaying with gold and silver, and by katā-kiri sculpture. Such pictures partake largely of the impressionist character, but they attain much beauty in the hands of the Japanese artist with his extensive *répertoire* of suggestive symbols. A process resembling maze-gane, but less fortuitous, is *shibuichi-dōshi* (combined shibuichi), which involves beating together two kinds of shibuichi and then adding a third variety, after which the details of the picture are worked in as in the case of maze-gane. The charm of these methods is that certain parts of the decorative design seem to float, not on the surface of the metal, but actually within it, an admirable effect of depth and atmosphere being thus produced. Mention must also be made of an extraordinarily elaborate and troublesome process invented by Kajima Ippu, a great artist of the present day. It is called *togi-dashi-zōgan* (ground-out inlaying). In this exquisite and ingenious kind of work the design appears to be growing up from the depths of the metal, and a delightful impression of atmosphere and water is obtained. All these processes, as well as that of *repoussé*, in which the Japanese have excelled from a remote period, are now practised with the greatest skill in Tokyo, Kiōto, Osaka and Kanazawa. At the art exhibitions held twice a year in the principal cities there may be seen specimens of statuettes, alcove ornaments, and household utensils which show that the Japanese worker in metals stands more indisputably than ever at the head of the world's artists in that field. The Occident does not yet appear to have full realized the existence of such talent in Japan; partly perhaps because its displays in former times were limited chiefly to sword-furniture, possessing little interest for the average European or American; and partly because the Japanese have not yet learned to adapt their skill to foreign requirements. They confine themselves at present to decorating plaques, boxes and cases for cigars or cigarettes, and an occasional tea or coffee service; but the whole domain of salvers, dessert-services, race-cups and so on remains virtually unexplored. Only within the past few years have stores been established in the foreign settlements for the sale of silver utensils, and already the workmanship on these objects displays palpable signs of the deterioration which all branches of Japanese art have undergone in the attempt to cater for foreign taste. In a general sense the European or American connoisseur is much less exacting than the Japanese. Broad effects of richness and splendour captivate the former, whereas the latter looks for delicacy of finish, accuracy of detail and, above all, evidences of artistic competence. It is nothing to a Japanese that a vase should be covered with profuse decoration of flowers and foliage: he requires that every blossom and every leaf shall be instinct with vitality, and the comparative costliness of fine workmanship does not influence his choice. But if the Japanese sculptor adopted such standards in working for foreign patrons, his market would be reduced to very narrow dimensions. He therefore adapts himself to his circumstances, and, using the mould rather than the chisel, produces specimens which snow tawdry handsomeness and are attractively cheap. It must be admitted, however, that even though foreign appreciative faculty were sufficiently educated, the Japanese artist in metals would still labour under the great difficulty of devising shapes to take the place of those which Europe and America have learned to consider classical.

Bronze is called by the Japanese *kara-kane*, a term signifying "Chinese metal" and showing clearly the source from which knowledge of the alloy was obtained. It is a copper-lead-tin compound, the proportions of its constituents varying from 72 to 88% of copper, from 4 to 20% of lead and from 2 to 8% of tin. There are also present small quantities of arsenic and antimony, and zinc is found generally as a mere trace, but sometimes reaching to 6%. Gold is supposed to have found a place in ancient bronzes, but its presence has never been detected by analysis, and of silver not more than 2% seems to have been admitted at any time. Mr W. Gowland has shown that, whatever may have been the practice of Japanese bronze makers in ancient and medieval eras, their successors in later days deliberately introduced arsenic and antimony into the compound in order to harden the bronze without impairing its fusibility, so that it might take a sharper impression of the mould. Japanese bronze is well suited for castings, not only because of its low melting-point, great fluidity and capacity for taking sharp impressions, but also because it has a particularly smooth surface and readily develops a fine patina. One variety deserves special mention. It is a golden yellow bronze, called *sentoku*—this being the Japanese pronunciation of *Suen-tē*, the era of the Ming dynasty of China when this compound was invented. Copper, tin, lead and zinc, mixed in various proportions by different experts, are the ingredients, and the beautiful golden hues and glossy texture of the surface are obtained by patina-producing processes, in which branch of metal-work the Japanese show altogether unique skill.

Bronze Casting.

From the time when they began to cast bronze statues, Japanese experts understood how to employ a hollow, removable core round which the metal was run in a skin just thick enough for strength without waste of material; and they also understood the use of wax for modelling purposes. In ordinary circumstances, a casting thus obtained took the form of a shell without any break of continuity. But for very large castings the process had to be modified. The great image of Lochana Buddha at Nara, for example, would measure 138 ft. in height were it standing erect, and its weight is about 550 tons. The colossal Amida at Kamakura has a height only 3 ft. less. It would have been scarcely possible to cast such statues in one piece *in situ*, or, if cast elsewhere, to transport them and elevate them on their pedestals. The plan pursued was to build them up gradually in their places by casting segment after segment. Thus, for the Nara Daibutsu, the mould was constructed in a series of steps ascending 12 in. at a time, until the head and neck were reached, which, of course, had to be cast in one shell, 12 ft. high.

The term "parlour bronzes" serves to designate objects for domestic use, as flower-vases, incense-burners and alcove ornaments. Bronze-casters began to turn their attention to these objects about the middle of the 17th century. The art of casting bronze reached its culmination in the hands of a group of great experts—Seimin, Tōun, Masatune, Teijō, Sōmin, Keisai, Takusai, Gido, Zenryūsai and Hotokusai—who flourished during the second half of the 18th century and the first half of the 19th. Many brilliant specimens of these men's work survive, their general features being that the motives are naturalistic, that the quality of the metal is exceptionally fine, that in addition to beautifully clear casting obtained by highly skilled use of the *cera-perduta* process, the chisel was employed to impart delicacy and finish to the design, and that modelling in high relief is most successfully introduced. But it is a mistake to assert, as many have asserted, that after the era of the above ten masters—the latest of whom, Sōmin, ceased to work in 1871—no bronzes comparable with theirs were cast. Between 1875 and 1879 some of the finest bronzes ever produced in Japan were turned out by a group of experts working under the business name of Sanseisha. Started by two brothers, Oshima Katsujiro (art-name Jōun) and Oshima Yasutaro (art-name Shōkaku), this association secured the services of a number of skilled chisellers of sword-furniture, who had lost their occupation by the abandonment of sword-wearing. Nothing could surpass the delicacy of the works executed at the Sanseisha's atelier in Tōkyō, but unfortunately such productions were above the standard of the customers for whom they were intended. Foreign buyers, who alone stood in the market at that time, failed to distinguish the fine and costly bronzes of Jōun, Shōkaku and their colleagues from cheap imitations which soon began to compete with them, so that ultimately the Sanseisha had to be closed. This page in the modern history of Japan's bronzes needs little alteration to be true of her applied art in general. Foreign demand has shown so little discrimination that experts, finding it impossible to obtain adequate remuneration for first-class work, have been obliged to abandon the field altogether, or to lower their standard to the level of general appreciation, or by forgery to cater for the perverted taste which attaches unreasoning value to age. Jōun has produced, and is thoroughly capable of producing, bronzes at least equal to the best of Seimin's masterpieces, yet he has often been induced to put Seimin's name on objects for the sake of attracting buyers who attach more value to cachet than to quality. If to the names of Jōun and his brilliant pupil Ryūki we add those of Suzuki Chōkichi, Okazaki Sessei, Hasegawa Kumazō, Kanaya Gorosaburō and Jomi Eisuke, we have a group of modern bronze-casters who unquestionably surpass the ten experts beginning with Seimin and ending with Sōmin. Okazaki Sessei has successfully achieved the casting of huge panels carrying designs in high relief; and whether there is question of patina or of workmanship, Jōmi Eisuke has never been surpassed.

Occidental influence has been felt, of course, in the field of modern bronze-casting. At a school of art officially established in Tōkyō in 1873 under the direction of Italian teachers—a school which owed its signal failure partly to the incompetence and intemperate behaviour of some of its foreign professors, and partly to a strong renaissance of pure Japanese classicism—one of the few accomplishments successfully taught was that of modelling in plaster and chiselling in marble after Occidental methods. Marble statues are out of place in the wooden buildings as well as in the parks of Japan, and even plaster busts or groups, though less incongruous perhaps, have not yet found favour. Hence the skill undoubtedly possessed by several graduates of the defunct art school has to be devoted chiefly to a subordinate purpose, namely, the fashioning of models for metal-casters. To this combination of modellers in European style and metal-workers of such force as Suzuki and Okazaki, Japan owes various memorial bronzes and effigies which are gradually finding a place in her parks, her museums, her shrines or her private houses. There is here little departure from the well-trodden paths of Europe. Studies in drapery, prancing steeds, ideal poses, heads with fragments of torsos attached (in extreme violation of true art), crouching beasts of prey—all the stereotyped styles are reproduced. The imitation is excellent.

Carving in Wood and Ivory.

Among the artists of early times it is often difficult to distinguish between the carver of wood and the caster of bronze. The latter sometimes made his own models in wax, sometimes chiselled them in wood, and sometimes had recourse to a specialist in wood-carving. The group of splendid sculptors in wood that graced the 11th, 12th and 13th centuries left names never to be forgotten, but undoubtedly many other artists of scarcely less force regarded bronze-casting as their principal business. Thus the story of wood-carving is very difficult to trace. Even in the field of architectural decoration for interiors, tradition tells us scarcely anything about the masters who carved such magnificent works as those seen in the Kiōto temples, the Tokugawa mausolea, and some of the old castles. There are, however, no modern developments of such work to be noted. The ability of former times exists and is exercised in the old way, though the field for its employment has been greatly narrowed.

PLATE V.

SCULPTURE

FIG. 11.—VAJRA MALLA. By Unkei (13th century).

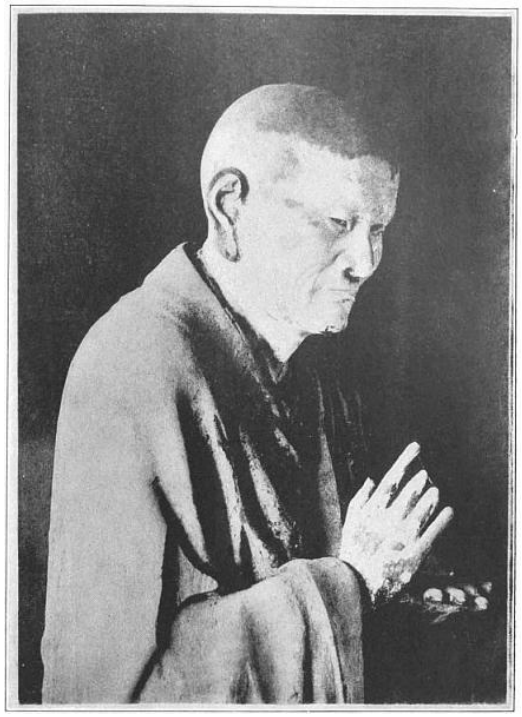

FIG. 12.—STATUE OF ASANGA (12th century, artist unknown).

FIG. 13.—STATUES OF BUDDHA AMI'TABHA AND TWO BODHISATTVAS (7th century).

METAL WORK AND LACQUER

FIG 14.—DOOR OF BRONZE LANTERN IN THE TODAI TEMPLE (8th century).

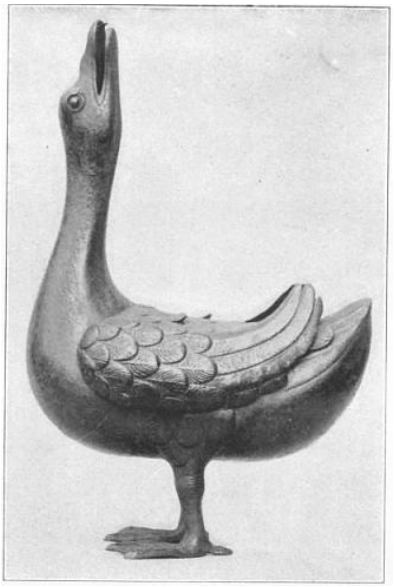

FIG. 15.—BRONZE DUCK INCENSE BURNER (15th century). British Museum.

FIG. 16.—BRONZE MIRROR (12th to 13th century).

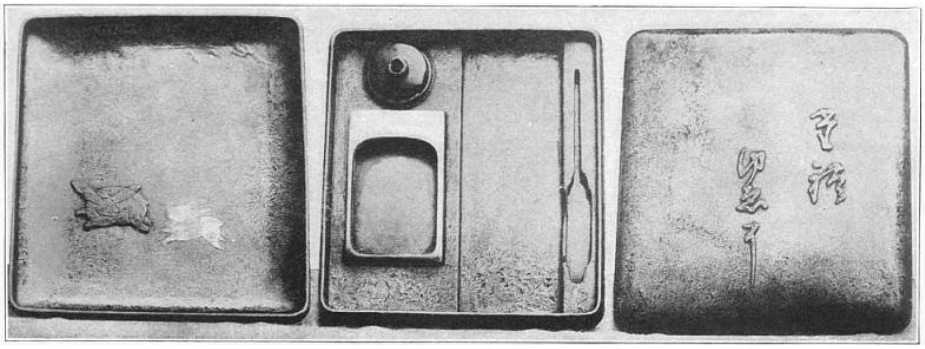

FIG. 17.—INKSTONE BOX IN LACQUER. By Koyetsu (1557-1637).

When Japanese sculpture in wood or ivory is spoken of, the first idea that presents itself is connected with the netsuke, which, of all the art objects found in Japan, is perhaps the most essentially Japanese. If Japan had given us nothing but the netsuke, we should still have no difficulty in differentiating the bright versatility of her national genius from the comparatively sombre, mechanic and unimaginative temperament of the Chinese. But the netsuke may now be said to be a thing of the past. The *inro* (medicine-box), which it mainly served to fix in the girdle, has been driven out of fashion by the new civilization imported from the West, and artists who would have carved netsuke in former times now devote their chisels to statuettes and alcove ornaments. It is not to be inferred, however, though it is a favourite assertion of collectors, that no good netsuke have been made in modern times. That theory is based upon the fact that after the opening of the country to foreign intercourse in 1857, hundreds of inferior specimens of netsuke were chiselled by inexpert hands, purchased wholesale by treaty-port merchants, and sent to New York, London and Paris, where, though they brought profit to the exporter, they also disgusted the connoisseur and soon earned discredit for their whole class. But in fact the glyptic artists of Tōkyō, Osaka and Kiōto, though they now devote their chisels chiefly to works of more importance than the netsuke, are in no sense inferior to their predecessors of feudal days, and many beautiful netsuke bearing their signatures are in existence. As for the modern ivory statuette or alcove ornament, of which great numbers are now carved for the foreign market, it certainly stands on a plane much higher than the netsuke, since anatomical defects which escape notice in the latter owing to its diminutive size, become obtrusive in the former.

Netsuke Carvers.

One of the most remarkable developments of figure sculpture in modern Japan was due to Matsumoto Kisaburo (1830-1869). He carved human figures with as much accuracy as though they were destined for purposes of surgical demonstration. Considering that this man had neither art education nor anatomical instruction, and that he never enjoyed an opportunity of studying from a model in a studio, his achievements were remarkable. He and the craftsmen of the school he established completely refute the theory that the anatomical solecisms commonly seen in the works of Japanese sculptors are due to faulty observation. Without scientific training of any kind Matsumoto and his followers produced works in which the eye of science cannot detect any error. But it is impossible to admit within the circle of high-art productions these wooden figures of everyday men and women, unrelieved by any subjective element, and owing their merit entirely to the fidelity with which their contours are shaped, their muscles modelled, and their anatomical proportions preserved. They have not even the attraction of being cleanly sculptured in wood, but are covered with thinly lacquered muslin, which, though doubtless a good preservative, accentuates their puppet-like character. Nevertheless, Matsumoto's figures marked an epoch in Japanese wood sculpture. Their vivid realism appealed strongly to the taste of the average foreigner. A considerable school of carvers soon began to work in the Matsumoto style, and hundreds of their productions have gone to Europe and America, finding no market in Japan.

The Realistic Departure.

Midway between the Matsumoto school and the pure style approved by the native taste in former times stand a number of wood-carvers headed by Takamura Kōun, who occupies in the field of sculpture much the same place as that held by Hashimoto Gaho in the realm of painting. Kōun carves figures in the round which not only display great power of chisel and breadth of style, but also tell a story not necessarily drawn from the motives of the classical school. This departure from established canons must be traced to the influence of the short-lived academy of Italian art established by the Japanese government early in the Meiji era. In the forefront of the new movement are to be found men like Yoneharu Unkai and Shinkai Taketarō; the former chiselled a figure of Jenner for the Medical Association of Japan when they celebrated the centenary of the great physician, and the latter has carved life-size effigies of two Imperial princes who lost their lives in the war with China (1894-95). The artists of the Kōun school, however, do much work which appeals to emotions in general rather than to individual memories. Thus Arakawa Reiun, one of Kōun's most brilliant pupils, has exhibited a figure of a swordsman in the act of driving home a furious thrust. The weapon is not shown. Reiun sculptured simply a man poised on the toes of one foot, the other foot raised, the arm extended, and the body straining forward in strong yet elastic muscular effort. A more imaginative work by the same artist is a figure of a farmer who has just shot an eagle that swooped upon his grandson. The old man holds his bow still raised. Some of the eagle's feathers, blown to his side, suggest the death of the bird; at his feet lies the corpse of the little boy, and the horror, grief and anger that such a tragedy would inspire are depicted with striking realism in the farmer's face. Such work has very close affinities with Occidental conceptions. The chief distinguishing feature is that the glyptic character is preserved at the expense of surface finish. The undisguised touches of the chisel tell a story of technical force and directness which could not be suggested by perfectly smooth surfaces. To subordinate process to result is the European canon; to show the former without marring the latter is the Japanese ideal. Many of Kōun's sculptures appear unfinished to eyes trained in Occidental galleries, whereas the Japanese connoisseur detects evidence of a technical feat in their seeming roughness.

The Semi-foreign School.

Architecture.—From the evidence of ancient records it appears that before the 5th century the Japanese resided in houses of a very rude character. The sovereign's palace itself was merely a wooden hut. Its pillars were thrust into the ground and the whole framework—consisting of posts, beams, rafters, door-posts and window-frames—was tied together with cords made by twisting the long fibrous stems of climbing plants. The roof was thatched, and perhaps had a gable at each end with a hole to allow the smoke of the wood fire to escape. Wooden doors swung on a kind of hook; the windows were mere holes in the walls. Rugs of skins or rush matting were used for sitting on, and the whole was surrounded with a palisade. In the middle of the 5th century two-storeyed houses seem to have been built, but the evidence on the subject is slender. In the 8th century, however, when the court was moved to Nara, the influence of Chinese civilization made itself felt. Architects, turners, tile-makers, decorative artists and sculptors, coming from China and from Korea, erected grand temples for the worship of Buddha enshrining images of much beauty and adorned with paintings and carvings of considerable merit. The plan of the city itself was taken from that of the Chinese metropolis. A broad central avenue led straight to the palace, and on either side of it ran four parallel streets, crossed at right angles by smaller thoroughfares. During this century the first sumptuary edict ordered that the dwellings of all high officials and opulent civilians should have tiled roofs and be coloured red, the latter injunction being evidently intended to stop the use of logs carrying their bark. Tiles thenceforth became the orthodox covering for a roof, but vermilion, being regarded as a religious colour, found no favour in private

Private Dwellings.

dwellings. In the 9th century, after the capital had been established at Kiōto, the palace of the sovereigns and the mansions of ministers and nobles were built on a scale of unprecedented grandeur. It is true that all the structures of the time had the defect of a box-like appearance. Massive, towering roofs, which impart an air of stateliness even to a wooden building and yet, by their graceful curves, avoid any suggestion of ponderosity, were still confined to Buddhist edifices. The architect of private dwellings attached more importance to satin-surfaced boards and careful joinery than to any appearance of strength or solidity.

> Except for the number of buildings composing it, the palace had little to distinguish it from a nobleman's mansion. The latter consisted of a principal hall, where the master of the house lived, ate and slept, and of three suites of chambers, disposed on the north, the east and the west of the principal hall. In the northern suite the lady of the house dwelt, the eastern and western suites being allotted to other members of the family. Corridors joined the principal hall to the subordinate edifices, for as yet the idea had not been conceived of having more than one chamber under the same roof. The principal hall was usually 42 ft. square. Its centre was occupied by a "parent chamber," 30 ft. square, around which ran an ambulatory and a veranda, each 6 ft. wide. The parent chamber and the ambulatory were ceiled, sometimes with interlacing strips of bark or broad laths, so as to produce a plaited effect; sometimes with plain boards. The veranda had no ceiling. Sliding doors, a characteristic feature of modern Japanese houses, had not yet come into use, and no means were provided for closing the veranda, but the ambulatory was surrounded by a wall of latticed timber or plain boards, the lower half of which could be removed altogether, whereas the upper half, suspended from hooks, could be swung upward and outward. Privacy was obtained by blinds of split bamboo, and the parent chamber was separated from the ambulatory by similar bamboo blinds with silk cords for raising or lowering them, or by curtains. The thick rectangular mats of uniform size which, fitting together so as to present a level unbroken surface, cover the floor of all modern Japanese houses, were not yet in use: floors were boarded, having only a limited space matted. This form of mansion underwent little modification until the 12th century, when the introduction of the Zen sect of Buddhism with its contemplative practice called for greater privacy. Interiors were then divided into smaller rooms by means of sliding doors covered with thin rice-paper, which permitted the passage of light while obstructing vision; the hanging lattices were replaced by wooden doors which could be slid along a groove so as to be removable in the daytime, and an alcove was added in the principal chamber for a sacred picture or Buddhist image to serve as an object of contemplation for a devotee while practising the rite of abstraction. Thus the main features of the Japanese dwelling-house were evolved, and little change took place subsequently, except that the brush of the painter was freely used for decorating partitions, and in aristocratic mansions unlimited care was exercised in the choice of rare woods.

Buddhist Temple Architecture.

The Buddhist temple underwent little change at Japanese hands except in the matter of decoration. Such as it was in outline when first erected in accordance with Chinese models, such it virtually remained, though in later times all the resources of the sculptor and the painter were employed to beautify it externally and internally.

> "The building, sometimes of huge dimensions, is invariably surrounded by a raised gallery, reached by a flight of steps in the centre of the approach front, the balustrade of which is a continuation of the gallery railing. This gallery is sometimes supported upon a deep system of bracketing, corbelled out from the feet of the main pillars. Within this raised gallery, which is sheltered by the over-sailing eaves, there is, in the larger temples, a columned loggia passing round the two sides and the front of the building, or, in some cases, placed on the façade only. The ceilings of the loggias are generally sloping, with richly carved roof-timbers showing below at intervals; and quaintly carved braces connect the outer pillars with the main posts of the building. Some temples are to be seen in which the ceiling of the loggia is boarded flat and decorated with large paintings of dragons in black and gold. The intercolumniation is regulated by a standard of about six or seven feet, and the general result of the treatment of columns, wall-posts, &c., is that the whole mural space, not filled in with doors or windows, is divided into regular oblong panels, which sometimes receive plaster, sometimes boarding and sometimes rich framework and carving or painted panels. Diagonal bracing or strutting is nowhere to be found, and in many cases mortises and other joints are such as very materially to weaken the timbers at their points of connexion. It would seem that only the immense weight of the roofs and their heavy projections prevent a collapse of some of these structures in high winds. The principal façade of the temple is filled in one, two or three compartments with hinged doors, variously ornamented and folding outwards, sometimes in double folds. From these doorways, generally left open, the interior light is principally obtained, windows, as the term is generally understood, being rare. An elaborate cornice of wooden bracketing crowns the walls, forming one of the principal ornaments of the building. The whole disposition of pillars, posts, brackets and rafters is harmonically arranged according to some measure of the standard of length. A very important feature of the façade is the portico or porch-way, which covers the principal steps and is generally formed by producing the central portion of the main roof over the steps and supporting such projection upon isolated wooden pillars braced together near the top with horizontal ties, carved, moulded and otherwise fantastically decorated. Above these ties are the cornice brackets and beams, corresponding in general design to the cornice of the walls, and the intermediate space is filled with open carvings of dragons or other characteristic designs. The forms of roof are various, but mostly they commence in a steep slope at the top, gradually flattening towards the eaves so as to produce a slightly concave appearance, this concavity being rendered more emphatic by the tilt which is given to the eaves at the four corners. The appearance of the ends of the roof is half hip, half gable. Heavy ribs of tile-cresting with large terminals are carried along the ridge and the slope of the gable. The result of the whole is very picturesque, and has the advantage of looking equally satisfactory from any point of view. The interior arrangement of wall columns, horizontal beams and cornice bracketing corresponds with that on the outside. The ceiling is invariably boarded and subdivided by ribs into small rectangular coffers. Sometimes painting is introduced into these panels and lacquer and metal clasps are added to the ribs. When the temple is of very large dimensions an interior peristyle of pillars is introduced to assist in supporting the roof, and in such cases each pillar carries profuse bracketing corresponding to that of the cornice. The construction of the framework of the Japanese roof is such that the weights all act vertically; there is no thrust on the outer walls, and every available point of the interior is used as a means of support.
>
> "The floor is partly boarded and partly matted. The shrines, altars and oblatory tables are placed at the back in the centre, and there are often other secondary shrines at the sides. In temples of the best class the floor of the gallery and of the central portion of the main building from entrance to altar are richly lacquered; in those of inferior class they are merely polished by continued rubbing."—(J. Conder, in the *Proceedings of the Royal Institute of British Architects*.)

Shintō Architecture.

None of the magnificence of the Buddhist temple belongs to the Shintō shrine. In the case of the latter conservatism has been absolute from time immemorial. The shrines of Ise, which may be called the Mecca of Shintō devotees, are believed to present to-day precisely the appearance they presented in 478, when they were moved thither in obedience to a revelation from the Sun-goddess. It has been the custom to rebuild them every twentieth year, alternately on each of two sites set apart for the purpose, the features of the old edifice being reproduced in the new with scrupulous accuracy.

> They are enlarged replicas of the primeval wooden hut described above, having rafters with their upper ends crossed; thatched or shingled roof; boarded floors, and logs laid on the roof-ridge at right angles for the purpose of binding the ridge and the rafters firmly together. A thatched roof is imperative in the orthodox shrine, but in modern days tiles or sheets of copper are sometimes substituted. At Ise, however, no such novelties are tolerated. The avenue of approach generally passes under a structure called *torii*. Originally designed as a perch for fowls which sang to the deities at daybreak, this torii subsequently came to be erroneously regarded as a gateway characteristic of the Shintō shrine. It

consists of two thick trunks placed upright, their upper ends mortised into a horizontal log which projects beyond them at either side. The structure derives some grace from its extreme simplicity.

Textile Fabrics and Embroidery.—In no branch of applied art does the decorative genius of Japan show more attractive results than in that of textile fabrics, and in none has there been more conspicuous progress during recent years. Her woven and embroidered stuffs have always been beautiful; but in former times few pieces of size and splendour were produced, if we except the curtains used for draping festival cars and the hangings of temples. Tapestry, as it is employed in Europe, was not thought of, nor indeed could the small hand-looms of the period be easily adapted to such work. All that has been changed, however. Arras of large dimensions, showing remarkable workmanship and grand combinations of colours, is now manufactured in Kiōto, the product of years of patient toil on the part of weaver and designer alike. Kawashima of Kiōto has acquired high reputation for work of this kind. He inaugurated the new departure a few years ago by copying a Gobelin, but it may safely be asserted that no Gobelin will bear comparison with the pieces now produced in Japan.

The most approved fashion of weaving is called *tsuzure-ori* (linked-weaving); that is to say, the cross threads are laid in with the fingers and pushed into their places with a comb by hand, very little machinery being used. The threads extend only to the outlines of each figure, and it follows that every part of the pattern has a rim of minute holes like pierced lines separating postage stamps in a sheet, the effect being that the design seems to hang suspended in the ground—linked into it, as the Japanese term implies.[3] A specimen of this nature recently manufactured by Kawashima's weavers measured 20 ft. by 13, and represented the annual festival at the Nikkō mausolea. The chief shrine was shown, as were also the gate and the long flight of stone steps leading up to it, several other buildings, the groves of cryptomeria that surround the mausolea, and the festival procession. All the architectural and decorative details, all the carvings and colours, all the accessories—everything was wrought in silk, and each of the 1500 figures forming the procession wore exactly appropriate costume. Even this wealth of detail, remarkable as it was, seemed less surprising than the fact that the weaver had succeeded in producing the effect of atmosphere and aerial perspective. Through the graceful cryptomerias distant mountains and the still more distant sky could be seen, and between the buildings in the foreground and those in the middle distance atmosphere appeared to be perceptible. Two years of incessant labour with relays of artisans working steadily throughout the twenty-four hours were required to finish this piece. Naturally such specimens are not produced in large numbers. Next in decorative importance to tsuzure-ori stands *yūzen birôdo*, commonly known among English-speaking people as cut velvet. Dyeing by the *yūzen* process is an innovation of modern times. The design is painted on the fabric, after which the latter is steamed, and the picture is ultimately fixed by methods which are kept secret. The soft silk known as *habutaye* is a favourite ground for such work, but silk crape also is largely employed. No other method permits the decorator to achieve such fidelity and such boldness of draughtsmanship. The difference between the results of the ordinary and the yūzen processes of dyeing is, in fact, the difference between a stencilled sketch and a finished picture. In the case of cut velvet, the yūzen process is supplemented as follows: The cutter, who works at an ordinary wooden bench, has no tool except a small sharp chisel with a V-shaped point. This chisel is passed into an iron pencil having at the end guards, between which the point of the chisel projects, so that it is impossible for the user to cut beyond a certain depth. When the velvet comes to him, it already carries a coloured picture permanently fixed by the yūzen process, but the wires have not been withdrawn. It is, in fact, velvet that has passed through all the usual stages of manufacture except the cutting of the thread along each wire and the withdrawal of the wires. The cutting artist lays the piece of unfinished velvet on his bench, and proceeds to carve into the pattern with his chisel, just as though he were shading the lines of the design with a steel pencil. When the pattern is lightly traced, he uses his knife delicately; when the lines are strong and the shadows heavy, he makes the point pierce deeply. In short, the little chisel becomes in his fingers a painter's brush, and when it is remembered that, the basis upon which he works being simply a thread of silk, his hand must be trained to such delicacy of muscular effort as to be capable of arresting the edge of the knife at varying depths within the diameter of the tiny filament, the difficulty of the achievement will be understood. Of course it is to be noted that the edge of the cutting tool is never allowed to trespass upon a line which the exigencies of the design require to be solid. The veining of a cherry petal, for example, the tessellation of a carp's scales, the serration of a leaf's edge—all these lines remain intact, spared by the cutter's tool, while the leaf itself, or the petal, or the scales of the fish, have the threads forming them cut so as to show the velvet nap and to appear in soft, low relief. In one variety of this fabric, a slip of gold foil is laid under each wire, and left in position after the wire is withdrawn, the cutting tool being then used with freedom in some parts of the design, so that the gold gleams through the severed thread, producing a rich and suggestive effect. Velvet, however, is not capable of being made the basis for pictures so elaborate and microscopically accurate as those produced by the yūzen process on silk crape or habutaye. The rich-toned, soft plumage of birds or the magnificent blending of colours in a bunch of peonies or chrysanthemums cannot be obtained with absolute fidelity on the ribbed surface of velvet.

Embroidery.

The embroiderer's craft has been followed for centuries in Japan with eminent success, but whereas it formerly ranked with dyeing and weaving, it has now come to be regarded as an art. Formerly the embroiderer was content to produce a pattern with his needle, now he paints a picture. So perfectly does the modern Japanese embroiderer elaborate his scheme of values that all the essential elements of pictorial effects—chiaroscuro, aerial perspective and atmosphere are present in his work. Thus a graceful and realistic school has replaced the comparatively stiff and conventional style of former times.

Further, an improvement of a technical character was recently made, which has the effect of adding greatly to the durability of these embroideries. Owing to the use of paper among the threads of the embroidery and sizing in the preparation of the stuff forming the ground, every operation of folding used to cause perceptible injury to a piece, so that after a few years it acquired a crumpled and dingy appearance. But by the new method embroiderers now succeed in producing fabrics which defy all destructive influences—except, of course, dirt and decay.

Early Period.

Ceramics.—All research proves that up to the 12th century of the Christian era the ceramic ware produced in Japan was of a very rude character. The interest attaching to it is historical rather than technical. Pottery was certainly manufactured from an early date, and there is evidence that kilns existed in some fifteen provinces in the 10th century. But although the use of the potter's wheel had long been understood, the objects produced were simple utensils to contain offerings of rice, fruit and fish at the austere ceremonials of the Shintō faith, jars for storing seeds, and vessels for common domestic use. In the 13th century, however, the introduction of tea from China, together with vessels for infusing and serving it, revealed to the Japanese a new conception of ceramic possibilities, for the potters of the Middle Kingdom had then (Sung dynasty) fully entered the road which was destined to carry them ultimately to a high pinnacle of their craft. It had long been customary in Japan to send students to China for the purpose of studying philosophy and religion, and she now (1223) sent a potter, Kato Shirozaemon, who, on his return, opened a kiln at Seto in the province of Owari, and began to produce little jars for preserving tea and cups for drinking it. These were conspicuously superior to anything previously manufactured. Kato is regarded as the father of Japanese ceramics. But the ware produced by him and his successors at the Seto kilns, or by their contemporaries in other parts of the country, had no valid claim to decorative excellence. Nearly three centuries elapsed before a radically upward movement took place, and on this occasion also the inspiration came from China. In 1520 a potter named Gorodayu Goshonzui (known to posterity as Shonzui) made his way to Fuchow and thence to King-te-chen, where, after five years' study, he acquired the art of manufacturing porcelain, as distinguished from pottery, together with the art of applying decoration in blue under the glaze. He established his kiln at Arita in Hizen, and the event marked the opening of the second epoch of Japanese ceramics. Yet the new departure then made did not lead far.

The existence of porcelain clay in Hizen was not discovered for many years, and Shonzui's pieces being made entirely with kaolin imported from China, their manufacture ceased after his death, though knowledge of the processes learned by him survived and was used in the production of greatly inferior wares. The third clearly differentiated epoch was inaugurated by the discovery of true kaolin at Izumi-yama in Hizen, the discoverer being one of the Korean potters who came to Japan in the train of Hideyoshi's generals returning from the invasion of Korea, and the date of the discovery being about 1605. Thus much premised, it becomes possible to speak in detail of the various wares for which Japan became famous.

The principal kinds of ware are Hizen, Kiōto, Satsuma, Kutani, Owari, Bizen, Takatori, Banko, Izumo and Yatsushiro.

Hizen.

There are three chief varieties of Hizen ware, namely, (1) the enamelled porcelain of Arita—the "old Japan" of European collectors; (2) the enamelled porcelain of Nabeshima; and (3) the blue and white, or plain white, porcelain of Hirado. The earliest manufacture of porcelain—as distinguished from pottery—began in the opening years of the 16th century, but its materials were exotic. Genuine Japanese porcelain dates from about a century later. The decoration was confined to blue under the glaze, and as an object of art the ware possessed no special merit. Not until the year 1620 do we find any evidence of the style for which Arita porcelain afterwards became famous, namely, decoration with vitrifiable enamels. The first efforts in this direction were comparatively crude; but before the middle of the 17th century, two experts—Goroshichi and Kakiemon—carried the art to a point of considerable excellence. From that time forward the Arita factories turned out large quantities of porcelain profusely decorated with blue under the glaze and coloured enamels over it. Many pieces were exported by the Dutch, and some also were specially manufactured to their order. Specimens of the latter are still preserved in European collections, where they are classed as genuine examples of Japanese ceramic art, though beyond question their style of decoration was greatly influenced by Dutch interference. The porcelains of Arita were carried to the neighbouring town of Imari for sale and shipment. Hence the ware came to be known to Japanese and foreigners alike as *Imari-yaki* (*yaki* = anything baked; hence ware).

Nabeshima.

The Nabeshima porcelain—so called because of its production at private factories under the special patronage of Nabeshima Naoshige, feudal chief of Hizen—was produced at Okawachiyama. It differed from Imari-yaki in the milky whiteness and softness of its glaze, the comparative sparseness of its enamelled decoration, and the relegation of blue *sous couverte* to an entirely secondary place. This is undoubtedly the finest jewelled porcelain in Japan; the best examples leave nothing to be desired. The factory's period of excellence began about the year 1680, and culminated at the close of the 18th century.

Hirado.

The Hirado porcelain—so called because it enjoyed the special patronage of Matsuura, feudal chief of Hirado—was produced at Mikawa-uchi-yama, but did not attain excellence until the middle of the 18th century, from which time until about 1830 specimens of rare beauty were produced. They were decorated with blue under the glaze, but some were pure white with exquisitely chiselled designs incised or in relief. The production was always scanty, and, owing to official prohibitions, the ware did not find its way into the general market.

Kiōto.

The history of Kiōto ware—which, being for the most part faience, belongs to an entirely different category from the Hizen porcelains spoken of above—is the history of individual ceramists rather than of special manufactures. Speaking broadly, however, four different varieties are usually distinguished. They are *raku-yaki*, *awata-yaki*, *iwakura-yaki* and *kiyomizu-yaki*.

Raku.

Raku-yaki is essentially the domestic faience of Japan; for, being entirely hand-made and fired at a very low temperature, its manufacture offers few difficulties, and has consequently been carried on by amateurs in their own homes at various places throughout the country. The raku-yaki of Kiōto is the parent of all the rest. It was first produced by a Korean who emigrated to Japan in the early part of the 16th century. But the term *raku-yaki* did not come into use until the close of the century, when Chōjiro (artistic name, Chōryū) received from Hideyoshi (the Taikō) a seal bearing the ideograph *raku*, with which he thenceforth stamped his productions. Thirteen generations of the same family carried on the work, each using a stamp with the same ideograph, its calligraphy, however, differing sufficiently to be identified by connoisseurs. The faience is thick and clumsy, having soft, brittle and very light *pâte*. The staple type has black glaze showing little lustre, and in choice varieties this is curiously speckled and pitted with red. Salmon-coloured, red, yellow and white glazes are also found, and in late specimens gilding was added. The raku faience owed much of its popularity to the patronage of the tea clubs. The nature of its paste and glaze adapted it for the infusion of powdered tea, and its homely character suited the austere canons of the tea ceremonies.

Awata.

Awata-yaki is the best known among the ceramic productions of Kiōto. There is evidence to show that the art of decoration with enamels over the glaze reached Kiōto from Hizen in the middle of the 17th century. Just at that time there flourished in the Western capital a potter of remarkable ability, called Nomura Seisuke. He immediately utilized the new method, and produced many beautiful examples of jewelled faience, having close, hard *pâte*, yellowish-white, or brownish-white, glaze covered with a network of fine crackle, and sparse decoration in pure full-bodied colours—red, green, gold and silver. He worked chiefly at Awata, and thus brought that factory into prominence. Nomura Seisuke, or Ninsei as he is commonly called, was one of Japan's greatest ceramists. Genuine examples of his faience have always been highly prized, and numerous imitations were subsequently produced, all stamped with the ideograph Ninsei. After Ninsei's time, the most renowned ceramists of the Awata factories were Kenzan (1688-1740); Ebisei, a contemporary of Kenzan; Dōhachi (1751-1763), who subsequently moved to Kiyōmizu-zaka, another part of Kiōto, the faience of which constitutes the Kiyōmizu-yaki mentioned above; Kinkōzan (1745-1760); Hōzan (1690-1721); Taizan (1760-1800); Bizan (1810-1838); and Tanzan, who was still living in 1909. It must be noted that several of these names, as Kenzan, Dōhachi, Kinkōzan, Hōzan and Taizan, were not limited to one artist. They are family names, and though the dates we have given indicate the eras of the most noted ceramists in each family, amateurs must not draw any chronological conclusion from the mere fact that a specimen bears such and such a name.

Iwakura.

The origin of the Iwakura-yaki is somewhat obscure, and its history, at an early date, becomes confused with that of the Awata yaki, from which, indeed, it does not materially differ.

Kiyōmizu.

In the term Kiyōmizu-yaki may be included roughly all the faience of Kiōto, with the exception of the three varieties described above. The distinction between Kiyōmizu, Awata and Iwakura is primarily local. They are parts of the same city, and if their names have been used to designate particular classes of pottery, it is not because the technical or decorative features of each class distinguish it from the other two, but chiefly for the purpose of identifying the place of production. On the slopes called Kiyōmizu-zaka and Gojō-zaka lived a number of ceramists, all following virtually the same models with variations due to individual genius. The principal Kiyōmizu artists were: Ebisei, who moved from Awata to Gojō-zaka in 1688; Eisen and Rokubei, pupils of Ebisei; Mokubei, a pupil of Eisen, but more celebrated than his master; Shūhei (1790-1810), Kentei (1782-1820), and Zengoro Hozen, generally known as Eiraku (1790-1850). Eisen was the first to manufacture porcelain (as distinguished from faience) in Kiōto, and this branch of the art was carried to a high standard of excellence by Eiraku, whose speciality was a rich coral-red glaze with finely executed decoration in gold. The latter ceramist excelled also in the production of purple, green and yellow glazes, which he combined with admirable skill and taste. Some choice ware of the latter type was manufactured by him in Kishū, by order of the feudal chief of that province. It is known as *Kaira-ku-yen-yaki* (ware of the Kairaku park).

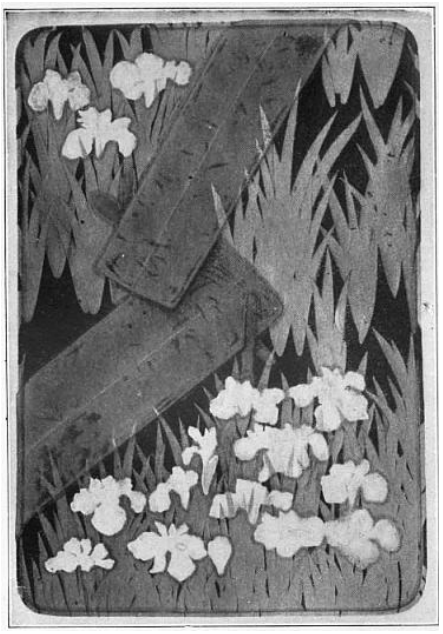

FIG. 18.—LID OF BOX. By Korin.

FIG. 19.—CASE FOR HEAD OF A SKAKUJO.

FIG. 20.—OWL ON A BRANCH. By Ritsuo.

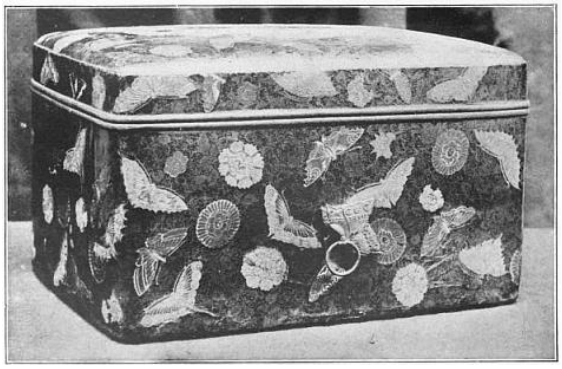

FIG. 21.—BOX WITH BUTTERFLIES AND FLOWERS IN GOLD (12th century).

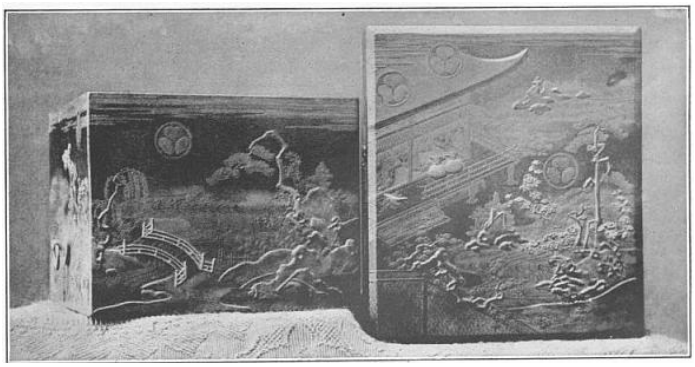

FIG. 22.—LACQUERED BOXES. By Kôami (1598-1651).

FIG. 23.—TEA BOWL. By Kenzan.

FIG. 24.—TEA JAR. By Ninsei.

FIG. 25.—FIGURE. By Kakiemon. Arita porcelain.

FIG. 26.—LION. By Chojiro Raku.

FIG. 27.—CENSER, WITH KOCHI GLAZE. By Eisen.

FIG. 28.—TEA JAR. By Ninsei.

FIG. 29.—BIZEN WARE. Samantabhadra.

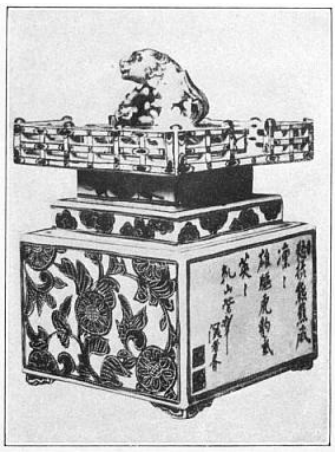

FIG. 30.—CENSER. By Kenzan.

Satsuma.

No phrase is commoner in the mouths of Western collectors than “Old Satsuma”; no ware is rarer in Western collections. Nine hundred and ninety-nine pieces out of every thousand that do duty as genuine examples of this prince of faiences are simply examples of the skill of modern forgers. In point of fact, the production of faience decorated with gold and coloured enamels may be said to have commenced at the beginning of the eighth century in Satsuma. Some writers maintain that it did actually commence then, and that nothing

of the kind had existed there previously. Setting aside, however, the strong improbability that a style of decoration so widely practised and so highly esteemed could have remained unknown during a century and a half to experts working for one of the most puissant chieftains in Japan, we have the evidence of trustworthy traditions and written records that enamelled faience was made by the potters at Tatsumonji—the principal factory of Satsuma-ware in early days—as far back as the year 1676. Mitsuhisa, then feudal lord of Satsuma, was a munificent patron of art. He summoned to his fief the painter Tangen—a pupil of the renowned Tanyū, who died in 1674—and employed him to paint faience or to furnish designs for the ceramists of Tatsumonji. The ware produced under these circumstances is still known by the name of Satsuma Tangen. But the number of specimens was small. Destined chiefly for private use or for presents, their decoration was delicate rather than rich, the colour chiefly employed being brown, or reddish brown, under the glaze, and the decoration over the glaze being sparse and chaste. Not until the close of the l8th century or the beginning of the 19th did the more profuse fashion of enamelled decoration come to be largely employed. It was introduced by two potters who had visited Kiōto, and there observed the ornate methods so well illustrated in the wares of Awata and Kiyōmizu. At the same time a strong impetus was given to the production of faience at Tadeno—then the chief factory in Satsuma—owing to the patronage of Shimazu Tamanobu, lord of the province. To this increase in production and to the more elaborate application of verifiable enamels may be attributed the erroneous idea that Satsuma faience decorated with gold and coloured enamels had its origin at the close of the 18th century. For all the purposes of the ordinary collector it may be said to have commenced then, and to have come to an end about 1860; but for the purposes of the historian we must look farther back.

The ceramic art in Satsuma owed much to the aid of a number of Korean experts who settled there after the return of the Japanese forces from Korea. One of these men, Boku Heii, discovered (1603) clay fitted for the manufacture of white *craquelé* faience. This was the subsequently celebrated *Satsuma-yaki*. But in Boku's time, and indeed as long as the factories flourished, many other kinds of faience were produced, the principal having rich black or *flambé* glazes, while a few were green or yellow monochromes. One curious variety, called *same-yaki*, had glaze chagrined like the skin of a shark. Most of the finest pieces of enamelled faience were the work of artists at the Tadeno factory, while the best specimens of other kinds were by the artists of Tatsumonji.

The porcelain of Kutani is among those best known to Western collectors, though good specimens ofthe old ware have always been scarce. Its manufacture dates from the close of the 17th century, when the feudal chief of Kaga took the industry under his patronage. There were two principal varieties of the ware: *ao-Kutani*, so called because of a green (*ao*) enamel of great brilliancy and beauty which was largely used in its decoration, and Kutani with painted and enamelled *pâte* varying from hard porcelain to pottery. Many of the pieces are distinguished by a peculiar creamy whiteness of glaze, suggesting the idea that they were intended to imitate the soft-paste wares of China. The enamels are used to delineate decorative subjects and are applied in masses, the principal colours being green, yellow and soft Prussian blue, all brilliant and transparent, with the exception of the last which is nearly opaque. In many cases we find large portions of the surface completely covered with green or yellow enamel overlying black diapers or scroll patterns. The second variety of Kutani ware may often be mistaken for "old Japan" (*i.e.* Imari porcelain). The most characteristic examples of it are distinguishable, however, by the preponderating presence of a peculiar russet red, differing essentially from the full-bodied and comparatively brilliant colour of the Arita pottery. Moreover, the workmen of Kaga did not follow the Arita precedent of massing blue under the glaze. In the great majority of cases they did not use blue at all in this position, and when they did, its place was essentially subordinate. They also employed silver freely for decorative purposes, whereas we rarely find it thus used on "old Japan" porcelain.

Kutani.

About the time (1843) of the ao-Kutani revival, a potter called lida Hachiroemon introduced a style of decoration which subsequently came to be regarded as typical of all Kaga procelains. Taking the Eiraku porcelains of Kiōto as models, Hachiroemon employed red grounds with designs traced on them in gold. The style was not absolutely new in Kaga. We find similar decoration on old and choice examples of Kutani-yaki. But the character of the old red differs essentially from that of the modern manufacture—the former being a soft, subdued colour, more like a bloom than an enamel; the latter a glossy and comparatively crude pigment. In Hachiroemon's time and during the twenty years following the date of his innovation, many beautiful examples of elaborately decorated Kutani porcelain were produced. The richness, profusion and microscopic accuracy of their decoration could scarcely have been surpassed; but, with very rare exceptions, their lack of delicacy of technique disqualifies them to rank as fine porcelains.

It was at the little village of Seto, some five miles from Nagoya, the chief town of the province of Owari, or Bishū, that the celebrated Kato Shirozaemon made the first Japanese faience worthy to be considered a technical success. Shirozaemon produced dainty little tea-jars, ewers and other *cha-no-yu* utensils. These, being no longer stoved in an inverted position, as had been the habit before Shirozaemon's time, were not disfigured by the bare, blistered lips of their predecessors. Their *pâte* was close and well-manufactured pottery, varying in colour from dark brown to russet, and covered with thick, lustrous glazes—black, amber-brown, chocolate and yellowish grey. These glazes were not monochromatic: they showed differences of tint, and sometimes marked varieties of colour; as when chocolate-brown passed into amber, or black was relieved by streaks and clouds of grey and dead-leaf red. This ware came to be known as *Tōshiro-yaki*, a term obtained by combining the second syllable of Katō with the two first of Shirozaemon. A genuine example of it is at present worth many times its weight in gold to Japanese dilettanti, though in foreign eyes it is little more than interesting. Shirozaemon was succeeded at the kiln by three generations of his family, each representative retaining the name of Tōshiro, and each distinguishing himself by the excellence of his work. Thenceforth Seto became the headquarters of the manufacture of *cha-no-yu* utensils, and many of the tiny pieces turned out there deserve high admiration, their technique being perfect, and their mahogany, russet-brown, amber and buff glazes showing wonderful lustre and richness. Seto, in fact, acquired such a widespread reputation for its ceramic productions that the term *seto-mono* (Seto article) came to be used generally for all pottery and porcelain, just as "China" is in the West. Seto has now ceased to be a pottery-producing centre, and has become the chief porcelain manufactory of Japan. The porcelain industry was inaugurated in 1807 by Tamikichi, a local ceramist, who had visited Hizen and spent three years there studying the necessary processes. Owari abounds in porcelain stone; but it does not occur in constant or particularly simple forms, and as the potters have not yet learned to treat their materials scientifically, their work is often marred by unforeseen difficulties. For many years after Tamikichi's processes had begun to be practised, the only decoration employed was blue under the glaze. Sometimes Chinese cobalt was used, sometimes Japanese, and sometimes a mixture of both. To Kawamoto Hansuke, who flourished about 1830-1845, belongs the credit of having turned out the richest and most attractive ware of this class. But, speaking generally, Japanese blues do not rank on the same decorative level with those of China. At Arita, although pieces were occasionally turned out of which the colour could not be surpassed in purity and brilliancy, the general character of the blue *sous couverte* was either thin or dull. At Hirado the ceramists affected a lighter and more delicate tone than that of the Chinese, and, in order to obtain it, subjected the choice pigment of the Middle Kingdom to refining processes of great severity. The Hirado blue, therefore, belongs to a special aesthetic category. But at Owari the experts were content with an inferior colour, and their blue-and-white porcelains never enjoyed a distinguished reputation, though occasionally we find a specimen of great merit.

Owari.

Decoration with vitrifiable enamels over the glaze, though it began to be practised at Owari about the year 1840, never became a speciality of the place. Nowadays, indeed, numerous examples of porcelains decorated in this manner are classed among Owari products. But they receive their decoration, almost without exception, in Tōkyō or Yokohama, where a large number of artists, called *e-tsuke-shi*, devote themselves entirely to porcelain-painting. These men seldom use vitrifiable enamels, pigments being much more tractable and less costly. The dominant feature of the designs is pictorial. They are frankly adapted to Western taste. Indeed, of this porcelain it may be said that, from the monster

pieces of blue-and-white manufactured at Seto—vases six feet high and garden pillar-lamps half as tall again do not dismay the Bishū ceramist—to tiny coffee-cups decorated in Tōkyō, with their delicate miniatures of birds, flowers, insects, fishes and so forth, everything indicates the death of the old severe aestheticism. To such a depth of debasement had the ceramic art fallen in Owari, that before the happy renaissance of the past ten years, Nagoya discredited itself by employing porcelain as a base for cloisonné enamelling. Many products of this vitiated industry have found their way into the collections of foreigners.

Bizen.

Pottery was produced at several hamlets in Bizen as far back as the 14th century, but ware worthy of artistic notice did not make its appearance until the close of the 16th century, when the Taikō himself paid a visit to the factory at Imbe. Thenceforth utensils for the use of the tea clubs began to be manufactured. This *Bizen-yaki* was red stoneware, with thin diaphanous glaze. Made of exceedingly refractory clay, it underwent stoving for more than three weeks, and was consequently remarkable for its hardness and metallic timbre. Some fifty years later, the character of the choicest Bizen-yaki underwent a marked change. It became slate-coloured or bluish-brown faience, with *pâte* as fine as pipe-clay, but very hard. In the *ao-Bizen* (blue Bizen), as well as in the red variety, figures of mythical beings and animals, birds, fishes and other natural objects, were modelled with a degree of plastic ability that can scarcely be spoken of in too high terms. Representative specimens are truly admirable—every line, every contour faithful. The production was very limited, and good pieces soon ceased to be procurable except at long intervals and heavy expense. The Bizen-yaki familiar to Western collectors is comparatively coarse brown or reddish brown, stoneware, modelled rudely, though sometimes redeemed by touches of the genius never entirely absent from the work of the Japanese artisan-artist. Easy to be confounded with it is another ware of the same type manufactured at Shidoro in the province of Tōtōmi.

Takatori.

The Japanese potters could never vie with the Chinese in the production of glazes: the wonderful monochromes and polychromes of the Middle Kingdom had no peers anywhere. In Japan they were most closely approached by the faience of Takatori in the province of Chikuzen. In its early days the ceramic industry of this province owed something to the assistance of Korean experts who settled there after the expedition of 1592. But its chief development took place under the direction of Igarashi Jizaemon, an amateur ceramist, who, happening to visit Chikuzen about 1620, was taken under the protection of the chief of the fief and munificently treated. Taking the renowned *yao-pien-yao*, or "transmutation ware" of China as a model, the Takatori potters endeavoured, by skilful mixing of colouring materials, to reproduce the wonderful effects of oxidization seen in the Chinese ware. They did not, indeed, achieve their ideal, but they did succeed in producing some exquisitely lustrous glazes of the *flambé* type, rich transparent brown passing into claret colour, with flecks or streaks of white and clouds of "iron dust." The *pâte* of this faience was of the finest description, and the technique in every respect faultless. Unfortunately, the best experts confined themselves to working for the tea clubs, and consequently produced only insignificant pieces, as tea-jars, cups and little ewers. During the 18th century, a departure was made from these strict canons. From this period date most of the specimens best known outside Japan—cleverly modelled figures of mythological beings and animals covered with lustrous variegated glazes, the general colours being grey or buff, with tints of green, chocolate, brown and sometimes blue.

Awaji.

A ware of which considerable quantities have found their way westward of late years in the *Awaji-yaki*, so called from the island of Awaji where it is manufactured in the village of Iga. It was first produced between the years 1830 and 1840 by one Kajū Mimpei, a man of considerable private means who devoted himself to the ceramic art out of pure enthusiasm. His story is full of interest, but it must suffice here to note the results of his enterprise. Directing his efforts at first to reproducing the deep green and straw-yellow glazes of China, he had exhausted almost his entire resources before success came, and even then the public was slow to recognize the merits of his ware. Nevertheless he persevered, and in 1838 we find him producing not only green and yellow monochromes, but also greyish white and mirror-black glazes of high excellence. So thoroughly had he now mastered the management of glazes that he could combine yellow, green, white and claret colour in regular patches to imitate tortoise-shell. Many of his pieces have designs incised or in relief, and others are skilfully decorated with gold and silver. Awaji-yaki, or *Mimpei-yaki* as it is often called, is generally porcelain, but we occasionally find specimens which may readily be mistaken for Awata faience.

Banko.

