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## THE ENCYCLOPÆDIA BRITANNICA

# A DICTIONARY OF ARTS, SCIENCES, LITERATURE AND GENERAL INFORMATION

**ELEVENTH EDITION** 

## **VOLUME X SLICE II**

## Fairbanks, Erastus to Fens

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FARNHAM	FELTRE
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FARO (town of Portugal)	FEMALE
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FARQUHAR, GEORGE	FENCING
FARR, WILLIAM	FENDER
FARRAGUT, DAVID GLASGOW	FÉNELON, BERTRAND DE SALIGNAC
FARRANT, RICHARD	FÉNELON, FRANÇOIS DE SALIGNAC DE LA MOTHE
FARRAR, FREDERIC WILLIAM	FENESTELLA
FARREN, ELIZABETH	FENESTRATION
FARREN, WILLIAM	FENIANS
FARRER, THOMAS HENRY FARRER	FENNEL
FARRIER, and FARRIERY	FENNER, DUDLEY
FARS	FENNY STRATFORD
FARTHING	FENRIR
FARTHINGALE	FENS
FASCES	

**FAIRBANKS, ERASTUS** (1792-1864), American manufacturer, was born in Brimfield, Massachusetts, on the 28th of October 1792. He studied law but abandoned it for mercantile pursuits, finally settling in St Johnsbury, Vermont, where in 1824 he formed a partnership with his brother Thaddeus for the manufacture of stoves and ploughs. Subsequently the scales invented by Thaddeus were manufactured extensively. Erastus was a member of the state legislature in 1836-1838, and governor of Vermont in 1852-1853 and 1860-1861, during his second term rendering valuable aid in the equipment and despatch of troops in the early days of the Civil War. His son HORACE (1820-1888) became president of E. & T. Fairbanks & Co. in 1874, and was governor of Vermont from 1876 to 1878.

His brother, THADDEUS FAIRBANKS (1796-1886), inventor, was born at Brimfield, Massachusetts, on the 17th of January 1796. He early manifested a genius for mechanics and designed the models from which he and his brother manufactured stoves and ploughs at St Johnsbury. In 1826 he patented a cast-iron plough which was extensively used. The growing of hemp was an important industry in the vicinity of St Johnsbury, and in 1831 Fairbanks invented a hemp-dressing machine. By the old contrivances then in use, the weighing of loads of hemp-straw was tedious and difficult, and in 1831 Fairbanks invented his famous compound-lever platform scale, which marked a great advance in the construction of machines for weighing bulky and heavy objects. He subsequently obtained more than fifty patents for improvements or innovations in scales and in machinery used in their manufacture, the last being granted on his ninetieth birthday. His firm, eventually known as E. & T. Fairbanks & Co., went into the manufacture of scales of all sizes, in which these inventions were utilized. He, with his brothers, Erastus and Joseph P., founded the St Johnsbury Academy. He died at St Johnsbury on the 12th of April 1886.

The latter's son HENRY, born in 1830 at St Johnsbury, Vermont, graduated at Dartmouth College in 1853 and at Andover Theological Seminary in 1857, and was professor of natural philosophy at Dartmouth from 1859 to 1865 and of natural history from 1865 to 1868. In the following year he patented a grain-scale and thenceforth devoted himself to the scale manufacturing business of his family. Altogether he obtained more than thirty patents for mechanical devices.

the second son of Sir Thomas Fairfax of Denton (father of the 1st Baron Fairfax of Cameron). His legitimacy has been called in question, and the date of his birth has not been ascertained. He is said to have been only about twenty years of age when he published his translation of the Gerusalemme Liberala, which would place his birth about the year 1580. He preferred a life of study and retirement to the military service in which his brothers were distinguished. He married a sister of Walter Laycock, chief alnager of the northern counties, and lived on a small estate at Fewston, Yorkshire. There his time was spent in his literary pursuits, and in the education of his children and those of his elder brother, Sir Thomas Fairfax, afterwards baron of Cameron. His translation appeared in 1600, -Godfrey of Bulloigne, or the Recoverie of Jerusalem, done into English heroicall Verse by Edw. Fairefax, Gent., and was dedicated to the queen. It was enthusiastically received. In the same year in which it was published extracts from it were printed in *England's Parnassus*. Edward Phillips, the nephew of Milton, in his Theatrum Poetarum, warmly eulogized the translation. Edmund Waller said he was indebted to it for the harmony of his numbers. It is said that it was King James's favourite English poem, and that Charles I. entertained himself in prison with its pages. Fairfax employed the same number of lines and stanzas as his original, but within the limits of each stanza he allowed himself the greatest liberty. Other translators may give a more literal version, but Fairfax alone seizes upon the poetical and chivalrous character of the poem. He presented, says Mr Courthope, "an idea of the chivalrous past of Europe, as seen through the medium of Catholic orthodoxy and classical humanism." The sweetness and melody of many passages are scarcely excelled even by Spenser. Fairfax made no other appeal to the public. He wrote, however, a series of ecloques, twelve in number, the fourth of which was published, by permission of the family, in Mrs Cooper's Muses' Library (1737). Another of the eclogues and a Discourse on Witchcraft, as it was acted in the Family of Mr Edward Fairfax of Fuystone in the county of York in 1621, edited from the original copy by Lord Houghton, appeared in the Miscellanies of the Philobiblon Society (1858-1859). Fairfax was a firm believer in witchcraft. He fancied that two of his children had been bewitched, and he had the poor wretches whom he accused brought to trial, but without obtaining a conviction. Fairfax died at Fewston and was buried there on the 27th of January 1635.

FAIRFAX OF CAMERON, FERDINANDO FAIRFAX, 2ND BARON (1584-1648), English parliamentary general, was a son of Thomas Fairfax of Denton (1560-1640), who in 1627 was created Baron Fairfax of Cameron in the peerage of Scotland. Born on the 29th of March 1584, he obtained his military education in the Netherlands, and was member of parliament for Boroughbridge during the six parliaments which met between 1614 and 1629 and also during the Short Parliament of 1640. In May 1640 he succeeded his father as Baron Fairfax, but being a Scottish peer he sat in the English House of Commons as one of the representatives of Yorkshire during the Long Parliament from 1640 until his death; he took the side of the parliament, but held moderate views and desired to maintain the peace. In the first Scottish war Fairfax had commanded a regiment in the king's army; then on the outbreak of the Civil War in 1642 he was made commander of the parliamentary forces in Yorkshire, with Newcastle as his opponent. Hostilities began after the repudiation of a treaty of neutrality entered into by Fairfax with the Royalists. At first he met with no success. He was driven from York, where he was besieging the Royalists, to Selby; then in 1643 to Leeds; and after beating off an attack at that place he was totally defeated on the 30th of June at Adwalton Moor. He escaped to Hull, which he successfully defended against Newcastle from the 2nd of September till the 11th of October, and by means of a brilliant sally caused the siege to be raised. Fairfax was victorious at Selby on the 11th of April 1644, and joining the Scots besieged York, after which he was present at Marston Moor, where he commanded the infantry and was routed. He was subsequently, in July, made governor of York and charged with the further reduction of the county. In December he took the town of Pontefract, but failed to secure the castle. He resigned his command on the passing of the Self-denying Ordinance, but remained a member of the committee for the government of Yorkshire, and was appointed, on the 24th of July 1645, steward of the manor of Pontefract. He died from an accident on the 14th of March 1648 and was buried at Bolton Percy. He was twice married, and by his first wife, Mary, daughter of Edmund Sheffield, 3rd Lord Sheffield (afterwards 1st earl of Mulgrave), he had six daughters and two sons, Thomas, who succeeded him as 3rd baron, and Charles, a colonel of horse, who was killed at Marston Moor. During his command in Yorkshire, Fairfax engaged in a paper war with Newcastle, and wrote The Answer of Ferdinando, Lord Fairfax, to a Declaration of William, earl of Newcastle (1642; printed in

Rushworth, pt. iii. vol. ii. p. 139); he also published *A Letter from ... Lord Fairfax to ... Robert, Earl of Essex* (1643), describing the victorious sally at Hull.

**FAIRFAX OF CAMERON, THOMAS FAIRFAX,** 3RD BARON (1612-1671), parliamentary general and commander-in-chief during the English Civil War, the eldest son of the 2nd lord, was born at Denton, near Otley, Yorkshire, on the 17th of January 1612. He studied at St John's College, Cambridge (1626-1629), and then proceeded to Holland to serve as a volunteer with the English army in the Low Countries under Sir Horace (Lord) Vere. This connexion led to one still closer; in the summer of 1637 Fairfax married Anne Vere, the daughter of the general.

The Fairfaxes, father and son, though serving at first under Charles I. (Thomas commanded a troop of horse, and was knighted by the king in 1640), were opposed to the arbitrary prerogative of the crown, and Sir Thomas declared that "his judgment was for the parliament as the king and kingdom's great and safest council." When Charles endeavoured to raise a guard for his own person at York, intending it, as the event afterwards proved, to form the nucleus of an army, Fairfax was employed to present a petition to his sovereign, entreating him to hearken to the voice of his parliament, and to discontinue the raising of troops. This was at a great meeting of the freeholders and farmers of Yorkshire convened by the king on Heworth Moor near York. Charles evaded receiving the petition, pressing his horse forward, but Fairfax followed him and placed the petition on the pommel of the king's saddle. The incident is typical of the times and of the actors in the scene. War broke out, Lord Fairfax was appointed general of the Parliamentary forces in the north, and his son, Sir Thomas, was made lieutenant-general of the horse under him. Both father and son distinguished themselves in the campaigns in Yorkshire (see GREAT REBELLION). Sometimes severely defeated, more often successful, and always energetic, prudent and resourceful, they contrived to keep up the struggle until the crisis of 1644, when York was held by the marquess of Newcastle against the combined forces of the English Parliamentarians and the Scots, and Prince Rupert hastened with all available forces to its relief. A gathering of eager national forces within a few square miles of ground naturally led to a battle, and Marston Moor (q.v.) was decisive of the struggle in the north. The younger Fairfax bore himself with the greatest gallantry in the battle, and though severely wounded managed to join Cromwell and the victorious cavalry on the other wing. One of his brothers, Colonel Charles Fairfax, was killed in the action. But the marquess of Newcastle fled the kingdom, and the Royalists abandoned all hope of retrieving their affairs. The city of York was taken, and nearly the whole north submitted to the parliament.

In the south and west of England, however, the Royalist cause was still active. The war had lasted two years, and the nation began to complain of the contributions that were exacted, and the excesses that were committed by the military. Dissatisfaction was expressed with the military commanders, and, as a preliminary step to reform, the Self-denying Ordinance was passed. This involved the removal of the earl of Essex from the supreme command, and the reconstruction of the armed forces of the parliament. Sir Thomas Fairfax was selected as the new lord general with Cromwell as his lieutenant-general and cavalry commander, and after a short preliminary campaign the "New Model" justified its existence, and "the rebels' new brutish general," as the king called him, his capacity as commander-in-chief in the decisive victory of Naseby (q.v.). The king fled to Wales. Fairfax besieged Leicester, and was successful at Taunton, Bridgwater and Bristol. The whole west was soon reduced.

Fairfax arrived in London on the 12th of November 1645. In his progress towards the capital he was accompanied by applauding crowds. Complimentary speeches and thanks were presented to him by both houses of parliament, along with a jewel of great value set with diamonds, and a sum of money. The king had returned from Wales and established himself at Oxford, where there was a strong garrison, but, ever vacillating, he withdrew secretly, and proceeded to Newark to throw himself into the arms of the Scots. Oxford capitulated, and by the end of September 1646 Charles had neither army nor garrison in England. In January 1647 he was delivered up by the Scots to the commissioners of parliament. Fairfax met the king beyond Nottingham, and accompanied him during the journey to Holmby, treating him with the utmost consideration in every way. "The general," said Charles, "is a man of honour, and keeps his word which he had pledged to me." With the collapse of the Royalist cause came a confused period of negotiations between the parliament

and the king, between the king and the Scots, and between the Presbyterians and the Independents in and out of parliament. In these negotiations the New Model Army soon began to take a most active part. The lord general was placed in the unpleasant position of intermediary between his own officers and parliament. To the grievances, usual in armies of that time, concerning arrears of pay and indemnity for acts committed on duty, there was quickly added the political propaganda of the Independents, and in July the person of the king was seized by Joyce, a subaltern of cavalry—an act which sufficiently demonstrated the hopelessness of controlling the army by its articles of war. It had, in fact, become the most formidable political party in the realm, and pressed straight on to the overthrow of parliament and the punishment of Charles. Fairfax was more at home in the field than at the head of a political committee, and, finding events too strong for him, he sought to resign his commission as commander-in-chief. He was, however, persuaded to retain it. He thus remained the titular chief of the army party, and with the greater part of its objects he was in complete, sometimes most active, sympathy. Shortly before the outbreak of the second Civil War, Fairfax succeeded his father in the barony and in the office of governor of Hull; In the field against the English Royalists in 1648 he displayed his former energy and skill, and his operations culminated in the successful siege of Colchester, after the surrender of which place he approved the execution of the Royalist leaders Sir Charles Lucas and Sir George Lisle, holding that these officers had broken their parole. At the same time Cromwell's great victory of Preston crushed the Scots, and the Independents became practically all-powerful.

Milton, in a sonnet written during the siege of Colchester, called upon the lord general to settle the kingdom, but the crisis was now at hand. Fairfax was in agreement with Cromwell and the army leaders in demanding the punishment of Charles, and he was still the effective head of the army. He approved, if he did not take an active part in, Pride's Purge (December 6th, 1648), but on the last and gravest of the questions at issue he set himself in deliberate and open opposition to the policy of the officers. He was placed at the head of the judges who were to try the king, and attended the preliminary sitting of the court. Then, convinced at last that the king's death was intended, he refused to act. In calling over the court, when the crier pronounced the name of Fairfax, a lady in the gallery called out "that the Lord Fairfax was not there in person, that he would never sit among them, and that they did him wrong to name him as a commissioner." This was Lady Fairfax, who could not forbear, as Whitelocke says, to exclaim aloud against the proceedings of the High Court of Justice. His last service as commander-in-chief was the suppression of the Leveller mutiny at Burford in May 1649. He had given his adhesion to the new order of things, and had been reappointed lord general. But he merely administered the affairs of the army, and when in 1650 the Scots had declared for Charles II., and the council of state resolved to send an army to Scotland in order to prevent an invasion of England, Fairfax resigned his commission. Cromwell was appointed his successor, "captain-general and commander-in-chief of all the forces raised or to be raised by authority of parliament within the commonwealth of England." Fairfax received a pension of £5000 a year, and lived in retirement at his Yorkshire home of Nunappleton till after the death of the Protector. The troubles of the later Commonwealth recalled Lord Fairfax to political activity, and for the last time his appearance in arms helped to shape the future of the country, when Monk invited him to assist in the operations about to be undertaken against Lambert's army. In December 1659 he appeared at the head of a body of Yorkshire gentlemen, and such was the influence of Fairfax's name and reputation that 1200 horse quitted Lambert's colours and joined him. This was speedily followed by the breaking up of all Lambert's forces, and that day secured the restoration of the monarchy. A "free" parliament was called; Fairfax was elected member for Yorkshire, and was put at the head of the commission appointed by the House of Commons to wait upon Charles II. at the Hague and urge his speedy return. Of course the "merry monarch, scandalous and poor," was glad to obey the summons, and Fairfax provided the horse on which Charles rode at his coronation. The remaining eleven years of the life of Lord Fairfax were spent in retirement at his seat in Yorkshire. He must, like Milton, have been sorely grieved and shocked by the scenes that followed—the brutal indignities offered to the remains of his companions in arms, Cromwell and Ireton, the sacrifice of Sir Harry Vane, the neglect or desecration of all that was great, noble or graceful in England, and the flood of immorality which, flowing from Whitehall, sapped the foundations of the national strength and honour. Lord Fairfax died at Nunappleton on the 12th of November 1671, and was buried at Bilborough, near York. As a soldier he was exact and methodical in planning, in the heat of battle "so highly transported that scarce any one durst speak a word to him" (Whitelocke), chivalrous and punctilious in his dealings with his own men and the enemy. Honour and conscientiousness were equally the characteristics of his private and public character. But his modesty and distrust of his powers made him less effectual as a statesman than as a soldier, and above all he is placed at a disadvantage by being both in war and peace overshadowed by his associate Cromwell.

Lord Fairfax had a taste for literature. He translated some of the Psalms, and wrote poems on solitude, the Christian warfare, the shortness of life, &c. During the last year or two of his life he wrote two *Memorials* which have been published—one on the northern actions in which he was engaged in 1642-1644, and the other on some events in his tenure of the chief command. At York and at Oxford he endeavoured to save the libraries from pillage, and he enriched the Bodleian with some valuable MSS. His only daughter, Mary Fairfax, was married to George Villiers, the profligate duke of Buckingham of Charles II.'s court.

His correspondence, edited by G.W. Johnson, was published in 1848-1849 in four volumes (see note thereon in *Dict. Nat. Biogr.*, s.v.), and a life of him by Clements R. Markham in 1870. See also S.R. Gardiner, *History of the Great Civil War* (1893).

His descendant Thomas, 6th baron (1692-1782), inherited from his mother, the heiress of Thomas, 2nd Baron Culpepper, large estates in Virginia, U.S.A., and having sold Denton Hall and his Yorkshire estates he retired there about 1746, dying a bachelor. He was a friend of George Washington. Thomas found his cousin William Fairfax settled in Virginia, and made him his agent, and Bryan (1737-1802), the son of William Fairfax, eventually inherited the title, becoming 8th baron in 1793. His claim was admitted by the House of Lords in 1800. But it was practically dropped by the American family, until, shortly before the coronation of Edward VII., the successor in title was discovered in Albert Kirby Fairfax (b. 1870), a descendant of the 8th baron, who was an American citizen. In November 1908 Albert's claim to the title as 12th baron was allowed by the House of Lords.

FAIRFIELD, a township in Fairfield county, Connecticut, U.S.A., near Long Island Sound, adjoining Bridgeport on the E. and Westport on the W. Pop. (1890) 3868; (1900) 4489 (1041 being foreign-born); (1910) 6134. It is served by the New York, New Haven & Hartford railway. The principal villages of the township are Fairfield, Southport, Greenfield Hill and Stratfield. The beautiful scenery and fine sea air attract to the township a considerable number of summer visitors. The township has the well-equipped Pequot and Fairfield memorial libraries (the former in the village of Southport, the latter in the village of Fairfield), the Fairfield fresh air home (which cares for between one and two hundred poor children of New York during each summer season), and the Gould home for self-supporting women. The Fairfield Historical Society has a museum of antiquities and a collection of genealogical and historical works. Among Fairfield's manufactures are chemicals, wire and rubber goods. Truck-gardening is an important industry of the township. In the Pequot Swamp within the present Fairfield a force of Pequot Indians was badly defeated in 1637 by some whites, among whom was Roger Ludlow, who, attracted by the country, founded the settlement in 1639 and gave it its present name in 1645. Within its original limits were included what are now the townships of Redding (separated, 1767), Weston (1787) and Easton (formed from part of Weston in 1845), and parts of the present Westport and Bridgeport. During the colonial period Fairfield was a place of considerable importance, but subsequently it was greatly outstripped by Bridgeport, to which, in 1870, a portion of it was annexed. On the 8th of July 1779 Fairfield was burned by the British and Hessians under Governor William Tryon. Among the prominent men who have lived in Fairfield are Roger Sherman, the first President Dwight of Yale (who described Fairfield in his Travels and in his poem Greenfield Hill), Chancellor James Kent, and Joseph Earle Sheffield.

See Frank S. Child, *An Old New England Town, Sketches of Life, Scenery and Character* (New York, 1895); and Mrs E.H. Schenck, *History of Fairfield* (2 vols., New York, 1889-1905).

**FAIRFIELD**, a city and the county-seat of Jefferson county, Iowa, U.S.A., about 51 m. W. by N. of Burlington. Pop. (1890) 3391; (1900) 4689, of whom 206 were foreign-born and 54 were negroes; (1905) 5009; (1910) 4970. Area, about 2.25 sq. m. Fairfield is served by the Chicago, Burlington & Quincy, and the Chicago, Rock Island & Pacific railways. The city is in a blue grass country, in which much live stock is bred; and it is an important market for draft horses. It is the seat of Parsons College (Presbyterian, coeducational, 1875), endowed by

Lewis Baldwin Parsons, Sr. (1798-1855), a merchant of Buffalo, N.Y. The college offers classical, philosophical and scientific courses, and has a school of music and an academic department; in 1907-1908 it had 19 instructors and 257 students, of whom 93 were in the college and 97 were in the school of music. Fairfield has a Carnegie library (1892), and a museum with a collection of laces. Immediately E. of the city is an attractive Chautauqua Park, of 30 acres, with an auditorium capable of seating about 4000 persons; and there is an annual Chautauqua assembly. The principal manufactures of Fairfield are farm waggons, farming implements, drain-tile, malleable iron, cotton gloves and mittens and cotton garments. The municipality owns its waterworks and an electric-lighting plant. Fairfield was settled in 1839; was incorporated as a town in 1847; and was first chartered as a city in the same year.

See Charles H. Fletcher, Jefferson County, Iowa: Centennial History (Fairfield, 1876).

FAIRHAVEN, a township in Bristol county, Massachusetts, U.S.A., on New Bedford Harbor, opposite New Bedford. Pop. (1890) 2919; (1900) 3567 (599 being foreign-born); (1905, state census) 4235; (1910) 5122. Area, about 13 sq. m. Fairhaven is served by the New York, New Haven & Hartford railway and by electric railway to Mattapoisett and Marion, and is connected with New Bedford by two bridges, by electric railway, and by the New York, New Haven & Hartford ferry line. The principal village is Fairhaven; others are Oxford, Naskatucket and Sconticut Neck. As a summer resort Fairhaven is widely known. Among the principal buildings are the following, presented to the township by Henry H. Rogers (1840-1909), a native of Fairhaven and a large stockholder and long vice-president of the Standard Oil Co.; the town hall, a memorial of Mrs Rogers, the Rogers public schools; the Millicent public library (17,500 vols. in 1908), a memorial to his daughter; and a fine granite memorial church (Unitarian) with parish house, a memorial to his mother; and there is also a public park, of 13 acres, the gift of Mr Rogers. From 1830 to 1857 the inhabitants of Fairhaven were chiefly engaged in whaling, and the fishing interests are still important. Among manufactures are tacks, nails, iron goods, loom-cranks, glass, yachts and boats, and shoes.

Fairhaven, originally a part of New Bedford, was incorporated as a separate township in 1812. On the 5th of September 1778 a fleet and armed force under Earl Grey, sent to punish New Bedford and what is now Fairhaven for their activity in privateering, burned the shipping and destroyed much of New Bedford. The troops then marched to the head of the Acushnet river, and down the east bank to Sconticut Neck, where they camped till the 7th of September, when they re-embarked, having meanwhile dismantled a small fort, built during the early days of the war, on the east side of the river at the entrance to the harbour. On the evening of the 8th of September a landing force from the fleet, which had begun to set fire to Fairhaven, was driven off by a body of about 150 minute-men commanded by Major Israel Fearing; and on the following day the fleet departed. The fort was at once rebuilt and was named Fort Fearing, but as early as 1784 it had become known as Fort Phoenix; it was one of the strongest defences on the New England coast during the war of 1812. The township of Acushnet was formed from the northern part of Fairhaven in 1860.

See James L. Gillingham and others, *A Brief History of the Town of Fairhaven, Massachusetts* (Fairhaven, 1903).

**FAIRHOLT, FREDERICK WILLIAM** (1814-1866), English antiquary and wood engraver, was born in London in 1814. His father, who was of a German family (the name was originally Fahrholz), was a tobacco manufacturer, and for some years Fairholt himself was employed in the business. For a time he was a drawing-master, afterwards a scene-painter, and in 1835 he became assistant to S. Sly, the wood engraver. Some pen and ink copies made by him of figures from Hogarth's plates led to his being employed by Charles Knight on several of his illustrated publications. His first published literary work was a contribution to Hone's *Year-Book* in 1831. His life was one of almost uninterrupted quiet labour, carried on

until within a few days of death. Several works on civic pageantry and some collections of ancient unpublished songs and dialogues were edited by him for the Percy Society in 1842. In 1844 he was elected fellow of the Society of Antiquaries. He published an edition of the dramatic works of Lyly in 1856. His principal independent works are *Tobacco, its History, and Association* (1859); *Gog and Magog* (1860); *Up the Nile and Home Again* (1862); many articles and serials contributed to the *Art Journal*, some of which were afterwards separately published, as *Costume in England* (1846); *Dictionary of Terms in Art* (1854). These works are illustrated by numerous cuts, drawn on the wood by his own hand. His pencil was also employed in illustrating Evans's *Coins of the Ancient Britons*, Madden's *Jewish Coinage*, Halliwell's folio *Shakespeare* and his *Sir John Maundeville*, Roach Smith's *Richborough*, the *Miscellanea Graphica* of Lord Londesborough, and many other works. He died on the 3rd of April 1866. His books relating to Shakespeare were bequeathed to the library at Stratford-on-Avon; those on civic pageantry (between 200 and 300 volumes) to the Society of Antiquaries; his old prints and works on costume to the British Museum; his general library he desired to be sold and the proceeds devoted to the Literary Fund.

**FAIRMONT,** a city and the county-seat of Marion county, West Virginia, U.S.A., on both sides of the Monongahela river, about 75 m. S.E. of Wheeling. Pop. (1890) 1023; (1900) 5655, of whom 283 were negroes and 182 foreign-born; (1910) 9711. It is served by the Baltimore & Ohio railway. Among its manufactures are glass, machinery, flour and furniture, and it is an important shipping point for coal mined in the vicinity. The city is the seat of one of the West Virginia state normal schools. Fairmont was laid out as Middletown in 1819, became the county-seat of the newly established Marion county in 1842, received its present name about 1844, and was chartered as a city in 1899.

FAIR OAKS, a station on a branch of the Southern railway, 6 m. E. of Richmond, Virginia, U.S.A. It is noted as the site of one of the battles of the Civil War, fought on the 31st of May and the 1st of June 1862, between the Union (Army of the Potomac) under General G.B. McClellan and the Confederate forces (Army of Northern Virginia) commanded by General J.E. Johnston. The attack of the Confederates was made at a moment when the river Chickahominy divided the Federal army into two unequal parts, and was, moreover, swollen to such a degree as to endanger the bridges. General Johnston stationed part of his troops along the river to prevent the Federals sending aid to the smaller force south of it, upon which the Confederate attack, commanded by General Longstreet, was directed. Many accidents, due to the inexperience of the staff officers and to the difficulty of the ground, hindered the development of Longstreet's attack, but the Federals were gradually driven back with a loss of ten guns, though at the last moment reinforcements managed to cross the river and re-establish the line of defence. At the close of the day Johnston was severely wounded, and General G.W. Smith succeeded to the command. The battle was renewed on the 1st of June but not fought out. At the close of the action General R.E. Lee took over the command of the Confederates, which he held till the final surrender in April 1865. So far as the victory lay with either side, it was with the Union army, for the Confederates failed to achieve their purpose of destroying the almost isolated left wing of McClellan's army, and after the battle they withdrew into the lines of Richmond. The Union losses were 5031 in killed, wounded and missing; those of the Confederates were 6134. The battle is sometimes known as the battle of Seven Pines.

**FAIRŪZĀBĀDĪ** Ābū-ţ-Ṭāhir ibn Ibrahīm Majd ud-Dīn ul-Fairūzābādī] (1329-1414), Arabian lexicographer, was born at Kārazīn near Shiraz. His student days were spent in Shiraz, Wāsiţ, Bagdad and Damascus. He taught for ten years in Jerusalem, and afterwards travelled

in western Asia and Egypt. In 1368 he settled in Mecca, where he remained for fifteen years. He next visited India and spent some time in Delhi, then remained in Mecca another ten years. The following three years were spent in Bagdad, in Shiraz (where he was received by Timur), and in Ta'iz. In 1395 he was appointed chief cadi (qadi) of Yemen, married a daughter of the sultan, and died at Zabīd in 1414. During this last period of his life he converted his house at Mecca into a school of Mālikite law and established three teachers in it. He wrote a huge lexicographical work of 60 or 100 volumes uniting the dictionaries of Ibn Sīda, a Spanish philologist (d. 1066), and of Sajānī (d. 1252). A digest of or an extract from this last work is his famous dictionary *al-Qāmūs* ("the Ocean"), which has been published in Egypt, Constantinople and India, has been translated into Turkish and Persian, and has itself been the basis of several later dictionaries.

(G. W. T.)

**FAIRY** (Fr. *fée, faerie*; Prov. *fada*; Sp. *hada*; Ital. *fata*; med. Lat. *fatare*, to enchant, from Lat. *fatum*, fate, destiny), the common term for a supposed race of supernatural beings who magically intermeddle in human affairs. Of all the minor creatures of mythology the fairies are the most beautiful, the most numerous, the most memorable in literature. Like all organic growths, whether of nature or of the fancy, they are not the immediate product of one country or of one time; they have a pedigree, and the question of their ancestry and affiliation is one of wide bearing. But mixture and connexion of races have in this as in many other cases so changed the original folk-product that it is difficult to disengage and separate the different strains that have gone to the making or moulding of the result as we have it.

It is not in literature, however ancient, that we must look for the early forms of the fairy belief. Many of Homer's heroes have fairy lemans, called nymphs, fairies taken up into a higher region of poetry and religion; and the fairy leman is notable in the story of Athamas and his cloud bride Nephelē, but this character is as familiar to the unpoetical Eskimo, and to the Red Indians, with their bird-bride and beaver-bride (see A. Lang's *Custom and Myth*, "The Story of Cupid and Psyche"). The Gandharvas of Sanskrit poetry are also fairies.

One of the most interesting facts about fairies is the wide distribution and long persistence of the belief in them. They are the chief factor in surviving Irish superstition. Here they dwell in the "raths," old earth-forts, or earthen bases of later palisaded dwellings of the Norman period, and in the subterranean houses, common also in Scotland. They are an organized people, often called "the army," and their life corresponds to human life in all particulars. They carry off children, leaving changeling substitutes, transport men and women into fairyland, and are generally the causes of all mysterious phenomena. Whirls of dust are caused by the fairy marching army, as by the being called Kutchi in the Dieri tribe of Australia. In 1907, in northern Ireland, a farmer's house was troubled with flying stones (see PolTERGEIST). The neighbours said that the fairies caused the phenomenon, as the man had swept his chimney with a bough of holly, and the holly is "a gentle tree," dear to the fairies. The fairy changeling belief also exists in some districts of Argyll, and a fairy boy dwelt long in a small farm-house in Glencoe, now unoccupied.

In Ireland and the west Highlands neolithic arrow-heads and flint chips are still fairy weapons. They are dipped in water, which is given to ailing cattle and human beings as a sovereign remedy for diseases. The writer knows of "a little lassie in green" who is a fairy and, according to the percipients, haunts the banks of the Mukomar pool on the Lochy. In Glencoe is a fairy hill where the fairy music, vocal and instrumental, is heard in still weather. In the Highlands, however, there is much more interest in second sight than in fairies, while in Ireland the reverse is the case. The best book on Celtic fairy lore is still that of the minister of Aberfoyle, the Rev. Mr Kirk (ob. 1692). His work on The Secret Commonwealth of Elves, Fauns and Fairies, left in MS. and incomplete (the remainder is in the Laing MSS., Edinburgh University library), was published (a hundred copies) in 1815 by Sir Walter Scott, and in the Bibliothèque de Carabas (Lang) there is a French translation. Mr Kirk is said (though his tomb exists) to have been carried away by fairies. He appeared to a friend and said that he would come again, when the friend must throw a dirk over his shoulder and he would return to this world. The friend, however, lost his nerve and did not throw the dirk. In the same way a woman reappeared to her husband in Glencoe in the last generation, but he was wooing another lass and did not make any effort to recover his wife. His character was therefore lost in the glen.

It is clear that in many respects fairyland corresponds to the pre-Christian abode of the dead. Like Persephone when carried to Hades, or Wainamoïnen in the Hades of the Finns (Manala), a living human being must not eat in fairyland; if he does, he dwells there for ever. Tamlane in the ballad, however, was "fat and fair of flesh," yet was rescued by Janet: probably he had not abstained from fairy food. He was to be given as the *kane* to Hell, which shows a distinction between the beliefs in hell and in the place of fairies.

It is a not uncommon theory that the fairies survive in legend from prehistoric memories of a pigmy people dwelling in the subterranean earth-houses, but the contents of these do not indicate an age prior to the close of the Roman occupation of Britain; nor are pigmy bones common in neolithic sepulchres. The "people of peace" (*Daoine Shie*) of Ireland and Scotland are usually of ordinary stature, indeed not to be recognized as varying from mankind except by their proceedings (see J. Curtin, *Irish Folk-tales*).

The belief in a species of lady fairies, deathly to their human lovers, was found by R.L. Stevenson to be as common in Samoa (see *Island Nights' Entertainments*) as in Strathfinlas or on the banks of Loch Awe. In New Caledonia a native friend of J.J. Atkinson (author of *Primal Law*) told him that he had met and caressed the girl of his heart in the forest, that she had vanished and must have been a fairy. He therefore would die in three days, which (Mr Atkinson informs the writer) he punctually did. The Greek sirens of Homer are clearly a form of these deadly fairies, as the Nereids and Oreads and Naiads are fairies of wells, mountains and the sea. The fairy women who come to the births of children and foretell their fortunes (*Fata, Moerae*, ancient Egyptian *Hathors, Fées, Dominae Fatales*), with their spindles, are refractions of the human "spae-women" (in the Scots term) who attend at birth and derive omens of the child's future from various signs. The custom is common among several savage races, and these women, represented in the spiritual world by *Fata*, bequeath to us the French *fée*, in the sense of fairy. Perrault also uses *fée* for anything that has magical quality; "the key was *fée*," had *mana*, or *wakan*, savage words for the supposed "power," or *ether*, which works magic or is the vehicle of magical influences.

Though the fairy belief is universally human, the nearest analogy to the shape which it takes in Scotland and Ireland-the "pixies" of south-western England-is to be found in Jān or *Jinnis* of the Arabs, Moors and people of Palestine. In stories which have passed through a literary medium, like The Arabian Nights, the geni or Jān do not so much resemble our fairies as they do in the popular superstitions of the East, orally collected. The Jān are now a subterranean commonwealth, now they reside in ruinous places, like the fairies in the Irish raths. Like the fairies they go about in whirls of dust, or the dust-whirls themselves are Jān. They carry off men and women "to their own herd," in the phrase of Mr Kirk, and are kind to mortals who are kind to them. They chiefly differ from our fairies in their greater tendency to wear animal forms; though, like the fairies, when they choose to appear in human shape they are not to be distinguished from men and women of mortal mould. Like the fairies everywhere they have amours with mortals, such as that of the Queen of Faery with Thomas of Ercildoune. The herb rue is potent against them, as in British folk-lore, and a man long captive among the Jān escaped from them by observing their avoidance of rue, and by plucking two handfuls thereof. They, like the British brownies (a kind of domesticated fairy), are the causes of strange disappearances of things. To preserve houses from their influences, rue, that "herb of grace," is kept in the apartments, and the name of Allah is constantly invoked. If this is omitted, things are stolen by the Jān.

They often bear animal names, and it is dangerous to call a cat or dog without pointing at the animal, for a *Jinni* of the same name may be present and may take advantage of the invocation. A man, in fun, called to a goat to escort his wife on a walk: he did not point at the goat, and the wife disappeared. A *Jinni* had carried her off, and her husband had to seek her at the court of the *Jān*. Euphemistically they are addressed as *mubārakin*, "blessed ones," as we say "the good folk" or "the people of peace." As our fairies give gold which changes into withered leaves, the *Jān* give onion peels which turn into gold. Like our fairies the *Jān* can apply an ointment, kohl, to human eyes, after which the person so favoured can see *Jān*, or fairies, which are invisible to other mortals, and can see treasure wherever it may be concealed (see *Folk-lore of the Holy Land*, by J.E. Hanauer, 1907).

It is plain that fairies and *Jān* are practically identical, a curious proof of the uniformity of the working of imagination in peoples widely separated in race and religion. Fairies naturally won their way into the poetry of the middle ages. They take lovers from among men, and are often described as of delicate, unearthly, ravishing beauty. The enjoyment of their charms is, however, generally qualified by some restriction or compact, the breaking of which is the cause of calamity to the lover and all his race, as in the notable tale of Melusine. This fay by enchantment built the castle of Lusignan for her husband. It was her nature to take every

week the form of a serpent from the waist below. The hebdomadal transformation being once, contrary to compact, witnessed by her husband, she left him with much wailing, and was said to return and give warning by her appearance and great shrieks whenever one of the race of Lusignan was about to die. At the birth of Ogier le Danois six fairies attend, five of whom give good gifts, which the sixth overrides with a restriction. Gervaise of Tilbury, writing early in the 13th century, has in his *Otia Imperialia* a chapter, *De lamiis et nocturnis larvis*, where he gives it out, as proved by individuals beyond all exception, that men have been lovers of beings of this kind whom they call *Fadas*, and who did in case of infidelity or infringement of secrecy inflict terrible punishment—the loss of goods and even of life. There seems little in the characteristics of these fairies of romance to distinguish them from human beings, except their supernatural knowledge and power. They are not often represented as diminutive in stature, and seem to be subject to such human passions as love, jealousy, envy and revenge. To this class belong the fairies of Boiardo, Ariosto and Spenser.

There is no good modern book on the fairy belief in general. Keightley's *Fairy Mythology* is full of interesting matter; Rhys's *Celtic Mythology* is especially copious about Welsh fairies, which are practically identical with those of Ireland and Scotland. The works of Mr Jeremiah Curtin and Dr Douglas Hyde are useful for Ireland; for Scotland, Kirk's *Secret Commonwealth* has already been quoted. Scott's dissertation on fairies in *The Border Minstrelsy* is rich in lore, though necessarily Scott had not the wide field of comparative study opened by more recent researches. There is a full description of French fairies of the 15th century in the evidence of Jeanne d'Arc at her trial (1431) in Quicherat's *Procès de Jeanne d'Arc*, vol. i. pp. 67, 68, 187, 209, 212, vol. ii. pp. 390, 404, 450.

(A. L.)

**FAIRY RING,** the popular name for the circular patches of a dark green colour that are to be seen occasionally on permanent grass-land, either lawn or meadow, on which the fairies were supposed to hold their midnight revels. They mark the area of growth of some fungus, starting from a centre of one or more plants. The mycelium produced from the spores dropped by the fungus or from the "spawn" in the soil, radiates outwards, and each year's successive crop of fungi rises from the new growth round the circle. The rich colour of the grass is due to the fertilizing quality of the decaying fungi, which are peculiarly rich in nitrogenous substances. The most complete and symmetrical grass rings are formed by *Marasmius orcades*, the fairy ring champignon, but the mushroom and many other species occasionally form rings, both on grass-lands and in woods. Observations were made on a ring in a pine-wood for a period of nine years, and it was calculated that it increased from centre to circumference about  $8\frac{1}{2}$  in. each year. The fungus was never found growing within the circle during the time the ring was under observation, the decaying vegetation necessary for its growth having become exhausted.

**FAITHFULL, EMILY** (1835-1895), English philanthropist, was the youngest daughter of the Rev. Ferdinand Faithfull, and was born at Headley Rectory, Surrey, in 1835. She took a great interest in the conditions of working-women, and with the object of extending their sphere of labour, which was then painfully limited, in 1860 she set up in London a printing establishment for women. The "Victoria Press," as it was called, soon obtained quite a reputation for its excellent work, and Miss Faithfull was shortly afterwards appointed printer and publisher in ordinary to Queen Victoria. In 1863 she began the publication of a monthly organ, *The Victoria Magazine*, in which for eighteen years she continuously and earnestly advocated the claims of women to remunerative employment. In 1868 she published a novel, *Change upon Change*. She also appeared as a lecturer, and with the object of furthering the interests of her sex, lectured widely and successfully both in England and the United States, which latter she visited in 1872 and 1882. In 1888 she was awarded a civil list pension of £50. She died in Manchester on the 31st of May 1895.

FAITH HEALING, a form of "mind cure," characterized by the doctrine that while pain and disease really exist, they may be neutralized and dispelled by faith in Divine power; the doctrine known as Christian Science (q.v.) holds, however, that pain is only an illusion and seeks to cure the patient by instilling into him this belief. In the Christian Church the tradition of faith healing dates from the earliest days of Christianity; upon the miracles of the New Testament follow cases of healing, first by the Apostles, then by their successors; but faith healing proper is gradually, from the 3rd century onwards, transformed into trust in relics, though faith cures still occur sporadically in later times. Catherine of Siena is said to have saved Father Matthew from dying of the plague, but in this case it is rather the healer than the healed who was strong in faith. With the Reformation faith healing proper reappears among the Moravians and Waldenses, who, like the Peculiar People of our own day, put their trust in prayer and anointing with oil. In the 16th century we find faith cures recorded of Luther and other reformers, in the next century of the Baptists, Quakers and other Puritan sects, and in the 18th century the faith healing of the Methodists in this country was paralleled by Pietism in Germany, which drew into its ranks so distinguished a man of science as Stahl (1660-1734). In the 19th century Prince Hohenlohe-Waldenburg-Schillingsfürst, canon of Grosswardein, was a famous healer on the continent; the Mormons and Irvingites were prominent among English-speaking peoples; in the last quarter of the 19th century faith healing became popular in London, and Bethshan homes were opened in 1881, and since then it has found many adherents in England.

Under faith healing in a wider sense may be included (1) the cures in the temples of Aesculapius and other deities in the ancient world; (2) the practice of touching for the king's evil, in vogue from the 11th to the 18th century; (3) the cures of Valentine Greatrakes, the "Stroker" (1629-1683); and (4) the miracles of Lourdes, and other resorts of pilgrims, among which may be mentioned St Winifred's Well in Flintshire, Treves with its Holy Coat, the grave of the Jansenist F. de Paris in the 18th century, the little town of Kevelaer from 1641 onwards, the tombs of St Louis, Francis of Assisi, Catherine of Siena and others.

An animistic theory of disease was held by Pastor J. Ch. Blumhardt, Dorothea Trudel, Boltzius and other European faith healers. Used in this sense faith healing is indistinguishable from much of savage leech-craft, which seeks to cure disease by expelling the evil spirit in some portion of the body. Although it is usually present, faith in the medicine man is not essential for the efficacy of the method. The same may be said of the lineal descendant of savage medicine—the magical leech-craft of European folk-lore; cures for toothache, warts, &c., act in spite of the disbelief of the sufferer; how far incredulity on the part of the healer would result in failure is an open question.

From the psychological point of view all these different kinds of faith healing, as indeed all kinds of mind cure, including those of Christian Science and hypnotism, depend on suggestion (q.v.). In faith healing proper not only are powerful direct suggestions used, but the religious atmosphere and the auto-suggestions of the patient co-operate, especially where the cures take place during a period of religious revival or at other times when large assemblies and strong emotions are found. The suggestibility of large crowds is markedly greater than that of individuals, and to this and the greater faith must be attributed the greater success of the fashionable places of pilgrimage.

See A.T. Myers and F.W.H. Myers in *Proc. Soc. Psychical Research*, ix. 160-209, on the miracles of Lourdes, with bibliography; A. Feilding, *Faith Healing and Christian Science*; O. Stoll, *Suggestion und Hypnotismus in der Völkerpsychologie*; article "Greatrakes" in *Dict. Nat. Biog.* 

(N. W. T.)

**FAITHORNE, WILLIAM** (1626 or 1627-1691), English painter and engraver, was born in London and was apprenticed to Robert Peake, a painter and printseller, who received the honour of knighthood from Charles I. On the outbreak of the Civil War he accompanied his master into the king's service, and being made prisoner at Basinghouse, he was confined for some time to Aldersgate, where, however, he was permitted to follow his profession of engraver, and among other portraits did a small one of the first Villiers, duke of Buckingham. At the earnest solicitation of his friends he very soon regained his liberty, but only on condition of retiring to France. There he was so fortunate as to receive instruction from Robert Nanteuil. He was permitted to return to England about 1650, and took up a shop near

Temple Bar, where, besides his work as an engraver, he carried on a large business as a printseller. In 1680 he gave up his shop and retired to a house in Blackfriars, occupying himself chiefly in painting portraits from the life in crayons, although still occasionally engaged in engraving. It is said that his life was shortened by the misfortunes, dissipation, and early death of his son William. Faithorne is especially famous as a portrait engraver, and among those on whom he exercised his art were a large number of eminent persons, including Sir Henry Spelman, Oliver Cromwell, Henry Somerset, the marquis of Worcester, John Milton, Queen Catherine, Prince Rupert, Cardinal Richelieu, Sir Thomas Fairfax, Thomas Hobbes, Richard Hooker, Robert second earl of Essex, and Charles I. All his works are remarkable for their combination of freedom and strength with softness and delicacy, and his crayon paintings unite to these the additional quality of clear and brilliant colouring. He is the author of a work on engraving (1622).

His son WILLIAM (1656-1686), mezzotint engraver, at an early age gave promise of attaining great excellence, but became idle and dissipated, and involved his father in money difficulties. Among persons of note whose portraits he engraved are Charles II., Mary princess of Orange, Queen Anne when princess of Denmark, and Charles XII. of Sweden.

The best account of the Faithornes is that contained in Walpole's *Anecdotes of Painting*. A life of Faithorne the elder is preserved in the British Museum among the papers of Mr Bayford, librarian to Lord Oxford, and an intimate friend of Faithorne.

**FAIZABAD**, a town of Afghanistan, capital of the province of Badakshan, situated on the Kokcha river. In 1821 it was destroyed by Murad Beg of Kunduz, and the inhabitants removed to Kunduz. But since Badakshan was annexed by Abdur Rahman, the town has recovered its former importance, and is now a considerable place of trade. It is the chief cantonment for eastern Afghanistan and the Pamir region, and is protected by a fort built in 1904.

**FAJARDO**, a district and town on the E. coast of Porto Rico, belonging to the department of Humacao. Pop. (1899) of the district, 16,782; and of the town, 3414. The district is highly fertile and is well watered, owing in great measure to its abundant rainfall. Sugar production is its principal industry, but some attention is also given to the growing of oranges and pineapples. The town, which was founded in 1774, is a busy commercial centre standing 1<sup>1</sup>/<sub>4</sub> m. from a large and well-sheltered bay, at the entrance to which is the cape called Cabeza de San Juan. It is the market town for a number of small islands off the E. coast, some of which produce cattle for export.

**FAKHR UD-DĪN RĀZI** (1149-1209), Arabian historian and theologian, was the son of a preacher, himself a writer, and was born at Rai (Rei, Rhagae), near Tehran, where he received his earliest training. Here and at Marāgha, whither he followed his teacher Majd ud-Dīn ul-Jilī, he studied philosophy and theology. He was a Shaf'ite in law and a follower of Ash'arī (*q.v.*) in theology, and became renowned as a defender of orthodoxy. During a journey in Khwarizm and Mawara'l-nahr he preached both in Persian and Arabic against the sects of Islam. After this tour he returned to his native city, but settled later in Herat, where he died. His dogmatic positions may be seen from his work *Kitāb ul-Muḥassal*, which is analysed by Schmölders in his *Essai sur les écoles philosophiques chez les Arabes* (Paris, 1842). Extracts from his *History of the Dynasties* were published by Jourdain in the *Fundgruben des Orients* (vol. v.), and by D.R. Heinzius (St Petersburg, 1828). His greatest work is the *Mafātiḥ ul-Ghaib* ("The Keys of Mystery"), an extensive commentary on the Koran published at Cairo (8 vols., 1890) and elsewhere; it is specially full in its exposition of Ash'arite theology and its use of early and late Mu'tazilite writings.

For an account of his life see F. Wüstenfeld's *Geschichte der arabischen Ärzte*, No. 200 (Göttingen, 1840); for a list of his works cf. C. Brockelmann's *Gesch. der arabischen Literatur*, vol. 1 (Weimar, 1898), pp. 506 ff. An account of his teaching is given by M. Schreiner in the *Zeitschrift der deutschen morgenländischen Gesellschaft* (vol. 52, pp. 505 ff.).

(G. W. T.)

FAKIR (from Arabic faqir, "poor"), a term equivalent to Dervish (q.v.) or Mahommedan religious mendicant, but which has come to be specially applied to the Hindu devotees and ascetics of India. There are two classes of these Indian Fakirs, (1) the religious orders, and (2) the nomad rogues who infest the country. The ascetic orders resemble the Franciscans of Christianity. The bulk lead really excellent lives in monasteries, which are centres of education and poor-relief; while others go out to visit the poor as Gurus or teachers. Strict celibacy is not enforced among them. These orders are of very ancient date, owing their establishment to the ancient Hindu rule, followed by the Buddhists, that each "twice-born" man should lead in the woods the life of an ascetic. The second class of Fakirs are simply disreputable beggars who wander round extorting, under the guise of religion, alms from the charitable and practising on the superstitions of the villagers. As a rule they make no real pretence of leading a religious life. They are said to number nearly a million. Many of them are known as "Jogi," and lay claim to miraculous powers which they declare have become theirs by the practice of abstinence and extreme austerities. The tortures which some of these wretches will inflict upon themselves are almost incredible. They will hold their arms over their heads until the muscles atrophy, will keep their fists clenched till the nails grow through the palms, will lie on beds of nails, cut and stab themselves, drag, week after week, enormous chains loaded with masses of iron, or hang themselves before a fire near enough to scorch. Most of them are inexpressibly filthy and verminous. Among the filthiest are the Aghoris, who preserve the ancient cannibal ritual of the followers of Siva, eat filth, and use a human skull as a drinking-vessel. Formerly the fakirs were always nude and smeared with ashes; but now they are compelled to wear some pretence of clothing. The natives do not really respect these wandering friars, but they dread their curses.

See John Campbell Oman, *The Mystics, Ascetics and Saints of India* (1903), and Indian Census Reports.

**FALAISE**, a town of north-western France, capital of an arrondissement in the department of Calvados, on the right bank of the Ante, 19 m. S. by E. of Caen by road. Pop. (1906) 6215. The principal object of interest is the castle, now partly in ruins, but formerly the seat of the dukes of Normandy and the birthplace of William the Conqueror. It is situated on a lofty crag overlooking the town, and consists of a square mass defended by towers and flanked by a small donjon and a lofty tower added by the English in the 15th century; the rest of the castle dates chiefly from the 12th century. Near the castle, in the Place de la Trinité, is an equestrian statue in bronze of William the Conqueror, to whom the town owed its prosperity. The churches of La Trinité and St Gervais combine the Gothic and Renaissance styles of architecture, and St Gervais also includes Romanesque workmanship. A street passes by way of a tunnel beneath the choir of La Trinité. Falaise has populous suburbs, one of which, Guibray, is celebrated for its annual fair for horses, cattle and wool, which has been held in August since the 11th century. The town is the seat of a subprefecture and has tribunals of first instance and commerce, a chamber of arts and manufacture, a board of trade-arbitrators and a communal college. Tanning and important manufactures of hosiery are carried on.

From 1417, when after a siege of forty-seven days it succumbed to Henry V., king of England, till 1450, when it was retaken by the French, Falaise was in the hands of the English.

FALASHAS (i.e. exiles; Ethiopic falas, a stranger), or "Jews of Abyssinia," a tribe of Hamitic stock, akin to Galla, Somali and Beja, though they profess the Jewish religion. They claim to be descended from the ten tribes banished from the Holy Land. Another tradition assigns them as ancestor Menelek, Solomon's alleged son by the queen of Sheba. There is little or no physical difference between them and the typical Abyssinians, except perhaps that their eyes are a little more oblique; and they may certainly be regarded as Hamitic. It is uncertain when they became Jews: one account suggests in Solomon's time; another, at the Babylonian captivity; a third, during the 1st century of the Christian era. That one of the earlier dates is correct seems probable from the fact that the Falashas know nothing of either the Babylonian or Jerusalem Talmud, make no use of phylacteries (tefilin), and observe neither the feast of Purim nor the dedication of the temple. They possess—not in Hebrew, of which they are altogether ignorant, but in Ethiopic (or Geez)-the canonical and apocryphal books of the Old Testament; a volume of extracts from the Pentateuch, with comments given to Moses by God on Mount Sinai; the Te-e-sa-sa Sanbat, or laws of the Sabbath; the Ardit, a book of secrets revealed to twelve saints, which is used as a charm against disease; lives of Abraham, Moses, &c.; and a translation of Josephus called Sana Aihud. A copy of the Orit or Mosaic law is kept in the holy of holies in every synagogue. Various pagan observances are mingled in their ritual: every newly-built house is considered uninhabitable till the blood of a sheep or fowl has been spilt in it; a woman guilty of a breach of chastity has to undergo purification by leaping into a flaming fire; the Sabbath has been deified, and, as the goddess Sanbat, receives adoration and sacrifice and is said to have ten thousand times ten thousand angels to wait on her commands. There is a monastic system, introduced it is said in the 4th century A.D. by Aba Zebra, a pious man who retired from the world and lived in the cave of Hoharewa, in the province of Armatshoho. The monks must prepare all their food with their own hands, and no lay person, male or female, may enter their houses. Celibacy is not practised by the priests, but they are not allowed to marry a second time, and no one is admitted into the order who has eaten bread with a Christian, or is the son or grandson of a man thus contaminated. Belief in the evil eye or shadow is universal, and spirit-raisers, soothsayers and rain-doctors are in repute. Education is in the hands of the monks and priests, and is confined to boys. Fasts, obligatory on all above seven years of age, are held on every Monday and Thursday, on every new moon, and at the passover (the 21st or 22nd of April). The annual festivals are the passover, the harvest feast, the Baala Mazalat or feast of tabernacles (during which, however, no booths are built), the day of covenant or assembly and Abraham's day. It is believed that after death the soul remains in a place of darkness till the third day, when the first sacrifice for the dead is offered; prayers are read in the synagogue for the repose of the departed, and for seven days a formal lament takes place every morning in his house. No coffins are used, and a stone vault is built over the corpse so that it may not come into direct contact with the earth.

The Falashas are an industrious people, living for the most part in villages of their own, or, if they settle in a Christian or Mahommedan town, occupying a separate quarter. They had their own kings, who, they pretend, were descended from David, from the 10th century until 1800, when the royal race became extinct, and they then became subject to the Abyssinian kingdom of Tigré. They do not mix with the Abyssinians, and never marry women of alien religions. They are even forbidden to enter the houses of Christians, and from such a pollution have to be purified before entering their own houses. Polygamy is not practised; early marriages are rare, and their morals are generally better than those of their Christian masters. Unlike most Jews, they have no liking for trade, but are skilled in agriculture, in the manufacture of pottery, ironware and cloth, and are good masons. Their numbers are variously estimated at from one hundred to one hundred and fifty thousand.

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**FALCÃO, CHRISTOVÃO DE SOUSA** (? 1512-1557), Portuguese poet, came of a noble family settled at Portalegre in the Alemtejo, which had originated with John Falcon or

Falconet, one of the Englishmen who went to Portugal in 1386 in the suite of Philippa of Lancaster. His father, João Vaz de Almada Falcão, was an upright public servant who had held the captaincy of Elmina on the West African coast, but died, as he had lived, a poor man. There is a tradition that in boyhood Christovão fell in love with a beautiful child and rich heiress, D. Maria Brandão, and in 1526 married her clandestinely, but parental opposition prevented the ratification of the marriage. Family pride, it is said, drove the father of Christovão to keep his son under strict surveillance in his own house for five years, while the lady's parents, objecting to the youth's small means, put her into the Cistercian convent of Lorvão, and there endeavoured to wean her heart from him by the accusation that he coveted her fortune more than her person. Their arguments and the promise of a good match ultimately prevailed, and in 1534 D. Maria left the convent to marry D. Luis de Silva, captain of Tangier, while the broken-hearted Christovão told his sad story in some beautiful lyrics and particularly in the eclogue Chrisfal. He had been the disciple and friend of the poets Bernardim Ribeiro and Sá de Miranda, and when his great disappointment came, Falcão laid aside poetry and entered on a diplomatic career. There is documentary evidence that he was employed at the Portuguese embassy in Rome in 1542, but he soon returned to Portugal, and we find him at court again in 1548 and 1551. The date of his death, as of his birth, is uncertain. Such is the story accepted by Dr Theophilo Braga, the historian of Portuguese literature, but Senhor Guimarães shows that the first part is doubtful, and, putting aside the testimony of a contemporary and grave writer, Diogo do Couto, he even denies the title of poet to Christovão Falcão, arguing from internal and other evidence that Chrisfal is the work of Bernardim Ribeiro; his destructive criticism is, however, stronger than his constructive work. The eclogue, with its 104 verses, is the very poem of saudade, and its simple, direct language and chaste and tender feeling, enshrined in exquisitely sounding verses, has won for its author lasting fame and a unique position in Portuguese literature. Its influence on later poets has been very considerable, and Camoens used several of the verses as proverbs.

The poetical works of Christovão Falcão were published anonymously, owing, it is supposed, to their personal nature and allusions, and, in part or in whole, they have been often reprinted. There is a modern critical edition of *Chrisfal* and a *Carta* (letter) by A. Epiphanio da Silva Dias under the title *Obras de Christovão Falcão* (Oporto, 1893), and one of the *Cantigas* and *Esparsas* by the same scholar appeared in the *Revista Lusitana*, vol. 4, pp. 142-179 (Lisbon, 1896), under the name *Fragmento de um Cancioneiro do Seculo XVI*. See *Bernardim Ribeiro e o Bucolismo*, by Dr T. Braga (Oporto, 1897), and *Bernardim Ribeiro (O Poeta Crisfal*), by Delfim Guimarães (Lisbon, 1908).

(E. Pr.)

FALCK, ANTON REINHARD (1777-1843), Dutch statesman, was born at Utrecht on the 19th of March 1777. He studied at the university of Leiden, and entered the Dutch diplomatic service, being appointed to the legation at Madrid. Under King Louis Napoleon he was secretary-general for foreign affairs, but resigned office on the annexation of the Batavian republic to France. He took a leading part in the revolt of 1813 against French domination, and had a considerable share in the organization of the new kingdom of the Netherlands. As minister of education under William I. he reorganized the universities of Ghent, Louvain and Liége and the Royal Academy of Brussels. Side by side with his activities in education he directed the departments of trade and the colonies. Falck was called in Holland the king's good genius, but William I. presently tired of his counsels and he was superseded by Van Maanen. He was ambassador in London when the disturbances of 1830 convinced him of the necessity of the separation of Belgium from Holland. He consequently resigned his post and lived in close retirement until 1839, when he became the first Dutch minister at the Belgian court. He died at Brussels on the 16th of March 1843. Besides some historical works he left a correspondence of considerable political interest, printed in Brieven van A.R. Falck, 1795-1843 (2nd ed. The Hague, 1861), and Ambtsbrieven van A.R. Falck (ibid. 1878).

**FALCÓN**, the most northern state of Venezuela, with an extensive coast line on the Caribbean Sea and Gulf of Venezuela. Pop. (1905 est.) 173,968. It lies between the Caribbean

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on the N. and the state of Lara on the S., with Zulia and the Gulf of Venezuela on the W. Its surface is much broken by irregular ranges of low mountains, and extensive areas on the coast are sandy plains and tropical swamps. The climate is hot, but, being tempered by the trade winds, is not considered unhealthy except in the swampy districts. The state is sparsely settled and has no large towns, its capital, Coro, being important chiefly because of its history, and as the entrepôt for an extensive inland district. The only port in the state is La Vela de Coro, on a small bay of the same name, 7 m. E. of the capital, with which it is connected by railway.

**FALCON** (Lat. *Falco*;<sup>1</sup> Fr. *Faucon*; Teutonic, *Falk* or *Valken*), a word now restricted to the high-couraged and long-winged birds of prey which take their quarry as it moves; but formerly it had a very different meaning, being by the naturalists of the 18th and even of the 19th century extended to a great number of birds comprised in the genus *Falco* of Linnaeus and writers of his day,<sup>2</sup> while, on the other hand, by falconers, it was, and still is, technically limited to the *female* of the birds employed by them in their vocation (see FALCONRY), whether "long-winged" and therefore "noble," or "short-winged" and "ignoble."

According to modern usage, the majority of the falcons, in the sense first given, may be separated into *five* very distinct groups: (1) the falcons pure and simple (*Falco* proper); (2) the large northern falcons (*Hierofalco*, Cuvier); (3) the "desert falcons" (*Gennaea*, Kaup); (4) the merlins (*Aesalon*, Kaup); and (5) the hobbies (*Hypotriorchis*, Boie). A sixth group, the kestrels (*Tinnunculus*, Vieillot), is often added. This, however, appears to have been justifiably reckoned a distinct genus.



FIG. 1.—Peregrine Falcon.

The typical falcon is by common consent allowed to be that almost cosmopolitan species to which unfortunately the English epithet "peregrine" (*i.e.* strange or wandering) has been attached. It is the *Falco peregrinus* of Tunstall (1771) and of most recent ornithologists, though some prefer the specific name *communis* applied by J.F. Gmelin a few years later (1788) to a bird which, if his diagnosis be correct, could not have been a true falcon at all, since it had yellow irides—a colour never met with in the eyes of any bird now called by naturalists a "falcon." This species inhabits suitable localities throughout the greater part of the globe, though examples from North America have by some received specific recognition as *F. anatum* (the "duck-hawk"), and those from Australia have been described as distinct under the name of *F. melanogenys*. Here, as in so many other cases, it is almost impossible to decide as to which forms should, and which should not, be accounted merely local races. In

size not surpassing a raven, this falcon (fig. 1) is perhaps the most powerful bird of prey for its bulk that flies, and its courage is not less than its power. It is the species, in Europe, most commonly trained for the sport of hawking (see FALCONRY). Volumes have been written upon it, and to attempt a complete account of it is, within the limits now available, impossible. The plumage of the adult is generally blackish-blue above, and white, with a more or less deep cream-coloured tinge, beneath-the lower parts, except the chin and throat, being barred transversely with black, while a black patch extends from the bill to the ear-coverts, and descends on either side beneath the mandible. The young have the upper parts deep blackish-brown, and the lower white, more or less strongly tinged with ochraceous-brown, and striped longitudinally with blackish-brown. From Port Kennedy, the most northern part of the American continent, to Tasmania, and from the shores of the Sea of Okhotsk to Mendoza in the Argentine territory, there is scarcely a country in which this falcon has not been found. Specimens have been received from the Cape of Good Hope, and it is only a question of the technical differentiation of species whether it does not extend to Cape Horn. Fearless as it is, and adapting itself to almost every circumstance, it will form its eyry equally on the sea-washed cliffs, the craggy mountains, or (though more rarely) the drier spots of a marsh in the northern hemisphere, as on trees (says H. Schlegel) in the forests of Java or the waterless ravines of Australia. In the United Kingdom it was formerly very common, and hardly a high rock from the Shetlands to the Isle of Wight but had a pair as its tenants. But the British gamekeeper has long held the mistaken faith that it is his worst foe, and the number of pairs now allowed to rear their brood unmolested in the British Islands is very small. Yet its utility to the game-preserver, by destroying every one of his most precious wards that shows any sign of infirmity, can hardly be questioned by reason, and G.E. Freeman (*Falconry*) has earnestly urged its claims to protection.<sup>3</sup> Nearly allied to this falcon are several species, such as F. barbarus of Mauretania, F. minor of South Africa, the Asiatic F. babylonicus, F. peregrinator of India (the shaheen), and perhaps F. cassini of South America, with some others.

Next to the typical falcons comes a group known as the "great northern" falcons (*Hierofalco*). Of these the most remarkable is the gyrfalcon (*F. gyrfalco*), whose home is in the Scandinavian mountains, though the young are yearly visitants to the plains of Holland and Germany. In plumage it very much resembles F. peregrinus, but its flanks have generally a bluer tinge, and its superiority in size is at once manifest. Nearly allied to it is the Icelander (F. islandus), which externally differs in its paler colouring and in almost entirely wanting the black mandibular patch. Its proportions, however, differ a good deal, its body being elongated. Its country is shown by its name, but it also inhabits south Greenland, and not unfrequently makes its way to the British Islands. Very close to this comes the Greenland falcon (F. candicans), a native of north Greenland, and perhaps of other countries within the Arctic Circle. Like the last, the Greenland falcon from time to time occurs in the United Kingdom, but it is always to be distinguished by wearing a plumage in which at every age the prevailing colour is pure white. In north-eastern America these birds are replaced by a kindred form (F. labradorus), first detected by Audubon and subsequently recognized by Dresser (Orn. Miscell. i. 135). It is at once distinguished by its very dark colouring, the lower parts being occasionally almost as deeply tinted at all ages as the upper.

All the birds hitherto named possess one character in common. The darker markings of their plumage are longitudinal before the first real moult takes place, and for ever afterwards are transverse. In other words, when young the markings are in the form of stripes, when old in the form of bars. The variation of tint is very great, especially in *F. peregrinus*; but the experience of falconers, whose business it is to keep their birds in the very highest condition, shows that a falcon of either of these groups if light-coloured in youth is light-coloured when adult, and if dark when young is also dark when old-age, after the first moult, making no difference in the complexion of the bird. The next group is that of the so-called "desert falcons" (Gennaea), wherein the difference just indicated does not obtain, for long as the bird may live and often as it may moult, the original style of markings never gives way to any other. Foremost among these are to be considered the lanner and the saker (commonly termed F. lanarius and F. sacer), both well known in the palmy days of falconry, but only since about 1845 readmitted to full recognition. Both of these birds belong properly to southeastern Europe, North Africa and south-western Asia. They are, for their bulk, less powerful than the members of the preceding group, and though they may be trained to high flights are naturally captors of humbler game. The precise number of species is very doubtful, but among the many candidates for recognition are especially to be named the lugger (F. jugger) of India, and the prairie falcon (*F. mexicanus*) of the western plains of North America.

The systematist finds it hard to decide in what group he should place two somewhat large Australian species (*F. hypoleucus* and F. *subniger*), both of which are rare in collections—the

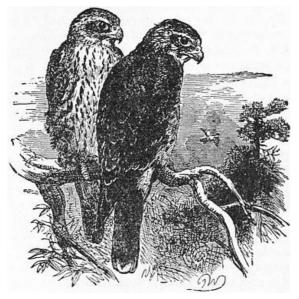


FIG. 2.—Merlin.

A small but very beautiful group comes next—the merlins<sup>4</sup> (*Aesalon* of some writers, *Lithofalco* of others). The European merlin (*F. aesalon*) is perhaps the boldest of the *Accipitres*, not hesitating to attack birds of twice its own size, and even on occasion threatening human beings. Yet it readily becomes tame, if not affectionate, when reclaimed, and its ordinary prey consists of the smaller *Passeres*. Its "pinion of glossy blue" has become almost proverbial, and a deep ruddy blush suffuses its lower parts; but these are characteristic only of the male—the female maintaining very nearly the sober brown plumage she wore when as a nestling she left her lowly cradle in the heather. Very close to this bird comes the pigeon-hawk (*F. columbarius*) of North America—so close, indeed, that none but an expert ornithologist can detect the difference. The turumti of Anglo-Indians (*F. chicquera*), and its representative from southern Africa (*F. ruficollis*), also belong to this group, but they are considerably larger than either of the former.



FIG. 3.—Hobby.

Lastly, the Hobbies (*Hypotriorchis*) comprise a greater number of forms—though how many seems to be doubtful. They are in life at once recognizable by their bold upstanding position, and at any time by their long wings. The type of this group is the English hobby (*F. subbuteo*), a bird of great power of flight, chiefly shown in the capture of insects, which form its ordinary food. It is a summer visitant to most parts of Europe, including the British Islands, and is most wantonly and needlessly destroyed by gamekeepers. A second European species of the group is the beautiful *F. eleonorae*, which hardly comes farther north than the countries bordering the Mediterranean, and, though in some places abundant, is an

extremely local bird. The largest species of this section seems to be the Neotropical *F. femoralis*, for *F. diroleucus* though often ranked here, is now supposed to belong to the group of typical falcons.

(A. N.)

- 1 Unknown to classical writers, the earliest use of this word is said to be by Servius Honoratus (*circa* A.D. 390-480) in his notes on *Aen.* x. 145. It seems possibly to be the Latinized form of the Teutonic *Falk*, though *falx* is commonly accounted its root.
- 2 The nomenclature of nearly all the older writers on this point is extremely confused. What many of them, even so lately as Pennant's time, termed the "gentle falcon" is certainly the bird we now call the goshawk (*i.e.* goose-hawk), which name itself may have been transferred to the *Astur palumbarius* of modern ornithologists, from one of the long-winged birds of prey.
- 3 It is not to be inferred, as many writers have done, that falcons habitually prey upon birds in which disease has made any serious progress. Such birds meet their fate from the less noble *Accipitres* or predatory animals of many kinds. But when a bird is *first* affected by any disorder, its power of taking care of itself is at once impaired, and hence in the majority of cases it may become an easy victim under circumstances which would enable a perfectly sound bird to escape from the attack even of a falcon.
- 4 French, *Émérillon*; Icelandic, *Smirill*.

FALCONE, ANIELLO (1600-1665), Italian battle-painter, was the son of a tradesman, and was born in Naples. He showed his artistic tendency at an early age, received some instruction from a relative, and then studied under Ribera (Lo Spagnoletto), of whom he ranks as the most eminent pupil. Besides battle-pictures, large and small, taken from biblical as well as secular history, he painted various religious subjects, which, however, count for little in his general reputation. He became, as a battle-painter, almost as celebrated as Borgognone (Courtois), and was named "L'Oracolo delle Battaglie." His works have animation, variety, truth to nature, and careful colour. Falcone was bold, generous, used to arms, and an excellent fencer. In the insurrection of Masaniello (1647) he resolved to be bloodily avenged for the death, at the hands of two Spaniards, of a nephew and of a pupil in the school of art which he had established in Naples. He and many of his scholars, including Salvator Rosa and Carlo Coppola, formed an armed band named the Compagnia della Morte ("Company of Death"; see Rosa, Salvator). They scoured the streets by day, exulting in slaughter; at night they were painters again, and handled the brush with impetuous zeal. Peace being restored, they had to decamp. Falcone and Rosa made off to Rome; here Borgognone noticed the works of Falcone, and became his friend, and a French gentleman induced him to go to France, where Louis XIV. became one of his patrons. Ultimately Colbert obtained permission for the painter to return to Naples, and there he died in 1665. Two of his battle-pieces are to be seen in the Louvre and in the Naples museum; he painted a portrait of Masaniello, and engraved a few plates. Among his principal scholars, besides Rosa and Coppola (whose works are sometimes ascribed to Falcone himself), were Domenico Gargiuolo (named Micco Spadaro), Paolo Porpora and Andrea di Lione.

**FALCONER, HUGH** (1808-1865), British palaeontologist and botanist, descended from an old Scottish family, was born at Forres on the 29th of February 1808. In 1826 he graduated at Aberdeen, where he manifested a taste for the study of natural history. He afterwards studied medicine in the university of Edinburgh, taking the degree of M.D. in 1829; during this period he zealously attended the botanical classes of Prof. R. Graham (1786-1845), and those on geology by Prof. R. Jameson. Proceeding to India in 1830 as assistant-surgeon on the Bengal establishment of the East India Company, he made on his arrival an examination of the fossil bones from Ava in the possession of the Asiatic Society of Bengal, and his description of the collection, published soon afterwards, gave him a recognized position among the scientists of India. Early in 1831 he was appointed to the army station at Meerut, in the Northwestern Provinces, but in the same year he was asked to officiate as superintendent of the botanic garden of Saharanpur, during the ill-health and absence of Dr

J.F. Royle; and in 1832 he succeeded to this post. He was thus placed in a district that proved to be rich in palaeontological remains; and he set to work to investigate its natural history and geology. In 1834 he published a geological description of the Siwalik hills, in the Tertiary strata of which he had in 1831 discovered bones of crocodiles, tortoises and other animals; and subsequently, with conjoint labourers, he brought to light a sub-tropical fossil fauna of unexampled extent and richness, including remains of *Mastodon*, the colossal ruminant *Sivatherium*, and the enormous tortoise *Colossochelys Atlas*. For these valuable discoveries he and Captain (afterwards Sir Proby T.) Cautley (1802-1871) received in 1837 the Wollaston medal in duplicate from the Geological Society of London. In 1834 Falconer was appointed to inquire into the fitness of India for the growth of the tea-plant, and it was on his recommendation that it was introduced into that country.

He was compelled by illness to leave India in 1842, and during his stay in England he occupied himself with the classification and arrangement of the Indian fossils presented to the British Museum and East India House, chiefly by himself and Sir Proby T. Cautley. He then set to work to edit the great memoir by Cautley and himself, entitled Fauna Antiqua Sivalensis, of which Part I. text was issued in 1846, and a series of 107 plates during the years 1846-1849. Unfortunately the work, owing partly to Dr Falconer's absence from England and partly to ill-health, was never completed. He was elected F.R.S. in 1845. In 1847 he was appointed superintendent of the Calcutta botanical garden, and professor of botany in the medical college; and on entering on his duties in the following year he was at once employed by the Indian government and the Agricultural and Horticultural Society as their adviser on all matters connected with the vegetable products of India. He prepared an important report on the teak forests of Tenasserim, and this was the means of saving them from destruction by reckless felling; and through his recommendation the cultivation of the cinchona bark was introduced into the Indian empire. Being compelled by the state of his health to leave India in 1855, he spent the remainder of his life chiefly in examining fossil species in England and the Continent corresponding to those which he had discovered in India, notably the species of mastodon, elephant and rhinoceros; he also described some new mammalia from the Purbeck strata, and he reported on the bone-caves of Sicily, Gibraltar, Gower and Brixham. In the course of his researches he became interested in the question of the antiquity of the human race, and actually commenced a work on "Primeval Man," which, however, he did not live to finish. He died on the 31st of January 1865. Shortly after his death a committee was formed for the promotion of a "Falconer Memorial." This took the shape of a marble bust, which was placed in the rooms of the Royal Society of London, and of a Falconer scholarship of the annual value of £100, open for competition to graduates in science or medicine of the university of Edinburgh.

Dr Falconer's botanical notes, with 450 coloured drawings of Kashmir and Indian plants, have been deposited in the library at Kew Gardens, and his *Palaeontological Memoirs and Notes*, comprising all his papers read before learned societies, have been edited, with a biographical sketch, by Charles Murchison, M.D. (London, 1868). Many reminiscences of Dr Falconer, and a portrait of him, were published by his niece, Grace, Lady Prestwich, in her *Essays descriptive and biographical* (1901).

FALCONER, WILLIAM (1732-1760), British poet, was born in Edinburgh on the 11th of February 1732. His father was a wig-maker, and carried on business in one of the small shops with wooden fronts at the Netherbow Port, an antique castellated structure which remained till 1764, dividing High Street from the Canongate. The old man became bankrupt, then tried business as a grocer, and finally died in extreme poverty. William, the son, having received a scanty education, was put to sea. He served on board a Leith merchant vessel, and in his eighteenth year obtained the appointment of second mate of the "Britannia," a vessel employed in the Levant trade, and sailed from Alexandria for Venice. The "Britannia" was overtaken by a dreadful storm off Cape Colonna and was wrecked, only three of the crew being saved. Falconer was happily one of the three, and the incidents of the voyage and its disastrous termination formed the subject of his poem of The Shipwreck (1762). Meanwhile, on his return to England, Falconer, in his nineteenth year, printed at Edinburgh an elegy on Frederick, prince of Wales, and afterwards contributed short pieces to the Gentleman's Magazine. Some of these descriptive and lyrical effusions possess merit. The fine naval song of "The Storm" ("Cease, rude Boreas"), reputed to be by George Alexander Stevens, the dramatic writer and lecturer, has been ascribed to Falconer, but apparently on no authority.

The duke of York, to whom The Shipwreck had been dedicated, advised Falconer to enter the royal navy, and before the end of 1762 the poet-sailor was rated as a midshipman on board the "Royal George." But as this ship was paid off at the peace of 1763, Falconer received an appointment as purser of the "Glory" frigate, a situation which he held until that vessel was laid up on ordinary at Chatham. In 1764 he published a new and enlarged edition of The Shipwreck, and in the same year a rhymed political tirade against John Wilkes and Charles Churchill, entitled The Demagogue. In 1769 appeared his Universal Marine Dictionary, in which retreat is defined as a French manœuvre, "not properly a term of the British marine." While engaged on this dictionary, J. Murray, a bookseller in Fleet Street, father of Byron's munificent publisher and correspondent, wished him to join him as a partner in business. The poet declined the offer, and became purser of the "Aurora" frigate, which had been commissioned to carry out to India certain supervisors or superintendents of the East India Company. Besides his nomination as purser, Falconer was promised the post of private secretary to the commissioners. Before sailing he published a third edition of his Shipwreck, which had again undergone "correction," but not improvement. The poet sailed in the "Aurora" from Spithead on the 20th of September 1769. The vessel arrived safely at the Cape of Good Hope, and left on the 27th of December. She was never more heard of, having, as is supposed, foundered at sea. The Shipwreck, the poem with which Falconer's name is connected, had a great reputation at one time, but the fine passages which pleased the earlier critics have not saved it from general oblivion.

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See his *Poetical Works* in the "Aldine Edition" (1836), with a life by J. Mitford.

**FALCONET, ÉTIENNE MAURICE** (1716-1791), French sculptor, was born in Paris. His parents were poor, and he was at first apprenticed to a carpenter, but some of his clay-figures, with the making of which he occupied his leisure hours, attracted the notice of the sculptor Lemoine, who made him his pupil. He found time to study Greek and Latin, and also wrote several *brochures* on art. His artistic productions are characterized by the same defects as his writings, for though manifesting considerable cleverness and some power of imagination, they display in many cases a false and fantastic taste, the result, most probably, of an excessive striving after originality. One of his most successful statues was one of Milo of Crotona, which secured his admission to the membership of the Academy of Fine Arts in 1754. At the invitation of the empress Catherine he went in 1766 to St Petersburg, where he executed a colossal statue of Peter the Great in bronze. In 1788 he became director of the French Academy of Painting. Many of Falconet's works, being placed in churches, were destroyed at the time of the French Revolution. His "*Nymphe descendant au bain*" is in the Louvre.

Among his writings are *Reflexions sur la sculpture* (Paris, 1768), and *Observations sur la statue de Marc-Aurèle* (Paris, 1771). The whole were collected under the title of *Œuvres littéraires* (6 vols., Lausanne, 1781-1782; 3 vols., Paris, 1787).

**FALCONRY** (Fr. *fauconnerie*, from Late Lat. *falco*, falcon), the art of employing falcons and hawks in the chase, often termed *Hawking*. Falconry was for many ages one of the principal sports of the richer classes, and, since many more efficacious methods and appliances for the capture of game undoubtedly existed, it is probable that it has always been carried on as a pure sport. The antiquity of falconry is very great. There appears to be little doubt that it was practised in Asia at a very remote period, for which we have the concurrent testimony of various Chinese and Japanese works, some of the latter being most quaintly and yet spiritedly illustrated. It appears to have been known in China some 2000 years B.C., and the records of a king Wen Wang, who reigned over a province of that country 689 B.C., prove that the art was at that time in very high favour. In Japan it appears to have been known at least 600 years B.C., and probably at an equally early date in India, Arabia, Persia and Syria. Sir A.H. Layard, in his *Nineveh and Babylon*, considered that in a bas-relief found by him in the ruins of Khorsabad "there appeared to be a falconer bearing a hawk on his wrist," from which it would appear to have been known there some 1700 years B.C. In all the above-

mentioned countries of Asia it is practised at the present day.

Little is known of the early history of falconry in Africa, but from very ancient Egyptian carvings and drawings it seems to have been known there many ages ago. It was probably also in vogue in the countries of Morocco, Oran, Algiers, Tunis and Egypt, at the same time as in Europe. The older writers on falconry, English and continental, often mention Barbary and Tunisian falcons. It is still practised in Egypt.

Perhaps the oldest records of falconry in Europe are supplied by the writings of Pliny, Aristotle and Martial. Although their notices of the sport are slight and somewhat vague, yet they are quite sufficient to show clearly that it was practised in their days-between the years 384 B.C. and A.D. 40. It was probably introduced into England from the continent about A.D. 860, and from that time down to the middle of the 17th century falconry was followed with an ardour that perhaps no English sport has ever called forth, not even fox-hunting. Stringent laws and enactments, notably in the reigns of William the Conqueror, Edward III., Henry VIII. and Elizabeth, were passed from time to time in its interest. Falcons and hawks were allotted to degrees and orders of men according to rank and station-for instance, to the emperor the eagle and vulture, to royalty the jerfalcons, to an earl the peregrine, to a yeoman the goshawk, to a priest the sparrow-hawk, and to a knave or servant the useless kestrel. The writings of Shakespeare furnish ample testimony to the high and universal estimation in which it was held in his days. About the middle of the 17th century falconry began to decline in England, to revive somewhat at the Restoration. It never, however, completely recovered its former favour, a variety of causes operating against it, such as enclosure of waste lands, agricultural improvements, and the introduction of fire-arms into the sporting field, till it fell, as a national sport, almost into oblivion. Yet it has never been even temporarily extinct, and it is successfully practised even at the present day.

In Europe the game or "quarry" at which hawks are flown consists of grouse (confined to the British Isles), black-game, pheasants, partridges, quails, landrails, ducks, teal, woodcocks, snipes, herons, rooks, crows, gulls, magpies, jays, blackbirds, thrushes, larks, hares and rabbits. In former days geese, cranes, kites, ravens and bustards were also flown at. Old German works make much mention of the use of the Iceland falcon for taking the great bustard, a flight scarcely alluded to by English writers. In Asia the list of guarry is longer, and, in addition to all the foregoing, or their Asiatic representatives, various kinds of bustards, sand grouse, storks, ibises, spoonbills, pea-fowl, jungle-fowl, kites, vultures and gazelles are captured by trained hawks. In Mongolia and Chinese Tartary, and among the nomad tribes of central Asia, the sport still flourishes; and though some late accounts are not satisfactory either to the falconer or the naturalist, yet they leave no doubt that a species of eagle is still trained in those regions to take large game, as antelopes and wolves. Mr Atkinson, in his account of his travels in the country of the Amur, makes particular mention of the sport, as does also Mr Shaw in his work on Yarkand; and in a letter from the Yarkand embassy, under Mr Forsyth, C.B., dated Camp near Yarkand, Nov. 27, 1873, the following passage occurs:--"Hawking appears also to be a favourite amusement, the golden eagle taking the place of the falcon or hawk. This novel sport seemed very successful." It is questionable whether the bird here spoken of is the golden eagle. In Africa gazelles are taken, and also partridges and wild-fowl.

The hawks used in England are the three great northern falcons, viz. the Greenland, Iceland and Norway falcons, the peregrine falcon, the hobby, the merlin, the goshawk and the sparrow-hawk. In former days the saker, the lanner and the Barbary or Tunisian falcon were also employed. (See FALCON.)

Of the foregoing the easiest to keep, most efficient in the field, and most suitable for general use are the peregrine falcon and the goshawk.

In all hawks, the female is larger and more powerful than the male.

Hawks are divided by falconers all over the world into two great classes. The first class comprises "falcons," *i.e.* "long-winged hawks," or "hawks of the lure," distinguished by Eastern falconers as "dark-eyed hawks." In these the wings are pointed, the second feather in the wing is the longest, and the iris is of a deep, dark-brown hue. Merlins must, however, be excepted; and here it would seem that the Eastern distinction is the better, for though merlins are much more falcons than they are hawks, they differ from falcons in having the third feather in the wing the longest, while they are certainly "dark-eyed hawks."

The second class is that of "hawks," *i.e.* "short-winged hawks," or "hawks of the fist," called by Eastern falconers "yellow (or rose) eyed hawks." In these the wings are rounded, the fourth feather is the longest in the wing, and the iris is yellow, orange or deep-orange.

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The following glossary of the principal terms used in falconry may assist the reader in perusing this notice of the practice of the art. Useless or obsolete terms are omitted:—

Austringan.—A falconer.

*Bate.*—A hawk is said to "bate" when she flutters off from the fist, perch or block, whether from wildness, or for exercise, or in the attempt to chase.

*Bewits.*—Straps of leather by which the bells are fastened to a hawk's legs.

- Bind.—A hawk is said to "bind" when she seizes a bird in the air and clings to it.
- *Block.*—The conical piece of wood, of the form of an inverted flower-pot, used for hawks to sit upon; for a peregrine it should be about 10 to 12 in. high, 5 to 6 in diameter at top, and 8 to 9 in diameter at base.
- *Brail.*—A thong of soft leather used to secure, when desirable, the wing of a hawk. It has a slit to admit the pinion joint, and the ends are tied together.
- Cadge.—The wooden frame on which hawks, when numerous, are carried to the field.
- Cadger.—The person who carries the cadge.
- Calling off.—Luring a hawk (see Lure) from the hand of an assistant.
- *Carry.*—A hawk is said to "carry" when she flies away with the quarry on the approach of the falconer.
- *Cast.*—Two hawks which may be used for flying together are called a "cast," not necessarily a pair.
- *Casting.*—The oblong or egg-shaped ball, consisting of feathers, bones, &c., which all hawks (and insectivorous birds) throw up after the nutritious part of their food has been digested. Also the fur or feathers given them to assist the process.
- Cere.—The naked wax-like skin above the beak.
- *Check.*—A hawk is said to fly at "check" when she flies at a bird other than the intended object of pursuit.
- *Clutching.*—Taking the quarry in the feet as the short-winged hawks do. Falcons occasionally "clutch."

*Come to.*—A hawk is said to "come to" when she begins to get tame.

Coping.—Cutting the beak or talons of a hawk.

- Crab.-To fight.
- *Creance.*—A long line or string.
- *Crop, to put away.*—A hawk is said to "put away her crop" when the food passes out of the crop into the stomach.
- Deck feathers.--The two centre tail-feathers.
- *Eyas.*—A hawk which has been brought up from the nest (nyas, from Fr. *niais*).
- Eyry.-The nest of a hawk.
- *Foot.*—A hawk is said to "foot" well or to be a "good footer" when she is successful in killing. Many hawks are very fine fliers without being "good footers."

Frounce.—A disease in the mouth and throat of hawks.

Get in.—To go up to a hawk when she has killed her quarry.

Hack.—The state of partial liberty in which young hawks must always at first be kept.

*Haggard.*—A wild-caught hawk in the adult plumage.

- Hood.-(See fig.)
- *Hoodshy.*—A hawk is said to be "hoodshy" when she is afraid of, or resists, having her hood put on.
- *Hunger trace.*—A mark, and a defect, in the tail feathers, denoting a weak point; generally due to temporary starvation as a nestling.

Imping.—The process of mending broken feathers is called "imping." (See fig.)

*Imping needle.*—A piece of tough soft iron wire from about  $1\frac{1}{2}$  to  $2\frac{1}{2}$  in. long, rough filed so as to be three-sided and tapering from the middle to the ends. (See fig.)

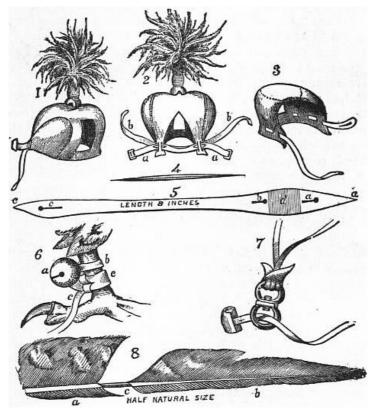
Intermewed.—A hawk moulted in confinement is said to be "intermewed."

Jack.—Mate of the merlin.

Jerkin.—Mate of the jerfalcon.

- *Jesses.*—Strips of light but very tough leather, some 6 to 8 in. long, which always remain on a hawk's legs—one on each leg. (See fig.)
- Jonk.—To sleep.
- Leash.—A strong leathern thong, some  $2\frac{1}{2}$  or 3 ft. long, with a knot or button at one end, used to secure a hawk. (See fig.)
- *Lure.*—The instrument used for calling long-winged hawks—a dead pigeon, or an artificial lure made of leather and feathers or wings of birds, tied to a string, with meat attached to it.
- Mail.—The breast feathers.
- *Make hawk.*—A hawk is called a "make hawk" when, as a thoroughly trained and steady hawk, she is flown with young ones to teach them their work.

Man a hawk.—To tame a hawk and accustom her to strangers.



Implements used in Falconry.

- 1. Hood.
- Back view of hood, showing braces *a*, *a*, *b*, *b*; by drawing the braces *b*, *b*, the hood, now open, is closed.
- 3. Rufter hood.
- 4. Imping-needle.
- 5. Jess; d is the space for the hawk's leg; the point and slit a, a are brought round the leg, and passed through slit b, after which the point c and slit c, and also the whole remaining length of jess, are pulled through slits a and b; c is the slit to which the upper ring of swivel is attached.
- 6. Hawk's leg with bell a, bewit *b*, jess *c*.
- 7. Jesses, swivel and leash.
- 8. Portion of first wing-feather of male peregrine falcon, "tiercel," half natural size, in process of imping; a, the living hawk's feather; b, piece supplied from another tiercel, with the imping needle c pushed half its length into it and ready to be pushed home into the living bird's feather.

- *Mantle.*—A hawk is said to "mantle" when she stretches out a leg and a wing simultaneously, a common action of hawks when at ease; also when she spreads out her wings and feathers to hide any quarry or food she may have seized from another hawk, or from man. In the last case it is a fault.
- *Mew.*—A hawk is said to "mew" when she moults. The place where a hawk was kept to moult was in olden times called her "mew." Buildings where establishments of hawks were kept were called "mews."

Musket.—Male of the sparrow-hawk.

Mutes (mutings).-Excrement of hawk.

- *Pannel.*—The stomach of a hawk, corresponding with the gizzard of a fowl, is called her pannel. In it the casting is formed.
- *Passage.*—The line herons take over a tract of country on their way to and from the heronry when procuring food in the breeding season.

Passage hawks.—Hawks captured when on their passage or migration.

Pelt.—The dead body of any quarry the hawk has killed.

*Pitch.*—The height to which a hawk, when waiting for game to be flushed, rises in the air.

Plume.—A hawk is said to "plume" a bird when she pulls off the feathers.

*Point.*—A hawk "makes her point" when she rises in the air over the spot where quarry has saved itself from capture by dashing into a hedge, or has otherwise secreted itself.

Pounces.—A hawk's claws.

- Pull through the hood.—A hawk is said to pull through the hood when she eats with it on.
- *Put in.*—A bird is said to "put in" when it saves itself from the hawk by dashing into covert or other place of security.

Quarry.—The bird or beast flown at.

*Rake out.*—A hawk is said to "rake out" when she flies, while "waiting on" (see *Wait on*), too far and wide from her master.

Ramage.-Wild.

Red hawk.—Hawks of the first year, in the young plumage, are called "red hawks."

- *Ringing.*—A bird is said to "ring" when it rises spirally in the air.
- *Rufter hood.*—An easy fitting hood, not, however, convenient for hooding and unhooding—used only for hawks when first captured. (See fig.)

*Sails.*—The wings of a hawk.

*Seeling.*—Closing the eyes by a fine thread drawn through the lid of each eye, the threads being then twisted together above the head—a practice long disused in England.

Serving a hawk.—Driving out quarry which has taken refuge, or has "put in."

*Stoop.*—The hawk's rapid plunge upon the quarry.

- *Take the air.*—A bird is said to "take the air" when it seeks to escape by trying to rise higher than the falcon.
- *Tiercel.*—The male of various falcons, particularly of the peregrine, also *tarcell, tassell* or *tercel*; the term is also applied to the male of the goshawk.
- *Trussing.*—A hawk is said to "truss" a bird when she catches it in the air, and comes to the ground with it in her talons: this term is not applied to large quarry. (See *Bind*.)
- *Varvels.*—Small rings, generally of silver, fastened to the end of the jesses, and engraved with the owner's name.
- *Wait on.*—A hawk is said to "wait on" when she flies above her master waiting till game is sprung.
- *Weathering.*—Hawks are "weathered" by being placed unhooded in the open air. Passage hawks which are not sufficiently reclaimed to be left out by themselves unhooded on blocks are "weathered" by being put out for an hour or two under the falconer's eye.

Yarak.--An Eastern term, generally applied to short-winged hawks. When a hawk is keen,

The training of hawks affords much scope for judgment, experience and skill on the part of the falconer, who must carefully observe the temper and disposition as well as the constitution of each bird. It is through the appetite principally that hawks, like most wild animals, are tamed; but to fit them for use in the field much patience, gentleness and care must be used. Slovenly taming necessitates starving, and low condition and weakness are the result. The aim of the falconer must be to have his hawks always keen, and the appetite when they are brought into the field should be such as would induce the bird in a state of nature to put forth its full powers to obtain its food, with, as near as possible, a corresponding condition as to flesh. The following is an outline of the process of training hawks, beginning with the management of a wild-caught peregrine falcon. When first taken, a rufter hood should be put on her head, and she must be furnished with jesses, swivel, leash and bell. A thick glove or rather gauntlet must be worn on the left hand (Eastern falconers always carry a hawk on the right), and she must be carried about as much as possible, late into the night, every day, being constantly stroked with a bird's wing or feather, very lightly at first. At night she should be tied to a perch in a room with the window darkened, so that no light can enter in the morning. The perch should be a padded pole placed across the room, about  $4\frac{1}{2}$  ft. from the ground, with a canvas screen underneath. She will easily be induced to feed in most cases by drawing a piece of beefsteak over her feet, brushing her legs at the time with a wing, and now and then, as she snaps, slipping a morsel into her mouth. Care must be taken to make a peculiar sound with the lips or tongue, or to use a low whistle as she is in the act of swallowing; she will very soon learn to associate this sound with feeding, and it will be found that directly she hears it, she will gripe with her talons, and bend down to feel for food. When the falconer perceives this and other signs of her "coming to," that she no longer starts at the voice or touch, and steps quietly up from the perch when the hand is placed under her feet, it will be time to change her rufter hood for the ordinary hood. This latter should be very carefully chosen—an easy fitting one, in which the braces draw closely and yet easily and without jerking. An old one previously worn is to be recommended. The hawk should be taken into a very dark room-one absolutely dark is best-and the change should be made if possible in total darkness. After this she must be brought to feed with her hood off; at first she must be fed every day in a darkened room, a gleam of light being admitted. The first day, the hawk having seized the food and begun to pull at it freely, the hood must be gently slipped off, and after she has eaten a moderate quantity, it must be replaced as slowly and gently as possible, and she should be allowed to finish her meal through the hood. Next day the hood may be twice removed, and so on; day by day the practice should be continued, and more light gradually admitted, until the hawk will feed freely in broad daylight, and suffer the hood to be taken off and replaced without opposition. Next she must be accustomed to see and feed in the presence of strangers and dogs, &c. A good plan is to carry her in the streets of a town at night, at first where the gas-light is not strong, and where persons passing by are few, unhooding and hooding her from time to time, but not letting her get frightened. Up to this time she should be fed on lean beefsteak with no castings, but as soon as she is tolerably tame and submits well to the hood, she must occasionally be fed with pigeons and other birds. This should be done not later than 3 or 4 P.M., and when she is placed on her perch for the night in the dark room, she must be unhooded and left so, of course being carefully tied up. The falconer should enter the room about 7 or 8 A.M. next day, admitting as little light as possible, or using a candle. He should first observe if she has thrown her casting; if so, he will at once take her to the fist, giving her a bite of food, and rehood her. If her casting is not thrown it is better for him to retire, leaving the room quite dark, and come in again later. She must now be taught to know the voice—the shout that is used to call her in the field—and to jump to the fist for food, the voice being used every time she is fed. When she comes freely to the fist she must be made acquainted with the lure. Kneeling down with the hawk on his fist, and gently unhooding her, the falconer casts out a lure, which may be either a dead pigeon or an artificial lure garnished with beefsteak tied to a string, to a distance of a couple or three feet in front of her. When she jumps down to it, she should be allowed to eat a little on it—the voice being used—the while receiving morsels from the falconer's hand; and before her meal is finished she must be taken off to the hand, being induced to forsake the lure for the hand by a tempting piece of meat. This treatment will help to check her inclination hereafter to carry her quarry. This lesson is to be continued till the falcon feeds very boldly on the lure on the ground, in the falconer's presence-till she will suffer him to walk round her while she is feeding. All this time she will have been held by the leash only, but in the next step a strong, but light creance must be made fast to the leash, and an assistant holding the hawk should unhood her, as the falconer, standing at a distance of 5 to 10 yds., calls her by shouting and casting out the lure. Gradually day after day the distance is increased, till the hawk will come 30 yds. or so without hesitation; then she may

be trusted to fly to the lure at liberty, and by degrees from any distance, say 1000 yds. This accomplished, she should learn to stoop at the lure. Instead of allowing the hawk to seize upon it as she comes up, the falconer should snatch the lure away and let her pass by, and immediately put it out that she may readily seize it when she turns round to look for it. This should be done at first only once, and then progressively until she will stoop backwards and forwards at the lure as often as desired. Next she should be entered at her quarry. Should she be intended for rooks or herons, two or three of these birds should be procured. One should be given her from the hand, then one should be released close to her, and a third at a considerable distance. If she take these keenly, she may be flown at a wild bird. Care must, however, be taken to let her have every possible advantage in her first flights—wind and weather, and the position of the quarry with regard to the surrounding country, must be considered.

Young hawks, on being received by the falconer before they can fly, must be put into a sheltered place, such as an outhouse or shed. Their basket or hamper should be filled with straw. A hamper is best, with the lid so placed as to form a platform for the young hawks to come out upon to feed. This should be fastened to a beam or prop a few feet from the ground. The young hawks must be most plentifully fed on the best fresh food obtainable-good beefsteak and fresh-killed birds; the falconer when feeding them should use his voice as in luring. As they grow old enough they will come out, and perch about the roof of their shed, by degrees extending their flights to neighbouring buildings or trees, never failing to come at feeding time to the place where they are fed. Soon they will be continually on the wing, playing or fighting with one another, and later the falconer will observe them chasing other birds, as pigeons and rooks, which may be passing by. As soon as one fails to come for a meal, it must be at once caught with a bow net or a snare the first time it comes back, or it will be lost. It must be borne in mind that the longer hawks can be left at hack the better they are likely to be for use in the field-those hawks being always the best which have preved a few times for themselves before being caught. Of course there is great risk of losing hawks when they begin to prey for themselves. When a hawk is so caught she is said to be "taken up" from hack. She will not require a rufter hood, but a good deal of the management described for the passage falcon will be necessary. She must be carefully tamed and broken to the hood in the same manner, and so taught to know the lure; but, as might be expected, very much less difficulty will be experienced. As soon as the evas knows the lure sufficiently well to come to it sharp and straight from a distance, she must be taught to "wait on." This is effected by letting the hawk loose in an open place, such as a down. It will be found that she will circle round the falconer looking for the lure she has been accustomed to see-perhaps mount a little in the air, and advantage must be taken of a favourable moment when the hawk is at a little height, her head being turned in towards the falconer, to let go a pigeon which she can easily catch. When the hawk has taken two or three pigeons in this way, and mounts immediately in expectation, in short, begins to wait on, she should see no more pigeons, but be tried at game as soon as possible. Young peregrines should be flown at grouse first in preference to partridges, not only because the season commences earlier, but because, grouse being the heavier birds, they are not so much tempted to "carry" as with partridges.

The training of the great northern falcons, as well as that of merlins and hobbies, is conducted much on the above principles, but the jerfalcons (gerfalcons or gyrfalcons) will seldom wait on well, and merlins will not do it at all.

The training of short-winged hawks is a simpler process. They must, like falcons, be provided with jesses, swivel, leash and bell. In these hawks a bell is sometimes fastened to the tail. Sparrow-hawks can, however, scarcely carry a bell big enough to be of any service. The hood is seldom used for short-winged hawks—never in the field. They must be made as tame as possible by carriage on the fist and the society of man, and taught to come to the fist freely when required—at first to jump to it in a room, and then out of doors. When the goshawk comes freely and without hesitation from short distances, she ought to be called from long distances from the hand of an assistant, but not oftener than twice in each meal, until she will come at least 1000 yds., on each occasion being well rewarded with some food she likes very much, as a fresh-killed bird, warm. When she does this freely, and endures the presence of strangers, dogs, &c., a few bagged rabbits should be given to her, and she will be ready to take the field. Some accustom the goshawk to the use of the lure, for the purpose of taking her if she will not come to the fist in the field when she has taken stand in a tree after being baulked of her quarry, but it ought not to be necessary to use it.

Falcons or long-winged hawks are either "flown out of the hood," *i.e.* unhooded and slipped when the quarry is in sight, or they are made to "wait on" till game is flushed. Herons and rooks are always taken by the former method. Passage hawks are generally employed for

flying at these birds, though sometimes good eyases are quite equal to the work. For heronhawking a well-stocked heronry is in the first place necessary. Next an open country which can be ridden over-over which herons are in the constant habit of passing to and from their heronry on their fishing excursions, or making their "passage." A heron found at his feedingplace at a brook or pond affords no sport whatever. If there be little water any peregrine falcon that will go straight at him will seize him soon after he rises. It is sometimes advisable to fly a young falcon at a heron so found, but it should not be repeated. If there be much water the heron will neither show sport nor be captured. It is quite a different affair when he is sighted winging his way at a height in the air over an open tract of country free from water. Though he has no chance whatever of competing with a falcon in straightforward flight, the heron has large concave wings, a very light body proportionately, and air-cells in his bones, and can rise with astonishing rapidity, more perpendicularly, or, in other words, in smaller rings, than the falcon can, with very little effort. As soon as he sees the approach of the falcon, which he usually does almost directly she is cast off, he makes play for the upper regions. Then the falcon commences to climb too to get above him, but in a very different style. She makes very large circles or rings, travelling at a high rate of speed, due to her strength and weight and power of flying, till she rises above the heron. Then she makes her attack by stooping with great force at the quarry, sometimes falling so far below it as the blow is evaded that she cannot spring up to the proper pitch for the next stoop, and has to make another ring to regain her lost command over the heron, which is ever rising, and so on -the "field" meanwhile galloping down wind in the direction the flight is taking till she seizes the heron aloft, "binds" to him, and both come down together. Absurd stories have been told and pictures drawn of the heron receiving the falcon on its beak in the air. It is, however, well known to all practical falconers that the heron has no power or inclination to fight with a falcon in the air; so long as he is flying he seeks safety solely from his wings. When on the ground, however, should the falcon be deficient in skill or strength, or have been mutilated by the coping of her beak and talons, as was sometimes formerly done in Holland with a view to saving the heron's life, the heron may use his dagger-like bill with dangerous effect, though it is very rare for a falcon to be injured. It is never safe to fly the goshawk at a heron of any description. Short-winged hawks do not immediately kill their quarry as falcons do, nor do they seem to know where the life lies, and seldom shift their hold once taken even to defend themselves; and they are therefore easily stabbed by a heron. Rooks are flown in the same manner as herons, but the flight is generally inferior. Although rooks fly very well, they seek shelter in trees or bushes as soon as possible.

For game-hawking eyases are generally used, though undoubtedly passage or wild-caught hawks are to be preferred. The best game hawks we have seen have been passage hawks, but there are difficulties attending the use of them. It may perhaps be fairly said that it is easy to make all passage hawks "wait on" in grand style, but until they have got over a season or two they are very liable to be lost. Among the advantages attending the use of eyases are the following: they are easier to obtain and to train and keep; they also moult far better and quicker than passage hawks, while if lost in the field they will often go home by themselves, or remain about the spot where they were liberated. Experience, and, we must add, some good fortune also, are requisite to make eyases good for waiting on for game. Slight mistakes on the part of the falconer, false points from dogs, or bad luck in serving, will cause a young hawk to acquire bad habits, such as sitting down on the ground, taking stand in a tree, raking out wide, skimming the ground, or lazily flying about at no height. A good game hawk in proper flying order goes up at once to a good pitch in the air-the higher she flies the better—and follows her master from field to field, always ready for a stoop when the quarry is sprung. Hawks that have been successfully broken and judiciously worked become wonderfully clever, and soon learn to regulate their flight by the movements of their master. Eyases were not held in esteem by the old falconers, and it is evident from their writings that these hawks have been very much better understood and managed in the 19th century than in the middle ages. It is probable that the old falconers procured their passage and wildcaught hawks with such facility, having at the same time more scope for their use in days when quarry was more abundant and there was more waste land than there now is, that they did not find it necessary to trouble themselves about eyases. Here may be quoted a few lines from one of the best of the old writers, which may be taken as giving a fair account of the estimation in which eyases were generally held, and from which it is evident that the old falconers did not understand flying hawks at hack. Simon Latham, writing in 1633, says of eyases:

They will be verie easily brought to familiaritie with the man, not in the house only, but also abroad, hooded or unhooded; nay, many of them will be more gentle and quiet when unhooded than when hooded, for if a man doe but stirre or speake in their hearing, they will crie and bate as though they did desire to see the man. Likewise some of them being unhooded, when they see the man will cowre and crie, shewing thereby their exceeding fondness and fawning love towards him....

... These kind of hawks be all (for the most part) taken out of the nest while verie young, even in the downe, from whence they are put into a close house, whereas they be alwaies fed and familiarly brought up by the man, untill they bee able to flie, when as the summer approaching verie suddenly they are continued and trained up in the same, the weather being alwaies warm and temperate; thus they are still inured to familiaritie with the man, not knowing from whence besides to fetch their relief or sustenance. When the summer is ended they bee commonly put up into a house again, or else kept in some warm place, for they cannot endure the cold wind to blow upon them.... But leaving to speak of these kind of scratching hawks that I never did love should come too neere my fingers, and to return unto the faire conditioned haggard faulcon....

The author here describes with accuracy the condition of unhacked eyases, which no modern falconer would trouble himself to keep. Many English falconers in modern times have had eyases which have killed grouse, ducks and other quarry in a style almost equalling that of passage hawks. Rooks also have been most successfully flown, and some herons on passage have been taken by eyases. No sport is to be had at game without hawks that wait on well. Moors, downs, open country where the hedges are low and weak are best suited to game hawking. Pointers or setters may be used to find game, or the hawk may be let go on coming to the ground where game is known to lie, and suffered, if an experienced one, to "wait on" till game is flushed. However, the best plan with most hawks, young ones especially, is to use a dog, and to let the hawk go when the dog points, and to flush the birds as soon as the hawk is at her pitch. It is not by any means necessary that the hawk should be near the birds when they rise, provided she is at a good height, and that she is watching; she will come at once with a rush out of the air at great speed, and either cut one down with the stoop, or the bird will save itself by putting in, when every exertion must be made, especially if the hawk be young and inexperienced, to "serve" her as soon as possible by driving out the bird again while she waits overhead. If this be successfully done she is nearly certain to kill it at the second flight. Perhaps falcons are best for grouse and tiercels for partridges.