Banko faience is a universal favourite with foreign collectors. The type generally known to them is exceedingly light ware, for the most part made of light grey, unglazed clay, and having hand-modelled decoration in relief. But there are numerous varieties. Chocolate or dove-coloured grounds with delicate diapers in gold and *engobe*; brown or black faience with white, yellow and pink designs incised or in relief; pottery curiously and deftly marbled by combinations of various coloured clays—these and many other kinds are to be found, all, however, presenting one common feature, namely, skilful finger-moulding and a slight roughening of the surface as though it had received the impression of coarse linen or crape before baking. This modern *banko-yaki* is produced chiefly at Yokkaichi in the province of Ise. It is entirely different from the original banko-ware made in Kuwana, in the same province, by Numanami Gozaemon at the close of the 18th century. Gozaemon was an imitator. He took for his models the raku faience of Kiōto, the masterpieces of Ninsei and Kenzan, the rococo wares of Korea, the enamelled porcelain of China, and the blue-and-white ware of Delft. He did not found a school, simply because he had nothing new to teach, and the fact that a modern ware goes by the same name as his productions is simply because his seal—the inscription on which (*banko*, everlasting) suggested the name of the ware—subsequently (1830) fell into the hands of one Mori Yūsetsu, who applied it to his own ware. Mori Yūsetsu, however, had more originality than Numanami. He conceived the idea of shaping his pieces by putting the mould inside and pressing the clay with the hand into the matrix. The consequence was that his wares received the design on the inner as well as the outer surface, and were moreover thumb-marked—essential characteristics of the banko-yaki now so popular.

Izumo.

Among a multitude of other Japanese wares, space allows us to mention only two, those of Izumo and Yatsushiro. The chief of the former is faience, having light grey, close *pâte* and yellow or straw-coloured glaze, with or without crackle, to which is applied decoration in gold and green enamel. Another variety has chocolate glaze, clouded with amber and flecked with gold dust. The former faience had its origin at the close of the 17th century, the latter at the close of the 18th; but the *Izumo-yaki* now procurable is a modern production.

Yatsushiro.

The Yatsushiro faience is a production of the province of Higo, where a number of Korean potters settled at the close of the 17th century. It is the only Japanese ware in which the characteristics of a Korean original are unmistakably preserved. Its diaphanous, pearl-grey glaze, uniform, lustrous and finely crackled, overlying encaustic decoration in white slip, the fineness of its warm reddish *pâte*, and the general excellence of its technique, have always commanded admiration. It is produced now in considerable quantities, but the modern ware falls far short of its predecessor.

Many examples of the above varieties deserve the enthusiastic admiration they have received, yet they unquestionably belong to a lower rank of ceramic achievements than the choice productions of Chinese kilns. The potters of the Middle Kingdom, from the early eras of the Ming dynasty down to the latest years of the 18th century, stood absolutely without rivals as makers of porcelain. Their technical ability was incomparable—though in grace of decorative conception they yielded the palm to the Japanese—and the representative specimens they bequeathed to posterity remained, until quite recently, far beyond the imitative capacity of European or Asiatic experts. As for faience and pottery, however, the Chinese despised them in all forms, with one notable exception, the *yi-hsing-yao*, known in the Occident as *boccaro*. Even the *yi-hsing-yao*, too, owed much of its popularity to special utility. It was essentially the ware of the tea-drinker. If in the

best specimens exquisite modelling, wonderful accuracy of finish and *pâtes* of interesting tints are found, such pieces are, none the less, stamped prominently with the character of utensils rather than with that of works of art. In short, the artistic output of Chinese kilns in their palmiest days was, not faience or pottery, but porcelain, whether of soft or hard paste. Japan, on the contrary, owes her ceramic distinction in the main to her faience. A great deal has been said by enthusiastic writers about the *famille chrysanthemo-péonienne* of Imari and the *genre Kakiemon* of Nabeshima, but these porcelains, beautiful as they undoubtedly are, cannot be placed on the same level with the *kwan-yao* and *famille rose* of the Chinese experts. The Imari ware, even though its thick biscuit and generally ungraceful shapes be omitted from the account, shows no enamels that can rival the exquisitely soft, broken tints of the *famille rose*; and the *Kakiemon* porcelain, for all its rich though chaste contrasts, lacks the delicate transmitted tints of the shell-like *kwan-yao*. So, too, the blue-and-white porcelain of Hirado, though assisted by exceptional tenderness of sous-pâte colour, by milk-white glaze, by great beauty of decorative design, and often by an admirable use of the modelling or graving tool, represents a ceramic achievement palpably below the soft paste *kai-pien-yao* of King-te-chen. It is a curious and interesting fact that this last product of Chinese skill remained unknown in Japan down to very recent days. In the eyes of a Chinese connoisseur, no blue-and-white porcelain worthy of consideration exists, or ever has existed, except the *kai-pien-yao*, with its imponderable *pâte*, its wax-like surface, and its rich, glowing blue, entirely free from superficiality or garishness and broken into a thousand tints by the microscopic crackle of the glaze. The Japanese, although they obtained from their neighbour almost everything of value she had to give them, did not know this wonderful ware, and their ignorance is in itself sufficient to prove their ceramic inferiority. There remains, too, a wide domain in which the Chinese developed high skill, whereas the Japanese can scarcely be said to have entered it at all; namely, the domain of monochromes and polychromes, striking every note of colour from the richest to the most delicate; the domain of *truité* and *flambé* glazes, of *yō-pien-yao* (transmutation ware), and of egg-shell with incised or translucid decoration. In all that region of achievement the Chinese potters stood alone and seemingly unapproachable. The Japanese, on the contrary, made a specialty of faience, and in that particular line they reached a high standard of excellence. No faience produced either in China or any other Oriental country can dispute the palm with really representative specimens of Satsuma ware. Not without full reason have Western connoisseurs lavished panegyrics upon that exquisite production. The faience of the Kiōto artists never reached quite to the level of the Satsuma in quality of *pâte* and glowing mellowness of decoration; their materials were slightly inferior. But their skill as decorators was as great as its range was wide, and they produced a multitude of masterpieces on which alone Japan's ceramic fame might safely be rested.

Change of Style after the Restoration.

When the mediatization of the fiefs, in 1871, terminated the local patronage hitherto extended so munificently to artists, the Japanese ceramists gradually learned that they must thenceforth depend chiefly upon the markets of Europe and America. They had to appeal, in short, to an entirely new public, and how to secure its approval was to them a perplexing problem. Having little to guide them, they often interpreted Western taste incorrectly, and impaired their own reputation in a corresponding degree. Thus, in the early years of the Meiji era, there was a period of complete prostitution. No new skill was developed, and what remained of the old was expended chiefly upon the manufacture of meretricious objects, disfigured by excess of decoration and not relieved by any excellence of technique. In spite of their artistic defects, these specimens were exported in considerable numbers by merchants in the foreign settlements, and their first cost being very low, they found a not unremunerative market. But as European and American collectors became better acquainted with the capacities of the pre-Meiji potters, the great inferiority of these new specimens was recognized, and the prices commanded by the old wares gradually appreciated. What then happened was very natural: imitations of the old wares were produced, and having been sufficiently disfigured by staining and other processes calculated to lend an air of rust and age, they were sold to ignorant persons, who laboured under the singular yet common hallucination that the points to be looked for in specimens from early kilns were, not technical excellence, decorative tastefulness and richness of colour, but dinginess, imperfections and dirt; persons who imagined, in short, that defects which they would condemn at once in new porcelains ought to be regarded as merits in old. Of course a trade of that kind, based on deception, could not have permanent success. One of the imitators of "old Satsuma" was among the first to perceive that a new line must be struck out. Yet the earliest results of his awakened perception helped to demonstrate still further the depraved spirit that had come over Japanese art. For he applied himself to manufacture wares having a close affinity with the shocking monstrosities used for sepulchral purposes in ancient Apulia, where fragments of dissected satyrs, busts of nymphs or halves of horses were considered graceful excrescences for the adornment of an amphora or a pithos. This *Makuzu* faience, produced by the now justly celebrated Miyagawa Shōzan of Ota (near Yokohama), survives in the form of vases and pots having birds, reptiles, flowers, crustacea and so forth plastered over the surface—specimens that disgrace the period of their manufacture, and represent probably the worst aberration of Japanese ceramic conception.

Adoption of Chinese Models.

A production so degraded as the early Makuzu faience could not possibly have a lengthy vogue. Miyagawa soon began to cast about for a better inspiration, and found it in the monochromes and polychromes of the Chinese *Kang-hsi* and *Yung-cheng kilns*. The extraordinary value attaching to the incomparable red glazes of China, not only in the country of their origin but also in the United States, where collectors showed a fine instinct in this matter, seems to have suggested to Miyagawa the idea of imitation. He took for model the rich and delicate "liquid-dawn" monochrome, and succeeded in producing some specimens of considerable merit. Thenceforth his example was largely followed, and it may now be said that the tendency of many of the best Japanese ceramists is to copy Chinese *chefs-d'œuvre*. To find them thus renewing their reputation by reverting to Chinese models, is not only another tribute to the perennial supremacy of Chinese porcelains, but also a fresh illustration of the eclectic genius of Japanese art. All the products of this new effort are porcelains proper. Seven kilns are devoted, wholly or in part, to the new wares: belonging to Miyagawa Shōzan of Ota, Seifū Yōhei of Kiōto, Takemoto Hayata and Katō Tomojiro of Tōkyō, Higuchi Haruzane of Hirado, Shida Yasukyo of Kaga and Kato Masukichi of Seto.

Seifū of Kiōto.

Among the seven ceramists here enumerated, Seifū of Kiōto probably enjoys the highest reputation. If we except the ware of Satsuma, it may be said that nearly all the fine faience of Japan was manufactured formerly in Kiōto. Nomura Ninsei, in the middle of the 17th century, inaugurated a long era of beautiful productions with his cream-like "fish-roe" *craquelé* glazes, carrying rich decoration of clear and brilliant vitrifiable enamels. It was he who gave their first really artistic impulse to the kilns of Awata, Mizoro and Iwakura, whence so many delightful specimens of faience issued almost without interruption until the middle of the 19th century and continue to issue to-day. The three Kenzan, of whom the third died in 1820; Ebisei; the four Dōhachi, of whom the fourth was still alive in 1909; the Kagiya family, manufacturers of the celebrated Kinkōzan ware; Hōzan, whose imitations of Delft faience and his *pâte-sur-pâte* pieces with fern-scroll decoration remain incomparable; Taizan Yōhei, whose ninth descendant of the same name now produces fine specimens of Awata ware for foreign markets; Tanzan Yōshitaro and his son Rokuro, to whose credit stands a new departure in the form of faience having *pâte-sur-pâte* decoration of lace patterns, diapers and archaic designs executed in low relief with admirable skill and minuteness; the two Bizan, renowned for their representations of richly apparelled figures as decorative motives; Rokubei, who studied painting under Maruyama Ōkyō and followed the naturalistic style of that great artist; Mokubei, the first really expert manufacturer of translucid porcelain in Kiōto; Shūhei, Kintei, and above all, Zengoro Hōzen, the celebrated potter of Eiraku wares—these names and many others give to Kiōto ceramics an eminence as well as an individuality which few other wares of Japan can boast. Nor is it to be supposed that the ancient capital now lacks great potters. Okamura Yasutaro, commonly called Shōzan, produces specimens which only a very acute connoisseur can distinguish from the

work of Nomura Ninsei; Tanzan Rokuro's half-tint enamels and soft creamy glazes would have stood high in any epoch; Taizan Yōhei produces Awata faience not inferior to that of former days; Kagiya Sōbei worthily supports the reputation of the Kinkōzan ware; Kawamoto Eijiro has made to the order of a well-known Kiōto firm many specimens now figuring in foreign collections as old masterpieces; and Itō Tōzan succeeds in decorating faience with seven colours *sous couverte* (black, green, blue, russet-red, tea-brown, purple and peach), a feat never before accomplished. It is therefore an error to assert that Kiōto has no longer a title to be called a great ceramic centre. Seifū Yōhei, however, has the special faculty of manufacturing monochromatic and jewelled porcelain and faience, which differ essentially from the traditional Kiōto types, their models being taken directly from China. But a sharp distinction has to be drawn between the method of Seifū and that of the other six ceramists mentioned above as following Chinese fashions. It is this, that whereas the latter produce their chromatic effects by mixing the colouring matter with the glaze, Seifū paints the biscuit with a pigment over which he runs a translucid colourless glaze. The Kiōto artist's process is much easier than that of his rivals, and although his monochromes are often of most pleasing delicacy and fine tone, they do not belong to the same category of technical excellence as the wares they imitate. From this judgment must be excepted, however, his ivory-white and *céladon* wares, as well as his porcelains decorated with blue, or blue and red *sous couverte*, and with vitrifiable enamels over the glaze. In these five varieties he is emphatically great. It cannot be said, indeed, that his *céladon* shows the velvety richness of surface and tenderness of colour that distinguished the old *Kuang-yao* and *Lungchuan-yao* of China, or that he has ever essayed the moss-edged crackle of the beautiful *Ko-yao*. But his *céladon* certainly equals the more modern Chinese examples from the *Kang-hsi* and *Yung-cheng* kilns. As for his ivory-white, it distinctly surpasses the Chinese Ming *Chen-yao* in every quality except an indescribable intimacy of glaze and *pâte* which probably can never be obtained by either Japanese or European methods.

Miyagawa Shōzan.

Miyagawa Shōzan, or Makuzu, as he is generally called, has never followed Seifū's example in descending from the difficult manipulation of coloured glazes to the comparatively simple process of painted biscuit. This comment does not refer to the use of blue and red *sous couverte*. In that class of beautiful ware the application of pigment to the unglazed *pâte* is inevitable, and both Seifū and Miyagawa, working on the same lines as their Chinese predecessors, produce porcelains that almost rank with choice Kang-hsi specimens, though they have not yet mastered the processes sufficiently to employ them in the manufacture of large imposing pieces or wares of moderate price. But in the matter of true monochromatic and polychromatic glazes, to Shōzan belongs the credit of having inaugurated Chinese fashions, and if he has never fully succeeded in achieving *lang-yao* (sang-de-bœuf), *chi-hung* (liquid-dawn red), *chiang-tou-hung* (bean-blossom red, the "peach-blow" of American collectors), or above all *pin-kwo-tsing* (apple-green with red bloom), his efforts to imitate them have resulted in some very interesting pieces.

Tōkyō Ceramists.

Takemoto and Katō of Tōkyō entered the field subsequently to Shōzan, but followed the same models approximately. Takemoto, however, has made a speciality of black glazes, his aim being to rival the *Sung Chien-yao*, with its glaze of mirror-black or raven's-wing green, and its leveret fur streaking or russet-moss dappling, the prince of all wares in the estimation of the Japanese tea-clubs. Like Shōzan, he is still very far from his original, but, also like Shōzan, he produces highly meritorious pieces in his efforts to reach an ideal that will probably continue to elude him for ever. Of Katō there is not much to be said. He has not succeeded in winning great distinction, but he manufactures some very delicate monochromes, fully deserving to be classed among prominent evidences of the new departure. Tōkyō was never a centre of ceramic production. Even during the 300 years of its conspicuous prosperity as the administrative capital of the Tokugawa shōguns, it had no noted factories, doubtless owing to the absence of any suitable potter's clay in the immediate vicinity. Its only notable production of a ceramic character was the work of Miura Kenya (1830-1843), who followed the methods of the celebrated Haritsu (1688-1704) of Kiōto in decorating plain or lacquered wood with mosaics of raku faience having coloured glazes. Kenya was also a skilled modeller of figures, and his factory in the Imado suburb obtained a considerable reputation for work of that nature. He was succeeded by Tozawa Benshi, an old man of over seventy in 1909, who, using clay from Owari or Hizen, has turned out many porcelain statuettes of great beauty. But although the capital of Japan formerly played only an insignificant part in Japanese ceramics, modern Tōkyō has an important school of artist-artisans. Every year large quantities of porcelain and faience are sent from the provinces to the capital to receive surface decoration, and in wealth of design as well as carefulness of execution the results are praiseworthy. But of the pigments employed nothing very laudatory could be said until very recent times. They were generally crude, of impure tone, and without depth or brilliancy. Now, however, they have lost these defects and entered a period of considerable excellence. Figure-subjects constitute the chief feature of the designs. A majority of the artists are content to copy old pictures of Buddha's sixteen disciples, the seven gods of happiness, and other similar assemblages of mythical or historical personages, not only because such work offers large opportunity for the use of striking colours and the production of meretricious effects, dear to the eye of the average Western householder and tourist, but also because a complicated design, as compared with a simple one, has the advantage of hiding the technical imperfections of the ware. Of late there have happily appeared some decorators who prefer to choose their subjects from the natural field in which their great predecessors excelled, and there is reason to hope that this more congenial and more pleasing style will supplant its modern usurper. The best known factory in Tōkyō for decorative purposes is the Hyōchi-en. It was established in the Fukagawa suburb in 1875, with the immediate object of preparing specimens for the first Tōkyō exhibition held at that time. Its founders obtained a measure of official aid, and were able to secure the services of some good artists, among whom may be mentioned Obanawa and Shimauchi. The porcelains of Owari and Arita naturally received most attention at the hands of the Hyōchi-en decorators, but there was scarcely one of the principal wares of Japan upon which they did not try their skill, and if a piece of monochromatic Minton or Sèvres came in their way, they undertook to improve it by the addition of designs copied from old masters or suggested by modern taste. The cachet of the Fukagawa atelier was indiscriminately applied to all such pieces, and has probably proved a source of confusion to collectors. Many other factories for decoration were established from time to time in Tōkyō. Of these some still exist; others, ceasing to be profitable, have been abandoned. On the whole, the industry may now be said to have assumed a domestic character. In a house, presenting no distinctive features whatsoever, one finds the decorator with a cupboard full of bowls and vases of glazed biscuit, which he adorns, piece by piece, using the simplest conceivable apparatus and a meagre supply of pigments. Sometimes he fixes the decoration himself, employing for that purpose a small kiln which stands in his back garden; sometimes he entrusts this part of the work to a factory. As in the case of everything Japanese, there is no pretence, no useless expenditure about the process. Yet it is plain that this school of Tōkyō decorators, though often choosing their subjects badly, have contributed much to the progress of the ceramic art during the past few years. Little by little there has been developed a degree of skill which compares not unfavourably with the work of the old masters. Table services of Owari porcelain—the ware itself excellently manipulated and of almost egg-shell fineness—are now decorated with floral scrolls, landscapes, insects, birds, figure-subjects and all sorts of designs, chaste, elaborate or quaint; and these services, representing so much artistic labour and originality, are sold for prices that bear no due ratio to the skill required in their manufacture.

There is only one reservation to be made in speaking of the modern decorative industry of Japan under its better aspects. In Tōkyō, Kiōto, Yokohama and Kobe—in all of which places decorating ateliers (*etsuke-dokoro*), similar to those of Tōkyō, have been established in modern times—the artists use chiefly pigments, seldom venturing to employ vitrifiable enamels. That the results achieved with these different materials are not comparable is a fact which every connoisseur must admit. The glossy surface of a porcelain glaze is ill fitted for rendering artistic effects with ordinary colours. The proper field for the application of these is the biscuit, in which position the covering glaze serves at once to soften and to preserve the pigment. It can scarcely be doubted that the true instincts of the ceramist will ultimately counsel him to confine his decoration over the glaze to vitrifiable enamels, with which the Chinese and Japanese potters of former times

obtained such brilliant results. But to employ enamels successfully is an achievement demanding special training and materials not easy to procure or to prepare. The Tōkyō decorators are not likely, therefore, to change their present methods immediately.

An impetus was given to ceramic decoration by the efforts of a new school, which owed its origin to Dr G. Wagener, an eminent German expert formerly in the service of the Japanese government. Dr Wagener conceived the idea of developing the art of decoration under the glaze, as applied to faience. Faience thus decorated has always been exceptional in Japan. Rare specimens were produced in Satsuma and Kiōto, the colour employed being chiefly blue, though brown and black were used in very exceptional instances. The difficulty of obtaining clear, rich tints was nearly prohibitive, and though success, when achieved, seemed to justify the effort, this class of ware never received much attention in Japan. By careful selection and preparation of *pâte*, glaze and pigments, Dr Wagener proved not only that the manufacture was reasonably feasible, but also that decoration thus applied to pottery possesses unique delicacy and softness. Ware manufactured by his direction at the Tōkyō school of technique (*shokkô gakkô*), under the name of *asahi-yaki*, ranks among the interesting productions of modern Japan. The decorative colour chiefly employed is chocolate brown, which harmonizes excellently with the glaze. But the ware has never found favour in Japanese eyes, an element of unpleasant garishness being imparted to it by the vitreous appearance of the glaze, which is manufactured according to European methods. The modern faience of Ito Tōzan of Kiōto, decorated with colour under the glaze, is incomparably more artistic than the Tōkyō *asahi-yaki*, from which, nevertheless, the Kiōto master doubtless borrowed some ideas. The decorative industry in Tōkyō owed much also to the kōshō-kaisha, an institution started by Wakai and Matsuo in 1873, with official assistance. Owing to the intelligent patronage of this company, and the impetus given to the ceramic trade by its enterprise, the style of the Tōkyō *etsuke* was much improved and the field of their industry extended. It must be acknowledged, however, that the Tōkyō artists often devote their skill to purposes of forgery, and that their imitations, especially of old Satsuma-yaki, are sometimes franked by dealers whose standing should forbid such frauds. In this context it may be mentioned that, of late years, decoration of a remarkably microscopic character has been successfully practised in Kiōto, Osaka and Kobe, its originator being Meisan of Osaka. Before dismissing the subject of modern Tōkyō ceramics, it may be added that Katō Tomatarō, mentioned above in connexion with the manufacture of special glazes, has also been very successful in producing porcelains decorated with blue *sous couverte* at his factory in the Koishikawa suburb.

Higuchi of Hirado is to be classed with ceramists of the new school on account of one ware only, namely, porcelain having translucid decoration, the so-called “grains of rice” of American collectors, designated *hotaru-de* (firefly style) in Japan. That, however, is an achievement of no small consequence, especially since it had never previously been essayed outside China. The Hirado expert has not yet attained technical skill equal to that of the Chinese. He cannot, like them, cover the greater part of a specimen’s surface with a lacework of transparent decoration, exciting wonder that *pâte* deprived so greatly of continuity could have been manipulated without accident. But his artistic instincts are higher than those of the Chinese, and there is reasonable hope that in time he may excel their best works. In other respects the Hirado factories do not produce wares nearly so beautiful as those manufactured there between 1759 and 1840, when the *Hirado-yaki* stood at the head of all Japanese porcelain on account of its pure, close-grained *pâte*, its lustrous milk-white glaze, and the soft clear blue of its carefully executed decoration.

Modern Wares of Hirado.

The Owari potters were slow to follow the lead of Miyagawa Shōzan and Seifū Yōhei. At the industrial exhibition in Kiōto (1895) the first results of their efforts were shown, attracting attention at once. In medieval times Owari was celebrated for faience glazes of various colours, much affected by the tea-clubs, but its staple manufacture from the beginning of the 19th century was porcelain decorated with blue under the glaze, the best specimens of which did not approach their Chinese prototypes in fineness of *pâte*, purity of glaze or richness of colour. During the first twenty-five years of the Meiji era the Owari potters sought to compensate the technical and artistic defects of their pieces by giving them magnificent dimensions; but at the Tōkyō industrial exhibition (1891) they were able to contribute some specimens showing decorative, plastic and graving skill of no mean order. Previously to that time, one of the Seto experts, Katō Gosuke, had developed remarkable ability in the manufacture of *céladon*, though in that field he was subsequently distanced by Seifū of Kiōto. Only lately did Owari feel the influence of the new movement towards Chinese types. Its potters took *flambé* glazes for models, and their pieces possessed an air of novelty that attracted connoisseurs. But the style was not calculated to win general popularity, and the manufacturing processes were too easy to occupy the attention of great potters. On a far higher level stood egg-shell porcelain, remarkable examples of which were sent from Seto to the Kiōto industrial exhibition of 1895. Chinese potters of the Yung-lo era (1403-1414) enriched their country with a quantity of ware to which the name of *totai-ki* (bodiless utensil) was given on account of its wonderfully attenuated *pâte*. The finest specimens of this porcelain had incised decoration, sparingly employed but adding much to the beauty of the piece. In subsequent eras the potters of King-te-chen did not fail to continue this remarkable manufacture, but its only Japanese representative was a porcelain distinctly inferior in more than one respect, namely, the egg-shell utensils of Hizen and Hirado, some of which had finely woven basket-cases to protect their extreme fragility. The Seto experts, however, are now making bowls, cups and vases that rank nearly as high as the celebrated Yung-lo totai-ki. In purity of tone and velvet-like gloss of surface there is distinct inferiority on the side of the Japanese ware, but in thinness of *pâte* it supports comparison, and in profusion and beauty of incised decoration it excels its Chinese original.

Ware of Owari.

Latest of all to acknowledge the impulse of the new departure have been the potters of Kaga. For many years their ware enjoyed the credit, or discredit, of being the most lavishly decorated porcelain in Japan. It is known to Western collectors as a product blazing with red and gold, a very degenerate offspring of the Chinese Ming type, which Hozen of Kiōto reproduced so beautifully at the beginning of the 19th century under the name of *eiraku-yaki*. Undoubtedly the best specimens of this *kinran-de* (brocade) porcelain of Kaga merit praise and admiration; but, on the whole, ware so gaudy could not long hold a high place in public esteem. The Kaga potters ultimately appreciated that defect. They still manufacture quantities of tea and coffee sets, and dinner or dessert services of red-and-gold porcelain for foreign markets; but about 1885 some of them made zealous and patient efforts to revert to the processes that won so much fame for the old Kutani-yaki, with its grand combinations of rich, lustrous, soft-toned glazes. The attempt was never entirely successful, but its results restored something of the Kaga kilns’ reputation. Since 1895, again, a totally new departure has been made by Morishita Hachizaemon, a ceramic expert, in conjunction with Shida Yasukyo, president of the Kaga products joint stock company (*Kaga bussan kabushiki kaisha*) and teacher in the Kaga industrial school. The line chosen by these ceramists is purely Chinese. Their great aim seems to be the production of the exquisite Chinese monochromes known as *u-kwo-tien-tsing* (blue of the sky after rain) and *yueh-peh* (*clair-de-lune*). But they also devote much attention to porcelains decorated with blue or red *sous couverte*. Their work shows much promise, but like all fine specimens of the Sino-Japanese school, the prices are too high to attract wide custom.

Ware of Kaga.

The sum of the matter is that the modern Japanese ceramist, after many efforts to cater for the taste of the Occident, evidently concludes that his best hope consists in devoting all his technical and artistic resources to reproducing the celebrated wares of China. In explanation of the fact that he did not essay this route in former times, it may be noted, first, that he had only a limited acquaintance with the wares in question; secondly, that Japanese connoisseurs never attached any value to their countrymen’s imitation of Chinese porcelains so long as the originals were obtainable; thirdly, that the ceramic art of China not having fallen into its present state of decadence, the idea of competing with it did not occur to outsiders; and fourthly, that Europe and America had not

Summary.

developed their present keen appreciation of Chinese masterpieces. Yet it is remarkable that China, at the close of the 19th century, should have again furnished models to Japanese eclecticism.

Lacquer.—Japan derived the art of lacquering from China (probably about the beginning of the 6th century), but she ultimately carried it far beyond Chinese conception. At first her experts confined themselves to plain black lacquer. From the early part of the 8th century they began to ornament it with dust of gold or mother-of-pearl, and throughout the Heian epoch (9th to 12th century) they added pictorial designs, though of a formal character, the chief motives being floral subjects, arabesques and scrolls. All this work was in the style known as *hira-makie* (flat decoration); that is to say, having the decorative design in the same plane as the ground. In the days of the great dilettante Yoshimasa (1449-1490), lacquer experts devised a new style, *taka-makie*, or decoration in relief, which immensely augmented the beauty of the ware, and constituted a feature altogether special to Japan. Thus when, at the close of the 16th century, the Taikō inaugurated the fashion of lavishing all the resources of applied art on the interior decoration of castles and temples, the services of the lacquerer were employed to an extent hitherto unknown, and there resulted some magnificent work on friezes, coffered ceilings, door panels, altar-pieces and cenotaphs. This new departure reached its climax in the Tokugawa mausolea of Yedo and Nikkō, which are enriched by the possession of the most splendid applications of lacquer decoration the world has ever seen, nor is it likely that anything of comparable beauty and grandeur will be again produced in the same line. Japanese connoisseurs indicate the end of the 17th century as the golden period of the art, and so deeply rooted is this belief that whenever a date has to be assigned to any specimen of exceptionally fine quality, it is unhesitatingly referred to the time of Joken-in (Tsunayoshi).

Among the many skilled artists who have practised this beautiful craft since the first on record, Kiyohara Norisuye (*c.* 1169), may be mentioned Kōyetsu (1558-1637) and his pupils, who are especially noted for their inro (medicine-cases worn as part of the costume); Kajikawa Kinjirō (*c.* 1680), the founder of the great Kajikawa family, which continued up to the 19th century; and Koma Kyūhaku (d. 1715), whose pupils and descendants maintained his traditions for a period of equal length. Of individual artists, perhaps the most notable is Ogata Kōrin (d. 1716), whose skill was equally great in the arts of painting and pottery. He was the eldest son of an artist named Ogato Sōken, and studied the styles of the Kanō and Tosa schools successively. Among the artists who influenced him were Kanō Tsunenobu, Nomura Sōtatsu and Kōyetsu. His lacquer-ware is distinguished for a bold and at times almost eccentric impressionism, and his use of inlay is strongly characteristic. Ritsuō (1663-1747), a pupil and contemporary of Kōrin, and like him a potter and painter also, was another lacquerer of great skill. Then followed Hanzan, the two Shiome, Yamamoto Shunshō and his pupils, Yamada Jōka and Kwanshōsai Tōyō (late 18th century). In the beginning of the 19th century worked Shōkwasai, who frequently collaborated with the metal-worker Shibayama, encrusting his lacquer with small decorations in metal by the latter.

Modern Work.

No important new developments have taken place during modern times in Japan's lacquer manufacture. Her artists follow the old ways faithfully; and indeed it is not easy to see how they could do better. On the other hand, there has not been any deterioration; all the skill of former days is still active. The contrary has been repeatedly affirmed by foreign critics, but no one really familiar with modern productions can entertain such a view. Lacquer-making, however, being essentially an art and not a mere handicraft, has its eras of great masters and its seasons of inferior execution. Men of the calibre of Kōyetsu Kōrin, Ritsuō, Kajikawa and Mitsutoshi must be rare in any age, and the epoch when they flourished is justly remembered with enthusiasm. But the Meiji era has had its Zeshin, and it had in 1909 Shirayama Fukumatsu, Kawanabe Itchō, Ogāwa Shōmin, Uematsu Hōmin, Shibayama Sōichi, Morishita Morihachi and other lesser experts, all masters in designing and execution. Zeshin, shortly before he died, indicated Shirayama Fukumatsu as the man upon whom his mantle should descend, and that the judgment of this really great craftsman was correct cannot be denied by any one who has seen the works of Shirayama. He excels in his representations of landscapes and waterscapes, and has succeeded in transferring to gold-lacquer panels tender and delicate pictures of nature's softest moods—pictures that show balance, richness, harmony and a fine sense of decorative proportion. Kawanabe Itchō is celebrated for his representations of flowers and foliage, and Morishita Morihachi and Asano Saburo (of Kaga) are admirable in all styles, but especially, perhaps, in the charming variety called *togi-dashi* (ground down), which is pre-eminent for its satin-like texture and for the atmosphere of dreamy softness that pervades the decoration. The togi-dashi design, when finely executed, seems to hang suspended in the velvety lacquer or to float under its silky surface. The magnificent sheen and richness of the pure *kin-makie* (gold lacquer) are wanting, but in their place we have inimitable tenderness and delicacy.

New Development.

The only branch of the lacquerer's art that can be said to have shown any marked development in the Meiji era is that in which parts of the decorative scheme consist of objects in gold, silver, shakudo, shibuichi, iron, or, above all, ivory or mother-of-pearl. It might indeed be inferred, from some of the essays published in Europe on the subject of Japan's ornamental arts, that this application of ivory and mother-of-pearl holds a place of paramount importance. Such is not the case. Cabinets, fire-screens, plaques and boxes resplendent with gold lacquer grounds carrying elaborate and profuse decoration of ivory and mother-of-pearl[4] are not objects that appeal to Japanese taste. They belong essentially to the catalogue of articles called into existence to meet the demand of the foreign market, being, in fact, an attempt to adapt the lacquerer's art to decorative furniture for European houses. On the whole it is a successful attempt. The plumage of gorgeously-hued birds, the blossoms of flowers (especially the hydrangea), the folds of thick brocade, microscopic diapers and arabesques, are built up with tiny fragments of iridescent shell, in combination with silver-foil, gold-lacquer and coloured bone, the whole producing a rich and sparkling effect. In fine specimens the workmanship is extraordinarily minute, and every fragment of metal, shell, ivory or bone, used to construct the decorative scheme, is imbedded firmly in its place. But in a majority of cases the work of building is done by means of paste and glue only, so that the result lacks durability. The employment of mother-of-pearl to ornament lacquer grounds dates from a period as remote as the 8th century, but its use as a material for constructing decorative designs began in the 17th century, and was due to an expert called Shibayama, whose descendant, Shibayama Sōichi, has in recent years been associated with the same work in Tōkyō.

Processes.

In the manufacture of Japanese lacquer there are three processes. The first is the extraction and preparation of the lac; the second, its application; and the third, the decoration of the lacquered surface. The lac, when taken from an incision in the trunk of the *Rhus vernicifera* (*urushi-no-ki*), contains approximately 70% of lac acid, 4% of gum arabic, 2% of albumen, and 24% of water. It is strained, deprived of its moisture, and receives an admixture of gamboge, cinnabar, acetous protoxide or some other colouring matter. The object to be lacquered, which is generally made of thin white pine, is subjected to singularly thorough and painstaking treatment, one of the processes being to cover it with a layer of Japanese paper or thin hempen cloth, which is fixed by means of a pulp of rice-paste and lacquer. In this way the danger of warping is averted, and exudations from the wooden surface are prevented from reaching the overlaid coats of lacquer. Numerous operations of luting, sizing, lacquering, polishing, drying, rubbing down, and so on, are performed by the *nurimono-shi*, until, after many days' treatment, the object emerges with a smooth, lustre-like dark-grey or coloured surface, and is ready to pass into the hands of the makie-shi, or decorator. The latter is an artist; those who have performed the preliminary operations are merely skilled artisans. The *makie-shi* may be said to paint a picture on the surface of the already lacquered object. He takes for subject a landscape, a seascape, a battle-scene, flowers, foliage, birds, fishes, insects—in short, anything. This he sketches in outline with a paste of white lead, and then, having filled in the details with gold and colours, he superposes a coat of translucid lacquer, which is finally subjected to careful polishing. If parts of the design are to be in relief, they are built up with a putty of black lacquer, white lead, camphor and lamp-black. In all fine lacquers gold predominates so largely that the general impression conveyed by the object is one of glow and richness. It is also an inviolable rule that every part must show beautiful and highly finished work, whether it be an external or an internal part. The makie-shi ranks

almost as high as the pictorial artist in Japanese esteem. He frequently signs his works, and a great number of names have been thus handed down during the past two centuries.

Cloisonné Enamel.—Cloisonné enamel is essentially of modern development in Japan. The process was known at an early period, and was employed for the purpose of subsidiary decoration from the close of the 16th century, but not until the 19th century did Japanese experts begin to manufacture the objects known in Europe as "enamels;" that is to say, vases, plaques, censers, bowls, and so forth, having their surface covered with vitrified pastes applied either in the *champlevé* or the *cloisonné* style. It is necessary to insist upon this fact, because it has been stated with apparent authority that numerous specimens which began to be exported from 1865 were the outcome of industry commencing in the 16th century and reaching its point of culmination at the beginning of the 18th. There is not the slenderest ground for such a theory. The work began in 1838, and Kaji Tsunekichi of Owari was its originator. During 20 years previously to the reopening of the country in 1858, cloisonné enamelling was practised in the manner now understood by the term; 190
when foreign merchants began to settle in Yokohama, several experts were working skilfully in Owari after the methods of Kaji Tsunekichi. Up to that time there had been little demand for enamels of large dimensions, but when the foreign market called for vases, censers, plaques and such things, no difficulty was found in supplying them. Thus, about the year 1865, there commenced an export of enamels which had no prototypes in Japan, being destined frankly for European and American collectors. From a technical point of view these specimens had much to recommend them. The base, usually of copper, was as thin as cardboard; the cloisons, exceedingly fine and delicate, were laid on with care and accuracy; the colours were even, and the designs showed artistic judgment. Two faults, however, marred the work—first, the shapes were clumsy and unpleasing, being copied from bronzes whose solidity justified forms unsuited to thin enamelled vessels; secondly, the colours, sombre and somewhat impure, lacked the glow and mellowness that give decorative superiority to the technically inferior Chinese enamels of the later Ming and early Tsing eras. Very soon, however, the artisans of Nagoya (Owari), Yokohama and Tōkyō—where the art had been taken up—found that faithful and fine workmanship did not pay. The foreign merchant desired many and cheap specimens for export, rather than few and costly. There followed then a period of gradual decline, and the enamels exported to Europe showed so much inferiority that they were supposed to be the products of a widely different era and of different makers. The industry was threatened with extinction, and would certainly have dwindled to insignificant dimensions had not a few earnest artists, working in the face of many difficulties and discouragements, succeeded in striking out new lines and establishing new standards for excellence.

New Schools.

Three clearly differentiated schools now (1875) came into existence. One, headed by Namikawa Yasuyuki of Kiōto, took for its objects the utmost delicacy and perfection of technique, richness of decoration, purity of design and harmony of colour. The thin clumsily-shaped vases of the Kaji school, with their uniformly distributed decoration of diapers, scrolls and arabesques in comparatively dull colours, ceased altogether to be produced, their place being taken by graceful specimens, technically flawless, and carrying designs not only free from stiffness, but also executed in colours at once rich and soft. This school may be subdivided, Kiōto representing one branch, Nagoya, Tōkyō and Yokohama the other. In the products of the Kiōto branch the decoration generally covered the whole surface of the piece; in the products of the other branch the artist aimed rather at pictorial effect, placing the design in a monochromatic field of low tone. It is plain that such a method as the latter implies great command of coloured pastes, and, indeed, no feature of the manufacture is more conspicuous than the progress made during the period 1880-1900 in compounding and firing vitrifiable enamels. Many excellent examples of cloisonné enamel have been produced by each branch of this school. There has been nothing like them in any other country, and they stand at an immeasurable distance above the works of the early Owari school represented by Kaji Tsunekichi and his pupils and colleagues.

Cloisonless Enamels.

The second of the modern schools is headed by Namikawa Sosuke of Tōkyō. It is an easily traced outgrowth of the second branch of the first school just described, for one can readily understand that from placing the decorative design in a monochromatic field of low tone, which is essentially a pictorial method, development would proceed in the direction of concealing the mechanics of the art in order to enhance the pictorial effect. Thus arose the so-called "cloisonless enamels" (*musenjippō*). They are not always without cloisons. The design is generally framed at the outset with a ribbon of thin metal, precisely after the manner of ordinary cloisonné ware. But as the work proceeds the cloisons are hidden—unless their presence is necessary to give emphasis to the design—and the final result is a picture in vitrified enamels.

Monochromatic Enamels.

The characteristic productions of the third among the modern schools are monochromatic and translucid enamels. All students of the ceramic art know that the monochrome porcelains of China owe their beauty to the fact that the colour is in the glaze, not under it. The ceramist finds no difficulty in applying a uniform coat of pigment to porcelain biscuit, and covering the whole with a diaphanous glaze. The colour is fixed and the glaze set by secondary firing at a lower temperature than that necessary for hardening the *pâte*. Such porcelains, however, lack the velvet-like softness and depth of tone so justly prized in the genuine monochrome, where the glaze itself contains the colouring matter, *pâte* and glaze being fired simultaneously at the same high temperature. It is apparent that a vitrified enamel may be made to perform, in part at any rate, the function of a porcelain glaze. Acting upon that theory, the experts of Tōkyō and Nagoya have produced many very beautiful specimens of monochrome enamel—yellow (canary or straw), *rose du Barry*, liquid-dawn, red, aubergine purple, green (grass or leaf), dove-grey and lapis lazuli blue. The pieces do not quite reach the level of Chinese monochrome porcelains, but their inferiority is not marked. The artist's great difficulty is to hide the metal base completely. A monochrome loses much of its attractiveness when the colour merges into a metal rim, or when the interior of a vase is covered with crude unpolished paste. But to spread and fix the enamel so that neither at the rim nor in the interior shall there be any break of continuity, or any indication that the base is copper, not porcelain, demands quite exceptional skill.

Translucid Enamel.

The translucid enamels of the modern school are generally associated with decorative bases. In other words, a suitable design is chiselled in the metal base so as to be visible through the diaphanous enamel. Very beautiful effects of broken and softened lights, combined with depth and delicacy of colour, are thus obtained. But the decorative designs which lend themselves to such a purpose are not numerous. A gold base deeply chiselled in wave-diaper and overrun with a paste of aubergine purple is the most pleasing. A still higher achievement is to apply to the chiselled base designs executed in coloured enamels, finally covering the whole with translucid paste. Admirable results are thus produced; as when, through a medium of cerulean blue, bright goldfish and blue-backed carp appear swimming in silvery waves, or brilliantly plumaged birds seem to soar among fleecy clouds. The artists of this school show also much skill in using enamels for the purposes of subordinate decoration —suspending enamelled butterflies, birds or floral sprays, among the reticulations of a silver vase chiselled à jour; or filling with translucid enamels parts of a decorative scheme sculptured in iron, silver, gold or shakudo.

V.—Economic Conditions

Communications.—From the conditions actually existing in the 8th century after the Christian era the first compilers of Japanese history inferred the conditions which might have existed in the 7th century before that era. One of their inferences was that, in the early days, communication was by water only, and that not until 549 B.C. did the most populous region of the empire—the west coast—come into possession of public roads. Six

Roads and

Posts in Early Times.

hundred years later, the local satraps are represented as having received instructions to build regular highways, and in the 3rd century the massing of troops for an over-sea expedition invested roads with new value. Nothing is yet heard, however, about posts. These evidences of civilization did not make their appearance until the first great era of Japanese reform, the Taika period (645-650), when stations were established along the principal highways, provision was made of post-horses, and a system of bells and checks was devised for distinguishing official carriers. In those days ordinary travellers were required to carry passports, nor had they any share in the benefits of the official organization, which was entirely under the control of the minister of war. Great difficulties attended the movements of private persons. Even the task of transmitting to the central government provincial taxes paid in kind had to be discharged by specially organized parties, and this journey from the north-eastern districts to the capital generally occupied three months. At the close of the 7th century the emperor Mommu is said to have enacted a law that wealthy persons living near the highways must supply rice to travellers, and in 745 an empress (Koken) directed that a stock of medical necessaries must be kept at the postal stations. Among the benevolent acts attributed to renowned Buddhist priests posterity specially remembers their efforts to encourage the building of roads and bridges. The great emperor Kwammu (782-806) was constrained to devote a space of five years to the reorganization of the whole system of post-stations. Owing to the anarchy which prevailed during the 10th, 11th and 12th centuries, facilities of communication disappeared almost entirely, even for men of rank a long journey involved danger of starvation or fatal exposure, and the pains and perils of travel became a household word among the people.

Yoritomo, the founder of feudalism at the close of the 12th century, was too great a statesman to underestimate the value of roads and posts. The highway between his stronghold, Kamakura, and the imperial city, Kiōto, began in his time to develop features which ultimately entitled it to be called one of the finest roads in the world. But after Yoritomo's death the land became once more an armed camp, in which the rival barons discouraged travel beyond the limits of their own domains. Not until the Tokugawa family obtained military control of the whole empire (1603), and, fixing its capital at Yedo, required the feudal chiefs to reside there every second year, did the problem of roads and post-stations force itself once more on official attention. Regulations were now strictly enforced, fixing the number of horses and carriers available at each station, the loads to be carried by them and their charges, as well as the transport services that each feudal chief was entitled to demand and the fees he had to pay in return. Tolerable hostelries now came into existence, but they furnished only shelter, fuel and the coarsest kind of food. By degrees, however, the progresses of the feudal chiefs to and from Yedo, which at first were simple and economical, developed features of competitive magnificence, and the importance of good roads and suitable accommodation received increased attention. This found expression in practice in 1663. A system more elaborate than anything antecedent was then introduced under the name of "flying transport." Three kinds of couriers operated. The first class were in the direct employment of the shōgunate. They carried official messages between Yedo and Osaka—a distance of 348 miles—in four days by means of a well organized system of relays. The second class maintained communications between the fiefs and the Tokugawa court as well as their own families in Yedo, for in the alternate years of a feudatory's compulsory residence in that city his family had to live there. The third class were maintained by a syndicate of 13 merchants as a private enterprise for transmitting letters between the three great cities of Kiōto, Osaka and Yedo and intervening places. This syndicate did not undertake to deliver a letter direct to an addressee. The method pursued was to expose letters and parcels at fixed places in the vicinity of their destination, leaving the addressees to discover for themselves that such things had arrived. Imperfect as this system was, it represented a great advance from the conditions in medieval times.

The nation does not seem to have appreciated the deficiencies of the syndicate's service, supplemented as it was by a network of waterways which greatly increased the facilities for transport. After the cessation of civil wars under the sway of the Tokugawa, the building and improvement of roads went on steadily. It is not too much to say, indeed, that when Japan opened her doors to foreigners in the middle of the 19th century, she possessed a system of roads some of which bore striking testimony to her medieval greatness. The most remarkable was the Tōkaidō (eastern-seaway), so called because it ran eastward along the coast from Kiōto. This great highway, 345 m. long, connected Osaka and Kiōto with Yedo. The date of its construction is not recorded, but it certainly underwent signal improvement in the 12th and 13th centuries, and during the two and a half centuries of Tokugawa sway in Yedo. A wide, well-made and well-kept avenue, it was lined throughout the greater part of its length by giant pine-trees, rendering it the most picturesque highway in the world. Iyeyasu, the founder of the Tokugawa dynasty of shōguns, directed that his body should be interred at Nikkō, a place of exceptional beauty, consecrated eight hundred years previously. This meant an extension of the Tōkaidō (under a different name) nearly a hundred miles northward, for the magnificent shrines erected then at Nikkō and the periodical ceremonies thenceforth performed there demanded a correspondingly fine avenue of approach. The original Tōkaidō was taken for model, and Yedo and Nikkō were joined by a highway flanked by rows of cryptomeria. Second only to the Tōkaidō is the Nakasendō (mid-mountain road), which also was constructed to join Kiōto with Yedo, but follows an inland course through the provinces of Yamashiro, Omi, Mino, Shinshū, Kōtzuke and Musashi. Its length is 340 m., and though not flanked by trees or possessing so good a bed as the Tōkaidō, it is nevertheless a sufficiently remarkable highway. A third road, the Oshūkaidō runs northward from Yedo (now Tōkyō) to Aomori on the extreme north of the main island, a distance of 445 m., and several lesser highways give access to other regions.

The Tōkaidō.

The Nakasendoō.

The Oshūkaido.

Modern Superintendence of Roads.

The question of road superintendence received early attention from the government of the restoration. At a general assembly of local prefects held at Tōkyō in June 1875 it was decided to classify the different roads throughout the empire, and to determine the several sources from which the sums necessary for their maintenance and repair should be drawn. After several days' discussion all roads were eventually ranged under one or other of the following heads:—

I. National roads, consisting of—

Class 1. Roads leading from Tōkyō to the various treaty ports.

Class 2. Roads leading from Tōkyō to the ancestral shrines in the province of Isē, and also to the cities or to military stations.

Class 3. Roads leading from Tōkyō to the prefectural offices, and those forming the lines of connexion between cities and military stations.

II. Prefectural roads, consisting of—

Class 1. Roads connecting different prefectures, or leading from military stations to their outposts.

Class 2. Roads connecting the head offices of cities and prefectures with their branch offices.

Class 3. Roads connecting noted localities with the chief town of such neighbourhoods, or leading to seaports convenient of access.

III. Village roads, consisting of—

Class 1. Roads passing through several localities in succession, or merely leading from one locality to another.

Class 2. Roads specially constructed for the convenience of irrigation, pasturage, mines, factories, &c., in accordance

with measures determined by the people of the locality.

Class 3. Roads constructed for the benefit of Shintō shrines, Buddhist temples, or to facilitate the cultivation of rice-fields and arable land.

Of the above three headings, it was decided that all national roads should be maintained at the national expense, the regulations for their up-keep being entrusted to the care of the prefectures along the line of route, and the cost incurred being paid from the Imperial treasury. Prefectural roads are maintained by a joint contribution from the government and from the particular prefecture, each paying one-half of the sum needed. Village roads, being for the convenience of local districts alone, are maintained at the expense of such districts under the general supervision of the corresponding prefecture. The width of national roads was determined at 42 ft. for class 1, 36 ft. for class 2, and 30 ft. for class 3; the prefectural roads were to be from 24 to 30 ft., and the dimensions of the village roads were optional, according to the necessity of the case.

Vehicles.

The vehicles chiefly employed in ante-Meiji days were ox-carriages, *norimono*, *kago* and carts drawn by hand. Ox-carriages were used only by people of the highest rank. They were often constructed of rich lacquer; the curtains suspended in front were of the finest bamboo workmanship, with thick cords and tassels of plaited silk, and the draught animal, an ox of handsome proportions, was brilliantly caparisoned. The care and expense lavished upon these highly ornate structures would have been deemed extravagant even in medieval Europe. They have passed entirely out of use, and are now to be seen in museums only, but the type still exists in China. The norimono resembled a miniature house slung by its roof-ridge from a massive pole which projected at either end sufficiently to admit the shoulders of a carrier. It, too, was frequently of very ornamental nature and served to carry aristocrats or officials of high position. The kago was the humblest of all conveyances recognized as usable by the upper classes. It was an open palanquin, V-shaped in cross section, slung from a pole which rested on the shoulders of two bearers. Extraordinary skill and endurance were shown by the men who carried the norimono and the kago, but none the less these vehicles were both profoundly uncomfortable. They have now been relegated to the warehouses of undertakers, where they serve as bearers for folks too poor to employ catafalques, their place on the roads and in the streets having been completely taken by the *jinrikisha*, a two-wheeled vehicle pulled by one or two men who think nothing of running 20 m. at the rate of 6 m. an hour. The jinrikisha was devised by a Japanese in 1870, and since then it has come into use throughout the whole of Asia eastward of the Suez Canal. Luggage, of course, could not be carried by norimono or kago. It was necessary to have recourse to packmen, pack-horses or baggage-carts drawn by men or horses. All these still exist and are as useful as ever within certain limits. In the cities and towns horses used as beasts of burden are now shod with iron, but in rural or mountainous districts straw shoes are substituted, a device which enables the animals to traverse rocky or precipitous roads with safety.

The Jinrikisha.

Railways.—It is easy to understand that an enterprise like railway construction, requiring a great outlay of capital with returns long delayed, did not at first commend itself to the Japanese, who were almost entirely ignorant of co-operation as a factor of business organization. Moreover, long habituated to snail-like modes of travel, the people did not rapidly appreciate the celerity of the locomotive. Neither the ox-cart, the norimono, nor the kago covered a daily distance of over 20 m. on the average, and the packhorse was even slower. Amid such conditions the idea of railways would have been slow to germinate had not a catastrophe furnished some impetus. In 1869 a rice-famine occurred in the southern island, Kiūshiū, and while the cereal was procurable abundantly in the northern provinces, people in the south perished of hunger owing to lack of transport facilities. Sir Harry Parkes, British representative in Tōkyō, seized this occasion to urge the construction of railways. Ito and Okuma, then influential members of the government, at once recognized the wisdom of his advice. Arrangements were made for a loan of a million sterling in London on the security of the customs revenue, and English engineers were engaged to lay a line between Tōkyō and Yokohama (18 m.). Vehement voices of opposition were at once raised in private and official circles alike, all persons engaged in transport business imagined themselves threatened with ruin, and conservative patriots detected loss of national independence in a foreign loan. So fierce was the antagonism that the military authorities refused to permit operations of survey in the southern suburb of Tōkyō, and the road had to be laid on an embankment constructed in the sea. Ito and Okuma, however, never flinched, and they were ably supported by Marquis M. Inouye and M. Mayejima. The latter published, in 1870, the first Japanese work on railways, advocating the building of lines from Tōkyō to Kiōto and Osaka; the former, appointed superintendent of the lines, held that post for 30 years, and is justly spoken of as “the father of Japanese railways.”

September 1872 saw the first official opening of a railway (the Tōkyō-Yokohama line) in Japan, the ceremony being performed by the emperor himself, a measure which effectually silenced all further opposition. Eight years from the time of turning the first sod saw 71 m. of road open to traffic, the northern section being that between Tōkyō and Yokohama, and the southern that between Kiōto and Kobe. A period of interruption now ensued, owing to domestic troubles and foreign complications, and when, in 1878, the government was able to devote attention once again to railway problems, it found the treasury empty. Then for the first time a public works loan was floated in the home market, and about £300,000 of the total thus obtained passed into the hands of the railway bureau, which at once undertook the building of a road from Kiōto to the shore of Lake Biwa, a work memorable as the first line built in Japan without foreign assistance.[5] During all this time private enterprise had remained wholly inactive in the matter of railways, and it became a matter of importance to rouse the people from this apathetic attitude. For the ordinary process of organizing a joint-stock company and raising share-capital the nation was not yet prepared. But shortly after the abolition of feudalism there had come into the possession of the former feudatories state loan-bonds amounting to some 18 millions sterling, which represented the sum granted by the treasury in commutation of the revenues formerly accruing to these men from their fiefs. Already events had shown that the feudatories, quite devoid of business experience, were not unlikely to dispose of these bonds and devote the proceeds to unsound enterprises. Prince Iwakura, one of the leaders of the Meiji statesmen, persuaded the feudatories to employ a part of the bonds as capital for railway construction, and thus the first private railway company was formed in Japan under the name *Nippon tetsudo kaisha* (Japan railway company), the treasury guaranteeing 8% on the paid-up capital for a period of 15 years. Some time elapsed before this example found followers, but ultimately a programme was elaborated and carried out having for its basis a grand trunk line extending the whole length of the main island from Aomori on the north to Shimonoseki on the south, a distance of 1153 m.; and a continuation of the same line throughout the length of the southern island of Kiūshiū, from Moji on the north—which lies on the opposite side of the strait from Shimonoseki—to Kagoshima on the south, a distance of 232¾ m.; as well as a line from Moji to Nagasaki, a distance of 163½ m. Of this main road the state undertook to build the central section (376 m.), between Tōkyō and Kōbe (via Kiōto); the Japan railway company undertook the portion (457 m.) northward of Tōkyō to Aomori; the Sanyō railway company undertook the portion (320 m.) southward of Tōkyō to Shimonoseki; and the Kiūshiū railway company undertook the lines in Kiūshiū. The whole line is now in operation. The first project was to carry the Tōkyō-Kiōto line through the interior of the island so as to secure it against enterprises on the part of a maritime enemy. Such engineering difficulties presented themselves, however, that the coast route was ultimately chosen, and though the line through the interior was subsequently constructed, strategical considerations were not allowed completely to govern its direction.

When this building of railways began in Japan, much discussion was taking place in England and India as to the relative advantages of the wide and narrow gauges, and so strongly did the arguments in favour of the latter appeal to the English advisers of the Japanese government that the metre gauge was chosen. Some fitful efforts made in later years to change the system proved unsuccessful. The lines are single, for the most part; and as the embankments, the cuttings,

the culverts and the bridge-piers have not been constructed for a double line, any change now would be very costly. The average speed of passenger trains in Japan is 18 m. an hour, the corresponding figure over the metre-gauge roads in India being 16 m., and the figure for English parliamentary trains from 19 to 28 m. British engineers surveyed the routes for the first lines and superintended the work of construction, but within a few years the Japanese were able to dispense with foreign aid altogether, both in building and operating their railways. They also construct carriages, wagons and locomotives, and they may therefore be said to have become entirely independent in the matter of railways, for a government iron-foundry at Wakamatsu in Kiūshiū is able to manufacture steel rails.

The total length of lines open for traffic at the end of March 1906 was 4746 m., 1470 m. having been built by the state and 3276 by private companies; the former at a cost of 16 millions sterling for construction and equipment, and the latter at a cost of 25 millions. Thus the expenditure by the state averaged £10,884 per mile, and that by private companies, £7631. This difference is explained by the facts that the state lines having been the pioneers, portions of them were built before experience had indicated cheap methods; that a very large and costly foreign staff was employed on these roads in the early days, whereas no such item appeared in the accounts of private lines; that extensive works for the building of locomotives and rolling stock are connected with the government's roads, and that it fell to the lot of the state to undertake lines in districts presenting exceptional engineering difficulties, such districts being naturally avoided by private companies. The gross earnings of all the lines during the fiscal year 1905-1906 were 7 millions sterling, approximately, and the gross expenses (including the payment of interest on loans and debentures) were under 3½ millions, so that there remained a net profit of 3½ millions, being at the rate of a little over 8½% on the invested capital. The facts that the outlays averaged less than 47% of the gross income, and that accidents and irregularities are not numerous, prove that Japanese management in this kind of enterprise is efficient.

When the fiscal year 1906-1907 opened, the number of private companies was no less than 36, owning and operating 3276 m. of railway. To say that this represented an average of 91 m. per company is to convey an over-favourable idea, for, as a matter of fact, 15 of the companies averaged less than 24 m. Anything like efficient co-operation was impossible in such circumstances, and constant complaints were heard about delays in transit and undue expense. The defects of divided ownership had long suggested the expediency of nationalization, but not until 1906 could the diet be induced to give its consent. On March 31 of that year, a railway nationalization law was promulgated. It enacted that, within a period of 10 years from 1906 to 1915, the state should purchase the 17 principal private roads, which had a length of 2812 m., and whose cost of construction and equipment had been 23½ millions sterling. The original scheme included 15 other railways, with an aggregate mileage of only 353 m.; but these were eliminated as being lines of local interest only. The actual purchase price of the 17 lines was calculated at 43 millions sterling (about double their cost price), on the following basis: (*a*) An amount equal to 20 times the sum obtained by multiplying the cost of construction at the date of purchase by the average ratio of the profit to the cost of construction during the six business terms of the company from the second half-year of 1902 to the first half-year of 1905. (*b*) The amount of the actual cost of stored articles converted according to current prices thereof into public loan-bonds at face value, except in the case of articles which had been purchased with borrowed money. The government agreed to hand over the purchase money within 5 years from the date of the acquisition of the lines, in public loan-bonds bearing 5% interest calculated at their face value; the bonds to be redeemed out of the net profits accruing from the purchased railways. It was calculated that this redemption would be effected in a period of 32 years, after which the annual profit accruing to the state from the lines would be 5½ millions sterling. But the nationalization scheme, though apparently the only effective method of linking together and co-ordinating an excessively subdivided system of lines, has proved a source of considerable financial embarrassment. For when the state constituted itself virtually the sole owner of railways, it necessarily assumed responsibility for extending them so that they should suffice to meet the wants of a nation numbering some 50 millions. Such extension could be effected only by borrowing money. Now the government was pledged by the diet in 1907 to an expenditure of 11½ millions (spread over 8 years) for extending the old state system of roads, and an expenditure of 6¼ millions (spread over 12 years) for improving them. But from the beginning of that year, a period of extreme commercial and financial depression set in, and the treasury had to postpone all recourse to loans for whatever purpose, so that railway progress was completely checked in the field alike of the original and the acquired state lines. Moreover, all securities underwent such sharp depreciation that, on the one hand, the government hesitated to hand over the bonds representing the purchase-price of the railways, lest such an addition to the volume of stocks should cause further depreciation, and, on the other, the former owners of the nationalized lines found the character of their bargain greatly changed. In these circumstances the government decided to take a strong step, namely, to place the whole of the railways owned by it—the original state lines as well as those nationalized—in an account independent of the regular budget, and to devote their entire profits to works of extension and improvement, supplementing the amount with loans from the treasury when necessary.