Magpies afford much sport. Only tiercels should be used for hunting magpies. A field is necessary—at the very least 4 or 5 runners to beat the magpie out, and perhaps the presence of a horseman is an advantage. Of course in open flight a magpie would be almost immediately caught by a tiercel peregrine, and there would be no sport, but the magpie makes up for his want of power of wing by his cunning and shiftiness; and he is, moreover, never to be found except where he has shelter under his lee for security from a passing peregrine. Once in a hedge or tree he is perfectly safe from the wild falcon, but the case is otherwise when the falconer approaches with his trained tiercel, perhaps a cast of tiercels, waiting on in the air, with some active runners in his field. Then driven from hedge to hedge, from one kind of shelter to another, stooped at every instant when he shows himself ever so little away from cover by the watchful tiercels overhead, his egg-stealing days are brought to an end by a fatal stroke-sometimes not before the field is pretty well exhausted with running and shouting. The magpie always manœuvres towards some thick wood, from which it is the aim of the field to cut him off. At first hawks must be flown in easy country, but when they understand their work well they will kill magpies in very enclosed country-with a smart active field a magpie may even be pushed through a small wood. Magpie hawking affords excellent exercise, not only for those who run to serve the hawks, but for the hawks also; they get a great deal of flying, and learn to hunt in company with men—any number of people may be present. Blackbirds may be hunted with tiercels in the same way. Woodcock afford capital sport where the country is tolerably open. It will generally be found that after a hawk has made one stoop at a woodcock, the cock will at first try to escape by taking the air, and will show a very fine flight. When beaten in the air it will try to get back to covert again, but when once a hawk has outflown a woodcock, he is pretty sure to kill it. Hawks seem to pursue woodcock with great keenness; something in the flight of the cock tempts them to exertion. The laziest and most useless hawks-hawks that will scarcely follow a slow pigeonwill do their best at woodcock, and will very soon, if the sport is continued, be improved in their style of flying. Snipe may be killed by first-class tiercels in favourable localities. Wild duck and teal are only to be flown at when they can be found in small pools or brooks at a distance from much water—where the fowl can be suddenly flushed by men or dogs while the falcon is flying at her pitch overhead. For duck, falcons should be used; tiercels will kill teal well.

The merlin is used for flying at larks, and there does not seem to be any other use to which this pretty little falcon may fairly be put. It is very active, but far from being, as some authors have stated, the swiftest of all hawks. Its flight is greatly inferior in speed and power to that of the peregrine. Perhaps its diminutive size, causing it to be soon lost to view, and a limited acquaintance with the flight of the wild peregrine falcon, have led to the mistake.

The hobby is far swifter than the merlin, but cannot be said to be efficient in the field; it may be trained to wait on beautifully, and will sometimes take larks; it is very much given to the fault of "carrying."

The three great northern falcons are not easy to procure in proper condition for training. They are very difficult to break to the hood and to manage in the field. They are flown, like the peregrine, at herons and rooks, and in former days were used for kites and hares. Their style of flight is magnificent; they are considerably swifter than the peregrine, and are a most deadly "footers." They seem, however, to lack somewhat of the spirit and dash of the peregrine.

For the short-winged hawks an open country is not required; indeed they may be flown in a wood. Goshawks are flown at hares, rabbits, pheasants, partridges and wild-fowl. Only very strong females are able to take hares; rabbits are easy quarry for any female goshawk, and a little too strong for the male. A good female goshawk may kill from 10 to 15 rabbits in a day, or more. For pheasants the male is to be preferred, certainly for partridges; either sex will take duck and teal, but the falconer must get close to them before they are flushed, or the goshawk will stand a poor chance of killing. Rabbit hawking may be practised by ferreting, and flying the hawk as the rabbits bolt, but care must be taken or the hawk will kill the ferret. Where rabbits sit out on grass or in turnip fields, a goshawk may be used with success, even in a wood when the holes are not too near. From various causes it is impossible, or nearly so, to have goshawks in England in the perfection to which they are brought in the East. In India, for instance, there is a far greater variety of quarry suited to them, and wild birds are much more approachable; moreover, there are advantages for training which do not exist in England. Unmolested—and scarcely noticed except perhaps by others of his calling or tastes-the Eastern falconer carries his hawk by day and night in the crowded bazaars, till the bird becomes perfectly indifferent to men, horses, dogs, carriages, and, in short, becomes as tame as the domestic animals.

The management of sparrow-hawks is much the same as that of goshawks, but they are far more delicate than the latter. They are flown in England at blackbirds, thrushes and other small birds; good ones will take partridges well till the birds get too wild and strong with the advancing season. In the East large numbers of quail are taken with sparrow-hawks.

It is of course important that hawks from which work in the field is expected should be kept in the highest health, and they must be carefully fed; no bad or tainted meat must on any account be given to them-at any rate to hawks of the species used in England. Peregrines and the great northern falcons are best kept on beefsteak, with a frequent change in the shape of fresh-killed pigeons and other birds. The smaller falcons, the merlin and the hobby, require a great number of small birds to keep them in good health for any length of time. Goshawks should be fed like peregrines, but rats and rabbits are very good as change of food for them. The sparrow-hawk, like the small falcons, requires small birds. All hawks require castings frequently. It is true that hawks will exist, and often appear to thrive, on good food without castings, but the seeds of probable injury to their health are being sown the whole time they are so kept. If there is difficulty in procuring birds, and it is more convenient to feed the hawks on beefsteak, they should frequently get the wings and heads and necks of game and poultry. In addition to the castings which they swallow, tearing these is good exercise for them, and biting the bones prevents the beaks from overgrowing. Most hawks, peregrines especially, require the bath. The end of a cask, sawn off to give a depth of about 6 in., makes a very good bath. Peregrines which are used for waiting on require a bath at least twice a week. If this be neglected, they will not wait long before going off in search of water to bathe, however hungry they may be.

The most agreeable and the best way, where practicable, of keeping hawks is to have them on blocks on the lawn. Each hawk's block should stand in a circular bed of sand—about 8 ft. in diameter; this will be found very convenient for keeping them clean. Goshawks are generally placed on bow perches, which ought not to be more than 8 or 9 in. high at the highest part of the arc. It will be several months before passage or wild-caught falcons can be kept out of doors; they must be fastened to a perch in a darkened room, hooded, but by degrees as they get thoroughly tame may be brought to sit on the lawn. In England (especially in the south) peregrines, the northern falcons and goshawks may be kept out of doors all day and night in a sheltered situation. In very wild boisterous weather, or in snow or sharp frost, it will be advisable to move them to the shelter of a shed, the floor of which should be laid with sand to a depth of 3 or 4 in. Merlins and hobbies are too tender to be kept much out of doors. An eastern aspect is to be preferred—all birds enjoy the morning sun, and

it is very beneficial to them. The more hawks confined to blocks out of doors see of persons, dogs, horses, &c., moving about the better, but of course only when there is no danger of their being frightened or molested, or of food being given to them by strangers. Those who have only seen wretched ill-fed hawks in cages as in zoological gardens or menageries, pining for exercise, with battered plumage, torn shoulders and bleeding ceres, from dashing against their prison bars, and overgrown beaks from never getting bones to break, can have little idea of the beautiful and striking-looking birds to be seen pluming their feathers and stretching their wings at their ease at their blocks on the falconer's lawn, watching with their large bright keen eyes everything that moves in the sky and everywhere else within the limits of their view. Contrary to the prevailing notion, hawks show a good deal of attachment when they have been properly handled. It is true that by hunger they are in a great measure tamed and controlled, and the same may be said of all undomesticated and many domesticated animals. And instinct prompts all wild creatures when away from man's control to return to their former shyness, but hawks certainly retain their tameness for a long time, and their memory is remarkably retentive. Wild-caught hawks have been retaken, either by their coming to the lure or upon quarry, from 2 to 7 days after they had been lost, and eyases after 3 weeks. As one instance of retentiveness of memory displayed by hawks we may mention the case of a wild-caught falcon which was recaptured after being at liberty more than 3 years, still bearing the jesses which were cut short close to the leg at the time she was released; in five days she was flying at the lure again at liberty, and was found to retain the peculiar ways and habits she was observed to have in her former existence as a trained hawk. It is useless to bring a hawk into the field unless she has a keen appetite; if she has not, she will neither hunt effectually nor follow her master. Even wild-caught falcons, however, may sometimes be seen so attached to their owner that, when sitting on their blocks on a lawn with food in their crops, they will on his coming out of the house bate hard to get to him, till he either go up to them and allow them to jump up to his hand or withdraw from their sight. Goshawks are also known to evince attachment to their owner. Another prevailing error regarding hawks is that they are supposed to be lazy birds, requiring the stimulus of hunger to stir them to action. The reverse is the truth; they are birds of very active habits, and exceedingly restless, and the notion of their being lazy has been propagated by those who have seen little or nothing of hawks in their wild state. The wild falcon requires an immense deal of exercise, and to be in wind, in order to exert the speed and power of flight necessary to capture her prey when hungry; and to this end instinct prompts her to spend hours daily on the wing, soaring and playing about in the air in all weathers, often chasing birds merely for play or exercise. Sometimes she takes a siesta when much gorged, but unless she fills her crop late in the evening she is soon moving again-before half her crop is put over. Goshawks and sparrowhawks, too, habitually soar in the air at about 9 or 10 A.M., and remain aloft a considerable time, but these birds are not of such active habits as the falcons. The frequent bating of thoroughly tame hawks from their blocks, even when not hungry or frightened, proves their restlessness and impatience of repose. So does the wretched condition of the caged falcon (before alluded to), while the really lazy buzzards and kites, which do not in a wild state depend on activity or power of wing for their sustenance, maintain themselves for years, even during confinement if properly fed, in good case and plumage. Such being the habits of the falcon in a state of nature, the falconer should endeavour to give the hawks under his care as much flying as possible, and he should avoid the very common mistake of keeping too many hawks. In this case a favoured few are sure to get all the work, and the others, possibly equally good if they had fair play, are spoiled for want of exercise.

The larger hawks may be kept in health and working order for several years—15 or 20 barring accidents. The writer has known peregrines, shaheens and goshawks to reach ages between 15 and 20 years. Goshawks, however, never fly well after 4 or 5 seasons, when they will no longer take difficult quarry; they may be used at rabbits as long as they live. Shaheens may be seen in the East at an advanced age, killing wild-fowl beautifully. The shaheen is a falcon of the peregrine type, which does not travel, like the peregrine, all over the world. It appears that the jerfalcons also may be worked to a good age. Old Simon Latham tells us of these birds—"I myself have known one of them an excellent Hearnor (killer of herons), and to continue her goodnesse very near twentie yeeres, or full out that time."

AUTHORITIES.—Schlegel's *Traité de fauconnerie* contains a very large list of works on falconry in the languages of all the principal countries of the Old World. *Bibliotheca accipitraria*, by J.E. Harting (1891), gives a complete bibliography. See *Coursing* and *Falconry* in the Badminton Library; and *The Art and Practice of Hawking*, by E.B. Michell (1900), the best modern book on the subject. Perhaps the most useful of the old works are *The Booke of Faulconrie or Hawking*, by George Turberville (1575), and *The Faulcon's Lure and Cure*, by Simon Latham (1633).

#### (E. D. R.)

**FALDSTOOL** (from the O.H. Ger. *falden* or *falten*, to fold, and *stuol*, Mod. Ger. *Stuhl*, a stool; from the medieval Latin *faldistolium* is derived, through the old form *faudesteuil*, the Mod. Fr. *fauteuil*), properly a folding seat for the use of a bishop when not occupying the throne in his own cathedral, or when officiating in a cathedral or church other than his own; hence any movable folding stool used for kneeling in divine service. The small desk or stand from which the Litany is read is sometimes called a faldstool, and a similar stool is provided for the use of the sovereign at his coronation.

FALERII [mod. Cività Castellana (q.v.)], one of the twelve chief cities of Etruria, situated about 1 m. W. of the ancient Via Flaminia,<sup>1</sup> 32 m. N. of Rome. According to the legend, it was of Argive origin; and Strabo's assertion that the population, the Falisci (q.v.), were of a different race from the Etruscans is proved by the language of the earliest inscriptions which have been found here. Wars between Rome and the Falisci appear to have been frequent. To one of the first of them belongs the story of the schoolmaster who wished to betray his boys to Camillus; the latter refused his offer, and the inhabitants thereupon surrendered the city. At the end of the First Punic War, the Falisci rose in rebellion, but were soon conquered (241 B.c.) and lost half their territory. Zonaras (viii. 18) tells us that the ancient city, built upon a precipitous hill, was destroyed and another built on a more accessible site on the plain. The description of the two sites agrees well with the usual theory that the original city occupied the site of the present Cività Castellana, and that the ruins of Falleri (as the place is now called) are those of the Roman town which was thus transferred 3 m. to the north-west. After this time Falerii hardly appears in history. It became a colony (Junonia Faliscorum) perhaps under Augustus, though according to the inscriptions apparently not until the time of Gallienus. There were bishops of Falerii up till 1033, when the desertion of the place in favour of the present site began, and the last mention of it dates from A.D. 1064.

The site of the original Falerii is a plateau, about 1100 yds. by 400, not higher than the surrounding country (475 ft.) but separated from it by gorges over 200 ft. in depth, and only connected with it on the western side, which was strongly fortified with a mound and ditch; the rest of the city was defended by walls constructed of rectangular blocks of tufa, of which some remains still exist. Remains of a temple were found at Lo Scasato, at the highest point of the ancient town, in 1888, and others have been excavated in the outskirts. The attribution of one of these to Juno Quiritis is uncertain. These buildings were of wood, with fine decorations of coloured terra-cotta (Notizie degli scavi, 1887, p. 92; 1888, p. 414). Numerous tombs hewn in the rock are visible on all sides of the town, and important discoveries have been made in them; many objects, both from the temples and from the tombs, are in the Museo di Villa Giulia at Rome. Similar finds have also been made at Calcata, 6 m. S., and Corchiano, 5 m. N.W. The site of the Roman Falerii is now entirely abandoned. It lay upon a road which may have been (see H. Nissen, Italische Landeskunde, ii. 361) the Via Annia, a by-road of the Via Cassia; this road approached it from the south passing through Nepet, while its prolongation to the north certainly bore the name Via Amerina. The circuit of the city is about 2250 yds., its shape roughly triangular, and the walls are a remarkably fine and well-preserved specimen of Roman military architecture. They are constructed of rectangular blocks of tufa two Roman ft. in height; the walls themselves reach in places a height of 56 ft. and are 7 to 9 ft. thick. There were about 80 towers, some 50 of which are still preserved. Two of the gates also, of which there were eight, are noteworthy. Of the buildings within the walls hardly anything is preserved above ground, though the forum and theatre (as also the amphitheatre, the arena of which measured 180 by 108 ft. outside the walls) were all excavated in the 19th century. Almost the only edifice now standing is the 12th-century abbey church of S. Maria. Recent excavations have shown that the plan of the whole city could easily be recovered, though the buildings have suffered considerable devastation (Notizie degli scavi, 1903, 14).

See G. Dennis, *Cities and Cemeteries of Etruria* (London, 1883), i. 97; for philology and ethnology see FALISCI.

1 The Roman town lay 3 m. farther N.W. on the Via Annia. The Via Flaminia, which did not traverse the Etruscan city, had two post-stations near it, Aquaviva, some 2<sup>1</sup>/<sub>2</sub> m. S.E., and Aequum Faliscum, 4<sup>1</sup>/<sub>2</sub> m. N.N.E.; the latter is very possibly identical with the Etruscan site which G. Dennis (*Cities and Cemeteries of Etruria*, London, 1883, i. 121) identified with Fescennium (*q.v.*). See O. Cuntz in *Jahreshefte des österr. arch. Inst.* ii. (1899), 87.

**FALERIO** (mod. *Falerone*), an ancient town of Picenum, Italy, about 10 m. S.E. of Urbs Salvia. We know almost nothing of the place except from inscriptions, from which, and from the remains of its buildings, it appears to have been of some importance. It was probably founded as a colony by Augustus after his victory at Actium. A question arose in the time of Domitian between the inhabitants of Falerio and Firmum as to land which had been taken out of the territory of the latter (which was recolonized by the triumvirs), and, though not distributed to the new settlers, had not been given back again to the people of Firmum. The emperor, by a rescript, a copy of which in bronze was found at Falerio, decided in favour of the people of Falerio, that the occupiers of this land should remain in possession of it (Th. Mommsen in *Corp. Inscr. Latin.* ix., Berlin, 1883, No. 5, 420). Considerable remains of a theatre in concrete faced with brickwork, erected, according to an inscription, in 43 B.C., and 161 ft. in diameter, were excavated in 1838 and are still visible; and an amphitheatre, less well preserved, also exists, the arena of which measures about 180 by 150 ft. Between the two is a water reservoir (called Bagno della Regina) connected with remains of baths.

See G. de Minicis in *Giornale Arcadico*, lv. (1832), 160 seq.; *Annali dell' Istituto* (1839), 5 seq.

(T. As.)

**FALGUIÈRE, JEAN ALEXANDRE JOSEPH** (1831-1900), French sculptor and painter, was born at Toulouse. A pupil of the École des Beaux Arts he won the *Prix de Rome* in 1859; he was awarded the medal of honour at the Salon in 1868 and was appointed officer of the Legion of Honour in 1878. His first bronze statue of importance was the "Victor of the Cock-Fight" (1864), and "Tarcisus the Christian Boy-Martyr" followed in 1867; both are now in the Luxembourg Museum. His more important monuments are those to Admiral Courbet (1890) at Abbeville and the famous "Joan of Arc." Among more ideal work are "Eve" (1880), "Diana" (1882 and 1891), "Woman and Peacock," and "The Poet," astride his Pegasus spreading wings for flight. His "Triumph of the Republic" (1881-1886), a vast quadriga for the Arc de Triomphe, Paris, is perhaps more amazingly full of life than others of his works, all of which reveal this quality of vitality in superlative degree. To these works should be added his monuments to "Cardinal Lavigerie" and "General de La Fayette" (the latter in Washington), and his statues of "Lamartine" (1876) and "St Vincent de Paul" (1879), as well as the "Balzac," which he executed for the *Société des gens de lettres* on the rejection of that by Rodin; and the busts of "Carolus-Duran" and "Coquelin cadet" (1896).

Falguière was a painter as well as a sculptor, but somewhat inferior in merit. He displays a fine sense of colour and tone, added to the qualities of life and vigour that he instils into his plastic work. His "Wrestlers" (1875) and "Fan and Dagger" (1882; a defiant Spanish woman) are in the Luxembourg, and other pictures of importance are "The Beheading of St John the Baptist" (1877), "The Sphinx" (1883), "Acis and Galatea" (1885), "Old Woman and Child" (1886) and "In the Bull Slaughter-House." He became a member of the Institute (Académie des Beaux-Arts) in 1882. He died in 1900.

See Léonce Bénédite, Alexandre Falguière, Librairie de l'art (Paris).

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and most illustrious Venetian families and had served the republic with distinction in various capacities. In 1346 he commanded the Venetian land forces at the siege of Zara, where he was attacked by the Hungarians under King Louis the Great and totally defeated them; this victory led to the surrender of the city. In September 1354, while absent on a mission to Pope Innocent IV. at Avignon, Faliero was elected doge, an honour which apparently he had not sought. His reign began, as it was to end, in disaster, for very soon after his election the Venetian fleet was completely destroyed by the Genoese off the island of Sapienza, while plague and a declining commerce aggravated the situation. Although a capable commander and a good statesman, Faliero possessed a violent temper, and after his election developed great ambition. The constitutional restrictions of the ducal power, which had been further curtailed just before his election, and the insolence of the nobility aroused in him a desire to free himself from all control, and the discontent of the arsenal hands at their treatment by the nobles offered him his opportunity. In concert with a sea-captain named Bertuccio Ixarella (who had received a blow from the noble Giovanni Dandolo), Filippo Calendario, a stonemason, and others, a plot was laid to murder the chief patricians on the 15th of April and proclaim Faliero prince of Venice. But there was much ferment in the city and disorders broke out before the appointed time; some of the conspirators having made revelations, the Council of Ten proceeded to arrest the ringleaders and to place armed guards all over the town. Several of the conspirators were condemned to death and others to various terms of imprisonment. The doge's complicity having been discovered, he was himself arrested; at the trial he confessed everything and was condemned and executed on the 17th of April 1355.

The story of the insult written by Michele Steno on the doge's chair is a legend of which no record is found in any contemporary authority. The motives of Faliero are not altogether clear, as his past record, even in the judgment of the poet Petrarch, showed him as a wise, clear-headed man of no unusual ambition. But possibly the attitude of the aristocracy and the example offered by the tyrants of neighbouring cities may have induced him to attempt a similar policy. The only result of the plot was to consolidate the power of the Council of Ten.

BIBLIOGRAPHY.—An account of Marino Faliero's reign is given in S. Romanin's *Storia documentata di Venezia*, lib. ix. cap. ii. (Venice, 1855); M. Sanudo, *Le Vite dei Dogi* in new edition of Muratori fasc, 3, 4, 5 (Citta di Castello, 1900). For special works see V. Lazzerini's "Genealogia d. M. Faliero" in the *Archivio Veneto* of 1892; "M. Faliero avanti il Dogado," *ibid.* (1893), and his exhaustive study "M. Faliero, la Congiura," *ibid.* (1897). The most recent essay on the subject is contained in Horatio Brown's *Studies in Venetian History* (London, 1907), wherein all the authorities are set forth.

(L. V.\*)

**FALISCI**, a tribe of Sabine origin or connexions, but speaking a dialect closely akin to Latin, who inhabited the town of Falerii (q.v.), as well as a considerable tract of the surrounding country, probably reaching as far south as to include the small town of Capena. But at the beginning of the historical period, *i.e.* from the beginning of the 5th century B.C., and no doubt earlier, the dominant element in the town was Etruscan; and all through the wars of the following centuries the town was counted a member, and sometimes a leading member, of the Etruscan league (cf. Livy iv. 23, v. 17, vii. 17).

In spite of the Etruscan domination, the Faliscans preserved many traces of their Italic origin, such as the worship of the deities Juno Quiritis (Ovid, *Fasti*, vi. 49) and Feronia (Livy xxvi. n), the cult of *Dis Soranus* by the *Hirpi* or fire-leaping priests on Mount Soracte (Pliny, *Nat. Hist.* vii. 2, 19; Servius, *ad Aen.* xi. 785, 787), above all their language. This is preserved for us in some 36 short inscriptions, dating from the 3rd and 2nd centuries B.C., and is written in a peculiar alphabet derived from the Etruscan, and written from right to left, but showing some traces of the influence of the Latin alphabet. Its most characteristic signs are —

As a specimen of the dialect may be quoted the words written round the edge of a picture on a patera, the genuineness of which is established by the fact that they were written before the glaze was put on: "foied vino pipafo, era carefo," *i.e.* in Latin "hodie vinum bibam, cras

carebo" (R.S. Conway, *Italic Dialects*, p. 312, b). This shows some of the phonetic characteristics of the Faliscan dialect, viz.:—

1. The retention of medial *f* which in Latin became b;

2. The representation of an initial Ind.-Eur. *gh* by, *f* (*foied*, contrast Latin *hodie*);

3. The palatalization of d + consonant i into some sound denoted merely by i-the central sound of *foied*, from *fo-diëd*;

4. The loss of final s, at all events before certain following sounds (cra beside Latin crās);

Other characteristics, appearing elsewhere, are:

5. The retention of the velars (Fal. cuando = Latin quando; contrast Umbrian pan(n)u);

6. The assimilation of some final consonants to the initial letter of the next word: "pretod de zenatuo sententiad" (Conway, *lib. cit.* 321), *i.e.* "praetor de senatus sententia" (*zenatuo* for *senaiuos.*, an archaic genitive). For further details see Conway, *ib.* pp. 370 if., especially pp. 384-385, where the relation of the names *Falisci, Falerii* to the local hero *Halaesus* (*e.g.* Ovid, *Fasti*, iv. 73) is discussed, and where reason is given for thinking that the change of initial f (from an original *bh* or *dh*) into an initial h was a genuine mark of Faliscan dialect.

It seems probable that the dialect lasted on, though being gradually permeated with Latin, till at least 150 B.C.

In addition to the remains found in the graves (see FALERII), which belong mainly to the period of Etruscan domination and give ample evidence of material prosperity and refinement, the earlier strata have yielded more primitive remains from the Italic epoch. A large number of inscriptions consisting mainly of proper names may be regarded as Etruscan rather than Faliscan, and they have been disregarded in the account of the dialect just given. It should perhaps be mentioned that there was a town Feronia in Sardinia, named probably after their native goddess by Faliscan settlers, from some of whom we have a votive inscription found at S. Maria di Falleri(Conway, *ib.* p. 335).

Further information may be sought from W. Deecke, *Die Falisker* (a useful but somewhat uncritical collection of the evidence accessible in 1888); E. Bormann, in *C.I.L.* xi. pp. 465 ff., and Conway, *op. cit.* 

(R. S. C.)

FALK, JOHANN DANIEL (1768-1826), German author and philanthropist, was born at Danzig on the 28th of October 1768, After attending the gymnasium of his native town, he entered the university of Halle with the view of studying theology, but preferring a nonprofessional life, gave up his theological studies and went to live at Weimar. There he published a volume of satires which procured him the notice and friendship of Wieland, and admission into literary circles. After the battle of Jena, Falk, on the recommendation of Wieland, was appointed to a civil post under the French official authorities and rendered his townsmen such good service that the duke of Weimar created him a counsellor of legation. In 1813 he established a society for friends in necessity (Gesellschaft der Freunde in der Not), and about the same time founded an institute for the care and education of neglected and orphan children, which, in 1820, was taken over by the state and still exists as the Falksches Institut. The first literary efforts of Falk took the form chiefly of satirical poetry, and gave promise of greater future excellence than was ever completely fulfilled; his later pieces, directed more against individuals than the general vices and defects of society, gradually degenerated in quality. In 1806 Falk founded a critical journal under the title of *Elysium und* Tartarus. He also contributed largely to contemporary journals. He enjoyed the acquaintance and intimate friendship of Goethe, and his account of their intercourse was posthumously published under the title Goethe aus näherem persönlichen Umgange dargestellt (1832) (English by S. Austin). Falk died on the 14th of February 1826.

Falk's Satirische Werke appeared in 7 vols. (1817 and 1826); his Auserlesene Schriften (3 vols., 1819). See Johannes Falk: Erinnerungsblatter aus Briefen und Tagebüchern, gesammelt von dessen Tochter Rosalie Falk (1868); Heinzelmann, Johannes Falk und die Gesellschaft der Freunde in der Not (1879); A. Stein, J. Falk (1881); S. Schultze, Falk und Goethe (1900).

FALK, PAUL LUDWIG ADALBERT (1827-1900), German politician, was born at Matschkau, Silesia, on the 10th of August 1827. In 1847 he entered the Prussian state service, and in 1853 became public prosecutor at Lyck. In 1858 he was elected a deputy, joining the Old Liberal party. In 1868 he became a privy-councillor in the ministry of justice. In 1872 he was made minister of education, and in connexion with Bismarck's policy of the Kultur-kampf he was responsible for the famous May Laws against the Catholics (see GERMANY: *History*). In 1879 his position became untenable, owing to the death of Pius IX. and the change of German policy with regard to the Vatican, and he resigned his office, but retained his seat in the Reichstag till 1882. He was then made president of the supreme court of justice at Hamm, where he died in 1900.

FALKE, JOHANN FRIEDRICH GOTTLIEB (1823-1876), German historian, was born at Ratzeburg on the 20th of April 1823. Entering the university of Erlangen in 1843, he soon began to devote his attention to the history of the German language and literature, and in 1848 went to Munich, where he remained five years, and diligently availed himself of the use of the government library for the purpose of prosecuting his historical studies. In 1856 he was appointed secretary of the German museum at Nuremberg, and in 1859 keeper of the manuscripts. With the aid of the manuscript collections in the museum he now turned his attention chiefly to political history, and, with Johann H. Müller, established an historical journal under the name of Zeitschrift für deutsche Kulturgeschichte (4 vols., Nuremberg, 1856-1859). To this journal he contributed a history of German taxation and commerce. On the latter subject he published separately Geschichte des deutschen Handels (2 vols., Leipzig, 1850-1860) and Die Hansa als deutsche See- und Handelsmacht (Berlin, 1862). In 1862 he was appointed secretary of the state archives at Dresden, and, a little later, keeper. He there began the study of Saxon history, still devoting his attention chiefly to the history of commerce and economy, and published Die Geschichte des Kurfürsten August von Sachsen in volkswirthschaftlicher Beziehung (Leipzig, 1868) and Geschichte des deutschen Zollwesens (Leipzig, 1869). He died at Dresden on the 2nd of March 1876.

FALKIRK, a municipal and police burgh of Stirlingshire, Scotland. Pop. (1891) 19,769; (1901) 29,280. It is situated on high ground overlooking the fertile Carse of Falkirk, 11 m. S.E. of Stirling, and about midway between Edinburgh and Glasgow. Grangemouth, its port, lies 3 m. to the N.E., and the Forth & Clyde Canal passes to the north, and the Union Canal to the south of the town. Falkirk now comprises the suburbs of Laurieston (E.), Grahamston and Bainsford (N.), and Camelon (W.). The principal structures include the burgh and county buildings, town hall, the Dollar free library and Camelon fever hospital. The present church, with a steeple 146 ft. high, dates only from 1811. In the churchyard are buried Sir John Graham, Sir John Stewart who fell in the battle of 1298, and Sir Robert Munro and his brother, Dr Duncan Munro, killed in the battle of 1746. The town is under the control of a council with provost and bailies, and combines with Airdrie, Hamilton, Lanark and Linlithgow (the Falkirk group of burghs) to return a member to parliament. The district is rich in coal and iron, which supply the predominant industries, Falkirk being the chief seat of the light casting trade in Scotland; but tanning, flour-milling, brewing, distilling and the manufacture of explosives (Nobel's) and chemicals are also carried on. Trysts or sales of cattle, sheep and horses are held thrice a year (August, September and October) on Stenhousemuir, 3 m. N.W. They were transferred hither from Crieff in 1770, and were formerly the most important in the kingdom, but have to a great extent been replaced by the local weekly auction marts. Carron, 2 m. N.N.W., is famous for the iron-works established in 1760 by Dr John Roebuck (1718-1794), whose advising engineers were successively John Smeaton and James Watt. The short iron guns of large calibre designed by General Robert Melville, and first cast in 1779, were called carronades from this their place of manufacture.

Falkirk is a town of considerable antiquity. Its original name was the Gaelic *Eaglais breac*, "church of speckled or mottled stone," which Simeon of Durham (fl. 1130) transliterated as Egglesbreth. By the end of the 13th century appears the form Faukirke (the present local

pronunciation), which is merely a translation of the Gaelic *fau* or *faw*, meaning "dun," "pale red." The first church was built by Malcolm Canmore (d. 1093). Falkirk was made a burgh of barony in 1600 and a burgh of regality in 1646, but on the forfeiture of the earl of Linlithgow in 1715, its superiority was vested in the crown. Callender House, immediately to the S., was the seat of the earl and his ancestors. The mansion was visited by Queen Mary, captured by Cromwell, and occupied by Generals Monk and Hawley. The wall of Antoninus ran through, the grounds, and the district is rich in Roman remains, Camelon, about 2 m. W., being the site of a Roman settlement; Merchiston Hall, to the N.W., was the birthplace of Admiral Sir Charles Napier. The eastern suburb of Laurieston was first called Langtoune, then Merchistown, and received its present name after Sir Lawrence Dundas of Kerse, who had promoted its welfare. At Polmont, farther east, which gives the title of baron to the duke of Hamilton, is the school of Blair Lodge, besides coal-mines and other industries.

Battles of Falkirk.—The battle of the 22nd of July 1298 was fought between the forces of King Edward I. of England and those of the Scottish national party under Sir William Wallace. The latter, after long baffling the king's attempts to bring him to battle, had taken up a strong position south of the town behind a morass. They were formed in four deep and close masses ("schiltrons") of pikemen, the light troops screening the front and flanks and a body of men-at-arms standing in reserve. It was perhaps hoped that the English cavalry would plunge into the morass, for no serious precautions were taken as to the flanks, but in any case Wallace desired no more than to receive an attack at the halt, trusting wholly to his massed pikes. The English right wing first appeared, tried the morass in vain, and then set out to turn it by a long détour; the main battle under the king halted in front of it, while the left wing under Antony Bec, bishop of Durham, was able to reach the head of the marsh without much delay. Once on the enemy's side of the obstacle the bishop halted to wait for Edward, who was now following him, but his undisciplined barons, shouting "'Tis not for thee, bishop, to teach us war. Go say mass!" drove off the Scottish archers and men-at-arms and charged the nearest square of pikes, which repulsed them with heavy losses. On the other flank the right wing, its flank march completed, charged with the same result. But Edward, who had now joined the bishop with the centre or "main battle," peremptorily ordered the cavalry to stand fast, and, taught by his experience in the Welsh wars, brought up his archers. The longbow here scored its first victory in a pitched battle. Before long gaps appeared in the close ranks of pike heads, and after sufficient preparation Edward again launched his men-at-arms to the charge. The shaken masses then gave way one after the other, and the Scots fled in all directions.

The second battle of Falkirk, fought on the 17th of January 1746 between the Highlanders under Prince Charles and the British forces under General Hawley, resulted in the defeat of the latter. It is remarkable only for the bad conduct of the British dragoons and the steadiness of the infantry. Hawley retreated to Linlithgow, leaving all his baggage, 700 prisoners and seven guns in the enemy's hands.

FALKLAND, LUCIUS CARY, 2ND VISCOUNT (c. 1610-1643), son of Sir Henry Cary, afterwards 1st Viscount Falkland (d. 1633), a member of an ancient Devonshire family, who was lord deputy of Ireland from 1622 to 1629, and of Elizabeth (1585-1639), only daughter of Sir Lawrence Tanfield, chief baron of the exchequer, was born either in 1609 or 1610, and was educated at Trinity College, Dublin. In 1625 he inherited from his grandfather the manors of Great Tew and Burford in Oxfordshire, and, about the age of 21, married Lettice, daughter of Sir Richard Morrison, of Tooley Park in Leicestershire. Involved in a quarrel with his father, whom he failed to propitiate by offering to hand over to him his estate, he left England to take service in the Dutch army, but soon returned. In 1633, by the death of his father, he became Viscount Falkland. His mother had embraced the Roman Catholic faith, to which it was now sought to attract Falkland himself, but his studies and reflections led him, under the influence of Chillingworth, to the interpretation of religious problems rather by reason than by tradition or authority. At Great Tew he enjoyed a short but happy period of study, and he assembled round him many gifted and learned men, whom the near neighbourhood of the university and his own brilliant qualities attracted to his house. He was the friend of Hales and Chillingworth, was celebrated by Jonson, Suckling, Cowley and Waller in verse, and in prose by Clarendon, who is eloquent in describing the virtues and genius of the "incomparable" Falkland, and draws a delightful picture of his society and hospitality.

Falkland's intellectual pleasures, however, were soon interrupted by war and politics. He felt it his duty to take part on the king's side as a volunteer under Essex in the campaign of 1639 against the Scots. In 1640 he was returned for Newport in the Isle of Wight to the Short and Long Parliaments, and took an active part on the side of the opposition. He spoke against the exaction of shipmoney on the 7th of December 1640, denouncing the servile conduct of Lord Keeper Finch and the judges.<sup>1</sup> He supported the prosecution of Strafford, at the same time endeavouring on more than one occasion to moderate the measures of the Commons in the interests of justice, and voted for the third reading of the attainder on the 21st of April 1641. On the great question of the church he urged, in the debate of the 8th of February 1641, that the interference of the clergy in secular matters, the encroachments in jurisdiction of the spiritual courts, and the imposition by authority of unnecessary ceremonies, should be prohibited. On the other hand, though he denied that episcopacy existed *jure divino*, he was opposed to its abolition; fearing the establishment of the Presbyterian system, which in Scotland had proved equally tyrannical. Triennial parliaments would be sufficient to control the bishops, if they meditated any further attacks upon the national liberties, and he urged that "where it is not necessary to change, it is necessary not to change." Even Hampden still believed that a compromise with the episcopal principle was possible, and assured Falkland that if the bill taken up to the Lords on the 1st of May 1641, excluding the bishops from the Lords and the clergy from secular offices, were passed, "there would be nothing more attempted to the prejudice of the church." Accordingly the bill was supported by Falkland. The times, however, were not favourable to compromise. The bill was lost in the Lords, and on the 27th of May the Root and Branch Bill, for the total abolition of episcopacy, was introduced in the House of Commons. This measure Falkland opposed, as well as the second bill for excluding the bishops, introduced on the 21st of October. In the discussion on the Grand Remonstrance he took the part of the bishops and the Arminians. He was now opposed to the whole policy of the opposition, and, being reproached by Hampden with his change of attitude, replied "that he had formerly been persuaded by that worthy gentleman to believe many things which he had since found to be untrue, and therefore he had changed his opinion in many particulars as well as to things as to persons."<sup>2</sup>

On the 1st of January 1642, immediately before the attempted arrest of the five members, of which, however, he was not cognizant, he was offered by the king the secretaryship of state, and was persuaded by Hyde to accept it, thus becoming involved directly in the king's policy, though evidently possessing little influence in his counsels. He was one of the peers who signed the protestation against making war, at York on the 15th of June 1642. On the 5th of September he carried Charles's overtures for peace to the parliament, when he informed the leaders of the opposition that the king consented to a thorough reformation of religion. The secret correspondence connected with the Waller plot passed through his hands. He was present with the king at Edgehill and at the siege of Gloucester. By this time the hopelessness of the situation had completely overwhelmed him. The aims and principles of neither party in the conflict could satisfy a man of Falkland's high ideals and intellectual vision. His royalism could not suffer the substitution, as the controlling power in the state, of a parliament for the monarchy, nor his conservatism the revolutionary changes in church and state now insisted upon by the opposite faction. The fatal character and policy of the king, the most incapable of men and yet the man upon whom all depended, must have been by now thoroughly understood by Falkland. Compromise had long been out of the question. The victory of either side could only bring misery; and the prolongation of the war was a prospect equally unhappy. Nor could Falkland find any support or consolation in his own inward convictions or principles. His ideals and hopes were now destroyed, and he had no definite political convictions such as inspired and strengthened Stratford and Pym. In fact his sensitive nature shrank from contact with the practical politics of the day and prevented his rise to the place of a leader or a statesman. Clarendon has recorded his final relapse into despair. "Sitting amongst his friends, often, after a deep silence and frequent sighs (he) would with a shrill and sad accent ingeminate the word *Peace*, *Peace*, and would passionately profess that the very agony of the war, and the view of the calamities and desolation the kingdom did and must endure, took his sleep from him and would shortly break his heart." At Gloucester he had in vain exposed himself to risks. On the morning of the battle of Newbury, on the 20th of September 1643, he declared to his friends, who would have dissuaded him from taking part in the fight, that "he was weary of the times and foresaw much misery to his own Country and did believe he should be out of it ere night."<sup>3</sup> He served during the engagement as a volunteer under Sir John Byron, and, riding alone at a gap in a hedge commanded by the enemy's fire, was immediately killed.

His death took place at the early age of 33, which should be borne in mind in every estimate of his career and character. He was succeeded in the title by his eldest son Lucius, 3rd Viscount Falkland, his male descent becoming extinct in the person of Anthony, 5th

viscount, in 1694, when the viscounty passed to Lucius Henry (1687-1730), a descendant of the first viscount, and the present peer is his direct descendant.

Falkland wrote a *Discourse of Infallibility*, published in 1646 (*Thomason Tracts*, E 361 [1]), reprinted in 1650, in 1651 (E 634 [1]) ed. by Triplet with replies, and in 1660 with the addition of two discourses on episcopacy by Falkland. This is a work of some importance in theological controversy, the general argument being that "to those who follow their reason in the interpretation of the Scriptures God will either give his grace for assistance to find the truth or his pardon if they miss it. And then this supposed necessity of an infallible guide (with the supposed damnation for the want of it) fall together to the ground." Also *A Letter ... 30 Sept. 1642 concerning the late conflict before Worcester* (1642); and *Poems*, in which he shows himself a follower of Ben Jonson, edited by A.B. Grosart in *Miscellanies of the Fuller Worthies Library*, vol. iii. (1871).

The chief interest in Falkland does not lie in his writings or in the incidents of his career, but in his character and the distinction of his intellectual position, in his isolation from his contemporaries seeking reformation in the inward and spiritual life of the church and state and not in its outward and material form, and as the leader and chief of rationalism in an age dominated by violent intolerance and narrow dogmatism. His personal appearance, according to Clarendon, was insignificant, "in no degree attractive or promising. His stature was low and smaller than most men; his motion not graceful ... but that little person and small stature was quickly found to contain a great heart ... all mankind could not but admire and love him."<sup>4</sup>

AUTHORITIES.—There is a *Life and Times* by J.A.R. Marriott (1907); see also S.R. Gardiner's *Hist, of England; Hist. of the Civil War*; the same author's article in the *Dict. of Nat. Biography* and references there given; Clarendon's *Hist. of the Rebellion, passim* and esp. vii. 217-234; Clarendon's *Life; Rational Theology ... in the 17th Century*, by John Tulloch (1874), i. 76; *Life of Lady Falkland from a MS. in the imperial library at Lille* (1861); *Life* of the same by Lady Georgiana Fullerton (1883); Jonson's *Ode Pindaric to the memory and friendship of ... Sir Lucius Cary and Sir Henry Morrison*; W.J. Courthope, *History of English Poetry* (1903), iii. 291; *Life of Falkland*, by W.H. Trale in the *Englishman's Library*, vol. 22 (1842); D. Lloyd, *Memoires* (1668), 331; and the *Life of Falkland*, by Lady M.T. Lewis in *Lives of the Friends ... of Lord Chancellor Clarendon*, vol. i. p. 3. John Duncan's account of Lettice, Lady Falkland, was edited in 1908 by M.F. Howard.

(P. C. Y.)

- 1 His speeches are in the *Thomason Tracts*, E 196 (9), (26), (36).
- 2 Clarendon's *Hist.* iv. 94, note.
- 3 Whitelocke, p. 73.
- 4 *Life*, i. 37.

FALKLAND, a royal and police burgh of Fifeshire, Scotland. Pop. (1901) 809. It is situated at the northern base of the hill of East Lomond (1471 ft. high), 2<sup>1</sup>/<sub>2</sub> m. from Falkland Road station (with which there is communication by 'bus), on the North British railway company's main line to Dundee, 21 m. N. of Edinburgh as the crow flies. It is an old-world-looking place, many of the ancient houses still standing. Its industries are chiefly concerned with the weaving of linen and the brewing of ale, for which it was once specially noted; and it has few public buildings save the town hall. The palace of the Stuarts, however-more beautiful than Holyrood and quite as romantic-lends the spot its fame and charm. The older edifice that occupied this site was a hunting-tower of the Macduffs, earls of Fife, and was transferred with the earldom in 1371 to Robert Stewart, earl of Fife and Menteith, afterwards duke of Albany, second son of Robert II. Because of his father's long illness and the incapacity of Robert III., his brother Albany was during many years virtual ruler of Scotland, and, in the hope of securing the crown, caused the heir-apparent-David, duke of Rothesay-to be conveyed to the castle by force and there starved to death, in 1402. The conversion of the Thane's tower into the existing palace was begun by James III. and completed in 1538. The western part had two round towers, similar to those at Holyrood, which were also built by James V., and the southern elevation was ornamented with niches and statues, giving it a close resemblance to the Perpendicular style of the semi-ecclesiastical architecture of England. The palace soon became the favourite summer residence of the Stuarts. From it 151

James V. when a boy fled to Stirling by night from the custody of the earl of Angus, and in it he died in 1542.

Here, too, Queen Mary spent some of her happiest days, playing the country girl in its parks and woods. When the court was held at Falkland the Green was the daily scene of revelry and dance, and "To be Falkland bred" was a proverb that then came into vogue to designate a courtier. James VI. delighted in the palace and especially in the deer. He upset the schemes of the Gowrie conspirators by escaping from Falkland to St Andrews, and it was while His Majesty was residing in the palace that the fifth earl of Bothwell, in 1592, attempted to kidnap him. In September 1596 an intensely dramatic interview took place in the palace between the king and Andrew Melville and other Presbyterian ministers sent by the general assembly at Cupar to remonstrate with him on allowing the Roman Catholic lords to return to Scotland. In 1654 the eastern wing was accidentally destroyed by fire, during its tenancy by the soldiers of Cromwell, by whose orders the fine old oaks in the park were cut down for the building of a fort at Perth. Even in its neglected state the mansion impressed Defoe, who declared the Scottish kings owned more palaces than their English brothers. In 1715 Rob Roy garrisoned the palace and failed not to levy dues on the burgh and neighbourhood. Signs of decay were more evident when Thomas Carlyle saw it, for he likened it to "a black old bit of coffin or protrusive shin-bone striking through the soil of the dead past." But a munificent protector at length appeared in the person of the third marquess of Bute, who acquired the estate and buildings in 1888, and forthwith undertook the restoration of the palace.

Falkland became a royal burgh in 1458 and its charter was renewed in 1595, and before the earlier date it had been a seat of the Templars. It gives the title of viscount to the English family of Cary, the patent having been granted in 1620 by James VI. The town's most distinguished native was Richard Cameron, the Covenanter. His house—a three-storeyed structure with yellow harled front and thatched roof—still stands on the south side of the square in the main street. The Hackstons of Rathillet also had a house in Falkland.

FALKLAND ISLANDS (Fr. Malouines; Span. Malvinas), a group of islands in the South Atlantic Ocean, belonging to Britain, and lying about 250 m. E. of the nearest point in the mainland of South America, between 51° and 53° S., and 57° 40' and 61° 25' W. With the uninhabited dependency of South Georgia Island, to the E.S.E., they form the most southerly colony of the British empire. The islands, inclusive of rocks and reefs, exceed 100 in number and have a total area of 6500 sq. m.; but only two are of considerable size; the largest of these, East Falkland, is 95 m. in extreme length, with an average width of 40 m., and the smaller, West Falkland, is 80 m. long and about 25 m. wide. The area of East Falkland is about 3000 sq. m., and that of West Falkland 2300. Most of the others are mere islets, the largest 16 m. long by 8 m. wide. The two principal islands are separated by Falkland Sound, a narrow strait from 18 to 21/2 m. in width, running nearly N.E. and S.W. The general appearance of the islands is not unlike that of one of the outer Hebrides. The general colouring, a faded brown, is somewhat dreary, but the mountain heights and promontories of the west display some grandeur of outline. The coast-line of both main islands is deeply indented and many of the bays and inlets form secure and well-protected harbours, some of which, however, are difficult of access to sailing ships.

East Falkland is almost bisected by two deep fjords, Choiseul and Brenton Sounds, which leave the northern and southern portions connected only by an isthmus a mile and a half wide. The northern portion is hilly, and is crossed by a rugged range, the Wickham Heights, running east and west, and rising in some places to a height of nearly 2000 ft. The remainder of the island consists chiefly of low undulating ground, a mixture of pasture and morass, with many shallow freshwater tarns, and small streams running in the valleys. Two fine inlets, Berkeley Sound and Port William, run far into the land at the north-eastern extremity of the island. Port Louis, formerly the seat of government, is at the head of Berkeley Sound, but the anchorage there having been found rather too exposed, about the year 1844 a town was laid out, and the necessary public buildings were erected on Stanley Harbour, a sheltered recess within Port William. West Falkland is more hilly near the east island; the principal mountain range, the Hornby Hills, runs north and south parallel with Falkland Sound. Mount Adam, the highest hill in the islands, is 2315 ft. high.

The little town of Stanley is built along the south shore of Stanley harbour and stretches a

short way up the slope; it has a population of little more than 900. The houses, mostly white with coloured roofs, are generally built of wood and iron, and have glazed porches, gay with fuchsias and pelargoniums. Government House, grey, stone-built and slated, calls to mind a manse in Shetland or Orkney. The government barrack is a rather imposing structure in the middle of the town, as is the cathedral church to the east, built of stone and buttressed with brick. Next to Stanley the most important place on East Falkland is Darwin on Choiseul Sound—a village of Scottish shepherds and a station of the Falkland Island Company.

The Falkland Islands consist entirely, so far as is known, of the older Palaeozoic rocks, Lower Devonian or Upper Silurian, slightly metamorphosed and a good deal crumpled and distorted, in the low grounds clay slate and soft sandstone, and on the ridges hardened sandstone passing into the conspicuous white quartzites. There do not seem to be any minerals of value, and the rocks are not such as to indicate any probability of their discovery. Galena is found in small quantity, and in some places it contains a large percentage of silver. The dark bituminous layers of clay slate, which occur intercalated among the quartzites, have led, here as elsewhere, to the hope of coming upon a seam of coal, but it is contrary to experience that coal of any value should be found in rocks of that age.

Many of the valleys in the Falklands are occupied by pale glistening masses which at a little distance much resemble small glaciers. Examined more closely these are found to be vast accumulations of blocks of quartzite, irregular in form, but having a tendency to a rude diamond shape, from 2 to 20 ft. in length, and half as much in width, and of a thickness corresponding with that of the quartzite ridges on the hills above. The blocks are angular, and rest irregularly one upon another, supported in all positions by the angles and edges of those beneath. The whole mass looks as if it were, as it is, slowly sliding down the valley to the sea. These "stone runs" are looked upon with great wonder by the shifting population of the Falklands, and they are shown to visitors with many strange speculations as to their mode of formation. Their origin is attributed by some to the moraine formation of former glaciers. Another out of many theories<sup>1</sup> is that the hard beds of quartzite are denuded by the disintegration of the softer layers. Their support being removed they break away in the direction of natural joints, and the fragments fall down the slope upon the vegetable soil. This soil is spongy, and, undergoing alternate contraction and expansion from being alternately comparatively dry and saturated with moisture, allows the heavy blocks to slip down by their own weight into the valley, where they become piled up, the valley stream afterwards removing the soil from among and over them.

The Falkland Islands correspond very nearly in latitude in the southern hemisphere with London in the northern, but the climatic influences are very different. The temperature is equable, the average of the two midsummer months being about 47° Fahr., and that of the two midwinter months 37° Fahr. The extreme frosts and heats of the English climate are unknown, but occasional heavy snow-falls occur, and the sea in shallow inlets is covered with a thin coating of ice. The sky is almost constantly overcast, and rain falls, mostly in a drizzle and in frequent showers, on about 250 days in the year. The rainfall is not great, only about 20 in., but the mean humidity for the year is 80, saturation being 100. November is considered the only dry month. The prevalent winds from the west, south-west and south blow continuously, at times approaching the force of a hurricane. "A region more exposed to storms both in summer and winter it would be difficult to mention" (Fitzroy, Voyages of "Adventure" and "Beagle," ii. 228). The fragments of many wrecks emphasize the dangers of navigation, which are increased by the absence of beacons, the only lighthouse being that maintained by the Board of Trade on Cape Pembroke near the principal settlement. Kelp is a natural danger-signal, and the sunken rock, "Uranie," is reputed to be the only one not buoyed by the giant seaweed.

Of aboriginal human inhabitants there is no trace in the Falklands, and the land fauna is very scanty. A small wolf, the *loup-renard* of de Bougainville, is extinct, the last having been seen about 1875 on the West Falkland. Some herds of cattle and horses run wild; but these were, of course, introduced, as were also the wild hogs, the numerous rabbits and the less common hares. All these have greatly declined in numbers, being profitably replaced by sheep. Land-birds are few in kind, and are mostly strays from South America. They include, however, the snipe and military starling, which on account of its scarlet breast is locally known as the robin. Sea-birds are abundant, and, probably from the islands having been comparatively lately peopled, they are singularly tame. Gulls and amphibious birds abound in large variety; three kinds of penguin have their rookeries and breed here, migrating yearly for some months to the South American mainland. Stray specimens of the great king penguin have been observed, and there are also mollymauks (a kind of albatross), Cape pigeons and many carrion birds. Kelp and upland geese abound, the latter being edible; and their shooting affords some sport.

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The Falkland Islands form essentially a part of Patagonia, with which they are connected by an elevated submarine plateau, and their flora is much the same as that of Antarctic South America. The trees which form dense forest and scrub in southern Patagonia and in Fuegia are absent, and one of the largest plants on the islands is a gigantic woolly ragweed (Senecio *candicans*) which attains in some places a height of 3 to 4 ft. A half-shrubby veronica (V. decussata) is found in some parts, and has also received cultivation. The greater part of the "camp" (the open country) is formed of peat, which in some places is of great age and depth, and at the bottom of the bed very dense and bituminous. The peat is different in character from that of northern Europe: cellular plants enter but little into its composition, and it is formed almost entirely of the roots and stems of *Empetrum rubrum*, a variety of the common crow-berry of the Scottish hills with red berries, called by the Falklanders the "diddle-dee" berry; of *Myrtus nummularia*, a little creeping myrtle whose leaves are used by the shepherds as a substitute for tea; of Caltha appendiculata, a dwarf species of marshmarigold; and of some sedges and sedge-like plants, such as Astelia pumila, Gaimardia australis and Bostkovia grandiflora. Peat is largely used as fuel, coal being obtained only at a cost of £3 a ton.

Two vegetable products, the "balsam bog" (*Bolar glebaria*) and the "tussock grass" (*Dactylis caespitosa*) have been objects of curiosity and interest ever since the first accounts of the islands were given. The first is a huge mass of a bright green colour, living to a great age, and when dead becoming of a grey and stony appearance. When cut open, it displays an infinity of tiny leaf-buds and stems, and at intervals there exudes from it an aromatic resin, which from its astringent properties is used by the shepherds as a vulnerary, but has not been converted to any commercial purpose. The "tussock grass" is a wonderful and most valuable natural production, which, owing to the introduction of stock, has become extinct in the two main islands, but still flourishes elsewhere in the group. It is a reed-like grass, which grows in dense tufts from 6 to 10 ft. high from stool-like root-crowns. It forms excellent fodder for cattle, and is regularly gathered for that purpose. It is of beautiful appearance, and the almost tropical profusion of its growth may have led to the early erroneous reports of the densely-wooded nature of these islands.