Nationalization of Private Railways.

In the sequel of the war of 1904-5 Japan, with China's consent, acquired from Russia the lease of the portion of the South-Manchuria railway (see Manchuria) between Kwang-cheng-tsze (Chang-chun) on the north and Tairen (Dalny), Port Arthur and Niuchwang on the south—a total length of 470 m. At the close of 1906 this road was handed over to a joint-stock company with a capital of 20 millions sterling, the government contributing 10 millions in the form of the road and its associated properties; the public subscribing 2 millions, and the company being entitled to issue debentures to the extent of 8 millions, the principal and interest of these debentures being officially guaranteed. Four millions' worth of debentures were issued in London in 1907 and 4 millions in 1908. This company's programme is not limited to operating the railway. It also works coal-fields at Yentai and Fushun; has a line of steamers plying between Tairen and Shanghai; and engages in enterprises of electricity, warehousing and the management of houses and lands within zones 50 *li* (17 m.) wide on either side of the line. The government guarantees 6% interest on the capital paid up by the general public.

South Manchuria Railway.

Not until 1905 did Japan come into possession of an electric railway. It was a short line of 8 m., built in Kiōto for the purposes of a domestic exhibition held in that city. Thenceforth this class of enterprise grew steadily in favour, so that, in 1907, there were 16 companies with an aggregate capital of 8 millions sterling, having 165 m. open to traffic and 77 m. under construction. Fifteen other companies with an aggregate capital of 3 millions had also obtained charters. The principal of these is the Tōkyō railway company, with a subscribed capital of 6 millions (3½ paid up), 90½ m. of line open and 149 m. under construction. In 1907 it carried 153 million passengers, and its net earnings were £300,000.

Electric Railways.

The traditional story of prehistoric Japan indicates that the first recorded emperor was an over-sea invader, whose followers must therefore have possessed some knowledge of ship-building and navigation. But in what kind of craft they sailed and how they handled them, there is nothing to show clearly. Nine centuries later, but still 500 years before the era of surviving written annals, an empress is said to have invaded Korea, embarking her forces at Kobe (then called Takekura) in 500 vessels. In the middle of the 6th century we read of a general named Abe-no-hirafu who led a flotilla up the Amur river to the invasion of Manchuria (then called Shukushin). All these things show that the Japanese of the earliest era navigated the high sea with some skill, and at later dates down to medieval times they are found occasionally sending forces to Korea and constantly visiting China in vessels which seem to have experienced no difficulty in making the voyage. The 16th century was a period of maritime activity so marked that, had not artificial checks been applied, the Japanese, in all probability, would have obtained partial command of Far-Eastern waters. They invaded Korea; their corsairs harried the coasts of China; two hundred of their vessels, sailing under authority of the Taikō's vermilion seal, visited Siam, Luzon, Cochin China and Annam, and they built ships in European style which crossed the Pacific to Acapulco. But this spirit of adventure was chilled at the

Maritime Communications.

close of the 16th century and early in the 17th, when events connected with the propagation of Christianity taught the Japanese to believe that national safety could not be secured without international isolation. In 1638 the ports were closed to all foreign ships except those flying the flag of Holland or of China, and a strictly enforced edict forbade the building of any vessel having a capacity of more than 500 *koku* (150 tons) or constructed for purposes of ocean navigation. Thenceforth, with rare exceptions, Japanese craft confined themselves to the coastwise trade. Ocean-going enterprise ceased altogether.

Things remained thus until the middle of the 19th century, when a growing knowledge of the conditions existing in the West warned the Tokugawa administration that continued isolation would be suicidal. In 1853 the law prohibiting the construction of sea-going ships was revoked and the Yedo government built at Uraga a sailing vessel of European type aptly called the "Phoenix" ("Howo Maru"). Just 243 years had elapsed since the founder of the Tokugawa dynasty constructed Japan's first ship after a foreign model, with the aid of an English pilot, Will Adams. In 1853 Commodore M. C. Perry made his appearance, and thenceforth everything conspired to push Japan along the new path. The Dutch, who had been proximately responsible for the adoption of the seclusion policy in the 17th century, now took a prominent part in promoting a liberal view. They sent to the Tokugawa a present of a man-of-war and urged the vital necessity of equipping the country with a navy. Then followed the establishment of a naval college at Tsukiji in Yedo, the building of iron-works at Nagasaki, and the construction at Yokosuka of a dockyard destined to become one of the greatest enterprises of its kind in the East. This last undertaking bore witness to the patriotism of the Tokugawa rulers, for they resolutely carried it to completion during the throes of a revolution which involved the downfall of their dynasty. Their encouragement of maritime enterprise had borne fruit, for when, in 1867, they restored the administration to the Imperial court, 44 ocean-going ships were found among their possessions and 94 were in the hands of the feudatories, a steamer and 20 sailing vessels having been constructed in Japan and the rest purchased abroad.

If the Tokugawa had been energetic in this respect, the new government was still more so. It caused the various maritime carriers to amalgamate into one association called the *Nippon-koku yubin jokisen kaisha* (Mail SS. Company of Japan), to which were transferred, free of charge, the steamers, previously the property of the Tokugawa or the feudatories, and a substantial subsidy was granted by the state. This, the first steamship company ever organized in Japan, remained in existence only four years. Defective management and incapacity to compete with foreign-owned vessels plying between the open ports caused its downfall (1875). Already, however, an independent company had appeared upon the scene. Organized and controlled by a man (Iwasaki Yataro) of exceptional enterprise and business faculty, this *mitsubishi kaisha* (three lozenge company, so called from the design on its flag), working with steamers chartered from the former feudatory of Tosa, to which clan Iwasaki belonged, proved a success from the outset, and grew with each vicissitude of the state. For when (1874) the Meiji government's first complications with a foreign country necessitated the despatch of a military expedition to Formosa, the administration had to purchase 63 foreign steamers for transport purposes, and these were subsequently transferred to the mitsubishi company together with all the vessels (17) hitherto in the possession of the Mail SS. Company, the Treasury further granting to the mitsubishi a subsidy of £50,000 annually. Shortly afterwards it was decided to purchase a service maintained by the Pacific Mail SS. Company with 4 steamers between Yokohama and Shanghai, and money for the purpose having been lent by the state to the mitsubishi, Japan's first line of steamers to a foreign country was firmly established, just 20 years after the law interdicting the construction of ocean-going vessels had been rescinded.

The next memorable event in this chapter of history occurred in 1877, when the Satsuma clan, eminently the most powerful and most warlike among all the former feudatories, took the field in open rebellion. For a time the fate of the government hung in the balance, and only by a flanking movement over-sea was the rebellion crushed. This strategy compelled the purchase of 10 foreign steamers, and these too were subsequently handed over to the mitsubishi company, which, in 1880, found itself possessed of 32 ships aggregating 25,600 tons, whereas all the other vessels of foreign type in the country totalled only 27 with a tonnage of 6500. It had now become apparent that the country could not hope to meet emergencies which might at any moment arise, especially in connexion with Korean affairs, unless the development of the mercantile marine proceeded more rapidly. Therefore in 1881 the formation of a new company was officially promoted. It had the name of the *kyōdō unyu kaisha* (Union Transport Company); its capital was about a million sterling; it received a large subsidy from the state, and its chief purpose was to provide vessels for military uses and as commerce-carriers. Japan had now definitely embraced the policy of entrusting to private companies rather than to the state the duty of acquiring a fleet of vessels capable of serving as transports or auxiliary cruisers in time of war. But there was now seen the curious spectacle of two companies (the Mitsubishi and the Union Transport) competing in the same waters and both subsidized by the treasury. After this had gone on for four years, the two companies were amalgamated (1885) into the *Nippon yusen kaisha* (Japan Mail SS. Company) with a capital of £1,100,000 and an annual subsidy of £88,000, fixed on the basis of 8% of the capital. Another company had come into existence a few months earlier. Its fleet consisted of 100 small steamers, totalling 10,000 tons, which had hitherto been competing in the Inland Sea.

Japan now possessed a substantial mercantile marine, the rate of whose development is indicated by the following figures:—

Year.	Steamers.		Sailing Vessels.		Totals.	
	Number.	Tons.	Number.	Tons.	Number.	Tons.
1870	35	15,498	11	2,454	46	17,952
1892	642	122,300	780	46,065	1,422	168,365

Nevertheless, only 23% of the exports and imports was transported in Japanese bottoms in 1892, whereas foreign steamers took 77%. This discrepancy was one of the subjects discussed in the first session of the diet, but a bill presented by the government for encouraging navigation failed to obtain parliamentary consent, and in 1893 the Japan Mail SS. Company, without waiting for state assistance, opened a regular service to Bombay mainly for the purpose of carrying raw cotton from India to supply the spinning industry which had now assumed great importance in Japan. Thus the rising sun flag flew for the first time outside Far-Eastern waters. Almost immediately after the establishment of this line, Japan had to engage in war with China, which entailed the despatch of some two hundred thousand men to the neighbouring continent and their maintenance there for more than a year. All the country's available shipping resources did not suffice for this task. Additional vessels had to be purchased or chartered, and thus, by the beginning of 1896, the mercantile marine of Japan had grown to 899 steamers of 373,588 tons, while the sailing vessels had diminished to 644 of 44,000 tons.

In 1897 there occurred an event destined to exercise a potent influence on the fortunes not only of Japan herself but also of her mercantile marine. No sooner had she exchanged with China ratifications of a treaty of peace which seemed to prelude a long period of tranquillity, than Russia, Germany and France ordered her to restore all the continental territory ceded to her by China. Japan then recognized that her hope of peace was delusive, and that she must be prepared to engage in a struggle incomparably more serious than the one from which she had just emerged. Determined that when the crucial moment came she should not be found without ample means for transporting her armies, the government, under the leadership of Prince Ito and with the consent of the diet, enacted, in March 1896 laws liberally encouraging ship-building and navigation. Under the navigation law "any Japanese subject or any commercial company whose partners or shareholders were all Japanese subjects, engaged in carrying passengers and cargo between Japan

and foreign countries or between foreign ports, in their own vessels, which must be of at least 1000 tons and registered in the shipping list of the Empire, became entitled to subsidies proportionate to the distance run and the tonnage of the vessels"; and under the ship-building law, bounties were granted for the construction of iron or steel vessels of not less than 700 tons gross by any Japanese subject or any commercial company whose partners and shareholders were all Japanese. The effect of this legislation was marked. In the period of six years ended 1902, no less than 835 vessels of 455,000 tons were added to the mercantile marine, and the treasury found itself paying encouragement money which totalled six hundred thousand pounds annually. Ship-building underwent remarkable development. Thus, while in 1870 only 2 steamers aggregating 57 tons had been constructed in Japanese yards, 53 steamers totalling 5380 tons and 193 sailing vessels of 17,873 tons were launched in 1900. By the year 1907 Japan had 216 private ship yards and 42 private docks,[6] and while the government yards were able to build first-class line-of-battle ships of the largest size, the private docks were turning out steamers of 9000 tons burden. When war broke out with Russia in 1904, Japan had 567,000 tons of steam shipping, but that stupendous struggle obliged her to materially augment even this great total. In operations connected with the war she lost 71,000 tons, but on the other hand, she built 27,000 tons at home and bought 177,000 abroad, so that the net increase to her mercantile fleet of steamers was 133,000 tons. The following table shows the growth of her marine during the ten years ending 1907:—

	Steamers.		Sailing Vessels.		Totals.	
Year.	Number.	Gross Tonnage.	Number.	Gross Tonnage.	Number.	Gross Tonnage.
1898	1130	477,430	1914	170,194	3044	648,324
1899	1221	510,007	3322	286,923	4543	467,930
1900	1329	543,365	3850	320,572	5179	863,937
1901	1395	583,532	4026	336,528	5471	920,060
1902	1441	610,445	3907	336,154	5348	946,600
1903	1570	663,220	3934	328,953	5504	992,173
1904	1815	798,240	3940	329,125	5755	1,127,365
1905	1988	939,749	4132	336,571	6170	1,276,320
1906	2103	1,041,569	4547	353,356	6700	1,395,925
1907	2139	1,115,880	4728	365,559	6867	1,481,439

With regard to the development of ship-building in Japanese yards the following figures convey information:—

Numbers of Vessels Built in Japan and Numbers Purchased Abroad

	Built in Japan.		Purchased abroad.	
Year.	Steamers.	Sailing Vessels.	Steamers.	Sailing Vessels.
1898	479	1301	194	9
1899	554	2771	199	12
1900	653	3302	206	7
1901	754	3559	215	6
1902	813	3585	220	6
1903	855	5304	233	8
1904	947	3324	277	8
1905	1028	3508	357	11
1906	1100	3859	387	11
1907	1150	4033	419	12

In the building of iron and steel ships the Japanese are obliged to import much of the material used, but a large steel-foundry has been established under government auspices at Wakamatsu in Kiūshiū, that position having been chosen on account of comparative proximity to the Taiya iron mine in China, where the greater part of the iron ore used for the foundry is procured.

Seamen.

Simultaneously with the growth of the mercantile marine there has been a marked development in the number of licensed mariners; that is to say, seamen registered by the government as having passed the examination prescribed by law. In 1876 there were only 4 Japanese subjects who satisfied that definition as against 74 duly qualified foreigners holding responsible positions. In 1895 the numbers were 4135 Japanese and 835 foreigners, and ten years later the corresponding figures were 16,886 and 349 respectively. In 1904 the ordinary seamen of the mercantile marine totalled 202,710.

Education of Mariners.

There are in Japan various institutions where the theory and practice of navigation are taught. The principal of these is the *Tōkyō shōsen gakkō* (Tōkyō mercantile marine college, established in 1875), where some 600 of the men now serving as officers arid engineers have graduated. Well equipped colleges exist also in seven other places, all having been established with official co-operation. Mention must be made of a mariners' assistance association (*kaiin ekizai-kai*, established in 1800) which acts as a kind of agency for supplying mariners to shipowners, and of a distressed mariners' relief association (*suinan kyūsai-kai*) which has succoured about a hundred thousand seamen since its establishment in 1899.

Maritime Administration.

The duty of overseeing all matters relating to the maritime carrying trade devolves on the department of state for communications, and is delegated by the latter to one of its bureaus (the *Kwansen-kyoku*, or ships superintendence bureau), which, again, is divided into three sections: one for inspecting vessels, one for examining mariners, and one for the general control of all shipping in Japanese waters. For the better discharge of its duties this bureau parcels out the empire into 4 districts, having their headquarters at Tōkyō, Osaka, Nagasaki and Hakodate; and these four districts are in turn subdivided into 18 sections, each having an office of marine affairs (*kwaiji-kyoku*).

Competition between Japanese and Foreign Ships.

Competition between Japanese and foreign ships in the carriage of the country's over-sea trade soon began to assume appreciable dimensions. Thus, whereas in 1891 the portion carried in Japanese bottoms was only 1½ millions sterling against 12½ millions carried by foreign vessels, the corresponding figures in 1902 were 20½ millions against 32¼ millions. In other words, Japanese steamers carried only 11% of the total trade in 1891, but their share rose to 39% in 1902. The prospect suggested by this record caused some uneasiness, which was not allayed by observing that while the tonnage of Japanese vessels in Chinese ports was only 2% in 1896 as compared with foreign vessels, the former figure grew to 16% in 1902; while in Korean ports Japanese steamers almost monopolized the carrying trade, leaving only 18% to their foreign rivals, and even in Hong-Kong the tonnage of Japanese ships increased from 3% in 1896 to 13% in 1900. In 1898 Japan stood eleventh on the list of the thirteen principal maritime countries of the world, but in 1907 she rose to the fifth place. Her principal company, the Nippon yusen kaisha, though established as lately as 1885, now ranks ninth in point of tonnage among the 21 leading maritime companies of the world. This company was able to supply 55 out of a total fleet of 207 transports furnished by all the steamship companies of Japan for military and naval purposes during the war with Russia in 1904-5. It may be noted in conclusion that the development of Japan's steam-shipping

during the five decades ended 1907 was as follows:—

	Tons.
At the end of 1868	17,952
At the end of 1878	63,468
At the end of 1888	197,365
At the end of 1898	648,324
At the end of 1907	1,115,880

Open Ports. There are 33 ports in Japan open as places of call for foreign steamers. Their names with the dates of their opening are as follow:—

Name.	Date of Opening.	Situation.
Yokohama	1859	Main Island.
Kobe	1868	”
Niigata	1867	”
Osaka	1899	”
Yokkaichi	”	”
Shimonoseki	”	”
Itozaki	”	”
Taketoyo	”	”
Shimizu	”	”
Tsuruga	”	”
Nanao	”	”
Fushiki	”	”
Sakai	”	”
Hamada	”	”
Miyazu	”	”
Aomori	1906	”
Nagasaki	1859	Kiūshiū.
Moji	1899	”
Hakata	”	”
Karatsu	”	”
Kuchinotsu	”	”
Misumi	”	”
Suminoye	1906	”
Izuhara	1899	Tsushima.
Sasuna	”	”
Shikami	”	”
Nafa	”	Riūkiū.
Otaru	”	Yezo.
Kushiro	”	”
Mororan	”	”
Hakodate	1865	”
Kelung	1899	Formosa.
Tamsui	”	”
Takow	”	”
Anping	”	”

Emigration.—Characteristic of the Japanese is a spirit of adventure: they readily emigrate to foreign countries if any inducement offers. A strong disposition to exclude them has displayed itself in the United States of America, in Australasia and in British Columbia, and it is evident that, since one nation cannot force its society on another at the point of the sword, this anti-Asiatic prejudice will have to be respected, though it has its origin in nothing more respectable than the jealousy of the labouring classes. One result is an increase in the number of Japanese emigrating to Korea, Manchuria and S. America. The following table shows the numbers residing at various places outside Japan in 1904 and 1906 respectively:—

Place.	Number in 1904.	Number in 1906.
China	9,417	27,126
Korea	31,093	100,000
Manchuria	—	43,823
Hong-Kong	600	756
Singapore	1,292	1,428
British India	413	530
Europe	183	697
United States of America	33,849	130,228
Canada	3,838	5,088
Mexico	456	1,294
S. America	1,496	2,500
Philippines	2,652	2,185
Hawaii	65,008	64,319
Australasia	71,129	3,274

Foreign Residents.—The number of foreigners residing in Japan and their nationalities in 1889, 1899 and 1906, respectively, were as follow:—

	1889.	1899.	1906.
Americans	899	1,296	1,650
British	1,701	2,013	2,155
Russians	63	134	211
French	335	463	540
Portuguese	108	158	165
Germans	550	532	670
Chinese	4,975	6,372	12,425

There are also small numbers of Dutch, Peruvians, Belgians, Swiss, Italians, Danes, Swedes, Austrians, Hungarians, &c. This slow growth of the foreign residents is remarkable when contrasted with the fact that the volume of the country's foreign trade, which constitutes their main business, grew in the same period from 13½ millions sterling to 92 millions.

Posts and Telegraphs.—The government of the Restoration did not wait for the complete abolition of feudalism before organizing a new system of posts in accordance with modern needs. At first, letters only were carried, but before the close of 1871 the service was extended so as to include newspapers, printed matter, books and commercial samples, while the area was extended so as to embrace all important towns between Hakodate in the northern island of Yezo and Nagasaki in the southern island of Kiūshiū. Two years later this field was closed to private enterprise, the state assuming sole charge of the business. A few years later saw Japan in possession of an organization comparable in every respect with the systems existing in Europe. In 1892 a foreign service was added. Whereas in 1871 the number of post-offices throughout the empire was only 179, it had grown to 6449 in 1907, while the mail matter sent during the latter year totalled 1254 millions (including 15 millions of parcels), and 67,000 persons were engaged in handling it. Japan labours under special difficulties for postal purposes, owing to the great number of islands included in the empire, the exceptionally mountainous nature of the country, and the wide areas covered by the cities in proportion to the number of their inhabitants. It is not surprising to find, therefore, that the means of distribution are varied. The state derives a net revenue of 5 million *yen* approximately from its postal service. It need scarcely be added that the system of postal money-orders was developed *pari passu* with that of ordinary correspondence, but in this context one interesting fact may be noted, namely, that while Japan sends abroad only some £25,000 annually to foreign countries through the post, she receives over £450,000 from her over-sea emigrants.

Postal Savings Bank.

Japan at the time of the Restoration (1867) was not entirely without experience which prepared her for the postal money-order system. Some 600 years ago the idea of the bill of exchange was born in the little town of Totsugawa (Yamato province), though it did not obtain much development before the establishment of the Tokugawa shōgunate in the 17th century. The feudal chiefs, having then to transmit large sums to Yedo for the purposes of their compulsory residence there, availed themselves of bills of exchange, and the shōgun's government, which received considerable amounts in Osaka, selected ten brokers to whom the duty of effecting the transfer of these funds was entrusted. Subsequently the 10 chosen brokers were permitted to extend their services to the general public, and a recent Japanese historian notes that Osaka thus became the birthplace of banking business in Japan. Postal money-orders were therefore easily appreciated at the time of their introduction in 1875. This was not true of the postal savings bank, however, an institution which came into existence in the same year. It was altogether a novel idea that the public at large, especially the lower sections of it, should entrust their savings to the government for safe keeping, especially as the minimum and maximum deposited at one time were fixed at such petty sums as 10 *sen* (2¼d.) and 50 *sen* (1s.), respectively. Indeed, in the circumstances, the fact that £1500 was deposited in the first year must be regarded as notable. Subsequently deposits were taken in postage stamps, and arrangements were effected for enabling depositors to pay money to distant creditors through the bank by merely stating the destination and the amount of the nearest post office. In 1908 the number of depositors in the post office savings bank was 8217, and their deposits exceeded 10 millions sterling. Thirty per cent. of the depositors belonged to the agricultural classes, 13 to the commercial and only 6 to the industrial.

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Telegraphs.

Rapid communication by means of beacons was not unknown in ancient Japan, but code-signalling by the aid of flags was not introduced until the 17th century and was probably suggested by observing the practice of foreign merchantmen. Its use, however, was peculiar. The central office stood at Osaka, between which city and many of the principal provincial towns rudely constructed towers were placed at long distances, and from one to another of these intelligence as to the market price of rice was flashed by flag-shaking, the signals being read with telescopes. The Japanese saw a telegraph for the first time in 1854, when Commodore Perry presented a set of apparatus to the shōgun, and four years later the feudal chief of Satsuma (Shimazu Nariakira) caused wires to be erected within the enclosure of his castle. The true value of electric telegraphy was first demonstrated to the Japanese in connexion with an insurrection in 1877, under the leadership of Saigo, the favourite of this same Shimazu Nariakira. Before that time, however, a line of telegraph had been put up between Tōkyō and Yokohama (18 m.) and a code of regulations had been enacted. Sudden introduction to such a mysterious product of foreign science created superstitious dread in the minds of a few of the lower orders, and occasional attempts were made at the outset to wreck the wires. In 1886 the postal and telegraph offices were amalgamated and both systems underwent large development. Whereas the length of wires at the end of the fourth year after the introduction of the system was only 53 m., and the number of messages 20,000, these figures had grown in 1907 to 95,623 and 25 millions, respectively. Several cables are included in these latter figures, the longest being that to Formosa (1229 m.). Wireless telegraphy began to come into general use in 1908, when several vessels belonging to the principal steamship companies were equipped with the apparatus. It had already been employed for some years by the army and navy, especially during the war with Russia, when the latter service installed a new system, the joint invention of Captain Tonami of the navy, Professor S. Kimura of the naval college and Mr M. Matsushiro of the department of communications. The telegraph service in Japan barely pays the cost of operating and maintenance.

Telephones.

The introduction of the telephone into Japan took place in 1877, but it served official purposes solely during 13 years, and even when (1890) it was placed at the disposal of the general public its utilities found at first few appreciators. But this apathy soon yielded to a mood of eager employment, and the resources of the government (which monopolized the enterprise) proved inadequate to satisfy public demand. Automatic telephones were ultimately set up at many places in the principal towns and along the most frequented highways. The longest distance covered was from Tōkyō to Osaka (348 m.). In 1907 Japan had 140,440 m. of telephone wires, 262 exchanges, 159 automatic telephones, and the approximate number of messages sent was 160 millions. The telephone service pays a net revenue of about £100,000 annually.

Agriculture.—The gross area of land in Japan—excluding Formosa and Sakhalin—is 89,167,880 acres, of which 53,487,022 acres represent the property of the crown, the state and the communes, the rest (35,680,868 acres) being owned by private persons. Of the grand total the arable lands represent 15,301,297 acres. With regard to the immense expanse remaining unproductive, experts calculate that if all lands inclined at less than 15° be considered cultivable, an area of 10,684,517 acres remains to be reclaimed, though whether the result would repay the cost is a question hitherto unanswered. The cultivated lands are thus classified, namely, wet fields (called also paddy fields or rice lands), 6,871,437 acres; dry fields (or upland farms), 5,741,745 acres, and others, 2,688,115 acres.

Rice.

Paddy fields are to be seen in every valley or dell where farming is practicable; they are divided into square, oblong or triangular plots by grass-grown ridges a few inches in height and on an average a foot in breadth—the rice being planted in the soft mud thus enclosed. Narrow pathways intersect these rice-valleys at intervals, and rivulets (generally flowing between low banks covered with clumps of bamboo) feed ditches cut for purposes of irrigation. The fields are generally kept under water to a depth of a few inches while the crops are young, but are drained immediately before harvesting. They are then dug up, and again flooded before the second crop is planted out. The rising grounds which skirt the rice-land are tilled by the hoe, and produce Indian corn, millet and edible

roots. The well-wooded slopes supply the peasants with timber and firewood. Thirty-six per cent. of the rice-fields yield two crops yearly. The seed is sown in small beds, and the seedlings are planted out in the fields after attaining the height of about 4 in. The finest rice is produced in the fertile plains watered by the Tone-gawa in the province of Shimōsa, but the grain of Kaga and of the two central provinces of Settsu and Harima is also very good.

Sake.

Not only does rice form the chief food of the Japanese but also the national beverage, called sake, is brewed from it. In colour the best sake resembles very pale sherry; the taste is rather acid. None but the finest grain is used in its manufacture. Of sake there are many varieties, from the best quality down to *shiro-zake* or "white sake," and the turbid sort, drunk only in the poorer districts, known as *nigori-zake*; there is also a sweet sort, called *mirin*.

The various cereal and other crops cultivated in Japan, the areas devoted to them and the annual production are shown in the following table:—

	1898. Acres.	1902. Acres.	1906. Acres.
Rice	7,044,060	7,117,990	7,246,982
Barley	1,649,240	1,613,270	1,674,595
Rye	1,703,410	1,688,635	1,752,095
Wheat	1,164,020	1,210,435	1,107,967
Millet	693,812	652,492	594,280
Beans	1,503,395	1,488,600	1,478,345
Buckwheat	450,100	414,375	402,575
Rape-seed	377,070	392,612	352,807
Potatoes	92,297	105,350	140,197
Sweet Potatoes	668,130	693,427	717,620
Cotton	100,720	51,750	24,165
Hemp	62,970	42,227	34,845
Indigo (leaf)	122,180	92,982	40,910

	1903.	1905.	1906.
Sugar Cane	41,750	43,308	45,087

It is observable that no marked increase is taking place in the area under cultivation, and that the business of growing cotton, hemp and indigo is gradually diminishing, these staples being supplied from abroad. In Germany and Italy the annual additions made to the arable area average 8% whereas in Japan the figure is only 5%. Moreover, of the latter amount the rate for paddy fields is only 3.3% against 7.9% in the case of upland farms. This means that the population is rapidly outgrowing its supply of home-produced rice, the great food-stuff of the nation, and the price of that cereal consequently shows a steady tendency to appreciate. Thus whereas the market value was 5s. 5d. per bushel in 1901, it rose to 6s. 9d. in 1906.

Silk and Tea.

Scarcely less important to Japan than the cereals she raises are her silk and tea, both of which find markets abroad. Her production of the latter staple does not show any sign of marked development, for though tea is almost as essential an article of diet in Japan as rice, its foreign consumers are practically limited to the United States and their demand does not increase. The figures for the 10-year period ended 1906 are as follow:—

	Area under cultivation (acres).	Tea produced (lb av.).
1897	147,230	70,063,076
1901	122,120	57,975,486
1906	126,125	58,279,286

Sericulture, on the contrary, shows steady development year by year. The demand of European and American markets has very elastic limits, and if Japanese growers are content with moderate, but still substantial, gains they can find an almost unrestricted sale in the West. The development from 1886 to 1906 was as follows:—

	Raw silk produced yearly (lb).
Average from 1886 to 1889	8,739,273
1895	19,087,310
1900	20,705,644
1905	21,630,829
1906	24,215,324

The chief silk-producing prefectures in Japan, according to the order of production, are Nagano, Gumma, Yamanashi, Fukushima, Aichi and Saitama. At the close of 1906 there were 3843 filatures throughout the country, and the number of families engaged in sericulture was 397,885.

Lacquer, vegetable wax and tobacco are also important staples of production. The figures for the ten-year period, 1897 to 1906, are as follow:—

	Lacquer (lb).	Vegetable wax (lb).	Tobacco (lb).
1897	344,267	25,850,790	110,572,925
1906	668,266	39,714,661	101,718,592

While the quantity of certain products increases, the number of filatures and factories diminishes, the inference being that industries are coming to be conducted on a larger scale than was formerly the case. Thus in sericulture the filatures diminished from 4723 in 1897 to 3843 in 1906; the number of lacquer factories from 1637 to 1123 at the same dates, and the number of wax factories from 2619 to 1929.

Agricultural Improvements.

It is generally said that whereas more than 60% of Japan's entire population is engaged in agriculture, she remains far behind the progressive nations of Europe in the application of scientific principles to farming. Nevertheless if we take for unit the average value of the yield per hectare in Italy, we obtain the following figures:—

	Yield per hectare
Italy	100
India	51
Germany	121
France	122
Egypt	153
Japan	213

In the realm of agriculture, as in all departments of modern Japan's material development, abundant traces are found of official activity. Thus, in the year 1900, the government enacted laws designed to correct the excessive subdivision of farmers' holdings; to utilize unproductive areas lying between cultivated fields; to straighten roads; to facilitate irrigation; to promote the use of machinery; to make known the value of artificial fertilizers; to conserve streams and to prevent inundations. Further, in order to furnish capital for the purposes of farming, 46 agricultural and commercial banks—one in each prefecture—were established with a central institution called the hypothec bank which assists them to collect funds. A Hokkaidō colonial bank and subsequently a bank of Formosa were also organized, and a law was framed to encourage the formation of co-operative societies which should develop a system of credit, assist the business of sale and purchase and concentrate small capitals. Experimental stations were another official creation. Their functions were to carry on investigations relating to seeds, diseases of cereals, insect pests, stock-breeding, the use of implements, the manufacture of agricultural products and cognate matters. Encouragement by grants in aid was also given to the establishment of similar experimental farms by private persons in the various prefectures, and such farms are now to be found everywhere. This official initiative, with equally successful results, extended to the domain of sericulture and tea-growing. There are two state sericultural training institutions where not only the rearing of silk-worms and the management of filatures are taught, but also experiments are made; and these institutions, like the state agricultural stations, have served as models for institutes on the same lines under private auspices. A silk-conditioning house at Yokohama; experimental tea-farms; laws to prevent and remove diseases of plants, cereals, silk-worms and cattle, and regulations to check dishonesty in the matter of fertilizers, complete the record of official efforts in the realm of agriculture during the Meiji era.

One of the problems of modern Japan is the supply of cattle. With a rapidly growing taste for beef—which, in former days, was not an article of diet—there is a slow but steady diminution in the stock of cattle. Thus while the number of the latter in 1897 was 1,214,163, out of which total 158,504 were slaughtered, the corresponding figures in 1906 were 1,190,373 and 167,458, respectively. The stock of sheep (3500 in 1906) increases slowly, and the stocks of goats (58,694 in 1897 and 74,750 in 1906) and swine (206,217 in 1897 and 284,708 in 1906) grow with somewhat greater rapidity, but mutton and pork do not suit Japanese taste, and goats are kept mainly for the sake of their milk. The government has done much towards the improvement of cattle and horses by importing bulls and sires, but, on the whole, the mixed breed is not a success, and the war with Russia in 1904-5 having clearly disclosed a pressing need of heavier horses for artillery and cavalry purposes, large importations of Australian, American and European cattle are now made, and the organization of race-clubs has been encouraged throughout the country.

Stock-breeding.

Forests.—Forests occupy an area of 55 millions of acres, or 60% of the total superficies of Japan, and one-third of that expanse, namely, 18 million acres, approximately, is the property of the state. It cannot be said that any very practical attempt has yet been made to develop this source of wealth. The receipts from forests stood at only 13 million *yen* in the budget for 1907-1908, and even that figure compares favourably with the revenue of only 3 millions derived from the same source in the fiscal year 1904-1905. This failure to utilize a valuable asset is chiefly due to defective communications, but the demand for timber has already begun to increase. In 1907 a revised forestry law was promulgated, according to which the administration is competent to prevent the destruction of forests and to cause the planting of plains and waste-lands, or the re-planting of denuded areas. A plan was also elaborated for systematically turning the state forests to valuable account, while, at the same time, providing for their conservation.

Fisheries.—From ancient times the Japanese have been great fishermen. The seas that encircle their many-coasted islands teem with fish and aquatic products, which have always constituted an essential article of diet. Early in the 18th century, the Tokugawa administration, in pursuance of a policy of isolation, interdicted the construction of ocean-going ships, and the people's enterprise in the matter of deep-sea fishing suffered a severe check. But shortly after the Restoration in 1867, not only was this veto rescinded, but also the government, organizing a marine bureau and a marine products examination office, took vigorous measures to promote pelagic industry. Then followed the formation of the marine products association under the presidency of an imperial prince. Fishery training schools were the next step; then periodical exhibitions of fishery and marine products; then the introduction and improvement of fishing implements; and then by rapid strides the area of operations widened until Japanese fishing boats of improved types came to be seen in Australasia, in Canada, in the seas of Sakhalin, the Maritime Province, Korea and China; in the waters of Kamchatka and in the Sea of Okhotsk. No less than 9000 fishermen with 2000 boats capture yearly about £300,000 worth of fish in Korean waters; at least 8000 find a plentiful livelihood off the coasts of Sakhalin and Siberia, and 200 Japanese boats engage in the salmon-fishing of the Fraser River. In 1893, the total value of Japanese marine products and fish captured did not exceed 1¼ millions sterling, whereas in 1906 the figure had grown to 5½ millions, to which must be added 3⅛ millions of manufactured marine products. Fourteen kinds of fish represent more than 50% of the whole catch, namely, (in the order of their importance) bonito (*katsuo*), sardines (*iwashi*), pagrus (*toi*), cuttle-fish and squid (*tako* and *ika*), mackerel (*saba*), yellow tail (*buri*), tunny-fish (*maguro*), prawns (*ebi*), sole (*karei*), grey mullet (*bora*), eels (*unagi*), salmon (*shake*), sea-ear (*awabi*) and carp (*koi*). Altogether 700 kinds of aquatic products are known in Japan, and 400 of them constitute articles of diet. Among manufactured aquatic products the chief are (in the order of their importance) dried bonito, fish guano, dried cuttle-fish, dried and boiled sardines, dried herring and dried prawns. The export of marine products amounted to £900,000 in 1906 against £400,000 ten years previously; China is the chief market. As for imports, they were insignificant at the beginning of the Meiji era, but by degrees a demand was created for salted fish, dried sardines (for fertilizing), edible sea-weed, canned fish and turtle-shell, so that whereas the total imports were only £1600 in 1868, they grew to over £400,000 in 1906.

Minerals.—Crystalline schists form the axis of Japan. They run in a general direction from south-west to north-east, with chains starting east and west from Shikoku. On these schists rocks of every age are superimposed, and amid these somewhat complicated geological conditions numerous minerals occur. Precious stones, however, are not found, though crystals of quartz and antimony as well as good specimens of topaz and agate are not infrequent.

Gold.

Gold occurs in quartz veins among schists, paleozoic or volcanic rocks and in placers. The quantity obtained is not large, but it shows tolerably steady development, and may possibly be much increased by more generous use of capital and larger recourse to modern methods.

Silver.

The value of the silver mined is approximately equal to that of the gold. It is found chiefly in volcanic rocks (especially tuff), in the form of sulphide, and it is usually associated with gold, copper, lead or zinc.

Copper.

Much more important in Japan's economics than either of the precious metals is copper. Veins often showing a thickness of from 70 to 80 ft., though of poor quality (2 to 8%), are found bedded in crystalline schists or paleozoic sedimentary rocks, but the richest (10 to 30%) occur in tuff and other

volcanic rocks.

Iron. There have not yet been found any evidences that Japan is rich in iron ores. Her largest known deposit (magnetite) occurs at Kamaishi in Iwate prefecture, but the quantity of pig-iron produced from the ore mined there does not exceed 37,000 tons annually, and Japan is obliged to import from the neighbouring continent the greater part of the iron needed by her for ship-building and armaments.

Coal. Considerable deposits of coal exist, both anthracite and bituminous. The former, found chiefly at Amakusa, is not greatly inferior to the Cardiff mineral; and the latter—obtained in abundance in Kiūshiū and Yezo—is a brown coal of good medium quality. Altogether there are 29 coal-fields now actually worked in Japan, and she obtained an important addition to her sources of supply in the sequel to the war with Russia, when the Fushun mines near Mukden, Manchuria, were transferred to her. During the 10 years ending in 1906, the market value of the coal mined in Japan grew from less than 2 millions sterling to over 6 millions.

Petroleum. Petroleum also has of late sprung into prominence on the list of her mineral products. The oil-bearing strata—which occur mainly in tertiary rocks—extend from Yezo to Formosa, but the principal are in Echigo, which yields the greater part of the petroleum now obtained, the Yezo and Formosa wells being still little exploited, the quantity of petroleum obtained in Japan in 1897 was 9 million gallons, whereas the quantity obtained in 1906 was 55 millions.

Japanese mining enterprise was more than trebled during the decade 1897 to 1906, for the value of the minerals taken out in the former year was only 3½ millions sterling, whereas the corresponding figure for 1906 was 11 millions. The earliest mention of gold-mining in Japan takes us back to the year A.D. 696, and by the 16th century the country had acquired the reputation of being rich in gold. During the days of her medieval intercourse with the outer world, her stores of the precious metals were largely reduced, for between the years 1602 and 1766, Holland, Spain, Portugal and China took from her 313,800 ℔ (troy) of gold and 11,230,000 ℔ of silver.

Copper occupied a scarcely less important place in Old Japan. From a period long anterior to historic times this metal was employed to manufacture mirrors and swords, and the introduction of Buddhism in the 6th century was quickly followed by the casting of sacred images, many of which still survive. Finding in the 18th century that her foreign intercourse not only had largely denuded her of gold and silver, but also threatened to denude her of copper, Japan set a limit (3415 tons) to the yearly export of the latter metal. After the resumption of administrative power by the emperor in 1867, attention was quickly directed to the question of mineral resources; several Western experts were employed to conduct surveys and introduce Occidental mining methods, and ten of the most important mines were worked under the direct auspices of the state in order to serve as object lessons. Subsequently these mines were all transferred to private hands, and the government now retains possession of only a few iron and coal mines whose products are needed for dockyard and arsenal purposes. The following table shows the recent progress and present condition of mining industry in Japan:—

	Gold		Silver		Copper		Lead	
	Quantity. oz.	Value. £	Quantity. oz.	Value. £	Quantity. Tons.	Value. £	Quantity Tons.	Value. £
1897	34,553	136,834	1,809,805	208,200	19,722	869,266	746	10,343
1901	82,517	330,076	1,824,842	211,682	26,495	1,625,244	1,744	24,640
1906	90,842	363,715	2,623,212	243,914	37,254	3,007,992	2,721	49,690

	Iron		Coal		Petroleum		Sulphur	
	Quantity. Tons.	Value. £	Quantity. Tons.	Value. £	Quantity. Gallons.	Value. £	Quantity Tons.	Value. £
1897	35,178	103,559	5,229,662	1,899,592	9,248,800	44,389	13,138	33,588
1901	46,456	123,701	9,025,325	3,060,931	39,351,960	227,841	16,007	38,612
1906	85,203	268,911	12,980,103	6,314,400	55,135,880	314,550	27,406	61,386

	Antimony		Manganese		Others	
	Quantity. Tons.	Value. £	Quantity. Tons.	Value. £	Value. £	Total Values. £
1897	1,133	27,362	13,175	8,758	3,863	3,345,662
1901	529	13,481	15,738	10,846	3,450	5,670,508
1906	293	22,862	12,322	51,365	41,338	10,839,783

The number of mine employees in 1907 was 190,000, in round numbers; the number of mining companies, 189; and the aggregate paid-up capital, 10 millions sterling.

Industries.—In the beginning of the Meiji era Japan was practically without any manufacturing industries, as the term is understood in the Occident, and she had not so much as one joint-stock company. At the end of 1906, her joint-stock companies and partnerships totalled 9329, their paid up capital exceeded 100 millions sterling, and their reserves totalled 26 millions. It is not to be inferred, however, from the absence of manufacturing organizations 50 years ago that such pursuits were deliberately eschewed or despised in Japan. On the contrary, at the very dawn of the historical epoch we find that sections of the people took their names from the work carried on by them, and that specimens of expert industry were preserved in the sovereign’s palace side by side with the imperial insignia. Further, skilled artisans from the neighbouring continent always found a welcome in Japan, and when Korea was successfully invaded in early times, one of the uses which the victors made of their conquest was to import Korean weavers and dyers. Subsequently the advent of Buddhism, with its demand for images, temples, gorgeous vestments and rich paraphernalia, gave a marked impulse to the development of artistic industry, which at the outset took its models from China, India and Greece, but gradually, while assimilating many of the best features of the continental schools, subjected them to such great modifications in accordance with Japanese genius that they ceased to retain more than a trace of their originals. From the 9th century luxurious habits prevailed in Kiōto under the sway of the Fujiwara regents, and the imperial city’s munificent patronage drew to its precincts a crowd of artisans. But these were not industrials, in the Western sense of the term, and, further, their organization was essentially domestic, each family selecting its own pursuit and following it from generation to generation without co-operation or partnership with any outsider. The establishment of military feudalism in the 12th century brought a reaction from the effeminate luxury of the metropolis, and during nearly 300 years no industry enjoyed large popularity except that of the armourer and the sword-smith. No sooner, however, did the prowess of Oda Nobunaga and, above all, of Hideyoshi, the taikō, bring within sight a cessation of civil war and the unification of the country, than the taste for beautiful objects and artistic utensils recovered vitality. By degrees there grew up among the feudal barons a keen rivalry in art industry, and the shōgun’s court in Yedo set a standard which the feudatories constantly strove to attain. Ultimately, in the days immediately antecedent to its fall, the shōgun’s administration sought to induce a more logical system by encouraging local manufacturers to supply local needs only, leaving to Kiōto and Yedo the duty of catering to general wants.

But before this reform had approached maturity, the second advent of Western nations introduced to Japan the products of an industrial civilization centuries in advance of her own from the point of view of utility, though nowise superior in the application of art. Immediately the nation became alive to the necessity of correcting its own inferiority in this respect. But the people being entirely without models for organization, without financial machinery and without the idea of joint stock enterprise, the government had to choose between entering the field as an instructor, and leaving the nation to struggle along an arduous and expensive way to tardy development. There could be no question as to which course would conduce more to the general advantage, and thus, in days immediately subsequent to the resumption of administrative power by the emperor, the spectacle was seen of official excursions into the domains of silk-reeling, cement-making, cotton and silk spinning, brick-burning, printing and book-binding, soap-boiling, type-casting and ceramic decoration, to say nothing of their establishing colleges and schools where all branches of applied science were taught. Domestic exhibitions also were organized, and specimens cf the country's products and manufactures were sent under government auspices to exhibitions abroad. On the other hand, the effect of this new departure along Western lines could not but be injurious to the old domestic industries of the country, especially to those which owed their existence to tastes and traditions now regarded as obsolete. Here again the government came to the rescue by establishing a firm whose functions were to familiarize foreign markets with the products of Japanese artisans, and to instruct the latter in adaptations likely to appeal to Occidental taste. Steps were also taken for training women as artisans, and the government printing bureau set the example of employing female labour, an innovation which soon developed large dimensions. In short, the authorities applied themselves to educate an industrial disposition throughout the country, and as soon as success seemed to be in sight, they gradually transferred from official to private direction the various model enterprises, retaining only such as were required to supply the needs of the state.

The result of all this effort was that whereas, in the beginning of the Meiji era, Japan had virtually no industries worthy of the name, she possessed in 1896—that is to say, after an interval of 25 years of effort—no less than 4595 industrial and commercial companies, joint stock or partnership, with a paid-up capital of 40 millions sterling. Her development during the decade ending in 1906 is shown in the following table:—

	Number of companies.	Paid-up capital (millions sterling).	Reserves (millions sterling).
1897	6,113	53	6
1901	8,602	83	12
1906	9,329	107	26

What effect this development exercised upon the country's over-sea trade may be inferred from the fact that, whereas the manufactured goods exported in 1870 were nil, their value in 1901 was 8 millions sterling, and in 1906 the figure rose to over 20 millions. In the following table are given some facts relating to the principal industries in which foreign markets are interested:—

Cotton Yarns

	Spindles.	Operatives.		Quantity produced.	Remarks.
		Male.	Female.	lb	
1897	768,328	9,933	35,059	216,913,196	This is a wholly new industry in Japan. It had no existence before the Meiji era.
1901	1,181,762	13,481	49,540	274,861,380	
1906	1,425,406	13,032	59,281	383,359,113	

Woven Goods

	Looms.	Operatives.		Market value of products.	Remarks.
		Male.	Female.	Millions sterling.	
1897	947,134	54,119	987,110	19	It is observable that a decrease in the number of operatives is concurrent with an increase of production.
1901	719,550	43,172	747,946	24	
1906	736,828	40,886	751,605	36	

Matches

	Families engaged.	Operatives.		Quantity produced.	Value.	Remarks
		Male.	Female.	Gross.	£	
1897	269	21,447	26,277	24,038,960	654,849	This is an altogether new industry. Japanese matches now hold the leading place in all Far-Eastern markets.
1901	261	5,656	16,50	32,901,319	926,689	
1906	250	5,468	18,721	54,802,293	1,551,698	

Foreign Paper (as distinguished from Japanese)

	Factories.	Operatives.		Quantity produced.	Value.	Remarks.
		Male.	Female.	lb	£	
1897	9	164	109	46,256,649	300,662	Had not Japanese factories been established all this paper must have been imported.
1901	13	2,635	1,397	113,348,340	714,094	
1906	22	3,774	1,778	218,022,434	1,415,778	

In the field of what may be called minor manufactures—as ceramic wares, lacquers, straw-plaits, &c.—there has been corresponding growth, for the value of these productions increased from 1¼ millions sterling in 1897 to 3½ millions in 1906. But as these manufactures do not enter into competition with foreign goods in either Eastern or Western markets,

they are interesting only as showing the development of Japan's producing power. They contribute nothing to the solution of the problem whether Japanese industries are destined ultimately to drive their foreign rivals from the markets of Asia, if not to compete injuriously with them even in Europe and America. Japan seems to have one great advantage over Occidental countries: she possesses an abundance of dexterous and exceptionally cheap labour. It has been said, indeed, that this latter advantage is not likely to be permanent, since the wages of labour and the cost of living are fast increasing. The average cost of labour doubled in the interval between 1895 and 1906, but, on the other hand, the number of manufacturing organizations doubled in the same time, while the amount of their paid-up capital nearly trebled. As to the necessaries of life, if those specially affected by government monopolies be excluded, the rate of appreciation between 1900 and 1906 averaged about 30%, and it thus appears that the cost of living is not increasing with the same rapidity as the remuneration earned by labour. The manufacturing progress of the nation seems, therefore, to have a bright future, the only serious impediment being deficient capital. There is abundance of coal, and steps have been taken on a large scale to utilize the many excellent opportunities which the country offers for developing electricity by water-power.

Silk-weaving

The fact that Japan's exports of raw silk amount to more than 12 millions sterling, while she sends over-sea only 3½ millions' worth of silk fabrics, suggests some marked inferiority on the part of her weavers. But the true explanation seems to be that her distance from the Occident handicaps her in catering for the changing fashions of the West. There cannot be any doubt that the skill of Japanese weavers was at one time eminent. The sun goddess herself, the predominant figure in the Japanese pantheon, is said to have practised weaving; the names of four varieties of woven fabrics were known in prehistoric times; the 3rd century of the Christian era saw the arrival of a Korean maker of cloth; after him came an influx of Chinese who were distributed throughout the country to improve the arts of sericulture and silk-weaving; a sovereign (Yuriaku) of the 5th century employed 92 groups of naturalized Chinese for similar purposes; in 421 the same emperor issued a decree encouraging the culture of mulberry trees and calling for taxes on silk and cotton; the manufacture of textiles was directly supervised by the consort of this sovereign; in 645 a bureau of weaving was established; many other evidences are conclusive as to the great antiquity of the art of silk and cotton weaving in Japan.

The coming of Buddhism in the 6th century contributed not a little to the development of the art, since not only did the priests require for their own vestments and for the decoration of temples silken fabrics of more and more gorgeous description, but also these holy men themselves, careful always to keep touch with the continental developments of their faith, made frequent voyages to China, whence they brought back to Japan a knowledge of whatever technical or artistic improvements the Middle Kingdom could show. When Kiōto became the permanent metropolis of the empire, at the close of the 8th century, a bureau was established for weaving brocades and rich silk stuffs to be used in the palace. This preluded an era of some three centuries of steadily developing luxury in Kiōto; an era when an essential part of every aristocratic mansion's furniture was a collection of magnificent silk robes for use in the sumptuous *Nō*. Then, in the 15th century came the "Tea Ceremonial," when the brocade mountings of a picture or the wrapper of a tiny tea-jar possessed an almost incredible value, and such skill was attained by weavers and dyers that even fragments of the fabrics produced by them command extravagant prices to-day. Kiōto always remained, and still remains, the chief producing centre, and to such a degree has the science of colour been developed there that no less than 4000 varieties of tint are distinguished. The sense of colour, indeed, seems to have been a special endowment of the Japanese people from the earliest times, and some of the combinations handed down from medieval times are treasured as incomparable examples. During the long era of peace under the Tokugawa administration the costumes of men and women showed an increasing tendency to richness and beauty. This culminated in the Genroku epoch (1688-1700), and the aristocracy of the present day delight in viewing histrionic performances where the costumes of that age and of its rival, the Momoyama (end of the 16th century) are reproduced.

It would be possible to draw up a formidable catalogue of the various kinds of silk fabrics manufactured in Japan before the opening of the Meiji era, and the signal ability of her weavers has derived a new impulse from contact with the Occident. Machinery has been largely introduced, and though the products of hand-looms still enjoy the reputation of greater durability, there has unquestionably been a marked development of producing power. Japanese looms now turn out about 17 millions sterling of silk textiles, of which less than 4 millions go abroad. Nor is increased quantity alone to be noted, for at the factory of Kawashima in Kiōto Gobelins are produced such as have never been rivalled elsewhere.

Commerce in Tokugawa Times.—The conditions existing in Japan during the two hundred and fifty years prefatory to the modern opening of the country were unfavourable to the development alike of national and of international trade. As to the former, the system of feudal government exercised a crippling influence, for each feudal chief endeavoured to check the exit of any kind of property from his fief, and free interchange of commodities was thus prevented so effectually that cases are recorded of one feudatory's subjects dying of starvation while those of an adjoining fief enjoyed abundance. International commerce, on the other hand, lay under the veto of the central government, which punished with death anyone attempting to hold intercourse with foreigners. Thus the fiefs practised a policy of mutual seclusion at home, and united to maintain a policy of general seclusion abroad. Yet it was under the feudal system that the most signal development of Japanese trade took place, and since the processes of that development have much historical interest they invite close attention.

As the bulk of a feudal chief's income was paid in rice, arrangements had to be made for sending the grain to market and transmitting its proceeds. This was effected originally by establishing in Osaka stores (*kura-yashiki*), under the charge of samurai, who received the rice, sold it to merchants in that city and remitted the proceeds by official carriers. But from the middle of the 17th century these stores were placed in the charge of tradesmen to whom was given the name of *kake-ya* (agent). They disposed of the products entrusted to them by a fief and held the money, sending it by monthly instalments to an appointed place, rendering yearly accounts and receiving commission at the rate of from 2 to 4%. They had no special licence, but they were honourably regarded and often distinguished by an official title or an hereditary pension. In fact a kake-ya, of such standing as the Mitsui and the Konoike families, was, in effect, a banker charged with the finances of several fiefs. In Osaka the method of sale was uniform. Tenders were invited, and these having been opened in the presence of all the store officials and kake-ya, the successful tenderers had to deposit bargain-money, paying the remainder within ten days, and thereafter becoming entitled to take delivery of the rice in whole or by instalments within a certain time, no fee being charged for storage. A similar system existed in Yedo, the shōgun's capital. Out of the custom of deferred delivery developed the establishment of exchanges where advances were made against sale certificates, and purely speculative transactions came into vogue. There followed an experience common enough in the West at one time: public opinion rebelled against these transactions in margins on the ground that they tended to enhance the price of rice. Several of the brokers were arrested and brought to trial; marginal dealings were thenceforth forbidden, and a system of licences was inaugurated in Yedo, the number of licensed dealers[7] being restricted to 108.

The system of organized trading companies had its origin in the 12th century, when, the number of merchants admitted within the confines of Yedo being restricted, it became necessary for those not obtaining that privilege to establish some mode of co-operation, and there resulted the formation of companies with representatives stationed in the feudal capital and share-holding members in the provinces. The Ashikaga shōguns developed this restriction by selling to the highest bidder the exclusive right of engaging in a particular trade, and the Tokugawa administration had recourse to the same practice. But whereas the monopolies instituted by the Ashikaga had for sole object the enrichment of the exchequer, the Tokugawa regarded it chiefly as a means of obtaining worthy representatives in each branch of trade. The

first licences were issued in Yedo to keepers of bath-houses in the middle of the 17th century. As the city grew in dimensions these licences increased in value, so that pawnbrokers willingly accepted them in pledge for loans. Subsequently almanack-sellers were obliged to take out licences, and the system was afterwards extended to money-changers.

It was to the fishmongers, however, that the advantages of commercial organization first presented themselves vividly. The greatest fish-market in Japan is at Nihon-bashi in Tōkyō (formerly Yedo). It had its origin in the needs of the Tokugawa court. When Iyeyasu (founder of the Tokugawa dynasty) entered Yedo in 1590, his train was followed by some fishermen of Settsu, to whom he granted the privilege of plying their trade in the adjacent seas, on condition that they furnished a supply of their best fish for the use of the garrison. The remainder they offered for sale at Nihon-bashi. Early in the 17th century one Sukegoro of Yamato province (hence called Yamato-ya) went to Yedo and organized the fishmongers into a great gild. Nothing is recorded about this man's antecedents, though his mercantile genius entitles him to historical notice. He contracted for the sale of all the fish obtained in the neighbouring seas, advanced money to the fishermen on the security of their catch, constructed preserves for keeping the fish alive until they were exposed in the market, and enrolled all the dealers in a confederation which ultimately consisted of 391 wholesale merchants and 246 brokers. The main purpose of Sukegoro's system was to prevent the consumer from dealing direct with the producer. Thus in return for the pecuniary accommodation granted to fishermen to buy boats and nets they were required to give every fish they caught to the wholesale merchant from whom they had received the advance; and the latter, on his side, had to sell in the open market at prices fixed by the confederation. A somewhat similar system applied to vegetables, though in this case the monopoly was never so close.

It will be observed that this federation of fishmongers approximated closely to a trust, as the term is now understood; that is to say, an association of merchants engaged in the same branch of trade and pledged to observe certain rules in the conduct of their business as well as to adhere to fixed rates. The idea was extended to nearly every trade, 10 monster confederations being organized in Yedo and 24 in Osaka. These received official recognition, and contributed a sum to the exchequer under the euphonious name of "benefit money," amounting to nearly £20,000 annually. They attained a high state of prosperity, the whole of the cities' supplies passing through their hands.[8] No member of a confederation was permitted to dispose of his licence except to a near relative, and if anyone not on the roll of a confederation engaged in the same business he became liable to punishment at the hands of the officials. In spite of the limits thus imposed on the transfer of licences, one of these documents commanded from £80 to £6,400, and in the beginning of the 19th century the confederations, or gilds, had increased to 68 in Yedo, comprising 1195 merchants. The gild system extended to maritime enterprise also. In the beginning of the 17th century a merchant of Sakai (near Osaka) established a junk service between Osaka and Yedo, but this kind of business did not attain any considerable development until the close of that century, when 10 gilds of Yedo and 24 of Osaka combined to organize a marine-transport company for the purpose of conveying their own merchandise. Here also the principle of monopoly was strictly observed, no goods being shipped for unaffiliated merchants. This carrying trade rapidly assumed large dimensions. The number of junks entering Yedo rose to over 1500 yearly. They raced from port to port, just as tea-clippers from China to Europe used to race in recent times, and troubles incidental to their rivalry became so serious that it was found necessary to enact stringent rules. Each junk-master had to subscribe a written oath that he would comply strictly with the regulations and observe the sequence of sailing as determined by lot. The junks had to call *en route* at Uraga for the purpose of undergoing official examination. The order of their arrival there was duly registered, and the master making the best record throughout the year received a present in money as well as a complimentary garment, and became the shippers' favourite next season.