The population slightly exceeds 2000. The large majority of the inhabitants live in the East Island, and the predominating element is Scottish-Scottish shepherds having superseded the South American Gauchos. In 1867 there were no settlers on the west island, and the government issued a proclamation offering leases of grazing stations on very moderate terms. In 1868 all the available land was occupied. These lands are fairly healthy, the principal drawback being the virulent form assumed by simple epidemic maladies. The occupation of the inhabitants is almost entirely pastoral, and the principal industry is sheepfarming. Wool forms by far the largest export, and tallow, hides, bones and frozen mutton are also exported. Trade is carried on almost entirely with the United Kingdom; the approximate annual value of exports is £120,000, and of imports a little more than half that sum. The Falkland Islands Company, having its headquarters at Stanley and an important station in the camp at Darwin, carries on an extensive business in sheep-farming and the dependent industries, and in the general import trade. The development of this undertaking necessitated the establishment of stores and workshops at Stanley, and ships can be repaired and provided in every way; a matter of importance since not a few vessels, after suffering injury during heavy weather off Cape Horn, call on the Falklands in distress. The maintenance of the requisite plant and the high wages current render such repairs somewhat costly. A former trade in oil and sealskin has decayed, owing to the smaller number of whales and seals remaining about the islands. Communications are maintained on horseback and by water, and there are no roads except at Stanley. There is a monthly mail to and from England, the passage occupying about four weeks.

The Falkland Islands are a crown colony, with a governor and executive and legislative councils. The legislative council consists of the governor and three official and two unofficial nominated members, and the executive of the same, with the exception that there is only one unofficial member. The colony is self-supporting, the revenue being largely derived from the drink duties, and there is no public debt. The Falklands are the seat of a colonial bishop. Education is compulsory. The government maintains schools and travelling teachers; the Falkland Islands Company also maintains a school at Darwin, and there is one for those of the Roman Catholic faith in Stanley. There is also on Keppel Island a Protestant missionary settlement for the training in agriculture of imported Fuegians. Stanley was for some years a naval station, but ceased to be so in 1904.

The Falkland Islands were first seen, by Davis in the year 1592, and Sir Richard Hawkins sailed along their north shore in 1594. The claims of Amerigo Vespucci to a previous discovery are doubtful. In 1598 Sebald de Wert, a Dutchman, visited them, and called them

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the Sebald Islands, a name which they bear on some Dutch maps. Captain Strong sailed through between the two principal islands in 1690, landed upon one of them, and called the passage Falkland Sound, and from this the group afterwards took its English name. In 1764 the French explorer De Bougainville took possession of the islands on behalf of his country, and established a colony at Port Louis on Berkeley Sound. But in 1767 France ceded the islands to Spain, De Bougainville being employed as intermediary. Meanwhile in 1765 Commodore Byron had taken possession on the part of England on the ground of prior discovery, and had formed a settlement at Port Egmont on the small island of Saunders. The Spanish and English settlers remained in ignorance, real or assumed, of each other's presence until 1769-1770, when Byron's action was nearly the cause of a war between England and Spain, both countries having armed fleets to contest the barren sovereignty. In 1771, however, Spain yielded the islands to Great Britain by convention. As they had not been actually colonized by England, the republic of Buenos Aires claimed the group in 1820, and subsequently entered into a dispute with the United States of America concerning the rights to the products of these islands. On the representations of Great Britain the Buenos Aireans withdrew, and the British flag was once more hoisted at Port Louis in 1833, and since that time the Falkland Islands have been a regular British colony.

In 1845 Mr S. Lafone, a wealthy cattle and hide merchant on the river Plate, obtained from government a grant of the southern portion of the island, a peninsula 600,000 acres in extent, and possession of all the wild cattle on the island for a period of six years, for a payment of £10,000 down, and £20,000 in ten years from January 1, 1852. In 1851 Mr Lafone's interest in Lafonia, as the peninsula came to be called, was purchased for £30,000 by the Falkland Islands Company, which had been incorporated by charter in the same year.

See Pernety, Journal historique d'une voyage faite aux îles Malouines en 1763 et 1764 (Berlin, 1767); S. Johnson, Thoughts on the late Transactions respecting Falkland's Islands (1771); L.A. de Bougainville, Voyage autour du monde (1771); T. Falkner, Description of Patagonia and the Falkland Islands (1774); B. Penrose, Account of the last Expedition to Port Egmont in the Falkland Islands (1775); Observations on the Forcible Occupation of Malvinas by the British Government in 1833 (Buenos Ayres, 1833); Reclamacion del Gobierno de las provincias Unidas de la Plata contra el de S.M. Britanica sobre la soverania y possesion de las Islas Malvinas (London, 1841); Fitzroy, Narrative of the Surveying Voyage of H.M.S. "Adventure" and "Beagle" (1839); Darwin, Voyage of a Naturalist round the World (1845); S.B. Sullivan, Description of the Falkland Islands (1849); W. Hadfield, Brazil, the Falkland Islands, &c. (1854); W. Parker Snow, Two Years' Cruise off the Tierra del Fuego, the Falkland Islands, &c. (1857); Sir C. Wyville Thomson, Voyage of the "Challenger" (1877); C.P. Lucas, Historical Geography of the British Colonies, vol. ii. "The West Indies" (Oxford, 1890); Colonial Reports Annual; MS. Sloane, 3295.

**FALLACY** (Lat. *fall-ax*, apt to mislead), the term given generally to any mistaken statement used in argument; in Logic, technically, an argument which violates the laws of correct demonstration. An argument may be fallacious in *matter* (*i.e.* misstatement of facts), in *wording* (*i.e.* wrong use of words), or in the *process of inference*. Fallacies have, therefore, been classified as: I. Material, II. Verbal, III. Logical Of Formal; II. and III. are often included under the general description *Logical*, and in scholastic phraseology, following Aristotle, are called fallacies *in dictione* or *in voce*, as opposed to material fallacies *in re* or *extra dictionem*.

I. *Material.*—The classification widely adopted by modern logicians and based on that of Aristotle, *Organon (Sophistici elenchi)*, is as follows:—(1) *Fallacy of Accident, i.e.* arguing erroneously from a general rule to a particular case, without proper regard to particular conditions which vitiate the application of the general rule; *e.g.* if manhood suffrage be the law, arguing that a criminal or a lunatic must, therefore, have a vote; (2) *Converse Fallacy of Accident, i.e.* arguing from a special case to a general rule; (3) *Irrelevant Conclusion*, or *Ignoratio Elenchi*, wherein, instead of proving the fact in dispute, the arguer seeks to gain his point by diverting attention to some extraneous fact (as in the legal story of "No case. Abuse the plaintiff's attorney"). Under this head come the so-called argumentum (*a*) *ad hominem*, (*b*) *ad populum*, (*c*) *ad baculum*, (*d*) *ad verecundiam*, common in platform oratory, in which

<sup>1</sup> See B Stechele, in *Münchener geographische Studien*, xx.(1906), and *Geographical Journal* (December 1907).

the speaker obscures the real issue by appealing to his audience on the grounds of (a) purely personal considerations, (b) popular sentiment, (c) fear, (d) conventional propriety. This fallacy has been illustrated by ethical or theological arguments wherein the fear of punishment is subtly substituted for abstract right as the sanction of moral obligation. (4) Petitio principii (begging the question) or Circulus in probando (arguing in a circle), which consists in demonstrating a conclusion by means of premises which presuppose that conclusion. Jeremy Bentham points out that this fallacy may lurk in a single word, especially in an epithet, e.g. if a measure were condemned simply on the ground that it is alleged to be "un-English"; (5) Fallacy of the Consequent, really a species of (3), wherein a conclusion is drawn from premises which do not really support it; (6) Fallacy of False Cause, or Non Sequitur ("it does not follow"), wherein one thing is incorrectly assumed as the cause of another, as when the ancients attributed a public calamity to a meteorological phenomenon; (7) Fallacy of Many Questions (Plurium Interrogationum), wherein several questions are improperly grouped in the form of one, and a direct categorical answer is demanded, e.g. if a prosecuting counsel asked the prisoner "What time was it when you met this man?" with the intention of eliciting the tacit admission that such a meeting had taken place.

II. Verbal Fallacies are those in which a false conclusion is obtained by improper or ambiguous use of words. They are generally classified as follows. (1) Equivocation consists in employing the same word in two or more senses, e.g. in a syllogism, the middle term being used in one sense in the major and another in the minor premise, so that in fact there are four not three terms ("All fair things are honourable; This woman is fair; therefore this woman is honourable," the second "fair" being in reference to complexion). (2) Amphibology is the result of ambiguity of grammatical structure, e.g. of the position of the adverb "only" in careless writers ("He only said that," in which sentence, as experience shows, the adverb has been intended to qualify any one of the other three words). (3) Composition, a species of (1), which results from the confused use of collective terms ("The angles of a triangle are less than two right angles" might refer to the angles separately or added together). (4) Division, the converse of the preceding, which consists in employing the middle term distributively in the minor and collectively in the major premise. (5) Accent, which occurs only in speaking and consists of emphasizing the wrong word in a sentence ("He is a fairly good pianist," according to the emphasis on the words, may imply praise of a beginner's progress, or an expert's depreciation of a popular hero, or it may imply that the person in question is a deplorable violinist). (6) Figure of Speech, the confusion between the metaphorical and ordinary uses of a word or phrase.

III. The purely *Logical* or Formal *fallacies* consist in the violation of the formal rules of the Syllogism (q.v.). They are (a) fallacy of Four Terms (*Quaternio terminorum*); (b) of Undistributed Middle; (c) of Illicit process of the major or the minor term; (d) of Negative Premises.

Of other classifications of Fallacies in general the most famous are those of Francis Bacon and J.S. Mill. Bacon (*Novum organum*, Aph. i. 33, 38 sqq.) divided fallacies into four *Idola* (Idols, *i.e.* False Appearances), which summarize the various kinds of mistakes to which the human intellect is prone (see Bacon, Francis). With these should be compared the *Offendicula* of Roger Bacon, contained in the *Opus maius*, pt. i. (see Bacon, Roger). J.S. Mill discussed the subject in book v. of his *Logic*, and Jeremy Bentham's *Book of Fallacies* (1824) contains valuable remarks.

See Rd. Whateley's *Logic*, bk. v.; A. de Morgan, *Formal Logic* (1847); A. Sidgwick, *Fallacies* (1883) and other text-books. See also article Logic, and for fallacies of Induction, see INDUCTION.

**FALLIÈRES, CLÉMENT ARMAND** (1841- ), president of the French republic, was born at Mézin in the department of Lot-et-Garonne, where his father was clerk of the peace. He studied law and became an advocate at Nérac, beginning his public career there as municipal councillor (1868), afterwards mayor (1871), and as councillor-general of the department of Lot-et-Garonne (1871). Being an ardent Republican, he lost this position in May 1873 upon the fall of Thiers, but in February 1876 was elected deputy for Nérac. In the chamber he sat with the Republican Left, signed the protestation of the 18th of May 1877, and was re-elected in October by his constituency. In 1880 he became under-secretary of state in the department of the interior in the Jules Ferry ministry (May 1880 to November

1881). From the 7th of August 1882 to the 20th of February 1883 he was minister of the interior, and for a month (from the 29th of January 1883) was premier. His ministry had to face the question of the expulsion of the pretenders to the throne of France, owing to the proclamation by Prince Jérome Napoleon (January 1883), and M. Fallières, who was ill at the time, was not able to face the storm of opposition, and resigned when the senate rejected his project. In the following November, however, he was chosen as minister of public instruction by Jules Ferry, and carried out various reforms in the school system. He resigned with the ministry in March 1885. Again becoming minister of the interior in the Rouvier cabinet in May 1887, he exchanged his portfolio in December for that of justice. He returned to the ministry of the interior in February 1889, and finally took the department of justice from March 1890 to February 1892. In June 1890 his department (Lot-et-Garonne) elected him to the senate by 417 votes to 23. There M. Fallières remained somewhat apart from party struggles, although maintaining his influence among the Republicans. In March 1899 he was elected president of the senate, and retained that position until January 1906, when he was chosen by a union of the groups of the Left in both chambers as candidate for the presidency of the republic. He was elected on the first ballot by 449 votes against 371 for his opponent, Paul Doumer.

**FALL-LINE,** in American geology, a line marking the junction between the hard rocks of the Appalachian Mountains and the softer deposits of the coastal plain. The pre-Cambrian and metamorphic rocks of the mountain mass form a continuous ledge parallel to the east coast, where they are subject to denudation and form a series of "falls" and rapids in the river courses all along this line. The relief of the land below the falls is very slight, and this low country rarely rises to a height of 200 ft., so that the rivers are navigable up to the falls, while the falls themselves are a valuable source of power. A line of cities may be traced upon the map whose position will thus be readily understood in relation to the economic importance of the fall-line. They are Trenton on the Delaware, Philadelphia on the Schuylkill, Georgetown on the Potomac, Richmond on the James, and Augusta on the Savannah. It will be readily understood that the softer and more recent rocks of the coastal plain have been more easily washed away, while the harder rocks of the mountains, owing to differential denudation, are left standing high above them, and that the trend of the edge of this great lenticular mass of ancient rock is roughly parallel to that of the Appalachian system.

FALLMERAYER, JAKOB PHILIPP (1790-1861), German traveller and historical investigator, best known for his opinions in regard to the ethnology of the modern Greeks, was born, the son of a poor peasant, at Tschötsch, near Brixen in Tirol, on the 10th of December 1790. In 1809 he absconded from the cathedral choir school at Brixen and made his way to Salzburg, where he supported himself by private teaching while he studied theology, the Semitic languages, and history. After a year's study he sought to assure to himself the peace and quiet necessary for a student's life by entering the abbey of Kremsmünster, but difficulties put in his way by the Bavarian officials prevented the accomplishment of this intention. At the university of Landshut, to which he removed in 1812, he first applied himself to jurisprudence, but soon devoted his attention exclusively to history and philology. His immediate necessities were provided for by a rich patron. During the Napoleonic wars he joined the Bavarian infantry as a subaltern in 1813, fought at Hanau (30th October 1813), and served throughout the campaign in France. He remained in the army of occupation on the banks of the Rhine until Waterloo, when he spent six months at Orleans as adjutant to General von Spreti. Two years of garrison life at Lindau on Lake Constance after the peace were spent in the study of modern Greek, Persian and Turkish.

Resigning his commission in 1818, he was successively engaged as teacher in the gymnasium at Augsburg and in the progymnasium and lyceum at Landshut. In 1827 he won the gold medal offered by the university of Copenhagen with his *Geschichte des Kaisertums von Trapezunt*, based on patient investigation of Greek and oriental MSS. at Venice and Vienna. The strictures on priestcraft contained in the preface to this book gave offence to the

authorities, and his position was not improved by the liberal views expressed in his Geschichte der Halbinsel Morea während des Mittelalters (Stuttgart, 1830-1836, 2 pts.). The three years from 1831 to 1834 he spent in travel with the Russian count Ostermann Tolstoy, visiting Egypt, Palestine, Syria, Cyprus, Rhodes, Constantinople, Greece and Naples. On his return he was elected in 1835 a member of the Royal Bavarian Academy of Sciences, but he soon after left the country again on account of political troubles, and spent the greater part of the next four years in travel, spending the winter of 1839-1840 with Count Tolstoy at Geneva. Constantinople, Trebizond, Athos, Macedonia, Thessaly and Greece were visited by him during 1840-1841; and after some years' residence in Munich he returned in 1847 to the East, and travelled in Palestine, Syria and Asia Minor. The authorities continued to regard him with suspicion, and university students were forbidden to attend the lectures he delivered at Munich. He entered, however, into friendly relations with the crown prince Maximilian, but this intimacy was destroyed by the events following on 1848. At that period he was appointed professor of history in the Munich University, and made a member of the national congress at Frankfort-on-Main. He there joined the left or opposition party, and in the following year he accompanied the rump-parliament to Stuttgart, a course of action which led to his expulsion from his professorate. During the winter of 1849-1850 he was an exile in Switzerland, but the amnesty of April 1850 enabled him to return to Munich. He died on the 26th of April 1861.

His contributions to the medieval history of Greece are of great value, and though his theory that the Greeks of the present day are of Albanian and Slav descent, with hardly a drop of true Greek blood in their veins, has not been accepted in its entirety by other investigators, it has served to modify the opinions of even his greatest opponents. A criticism of his views will be found in Hopf's *Geschichte Griechenlands* (reprinted from Ersch and Gruber's *Encykl.*) and in Finlay's *History of Greece in the Middle Ages.* Another theory which he propounded and defended with great vigour was that the capture of Constantinople by Russia was inevitable, and would lead to the absorption by the Russian empire of the whole of the Balkan and Grecian peninsula; and that this extended empire would constitute a standing menace to the western Germanic nations. These views he expressed in a series of brilliant articles in German journals. His most important contribution to learning remains his history of the empire of Trebizond. Prior to his discovery of the chronicle of Michael Panaretos, covering the dominion of Alexus Comnenus and his successors from 1204 to 1426, the history of this medieval empire was practically unknown.

His works are—Geschichte des Kaiserthums Trapezunt (Munich, 1827-1848); Geschichte der Halbinsel Morea im Mittelalter (Stuttgart, 1830-1836); Über die Entstehung der Neugriechen (Stuttgart, 1835); "Originalfragmente, Chroniken, u.s.w., zur Geschichte des K. Trapezunts" (Munich, 1843), in Abhandl. der hist. Classe der K. Bayerisch. Akad. v. Wiss.; Fragmente aus dem Orient (Stuttgart, 1845); Denkschrift über Golgotha und das heilige Grab (Munich, 1852), and Das Todte Meer (1853)—both of which had appeared in the Abhandlungen of the Academy; Das albanesische Element in Griechenland, iii. parts, in the Abhandl. for 1860-1866. After his death there appeared at Leipzig in 1861, under the editorship of G.M. Thomas, three volumes of Gesammelte Werke, containing Neue Fragmente aus dem Orient, Kritische Versuche, and Studien und Erinnerungen aus meinem Leben. A sketch of his life will also be found in L. Steub, Herbsttage in Tyrol (Munich, 1867).

**FALLOPIUS** (or FALLOPIO), **GABRIELLO** (1523-1562), Italian anatomist, was born about 1523 at Modena, where he became a canon of the cathedral. He studied medicine at Ferrara, and, after a European tour, became teacher of anatomy in that city. He thence removed to Pisa, and from Pisa, at the instance of Cosmo I., grand-duke of Tuscany, to Padua, where, besides the chairs of anatomy and surgery and of botany, he held the office of superintendent of the new botanical garden. He died at Padua on the 9th of October 1562. Only one treatise by Fallopius appeared during his lifetime, namely the *Observationes anatomicae* (Venice, 1561). His collected works, *Opera genuina omnia*, were published at Venice in 1584. (See ANATOMY.)

FALLOUX, FRÉDÉRIC ALFRED PIERRE, COMTE DE (1811-1886), French politician and author, was born at Angers on the 11th of May 1811. His father had been ennobled by Charles X., and Falloux began his career as a Legitimist and clerical journalist under the influence of Mme Swetchine. In 1846 he entered the legislature as deputy for Maine-et-Loire, and with many other ultra-Catholics he gave real or pretended support to the revolution of 1848. Louis Napoleon made him minister of education in 1849, but disagreements with the president led to his resignation within a year. He had nevertheless secured the passage of the Loi Falloux (March 15, 1850) for the organization of primary and secondary education. This law provided that the clergy and members of ecclesiastical orders, male and female, might exercise the profession of teaching without producing any further qualification. This exemption was extended even to priests who taught in secondary schools, where a university degree was exacted from lay teachers. The primary schools were put under the management of the curés. Falloux was elected to the French Academy in 1856. His failure to secure reelection to the legislature in 1866, 1869, 1870 and 1871 was due to the opposition of the stricter Legitimists, who viewed with suspicion his attempts to reconcile the Orleans princes with Henri, comte de Chambord. In spite of his failure to enter the National Assembly his influence was very great, and was increased by the intimacy of his personal relations with Thiers. But in 1872 he offended both sections of the monarchical party at a conference arranged in the hope of effecting a fusion between the partisans of the comte de Chambord and of the Orleans princes, divided on the vexed question of the flag. He suggested that the comte de Chambord might recede from his position with dignity at the desire of the National Assembly, and not content with this encroachment on royalist principles, he insinuated the possibility of a transitional stage with the duc d'Aumale as president of the republic. His disgrace was so complete that he was excommunicated by the bishop of Angers in 1876. He died on the 16th of January 1886.

Of his numerous works the best known are his *Histoire de Louis XVI* (1840); *Histoire de Saint Pie* (1845); *De la contre-revolution* (1876); and the posthumous *Mémoires d'un royaliste* (2 vols., 1888).

FALLOW, land ploughed and tilled, but left unsown, usually for a year, in order, on the one hand, to disintegrate, aërate and free it from weeds, and, on the other, to allow it to recuperate. The word was probably early confused with "fallow" (from O. Eng. fealu, probably cognate with Gr.  $\pi o \lambda i \delta \zeta$ , grey), of a pale-brown or yellow colour, often applied to soil left unfilled and unsown, but chiefly seen in the name of the "fallow deer." The true derivation is from the O. Eng. *fealga*, only found in the plural, a harrow, and the ultimate origin is a Teutonic root meaning "to plough," cf. the German falgen. The recognition that continuous growing of wheat on the same area of land robs the soil of its fertility was universal among ancient peoples, and the practice of "fallowing" or resting the soil is as old as agriculture itself. The "Sabbath rest" ordered to be given every seventh year to the land by the Mosaic law is a classical instance of the "fallow." Improvements in crop rotations and manuring have diminished the necessity of the "bare fallow," which is uneconomical because the land is left unproductive, and because the nitrates in the soil unintercepted by the roots of plants are washed away in the drainage waters. At the present time bare fallowing is, in general, only advisable on stiff soils and in dry climates. A "green fallow" is land planted with turnips, potatoes or some similar crop in rows, the space between which may be cleared of weeds by hoeing. The "bastard fallow" is a modification of the bare fallow, effected by the growth of rye, vetches, or some other rapidly growing crop, sown in autumn and fed off in spring, the land then undergoing the processes of ploughing, grubbing and harrowing usual in the bare fallow.

**FALLOW-DEER** (that is, DUN DEER, in contradistinction to the red deer, *Cervus* [*Dama*] *dama*), a medium-sized representative of the family *Cervidae*, characterized by its expanded or palmated antlers, which generally have no bez-tine, rather long tail (black above and white below), and a coat spotted with white in summer but uniformly coloured in winter. The

shoulder height is about 3 ft. The species is semi-domesticated in British parks, and occurs wild in western Asia, North Africa, the south of Europe and Sardinia. In prehistoric times it occurred throughout northern and central Europe. One park-breed has no spots. Bucks and does live apart except during the pairing-season; and the doe produces one or two, and sometimes three fawns at a birth. These deer are particularly fond of horse-chestnuts, which the stags are said to endeavour to procure by striking at the branches with their antlers. The Persian fallow-deer (C. [D.] mesopotamicus), a native of the mountains of Luristan, is larger than the typical species, and has a brighter coat, differing in some details of colouring. The antlers have the trez-tine near the small brow-tine, and the palmation beginning near the former. Here may be mentioned the gigantic fossil deer commonly known as the Irish elk, which is perhaps a giant type of fallow-deer, and if so should be known as Cervus (Dama) giganteus. If a distinct type, its title should be C. (Megaceros) giganteus. This deer inhabited Ireland, Great Britain, central and northern Europe, and western Asia in Pleistocene and prehistoric times; and must have stood 6 ft. high at the shoulder. The antlers are greatly palmated and of enormous size, fine specimens measuring as much as 11 ft. between the tips.

FALL RIVER, a city of Bristol county, Massachusetts, U.S.A., situated on Mount Hope Bay, at the mouth of the Taunton river, 49 m. S. of Boston. Pop. (1890) 74,398; (1900) 104,863; (estimated, 1906) 105,942;<sup>1</sup> (1910 census) 119,295. It is the third city in size of the commonwealth. Of the population in 1900, 50,042, or 47.7%, were foreign-born, 90,244 were of foreign parentage (i.e. either one or both parents were foreign), and of these 81,721 had both foreign father and foreign mother. Of the foreign-born, 20,172 were French Canadians, 2329 were English Canadians, 12,268 were from England, 1045 were from Scotland, 7317 were from Ireland, 2805 were from Portugal, and 1095 were from Russia, various other countries being represented by smaller numbers. Fall River is served by the New York, New Haven & Hartford railway, and has good steamer connexions with Providence, Newport and New York, notably by the "Fall River Line," which is much used, in connexion with the N.Y., N.H. & H. railway, by travellers between New York and Boston. The harbour is large, deep and easy of access. The city lies on a plateau and on slopes that rise rather steeply from the river, and is irregularly laid out. Granite underlying the city furnishes excellent building material; among the principal buildings are the state armoury, the county court house, the B.M.C. Durfee high school, the custom house, Notre Dame College, the church of Notre Dame, the church of St Anne, the Central Congregational church and the public library. The commonwealth aids in maintaining a textile school (the Bradford Durfee textile school), opened in 1904. The city library contained in 1908 about 78,500 volumes. There is considerable commerce, but it is as a manufacturing centre that Fall River is best known. Above the city, on the plateau, about 2 m. from the bay, are the Watuppa Lakes, 7 m. long and on an average three-fourths of a mile wide, and from them runs the Fall (Quequechan) river, with a constant flow and descending near its mouth through 127 ft. in less than half a mile. The conjunction of water transportation and water power is thus remarkable, and accounts in great part for the city's rapid growth. The waters of the North Watuppa Lake (which is fed by springs and drains out a very small area) are also exceptionally pure and furnish an excellent water-supply. The Fall river runs directly through the city (passing beneath the city hall), and along its banks are long rows of cotton mills; formerly many of these were run by water power, and their wheels were placed directly in the stream bed, but steam power is now used almost exclusively. According to the special census of manufactures of 1905, the value of all factory products for the calendar year 1904 was \$43,473,105, of which amount \$35,442,581, or 81.5%, consisted of cotton goods and dyeing and finishing, making Fall River the largest producer of cotton goods among American cities.<sup>2</sup> A large hat manufactory (the Marshall Brothers' factory) furnishes the United States army with hats. Until forced by the competition of mills in the Southern states to direct attention to finer products, the cotton manufacturers of Fall River devoted themselves almost exclusively to the making of print cloth, in which respect the city was long distinguished from Lawrence and Lowell, whose products were more varied and of higher grade. The number of spindles increased from 265,328 in 1865 to 1,269,043 in 1875, 3,000,000 in 1900, and to about 3,500,000 in 1906. Excellent drainage and sewerage systems contribute to the city's health. The birth-rate was in 1900 the highest (38.75) of any city in the country of above 30,000 inhabitants (three of the four next highest being Massachusetts towns). The social conditions and labour problems of Fall River have long been exceptional. The mills supplement the

public schools in the mingling of races and the work for Americanization, and labour disturbances, for which Fall River was once conspicuous, have become less frequent and less bitter, the great strike of 1904-1905—perhaps the greatest in the history of the textile industry in the United States—being marked by little or no violence. Fall River has become a "city of homes," and tenements are giving way to dwellings for one or two families. The lists of the city's corporation stockholders show more than 10,000 names. The municipal police is controlled (as nowhere else in the state save in Boston) by a state board; this arrangement is generally regarded as having worked for better order. Lowell was about three times as large as Fall River in 1850, and Lawrence was larger until after 1870. Fall River was originally a part of Freetown; it was incorporated as a township in 1803 (being known as "Troy" in 1804-1834), and was chartered as a city in 1854. In 1861 it was increased by certain territory secured from Rhode Island, the city having spread across the state boundary and become subject to a divided jurisdiction. In 1902 the city received a new charter. Its manufactures amounted to little before the War of 1812. A disastrous fire occurred in 1843 (loss above \$500,000). In 1904 Fall River became the see of the Roman Catholic diocese of that name.

See H.H. Earl, *Centennial History of Fall River ... 1656-1876* (New York, 1877); and the report of Carroll D. Wright on *Fall River, Lowell and Lawrence*, in 13th annual report of the Massachusetts Bureau of Statistics of Labor (1882), which, however, was regarded as unjust and partial by the manufacturers of Fall River.

2 The above figures do not show adequately the full importance of Fall River as a cotton manufacturing centre, for during six months of the census year the great strike was in progress; this strike, caused by a reduction in wages, lasted from the 25th of July 1904 to the 18th of January 1905.

FALMOUTH, a municipal and contributary parliamentary borough and seaport of Cornwall, England, 306 m. W.S.W. of London, on a branch of the Great Western railway. Pop. (1901) 11,789. It is finely situated on the west shore of the largest of the many estuaries which open upon the south coast of the county. This is entered by several streams, of which the largest is the Fal. Falmouth harbour lies within Pendennis Point, which shelters the estuary from the more open Falmouth Bay. The Penryn river, coming in from the north-west, forms one of several shallow, winding arms of the estuary, the main channel of which is known as Carrick Roads. To the east Pendennis Castle stands on its lofty promontory, while on the opposite side of the roads the picturesque inlet of the Porthcuel river opens between Castle Point on the north, with St Mawes' Castle, and St Anthony Head and Zoze Point on the south. The shores of the estuary as a rule slope sharply up to about 250 ft., and are beautifully wooded. The entrance is 1 m. across, and the roads form one of the best refuges for shipping on the south coast, being accessible at all times by the largest vessels. Among the principal buildings and institutions in Falmouth are the town hall, market-house, hall of the Cornwall Polytechnic Society, a meteorological and magnetic observatory, and a submarine mining establishment. The Royal Cornwall Yacht Club has its headquarters here, and in the annual regatta the principal prize is a cup given by the prince of Wales as duke of Cornwall. Engineering, shipbuilding, brewing and the manufacture of manure are carried on, and there are oyster and trawl fisheries, especially for pilchard. The inner harbour, under the jurisdiction partly of commissioners and partly of a dock company, is enclosed between two breakwaters, of which the eastern has 23 ft. of water at lowest tides alongside. The area of the harbour is 42 acres, with nearly 700 lineal yards of quayage. There are two graving docks, and repairing yards. Grain, timber, coal and guano and other manures are imported, and granite, china clay, copper ore, ropes and fish exported. Falmouth is also in favour as a watering-place. The parliamentary borough of Penryn and Falmouth returns one member. The municipal borough is under a mayor, 4 aldermen and 12 councillors. Area, 790 acres.

Falmouth (Falemuth) as a haven and port has had a place in the maritime history of Cornwall from very early times. The site of the town, which is comparatively modern, was formerly known as Smithick and Pennycomequick and formed part of the manor of Arwenack held by the family of Killigrew. The corporations of Penryn, Truro and Helston opposed the undertaking, but the lords in council, to whom the matter was referred, decided in Killigrew's favour. In 1652 the House of Commons considered that it would be advantageous to the

<sup>1</sup> The small increase between 1900 and 1906 was due in large part to the emigration of many of the inhabitants during the great strike of 1904-1905.

Commonwealth to grant a Thursday market to Smithick. This market was confirmed to Sir Peter Killigrew in 1660 together with two fairs, on the 30th of October and the 27th of July, and also a ferry between Smithick and Flushing. By the charter of incorporation granted in the following year the name was changed to Falmouth, and a mayor, recorder, 7 aldermen and 12 burgesses constituted a common council with the usual rights and privileges. Three years later an act creating the borough a separate ecclesiastical parish empowered the mayor and aldermen to assess all buildings within the town at the rate of sixteen pence in the pound for the support of the rector. This rector's rate occasioned much ill-feeling in modern times, and by act of parliament in 1896 was taken over by the corporation, and provision made for its eventual extinction. The disfranchisement of Penryn, which had long been a subject of debate in the House of Commons, was settled in 1832, by uniting Penryn with Falmouth for parliamentary purposes and assigning two members to the united boroughs. By the Redistribution of Seats Act 1885, the number of members was reduced to one. The fairs granted in 1660 are no longer held, and a Saturday market has superseded the chartered market. In the 17th and 18th centuries Falmouth grew in importance owing to its being a station of the Packet Service for the conveyance of mails.

**FALSE POINT,** a landlocked harbour in the Cuttack district of Bengal, India. It was reported by the famine commissioners in 1867 to be the best harbour on the coast of India from the Hugli to Bombay. It derives its name from the circumstance that vessels proceeding up the Bay of Bengal frequently mistook it for Point Palmyras, a degree farther north. The anchorage is safe, roomy and completely landlocked, but large vessels are obliged to lie out at some distance from its mouth in an exposed roadstead. The capabilities of False Point as a harbour remained long unknown, and it was only in 1860 that the port was opened. It was rapidly developed, owing to the construction of the Orissa canals. Two navigable channels lead inland across the Mahanadi delta, and connect the port with Cuttack city. The trade of False Point is chiefly with other Indian harbours, but a large export trade in rice and oil-seeds has sprung up with Mauritius, the French colonies and France. False Point is now a regular port of call for Anglo-Indian coasting steamers. Its capabilities were first appreciated during the Orissa famine of 1866, when it afforded almost the only means by which supplies of rice could be thrown into the province. A lighthouse is situated a little to the south of the anchorage, on the point which screens it from the southern monsoon.

**FALSE PRETENCES**, in English law, the obtaining from any other person by any false pretence any chattel, money or valuable security, with intent to defraud. It is an indictable misdemeanour under the Larceny Act of 1861. The broad distinction between this offence and larceny is that in the former the owner intends to part with his property, in the latter he does not. This offence dates as a statutory crime practically from 1756. At common law the only remedy originally available for an owner who had been deprived of his goods by fraud was an indictment for the crime of cheating, or a civil action for deceit. These remedies were insufficient to cover all cases where money or other properties had been obtained by false pretences, and the offence was first partially created by a statute of Henry VIII. (1541), which enacted that if any person should falsely and deceitfully obtain any money, goods, &c., by means of any false token or counterfeit letter made in any other man's name, the offender should suffer any punishment other than death, at the discretion of the judge. The scope of the offence was enlarged to include practically all false pretences by the act of 1756, the provisions of which were embodied in the Larceny Act 1861.

The principal points to notice are that the pretence must be a false pretence of some existing fact, made for the purpose of inducing the prosecutor to part with his property (*e.g.* it was held not to be a false pretence to promise to pay for goods on delivery), and it may be by either words or conduct. The property, too, must have been actually obtained by the false pretence. The owner must be induced by the pretence to make over the absolute and immediate ownership of the goods, otherwise it is "larceny by means of a trick." It is not always easy, however, to draw a distinction between the various classes of offences. In the

case where a man goes into a restaurant and orders a meal, and, after consuming it, says that he has no means of paying for it, it was usual to convict for obtaining food by false pretences. But *R.* v. *Jones*, 1898, L.R. 1 Q.B. 119 decided that it is neither larceny nor false pretences, but an offence under the Debtors Act 1869, of obtaining credit by fraud. (See also CHEATING; FRAUD; LARCENY.)

United States.—American statutes on this subject are mainly copied from the English statutes, and the courts there in a general way follow the English interpretations. The statutes of each state must be consulted. There is no Federal statute, though there are Federal laws providing penalties for false personation of the lawful owner of public stocks, &c., or of persons entitled to pensions, prize money, &c. (U.S. Rev. Stats. § 5435), or the false making of any order purporting to be a money order (*id.* § 5463).

In Arizona, obtaining money or property by falsely personating another is punishable as for larceny (Penal Code, 1901, § 479). Obtaining credit by false pretences as to wealth and mercantile character is punishable by six months' imprisonment and a fine not exceeding three times the value of the money or property obtained (*id.* § 481).

In Illinois, whoever by any false representation or writing signed by him, of his own respectability, wealth or mercantile correspondence or connexions, obtains credit and thereby defrauds any person of money, goods, chattels or any valuable thing, or who procures another to make a false report of his honesty, wealth, &c., shall return the money, goods, &c., and be fined and imprisoned for a term not exceeding one year (Crim. Code, 1903, ch. xxxviii. §§ 96, 97). Obtaining money or property by bogus cheques, the "confidence game" (*Dorr* v. *People*, 1907, § 228, Ill. 216), or "three card monte," sleight of hand, fortune-telling, &c., is punishable by imprisonment for from one to ten years (*id.* §§ 98, 100). Obtaining goods from warehouse, mill or wharf by fraudulent receipt wrongly stating amount of goods deposited—by imprisonment for not less than one nor more than ten years (*id.* § 124). Fraudulent use of railroad passes is a misdemeanour (*id.* 125a).

In Massachusetts it is simple larceny to obtain by false pretences the money or personal chattel of another (Rev. Laws, 1902, ch. ccviii. § 26). Obtaining by a false pretence with intent to defraud the signature of a person to a written instrument, the false making whereof would be forgery, is punishable by imprisonment in a state prison or by fine (*id.* § 27).

In New York, obtaining property by false pretences, felonious breach of trust and embezzlement are included in the term "larceny" (Penal Code, § 528; *Paul* v. *Dumar*, 106 N.Y. 508; *People* v. *Tattlekan*, 1907, 104 N.Y. Suppl. 805), but the methods of proof required to establish each crime remain as before the code. Obtaining lodging and food on credit at hotel or lodging house with intent to defraud is a misdemeanour (Pen. Code, § 382). Purchase of property by false pretences as to person's means or ability to pay is not criminal when in writing signed by the party to be charged (Pen. Code, § 544).

**FALTICHENI** (*Falticeni*), the capital of the department of Suceava, Rumania, situated on a small right-hand tributary of the Sereth, among the hills of north-west Moldavia, and 2 m. S.E. of the frontier of Bukovina. Pop. (1900) 9643, about half being Jews. A branch railway runs for 15 m. to join the main line between Czernowitz in Bukovina, and Galatz. The Suceava department (named after Suceava or Suciava, its former capital, now Suczawa in Bukowina) is densely forested; its considerable timber trade centres in Falticheni. For five weeks, from the 20th July onwards, Russians and Austro-Hungarians, as well as Rumans, attend the fair which is held at Falticheni, chiefly for the sale of horses, carriages and cattle.

**FALUN**, a town of Sweden, capital of the district (*län*) of Kopparberg, 153 m. N.W. of Stockholm by rail. Pop. (1900) 9606. It is situated in a bare and rocky country near the western shore of lake Runn. Here are the oldest and most celebrated copper mines in Europe. Their produce has gradually decreased since the 17th century, and is now unimportant, but sulphate of copper, iron pyrites, and some gold, silver, sulphur and

sulphuric acid, and red ochre are also produced. The mines belong to the Kopparberg Mining Company (*Stora Kopparbergs Bergslags Aktiebolag*, formerly *Kopparbergslagen*). This is the oldest industrial corporation in Sweden, and perhaps the oldest still existing in the world; it is known to have been established before 1347. Since its reorganization as a joint-stock company in 1890 many of the shares have been held by the crown, philanthropic institutions and other public bodies. The company also owns iron mines, limestone and quartz quarries, large iron-works at Domnarfvet and elsewhere, a great extent of forests and saw-mills, and besides the output of the copper mines it produces manufactured iron and steel, timber, wood-pulp, bricks and charcoal. Falun has also railway rolling-stock factories. There are museums of mineralogy and geology, a lower school of mining, model room and scientific library. The so-called "Gothenburg System" of municipal control over the sale of spirits was actually devised at Falun as early as 1850.

**FAMA** (Gr. Φήμη, Όσσα), in classical mythology, the personification of Rumour. The Homeric equivalent *Ossa* (*Iliad*, ii. 93) is represented as the messenger of Zeus, who spreads reports with the rapidity of a conflagration. Homer does not personify *Pheme*, which is merely a presage drawn from human utterances, whereas Ossa (until later times) is associated with the idea of divine origin. A more definite character is given to Pheme by Hesiod (*Works and Days*, 764), who calls her a goddess; in Sophocles (*Oed. Tyr.* 158) she is the immortal daughter of golden Hope and is styled by the orator Aeschines (*Contra Timarchum*, § 128) one of the mightiest of goddesses. According to Pausanias (i. 17. 1) there was a temple of Pheme at Athens, and at Smyrna (*ib.* ix. 11, 7), whose inhabitants were especially fond of seeking the aid of divination, there was a sanctuary of Cledones (sounds or rumours supposed to convey omens).

There does not seem to have been any cult of Fama among the Romans, by whom she was regarded merely as "a figure of poetical religion." The Temple of Fame and Omen (Pheme and Cledon) mentioned by Plutarch (*Moralia*, p. 319) is due to a confusion with Aius Locutius, the divinity who warned the Romans of the coming attack of the Gauls. There are well-known descriptions of Fame in Virgil (*Aeneid*, iv. 173) and Ovid (*Metam.* xii. 39); see also Valerius Flaccus (ii. 116), Statius (*Thebais*, iii. 425). An unfavourable idea gradually became attached to the name; thus Ennius speaks of Fama as the personification of "evil" reputation and the opposite of Gloria (cp. the adjective *famosus*, which is not used in a good sense till the post-Augustan age). Chaucer in his *House of Fame* is obviously imitating Virgil and Ovid, although he is also indebted to Dante's *Divina Commedia*.

FAMAGUSTA (Gr. Ammochostos), a town and harbour on the east cost of Cyprus, 2<sup>1</sup>/<sub>2</sub> m. S. of the ruins of Salamis. The population in 1901 was 818, nearly all being Moslems who live within the walls of the fortress; the Christian population has migrated to a suburb called Varosia (pop. 2948). The foundation of Salamis (q.v.) was ascribed to Teucer: it was probably the most important town in early Cyprus. The revolt of the Jews under Trajan, and earthquakes in the time of Constantius and Constantine the Great helped in turn to destroy it. It was restored by Fl. Constantius II. (A.D. 337-361) as Constantia. Another town a little to the south, built by Ptolemy Philadelphus in 274 B.c., and called Arsinoe in honour of his sister, received the refugees driven from Constantia by the Arabs under Mu'awiyah, became the seat of the orthodox archbishopric, and was eventually known as Famagusta. It received a large accession of population at the fall of Acre in 1291; was annexed by the Genoese in 1376; reunited to the throne of Cyprus in 1464; and surrendered, after an investment of nearly a year, to the Turks in 1571. The fortifications, remodelled by the Venetians after 1489, the castle, the grand cathedral church of St Nicolas, and the remains of the palace and many other churches make Famagusta a place of unique interest. Acts ii. and v. of Shakespeare's Othello pass there. In 1903 measures were taken to develop the fine natural harbour of Famagusta. Basins were dredged to give depths of 15 and 24 ft. respectively at ordinary low tides, and commodious jetties and quays were constructed.

**FAMILIAR** (through the Fr. *familier*, from Lat. *familiaris*, of or belonging to the *familia*, family), an adjective, properly meaning belonging to the family or household, but in this sense the word is rare. The more usual meanings are: friendly, intimate, well known; and from its application to the easy relations of intimate friends the term may be used in an invidious sense of "free and easy" conduct on the part of any one not justified by any close relationship, friendship or intimacy. "Familiar" is, however, also used as a substantive, especially of the spirit or demon which attended on a wizard or magician, and was summoned to execute his master's wishes. The idea underlies the notion of the Christian guardian angel and of the Roman *genius natalis* (see DEMONOLOGY; WITCHCRAFT). In the Roman Church the term is applied to persons attached to the household of the pope or of bishops. These must actually do some domestic service. They are supported by their patron, and enjoy privileges which in the case of the papal familiars are considerable. "Familiars of the Holy Office" were lay officers of the Inquisition, whose functions were chiefly those of police, in making arrests, &c., of persons charged.

**FAMILISTS**, a term of English origin (later adopted in other languages) to denote the members of the Familia Caritatis (Hus der Lieften; Huis der Liefde; Haus der Liebe; "Family of Love"), founded by Hendrik Niclaes (born on the 9th or 10th of January 1501 or 1502, probably at Münster; died after 1570, not later than 1581, probably in 1580). His calling was that of a merchant, in which he and his son Franz prospered, becoming ultimately wealthy. Not till 1540 did he appear in the character of one divinely endowed with "the spirit of the true love of Jesus Christ." For twenty years (1540-1560) Emden was the headquarters at once of his merchandise and of his propaganda; but he travelled in both interests to various countries, visiting England in 1552 or 1553. To this period belong most of his writings. His primary work was Den Spegel der Gherechticheit dorch den Geist der Liefden unde den vergodeden Mensch H.N. uth de hemmelische Warheit betüget. It appeared in an English form with the author's revision, as An Introduction to the holy Understanding of the Glasse of Righteousness (1575?; reprinted in 1649). None of his works bear his name in full; his initials were mystically interpreted as standing for Homo Novus. His "glass of righteousness" is the spirit of Christ as interpreted by him. The remarkable fact was brought out by G. Arnold (and more fully by F. Nippold in 1862) that the printer of Niclaes's works was Christopher Plantin, of Antwerp, a specially privileged printer of Roman Catholic theology and liturgy, yet secretly a steadfast adherent of Niclaes. It is true that Niclaes claimed to hold an impartial attitude towards all existing religious parties, and his mysticism, derived from David Joris, was undogmatic. Yet he admitted his followers by the rite of adult baptism, and set up a hierarchy among them on the Roman model (see his Evangelium Regni, in English A Joyfull Message of the Kingdom, 1574?; reprinted, 1652). His pantheism had an antinomian drift; for himself and his officials he claimed impeccability; but, whatever truth there may be in the charge that among his followers were those who interpreted "love" as licence, no such charge can be sustained against the morals of Niclaes and the other leaders of the sect. His chief apostle in England was Christopher Vitel, a native of Delft, an "illuminate elder," living at Colchester and Southwark, who ultimately recanted. The society spread in the eastern counties, in spite of repressive measures; it revived under the Commonwealth, and lingered into the early years of the 18th century; the leading idea of its "service of love" was a reliance on sympathy and tenderness for the moral and spiritual edification of its members. Thus, in an age of strife and polemics, it seemed to afford a refuge for quiet, gentle spirits, and meditative temperaments.

See F. Nippold, "H. Niclaes u. das Haus der Liebe," in *Zeitschrift für die histor. Theol.* (1862); article "H. Niclaes" in A.J. van der Aa, Biog. *Woordenboek der Nederlanden* (1868); article "H. Nicholas," by C. Fell Smith, in *Dict. Nat. Biog.* (1894); article "Familisten," by Loofs, in Herzog-Hauck's *Realencyklopädie* (1898).

**FAMILY,** a word of which the etymology but partially illustrates the meaning. The Roman *familia*, derived from the Oscan *famel* (*servus*), originally signified the servile property, the thralls, of a master. Next, the term denoted other domestic property, in things as well as in persons. Thus, in the fifth of the laws of the Twelve Tables, the rules are laid down: si · INTESTATO · MORITUR · CUI · SUUS · HERES · NEC · SIT · ADGNATUS · PROXIMUS · AMILIAM · ABETO, and SI · AGNATUS · NEC · ESCIT · GENTILIS · FAMILIAM · NANCITOR; that is, if a man die intestate, leaving no natural heir who had been under his *potestas*, the nearest agnate, or relative tracing his connexion with the deceased exclusively through males, is to inherit the *familia*, or family fortune of every sort. Failing an agnate, a member of the *gens* of the dead man is to inherit. In a third sense, *familia* was applied to all the persons who could prove themselves to be descended from the same ancestor, and thus the word almost corresponded to our own use of it in the widest meaning, as when we say that a person is "of a good family" (Ulpian, *Dig.* 50, 16, 195 *fin.*).

1. Leaving for awhile the Roman terms, to which it will be necessary to return, we may provisionally define Family, in the modern sense, as the small community formed by the

union of one man with one woman, and by the increase of children born to them. These in modern times, and in most European countries, constitute Old theory. the household, and it has been almost universally supposed that little natural associations of this sort are the germ-cell of early society. The Bible presents the growth of the Jewish nation from the one household of Abraham. His patriarchal family differed from the modern family in being polygamous, but, as female chastity was one of the conditions of the patriarchal family, and as descent through males was therefore recognized as certain, the plurality of wives makes no real difference to the argument. In the same way the earliest formal records of Indian, Greek and Roman society present the family as firmly established, and generally regarded as the most primitive of human associations. Thus, Aristotle derives the first household ( $oi\kappa(\alpha \pi\rho\omega\tau\eta)$  from the combination of man's possession of property-in the slave or in domesticated animals-with man's relation to woman, and he quotes Hesiod: οἶκον μὲν πρώτιστα γυναῖκά τε βοῦν τ' ἀροτῆρα (*Politics*, i. 2. 5). The village, again, with him is a colony or offshoot of the household, and monarchical government in states is derived from the monarchy of the eldest male member of the family. Now, though certain ancient terms, introduced by Aristotle in the chapters to which we refer, might have led him to imagine a very different origin of society, his theory is, on the face of it, natural and plausible, and it has been almost universally accepted. The beginning of society, it has been said a thousand times, is the family, a natural association of kindred by blood, composed of father, mother and their descendants. In this family, the father is absolute master of his wife, his children and the goods of the little community; at his death his eldest son succeeds him; and in course of time this association of kindred, by natural increase and by adoption, develops into the clan, gens, or yévoc. As generations multiply, the more distant relations split off into other clans, and these clans, which have not lost the sense of primitive kinship, unite once more into tribes. The tribes again, as civilization advances, acknowledge themselves to be subjects of a king, in whose veins the blood of the original family runs purest. This, or something like this, is the common theory of the growth of society.

2. It was between 1866 and 1880 that the common opinion began to be seriously opposed. John Ferguson McLennan, in his *Primitive Marriage* and his essays on *The Worship of Plants* 

Modern criticism and Animals (see his Studies in Ancient History, second series), drew attention to the wide prevalence of the custom of inheriting the kinship name through mothers, not fathers; and to the law of "Exogamy" (q.v.). The former usage he attributed to archaic uncertainty as to fatherhood; the

natural result of absolute sexual promiscuity, or of Polyandry (q.v.). Either practice is inconsistent, prima facie, with the primitive existence of the Family, whether polygamous or monogamous, whether patriarchal or modern. The custom of Exogamy, again,—here taken to mean the unwritten law which makes it incest, and a capital offence, to marry within the real or supposed kin denoted by the common name of the kinship,—pointed to an archaic condition of family affairs all unlike our Table of prohibited degrees. This law of Exogamy was found, among many savage races, associated with Totems, that is plants, animals and other natural objects which give names to the various kinships, and are themselves, in various degrees, reverenced by members of the kinships. (See TOTEM AND TOTEMISM.) Traces of such kinships, and of Totemism, also of alleged promiscuity in ancient times, were detected by McLennan in the legends, folk-lore and institutions of Greece, Rome and India. Later, Prof. Robertson Smith found similar survivals, or possible survivals, among the Semitic races (*Kinship in Early Arabia*). Others have followed the same trail among the Celts (S. Reinach, *Cultes, mythes et religions*, 1904).

If arguments founded on these alleged survivals be valid, it may be that the most civilized

races have passed through the stages of Exogamy, Totemism and reckoning descent in the female line. McLennan explained Exogamy as a result of scarcity of women, due to female infanticide. Women being scarce, the men of a group would steal them from other groups, and it would become shameful, and finally a deadly sin, for a man to marry within his own group-name, or name of kinship, say Wolf or Raven. Meanwhile, owing to scarcity of women, one woman would be the mate of many husbands (polyandry); hence, paternity being undetermined, descent would be reckoned through mothers.

Such are the outlines of McLennan's theory, which, as a whole, has been attacked by many writers, and is now, perhaps, accepted by none. McLennan's was the most brilliant pioneer

McLennan's value. work; but his supply of facts was relatively scanty, and his friend Charles Darwin stated objections which to many seem final, as regards the past existence of a stage of sexual promiscuity. C.N. Starcke (*The Primitive Family*, 1889), Edward Alexander Westermarck (*History of Human Empet Crawley (The Muntic Rese)*, Herbert Spanser, Emile Durkheim, Lord

*Marriage*, 1891), Ernest Crawley (*The Mystic Rose*), Herbert Spencer, Emile Durkheim, Lord Avebury and many others, have criticized McLennan, who, however, in coining the term Exogamy, and drawing scientific attention to Totemism, and reckoning of kin through mothers, founded the study of early society. Here it must be observed that "Matriarchate" (q.v.) is a misleading term, as is "Gynaecocracy," for the custom of deducing descent on the spindle side. Women among totemistic and exogamous savages are in a degraded position, nor does the deriving and inheriting of the kinship name, or anything else, on the spindle side, imply any ignorance of paternal relations; even where, as among Central Australian tribes, the facts of reproduction are said to be unknown.

3. Simultaneous with McLennan's researches and speculations were the works of Lewis H. Morgan. He was the discoverer of a custom very important in its bearing on the history of

## Lewis Morgan.

society. In about two-thirds of the globe, persons in addressing a kinsman do not discriminate between grades of relationship. All these grades are merged in large categories. Thus, in what Morgan calls the "Malayan system," "all *consanguinei*, near or far, fall within one of these relationships

-grandparent, parent, brother, sister, child and grandchild." No other blood-relationships are recognized (Ancient Society). This at once reminds us of the Platonic Republic. "We devised means that no one should ever be able to know his own child, but that all should imagine themselves to be of one family, and should regard as brothers and sisters those who were within a certain limit of age; and those who were of an elder generation they were to regard as parents and grandparents, and those who were of a younger generation as children and grandchildren" (Timaeus, 18, Jowett's translation, first edition, vol. ii., 1871). This system prevails in the Polynesian groups and in New Zealand. Next comes what Morgan chooses to call the Turanian system. "It was universal among the North American aborigines," whom he styles Ganowanians. "Traces of it have been found in parts of Africa" (Ancient Society), and "it still prevails in South India among the Hindus, who speak the Dravidian language," and also in North India, among other Hindus. The system, Morgan says, "is simply stupendous." It is not exactly the same among all his miscellaneous "Turanians," but, on the whole, assumes the following shapes. Suppose the speaker to be a male, he will style his nephew and niece in the male line, his brother's children, "son" and "daughter," and his grand-nephews and grand-nieces in the male line, "grandson" and "granddaughter." Here the Turanian and the Malayan systems agree. But change the sex; let the male speaker address his nephews and nieces in the female line,-the children of his sister,-he salutes them as "nephew" and "niece," and they hail him as "uncle." Now, in the Malay system, nephews and nieces on both sides, brother's children or sisters, are alike named "children" of the uncle. If the speaker be a female, using the Turanian style, these terms are reversed. Her sister's sons and daughters are saluted by her as "son" and "daughter," her brother's children she calls "nephew" and "niece." Yet the children of the persons thus styled "nephew" and "niece" are not recognized in conversation as "grand-nephew" and "grandniece," but as "grandson" and "granddaughter." It is impossible here to do more than indicate these features of the classificatory nomenclature, from which the others may be inferred. The reader is referred for particulars to Morgan's Systems of Consanguinity and Affinity of the Human Race.