Operations relating to the currency also were brought under the control of gilds. The business of money-changing seems to have been taken up as a profession from the beginning of the 15th century, but it was then in the hands of pedlars who carried strings of copper cash which they exchanged for gold or silver coins, then in rare circulation, or for parcels of gold dust. From the early part of the 17th century exchanges were opened in Yedo, and in 1718 the men engaged in this business formed a gild after the fashion of the time. Six hundred of these received licences, and no unlicensed person was permitted to purchase the avocation. Four representatives of the chief exchange met daily and fixed the ratio between gold and silver, the figure being then communicated to the various exchanges and to the shōgun's officials. As for the prices of gold or silver in terms of copper or bank-notes, 24 representatives of the exchanges met every evening, and, in the presence of an official censor, settled the figure for the following day and recorded the amount of transactions during the past 24 hours, full information on these points being at once sent to the city governors and the street elders.

The exchanges in their ultimate form approximated very closely to the Occidental idea of banks. They not only bought gold, silver and copper coins, but they also received money on deposit, made loans and issued vouchers which played a very important part in commercial transactions. The voucher seems to have come into existence in Japan in the 14th century. It originated in the Yoshino market of Yamato province, where the hilly nature of the district rendered the carriage of copper money so arduous that rich merchants began to substitute written receipts and engagements which quickly became current. Among these documents there was a "joint voucher" (*kumiai-fuda*), signed by several persons, any one of whom might be held responsible for its redemption. This had large vogue, but it did not obtain official recognition until 1636, when the third Tokugawa shōgun selected 30 substantial merchants and divided them into 3 gilds, each authorized to issue vouchers, provided that a certain sum was deposited by way of security. Such vouchers were obviously a form of bank-note. Their circulation by the exchange came about in a similar manner. During many years the treasure of the shōgun and of the feudal chiefs was carried to Yedo by pack-horses and coolies of the regular postal service. But the costliness of such a method led to the selection in 1691 of 10 exchange agents who were appointed bankers to the Tokugawa government and were required to furnish money within 30 days of the date of an order drawn on them. These agents went by the name of the "ten-men gild." Subsequently the firm of Mitsui was added, but it enjoyed the special privilege of being allowed 150 days to collect a specified amount. The gild received moneys on account of the Tokugawa or the feudal chiefs at provincial centres, and then made its own arrangements for cashing the cheques drawn upon it by the shōgun or the daimyō in Yedo. If coin happened to be immediately available, it was employed to cash the cheques; otherwise the vouchers of the gild served instead. It was in Osaka, however, that the functions of the exchanges acquired fullest development. That city has exhibited, in all eras, a remarkable aptitude for trade. Its merchants, as already shown, were not only entrusted with the duty of selling the rice and other products of the surrounding fiefs, but also they became depositories of the proceeds, which they paid out on account of the owners in whatever sums the latter desired. Such an evidence of official confidence greatly strengthened their credit, and they received further encouragement from the second Tokugawa shōgun (1605-1623)and from Ishimaru Sadatsugu, governor of the city in 1661. He fostered wholesale transactions, sought to introduce a large element of credit into commerce by instituting a system of credit sales; took measures to promote the circulation of cheques; inaugurated market sales of gold and silver and appointed ten chiefs of exchange who were empowered to oversee the business of money-exchanging in general. These ten received exemption from municipal taxation and were permitted to wear swords. Under them were 22 exchanges forming a gild, whose members agreed to honour one another's vouchers and mutually to facilitate business. Gradually they elaborated a regular system of banking, so that, in the middle of the 18th century, they issued various descriptions of paper-orders for fixed sums payable at certain places within fixed periods; deposit notes redeemable on the demand of an indicated person or his order; bills of exchange drawn by *A* upon *B* in favour of *C* (a common form for use in monthly or annual settlements); promissory notes to be paid at a future time, or cheques payable at sight, for goods purchased; and storage orders engaging to deliver goods on account of which earnest money had been paid. These last, much employed in transactions relating to rice and sugar, were generally valid for a period of 3 years and 3 months, were signed by a confederation of exchanges or merchants on joint responsibility, and guaranteed the

delivery of the indicated merchandise independently of all accidents. They passed current as readily as coin, and advances could always be obtained against them from pawnbrokers.

All these documents, indicating a well-developed system of credit, were duly protected by law, severe penalties being inflicted for any failure to implement the pledges they embodied. The merchants of Yedo and Osaka, working on the system of trusts here described, gradually acquired great wealth and fell into habits of marked luxury. It is recorded that they did not hesitate to pay £5 for the first bonito of the season and £11 for the first egg-fruit. Naturally the spectacle of such extravagance excited popular discontent. Men began to grumble against the so-called "official merchants" who, under government auspices, monopolized every branch of trade; and this feeling grew almost uncontrollable in 1836, when rice rose to an unprecedented price owing to crop failure. Men loudly ascribed that state of affairs to regrating on the part of the wholesale companies, and murmurs similar to those raised at the close of the 19th century in America against the trust system began to reach the ears of the authorities perpetually. The celebrated Fujita Toko of Mito took up the question. He argued that the monopoly system, since it included Osaka, exposed the Yedo market to all the vicissitudes of the former city, which had then lost much of its old prosperity.

Finally, in 1841, the shōgun's chief minister, Mizuno Echizen-no-Kami, withdrew all trading licences, dissolved the gilds and proclaimed that every person should thenceforth be free to engage in any commerce without let or hindrance. This recklessly drastic measure, vividly illustrating the arbitrariness of feudal officialdom, not only included the commercial gilds, the shipping gilds, the exchange gilds and the land transport gilds, but was also carried to the length of forbidding any company to confine itself to wholesale dealings. The authorities further declared that in times of scarcity wholesale transactions must be abandoned altogether and retail business alone carried on, their purpose being to bring retail and wholesale prices to the same level. The custom of advancing money to fishermen or to producers in the provincial districts was interdicted; even the fuda-sashi might no longer ply their calling, and neither bath-house keepers nor hairdressers were allowed to combine for the purpose of adopting uniform rates of charges. But this ill-judged interference produced evils greater than those it was intended to remedy. The gilds had not really been exacting. Their organization had reduced the cost of distribution, and they had provided facilities of transport which brought produce within quick and cheap reach of central markets.

Ten years' experience showed that a modified form of the old system would conduce to public interests. The gilds were re-established, licence fees, however, being abolished, and no limit set to the number of firms in a gild. Things remained thus until the beginning of the Meiji era (1867), when the gilds shared the cataclysm that overtook all the country's old institutions.

Japanese commercial and industrial life presents another feature which seems to suggest special aptitude for combination. In mercantile or manufacturing families, while the eldest son always succeeded to his father's business, not only the younger sons but also the apprentices and employees, after they had served faithfully for a number of years, expected to be set up as branch houses under the auspices of the principal family, receiving a place of business, a certain amount of capital and the privilege of using the original house-name. Many an old-established firm thus came to have a plexus of branches all serving to extend its business and strengthen its credit, so that the group held a commanding position in the business world. It will be apparent from the above that commercial transactions on a large scale in pre-Meiji days were practically limited to the two great cities of Yedo and Osaka, the people in the provincial fiefs having no direct association with the gild system, confining themselves, for the most part, to domestic industries on a small scale, and not being allowed to extend their business beyond the boundaries of the fief to which they belonged.

Foreign Commerce during the Meiji Era.—If Japan's industrial development in modern times has been remarkable, the same may be said even more emphatically about the development of her over-sea commerce. This was checked at first not only by the unpopularity attaching to all intercourse with outside nations, but also by embarrassments resulting from the difference between the silver price of gold in Japan and its silver price in Europe, the precious metals being connected in Japan by a ratio of 1 to 8, and in Europe by a ratio of 1 to 15. This latter fact was the cause of a sudden and violent appreciation of values; for the government, seeing the country threatened with loss of all its gold, tried to avert the catastrophe by altering and reducing the weights of the silver coins without altering their denominations, and a corresponding difference exhibited itself, as a matter of course, in the silver quotations of commodities. Another difficulty was the attitude of officialdom. During several centuries Japan's over-sea trade had been under the control of officialdom, to whose coffers it contributed a substantial revenue. But when the foreign exporter entered the field under the conditions created by the new system, he diverted to his own pocket the handsome profit previously accruing to the government; and since the latter could not easily become reconciled to this loss of revenue, or wean itself from its traditional habit of interference in affairs of foreign commerce, and since the foreigner, on his side, not only desired secrecy in order to prevent competition, but was also tormented by inveterate suspicions of Oriental espionage, not a little friction occurred from time to time. Thus the scanty records of that early epoch suggest that trade was beset with great difficulties, and that the foreigner had to contend against most adverse circumstances, though in truth his gains amounted to 40 or 50%.

Tea and Silk.

The chief staples of the early trade were tea and silk. It happened that just before Japan's raw silk became available for export, the production of that article in France and Tea and Italy had been largely curtailed owing to a novel disease of the silkworm. Thus, when the first bales of Japanese silk appeared in London, and when it was found to possess qualities entitling it to the highest rank, a keen demand sprang up. Japanese green tea also, differing radically in flavour and bouquet from the black tea of China, appealed quickly to American taste, so that by the year 1907 Japan found herself selling to foreign countries tea to the extent of 1¼ millions sterling, and raw silk to the extent of 12¼ millions. This remarkable development is typical of the general history of Japan's foreign trade in modern times. Omitting the first decade and a half, the statistics for which are imperfect, the volume of the trade grew from 5 millions sterling in 1873—3 shillings per head of the population—to 93 millions in 1907—or 38 shillings per head. It was not a uniform growth. The period of 35 years divides itself conspicuously into two eras: the first, of 15 years (1873-1887), during which the development was from 5 millions to 9.7 millions, a ratio of 1 to 2, approximately; the second, of 20 years (1887-1907), during which the development was from 9.7 millions to 93 millions, a ratio of 1 to 10.

That a commerce which scarcely doubled itself in the first fifteen years should have grown nearly tenfold in the next twenty is a fact inviting attention. There are two principal causes: one general, the other special. The general cause was that several years necessarily elapsed before the nation's material condition began to respond perceptibly to the improvements effected by the Meiji government in matters of administration, taxation and transport facilities. Fiscal burdens had been reduced and security of life and property obtained, but railway building and road-making, harbour construction, the growth of posts, telegraphs, exchanges and banks, and the development of a mercantile marine did not exercise a sensible influence on the nation's prosperity until 1884 or 1885. From that time the country entered a period of steadily growing prosperity, and from that time private enterprise may be said to have finally started upon a career of independent activity. The special cause which, from 1885, contributed to a marked growth of trade was the resumption of specie payments. Up to that time the treasury's fiat notes had suffered such marked fluctuations of specie value that sound or successful commerce became very difficult. Against the importing merchant the currency trouble worked with double potency. Not only did the gold with which he purchased goods appreciate constantly in terms of the silver for which he sold them, but the silver itself appreciated sharply and rapidly in terms of the fiat notes paid by Japanese

consumers. Cursory reflection may suggest that these factors should have stimulated exports as much as they depressed imports. But such was not altogether the case in practice. For the exporter's transactions were hampered by the possibility that a delay of a week or even a day might increase the purchasing power of his silver in Japanese markets by bringing about a further depreciation of paper, so that he worked timidly and hesitatingly, dividing his operations as minutely as possible in order to take advantage of the downward tendency of the fiat notes. Not till this element of pernicious disturbance was removed did the trade recover a healthy tone and grow so lustily as to tread closely on the heels of the foreign commerce of China, with her 300 million inhabitants and long-established international relations.

The Foreign Middleman.

Japan's trade with the outer world was built up chiefly by the energy and enterprise of the foreign middleman. He acted the part of an almost ideal agent. As an exporter, his command of cheap capital, his experience, his knowledge of foreign markets, and his connexions enabled him to secure sales such as must have been beyond reach of the Japanese working independently. Moreover, he paid to native consumers ready cash for their staples, taking upon his own shoulders all the risks of finding markets abroad. As an importer, he enjoyed, in centres of supply, credit which the Japanese lacked, and he offered to native consumers foreign produce brought to their doors with a minimum of responsibility on their part. Finally, whether as exporters or importers, foreign middlemen always competed with each other so keenly that their Japanese clients obtained the best possible terms from them. Yet the ambition of the Japanese to oust them cannot be regarded as unnatural. Every nation must desire to carry on its own commerce independently of alien assistance; and moreover, the foreign middleman's residence during many years within Japanese territory, but without the pale of Japanese sovereignty, invested him with an aggressive character which the anti-Oriental exclusiveness of certain Occidental nations helped to accentuate. Thus from the point of view of the average Japanese there are several reasons for wishing to dispense with alien middlemen, and it is plain that these reasons are operative; for whereas, in 1888, native merchants carried on only 12% of the country's over-sea trade without the intervention of the foreign middlemen, their share rose to 35% in 1899 and has since been slowly increasing.

Balance of Trade.

Analysis of Japan's foreign trade during the Meiji era shows that during the 35-year period ending in 1907, imports exceeded exports in 21 years and exports exceeded imports in 14 years. This does not suggest a very badly balanced trade. But closer examination accentuates the difference, for when the figures are added, it is found that the excesses of exports aggregated only 11 millions sterling, whereas the excesses of imports totalled 71 millions, there being thus a so-called "unfavourable balance" of 60 millions over all. The movements of specie do not throw much light upon this subject, for they are complicated by large imports of gold resulting from war indemnities and foreign loans. Undoubtedly the balance is materially redressed by the expenditures of the foreign communities in the former settlements, of foreign tourists visiting Japan and of foreign vessels engaged in the carrying trade, as well as by the earnings of Japanese vessels and the interest on investments made by foreigners. Nevertheless there remains an appreciable margin against Japan, and it is probably to be accounted for by the consideration that she is still engaged equipping herself for the industrial career evidently lying before her.

Trade with Various Countries.

The manner in which Japan's over-sea trade was divided in 1907 among the seven foreign countries principally engaged in it may be seen from the following table:—

	Exports to £ (millions).	Imports from £ (millions).	Total £ (millions).
United States	13½	8½	22
China	8¾	6¼	15
Great Britain	2¼	11¾	14
British India	1⅓	7⅔	9
Germany	1⅛	4⅞	6
France	4⅓	⅔	5
Korea	3⅓	1⅔	5

Among the 33 open ports of Japan, the first place belongs to Yokohama in the matter of foreign trade, and Kobe ranks second. The former far outstrips the latter in exports, but the case is reversed when imports are considered. As to the percentages of the whole trade standing to the credit of the five principal ports, the following figures may be consulted:—Yokohama, 40%; Kobe, 35.6; Osaka, 10; Moji, 5; and Nagasaki, 2.

VI.—Government, Administration, &c.

Emperor and Princes.—At the head of the Japanese State stands the emperor, generally spoken of by foreigners as the *mikado* (honourable gate[9]), a title comparable with sublime porte and by his own subjects as *tenshi* (son of heaven) or *tennō* (heavenly king). The emperor Mutou Hito (*q.v.*) was the 121st of his line, according to Japanese history, which reckons from 660 B.C., when Jimmu ascended the throne. But as written records do not carry us back farther than A.D. 712, the reigns and periods of the very early monarchs are more or less apocryphal. Still the fact remains that Japan has been ruled by an unbroken dynasty ever since the dawn of her history, in which respect she is unique among all the nations in the world. There are four families of princes of the blood, from any one of which a successor to the throne may be taken in default of a direct heir: Princes Arisugawa, Fushimi, Kanin and Higashi Fushimi. These families are all direct descendants of emperors, and their heads have the title of *shinnō* (prince of the blood), whereas the other imperial princes, of whom there are ten, have only the second syllable of *shinnō* (pronounced *wō* when separated from *shin*). Second and younger sons of a *shinnō* are all *wō*, and eldest sons lose the title *shin* and become *wō* from the fifth generation.

The Peerage.—In former times there were no Japanese titles of nobility, as the term is understood in the Occident. Nobles there were, however, namely, *kuge*, or court nobles, descendants of younger sons of emperors, and *daimyō* (great name), some of whom could trace their lineage to mikados; but all owed their exalted position as feudal chiefs to military prowess. The Meiji restoration of 1867 led to the abolition of the *daimyōs* as feudal chiefs, and they, together with the kuge, were merged into one class called *kwazoku* (flower families), a term corresponding to aristocracy, all inferior persons being *heimin* (ordinary folk). In 1884, however, the five Chinese titles of *ki* (prince), *kō* (marquis), *haku* (count), *shi* (viscount) and *dan* (baron) were introduced, and patents were not only granted to the ancient nobility but also conferred on men who had rendered conspicuous public service. The titles are all hereditary, but they descend to the firstborn only, younger children having no distinguishing appellation. The first list in 1884 showed 11 princes, 24 marquises, 76 counts, 324 viscounts and 74 barons. After the war with China (1894-95) the total grew to 716, and the war with Russia (1904-5) increased the number to 912, namely, 15 princes, 39 marquises, 100 counts, 376 viscounts and 382 barons.

Household Department.—The Imperial household department is completely differentiated from the administration of state affairs. It includes bureaux of treasury, forests, peerage and hunting, as well as boards of ceremonies and

chamberlains, officials of the empress's household and officials of the crown prince's household. The annual allowance made to the throne is £300,000, and the Imperial estate comprises some 12,000 acres of building land, 3,850,000 acres of forests, and 300,000 acres of miscellaneous lands, the whole valued at some 19 millions sterling, but probably not yielding an income of more than £200,000 yearly. Further, the household owns about 3 millions sterling (face value) of bonds and shares, from which a revenue of some £250,000 is derived, so that the whole income amounts to three-quarters of a million sterling, approximately. Out of this the households of the crown prince and all the Imperial princes are supported; allowances are granted at the time of conferring titles of nobility; a long list of charities receive liberal contributions, and considerable sums are paid to encourage art and education. The emperor himself is probably one of the most frugal sovereigns that ever occupied a throne.

Departments of State.—There are nine departments of state presided over by ministers—foreign affairs, home affairs, finance, war, navy, justice, education, agriculture and commerce, communications. These ministers form the cabinet, which is presided over by the minister president of state, so that its members number ten in all. Ministers of state are appointed by the emperor and are responsible to him alone. But between the cabinet and the crown stand a small body of men, the survivors of those by whose genius modern Japan was raised to her present high position among the nations. They are known as "elder statesmen" (*genrō*). Their proved ability constitutes an invaluable asset, and in the solution of serious problems their voice may be said to be final. At the end of 1909 four of these renowned statesmen remained—Prince Yamagata, Marquises Inouye and Matsukata and Count Okuma. There is also a privy council, which consists of a variable number of distinguished men—in 1909 there were 29, the president being Field-Marshal Prince Yamagata. Their duty is to debate and advise upon all matters referred to them by the emperor, who sometimes attends their meetings in person.

Civil Officials.—The total number of civil officials was 137,819 in 1906. It had been only 68,876 in 1898, from which time it grew regularly year by year. The salaries and allowances paid out of the treasury every year on account of the civil service are 4 millions sterling, approximately, and the annual emoluments of the principal officials are as follow:—Prime minister, £960; minister of a department, £600; ambassador, £500, with allowances varying from £2200 to £3000; president of privy council, £500; resident-general in Seoul, £600; governor-general of Formosa, £600; vice-minister, £400; minister plenipotentiary, £400, with allowances from £1000 to £1700; governor of prefecture, £300 to £360; judge of the court of cassation, £200 to £500; other judges, £60 to £400; professor of imperial university, from £80 to £160, with allowances from £40 to £120; privy councillor, £400; director of a bureau, £300; &c.

Legislature.—The first Japanese Diet was convoked the 29th of November, 1890. There are two chambers, a house of peers (*kizoku-in*) and a house of representatives (*shugi-in*). Each is invested with the same legislative power.

The upper chamber consists of four classes of members. They are, first, hereditary members, namely, princes and marquises, who are entitled to sit when they reach the age of 25; secondly, counts, viscounts and barons, elected—after they have attained their 25th year—by their respective orders in the maximum ratio of one member to every five peers; thirdly, men of education or distinguished service who are nominated by the emperor; and, fourthly, representatives of the highest tax-payers, elected, one for each prefecture, by their own class. The minimum age limit for non-titled members is 30, and it is provided that their total number must not exceed that of the titled members. The house was composed in 1909 of 14 princes of the blood, 15 princes, 39 marquises, 17 counts, 69 viscounts, 56 barons, 124 Imperial nominees, and 45 representatives of the highest tax-payers—that is to say, 210 titled members and 169 non-titled.

The lower house consists of elected members only. Originally the property qualification was fixed at a minimum annual payment of 30s. in direct taxes (*i.e.* taxes imposed by the central government), but in 1900 the law of election was amended, and the property qualification for electors is now a payment of £1 in direct taxes, while for candidates no qualification is required either as to property or as to locality. Members are of two kinds, namely, those returned by incorporated cities and those returned by prefectures. In each case the ratio is one member for every 130,000 electors, and the electoral district is the city or prefecture.

Voting is by ballot, one man one vote, and a general election must take place once in 4 years for the house of representatives, and once in 7 years for the house of peers. The house of representatives, however, is liable to be dissolved by order of the sovereign as a disciplinary measure, in which event a general election must be held within 5 months from the date of dissolution, whereas the house of peers is not liable to any such treatment. Otherwise the two houses enjoy equal rights and privileges, except that the budget must first be submitted to the representatives. Each member receives a salary of £200; the president receives £500, and the vice-president £300. The presidents are nominated by the sovereign from three names submitted by each house, but the appointment of a vice-president is within the independent right of each chamber. The lower house consists of 379 members, of whom 75 are returned by the urban population and 304 by the rural. Under the original property qualification the number of franchise-holders was only 453,474, or 11.5 to every 1000 of the nation, but it is now 1,676,007, or 15.77 to every 1000. By the constitution which created the diet freedom of conscience, of speech and of public meeting, inviolability of domicile and correspondence, security from arrest or punishment except by due process of law, permanence of judicial appointments and all the other essential elements of civil liberty were granted. In the diet full legislative authority is vested: without its consent no tax can be imposed, increased or remitted; nor can any public money be paid out except the salaries of officials, which the sovereign reserves the right to fix at will. In the emperor are vested the prerogatives of declaring war and making peace, of concluding treaties, of appointing and dismissing officials, of approving and promulgating laws, of issuing urgent ordinances to take the temporary place of laws, and of conferring titles of nobility.

Procedure of the Diet.—It could scarcely have been expected that neither tumult nor intemperance would disfigure the proceedings of a diet whose members were entirely without parliamentary experience, but not without grievances to ventilate, wrongs (real or fancied) to avenge, and abuses to redress. On the whole, however, there has been a remarkable absence of anything like disgraceful licence. The politeness, the good temper, and the sense of dignity which characterize the Japanese, generally saved the situation when it threatened to degenerate into a "scene." Foreigners entering the house of representatives in Tōkyō for the first time might easily misinterpret some of its habits. A number distinguishes each member. It is painted in white on a wooden indicator, the latter being fastened by a hinge to the face of the member's desk. When present he sets the indicator standing upright, and lowers it when leaving the house. Permission to speak is not obtained by catching the president's eye, but by calling out the aspirant's number, and as members often emphasize their calls by hammering their desks with the indicators, there are moments of decided din. But, for the rest, orderliness and decorum habitually prevail. Speeches have to be made from a rostrum. There are few displays of oratory or eloquence. The Japanese formulates his views with remarkable facility. He is absolutely free from *gaucherie* or self-consciousness when speaking in public: he can think on his feet. But his mind does not usually busy itself with abstract ideas and subtleties of philosophical or religious thought. Flights of fancy, impassioned bursts of sentiment, appeals to the heart rather than to the reason of an audience, are devices strange to his mental habit. He can be rhetorical, but not eloquent. Among all the speeches hitherto delivered in the Japanese diet it would be difficult to find a passage deserving the latter epithet.

From the first the debates were recorded verbatim. Years before the date fixed for the promulgation of the constitution, a little band of students elaborated a system of stenography and adapted it to the Japanese syllabary. Their labours remained almost without recognition or remuneration until the diet was on the eve of meeting, when it was discovered that a competent staff of shorthand reporters could be organized at an hour's notice. Japan can thus boast

that, alone among the countries of the world, she possesses an exact record of the proceedings of her Diet from the moment when the first word was spoken within its walls.

A special feature of the Diet's procedure helps to discourage oratorical displays. Each measure of importance has to be submitted to a committee, and not until the latter's report has been received does serious debate take place. But in ninety-nine cases out of every hundred the committee's report determines the attitude of the house, and speeches are felt to be more or less superfluous. One result of this system is that business is done with a degree of celerity scarcely known in Occidental legislatures. For example, the meetings of the house of representatives during the session 1896-1897 were 32, and the number of hours occupied by the sittings aggregated 116. Yet the result was 55 bills debated and passed, several of them measures of prime importance, such as the gold standard bill, the budget and a statutory tariff law. It must be remembered that although actual sittings of the houses are comparatively few and brief, the committees remain almost constantly at work from morning to evening throughout the twelve weeks of the session's duration.

Divisions of the Empire.—The earliest traditional divisions of Japan into provinces was made by the emperor Seimu (131-190), in whose time the sway of the throne did not extend farther north than a line curving from Sendai Bay, on the north-east coast of the main island, to the vicinity of Niigata (one of the treaty ports), on the north-west coast. The region northward of this line was then occupied by barbarous tribes, of whom the Ainu (still to be found in Yezo) are probably the remaining descendants. The whole country was then divided into thirty-two provinces. In the 3rd century the empress Jingō, on her return from her victorious expedition against Korea, portioned out the empire into five home provinces and seven circuits, in imitation of the Korean system. By the emperor Mommu (696-707) some of the provinces were subdivided so as to increase the whole number to sixty-six, and the boundaries then fixed by him were re-surveyed in the reign of the emperor Shōmu (723-756). The old division is as follows[10]:—

I. The *Go-kinai* or "five home provinces" *i.e.* those lying immediately around Kyōto, the capital, viz.:—

Yamashiro,	also called	Jōshū	Izumi,	also called	*Senshū*
Yamato	″	Washū	*Settsū*	″	Sesshū
Kawachi	″	Kashū			

II. The seven circuits, as follow:—

1. The *Tōkaidō*, or "eastern-sea circuit," which comprised fifteen provinces, viz.:—

Iga	or	Ishū	Kai	or	*Kōshyū*
Isé	″	*Seishū*	*Sagami*	″	*Sōshyū*
Shima	″	Shinshū	Musashi	″	*Bushyū*
Owari	″	*Bishū*	Awa	″	*Bōshū*
Mikawa	″	*Sanshū*	Kazusa	″	Sōshū
Tōtōmi	″	*Enshū*	Shimōsa	″	Sōshū
Suruga	″	*Sunshū*	Hitachi	″	Jōshū
Izu	″	Dzushū			

2. The *Tōzandō*, or "eastern-mountain circuit," which comprised eight provinces, viz.:—

Ōmi	or	*Gōshū*	Kōzuke	or	*Jōshū*
Mino	″	Nōshū	Shimotsuke	″	*Yashū*
Hida	″	Hishū	Mutsu	″	*Ōshū*
Shinano	″	*Shinshū*	*Dewa*	″	Ushū

3. The *Hokurikudō*, or "northern-land circuit," which comprised seven provinces, viz.:—

Wakasa	or	*Jakushū*	*Etchiu*	or	Esshū
Echizen	″	Esshū	*Echigo*	″	Esshū
Kaga	″	*Kashū*	*Sado* (island)	″	Sashū
Noto	″	Nōshū			

4. The *Sanindō*, or "mountain-back circuit," which comprised eight provinces, viz.:—

Tamba	or	Tanshū	*Hōki*	or	Hakushū
Tango	″	Tanshū	Izumo	″	*Unshū*
Tajima	″	Tanshū	Iwami	″	*Sekishū*
Inaba	″	*Inshū*	*Oki* (group of islands)		

5. The *Sanyōdō*, or "mountain-front circuit," which comprised eight provinces, viz.:—

Harima	or	Banshū	*Bingo*	or	Bishū
Mimasaka	″	Sakushū	Aki	″	*Geishū*
Bizen	″	Bishū	*Suwō*	″	Bōshū
Bitchiu	″	Bishū	Nagato	″	*Chōshū*

6. The *Nankaidō*, or "southern-sea circuit," which comprised, six provinces, viz.:—

Kii	or	*Kishū*	*Sanuki*	or	Sanshū
Awaji (island)	″	Tanshū	*Iyo*	″	Yoshū
Awa	″	*Ashū*	*Tosa*	″	*Toshū*

7. The *Saikaidō*, or "western-sea circuit," which comprised nine provinces, viz:—

Chikuzen	or	Chikushū	*Higo*	or	Hishū
Chikugo	″	Chikushū	*Hiuga*	″	Nisshū
Buzen	″	Hōshū	*Osumi*	″	Gūshū
Bungo	″	Hōshū	Satsuma	″	*Sasshū*
Hizen	″	Hishū ″			

III. The two islands, viz.:—

1. Tsushima or *Taishū* | 2. *Iki* or Ishū

Upon comparing the above list with a map of Japan, it will be seen that the main island contains the Go-kinai, Tōkaidō, Tōzandō, Hokurikudō, Sanindō, Sanyōdō, and one province (Kishu) of the Nankaidō. Omitting also the island of Awaji, the remaining provinces of the Nankaidō give the name Shikoku (the "four provinces") to the island in which they lie; while Saikaidō coincides exactly with the large island Kiūshiū (the "nine provinces").

In 1868, when the rebellious nobles of Ōshū and Dewa, in the Tōzandō, had submitted to the emperor, those two provinces were subdivided, Dewa into Uzen and Ugo, and Ōshū into Iwaki, Iwashiro, Rikuzen, Rikuchū and Michinoku (usually called Mutsu). This increased the old number of provinces from sixty-six to seventy-one. At the same time there was created a new circuit, called the *Hokkaidō*, or "northern-sea circuit," which comprised the eleven provinces into which the large island of Yezo was then divided (viz. Oshima, Shiribeshi, Ishikari, Teshibo, Kitami, Iburi, Hiaka, Tokachi, Kushiro, and Nemuro) and the Kurile Islands (Chishima).

Another division of the old sixty-six provinces was made by taking as a central point the ancient barrier of Osaka on the frontier of Ōmi and Yamashiro,—the region lying on the east, which consisted of thirty-three provinces, being called *Kwantō*, or "east of the barrier," the remaining thirty-three provinces on the west being styled *Kwansei*, or "west of the barrier." At the present time, however, the term Kwantō is applied to only the eight provinces of Musashi, Sagami, Kōzuke, Shimotsuke, Kazusa, Shimōsa, Awa and Hitachi,—all lying immediately to the east of the old barrier of Hakone, in Sagami.

Chū-goku, or "central provinces," is a name in common use for the Sanindō and Sanyōdō taken together. *Saikoku*, or "western provinces," is another name for Kiūshiū, which in books again is frequently called *Chinsei*.

Local Administrative Divisions.—For purposes of local administration Japan is divided into 3 urban prefectures (*fu*), 43 rural prefectures (*ken*), and 3 special dominions (*chō*), namely Formosa; Hokkaidō and South Sakhalin. Formosa and Sakhalin not having been included in Japan's territories until 1895 and 1905, respectively, are still under the military control of a governor-general, and belong, therefore, to an administrative system different from that prevailing throughout the rest of the country. The prefectures and Hokkaidō are divided again into 638 sub-prefectures (*gun* or *kōri*); 60 towns (*shi*); 125 urban districts (*chō*) and 12,274 rural districts (*son*). The three urban prefectures are Tokyo, Osaka and Kiōto, and the urban and rural districts are distinguished according to the number of houses they contain. Each prefecture is named after its chief town, with the exception of Okinawa, which is the appellation of a group of islands called also Riūkiū (Luchu). The following table shows the names of the prefectures, their areas, populations, number of sub-prefectures, towns and urban and rural divisions:—

Prefecture.	Area in sq. m.	Population	Sub-Prefectures.	Towns	Urban Districts	Rural Districts
Tōkyō	749.76	1,795,128*	8	1	20	157
Kanagawa	927.79	776,642	11	1	19	202
Saitama	1,585.30	1,174,094	9	—	42	343
Chiba	1,943.85	1,273,387	12	—	69	286
Ibaraki	2,235.67	1,131,556	14	1	45	335
Tochigi	2,854.14	788,324	8	1	30	145
Gumma	2,427.21	774,654	11	2	38	169
Nagano	5,088.41	1,237,584	16	1	22	371
Yamanashi	1,727.50	498,539	9	1	7	235
Shizuoka	3,002.76	1,199,805	13	1	38	306
Aichi	1,864.17	1,591,357	19	1	74	592
Miye	2,196.56	495,389	15	2	19	325
Gifu	4,001.84	996,062	18	1	42	299
Shiga	1,540.30	712,024	12	1	12	190
Fukui	1,621.50	633,840	11	1	9	171
Ishikawa	1,611.59	392,905	8	1	16	259
Toyama	1,587.80	785,554	8	2	31	239
The above 17 prefectures form Central Japan.						
Niigata	4,914.55	1,812,289	16	1	47	401
Fukushima	5,042.57	1,057,971	17	1	37	388
Miyagi	3,223.11	835,830	16	1	31	172
Yamagata	3,576.89	829,210	11	2	24	206
Akita	4,493.84	775,077	9	1	42	197
Iwate	5,359.17	726,380	13	1	23	217
Aomori	3,617.89	612,171	8	2	9	159
The above 7 prefectures form Northern Japan.						
Kiōto	1,767.43	931,576*	18	1	20	260
Osaka	689.69	1,311,909*	9	2	13	289
Nara	1,200.46	538,507	10	1	18	142
Wakayama	1,851.29	681,572	7	1	16	215
Hiōgo	3,318.31	1,667,226	25	2	29	403
Okayama	2,509.04	1,132,000	19	1	29	383
Hiroshima	3,103.84	1,436,415	16	3	27	420
Yamaguchi	1,324.34	986,161	11	1	10	215
Shimane	2,597.48	721,448	16	1	14	276
Tottori	1,335.99	418,929	6	1	8	227
The above 10 prefectures form Southern Japan.						
Tokushima	1,616.82	699,398	10	1	2	137
Kagawa	976.46	700,462	7	2	12	166
Ehime	2,033.57	997,481	12	1	18	283
Kochi	2,720.13	616,549	6	1	14	183
The above 4 prefectures form the island of Shikoku.						
Nagasaki	1,401.49	821,323	9	2	15	288
Saga	984.07	621,011	8	1	7	127

Fukuoka	1,894.14	1,362,743	19	4	38	340
Kumamoto	2,774.20	1,151,401	12	1	33	331
Oita	2,400.27	839,485	12	—	28	251
Miyazaki	2,904.54	454,707	8	—	9	91
Kagoshima	3,589.76	1,104,631	12	1	—	380
Okinawa	935.18	469,203	5	2	—	52
The above 8 prefectures form Kiūshiū.						
Hokkaidō	36,328.34	610,155	88	3	19	456

* This is not the population of the city proper, but that of the urban prefecture.

Local Administrative System.—In the system of local administration full effect is given to the principle of popular representation. Each prefecture (urban or rural), each sub-prefecture, each town and each district (urban or rural) has its local assembly, the number of members being fixed in proportion to the population. There is no superior limit of number in the case of a prefectural assembly, but the inferior limit is 30. For a town assembly, however, the superior limit is 60 and the inferior 30; for a sub-prefectural assembly the corresponding figures are 40 and 15, and for a district assembly, 30 and 8. These bodies are all elective. The property qualification for the franchise in the case of prefectural and sub-prefectural assemblies is an annual payment of direct national taxes to the amount of 3 *yen;* and in the case of town and district assemblies, 2 *yen*; while to be eligible for election to a prefectural assembly a yearly payment of 10 *yen* of direct national taxes is necessary; to a sub-prefectural assembly, 5 *yen*, and to a town or district assembly, 2 *yen*. Under these qualifications the electors aggregate 2,009,745, and those eligible for election total 919,507. In towns and districts franchise-holders are further divided into classes with regard to their payment of local taxes. Thus for town electors there are three classes, differentiated by the following process: On the list of ratepayers the highest are checked off until their aggregate payments are equal to one-third of the total taxes. These persons form the first class. Next below them the persons whose aggregate payments represent one-third of the total amount are checked off to form the second class, and all the remainder form the third class. Each class elects one-third of the members of assembly. In the districts there are only two classes, namely, those whose payments, in order from the highest, aggregate one-half of the total, the remaining names on the list being placed in the second class. Each class elects one-half of the members. This is called the system of *ō-jinushi* (large landowners) and is found to work satisfactorily as a device for conferring representative rights in proportion to property. The franchise is withheld from all salaried local officials, from judicial officials, from ministers of religion, from persons who, not being barristers by profession, assist the people in affairs connected with law courts or official bureaux, and from every individual or member of a company that contracts for the execution of public works or the supply of articles to a local administration, as well as from persons unable to write their own names and the name of the candidate for whom they vote. Members of assembly are not paid. For prefectural and sub-prefectural assemblies the term is four years; for town and district assemblies, six years, with the provision that one-half of the members must be elected every third year. The prefectural assemblies hold one session of 30 days yearly; the sub-prefectural assemblies, one session of not more than 14 days. The town and district assemblies have no fixed session; they are summoned by the mayor or the head-man when their deliberations appear necessary, and they continue in session till their business is concluded.

The chief function of the assemblies is to deal with all questions of local finance. They discuss and vote the yearly budgets; they pass the settled accounts; they fix the local taxes within a maximum limit which bears a certain ratio to the national taxes; they make representations to the minister for home affairs; they deal with the fixed property of the locality; they raise loans, and so on. It is necessary, however, that they should obtain the consent of the minister for home affairs, and sometimes of the minister of finance also, before disturbing any objects of scientific, artistic or historical importance; before contracting loans; before imposing special taxes or passing the normal limits of taxation; before enacting new local regulations or changing the old; before dealing with grants in aid made by the central treasury, &c. The governor of a prefecture, who is appointed by the central administration, is invested with considerable power. He oversees the carrying out of all works undertaken at the public expense; he causes bills to be drafted for discussion by an assembly; he is responsible for the administration of the funds and property of the prefecture; he orders payments and receipts; he directs the machinery for collecting taxes and fees; he summons a prefectural assembly, opens it and closes it, and has competence to suspend its session should such a course seem necessary. Many of the functions performed by the governor with regard to prefectural assemblies are discharged by a head-man (*gun-chô*) in the case of sub-prefectural assemblies. This head-man is a salaried official appointed by the central administration. He convenes, opens and closes the sub-prefectural assembly; he may require it to reconsider any of its financial decisions that seem improper, explaining his reasons for doing so, and should the assembly adhere to its original view, he may refer the matter to the governor of the prefecture. On the other hand, the assembly is competent to appeal to the home minister from the governor's decision. The sub-prefectural head-man may also take upon himself, in case of emergency, any of the functions falling within the competence of the sub-prefectural assembly, provided that he reports the fact to the assembly and seeks its sanction at the earliest possible opportunity. In each district also there is a head-man, but his post is always elective and generally non-salaried. He occupies towards a district assembly the same position that the sub-prefecture head-man holds towards a sub-prefectural assembly. Over the governors stands the minister for home affairs, who discharges general duties of superintendence and sanction, has competence to delete any item of a local budget, and may, with the emperor's consent, order the dissolution of a local assembly, provided that steps are taken to elect and convene another within three months.

The machinery of local administration is completed by councils, of which the governor of a prefecture, the mayor[11] of a town, or the head-man of a sub-prefecture or district, is *ex officio* president, and the councillors are partly elective, partly nominated by the central government. The councils may be said to stand in an executive position towards the local legislatures, namely, the assemblies, for the former give effect to the measures voted by the latter, take their place in case of emergency and consider questions submitted by them. This system of local government has now been in operation since 1885, and has been found to work well. It constitutes a thorough method of political education for the people. In feudal days popular representation had no existence, but a very effective chain of local responsibility was manufactured by dividing the people—apart from the samurai—into groups of five families, which were held jointly liable for any offence committed by one of their members. Thus it cannot be said that the people were altogether unprepared for this new system.

The Army.—The Japanese—as distinguished from the aboriginal inhabitants of Japan—having fought their way into the country, are naturally described in their annals as a nation of soldiers. The sovereign is said to have been the commander-in-chief and his captains were known as *o-omi* and *o-muraji*, while the duty of serving in the ranks devolved on all subjects alike. This information is indeed derived from tradition only, since the first written record goes back no further than 712. We are justified, however, in believing that at the close of the 7th century of the Christian era, when the empress Jito sat upon the throne, the social system of the Tang dynasty of China commended itself for adoption; the distinction of civil and military is said to have been then established for the first time, though it probably concerned officials only. Certain officers received definitely military commissions, as generals, brigadiers, captains and so on; a military office (*hyōbu-shō*) was organized, and each

The Ancient System.

important district throughout the empire had its military division (*gundan*). One-third—some say one-fourth—of the nation's able-bodied males constituted the army. Tactically there was a complete organization, from the squad of 5 men to the division of 600 horse and 400 foot. Service was for a defined period, during which taxes were remitted, so that military duties always found men ready to discharge them. Thus the hereditary soldier—afterwards known as the *samurai* or *bushi*—did not yet exist, nor was there any such thing as an exclusive right to carry arms. Weapons of war, the property of the state, were served out when required for fighting or for training purposes.

At the close of the 8th century stubborn insurrections on the part of the aborigines gave new importance to the soldier. The conscription list had to be greatly increased, and it came to be a recognized principle that every stalwart man should bear arms, every weakling become a bread-winner. Thus, for the first time, the distinction between "soldier" and "working man"[12] received official recognition, and in consequence of the circumstances attending the distinction a measure of contempt attached to the latter. The next stage of development had its origin in the assumption of high offices of state by great families, who encroached upon the imperial prerogatives, and appropriated as hereditary perquisites posts which should have remained in the gift of the sovereign. The Fujiwara clan, taking all the civil offices, resided in the capital, whereas the military posts fell to the lot of the Taira and the Minamoto, who, settling in the provinces and being thus required to guard and police the outlying districts, found it expedient to surround themselves with men who made soldiering a profession. These latter, in their turn, transmitted their functions to their sons, so that there grew up in the shadow of the great houses a number of military families devoted to maintaining the power and promoting the interests of their masters, from whom they derived their own privileges and emoluments.

From the middle of the 10th century, therefore, the terms *samurai* and *bushi* acquired a special significance, being applied to themselves and their followers by the local magnates, whose power tended more and more to eclipse even that of the throne, and finally, in the 12th century, when the Minamoto brought the whole country under the sway of military organization, the privilege of bearing arms was restricted to the samurai. Thenceforth the military class entered upon a period of administrative and social superiority which lasted, without serious interruption, until the middle of the 19th century. But it is to be observed that the distinction between soldier and civilian, samurai and commoner, was not of ancient existence, nor did it arise from any question of race or caste, victor or vanquished, as is often supposed and stated. It was an outcome wholly of ambitious usurpations, which, relying for success on force of arms, gave practical importance to the soldier, and invested his profession with factitious honour.

Weapons.

The bow was always the chief weapon of the fighting-man in Japan. "War" and "bow-and-arrow" were synonymous terms. Tradition tells how Tametomo shot an arrow through the crest of his brother's helmet, in order to recall the youth's allegiance without injuring him; how Nasuno Michitaka discharged a shaft that severed the stem of a fan swayed by the wind; how Mutsuru, ordered by an emperor to rescue a fish from the talons of an osprey without killing bird or fish, cut off the osprey's feet with a crescent-headed arrow so that the fish dropped into the palace lake and the bird continued its flight; and there are many similar records of Japanese skill with the weapon. Still better authenticated were the feats performed at the "thirty-three-span halls" in Kiōto and Yedo, where the archer had to shoot an arrow through the whole length of a corridor 128 yards long and only 16 ft. high. Wada Daihachi, in the 17th century, succeeded in sending 8133 arrows from end to end of the corridor in 24 consecutive hours, being an average of over 5 shafts per minute; and Masatoki, in 1852, made 5383 successful shots in 20 hours, more than 4 a minute. The lengths of the bow and arrow were determined with reference to the capacity of the archer. In the case of the bow, the unit of measurement was the distance between the tips of the thumb and the little finger with the hand fully stretched. Fifteen of these units gave the length of the bow—the maximum being about 7½ ft. The unit for the arrow was from 12 to 15 hand-breadths, or from 3 ft. to 3¾ ft. Originally the bow was of unvarnished boxwood or *zelkowa*; but subsequently bamboo alone came to be employed. Binding with cord or rattan served to strengthen the bow, and for precision of flight the arrow had three feathers, an eagle's wing being most esteemed for that purpose, and after it, in order, that of the copper pheasant, the crane, the adjutant and the snipe.

Next in importance to the bow came the sword, which is often spoken of as the samurai's chief weapon, though there can be no doubt that during long ages it ranked after the bow. It was a single-edged weapon remarkable for its three exactly similar curves—edge, face-line and back; its almost imperceptibly convexed blade; its admirable tempering; its consummately skilled forging; its razor-like sharpness; its cunning distribution of weight, giving a maximum efficiency of stroke. The 10th century saw this weapon carried to perfection, and it has been inferred that only from that epoch did the samurai begin to esteem his sword as the greatest treasure he possessed, and to rely on it as his best instrument of attack and defence. But it is evident that the evolution of such a blade must have been due to an urgent, long-existing demand, and that the *katana* came as the sequel of innumerable efforts on the part of the sword-smith and generous encouragement on that of the soldier. Many pages of Japanese annals and household traditions are associated with its use. In every age numbers of men devoted their whole lives to acquiring novel skill in swordsmanship. Many of them invented systems of their own, differing from one another in some subtle details unknown to any save the master himself and his favourite pupils. Not merely the method of handling the weapon had to be studied. Associated with sword-play was an art variously known as *shinobi*, *yawara*, and *jujutsu*, names which imply the exertion of muscular force in such a manner as to produce a maximum of effect with a minimum of effort, by directing an adversary's strength so as to become auxiliary to one's own. It was an essential element of the expert's art not only that he should be competent to defend himself with any object that happened to be within reach, but also that without an orthodox weapon he should be capable of inflicting fatal or disabling injury on an assailant. In the many records of great swordsmen instances are related of men seizing a piece of firewood, a brazier-iron, or a druggist's pestle as a weapon of offence, while, on the other side, an umbrella, an iron fan or even a pot-lid served for protection. The samurai had to be prepared for every emergency. Were he caught weaponless by a number of assailants, his art of yawara was supposed to supply him with expedients for emerging unscathed. Nothing counted save the issue. The methods of gaining victory or the circumstances attending defeat were scarcely taken into consideration. The true samurai had to rise superior to all contingencies. Out of this perpetual effort on the part of hundreds of experts to discover and perfect novel developments of swordsmanship, there grew a habit which held its vogue down to modern times, namely, that when a man had mastered one style of sword-play in the school of a teacher, he set himself to study all others, and for that purpose undertook a tour throughout the provinces, challenging every expert, and, in the event of defeat, constituting himself the victor's pupil. The sword exercised a potent influence on the life of the Japanese nation. The distinction of wearing it, the rights that it conferred, the deeds wrought with it, the fame attaching to special skill in its use, the superstitions connected with it, the incredible value set upon a fine blade, the honours bestowed on an expert sword-smith, the traditions that had grown up around celebrated weapons, the profound study needed to be a competent judge of a sword's qualities—all these things conspired to give the katana an importance beyond the limits of ordinary comprehension. A samurai carried at least two swords, a long and a short. Their scabbards of lacquered wood were thrust into his girdle, not slung from it, being fastened in their place by cords of plaited silk. Sometimes he increased the number of swords to three, four or even five, before going into battle, and this array was supplemented by a dagger carried in the bosom. The short sword was not employed in the actual combat. Its use was to cut off an enemy's head after overthrowing him, and it also served a defeated soldier in his last resort—suicide. In general the long sword did not measure more than 3 ft., including the hilt; but some were 5 ft. long, and some 7. Considering that the scabbard, being fastened to the girdle, had no play, the feat of drawing one of these very long swords demanded extraordinary aptitude.

Spear and glaive were also ancient Japanese weapons. The oldest form of spear was derived from China. Its handle measured about 6 ft. and its blade 8 in., and it had sickle-shaped horns at the junction of blade and hilt (somewhat

resembling a European *ranseur*). This weapon served almost exclusively for guarding palisades and gates. In the 14th century a true lance came into use. Its length varied greatly, and it had a hog-backed blade tempered almost as finely as the sword itself. This, too, was a Chinese type, as was also the glaive. The glaive (*naginata*, long sword) was a scimitar-like blade, some 3 ft. in length, fixed on a slightly longer haft. Originally the warlike monks alone employed this weapon, but from the 12th century it found much favour among military men. Ultimately, however, its use may be said to have been limited to women and priests. The spear, however, formed a useful adjunct of the sword, for whereas the latter could not be used except by troops in very loose formation, the former served for close-order fighting.

Armour.

Japanese armour (*gusoku*) may be broadly described as plate armour, but the essential difference between it and the European type was that, whereas the latter took its shape from the body, the former neither resembled nor was intended to resemble ordinary garments. Hence the only changes that occurred in Japanese armour from generation to generation had their origin in improved methods of construction. In general appearance it differed from the panoply of all other nations, so that, although to its essential parts we may apply with propriety the European terms—helmet, corselet, &c.—individually and in combination these parts were not at all like the originals of those names. Perhaps the easiest way of describing the difference is to say that whereas a European knight seemed to be clad in a suit of metal clothes, a Japanese samurai looked as if he wore protective curtains. The Japanese armour was, in fact, suspended from, rather than fitted to, the person. Only one of its elements found a counterpart in the European suit, namely, a tabard, which, in the case of men of rank, was made of the richest brocade. Iron and leather were the chief materials, and as the laminae were strung together with a vast number of coloured cords —silk or leather—an appearance of considerable brilliancy was produced. Ornamentation did not stop there. Plating and inlaying with gold and silver, and finely wrought decoration in chiselled, inlaid and *repoussé* work were freely applied. On the whole, however, despite the highly artistic character of its ornamentation, the loose, pendulous nature of Japanese armour detracted greatly from its workmanlike aspect, especially when the *horo* was added—a curious appendage in the shape of a curtain of fine transparent silk, which was either stretched in front between the horns of the helmet and the tip of the bow, or worn on the shoulders and back, the purpose in either case being to turn the point of an arrow. A true samurai observed strict rules of etiquette with regard even to the garments worn under his armour, and it was part of his soldierly capacity to be able to bear the great weight of the whole without loss of activity, a feat impossible to any untrained man of modern days. Common soldiers were generally content with a comparatively light helmet and a corselet.

War-horses.

The Japanese never had a war-horse worthy to be so called. The mis-shapen ponies which carried them to battle showed qualities of hardiness and endurance, but were so deficient in stature and massiveness that when mounted by a man in voluminous armour they looked painfully puny. Nothing is known of the early Japanese saddle, but at the beginning of historic times it approximated closely to the Chinese type. Subsequently a purely Japanese shape was designed. It consisted of a wooden frame so constructed that a padded numnah could be fastened to it. Galled backs or withers were unknown with such a saddle: it fitted any horse. The stirrup, originally a simple affair resembling that of China and Europe, afterwards took the form of a shoe-sole with upturned toe. Both stirrups and saddle-frame were often of beautiful workmanship, the former covered with rich gold lacquer, the latter inlaid with gold or silver. In the latter part of the military epoch chain-armour was adopted for the horse, and its head was protected by a monster-faced mask of iron.

Early Strategy and Tactics.

Flags were used in battle as well as on ceremonial occasions. Some were monochrome, as the red and white flags of the Taira and the Minamoto clans in their celebrated struggle during the 12th century; and some were streamers emblazoned with figures of the sun, the moon, a dragon, a tiger and so forth, or with religious legends. Fans with iron ribs were carried by commanding officers, and signals to advance or retreat were given by beating drums and metal gongs and blowing conches. During the military epoch a campaign was opened or a contest preluded by a human sacrifice to the god of war, the victim at this rite of blood (*chi-matsuri*) being generally a prisoner or a condemned criminal. Although ambuscades and surprises played a large part in all strategy, pitched battles were the general rule, and it was essential that notice of an intention to attack should be given by discharging a singing arrow. Thereafter the assaulting army, taking the word from its commander, raised a shout of “Ei! Ei!” to which the other side replied, and the formalities having been thus satisfied, the fight commenced. In early medieval days tactics were of the crudest description. An army consisted of a congeries of little bands, each under the order of a chief who considered himself independent, and instead of subordinating his movements to a general plan, struck a blow wherever he pleased. From time immemorial a romantic value has attached in Japan to the first of anything: the first snow of winter; the first water drawn from the well on New Year’s Day; the first blossom of the spring; the first note of the nightingale. So in war the first to ride up to the foe or the wielder of the first spear was held in high honour, and a samurai strove for that distinction as his principal duty. It necessarily resulted, too, not only from the nature of the weapons employed, but also from the immense labour devoted by the true samurai to perfecting himself in their use, that displays of individual prowess were deemed the chief object in a battle. Some tactical formations borrowed from China were familiar in Japan, but their intelligent use and their modification to suit the circumstances of the time were inaugurated only by the great captains of the 15th and 16th centuries. Prior to that epoch a battle resembled a gigantic fencing match. Men fought as individuals, not as units of a tactical formation, and the engagement consisted of a number of personal duels, all in simultaneous progress. It was the samurai’s habit to proclaim his name and titles in the presence of the enemy, sometimes adding from his own record or his father’s any details that might tend to dispirit his hearers. Then some one advancing to cross weapons with him would perform the same ceremony of self-introduction, and if either found anything to upbraid in the other’s antecedents or family history, he did not fail to make loud reference to it, such a device being counted efficacious as a means of disturbing an adversary’s *sang-froid*, though the principle underlying the mutual introduction was courtesy. The duellists could reckon on finishing their fight undisturbed, but the victor frequently had to endure the combined assault of a number of the comrades or retainers of the vanquished. Of course a skilled swordsman did not necessarily seek a single combat; he was equally ready to ride into the thick of the fight without discrimination, and a group of common soldiers never hesitated to make a united attack upon a mounted officer if they found him disengaged. But the general feature of a battle was individual contests, and when the fighting had ceased, each samurai proceeded to the tent[13] of the commanding officer and submitted for inspection the heads of those whom he had killed.

Change of Tactics.

The disadvantage of such a mode of fighting was demonstrated for the first time when the Mongols invaded Japan in 1274. The invaders moved in phalanx, guarding themselves with pavises, and covering their advance with a host of archers shooting clouds of poisoned arrows.[14] When a Japanese samurai advanced singly and challenged one of them to combat, they opened their ranks, enclosed the challenger and cut him to pieces. Many Japanese were thus slain, and it was not until they made a concerted movement of attack that they produced any effect upon the enemy. But although the advantage of massing strength seems to have been recognized, the Japanese themselves did not adopt the formation which the Mongols had shown to be so formidable. Individual prowess continued to be the prominent factor in battles down to a comparatively recent period. The great captains Takeda Shingen and Uyesugi Kenshin are supposed to have been Japan’s pioneer tacticians. They certainly appreciated the value of a formation in which the action of the individual should be subordinated to the unity of the whole. But when it is remembered that fire-arms had already been in the hands of the Japanese for several years, and that they had means of acquainting themselves with the tactics of Europe through their intercourse with the Dutch, it is remarkable that the changes attributed to Takeda and Uyesugi were not more drastic. Speaking broadly, what they

did was to organize a column with the musqueteers and archers in front; the spearmen and swordsmen in the second line; the cavalry in the third line; the commanding officer in the rear, and the drums and standards in the centre. At close quarters the spear proved a highly effective weapon, and in the days of Hideyoshi (1536-1598) combined flank and front attacks by bands of spearmen became a favourite device. The importance of a strong reserve also received recognition, and in theory, at all events, a tolerably intelligent system of tactics was adopted. But not until the close of the 17th century did the doctrine of strictly disciplined action obtain practical vogue. Yamaga Soko is said to have been the successful inculcator of this principle, and from his time the most approved tactical formation was known as the *Yamagaryū* (Yamaga style), though it showed no other innovation than strict subordination of each unit to the general plan.

Military Principles.

Although, tactically speaking, the samurai was everything and the system nothing before the second half of the 17th century, and although strategy was chiefly a matter of deception, surprises and ambushes, it must not be supposed that there were no classical principles. The student of European military history searches in vain for the rules and maxims of war so often invoked by glib critics, but the student of Japanese history is more successful. Here, as in virtually every field of things Japanese, retrospect discovers the ubiquitous Chinaman. The treatises of Sung and ’Ng (called in Japan Son and Go) Chinese generals of the third century after Christ, were the classics of Far-Eastern captains through all generations. (See *The Book of War*, tr. E. F. Calthrop, 1908.) Yoshitsunē, in the 12th century, deceived a loving girl to obtain a copy of Sung’s work which her father had in his possession, and Yamaga, in the 17th century, when he set himself to compose a book on tactics, derived his materials almost entirely from the two Chinese monographs. These treatises came into the hands of the Japanese in the 8th century, when the celebrated Kibi no Mabi went to study civilization in China, just as his successors of the 19th century went to study a new civilization in Europe and America. Thenceforth Son and Go became household words among Japanese soldiers. Their volumes were to the samurai what the *Mahayana* was to the Buddhist. They were believed to have collected whatever of good had preceded them, and to have forecast whatever of good the future might produce. The character of their strategic methods, somewhat analogous to those of 18th-century Europe, may be gathered from the following:—

> “An army undertaking an offensive campaign must be twice as numerous as the enemy. A force investing a fortress should be numerically ten times the garrison. When the adversary holds high ground, turn his flank; do not deliver a frontal attack. When he has a mountain or a river behind him, cut his lines of communication. If he deliberately assumes a position from which victory is his only escape, hold him there, but do not molest him. If you can surround him, leave one route open for his escape, since desperate men fight fiercely. When you have to cross a river, put your advance-guard and your rear-guard at a distance from the banks. When the enemy has to cross a river, let him get well engaged in the operation before you strike at him. In a march, make celerity your first object. Pass no copse, enter no ravine, nor approach any thicket until your scouts have explored it fully.”

Such precepts are multiplied; but when these ancient authors discuss tactical formations, they do not seem to have contemplated anything like rapid, well-ordered changes of mobile, highly trained masses of men from one formation to another, or their quick transfer from point to point of a battlefield. The basis of their tactics is *The Book of Changes*. Here again is encountered the superstition that underlies nearly all Chinese and Japanese institutions: the superstition that took captive even the great mind of Confucius. The positive and the negative principles; the sympathetic and the antipathetic elements; cosmos growing out of chaos; chaos re-absorbing cosmos—on such fancies they founded their tactical system. The result was a phalanx of complicated organization, difficult to manœuvre and liable to be easily thrown into confusion. Yet when Yamaga in the 17th century interpreted these ancient Chinese treatises, he detected in them suggestions for a very shrewd use of the principle of échelon, and applied it to devise formations which combined much of the frontal expansion of the line with the solidity of the column. More than that cannot be said for Japanese tactical genius. The samurai was the best fighting unit in the Orient—probably one of the best fighting units the world ever produced. It was perhaps because of that excellence that his captains remained indifferent tacticians.

Ethics of the Samurai.

In estimating the military capacity of the Japanese, it is essential to know something of the ethical code of the samurai, the *bushido* (way of the warrior) as it was called. A typical example of the rules of conduct prescribed by feudal chieftains is furnished in the code of Kato Kiyomasa, a celebrated general of the 16th century:—

Regulations for Samurai of every Rank; the Highest and Lowest alike.

1. The routine of service must be strictly observed. From 6 a.m. military exercises shall be practised. Archery, gunnery and horsemanship must not be neglected. If any man shows exceptional proficiency he shall receive extra pay.

2. Those that desire recreation may engage in hawking, deer-hunting or wrestling.

3. With regard to dress, garments of cotton or pongee shall be worn. Any man incurring debts owing to extravagance of costume or living shall be considered a law-breaker. If, however, being zealous in the practice of military arts suitable to his rank, he desires to hire instructors, an allowance may be granted to him for that purpose.

4. The staple of diet shall be unhulled rice. At social entertainments one guest for one host is the proper limit. Only when men are assembled for military exercises shall many dine together.

5. It is the duty of every samurai to make himself acquainted with the principles of his craft. Extravagant displays of adornment are forbidden in battle.

6. Dancing or organizing dances is unlawful; it is likely to betray sword-carrying men into acts of violence. Whatever a man does should be done with his heart. Therefore for the soldier military amusements alone are suitable. The penalty for violating this provision is death by suicide.

7. Learning shall be encouraged. Military books must be read. The spirit of loyalty and filial piety must be educated before all things. Poem-composing pastimes are not to be engaged in by samurai. To be addicted to such amusements is to resemble a woman. A man born a samurai should live and die sword in hand. Unless he is thus trained in time of peace, he will be useless in the hour of stress. To be brave and warlike must be his invariable condition.

8. Whosoever finds these rules too severe shall be relieved from service. Should investigation show that any one is so unfortunate as to lack manly qualities, he shall be singled out and dismissed forthwith. The imperative character of these instructions must not be doubted.

The plainly paramount purpose of these rules was to draw a sharp line of demarcation between the samurai and the courtiers living in Kiōto. The dancing, the couplet-composing, the sumptuous living and the fine costumes of the officials frequenting the imperial capital were strictly interdicted by the feudatories. Frugality, fealty and filial piety—these may be called the fundamental virtues of the samurai. Owing to the circumstances out of which his caste had grown, he regarded all bread-winning pursuits with contempt, and despised money. To be swayed in the smallest degree by mercenary motives was despicable in his eyes. Essentially a stoic, he made self-control the ideal of his existence, and practised the courageous endurance of suffering so thoroughly that he could without hesitation inflict on his own body pain of the most horrible description. Nor can the courage of the samurai justly be ascribed to bluntness of moral

sensibility resulting from semi-savage conditions of life. From the 8th century onwards the current of existence in Japan set with general steadiness in the direction of artistic refinement and voluptuous luxury, amidst which men could scarcely fail to acquire habits and tastes inconsistent with acts of high courage and great endurance. The samurai's mood was not a product of semi-barbarism, but rather a protest against emasculating civilization. He schooled himself to regard death by his own hand as a normal eventuality. The story of other nations shows epochs when death was welcomed as a relief and deliberately invited as a refuge from the mere weariness of living. But wherever there has been liberty to choose, and leisure to employ, a painless mode of exit from the world, men have invariably selected it. The samurai, however, adopted in *harakiri* (disembowelment) a mode of suicide so painful and so shocking that to school the mind to regard it with indifference and perform it without flinching was a feat not easy to conceive. Assistance was often rendered by a friend who stood ready to decapitate the victim immediately after the stomach had been gashed; but there were innumerable examples of men who consummated the tragedy without aid, especially when the sacrifice of life was by way of protest against the excesses of a feudal chief or the crimes of a ruler, or when some motive for secrecy existed. It must be observed that the suicide of the samurai was never inspired by any doctrine like that of Hegesias. Death did not present itself to him as a legitimate means of escaping from the cares and disappointments of life. Self-destruction had only one consolatory aspect, that it was the soldier's privilege to expiate a crime with his own sword, not under the hand of the executioner. It rested with his feudal chief to determine his guilt, and his peremptory duty was never to question the justice of an order to commit suicide, but to obey without murmur or protest. For the rest, the general motives for suicide were to escape falling into the hands of a victorious enemy, to remonstrate against some official abuse which no ordinary complaint could reach, or, by means of a dying protest, to turn a liege lord from pursuing courses injurious to his reputation and his fortune. This last was the noblest and by no means the most infrequent reason for suicide. Scores of examples are recorded of men who, with everything to make existence desirable, deliberately laid down their lives at the prompting of loyalty. Thus the samurai rose to a remarkable height of moral nobility. He had no assurance that his death might not be wholly fruitless, as indeed it often proved. If the sacrifice achieved its purpose, if it turned a liege lord from evil courses, the samurai could hope that his memory would be honoured. But if the lord resented such a violent and conspicuous mode of reproving his excesses, then the faithful vassal's retribution would be an execrated memory and, perhaps, suffering for his family and relatives. Yet the deed was performed again and again. It remains to be noted that the samurai entertained a high respect for the obligations of truth; "A bushi has no second word," was one of his favourite mottoes. However, a reservation is necessary here. The samurai's doctrine was not truth for truth's sake, but truth for the sake of the spirit of uncompromising manliness on which he based all his code of morality. A pledge or a promise must never be broken, but the duty of veracity did not override the interests or the welfare of others. Generosity to a defeated foe was also one of the tenets of the samurai's ethics. History contains many instances of the exercise of that quality.

Religious Influence.

Something more, however, than a profound conception of duty was needed to nerve the samurai for sacrifices such as he seems to have been always ready to make. It is true that Japanese parents of the military class took pains to familiarize their children of both sexes from very tender years with the idea of self-destruction at any time. But superadded to the force of education and the incentive of tradition there was a transcendental influence. Buddhism supplied it. The tenets of that creed divided themselves, broadly speaking, into two doctrines, salvation by faith and salvation by works, and the chief exponent of the latter principle is the sect which prescribes meditation as the vehicle of enlightenment. Whatever be the mental processes induced by this rite, those who have practised it insist that it leads finally to a state of absorption, in which the mind is flooded by an illumination revealing the universe in a new aspect, absolutely free from all traces of passion, interest or affection, and showing, written across everything in flaming letters, the truth that for him who has found Buddha there is neither birth nor death, growth nor decay. Lifted high above his surroundings, he is prepared to meet every fate with indifference. The attainment of that state seems to have been a fact in the case both of the samurai of the military epoch and of the Japanese soldier to-day.

Abolition of the Samurai.

The policy of seclusion adopted by the Tokugawa administration after the Shimabara insurrection included an order that no samurai should acquire foreign learning. Nevertheless some knowledge could not fail to filter in through the Dutch factory at Deshima, and thus, a few years before the advent of the American ships, Takashima Shūhan, governor of Nagasaki, becoming persuaded of the fate his country must invite if she remained oblivious of the world's progress, memorialized the Yedo government in the sense that, unless Japan improved her weapons of war and reformed her military system, she could not escape humiliation such as had just overtaken China. He obtained small arms and field-guns of modern type from Holland, and, repairing to Yedo with a company of men trained according to the new tactics, he offered an object lesson for the consideration of the conservative officials. They answered by throwing him into prison. But Egawa, one of his retainers, proved a still more zealous reformer, and his foresight being vindicated by the appearance of the American war-vessels in 1853, he won the government's confidence and was entrusted with the work of planning and building forts at Shinagawa and Shimoda. At Egawa's instance rifles and cannon were imported largely from Europe, and their manufacture was commenced in Japan, a powder-mill also being established with machinery obtained from Holland. Finally, in 1862, the shōgun's government adopted the military system of the West, and organized three divisions of all arms, with a total strength of 13,600 officers and men. Disbanded at the fall of the shōgunate in 1867, this force nevertheless served as a model for a similar organization under the imperial government, and in the meanwhile the principal fiefs had not been idle, some—as Satsuma—adopting English tactics, others following France or Germany, and a few choosing Dutch. There appeared upon the stage at this juncture a great figure in the person of Omura Masujiro, a samurai of the Chōshū clan. He established Japan's first military school at Kiōto in 1868; he attempted to substitute for the hereditary soldier conscripts taken from all classes of the people, and he conceived the plan of dividing the whole empire into six military districts. An assassin's dagger removed him on the threshold of these great reforms, but his statue now stands in Tōkyō and his name is spoken with reverence by all his countrymen. In 1870 Yamagata Aritomo (afterwards Field-Marshal Prince Yamagata) and Saigo Tsugumichi (afterwards Field-Marshal Marquis Saigo) returned from a tour of military inspection in Europe, and in 1872 they organized a corps of Imperial guards, taken from the three clans which had been conspicuous in the work of restoring the administrative power to the sovereign, namely, the clans of Satsuma, Chōshū and Tosa. They also established garrisons in Tōkyō, Sendai, Osaka and Kumamoto, thus placing the military authority in the hands of the central government. Reforms followed quickly. In 1872, the *hyōbushō*, an office which controlled all matters relating to war, was replaced by two departments, one of war and one of the navy, and, in 1873, an imperial decree substituted universal conscription for the system of hereditary militarism. Many persons viewed this experiment with deep misgiving. They feared that it would not only alienate the samurai, but also entrust the duty of defending the country to men unfitted by tradition and custom for such a task, namely, the farmers, artisans and tradespeople, who, after centuries of exclusion from the military pale, might be expected to have lost all martial spirit. The government, however, was not deterred by these apprehensions. It argued that since the distinction of samurai and commoner had not originally existed, and since the former was a product simply of accidental conditions, there was no valid reason to doubt the military capacity of the people at large. The justice of this reasoning was put to a conclusive test a few years later. Originally the period of service with the colours was fixed at 3 years, that of service with the first and second reserves being 2 years each. One of the serious difficulties encountered at the outset was that samurai conscripts were too proud to stand in the ranks with common rustics or artisans, and above all to obey the commands of plebeian officers. But

patriotism soon overcame this obstacle. The whole country—with the exception of the northern island, Yezo—was parcelled out into six military districts (headquarters Tōkyō, Osaka, Nagoya, Sendai, Hiroshima and Kumamoto) each furnishing a division of all arms and services. There was also from 1876 a guards division in Tōkyō. The total strength on a peace footing was 31,680 of all arms, and on a war footing, 46,350. The defence of Yezo was entrusted to a colonial militia. It may well be supposed that to find competent officers for this army greatly perplexed its organizers. The military school—now in Tōkyō but originally founded by Omura in Kiōto—had to turn out graduates at high pressure, and private soldiers who showed any special aptitude were rapidly promoted to positions of command. French military instructors were engaged, and the work of translating manuals was carried out with all celerity. In 1877, this new army of conscripts had to endure a crucial test: it had to take the field against the Satsuma samurai, the very flower of their class, who in that year openly rebelled against the Tōkyō government. The campaign lasted eight months; as there had not yet been time to form the reserves, the Imperial forces were soon seriously reduced in number by casualties in the field and by disease, the latter claiming many victims owing to defective commissariat. It thus became necessary to have recourse to volunteers, but as these were for the most part samurai, the expectation was that their hereditary instinct of fighting would compensate for lack of training. That expectation was not fulfilled. Serving side by side in the field, the samurai volunteer and the heimin[15] regular were found to differ by precisely the degree of their respective training. The fact was thus finally established that the fighting qualities of the farmer and artisan reached as high a standard as those of the bushi.

Thenceforth the story of the Japanese army is one of steady progress and development. In 1878, the military duties of the empire were divided among three offices: namely, the army department, the general staff and the inspection department, while the six divisions of troops were organized into three army corps.

In 1879, the total period of colour and reserve service became 10 years. In 1883 the period was extended to 12 years, the list of exemptions was abbreviated, and above all substitution was no longer allowed. Great care was devoted to the training of officers; promotion went by merit, and at least ten of the most promising officers were sent abroad every year to study. A comprehensive system of education for the rank and file was organized. Great difficulty was experienced in procuring horses suitable for cavalry, and indeed the Japanese army long remained weak in this arm. In 1886, the whole littoral of the empire was divided into five districts, each with its admiralty and its naval port, and the army being made responsible for coast defence, a battery construction corps was formed. Moreover, an exhaustive scheme was elaborated to secure full co-operation between the army and navy. In 1888 the seven divisions of the army first found themselves prepared to take the field, and, in 1893, a revised system of mobilization was sanctioned, to be put into operation the following year, for the Chino-Japanese War (*q.v.*). At this period the division, mobilized for service in the field, consisted of 12 battalions of infantry, 3 troops of cavalry, 4 batteries of field and 2 of mountain artillery, 2 companies of sappers and train, totalling 18,492 of all arms with 5633 horses. The guards had only 8 battalions and 4 batteries (field). The field army aggregated over 120,000, with 168 field and 72 mountain guns, and the total of all forces, field, garrison and dépôt, was 220,580 of all arms, with 47,220 horses and 294 guns. Owing, however, to various modifications necessitated by circumstances, the numbers actually on duty were over 240,000, with 6495 non-combatant employees and about 100,000 coolies who acted as carriers. The infantry were armed with the Murata single-loader rifle, but the field artillery was inferior, and the only two divisions equipped with magazine rifles and smokeless powder never came into action. The experiences gained in this war bore large fruit. The total term of service with the colours and the reserves was slightly increased; the colonial militia of Yezo (Hokkaidō) was organized as a seventh line division; 5 new divisions were added, bringing the whole number of divisions to 13 (including the guards); a mixed brigade was stationed in Formosa (then newly added to Japan's dominions); a high military council composed of field-marshals was created; the cavalry was brigaded; the garrison artillery was increased; strenuous efforts were made to improve the education of officers and men; and lastly, sanitary arrangements underwent much modification. An arsenal had been established in Tōkyō, in 1868, for the manufacture of small arms and small-arm ammunition; this was followed by an arsenal in Osaka for the manufacture of guns and gun-ammunition; four powder factories were opened, and in later years big-gun factories at Kure and Mororan. Japan was able to make 12-inch guns in 1902, and her capacity for this kind of work was in 1909 second to none. She has her own patterns of rifle and field gun, so that she is independent of foreign aid so far as armaments are concerned. In 1900, she sent a force to North China to assist in the campaign for the relief of the foreign legations in Peking, and on that occasion her troops were able to observe at first hand the qualities and methods of European soldiers. In 1904 took place the great war with Russia (see Russo-Japanese War). After the war important changes were made in the direction of augmenting and improving the armed forces. The number of divisions was increased to 19 (including the guards), of which one division is for service in Korea and one for service in Manchuria. Various technical corps were organized, as well as horse artillery, heavy field artillery and machine-gun units. The field-gun was replaced by a quick-firer manufactured at Osaka, and much attention was given to the question of remounts—for, both in the war with China and in that with Russia, the horsing of the cavalry had been poor. Perhaps the most far-reaching change in all armies of late years is the shortening of the term of service with the colours to 2 years for the infantry, 3 years remaining the rule for other arms. This was adopted by Japan after the war, the infantry period of service with the reserves being extended to 14⅓ years, and of course has the effect of greatly augmenting the potential war strength. As to this, figures are kept secret, nor can any accurate approximation be attempted without danger of error. Rough estimates of Japan's war strength have, however, been made, giving 550,000 as the war strength of the first line army, plus 34,000 for garrisons overseas and 150,000 special reserves (*hojū*); 370,000 second line or *kōbi*, and 110,000 for the fully trained portion of the territorial forces, or *Kokumin-hei*. All these branches can further draw upon half-trained elements to the number of about 800,000 to replace losses. Japan's available strength in the last resort for home defence was recently (1909) stated by the Russian *Novoye Vremya* at 3,000,000. In 20 years, when the present system has produced its full effect, the first line should be 740,000 strong, the second line 780,000, and the third line about 3,850,000 (3,000,000 untrained and 850,000 partly trained). Details can be found in *Journal of the R. United Service Institution*, Dec. 1909-Jan. 1910.

Recruiting.

At 20 years of age every Japanese subject, of whatever status, becomes liable for military service. But the difficulty of making service universal in the case of a growing population is felt here as in Europe, and practically the system has elements of the old-fashioned conscription. The minimum height is 5.2 ft. (artillery and engineers, 5.4 ft.). There are four principal kinds of service, namely, service with the colours (*genyeki*), for two years; service with the first reserves (*yobi*), for 7⅓ years; service with the second reserves (*kōbi*), for 7 years; and service with the territorial troops (*ko kumin-hei*) up to the age of 40. Special reserve (*hojū*) takes up men who, though liable for conscription and medically qualified, have escaped the lot for service with the colours. It consists of two classes, one of men remaining in the category of *hojū* for 7⅓ years, the other for 1⅓ year, before passing into the territorial army. Their purpose is similar to that of special or *ersatz* reserves elsewhere. The first class receives the usual short initial training. Men of the second class, in ordinary circumstances, pass, after their 1⅓ year's inability, to the territorial army untrained. As for the first and second general reserves (*yobi* and *kōbi*), each is called out twice during its full term for short "refresher" courses. After reaching the territorial army a man is relieved from all further training. The total number of youths eligible for conscription each year is about 435,000, but the annual contingent for full service is not much more than 100,000. Conscripts in the active army may be discharged before the expiration of two years if their conduct and aptitude are exceptional.

A youth is exempted if it be clearly established[16] that his family is dependent upon his earnings. Except for permanent deformities men are put back for one year before being finally rejected on medical grounds. Men who have been convicted of crime are disqualified, but those who have been temporarily deprived of civil rights must present themselves

for conscription at the termination of their sentence. Educated men may enrol themselves as one-year volunteers instead of drawing lots, this privilege of entry enduring up to the age of 28, after which, service for the full term without drawing lots is imposed. Residence in a foreign country secures exemption up to the age of 32—provided that official permission to go abroad has been obtained. A man returning after the age of 32 is drafted into the territorial army, but if he returns before that age he must volunteer to receive training, otherwise he is taken without lot for service with the colours. The system of volunteering is largely resorted to by persons of the better classes. Any youth who possesses certain educational qualifications is entitled to volunteer for training. If accepted after medical inspection, he serves with the colours for one year, during three months of which time he must live in barracks—unless a special permit be granted by his commanding officer. A volunteer has to contribute to his maintenance and equipment, although youths who cannot afford the full expense, if otherwise qualified, are assisted by the state. At the conclusion of a year's training the volunteer is drafted into the first reserve for 6¼ years, and then into the second reserve for 5 years, so that his total period (12¼ years) of service before passing into the territorial army is the same as that of an ordinary conscript. The main purpose of the one-year voluntariat, as in Germany, is to provide officers for the reserves to territorial troops. Qualified teachers in the public service are only liable to a very short initial training, after which they pass at once into the territorial army. But if a teacher abandons that calling before the age of 28, he becomes liable, without lot,[17] to two years with the colours, unless he adopts the alternative of volunteering.

Officers.

Officers are obtained in two ways. There are six local preparatory cadet schools (*yonen-gakko*) in various parts of the empire, for boys of from 13 to 15. After 3 years at one of these schools[18] a graduate spends 21 months at the central preparatory school (*chuo-yonen-gakko*), Tōkyō, and if he graduates with sufficient credit at the latter institution, he becomes eligible for admission to the officers' college (*shikan-gakko*) without further test of proficiency. The second method of obtaining officers is by competitive examination for direct admission to the officers' college. In either case the cadet is sent to serve with the colours for 6 to 12 months as a private and non-commissioned officer, before commencing his course at the officers' college. The period of study at the officers' college is one year, and after graduating successfully the cadet serves with troops for 6 months on probation. If at the end of that time he is favourably reported on, he is commissioned as a sub-lieutenant. Young officers of engineers and artillery receive a year's further training at a special college. Officers' ranks are the same as in the British army, but the nomenclature is more simple. The terms, with their English equivalents, are *shōi* (second lieutenant), *chūi* (first lieutenant), *tai* (captain), *shōsa* (major), *chūsa* (lieut.-colonel), *taisa* (colonel), *shōshō* (major-general), *chūjō* (lieut.-general), *taishō* (general), *gensui* (field-marshal). All these except the last apply to the same relative ranks in the navy. Promotion of officers in the junior grades is by seniority or merit, but after the rank of captain all promotion is by merit, and thus many officers never rise higher than captain, in which case retirement is compulsory at the age of 48. Except in the highest ranks, a certain minimum period has to be spent in each rank before promotion to the next.

Soldiers.

There are three grades of privates: upper soldiers (*jōtō-hei*), first-class soldiers (*ittō-sotsu*), and second-class soldiers (*nitō-sotsu*). A private on joining is a second-class soldier. For proficiency and good conduct he is raised to the rank of first-class soldier, and ultimately to that of upper soldier. Non-commissioned officers are obtained from the ranks, or from those who wish to make soldiering a profession, as in European armies. The grades are corporal (*gochō*), sergeant (*gunsō*), sergeant-major (*sōchō*) and special sergeant-major (*tokumu-sōchō*).

The pay of the conscript is, as it is everywhere, a trifle (1s. 10d.-3s. 0½d. per month). The professional non-commissioned officers are better paid, the lowest grade receiving three times as much as an upper soldier. Officers' pay is roughly at about three-quarters of the rates prevailing in Germany, sub-lieutenants receiving about £34, captains £71, colonels £238 per annum, &c. Pensions for officers and non-commissioned officers, according to scale, can be claimed after 11 years' colour service.

The emperor is the commander-in-chief of the army, and theoretically the sole source of military authority, which he exercises through a general staff and a war department, with the assistance of a board of field-marshals (*gensuifu*). The general staff has for chief a field-marshal, and for vice-chief a general or lieutenant-general. It includes besides the usual general staff departments, various survey and topographical officers, and the military college is under its direction. The war department is presided over by a general officer on the active list, who is a member of the cabinet without being necessarily affected by ministerial changes. There are, further, artillery and engineer committees, and a remount bureau. The headquarters of coast defences under general officers are Tōkyō, Yokohama, Shimonoseki and Yura. The whole empire is divided into three military districts—eastern, central and western—each under the command of a general or lieutenant-general. The divisional headquarters are as follows:—Guard Tōkyō, I. Tōkyō, II. Sendai, III. Nagoya, IV. Wakayama, V. Hiroshima, VI. Kumamoto, VII. Asahikawa, VIII. Hirosaki, IX. Kasanava, X. Himeji, XI. Senzui, XII. Kokura, XIII. Takata, XIV. Utsonomia, XV. Fushimi, XVI. Kiōto, XVII. Okayama, XVIII. Kurume. Some of these divisions are permanently on foreign service, but their recruiting areas in Japan are maintained. There are also four cavalry brigades, and a number of unassigned regiments of field and mountain artillery, as well as garrison artillery and army technical troops. The organization of the active army by regiments is 176 infantry regiments of 3 battalions; 27 cavalry regiments; 30 field artillery regiments each of 6 and 3 mountain artillery regiments each of 3 batteries; 6 regiments and 6 battalions of siege, heavy field and fortress artillery; 20 battalions engineers; 19 supply and transport battalions.

Medical Service.

The medical service is exceptionally well organized. It received unstinted praise from European and American experts who observed it closely during the wars of 1900 and 1904-5. The establishment of surgeons to each division is approximately 100, and arrangements complete in every detail are made for all lines of medical assistance. Much help is rendered by the red cross society of Japan, which has an income of 2,000,000 *yen* annually, a fine hospital in Tōkyō, a large nursing staff and two specially built and equipped hospital ships. During the early part of the campaign in Pechili, in 1900, the French column entrusted its wounded to the care of the Japanese.

Supply.

The staple article of commissariat for a Japanese army in the field is *hoshii* (dried rice), of which three days' supply can easily be carried in a bag by the soldier. When required for use the rice, being placed in water, swells to its original bulk, and is eaten with a relish of salted fish, dried sea-weed or pickled plums. The task of provisioning an army on these lines is comparatively simple. The Japanese soldier, though low in stature, is well set up, muscular and hardy. He has great powers of endurance, and manœuvres with remarkable celerity, doing everything at the run, if necessary, and continuing to run without distress for a length of time astonishing to European observers. He is greatly subject, however, to attacks of *kakke* (beri-beri), and if he has recourse to meat diet, which appears to be the best preventive, he will probably lose something of his capacity for prolonged rapid movement. He attacks with apparent indifference to danger, preserves his cheerfulness amid hardships, is splendidly patriotic and has always shown himself thoroughly amenable to discipline.

Military Schools.

Of the many educational and training establishments, the most important is the *rikugun daigakkō*, or army college, where officers, (generally subalterns), are prepared for service in the upper ranks and for staff appointments, the course of study extending over three years. The Toyama school stands next in importance. The courses pursued there are attended chiefly by subaltern officers of dismounted branches, non-commissioned officers also being allowed to take the musketry course. The term of training is five months. Young officers of the scientific branches are instructed at the *hōkōgakkō* (school of artillery and engineers). There are, further, two special schools of gunnery—one for field, the other for garrison artillery, attended chiefly by captains and senior subalterns of the two branches. There is an inspection department of military education, the

inspector-general being a lieutenant-general, under whom are fifteen field and general officers, who act as inspectors of the various schools and colleges and of military educational matters in general.

The Japanese officer's pay is small and his mode of life frugal. He lives out of barracks, frequently with his own family. His uniform is plain and inexpensive,[19] and he has no desire to exchange it for mufti. He has no mess expenses, contribution to a band, or luxuries of any kind, and as he is nearly always without private means to supplement his pay, his habits are thoroughly economical. He devotes himself absolutely to his profession, living for nothing else, and since he is strongly imbued with an effective conception of the honour of his cloth, instances of his incurring disgrace by debt or dissipation are exceptional. The samurai may be said to have been revived in the officers of the modern army, who preserve and act up to all the old traditions. The system of promotion has evidently much to do with this good result, for no Japanese officer can hope to rise above the rank of captain unless, by showing himself really zealous and capable, he obtains from his commanding officer the recommendation without which all higher educational opportunities are closed to him. Yet promotion by merit has not degenerated into promotion by favour, and corruption appears to be virtually absent. In the stormiest days of parliamentary warfare, when charges of dishonesty were freely preferred by party politicians against all departments of officialdom, no whisper ever impeached the integrity of army officers.

The training of the troops is thorough and strictly progressive, the responsibility of the company, squadron and battery commanders for the training of their commands, and the latitude granted them in choice of means being, as in Germany, the keystone of the system.

Foreign Assistance.

Originally the government engaged French officers to assist in organizing the army and elaborating its system of tactics and strategy, and during several years a military mission of French officers resided in Tōkyō and rendered valuable aid to the Japanese. Afterwards German officers were employed, with Jakob Meckel at their head, and they left a perpetually grateful memory. But ultimately the services of foreigners were dispensed with altogether, and Japan now adopts the plan of sending picked men to complete their studies in Europe. Up to 1904 she followed Germany in military matters almost implicitly, but since then, having the experience of her own great war to guide her, she has, instead of modelling herself on any one foreign system, chosen from each whatever seemed most desirable, and also, in many points, taken the initiative herself.

Military Finance.

When the power of the sword was nominally restored to the Imperial government in 1868, the latter planned to devote one-fourth of the state's ordinary revenue to the army and navy. Had the estimated revenue accrued, this would have given a sum of about 3 millions sterling for the two services. But not until 1871, when the troops of the fiefs were finally disbanded, did the government find itself in a position to include in the annual budgets an adequate appropriation on account of armaments. Thenceforth, from 1872 to 1896, the ordinary expenditures of the army varied from three-quarters of a million sterling to 1½ millions, and the extraordinary outlays ranged from a few thousands of pounds to a quarter of a million. Not once in the whole period of 25 years—if 1877 (the year of the Satsuma rebellion) be excepted—did the state's total expenditures on account of the army exceed 1½ millions sterling, and it redounds to the credit of Japan's financial management that she was able to organize, equip and maintain such a force at such a small cost. In 1896, as shown above, she virtually doubled her army, and a proportionate increase of expenditure ensued, the outlays for maintenance jumping at once from an average of about 1¼ millions sterling to 2¼ millions, and growing thenceforth with the organization of the new army, until in the year (1903) preceding the outbreak of war with Russia, they reached the figure of 4 millions. Then again, in 1906, six divisions were added, and additional expenses had to be incurred on account of the new overseas garrisons, so that, in 1909, the ordinary outlays reached a total of 7 millions, or about one-seventh of the ordinary revenue of the state. This takes no account of extraordinary outlays incurred for building forts and barracks, providing new patterns of equipment, &c. In 1909 the latter, owing to the necessity of replacing the weapons used in the Russian War, and in particular the field artillery gun (which was in 1905 only a semi-quickfirer), involved a relatively large outlay.

The Navy.—The traditions of Japan suggest that the art of navigation was not unfamiliar to the inhabitants of a country consisting of hundreds of islands and abounding in bays and inlets. Some interpreters of her cosmography discover a great ship in the "floating bridge of heaven" from which the divine procreators of the islands commenced their work, and construe in a similar sense other poetically named vehicles of that remote age. But though the seas were certainly traversed by the early invaders of Japan, and though there is plenty of proof that in medieval times the Japanese flag floated over merchantmen which voyaged as far as Siam and India, and over piratical craft which harassed the coasts of Korea and China, it is unquestionable that in the matter of naval architecture Japan fell behind even her next-door neighbours. Thus, when a Mongol fleet came to Kiūshiū in the 13th century, Japan had no vessels capable of contending against the invaders, and when, at the close of the 16th century, a Japanese army was fighting in Korea, repeated defeats of Japan's squadrons by Korean war-junks decided the fate of the campaign on shore as well as on sea. It seems strange that an enterprising nation like the Japanese should not have taken for models the great galleons which visited the Far East in the second half of the 16th century under the flags of Spain, Portugal, Holland and England. With the exception, however, of two ships built by a castaway English pilot to order of Iyeyasu, no effort in that direction appears to have been made, and when an edict vetoing the construction of sea-going vessels was issued in 1636 as part of the Tokugawa policy of isolation, it can scarcely be said to have checked the growth of Japan's navy, for she possessed nothing worthy of the name. It was to the object lesson furnished by the American ships which visited Yedo bay in 1853 and to the urgent counsels of the Dutch that Japan owed the inception of a naval policy. A seamen's training station was opened under Dutch instructors in 1855 at Nagasaki, a building-slip was constructed and an iron factory established at the same place, and shortly afterwards a naval school was organized at Tsukiji in Yedo, a war-ship the "Kwanko Maru"[20]—presented by the Dutch to the shōgun's government—being used for exercising the cadets. To this vessel two others, purchased from the Dutch, were added in 1857 and 1858, and these, with one given by Queen Victoria, formed the nucleus of Japan's navy. In 1860, we find the Pacific crossed for the first time by a Japanese war-ship—the "Kwanrin Maru"—and subsequently some young officers were sent to Holland for instruction in naval science. In fact the Tokugawa statesmen had now thoroughly appreciated the imperative need of a navy. Thus, in spite of domestic unrest which menaced the very existence of the Yedo government, a dockyard was established and fully equipped, the place chosen as its site being, by a strange coincidence, the village of Yokosuka where Japan's first foreign ship-builder, Will Adams, had lived and died 250 years previously. This dockyard was planned and its construction superintended by a Frenchman, M. Bertin. But although the Dutch had been the first to advise Japan's acquisition of a navy, and although French aid was sought in the case of the important and costly work at Yokosuka, the shōgun's government turned to England for teachers of the art of maritime warfare. Captain Tracey, R.N., and other British officers and warrant-officers were engaged to organize and superintend the school at Tsukiji. They arrived, however, on the eve of the fall of the Tokugawa shōgunate, and as the new administration was not prepared to utilize their services immediately, they returned to England. It is not to be inferred that the Imperial government underrated the importance of organizing a naval force. One of the earliest Imperial rescripts ranked a navy among "the country's most urgent needs" and ordered that it should be "at once placed on a firm foundation." But during the four years immediately subsequent to the restoration, a semi-interregnum existed in military affairs, the power of the sword being partly transferred to the hands of the sovereign and partly retained by the feudal chiefs. Ultimately, not only the vessels which had been in the possession of the shōgunate but also several obtained from Europe by the great feudatories had to be taken over by the Imperial government, which, on reviewing the situation, found itself owner of a motley squadron of 17 war-ships aggregating 13,812 tons

Early Japanese War-vessels.

displacement, of which two were armoured, one was a composite ship, and the rest were of wood. Steps were now taken to establish and equip a suitable naval college in Tsukiji, and application having been made to the British government for instructors, a second naval mission was sent from England in 1873, consisting of 30 officers and warrant-officers under Commander (afterwards Vice-Admiral Sir) Archibald Douglas. At the very outset occasions for active service afloat presented themselves. In 1868, the year after the fall of the shōgunate, such ships as could be assembled had to be sent to Yezo to attack the main part of the Tokugawa squadron which had raised the flag of revolt and retired to Hakodate under the command of the shōgun's admiral, Enomoto. Then in 1874 the duty of convoying a fleet of transports to Formosa had to be undertaken; and in 1877 sea power played its part in crushing the formidable rebellion in Satsuma. Meanwhile the work of increasing and organizing the navy went on steadily. The first steam war-ship constructed in Japan had been a gunboat (138 tons) launched in 1866 from a building-yard established at Ishikawajima, an island near the mouth of the Sumida river on which Tōkyō stands. At this yard and at Yokosuka two vessels of 897 tons and 1450 tons, respectively, were launched in 1875 and 1876, and Japan now found herself competent not only to execute all repairs but also to build ships of considerable size. An order was placed in England in 1875, which produced, three years later, the "Fusō," Japan's first ironclad (3717 tons) and the "Kongo" and "Hiei," steel-frame sister-cruisers of 2248 tons. Meanwhile training, practical and theoretical, in seamanship, gunnery, torpedo-practice and naval architecture went on vigorously, and in 1878 the Japanese flag was for the first time seen in European waters, floating over the cruiser "Seiki" (1897 tons) built in Japan and navigated solely by Japanese. The government, constantly solicitous of increasing the fleet, inaugurated, in 1882, a programme of 30 cruisers and 12 torpedo-boats, and in 1886 this was extended, funds being obtained by an issue of naval loan-bonds. But the fleet did not yet include a single battleship. When the diet opened for the first time in 1890, a plan for the construction of two battleships encountered stubborn opposition in the lower house, where the majority attached much less importance to voting money for war-ships than to reducing the land tax. Not until 1892 was this opposition overcome in deference to an order from the throne that thirty thousand pounds sterling should be contributed yearly from the privy purse and that a tithe of all official salaries should be devoted during the same interval to naval needs. Had the house been more prescient, Japan's position at the outbreak of war with China in 1894 would have been very different. She entered the contest with 28 fighting craft, aggregating 57,600 tons, and 24 torpedo-boats, but among them the most powerful was a belted cruiser of 4300 tons. Not one battleship was included, whereas China had two ironclads of nearly 8000 tons each. Under these conditions the result of the naval conflict was awaited with much anxiety in Japan. But the Chinese suffered signal defeats (see Chino-Japanese War) off the Yalu and at Wei-hai-wei, and the victors took possession of 17 Chinese craft, including one battleship. The resulting addition to Japan's fighting force was, however, insignificant. But the naval strength of Japan did not depend on prizes. Battleships and cruisers were ordered and launched in Europe one after the other, and when the Russo-Japanese War (*q.v.*) came, the fleet promptly asserted its physical and moral superiority in the surprise of Port Arthur, the battle of the 10th of August 1904, and the crowning victory of Tsushima.

As to the development of the navy from 1903 onwards, it is not possible to detail with absolute accuracy the plans laid down by the admiralty in Tōkyō, but the actual state of the fleet in the year 1909 will be apparent from the figures given below.

Japan's naval strength at the outbreak of the war with Russia in 1904 was:—

	Number.	Displacement. Tons.
Battleships	6	84,652
Armoured cruisers	8	73,982
Other cruisers	44	111,470
Destroyers	19	6,519
Torpedo-boats	80	7,119
	—	———
Totals	157	283,742
Losses during the war were:—		
Battleships	2	27,300
Cruisers (second and smaller classes)	8	18,009
Destroyers	2	705
Torpedo-boats	7	557
	—	———
Totals	19	46,571
The captured vessels repaired and added to the fleet were:—		
Battleships	5	62,524
Cruisers	11	71,276
Destroyers	5	1,740
	—	———
Totals	21	135,530
The vessels built or purchased after the war and up to the close of 1908 were:—		
Battleships	4	71,500
Armoured cruisers	4	56,700
Other cruisers	5	7,000
Destroyers	33	12,573
Torpedo-boats	5	760
	—	———
Totals	51	148,533
Some of the above have been superannuated, and the serviceable fleet in 1909 was:—		
Battleships	13	191,380
Armoured cruisers	12	130,683
Other cruisers, coast-defence ships and gun-boats	47	165,253
Destroyers	55	20,508
Torpedo-boats	77	7,258
	—	———
Totals	204	515,082

To the foregoing must be added two armoured cruisers—the "Kurama" (14,000) launched at Yokosuka in October 1907, and the "Ibuki" (14,700) launched at Kure in November 1907, but no other battleships or cruisers were laid down in Japan or ordered abroad up to the close of 1908.

Naval Dockyards.

There are four naval dockyards, namely, at Yokosuka, Kure, Sasebo and Maizuru. Twenty-one vessels built at Yokosuka since 1876 included a battleship (19,000 tons) and an armoured cruiser (14,000 tons); seven built at Kure since 1898 included a battleship (19,000 tons) and an armoured cruiser (14,000 tons). The yards at Sasebo and Maizuru had not yet been used in 1909 for constructing large vessels. Two private yards—the Mitsubishi at Nagasaki and Kobe, and the Kawasaki at the latter place—have built several cruisers, gun-boats and torpedo craft, and are competent to undertake more important work. Nevertheless in 1909 Japan did not yet possess complete independence in this matter, for she was obliged to have recourse to foreign countries for a part of the steel used in ship-building. Kure manufactures practically all the steel it requires, and there is a government steel-foundry at Wakamatsu on which more than 3 millions sterling had been spent in 1909, but it did not yet keep pace with the country's needs. When this independence has been attained, it is hoped to effect an economy of about 18% on the outlay for naval construction, owing to the cheapness of manual labour and the disappearance both of the manufacturer's profit and of the expenses of transfer from Europe to Japan.

There are five admiralties—Yokosuka, Kure, Sasebo, Maizuru and Port Arthur; and four naval stations—Takeshiki (in Tsushima), Mekong (in the Pescadores), Ominato and Chinhai (in southern Korea).

Personnel.

The navy is manned partly by conscripts and partly by volunteers. About 5500 are taken every year, and the ratio is, approximately, 55% of volunteers and 45% of conscripts. The period of active service is 4 years and that of service with the reserve 7 years. On the average 200 cadets are admitted yearly, of whom 50 are engineers, and in 1906 the personnel of the navy consisted of the following:—

Admirals, combative and non-combative	77
Officers, combative and non-combative, below the rank of admiral	2,867
Warrant officers	9,075
Bluejackets	29,667
Cadets	721
Total	42,407

Naval Education.

The highest educational institution for the navy is the naval staff college, in which there are five courses for officers alone. The gunnery and torpedo schools are attended by officers, and also by selected warrant-officers and bluejackets, who consent to extend their service. There is also a mechanical school for junior engineers, warrant-officers and ordinary artificers.

At the naval cadet academy—originally situated in Tōkyō but now at Etajima near Kure—aspirants for service as naval officers receive a 3 years' academical course and 1 year's training at sea; and, finally, there is a naval engineering college collateral to the naval cadet academy.

Since 1882, foreign instruction has been wholly dispensed with in the Japanese navy; since 1886 she has manufactured her own prismatic powder; since 1891 she has been able to make quick-firing guns and Schwartzkopf torpedoes, and in 1892 one of her officers invented a particularly potent explosive, called (after its inventor) Shimose powder.

Finance.—Under the feudal system of the Tokugawa (1603-1871), all land in Japan was regarded as state property, and parcelled out into 276 fiefs, great and small, which were assigned to as many feudatories. These were empowered to raise revenue for the support of their households, for administrative purposes, and for the maintenance of troops. The basis of taxation varied greatly in different districts, but, at the time of the Restoration in 1867, the general principle was that four-tenths of the gross produce should go to the feudatory, six-tenths to the farmer. In practice this rule was applied to the rice crop only, the assessments for other kinds of produce being levied partly in money and partly in manufactured goods. Forced labour also was exacted, and artisans and tradesmen were subjected to pecuniary levies. The yield of rice in 1867 was about 154 million bushels,[21] of which the market value at prices then ruling was £24,000,000, or 240,000,000 *yen*.[22] Hence the grain tax represented, at the lowest calculation, 96,000,000 *yen*. When the administration reverted to the emperor in 1867 the central treasury was empty, and the funds hitherto employed for governmental purposes in the fiefs continued to be devoted to the support of the feudatories, to the payment of the samurai, and to defraying the expenses of local administration, the central treasury receiving only whatever might remain after these various outlays.

The Feudal Period.

The shōgun himself, whose income amounted to about £3,500,000, did not, on abdicating, hand over to the sovereign either the contents of his treasury or the lands from which he derived his revenues. He contended that funds for the government of the nation as a whole should be levied from the people at large. Not until 1871 did the feudal system cease to exist. The fiefs being then converted into prefectures, their revenues became an asset of the central treasury, less 10% allotted for the support of the former feudatories.[23]

But during the interval between 1867 and 1871, the men on whom had devolved the direction of national affairs saw no relief from crippling impecuniosity except an issue of paper money. This was not a novelty in Japan. Paper money had been known to the people since the middle of the 17th century, and in the era of which we are now writing no less than 1694 varieties of notes were in circulation. There were gold notes, silver notes, cash-notes, rice-notes, umbrella-notes, ribbon-notes, lathe-article-notes, and so on through an interminable list, the circulation of each kind being limited to the issuing fief. Many of these notes had almost ceased to have any purchasing power, and nearly all were regarded by the people as evidences of official greed. The first duty of a centralized progressive administration should have been to reform the currency. The political leaders of the time appreciated that duty, but saw themselves compelled by stress of circumstances to adopt the very device which in the hands of the feudal chiefs had produced such deplorable results. The ordinary revenue amounted to only 3,000,000 *yen*, while the extraordinary aggregated 29,000,000, and was derived wholly from issues of paper money or other equally unsound sources.

Paper Money.

Even on the abolition of feudalism in 1871 the situation was not immediately relieved. The land tax, which constituted nine-tenths of the feudal revenues, had been assessed by varying methods and at various rates by the different feudatories, and re-assessment of all the land became a preliminary essential to establishing a uniform system. Such a task, on the basis of accurate surveys, would have involved years of work, whereas the financial needs of the state had to be met immediately. Under the pressure of this imperative necessity a re-assessment was roughly made in two years, and being continued thereafter with greater accuracy, was completed in 1881. This survey, eminently liberal to the agriculturists, assigned a value of 1,200,000,000 *yen* to the whole of the arable land, and the treasury fixed the tax at 3% of the assessed value of the land, which was about one-half of the real market value. Moreover, the government contemplated a gradual reduction of this already low impost until it should ultimately fall to 1%. Circumstances prevented the consummation of that purpose. The rate underwent only one

Land Tax.

reduction of ½%, and thereafter had to be raised on account of war expenditures. On the whole, however, no class benefited more conspicuously from the change of administration than the peasants, since not only was their burden of taxation light, but also they were converted from mere tenants into actual proprietors. In brief, they acquired the fee-simple of their farms in consideration of paying an annual rent equal to about one sixty-sixth of the market value of the land.

In 1873, when these changes were effected, the ordinary revenue of the state rose from 24,500,000 *yen* to 70,500,000 *yen*. But seven millions sterling is a small income for a country confronted by such problems as Japan had to solve. She had to build railways; to create an army and a navy; to organize posts, telegraphs, prisons, police and education; to construct roads, improve harbours, light and buoy the coasts; to create a mercantile marine; to start under official auspices numerous industrial enterprises which should serve as object lessons to the people, as well as to lend to private persons large sums in aid of similar projects. Thus, living of necessity beyond its income, the government had recourse to further issues of fiduciary notes, and in proportion as the volume of the latter exceeded actual currency requirements their specie value depreciated.

State Revenue.

This question of paper currency inaugurates the story of banking; a story on almost every page of which are to be found inscribed the names of Prince Itō, Marquis Inouye, Marquis Matsukata, Count Okuma and Baron Shibusawa, the fathers of their country's economic and financial progress in modern times. The only substitutes for banks in feudal days were a few private firms—"households" would, perhaps, be a more correct expression—which received local taxes in kind, converted them into money, paid the proceeds to the central government or to the feudatories, gave accommodation to officials, did some exchange business, and occasionally extended accommodation to private individuals. They were not banks in the Occidental sense, for they neither collected funds by receiving deposits nor distributed capital by making loans. The various fiefs were so isolated that neither social nor financial intercourse was possible, and moreover the mercantile and manufacturing classes were regarded with some disdain by the gentry. The people had never been familiarized with combinations of capital for productive purposes, and such a thing as a joint-stock company was unknown. In these circumstances, when the administration of state affairs fell into the hands of the men who had made the restoration, they not only lacked the first essential of rule, money, but were also without means of obtaining any, for they could not collect taxes in the fiefs, these being still under the control of the feudal barons; and in the absence of widely organized commerce or finance, no access to funds presented itself. Doubtless the minds of these men were sharpened by the necessities confronting them, yet it speaks eloquently for their discernment that, samurai as they were, without any business training whatever, one of their first essays was to establish organizations which should take charge of the national revenue, encourage industry and promote trade and production by lending money at comparatively low rates of interest. The tentative character of these attempts is evidenced by frequent changes. There was first a business bureau, then a trade bureau, then commercial companies, and then exchange companies, these last being established in the principal cities and at the open ports, their personnel consisting of the three great families—Mitsui, Shimada and Ono—houses of ancient repute, as well as other wealthy merchants in Kiōto, Osaka and elsewhere. These exchange companies were partnerships, though not strictly of the joint-stock kind. They formed the nucleus of banks in Japan, and their functions included, for the first time, the receiving of deposits and the lending of money to merchants and manufacturers. They had power to issue notes, and, at the same time, the government issued notes on its own account. Indeed, in this latter fact is to be found one of the motives for organizing the exchange companies, the idea being that if the state's notes were lent to the companies, the people would become familiarized with the use of such currency, and the companies would find them convenient capital. But this system was essentially unsound: the notes, alike of the treasury and of the companies, though nominally convertible, were not secured by any fixed stock of specie. Four years sufficed to prove the unpracticality of such an arrangement, and in 1872 the exchange companies were swept away, to be succeeded in July 1873 by the establishment of national banks on a system which combined some of the features of English banking with the general bases of American. Each bank had to pay into the treasury 60% of its capital in government notes. It was credited in return with interest-bearing bonds, which bonds were to be left in the treasury as security for the issue of bank-notes to an equal amount, the banks being required to keep in gold the remaining 40% of their capital as a fund for converting the notes, which conversion must always be effected on application. The elaborators of this programme were Ito, Inouye, Okuma and Shibusawa. They added a provision designed to prevent the establishment of too small banks, namely, that the capital of each bank must bear a fixed ratio to the population of its place of business. Evidently the main object of the treasury was gradually to replace its own fiat paper with convertible bank-notes. But experience quickly proved that the scheme was unworkable. The treasury notes had been issued in such large volume that sharp depreciation had ensued; gold could not be procured except at a heavy cost, and the balance of foreign trade being against Japan, some 300,000,000 *yen* in specie flowed out of the country between 1872 and 1874.

Banks.

It should be noted that at this time foreign trade was still invested with a perilous character in Japanese eyes. In early days, while the Dutch had free access to her ports, they sold her so much and bought so little in return that an immense quantity of the precious metals flowed out of her coffers. Again, when over-sea trade was renewed in modern times, Japan's exceptional financial condition presented to foreigners an opportunity of which they did not fail to take full advantage. For, during her long centuries of seclusion, gold had come to hold to silver in her coinage a ratio of 1 to 8, so that gold cost, in terms of silver, only one-half of what it cost in the West. On the other hand, the treaty gave foreign traders the right to exchange their own silver coins against Japanese, weight for weight, and thus it fell out that the foreigner, going to Japan with a supply of Mexican dollars, could buy with them twice as much gold as they had cost in Mexico. Japan lost very heavily by this system, and its effects accentuated the dread with which her medieval experience had invested foreign commerce. Thus, when the balance of trade swayed heavily in the wrong direction between 1872 and 1874, the fact created undue consternation, and moreover there can be no doubt that the drafters of the bank regulations had over-estimated the quantity of available gold in the country.

All these things made it impossible to keep the bank-notes long in circulation. They were speedily returned for conversion; no deposits came to the aid of the banks, nor did the public make any use of them. Disaster became inevitable. The two great firms of Ono and Shimada, which had stood high in the nation's estimation alike in feudal and in imperial days, closed their doors in 1874; a panic ensued, and the circulation of money ceased almost entirely.

Evidently the banking system must be changed. The government bowed to necessity. They issued a revised code of banking regulations which substituted treasury notes in the place of specie. Each bank was thenceforth required to invest 80% of its capital in 6% state bonds, and these being lodged with the treasury, the bank became competent to issue an equal quantity of its own notes, forming with the remainder of its capital a reserve of treasury notes for purposes of redemption. This was a complete subversion of the government's original scheme. But no alternative offered. Besides, the situation presented a new feature. The hereditary pensions of the feudatories had been commuted with bonds aggregating 174,000,000 *yen*. Were this large volume of bonds issued at once, their heavy depreciation would be likely to follow, and moreover their holders, unaccustomed to dealing with financial problems, might dispose of the bonds and invest the proceeds in hazardous enterprises. To devise some opportunity for the safe and profitable employment of these bonds seemed, therefore, a pressing necessity, and the newly organized national banks offered such an opportunity. For bond-holders, combining to form a bank, continued to draw from the treasury 6% on their bonds, while they acquired power to issue a corresponding amount of notes which could be lent at profitable rates. The programme worked well. Whereas, up

Change of the Banking System.

to 1876, only five banks were established under the original regulations, the number under the new rule was 151 in 1879, their aggregate capital having grown in the same interval from 2,000,000 *yen* to 40,000,000 *yen*, and their note issues from less than 1,000,000 to over 34,000,000. Here, then, was a rapidly growing system resting wholly on state credit. Something like a mania for bank-organizing declared itself, and in 1878 the government deemed it necessary to legislate against the establishment of any more national banks, and to limit to 34,000,000 *yen* the aggregate note issues of those already in existence.

It is possible that the conditions which prevailed immediately after the establishment of the national banks might have developed some permanency had not the Satsuma rebellion broken out in 1877. Increased taxation to meet military outlay being impossible in such circumstances, nothing offered except recourse to further note issues. The result was that by 1881, fourteen years after the Restoration, notes whose face value aggregated 164,000,000 *yen* had been put into circulation; the treasury possessed specie amounting to only 8,000,000 *yen*, and 18 paper *yen* could be purchased with 10 silver ones.

Up to 1881 fitful efforts had been made to strengthen the specie value of fiat paper by throwing quantities of gold and silver upon the market from time to time, and 23,000,000 *yen* had been devoted to the promotion of industries whose products, it was hoped, would go to swell the list of exports, and thus draw specie to the country. But these devices were now finally abandoned, and the government applied itself steadfastly to reducing the volume of the fiduciary currency on the one hand, and accumulating a specie reserve on the other. The steps of the programme were simple. By cutting down administrative expenditure; by transferring certain charges from the treasury to the local communes; by suspending all grants in aid of provincial public works and private enterprises, and by a moderate increase of the tax on alcohol, an annual surplus of revenue, totalling 7,500,000 *yen*, was secured. This was applied to reducing the volume of the notes in circulation. At the same time, it was resolved that all officially conducted industrial and agricultural works should be sold—since their purpose of instruction and example seemed now to have been sufficiently achieved—and the proceeds, together with various securities (aggregating 26,000,000 *yen* in face value) held by the treasury, were applied to the purchase of specie. Had the government entered the market openly as a seller of its own fiduciary notes, its credit must have suffered. There were also ample reasons to doubt whether any available stores of precious metal remained in the country. In obedience to elementary economical laws, the cheap money had steadily driven out the dear, and although the government mint at Osaka, founded in 1871, had struck gold and silver coins worth 80,000,000 *yen* between that date and 1881, the customs returns showed that a great part of this metallic currency had flowed out of the country. In these circumstances Japanese financiers decided that only one course remained: the treasury must play the part of national banker. Produce and manufactures destined for export must be purchased by the state with fiduciary notes, and the metallic proceeds of their sales abroad must be collected and stored in the treasury. This programme required the establishment of consulates in the chief marts of the Occident, and the organization of a great central bank—the present Bank of Japan—as well as of a secondary bank—the present Specie Bank of Yokohama—the former to conduct transactions with native producers and manufacturers, the latter to finance the business of exportation. The outcome of these various arrangements was that, by the middle of 1885, the volume of fiduciary notes had been reduced to 119,000,000 *yen*, their depreciation had fallen to 3%, and the metallic reserve of the treasury had increased to 45,000,000 *yen*. The resumption of specie payments was then announced, and became, in the autumn of that year, an accomplished fact. From the time when this programme began to be effective, Japan entered a period of favourable balance of trade. According to accepted economic theories, the influence of an appreciating currency should be to encourage imports; but the converse was seen in Japan's case, for from 1882 her exports annually exceeded her imports, the maximum excess being reached in 1886, the very year after the resumption of specie payments.

Resumption of Specie Payments.

The above facts deserve to figure largely in a retrospect of Japanese finance, not merely because they set forth a fine economic feat, indicating clear insight, good organizing capacity, and courageous energy, but also because volumes of adverse foreign criticism were written in the margin of the story during the course of the incidents it embodies. Now Japan was charged with robbing her own people because she bought their goods with paper money and sold them for specie; again, she was accused of an official conspiracy to ruin the foreign local banks because she purchased exporters' bills on Europe and America at rates that defied ordinary competition; and while some declared that she was plainly without any understanding of her own doings, others predicted that her heroic method of dealing with the problem would paralyze industry, interrupt trade and produce widespread suffering. Undoubtedly, to carry the currency of a nation from a discount of 70 or 80% to par in the course of four years, reducing its volume at the same time from 160 to 119 million *yen*, was a financial enterprise violent and daring almost to rashness. The gentler expedient of a foreign loan would have commended itself to the majority of economists. But it may be here stated, once for all, that until her final adoption of a gold standard in 1897, the foreign money market was practically closed to Japan. Had she borrowed abroad it must have been on a sterling basis. Receiving a fixed sum in silver, she would have had to discharge her debt in rapidly appreciating gold. Twice, indeed, she had recourse to London for small sums, but when she came to cast up her accounts the cost of the accommodation stood out in deterrent proportions. A 9% loan, placed in England in 1868 and paid off in 1889, produced 3,750,000 *yen*, and cost altogether 11,750,000 *yen* in round figures; and a 7% loan, made in 1872 and paid off in 1897, produced 10,750,000 *yen*, and cost 36,000,000 *yen*. These considerations were supplemented by a strong aversion from incurring pecuniary obligations to Western states before the latter had consented to restore Japan's judicial and tariff autonomy. The example of Egypt showed what kind of fate might overtake a semi-independent state falling into the clutches of foreign bond-holders. Japan did not wish to fetter herself with foreign debts while struggling to emerge from the rank of Oriental powers.

After the revision of the national bank regulations, semi-official banking enterprise won such favour in public eyes that the government found it necessary to impose limits. This conservative policy proved an incentive to private banks and banking companies, so that, by the year 1883, no less than 1093 banking institutions were in existence throughout Japan with an aggregate capital of 900,000,000 *yen*. But these were entirely lacking in arrangements for combination or for equalizing rates of interest, and to correct such defects, no less than ultimately to constitute the sole note-issuing institution, a central bank (the Bank of Japan) was organized on the model of the Bank of Belgium, with due regard to corresponding institutions in other Western countries and to the conditions existing in Japan. Established in 1882 with a capital of 4,000,000 *yen*, this bank has now a capital of 30 millions, a security reserve of 206 millions, a note-issue of 266 millions, a specie reserve of 160 millions, and loans of 525 millions.

Closing of the National Banks.

The banking machinery of the country being now complete, in a general sense, steps were taken in 1883 for converting the national banks into ordinary joint-stock concerns and for the redemption of all their note-issues. Each national bank was required to deposit with the treasury the government paper kept in its strong room as security for its own notes, and further to take from its annual profits and hand to the treasury a sum equal to 2½% of its notes in circulation. With these funds the central bank was to purchase state bonds, devoting the interest to redeeming the notes of the national banks. Formed with the object of disturbing the money market as little as possible, this programme encountered two obstacles. The first was that, in view of the Bank of Japan's purchases, the market price of state bonds rose rapidly, so that, whereas official financiers had not expected them to reach par before 1897, they were quoted at a considerable premium in 1886. The second was that the treasury having in 1886 initiated the policy of converting its 6% bonds into 5% consols, the former no longer produced interest at the rate estimated for the purposes of the banking scheme. The national banks thus found themselves in an embarrassing situation and began to clamour for a revision of the programme. But the government, seeing compensations for them in other directions, adhered firmly to its scheme. Few problems have caused greater controversy in modern Japan than this question of the ultimate fate of the national banks. Not until 1896 could

the diet be induced to pass a bill providing for their dissolution at the close of their charter terms, or their conversion into ordinary joint-stock concerns without any note-issuing power, and not until 1899 did their notes cease to be legal tender. Out of a total of 153 of these banks, 132 continued business as private institutions, and the rest were absorbed or dissolved. Already (1890 and 1893) minute regulations had been enacted bringing all the banks and banking institutions —except the special banks to be presently described—within one system of semi-annual balance-sheets and official auditing, while in the case of savings banks the directors' responsibility was declared unlimited and these banks were required to lodge security with the treasury for the protection of their depositors.