The existence of the classificatory system is not an entirely novel discovery. Nicolaus Damascenus, one of the inquirers into early society, who lived in the first century of our era, noticed this mode of address among the Galactophagi. Lafitau found it among the Iroquois. To Morgan's perception of the importance of the facts, and to his energetic collection of reports, we owe our knowledge of the wide prevalence of the system. From an examination of the degrees of kindred which seem to be indicated by the "Malayan" and "Turanian" modes of address, he has worked out a theory of the evolution of the modern family. A brief

comparison of this with other modern theories will close our account of the family. The main points of the theory are shortly stated in *Systems of Consanguinity*, &c., and in *Ancient Society*. From the latter work we quote the following description of the five different and successive forms of the family:—

"I. *The Consanguine Family.*—It was founded upon the intermarriage of brothers and sisters, own and collateral, in a group.

"II. *The Punaluan Family.*—It was founded upon the intermarriage of several sisters, own and collateral, with each others' husbands, in a group—the joint husbands not being necessarily kinsmen of each other; also, on the intermarriage of several brothers, own and collateral, with each others' wives in a group—these wives not being necessarily of kin to each other, although often the case in both instances (sic). In each case the group of men were conjointly married to the group of women.

"III. *The Syndyasmian or Pairing Family.*—It was founded upon marriage between single pairs, but without an exclusive cohabitation. The marriage continued during the pleasure of the parties.

"IV. *The Patriarchal Family.*—It was founded upon the marriage of one man with several wives, followed in general by the seclusion of the wives.

"V. *The Monogamian Family.*—It was founded upon marriage between single pairs with an exclusive cohabitation.

"Three of these forms, namely, the first, second, and fifth, were radical, because they were sufficiently general, and influential to create three distinct systems of consanguinity, all of which still exist in living forms. Conversely, these systems are sufficient of themselves to prove the antecedent existence of the forms of the family and of marriage with which they severally stand connected."

Morgan makes the systems of nomenclature proofs of the existence of the Consanguine and Punaluan families. Unhappily, there is no other proof, and the same systems have been explained on a very different principle (McLennan, Studies in Ancient History). Looking at facts, we find the Consanguine family nowhere, and cannot easily imagine how early groups abstained from infringing on each other, and created a systematic marriage of brothers and sisters. St Augustine, however (De civ. Dei, xv. 16), and Archinus in his Thessalica (Odyssey, xi. 7, scholia B, Q) agree more or less with Morgan. Next, how did the Consanguine family change into the Punaluan? Morgan says (Ancient Society) brothers ceased to marry their sisters, because "the evils of it could not for ever escape human observation." Thus the Punaluan family was hit upon, and "created a distinct system of consanguinity" (Ancient Society), the Turanian. Again, "marriages in Punaluan groups explain the relationships in the system." But Morgan provides himself with another explanation, "the Turanian system owes its origin to marriage in the group and to the gentile organization." He calls exogamy "the gentile organization," though, in point of fact, the only gentes we know, the Roman gentes, show scarcely a trace of exogamy. Again, "the change of relationships which resulted from substituting Punaluan in the place of Consanguine marriage turns the Malayan into the Turanian system." On the same page Morgan attributes the change to the "gentile organization," and, still on the same page, uses both factors in his working out of the problem. Now, if the Punaluan marriage is a sufficient explanation, we do not need the "gentile organization." Both, in Morgan's opinion, were efforts of conscious moral reform. In Systems of Consanguinity the gentile organization (there called tribal), that is, exogamy, is said to have been "designed to work out a reformation in the intermarriage of brothers and sisters." But the Punaluan marriage had done that, otherwise it would not have produced (as Morgan says it did) the change from the Malayan to the Turanian system, the difference in the two systems, as exemplified in Seneca and Tamil, being "in the relationships which depended on the intermarriage or non-intermarriage of brothers and sisters" (Ancient Society). Yet the Punaluan family, though itself a reform in morals and in "breeding," "did not furnish adequate motives to reform the Malay system," which, as we have seen, it did reform. The Punaluan family, it is suspected, "frequently involved own brothers and sisters"; had it not been so, there would have been no need of a fresh moral reformation,-"the gentile organization." Yet even in the Punaluan family (Ancient Society) "brothers ceased to marry their own sisters." What, then, did the "gentile organization" do for men? As they had already ceased to marry their own sisters, and as, under the gentile organization, they were still able to marry their half-sisters, the reformatory "ingenuity" of the inventors of the organizations was at once superfluous and useless. It is impossible to understand the Punaluan system. Its existence is inferred from a system of nomenclature which it does (and does not) produce; it admits (and excludes) own brothers and sisters. Morgan has intended, apparently, to represent the Punaluan marriage as a long transition to the definite custom of exogamy, but

it will be seen that his language is not very clear nor his positions assured. He does not adduce sufficient proof that the Punaluan family ever existed as an institution, even in Hawaii. There is, if possible, a greater absence of historical testimony to the existence of the Consanguine family. It is difficult to believe that exogamy was a conscious moral and social reformation, because, ex hypothesi, the savages had no moral data, nothing to cause disgust at relations which seem revolting to us. It is as improbable that they discovered the supposed physical evils of breeding in and in. That discovery could only have been made after a long experience, and in the Consanguine family that experience was impossible. Thus, setting moral reform aside as inconceivable, we cannot understand how the Consanguine families ever broke up. Morgan's ingenious speculations as to a transitional step towards the gens (as he calls what we style the totem-kindred), supposed to be found in the "classes" and marriage laws of the Kamilaroi, are vitiated by the weakness and contradictory nature of the evidence (see Pritchard; J.D. Lang's Queensland, Appendix; Proceedings of American Academy of Arts, &c., vol. viii. 412; Nature, October 29, 1874). Further, though Morgan calls the Australian "gentile organization" "incipient," he admits (Ancient Society) that the Narrinyeri have totem groups, in which "the children are of the clan of the father." Far from being "incipient," the gens of the Narrinyeri is on the footing of the ghotra of Hindu custom. Lastly, though Morgan frequently declares that the Polynesians have not the gens (for he thinks them not sufficiently advanced), W.W. Gill (Myths and Songs from the South Pacific, London, 1876) has shown that unmistakable traces of the totem survive in Polynesian mythology.

4. Morgan's theory was opposed by McLennan (*Studies in Ancient History*, 1876), who maintained that the names of relationships, in the "classificatory system," were merely terms

Rival theories. of address, as among ourselves when a preacher calls any adult male "brother," when an old woman is addressed as "mother," when an elder man calls a junior "my son." He also showed that his own system accounted for the terms. The controversy is still alive; one set of writers regarding the

savage terms of relationship as indicating a state of things in which human beings dwelt in a "horde," with promiscuous intercourse; another set holding that the terms do not indicate consanguineous kinship, but degrees of age, status, and reciprocal obligations in a local *tribe*, and therefore that they do not yield any presumption that there was a past of promiscuity or of what is called "group marriage." On Morgan's side (not of course accepting all his details) are L. Fison and A.W. Howitt, and Baldwin Spencer and F.J. Gillen. Against him are Starcke, Westermarck, A. Lang, Dr Durkheim, apparently, Crawley and many others.

5. A second presumption in favour of original promiscuity has been drawn by the eminent Australian students, Baldwin Spencer and F.J. Gillen, and by A.W. Howitt, from the customs

Evidence of original promiscuity. of some Australian aborigines. In each tribe, owing to customary laws which are to be examined later, only men and women of a given status are intermarriageable (*nupa*, *noa*, *unawa*) with each other. Though child-betrothals are usual, and though the woman is specialized to one man, who protects and nourishes her and all her children, and though their union is

immediately preceded by an extended *jus primae noctis* (such as Herodotus describes among the Nasamones), yet, among certain tribes, the following custom prevails. At great meetings the tribal leaders assign a woman as paramour (with what amount of permanence remains obscure) to a man (*pirrauru*); one woman may have several *pirrauru* men, one man several *pirrauru* women, in addition to their regularly betrothed (*tippa malku*) wives and husbands. The husband occasionally shows fight, and bitter jealousies prevail, but, at the great ceremonial meetings, complaisance is enforced under penalty of strangling. Thenceforth, if the husband permits, the male *pirrauru* has matrimonial rights over the other man's *tippa malku* wife when they meet. A symbolic ceremony of union precedes the junction of the *pirrauru* people. This institution, as far as reported, is peculiar to a group of tribes near Lake Eyre, the Dieri, Urabunna, and their congeners,—or perhaps to all who have the same "phratry" names as the Dieri and Urabunna (*Kiraru* and *Mattera*, in various dialectic forms).

Elsewhere the *pirrauru* custom is not known: but almost everywhere there are licentious festivals, in which all marriage rules except those which forbid incest (in our sense of the word, namely between the closest relations) are thrown to the winds. Also a native travelling among alien tribes is lent women of the status into which he may legally marry.

Baldwin Spencer and F.J. Gillen, and A.W. Howitt, regard *pirrauru* as "group marriage" and as a proof that, at one time, all intermarriageable people were actually husbands and wives,

Group marriage. while the other examples of licence are also survivals, in a later stage of decay, of promiscuity, and "group marriage." To this it is replied that "group marriage" is a misnomer; that if *pirrauru* be in a sense marriage it is *status*, not *group* marriage. Again, it is urged, *pirrauru* is a modification of *tippa* 

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*malku*, which comes first; a woman is "specialized" to a man *before* she can be made *pirrauru* to another, and her tippa *malku husband* continues to support her, and to recognize her children as his own, after she has become *pirrauru* to another man or other men. Without the foregoing *tippa malku* union, the *pirrauru* unions are not conceivable; they are mere legalized paramourships, modifying the *tippa malku* marriage (like the Italian cicisbeism); procuring a protector for a woman in her husband's absence, and supplying legal loves for bachelors. The custom is peculiar to a given set of kindred tribes. The festivals are the legalized, restricted and more or less permanent modification of the casual orgies of feasts of licence, or *Saturnalia*, which have their analogies among many people, ancient and modern. *Pirrauru* is no more a survival of and a proof of primitive promiscuity, than is the legalized incest of ancient Egypt or ancient Peru. If these views be correct the argument for primitive promiscuity derived from *pirrauru* falls to the ground.

6. The questions at issue obviously are, was mankind originally promiscuous, with no objections to marriage between persons of the nearest kin; and was the first step in advance

The historical problem. the prohibition of marriage (or of amatory intercourse) between brothers and sisters; or did mankind originally live in very small groups, under a jealous sire, who imposed restrictions on intercourse between the young males, his sons, and all the females of the "hearth-circle," who constituted his harem? The problem has been studied, first, in the institutions of

savages, notably of the most backward savages, the black natives of Australia; and next, in the light of the habits of the higher mammalia.

As regards Australian matrimonial institutions, it has been known since the date of the Journals of two Expeditions of Discovery, by Sir George Grey (1837-1839), that they are very complex and peculiar, in points strongly resembling the customary laws of the more backward Red Indian tribes of North America. Information came in, while McLennan was working, from G. Taplin (The Narrinyeri, 1874), from A.W. Howitt and L. Fison, and many other inquirers (in Brough Smyth's Aborigines of Victoria, 1878), from Howitt and Fison again (in Kamilaroi and Kurnai, 1880), and many essays by these authors, and finally, in Native Tribes of Central Australia (1899) and Northern Tribes of Central Australia (1904), by Baldwin Spencer and F.J. Gillen; and in Howitt's Native Tribes of South-East Australia (1904), with R. Roth's North-West Central Queensland Aborigines (1897). All of these are works of very high merit. Knowledge is now much more wide, minute and securely based than it was when McLennan's Studies in Ancient History, second series, was posthumously published (1896). We know with certainty that in Australia, among archaic savages who have neither metals, agriculture, pottery nor domesticated animals, a graduated scale of matrimonial institutions exists. First there are *local* tribes, each tribe having its own dialect; holding a recognized area of territory; and living on friendly terms with neighbouring tribes. Territorial conquest is never attempted. In many cases a knot of tribes of allied dialects and kindred rites may be, or at least is, spoken of as a "nation" by our authorities.

7. Customary law is administered by the Seniors, the wise, the magically skilled, who in many cases are "headmen" of local groups or of sets of kindred. As to marriage, persons may

wed within the local tribe, or into a neighbouring local tribe, at will,
 primitive
 provided that they obey the restrictions of customary law. The local tribe is
 neither exogamous nor endogamous, any more than is an English county.
 The restrictions, except where they have become obsolete, fall into six main
 categories:—

(1) In the most primitive, each tribe consists of two intermarrying and exogamous divisions, which are often styled *phratries*. Each such division has a name, which, when it can be translated, is the name of an animal: in the majority of cases, however, the meaning of the phratry name is lost. In one instance, that of the Euahlayi tribe of north-west New South Wales, the phratry names are said (by Mrs Langloh Parker) to mean "Light Blood" and "Dark Blood." This, as in the theory of the Rev. J. Mathews, *Eagle and Crow*, might be taken to indicate a blending of two distinct *races*.

Taking, for the sake of clearness, tribes whose phratry names mean "Crow" and "Eagle Hawk," every member of the tribe belongs either to Eagle Hawk phratry or to Crow phratry: if to Crow, the man or woman can only marry an Eagle Hawk, if to Eagle Hawk, can only marry a Crow. The children invariably belong to the phratry of the mother, in this most primitive type. Within Eagle Hawk phratry is one set of totem kins, named usually after various species of animals and plants; within Crow phratry is another set of totem kins, named always (except in one region of Central Australia) after a *different* set of plants and animals. With the exception mentioned (that of the Arunta "nation"), in no tribe does the same totem ever occur in both phratries. Totems and totem names are inherited by the

children from the mother, in this primitive type. Thus a man, Eagle Hawk by phratry, Snipe by totem, marries a woman Crow by phratry, Black Duck by totem. His children by her are of phratry Crow, of totem Black Duck. Obviously no person can marry another of his or her own totem, because, in the phratry into which he or she *must* marry, no man or woman of his or her totem exists. The prohibition extends to members of alien and remote tribes, if of the same totem name.

The same rules exist in the more primitive North American tribes, but as the phratry there has generally, though not always, decayed, the rule, where this has occurred, merely forbids marriage within the totem kin.

(2) We find this type of organization, where the child inherits phratry and totem from the father, not from the mother.

(3) We find tribes in which phratry and totem are inherited from the mother, but an additional rule prevails: the rule of "Matrimonial Classes." By this device, in phratry "Dilbi," there are two classes, "Muri" and "Kubi." In phratry "Kupathin" are two classes, "Ipai" and "Kumbo" (all these names are of unknown meaning). Each child inherits its mother's phratry name and totem name, and also the name of that class of the two in the mother's phratry to which the mother does not belong. No person may marry into his or her own classpractically into his or her own generation: the rule makes parental and filial marriages impossible,-but these never occur even among more primitive tribes which have not the institution of classes. Suppose that the class names are really names of animals and other objects in nature—as in a few cases they actually are. Then the rules, where classes exist, would amount to this: no person may marry another who, by phratry, totem or generation, owns the same hereditary animal name as himself or herself. In practice, where phratries exist, a man who knows a woman's phratry name knows whether or not he may marry her. Where class names exist (even though the phratry name be lost), a man who knows a woman's class name knows whether or not he may marry her. Nothing can be simpler in practice.

(4) The same rules as under (3) exist, but the phratry, totem and class are inherited through the father: the class of the child of course not being the father's, but the linked class in his phratry.

(5) In the fifth category (Central North Australia), while phratry name (if not lost) and totem name are inherited from the father, by a refinement of law which is spreading southwards there are *four* classes in each phratry (or main exogamous division unnamed), and the choice of a partner in life is thus more restricted than in more primitive tribes.

(6) Finally we reach the institutions of the group of tribes called, from the name of the most powerful tribe in the set, "the Arunta nation." They occupy the Macdonnell Ranges and other

## Arunta customs.

territory in the very centre of Australia. The Arunta reckon kinship in the male line: their phratry names they have forgotten, in place of phratries eight matrimonial classes regulate marriage. In these respects they resemble most of the central and northern tribes, but present this unique

peculiarity, that the same totems may and do exist in *both* of the opposed intermarrying exogamous divisions consisting of four classes each. It thus results that a man, in the Arunta tribe, may marry a woman of his own totem, if she be in the class with which he may intermarry. This licence is unknown in every other part of the totemic world, and even in the Kaitish tribe of the Arunta nation intertotemic marriages, in practice, almost never occur.

Among the Arunta the totems are only prominent in magical ceremonies, unknown in South-Eastern Australia. At these ceremonies (Intichiuma) the men of the totem do cooperative magic for the benefit of their plant or animal, as part of the tribal food-supply. The members of the totem taste it sparingly on these occasions, apparently under the belief that to do so increases their magical power: the rest of the tribe eat freely. But, as far as denoting kinship or regulating marriage is concerned, the totems, among the Arunta, have no legally important existence. Men and women of the same totem may intermarry, their children need not belong to the totem of either father or mother.

The process by which Arunta totems came thus to differ from those of all other savages is easily understood. Like the other tribes from the centre to the north (including the Urabunna nation, which reckons descent through women), the Arunta believe that the souls of the primal semi-bestial ancestors of the Alcheringa or "dream time" are perpetually reincarnated. This opinion does not affect by itself the usual exogamous character of totemism among the other tribes. The Arunta nation, however, cultivates an additional myth, namely that the primal ancestors, when they sank into the ground, left behind them certain oval stone slabs, with archaic markings, called *churinga nanja*, or "sacred things of the *nanja.*" The *nanja*, again, is a tree or rock, fabled to have risen up to mark the spot where a group of primal ancestors, all of one and the same totem in each case (Cats here, Grubs there, Ducks elsewhere), "went into the ground." The souls of these ancestors haunt such spots, especially they haunt the nanja tree or rock, and the stone *churinga nanja*. Each district, therefore, has its own *oknanikilla* (or local totem centre of the ghosts), Cat ghosts, Grub ghosts, Hakea flower ghosts and so on. These spirits enter into women and are reborn as children. When a child comes to birth, the mother names the oknanikilla in which she conceived it, and, whatever the ghost totem of that place may be, it is the child's totem. Its mother may be a Grub, its father may be a Crow, but if the child was conceived in a Duck, or Cat, or Opossum or Kangaroo locality, it is, by totem, a Cat, Opossum, Duck or Kangaroo. The *churinga nanja* of its primal ancestor is sought for at the place of the child's conception, and is put into the sacred repository of such objects.

Thus the child does not inherit its totem from father, or from mother, as everywhere else, but *does* inherit the right to do ceremonies for the paternal totem: a proof that, of old, totems were inherited, as elsewhere, and that in the male line. If totems among the Arunta, as everywhere else, were once arranged on the plan that the same totem never occurs in both exogamous moieties, that arrangement has been destroyed, as was inevitable, by the existing method of allotting totems to children,—not by inheritance,—but at haphazard. By this means (a consequence of the unique Arunta belief about *churinga nanja*) the same totems have got into *both* exogamous moieties, so that persons of the same totem, but of appropriate matrimonial classes, may marry. This licence is absolutely confined to the limited region in which stone *churinga nanja* occur.

The whole system is impossible except where descent is reckoned in the male line, for there alone is *local* totemism possible, and the Arunta system is based on local totemism, *plus* the *churinga nanja* and reincarnation beliefs. With reckoning of descent in the female line, no locality can possibly have its *local* totem: all the totems indiscriminately distributed everywhere: and thus no woman can say in what totemic locality her child was conceived, for there is not and cannot be, with female descent, any totemic *locality*. Now it is admitted that reckoning by female descent is the earlier method, and it is granted that in rites and ceremonies the Arunta are of a relatively advanced and highly organized pattern. Their social organization is local, and they have a kind of local magistracies, hereditary in the male line.

In spite of these facts, Spencer and Gillen conceive that the peculiar totemism of the Arunta is the most primitive type extant (cp. Spencer, *J.A.I.* (N.S.), vol. i. 275-281; and Frazer, *ibid.* 281-288). It is not easy to understand this position, as, without male kinship and consequent local totemism (which are not primitive), and without the *churinga nanja* (which exist only in a strictly limited area), the Arunta system of non-exogamous totems cannot possibly exist. Again, the other tribes cannot have passed through the Arunta stage, for, if they had, their totems would have existed, as among the Arunta, in *both* exogamous moieties, and would there remain when they came to be inherited; so that the totems of all these tribes would still be non-exogamous, like those of the Arunta. But this is not the case. Once more, it is clear that the Arunta system has but recently reached their neighbours, the Kaitish, for though they have the *churinga nanja* belief, and the haphazard method of acquiring totems by local accident, these things have not yet overcome the old traditional reluctance to marry within the totem name. It is not unlawful among the Kaitish; but it is hardly ever done.

Despite these objections, however, Spencer and Gillen hold, as we have said, that, originally, there were no restrictions (or no known restrictions) on marriage. Totems were merely the result of the formation of co-operative magical societies, in the interest of the tribal food supply. Then, in some unknown way, regulations as to marriage were introduced for some unknown purpose, or were involved in some manner not understood. "The traditions of the Arunta," says Spencer, "point to a very definite introduction of an exogamous system long after the totemic groups were fully developed, and, further, they point very clearly to the fact that the introduction was due to the deliberate action of certain ancestors. Our knowledge of the natives leads us to the opinion that it is quite possible that this really took place, that the exogamic groups were deliberately introduced so as to regulate marital relations."

Thus the wisdom of men living promiscuously as regards marriage, but organized in magical societies for the benefit of the common food supply of the local *tribe* (a complex institution postulated as already in being at this early stage), induced them to institute exogamy. Why they did this, what harm they saw in their promiscuity, we are not informed. Spencer goes on, "by this we do not mean that the regulations had anything whatever to do with the idea of incest, or of any harm accruing from the union of individuals who were regarded as too nearly related.... There was felt the need of some kind of organization, and

this gradually resulted in the development of exogamous groups." But as "it is quite possible that the exogamous groups were deliberately introduced to regulate marital relations," and as they could only do so by introducing exogamy, we do not see how that system can be the result of the *gradual* development of an organization *quelconque*,—of unknown nature. A magical organization already existed (*Journal of the Anthropological Institute*, New Series, i. pp. 284-285).

The traditions of the Arunta seem here to be first accepted: "quite possibly" they are correct in stating that an exogamic system was purposefully introduced, long after totemic groups had arisen, by "the deliberate action of certain ancestors," and then that myth is rejected, in favour of the *gradual* development of exogamy, "out of some form of organization," unknown.

People who, like the Arunta, have lost memory of the very names of the phratries, cannot conceivably remember the nature of the origin of exogamy. Accustomed as they now are to tribal councils which introduce new rules, they fancy that, in the beginning, new rules were thus introduced.

Meanwhile the working of magic for the behoof of the totem animals and plants, or rather for the name-giving animals of magical societies, is not known to Howitt among the tribes of

Conclusionprimitive social organization, while it is well known among agricultural<br/>natives of the Torres Strait Islands and among the advanced Sioux and<br/>Omaha of North America. The practice seems to belong rather to the<br/>decadence than to the dawn of totemism. On the whole, then, there seem to<br/>be insuperable difficulties in the way of Spencer's hypothesis that mankind

were promiscuous, as regards marriage, but were organized into cooperative magical groups, athwart which came, in some unexplained way, the rule of exogamy; while, when it did come, all savages except the Arunta arranged matters so that totem kins were exogamous. The reverse was probably the case, totem kins were originally exogamous, and ceased to be so, and even to be kins among the Arunta, in consequence of the *churinga nanja* creed, becoming co-operative magical societies (Hartland, Marett, Durkheim and others).

8. Spencer and Gillen leave the origin of exogamy an open question. Howitt supposes that, in the shape of the phratriac division of the tribe into two exogamous moieties, the scheme

**Origin of exogamy.** "announcing to his fellow headman a command received from some supernatural being ..." (*Natives of South-East Australia*, pp. 89, 90). The Council, so to speak, of "headmen" accept the divine decree, and the assembled tribe pass the Act. But this explanation explains nothing. Why did the prophet wish to introduce exogamy? Why were names of animals given, in so many cases, to the two exogamous divisions? As Howitt asks (*op. cit.* p. 153), "How was it that men assumed the names of objects, which in fact must have been the commencement of totemism?"

It is apparent that any theory which begins by postulating the existence of early mankind in promiscuous groups or hordes, into which exogamous moieties are introduced by tribal decree, takes for granted that the *tribe*, with its headman, councils and great meetings (not to mention its inspired prophet, with the tribal "All Father" who inspires him), existed before any rules regulating "marital relations" were evolved. Even if all this were probable, we are not told why a promiscuous tribe thought good to establish exogamous divisions. Some native myths attribute the institution to certain wise ancestors; some to the supernatural "All Father," say Baiame; some to a treaty between Eagle Hawk and Crow, beings of cosmogonic legend, who give names to the phratries. Such myths are mere hypotheses. It is impossible to imagine how early savages, *ex hypothesi* promiscuous, saw anything to reform in their state of promiscuity. They now think certain unions wrong, because they are forbidden: they were not forbidden, originally, because they were thought wrong.

Westermarck has endeavoured to escape the difficulty thus: "Among the ancestors of man, as among other animals, there was no doubt a time when blood relationship was no bar to

sexual intercourse. But variations here, as elsewhere, would naturally

Westermarck present themselves, and those of our ancestors who avoided in and in breeding would survive," while the others would die out. This appears to be orthodox evolutionary language, but it carries us no further. Human societies are not animals or plants, in whose structure various favourable "accidents" occur, producing better types, which survive. We ask why in human society did "variations present themselves"; why did certain sets of human beings "avoid in and in breeding"? We are merely told that some of our ancestors became exogamous and survived, while others remained promiscuous and perished. No light is thrown on the problem,—wherefore did some of our ancestors avoid in

and in breeding, and become exogamous? Nothing is gained by saying "thus an instinct would be developed which would be powerful enough, as a rule, to prevent injurious unions." There is no "instinct," there is a tribal law of exogamy. If there had been an "instinct," it might account for the avoidance of "in and in breeding"-that is, it might account for exogamy, ab initio. But that is left unaccounted for by the theory which, after maintaining that the avoidance produced the instinct, seems to argue that the instinct produced the avoidance. Westermarck goes on to say that "exogamy, as a natural extension of the instinct, would arise when single families united in small hordes." But, if the single families already had the "instinct," they would not marry within the family: they would be exogamous,marrying only into other families, -before they "united in small hordes." The difficulty of accounting for exogamy does not seem to have been overcome, and no attempt is made to explain the animal names of totem kins and phratries. Westermarck, however, says that "there is no reason why we should assume, as so many anthropologists have done, that primitive men lived in small endogamous groups, practising incest in every degree," although, as he also says, "there was no doubt a time when blood relationship was no bar to sexual intercourse." If there was no bar, people would "practise incest in every degree,"what was there to prevent them? (History of Human Marriage, pp. 352, 353 (1891)).

So far we have seen no luminous and consistent account of how mankind became exogamous, if they began by being promiscuous. The theories rest on the idea that man,

*Durkheim. Durkheim. dwelling in an "undivided horde" (except so far as it was divided into cooperative magical societies), bisected it into two exogamous intermarrying moieties. Durkheim has put forward a theory which is not at all points easily understood. He supposes that, "at the beginning of societies of men, incest was not prohibited ... before each horde (<i>peuplade*) divided itself into two primitive 'clans' at least" (*L'Année sociologique*, i. pp. 62, 63). Each of the two "clans" claimed descent from a different animal, which was its totem, and its "god." The two clans were exogamous,—out of respect to the blood of their totem (with which every member of the clan is mystically one), and, being hostile, the two clans raided each other for women. Each clan threw off colonies, which took new totems, new "gods," though still owning some regard to their original clan, from which they had seceded, while abandoning its "god." When the two "primary clans" made alliance and *connubium*, they became the phratries in the local tribe, and their colonies became the totem kins within the phratries.

We are not told why the original horde was disrupted into two hostile and intermarrying "clans": we especially wonder why the horde, if it wanted an animal god, did not choose one animal for the whole community; and we may suspect that a difference of taste in animal "gods" caused the hostility of the two clans. Nor do we see why, if things occurred thus, the totem kins should not represent twenty or thirty differences of religious taste, in the original horde, as to the choice of animal gods. If the horde was going to vary in opinion, it is unlikely that only *two* factions put forward animal candidates for divinity. Again, a "clan" (a totem kin, with exogamy and descent derived through mothers) cannot overflow its territorial area and be therefore obliged to send out colonies, for such a clan (as Durkheim himself remarks) has no territorial area to overflow. It is not a *local* institution at all.

While these objections cannot but occur, Durkheim does provide a valid reason for the existence of exogamy. When once the groups (however they got them) had totems, with the usual taboos on any sort of use of the totem by his human kinsfolk, the women of the kin would be tabooed to the men of the same kin. In marrying a maiden of his own totem, a man inevitably violates the sanctity of the blood of the totem (*L'Année sociologique*, i. pp. 47-57. Cf. Reinach, *Cultes, mythes et religions*, vol. i. pp. 162-166).

Here at last we have a theory which accounts for the "religious horror" that attaches to the violation of the rule of totemic exogamy: a mysterious entity, the totem, is hereby offended. But how did totems, animals, plants and so on, come to be mystically *solidaires* with their human namesakes and kinsmen? We do not observe that Dr Durkheim ever explains *why* two divisions of one horde chose each a different animal god, or why the supposed colonies thrown off by these primary clans deserted their animal gods for others, or why, and on what principle, they all chose new "gods,"—fresh animals, plants and other objects. His hereditary totem is, in practice, the last thing that a savage changes. The only case of change on record is a recent attempt to increase the range of legal marriages in a waning Australian tribe, on whose lands certain species of animals are perishing.

Theories based on a supposed primal state of promiscuity certainly encounter, when explaining the social oganization of Australian savages, difficulties which they do not

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conception of early mankind dwelling promiscuously in "undivided solution. communes." The way out is practically to say that, in everyday life, they lived in nothing of the sort. Howitt writes (Native Tribes of South-East Australia, p. 173): "A study of the evidence ... has led me to the conclusion that the state of society among the early Australians was that of an 'Undivided Commune.'... It is, however, well to guard this expression. I do not desire to imply necessarily the existence of complete and continuous communism between the sexes. The character of the country, the necessity of moving from one point to another in search of game and vegetable food, would cause any Undivided Commune, when it assumed dimensions greater than the immediate locality could provide with food, to break up into two or more Communes of the same character. In addition to this it is clear ... that in the past as now, individual likes and dislikes must have existed, so that, admitting the existence of common rights between the members of the Commune, these rights would remain in abeyance, so far as the separated parts of the Commune were concerned. But at certain gatherings ... or on great ceremonial occasions, all the segments of the original Commune would reunite," and would behave in the fashion now common in great licentious festive meetings.

In the early ages contemplated, how can we postulate "great ceremonial occasions" or even peaceful assemblies at fruit-bearing spots? How can we postulate a surviving sense of

*Primitive promiscuity improbable.* solidarity among the scattered segments of the Commune, obviously very small, owing to lack of supplies, and perpetually disintegrated? But, taking the original groups as very small, and as ruled by likes and dislikes, by affection and jealousy, we are no longer concerned with a promiscuous horde, but with a little knot of human beings, in whom love, parental

affection and the jealousy of sires, would promptly make discriminations between this person and that person, as regards sexual privileges. Thus we have edged away from the hypothesis of the promiscuous indiscriminating horde to the opinion of Darwin. "We may conclude," he says, "from what we know of the jealousy of all male quadrupeds, armed as many of them are with special weapons for battling with their rivals, that promiscuous intercourse in a state of Nature is extremely improbable.... The most probable view is that Man originally lived in small communities, each (man) with a single wife, or, if powerful, with-several, whom he jealously guarded against all other men." But, in a community of this early type, to guard women jealously would mean constant battle, at least when Man became an animal who makes love all the year round. So Darwin adds: "Or man may not have been a social animal, and yet have lived with several wives, like the Gorilla,-for all the natives agree that but one adult male is seen in a band; when the young male grows up a contest takes place for the mastery, and the strongest, by killing or driving out the others, establishes himself as head of the Community. Younger males, being thus expelled and wandering about, would, when at last successful in finding a partner, prevent too close interbreeding within the limits of the same family" (Descent of Man, ii. pp. 361, 363 (1871)).

Here, then, we have practical Exogamy, as regards unions of brothers and sisters, among man still brutish, while the Sire is husband of the whole harem of females, probably unchecked as regards his daughters.

On this Darwinian text J.J. Atkinson builds his theory of the evolution of exogamy and of savage society in his *Primal Law* (*Social Origins and Primal Law*, by Lang and Atkinson,

Atkinson's theory. 1903). Paternal jealousy "gave birth to Primal Law, prohibitory of marriage between certain members of a family or local group, and thus, in natural sequence, led to *forced* connubial selection *beyond* its circle, that is, led to Exogamy ... as a *habit*, not as an expressed law...." The "expressed law" was

necessarily a later development; conditioned by the circumstances which produced totemism, and sanctioned, as on Durkheim's scheme, by the totemic taboo. Atkinson worked out his theory by a minute study of customs of avoidance between near kin by blood or affinity; by observations on the customs of animals, and by hypotheses as to the very gradual evolution of human restrictions through many modifications. He also gave a theory of the "classificatory" system of names for relationships opposed to that of Morgan. The names are based merely "on reference to relativity of age of a class in relation to the group." The exogamous moieties of a tribe (phratries) are not the result of a reformatory legislative bisection of the tribe, but of the existence of "two intermarrying totem clan groups." The whole treatise, allowing for defects caused by the author's death before the book was printed, is highly original and ingenious. The author, however, did not touch on the evolution of totemism.

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9. The following system, as a means of making intelligible the evolution of Australian totemic society, is proposed by the present writer. We may suggest that men originally lived in the state of "the Cyclopean family" of Atkinson; that is, in Darwin's "family group,"

Lang'scontaining but one adult male, with the females, the adolescent males being<br/>driven out, to find each a female mate, or mates, elsewhere if they can. With

increase of skill, improvements in implements and mitigation of ferocity, such groups may become larger, in a given area, but men may retain the habit of seeking mates outside the limits of the group of contiguity; the "avoidance" of brothers and sisters may already have arisen. Among the advanced Arunta, now, a man may speak freely to his elder sisters; to younger sisters, or "tribal sisters," he may not speak, "or only at such a distance that the features are indistinguishable." This archaic rule of avoidance would be a step facilitating the permission to adult males to dwell in their paternal group, avoiding their sisters. Such groups, whether habitually exogamous or not, will require names for each other, and various reasons would yield a preference to names derived from animals. These are easily signalled in gesture language; are easily presented in pictographs and tattooing; are even now, among savages and boys, the most usual sort of *personal* nicknames; and are widely employed as group names of villagers in European folk-lore. Among European rustics such group sobriquets are usual, but are resented. The savage, with his ideas of the equality or superiority of animals to himself, sees nothing to resent in an animal sobriguet, and the names, originally group sobriquets, would not find more difficulty in being accepted than "Whig," "Tory," "Huguenot," "Cavalier," "Christian," "Cameronian,"—all of them originally nicknames given from without. Again, "Wry Nose" and "Crooked Mouth" are derisive nicknames, but they are the translations of the ancient Celtic clan names Cameron and Campbell. The nicknames "Naked Dogs," "Liars," "Buffalo Dung," "Men who do not laugh," "Big Topknots," have been thoroughly accepted by the "gentes" of the Blackfoot Indians, now passing out of Totemism (Grinnell, *Blackfoot Lodge Tales*, pp. 208-225).

As Howitt writes, "the assumption of the names of objects by men must in fact have been the origin of totemism." Howitt does not admit the theory that the totem names came to arise in this way, but this way is a *vera causa*. Names must be given either from within or from without. A group, in savagery, has no need of a name for itself; "we" are "we," or are "The Men"; for all other adjacent groups names are needed. The name of one totem, *Thaballa*, "The Laughing Boy" totem, among the Warramunga and another tribe, is quite transparently a nickname, as is *Karti*, "The Grown-up Men" (Spencer and Gillen, *Northern Tribes of Central Australia*, p. 207).

There is nothing, prima facie, which renders this origin of animal, plant and other such names for early savage groups at all improbable. They would not even be resented, as now are the animal names for villagers in the Orkneys, the Channel Islands, France, Cornwall and in ancient Israel (for examples see Social Origins, pp. 295-301). The names once accepted, and their origin forgotten, would be inevitably regarded as implying a mystic rapport between the bestial and the human namesakes, Crow, Eagle Hawk, Grub, Bandicoot, Opossum, Emu, Kangaroo and so on (see NAME). On this subject it is enough to cite J.G. Frazer, in The Golden Bough (2nd ed., vol. i. pp. 404-446). Here will be found a rich and satisfactory collection of proof that community of name implies mystic rapport. Professor Rhys is quoted for the statement that probably "the whole Aryan race believed at one time not only that the name was a part of the man, but that it was that part of him which is termed the soul." In such a mental stage the men "Crows" identify themselves with the actual Crow species: the birds are now "of their flesh," are fabled to be their ancestors, or the men have been evolved out of the birds. The Crow is sacro-sanct, a friend and protector, and a centre of taboos, one of which is the prohibition preventing a Crow man from intercourse with a Crow woman, "however far apart their hunting grounds may have been." All men and women Crows are recognized as brothers and sisters in the Crow, and are not intermarriageable.

On these lines the prohibition to infringe the totem taboo by marriage within the totem name is intelligible, but the system of phratries has yet to be accounted for. It is obvious that the names could only have been given originally to *local* groups: the people who held this or that local habitation received the name. Suppose that the rule of each such group, or heart circle, had been "no marriage within the local group or camp," as in Atkinson's scheme. When the groups accept their new names, the rule becomes, "no marriage within local group Eagle Hawk, group Crow," and so on. So far the animal giving the group name may not yet have become a revered totem. The result of the rule would inevitably be, in three or four generations, that in groups Crow or Eagle Hawk, there were no Crows or Eagle Hawks *by descent*, if the children took the names of descent from their mothers; for the sake of differentiation: the Ant woman's children in local group Crow being Ants, the Grub woman's children being Grubs, the Eagle Hawk woman's children being Eagle Hawks,—all in local group Crow, and inheriting the names of the local groups whence their mothers were brought into local group Crow.

By this means (indicated first by McLennan) each member of a local group would have a

*local* group name, say Eagle Hawk, and a name by *female descent*, say Kangaroo, in addition, as now, to his or her personal name. In this way, all members of each local group would find, in any other local group, people of his name of descent, and, as the totem belief grew to maturity, kinsmen of his in the totem. When this fact was realized, it would inevitably make for peace among all contiguous groups. In place of taking women by force, at the risk of shedding kindred blood, peaceful betrothals between men and women of different local groups names and of different names by descent could be arranged. Say that local groups Eagle Hawk and Crow took the lead in this arrangement of alliance and *connubium*, and that (as they would naturally flourish in the strength conferred by union) the other local groups came into it, ranging themselves under Eagle Hawk and Crow, we should have the existing primitive type of organization: Local Groups Eagle Hawk (*Mukwara*) and Crow (*Kilpara*) would have become the widely diffused phratries, *Mukwara* and *Kilpara*, with all the totem kins within them.

But, on these lines, some members of any totem kin, say Cat, would be in phratry Eagle Hawk, some would be in phratry *Kilpara* as now (for the different reason already indicated) among the Arunta. Such persons were in a quandary. By *phratry* law, as being in opposite phratries, a Cat in Eagle Hawk' phratry could marry a Cat in Crow phratry. But, by totem law, this was impossible. To avoid the clash of law, all Cats had to go into one phratry or the other, either into Eagle Hawk or into Crow.

Two whole totem kins were in the same unhappy position. The persons who were Eagle Hawks by descent could not be in Eagle Hawk local group, now phratry, as we have already shown. They were in Crow phratry, they could not, by phratry law, marry in their own phratry, and to marry in Eagle Hawk was to break the old law, "no marriage within the local group name." Their only chance was to return to Eagle Hawk phratry, while Crow totem kin went into Crow phratry, and thus we often find, in fact, that in Australian phratries Mukwara (Eagle Hawk) there is a totem kin Eagle Hawk, and in Kilpara phratry (Crow) there is a totem kin Crow. This arrangement—the totem kin within the phratry of its own name—has long been known to exist in America. The Thlinkets have Raven phratry, with totem kins Raven, Frog, Goose, &c., and Wolf phratry, with totem kins Wolf, Bear, Eagle, &c. (Frazer, Totemism, pp. 61, 62 (1887)). In Australia the fact has hitherto escaped observation, because so many phratry names are not translated, while, though Mukwara and Kilpara are translated, the Eagle Hawk and Crow totem kins within them bear other names for the same birds, more recent names, or tribal native names, such as Biliari and Waa, while Mukwara and Kilpara may have been names borrowed, within the institution of phratries, from some alien tribe now perhaps extinct.

We have now sketched a scheme explanatory of the most primitive type of social organization in Australia. The tendency is for phratries first to lose the meanings of their names, and, next, for their names to lapse into oblivion, as among the Arunta; the work of regulating marriage being done by the opposed Matrimonial Classes.

These classes are obviously an artificial arrangement, intended to restrict marriage to persons on the same level as generations. The meanings of the class names are only known with certainty in two cases, and then are names of animals, while there is reason to suspect that animal names occur in four or five of the eight class-names which, in different dialect forms, prevail in central and northern Australia. Conceivably the new class regulations made use of the old totemic machinery of nomenclature. But until Australian philologists can trace the original meanings of Class names, further speculation is premature.

10. Much might be said about the way out of totemism. When once descent and inheritance are traced through males, the social side of totemism begins to break up. One way out is the

## Breaking up of totemism.

Arunta way, where totems no longer designate kinships. In parts of America totems are simply fading into heraldry, or into magical societies, while the "gentes," once totemic, have acquired new names, often local, as among the Sioux, or mere sobriquets, as among the Blackfeet. In Melanesia the

phratries, whether named or nameless, have survived, while the totems have left but a few traces which some consider disputable (*Social Origins*, pp. 176-184). Among the Bantu of South Africa the *tribes* have sacred animals (*Siboko*), which may be survivals of the totems of the chief local totem group, with male descent in the tribe, the whole of which now bears the name of the sacred animal. Even in Australia, among tribes where there is reckoning of descent in the male line, and where there are no matrimonial classes, the tendency is for totems to dwindle, while exogamy becomes *local*, the rule being to marry out of the *district*, not out of the *kin* (Howitt, *Native Tribes of South-East Australia*, pp. 270-272; cf. pp. 135-137).

The problem as to why, among savages all on the same low level of material culture, one

tribe derives descent through women, while its nearest neighbouring tribe, with ceremonies, rites, beliefs and myths like its own, and occupying lands of similar character in a similar climate, traces descent through men, seems totally insoluble. Again, we find that the civilized Lycians, as described by Herodotus (book i. ch. 173), reckoned lineage in the female line, while the naked savages of north and central Australia reckon in the male line. Our knowledge does not enable us to explain the change from female to male tracing of lineage. Yet the change was essential for the formation of the family system of civilized life. The change may be observed taking place in the region of North-West America peopled by the Thlinket, Haida and Salish tribes; the first are pure totemists, the last have arrived, practically, in the south, at the modern family, while a curious intermediate stage pervades the interjacent region.

The best authority on the Family developed in different shapes in North-West America is Charles Hill-Tout (cf. "Origin of the Totemism of the Aborigines of British Columbia," *Transactions of the Royal Society of Canada*, vol. vii. sect. 11, 1901). He, like many American and some English and continental students, applies the term "totem" not only to the hereditary totem of the exogamous kin, but to the animal familiars of individual men or women, called *manitus, naguals, nyarongs* and *yunbeai*, among North American Indians, in South America, in Borneo and in the Euahlayi tribe of New South Wales. These animal familiars are chosen by individuals, obeying the monition of dreams, or are assigned to them at birth, or at puberty, by the tribal magicians. It has often been suggested that totemism arose when the familiar of an individual became hereditary among his descendants. This could not occur under a system of reckoning descent and inheriting the kin name through women, but as a Tsimshian myth says that a man's sister adopted his animal familiar, the bear, and transmitted it to *her* offspring, Hill-Tout supposes that this may have been the origin of totemism in tribes with reckoning of descent in the female line. Instances, however, are not known to exist in practice, and myths are mere baseless savage hypotheses.

Exogamy, in his opinion, is the result of treaties of political alliance with exclusive *interconnubium* between two sets of kinsfolk by blood, totemism being a mere accidental concomitant. This theory evades the difficulties raised by the hypothesis of deliberate reformatory legislation introducing the bisection of the tribe into exogamous societies.

AUTHORITIES.—The study of the History of the Family has been subject to great fluctuation of opinion, as unexpected evidence has kept pouring in from many quarters. The theory of primal promiscuity, which in 1870 succeeded to Sir Henry Maine's *patriarchal theory*, has endured many attacks, and there is a tendency to return, not precisely to the "patriarchal theory," but to the view that the jealousy of the Sire of the "Cyclopean family," or "Gorilla family" indicated by Darwin, has had much to do with laying the bases of "primal law." The whole subject has been especially studied by English-speaking writers, as the English and Americans are brought most into contact with the most archaic savage societies. Among foreigners, in addition to Starcke, Westermarck and Durkheim, already cited, may be mentioned Professor J. Kohler, *Zur Urgeschichte der Ehe* (Stuttgart, 1897). Professor Kohler is in favour of a remote past of "collective marriage," indicated, as in Morgan's hypothesis, by the existing savage names of relationships, which are expressive of relations of consanguinity. E.S. Hartland (*Primitive Paternity*, 1910) discusses myths of supernatural birth in relation to the history of the Family.

A careful and well-reasoned work by Herr Cunow (*Die Verwandtschafts Organisationen der Australneger*, Stuttgart, 1894) deals with the Matrimonial Classes of Australian tribes. Cunow supposes that descent was originally reckoned in the male line, and that tribes with this organization (such as the Narrinyeri) are the more primitive. In this opinion he has few allies: and on the origin of Exogamy he seems to possess no definite ideas. Pikler's *Ursprung des Totemismus* (Berlin, 1900) explains Totemism as arising from the need of names for early groups of men: names which could be expressed in pictographs and tattooing, to which we may add "gesture language." This is much akin to the theory which we have already suggested, though Pikler seems to think that the pictograph (say of a Crow or an Eagle Hawk) was prior to the group name. But, he remarks, like Howitt, "the germ of Totemism is the naming"; and the community of name between the animal species and the human group led to the belief that there was an important connexion between the men and their name-giving animal.

Other useful sources of information are the annual Reports of the Bureau of Ethnology (Washington), the *Journal of the Institute of the Anthropological Society, Folk Lore* (the organ of the Folk Lore Society), and Durkheim's *L'Année sociologique. Tabou et totémisme à Madagascar*, by M.A. van Gennep (Leroux, Paris, 1904) is a valuable contribution to knowledge.

For India, where vestiges of totemism linger in the hill tribes, see Risley and Crooke, Tribes

and Castes, vols. i., ii., iii., iv.; and Crooke, *Popular Religion*; also Crooke in *J.A.I.* (N.S.), vol. i. pp. 232-244.

(A. L.)

**FAMINE** (Lat. *fames*, hunger), extreme and general scarcity of food, causing distress and deaths from starvation among the population of a district or country. Famines have caused widespread suffering in all countries and ages. A list of the chief famines recorded by history is given farther on. The causes of famine are partly natural and partly artificial. Among the natural causes may be classed all failures of crops due to excess or defect of rainfall and other meteorological phenomena, or to the ravages of insects and vermin. Among the artificial causes may be classed war and economic errors in the production, transport and sale of food-stuffs.

The natural causes of famine are still mainly outside our control, though science enables agriculturists to combat them more successfully, and the improvement in means of transport allows a rich harvest in one land to supplement the defective crops in another. In tropical countries drought is the commonest cause of a failure in the harvest, and where great droughts are not uncommon—as in parts of India and Australia—the hydraulic engineer comes to the rescue by devising systems of water-storage and irrigation. It is less easy to provide against the evils of excessive rainfall and of frost, hail and the like. The experience of the French in Algiers shows that it is possible to stamp out a plague of locusts, such as is the greatest danger to the farmer in many parts of Argentina. But the ease with which food can nowadays be transported from one part of the world to another minimizes the danger of famine from natural causes, as we can hardly conceive that the whole food-producing area of the world should be thus affected at once.

The artificial causes of famine have mostly ceased to be operative on any large scale. Chief among them is war, which may cause a shortage of food-supplies, either by its direct ravages or by depleting the supply of agricultural labour. But only local famines are likely to arise from this cause. Legislative interference with agricultural operations or with the distribution of food-supplies, currency restrictions and failure of transport, which have all caused famines in the past, are unlikely thus to operate again; nor is it probable that the modern speculators who attempt to make "corners" in wheat could produce the evil effects contemplated in the old statutes against forestallers and regrators.

Such local famines as may occur in the 20th century will probably be attributable to natural causes. It is impossible to regulate the rainfall of any district, or wholly to supply its failure by any system of water-storage. Irrigation is better able to bring fertility to a naturally arid district than to avert the failure of crops in one which is naturally fertile. The true palliative of famine is to be found in the improvement of methods of transport, which make it possible rapidly to convey food from one district to another. But the efficiency of this preventive stops short at the point of saving human life. It cannot prevent a rise in prices, with the consequent suffering among the poor. Still, every year makes it less likely that the world will see a renewal of the great famines of the past, and it is only the countries where civilization is still backward that are in much danger of even a local famine.

Great Famines.—Amongst the great famines of history may be named the following:—

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B.C.	
436	Famine at Rome, when thousands of starving people threw themselves into the Tiber.
A.D.	
42	Great famine in Egypt.
650	Famine throughout India.
879	Universal famine.
941, 1022 and 1033	Great famines in India, in which entire provinces were depopulated and man was driven to cannibalism.
1005	Famine in England.
1016	Famine throughout Europe.
1064-1072	Seven years' famine in Egypt.
1148-1159	Eleven years' famine in India.
1162	Universal famine.

1344-1345	Great famine in India, when the Mogul emperor was unable to obtain the necessaries for his household. The famine continued for years and
	thousands upon thousands of people perished of want.
1396-1407	The Durga Devi famine in India, lasting twelve years.
1586	Famine in England which gave rise to the Poor Law system.
1661	Famine in India, when not a drop of rain fell for two years.
1769-1770	Great famine in Bengal, when a third of the population (10,000,000 persons) perished.
1783	The Chalisa famine in India, which extended from the eastern edge of the Benares province to Lahore and Jammu.
1790-1792	The Doji Bara, or skull famine, in India, so-called because the people died in such numbers that they could not be buried. According to tradition this was one of the severest famines ever known. It extended over the whole of Bombay into Hyderabad and affected the northern districts of Madras. Relief works were first opened during this famine in Madras.
1838	Intense famine in North-West Provinces (United Provinces) of India; 800,000 perished.
1846-1847	Famine in Ireland, due to the failure of the potato-crop. Grants were made by parliament amounting to £10,000,000.
1861	Famine in North-West India.
1866	Famine in Bengal and Orissa; one million perished.
1869	Intense famine in Rajputana; one million and a half perished. The government initiated the policy of saving life.
1874	Famine in Behar, India. Government relief in excess of the needs of the people.
1876-1878	Famine in Bombay, Madras and Mysore; five millions perish. Relief insufficient.
1877-1878	Severe famine in north China. Nine and a half millions said to have perished.
1887-1889	Famine in China.
1891-1892	Famine in Russia.
1897	Famine in India. Government policy of saving life successful. Mansion House fund £550,000.
1899-1901	Famine in India. One million people perished. Estimated loss to India £50,000,000. The government spent £10,000,000 on relief, and at one time there were 4,500,000 people on the relief works.
1905	Famine in Russia.

*Famines in India.*—Owing to its tropical situation and its almost entire dependence upon the monsoon rains, India is more liable than any other country in the world to crop failures, which upon occasion deepen into famine. Every year sufficient rain falls in India to secure an abundant harvest if it were evenly distributed over the whole country; but as a matter of fact the distribution is so uneven and so uncertain that every year some district suffers from insufficient rainfall. In fact, famine is, to all intents and purposes, endemic in India, and is a problem to reckon with every year in some portion of that vast area. The people depend so entirely upon agriculture, and the harvest is so entirely destroyed by a single monsoon failure, that wherever a total failure occurs the landless labourer is immediately thrown out of work and remains out of work for the whole year. The question is thus one of lack of employment, rather than lack of food. The food is there, perhaps at a slightly enhanced price, but the unemployed labourer has no money to buy it. The problem is very much the same as that met by the British Poor Law system. Every year in England a poor rate of some £22,000,000 is expended for a population of 40 millions; while it is only in an exceptional year in India that £10,000,000 are spent on a population of 300 millions.

Famines seem to recur in India at periodical intervals, which have been held to be in some way dependent on the sun-spot period. Every five or ten years the annual scarcity widens its area and becomes a recognized famine; every fifty or a hundred years whole provinces are involved, loss of life becomes widespread, and a great famine is recorded. In the 140 years since Warren Hastings initiated British rule in India, there have been nineteen famines and five severe scarcities. For the period preceding British rule the records have not been so well preserved, but there is ample evidence to show that famine was just as frequent in its incidence and infinitely more deadly in its effects under the native rulers of India. In the great Bengal famine of 1769-1770, which occurred shortly after the foundation of British rule, but while the native officials were still in power, a third of the population, or ten millions out of thirty millions, perished. From this it may be guessed what occurred in the centuries under Mogul rule, when for years there was no rain, when famine lasted for three, four or twelve years, and entire cities were left without an inhabitant. In the famine of 1901, the worst of recent years, the loss of life in British districts was 3% of the population

affected, as against 33% in the Bengal famine of 1770.