Just as the ordinary banks were all centred on the Bank of Japan[24] and more or less connected with it, so in 1895, a group of special institutions, called agricultural and commercial banks, were organized and centred on a hypothec bank,

Special Banks.

the object of this system being to supply cheap capital to farmers and manufacturers on the security of real estate. The hypothec bank had its head office in Tōkyō and was authorized to obtain funds by issuing premium-bearing bonds, while an agricultural and industrial bank was established in each prefecture and received assistance from the hypothec bank. Two years later (1900), an industrial bank —sometimes spoken of as the *crédit mobilier* of Japan—was brought into existence under official auspices, its purpose being to lend money against bonds, debentures and shares as well as to public corporations. These various institutions, together with clearing houses, bankers' associations, the Hokkaidō colonial bank, the bank of Formosa, savings banks (including a post-office savings bank), and a mint complete the financial machinery of modern Japan.

Reviewing this chapter of Japan's material development, we find that whereas, at the beginning of the Meiji era (1867),

Review of Banking Development.

the nation did not possess so much as one banking institution worthy of the name, forty years later it had 2211 banks, with a paid-up capital of £40,000,000, reserves of £12,000,000, and deposits of £147,000,000; and whereas there was not one savings bank in 1867, there were 487 in 1906 with deposits of over £50,000,000. The average yearly dividends of these banks in the ten years ending 1906 varied between 9.1 and 9.9%.

Necessarily the movement of industrial expansion was accompanied by a development of insurance business. The beginnings of this kind of enterprise did not become visible, however, until 1881, and even at that comparatively recent

Insurance.

date no Japanese laws had yet been enacted for the control of such operations. The commercial code, published in March 1890, was the earliest legislation which met the need, and from that time the number of insurance companies and the volume of their transactions grew rapidly. In 1897, there were 35 companies with a total paid-up capital of 7,000,000 *yen* and policies aggregating 971,000,000 *yen*, and in 1906 the corresponding figures were 65 companies, 22,000,000 *yen* paid up and policies of 4,149,000,000 *yen*. The premium reserves grew in the same period from 7,000,000 to 108,000,000. The net profits of these companies in 1906 were (in round numbers) 10,000,000 *yen*.

The origin of clearing houses preceded that of insurance companies in Japan by only two years (1879). Osaka set the

Clearing Houses.

example, which was quickly followed by Tōkyō, Kobe, Yokohama, Kiōto and Nagoya. In 1898 the bills handled at these institutions amounted to 1,186,000,000 *yen*, and in 1907 to 7,484,000,000 *yen*. Japanese clearing houses are modelled after those of London and New York.

Exchanges existed in Japan as far back as the close of the 17th century. At that time the income of the feudal chiefs consisted almost entirely of rice, and as this was sold to brokers, the latter found it convenient to meet

Bourses.

at fixed times and places for conducting their business. Originally their transactions were all for cash, but afterwards they devised time bargains which ultimately developed into a definite form of exchange. The reform of abuses incidental to this system attracted the early attention of the Meiji government, and in 1893 a law was promulgated for the control of exchanges, which then numbered 146. Under this law the minimum share capital of a bourse constituted as a joint-stock company was fixed at 100,000 *yen*, and the whole of its property became liable for failure on the part of its brokers to implement their contracts. There were 51 bourses in 1908.

Not less remarkable than this economic development was the large part acted in it by officialdom. There were two reasons for this. One was that a majority of the men gifted with originality and foresight were drawn into the ranks of the

The Government and Economic Development.

administration by the great current of the revolution; the other, that the feudal system had tended to check rather than to encourage material development, since the limits of each fief were also the limits of economical and industrial enterprise. Ideas for combination and co-operation had been confined to a few families, and there was nothing to suggest the organization of companies nor any law to protect them if organized. Thus the opening of the Meiji era found the Japanese nation wholly unqualified for the commercial and manufacturing competition in which it was thenceforth required to engage, and therefore upon those who had brought the country out of its isolation there devolved the responsibility of speedily preparing their fellow countrymen for the new situation. To these leaders banking facilities seemed to be the first need, and steps were accordingly taken in the manner already described. But how to educate men of affairs at a moment's notice? How to replace by a spirit of intelligent progress the ignorance and conservatism of the hitherto despised traders and artisans? When the first bank was organized, its two founders—men who had been urged, nay almost compelled, by officialdom to make the essay—were obliged to raise four-fifths of the capital themselves, the general public not being willing to subscribe more than one-fifth—a petty sum of 500,000 *yen*—and when its staff commenced their duties, they had not the most shadowy conception of what to do. That was a faithful reflection of the condition of the business world at large. If the initiative of the people themselves had been awaited, Japan's career must have been slow indeed.

Only one course offered, namely, that the government itself should organize a number of productive enterprises on modern lines, so that they might serve as schools and also as models. Such, as already noted under *Industries*, was the programme adopted. It provoked much hostile criticism from foreign onlookers, who had learned to decry all official incursions into trade and industry, but had not properly appreciated the special conditions existing in Japan. The end justified the means. At the outset of its administration we find the Meiji government not only forming plans for the circulation of money, building railways and organizing posts and telegraphs, but also establishing dockyards, spinning mills, printing-houses, silk-reeling filatures, paper-making factories and so forth, thus by example encouraging these kinds of enterprise and by legislation providing for their safe prosecution. Yet progress was slow. One by one and at long intervals joint-stock companies came into existence, nor was it until the resumption of specie payments in 1886 that a really effective spirit of enterprise manifested itself among the people. Railways, harbours, mines, spinning, weaving, paper-making, oil-refining, brick-making, leather-tanning, glass-making and other industries attracted eager attention, and whereas the capital subscribed for such works aggregated only 50,000,000 *yen* in 1886, it exceeded 1,000,000,000 *yen* in 1906.

When specie payments were resumed in 1885, the notes issued by the Bank of Japan were convertible into silver on demand, the silver standard being thus definitely adopted, a complete reversal of the system inaugurated at the

Adoption of the Gold Standard.

establishment of the national banks on Prince Ito's return from the United States. Japanese financiers believed from the outset in gold monometallism. But, in the first place, the country's stock of gold was soon driven out by her depreciated fiat currency; and, in the second, not only were all other Oriental nations silver-using, but also the Mexican silver dollar had long been the unit of account in Far-Eastern trade. Thus Japan ultimately drifted into silver monometallism, the silver *yen* becoming her unit of currency. So soon, however, as the indemnity that she received from China after the war of 1894-95 had placed her in possession of a stock of gold, she determined to revert to the gold standard. Mechanically speaking, the operation was

very easy. Gold having appreciated so that its value in terms of silver had exactly doubled during the first 30 years of the Meiji era, nothing was necessary except to double the denominations of the gold coins in terms of *yen*, leaving the silver subsidiary coins unchanged. Thus the old 5-*yen* gold piece, weighing 2.22221 *momme* of 900 fineness, became a 10-*yen* piece in the new currency, and a new 5-*yen* piece of half the weight was coined. No change whatever was required in the reckonings of the people. The *yen* continued to be their coin of account, with a fixed sterling value of a small fraction over two shillings, and the denominations of the gold coins were doubled. Gold, however, is little seen in Japan; the whole duty of currency is done by notes.

It is not to be supposed that all this economic and financial development was unchequered by periods of depression and severe panic. There were in fact six such seasons: in 1874, 1881, 1889, 1897, 1900 and 1907. But no year throughout the whole period failed to witness an increase in the number of Japan's industrial and commercial companies, and in the amount of capital thus invested.

State Revenue.

To obtain a comprehensive idea of Japan's state finance, the simplest method is to set down the annual revenue at quinquennial periods, commencing with the year 1878-1879, because it was not until 1876 that the system of duly compiled and published budgets came into existence.

REVENUE (omitting fractions)

Year.*	Ordinary Revenue (millions of *yen*).	Extraordinary Revenue (millions of *yen*).	Total Revenue (millions of *yen*).
1878-9	53	9	62
1883-4	76	7	83
1888-9	74	18	92
1893-4	86	28	114
1898-9	133	87	220
1903-4	224	36	260
1908-9	476	144	620

* The Japanese fiscal year is from April 1 to March 31.

The most striking feature of the above table is the rapid growth of revenue during the last three periods. So signal was the growth that the revenue may be said to have sextupled in the 15 years ended 1909. This was the result of the two great wars in which Japan was involved, that with China in 1894-95 and that with Russia in 1904-5. The details will be presently shown.

Turning now to the expenditure and pursuing the same plan, we have the following figures:—

EXPENDITURE (omitting fractions)

Year.	Ordinary Expenditures (millions of *yen*).	Extraordinary Expenditures (millions of *yen*).	Total Expenditures (millions of *yen*).
1878-9	56	5	61
1883-4	68	15	83
1888-9	66	15	81
1893-4	64	20	84
1898-9	119	101	220
1903-4	170	80	250
1908-9	427	193	620

It may be here stated that, with three exceptions, the working of the budget showed a surplus in every one of the 41 years between 1867 and 1908.

The sources from which revenue is obtained are as follow:—

ORDINARY REVENUE

	1894-5. millions of *yen*.	1898-9. millions of *yen*.	1903-4. millions of *yen*.	1908-9. millions of *yen*.
Taxes	70.50	96.20	146.10	299.61
Receipts from stamps and Public Undertakings	14.75	33.00	96.87	164.66
Various Receipts	4.58	3.67	8.15	11.48

It appears from the above that during 15 years the weight of taxation increased fourfold. But a correction has to be applied, first, on account of the tax on alcoholic liquors and, secondly, on account of customs dues, neither of which can properly be called general imposts. The former grew from 16 millions in 1894-1895 to 72 millions in 1908-1909, and the latter from 5¼ millions to 41½ millions. If these increases be deducted, it is found that taxes, properly so called, grew from 70.5 millions in 1894-1895 to 207.86 millions in 1908-1909, an increase of somewhat less than three-fold. Otherwise stated, the burden per unit of population in 1894-1895 was 3s. 6d., whereas in 1908-1909 it was 8s. 4d. To understand the principle of Japanese taxation and the manner in which the above development took place, it is necessary to glance briefly at the chief taxes separately.

Land Tax.

The land tax is the principal source of revenue. It was originally fixed at 3% of the assessed value of the land, but in 1877 this ratio was reduced to 2½%, on which basis the tax yielded from 37 to 38 million *yen* annually. After the war with China (1894-1895) the government proposed to increase this impost in order to obtain funds for an extensive programme of useful public works and expanded armaments (known subsequently as the "first *post bellum* programme"). By that time the market value of agricultural land had largely appreciated owing to improved communications, and urban land commanded greatly enhanced prices. But the lower house of the diet, considering itself guardian of the farmers' interests, refused to endorse any increase of the tax. Not until 1889 could this resistance be overcome, and then only on condition that the change should not be operative for more than 5 years. The amended rates were 3.3% on rural lands and 5% on urban building sites. Thus altered, the tax produced 46,000,000 *yen*, but at the end of the five-year period it would have reverted to its old figure, had not war with Russia broken out. An increase was then made so that the impost varied from 3% to 17½% according to the class of land, and under this new system the tax yielded 85 millions. Thus the exigencies of two wars had augmented it from 38

millions in 1889 to 85 millions in 1907.

Income Tax.

The income tax was introduced in 1887. It was on a graduated scale, varying from 1% on incomes of not less than 300 *yen*, to 3% on incomes of 30,000 *yen* and upwards. At these rates the tax yielded an insignificant revenue of about 2,000,000 *yen*. In 1899, a revision was effected for the purposes of the first *post bellum* programme. This revision increased the number of classes from five to ten, incomes of 300 *yen* standing at the bottom and incomes of 100,000*yen* or upwards at the top, the minimum and maximum rates being 1% and 5½%. The tax now produced approximately 8,000,000 *yen*. Finally in 1904, when war broke out with Russia, these rates were again revised, the minimum now becoming 2%, and the maximum 8.2%. Thus revised, the tax yields a revenue of 27,000,000 *yen*.

Business Tax.

The business tax was instituted in 1896, after the war with China, and the rates have remained unchanged. For the purposes of the tax all kinds of business are divided into nine classes, and the tax is levied on the amounts of sales (wholesale and retail), on rental value of buildings, on number of employees and on amount of capital. The yield from the tax grows steadily. It was only 4,500,000 *yen* in 1897, but it figured at 22,000,000 *yen* in the budget for 1908-1909.

Tax on Alcoholic Liquors.

The above three imposts constitute the only direct taxes in Japan. Among indirect taxes the most important is that upon alcoholic liquors. It was inaugurated in 1871; doubled, roughly speaking, in 1878; still further increased thenceforth at intervals of about 3 years, until it is now approximately twenty times as heavy as it was originally. The liquor taxed is mainly sake; the rate is about 50 *sen* (one shilling) per gallon, and the annual yield is 72,000,000 *yen*.

Customs Duties.

In 1859, when Japan re-opened her ports to foreign commerce, the customs dues were fixed on a basis of 10% *ad valorem*, but this was almost immediately changed to a nominal 5% and a real 3%. The customs then yielded a very petty return—not more than three or four million *yen*—and the Japanese government had no discretionary power to alter the rates. Strenuous efforts to change this system were at length successful, and, in 1899, the tariff was divided into two sections, conventional and statutory; the rates in the former being governed by a treaty valid for 12 years; those in the latter being fixed at Japan's will. Things remained thus until the war with Russia compelled a revision of the statutory tariff. Under this system the ratio of the duties to the value of the dutiable goods was about 15.65%. The customs yield a revenue of about 42,000,000 *yen*.

Other Taxes.

In addition to the above there are eleven taxes, some in existence before the war of 1904-5, and some created for the purpose of carrying on the war or to meet the expenses of a *post bellum* programme.

Taxes in existence before 1904-1905:—

Name.	Yield (millions of *yen*).
Tax on soy	4
Tax on sugar	16¼
Mining tax	2
Tax on bourses	2
Tax on issue of bank-notes	1
Tonnage dues	½

Taxes created on account of the war (1904-5) or in its immediate sequel:—

Name.	Yield (millions of *yen*).
Consumption tax on textile fabrics	19½
Tax on dealers in patent medicines	¼
Tax on communications	2⅓
Consumption tax on kerosene	1½
Succession tax	1½

Also, as shown above, the land tax was increased by 39 millions; the income tax by 19 millions; the business tax by 15 millions; and the tax on alcoholic liquors by 15 millions. On the whole, if taxes of general incidence and those of special incidence be lumped together, it appears that the burden swelled from 160,000,000 *yen* before the war to 320,000,000 after it.

State Monopolies and Manufactures.

The government of Japan carries on many manufacturing undertakings for purposes of military and naval equipment, for ship-building, for the construction of railway rolling stock, for the manufacture of telegraph and light-house materials, for iron-founding and steel-making, for printing, for paper-making and so forth. There are 48 of these institutions, giving employment to 108,000 male operatives and 23,000 female, together with 63,000 labourers. But the financial results do not appear independently in the general budget. Three other government undertakings, however, constitute important budgetary items: they are, the profits derived from the postal and telegraph services, 39,000,000 *yen*; secondly, from forests, 13,000,000 *yen*; and thirdly, from railways, 37,000,000 *yen*. The government further exercises a monopoly of three important staples, tobacco, salt and camphor. In each case the crude article is produced by private individuals from whom it is taken over at a fair price by the government, and, having been manufactured (if necessary), it is resold by government agents at fixed prices. The tobacco monopoly yields a profit of some 33,000,000 *yen*; the salt monopoly a profit of 12,000,000 *yen*, and the camphor monopoly a profit of 1,000,000 *yen*. Thus the ordinary revenue of the state consisted in 1908-1909 of:—

	Yen.
Proceeds of taxes	320,000,000
Proceeds of state enterprises (posts and telegraphs, forests and railways)	89,000,000
Proceeds of monopolies	56,000,000
Sundries	11,000,000
Total	476,000,000

The ordinary expenditures of the nine departments of state aggregated—in 1908-1909—427,000,000 *yen*, so that there was a surplus revenue of 49,000,000 *yen*.

Japanese budgets have long included an extraordinary section, so called because it embodies outlays of a special and terminable character as distinguished from ordinary and perpetually recurring expenditures. The items in this

Extraordinary Expenditures. extraordinary section possessed deep interest in the years 1896 and 1907, because they disclosed the special programmes mapped out by Japanese financiers and statesmen after the wars with China and Russia. Both programmes had the same bases—expansion of armaments and development of the country's material resources. After her war with China, Japan received a plain intimation that she must either fight again after a few years or resign herself to a career of insignificance on the confines of the Far East. No other interpretation could be assigned to the action of Russia, Germany and France in requiring her to retrocede the territory which she had acquired by right of conquest. Japan therefore made provision for the doubling of her army and her navy, for the growth of a mercantile marine qualified to supply a sufficiency of troop-ships, and for the development of resources which should lighten the burden of these outlays.

The war with Russia ensued nine years after these preparations had begun, and Japan emerged victorious. It then seemed to the onlooking nations that she would rest from her warlike efforts. On the contrary, just as she had behaved after her war with China, so she now behaved after her war with Russia—made arrangements to double her army and navy and to develop her material resources. The government drafted for the year 1907-1908 a budget with three salient features. First, instead of proceeding to deal in a leisurely manner with the greatly increased national debt, Japan's financiers made dispositions to pay it off completely in the space of 30 years. Secondly, a total outlay of 422,000,000 *yen* was set down for improving and expanding the army and the navy. Thirdly, expenditures aggregating 304,000,000 *yen* were estimated for productive purposes. All these outlays, included in the extraordinary section of the budget, were spread over a series of years commencing in 1907 and ending in 1913, so that the disbursements would reach their maximum in the fiscal year 1908-1909 and would thenceforth decline with growing rapidity. To finance this programme three constant sources of annual revenue were provided, namely, increased taxation, yielding some 30 millions yearly; domestic loans, varying from 30 to 40 millions each year; and surpluses of ordinary revenue amounting to from 45 to 75 millions. There were also some exceptional and temporary assets: such as 100,000,000 *yen* remaining over from the war fund; 50 millions paid by Russia for the maintenance of her officers and soldiers during their imprisonment in Japan; occasional sales of state properties and so forth. But the backbone of the scheme was the continuing revenue detailed above.

The house of representatives unanimously approved this programme. By the bulk of the nation, however, it was regarded with something like consternation, and a very short time sufficed to demonstrate its impracticability. From the beginning of 1907 a cloud of commercial and industrial depression settled down upon Japan, partly because of so colossal a programme of taxes and expenditures, and partly owing to excessive speculation during the year 1906 and to unfavourable financial conditions abroad. To float domestic loans became a hopeless task, and thus one of the three sources of extraordinary revenue ceased to be available. There remained no alternative but to modify the programme, and this was accomplished by extending the original period of years so as correspondingly to reduce the annual outlays. The nation, however, as represented by its leading men of affairs, clamoured for still more drastic measures, and it became evident that the government must study retrenchment, not expansion, eschewing above all things any increase of the country's indebtedness. A change of ministry took place, and the new cabinet drafted a programme on five bases: first, that all expenditures should be brought within the margin of actual visible revenue, loans being wholly abstained from; secondly, that the estimates should not include any anticipated surpluses of yearly revenue; thirdly, that appropriations of at least 50,000,000 *yen* should be annually set aside to form a sinking fund, the whole of the foreign debt being thus extinguished in 27 years; fourthly, that the state railways should be placed in a separate account, all their profits being devoted to extensions and repairs; and fifthly, that the period for completing the *post bellum* programme should be extended from 6 years to 11. This scheme had the effect of restoring confidence in the soundness of the national finances.

National Debt.—When the fiefs were surrendered to the sovereign at the beginning of the Meiji era, it was decided to provide for the feudal nobles and the samurai by the payment of lump sums in commutation, or by handing to them public bonds, the interest on which should constitute a source of income. The result of this transaction was that bonds having a total face value of 191,500,000 *yen* were issued, and ready-money payments were made aggregating 21,250,000 *yen*.[25] This was the foundation of Japan's national debt. Indeed, these public bonds may be said to have represented the bulk of the state's liabilities during the first 25 years of the Meiji period. The government had also to take over the debts of the fiefs, amounting to 41,000,000 *yen*, of which 21,500,000 *yen* were paid with interest-bearing bonds, the remainder with ready money. If to the above figures be added two foreign loans aggregating 16,500,000 *yen* (completely repaid by the year 1897); a loan of 15,000,000 *yen* incurred on account of the Satsuma revolt of 1877; loans of 33,000,000 *yen* for public works, 13,000,000 *yen* for naval construction, and 14,500,000 *yen*[26] in connexion with the fiat currency, we have a total of 305,000,000 *yen*, being the whole national debt of Japan during the first 28 years of her new era under Imperial administration.

The second epoch dates from the war with China in 1894-95. The direct expenditures on account of the war aggregated 200,000,000 *yen*, of which 135,000,000 *yen* were added to the national debt, the remainder being defrayed with accumulations of surplus revenue, with a part of the indemnity received from China, and with voluntary contributions from patriotic subjects. As the immediate sequel of the war, the government elaborated a large programme of armaments and public works. The expenditure for these unproductive purposes, as well as for coast fortifications, dockyards, and so on, came to 314,000,000 *yen*, and the total of the productive expenditures included in the programme was 190,000,000 *yen*—namely, 120 millions for railways, telegraphs and telephones; 20 millions for riparian improvements; 20 millions in aid of industrial and agricultural banks and so forth—the whole programme thus involving an outlay of 504,000,000 *yen*. To meet this large figure, the Chinese indemnity, surpluses of annual revenue and other assets, furnished 300 millions; and it was decided that the remaining 204 millions should be obtained by domestic loans, the programme to be carried completely into operation—with trifling exceptions—by the year 1905. In practice, however, it was found impossible to obtain money at home without paying a high rate of interest. The government, therefore, had recourse to the London market in 1899, raising a loan of £10,000,000 at 4%, and selling the £100 bonds at 90. In 1902, it was not expected that Japan would need any further immediate recourse to foreign borrowing. According to her financiers' forecast at that time, her national indebtedness would reach its maximum, namely, 575,000,000 *yen*, in the year 1903, and would thenceforward diminish steadily. All Japan's domestic loans were by that time placed on a uniform basis. They carried 5% interest, ran for a period of 5 years without redemption, and were then to be redeemed within 50 years at latest. The treasury had power to expedite the operation of redemption according to financial convenience, but the sum expended on amortization each year must receive the previous consent of the diet. Within the limit of that sum redemption was effected either by purchasing the stock of the loans in the open market or by drawing lots to determine the bonds to be paid off. During the first two periods (1867 to 1897) of the Meiji era, owing to the processes of conversion, consolidation, &c., and to the various requirements of the state's progress, twenty-two different kinds of national bonds were issued; they aggregated 673,215,500 *yen*; 269,042,198 *yen* of that total had been paid off at the close of 1897, and the remainder was to be redeemed by 1946, according to these programmes.

But at this point the empire became involved in war with Russia, and the enormous resulting outlays caused a signal change in the financial situation. Before peace was restored in the autumn of 1905, Japan had been obliged to borrow 405,000,000 *yen* at home and 1,054,000,000 abroad, so that she found herself in 1908 with a total debt of 2,276,000,000 *yen*, of which aggregate her domestic indebtedness stood for 1,110,000,000 and her foreign borrowings amounted to 1,166,000,000. This meant that her debt had grown from 561,000,000 *yen* in 1904 to 2,276,000,000 *yen*[27] in 1908; or from 11.3 *yen* to 43.8 *yen* per head of the population. Further, out of the grand total, the sum actually spent on account of war and armaments represented 1,357,000,000 *yen*. The debt carried interest varying from 4 to 5%.

It will be observed that the country's indebtedness grew by 1,700,000,000 *yen*, in round numbers, owing to the war with Russia. This added obligation the government resolved to discharge within the space of 30 years, for which purpose the diet was asked to approve the establishment of a national debt consolidation fund, which should be kept distinct from the general accounts of revenue and expenditure, and specially applied to payment of interest and redemption of principal. The amount of this fund was never to fall below 110,000,000 *yen* annually. Immediately after the war, the diet approved a cabinet proposal for the nationalization of 17 private railways, at a cost of 500,000,000 *yen*, and this brought the state's debts to 2,776,000,000 *yen* in all. The people becoming impatient of this large burden, a scheme was finally adopted in 1908 for appropriating a sum of at least 50,000,000 *yen* annually to the purpose of redemption.

Local Finance.—Between 1878 and 1888 a system of local autonomy in matters of finance was fully established. Under this system the total expenditures of the various corporations in the last year of each quinquennial period commencing from the fiscal year 1889-1890 were as follow:—

Year.	Total Expenditure (millions of *yen*).
1889-1890	22
1893-1894	52
1898-1899	97
1903-1904[28]	158
1907-1908	167

In the same years the total indebtedness of the corporations was:—

Year.	Debts (millions of *yen*).
1890	¾
1894	10
1899	32
1904	65
1907	89[29]

The chief purposes to which the proceeds of these loans were applied are as follow:—

	Millions of *yen*.
Education	5
Sanitation	12
Industries	13
Public works	52

Local corporations are not competent to incur unrestricted indebtedness. The endorsement of the local assembly must be secured; redemption must commence within 3 years after the date of issue and be completed within 30 years; and, except in the case of very small loans, the sanction of the minister of home affairs must be obtained.

Wealth of Japan.—With reference to the wealth of Japan, there is no official census. So far as can be estimated from statistics for the year 1904-1905, the wealth of Japan proper, excluding Formosa, Sakhalin and some rights in Manchuria, amounts to about 19,896,000,000 *yen*, the items of which are as follow:—

	Yen (10 *yen* = £1).
Lands	12,301,000,000
Buildings	2,331,000,000
Furniture and fittings	1,080,000,000
Live stock	109,000,000
Railways, telegraphs and telephones	707,000,000
Shipping	376,000,000
Merchandise	873,000,000
Specie and bullion	310,000,000
Miscellaneous	1,809,000,000
Grand total	19,896,000,000

Early Education.

Education.—There is no room to doubt that the literature and learning of China and Korea were transported to Japan in very ancient times, but tradition is the sole authority for current statements that in the 3rd century a Korean immigrant was appointed historiographer to the Imperial court of Japan and another learned man from the same country introduced the Japanese to the treasures of Chinese literature. About the end of the 6th century the Japanese court began to send civilians and religionists direct to China, there to study Confucianism and Buddhism, and among these travellers there were some who passed as much as 25 or 30 years beyond the sea. The knowledge acquired by these students was crystallized into a body of laws and ordinances based on the administrative and legal systems of the Sui dynasty in China, and in the middle of the 7th century the first Japanese school seems to have been established by the emperor Tenchi, followed some 50 years later by the first university. Nara was the site of the latter, and the subjects of study were ethics, law, history and mathematics.

Not until 794, the date of the transfer of the capital to Kiōto, however, is there any evidence of educational organization on a considerable scale. A university was then opened in the capital, with affiliated colleges; and local schools were built and endowed by noble families, to whose scions admittance was restricted, but for general education one institution only appears to have been provided. In this Kiōto university the curriculum included the Chinese classics, calligraphy, history, law, etiquette, arithmetic and composition; while in the affiliated colleges special subjects were taught, as medicine, herbalism, acupuncture, shampooing, divination, the almanac and languages. Admission was limited to youths of high social grade; the students aggregated some 400, from 13 to 16 years of age; the faculty included professors and teachers, who were known by the same titles (*hakase* and *shi*) as those applied to their successors to-day; and the government supplied food and clothing as well as books. The family schools numbered five, and their patrons were the Wage, the Fujiwara, the Tachibana (one school each) and the Minamoto (two). At the one institution—opened in 828—where youths in general might receive instruction, the course embraced only calligraphy and the precepts of Buddhism and Confucianism.

The above retrospect suggests that Japan, in those early days, borrowed her educational system and its subjects of

Combination of Native and Foreign Element.

study entirely from China. But closer scrutiny shows that the national factor was carefully preserved. The ethics of administration required a combination of two elements, *wakon*, or the soul of Japan, and *kwansai*, or the ability of China; so that, while adopting from Confucianism the doctrine of filial piety, the Japanese grafted on it a spirit of unswerving loyalty and patriotism; and while accepting Buddha's teaching as to three states of existence, they supplemented it by a belief that in the life beyond the grave the duty of guarding his country would devolve on every man. Great academic importance attached to proficiency in literary composition, which demanded close study of the ideographic script, endlessly perplexing in form and infinitely delicate in sense. To be able to compose and indite graceful couplets constituted a passport to high office as well as to the favour of great ladies, for women vied with men in this accomplishment. The early years of the 11th century saw, grouped about the empress Aki, a galaxy of female authors whose writings are still accounted their country's classics—Murasaki no Shikibu, Akazome Emon, Izumi Shikibu, Ise Taiyu and several lesser lights. To the first two Japan owes the *Genji monogatari* and the *Eiga monogatari*, respectively, and from the Imperial court of those remote ages she inherited admirable models of painting, calligraphy, poetry, music, song and dance. But it is to be observed that all this refinement was limited virtually to the noble families residing in Kiōto, and that the first object of education in that era was to fit men for office and for society.

Meanwhile, beyond the precincts of the capital there were rapidly growing to maturity numerous powerful military magnates who despised every form of learning that did not contribute to martial excellence. An illiterate era ensued

Education in the Middle Ages.

which reached its climax with the establishment of feudalism at the close of the 12th century. It is recorded that, about that time, only one man out of a force of five thousand could decipher an Imperial mandate addressed to them. Kamakura, then the seat of feudal government, was at first distinguished for absence of all intellectual training, but subsequently the course of political events brought thither from Kiōto a number of court nobles whose erudition and refinement acted as a potent leaven. Buddhism, too, had been from the outset a strong educating influence. Under its auspices the first great public library was established (1270) at the temple Shōmyo-ji in Kanazawa. It is said to have contained practically all the Chinese and Japanese books then existing, and they were open for perusal by every class of reader. To Buddhist priests, also, Japan owed during many years all the machinery she possessed for popular education. They organized schools at the temples scattered about in almost every part of the empire, and at these *tera-koya*, as they were called, lessons in ethics, calligraphy, reading and etiquette were given to the sons of samurai and even to youths of the mercantile and manufacturing classes.

When, at the beginning of the 17th century, administrative supremacy fell into the hands of the Tokugawa, the illustrious founder of that dynasty of shōguns, Iyeyasu, showed himself an earnest promoter of erudition. He employed a

Education in the pre-Meiji Era.

number of priests to make copies of Chinese and Japanese books; he patronized men of learning and he endowed schools. It does not appear to have occurred to him, however, that the spread of knowledge was hampered by a restriction which, emanating originally from the Imperial court in Kiōto, forbade any one outside the ranks of the Buddhist priesthood to become a public teacher. To his fifth successor Tsunayoshi (1680-1709) was reserved the honour of abolishing this veto. Tsunayoshi, whatever his faults, was profoundly attached to literature. By his command a pocket edition of the Chinese classics was prepared, and the example he himself set in reading and expounding rare books to audiences of feudatories and their vassals produced something like a mania for erudition, so that feudal chiefs competed in engaging teachers and founding schools. The eighth shōgun, Yoshimunē (1716-1749), was an even more enlightened ruler. He caused a geography to be compiled and an astronomical observatory to be constructed; he revoked the veto on the study of foreign books; he conceived and carried out the idea of imparting moral education through the medium of calligraphy by preparing ethical primers whose precepts were embodied in the head-lines of copy-books, and he encouraged private schools. Iyenari (1787-1838), the eleventh shōgun, and his immediate successor, Iyeyoshi (1838-1853), patronized learning no less ardently, and it was under the auspices of the latter that Japan acquired her five classics, the primers of *True Words*, of *Great Learning*, of *Lesser Learning*, of *Female Ethics* and of *Women's Filial Piety*.

Thus it may be said that the system of education progressed steadily throughout the Tokugawa era. From the days of Tsunayoshi the number of fief schools steadily increased, and as students were admitted free of all charges, a duty of grateful fealty as well as the impulse of interfief competition drew thither the sons of all samurai. Ultimately the number of such schools rose to over 240, and being supported entirely at the expense of the feudal chiefs, they did no little honour to the spirit of the era. From 7 to 15 years of age lads attended as day scholars, being thereafter admitted as boarders, and twice a year examinations were held in the presence of high officials of the fief. There were also several private schools where the curriculum consisted chiefly of moral philosophy, and there were many temple schools, where ethics, calligraphy, arithmetic, etiquette and, sometimes, commercial matters were taught. A prominent feature of the system was the bond of reverential affection uniting teacher and student. Before entering school a boy was conducted by his father or elder brother to the home of his future teacher, and there the visitors, kneeling before the teacher, pledged themselves to obey him in all things and to submit unquestioningly to any discipline he might impose. Thus the teacher came to be regarded as a parent, and the veneration paid to him was embodied in a precept: "Let not a pupil tread within three feet of his teacher's shadow." In the case of the temple schools the priestly instructor had full cognisance of each student's domestic circumstances and was guided by that knowledge in shaping the course of instruction. The universally underlying principle was, "serve the country and be diligent in your respective avocations." Sons of samurai were trained in military arts, and on attaining proficiency many of them travelled about the country, inuring their bodies to every kind of hardship and challenging all experts of local fame.

Unfortunately, however, the policy of national seclusion prevented for a long time all access to the stores of European knowledge. Not until the beginning of the 18th century did any authorized account of the great world of the West pass into the hands of the people. A celebrated scholar (Arai Hakuseki) then compiled two works—*Saiyō kibun* (*Record of Occidental Hearsay*), and *Sairan igen* (*Renderings of Foreign Languages*)—which embodied much information, obtained from Dutch sources, about Europe, its conditions and its customs. But of course the light thus furnished had very restricted influence. It was not extinguished, however. Thenceforth men's interest centred more and more on the astronomical, geographical and medical sciences of the West, though such subjects were not included in academical studies until the renewal of foreign intercourse in modern times. Then (1857), almost immediately, the nation turned to Western learning, as it had turned to Chinese thirteen centuries earlier. The Tokugawa government established in Yedo an institution called *Bansho-shirabe-dokoro* (place for studying foreign books), where Occidental languages were learned and Occidental works translated. Simultaneously a school for acquiring foreign medical art (*Seiyo igaku-sho*) was opened, and, a little later (1862), the *Kaisei-jo* (place of liberal culture), a college for studying European sciences, was added to the list of new institutions. Thus the eve of the Restoration saw the Japanese people already appreciative of the stores of learning rendered accessible to them by contact with the Occident.

Commercial education was comparatively neglected in the schools. Sons of merchants occasionally attended the *tera-koya*, but the instruction they received there had seldom any bearing upon the conduct of trade. Mercantile knowledge had to be acquired by a system of apprenticeship. A boy of 9 or 10 was apprenticed for a period of 8 or 9 years to a merchant, who undertook to support him and teach him a trade. Generally this young

Commercial

Education in Tokugawa Times.

apprentice could not even read or write. He passed through all the stages of shop menial, errand boy, petty clerk, salesman and senior clerk, and in the evenings he received instruction from a teacher, who used for textbooks the manual of letter-writing (*Shosoku orai*) and the manual of commerce (*Shōbai orai*). The latter contained much useful information, and a youth thoroughly versed in its contents was competent to discharge responsible duties. When an apprentice, having attained the position of senior clerk, had given proof of practical ability, he was often assisted by his master to start business independently, but under the same firm-name, for which purpose a sum of capital was given to him or a section of his master's customers were assigned.

When the government of the Restoration came into power, the emperor solemnly announced that the administration should be conducted on the principle of employing men of capacity wherever they could be found. This amounted to a declaration that in choosing officials scholastic acquirements would thenceforth take precedence of the claims of birth, and thus unprecedented importance was seen to attach to education. But so long as the feudal system survived, even in part, no general scheme of education could be thoroughly enforced, and thus it was not until the conversion of the fiefs into prefectures in 1871 that the government saw itself in a position to take drastic steps. A commission of investigation was sent to Europe and America, and on its return a very elaborate and extensive plan was drawn up in accordance with French models, which the commissioners had found conspicuously complete and symmetrical. This plan subsequently underwent great modifications. It will be sufficient to say that in consideration of the free education hitherto provided by the feudatories in their various fiefs, the government of the restoration resolved not only that the state should henceforth shoulder the main part of this burden, but also that the benefits of the system should be extended equally to all classes of the population, and that the attendance at primary schools should be compulsory. At the outset the sum to be paid by the treasury was fixed at 2,000,000 *yen*, that having been approximately the expenditure incurred by the feudatories. But the financial arrangements suffered many changes from time to time, and finally, in 1877, the cost of maintaining the schools became a charge on the local taxes, the central treasury granting only sums in aid.

Education in Modern Japan.

Every child, on attaining the age of six, must attend a common elementary school, where, during a six-years' course, instruction is given in morals, reading, arithmetic, the rudiments of technical work, gymnastics and poetry. Year by year the attendance at these schools has increased. Thus, whereas in the year 1900, only 81.67% of the school-age children of both sexes received the prescribed elementary instruction, the figure in 1905 was 94.93%. The desire for instruction used to be keener among boys than among girls, as was natural in view of the difference of inducement; but ultimately this discrepancy disappeared almost completely. Thus, whereas the percentage of girls attending school was 75.90 in 1900, it rose to 91.46 in 1905, and the corresponding figures for boys were 90.55 and 97.10 respectively. The tuition fee paid at a common elementary school in the rural districts must not exceed 5s. yearly, and in the urban districts, 10s.; but in practice it is much smaller, for these elementary schools form part of the communal system, and such portion of their expenses as is not covered by tuition fees, income from school property and miscellaneous sources, must be defrayed out of the proceeds of local taxation. In 1909 there were 18,160 common elementary schools, and also 9105 schools classed as elementary but having sections where, subsequently to the completion of the regular curriculum, a special supplementary course of study might be pursued in agriculture, commerce or industry (needle-work in the case of girls). The time devoted to these special courses is two, three or four years, according to the degree of proficiency contemplated, and the maximum fees are 15d. per month in urban districts and one-half of that amount in rural districts.

There are also 294 kindergartens, with an attendance of 26,000 infants, whose parents pay 3d. per month on the average for each child. In general the kindergartens are connected with elementary schools or with normal schools.

If a child, after graduation at a common elementary school, desires to extend its education, it passes into a common middle school, where training is given for practical pursuits or for admission to higher educational institutions. The ordinary curriculum at a common middle school includes moral philosophy, English language, history, geography, mathematics, natural history, natural philosophy, chemistry, drawing and the Japanese language. Five years are required to graduate, and from the fourth year the student may take up a special technical course as well as the main course; or, in accordance with local requirements, technical subjects may be taught conjointly with the regular curriculum throughout the whole time. The law provides that there must be at least one common middle school in each prefecture. The actual number in 1909 was 216.

Great inducements attract attendance at a common middle school. Not only does the graduation certificate carry considerable weight as a general qualification, but it also entitles a young man to volunteer for one year's service with the colours, thus escaping one of the two years he would have to serve as an ordinary conscript.

The graduate of a common middle school can claim admittance, without examination, to a high school, where he spends three years preparing to pass to a university, or four years studying a special subject, as law, engineering or medicine. By following the course in a high school, a youth obtains exemption from conscription until the age of 28, when one year as a volunteer will free him from all service with the colours. A high-school certificate of graduation entitles its holder to enter a university without examination, and qualifies him for all public posts.

For girls also high schools are provided, the object being to give a general education of higher standard. Candidates for admission must be over 12 years of age, and must have completed the second-year course of a higher elementary school. The regular course of study requires 4 years, and supplementary courses as well as special art courses may be taken.

In addition to the schools already enumerated, which may be said to constitute the machinery of general education, there are special schools, generally private, and technical schools (including a few private), where instruction is given in medicine and surgery, agriculture, commerce, mechanics, applied chemistry, navigation, electrical engineering, art (pictorial and applied), veterinary science, sericulture and various other branches of industry. There are also apprentices' schools, classed under the heading of elementary, where a course of not less than six months, and not more than four years, may be taken in dyeing and weaving, embroidery, the making of artificial flowers, tobacco manufacture, sericulture, reeling silk, pottery, lacquer, woodwork, metal-work or brewing. There are also schools—nearly all supported by private enterprise—for the blind and the dumb.

Normal schools are maintained for the purpose of training teachers, a class of persons not plentiful in Japan, doubtless because of an exceptionally low scale of emoluments, the yearly pay not exceeding £60 and often falling as low as £15.

There are two Imperial universities, one in Tōkyō and one in Kiōto. In 1909 the former had about 220 professors and instructors and 2880 students. Its colleges number six: law, medicine, engineering, literature, science and agriculture. It has a university hall where post-graduate courses are studied, and it publishes a quarterly journal giving accounts of scientific researches, which indicate not only large erudition, but also original talent. The university of Kiōto is a comparatively new institution and has not given any signs of great vitality. In 1909 its colleges numbered four: law, medicine, literature and science; its faculty consisted of about 60 professors with 70 assistants, and its students aggregated about 1100.

Except in the cases specially indicated, all the figures given above are independent of private educational institutions. The system pursued by the state does not tend to encourage private education, for unless a private school brings its curriculum into exact accord with that prescribed for public institutions of corresponding grade, its students are denied the valuable privilege of partial exemption from conscription, as well as other advantages attaching to state recognition. Thus the quality of the instruction being nominally the same, the rate of fees must also be similar, and no margin offers

to tempt private enterprise.

Public education in Japan is strictly secular: no religious teaching of any kind is permitted in the schools. There are about 100 libraries. Progress is marked in this branch, the rate of growth having been from 43 to 100 in the five-year period ended 1905. The largest library is the Imperial, in Tōkyō. It had about half a million volumes in 1909, and the daily average of visitors was about 430.

Apart from the universities, the public educational institutions in Japan involve an annual expenditure of 3½ millions sterling, out of which total a little more than half a million is met by students' fees; 2¾ millions are paid by the communes, and the remainder is defrayed from various sources, the central government contributing only some £28,000. It is estimated that public school property—in land, buildings, books, furniture, &c., aggregates 11 millions sterling.

VII.—Religion

Shintō.

The primitive religion of Japan is known by the name of Shintō, which signifies "the divine way," but the Japanese maintain that this term is of comparatively modern application. The term Shintō being obviously of Chinese origin, cannot have been used in Japan before she became acquainted with the Chinese language. Now Buddhism did not reach Japan until the 6th century, and a knowledge of the Chinese language had preceded it by only a hundred years. It is therefore reasonable to conclude that the primitive religion of Japan had no name, and that it did not begin to be called Shintō until Buddhism had entered the field. The two creeds remained distinct, though not implacably antagonistic, until the beginning of the 9th century, when they were welded together into a system of doctrine to which the name *Ryōbu-Shintō* (dual Shintō) was given. In this new creed the Shintō deities were regarded as avatars of Buddhist divinities, and thus it may be said that Shintō was absorbed into Buddhism. Probably that would have been the fate of the indigenous creed in any circumstances, for a religion without a theory as to a future state and without any code of moral duties could scarcely hope to survive contact with a faith so well equipped as Buddhism in these respects. But Shintō, though absorbed, was not obliterated. Its beliefs survived; its shrines survived; its festivals survived, and something of its rites survived also.

Shintō, indeed, may be said to be entwined about the roots of Japan's national existence. Its scripture—as the *Kojiki* must be considered—resembles the Bible in that both begin with the cosmogony. But it represents the gods as peopling the newly created earth with their own offspring instead of with human beings expressly made for the purpose. The actual work of creation was done by a male deity, Izanagi, and a female deity, Izanami. From the right eye of the former was born Amaterasu, who became goddess of the sun; from his left eye, the god of the moon; and from his nose, a species of Lucifer. The grandson of the sun goddess was the first sovereign of Japan, and his descendants have ruled the land in unbroken succession ever since, the 121st being on the throne in 1909. Thus it is to Amaterasu (the heaven-illuminating goddess) that the Japanese pay reverence above all other deities, and it is to her shrine at Ise that pilgrims chiefly flock.

The story of creation, as related in the *Kojiki*, is obviously based on a belief that force is indestructible, and that every exercise of it is productive of some permanent result. Thus by the motions of the creative spirit there spring into existence all the elements that go to make up the universe, and these, being of divine origin, are worshipped and propitiated. Their number becomes immense when we add the deified ghosts of ancestors who were descended from the gods and whose names are associated with great deeds. These ancestors are often regarded as the tutelary deities of districts, where they receive special homage and where shrines are erected to them. The method of worship consists in making offerings and in the recital of rituals (*norito*). Twenty-seven of these rituals were reduced to writing and embodied in a work called *Engishiki* (927). Couched in antique language, these liturgies are designed for the dedication of shrines, for propitiating evil, for entreating blessings on the harvest, for purification, for obtaining household security, for bespeaking protection during a journey, and so forth. Nowhere is any reference found to a future state of reward or punishment, to deliverance from evil, to assistance in the path of virtue. One ceremonial only is designed to avert the consequences of sin or crime; namely, the rite of purification, which, by washing with water and by the sacrifice of valuables, removes the pollution resulting from all wrong-doing. Originally performed on behalf of individuals, this *ō-barai* ultimately came to be a semi-annual ceremony for sweeping away the sins of all the people.

Shintō is thus a mixture of ancestor-worship and of nature-worship without any explicit code of morals. It regards human beings as virtuous by nature; assumes that each man's conscience is his best guide; and while believing in a continued existence beyond the grave, entertains no theory as to its pleasures or pains. Those that pass away become disembodied spirits, inhabiting the world of darkness (*yomi-no-yo*) and possessing power to bring sorrow or joy into the lives of their survivors, on which account they are worshipped and propitiated. Purity and simplicity being essential characteristics of the cult, its shrines are built of white wood, absolutely without decorative features of any kind, and fashioned as were the original huts of the first Japanese settlers. There are no graven images—a fact attributed by some critics to ignorance of the glyptic art on the part of the original worshippers—but there is an emblem of the deity, which generally takes the form of a sword, a mirror or a so-called jewel, these being the insignia handed by the sun goddess to her grandson, the first ruler of Japan. This emblem is not exposed to public view: it is enveloped in silk and brocade and enclosed in a box at the back of the shrine. The mirror sometimes prominent is a Buddhist innovation and has nothing to do with the true emblem of the creed.

From the 9th century, when Buddhism absorbed Shintō, the two grew together so intimately that their differentiation seemed hopeless. But in the middle of the 17th century a strong revival of the indigenous faith was effected by the efforts of a group of illustrious scholars and politicians, at whose head stood Mabuchi, Motoori and Hirata. These men applied themselves with great diligence and acumen to reproduce the pure Shintō of the *Kojiki* and to restore it to its old place in the nation's reverence, their political purpose being to educate a spirit of revolt against the feudal system which deprived the emperor of administrative power. The principles thus revived became the basis of the restoration of 1867; Shintō rites and Shintō rituals were readopted, and Buddhism fell for a season into comparative disfavour, Shintō being regarded as the national religion. But Buddhism had twined its roots too deeply around the heart of the people to be thus easily torn up. It gradually recovered its old place, though not its old magnificence, for its disestablishment at the hands of the Meiji government robbed it of a large part of its revenues.

Buddhism.

Buddhism entered China at the beginning of the Christian era, but not until the 4th century did it obtain any strong footing. Thence, two centuries later (522), it reached Japan through Korea. The reception extended to it was not encouraging at first. Its images and its brilliant appurtenances might well deter a nation which had never seen an idol nor ever worshipped in a decorated temple. But the ethical teachings and the positive doctrines of the foreign faith presented an attractive contrast to the colourless Shintō. After a struggle, not without bloodshed, Buddhism won its way. It owed much to the active patronage of Shōtoku taishi, prince-regent during the reign of the empress Suiko (593-621). At his command many new temples were built; the country was divided into dioceses under Buddhist prelates; priests were encouraged to teach the arts of road-making and bridge-building, and students were sent to China to investigate the mysteries of the faith at its supposed fountain-head. Between the middle of the 7th century and that of the 8th, six sects were introduced from China, all imperfect and all based on the

teachings of the Hinayana system. Up to this time the propagandists of the creed had been chiefly Chinese and Korean teachers. But from the 8th century onwards, when Kiōto became the permanent capital of the empire, Japanese priests of lofty intelligence and profound piety began to repair to China and bring thence modified forms of the doctrines current there. It was thus that Dengyō daishi (*c.* 800) became the founder of the Tendai (heavenly tranquillity) sect and Kōbō daishi (774-834) the apostle of the Shingon (true word). Other sects followed, until the country possessed six principal sects in all with thirty-seven sub-sects. It must be remembered that Buddhism offers an almost limitless field for eclecticism. There is not in the world any literary production of such magnitude as the Chinese scriptures of the Mahayana. "The canon is seven hundred times the amount of the New Testament. Hsüan Tsang's translation of the *Prajna paramita* is twenty-five times as large as the whole Christian Bible."

It is natural that out of such a mass of doctrine different systems should be elaborated. The Buddhism that came to Japan prior to the days of Dengyō daishi was that of the Vaipulya school, which seems to have been accepted in its entirety. But the Tendai doctrines, introduced by Dengyō, Iikaku and other fellow-thinkers, though founded mainly on the *Saddharma pundarika*, were subjected to the process of eclecticism which all foreign institutions undergo at Japanese hands. Dengyō studied it in the monastery of Tientai which "had been founded towards the close of the 6th century of our era on a lofty range of mountains in the province of Chehkiang by the celebrated preacher Chikai" (Lloyd, "Developments of Japanese Buddhism," *Transactions of the Asiatic Society of Japan*, vol. xxii.), and carrying it to Japan he fitted its disciplinary and meditative methods to the foundations of the sects already existing there.

This eclecticism was even more marked in the case of the Shingon (true word) doctrines, taught by Dengyō's illustrious contemporary, Kōbō daishi, who was regarded as the incarnation of Vairocana. He led his countrymen, by a path almost wholly his own, from the comparatively low platform of Hinayana Buddhism, whose sole aim is individual salvation, to the Mahayana doctrine, which teaches its devotee to strive after perfect enlightenment, not for his own sake alone, but also that he may help his fellows and intercede for them. Then followed the Jōdo (Pure Land) sect, introduced in 1153 by a priest, Senku, who is remembered by later generations as Hōnen shōnin. He taught salvation by faith ritualistically expressed. The virtue that saves comes, not from imitation of and conformity to the person and character of the saviour Amida, but from blind trust in his efforts and ceaseless repetition of pious formulae. It is really a religion of despair rather than of hope, and in that respect it reflects the profound sympathy awakened in the bosom of its teacher by the sorrows and sufferings of the troublous times in which he lived.

A favourite pupil of Hōnen shōnin was Shinran (1173-1262). He founded the Jōdo Shinshū (true sect of jōdo), commonly called simply Shinshū and sometimes Monto, which subsequently became the most influential of Japanese sects, with its splendid monasteries, the two Hongwana-ji in Kiōto. The differences between the doctrines of this sect and those of its predecessors were that the former "divested itself of all metaphysics"; knew nothing of a philosophy of religion, dispensed with a multiplicity of acts of devotion and the keeping of many commandments; did not impose any vows of celibacy or any renunciation of the world, and simply made faith in Amida the all in all. In modern days the Shinshū sect has been the most progressive of all Buddhist sects and has freely sent forth its promising priests to study in Europe and America. Its devotees make no use of charms or spells, which are common among the followers of other sects.

Anterior by a few years to that introduction of the Shinshū was the Zen sect, which has three main divisions, the Rinzai (1168), the Sōtō (1223) and the Obaku (1650). This is essentially a contemplative sect. Truth is reached by pure contemplation, and knowledge can be transmitted from heart to heart without the use of words. In that simple form the doctrine was accepted by the Rinzai believers. But the founders of the Sōtō branch—Shōyo taishi and Butsuji zenshi—added scholarship and research to contemplation, and taught that the "highest wisdom and the most perfect enlightenment are attained when all the elements of phenomenal existence are recognized as empty, vain and unreal." This creed played an important part in the development of Bushidō, and its priests have always been distinguished for erudition and indifference to worldly possessions.

Last but not least important among Japanese sects of Buddhism is the Nichiren or Hokke, called after its founder, Nichiren (1222-1282). It was based on the *Saddharma pundarika*, and it taught that there was only one true Buddha—the moon in the heavens—the other Buddhas being like the moon reflected in the waters, transient, shadowy reflections of the Buddha of truth. It is this being who is the source of all phenomenal existence, and in whom all phenomenal existence has its being. The imperfect Buddhism teaches a chain of cause and effect; true Buddhism teaches that the first link in this chain of cause and effect is the Buddha of original enlightenment. When this point has been reached true wisdom has at length been attained. Thus the monotheistic faith of Christianity was virtually reached in one God in whom all creatures "live, move and have their being." It will readily be conceived that these varied doctrines caused dissension and strife among the sects professing them. Sectarian controversies and squabbles were nearly as prominent among Japanese Buddhists as they were among European Christians, but to the credit of Buddhism it has to be recorded that the stake and the rack never found a place among its instruments of self-assertion. On the other hand, during the wars that devastated Japan from the 12th to the end of the 16th century, many of the monasteries became military camps, and the monks, wearing armour and wielding glaives, fought in secular as well as religious causes.

Christianity in Modern Japan.

The story of the first Christian missionaries to Japan is told elsewhere (see § VIII. Foreign Intercourse). Their work suffered an interruption for more than 200 years until, in 1858, almost simultaneously with the conclusion of the treaties, a small band of Catholic fathers entered Japan from the Riūkiū islands, where they had carried on their ministrations since 1846. They found that, in the neighbourhood of Nagasaki, there were some small communities where Christian worship was still carried on. It would seem that these communities had not been subjected to any severe official scrutiny. But the arrival of the fathers revived the old question, and the native Christians, or such of them as refused to apostatize, were removed from their homes and sent into banishment. This was the last example of religious intolerance in Japan. At the instance of the foreign representatives in Tōkyō the exiles were set at liberty in 1873, and from that time complete freedom of conscience existed in fact, though it was not declared by law until the promulgation of the constitution in 1889. In 1905 there were 60,000 Roman Catholic converts in Japan forming 360 congregations, with 130 missionaries and 215 teachers, including 145 nuns. These were all European. They were assisted by 32 Japanese priests, 52 Japanese nuns, 280 male catechists and 265 female catechists and nurses. Three seminaries for native priests existed, together with 58 schools and orphanages and two lepers' homes. The whole was presided over by an archbishop and three bishops.

The Anglican Church was established in Japan in 1859 by two American clergymen who settled in Nagasaki, and now, in conjunction with the Episcopal Churches of America and Canada, it has missions collectively designated Nihon Sei-Kōkai. There are 6 bishops—2 American and 4 English—with about 60 foreign and 50 Japanese priests and deacons, besides many foreign lay workers of both sexes and Japanese catechists and school teachers. The converts number 11,000. The Protestant missions include Presbyterian (Nihon Kirisuto Kyokai), Congregational (Kumi-ai), Methodist, Baptist and the Salvation Army (Kyusei-gun). The pioneer Protestant mission was founded in 1859 by representatives of the American Presbyterian and Dutch Reformed Churches. To this mission belongs the credit of having published, in 1880, the first complete Japanese version of the New Testament, followed by the Old Testament in 1887. The Presbyterians, representing 7 religious societies, have over a hundred missionaries; 12,400 converts; a number of boarding schools for boys and girls and day schools. The Congregational churches are associated exclusively with the mission of the American board of commissioners for foreign missions. They have about 11,400 converts, and the largest

Christian educational institution in Japan, namely, the Dōshisha in Kiōto. The Methodists represent 6 American societies and 1 Canadian. They have 130 missionaries and 10,000 converts; boarding schools, day schools, and the most important Christian college in Tōkyō, namely, the Awoyama Gaku-in. The Baptists represent 4 American societies; have 60 missionaries, a theological seminary, an academy for boys, boarding schools for girls, day schools and 3500 converts. The Salvation Army, which did not enter Japan until 1895, has organized 15 corps, and publishes ten thousand copies of a fortnightly magazine, the *War Cry* (*Toki no Koe*). Finally, the Society of Friends, the American and London Religious Tract Societies and the Young Men's Christian Association have a number of missions. It will be seen from the above that the missionaries in Japan, in the space of half a century (1858 to 1908), had won 110,000 converts, in round numbers. To these must be added the Orthodox Russian Church, which has a fine cathedral in Tōkyō, a staff of about 40 Japanese priests and deacons and 27,000 converts, the whole presided over by a bishop. Thus the total number of converts becomes 137,000. In spite of the numerous sects represented in Japan there has been virtually no sectarian strife, and it may be said of the Japanese converts that they concern themselves scarcely at all about the subtleties of dogma which divide European Christianity. Their tendency is to consider only the practical aspects of the faith as a moral and ethical guide. They are disposed, also, to adapt the creed to their own requirements just as they adapted Buddhism, and this is a disposition which promises to grow.