The native rulers of India seem to have made no effort to relieve the sufferings of their subjects in times of famine; and even down to 1866 the British government had no settled famine policy. In that year the Orissa famine awakened the public conscience, and the commission presided over by Sir George Campbell laid down the lines upon which subsequent famine-relief was organized. In the Rajputana famine of 1869 the humane principle of saving every possible life was first enunciated. In the Behar famine of 1874 this principle was even carried to an extreme, the cost was enormous, and the people were in danger of being pauperized. The resulting reaction caused a regrettable loss of life in the Madras and Bombay famine of 1876-1878; and the Famine Commission of 1880, followed by those of 1898 and 1901, laid down the principle that every possible life must be saved, but that the wages on relief works must be so regulated in relation to the market rate of wages as not to undermine the independence of the people. The experience gained in the great famines of 1898 and 1901 has been garnered by these commissions, and stored up in the "famine codes" of each separate province, where rules are provided for the treatment of famine directly a crop failure is seen to be probable. The first step is to open test works; and directly they show the necessity, regular relief works are established, in which the people may earn enough to keep them from starvation, until the time comes to sow the next crop.

As a result of the severe famine of 1878-1879, Lord Lytton's government instituted a form of insurance against famine known as the Famine Insurance Grant. A sum of Rs. 1,500,000 was to be yearly set aside for purposes of famine relief. This scheme has been widely misunderstood; it has been assumed that an entirely separate fund was created, and that in years when the specified sum was not paid into this fund, the purpose of the government was not carried out. But Sir John Strachey, the author of the scheme, explains in his book on India that the original intention was nothing more than the annual application of surplus revenue, of the indicated amount, to purposes of famine relief; and that when the country was free from famine, this sum should be regularly devoted to the discharge of debt, or to the prevention of debt which would otherwise have been incurred for the construction of railways and canals. The sum of  $1\frac{1}{2}$  crores is regularly set aside for this purpose, and is devoted as a rule to the construction of protective irrigation works, and for investigating and preparing new projects falling under the head of protective works.

The measures by which the government of India chiefly endeavours to reduce the liability of the country to famine are the promotion of railways; the extension of canal and well irrigation; the reclamation of waste lands, with the establishment of fuel and fodder reserves; the introduction of agricultural improvements; the multiplication of industries; emigration; and finally the improvement where necessary of the revenue and rent systems. In times of famine the function of the railways in distributing the grain is just as important as the function of the irrigation-canals in increasing the amount grown. There is always enough grain within the boundaries of India for the needs of the people; the only difficulty is to transport it to the tract where it is required at a particular moment. Owing to the extension of railways, in the famines of 1898 and 1901 there was never any dearth of food in any famine-stricken tract; and the only difficulty was to find enough rolling-stock to cope with the demand. Irrigation protects large tracts against famine, and has immensely increased the wheat output of the Punjab; the Irrigation Commission of 1903 recommended the addition of  $6\frac{1}{2}$  million acres to the irrigated area of India, and that recommendation is being carried out at an annual cost of 1½ millions sterling for twenty years, but at the end of that time the list of works that will return a lucrative interest on capital will be practically exhausted. Local conditions do not make irrigation everywhere possible.

As five-sixths of the whole population of India are dependent upon the land, any failure, of agriculture becomes a national calamity. If there were more industries and manufactures in India, the dependence on the land would not be so great and the liability to lack of occupation would not be so uniform in any particular district. The remedy for this is the extension of factories and home industries; but European capital is difficult to obtain in India, and the native capitalist prefers to hoard his rupees. The extension of industries, therefore, is a work of time.

It is sometimes alleged by native Indian politicians that famines are growing worse under British rule, because India is becoming exhausted by an excessive land revenue, a civil service too expensive for her needs, military expenditure on imperial objects, and the annual drain of some £15,000,000 for "home charges." The reply to this indictment is that the British land revenue is £16,000,000 annually, whereas Aurangzeb's over a smaller area, allowing for the difference in the value of the rupee, was £110,000,000; though the Indian Civil Service is expensive, its cost is more than covered by the fact that India, under British guarantee, obtains her loans at  $3\frac{1}{2}\%$  as against 10% or more paid by native rulers; though India has a heavy military burden, she pays no contribution to the British navy, which protects her seaboard from invasion; the drain of the home charges cannot be very great, as India annually absorbs 6 millions sterling of the precious metals; in 1899-1900, a year of famine, the net imports of gold and silver were 130 millions. Finally, it is estimated by the census commissioners that in the famine of 1901 three million people died in the native states and only one million in British territory.

See Cornelius Walford, "On the Famines of the World, Past and Present" (Journal of the Statistical Society, 1878-1879); Romesh C. Dutt, Famines in India (1900); Robert Wallace, Famine in India (1900); George Campbell, Famines in India (1769-1788); Chronological List of Famines for all India (Madras Administration Report, 1885); J.C. Geddes, Administrative Experience in Former Famines (1874); Statistical Atlas of India (1895); F.H.S. Merewether, Through the Famine Districts of India (1898); G.W. Forrest, The Famine in India (1898); E.A.B. Hodgetts, In the Track of the Russian Famine (1892); W.B. Steveni, Through Faminestricken Russia (1892); Vaughan Nash, The Great Famine (1900); Lady Hope, Sir Arthur Cotton (1900); Lord Curzon in India (1905); T.W. Holderness, Narrative of the Famine of 1896-1897 (c. 8812 of 1898); the Indian Famine Commission reports of 1880, 1898 and 1900; report of the Indian Irrigation Commission (1901-1903); C.W. McMinn, Famine Truths, Half-Truths, Untruths (1902); Theodore Morison, Indian Industrial Organization (1906).

**FAN** (Lat. *vannus*; Fr. *éventail*), in its usually restricted meaning, a light implement used for giving motion to the air in order to produce coolness to the face; the word is, however, also applied to the winnowing fan, for separating chaff from grain, and to various engineering appliances for ventilation, &c. *Ventilabrum* and *flabellum* are names under which ecclesiastical fans are mentioned in old inventories. Fans for cooling the face have been in use in hot climates from remote ages. A bas-relief in the British Museum represents Sennacherib with female figures carrying feather fans. They were attributes of royalty along with horse-hair fly-flappers and umbrellas. Examples may be seen in plates of the Egyptian sculptures at Thebes and other places, and also in the ruins of Persepolis. In the museum of Boulak, near Cairo, a wooden fan handle showing holes for feathers is still preserved. It is from the tomb of Amenhotep, of the 18th dynasty, 17th century B.C. In India fans were also attributes of men in authority, and sometimes sacred emblems. A heart-shaped fan, with an ivory handle, of unknown age, and held in great veneration by the Hindus, was given to King Edward VII. when prince of Wales. Large punkahs or screens, moved by a servant who does nothing else, are in common use in hot countries, and particularly India.

Fans were used in the early middle ages to keep flies from the sacred elements during the celebrations of the Christian mysteries. Sometimes they were round, with bells attached—of silver or silver gilt. Notices of such fans in the ancient records of St Paul's, London, Salisbury cathedral and many other churches exist still. For these purposes they are no longer used in the Western church, though they are retained in some Oriental rites. The large feather fans, however, are still carried in the state processions of the supreme pontiff in Rome, though not used during the celebration of the mass. The fan of Queen Theodolinda (7th century) is still preserved in the treasury of the cathedral of Monza. Fans made part of the bridal outfit, or *mundus muliebris*, of Roman ladies.

Folding fans had their origin in Japan, and were imported thence to China. They were in the shape still used—a segment of a circle of paper pasted on a light radiating framework of bamboo, and variously decorated, some in colours, others of white paper on which verses or sentences are written. It is a compliment in China to invite a friend or distinguished guest to write some sentiment on your fan as a memento of any special occasion, and this practice has continued. A fan that has some celebrity in France was presented by the Chinese ambassador to the comtesse de Clauzel at the coronation of Napoleon I. in 1804. When a site was given in 1635, on an artificial island, for the settlement of Portuguese merchants in Nippo in Japan, the space was laid out in the form of a fan as emblematic of an object agreeable for general use. Men and women of every rank both in China and Japan carry fans, even artisans using them with one hand while working with the other. In China they are often made of carved ivory, the sticks being plates very thin and sometimes carved on both sides, the intervals between the carved parts pierced with astonishing delicacy, and the plates held together by a ribbon. The Japanese make the two outer guards of the stick, which cover the others, occasionally of beaten iron, extremely thin and light, damascened with gold and other metals.

Fans were used by Portuguese ladies in the 14th century, and were well known in England before the close of the reign of Richard II. In France the inventory of Charles V. at the end of the 14th century mentions a folding ivory fan. They were brought into general use in that country by Catherine de'Medici, probably from Italy, then in advance of other countries in all matters of personal luxury. The court ladies of Henry VIII.'s reign in England were used to handling fans. A lady in the "Dance of Death" by Holbein holds a fan. Queen Elizabeth is painted with a round feather fan in her portrait at Gorhambury; and as many as twenty-seven are enumerated in her inventory (1606). Coryat, the English traveller, in 1608 describes them as common in Italy. They also became of general use from that time in Spain. In Italy, France and Spain fans had special conventional uses, and various actions in handling them grew into a code of signals, by which ladies were supposed to convey hints or signals to admirers or to rivals in society. A paper in the *Spectator* humorously proposes to establish a regular drill for these purposes.

The chief seat of the European manufacture of fans during the 17th century was Paris, where the sticks or frames, whether of wood or ivory, were made, and the decorations painted on mounts of very carefully prepared vellum (incorrectly called chicken skin)-a material stronger and tougher than paper, which breaks at the folds. Paris makers exported fans unpainted to Madrid and other Spanish cities, where they were decorated by native artists. Many were exported complete; of old fans called Spanish a great number were in fact made in France. Louis XIV. issued edicts at various times to regulate the manufacture. Besides fans mounted with parchment, Dutch fans of ivory were imported into Paris, and decorated by the heraldic painters in the process called "Vernis Martin," after a famous carriage painter and inventor of colourless lac varnish. Fans of this kind belonging to Queen Victoria and the baroness de Rothschild were exhibited in 1870 at Kensington. A fan of the date of 1660, representing sacred subjects, is attributed to Philippe de Champagne, another to Peter Oliver in England in the 17th century. Cano de Arevalo, a Spanish painter of the 17th century, devoted himself to fan painting. Some harsh expressions of Queen Christina to the young ladies of the French court are said to have caused an increased ostentation in the splendour of their fans, which were set with jewels and mounted in gold. Rosalba Carriera was the name of a fan painter of celebrity in the 17th century. Le Brun and Romanelli were much employed during the same period. Klingstet, a Dutch artist, enjoyed a considerable reputation in the latter part of the 17th and the first thirty years of the 18th century.

The revocation of the edict of Nantes drove many fan-makers out of France to Holland and England. The trade in England was well established under the Stuart sovereigns. Petitions were addressed by the fan-makers to Charles II. against the importation of fans from India, and a duty was levied upon such fans in consequence. This importation of Indian fans, according to Savary, extended also to France. During the reign of Louis XV. carved Indian and China fans displaced to some extent those formerly imported from Italy, which had been painted on swanskin parchment prepared with various perfumes.

During the 18th century all the luxurious ornamentation of the day was bestowed on fans as far as they could display it. The sticks were made of mother-of-pearl or ivory, carved with extraordinary skill in France, Italy, England and other countries. They were painted from designs of Boucher, Watteau, Lancret and other "genre" painters; Hébert, Rau, Chevalier, Jean Boquet, Mme. Vérité, are known as fan-painters. These fashions were followed in most countries of Europe, with certain national differences. Taffeta and silk, as well as fine parchment, were used for the mounts. Little circles of glass were let into the stick to be looked through, and small telescopic glasses were sometimes contrived at the pivot of the stick. They were occasionally mounted with the finest point lace. An interesting fan (belonging to Madame de Thiac in France), the work of Le Flamand, was presented by the municipality of Dieppe to Marie Antoinette on the birth of her son the dauphin. From the time of the Revolution the old luxury expended on fans died out. Fine examples ceased to be exported to England and other countries. The painting on them represented scenes or personages connected with political events. At a later period fan mounts were often prints coloured by hand. The events of the day mark the date of many examples found in modern collections. Among the fan-makers of modern days the names of Alexandre, Duvelleroy, Fayet, Vanier became well known in Paris; and the designs of Charles Conder (1868-1909) have brought his name to the front in this art. Painters of distinction often design and paint the mounts, the best designs being figure subjects. A great impulse was given to the manufacture and painting of fans in England after the exhibition which took place at South Kensington in 1870. Modern collections of fans take their date from the emigration of many noble families from France at the time of the Revolution. Such objects were given as souvenirs, and occasionally sold by families in straitened circumstances. A large number of fans of all sorts, principally those of the 18th century, French, English, German, Italian,

Spanish, &c., have been bequeathed to the South Kensington (Victoria and Albert) Museum.

The sticks of folding fans are called in French *brins*, the two outer guards *panaches*, and the mount *feuille*.

See also Blondel, *Histoire des éventails* (1875); Octave Uzanne, *L'éventail* (1882); and especially G. Wooliscroft Rhead, *History of the Fan* (1909).

(J. H. P.\*)

**FANCY** (a shortened form, dating from the 15th century, of "fantasy," which is derived through the O. Fr. *fantasie*, modern *fantaisie*. from the Latinized form of the Gr.  $\varphi \alpha v \tau \alpha \sigma (\alpha, \varphi \alpha v \tau \alpha \zeta \epsilon \iota v, \varphi \alpha (v \epsilon \iota v, to show))$ , display, showing forth, as a philosophical term, the presentative power of the mind. The word "fancy" and the older form "fantasy," which is now chiefly used poetically, was in its early application synonymous with imagination, the mental faculty of creating representations or images of things not present to the senses; it is more usually, in this sense, applied to the lighter forms of the imagination. "Fancy" also commonly means inclination, whim, caprice. The more learned form "phantasy," as also such words as "phantom" and "phantasm," is chiefly confined to visionary imaginings.

**FANG** (FAN, FANWE, PANWE, PAHOUIN, PAOUEN, MPANGWE), a powerful African people occupying the Gabun district north of the Ogowé river in French Congo. Their name means "men." They call themselves Pa<sup>n</sup>we, Fa<sup>n</sup>we and Fa<sup>n</sup> with highly nasalized n. They are a finely-made race of chocolate colour; some few are very dark, but these are of slave origin. They have bright expressive oval faces with prominent cheek-bones. Many of them file their teeth to points. Their hair, which is woolly, is worn by the women long, reaching below the nape of the neck. The men wear it in a variety of shapes, often building it up over a wooden base. The growth of the hair appears abundant, but that on the face is usually removed. Little clothing is worn; the men wear a bark waist-cloth, the women a plantain girdle, sometimes with a bustle of dried grass. A chief wears a leopard's skin round the shoulders. Both sexes tattoo and paint the body, and delight in ornaments of every kind. The men, whose sole occupations are fighting and hunting, all carry arms—muskets, spears for throwing and stabbing, and curious throwing-knives with blades broader than they are long. Instead of bows and arrows they use crossbows made of ebony, with which they hunt apes and birds. In battle the Fang used to carry elephant hide shields; these have apparently been discarded.

When first met by T.E. Bowdich (1815) the Paamways, as he calls the Fang, were an inland people inhabiting the hilly plateaus north of the Ogowé affluents. Now they have become the neighbours of the Mpongwe (q.v.) of Glass and Libreville on the Komo river, while south of the Gabun they have reached the sea at several points. Their original home is probably to be placed somewhere near the Congo. Their language, according to Sir R. Burton, is soft and sweet and a contrast to their harsh voices, and the vocabularies collected prove it to be of the Bantu-Negroid linguistic family. W. Winwood Reade (*Sketch Book*, i. p. 108) states that "it is like Mpongwe (a pure Bantu idiom) cut in half; for instance, *njina* (gorilla) in Mpongwe is *nji* in Fan." The plural of the tribal name is formed in the usual Bantu way, Ba-Fang.

Morally the Fang are superior to the negro. Mary Kingsley writes: "The Fan is full of fire, temper, intelligence and go, very teachable, rather difficult to manage, quick to take offence, and utterly indifferent to human life." This latter characteristic has made the Fang dreaded by all their neighbours. They are noted cannibals, and ferocious in nature. Prisoners are badly treated and are often allowed to starve. The Fang are always fighting, but the battles are not bloody. After the fall of two or three warriors the bodies are dragged off to be devoured, and their friends disperse. Burton says that their cannibalism is limited to the consumption of slain enemies; that the sick are not devoured; and that the dead are decently buried, except slaves, whose bodies are thrown into the forest. Mary Kingsley, on the other hand, believed their cannibalism was not limited. She writes: "The Fan is not a cannibal for sacrificial motives, like the negro. He will eat his next door neighbour's relation and sell his own deceased to his next door neighbour in return, but he does not buy slaves and fatten

them up for his table as some of the middle Congo tribes do. He has no slaves, no prisoners of war, no cemeteries, so you must draw your own conclusions." Among certain tribes the aged alone are permitted to eat human flesh, which is *taboo* for all others. There is no doubt that the cannibalism of the Fang is diminishing before the advance of civilization. Apart from their ferocity, the Fang are an agreeable and industrious people. They are skilful workers in iron and have a curious coinage called *bikěi*, little iron imitation axeheads tied up in bundles called *ntet*, ten to a bundle; these are used chiefly in the purchase of wives. They are energetic traders and are skilled in pottery and in gardening. Their religion appears to be a combination of primitive animism and ancestor worship, with a belief in sympathetic magic.

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**FANO** (anc. *Fanum Fortunae, q.v.*), a town and episcopal see of the Marches, Italy, in the province of Pesaro and Urbino, 8 m. S.E. of the former by rail, and 46 ft. above sea-level, on the N.E. coast of Italy. Pop. (1901), town 10,535, commune 24,730. The cathedral has a 13th century portal, but the interior is unimportant. The vestibule of S. Francesco contains the tombs of some members of the Malatesta family. S. Croce and S. Maria Nuova contain works by Giovanni Santi, the father of Raphael; the latter has also two works by Perugino, the predella of one of which is attributed to Raphael. S. Agostino contains a painting of S. Angelo Custode ("the Guardian Angel"), which is the subject of a poem by Robert Browning. The fine Gothic Palazzo della Ragione (1299) has been converted into a theatre. The palace of the Malatesta, with fine porticos and Gothic windows, was much damaged by an earthquake in 1874. S. Michele, built against the arch of Augustus, is an early Renaissance building (1475-1490), probably by Matteo Nuzio of Fano, with an ornate portal. The façade has an interesting relief showing the colonnade added by Constantine as an upper storey to the arch of Augustus and removed in 1463.

Fano in the middle ages passed through various political vicissitudes, and in the 14th century became subject to the Malatesta. In 1458 Pius II. added it to the states of the Church. Julius II. established here in 1514 the first printing press with movable Arabic type. The harbour was restored by Paul V. but is now unimportant.

FANSHAWE, SIR RICHARD, Bart. (1608-1666), English poet and ambassador, son of Sir Henry Fanshawe, remembrancer of the exchequer, of Ware Park, Hertfordshire, and of Elizabeth, daughter of Thomas Smith or Smythe, was born early in June 1608, and was educated in Cripplegate by the famous schoolmaster, Thomas Farnaby. In November 1623 he was admitted fellow-commoner of Jesus College, Cambridge, and in January 1626 he entered the Inner Temple; but the study of the law being distasteful to him he travelled in France and Spain. On his return, an accomplished linguist, in 1635, he was appointed secretary to the English embassy at Madrid under Lord Aston. At the outbreak of the Civil War he joined the king, and while at Oxford in 1644 married Anne, daughter of Sir John Harrison of Balls, Hertfordshire. About the same time he was appointed secretary at war to the prince of Wales, with whom he set out in 1645 for the western counties, Scilly, and afterwards Jersey. He compounded in 1646 with the parliamentary authorities, and was allowed to live in London till October 1647, visiting Charles I. at Hampton Court. In 1647 he published his translation of the Pastor Fido of Guarini, which he reissued in 1648 with the addition of several other poems, original and translated. In 1648 he was appointed treasurer to the navy under Prince Rupert. In November of this year he was in Ireland, where he actively engaged in the royalist cause till the spring of 1650, when he was despatched by Charles II. on a mission to obtain help from Spain. This was refused, and he joined Charles in Scotland as secretary. On the 2nd of September 1650 he had been created a baronet. He accompanied Charles in the expedition into England, and was taken prisoner at the battle of Worcester on the 3rd of September 1651. After a confinement of some weeks at Whitehall, he was allowed, with restrictions, and under the supervision of the authorities, to choose his own place of residence. He published in 1652 his *Selected Parts of Horace*, a translation remarkable for its fidelity, felicity and elegance. In 1654 he completed translations of two of the comedies of the Spanish poet Antonio de Mendoza, which were published after his death, *Querer per solo querer: To Love only for Love's Sake*, in 1670, and *Fiestas de Aranjuez* in 1671. But the great labour of his retirement was the translation of the *Lusiad*, by Camoens published in 1655. It is in ottava rima, with the translation prefixed to it of the Latin poem *Furor Petroniensis*. In 1658 he published a Latin version of the *Faithful Shepherdess* of Fletcher.

In April 1659 Fanshawe left England for Paris, re-entered Charles's service and accompanied him to England at the Restoration, but was not offered any place in the administration. In 1661 he was returned to parliament for the university of Cambridge, and the same year was sent to Portugal to negotiate the marriage between Charles II. and the infanta. In January 1662 he was made a privy councillor of Ireland, and was appointed ambassador again to Portugal in August, where he remained till August 1663. He was sworn a privy councillor of England on the 1st of October. In January 1664 he was sent as ambassador to Spain, and arrived at Cadiz in February of that year. He signed the first draft of a treaty on the 17th of December, which offered advantageous concessions to English trade, but of which one condition was that it should be confirmed by his government before a certain date. In January 1666 Fanshawe went to Lisbon to procure the adherence of Portugal to this agreement. He returned to Madrid, having failed in his mission, and was almost immediately recalled by Clarendon on the plea that he had exceeded his instructions. He died very shortly afterwards before leaving Madrid, on the 26th of June 1666. He had a family of fourteen children, of whom five only survived him, Richard, the youngest, succeeding as second baronet and dying unmarried in 1694.

As a translator, whether from the Italian, Latin, Portuguese or Spanish, Fanshawe has a considerable reputation. His *Pastor Fido* and his *Lusiad* have not been superseded by later scholars, and his rendering of the latter is praised by Southey and Sir Richard Burton. As an original poet also the few verses he has left are sufficient evidence of exceptional literary talent.

AUTHORITIES.—*Memoirs of Lady Fanshawe*, written in 1676 and published 1829 (from an inaccurate transcript); these were reprinted from the original manuscript and edited by H.C. Fanshawe (London, 1907); article in the *Dict. of Nat. Biography* and authorities there quoted; *Biographia Brit.* (Kippis); *Original Letters of Sir R.F.* (2 vols., 1724), the earlier edition of 1702 with portrait being only vol. i. of this edition; *Notes Genealogical and Historical of the Fanshawe Family* (1868-1872); funeral sermon by H. Bagshaw; *Nicholas Papers* (Camden Society); *Quarterly Review*, xxvii. 1; *Macmillan's Mag.* lvii. 279; *Camoen's Life and Lusiads*, by Sir F. Burton, i. 135; Clarendon's *State Papers, Calendars of State Papers, Autobiography and Hist. of the Rebellion; Athenaeum* (1883), i. 121; *Add. MSS. British Museum*, 15,228 (poems); *Harl. MSS. Brit. Mus.* 7010 (letters).

(P. C. Y.)

**FANTAN**, a form of gambling highly popular among the Chinese. The game is simple. A square is marked in the centre of an ordinary table, or a square piece of metal is laid on it, the sides being marked 1, 2, 3 and 4. The banker puts on the table a double handful of small coins—in China "cash"—or similar articles, which he covers with a metal bowl. The players bet on the numbers, setting their stakes on the side of the square which bears the number selected. When all have staked, the bowl is removed, and the banker or croupier with a small stick removes coins from the heap, four at a time, till the final batch is reached. If it contains four coins, the backer of No. 4 wins; if three, the backer of No. 3 wins, and so on. Twenty-five per cent is deducted from the stake by the banker, and the winner receives five times the amount of his stake thus reduced. In Macao, the Monte Carlo of China, play goes on day and night, every day of the week, and bets can be made from 5 cents to 500 dollars, which are the limits.

Fantan is also the name of a card game, played with an ordinary pack, by any number of players up to eight. The deal decided, the cards are dealt singly, any that are left over forming a stock, and being placed face downwards on the table. Each player contributes a

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fixed stake or "ante." The first player can enter if he has an ace; if he has not he pays an "ante" and takes a card from the stock; the second player is then called upon and acts similarly till an ace is played. This (and the other aces when played) is put face upwards on the table, and the piles are built up from the ace to the king. The pool goes to the player who first gets rid of all his cards. If a player fails to play, having a playable card, he is fined the amount of the ante for every card in the other players' hands.

**FANTASIA** (Italian for "fantasy," a causing to be seen, from Greek,  $\varphi \alpha (v \epsilon i v, to show)$ , a name in music sometimes loosely used for a composition which has little structural form, and appears to be an improvization; and also for a combination or medley of familiar airs connected together with original passages of more or less brilliance. The word, however, was originally applied to more formal compositions, based on the madrigal, for several instruments. Fantasias appear as distinct compositions in Bach's works, and also joined to a fugue, as in the "Great Fantasia and Fugue" in A minor, and the "Fantasia cromatica" in D minor. Brahms used the name for his shorter piano pieces. It is also applied to orchestral compositions "not long enough to be called symphonic poems and not formal enough to be called overtures" (Sir C. Hubert Parry, in Grove's *Dictionary of Music*, ed. 1906). The Italian word is still used in Tunis, Algeria and Morocco, with the meaning of "showing off," for an acrobatic exhibition of horsemanship by the Arabs. The riders fire their guns, throw them and their lances into the air, and catch them again, standing or kneeling in the saddle, all at a full gallop.

FANTI, MANFREDO (1806-1865), Italian general, was born at Carpi and educated at the military college of Modena. In 1831 he was implicated in the revolutionary movement organized by Ciro Menotti (see FRANCIS IV., of Modena), and was condemned to death and hanged in effigy, but escaped to France, where he was given an appointment in the French corps of engineers. In 1833 he took part in Mazzini's abortive attempt to invade Savoy, and in 1835 he went to Spain to serve in Queen Christina's army against the Carlists. There he remained for thirteen years, distinguishing himself in battle and rising to a high staff appointment. But on the outbreak of the war between Piedmont and Austria in 1848 he hurried back to Italy, and although at first his services were rejected both by the Piedmontese government and the Lombard provisional government, he was afterwards given the command of a Lombard brigade. In the general confusion following on Charles Albert's defeat on the Mincio and his retreat to Milan, where the people rose against the unhappy king, Fanti's courage and tact saved the situation. He was elected member of the Piedmontese chamber in 1849, and on the renewal of the campaign he again commanded a Lombard brigade under General Ramorino. After the Piedmontese defeat at Novara (23rd of March) peace was made, but a rising broke out at Genoa, and Fanti with great difficulty restrained his Lombards from taking part in it. But he was suspected as a Mazzinian and a soldier of fortune by the higher Piedmontese officers, and they insisted on his being courtmartialled for his operations under Ramorino (who had been tried and shot). Although honourably acquitted, he was not employed again until the Crimean expedition of 1855. In the second Austrian war in 1859 Fanti commanded the 2nd division, and contributed to the victories of Palestro, Magenta and San Martino. After the peace of Villafranca he was sent to organize the army of the Central Italian League (composed of the provisional governments of Tuscany, Modena, Parma and Romagna), and converted it in a few months into a well-drilled body of 45,000 men, whose function was to be ready to intervene in the papal states on the outbreak of a revolution. He showed statesmanlike qualities in steering a clear course between the exaggerated prudence of Baron Ricasoli, who wished to recall the troops from the frontier, and the impetuosity of Garibaldi, his second-in-command, who was anxious to invade Romagna prematurely, even at the risk of Austrian intervention. Fanti's firmness led to Garibaldi's resignation. In January 1860 Fanti became minister of war and marine under Cavour, and incorporated the League's army in that of Piedmont. In the meanwhile Garibaldi had invaded Sicily with his Thousand, and King Victor Emmanuel decided at last that he too must intervene; Fanti was given the chief command of a strong Italian force which invaded

the papal states, seized Ancona and other fortresses, and defeated the papal army at Castelfidardo, where the enemy's commander, General Lamoricière, was captured. In three weeks Fanti had conquered the Marche and Umbria and taken 28,000 prisoners. When the army entered Neapolitan territory the king took the chief command, with Fanti as chief of the staff. After defeating a large Neapolitan force at Mola and organizing the siege operations round Gaeta, Fanti returned to the war office at Turin to carry out important army reforms. His attitude in opposing the admission of Garibaldi's 7000 officers into the regular army with their own grades made him the object of great unpopularity for a time, and led to a severe reprimand from Cavour. On the death of the latter (7th of June 1861) he resigned office and took command of the VII. army corps. But his health had now broken down, and after four years' suffering he died in Florence on the 5th of April 1865. His lose was greatly felt in the war of 1866.

See Carandini, *Vita di M. Fanti* (Verona, 1872); A. Di Giorgio, *Il Generale M. Fanti* (Florence, 1906).

(L. V.\*)

FANTI, a nation of Negroes, inhabiting part of the seaboard of the Gold Coast colony, British West Africa, and about 20,000 sq. m. of the interior. They number about a million. They have many traditions of early migrations. It seems probable that the Fanti and Ashanti were originally one race, driven from the north-east towards the sea by more powerful races, possibly the ancestors of Fula and Hausa. There are many words in Fanti for plants and animals not now existing in the country, but which abound in the Gurunsi and Moshi countries farther north. These regions have been always haunted by slave-raiders, and possibly these latter may have influenced the exodus. At any rate, the Fanti were early driven into the forests from the open plains and slopes of the hills. The name Fanti, an English version of *Mfantsi*, is supposed to be derived from *fan*, a wild cabbage, and *ti*, *di* or *dz*, to eat; the story being that upon the exile of the tribe the only available food was some such plant. They are divided into seven tribes, obviously totemic, and with rules as to exogamy still in force. (1) Kwonna, buffalo; (2) Etchwi, leopard; (3) Eso, bush-cat; (4) Nitchwa, dog; (5) Nnuna, parrot; (6) Ebradzi, lion; and (7) Abrutu, corn-stalk; these names are obsolete, though the meanings are known. The tribal marks are three gashes in front of the ear on each side in a line parallel to the jaw-bone. The Fanti language has been associated by A.B. Ellis with the Ashanti speech as the principal descendant of an original language, possibly the Tshi (pronounced Tchwi), which is generally considered as the parent of Ashanti, Fanti, Akim, Akwapim and modern Tshi.

The average Fanti is of a dull brown colour, of medium height, with negroid features. Some of the women, when young, are quite pretty. The women use various perfumes, one of the most usual being prepared from the excrement of snakes. There are no special initiatory rites for the youthful Fanti, only a short seclusion for girls when they reach the marriageable age. Marriage is a mere matter of sale, and the maidens are tricked out in all the family finery and walk round the village to indicate that they are ready for husbands. The marriages frequently end in divorce. Polygamy is universally practised. The care of the children is left exclusively to the mothers, who are regarded by the Fanti with deep veneration, while little attention is paid to the fathers. Wives never eat with their husbands, but always with the children. The rightful heir in native law is the eldest nephew, *i.e.* the eldest sister's eldest son, who invariably inherits wives, children and all property. As to tenure of land, the source of ownership of land is derived from the possession of the chief's "stool," which is, like the throne of a king, the symbol of authority, and not even the chief can alienate the land from the stool. Females may succeed to property, but generally only when the acquisition of such property is the result of their succeeding to the stool of a chief. The Fanti are not permanent cultivators of the soil. Three or at most five years will cover the period during which land is continuously cultivated. The commonest native dishes are palm-oil chop, a bowl of palm oil, produced by boiling freshly ground palm nuts, in which a fowl or fish is then cooked; and fūfū, "white," a boiled mash of yams or plantains. The Fanti have a taste for shark-flesh, called locally "stink-fish." It is sliced up and partly sun-dried, and is eaten in a putrid state. The Fanti are skilful sailors and fishermen, build excellent canoes, and are expert weavers. Pottery and goldsmithery are trades also followed. Their religion is fetishism, every Fanti having his own "fetish" or familiar spirit, but there is a belief in a beneficent Creative Being. Food is offered the dead, and a ceremony of purification is said to be indulged in at funerals,

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the bearers and mourners plunging into the sea or river after the interment.

See *Journal of Anthropological Institute of Great Britain*, vol. 26, pp. 128 et seq.; A.B. Ellis, *The Tshi-speaking Peoples of the Gold Coast* (London, 1887).

FANTIN-LATOUR, IGNACE HENRI JEAN THÉODORE (1836-1904), French artist, was born at Grenoble on the 14th of January 1836. He studied first with his father, a pastel painter, and then at the drawing school of Lecoq de Boisbaudran, and later under Couture. He was the friend of Ingres, Dalacroix, Corot, Courbet and others. He exhibited in the Salon of 1861, and many of his more important canvases appeared on its walls in later years, though 1863 found him with Harpignies, Monet, Legros and Whistler in the Salon des Refusés. Whistler introduced him to English artistic circles, and he lived for some time in England, many of his portraits and flower pieces being in English galleries. He died on the 28th of August 1904. His portrait groups, arranged somewhat after the manner of the Dutch masters, are as interesting from their subjects as they are from the artistic point of view. "Hommage à Delacroix" showed portraits of Whistler and Legros, Baudelaire, Champfleury and himself; "Un Atelier à Batignolles" gave portraits of Monet, Manet, Zola and Renoir, and is now in the Luxembourg; "Un Coin de table" presented Verlaine, Rimbaud, Camille Peladan and others; and "Autour du Piano" contained portraits of Chabrier, D'Indy and other musicians. His paintings of flowers are perfect examples of the art, and form perhaps the most famous section of his work in England. In his later years he devoted much attention to lithography, which had occupied him as early as 1862, but his examples were then considered so revolutionary, with their strong lights and black shadows, that the printer refused to execute them. After "L'Anniversaire" in honour of Berlioz in the Salon of 1876, he regularly exhibited lithographs, some of which were excellent examples of delicate portraiture, others being elusive and imaginative drawings illustrative of the music of Wagner (whose cause he championed in Paris as early as 1864), Berlioz, Brahms and other composers. He illustrated Adolphe Jullien's Wagner (1886) and Berlioz (1888). There are excellent collections of his lithographic work at Dresden, in the British Museum, and a practically complete set given by his widow to the Louvre. Some were also exhibited at South Kensington in 1898-1899, and at the Dutch gallery in 1904.

A catalogue of the lithographs of Fantin-Latour was drawn up by Germain Hédiard in *Les Maîtres de la lithographie* (1898-1899). A volume of reproductions, in a limited edition, was published (Paris, 1907) as *L'Œuvre lithographique de Fantin-Latour*. See A. Jullien, *Fantin-Latour, sa vie et ses amitiés* (Paris, 1909).

**FANUM FORTUNAE** (mod. *Fano*), an ancient town of Umbria, Italy, at the point where the Via Flaminia reaches the N.E. coast of Italy. Its name shows that it was of Roman origin, but of its foundation we know nothing. It is first mentioned, with Pisaurum and Ancona, as held by Julius Caesar in 49 B.C. Augustus planted a colony there, and round it constructed a wall (of which some remains exist), as is recorded in the inscription on the triple arch erected in his honour at the entrance to the town (A.D. 9-10), which is still standing. Vitruvius tells us that there was, during Augustus's lifetime, a temple in his honour and a temple of Jupiter, and describes a basilica of which he himself was the architect. The arch of Augustus bears a subsequent inscription in honour of Constantine, added after his death by L. Turcius Secundus, *corrector Flaminiae et Piceni*, who also constructed a colonnade above the arch. Several Roman statues and heads, attributable to members of the Julio-Claudian dynasty, were found in the convent of S. Filippo in 1899. These and other objects are now in the municipal museum (E. Brizio in *Notizie degli scavi*, 1899, 249 seq.). Of the temple of Fortune from which the town took its name no traces have been discovered.

**FAN VAULT**, in architecture, a method of vaulting used in the Perpendicular style, of which the earliest example is found in the cloisters of Gloucester cathedral, built towards the close of the 14th century. The ribs are all of one curve and equidistant, and their divergency, resembling that of an open fan, has suggested the name. One of the finest examples, though of later date (1640), is the vault over the staircase of Christ Church, Oxford. For the origin of its development see Vault.

FĀRĀBĪ [Abū Nașr Muḥammad ibn Tarkhān ul-Fārābī] (ca. 870-950), Arabian philosopher, was born of Turkish stock at Fārāb in Turkestan, where also he spent his youth. Thence he journeyed to Bagdad, where he learned Arabic and gave himself to the study of mathematics, medicine and philosophy, especially the works of Aristotle. Later he went to the court of the Hamdanid Saif addaula, from whom he received a warm welcome and a small pension. Here he lived a quiet if not an ascetic life. He died in Damascus, whither he had gone with his patron. His works are very clear in style, though aphoristic rather than systematic in the treatment of subjects. Unfortunately the success of Avicenna seems to have led to the neglect of much of his work. In Europe his compendium of Aristotle's *Rhetoric* was published at Venice, 1484. Two of his smaller works appear in Alpharabii opera omnia (Paris, 1638), and two are translated in F.A. Schmölders' Documenta philosophiae Arabum (Bonn, 1836). More recently Fr. Dieterici has published at Leiden: Alfarabi's philosophische Abhandlungen (1890; German trans. 1892); Alfarabi's Abhandlung des Musterstaats (1895; German trans. with an essay "Über den Zusammenhang der arabischen und griechischen Philosophie," 1900); Die Staatsleitung von Alfarabi in German, with an essay on "Das Wesen der arabischen Philosophie" (1904).

For Fārābi's life see McG. de Slane's translation of Ibn Khallikān (vol. 3, pp. 307 ff.); and for further information as to his works M. Steinschneider's article in the *Mémoires de l'Académie* (St Petersburg, série 7, tom. 13, No. 4, 1869); and C. Brockelmann's *Gesch. der arab. Litteratur*, vol. i. (Weimar, 1898), pp. 210-213.

(G. W. T.)

FARADAY, MICHAEL (1791-1867), English chemist and physicist, was born at Newington, Surrey, on the 22nd of September 1791. His parents had migrated from Yorkshire to London, where his father worked as a blacksmith. Faraday himself became apprenticed to a bookbinder. The letters written to his friend Benjamin Abbott at this time give a lucid account of his aims in life, and of his methods of self-culture, when his mind was beginning to turn to the experimental study of nature. In 1812 Mr Dance, a customer of his master, took him to hear four lectures by Sir Humphry Davy. Faraday took notes of these lectures, and afterwards wrote them out in a fuller form. Under the encouragement of Mr Dance, he wrote to Sir H. Davy, enclosing these notes. "The reply was immediate, kind and favourable." He continued to work as a journeyman bookbinder till the 1st of March 1813, when he was appointed assistant in the laboratory of the Royal Institution of Great Britain on the recommendation of Davy, whom he accompanied on a tour through France, Italy and Switzerland from October 1813 to April 1815. He was appointed director of the laboratory in 1825; and in 1833 he was appointed Fullerian professor of chemistry in the institution for life, without the obligation to deliver lectures. He thus remained in the institution for fiftyfour years. He died at Hampton Court on the 25th of August 1867.

Faraday's earliest chemical work was in the paths opened by Davy, to whom he acted as assistant. He made a special study of chlorine, and discovered two new chlorides of carbon. He also made the first rough experiments on the diffusion of gases, a phenomenon first pointed out by John Dalton, the physical importance of which was more fully brought to light by Thomas Graham and Joseph Loschmidt. He succeeded in liquefying several gases; he investigated the alloys of steel, and produced several new kinds of glass intended for optical purposes. A specimen of one of these heavy glasses afterwards became historically important as the substance in which Faraday detected the rotation of the plane of polarization of light when the glass was placed in the magnetic field, and also as the substance which was first

repelled by the poles of the magnet. He also endeavoured with some success to make the general methods of chemistry, as distinguished from its results, the subject of special study and of popular exposition. See his work on *Chemical Manipulation*.

But Faraday's chemical work, however important in itself, was soon completely overshadowed by his electrical discoveries. The first experiment which he has recorded was the construction of a voltaic pile with seven halfpence, seven disks of sheet zinc, and six pieces of paper moistened with salt water. With this pile he decomposed sulphate of magnesia (first letter to Abbott, July 12, 1812). Henceforward, whatever other subjects might from time to time claim his attention, it was from among electrical phenomena that he selected those problems to which he applied the full force of his mind, and which he kept persistently in view, even when year after year his attempts to solve them had been baffled.

His first notable discovery was the production of the continuous rotation of magnets and of wires conducting the electric current round each other. The consequences deducible from the great discovery of H.C. Oersted (21st July 1820) were still in 1821 apprehended in a somewhat confused manner even by the foremost men of science. Dr W.H. Wollaston indeed had formed the expectation that he could make the conducting wire rotate on its own axis, and in April 1821 he came with Sir H. Davy to the laboratory of the Royal Institution to make an experiment. Faraday was not there at the time, but coming in afterwards he heard the conversation on the expected rotation of the wire.

In July, August and September of that year Faraday, at the request of R. Phillips, the editor of the *Annals of Philosophy*, wrote for that journal an historical sketch of electromagnetism, and he repeated almost all the experiments he described. This led him in the beginning of September to discover the method of producing the continuous rotation of the wire round the magnet, and of the magnet round the wire. He did not succeed in making the wire or the magnet revolve on its own axis. This first success of Faraday in electro-magnetic research became the occasion of the most painful, though unfounded, imputations against his honour. Into these we shall not enter, referring the reader to the *Life of Faraday*, by Dr Bence Jones.

We may remark, however, that although the fact of the tangential force between an electric current and a magnetic pole was clearly stated by Oersted, and clearly apprehended by A.M. Ampère, Wollaston and others, the realization of the continuous rotation of the wire and the magnet round each other was a scientific puzzle requiring no mean ingenuity for its original solution. For on the one hand the electric current always forms a closed circuit, and on the other the two poles of the magnet have equal but opposite properties, and are inseparably connected, so that whatever tendency there is for one pole to circulate round the current in one direction is opposed by the equal tendency of the other pole to go round the other way, and thus the one pole can neither drag the other round and round the wire nor yet leave it behind. The thing cannot be done unless we adopt in some form Faraday's ingenious solution, by causing the current, in some part of its course, to divide into two channels, one on each side of the magnet, in such a way that during the revolution of the magnet the current is transferred from the channel in front of the magnet to the channel behind it, so that the middle of the magnet can pass across the current without stopping it, just as Cyrus caused his army to pass dryshod over the Gyndes by diverting the river into a channel cut for it in his rear.

We must now go on to the crowning discovery of the induction of electric currents.

In December 1824 he had attempted to obtain an electric current by means of a magnet, and on three occasions he had made elaborate but unsuccessful attempts to produce a current in one wire by means of a current in another wire or by a magnet. He still persevered, and on the 29th of August 1831 he obtained the first evidence that an electric current can induce another in a different circuit. On the 23rd of September he writes to his friend R. Phillips: "I am busy just now again on electromagnetism, and think I have got hold of a good thing, but can't say. It may be a weed instead of a fish that, after all my labour, I may at last pull up." This was his first successful experiment. In nine more days of experimenting he had arrived at the results described in his first series of "Experimental Researches" read to the Royal Society on the 24th of November 1841. By the intense application of his mind he had thus brought the new idea, in less than three months from its first development, to a state of perfect maturity.

During his first period of discovery, besides the induction of electric currents, Faraday established the identity of the electrification produced in different ways; the law of the definite electrolytic action of the current; and the fact, upon which he laid great stress, that every unit of positive electrification is related in a definite manner to a unit of negative electrification, so that it is impossible to produce what Faraday called "an absolute charge of

electricity" of one kind not related to an equal charge of the opposite kind. He also discovered the difference of the capacities of different substances for taking part in electric induction. Henry Cavendish had before 1773 discovered that glass, wax, rosin and shellac have higher specific inductive capacities than air, and had actually determined the numerical ratios of these capacities, but this was unknown both to Faraday and to all other electricians of his time, since Cavendish's *Electrical Researches* remained unpublished till 1879.

The first period of Faraday's electrical discoveries lasted ten years. In 1841 he found that he required rest, and it was not till 1845 that he entered on his second great period of research, in which he discovered the effect of magnetism on polarized light, and the phenomena of diamagnetism.

Faraday had for a long time kept in view the possibility of using a ray of polarized light as a means of investigating the condition of transparent bodies when acted on by electric and magnetic forces. Dr Bence Jones (*Life of Faraday*, vol. i. p. 362) gives the following note from his laboratory book on the 10th of September 1822:—

"Polarized a ray of lamplight by reflection, and endeavoured to ascertain whether any depolarizing action (was) exerted on it by water placed between the poles of a voltaic battery in a glass cistern; one Wollaston's trough used; the fluids decomposed were pure water, weak solution of sulphate of soda, and strong sulphuric acid; none of them had any effect on the polarized light, either when out of or in the voltaic circuit, so that no particular arrangement of particles could be ascertained in this way."

Eleven years afterwards we find another entry in his notebook on the 2nd of May 1833 (*Life*, by Dr Bence Jones, vol. ii. p. 29). He then tried not only the effect of a steady current, but the effect on making and breaking contact.

"I do not think, therefore, that decomposing solutions or substances will be found to have (as a consequence of decomposition or arrangement for the time) any effect on the polarized ray. Should now try non-decomposing bodies, as solid nitre, nitrate of silver, borax, glass, &c., whilst solid, to see if any internal state induced, which by decomposition is destroyed, *i.e.* whether, when they cannot decompose, any state of electrical tension is present. My borate of glass good, and common electricity better than voltaic."

On the 6th of May he makes further experiments, and concludes: "Hence I see no reason to expect that any kind of structure or tension can be rendered evident, either in decomposing or non-decomposing bodies, in insulating or conducting states."

At last, in 1845, Faraday attacked the old problem, but this time with complete success. Before we describe this result we may mention that in 1862 he made the relation between magnetism and light the subject of his very last experimental work. He endeavoured, but in vain, to detect any change in the lines of the spectrum of a flame when the flame was acted on by a powerful magnet.

This long series of researches is an instance of his persistence. His energy is shown in the way in which he followed up his discovery in the single instance in which he was successful. The first evidence which he obtained of the rotation of the plane of polarization of light under the action of magnetism was on the 13th of September 1845, the transparent substance being his own heavy glass. He began to work on the 30th of August 1845 on polarized light passing through electrolytes. After three days he worked with common electricity, trying glass, heavy optical glass, quartz, Iceland spar, all without effect, as on former trials. On the 13th of September he worked with lines of magnetic force. Air, flint, glass, rock-crystal, calcareous spar were examined, but without effect.

"Heavy glass was experimented with. It gave no effects when the *same magnetic poles* or the *contrary* poles were on opposite sides (as respects the course of the polarized ray), nor when the same poles were on the same side either with the constant or intermitting current. But when contrary magnetic poles were on the same side there was an effect produced on the polarized ray, and thus magnetic force and light were proved to have relations to each other. This fact will most likely prove exceedingly fertile, and of great value in the investigation of the conditions of natural force."

He immediately goes on to examine other substances, but with "no effect," and he ends by saying, "Have got enough for to-day." On the 18th of September he "does an excellent day's work." During September he had four days of work, and in October six, and on the 6th of November he sent in to the Royal Society the nineteenth series of his "Experimental Researches," in which the whole conditions of the phenomena are fully specified. The negative rotation in ferro-magnetic media is the only fact of importance which remained to be discovered afterwards (by M.E. Verdet in 1856).

But his work for the year was not yet over. On the 3rd of November a new horseshoe magnet came home, and Faraday immediately began to experiment on the action in the polarized ray through gases, but with no effect. The following day he repeated an experiment which had given no result on the 6th of October. A bar of heavy glass was suspended by silk between the poles of the new magnet. "When it was arranged, and had come to rest, I found I *could* affect it by the magnetic forces and give it position." By the 6th of December he had sent in to the Royal Society the twentieth, and on the 24th of December the twenty-first, series of his "Researches," in which the properties of diamagnetic bodies are fully described. Thus these two great discoveries were elaborated, like his earlier one, in about three months.

The discovery of the magnetic rotation of the plane of polarized light, though it did not lead to such important practical applications as some of Faraday's earlier discoveries, has been of the highest value to science, as furnishing complete dynamical evidence that wherever magnetic force exists there is matter, small portions of which are rotating about axes parallel to the direction of that force.

We have given a few examples of the concentration of his efforts in seeking to identify the apparently different forces of nature, of his far-sightedness in selecting subjects for investigation, of his persistence in the pursuit of what he set before him, of his energy in working out the results of his discoveries, and of the accuracy and completeness with which he made his final statement of the laws of the phenomenon.

These characteristics of his scientific spirit lie on the surface of his work, and are manifest to all who read his writings. But there was another side of his character, to the cultivation of which he paid at least as much attention, and which was reserved for his friends, his family and his church. His letters and his conversation were always full of whatever could awaken a healthy interest, and free from anything that might rouse ill-feeling. When, on rare occasions, he was forced out of the region of science into that of controversy, he stated the facts and let them make their own way. He was entirely free from pride and undue self-assertion. During the growth of his powers he always thankfully accepted a correction, and made use of every expedient, however humble, which would make his work more effective in every detail. When at length he found his memory failing and his mental powers declining, he gave up, without ostentation or complaint, whatever parts of his work he could no longer carry on according to his own standard of efficiency. When he was no longer able to apply his mind to science, he remained content and happy in the exercise of those kindly feelings and warm affections which he had cultivated no less carefully than his scientific powers.

The parents of Faraday belonged to the very small and isolated Christian sect which is commonly called after Robert Sandeman. Faraday himself attended the meetings from childhood; at the age of thirty he made public profession of his faith, and during two different periods he discharged the office of elder. His opinion with respect to the relation between his science and his religion is expressed in a lecture on mental education delivered in 1854, and printed at the end of his *Researches in Chemistry and Physics*.

"Before entering upon the subject, I must make one distinction which, however it may appear to others, is to me of the utmost importance. High as man is placed above the creatures around him, there is a higher and far more exalted position within his view; and the ways are infinite in which he occupies his thoughts about the fears, or hopes, or expectations of a future life. I believe that the truth of that future cannot be brought to his knowledge by any exertion of his mental powers, however exalted they may be; that it is made known to him by other teaching than his own, and is received through simple belief of the testimony given. Let no one suppose for an instant that the self-education I am about to commend, in respect of the things of this life, extends to any considerations of the hope set before us, as if man by reasoning could find out God. It would be improper here to enter upon this subject further than to claim an absolute distinction between religious and ordinary belief. I shall be reproached with the weakness of refusing to apply those mental operations which I think good in respect of high things to the very highest. I am content to bear the reproach. Yet even in earthly matters I believe that 'the invisible things of Him from the creation of the world are clearly seen, being understood by the things that are made, even His eternal power and Godhead'; and I have never seen anything incompatible between those things of man which can be known by the spirit of man which is within him and those higher things concerning his future, which he cannot know by that spirit."

Faraday gives the following note as to this lecture:-

"These observations were delivered as a lecture before His Royal Highness the Prince Consort and the members of the Royal Institution on the 6th of May 1854. They are so immediately connected in their nature and origin with my own experimental life, considered either as cause or consequence, that I have thought the close of this volume not an unfit place for their reproduction."

As Dr Bence Jones concludes—

"His standard of duty was supernatural. It was not founded on any intuitive ideas of right and wrong, nor was it fashioned upon any outward experiences of time and place, but it was formed entirely on what he held to be the revelation of the will of God in the written word, and throughout all his life his faith led him to act up to the very letter of it."

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BIOGRAPHIES.—*Faraday as a Discoverer*, by John Tyndall (Longmans, 1st ed. 1868, 2nd ed. 1870); *The Life and Letters of Faraday*, by Dr Bence Jones, secretary of the Royal Institution, in 2 vols. (Longmans, 1870); *Michael Faraday*, by J.H. Gladstone, Ph.D., F.R.S. (Macmillan, 1872); *Michael Faraday; his Life and Work*, by S.P. Thompson (1898).

(J. C. M.)

**FARAH,** a river of Afghanistan. It rises in the southern slopes of Siah-Koh, which forms the southern wall of the valley of Herat, and after a south-westerly course of about 200 m. falls into the Seistan Hamun. At the town of Farah it has a width of 150 yds. in the dry season with 2 ft. of water and a clear swift stream. It is liable to floods, when it becomes impassable for weeks. The lower valley of the Farah Rud is fertile and well cultivated.

**FARAH,** a town of Afghanistan. It is situated on the river that bears its name on the main road between Herat and Kandahar, 160 m. S. of Herat and 225 m. W. of Kandahar. It is a place of some strategical importance, as it commands the approaches to India and Seistan from Herat. The town (2460 ft. above sea-level) is a square walled enclosure standing in the middle of the plain, surrounded with a walled rampart. Owing to its unhealthiness it is now almost deserted, being only occupied by the Afghan regiment quartered there. It is a place of great antiquity, being probably the Phra mentioned by Isidore of Charax in the 1st century A.D. It was sacked by the armies of Jenghiz Khan, and the survivors transported to a position farther north, where there are still great ruins. The population returned to the original site after the destruction of the medieval city by Shah Abbas, and the city prospered again until its bloody siege by Nadir Shah. Subsequently under constant attacks it declined, and in 1837 the population amounting to 6000 was carried off to Kandahar. The sole industry of the town at present is the manufacture of gunpowder. In the districts east of Farah are to be found the most fanatical of the Durani Afghan tribes.