VIII.—Foreign Intercourse

Foreign Intercourse in Early and Medieval Times.—There can be no doubt that commerce was carried on by Japan with China and Korea earlier that the 8th century of the Christian era. It would appear that from the very outset over-sea trade was regarded as a government monopoly. Foreigners were allowed to travel freely in the interior of the country provided that they submitted their baggage for official inspection and made no purchases of weapons of war, but all imported goods were bought in the first place by official appraisers who subsequently sold them to the people at arbitrarily fixed prices. Greater importance attached to the trade with China under the Ashikaga shōguns (14th, 15th and 16th centuries), who were in constant need of funds to defray the cost of interminable military operations caused by civil disturbances. In this distress they turned to the neighbouring empire as a source from which money might be obtained. This idea seems to have been suggested to the shōgun Takauji by a Buddhist priest, when he undertook the construction of the temple Tenryū-ji. Two ships laden with goods were fitted out, and it was decided that the enterprise should be repeated annually. Within a few years after this development of commercial relations between the two empires, an interruption occurred owing partly to the overthrow of the Yuen Mongols by the Chinese Ming, and partly to the activity of Japanese pirates and adventurers who raided the coasts of China. The shōgun Yoshimitsu (1368-1394), however, succeeded in restoring commercial intercourse, though in order to effect his object he consented that goods sent from Japan should bear the character of tribute and that he himself should receive investiture at the hands of the Chinese emperor's ambassador. The Nanking government granted a certain number of commercial passports, and these were given by the shōgun to Ouchi, feudal chief of Cho-shu, which had long been the principal port for trade with the neighbouring empire. Tribute goods formed only a small fraction of a vessel's cargo: the bulk consisted of articles which were delivered into the government's stores in China, payment being received in copper cash. It was from this transaction that the shōgun derived a considerable part of his profits, for the articles did not cost him anything originally, being either presents from the great temples and provincial governors or compulsory contributions from the house of Ouchi. As for the gifts by the Chinese government and the goods shipped in China, they were arbitrarily distributed among the noble families in Japan at prices fixed by the shōgun's assessor. Thus, so far as the shōgun was concerned, these enterprises could not fail to be lucrative. They also brought large profits to the Ouchi family, for, in the absence of competition, the products and manufactures of each country found ready sale in the markets of the other. The articles found most suitable in China were swords, fans, screens, lacquer wares, copper and agate, and the goods brought back to Japan were brocade and other silk fabrics, ceramic productions, jade and fragrant woods. The Chinese seem to have had a just appreciation of the wonderful swords of Japan. At first they were willing to pay the equivalent of 12 guineas for a pair of blades, but by degrees, as the Japanese began to increase the supply, the price fell, and at the beginning of the 16th century all the diplomacy of the Japanese envoys was needed to obtain good figures for the large and constantly growing quantity of goods that they took over by way of supplement to the tribute. Buddhist priests generally enjoyed the distinction of being selected as envoys, for experience showed that their subtle reasoning invariably overcame the economical scruples of the Chinese authorities and secured a fine profit for their master, the shōgun. In the middle of the 16th century these tribute-bearing missions came to an end with the ruin of the Ouchi family and the overthrow of the Ashikaga shōguns, and they were never renewed.

With Korea.

Japan's medieval commerce with Korea was less ceremonious than that with China. No passports had to be obtained from the Korean government. A trader was sufficiently equipped when he carried a permit from the So family, which held the island of Tsushima in fief. Fifty vessels were allowed to pass yearly from ports in Japan to the three Japanese settlements in Korea. Little is recorded about the nature of this trade, but it was rudely interrupted by the Japanese settlers, who, offended at some arbitrary procedure on the part of the local Korean authorities, took up arms (A.D. 1510) and at first signally routed the Koreans. An army from Seoul turned the tables, and the Japanese were compelled to abandon the three settlements. Subsequently the shōgun's government—which had not been concerned in the struggle—approached Korea with amicable proposals, and it was agreed that the ringleaders of the raiders should be decapitated and their heads sent to Seoul, Japan's compliance with this condition affording, perhaps, a measure of the value she attached to neighbourly friendship. Thenceforth the number of vessels was limited to 25 annually and the settlements were abolished. Some years later, the Japanese again resorted to violent acts of self-assertion, and on this occasion, although the offenders were arrested by order of the shōgun Yoshiharu, and handed over to Korea for punishment, the Seoul court persisted in declining to restore the system of settlements or to allow the trade to be resumed on its former basis. Fifty years afterwards the taikō's armies invaded Korea, overrunning it for seven years, and leaving, when they retired in 1598, a country so impoverished that it no longer offered any attraction to commercial enterprise from beyond the sea.

With Occidental Nations.

The Portuguese discovered Japan by accident in 1542 or 1543—the exact date is uncertain. On a voyage to Macao from Siam, a junk carrying three Portuguese was blown from her course and fetched Tanegashima, a small island lying south of the province of Satsuma. The Japanese, always hospitable and inquisitive, welcomed the newcomers and showed special curiosity about the arquebuses carried by the Portuguese, fire-arms being then a novelty in Japan and all weapons of war being in great request. Conversation was impossible, of course, but, by tracing ideographs upon the sand, a Chinese member of the crew succeeded in explaining the cause of the junk's arrival. She was then piloted to a more commodious harbour, and the Portuguese sold two arquebuses to the local feudatory, who immediately ordered his armourer to manufacture similar weapons. Very soon the news of the discovery reached all the Portuguese settlements in the East, and at least seven expeditions were fitted out during the next few years to exploit this new market. Their objective points were all in the island of Kiūshiū—the principal stage where the drama—ultimately converted into a tragedy—of Christian propagandism and European commercial intercourse was acted in the interval between 1542 and 1637.

It does not appear that the Jesuits at Macao, Goa or other centres of Portuguese influence in the East took immediate advantage of the discovery of Japan. The pioneer propagandist was Francis Xavier, who landed at Kagoshima on the 15th

Arrival of the Jesuits.

of August 1549. During the interval of six (or seven) years that separated this event from the drifting of the junk to Tanegashima, the Portuguese had traded freely in the ports of Kiūshiū, had visited Kiōto, and had reported the Japanese capital to be a city of 96,000 houses, therefore larger than Lisbon. Xavier would certainly have gone to Japan even though he had not been specially encouraged, for the reports of his countrymen depicted the Japanese as "very desirous of being instructed," and he longed to find a field more promising than that inhabited by "all these Indian nations, barbarous, vicious and without inclination to virtue." There were, however, two special determinants. One was a request addressed by a feudatory, supposed to have been the chief of the Bungo fief, to the viceroy of the Indies at Goa; the other, an appeal made in person by a Japanese named Yajiro, whom the fathers spoke of as Anjiro, and who subsequently attained celebrity under his baptismal name, Paul of the holy faith. No credible reason is historically assigned for the action of the Japanese feudatory. Probably his curiosity had been excited by accounts which the Portuguese traders gave of the noble devotion of their country's missionaries, and being entirely without bigotry, as nearly all Japanese were at that epoch, he issued the invitation partly out of curiosity and partly from a sincere desire for progress. Anjiro's case was very different. Labouring under stress of repentant zeal, and fearful that his evil acts might entail murderous consequences, he sought an asylum abroad, and was taken away in 1548 by a Portuguese vessel whose master advised him to repair to Malacca for the purpose of confessing to Xavier. This might well have seemed to the Jesuits a providential dispensation, for Anjiro, already able to speak Portuguese, soon mastered it sufficiently to interpret for Xavier and his fellow-missionaries (without which aid they must have remained long helpless in the face of the immense difficulty of the Japanese language), and to this linguistic skill he added extraordinary gifts of intelligence and memory. Xavier, with two Portuguese companions and Anjiro, were excellently received by the feudal chiefs of Satsuma and obtained permission to preach their doctrine in any part of the fief. This permit is not to be construed as an evidence of official sympathy with the foreign creed. Commercial considerations alone were in question. A Japanese feudal chief in that era had sedulously to foster every source of wealth or strength, and as the newly opened trade with the outer world seemed full of golden promise, each feudatory was not less anxious to secure a monopoly of it in the 16th century than the Ashikaga shōguns had been in the 15th. The Satsuma daimyō was led to believe that the presence of the Jesuits in Kagoshima would certainly prelude the advent of trading vessels. But within a few months one of the expected merchantmen sailed to Hirado without touching at Kagoshima, and her example was followed by two others in the following year, so that the Satsuma chief saw himself flouted for the sake of a petty rival, Matsudaira of Hirado. This fact could not fail to provoke his resentment. But there was another influence at work. Buddhism has always been a tolerant religion, eclectic rather than exclusive. Xavier, however, had all the bigoted intolerance of his time. The Buddhist priests in Kagoshima received him with courtesy and listened respectfully to the doctrines he expounded through the mouth of Anjiro. Xavier rejoined with a display of aggressive intolerance which shocked and alienated the Buddhists. They represented to the Satsuma chief that peace and good order were inconsistent with such a display of militant propagandism, and he, already profoundly chagrined by his commercial disappointment, issued in 1550 an edict making it a capital offence for any of his vassals to embrace Christianity. Xavier, or, more correctly speaking, Anjiro, had won 150 converts, who remained without molestation, but Xavier himself took ship for Hirado. There he was received with salvoes of artillery by the Portuguese merchantmen lying in the harbour and with marks of profound respect by the Portuguese traders, a display which induced the local chief to issue orders that courteous attention should be paid to the teaching of the foreign missionaries. In ten days a hundred baptisms took place; another significant index of the mood of the Japanese in the early era of Occidental intercourse: the men in authority always showed a complaisant attitude towards Christianity where trade could be fostered by so doing, and wherever the men in authority showed such an attitude, considerable numbers of the lower orders embraced the foreign faith. Thus, in considering the commercial history of the era, the element of religion constantly thrusts itself into the foreground.

First Visit of Europeans to Kiōto.

Xavier next resolved to visit Kiōto. The first town of importance he reached on the way was Yamaguchi, capital of the Chōshū fief, situated on the northern shore of the Shimonoseki Strait. There the feudal chief, Ouchi, though sufficiently courteous and inquisitive, showed no special cordiality towards humble missionaries unconnected with commerce, and the work of proselytizing made no progress, so that Xavier and his companion, Fernandez, pushed on to Kiōto. The time was mid-winter; the two fathers suffered terrible privations during their journey of two months on foot, and on reaching Kiōto they found a city which had been almost wholly reduced to ruins by internecine war. Necessarily they failed to obtain audience of either emperor or shōgun, at that time the most inaccessible potentates in the world, the Chinese "son of heaven" excepted, and nothing remained but street preaching, a strange resource, seeing that Xavier, constitutionally a bad linguist, had only a most rudimentary acquaintance with the profoundly difficult tongue in which he attempted to expound the mysteries of a novel creed. A fortnight sufficed to convince him that Kiōto was unfruitful soil. He therefore returned to Yamaguchi. But he had now learned a lesson. He saw that propagandism without scrip or staff and without the countenance of those sitting in the seats of power would be futile in Japan. So he obtained from Hirado his canonicals, together with a clock and other novel products of European skill, which, as well as credentials from the viceroy of India, the governor of Malacca and the bishop of Goa, he presented to the Chōshū chief. His prayer for permission to preach Christianity was now readily granted, and Ouchi issued a proclamation announcing his approval of the introduction of the new religion and according perfect liberty to embrace it. Xavier and Fernandez now made many converts. They also gained the valuable knowledge that the road to success in Japan lay in associating themselves with over-sea commerce and its directors, and in thus winning the co-operation of the feudal chiefs.

Christian Propagandists.

Nearly ten years had now elapsed since the first Portuguese landed in Kagoshima, and during that time trade had gone on steadily and prosperously. No attempt was made to find markets in the main island: the Portuguese confined themselves to Kiūshiū for two reasons: one, that having no knowledge of the coasts, they hesitated to risk their ships and their lives in unsurveyed waters; the other, that whereas the main island, almost from end to end, was seething with internecine war, Kiūshiū remained beyond the pale of disturbance and enjoyed comparative tranquillity. At the time of Xavier's second sojourn in Yamaguchi, a Portuguese ship happened to be visiting Bungo, and at its master's suggestion the great missionary proceeded thither, with the intention of returning temporarily to the Indies. At Bungo there was then ruling Otomo, second in power to only the Satsuma chief among the feudatories of Kiūshiū. By him the Jesuit father was received with all honour. Xavier did not now neglect the lesson he had learned in Yamaguchi. He repaired to the Bungo chieftain's court, escorted by nearly the whole of the Portuguese crew, gorgeously bedizened, carrying their arms and with banners flying. Otomo, a young and ambitious ruler, was keenly anxious to attract foreign traders with their rich cargoes and puissant weapons of war. Witnessing the reverence paid to Xavier by the Portuguese traders, he appreciated the importance of gaining the goodwill of the Jesuits, and accordingly not only granted them full freedom to teach and preach, but also enjoined upon his younger brother, who, in the sequel of a sudden rebellion, had succeeded to the lordship of Yamaguchi, the advisability of extending protection to Torres and Fernandez, then sojourning there. After some four months' stay in Bungo, Xavier set sail for Goa in February 1552. Death overtook him in the last month of the same year.

Xavier's departure from Japan marked the conclusion of the first epoch of Christian propagandism. His sojourn in Japan extended to 27 months. In that time he and his coadjutors won about 760 converts. In Satsuma more than a year's labour produced 150 believers. There Xavier had the assistance of Anjiro to expound his doctrines. No language lends itself with greater difficulty than Japanese to the discussion of theological questions. The terms necessary for such a

purpose are not current among laymen, and only by special study, which, it need scarcely be said, must be preluded by an accurate acquaintance with the tongue itself, can a man hope to become duly equipped for the task of exposition and dissertation. It is open to grave doubt whether any foreigner has ever attained the requisite proficiency. Leaving Anjiro in Kagoshima to care for the converts made there, Xavier pushed on to Hirado, where he baptized a hundred Japanese in a few days. Now we have it on the authority of Xavier himself that in this Hirado campaign “none of us knew Japanese.” How then did they proceed? “By reciting a semi-Japanese volume” (a translation made by Anjiro of a treatise from Xavier’s pen) “and by delivering sermons, we brought several over to the Christian cult.” Sermons preached in Portuguese or Latin to a Japanese audience on the island of Hirado in the year 1550 can scarcely have attracted intelligent interest. On his first visit to Yamaguchi, Xavier’s means of access to the understanding of his hearers was confined to the rudimentary knowledge of Japanese which Fernandez had been able to acquire in 14 months, a period of study which, in modern times, with all the aids now procurable, would not suffice to carry a student beyond the margin of the colloquial. No converts were won. The people of Yamaguchi probably admired the splendid faith and devotion of these over-sea philosophers, but as for their doctrine, it was unintelligible. In Kiōto the same experience was repeated, with an addition of much physical hardship. But when the Jesuits returned to Yamaguchi in the early autumn of 1551, they baptized 500 persons, including several members of the military class. Still Fernandez with his broken Japanese was the only medium for communicating the profound doctrines of Christianity. It must be concluded that the teachings of the missionaries produced much less effect than the attitude of the local chieftain.

Second Period of Christian Propagandism.

Only two missionaries, Torres and Fernandez, remained in Japan after the departure of Xavier, but they were soon joined by three others. These newcomers landed at Kagoshima and found that, in spite of the official veto against the adoption of Christianity, the feudal chief had lost nothing of his desire to foster foreign trade. Two years later, all the Jesuits in Japan were assembled in Bungo. Their only church stood there; and they had also built two hospitals. Local disturbances had compelled them to withdraw from Yamaguchi, not, however, before their violent disputes with the Buddhist priests in that town had induced the feudatory to proscribe the foreign religion, as had previously been done in Kagoshima. From Funai, the chief town of Bungo, the Jesuits began in 1579 to send yearly reports to their Generals in Rome. These reports, known as the *Annual Letters*, comprise some of the most valuable information available about the conditions then existing in Japan. They describe a state of abject poverty among the lower orders; poverty so cruel that the destruction of children by their famishing parents was an everyday occurrence, and in some instances choice had to be made between cannibalism and starvation. Such suffering becomes easily intelligible when the fact is recalled that Japan had been racked by civil war during more than 200 years, each feudal chief fighting for his own hand, to save or to extend his territorial possessions. From these *Annual Letters* it is possible also to gather a tolerably clear idea of the course of events during the years immediately subsequent to Xavier’s departure. There was no break in the continuity of the newly inaugurated foreign trade. Portuguese ships visited Hirado as well as Bungo, and in those days their masters and crews not only attended scrupulously to their religious duties, but also showed such profound respect for the missionaries that the Japanese received constant object lessons in the influence wielded over the traders by the Jesuits. Thirty years later, this orderly and reverential demeanour was exchanged for riotous excesses such as had already made the Portuguese sailor a byword in China. But in the early days of intercourse with Japan the crews of the merchant vessels seem to have preached Christianity by their exemplary conduct. Just as Xavier had been induced to visit Bungo by the anxiety of a ship-captain for Christian ministrations, so in 1557 two of the fathers repaired to Hirado in obedience to the solicitations of Portuguese sailors. There the fathers, under the guidance of Vilela, sent brothers to parade the streets ringing bells and chaunting litanies; they organized bands of boys for the same purpose; they caused the converts, and even children, to flagellate themselves at a model of Mount Calvary, and they worked miracles, healing the sick by contact with scourges or with a booklet in which Xavier had written litanies and prayers. It may well be imagined that such doings attracted surprised attention in Japan. They were supplemented by even more striking practices. For a sub-feudatory of the Hirado chief, having been converted, showed his zeal by destroying Buddhist temples and throwing down the idols, thus inaugurating a campaign of violence destined to mark the progress of Christianity throughout the greater part of its history in Japan. There followed the overthrowing of a cross in the Christian cemetery, the burning of a temple in the town of Hirado, and a street riot, the sequel being that the Jesuit fathers were compelled to return once more to Bungo. It is essential to follow all these events, for not otherwise can a clear understanding be reached as to the aspects under which Christianity presented itself originally to the Japanese. The Portuguese traders, reverent as was their demeanour towards Christianity, did not allow their commerce to be interrupted by vicissitudes of propagandism. They still repaired to Hirado, and rumours of the wealth-begetting effects of their presence having reached the neighbouring fief of Omura, its chief, Sumitada, made overtures to the Jesuits in Bungo, offering a port free from all dues for ten years, a large tract of land, a residence for the missionaries and other privileges. The Jesuits hastened to take advantage of this proposal, and no sooner did the news reach Hirado than the feudatory of that island repented of having expelled the fathers and invited them to return. But while they hesitated, a Portuguese vessel arrived at Hirado, and the feudal chief declared publicly that no need existed to conciliate the missionaries, since trade went on without them. When this became known in Bungo, Torres hastened to Hirado, was received with extraordinary honours by the crew of the vessel, and at his instance she left the port, her master declaring that “he could not remain in a country where they maltreated those who professed the same religion as himself.” Hirado remained a closed port for some years, but ultimately the advent of three merchantmen, which intimated their determination not to put in unless the anti-Christian ban was removed, induced the feudal chief to receive the Jesuits, once more. This incident was paralleled a few years later in the island of Amakusa, where a petty feudatory, in order to attract foreign trade, as the missionaries themselves frankly explain, embraced Christianity and ordered all his vassals to follow his example; but when no Portuguese ship appeared, he apostatized, required his subjects to revert to Buddhism arid made the missionaries withdraw. In fact, the competition for the patronage of Portuguese traders was so keen that the Hirado feudatory attempted to burn several of their vessels because they frequented the territorial waters of his neighbour and rival, Sumitada. The latter became a most stalwart Christian when his wish was gratified. He set himself to eradicate idolatry throughout his fief with the strong arm, and his fierce intolerance provoked results which ended in the destruction of the Christian town at the newly opened free port. Sumitada, however, quickly reasserted his authority, and five years later (1567), he took a step which had far-reaching consequences, namely, the building of a church at Nagasaki, in order that Portuguese commerce might have a centre and the Christians an assured asylum. Nagasaki was then a little fishing village. In five years it grew to be a town of thirty thousand inhabitants, and Sumitada became one of the richest of the Kiūshiū feudatories. When in 1573 successful conflicts with the neighbouring fiefs brought him an access of territory, he declared that he owed these victories to the influence of the Christian God, and shortly afterwards he publicly proclaimed banishment for all who would not accept the foreign faith. There were then no Jesuits by his side, but immediately two hastened to join him, and “these, accompanied by a strong guard, but yet not without danger of their lives, went round causing the churches of the Gentiles, with their idols, to be thrown to the ground, while three Japanese Christians went preaching the law of God everywhere. Three of us who were in the neighbouring kingdoms all withdrew therefrom to work in this abundant harvest, and in the space of seven months twenty thousand persons were baptized, including the bonzes of about sixty monasteries, except a few who quitted the State.” In Bungo, however, where the Jesuits were originally so well received, it is doubtful whether Christian propagandism would not have ended in failure but for an event which occurred in 1576, namely, the conversion of the chieftain’s son, a youth of some 16 years. Two years later Otomo himself came over to the Christian faith. He rendered inestimable aid, not merely within his own fief, but also by the influence he exercised on

others. His intervention, supported by recourse to arms, obtained for the Jesuits a footing on the island of Amakusa, where one of the feudatories gave his vassals the choice of conversion or exile, and announced to the Buddhist priests that unless they accepted Christianity their property would be confiscated and they themselves banished. Nearly the whole population of the fief did violence to their conscience for the sake of their homes. Christianity was then becoming established in Kiūshiū by methods similar to those of Islam and the inquisition. Another notable illustration is furnished by the story of the Arima fief, adjoining that of Sumitada (Omura), where such resolute means had been adopted to force Christianity upon the vassals. Moreover, the heads of the two fiefs were brothers. Accordingly, at the time of Sumitada's very dramatic conversion, the Jesuits were invited to Arima and encouraged to form settlements at the ports of Kuchinotsu and Shimabara, which thenceforth began to be frequented by Portuguese merchantmen. The fief naturally became involved in the turmoil resulting from Sumitada's iconoclastic methods of propagandism; but, in 1576, the then ruling feudatory, influenced largely by the object lesson of Sumitada's prosperity and puissance, which that chieftain openly ascribed to the tutelary aid of the Christian deity, accepted baptism and became the "Prince Andrew" of missionary records. It is written in those records that "the first thing Prince Andrew did after his baptism was to convert the chief temple of his capital into a church, its revenues being assigned for the maintenance of the building and the support of the missionaries. He then took measures to have the same thing done in the other towns of his fief, and he seconded the preachers of the gospel so well in everything else that he could flatter himself that he soon would not have one single idolater in his states." Thus in the two years that separated his baptism from his death, twenty thousand converts were won in Arima. But his successor was an enemy of the alien creed. He ordered the Jesuits to quit his dominions, required the converts to return to their ancestral faith, and caused "the holy places to be destroyed and the crosses to be thrown down." Nearly one-half of the converts apostatized under this pressure, but others had recourse to a device of proved potency. They threatened to leave Kuchinotsu *en masse*, and as that would have involved the loss of foreign trade, the hostile edict was materially modified. To this same weapon the Christians owed a still more signal victory. For just at that time the great ship from Macao, now an annual visitor, arrived in Japanese waters carrying the visitor-general, Valegnani. She put into Kuchinotsu, and her presence, with its suggested eventualities, gave such satisfaction that the feudatory offered to accept baptism and to sanction its acceptance by his vassals. This did not satisfy Valegnani, a man of profound political sagacity. He saw that the fief was menaced by serious dangers at the hands of its neighbours, and seizing the psychological moment of its extreme peril, he used the secular arm so adroitly that the fief's chance of survival seemed to be limited to the unreserved adoption of Christianity. Thus, in 1580, the chieftain and his wife were baptized; "all the city was made Christian; they burned their idols and destroyed 40 temples, reserving some materials to build churches."

Christian propagandism had now made substantial progress. The *Annual Letter* of 1582 recorded that at the close of 1581, thirty-two years after the landing of Xavier in Japan, there were about 150,000 converts, of whom some 125,000 were in Kiūshiū and the remainder in Yamaguchi, Kiōto and the neighbourhood of the latter city. The Jesuits in the empire then numbered 75, but down to the year 1563 there had never been more than 9, and down to 1577, not more than 18. The harvest was certainly great in proportion to the number of sowers. But it was a harvest mainly of artificial growth; forced by the despotic insistence of feudal chiefs who possessed the power of life and death over their vassals, and were influenced by a desire to attract foreign trade. To the Buddhist priests this movement of Christian propagandism had brought an experience hitherto unknown to them, persecution on account of creed. They had suffered for interfering in politics, but the fierce cruelty of the Christian fanatic now became known for the first time to men themselves conspicuous for tolerance of heresy and receptivity of instruction. They had had no previous experience of humanity in the garb of an Otomo of Bungo, who, in the words of Crasset, "went to the chase of the bonzes as to that of wild beasts, and made it his singular pleasure to exterminate them from his states."

In 1582 the first Japanese envoys sailed from Nagasaki for Europe. The embassy consisted of four youths, the oldest not more than 16, representing the fiefs of Arima, Omura and Bungo. They visited Lisbon, Madrid and Rome, and in all these cities they were received with displays of magnificence such as 16th century Europe delighted to make. That, indeed, had been the motive of Valegnani in organizing the mission: he desired to let the Japanese see with their own eyes how great were the riches and might of Western states.

First Japanese Embassy to Europe.

In the above statistics of converts at the close of 1581 mention is made of Christians in Kiōto, though we have already seen that the visit by Xavier and Fernandez to that city was wholly barren of results. A second visit, however, made by Vilela in 1559, proved more successful. He carried letters of recommendation from the Bungo chieftain, and the proximate cause of his journey was an invitation from a Buddhist priest in the celebrated monastery of Hiei-zan, who sought information about Christianity. This was before the razing of temples and the overthrow of idols had commenced in Kiūshiū. On arrival at Hiei-zan, Vilela found that the Buddhist prior who had invited him was dead and that only a portion of the old man's authority had descended to his successor. Nevertheless the Jesuit obtained an opportunity to expound his doctrines to a party of bonzes at the monastery. Subsequently, through the good offices of a priest, described as "one of the most respected men in the city," and with the assistance of the Bungo feudatory's letter, Vilela enjoyed the rare honour of being received by the shōgun in Kiōto, who treated him with all consideration and assigned a house for his residence. It may be imagined that, owing such a debt of gratitude to Buddhist priests, Vilela would have behaved towards them and their creed with courtesy. But the Jesuit fathers were proof against all influences calculated to impair their stern sense of duty. Speaking through the mouth of a Japanese convert, Vilela attacked the bonzes in unmeasured terms and denounced their faith. Soon the bonzes, on their side, were seeking the destruction of these uncompromising assailants with insistence inferior only to that which the Jesuits themselves would have shown in similar circumstances. Against these perils Vilela was protected by the goodwill of the shōgun, who had already issued a decree threatening with death any one who injured the missionaries or obstructed their work. In spite of all difficulties and dangers these wonderful missionaries, whose courage, zeal and devotion are beyond all eulogy, toiled on resolutely and even recklessly, and such success attended their efforts that by 1564 many converts had been won and churches had been established in five walled towns within a distance of 50 miles from Kiōto. Among the converts were two Buddhist priests, notoriously hostile at the outset, who had been nominated as official commissioners to investigate and report upon the doctrine of Christianity. The first conversion *en masse* was due to pressure from above. A petty feudatory, Takayama, whose fief lay at Takatsuki in the neighbourhood of the capital, challenged Vilela to a public controversy, the result of which was that the Japanese acknowledged himself vanquished, embraced Christianity and invited his vassals as well as his family to follow his example. This man's son—Takayama Yūsho—proved one of the stanchest supporters of Christianity in all Japan, and has been immortalized by the Jesuits under the name of Don Justo Ucondono. Incidentally this event furnishes an index to the character of the Japanese samurai: he accepted the consequences of defeat as frankly as he dared it. In the same year (1564) the feudatory of Sawa, a brother of Takayama, became a Christian and imposed the faith on all his vassals, just as Sumitada and other feudal chiefs had done in Kiūshiū. But the Kiōto record differs from that of Kiūshiū in one important respect—the former is free from any intrusion of commercial motives.

Second Visit of Jesuits to Kiōto.

Kiōto was at that time the scene of sanguinary tumults, which culminated in the murder of the shōgun (1565), and led to the issue of a decree by the emperor proscribing Christianity. In Japanese medieval history this is one of the only two instances of Imperial interference with Christian propagandism. There is evidence that the edict was obtained at the instance of one of the shōgun's assassins and certain Buddhist priests. The

Nobunaga and the

Jesuits. Jesuits—their number had been increased to three—were obliged to take refuge in Sakai, now little more than a suburb of Osaka, but at that time a great and wealthy mart, and the only town in Japan which did not acknowledge the sway of any feudal chief. Three years later they were summoned thence to be presented to Oda Nobunaga, one of the greatest captains Japan has ever produced. In the very year of Xavier's landing at Kagoshima, Nobunaga had succeeded to his father's fief, a comparatively petty estate in the province of Owari. In 1568 he was seated in Kiōto, a maker of shōguns and acknowledged ruler of 30 among the 66 provinces of Japan. Had Nobunaga, wielding such immense power, adopted a hostile attitude towards Christianity, the fires lit by the Jesuits in Japan must soon have been extinguished. Nobunaga, however, to great breadth and liberality of view added strong animosity towards Buddhist priests. Many of the great monasteries had become armed camps, their inmates skilled equally in field-attacks and in the defence of ramparts. One sect (the Nichiren), which was specially affected by the samurai, had lent powerful aid to the murderers of the shōgun three years before Nobunaga's victories carried him to Kiōto, and the armed monasteries constituted *imperia in imperio* which assorted ill with his ambition of complete supremacy. He therefore welcomed Christianity for the sake of its opposition to Buddhism, and when Takayama conducted Froez from Sakai to Nobunaga's presence, the reception accorded to the Jesuit was of the most cordial character. Throughout the fourteen years of life that remained to him, Nobunaga continued to be the constant friend of the missionaries in particular and of foreigners visiting Japan in general. He stood between the Jesuits and the Throne when, in reply to an appeal from the Buddhist priests, the emperor, for the second time, issued an anti-Christian decree (1568); he granted a site for a church and residence at Azuchi on Lake Biwa, where his new fortress stood; he addressed to various powerful feudatories letters signifying a desire for the spread of Christianity; he frequently made handsome presents to the fathers, and whenever they visited him he showed a degree of accessibility and graciousness very foreign to his usually haughty and imperious demeanour. The Jesuits themselves said of him: "This man seems to have been chosen by God to open and prepare the way for our faith." Nevertheless they do not appear to have entertained much hope at any time of converting Nobunaga. They must have understood that their doctrines had not made any profound impression on a man who could treat them as this potentate did in 1579, when he plainly showed that political exigencies might at any moment induce him to sacrifice them.[30] His last act, too, proved that sacrilege was of no account in his eyes, for he took steps to have himself apotheosized at Azuchi with the utmost pomp and circumstance. Still nothing can obscure the benefits he heaped upon the propagandists of Christianity.

Hideyshi and the Christians. The terrible tumult of domestic war through which Japan passed in the 15th and 16th centuries brought to her service three of the greatest men ever produced in Occident or Orient. They were Oda Nobunaga, Toyotomi Hideyoshi and Tokugawa Iyeyasu. Hideyoshi, as Nobunaga's lieutenant, contributed largely to the building of the latter's fortunes, and, succeeding him in 1582, brought the whole 66 provinces of the empire under his own administrative sway. For the Jesuits now the absorbing question was, what attitude Hideyoshi would assume towards their propagandism. His power was virtually limitless. With a word he could have overthrown the whole edifice created by them at the cost of so much splendid effort and noble devotion. They were very quickly reassured. In this matter Hideyoshi walked in Nobunaga's footsteps. He not only accorded a friendly audience to Father Organtino, who waited on him as representative of the Jesuits, but also he went in person to assign to the company a site for a church and a residence in Osaka, where there was presently to rise the most massive fortress ever built in the East. At that time many Christian converts were serving in high positions, and in 1584 the Jesuits placed it on record that "Hideyoshi was not only not opposed to the things of God, but he even showed that he made much account of them and preferred them to all the sects of the bonzes.... He is entrusting to Christians his treasures, his secrets and his fortresses of most importance, and shows himself well pleased that the sons of the great lords about him should adopt our customs and our law." Two years later in Osaka he received with every mark of cordiality and favour a Jesuit mission which had come from Nagasaki seeking audience, and on that occasion his visitor recorded that he spoke of an intention of christianizing one half of Japan. Nor did Hideyoshi confine himself to words. He actually signed a patent licensing the missionaries to preach throughout all Japan, and exempting not only their houses and churches from the billeting of soldiers but also the priests themselves from local burdens. This was in 1586, on the eve of Hideyoshi's greatest military enterprise, the invasion of Kiūshiū and its complete reduction. He carried that difficult campaign to completion by the middle of 1587, and throughout its course he maintained a uniformly friendly demeanour towards the Jesuits. But suddenly, when on the return journey he reached Hakata in the north of the island, his policy underwent a radical metamorphosis. Five questions were by his order propounded to the vice-provincial of the Jesuits: "Why and by what authority he and his fellow-propagandists had constrained Japanese subjects to become Christians? Why they had induced their disciples and their sectaries to overthrow temples? Why they persecuted the bonzes? Why they and other Portuguese ate animals useful to men, such as oxen and cows? Why the vice-provincial allowed merchants of his nation to buy Japanese to make slaves of them in the Indies?" To these queries Coelho, the vice-provincial, made answer that the missionaries had never themselves resorted, or incited, to violence in their propagandism or persecuted bonzes; that if their eating of beef were considered inadvisable, they would give up the practice; and that they were powerless to prevent or restrain the outrages perpetrated by their countrymen. Hideyoshi read the vice-provincial's reply and, without comment, sent him word to retire to Hirado, assemble all his followers there, and quit the country within six months. On the next day (July 25, 1587) the following edict was published:—

> "Having learned from our faithful councillors that foreign priests have come into our estates, where they preach a law contrary to that of Japan, and that they even had the audacity to destroy temples dedicated to our Kami and Hotoke; although the outrage merits the most extreme punishment, wishing nevertheless to show them mercy, we order them under pain of death to quit Japan within twenty days. During that space no harm or hurt will be done to them. But at the expiration of that term, we order that if any of them be found in our states, they should be seized and punished as the greatest criminals. As for the Portuguese merchants, we permit them to enter our ports, there to continue their accustomed trade, and to remain in our states provided our affairs need this. But we forbid them to bring any foreign priests into the country, under the penalty of the confiscation of their ships and goods."

How are we to account for this apparently rapid change of mood on the part of Hideyoshi? Some historians insist that from the very outset he conceived the resolve of suppressing Christianity and expelling its propagandists, but that he concealed his design pending the subjugation of Kiūshiū, lest, by premature action, he might weaken his hand for that enterprise. This hypothesis rests mainly on conjecture. Its formulators found it easier to believe in a hidden purpose than to attribute to a statesman so shrewd and far-seeing a sudden change of mind. A more reasonable theory is that, shortly before leaving Osaka for Kiūshiū, Hideyoshi began to entertain doubts as to the expediency of tolerating Christian propagandism, and that his doubts were signally strengthened by direct observation of the state of affairs in Kiūshiū. While still in Osaka, he one day remarked publicly that "he feared much that all the virtue of the European priests served only to conceal pernicious designs against the empire." There had been no demolishing of temples or overthrowing of images at Christian instance in the metropolitan provinces. In Kiūshiū, however, very different conditions prevailed. There Christianity may be said to have been preached at the point of the sword. Temples and images had been destroyed wholesale; vassals in thousands had been compelled to embrace the foreign faith; and the missionaries themselves had come to be treated as demi-gods whose nod was worth conciliating at any cost of self-abasement. Brought into direct contact with these evidences of the growth of a new power, temporal as well as spiritual, Hideyoshi may well have reached the conclusion that a choice had to be finally made between his own supremacy and that of the alien creed, if not between the independence of Japan and the yoke of the great Christian states of Europe.

Hideyoshi gauged the character of the medieval Christians with sufficient accuracy to know that for the sake of their faith they would at any time defy the laws of the island. His estimate received immediate verification, for when the Jesuits, numbering 120, assembled at Hirado and received his order to embark at once they decided that only those should sail whose services were needed in China. The others remained and went about their duties as usual, under the protection of the converted feudatories. Hideyoshi, however, saw reason to wink at this disregard of his authority. At first he showed uncompromising resolution. All the churches in Kiōto, Osaka and Sakai were demolished, while troops were sent to raze the Christian places of worship in Kiūshiū and seize the port of Nagasaki. These troops were munificently dissuaded from their purpose by the Christian feudatories. But Hideyoshi did not protest, and in 1588 he allowed himself to be convinced by a Portuguese envoy that in the absence of missionaries foreign trade must cease, since without the intervention of the fathers peace and good order could not be maintained among the merchants. Rather than suffer the trade to be interrupted Hideyoshi agreed to the coming of priests, and thenceforth, during some years, Christianity not only continued to flourish and grow in Kiūshiū but also found a favourable field of operations in Kiōto itself. Care was taken that Hideyoshi's attention should not be attracted by any salient evidences of what he had called a "diabolical religion," and thus for a time all went well. There is evidence that, like the feudal chiefs in Kiūshiū, Hideyoshi set great store by foreign trade and would even have sacrificed to its maintenance and expansion something of the aversion he had conceived for Christianity. He did indeed make one very large concession. For on being assured that Portuguese traders could not frequent Japan unless they found Christian priests there to minister to them, he consented to sanction the presence of a limited number of Jesuits. The statistics of 1595 show how Christianity fared under even this partial tolerance, for there were then 137 Jesuits in Japan with 300,000 converts, among whom were 17 feudal chiefs, to say nothing of many men of lesser though still considerable note, and even not a few bonzes.

Sequel of the Edict of Banishment.

For ten years after his unlooked-for order of expulsion, Hideyoshi preserved a tolerant mien. But in 1597 his forbearance gave place to a mood of uncompromising severity. The reasons of this second change are very clear, though diverse accounts have been transmitted. Up to 1593 the Portuguese had possessed a monopoly of religious propagandism and over-sea commerce in Japan. The privilege was secured to them by agreement between Spain and Portugal and by a papal bull. But the Spaniards in Manila had long looked with somewhat jealous eyes on this Jesuit reservation, and when news of the disaster of 1587 reached the Philippines, the Dominicans and Franciscans residing there were fired with zeal to enter an arena where the crown of martyrdom seemed to be the least reward within reach. The papal bull, however, demanded obedience, and to overcome that difficulty a ruse was necessary: the governor of Manila agreed to send a party of Franciscans as ambassadors to Hideyoshi. In that guise the friars, being neither traders nor propagandists, considered that they did not violate either the treaty or the bull. It was a technical subterfuge very unworthy of the object contemplated, and the friars supplemented it by swearing to Hideyoshi that the Philippines would submit to his sway. Thus they obtained permission to visit Kiōto, Osaka and Fushimi, but with the explicit proviso that they must not preach. Very soon they had built a church in Kiōto, consecrated it with the utmost pomp, and were preaching sermons and chaunting litanies there in flagrant defiance of Hideyoshi's veto. Presently their number received an access of three friars who came bearing gifts from the governor at Manila, and now they not only established a convent in Osaka, but also seized a Jesuit church in Nagasaki and converted the circumspect worship hitherto conducted there by the fathers into services of the most public character. Officially checked in Nagasaki, they charged the Jesuits in Kiōto with having intrigued to impede them, and they further vaunted the courageous openness of their own ministrations as compared with the clandestine timidity of the methods which wise prudence had induced the Jesuits to adopt. Retribution would have followed quickly had not Hideyoshi's attention been engrossed by an attempt to invade China through Korea. At this stage, however, a memorable incident occurred. Driven out of her course by a storm, a great and richly laden Spanish galleon, bound for Acapulco from Manila, drifted to the coast of Tosa province, and running—or being purposely run—on a sand-bank as she was being towed into port by Japanese boats, broke her back. She carried goods to the value of some 600,000 crowns, and certain officials urged Hideyoshi to confiscate her as derelict, conveying to him at the same time a detailed account of the doings of the Franciscans and their open flouting of his orders. Hideyoshi, much incensed, commanded the arrest of the Franciscans and despatched officers to Tosa to confiscate the "San Felipe." The pilot of the galleon sought to intimidate these officers by showing them on a map of the world the vast extent of Spain's dominions, and being asked how one country had acquired such extended sway, replied: "Our kings begin by sending into the countries they wish to conquer missionaries who induce the people to embrace our religion, and when they have made considerable progress, troops are sent who combine with the new Christians, and then our kings have not much trouble in accomplishing the rest."

Hideyoshi's Final Attitude towards Christianity.

On learning of this speech Hideyoshi was overcome with fury. He condemned the Franciscans to have their noses and ears cut off, to be promenaded through Kiōto, Osaka and Sakai, and to be crucified at Nagasaki. "I have ordered these foreigners to be treated thus, because they have come from the Philippines to Japan, calling themselves ambassadors, although they were not so; because they have remained here far too long without my permission; because, in defiance of my prohibition, they have built churches, preached their religion and caused disorders." Twenty-six suffered under this sentence—six Franciscans, three Japanese Jesuits and seventeen native Christians, chiefly domestic servants of the Franciscans.[31] They met their fate with noble fortitude. Hideyoshi further issued a special injunction against the adoption of Christianity by a feudal chief, and took steps to give practical effect to his expulsion edict of 1587. The governor of Nagasaki received instructions to send away all the Jesuits, permitting only two or three to remain for the service of the Portuguese merchants. But the Jesuits were not the kind of men who, to escape personal peril, turn their back upon an unaccomplished work of grace. There were 125 of them in Japan at that time. In October 1597 a junk sailed out of Nagasaki harbour, her decks crowded with seeming Jesuits. In reality she carried 11 of the company, the apparent Jesuits being disguised sailors. It is not to be supposed that such a manœuvre could be hidden from the local authorities. They winked at it, until rumour became insistent that Hideyoshi was about to visit Kiūshiū in person, and all Japanese in administrative posts knew how Hideyoshi visited disobedience and how hopeless was any attempt to deceive him. Therefore, early in 1598, really drastic steps were taken. Churches to the number of 137 were demolished in Kiūshiū, seminaries and residences fell, and the governor of Nagasaki assembled there all the fathers of the company for deportation to Macao by the great ship in the following year. But while they waited, Hideyoshi died. It is not on record that the Jesuits openly declared his removal from the earth to have been a special dispensation in their favour. But they pronounced him an execrable tyrant and consigned his "soul to hell for all eternity." Yet no impartial reader of history can pretend to think that a 16th-century Jesuit general in Hideyoshi's place would have shown towards an alien creed and its propagandists even a small measure of the tolerance exercised by the Japanese statesman towards Christianity and the Jesuits.

The First Execution of Christians.

Hideyoshi's death occurred in 1598. Two years later, his authority as administrative ruler of all Japan had passed into the hands of Iyeyasu, the Tokugawa chief, and thirty-nine years later the Tokugawa potentates had not only exterminated Christianity in Japan but had also condemned their country to a period of international isolation which continued unbroken until 1853, an interval of 214 years. It has been shown that even when they were most incensed against Christianity, Japanese administrators sought to foster and preserve foreign trade. Why then did they close the country's doors to the outside world and suspend a commerce once so much esteemed? To answer that question some retrospect is needed.

Foreign Policy of the Tokugawa Rulers.

Certain historians allege that from the outset Iyeyasu shared Hideyoshi's misgivings about the real designs of Christian potentates and Christian propagandists. But that verdict is not supported by facts. The first occasion of the Tokugawa chief's recorded contact with a Christian propagandist was less than three months after Hideyoshi's death. There was then led into his presence a Franciscan, by name Jerome de Jesus, originally a member of the fictitious embassy from Manila. This man's conduct constitutes an example of the invincible zeal and courage inspiring a Christian priest in those days. Barely escaping the doom of crucifixion which overtook his companions, he had been deported from Japan to Manila at a time when death seemed to be the certain penalty of remaining. But no sooner had he been landed at Manila than he took passage in a Chinese junk, and, returning to Nagasaki, made his way secretly from the far south of Japan to the province of Kii. There arrested, he was brought into the presence of Iyeyasu, and his own record of what ensued is given in a letter subsequently sent to Manila:—

> "When the Prince saw me he asked how I had managed to escape the previous persecution. I answered him that at that date God had delivered me in order that I might go to Manila and bring back new colleagues from there—preachers of the divine law—and that I had returned from Manila to encourage the Christians, cherishing the desire to die on the cross in order to go to enjoy eternal glory like my former colleagues. On hearing these words the Emperor began to smile, whether in his quality of a pagan of the sect of Shaka, which teaches that there is no future life, or whether from the thought that I was frightened at having to be put to death. Then, looking at me kindly, he said, 'Be no longer afraid and no longer conceal yourself, and no longer change your habit, for I wish you well; and as for the Christians who every year pass within sight of the Kwantō where my domains are, when they go to Mexico with their ships, I have a keen desire for them to visit the harbours of this island, to refresh themselves there, and to take what they wish, to trade with my vassals and to teach them how to develop silver mines; and that my intentions may be accomplished before my death, I wish you to indicate to me the means to take to realize them.' I answered that it was necessary that Spanish pilots should take the soundings of his harbours, so that ships might not be lost in future as the 'San Felipe' had been, and that he should solicit this service from the governor of the Philippines. The Prince approved of my advice, and accordingly he has sent a Japanese gentleman, a native of Sakai, the bearer of this message.... It is essential to oppose no obstacle to the complete liberty offered by the Emperor to the Spaniards and to our holy order, for the preaching of the holy gospel.... The same Prince (who is about to visit the Kwantō) invites me to accompany him to make choice of a house, and to visit the harbour which he promises to open to us; his desires in this respect are keener than I can express."

The above version of the Tokugawa chief's mood is confirmed by events, for not only did he allow the contumelious Franciscan to build a church—the first—in Yedo and to celebrate Mass there, but also he sent three embassies to the Philippines, proposing reciprocal freedom of commerce, offering to open ports in the Kwantō and asking for competent naval architects. He never obtained the architects, and though the trade came, its volume was small in comparison with the abundance of friars that accompanied it. There is just a possibility that Iyeyasu saw in these Spanish monks an instrument of counteracting the influence of the Jesuits, for he must have known that the Franciscans opened their mission in Yedo by "declaiming with violence against the fathers of the company of Jesus." In short, the Spanish monks assumed towards the Jesuits in Japan the same intolerant and abusive tone that the Jesuits themselves had previously assumed towards Buddhism.

At that time there appeared upon the scene another factor destined greatly to complicate events. It was a Dutch merchant ship, the "Liefde." Until the Netherlands revolted from Spain, the Dutch had been the principal distributors of all goods arriving at Lisbon from the Far East; but in 1594 Philip II. closed the port of Lisbon to these rebels, and the Dutch met the situation by turning their prows to the Orient to invade the sources of Portuguese commerce. One of the first expeditions despatched for that purpose set out in 1598, and of the five vessels composing it one only was ever heard of again. This was the "Liefde." She reached Japan during the spring of 1600, with only four-and-twenty alive out of her original crew of 110. Towed into the harbour at Funai, the "Liefde" was visited by Jesuits, who, on discovering her nationality, denounced her to the local authorities as a pirate and endeavoured to incense the Japanese against them. The "Liefde" had on board in the capacity of "pilot major" an Englishman, Will Adams of Gillingham in Kent, whom Iyeyasu summoned to Osaka, where there commenced between the rough British sailor and the Tokugawa chief a curiously friendly intercourse which was not interrupted until the death of Adams twenty years later. The Englishman became master ship-builder to the Yedo government; was employed as diplomatic agent when other traders from his own country and from Holland arrived in Japan, received in perpetual gift a substantial estate, and from first to last possessed the implicit confidence of the shōgun. Iyeyasu quickly discerned the man's honesty, perceived that whatever benefits foreign commerce might confer would be increased by encouraging competition among the foreigners, and realized that English and Dutch trade presented the wholesome feature of complete dissociation from religious propagandism. On the other hand, he showed no intolerance to either Spaniards or Portuguese. He issued (1601) two official patents sanctioning the residence of the fathers in Kiōto, Osaka and Nagasaki; he employed Father Rodriguez as interpreter to the court at Yedo; and in 1603 he gave munificent succour to the Jesuits who were reduced to dire straits owing to the capture of the great ship from Macao by the Dutch and the consequent loss of several years' supplies for the mission in Japan.

It is thus seen that each of the great trio of Japan's 16th-century statesmen—Nobunaga, Hideyoshi and Iyeyasu—adopted at the outset a most tolerant demeanour towards Christianity. The reasons of Hideyoshi's change of mood have been set forth. We have now to examine the reasons that produced a similar metamorphosis in the case of Iyeyasu. Two causes present themselves immediately. The first is that, while tolerating Christianity, Iyeyasu did not approve of it as a creed; the second, that he himself, whether from state policy or genuine piety, strongly encouraged Buddhism. Proof of the former proposition is found in an order issued by him in 1602 to insure the safety of foreign merchantmen entering Japanese ports: it concluded with the reservation, "but we rigorously forbid them" (foreigners coming in such ships) "to promulgate their faith." Proof of the latter is furnished by the facts that he invariably carried about with him a miniature Buddhist image which he regarded as his tutelary deity, and that he fostered the creed of Shaka as zealously as Oda Nobunaga had suppressed it. There is much difficulty in tracing the exact sequence of events which gradually educated a strong antipathy to the Christian faith in the mind of the Tokugawa chief. He must have been influenced in some degree by the views of his great predecessor, Hideyoshi. But he did not accept those views implicitly. At the end of the 16th century he sent a trusted emissary to Europe for the purpose of directly observing the conditions in the home of Christianity, and this man, the better to achieve his aim, embraced the foreign faith, and studied it from within as well as from without. The story that he had to tell on his return could not fail to shock the ruler of a country where freedom of conscience had existed from time immemorial. It was a story of the inquisition and of the stake; of unlimited aggression in the name of the cross; of the pope's overlordship which entitled him to confiscate the realm of heretical sovereigns; of religious wars and of well-nigh incredible fanaticism. Iyeyasu must have received an evil impression while he listened to his emissary's statements. Under his own eyes, too, were abundant evidences of the spirit of strife that Christian dogma engendered in those times. From the moment when the Franciscans and Dominicans arrived in Japan, a fierce quarrel began between them and the Jesuits; a quarrel which even community of suffering could not compose. Not less repellent was an attempt on the part of the Spaniards to dictate to Iyeyasu the expulsion of all Hollanders from Japan, and on the part of the Jesuits to dictate the expulsion of the Spaniards. The former proposal, couched almost in the form of a demand, was twice formulated, and accompanied on the second occasion by a scarcely less insulting offer, namely, that Spanish men-of-war would be sent to Japan to burn all Dutch ships found in the ports of the empire. If in the face of proposals so contumelious of his sovereign authority Iyeyasu preserved a calm and dignified mien, merely replying that

his country was open to all comers, and that, if other nations had quarrels among themselves, they must not take Japan for battle-ground, it is nevertheless unimaginable that he did not strongly resent such interference with his own independent foreign policy, and that he did not interpret it as foreshadowing a disturbance of the realm's peace by sectarian quarrels among Christians. These experiences, predisposing Iyeyasu to dislike Christianity as a creed and to distrust it as a political influence, were soon supplemented by incidents of an immediately determinative character. The first was an act of fraud and forgery committed in the interests of a Christian feudatory by a trusted official, himself a Christian. Thereupon Iyeyasu, conceiving it unsafe that Christians should fill offices at his court, dismissed all those so employed, banished them from Yedo and forbade any feudal chief to harbour them. The second incident was an attempted survey of the coast of Japan by a Spanish mariner and a Franciscan friar. Permission to take this step had been obtained by an envoy from New Spain, but no deep consideration of reasons seems to have preluded the permission on Japan's side, and when the mariner (Sebastian) and the friar (Sotelo) hastened to carry out the project, Iyeyasu asked Will Adams to explain this display of industry. The Englishman replied that such a proceeding would be regarded in Europe as an act of hostility, especially on the part of the Spaniards or Portuguese, whose aggressions were notorious. He added, in reply to further questions, that "the Roman priesthood had been expelled from many parts of Germany, from Sweden, Norway, Denmark, Holland and England, and that although his own country preserved the pure form of the Christian faith from which Spain and Portugal had deviated, yet neither English nor Dutch considered that that fact afforded them any reason to war with, or to annex, States which were not Christian solely for the reason that they were non-Christian." Iyeyasu reposed entire confidence in Adams. Hearing the Englishman's testimony, he is said to have exclaimed, "If the sovereigns of Europe do not tolerate these priests, I do them no wrong if I refuse to tolerate them." Japanese historians add that Iyeyasu discovered a conspiracy on the part of some Japanese Christians to overthrow his government by the aid of foreign troops. It was not a widely ramified plot, but it lent additional importance to the fact that the sympathy of the fathers and their converts was plainly with the only magnate in the empire who continued to dispute the Tokugawa supremacy, Hideyori, the son of Hideyoshi. Nevertheless Iyeyasu shrank from proceeding to extremities in the case of any foreign priest, and this attitude he maintained until his death (1616). Possibly he might have been not less tolerant towards native Christians also had not the Tokugawa authority been openly defied by a Franciscan father—the Sotelo mentioned above—in Yedo itself. Then (1613) the first execution of Japanese converts took place, though the monk himself was released after a short incarceration. At that time, as is still the case even in these more enlightened days, insignificant differences of custom sometimes induced serious misconceptions. A Christian who had violated the secular law was crucified in Nagasaki. Many of his fellow-believers kneeled around his cross and prayed for the peace of his soul. A party of converts were afterwards burned to death in the same place for refusing to apostatize, and their Christian friends crowded to carry off portions of their bodies as holy relics. When these things were reported to Iyeyasu, he said, "Without doubt that must be a diabolic faith which persuades people not only to worship criminals condemned to death for their crimes, but also to honour those who have been burned or cut in pieces by the order of their lord" (feudal chief).

Suppression of Christianity.

The fateful edict ordering that all foreign priests should be collected in Nagasaki preparatory to removal from Japan, that all churches should be demolished, and that the converts should be compelled to abjure Christianity, was issued on the 27th of January 1614. There were then in Japan 122 Jesuits, 14 Franciscans, 9 Dominicans, 4 Augustins and 7 secular priests. Had these men obeyed the orders of the Japanese authorities by leaving the country finally, not one foreigner would have suffered for his faith in Japan, except the 6 Franciscans executed at Nagasaki by order of Hideyoshi in 1597. But suffering and death counted for nothing with the missionaries as against the possibility of winning or keeping even one convert. Forty-seven of them evaded the edict, some by concealing themselves at the time of its issue, the rest by leaving their ships when the latter had passed out of sight of the shore of Japan, and returning by boats to the scene of their former labours. Moreover, in a few months, those that had actually crossed the sea re-crossed it in various disguises, and soon the Japanese government had to consider whether it would suffer its authority to be thus flouted or resort to extreme measures.

During two years immediately following the issue of the anti-Christian decree, the attention of the Tokugawa chief and indeed of all Japan was concentrated on the closing episode of the great struggle which assured to Iyeyasu final supremacy as administrative ruler of the empire. That episode was a terrible battle under the walls of Osaka castle between the adherents of the Tokugawa and the supporters of Hideyori. In this struggle fresh fuel was added to the fire of anti-Christian resentment, for many Christian converts threw in their lot with Hideyori, and in one part of the field the Tokugawa troops found themselves fighting against a foe whose banners were emblazoned with the cross and with images of the Saviour and St James, the patron saint of Spain. But the Christians had protectors. Many of the feudatories showed themselves strongly averse from inflicting the extreme penalty on men and women whose adoption of an alien religion had been partly forced by the feudatories themselves. As for the people at large, their liberal spirit is attested by the fact that five fathers who were in Osaka castle at the time of its capture made their way to distant refuges without encountering any risk of betrayal. During these events the death of Iyeyasu took place (June 1, 1616), and pending the dedication of his mausoleum the anti-Christian crusade was virtually suspended.

In September 1616 a new anti-Christian edict was promulgated by Hidetada, son and successor of Iyeyasu. It pronounced sentence of exile against all Christian priests, including even those whose presence had been sanctioned for ministering to the Portuguese merchants: it forbade the Japanese, under the penalty of being burned alive and of having all their property confiscated, to have any connexion with the ministers of religion or to give them hospitality. It was forbidden to any prince or lord to keep Christians in his service or even on his estates, and the edict was promulgated with more than usual solemnity, though its enforcement was deferred until the next year on account of the obsequies of Iyeyasu. This edict of 1616 differed from that issued by Iyeyasu in 1614, since the latter did not prescribe the death penalty for converts refusing to apostatize. But both agreed in indicating expulsion as the sole manner of dealing with the foreign priests. As for the shōgun and his advisers, it is reasonable to assume that they did not anticipate much necessity for recourse to violence. They must have known that a great majority of the converts had joined the Christian church at the instance or by the command of their local rulers, and nothing can have seemed less likely than that a creed thus lightly embraced would be adhered to in defiance of torture and death. It is moreover morally certain that had the foreign propagandists obeyed the Government's edict and left the country, not one would have been put to death. They suffered because they defied the laws of the land. Some fifty missionaries happened to be in Nagasaki when Hidetada's edict was issued. A number of these were apprehended and deported, but several of them returned almost immediately. This happened under the jurisdiction of Omura, who had been specially charged with the duty of sending away the *bateren* (*padres*). He appears to have concluded that a striking example must be furnished, and he therefore ordered the seizure and decapitation of two fathers, De l'Assumpcion and Machado. The result completely falsified his calculations, and presaged the cruel struggle now destined to begin.

> The bodies, placed in different coffins, were interred in the same grave. Guards were placed over it, but the concourse was immense. The sick were carried to the sepulchre to be restored to health. The Christians found new strength in this martyrdom; the pagans themselves were full of admiration for it. Numerous conversions and numerous returns of apostates took place everywhere.