**FARAZDAQ** [Hammām ibn Ghālib ibn Sa'sa', known as al-Farazdaq] (*ca.* 641-*ca.* 728), Arabian poet, was born at Basra. He was of the Dārim, one of the most respected divisions of the bani Tamīm, and his mother was of the tribe of Dabba. His grandfather Sa'sa' was a Bedouin of great repute, his father Ghālib followed the same manner of life until Basra was founded, and was famous for his generosity and hospitality. At the age of fifteen Farazdaq was known as a poet, and though checked for a short time by the advice of the caliph Ali to devote his attention to the study of the Koran, he soon returned to making verse. In the true Bedouin spirit he devoted his talent largely to satire and attacked the bani Nahshal and the bani Fuqaim. When Ziyād, a member of the latter tribe, became governor of Basra, the poet

was compelled to flee, first to Kufa, and then, as he was still too near Ziyād, to Medina, where he was well received by Sa'id ibn ul-Āsī. Here he remained about ten years, writing satires on Bedouin tribes, but avoiding city politics. But he lived a prodigal life, and his amorous verses led to his expulsion by the caliph Merwan I. Just at that time he learned of the death of Ziyād and returned to Basra, where he secured the favour of Ziyād's successor 'Obaidallāh ibn Ziyād. Much of his poetry was now devoted to his matrimonial affairs. He had taken advantage of his position as guardian and married his cousin Nawār against her will. She sought help in vain from the court of Basra and from various tribes. All feared the poet's satires. At last she fled to Mecca and appealed to the pretender 'Abdallah ibn Zobair, who, however, succeeded in inducing her to consent to a confirmation of the marriage. Quarrels soon arose again. Farazdaq took a second wife, and after her death a third, to annoy Nawār. Finally he consented to a divorce pronounced by Hasan al-Basrī. Another subject occasioned a long series of verses, namely his feud with his rival Jarir (q.v.) and his tribe the bani Kulaib. These poems are published as the Naka'id of Jarīr and al-Farazdaq (ed. A.A. Bevan, Leiden, 1906 ff.). In political life Farazdaq was prevented by fear from taking a large part. He seems, however, to have been attached to the house of Ali. During the reign of Moawiya I. he avoided politics, but later gave his allegiance to 'Abdallah ibn Zobair.

The fullest account of his life is contained in J. Hell's *Das Leben Farazdaq nach seinen Gedichten* (Leipzig, 1903); Arabian stories of him in the *Kitab ul-Aghāni* and in Ibn Khallikān. A portion of his poems was edited with French translation by R. Boucher (Paris, 1870); the remainder have been published by J. Hell (Munich, 1900).

(G. W. T.)

**FARCE,** a form of the comic in dramatic art, the object of which is to excite laughter by ridiculous situations and incidents rather than by imitation with intent to ridicule, which is the province of burlesque, or by the delineation of the play of character upon character, which is that of comedy. The history of the word is interesting. Its ultimate origin is the Latin *farcire*, to stuff, and with the meaning of "stuffing" or forcemeat it appears in old cookery books in English. In medieval Latin *farsa* and *farsia* were applied to the expansion of the *Kyrie eleison* in litanies, &c., by interpolating words and phrases between those two words; later, to words, phrases and rhymed verses, sometimes in the vernacular, also interpolated in various parts of the service. The French *farce*, the form to which we owe our word, was originally the "gag" that the actors in the medieval drama inserted into their parts, generally to meet the popular demand for a lightening of humour or buffoonery. It has thus been used for the lighter form of comic drama (see DRAMA), and also figuratively for a piece of idle buffoonery, sham, or mockery.

**FAREHAM**, a market town in the Fareham parliamentary division of Hampshire, England, 76 m. S.W. from London by the London & South Western railway. Pop. of urban district (1901) 8246. It lies at the head of a creek opening into the north-western corner of Portsmouth harbour. The principal industries are the manufacture of sackings, ropes, bricks, coarse earthenware, terra-cotta, tobacco-pipes and leather. Fareham has a considerable trade in corn, timber and coal; the creek being accessible to vessels of 300 tons. Three miles E. of Fareham, on Portsmouth harbour, are the interesting ruins of Porchester Castle, an extensive walled enclosure retaining its Norman keep, and exhibiting in its outer walls considerable evidence of Roman workmanship; Professor Haverfield, however, denies that it occupies the site of the Roman *Portus Magnus*. The church of St Mary has some fine Norman portions. It belonged to an Augustinian priory founded by Henry I. At Titchfield, 3 m. W. of Fareham, are ruins of the beautiful Tudor mansion, Place House, built on the site of a Premonstratensian abbey of the 13th century, of which there are also fragments.

The fact that Fareham (Fernham, Fernham) formed part of the original endowment of the see of Winchester fixes its existence certainly as early as the 9th century. It is mentioned in the Domesday Survey as subject to a reduced assessment on account of its exposed position and liability to Danish attacks. There is evidence to show that Fareham had become a

borough before 1264, but no charter can be found. It was a mesne borough held of the bishop of Winchester, but it is probable that during the 18th century the privileges of the burgesses were allowed to lapse, as by 1835 it had ceased to be a borough. Fareham returned two members to the parliament of 1306, but two years later it petitioned against representation on the ground of expense. A fair on the 31st of October and the two following days was held under grant of Henry III. The day appears to have been afterwards changed to the 29th of June, and in the 18th century was mainly important for the sale of toys. It was abolished in 1871. Fareham owed its importance in medieval times to its facilities for commerce. It was a free port and had a considerable trade in wool and wine. Later its shipping declined and in the 16th century it was little more than a fishing village. Its commercial prosperity in modern times is due to its nearness to Portsmouth.

**FAREL, GUILLAUME** (1489-1565), French reformer, was born of a noble family near Gap in Dauphiné in 1489. His parents meant him for the military profession, but his bent being for study he was allowed to enter the university of Paris. Here he came under the influence of Jacobus Faber (Stapulensis), on whose recommendation he was appointed professor in the college of Cardinal Lemoine. In 1521, on the invitation of Bishop Briçonnet, he repaired to Meaux, and took part in efforts of reform within the Roman communion. The persecuting measures of 1523, from which Faber found a refuge at Meaux, determined Farel to leave France. Oecolampadius welcomed him to Basel, where in 1524 he put forth thirteen theses sharply antagonizing Roman doctrine. These he defended with great ability, but with so much heat that Erasmus joined in demanding his expulsion from the city. He thought of going to Wittenberg, but his first halt was at Strassburg, where Bucer and Capito received him kindly. At the call of Duke Ulrich of Württemberg he went as preacher to Montbéliard. Displaying the same qualities which had driven him from Basel, he was forced to leave Montbéliard in the spring of 1525.

He retraced his steps to Strassburg and Basel; and, at the end of 1526, obtained a preacher's post at Aigle, then a dependency of Bern. Deeming it wise to suppress his name, he adopted the pseudonym Ursinus, with reference to his protection by Bern. Despite strenuous opposition by the monastic orders, he obtained in 1528 a licence from the authorities to preach anywhere within the canton of Bern. He extended his labours to the cantons of Neuchâtel and Vaud. His vehement missionary addresses were met by mob violence, but he persevered with undaunted zeal. In October 1530 he broke into the church of Neuchâtel with an iconoclastic mob, thus planting the Reformation in that city. In 1532 he visited the Waldenses. On the return journey he halted at Geneva, then at a crisis of political and religious strife. On the 30th of June 1532 the council of two hundred had ordained that in every church and cloister of the city "the pure Gospel" should be preached; against this order the bishop's vicar led the opposition. Reaching Geneva in October 1532, Farel (described in a contemporary monastic chronicle as "un chétif malheureux prédicant, nommé maistre Guillaume") at once began to preach in a room of his lodging, and soon attracted "un grand nombre de gens qui estoient advertis de sa venue et déjà infects de son hérésie." Summoned before the bishop's vicar, his trial was a scene of insult and clamour, ending in his being violently thrust from the court and bidden to leave the city within three hours. He escaped with difficulty to Orbe by boat. Through the intervention of the government of Bern, liberty of worship was granted on the 28th of March 1533 to the Reformation party in Geneva. Farel, returning, achieved in a couple of years a complete supremacy for his followers. On New Year's Day 1534 the bishop interdicted all preaching unauthorized by himself, and ordered the burning of all Protestant Bibles. This was the signal for public disputations in which Farel took the leading part on the Reformation side, with the result that by decree of the 27th of August 1535 the mass was suppressed and the reformed religion established. Calvin, on his way to Basel for a life of study, touched at Geneva, and by the importunity of Farel was there detained to become the leader of the Genevan Reformation. The severity of the disciplinary measures which followed procured a reaction under which Farel and Calvin were banished the city in 1538. Farel was called to Neuchâtel in July 1538, but his position there was made untenable, though he remained at his post during a visitation of the plague. When (1541) Calvin was recalled to Geneva, Farel also returned; but in 1542 he went to Metz to support the Reformation there. It is said that when he preached in the Dominican church of Metz, the bells were rung to drown his voice, but his voice outdid the bells, and on the next occasion he had three thousand hearers. His work was checked by the active hostility of the duke of Lorraine, and in 1544 he returned to Neuchâtel. No one was more frequently and confidentially consulted by Calvin. When the trial of Servetus was in progress (1553), Calvin was anxious for Farel's presence, but he did not arrive till sentence had been passed. He accompanied Servetus to the stake, vainly urging him to a recantation at the last moment. A coolness with Calvin was created by Farel's marriage, at the age of sixty-nine, with a refugee widow from Rouen, of unsuitable age. By her, six years later, he had one son, who died in infancy. The vigour and fervency of his preaching were unabated by length of years. Calvin's death, in 1564, affected him deeply. Yet in his last year he revisited Metz, preaching amid great enthusiasm, with all his wonted fire. The effort was too much for him; he left the church exhausted, took to his bed, and died at Metz on the 13th of September 1565.

Farel wrote much, but usually in haste, and for an immediate purpose. He takes no rank as a scientific theologian, being a man of activity rather than of speculation or of much insight. His *Sommaire* was re-edited from the edition of 1534 by J.G. Baum in 1867. Others of his works (all in French) were his treatise on purgatory (1534), on the Lord's Prayer (1543), on the Supper (1555). He "was remarkable for boldness and energy both in preaching and prayer" (M. Young, *Life of Paleario*). As an orator, he was denunciatory rather than suasive; thus while on the one hand he powerfully impressed, on the other hand he stimulated opposition. A monument to him was unveiled at Neuchâtel on the 4th of May 1876.

Lives of Farel are numerous; it may suffice to mention C. Ancillon, *Vie de G. Farel* (1691); the article in Bayle.; M. Kirchhofer, *Das Leben W. Farels* (1831-1833); Ch. Schmidt, *Études sur Farel* (1834); F. Bevan, *W. Farel* (1893); J.J. Herzog, in Herzog-Hauck's *Realencyklopädie* (1898).

(A. Go.\*)

FAREY, JOHN (1766-1826), English geologist, was born at Woburn in Bedfordshire in 1766. He was educated at Halifax in Yorkshire, and showed such aptitude in mathematics, drawing and surveying, that he was brought under the notice of John Smeaton (1724-1792). In 1792 he was appointed agent to the duke of Bedford for his Woburn estates. After the decease of the duke, Farey in 1802 removed to London, and settled there as a consulting surveyor and geologist. That he was enabled to take this step was due largely to his acquaintance with William Smith (q.v.), who in 1801 had been employed by the duke of Bedford in works of draining and irrigation. The duke, appreciating Smith's knowledge of the strata, commissioned him in 1802 to explore the margin of the chalk-hills south of Woburn in order to determine the true succession of the strata; and he instructed Farey to accompany him. Farey has remarked that Smith was his "Master and Instructor in Mineral Surveying," and his subsequent publications show how well he had profited by the teachings he received. Farey prepared the *General View of the Agriculture and Minerals of Derbyshire* in two vols. (1811-1813) for the Board of Agriculture. In the first of these volumes (1811) he gave an able account of the upper part of the British series of strata, and a masterly exposition of the Carboniferous and other strata of Derbyshire. In this classic work, and in a paper published in the Phil. Mag. vol. li. 1818, p. 173, on "Mr Smith's Geological Claims stated," he zealously called attention to the importance of the discoveries of William Smith. Farey died in London on the 6th of January 1826.

See Biographical Notice, by W.S. Mitchell, in Geol. Mag. 1873, P. 25.

**FARGO, WILLIAM GEORGE** (1818-1881), pioneer American expressman, was born in Pompey, New York, on the 20th of May 1818. From the age of thirteen he had to support himself, obtaining little schooling, and for several years he was a clerk in grocery stores in Syracuse. He became a freight agent for the Auburn & Syracuse railway company at Auburn in 1841, an express messenger between Albany and Buffalo a year later, and in 1843 a resident agent in Buffalo. In 1844 he organized, with Henry Wells (1805-1878) and Daniel Dunning, the first express company (Wells & Co.; after 1845 Livingston & Fargo) to engage in the carrying business west of Buffalo. The lines of this company (which first operated only to Detroit, via Cleveland) were rapidly extended to Chicago, St Louis, and other western

points. In March 1850, when through a consolidation of competing lines the American Express Company was organized, Wells became president and Fargo secretary. In 1851, with Wells and others, he organized the firm of Wells, Fargo & Company to conduct an express business between New York and San Francisco by way of the Isthmus of Panama and on the Pacific coast, where it long had a virtual monopoly. In 1861 Wells, Fargo & Co. bought and reorganized the Overland Mail Co., which had been formed in 1857 to carry the United States mails, and of which Fargo had been one of the original promoters. From 1862 to 1866 he was mayor of Buffalo, and from 1868 to his death, in Buffalo, on the 3rd of August 1881, he was president of the American Express Company, with which in 1868 the Merchants Union Express Co. was consolidated. He was a director of the New York Central and of the Northern Pacific railways.

FARGO, a city and the county-seat of Cass county, North Dakota, U.S.A., about 254 m. W. of Duluth, Minnesota. Pop. (1890) 5664; (1900) 9589, of whom 2564 were foreign-born; (1910 census) 14,331. It is served by the Northern Pacific, the Great Northern, and the Chicago, Milwaukee & St Paul railways. The city is situated on the W. bank of the Red river of the North, which in 1909 had a navigable depth of only about 2 ft. from Fargo to Grank Forks, and the navigation of which was obstructed at various places by fixed bridges. In the city are Island and Oakgrove parks, the former of which contains a statue (erected by Norwegians in 1908) of Henrik Arnold Wergeland, the Norwegian poet. Fargo is the seat of the North Dakota agricultural college (coeducational), founded in 1890 under the provisions of the Federal "Morrill Act" of 1862; it receives both Federal and state support (the former under the Morrill Act of 1890), and in connexion with it a United States Agricultural Experiment Station is maintained. In 1907-1908 the college had 988 students in the regular courses (including the students in the Academy), 117 in the summer course in steam engineering, and 68 in correspondence courses. At Fargo, also, are Fargo College (nonsectarian, 1887; founded by Congregationalists), which has a college department, a preparatory department, and a conservatory of music, and in 1908 had 310 students, of whom 211 were in the conservatory of music; the Oak Grove Lutheran ladies' seminary (1906) and the Sacred Heart Academy (Roman Catholic). The city is the see of both a Roman Catholic bishop and a Protestant Episcopal bishop; and it is the centre of masonic interests in the state, having a fine masonic temple. There are a public library and a large Y.M.C.A. building. St John's hospital is controlled by Roman Catholic sisters, and St Luke's hospital by the Lutheran Church. Fargo is in a rich agricultural (especially wheat) region, is a busy grain-trading and jobbing centre, is one of the most important wholesale distributing centres for agricultural implements and machinery in the United States, and has a number of manufactures, notably flour. The total value of the city's factory products in 1905 was \$1,160,832. Fargo, named in honour of W.G. Fargo of the Wells Fargo Express Company, was first settled as a tent city in 1871, when the Red river was crossed by the Northern Pacific, but was not permanently settled until after the extinction in 1873 of the Indian title to the reservation on which it was situated. It was chartered as a city in 1875. The Milwaukee railway was completed to Fargo in 1884. In June 1893 a large part of the city was destroyed by fire, the loss being more than \$3,000,000.

FARIA Y SOUSA, MANUEL DE (1590-1649), Spanish and Portuguese historian and poet, was born of an ancient Portuguese family, probably at Pombeiro, on the 18th of March 1590, attended the university of Braga for some years, and when about fourteen entered the service of the bishop of Oporto. With the exception of about four years from 1631 to 1634, during which he was a member of the Portuguese embassy in Rome, the greater part of his later life was spent at Madrid, and there he died, after much suffering, on the 3rd of June 1649. He was a laborious, peaceful man; and a happy marriage with Catharina Machado, the Albania of his poems, enabled him to lead a studious domestic life, dividing his cares and affections between his children and his books. His first important work, an *Epitome de las historias Portuguezas* (Madrid, 1628), was favourably received; but some passages in his enormous commentary upon *Os Lusiadas*, the poem of Luis de Camoens, excited the

suspicion of the inquisitors, caused his temporary incarceration, and led to the permanent loss of his official salary. In spite of the enthusiasm which is said to have prescribed to him the daily task of twelve folio pages, death overtook him before he had completed his greatest enterprise, a history of the Portuguese in all parts of the world. Several portions of the work appeared at Lisbon after his death, under the editorship of Captain Faria y Sousa:—*Europa Portugueza* (1667, 3 vols.); *Asia Portugueza* (1666-1675, 3 vols.); *Africa Portugueza* (1681). As a poet Faria y Sousa was nearly as prolific; but his poems are vitiated by the prevailing Gongorism of his time. They were for the most part collected in the *Noches claras* (Madrid, 1624-1626), and the *Fuente de Aganipe*, of which four volumes were published at Madrid in 1644-1646. He also wrote, from information supplied by P.A. Semmedo, *Imperio de China i cultura evangelica en él* (Madrid, 1642); and translated and completed the *Nobiliario* of the count of Barcellos.

There are English translations by J. Stevens of the *History of Portugal* (London, 1698), and of *Portuguese Asia* (London, 1695).

FARIBAULT, a city and the county-seat of Rice county, Minnesota, U.S.A., on the Cannon river, at the mouth of the Straight river, about 45 m. S. of St Paul. (Pop. 1890) 6520; (1900) 7868, of whom 1586 were foreign-born; (1905) 8279; (1910) 9001. Faribault is served by the Chicago Great Western, the Chicago, Milwaukee & St Paul, and the Chicago, Rock Island & Pacific railways. The city is attractively situated near a lake region widely known for its summer resorts. Faribault is the seat of the Minnesota institute for defectives, embracing the state school for the deaf (1863), the state school for the blind (1874), and the state school for the feeble-minded (1879); of three institutions under control of the Protestant Episcopal Church-the Seabury divinity school (incorporated 1860), the Shattuck school (1867; incorporated in 1905), a military school for boys, and St Mary's hall (1866), a school for girls, founded by Bishop Whipple; and of the Roman Catholic (Dominican) Bethlehem Academy for girls. In the city are the cathedral of our Merciful Saviour (1868-1869), the first Protestant Episcopal church in the United States built and used as a cathedral from its opening; and the hospital and nurses' training school of the Minnesota District of the Evangelical Synod. The city has a public library, and owns and operates its own water-supply system. There is a good water power, and among the city's manufactures are flour, beer, shoes, furniture, rattanware, warehouse trucks, canned goods, cane syrup, waggons and carriages, gasolene engines, wind-mills, pianos and woollen goods. Faribault, named in honour of Jean Baptiste Faribault, a French fur-trader and pioneer who made his headquarters in the region in the latter part of the 18th century, was permanently settled about 1848, and was chartered as a city in 1872. A French millwright, N. La Croix, introduced here, about 1860, a new process of making flour, which revolutionized the industry in the United States, but his mill was soon destroyed by flood and he removed to Minneapolis, where the process was first successful on a large scale. Faribault was for many years the home of Bishop Henry Benjamin Whipple (1822-1901), the pioneer bishop (1850-1901) of the Protestant Episcopal Church in Minnesota, famous for his missionary work among the Indians.

**FARIDKOT,** a native state of India in the Punjab. It ranks as one of the Cis-Sutlej states, which came under British influence in 1809. Its area is 642 sq. m., and its population in 1901 was 124,912. It is bounded on the W. and N.E. by the British district of Ferozepore, and on the S. by Nabha state. During the Sikh wars in 1845 the chief, Raja Pahar Singh, exerted himself in the British cause, and was rewarded with an increase of territory. In the Mutiny of 1857, too, his son and successor, Wazir Singh, did good service by guarding the Sutlej ferries, and in attacking a notorious rebel, whose stronghold he destroyed. The estimated gross revenue is £28,300; there is no tribute. The territory is traversed by the Rewari-Ferozepore railway, and also crossed by the Fazilka line, which starts from Kotkapura, the old capital. It is irrigated by a branch of the Sirhind canal. The town of Faridkot has a railway station, 84 m. from Lahore.

FARIDPUR, or FURREEDPORE, a town and district of British India, in the Dacca division of eastern Bengal and Assam. The town, which has a railway station, stands on an old channel of the Ganges. Pop. (1901) 11,649. There are a Baptist mission and a government high school. The district comprises an area of 2281 sq. m. The general aspect is flat, tame and uninteresting, although in the northern tract the land is comparatively high, with a light sandy soil, covered with water during the rainy season, but dry during the cold and hot weather. From the town of Faridpur the ground slopes, until in the south, on the confines of Backergunje, it becomes one immense swamp, never entirely dry. During the height of the inundations the whole district may be said to be under water. The villages are built on artificially raised sites, or the high banks of the deltaic streams. Along many of the larger rivers the line of hamlets is unbroken for miles together, so that it is difficult to say where one ends and another begins. The huts, however, except in markets and bazaars, are seldom close together, but are scattered amidst small garden plots, and groves of mango, date and betel-nut trees. The plains between the villages are almost invariably more or less depressed towards the centre, where usually a marsh, or lake, or deep lagoon is found. These marshes, however, are gradually filling up by the silt deposited from the rivers; in the north of the district there now only remain two or three large swamps, and in them the process may be seen going on. The climate of Faridpur is damp, like that of the other districts of eastern Bengal; the average annual rainfall is 66 in. and the average mean temperature 76.9° F.

The principal rivers of Faridpur are the Ganges, the Arial Khan and the Haringhata. The Ganges, or Padma as it is locally called, touches the extreme north-west corner of the district, flows along its northern boundary as far as Goalanda, where it receives the waters of the Jamuna or main stream of the Brahmaputra, and whence the united stream turns southwards and forms the eastern boundary of the district. The river is navigable by large cargo boats throughout the year, and has an average breadth during the rainy season of 1600 yds. Rice is the great crop of the district. In 1901 the population was 1,937,646, showing an increase of 6% in the decade. The north of the district is crossed by the line of the Eastern Bengal railway to Goalanda, the port of the Brahmaputra steamers, and a branch runs to Faridpur town. But most of the trade is conducted by river.

FARID UD-DIN 'ATTAR, or Ferid Eddin-Athar (1119-1229), Persian poet and mystic, was born at Nishapur, 513 A.H. (1119 A.D.), and was put to death 627 A.H. (1229 A.D.), thus having reached the age of 110 years. The date of his death is, however, variously given between the years 1193 and 1235, although the majority of authorities support 1229; it is also probable that he was born later than 1119, but before 1150. His real name was Abu Talib (or Abu Hamid) Mahommed ben Ibrahim, and Farīd ud-dīn was simply an honourable title equivalent to Pearl of Religion. He followed for a time his father's profession of druggist or perfumer, and hence the name 'Attar (one who sold 'itr, otto of roses; hence, simply, dealer in drugs), which he afterwards employed as his poetical designation. According to the account of Dawlatshah, his interest in the great mystery of the higher life of man was awakened in the following way. One day a wandering fakir gazed sadly into his shop, and, when ordered to be gone, replied: "It is nothing for me to go; but I grieve for thee, O druggist, for how wilt thou be able to think of death, and leave all these goods of thine behind thee?" The word was in season; and Mahommed ben Ibrahim the druggist soon gave up his shop and began to study the mystic theosophy of the Sufis under Sheik Rukneddin. So thoroughly did he enter into the spirit of that religion that he was before long recognized as one of its principal representatives. He travelled extensively, visited Mecca, Egypt, Damascus and India, and on his return was invested with the Sufi mantle by Sheik Majd-ud-din of Bagdad. The greater portion of his life was spent in the town of Shadyakh, but he is not unfrequently named Nishapuri, after the city of his boyhood and youth. The story of his death is a strange one. Captured by a soldier of Jenghiz Khan, he was about to be sold for a thousand dirhems, when he advised his captor to keep him, as doubtless a larger offer would yet be made; but when the second bidder said he would give a bag of horse fodder for the old man, he asserted that he was worth no more, and had better be sold. The soldier, irritated at the loss of the first offer, immediately slew him. A noble tomb was erected over his grave, and the spot acquired a reputation for sanctity. Farid was a voluminous writer, and left no fewer than 120,000 couplets of poetry, though in his later years he carried his asceticism so far as to deny himself the pleasures of poetical composition. His most famous work is the Mantik uttair, or language of birds, an allegorical poem containing a complete survey of the life and doctrine

of the Sufis. It is extremely popular among Mahommedans both of the Sunnite and Shiite sects, and the manuscript copies are consequently very numerous. The birds, according to the poet, were tired of a republican constitution, and longed for a king. As the lapwing, having guided Solomon through the desert, best knew what a king should be, he was asked whom they should choose. The Simorg in the Caucasus, was his reply. But the way to the Caucasus was long and dangerous, and most of the birds excused themselves from the enterprise. A few, however, set out; but by the time they reached the great king's court, their number was reduced to thirty. The thirty birds (si morg), wing-weary and hunger-stricken, at length gained access to their chosen monarch the Simorg; but only to find that they strangely lost their identity in his presence—that they are he, and he is they. In such strange fashion does the poet image forth the search of the human soul after absorption into the divine.

The text of the *Mantik uțțair* was published by Garcin de Tassy in 1857, a summary of its contents having already appeared as *La Poésie philosophique et religieuse chez les Persans* in 1856; this was succeeded by a complete translation in 1863. Among Farīd ud-dīn's other works may be mentioned his *Pandnāma* (Book of Counsel), of which a translation by Silvestre de Sacy appeared in 1819; *Bulbul Nama* (Book of the Nightingale); *Wasalet Nama* (Book of Conjunctions); *Khusru va Gul* (The King and the Rose); and *Tadhkiratu 1 Awliyā* (Memoirs of the Saints) (ed. R.A. Nicholson in *l'ersian Historical Texts*). See Sir Gore Ouseley, *Biographical Notices of Persian Poets* (1846), p. 236; Von Hammer Purgstall, *Geschichte der schönen Redekünste Persiens* (Vienna, 1818), p. 140; the Oriental Collections, ii. (London, 1798), pp. 84, 124, containing translations of part of the *Pandnāma*; E.H. Palmer, *Oriental Mysticism* (1867); E.G. Browne, *Literary History of Persia* (1906).

**FARINA, SALVATORE** (1846-), Italian novelist, was born in Sardinia, and after studying law at Turin and Pavia devoted himself to a literary life at Milan. Farina has often been compared as a sentimental humorist with Dickens, and his style of writing has given him a special place in modern Italian fiction. His masterpiece is *Il Signor Io* (1880), a delightful portrait of an egoist; *Don Chisciottino, Amore bendato, Capelli biondi, Oro nascosto, Il Tesoro di Donnina, Amore a cent' occhi, Mio figlio, Il numero 13*, are some of his other volumes.

FARINATO, PAOLO (1522-1606), Italian painter and architect, was a native of Verona. He is sometimes named Farinato degli Uberti, as he came from the ancient Florentine stock to which the Ghibelline leader Farinata degli Uberti, celebrated in Dante's Commedia, belonged. He flourished at the same time that the art of Verona obtained its greatest lustre in the works of Paolo Cagliari (Paul Veronese), succeeded by other members of the Cagliari family, of whom most or all were outlived by Farinato. He was instructed by Niccolò Giolfino, and probably by Antonio Badile and Domenico del Riccio (Brusasorci). Proceeding to Venice, he formed his style partly on Titian and Giorgione, though he was never conspicuous as a colourist, and in form he learned more from the works of Giulio Romano. His nude figures show knowledge of the antique; he affected a bronzed tone in the complexions, harmonizing with the general gravity of his colour, which is more laudable in fresco than in oil-painting. Vasari praised his thronged compositions and merit of draughtsmanship. His works are to be found not only in Venice and principally in Verona, but also in Mantua, Padua and other towns belonging or adjacent to the Venetian territory. He was a prosperous and light-hearted man, and continually progressed in his art, passing from a comparatively dry manner into a larger and bolder one, with much attraction of drapery and of landscape. The "Miracle of the Loaves and Fishes," painted in the church of S. Giorgio in Verona, is accounted his masterpiece; it was executed at the advanced age of seventy-nine, and is of course replete with figures, comprising those of the painter's own family. A saloon was painted by him in S. Maria in Organo, in the same city, with the subjects of "Michael expelling Lucifer" and the "Massacre of the Innocents"; in Piacenza is a "St Sixtus"; in Berlin a "Presentation in the Temple"; and in the communal gallery of Verona one of his prime works, the "Marriage of St Catherine." Farinato executed some sculptures, and various etchings of sacred and mythologic subjects; his works of all kinds were much in request, including the wax models

which he wrought as studies for his painted figures. He is said to have died at the same hour as his wife. His son Orazio was also a painter of merit.

FARINELLI (1705-1782), whose real name was CARLO BROSCHI, one of the most extraordinary singers that ever lived, was born on the 24th of January 1705, at Naples. He was the nephew of Cristiano Farinelli, the composer and violinist, whose name he took. Having been prepared for the career of a soprano, he soon acquired, under the instruction of N.A. Porpora, a voice of marvellous beauty, and became famous throughout southern Italy as il ragazzo (the boy). In 1722 he made his first appearance at Rome in his master's Eumene, creating the greatest enthusiasm by surpassing a popular German trumpet-player, for whom Porpora had written an obligato to one of the boy's songs, in holding and swelling a note of prodigious length, purity and power, and in the variations, roulades and trills which he introduced into the air. In 1724 he appeared at Vienna, and at Venice in the following year, returning to Naples shortly afterwards. He sang at Milan in 1726, and at Bologna in 1727, where he first met and acknowledged himself vanquished by the singer Antonio Bernacchi (b. 1700), to whose instruction he was much indebted. With ever-increasing success and fame Farinelli appeared in nearly all the great cities of Italy; and returned a third time to Vienna in 1731. He now modified his style, it is said on the advice of Charles VI., from mere bravura of the Porpora school to one of pathos and simplicity. He visited London in 1734, arriving in time to lend his powerful support to the faction which in opposition to Handel had set up a rival opera with Porpora as composer and Senesino as principal singer. But not even his aid could make the undertaking successful. His first appearance at the Lincoln's Inn Fields theatre was in Artaserse, much of the music of which was by his brother, Riccardo Broschi. His success was instantaneous, and the prince of Wales and the court loaded him with favours and presents. Having spent three years in England, Farinelli set out for Spain, staying a few months on the way in France, where he sang before Louis XV. In Spain, where he had only meant to stay a few months, he ended by passing nearly twenty-five years. His voice, employed by the queen to cure Philip V. of his melancholy madness, acquired for him an influence with that prince which gave him eventually the power, if not the name, of prime minister. This power he was wise and modest enough to use discreetly. For ten years, night after night, he had to sing to the king the same six songs, and never anything else. Under Ferdinand VI. he held a similar position, and was decorated (1750) with the cross of Calatrava. He utilized his ascendancy over this king by persuading him to establish an Italian opera. After the accession of Charles III. Farinelli retired with the fortune he had amassed to Bologna, and spent the remainder of his days there in melancholy splendour, dying on the 15th of July 1782. His voice was of large compass, possessing seven or eight notes more than those of ordinary singers, and was sonorous, equal and clear; he also possessed a great knowledge of music.

**FARINGDON**, properly GREAT FARINGDON, a market town in the Abingdon parliamentary division of Berkshire, England, 17 m. W.S.W. of Oxford by road. Pop. (1901) 2900. It lies on the slope of a low range of hills which borders the valley of the Thames on the south. It is the terminus of a branch of the Great Western railway from Uffington. The church of All Saints is a large cruciform building with low central tower. Its period is mainly Transitional Norman and Early English, and though considerably altered by restoration it contains some good details, with many monuments and brasses. Faringdon House, close to the church, was built by Henry James Pye (1745-1813), poet laureate from 1790 to 1813, who also caused to be planted the conspicuous group of fir-trees on the hill east of the town called Faringdon Clump, or locally (like other similar groups) the Folly. The trade of Faringdon is agricultural.

FARINI, LUIGI CARLO (1812-1866), Italian statesman and historian, was born at Russi, near Ravenna, on the 22nd of October 1812. After completing a brilliant university course at Bologna, which he interrupted to take part in the revolution of 1831 (see CARBONARI), he practised as a physician at Russi and at Ravenna. He acquired a considerable reputation, but in 1843 his political opinions brought him under the suspicion of the police and caused his expulsion from the papal states. He resided successively in Florence and Paris, and travelled about Europe as private physician to Prince Jerome Bonaparte, but when Pius IX. was elected to the Holy See and began his reign with apparently Liberal and nationalist tendencies, Farini returned to Italy and was appointed secretary-general to G. Recchi, the minister of the interior (March 1848). But he held office for little more than a month, since like all the other Italian Liberals he disapproved of the pope's change of front in refusing to allow his troops to fight against Austria, and resigned with the rest of the ministry on the 29th of April. Pius, wishing to counteract the effect of this policy, sent Farini to Charles Albert, king of Sardinia, to hand over the command of the papal contingent to him. Elected member of parliament for Faenza, he was again appointed secretary to the ministry of the interior in the Mamiani cabinet, and later director-general of the public health department. He resigned office on the proclamation of the republic after the flight of the pope to Gaeta in 1849, resumed it for a while when Pius returned to Rome with the protection of French arms, but when a reactionary and priestly policy was instituted, he went into exile and took up his residence at Turin. There he became convinced that it was only through the House of Savoy that Italy could be liberated, and he expounded his views in Cavour's paper Il Risorgimento, in La Frusta and Il Piemonte, of which latter he was at one time editor. He also wrote his chief historical work, Lo Stato Romano dal 1815 al 1850, in four volumes (Turin, 1850). In 1851 he was appointed minister of public instruction in the D'Azeglio cabinet, an office which he held till May 1852. As a member of the Sardinian parliament and as a journalist Farini was one of the staunchest supporters of Cavour (q.v.), and strongly favoured the proposal that Piedmont should participate in the Crimean War, if indeed he was not actually the first to suggest that policy (see G.B. Ercolani's letter in E. Parri's memoir of Farini). In 1856 and 1857 he published two letters to Mr Gladstone on Italian affairs, which created a sensation, while he continued to propagate his views in the Italian press. When on the outbreak of the war of 1859 Francis V., duke of Modena, was expelled and a provisional government set up, Farini was sent as Piedmontese commissioner to that city; but although recalled after the peace of Villafranca he was determined on the annexation of central Italy to Piedmont and remained behind, becoming a Modenese citizen and dictator of the state. He negotiated an alliance with Parma, Romagna and Tuscany, when other provisional governments had been established, and entrusted the task of organizing an army for this central Italian league to General Fanti (q.v.). Annexation to Piedmont having been voted by plébiscite and the opposition of Napoleon III. having been overcome, Farini returned to Turin, when the king conferred on him the order of the Annunziata and Cavour appointed him minister of the interior (June 1860), and subsequently viceroy of Naples; but he soon resigned on the score of ill-health. Cavour died in 1861, and the following year Farini succeeded Rattazzi as premier, in which office he endeavoured to carry out Cavour's policy. Over-exertion, however, brought on softening of the brain, which compelled him to resign office on the 24th of March 1863, and ultimately resulted in his death on the 1st of August 1866. He was buried at Turin, but in 1878 his remains were removed to his native village of Russi.

His son Domenico Farini had a distinguished political career and was at one time president of the chamber.

BIBLIOGRAPHY.—Several letters from Farini to Mr Gladstone and Lord John Russell were reprinted in a *Mémoire sur les affaires d'Italie* (1859), and a collection of his political Correspondence was published under the title of *Lettres sur les affaires d'Italie* (Paris, 1860). His historical work was translated into English in part by Mr Gladstone and in part under his superintendence. See E. Parri, *Luigi Carlo Farini* (Rome, 1878); L. Carpi in *Il Risorgimento Italiano*, vol. iv. (Milan, 1888); and G. Finali's article, "Il 27 Aprile 1859," in the *Nuova Antologia* for the 16th of May 1903.

(L. V.\*)

**FARM,** in the most generally used sense, a portion of land leased or held for the purpose of agriculture; hence "farming" is equivalent to the pursuit of agriculture, and "farmer" to an agriculturist. This meaning is comparatively modern. The origin of the word has perhaps

been complicated by an Anglo-Saxon feorm, meaning provisions or food supply, and more particularly a payment of provisions for the sustenance of the king, the *cyninges feorm*. In Domesday this appears as a food rent: firma unius noctis or diei. According to the New English Dictionary there is no satisfactory Teutonic origin for the word. It has, however, been sometimes connected with a word which appears in the older forms of some Teutonic languages, meaning "life." The present form "farm" certainly comes, through the French ferme, from the medieval Lat. firma (firmus, fixed), a fixed or certain payment in money or kind. The Anglo-Saxon feorm may be not an original Teutonic word but an early adaptation of the Latin. The *feorm*, originally a tax, seems, as the king "booked" his land, to have become a rent (see F.W. Maitland, Domesday Book and After, 1897, p. 236 ff., and J.H. Round, Feudal England, 1895, p. 109 ff.). The word firma is thus used of the composition paid by the sheriff in respect of the dues to be collected from the shire. From the use of the word for the fixed sum paid as rent for a portion of land leased for cultivation, "farm" was applied to the land itself, whether held on lease or otherwise, and always with the meaning of agricultural land. The aspect of the fixity of the sum paid leads to a secondary meaning, that of a certain sum paid by a taxable person, community, state, &c., in respect of the taxes or dues that will be imposed, or to such a sum paid as a rent by a contractor for the right of collecting such taxes. This method of indirect collection of the revenue by contractors instead of directly by the officials of the state is that known as "farming the taxes." The system is best known through the *publicani* of Rome, who formed companies or syndicates to farm not only the indirect taxation of the state, but also other sources of the state revenues, such as mines, fisheries, &c. (see Publicani).

In monarchical Europe, which grew out of the ruins of the Roman empire, the revenue was almost universally farmed, but the system was gradually narrowed down until only indirect taxes became the subject of farming. France from the 16th to the 18th centuries is the most interesting modern example. Owing to the hopeless condition of its revenues, the French government was continually in a state of anticipating its resources, and was thus entirely in the hands of financiers. In 1681 the indirect taxes were farmed collectively to a single company of forty capitalists (*ferme générale*), increased to sixty in 1755, and reduced to the original number in 1780. These farmers-general were appointed by the king for six years, and paid an annual fixed sum every year in advance. The taxes which they collected were the customs (douanes or traites), the gabelle or salt tax, local taxes or octrois (entrées, &c.), and various smaller taxes. They were under the management of a controller-general, who had a central office in Paris. The office of farmer-general was the object of keen competition, notwithstanding that the successful candidates had to share a considerable part of the profits of the post with ministers, courtiers, favourites, and even the sovereign, in the shape of gifts (croupes) and pensions. The rapacity of the farmers-general was proverbial, and the loss to the revenue by the system was great, while very considerable hardships were inflicted on the poorer contributors by the unscrupulous methods of collection practised by the underlings of the farmers. In addition, the unpopular nature of the taxes caused deep discontent, and the detestation in which the farmers-general were held culminated in the execution of thirty-two of them during the French Revolution and the sweeping away of the system.

See also Agriculture, Dairy and Dairy-Farming, Fruit and Flower Farming, &c.

**FARM BUILDINGS.** The best laying out of a farm, and the construction of its buildings, are matters which, from the variety of needs and circumstances, involve practical considerations and expert knowledge, too detailed in their nature for more than a brief reference in this work. It may be said generally that the best aspect for farm buildings is S. or S.S.E., and with a view to easy disposal of drainage they should be built on a slight slope. The supply of water, whether it be provided from wells by engine or windmill power, by hydraulic rams or other means, is a prime consideration, and it should if possible be laid on at different suitable points or at any rate the central source of supply should be in the most accessible and convenient place as regards stables and cow-sheds. The buildings should be constructed on or within easy distance of the public road, in order to save the upkeep of private roads, and should be as near as possible to the centre of the farm. On mixed farms of ordinary size (200 to 500 acres) the building may be advantageously planned in one rectangular block, the stock-yards being placed in the centre separated by the cow-sheds, and surrounded by the cart-sheds, stables, stores and barn, cattle-boxes, piggeries and minor buildings. On farms of larger size and on dairy farms special needs must be taken into

account, while in all cases the local methods of farming must influence the grouping and arrangement of the steading.

For a more detailed treatment of the subject reference may be made to the following works;—S. Taylor, *Modern Homesteads, a Treatise on the Designing of Farm Buildings* (London, 1905); A.D. Clarke, *Modern Farm Buildings* (London, 1899); P. Roberts, *The Farmstead*, in the "Rural Science Series" (New York, 1900), and articles in the *Standard Cyclopaedia of Agriculture*, vol. 3, and in the *Cyclopaedia of American Agriculture*, vol. 1.

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FARMER, RICHARD (1735-1797), Shakespearian commentator, the son of a rich maltster, was born at Leicester on the 28th of August 1735. He was educated at the free grammar school of his native town, and at Emmanuel College, Cambridge. He graduated in 1757 a senior optime; three years later he proceeded M.A. and became classical tutor, and in 1775 master of his college, in succession to William Richardson, the biographer of the English bishops. In the latter year also he was appointed vice-chancellor, and three years afterwards chief librarian of the university. In 1780 he was appointed to a prebendal stall in Lichfield, and two years later to one at Canterbury; but the second office he exchanged in 1788 for that of a canon residentiary of St Paul's. Cambridge, where he usually resided, was indebted to him for improvements in lighting, paving and watching; but perhaps London and the nation have less reason to be grateful for his zealous advocacy of the custom of erecting monuments to departed worthies in St Paul's. In 1765 he issued a prospectus for a history of the town of Leicester; but this work, based on materials collected by Thomas Staveley, he never even began; it was carried out by the learned printer John Nichols. In 1766 he published his famous Essay on the Learning of Shakespeare, in which he proved that the poet's acquaintance with ancient and modern Continental literature was exclusively derived from translations, of which he copied even the blunders. "Shakespeare," he said, "wanted not the stilts of language to raise him above all other men." "He came out of nature's hand, like Pallas out of Jove's head, at full growth and mature." "One might," he said-by way of ridiculing the Shakespearian criticism of the day—"with equal wisdom, study the Talmud for an exposition of Tristram Shandy." The essay fully justifies the author's description of himself in the preface to the second edition: "I may consider myself as the pioneer of the commentators; I have removed a deal of learned rubbish, and pointed out to them Shakespeare's track in the very pleasant paths of nature." Farmer died at Cambridge on the 8th of September 1797. He was, it appears, twice offered a bishopric by Pitt, but declined the preferment. Farmer was immensely popular in his own college, and loved, it was said, above all other things, old port, old clothes and old books.

**FARMERS' MOVEMENT,** in American political history, the general name for a movement between 1867 and 1896 remarkable for a radical socio-economic propaganda that came from what was considered the most conservative class of American society. In this movement there were three periods, popularly known as Granger, Alliance and Populist.

The GRANGE, or Order of the Patrons of Husbandry (the latter the official name of the national organization, while the former was the name of local chapters, including a supervisory National Grange at Washington), was a secret order founded in 1867 to advance the social needs and combat the economic backwardness of farm life. It grew remarkably in 1873-1874, and in the latter year attained a membership of perhaps 800,000. In the causes of its growth—much broader than those that issued in the financial crisis of 1873—a high tariff, railway freight-rates and other grievances were mingled with agricultural troubles like the fall of wheat prices and the increase of mortgages. The condition of the farmer seemed desperate. The original objects of the Grange were primarily educational, but these were soon overborne by an anti-middleman, co-operative movement. Grange agents bought everything from farm machinery to women's dresses; hundreds of grain elevators and cotton and tobacco warehouses were bought, and even steamboat lines; mutual insurance companies were formed and joint-stock stores. Nor was co-operation limited to distributive processes; crop-reports were circulated, co-operative dairies multiplied, flour-mills were

operated, and patents were purchased, that the Grange might manufacture farm machinery. The outcome in some states was ruin, and the name Grange became a reproach. Nevertheless these efforts in co-operation were exceedingly important both for the results obtained and for their wider significance. Nor could politics be excluded, though officially tabooed; for economics must be considered by social idealists, and economics everywhere ran into politics. Thus it was with the railway question. Railways had been extended into frontier states; there were heavy crops in sparsely settled regions where freight-rates were high, so that-given the existing distributive system-there were "over production" and waste; there was notorious stock manipulation and discrimination in rates; and the farmers regarded "absentee ownership" of railways by New York capitalists much as absentee ownership of land has been regarded in Ireland. The Grange officially disclaimed enmity to railways; but though the organization did not attack them, the Grangers-through political "farmers' clubs" and the like—did. About 1867 began the efforts to establish regulation of the railways, as common-carriers, by the states. Such laws were known as "Granger laws," and their general principles, soon endorsed (1876) by the Supreme Court of the United States, have become an important chapter in the laws of the land. In a declaration of principles in 1874 Grangers were declared to be "not enemies of railroads," and their cause to stand for "no communism, no agrarianism." To conservatives, however, co-operation seemed communism, and "Grange laws" agrarianism; and thus in 1873-1874 the growth of the movement aroused extraordinary interest and much uneasiness. In 1874 the order was reorganized, membership being limited to persons directly interested in the farmers' cause (there had been a millionaire manufacturers' Grange on Broadway), and after this there were constant quarrels in the order; moreover, in 1875 the National Grange largely lost control of the state Granges, which discredited the organization by their disastrous co-operation ventures. Thus by 1876 it had already ceased to be of national political importance. About 1880 a renascence began, particularly in the Middle States and New England; this revival was marked by a recurrence to the original social and educational objects. The national Grange and state Granges (in all, or nearly all, of the states) were still active in 1909, especially in the old cultural movement and in such economic movements-notably the improvement of highways-as most directly concern the farmers. The initiative and referendum, and other proposals of reform politics in the direction of a democratic advance, also enter in a measure into their propaganda.

The ALLIANCE carried the movement farther into economics. The "National Farmers' Alliance and Industrial Union," formed in 1889, embraced several originally independent organizations formed from 1873 onwards; it was largely confined to the South and was secret. The "National Farmers' Alliance," formed in 1880, went back similarly to 1877, was much smaller, Northern and non-secret. The "Colored Farmers' National Alliance and Cooperative Union" (formed 1888, merged in the above "Southern" Alliance in 1890) was the second greatest organization. With these three were associated many others, state and national, including an annual, non-partisan, deliberative and advisory Farmers' National Congress. The Alliance movement reached its greatest power about 1890, in which year twelve national farmers' organizations were represented in conventions in St Louis, and the six leading ones alone probably had a membership of 5,000,000.<sup>1</sup>

As with the Grange, so in the ends and declarations of the whole later movement, concrete remedial legislation for agricultural or economic ills was mingled with principles of vague radical tendency and with lofty idealism.<sup>2</sup> Among the principles advocated about 1890, practically all the great organizations demanded the abolition of national banks, the free coinage of silver, a "sufficient" issue of government paper money, tariff revision, and a secret ballot (the last was soon realized); only less commonly demanded were an income tax, taxation of evidence of debt, and government loans on lands. All of these were principles of the two great Alliances (the Northern and the Southern), as were also pure food legislation, abolition of landholding by aliens, reclamation of unused or unearned land grants (to railways, e.g.), and either rigid federal regulation of railways and other means of communication or government ownership thereof. The "Southern" Alliance put in the forefront a "sub-treasury" scheme according to which cheap loans should be made by government from local sub-treasuries on non-perishable farm products (such as grain and cotton) stored in government warehouses; while the "Northern" Alliance demanded restriction of the liquor traffic and (for a short time) woman suffrage. Still other issues were a modification of the patent laws (e.g. to prevent the purchase of patents to stifle competition), postal currency exchange, the eight-hour day, inequitable taxation, the singletax on land, "trusts," educational qualification for suffrage, direct popular election of federal judges, of senators, and of the president, special-interest lobbying, &c.

In 1889-1890 the political (non-partisan) movement developed astonishing strength; it

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captured the Republican stronghold of Kansas, brought the Democratic Party to vassalage in South Carolina, revolutionized legislatures even in conservative states like Massachusetts, and seemed likely completely to dominate the South and West. All its work in the South was accomplished within the old-party organizations, but in 1890 the demand became strong for an independent third party, for which various consolidations since 1887 had prepared the way, and by 1892 a large part of the strength of the farmers' organizations, with that of various industrial and radical orders, was united in the People's Party (perhaps more generally known as the Populist Party), which had its beginnings in Kansas in 1890, and received national organization in 1892. This party emphasized free silver, the income tax, eight-hour day, reclamation of land grants, government ownership of railways, telephones and telegraphs, popular election of federal senators, and the initiative and referendum. In the presidential election of 1892 it cast 1,041,021 votes (in a total of 12,036,089), and elected 22 presidential electors, the first chosen by any third party since 1856. In 1896 the People's Party "fused" with the Democratic Party (q.v.) in the presidential campaign, and again in 1900; during this period, indeed, the greatest part of the People's Party was reabsorbed into the two great parties from which its membership had originally been drawn;-in some northern states apparently largely into the Republican ranks, but mainly into the Democratic Party, to which it gave a powerful radical impulse.

The Farmers' movement was much misunderstood, abused and ridiculed. It accomplished a vast amount of good. The movement-and especially the Grange, for on most important points the later movements only followed where it had led-contributed the initial impulse and prepared the way for the establishment of travelling and local rural libraries, reading courses, lyceums, farmers' institutes (a steadily increasing influence) and rural free mail delivery (inaugurated experimentally in 1896 and adopted as part of the permanent postal system of the country in 1902); for agricultural exhibits and an improved agricultural press; for encouragement to and increased profit from the work of agricultural colleges, the establishment (1885) and great services of the United States Department of Agriculture, -- in short, for an extraordinary lessening of rural isolation and betterment of the farmers' opportunities; for the irrigation of the semi-arid West, adopted as a national policy in 1902, the pure-food laws of 1906, the interstate-commerce law of 1887, the railway-rate laws of 1903 and 1906, even the great Bureau of Commerce-and-Labor law of 1903, and the Antitrust laws of 1903 and later. The Alliance and Populist movements were bottomed on the idea of "ethical gains through legislation." In its local manifestations the whole movement was often marked by eccentric ideas, narrow prejudices and weaknesses in economic reasoning. It is not to be forgotten that owing to the movement of the frontier the United States has always been "at once a developed country and a primitive one. The same political questions have been put to a society advanced in some regions and undeveloped in others.... On specific political questions each economic area has reflected its peculiar interests" (Prof. F.J. Turner). That this idea must not, however, be over-emphasized, is admirably enforced by observing the great mass of farmer radicalism that has, since about 1896, become an accepted Democratic and Republican principle over the whole country. The Farmers' movement was the beginning of widespread, effective protest against "the menace of privilege" in the United States.

American periodicals, especially in 1890-1892, are particularly informing on the growth of the movement; see F.M. Drew in *Political Science Quarterly* (1891), vi. p. 282; C.W. Pierson in *Popular Science Monthly* (1888), xxxii. pp. 199, 368; C.S. Walker and F.J. Foster in *Annals of American Academy* (1894); iv. p. 790; Senator W.A. Peffer in *Cosmopolitan* (1890), x. p. 694; and on agricultural discontent, *Political Science Quarterly*, iv. (1889), p. 433, by W.F. Mappin; v. (1890), p. 65, by J.P. Dunn; xi. (1896), pp. 433, 601, xii. (1897), p. 93, and xiv. (1899), p. 444, by C.F. Emerick; Prof. E.W. Bemis in *Journal of Political Economy* (1893), i. p. 193; A.H. Peters in *Quarterly Journal of Economics* (1890), iv. p. 18; C.W. Davis in *Forum* (1890), ix. pp. 231, 291, 348.

1 Membership usually included males or females above 16 years of age.

2 Thus, the "Southern" Alliance in 1890 (the chief platforms were the one at Ocala, Florida, and that of 1889 at St Louis, in conjunction with the Knights of Labor) declared its principles to be: "(1) To labour for the education of the agricultural classes in the science of economical government in a strictly non-partisan way, and to bring about a more perfect union of such classes. (2) To demand equal rights to all, and special privileges to none. (3) To endorse the motto: 'In things essential, unity; in all things, charity.' (4) To develop a better state, mentally, morally, socially and financially.... (6) To suppress personal, local, sectional and national prejudices." For the Southern farmer a chief concrete evil was the pre-crop mortgages by which cotton farmers remained in debt to country merchants; in the North the farmer attacked a wide range of "capitalistic" legislation that hurt him, he believed, for the benefit of other classes—notably legislation sought by railways.