In the midst of all this, Navarette, the vice-provincial of the Dominicans, and Ayala, the vice-provincial of the

Augustins, came out of their retreat, and in full priestly garb started upon an open propaganda. The two fanatics—for so even Charlevoix considers them to have been—were secretly conveyed to the island Takashima and there decapitated, while their coffins were weighted with big stones and sunk in the sea. Even more directly defiant was the attitude of the next martyred priest, an old Franciscan monk, Juan de Santa Martha. He had for three years suffered all the horrors of a medieval Japanese prison, when it was proposed to release him and deport him to New Spain. His answer was that, if released, he would stay in Japan and preach there. He laid his head on the block in August 1618. But from that time until 1622 no other foreign missionary suffered capital punishment in Japan, though many of them arrived in the country and continued their propagandism there. During that interval, also, there occurred another incident eminently calculated to fix upon the Christians still deeper suspicion of political designs. In a Portuguese ship captured by the Dutch a letter was found instigating the Japanese converts to revolt, and promising that, when the number of these disaffected Christians was sufficient, men-of-war would be sent to aid them. Not the least potent of the influences operating against the Christians was that pamphlets were written by apostates attributing the zeal of the foreign propagandists solely to political motives. Yet another indictment of Spanish and Portuguese propagandists was contained in a despatch addressed to Hidetada in 1620 by the admiral in command of the British and Dutch fleet then cruising in Far-Eastern waters. In that document the friars were flatly accused of treacherous practices, and the Japanese ruler was warned against the aggressive designs of Philip of Spain. In the face of all this evidence the Japanese ceased to hesitate, and a time of terror ensued for the fathers and their converts. The measures adopted towards the missionaries gradually increased in severity. In 1617 the first two fathers put to death (De l'Assumpcion and Machado) were beheaded, "not by the common executioner, but by one of the first officers of the prince." Subsequently Navarette and Ayala were decapitated by the executioner. Then, in 1618, Juan de Santa Martha was executed like a common criminal, his body being dismembered and his head exposed. Finally, in 1622, Zuñiga and Flores were burnt alive. The same year was marked by the "great martyrdom" at Nagasaki when 9 foreign priests went to the stake with 19 Japanese converts. The shōgun seems to have been now labouring under vivid fear of a foreign invasion. An emissary sent by him to Europe had returned on the eve of the "great martyrdom" after seven years abroad, and had made a report more than ever unfavourable to Christianity. Therefore Hidetada deemed it necessary to refuse audience to a Philippine embassy in 1624 and to deport all Spaniards from Japan. Further, it was decreed that no Japanese Christian should thenceforth be suffered to go abroad for commerce, and that though non-Christians or men who had apostatized might travel freely, they must not visit the Philippines. Thus ended all intercourse between Japan and Spain. It had continued for 32 years and had engendered a widespread conviction that Christianity was an instrument of Spanish aggression.

Iyemitsu, son of Hidetada, now ruled in Yedo, though Hidetada himself remained the power behind the throne. The year (1623) of the former's accession to power had been marked by the re-issue of anti-Christian decrees, and by the martyrdom of some 500 Christians within the Tokugawa domains, whither the tide of persecution now flowed for the first time. Thenceforth the campaign was continuous. The men most active and most relentless in carrying on the persecution were Mizuno and Takenaka, governors of Nagasaki, and Matsukura, feudatory of Shimabara. By the latter were invented the punishment of throwing converts into the solfataras at Unzen and the torture of the *fosse*, which consisted in suspension by the feet, head downwards, in a pit until blood oozed from the mouth, nose and ears. Many endured this latter torture for days, until death came to their relief, but a few—notably the Jesuit provincial Ferreyra—apostatized. Matsukura and Takenaka were so strongly obsessed by the Spanish menace that they contemplated the conquest of the Philippines in order to deprive the Spaniards of a Far-Eastern base. But timid counsels then prevailed in Yedo, where the spirit of a Nobunaga, a Hideyoshi or an Iyeyasu no longer presided. Of course the measures of repression grew in severity as the fortitude of the Christians became more obdurate. It is not possible to state the exact number of victims. Some historians say that, down to 1635, no fewer than 280,000 were punished, but that figure is probably exaggerated, for the most trustworthy records indicate that the converts never aggregated more than 300,000, and many of these, if not a great majority, having accepted the foreign faith very lightly, doubtless discarded it readily under menace of destruction. Every opportunity was given for apostatizing and for escaping death. Immunity could be secured by pointing out a fellow-convert, and when it is observed that among the seven or eight feudatories who embraced Christianity only two or three died in that faith, we must conclude that not a few cases of recanting occurred among the commoners. Remarkable fortitude, however, is said to have been displayed. If the converts were intrepid their teachers showed no less courage. Again and again the latter defied the Japanese authorities by coming to the country or returning thither after having been deported. Ignoring the orders of the governors of Macao and Manila and even of the king of Spain himself, they arrived, year after year, to be certainly apprehended and sent to the stake after brief periods of propagandism. In 1626 they actually baptized over 3000 converts. Large rewards were paid to anyone denouncing a propagandist, and as for the people, they had to trample upon a picture of Christ in order to prove that they were not Christians.

Meanwhile the feuds between the Dutch, the Spaniards and the Portuguese never ceased. In 1636, the Dutch found on a captured Portuguese vessel a report of the governor of Macao describing a two days' festival which had been held there in honour of Vieyra, the vice-provincial whose martyrdom had just taken place in Japan. This report the Dutch handed to the Japanese authorities "in order that his majesty may see more clearly what great honour the Portuguese pay to those he has forbidden his realm as traitors to the state and to his crown." Probably the accusation added little to the resentment and distrust already harboured by the Japanese against the Portuguese. At all events the Yedo government took no step distinctly hostile to Portuguese laymen until 1637, when an edict was issued forbidding any foreigners to travel in the empire, lest Portuguese with passports bearing Dutch names might enter it. This was the beginning of the end. In the last month of 1637 a rebellion broke out, commonly called the "Christian revolt of Shimabara," which sealed the fate of Japan's foreign intercourse for over 200 years.

The Shimabara Revolt.

The promontory of Shimabara and the island of Amakusa enclose the gulf of Nagasaki on the west. Among all the fiefs in Japan, Shimabara and Amakusa had been the two most thoroughly christianized in the early years of Jesuit propagandism. Hence in later days they were naturally the scene of the severest persecutions. Still the people would probably have suffered in silence had they not been taxed beyond all endurance to supply funds for an extravagant chief who employed savage methods of extortion. Japanese annals, however, relegate the taxation grievance to an altogether secondary place, and attribute the revolt solely to the instigation of five samurai who led a roving life to avoid persecution for their adherence to Christianity. Whichever version be correct, it is certain that the outbreak ultimately attracted all the Christians from the surrounding regions, and was regarded by the authorities as in effect a Christian rising. The Amakusa insurgents passed over to Shimabara, and on the 27th of January 1638 the whole body—numbering, according to some authorities, 20,000 fighting men with 17,000 women and children; according to others, little more than one-half of these figures—took possession of the dilapidated castle of Hara, which stood on a plateau with three sides descending perpendicularly to the sea, a hundred feet beneath, and with a swamp on its fourth front. There the insurgents, who fought under flags with red crosses and whose battle cries were "Jesus," "Maria" and "St Iago," successfully maintained themselves against the repeated assaults of strong forces until the 12th of April, when, their ammunition and their provisions alike exhausted, they were overwhelmed and put to the sword, with the exception of 105 prisoners. During the siege the Dutch were enabled to furnish a vivid proof of enmity to the Christianity of the Spaniards and the Portuguese. For the guns in possession of the besiegers being too light to accomplish anything, Koeckebacker, the factor at Hirado, was invited to send ships carrying heavier metal. He replied with the "de Ryp" of 20 guns, which threw 426 shot into the castle in 15

days. Probably the great bulk of the remaining Japanese Christians perished at the massacre of Hara. Thenceforth there were few martyrs.[32]

It has been clearly shown that Nobunaga, Hideyoshi and Iyeyasu were all in favour of foreign intercourse and trade, and that the Tokugawa chief, even more than his predecessor Hideyoshi, made strenuous efforts to differentiate between Christianity and commerce, so that the latter might not be involved in the former's fate. In fact the three objects which Iyeyasu desired most earnestly to compass were the development of foreign commerce, the acquisition of a mercantile marine and the exploitation of Japan's mines. He offered the Spaniards, Portuguese, English and Dutch a site for a settlement in Yedo, and had they accepted the offer the country might never have been closed. In his time Japan was virtually a free-trade country. Importers had not to pay any duties. It was expected, however, that they should make presents to the feudatory into whose port they carried their goods, and these presents were often very valuable. Naturally the Tokugawa chief desired to attract such a source of wealth to his own domains. He sent more than one envoy to Manila to urge the opening of commerce direct with the regions about Yedo, and to ask the Spaniards for competent naval architects. Perhaps the truest exposition of his attitude is given in a law enacted in 1602:—

Foreign Trade in the 17th Century.

> "If any foreign vessel by stress of weather is obliged to touch at any principality or to put into any harbour of Japan, we order that, whoever these foreigners may be, absolutely nothing whatever that belongs to them or that they may have brought in their ship, shall be taken from them. Likewise we rigorously prohibit the use of any violence in the purchase or the sale of any of the commodities brought by their ship, and if it is not convenient for the merchants of the ship to remain in the port they have entered, they may pass to any other port that may suit them, and therein buy and sell in full freedom. Likewise we order in a general manner that foreigners may freely reside in any part of Japan they choose, but we rigorously forbid them to promulgate their faith."

It was in that mood that he granted (1605) a licence to the Dutch to trade in Japan, his expectation doubtless being that the ships which they promised to send every year would make their dépôt at Uraga or in some other place near Yedo. But things were ordered differently. The first Hollanders that set foot in Japan were the survivors of the wrecked "Liefde." Thrown into prison for a time, they were approached by emissaries from the feudatory of Hirado, who engaged some of them to teach the art of casting guns and the science of gunnery to his vassals, and when two of them were allowed to leave Japan, he furnished them with the means of doing so, at the same time making promises which invested Hirado with attractions as a port of trade, though it was then and always remained an insignificant fishing village. The Dutch possessed precisely the qualifications suited to the situation then existing in Japan: they had commercial potentialities without any religious associations. Fully appreciating that fact, the shrewd feudatory of Hirado laid himself out to entice the Dutchmen to his fief, and he succeeded. Shortly afterwards, an incident occurred which clearly betrayed the strength of the Tokugawa chief's desire to exploit Japan's mines. The governor-general of the Philippines (Don Rodrigo Vivero y Velasco), his ship being cast away on the Japanese coast on a voyage to Acapulco, was received by Iyeyasu, and in response to the latter's request for fifty miners, the Spaniard formulated terms to which Iyeyasu actually agreed: that half the produce of the mines should go to the miners; that the other half should be divided between Iyeyasu and the king of Spain; that the latter might send commissioners to Japan to look after his mining interests, and that these commissioners might be accompanied by priests who would be entitled to have public churches for holding services. This was in 1609, when the Tokugawa chief had again and again imposed the strictest veto on Christian propagandism. There can be little doubt that he understood the concession made to Don Rodrigo in the sense of Hideyoshi's mandate to the Jesuits in Nagasaki, namely, that a sufficient number might remain to minister to the Portuguese traders frequenting the port. Iyeyasu had confidence in himself and in his countrymen. He knew that emergencies could be dealt with when they arose and he sacrificed nothing to timidity. But his courageous policy died with him and the miners did not come. Neither did the Spaniards ever devote any successful efforts to establishing trade with Japan. Their vessels paid fitful visits to Uraga, but the Portuguese continued to monopolize the commerce.

In 1611 a Dutch merchantman (the "Brach") reached Hirado with a cargo of pepper, cloth, ivory, silk and lead. She carried two envoys, Spex and Segerszoon, and in the very face of a Spanish embassy which had just arrived from Manila expressly for the purpose of "settling the matter regarding the Hollanders," the Dutchmen obtained a liberal patent from Iyeyasu. Twelve years previously, the merchants of London, stimulated generally by the success of the Dutch in trade with the East, and specially by the fact that "these Hollanders had raised the price of pepper against us from 3 shillings per pound to 6 shillings and 8 shillings," organized the East India Company which immediately began to send ships eastward. Of course the news that the Dutch were about to establish a trading station in Japan reached London speedily, and the East India Company lost no time in ordering one of their vessels, the "Clove," under Captain Saris, to proceed to the Far-Eastern islands. She carried a quantity of pepper, and on the voyage she endeavoured to procure some spices at the Moluccas. But the Dutch would not suffer any poaching on their valuable monopoly. The "Clove" entered Hirado on the 11th of June 1613. Saris seems to have been a man self-opinionated, of shallow judgment and suspicious. Though strongly urged by Will Adams to make Uraga the seat of the new trade, though convinced of the excellence of the harbour there, and though instructed as to the great advantage of proximity to the shōgun's capital, he appears to have conceived some distrust of Adams, for he chose Hirado. From Iyeyasu Captain Saris received a most liberal charter, which plainly displayed the mood of the Tokugawa shōgun towards foreign trade:—

Opening of Dutch and English Trade.

> 1. The ship that has now come for the first time from England over the sea to Japan may carry on trade of all kinds without hindrance. With regard to future visits (of English ships) permission will be given in regard to all matters.
>
> 2. With regard to the cargoes of ships, requisition will be made by list according to the requirements of the shōgunate.
>
> 3. English ships are free to visit any port in Japan. If disabled by storms they may put into any harbour.
>
> 4. Ground in Yedo in the place which they may desire shall be given to the English, and they may erect houses and reside and trade there. They shall be at liberty to return to their country whenever they wish to do so, and to dispose as they like of the houses they have erected.
>
> 5. If an Englishman dies in Japan of disease, or any other cause, his effects shall be handed over without fail.
>
> 6. Forced sales of cargo, and violence, shall not take place.
>
> 7. If one of the English should commit an offence, he should be sentenced by the English General according to the gravity of his offence.
>
> (Translated by Professor Riess.)

The terms of the 4th article show that the shōgun expected the English to make Yedo their headquarters. Had Saris done so, he would have been free from all competition, would have had an immense market at his very doors, would have economized the expense of numerous overland journeys to the Tokugawa court, and would have saved the payment of many "considerations." The result of his mistaken choice and subsequent bad management was that, ten years later (1623), the English factory at Hirado had to be closed, having incurred a total loss of about £2000. In condonation of this failure it must be noted that a few months after the death of Iyeyasu, the charter he had granted to Saris underwent serious modification. The original document threw open to the English every port in Japan; the revised document limited

them to Hirado. But this restriction may be indirectly traced to the blunder of not accepting a settlement in Yedo and a port at Uraga. For the Tokugawa's foreign policy was largely swayed by an apprehension lest the Kiūshiū feudatories, over whom the authority of Yedo had never been fully established, might, by the presence of foreign traders, come into possession of such a fleet and such an armament as would ultimately enable them to wrest the administration of the empire from Tokugawa hands. Hence the precaution of confining the English and the Dutch to Hirado, the fief of a *daimyō* too petty to become formidable, and to Nagasaki which was an imperial city.[33] But evidently an English factory in Yedo and English ships at Uraga would have strengthened the Tokugawa ruler's hand instead of supplying engines of war to his political foes. It must also be noted that the question of locality had another injurious outcome. It exposed the English—and the Dutch also—to crippling competition at the hands of a company of rich Osaka monopolists, who, as representing an Imperial city and therefore being pledged to the Tokugawa interests, enjoyed Yedo's favour and took full advantage of it. These shrewd traders not only drew a ring round Hirado, but also sent vessels on their own account to Cochin China, Siam, Tonkin, Cambodia and other places, where they obtained many of the staples in which the English and the Dutch dealt. Still the closure of the English factory at Hirado was purely voluntary. From first to last there had been no serious friction between the English and the Japanese. The company's houses and godowns were not sold. These as well as the charter were left in the hands of the daimyō of Hirado, who promised to restore them should the English re-open business in Japan. The company did think of doing so on more than one occasion, but no practical step was taken until the year 1673, when a merchantman, aptly named the "Return," was sent to seek permission. The Japanese, after mature reflection, made answer that as the king of England was married to a Portuguese princess, British subjects could not be permitted to visit Japan. That this reply was suggested by the Dutch is very probable; that it truly reflected the feeling of the Japanese government towards Roman Catholics is certain.

The Last Days of the Portuguese in Japan.

The Spaniards were expelled from Japan in 1624, the Portuguese in 1638. Two years before the latter event, the Yedo government took a signally retrogressive step. They ordained that no Japanese vessel should go abroad; that no Japanese subject should leave the country, and that, if detected attempting to do so, he should be put to death, the vessel that carried him and her crew being seized "to await our pleasure"; that any Japanese resident abroad should be executed if he returned; that the children and descendants of Spaniards together with those who had adopted such children should not be allowed to remain on pain of death; and that no ship of ocean-going dimensions should be built in Japan. Thus not only were the very children of the Christian propagandists driven completely from the land, but the Japanese people also were sentenced to imprisonment within the limits of their islands, and the country was deprived of all hope of acquiring a mercantile marine. The descendants of the Spaniards, banished by the edict, were taken to Macao in two Portuguese galleons. They numbered 287 and the property they carried with them aggregated 6,697,500 florins. But if the Portuguese derived any gratification from this sweeping out of their much-abused rivals, the feeling was destined to be short-lived. Already they were subjected to humiliating restrictions.

> "From 1623 the galleons and their cargoes were liable to be burnt and their crews executed if any foreign priest was found on board of them. An official of the Japanese government was stationed in Macao for the purpose of inspecting all intending passengers, and of preventing any one that looked at all suspicious from proceeding to Japan. A complete list and personal description of every one on board was drawn up by this officer, a copy of it was handed to the captain and by him it had to be delivered to the authorities who met him at Nagasaki before he was allowed to anchor. If in the subsequent inspection any discrepancy between the list and the persons actually carried by the vessel appeared, it would prove very awkward for the captain. Then in the inspection of the vessel letters were opened, trunks and boxes ransacked, and all crosses, rosaries or objects of religion of any kind had to be thrown overboard. In 1635 Portuguese were forbidden to employ Japanese to carry their umbrellas or their shoes, and only their chief men were allowed to bear arms, while they had to hire fresh servants every year. It was in the following year (1636) that the artificial islet of Deshima was constructed for their special reception, or rather imprisonment. It lay in front of the former Portuguese factory, with which it was connected by a bridge, and henceforth the Portuguese were to be allowed to cross this bridge only twice a year—at their arrival and at their departure. Furthermore, all their cargoes had to be sold at a fixed price during their fifty days' stay to a ring of licensed merchants from the imperial towns."[34]

The imposition of such irksome conditions did not deter the Portuguese, who continued to send merchandise-laden galleons to Nagasaki. But in 1638 the bolt fell. The Shimabara rebellion was directly responsible. Probably the fact of a revolt of Christian converts, in such numbers and fighting with such resolution, would alone have sufficed to induce the weak government in Yedo to get rid of the Portuguese altogether. But the Portuguese were suspected of having instigated the Shimabara insurrection, and the Japanese authorities believed that they had proof of the fact. Hence, in 1638, an edict was issued proclaiming that as, in defiance of the government's order, the Portuguese had continued to bring missionaries to Japan; as they had supplied these missionaries with provisions and other necessaries, and as they had fomented the Shimabara rebellion, thenceforth any Portuguese ship coming to Japan should be burned, together with her cargo, and every one on board of her should be executed. Ample time was allowed before enforcing this edict. Not only were the Portuguese ships then at Nagasaki permitted to close up their commercial transactions and leave the port, but also in the following year when two galleons arrived from Macao, they were merely sent away with a copy of the edict and a stern warning. But the Portuguese could not easily become reconciled to abandon a commerce from which they had derived splendid profits prior to the intrusion of the Spaniards, the Dutch and the English, and from which they might now hope further gains, since, although the Dutch continued to be formidable rivals, the Spaniards had been excluded, the English had withdrawn, and the Japanese, by the suicidal policy of their own rulers, were no longer able to send ships to China. Therefore they took a step which resulted in one of the saddest episodes of the whole story. Four aged men, the most respected citizens of Macao, were despatched (1640) to Nagasaki as ambassadors in a ship carrying no cargo but only rich presents. They bore a petition declaring that for a long time no missionaries had entered Japan from Macao, that the Portuguese had not been in any way connected with the Shimabara revolt, and that interruption of trade would injure Japan as much as Portugal. These envoys arrived at Nagasaki on the 1st of July 1640, and 24 days sufficed to bring from Yedo, whither their petition had been sent, peremptory orders for their execution as well as executioners to carry out the orders. There was no possibility of resistance. The Japanese had removed the ship's rudder, sails, guns and ammunition, and had placed the envoys, their suite and the crews under guard in Deshima. On the 2nd of August they were all summoned to the governor's hall of audience, where, after their protest had been heard that ambassadors should be under the protection of international law, the sentence written in Yedo 13 days previously was read to them. The following morning the Portuguese were offered their lives if they would apostatize. Every one rejected the offer, and being then led out to the martyrs' mount, the heads of the envoys and of 57 of their companions fell. Thirteen were saved to carry the news to Macao. These thirteen, after witnessing the burning of the galleon, were conducted to the governor's residence who gave them this message:—

> "Do not fail to inform the inhabitants of Macao that the Japanese wish to receive from them neither gold nor silver, nor any kind of presents or merchandise; in a word, absolutely nothing which comes from them. You are witnesses that I have caused even the clothes of those who were executed yesterday to be burned. Let them do the same with respect to us if they find occasion to do so; we consent to it without difficulty. Let them think no more of us, just as if we were no longer in the world."

Finally the thirteen were taken to the martyrs' mount where, set up above the heads of the victims, a tablet recounted

the story of the embassy and the reasons for the execution, and concluded with the words:—

> "So long as the sun warms the earth, let no Christian be so bold as to come to Japan, and let all know that if King Philip himself, or even the very God of the Christians, or the great Shaka contravene this prohibition, they shall pay for it with their heads."

Had the ministers of the shōgun in Yedo desired to make clear to future ages that to Christianity alone was due the expulsion of Spaniards and Portuguese from Japan and her adoption of the policy of seclusion they could not have placed on record more conclusive testimony. Macao received the news with rejoicing in that its "earthly ambassadors had been made ambassadors of heaven," but it did not abandon all hope of overcoming Japan's obduracy. When Portugal recovered her independence in 1640, the people of Macao requested Lisbon to send an ambassador to Japan, and on the 16th of July 1647 Don Gonzalo de Siqueira arrived in Nagasaki with two vessels. He carried a letter from King John IV., setting forth the severance of all connexion between Portugal and Spain, which countries were now actually at war, and urging that commercial relations should be re-established. The Portuguese, having refused to give up their rudders and arms, soon found themselves menaced by a force of fifty thousand samurai, and were glad to put out of port quietly on the 4th of September. This was the last episode in the medieval history of Portugal's intercourse with Japan.

The Dutch at Deshima.

When (1609) the Dutch contemplated forming a settlement in Japan, Iyeyasu gave them a written promise that "no man should do them any wrong and that he would maintain and defend them as his own subjects." Moreover, the charter granted to them contained a clause providing that, into whatever ports their ships put, they were not to be molested or hindered in any way, but, "on the contrary, must be shown all manner of help, favour and assistance." They might then have chosen any port in Japan for their headquarters, but they had the misfortune to choose Hirado. For many years they had no cause to regret the choice. Their exclusive possession of the Spice Islands and their own enterprise and command of capital gave them the leading place in Japan's over-sea trade. Even when things had changed greatly for the worse and when the English closed their books with a large loss, it is on record that the Dutch were reaping a profit of 76% annually. Their doings at Hirado were not of a purely commercial character. The Anglo-Dutch "fleet of defence" made that port its basis of operations against the Spaniards and the Portuguese. It brought its prizes into Hirado, the profits to be equally divided between the fleet and the factories, Dutch and English, which arrangement involved a sum of a hundred thousand pounds in 1622. But after the death of Iyeyasu there grew up at the Tokugawa court a party which advocated the expulsion of all foreigners on the ground that, though some professed a different form of Christianity from that of the Castilians and Portuguese, it was nevertheless one and the same creed. This policy was not definitely adopted, but it made itself felt in a discourteous reception accorded to the commandant of Fort Zelandia when he visited Tōkyō in 1627. He attempted to retaliate upon the Japanese vessels which put into Zelandia in the following year, but the Japanese managed to seize his person, exact reparation for loss of time and obtain five hostages whom they carried to prison in Japan. The Japanese government of that time was wholly intolerant of any injury done to its subjects by foreigners. When news of the Zelandia affair reached Yedo, orders were immediately issued for the sequestration of certain Dutch vessels and for the suspension of the Hirado factory, which veto was not removed for four years. Commercial arrangements, also, became less favourable. The Dutch, instead of selling their silk—which generally formed the principal staple of import—in the open market, were required to send it to the Osaka gild of licensed merchants at Nagasaki, by which means, Nagasaki and Osaka being Imperial cities, the Yedo government derived advantage from the transaction. An attempt to evade this onerous system provoked a very stern rebuke from Yedo, and shortly afterwards all Japanese subjects were forbidden to act as servants to the Dutch outside the latter's dwellings. The co-operation of the Hollanders in bombarding the castle of Hara during the Shimabara rebellion (1638) gave them some claim on the shōgun's government, but in the same year the Dutch received an imperious warning that the severest penalties would be inflicted if their ships carried priests or any religious objects or books. So profound was the dislike of everything relating to Christianity that the Dutch nearly caused the ruin of their factory and probably their own destruction by inscribing on some newly erected warehouses the date according to the Christian era. The factory happened to be then presided over by Caron, a man of extraordinary penetration. Without a moment's hesitation he set 400 men to pull down the warehouses, thus depriving the Japanese of all pretext for recourse to violence. He was compelled, however, to promise that there should be no observance of the Sabbath hereafter and that time should no longer be reckoned by the Christian era. In a few months, further evidence of Yedo's ill will was furnished. An edict appeared ordering the Dutch to dispose of all their imports during the year of their arrival, without any option of carrying them away should prices be low. They were thus placed at the mercy of the Osaka gild. Further, they were forbidden to slaughter cattle or carry arms, and altogether it seemed as though the situation was to be rendered impossible for them. An envoy despatched from Batavia to remonstrate could not obtain audience of the shōgun, and though he presented, by way of remonstrance, the charter originally granted by Iyeyasu, the reply he received was:—

> "His Majesty charges us to inform you that it is of but slight importance to the Empire of Japan whether foreigners come or do not come to trade. But in consideration of the charter granted to them by Iyeyasu, he is pleased to allow the Hollanders to continue their operations, and to leave them their commercial and other privileges, on the condition that they evacuate Hirado and establish themselves with their vessels in the port of Nagasaki."

The Dutch did not at first regard this as a calamity. During their residence of 31 years at Hirado they had enjoyed full freedom, had been on excellent terms with the feudatory and his samurai, and had prospered in their business. But the pettiness of the place and the inconvenience of the anchorage having always been recognized, transfer to Nagasaki promised a splendid harbour and much larger custom. Bitter, therefore, was their disappointment when they found that they were to be imprisoned in Deshima, a quadrangular island whose longest face did not measure 300 yds., and that, so far from living in the town of Nagasaki, they would not be allowed even to enter it. Siebold writes:—

> "A guard at the gate prevented all communications with the city of Nagasaki; no Dutchman without weighty reasons and without the permission of the governor might pass the gate; no Japanese (unless public women) might live in a Dutchman's house. As if this were not enough, even within Deshima itself our state prisoners were keenly watched. No Japanese might speak with them in his own language unless in the presence of a witness (a government spy) or visit them in their houses. The creatures of the governor had the warehouses under key and the Dutch traders ceased to be masters of their property."

There were worse indignities to be endured. No Dutchman might be buried in Japanese soil: the dead had to be committed to the deep. Every Dutch ship, her rudder, guns and ammunition removed and her sails sealed, was subjected to the strictest search. No religious service could be held. No one was suffered to pass from one Dutch ship to another without the governor's permit. Sometimes the officers and men were wantonly cudgelled by petty Japanese officials. They led, in short, a life of extreme abasement. Some relaxation of this extreme severity was afterwards obtained, but at no time of their sojourn in Deshima, a period of 217 years, were the Dutch relieved from irksome and humiliating restraints. Eleven years after their removal thither, the expediency of consulting the national honour by finally abandoning an enterprise so derogatory was gravely discussed, but hopes of improvement supplementing natural reluctance to surrender a monopoly which still brought large gains, induced them to persevere. At that time this Nagasaki over-sea trade was considerable. From 7 to 10 Dutch ships used to enter the port annually, carrying cargo valued at some 80,000 ℔ of silver, the chief staples of import being silk and piece-goods, and the government levying 5%

by way of customs dues. But this did not represent the whole of the charges imposed. A rent of 459 ℔ of silver had to be paid each year for the little island of Deshima and the houses standing on it; and, further, every spring, the Hollanders were required to send to Yedo a mission bearing for the shōgun, the heir-apparent and the court officials presents representing an aggregate value of about 550 ℔ of silver. They found their account, nevertheless, in buying gold and copper—especially the latter—for exportation, until the Japanese authorities, becoming alarmed at the great quantity of copper thus carried away, adopted the policy of limiting the number of vessels, as well as their inward and outward cargoes, so that, in 1790, only one ship might enter annually, nor could she carry away more than 350 tons of copper. On the other hand, the formal visits of the captain of the factory to Yedo were reduced to one every fifth year, and the value of the presents carried by him was cut down to one half.

Loss to Japan by adopting the Policy of Exclusion.

Well-informed historians have contended that, by thus segregating herself from contact with the West, Japan's direct losses were small. Certainly it is true that she could not have learned much from European nations in the 17th century. They had little to teach her in the way of religious tolerance; in the way of international morality; in the way of social amenities and etiquette; in the way of artistic conception and execution; or in the way of that notable shibboleth of modern civilization, the open door and equal opportunities. Yet when all this is admitted, there remains the vital fact that Japan was thus shut off from the atmosphere of competition, and that for nearly two centuries and a half she never had an opportunity of warming her intelligence at the fire of international rivalry or deriving inspiration from an exchange of ideas. She stood comparatively still while the world went on, and the interval between her and the leading peoples of the Occident in matters of material civilization had become very wide before she awoke to a sense of its existence. The sequel of this page of her history has been faithfully summarized by a modern writer:—

> "A more complete metamorphosis of a nation's policy could scarcely be conceived. In 1541 we find the Japanese celebrated, or notorious, throughout the whole of the Far East for exploits abroad; we find them known as the 'kings of the sea'; we find them welcoming foreigners with cordiality and opposing no obstacles to foreign commerce or even to the propagandism of foreign creeds; we find them so quick to recognize the benefits of foreign trade and so apt to pursue them that, in the space of a few years, they establish commercial relations with no less than twenty over-sea markets; we find them authorizing the Portuguese, the Dutch and the English to trade at every port in the empire; we find, in short, all the elements requisite for a career of commercial enterprise, ocean-going adventure and industrial liberality. In 1641 everything is reversed. Trade is interdicted to all Western peoples except the Dutch, and they are confined to a little island 200 yards in length by 80 in width; the least symptom of predilection for any alien creed exposes a Japanese subject to be punished with awful rigour; any attempt to leave the limits of the realm involves decapitation; not a ship large enough to pass beyond the shadow of the coast may be built. However unwelcome the admission, it is apparent that for all these changes Christian propagandism was responsible. The policy of seclusion adopted by Japan in the early part of the 17th century and resolutely pursued until the middle of the 19th, was anti-Christian, not anti-foreign. The fact cannot be too clearly recognized. It is the chief lesson taught by the events outlined above. Throughout the whole of that period of isolation, Occidentals were not known to the Japanese by any of the terms now in common use, as *gwaikoku-jin*, *seiyō-jin*, or *i-jin*, which embody the simple meanings 'foreigner,' 'Westerner' or 'alien': they were popularly called *bateren* (*padres*). Thus completely had foreign intercourse and Christian propagandism become identified in the eyes of the people. And when it is remembered that foreign intercourse, associated with Christianity, had come to be synonymous in Japanese ears with foreign aggression, with the subversal of the mikado's ancient dynasty, and with the loss of the independence of the 'country of the gods,' there is no difficulty in understanding the attitude of the nation's mind towards this question."

Dutch and Russian Influence.

Foreign Intercourse in Modern Times.—From the middle of the 17th century to the beginning of the 19th, Japan succeeded in rigorously enforcing her policy of seclusion. But in the concluding days of this epoch two influences began to disturb her self-sufficiency. One was the gradual infiltration of light from the outer world through the narrow window of the Dutch prison at Deshima; the other, frequent apparitions of Russian vessels on her northern coasts. The former was a slow process. It materialized first in the study of anatomy by a little group of youths who had acquired accidental knowledge of the radical difference between Dutch and Japanese conceptions as to the structure of the human body. The work of these students reads like a page of romance. Without any appreciable knowledge of the Dutch language, they set themselves to decipher a Dutch medical book, obtained at enormous cost, and from this small beginning they passed to a vague but firm conviction that their country had fallen far behind the material and intellectual progress of the Occident. They laboured in secret, for the study of foreign books was then a criminal offence; yet the patriotism of one of their number outweighed his prudence, and he boldly published a brochure advocating the construction of a navy and predicting a descent by the Russians on the northern borders of the empire. Before this prescient man had lain five months in prison, his foresight was verified by events. The Russians simulated at the outset a desire to establish commercial relations by peaceful means. Had the Japanese been better acquainted with the history of nations, they would have known how to interpret the idea of a Russian quest for commercial connexions in the Far East a hundred years ago. But they dealt with the question on its superficial merits, and, after imposing on the tsar's envoys a wearisome delay of several months at Nagasaki, addressed to them a peremptory refusal together with an order to leave that port forthwith. Incensed by such treatment, and by the subsequent imprisonment of a number of their fellow countrymen who had landed on the island of Etorofu in the Kuriles, the Russians resorted to armed reprisals. The Japanese settlements in Sakhalin and Etorofu were raided and burned, other places were menaced and several Japanese vessels were destroyed. The lesson sank deep into the minds of the Yedo officials. They withdrew their veto against the study of foreign books, and they arrived in part at the reluctant conclusion that to offer armed opposition to the coming of foreign ships was a task somewhat beyond Japan's capacity. Japan ceased, however, to attract European attention amid the absorbing interest of the Napoleonic era, and the shōgun's government, misinterpreting this respite, reverted to their old policy of stalwart resistance to foreign intercourse.

American Enterprise.

Meanwhile another power was beginning to establish close contact with Japan. The whaling industry in Russian waters off the coast of Alaska and in the seas of China and Japan had attracted large investments of American capital and was pursued yearly by thousands of American citizens. In one season 86 of these whaling vessels passed within easy sight of Japan's northern island, Yezo, so that the aspect of foreign ships became quite familiar. From time to time American schooners were cast away on Japan's shores. Generally the survivors were treated with tolerable consideration and ultimately sent to Deshima for shipment to Batavia. Japanese sailors, too, driven out of their route by hurricanes and caught in the stream of the "Black Current," were occasionally carried to the Aleutian Islands, to Oregon or California, and in several instances these shipwrecked mariners were taken back to Japan with all kindness by American vessels. On such an errand of mercy the "Morrison" entered Yedo Bay in 1837, proceeding thence to Kagoshima, only to be driven away by cannon shot; and on such an errand the "Manhattan" in 1845 lay for four days at Uraga while her master (Mercater Cooper) collected books and charts. It would seem that his experience induced the Washington government to attempt the opening of Japan. A ninety-gun ship and a sloop were sent on the errand. They anchored off Uraga (July 1846) and Commodore Biddle made due application for trade. But he received a positive refusal, and having been instructed by his government to abstain from any act calculated to excite hostility or distrust, he quietly weighed anchor and sailed away.

In this same year (1846) a French ship touched at the Riukiu (Luchu) archipelago and sought to persuade the islanders that their only security against British aggression was to place themselves under the protection of France. In fact Great Britain was now beginning to interest herself in south China, and more than one warning reached Yedo from Deshima that English war-ships might at any moment visit Japanese waters. The Dutch have been much blamed for thus attempting to prejudice Japan against the Occident, but if the dictates of commercial rivalry, as it was then practised, do not constitute an ample explanation, it should be remembered that England and Holland had recently been enemies, and that the last British vessel,[35] seen at Nagasaki had gone there hoping to capture the annual Dutch trading-ship from Batavia. Deshima's warnings, however, remained unfulfilled, though they doubtless contributed to Japan's feeling of uneasiness. Then, in 1847, the king of Holland himself intervened. He sent to Yedo various books, together with a map of the world and a despatch advising Japan to abandon her policy of isolation. Within a few months (1849) of the receipt of his Dutch majesty's recommendation, an American brig, the "Preble," under Commander J. Glynn, anchored in Nagasaki harbour and threatened to bombard the town unless immediate delivery were made of 18 seamen who, having been wrecked in northern waters, were held by the Japanese preparatory to shipment for Batavia. In 1849 another despatch reached Yedo from the king of Holland announcing that an American fleet might be expected in Japanese waters a year later, and that, unless Japan agreed to enter into friendly commercial relations, war must ensue. Appended to this despatch was an approximate draft of the treaty which would be presented for signature, together with a copy of a memorandum addressed by the Washington government to European nations, justifying the contemplated expedition on the ground that it would inure to the advantage of Japan as well as to that of the Occident.

Great Britain reappears upon the scene.

In 1853, Commodore Perry, with a squadron of four ships-of-war and 560 men, entered Uraga Bay. So formidable a foreign force had not been seen in Japanese waters since the coming of the Mongol Armada. A panic ensued among the people—the same people who, in the days of Hideyoshi or Iyeyasu, would have gone out to encounter these ships with assured confidence of victory. The contrast did not stop there. The shōgun, whose ancestors had administered the country's affairs with absolutely autocratic authority, now summoned a council of the feudatories to consider the situation; and the Imperial court in Kiōto, which never appealed for heaven's aid except in a national emergency such as had never been witnessed since the creation of the shōgunate, now directed that at the seven principal shrines and at all the great temples special prayers should be offered for the safety of the land and for the destruction of the aliens. Thus the appearance of the American squadron awoke in the cause of the country as a whole a spirit of patriotism hitherto confined to feudal interests. The shōgun does not seem to have had any thought of invoking that spirit: his part in raising it was involuntary and his ministers behaved with perplexed vacillation. The infirmity of the Yedo Administration's purpose presented such a strong contrast to the single-minded resolution of the Imperial court that the prestige of the one was largely impaired and that of the other correspondingly enhanced. Perry, however, was without authority to support his proposals by any recourse to violence. The United States government had relied solely on the moral effect of his display of force, and his countrymen had supplied him with a large collection of the products of peaceful progress, from sewing machines to miniature railways. He did not unduly press for a treaty, but after lying at anchor off Uraga during a period of ten days and after transmitting the president's letter to the sovereign of Japan, he steamed away on the 17th of July, announcing his return in the ensuing spring. The conduct of the Japanese subsequently to his departure showed how fully and rapidly they had acquired the conviction that the appliances of their old civilization were powerless to resist the resources of the new. Orders were issued rescinding the long-enforced veto against the construction of sea-going ships; the feudal chiefs were invited to build and arm large vessels; the Dutch were commissioned to furnish a ship of war and to procure from Europe all the best works on modern military science; every one who had acquired any expert knowledge through the medium of Deshima was taken into official favour; forts were built; cannon were cast and troops were drilled. But from all this effort there resulted only fresh evidence of the country's inability to defy foreign insistence, and on the 2nd of December 1853, instructions were issued that if the Americans returned, they were to be dealt with peacefully. The sight of Perry's steam-propelled ships, their powerful guns and all the specimens they carried of western wonders, had practically broken down the barriers of Japan's isolation without any need of treaties or conventions. Perry returned in the following February, and after an interchange of courtesies and formalities extending over six weeks, obtained a treaty pledging Japan to accord kind treatment to shipwrecked sailors; to permit foreign vessels to obtain stores and provisions within her territory, and to allow American ships to anchor in the ports at Shimoda and Hakodate. On this second occasion Perry had 10 ships with crews numbering two thousand, and when he landed to sign the treaty, he was escorted by a guard of honour mustering 500 strong in 27 boats. Much has been written about his judicious display of force and his sagacious tact in dealing with the Japanese, but it may be doubted whether the consequences of his exploit have not invested its methods with extravagant lustre. Standing on the threshold of modern Japan's wonderful career, his figure shines by the reflected light of its surroundings.

Commodore Perry.

Russia, Holland and England speedily secured for themselves treaties similar to that concluded by Commodore Perry in 1854. But Japan's doors still remained closed to foreign commerce, and it was reserved for another citizen of the great republic to open them. This was Townsend Harris (1803-1878), the first U.S. consul-general in Japan. Arriving in August 1856, he concluded, in June of the following year, a treaty securing to American citizens the privilege of permanent residence at Shimoda and Hakodate, the opening of Nagasaki, the right of consular jurisdiction and certain minor concessions. Still, however, permission for commercial intercourse was withheld, and Harris, convinced that this great goal could not be reached unless he made his way to Yedo and conferred direct with the shōgun's ministers, pressed persistently for leave to do so. Ten months elapsed before he succeeded, and such a display of reluctance on the Japanese side was very unfavourably criticized in the years immediately subsequent. Ignorance of the country's domestic politics inspired the critics. The Yedo administration, already weakened by the growth of a strong public sentiment in favour of abolishing the dual system of government—that of the mikado in Kiōto and that of the shōgun in Yedo—had been still further discredited by its own timid policy as compared with the stalwart mien of the throne towards the question of foreign intercourse. Openly to sanction commercial relations at such a time would have been little short of reckless. The Perry convention and the first Harris convention could be construed, and were purposely construed, as mere acts of benevolence towards strangers; but a commercial treaty would not have lent itself to any such construction, and naturally the shōgun's ministers hesitated to agree to an apparently suicidal step. Harris carried his point, however. He was received by the shōgun in Yedo in November 1857, and on the 29th of July 1858 a treaty was signed in Yedo, engaging that Yokohama should be opened on the 4th of July 1859 and that commerce between the United States and Japan should thereafter be freely carried on there. This treaty was actually concluded by the shōgun's Ministers in defiance of their failure to obtain the sanction of the sovereign in Kiōto. Foreign historians have found much to say about Japanese duplicity in concealing the subordinate position occupied by the Yedo administration towards the Kiōto court. Such condemnation is not consistent with fuller knowledge. The Yedo authorities had power to solve all problems of foreign intercourse without reference to Kiōto. Iyeyasu had not seen any occasion to seek imperial assent when he granted unrestricted liberty of trade to the representatives of the East India Company, nor had Iyemitsu asked for Kiōto's sanction when he issued his decree for the expulsion of all foreigners. If, in the 19th century, Yedo shrank from a responsibility which it had unhesitatingly assumed in the 17th, the cause was to be found, not in the shōgun's simulation of autonomy, but in his desire to associate the throne with a policy which, while recognizing it to be unavoidable, he distrusted his own ability to

First Treaty of Commerce.

make the nation accept. But his ministers had promised Harris that the treaty should be signed, and they kept their word, at a risk of which the United States' consul-general had no conception. Throughout these negotiations Harris spared no pains to create in the minds of the Japanese an intelligent conviction that the world could no longer be kept at arm's length, and though it is extremely problematical whether he would have succeeded had not the Japanese themselves already arrived at that very conviction, his patient and lucid expositions coupled with a winning personality undoubtedly produced much impression. He was largely assisted, too, by recent events in China, where the Peihō forts had been captured and the Chinese forced to sign a treaty at Tientsin. Harris warned the Japanese that the British fleet might be expected at any moment in Yedo Bay, and that the best way to avert irksome demands at the hands of the English was to establish a comparatively moderate precedent by yielding to America's proposals.

Effects of the Treaty.

This treaty could not be represented, as previous conventions had been, in the light of a purely benevolent concession. It definitely provided for the trade and residence of foreign merchants, and thus finally terminated Japan's traditional isolation. Moreover, it had been concluded in defiance of the Throne's refusal to sanction anything of the kind. Much excitement resulted. The nation ranged itself into three parties. One comprised the advocates of free intercourse and progressive liberality; another, while insisting that only the most limited privileges should be accorded to aliens, was of two minds as to the advisability of offering armed resistance at once or temporizing so as to gain time for preparation; the third advocated uncompromising seclusion. Once again the shōgun convoked a meeting of the feudal barons, hoping to secure their co-operation. But with hardly an exception they pronounced against yielding. Thus the shōgunate saw itself compelled to adopt a resolutely liberal policy: it issued a decree in that sense, and thenceforth the administrative court at Yedo and the Imperial court in Kiōto stood in unequivocal opposition to each other, the Conservatives ranging themselves on the side of the latter, the Liberals on that of the former. It was a situation full of perplexity to outsiders, and the foreign representatives misinterpreted it. They imagined that the shōgun's ministers sought only to evade their treaty obligations and to render the situation intolerable for foreign residents, whereas in truth the situation threatened to become intolerable for the shōgunate itself. Nevertheless the Yedo officials cannot be entirely acquitted of duplicity. Under pressure of the necessity of self-preservation they effected with Kiōto a compromise which assigned to foreign intercourse a temporary character. The threatened political crisis was thus averted, but the enemies of the dual system of government gained strength daily. One of their devices was to assassinate foreigners in the hope of embroiling the shōgunate with Western powers and thus either forcing its hand or precipitating its downfall. It is not wonderful, perhaps, that foreigners were deceived, especially as they approached the solution of Japanese problems with all the Occidental's habitual suspicion of everything Oriental. Thus when the Yedo government, cognisant that serious dangers menaced the Yokohama settlement, took precautions to guard it, the foreign ministers convinced themselves that a deliberate piece of chicanery was being practised at their expense; that statecraft rather than truth had dictated the representations made to them by the Japanese authorities; and that the alarm of the latter was simulated for the purpose of finding a pretext to curtail the liberty enjoyed by foreigners. Therefore a suggestion that the inmates of the legations should show themselves as little as possible in the streets of the capital, where at any moment a desperado might cut them down, was treated almost as an insult. Then the Japanese authorities saw no recourse except to attach an armed escort to the person of every foreigner when he moved about the city. But even this precaution, which certainly was not adopted out of mere caprice or with any sinister design, excited fresh suspicions. The British representative, in reporting the event to his government, said that the Japanese had taken the opportunity to graft upon the establishment of spies, watchmen and police-officers at the several legations, a mounted escort to accompany the members whenever they moved about.

Attacks upon Foreigners and their Consequences.

Just at this time (1861) the Yedo statesmen, in order to reconcile the divergent views of the two courts, negotiated a marriage between the emperor's sister and the shōgun. But in order to bring the union about, they had to placate the Kiōto Conservatives by a promise to expel foreigners from the country within ten years. When this became known, it strengthened the hands of the reactionaries, and furnished a new weapon to Yedo's enemies, who interpreted the marriage as the beginning of a plot to dethrone the mikado. Murderous attacks upon foreigners became more frequent. Two of these assaults had momentous consequences. Three British subjects attempted to force their way through the *cortège* of the Satsuma feudal chief on the highway between Yokohama and Yedo. One of them was killed and the other two wounded. This outrage was not inspired by the "barbarian-expelling" sentiment: to any Japanese subject violating the rules of etiquette as these Englishmen had violated them, the same fate would have been meted out. Nevertheless, as the Satsuma daimyō refused to surrender his implicated vassals, and as the shōgun's arm was not long enough to reach the most powerful feudatory in Japan, the British government sent a squadron to bombard his capital, Kagoshima. It was not a brilliant exploit in any sense, but its results were invaluable; for the operations of the British ships finally convinced the Satsuma men of their impotence in the face of Western armaments, and converted them into advocates of liberal progress. Three months previously to this bombardment of Kagoshima another puissant feudatory had thrown down the gauntlet. The Chōshū chief, whose batteries commanded the entrance to the inland sea at Shimonoseki, opened fire upon ships flying the flags of the United States, of France and of Holland. In thus acting he obeyed an edict obtained by the extremists from the mikado without the knowledge of the shōgun, which edict fixed the 11th of May 1863 as the date for practically inaugurating the foreigners-expulsion policy. Again the shōgun's administrative competence proved inadequate to exact reparation, and a squadron, composed chiefly of British men-of-war, proceeding to Shimonoseki, demolished Chōshū's forts, destroyed his ships and scattered his samurai. In the face of the Kagoshima bombardment and the Shimonoseki expedition, no Japanese subject could retain any faith in his country's ability to oppose Occidentals by force. Thus the year 1863 was memorable in Japan's history. It saw the "barbarian-expelling" agitation deprived of the emperor's sanction; it saw the two principal clans, Satsuma and Chōshū, convinced of their country's impotence to defy the Occident; it saw the nation almost fully roused to the disintegrating and weakening effects of the feudal system; and it saw the traditional antipathy to foreigners beginning to be exchanged for a desire to study their civilization and to adopt its best features.

Ratification of the Treaties.

The treaty concluded between the shōgun's government and the United States in 1858 was of course followed by similar compacts with the principal European powers. From the outset these states agreed to co-operate for the assertion of their conventional privileges, and they naturally took Great Britain for leader, though such a relation was never openly announced. The treaties, however, continued during several years to lack imperial ratification, and, as time went by, that defect obtruded itself more and more upon the attention of their foreign signatories. The year 1865 saw British interests entrusted to the charge of Sir Harry Parkes, a man of keen insight, indomitable courage and somewhat peremptory methods, learned during a long period of service in China. It happened that the post of Japanese secretary at the British legation in Yedo was then held by a remarkably gifted young Englishman, who, in a comparatively brief interval, had acquired a good working knowledge of the Japanese language, and it happened also that the British legation in Yedo was already—as it has always been ever since—the best equipped institution of its class in Japan. Aided by these facilities and by the researches of Mr Satow (afterwards Sir Ernest Satow) Parkes arrived at the conclusions that the Yedo government was tottering to its fall; that the resumption of administrative authority by the Kiōto court would make for the interests not only of the West but also of Japan; and that the ratification of the treaties by the mikado would elucidate the situation for foreigners while being, at the same time, essential to the validity of the documents. Two other objects also presented themselves, namely, that the import duties fixed by the conventions should be reduced from 15 to 5% *ad valorem*, and that the ports of Hiōgō

and Osaka should be opened at once, instead of at the expiration of two years as originally fixed. It was not proposed that these concessions should be entirely gratuitous. When the four-power flotilla destroyed the Shimonoseki batteries and sank the vessels lying there, a fine of three million dollars (some £750,000) had been imposed upon the daimyō of Chōshū by way of ransom for his capital, which lay at the mercy of the invaders. The daimyō of Chōshū, however, was in open rebellion against the shōgun, and as the latter could not collect the debt from the recalcitrant clansmen, while the four powers insisted on being paid by some one, the Yedo treasury was finally compelled to shoulder the obligation. Two out of the three millions were still due, and Parkes conceived the idea of remitting this debt in exchange for the ratification of the treaties, the reduction of the customs tariff from 15 to 5% *ad valorem* and the immediate opening of Hiōgō and Osaka. He took with him to the place of negotiation (Hiōgō) a fleet of British, French and Dutch war-ships, for, while announcing peaceful intentions, he had accustomed himself to think that a display of force should occupy the foreground in all negotiations with Oriental states. This coup may be said to have sealed the fate of the shōgunate. For here again was produced in a highly aggravated form the drama which had so greatly startled the nation eight years previously. Perry had come with his war-ships to the portals of Yedo, and now a foreign fleet, twice as strong as Perry's, had anchored at the vestibule of the Imperial city itself. No rational Japanese could suppose that this parade of force was for purely peaceful purposes, or that rejection of the amicable bargain proposed by Great Britain's representative would be followed by the quiet withdrawal of the menacing fleet, whose terrible potentialities had been demonstrated at Kagoshima and Shimonoseki. The seclusionists, whose voices had been nearly silenced, raised them in renewed denunciation of the shōgun's incompetence to guarantee the sacred city of Kiōto against such trespasses, and the emperor, brought once more under the influence of the anti-foreign party, inflicted a heavy disgrace on the shōgun by dismissing and punishing the officials to whom the latter had entrusted the conduct of negotiations at Hiōgō. Such procedure on the part of the throne amounted to withdrawing the administrative commission held by the Tokugawa family since the days of Iyeyasu. The shōgun resigned. But his adversaries not being yet ready to replace him, he was induced to resume office, with, however, fatally damaged prestige. As for the three-power squadron, it steamed away successful. Parkes had come prepared to write off the indemnity in exchange for three concessions. He obtained two of the concessions without remitting a dollar of the debt.

Final Adoption of Western Civilization.

The shōgun did not long survive the humiliation thus inflicted on him. He died in the following year (1866), and was succeeded by Keiki, destined to be the last of the Tokugawa rulers. Nine years previously this same Keiki had been put forward by the seclusionists as candidate for the shōgunate. Yet no sooner did he attain that distinction in 1866 than he remodelled the army on French lines, engaged English officers to organize a navy, sent his brother to the Paris Exhibition, and altered many of the forms and ceremonies of his court so as to bring them into accord with Occidental fashions. The contrast between the politics he represented when a candidate for office in 1857 and the practice he adopted on succeeding to power in 1866 furnished an apt illustration of the change that had come over the spirit of the time. The most bigoted of the exclusionists were now beginning to abandon all idea of expelling foreigners and to think mainly of acquiring the best elements of their civilization. The Japanese are slow to reach a decision but very quick to act upon it when reached. From 1866 onwards the new spirit rapidly permeated the whole nation; progress became the aim of all classes, and the country entered upon a career of intelligent assimilation which, in forty years, won for Japan a universally accorded place in the ranks of the great Occidental powers.

[*Continued in volume XV slice III.*]

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1 The highest rate of subscription to a daily journal is twelve shillings per annum, and the usual charge for advertisement is from 7d. to one shilling per line of 22 ideographs (about nine words).

2 It is first boiled in a lye obtained by lixiviating wood ashes; it is next polished with charcoal powder; then immersed in plum vinegar and salt; then washed with weak lye and placed in a tub of water to remove all traces of alkali, the final step being to digest in a boiling solution of copper sulphate, verdigris and water.

3 This method is some 300 years old. It is by no means a modern invention, as some writers have asserted.

4 Obtained from the shell of the *Halictis*.

5 In 1877 there were 120 English engineers, drivers and foremen in the service of the railway bureau. Three years later only three advisers remained.

6 The largest is the mitsubishi at Nagasaki. It has a length of 722 ft. Next stands the kawasaki at Kobe, and in the third place is the uraga.

7 They were called *fuda-sashi* (ticket-holders), a term derived from the fact that rice-vouchers were usually held in a split bamboo which was thrust into a pile of rice-bags to indicate their buyer.

8 In 1725, when the population of Yedo was about three-quarters of a million, the merchandise that entered the city was 861,893 bags of rice; 795,856 casks of sake; 132,892 casks of soy (fish-sauce); 18,209,987 bundles of fire-wood; 809,790 bags of charcoal; 90,811 tubs of oil; 1,670,850 bags of salt and 3,613,500 pieces of cotton cloth.

9 Some derive this term from *mika*, an ancient Japanese term for "great," and *to*, "place."

10 The names given in italics are those more commonly used. Those in the first column are generally of pure native derivation; those in the second column are composed of the Chinese word *shū*, a "province," added to the Chinese pronunciation of one of the characters with which the native name is written. In a few cases both names are used.

11 The mayor of a town (*shichō*) is nominated by the minister for home affairs from three men chosen by the town assembly.

12 The term *hyaku-shō*, here translated "working man," means literally "one engaged in any of the various callings" apart from military service. In a later age a further distinction was established between the agriculturist, the artisan, and the trader, and the word *hyaku-shō* then came to carry the signification of "husbandman" only.

13 A tent was simply a space enclosed with strips of cloth or silk, on which was emblazoned the crest of the commander. It had no covering.

14 The Japanese never at any time of their history used poisoned arrows; they despised them as depraved and inhuman weapons.

15 The general term for commoners as distinguished from samurai.

16 The privilege at first led to great abuses. It became a common thing to employ some aged and indigent person, set him up as the head of a "branch family," and give him for adopted son a youth liable to conscription.

17 Conscription without lot is thus the punishment for all failures to comply with and attempts to evade the military laws.

18 Sons of officers' widows, or of officers in reduced circumstances, are educated at these schools either free or at reduced charges, but are required to complete the course and to graduate.

19 Uniform does not vary according to regiments or divisions. There is only one type for the whole of the infantry, one for the cavalry, and so on (see Uniforms, Naval and Military). Officers largely obtain their uniforms and equipment, as well as their books and technical literature through the *Kai-ko-sha*, which is a combined officers' club, benefit society and co-operative trading association to which nearly all belong.

20 The term *maru* subsequently became applicable to merchantmen only, war-ships being distinguished as *kan*.

21 The reader should be warned that absolute accuracy cannot be claimed for statistics compiled before the Meiji era.

22 The *yen* is a silver coin worth about 2s.: 10 *yen* = £1.

23 In addition to the above grant, the feudatories were allowed to retain the reserves in their treasuries; thus many of the feudal nobles found themselves possessed of substantial fortunes, a considerable part of which they generally devoted to the support of their former vassals.

24 The Bank of Japan was established as a joint-stock company in 1882. The capital in 1909 was 30,000,000 *yen*. In it alone is vested note-issuing power. There is no limit to its issues against gold or silver coins and bullion, but on other securities (state bonds, treasury bills and other negotiable bonds or commercial paper) its issues are limited to 120 millions, any excess over that figure being subject to a tax of 5% per annum.

25 The amounts include the payments made in connexion with what may be called the disestablishment of the Church. There were 29,805 endowed temples and shrines throughout the empire, and their estates aggregated 354,481 acres, together with 1¾ million bushels of rice (representing 2,500,000 *yen*). The government resumed possession of all these lands and revenues at a total cost to the state of a little less than 2,500,000 *yen*, paid out in pensions spread over a period of fourteen years. The measure sounds like wholesale confiscation. But some extenuation is found in the fact that the temples and shrines held their lands and revenues under titles which, being derived from the feudal chiefs, depended for their validity on the maintenance of feudalism.

26 This sum represents interest-bearing bonds issued in exchange for fiat notes, with the idea of reducing the volume of the latter. It was a tentative measure, and proved of no value.

27 In this is included a sum of 110,000,000 *yen* distributed in the form of loan-bonds among the officers and men of the army and navy by way of reward for their services during the war of 1904-5.

28 When war broke out in 1904 the local administrative districts took steps to reduce their outlays, so that whereas the expenditures totalled 158,000,000 *yen* in 1903-1904, they fell to 122,000,000 and 126,000,000 in 1904-1905 and 1905-1906 respectively. Thereafter however, they expanded once more.

29 This includes 22¼ millions of loans raised abroad.

30 The problem was to induce the co-operation of a feudatory whose castle served for frontier guard to the fief of a powerful chief, his suzerain. The feudatory was a Christian. Nobunaga seized the Jesuits in Kiōto, and threatened to suppress their religion altogether unless they persuaded the feudatory to abandon the cause of his suzerain.

31 The mutilation was confined to the lobe of one ear. Crucifixion, according to the Japanese method, consisted in tying to a cross and piercing the heart with two sharp spears driven from either side. Death was always instantaneous.

32 See *A History of Christianity in Japan* (1910), by Otis Cary.

33 The Imperial cities were Yedo, Kiōto, Osaka and Nagasaki. To this last the English were subsequently admitted. They were also invited to Kagoshima by the Shimazu chieftain, and, had not their experience at Hirado proved so deterrent, they might have established a factory at Kagoshima.

34 *A History of Japan* (Murdoch and Yamagata).

35 H.M.S. “Phaeton,” which entered that port in 1808.

works. See paragraph 1.E below.

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