FARNABY (or FARNABIE), THOMAS (c. 1575-1647), English grammarian, was the son of a London carpenter; his grandfather, it is said, had been mayor of Truro, his great-grandfather an Italian musician. Between 1590 and 1595 he appears successively as a student of Merton College, Oxford, a pupil in a Jesuit college in Spain, and a follower of Drake and Hawkins. After some military service in the Low Countries "he made shift," says Wood, "to be set on shore in the western part of England; where, after some wandering to and fro under the name of Tho. Bainrafe, the anagram of his sirname, he settled at Martock, in Somersetshire, and taught the grammar school there for some time with success. After he had gotten some feathers at Martock, he took his flight to London," and opened a school in Goldsmiths' Rents, Cripplegate. From this school, which had as many as 300 pupils, there issued, says Wood, "more churchmen and statesmen than from any school taught by one man in England." In the course of his London career "he was made master of arts of Cambridge, and soon after incorporated at Oxon." Such was his success that he was enabled to buy an estate at Otford near Sevenoaks, Kent, to which he retired from London in 1636, still, however, carrying on his profession of schoolmaster. In course of time he added to his Otford estate and bought another near Horsham in Sussex. In politics he was a royalist; and, suspected of participation in the rising near Tunbridge, 1643, he was imprisoned in Ely House, Holborn. He died at Sevenoaks on the 12th of June 1647.

The details of his life were derived by Anthony à Wood from Francis, Farnaby's son by a second marriage (see Wood's *Athenae Oxonienses*, ed. Bliss, iii. 213). His works chiefly consisted of annotated editions of Latin authors—Juvenal, Persius, Seneca, Martial, Lucan, Virgil, Ovid and Terence, which enjoyed extraordinary popularity. His *Systema grammaticum* was published in London in 1641. On the 6th of April 1632, Farnaby was presented with a royal patent granting him, for the space of twenty-one years, the sole right of printing and publishing certain of his works.

FARNBOROUGH, THOMAS ERSKINE MAY, BARON (1815-1886), English Constitutional historian, was born in London on the 8th of February 1815 and educated at Bedford grammar school. In 1831 he was nominated by Manners Sutton, speaker of the House of Commons, to the post of assistant librarian, so that his long connexion with parliament began in his youth. He studied for the bar, and was called at the Middle Temple in 1838. In 1844 he published the first edition of his Treatise on the Law, Privilege, Proceedings and Usage of Parliament. This work, which has passed through many editions, is not only an invaluable mine of information for the historical student, but it is known as the text-book of the law by which parliament governs its proceedings. In 1846 Erskine May was appointed examiner of petitions for private bills, and the following year taxing-master of the House of Commons. He published his Remarks to Facilitate Public Business in Parliament in 1849; a work On the Consolidation of Election Laws in 1850; and his Rules, Orders and Forms of the House of Commons was printed by command of the House in 1854. In 1856 he was appointed clerk assistant at the table of the House of Commons. He received the companionship of the Bath in 1860 for his parliamentary services, and became a knight commander in 1866. His important work, The Constitutional History of England since the Accession of George III. (1760-1860), was published in 1861-1863, and it received frequent additions in subsequent editions. In 1871 Sir Erskine May was appointed clerk of the House of Commons. His Democracy in Europe: a History appeared in 1877, but it failed to take the same rank in critical esteem as his *Constitutional History*. He retired from the post of clerk to the House of Commons in April 1886, having for fifteen years discharged the onerous duties of the office with as much knowledge and energy as unfailing tact and courtesy. Shortly after his retirement from office he was raised to the peerage under the title of Baron Farnborough of Farnborough, in the county of Southampton, but he only survived to enjoy the dignity for a few days. He died in London on the 17th of May 1886, and as he left no issue the title became extinct.

**FARNBOROUGH,** an urban district in the Basingstoke parliamentary division of Hampshire, England, 33 m. S.W. by W. from London, on the London & South Western and the South Eastern & Chatham railways. Pop. (1901) 11,500 (including 5070 military). The church of St Peter ranges from Early English to Perpendicular in style. St Michael's Catholic memorial church, erected in 1887 by the ex-empress Eugénie, contains the remains of Napoleon III. and the prince imperial. An adjoining abbey is occupied by Benedictine fathers of the French congregation; the convent is a ladies' boarding-school. Aldershot North Camp is within the parish.

**FARNE ISLANDS** [also FEARNE, FERN, or THE STAPLES], a group of rocky islands and reefs off the coast of Northumberland, England, included in that county. In 1901 they had only eleven inhabitants. They extend in a line of some 6 m. in a northeasterly direction from the coast, on which the nearest villages are Bamborough and North Sunderland. The Fairway, 1<sup>1</sup>/<sub>2</sub> m. across, separates the largest island, Farne, or House, from the mainland. Farne is 16 acres in area, and has precipitous cliffs up to 80 ft. in height on the east, but the shore is otherwise low. The other principal islets are Staple, Brownsman, North and South Wamses, Longstone and Big Harcar. On Farne is a small ancient chapel, with a square tower near it built for purposes of defence in the 15th century. The chapel is believed to occupy the site of St Cuthbert's hermitage, whither he retired from the priory on the neighbouring Holy Island or Lindisfarne. He was with difficulty persuaded to leave it on his elevation to the bishopric of Lindisfarne, and returned to it to die (687). Longstone rock, with its lighthouse, is famous as the scene of the bravery of Grace Darling in rescuing some of the survivors of the wreck of the "Forfarshire" (1838). The rocks abound in sea-birds, including eider duck.

**FARNESE**, the name of one of the most illustrious and powerful Italian families, which besides including eminent prelates, statesmen and warriors among its members, ruled the duchy of Parma for two centuries. The early history of the family is involved in obscurity, but they are first heard of as lords of Farneto or Farnese, a castle near the lake of Bolsena, and they played an important part as consuls and signori of Orvieto. They seem to have always been Guelphs, and in the civil broils of Orvieto they sided with the Monaldeschi faction against the Ghibelline Filippeschi. One Pietro Farnese commanded the papal armies under Paschal II. (1099-1118); another Pietro led the Florentines to victory against the Pisans in 1363. Ranuccio Farnese served Eugene IV. so well that the pope endowed him with large fiefs, and is reported to have said, "The Church is ours because Farnese has given it back to us."

The family derived further advantages at the time of Pope Alexander VI., who was the lover of the beautiful Giulia Farnese, known as Giulia Bella, and created her brother Alessandro a cardinal (1493). The latter was elected pope as Paul III. in 1534, and it is from that moment that the great importance of the family dates. An unblushing nepotist, he alienated immense fiefs belonging to the Holy See in favour of his natural children. Of these the most famous was Pierluigi Farnese (1503-1547), who served in the papal army in various campaigns, but also took part in the sack of Rome in 1527. On his father's elevation to the papacy he was made captain-general of the Church, and received the duchy of Castro in the Maremma, besides Frascati, Nepi, Montalto and other fiefs. A shameless rake and a man of uncontrollable temper, his massacre of the people of Perugia after a rebellion in 1540 and the unspeakable outrage he committed on the bishop of Fano are typical of his character. In 1545 his father conferred on him the duchy of Parma and Piacenza, which likewise belonged to the Holy See, and his rule proved cruel and tyrannical. He deprived the nobles of their privileges, and forced them to dwell in the towns, but to some extent he improved the conditions of the lower classes. Pierluigi being an uncompromising opponent of the emperor Charles V., Don Ferrante Gonzaga, the imperial governor of Milan, was ever on the watch for a pretext to deprive him of Piacenza, which the emperor greatly coveted. When the duke proceeded to build a castle in that town in order to overawe its inhabitants, the nobles were furiously indignant, and a plot to murder him was organized by the marquis Anguissola and

others with the support both of Gonzaga and of Andrea Doria (q.v.), Charles's admiral, who wished to be revenged on Pierluigi for the part he had played in the Fiesco conspiracy (see Fiesco). The deed was done while the duke was superintending the building of the above-mentioned citadel, and his corpse was flung into the street (December 10th, 1547). Piacenza was thereupon occupied by the imperialists.

Pierluigi had several children, for all of whom Paul made generous provision. One of them, Alessandro (1520-1589), was created cardinal at the age of fourteen; he was a man of learning and artistic tastes, and lived with great splendour surrounded by scholars and artists, among whom were Annibal Caro, Paolo Giovio, Mons. Della Casa, Bembo, Vasari, &c. It was he who completed the magnificent Farnese palace in Rome. He displayed diplomatic ability on various missions to foreign courts, but failed to get elected to the papacy.

Orazio, Pierluigi's third son, was made duke of Castro when his father became duke of Parma, and married Diane, a natural daughter of Henry II. of France. Ottavio, the second son (1521-1586), married Margaret, the natural daughter of Charles V. and widow of Alessandro de' Medici, at the age of fifteen, she being a year older; at first she disliked her youthful bridegroom, but when he returned wounded from the expedition to Algiers in 1541 her aversion was turned to affection (see MARGARET OF AUSTRIA). Ottavio had been made lord of Camerino in 1540, but he gave up that fief when his father became duke of Parma. When, on the murder of the latter in 1547, Piacenza was occupied by the imperialists, Paul determined to make an effort to regain the city; he set aside Ottavio's claims to the succession of Parma, where he appointed a papal legate, giving him back Camerino in exchange, and then claimed Piacenza of the emperor, not for the Farnesi, but for the Church. But Ottavio would not be put off; he attempted to seize Parma by force, and having failed, entered into negotiations with Gonzaga. This unnatural rebellion on the part of one grandson, combined with the fact that it was supported by the other grandson, Cardinal Alessandro, hastened the pope's death, which occurred on the 10th of November 1549. During the interregnum that followed Ottavio again tried to induce the governor of Parma to give up the city to him, but met with no better success; however, on the election of Giovan Maria Ciocchi (Julius III.) the duchy was conferred on him (1551). This did not end his quarrel with the emperor, for Gonzaga refused to give up Piacenza and even threatened to occupy Parma, so that Ottavio was driven into the arms of France. Julius, who was anxious to be on good terms with Charles on account of the council of Trent which was then sitting, ordered Farnese to hand Parma over to the papal authorities once more, and on his refusal hurled censures and admonitions at his head, and deprived him of his Roman fiefs, while Charles did the same with regard to those in Lombardy. A French army came to protect Parma, war broke out, and Gonzaga at once laid siege to the city. But the duke came to an arrangement with his father-in-law, by which he regained Piacenza and his other fiefs. The rest of his life was spent quietly at home, where the moderation and wisdom of his rule won for him the affection of his people. At his death in 1586 he was succeeded by his son Alessandro Farnese (1545-1592), the famous general of Philip II. of Spain, who spent the whole of his reign in the Flemish wars.

The first years of the reign of his son and successor Ranuccio I. (1569-1622), who had shown much spirit in a controversy with Pope Sixtus V., were uneventful, but in 1611 a conspiracy was formed against him by a group of discontented nobles supported by the dukes of Modena and Mantua. The plot was discovered and the conspirators were barbarously punished, many being tortured and put to death, and their estates confiscated. Ranuccio was a reserved and gloomy bigot; he instituted savage persecutions against supposed witches and heretics, and lived in perpetual terror of plots. His eldest son Alessandro being deaf and dumb, the succession devolved on his second son Odoardo (1612-1646), who fought on the French side in the war against Spain. His failure to pay the interest of the money borrowed in Rome, and the desire of Urban VIII. to obtain Castro for his relatives the Barberini (q.v.), resulted in a war between that pope and Odoardo. His son and successor Ranuccio II. (1630-1694) also had a war with the Holy See about Castro, which was eventually razed to the ground. His son Francesco Maria (1678-1727) suffered from the wars between Spain and Austria, the latter's troops devastating his territory; but although this obliged him to levy some burdensome taxes, he was a good ruler and practised economy in his administration. Having no children, the succession devolved at his death on his brother Antonio (1679-1731), who was also childless. The powers had agreed that at the death of the latter the duchy should pass to Don Carlos of Bourbon, son of King Philip V. of Spain by Elisabetta Farnese (1692-1766), granddaughter of Ranuccio II. Antonio died in 1731, and with him the line of Farnese came to an end.

The Palazzo Farnese in Rome, one of the finest specimens of Roman Renaissance architecture, was begun under Paul III., while he was cardinal, by Antonio da San Gallo, and completed by his nephew Cardinal Alessandro under the direction of Michelangelo (1526). It

was inherited by Don Carlos, afterwards king of Naples and Spain, and most of the pictures were removed to Naples. It now contains the French embassy to the Italian court, as well as the French school of Rome.

BIBLIOGRAPHY.—F. Odorici gives a detailed history of the family in P. Litta's *Famiglie celebri italiane*, vol. x. (Milan, 1868), to which an elaborate bibliography is appended, including manuscript sources; a more recent bibliography is S. Lottici and G. Sitti, *Bibliografia generale per la storia parmense* (Parma, 1904); much information will be found in A. von Reumont's *Geschichte der Stadt Rom*, vol. iii. (Berlin, 1868), and in F. Gregorovius's *Geschichte der Stadt Rom* (Stuttgart, 1872).

(L. V.\*)

FARNESE, ALEXANDER (1545-1592), duke of Parma, general, statesman and diplomatist, governor-general of the Netherlands under Philip II. of Spain, was born at Rome on the 27th of August 1545, and died at the abbey of St Waast, near Arras, on the 3rd of December 1592. He was the son of Ottavio Farnese, duke of Parma, and Margaret of Austria, natural daughter of Charles V. He accompanied his mother to Brussels when she was appointed governor of the Netherlands, and in 1565 his marriage with the princess Maria of Portugal was celebrated in Brussels with great splendour. Alexander Farnese had been brought up in Spain with his cousin, the ill-fated Don Carlos, and his uncle Don John of Austria, both of whom were about the same age as himself, and after his marriage he took up his residence at once at the court of Madrid. He fought with much personal distinction under the command of Don John in 1571 at the battle of Lepanto. It was seven years, however, before he had again an opportunity for the display of his great military talents. In the meantime the provinces of the Netherlands had revolted against the arbitrary and oppressive Spanish rule, and Don John of Austria, who had been sent as governor-general to restore order, had found himself helpless in face of the superior talent and personal influence of the prince of Orange, who had succeeded in uniting all the provinces in common resistance to the civil and religious tyranny of Philip. In the autumn of 1577 Farnese was sent to join Don John at the head of reinforcements, and it was mainly his prompt decision at a critical moment that won the battle of Gemblours (1578). Shortly afterwards Don John, whose health had broken down through disappointment and ill-health, died, and Farnese was appointed to take his place.

It is scarcely possible to exaggerate the difficulties with which he found himself confronted, but he proved himself more than equal to the task. In military ability the prince of Parma was inferior to none of his contemporaries, as a skilful diplomatist he was the match even of his great antagonist William the Silent, and, like most of the leading statesmen of his day, was unscrupulous as to the means he employed so long as he achieved his ends. Perceiving that there were divisions and jealousies in the ranks of his opponents between Catholic and Protestant, Fleming and Walloon, he set to work by persuasion, address and bribery, to foment the growing discord, and bring back the Walloon provinces to the allegiance of the king. He was successful, and by the treaty of Arras, January 1579, he was able to secure the support of the "Malcontents," as the Catholic nobles of the south were styled, to the royal cause. The reply to the treaty of Arras was the Union of Utrecht, concluded a few weeks later between the seven northern provinces, who abjured the sovereignty of King Philip and bound themselves to use all their resources to maintain their independence of Spanish rule.

Farnese, as soon as he had obtained a secure basis of operations in Hainaut and Artois, set himself in earnest to the task of reconquering Brabant and Flanders by force of arms. Town after town fell into his power. Tournai, Maastricht, Breda, Bruges and Ghent opened their gates, and finally he laid siege to the great seaport of Antwerp. The town was open to the sea, was strongly fortified, and was defended with resolute determination and courage by the citizens. They were led by the famous Philip de Marnix, lord of St Aldegonde, and had the assistance of an ingenious Italian engineer, by name Gianibelli. The siege began in 1584 and called forth all the resources of Farnese's military genius. He cut off all access to Antwerp from the sea by constructing a bridge of boats across the Scheldt from Calloo to Oordam, in spite of the desperate efforts of the besieged to prevent its completion. At last, on the 15th of August 1585, Antwerp was compelled by famine to capitulate. Favourable conditions were granted, but all Protestants were required to leave the town within two years. With the fall of Antwerp, for Malines and Brussels were already in the hands of Farnese, the whole of the southern Netherlands was brought once more to recognize the authority of Philip. But Holland and Zeeland, whose geographical position made them unassailable except by water, were by the courage and skill of their hardy seafaring population, with the help of English auxiliaries sent by Queen Elizabeth, able to defy his further advance.

In 1586 Alexander Farnese became duke of Parma by the death of his father. He applied for leave to visit his paternal territory, but Philip would not permit him. He could not replace him in the Netherlands; but while retaining him in his command at the head of a formidable army, the king would not give his sanction to his great general's desire to use it for the reconquest of the Northern Provinces. Never was there a better opportunity than the end of 1586 for an invading army to march through the country almost without opposition. The misgovernment and lack of high statesmanship of the earl of Leicester had caused faction to be rampant in the United Provinces; and on his return to England he left the country without organized forces or experienced generals to oppose an advance of a veteran army under the greatest commander of his time. But Philip's whole thoughts and energies were already directed to the preparation of an Invincible Armada for the conquest of England, and Parma was ordered to collect an enormous flotilla of transports and to keep his army concentrated and trained for the projected invasion of the island realm of Queen Elizabeth. Thus the critical period passed by unused, and when the tempests had finally dispersed the defeated remnants of the Great Armada the Dutch had found a general, in the youthful Maurice of Nassau, worthy to be the rival in military genius even of Alexander of Parma. Moreover, the accession to the throne of France of Henry of Navarre had altogether altered the situation of affairs, and relieved the pressure upon the Dutch by creating a diversion, and placing Parma and his army between hostile forces. The ruinous expenditure upon the Great Armada had also depleted the Spanish treasury and Philip found himself virtually bankrupt. In 1590 the condition of the Spanish troops had become intolerable. Farnese could get no regular supplies of money from the king for the payment of the soldiery, and he had to pledge his own jewels to meet the demand. A mutiny broke out, but was suppressed. In the midst of these difficulties Parma received orders to abandon the task on which he had spent himself for so many years, and to raise the siege of Paris, which was blockaded by Henry IV. He left the Netherlands on the 3rd of August 1590 at the head of 15,000 troops. By brilliant generalship he outwitted Henry and succeeded in relieving Paris; but owing to lack of money and supplies he was compelled immediately to retreat to the Netherlands, abandoning on the march many stragglers and wounded, who were killed by the peasantry, and leaving all the positions he had taken to be recaptured by Henry.

Again in 1591, in the very midst of a campaign against Maurice of Nassau, sorely against his will, the duke of Parma was obliged to give up the engrossing struggle and march to relieve Rouen. He was again successful in his object, but was wounded in the arm before Caudebec, and was finally compelled to withdraw his army with considerable losses through the privations the troops had to undergo. He himself was shattered in health by so many years of continuous campaigning and exposure, and by the cares and disappointments which had befallen him. He died at Arras on the 3rd of December 1592, in the forty-seventh year of his age. The feeling that his immense services had not won for him either the gratitude or confidence of his sovereign hastened his end. He was honoured by a splendid funeral at Brussels, but his body was interred at his own capital city of Parma. He left two sons, Ranuce, who succeeded him, and Edward, who was created a cardinal in 1591 by Pope Gregory XIV. His daughter Margaret married Vincent, duke of Mantua.

See L.P. Gachard, *Correspondance d'Alexandre Farnese, Prince de Parme, gouverneur général des Pays-Bas, avec Philippe II, 1578-1579* (Brussels, 1850); Fra Pietro, *Alessandro Farnese, duca di Parma* (Rome, 1836).

**FARNESE, ELIZABETH** (1692-1766), queen of Spain, born on the 25th of October 1692, was the only daughter of Odoardo II., prince of Parma. Her mother educated her in strict seclusion, but seclusion altogether failed to tame her imperious and ambitious temper. At the age of twenty-one (1714) she was married by proxy at Parma to Philip V. of Spain. The marriage was arranged by Cardinal Alberoni (q.v.), with the concurrence of the Princess des Ursins, the *Camerara Mayor*. On arriving at the borders of Spain, Elizabeth was met by the Princess des Ursins, but received her sternly, and, perhaps in accordance with a plan previously concerted with the king, at once ordered her to be removed from her presence and from Spain. Over the weak king Elizabeth quickly obtained complete influence. This influence was exerted altogether in support of the policy of Alberoni, one chief aim of which

was to recover the ancient Italian possessions of Spain, and which actually resulted in the seizure of Sardinia and Sicily. So vigorously did she enter into this policy that, when the French forces advanced to the Pyrenees, she placed herself at the head of one division of the Spanish army. But Elizabeth's ambition was grievously disappointed. The Triple Alliance thwarted her plans, and at length in 1720 the allies made the banishment of Alberoni a condition of peace. Sicily also had to be evacuated. And finally, all her entreaties failed to prevent the abdication of Philip, who in 1724 gave up the throne to his heir, and retired to the palace of La Granja. Seven months later, however, the death of the young king recalled him to the throne. During his later years, when he was nearly imbecile, she directed the whole policy of Spain so as to secure thrones in Italy for her sons. In 1736 she had the satisfaction of seeing her favourite scheme realized in the accession of her son Don Carlos (afterwards Charles III. of Spain) to the throne of the Two Sicilies and his recognition by the powers in the treaty of Vienna. Her second son, Philip, became duke of Parma. Elizabeth survived her husband twenty years, dying in 1766.

See *Mémoires pour servir à l'histoire d'Espagne sous le règne de Philippe V*, by the Marquis de St Philippe, translated by Maudave (Paris, 1756); *Memoirs of Elizabeth Farnese* (London, 1746); and E. Armstrong, *Elizabeth Farnese, the Termagant of Spain* (1892).

FARNHAM, a market town in the Guildford parliamentary division of Surrey, England, 37<sup>1</sup>/<sub>2</sub> m. S.W. by W. from London by the London & South Western railway. Pop. of urban district (1901) 6124. It lies on the left bank of the river Wey, on the southern slope of a hill rising about 700 ft. above the sea-level. The church of St Andrew is a spacious transitional Norman and Early English building, with later additions, and was formerly a chapel of ease to Waverley Abbey, of which a crypt and fragmentary remains, of Early English date, stand in the park attached to a modern residence of the same name. This was the earliest Cistercian house in England, founded in 1128 by William Gifford, bishop of Winchester. The Annales Waverlienses, published by Gale in his Scriptores and afterwards in the Record series of Chronicles, are believed to have suggested to Sir Walter Scott the name of his first novel. Farnham Castle, on a hill north of the town, the seat of the bishops of Winchester, was first built by Henry de Blois, bishop of Winchester, and brother of King Stephen; but it was razed by Henry III. It was rebuilt and garrisoned for Charles I. by Denham, from whom it was taken in 1642 by Sir W. Waller; and having been dismantled, it was restored by George Morley, bishop of Winchester (1662-1684). Farnham has a town hall and exchange in Italian style (1866), a grammar school of early foundation, and a school of science and art. It was formerly noted for its cloth manufacture. Hops of fine quality are grown in the vicinity. William Cobbett was born in the parish (1766), and is buried in the churchyard of St Andrew's. The neighbouring mansion of Moor Park was the residence of Sir William Temple (d. 1699), and Swift worked here as his secretary. Hester Johnson, Swift's "Stella," was the daughter of Temple's steward, whose cottage still stands. The town has grown in favour as a residential centre from the proximity of Aldershot Camp (3 m. N.E.).

Though there is evidence of an early settlement in the neighbourhood, the town of Farnham (Ferneham) seems to have grown up round the castle of the bishops of Winchester, who possessed the manor at the Domesday Survey. Its position at the junction of the Pilgrim's Way and the road from Southampton to London was important. In 1205 Farnham had bailiffs, and in 1207 it was definitely a mesne borough under the bishops of Winchester. In 1247 the bishop granted the first charter, giving, among other privileges, a fair on All Saints' Day. The burgesses surrendered the proceeds of the borough court and other rights in 1365 in return for respite of the fee farm rent; these were recovered in 1405 and rent again paid. Bishop Waynflete is said to have confirmed the original charter in 1452, and in 1566 Bishop Horne granted a new charter by which the burgesses elected 2 bailiffs and 12 burgesses annually and did service at their own courts every three weeks, the court leet being held twice a year. In resisting an attack made by the bishop in 1660 on their right of toll, the burgesses could only claim Farnham as a borough by prescription as their charters had been mislaid, but the charters were subsequently found, and after some litigation their rights were established. In the 18th century the corporation, a close body, declined, its duties being performed by the vestry, and in 1789 the one survivor resigned and handed over the town papers to the bishop. Farnham sent representatives to parliament in 1311 and 1460, on both occasions being practically the bishop's pocket borough. In accordance with the grant of 1247 a fair was held on All Saints' day and also on Holy Thursday; the former was

afterwards held on All Souls' Day. Farnham was early a market of importance, and in 1216 a royal grant changed the market day from Sunday to Thursday in each week. It was famous in the early 17th century for wheat and oats; hop-growing began in 1597.

**FARNWORTH**, an urban district in the Radcliffe-cum-Farnworth parliamentary division of Lancashire, England, on the Irwell, 3 m. S.E. of Bolton by the Lancashire & Yorkshire railway. Pop. (1901) 25,925. Cotton mills, iron foundries, brick and tile works, and collieries employ the large industrial population.

**FARO**, the capital of a district bearing the same name, in southern Portugal; at the terminus of the Lisbon-Faro railway, and on the Atlantic Ocean. Pop. (1900) 11,789. Faro is an episcopal see, with a Renaissance cathedral of great size, an ecclesiastical seminary, and a ruined castle surrounded by Moorish fortifications. Its broad but shallow harbour is protected on the south by the long island of Cães, and a number of sandy islets, which, being constantly enlarged by silt from the small river Fermoso, render the entrance of large vessels impossible. Fishing is an important industry, and fish, with wine, fruit, cork, baskets and sumach, are the principal articles of export. Little has been done to develop the mineral resources of the district, which include tin, lead, antimony and auriferous quartz. Faro was taken from the Moors by Alphonso III. of Portugal (1248-1279). It was sacked by the English in 1596, and nearly destroyed by an earthquake in 1755.

The administrative district of Faro coincides with the ancient kingdom and province of Algarve (q.v.); pop. (1900) 255,191; area, 1937 sq. m.

FARO (from *Pharaoh*, a picture of the Egyptian king appearing on a card of the old French pack), a game of cards, played with a full pack. Originally the pack was held in the dealer's left hand, but nowadays very elaborate and expensive implements are used. The dealer places the pack, after shuffling and cutting, in a dealing-box face upwards, and the cards are taken from the top of the box in couples through a slit in the side. The exposed card on top is called *soda*, and the last card left in the box is *in hoc*. The implements include counters of various colours and values, a dealing-box, a case or frame manipulated by a "case-keeper," upon which the cards already played are arranged in sight, a shuffling-board, and scoresheets for the players. Upon the table is the "lay-out," a complete suit of spades, enamelled on green cloth, upon or near which to place the stakes. The dealer takes two cards from the box, placing the first one near it and the second close beside it. Each deal of two cards is called a *turn*, and there are twenty-five such, *soda* and *hoc* not counting. The players stake upon any card they please, or in such manner as to take in several cards, reducing the amount, but increasing the chances, of winning, as at roulette. The dealer, having waved the hand, after which no more bets may be made, deals the turn, and then proceeds to gather in the stakes won by him, and to pay those he has lost. The chances as between dealer and punters, or players, are equal, except that the banker wins half the money staked on the cards of a turn should they chance to be alike. Faro is played considerably in parts of the United States, whither it is said to have been taken from France, where it had a great vogue during the reign of Louis XIV. Owing to the dishonest methods of many gambling "clubs" the game is in disrepute.

FARQUHAR, GEORGE (1677-1707), British dramatist, son of William Farquhar, a clergyman, was born in Londonderry, Ireland, in 1677. When he was seventeen he was entered as a sizar at Trinity College, Dublin, under the patronage of Dr Wiseman, bishop of Dromore. He did not long continue his studies, being, according to one account, expelled for a profane joke. Thomas Wilkes, however, states that the abrupt termination of his studies was due to the death of his patron. He became an actor on the Dublin stage, but in a fencing scene in Dryden's Indian Emperor he forgot to exchange his sword for a foil, with results which narrowly escaped being fatal to a fellow-actor. After this accident he never appeared on the boards. He had met Robert Wilks, the famous comedian, in Dublin. Though he did not, as generally stated, go to London with Wilks, it was at his suggestion that he wrote his first play, Love and a Bottle, which was performed at Drury Lane, perhaps through Wilks's interest, in 1698. He received from the earl of Orrery a lieutenancy in his regiment, then in Ireland, but in two letters of his dated from Holland in 1700 he says nothing of military service. His second comedy, The Constant Couple: or a Trip to the Jubilee (1699), ridiculing the preparations for the pilgrimage to Rome in the Jubilee year, met with an enthusiastic reception. Wilks as Sir Harry Wildair contributed substantially to its success. In 1701 Farquhar wrote a sequel, Sir Harry Wildair. Leigh Hunt says that Mrs Oldfield, like Wilks, played admirably well in it, but the original Lady Lurewell was Mrs Verbruggen. Mrs Oldfield is said to have been the "Penelope" of Farquhar's letters. In 1702 Farquhar published a slight volume of miscellanies-Love and Business; in a Collection of Occasionary Verse and Epistolary Prose-containing, among other things, "A Discourse on Comedy in reference to the English Stage," in which he defends the English neglect of the dramatic unities. "The rules of English comedy," he says, "don't lie in the compass of Aristotle or his followers, but in the pit, box and galleries." In 1702 he borrowed from Fletcher's Wild Goose Chase, The Inconstant, or the Way to win Him, in which he followed his original fairly closely except in the last act. In 1703 he married, in the expectation of a fortune, but found too late that he was deceived. It is said that he never reproached his wife, although the marriage increased his liabilities and the rest of his life was a constant struggle against poverty. His other plays are: The Stage Coach (1704), a one-act farce adapted from the French of Jean de la Chapelle in conjunction with Peter Motteux; The Twin Rivals (Drury Lane, 1702); The Recruiting Officer (Drury Lane, 1706); and The Beaux' Stratagem (Haymarket, 1707). The Recruiting Officer was suggested to him by a recruiting expedition (1705) in Shropshire, and is dedicated to his "friends round the Wrekin." The Beaux' Stratagem, is the best of all his plays, and long kept the stage. Genest notes nineteen revivals up to 1828. Two embarrassed gentlemen travel in the country disguised as master and servant in the hope of mending their fortune. The play gives vivid pictures of the Lichfield inn with its rascally landlord, and of the domestic affairs of the Sullens. Archer, the supposed valet, whose adventurous spirit secures full play, was one of Garrick's best parts.

Meanwhile one of his patrons, said to have been the duke of Ormond, had advised Farquhar to sell out of his regiment, and had promised to give him a captaincy in his own. Farquhar sold his commission, but the duke's promise remained unfulfilled. Before he had finished the second act of *The Beaux' Stratagem* he knew that he was stricken with a mortal illness, but it was necessary to persevere and to be "consumedly lively to the end." He had received in advance £30 for the copyright from Lintot the bookseller. The play was staged on the 8th of March, and Farquhar lived to have his third night, and there was an extra benefit on the 29th of April, the day of his death. He left his two children to the care of his friend Wilks. Wilks obtained a benefit at the theatre for the dramatist's widow, but he seems to have done little for the daughters. They were apprenticed to a mantua-maker, and one of them was, as late as 1764, in receipt of a pension of £20 solicited for her by Edmund Chaloner, a patron of Farquhar. She was then described as a maidservant and possessed of sentiments "fitted to her humble situation."

The plots of Farquhar's comedies are ingenious in conception and skilfully conducted. He has no pretensions to the brilliance of Congreve, but his amusing dialogue arises naturally out of the situation, and its wit is never strained. Sergeant Kite in the *Recruiting Officer*, Scrub, Archer and Boniface in *The Beaux' Stratagem* are distinct, original characters which had a great success on the boards, and the unexpected incidents and adventures in which they are mixed up are represented in an irresistibly comic manner by a man who thoroughly understood the resources of the stage. The spontaneity and verve with which his adventurous heroes are drawn have suggested that in his favourite type he was describing himself. His own disposition seems to have been most lovable, and he was apparently a much gayer person than the reader might be led to suppose from the "Portrait of Himself" quoted by Leigh Hunt. The code of morals followed by these characters is open to criticism, but they are human and genial in their roguery, and compare far from unfavourably with the cynical creations of contemporary drama. The advance which he made on his immediate

predecessors in dramatic construction and in general moral tone is more striking when it is remembered that he died before he was thirty.

Farquhar's dramatic works were published in 1728, 1742 and 1772, and by Thomas Wilkes with a biography in 1775. They were included in the *Dramatic Works of Wycherley, Congreve, Vanbrugh and Farquhar* (1849), with biographical and critical notices, by Leigh Hunt. See also *The Dramatic Works of George Farquhar, with Life and Notes*, by A.C. Ewald (2 vols., 1892); *The Best Plays of George Farquhar* (Mermaid series, 1906), with biographical and critical introductions, by William Archer; *The Beaux' Stratagem*, edited (1898) by H. Macaulay Fitzgibbon for "The Temple Dramatists"; and D. Schmid, "George Farquhar, sein Leben und seine Original-Dramen" (1904) in *Wiener Beiträge zur engl. Philol.* 

FARR, WILLIAM (1807-1883), English statistician, was born at Kenley, in Shropshire, on the 30th of November 1807. When nineteen he became the pupil of a doctor in Shrewsbury, also acting as dresser in the infirmary there. He then went to Paris to study medicine, but after two years returned to London, where, in 1832, he qualified as L.S.A. Next year he began to practise, but without very brilliant results, for five years later he definitely abandoned the exercise of his profession on accepting the post of compiler of abstracts in the registrar-general's office. The commissioners for the 1841 census consulted him on several points, but did not in every case follow his advice. For the next two decennial censuses he acted as assistant-commissioner; for that of 1871 he was a commissioner, and he wrote the greater part of the reports of all. He had an ambition to become registrar-general; and when that post became vacant in 1879, he was so disappointed at the selection of Sir Brydges Henniker instead of himself, that he refused to stay any longer in the registrar's office. He died of paralysis of the brain a year or two later, on the 14th of April 1883. A great part of Farr's literary production is to be found in the papers which, from 1839 to 1880, he wrote for each annual report of the registrar-general on the cause of the year's deaths in England. He was also the author of many papers on general statistics and on life-tables for insurance, some read before the Royal Statistical Society, of which he was president in 1871 and 1872, some contributed to the Lancet and other periodicals. A selection from his statistical writings was published in 1885 under the editorship of Mr Noël Humphreys.

**FARRAGUT, DAVID GLASGOW** (1801-1870), first admiral of the United States navy, was the son of Major George Farragut, a Catalan by descent, a Minorquin by birth, who had emigrated to America in 1776, and, after the peace, had married a lady of Scottish family and settled near Knoxville, in Tennessee; there Farragut was born on the 5th of July 1801. At the early age of nine he entered the navy, under the protection of his name-father, Captain David Porter, with whom he served in the "Essex" during her cruise in the Atlantic in 1812, and afterwards in the Pacific, until her capture by the "Phoebe," in Valparaiso Bay, on the 28th of March 1814. He afterwards served on board the "Washington" (74) carrying the broad pennant of Commodore Chauncey in the Mediterranean, and pursued his professional and other studies under the instruction of the chaplain, Charles Folsom, with whom he contracted a lifelong friendship. Folsom was appointed from the "Washington" as U.S. consul at Tunis, and obtained leave for his pupil to pay him a lengthened visit, during which he studied not only mathematics, but also French and Italian, and acquired a familiar knowledge of Arabic and Turkish. He is said to have had a great natural aptitude for languages and in after years to have spoken several fluently.

After more than four years in the Mediterranean, Farragut returned to the States in November 1820. He then passed his examination, and in 1822 was appointed for service in what was called the "mosquito" fleet, against the pirates, who then infested the Caribbean Sea. The service was one of great exposure and privation; for two years and a half, Farragut wrote, he never owned a bed, but lay down to rest wherever he found the most comfortable berth. By the end of that time the joint action of the British and American navies had driven the pirates off the sea, and when they took to marauding on shore the Spanish governors did the rest. In 1825 he was promoted to the rank of lieutenant, whilst serving in the navy yard

at Norfolk, where, with some breaks in sea-going ships, he continued till 1832; he then served for a commission on the coast of Brazil, and was again appointed to the yard at Norfolk.

It is needless to trace the ordinary routine of his service step by step. The officers of the U.S. navy have one great advantage which British officers are without; when on shore they are not necessarily parted from the service, but are employed in their several ranks in the different dockyards, escaping thus not only the private grievance and pecuniary difficulties of a very narrow half-pay, but also, what from a public point of view is much more important, the loss of professional aptitude, and of that skill which comes from unceasing practice. On the 8th of September 1841 Farragut was promoted to the rank of commander, and on the 14th of September 1855 to that of captain. At this time he was in charge of the navy yard, Mare Island, California, from which post he was recalled in 1858, and appointed to the "Brooklyn" frigate, the command of which he held for the next two years. When the war of secession broke out in 1861, he was "waiting orders" at Norfolk. By birth and marriage he was a Southerner, and the citizens of Norfolk counted on his throwing in his lot with them; but professional pride, and affection for the flag under which he had served for more than fifty years, held him true to his allegiance; he passionately rejected the proposals of his fellow-townsmen, and as it was more than hinted to him that his longer stay in Norfolk might be dangerous, he hastily quitted that place, and offered his services to the government at Washington. These were at once accepted; he was requested to sit on the Naval Retiring Board—a board then specially constituted for clearing the navy of unfit or disloyal officers and a few months later was appointed to the command of the "Western Gulf Blockading Squadron," with the rank of flag-officer, and ordered to proceed forthwith, in the "Hartford," to the Gulf of Mexico, to collect such vessels as could be spared from the blockade, to proceed up the Mississippi, to reduce the defences which guarded the approaches to New Orleans, and to take and hold the city. All this Farragut executed to the letter, with a skill and caution that won for him the love of his followers, and with a dash and boldness that gained him the admiration of the public and the popular name of "Old Salamander." The passage of the Mississippi was forced on the 24th of April 1862, and New Orleans surrendered on the 26th; this was immediately followed by the operations against Vicksburg, from which, however, Farragut was compelled to withdraw, having relearnt the old lesson that against heavy earthworks, crowning hills of sufficient height, a purely naval attack is unavailing; it was not till the following summer, and after a long siege, that Vicksburg surrendered to a land force under General Grant. During this time the service on the Mississippi continued both difficult and irksome; nor until the river was cleared could Farragut seriously plan operations against Mobile, a port to which the fall of New Orleans had given increased importance. Even then he was long delayed by the want of monitors with which to oppose the ironclad vessels of the enemy. It was the end of July 1864 before he was joined by these monitors; and on the 5th of August, undismayed by the loss of his leading ship, the monitor "Tecumseh," sunk by a torpedo, he forced the passage into the bay, destroyed or captured the enemy's ships, including the ram "Tennessee" bearing Admiral Buchanan's flag, and took possession of the forts. The town was not occupied till the following April, but with the loss of its harbour it ceased to have any political or strategical importance.

With this Farragut's active service came to an end; for though in September 1864 he was offered the command of the force intended for the reduction of Wilmington, the state of his health, after the labours and anxieties of the past three years, in a trying climate, compelled him to decline it and to ask to be recalled. He accordingly returned to New York in December, and was received with the wildest display of popular enthusiasm. It was then that the Government instituted the rank of vice-admiral, previously unknown in the American service. Farragut was promoted to it, and in July 1866 was further promoted to the rank of admiral. In 1867, with his flag flying in the "Franklin," he visited Europe. The appointment was an honourable distinction without political or naval import: the "Franklin" was, to all intents, for the time being, a yacht at Farragut's disposal; and her arrival in the different ports was the signal for international courtesies, entertainments and social gaiety. She returned to America in 1868, and Farragut retired into private life. Two years later, on the 14th of August 1870, he died at Portsmouth, New Hampshire.

Farragut was twice married, and left, by his second wife, a son, Loyall Farragut, who, in 1878, published a *Life* of his father "embodying his Journal and Letters." Another *Life* (1892), by Captain A.T. Mahan, though shorter, has a greater value from the professional point of view, by reason of the critical appreciation of Farragut's services.

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FARRANT, RICHARD, composer of English church music, flourished during the 16th century. Very little is known about him. Fétis gives 1530 as the date of his birth, but on what authority does not appear. He became a gentleman of the Chapel Royal in the reign of Edward VI., but resigned his post in 1564 on being appointed master of the children of St George's chapel, Windsor. In this capacity he presented a play before the queen at Shrovetide 1568, and again at Christmas of the same year, receiving on each occasion the sum of £6: 13: 4d. In November 1569 he was reinstated as gentleman of the Chapel Royal. It is stated by Hawkins (History of Music, vol. iii. 279) that Farrant was also one of the clerks and organists of St George's chapel, Windsor, and that he retained these posts till his death. Many of his compositions are printed in the collections of Barnard and Boyce. Among the most admired of them are a service in G minor, and the anthems "Call to remembrance" and "Hide not thou thy face." It is doubtful whether Farrant is entitled to the credit of the authorship of the beautiful anthem "Lord, for thy tender mercies' sake." No copy of the music under his name appeared in print till 1800, although it had been earlier attributed to him. Some writers have named John Hilton, and others Thomas Tallis, as the composer. From entries in the Old Check Book of the Chapel Royal (edited for the Camden Society by Dr Rimbault) it appears that Farrant died, not in 1585, as Hawkins states, but on the 30th of November 1580 or 1581.

**FARRAR, FREDERIC WILLIAM** (1831-1903), English divine, was born on the 7th of August 1831, in the Fort of Bombay, where his father, afterwards vicar of Sidcup, Kent, was then a missionary. His early education was received in King William's College, Castletown, Isle of Man, a school whose external surroundings are reproduced in his popular schoolboy tale, *Eric; or, Little by Little*. In 1847 he entered King's College, London. Through the influence of F.D. Maurice he was led to the study of Coleridge, whose writings had a profound influence upon his faith and opinions. He proceeded to Trinity College, Cambridge, in October 1851, and in the following year took the degree of B.A. at the university of London. In 1854 he took his degree as fourth junior optime, and fourth in the first class of the classical tripos. In addition to other college prizes he gained the chancellor's medal for the English prize poem on the search for Sir John Franklin in 1852, the Le Bas prize and the Norrisian prize. He was elected fellow of Trinity College in 1856.

On leaving the university Farrar became an assistant-master under G.E.L. Cotton at Marlborough College. In November 1855 he was appointed an assistant-master at Harrow, where he remained for fifteen years. He was elected a fellow of the Royal Society in 1864, university preacher in 1868, honorary chaplain to the queen in 1869 and Hulsean lecturer in 1870. In 1871 he was appointed headmaster of Marlborough College, and in the following year he became chaplain-in-ordinary to the queen. In 1876 he was appointed canon of Westminster and rector of St Margaret's, Westminster. He took his D.D. degree in 1874, the first under the new regulations at Cambridge. Farrar began his literary labours with the publication of his schoolboy story Eric in 1858, succeeded in the following year by Julian Home and Lyrics of Life, and in 1862 by St Winifred's; or the World of School. He had already published a work on *The Origin of Language*, and followed it up by a series of works on grammar and scholastic philology, including Chapters on Language (1865); Greek Grammar Rules (1865); Greek Syntax (1866); and Families of Speech (1869). He edited Essays on a Liberal Education in 1868; and published Seekers after God in the Sunday Library (1869). It was by his theological works, however, that Farrar attained his greatest popularity. His Hulsean lectures were published in 1870 under the title of The Witness of *History to Christ. The Life of Christ,* which was published in 1874, speedily passed through a great number of editions, and is still in much demand. It reveals considerable powers of imagination and eloquence, and was partly inspired by a personal knowledge of the sacred localities depicted. In 1877 appeared In the Days of My Youth, sermons preached in the chapel of Marlborough College; and during the same year his volume of sermons on *Eternal Hope*—in which he called in question the dogma of everlasting punishment—caused much controversy in religious circles and did much to mollify the harsh theology of an earlier age. There is little doubt that his boldness and liberality of thought barred his elevation to the episcopate. In 1879 appeared The Life and Works of St Paul, and this was succeeded in 1882 by The Early Days of Christianity. Then came in order of publication the following works: Everyday Christian Life; or, Sermons by the Way (1887); Lives of the Fathers (1888); Sketches of Church History (1889); Darkness and Dawn, a story of the Neronic persecution

(1891); *The Voice from Sinai* (1892); *The Life of Christ as Represented in Art* (1894); a work on Daniel (1895); *Gathering Clouds*, a tale of the days of Chrysostom (1896); and *The Bible*, *its Meaning and Supremacy* (1896). Farrar was a copious contributor of articles to various magazines, encyclopaedias and theological commentaries. In 1883 he was made archdeacon of Westminster and rural dean; in 1885 he was appointed Bampton lecturer at Oxford, and took for his subject "The History of Interpretation." He was appointed dean of Canterbury in 1895. From 1890 to 1895 he was chaplain to the speaker of the House of Commons, and in 1894 he was appointed deputy-clerk of the closet to Queen Victoria. He died at Canterbury on the 22nd of March 1903.

As a theologian Farrar occupied a position midway between the Evangelical party and the Broad Church; while as a somewhat rhetorical preacher and writer he exerted a commanding influence over wide circles of readers. He was an ardent temperance and social reformer, and was one of the founders of the institution known as the Anglican Brotherhood, a religious band with modern aims and objects.

See his *Life*, by his son R. Farrar (1904).

**FARREN, ELIZABETH** (*c.* 1759-1829), English actress, was the daughter of George Farren, an actor. Her first London appearance was in 1777 as Miss Hardcastle in *She Stoops to Conquer*. Subsequent successes established her reputation and she became the natural successor to Mrs Abington when the latter left Drury Lane in 1782. The parts of Hermione, Olivia, Portia and Juliet were in her repertory, but her Lady Betty Modish, Lady Townly, Lady Fanciful, Lady Teazle and similar parts were her favourites. In 1797 she married Edward, 12th earl of Derby (1752-1834).

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FARREN, WILLIAM (1786-1861), English actor, was born on the 13th of May 1786, the son of an actor (b. 1725) of the same name, who played leading rôles from 1784 to 1795 at Covent Garden. His first appearance on the stage was at Plymouth at the Theatre Royal, then under the management of his brother, in *Love à la mode*. His first London appearance was in 1818 at Covent Garden as Sir Peter Teazle, a part with which his name is always associated. He played at Covent Garden every winter until 1828, and began in 1824 a series of summer engagements at the Haymarket which also lasted some years. At these two theatres he played an immense variety of comedy characters. From 1828 until 1837 he was at Drury Lane, where he essayed a wider range, including Polonius and Caesar. He was again at Covent Garden for a few years, and next joined Benjamin Webster at the Haymarket, as stage-manager as well as actor. In 1843 at the close of his performance of the title-part in Mark Lemon's Old Parr, he was stricken with paralysis on the stage. He was, however, able to reappear the following year, and he remained at the Haymarket ten years more, though his acting never again reached its former level. For a time he managed the Strand, and, 1850-1853, was lessee of the Olympic. During his later years he confined himself to old men parts, in which he was unrivalled. In 1855 he made his final appearance at the Haymarket, as Lord Ogleby in a scene from the *Clandestine Marriage*. He died in London on the 24th of September 1861. In 1825 he had married the actress Mrs Faucit, mother of Miss Helena Saville Faucit (Lady Martin), and he left two sons, Henry (1826-1860) and William (1825-1908), both actors. The former was the father of Ellen [Nellie] Farren (1848-1904), long famous for boy's parts in Gaiety musical burlesques, in the days of Edward Terry and Fred Leslie. As Jack Sheppard, and in similar rôles, she had a unique position at the Gaiety, and was an unrivalled public favourite. From 1892 her health failed, and her retirement, coupled with Fred Leslie's death, brought to an end the type of Gaiety burlesque associated with them.

FARRER, THOMAS HENRY FARRER, 1st BARON (1819-1899), English civil servant and statistician, was the son of Thomas Farrer, a solicitor in Lincoln's Inn Fields. Born in London on the 24th of June 1819, he was educated at Eton and Balliol College, Oxford, where he graduated in 1840. He was called to the bar at Lincoln's Inn in 1844, but retired from practice in the course of a few years. He entered the public service in 1850 as secretary to the naval (renamed in 1853 the marine) department of the Board of Trade. In 1865 he was promoted to be one of the joint secretaries of the Board of Trade, and in 1867 became permanent secretary. His tenure of this office, which he held for upwards of twenty years, was marked by many reforms and an energetic administration. Not only was he an advanced Liberal in politics, but an uncompromising Free-trader of the strictest school. He was created a baronet for his services at the Board of Trade in 1883, and in 1886 he retired from office. During the same year he published a work entitled *Free Trade versus Fair Trade*, in which he dealt with an economic controversy then greatly agitating the public mind. He had already, in 1883, written a volume on The State in its Relation to Trade. In 1889 he was co-opted by the Progressives an alderman of the London County Council, of which he became vice-chairman in 1890. His efficiency and ability in this capacity were warmly recognized; but in the course of time divergencies arose between his personal views and those of many of his colleagues. The tendency towards socialistic legislation which became apparent was quite at variance with his principles of individual enterprise and responsibility. He consequently resigned his position. In 1893 he was raised to the peerage. From this time forward he devoted much of his energy and leisure to advocating his views at the Cobden Club, the Political Economy Club, on the platform, and in the public press. Especially were his efforts directed against the opinions of the Fair Trade League, and upon this and other controversies on economic questions he wrote able, clear, and uncompromising letters, which left no doubt that he still adhered to the doctrines of free trade as advocated by its earliest exponents. In 1898 he published his Studies in Currency. He died at Abinger Hall, Dorking, on the 11th of October 1899. He was succeeded in the title by his eldest son Thomas Cecil (b. 1859).

**FARRIER,** and **FARRIERY** (from Lat. *ferrarius*, a blacksmith, *ferrum*, iron). Farrier is the name given generally either to the professional shoer of horses or in a more extended sense to a practitioner of the veterinary art; and farriery is the term for his business. Primarily the art of farriery is identical with that of the blacksmith, in so far as he makes and fixes shoes on horses (see Horse-Shoes); he is liable in law for negligence, as one who holds himself out as skilled; and he has a lien on the animal for his expenses. William the Conqueror is supposed to have introduced horse-shoeing into England, and the art had an important place through the middle ages, the days of chivalry, and the later developments of equitation. In modern times it has been closely allied with the general progress in veterinary science, and in the knowledge of the anatomy and physiology of the horse's foot and hoof.

See Fisher, The Farrier (1893); Lungwitz, Text-Book of Horse-shoeing (Eng. trans., 1898).

**FARS** (the name *Farsistan* is not used), one of the five *mamlikats* (great provinces) of Persia, extending along the northern shore of the Persian Gulf and bounded on the west by Arabistan, on the north by Isfahan and on the east by Kerman. It lies between 49° 30′ and 56° 10′ E. and 26° 20′ and 31° 45′ N. and has an area of nearly 60,000 sq. m. Fars is the same word as the Greek *Persis*, and, originally the name of only a part of the Persian empire (Iran), has become the name which Europeans have applied to the whole (see PERSIS). The province is popularly, but not for administrative purposes, divided according to climate into *germsīr* and *sardsīr*, or the warm and cold regions. The former extends from the sea to the central chain of hills and contains all the lowlands and many mountainous districts, some of the latter rising to an elevation of between 3000 and 4000 ft. and the *sardsīr* comprises the remaining and northern districts of the province.

In Arrian's relation of the voyage of Nearchus (*Indica*, 40), these two regions are well described. "The first part of Persis which lies along the Persian Gulf is hot, sandy and barren and only the date palm thrives there. The other part comprehends inner Persis lying

northwards; it enjoys a pleasant climate and has fertile and well-watered plains, gardens with trees of all kinds, rich pasturages and forests abounding with game; with the exception of the olive all fruits are produced in profusion, particularly the vine. Horses and other draught animals are reared in the province, and there are several lakes frequented by water-fowl, and streams of clear water flow through it, as for instance the Kyros (Kur) formed by the junction of the Medos and Araxes."

The mountains of Fars may be considered as a continuation of the Zagros and run parallel to the shores of the Persian Gulf. They comprise several ranges which the roads from the sea to the interior have to cross at right angles, thereby rendering communication and transport very difficult. The highest of the mountains of Fars (14,000 ft.) is the Kuh Dinā in the northwestern part of the province. Of the rivers of Fars only three important ones flow into the sea: (1) the Mand (Arrian's Sitakos), Karaaghach in its upper course; (2) the Shapur or Khisht river (Granis); (3) the Tab (Oroatis). Some rivers, notably the Kur (Kyros, Araxes) which flows into the Bakhtegan lake east of Shiraz, drain into inland depressions or lakes.

The capital of the province is Shiraz, and the subdivision in districts, the chief places of the districts and their estimated population, and the number of inhabited villages in each as they appear in lists dated 1884 and 1905 are shown on the following page.

	Name of District.	Chief Place or Seat of Government.		Number of inhabited
	Name of District.	Name.	Population.	Villages in District.
1	Abādeh Iklīd	Abādeh	4,000	33
2	Abādeh-Tashk	Tashk	600	8
3	Abarj	Dashtek	2,000	6
4	Abbāsi			
	(1) Bander Abbāsi <sup>1</sup> and villages (2) Issīn and Taziān	Bander Abbāsi Issīn	10,000	14 6
	(2) Issin and Tazian (3) Shamil	Shamil	1 000	18
		Ziarat	1,000	
	(4) Moghistan		1 000	10
_	(5) Mināb	Mināb	4,000	23
5	Afzar	Nī-mdeh	1 000	12
6	'Alemrūd	Sabzpushan	1,000	16
7	Arb'ah (the four)			
	(1) Deh Rūd		1 500	10
	(2) Deh Ram	Deh Ram	1,500	19
	(3) Hengam			
	(4) Rudbāl			10
8	Ardakān	Ardakān	5,000	10
9	Arsinjan	Arsinjan	5,000	25
10	Asīr	Asīr	500	10
11	Baiza	Baiza	2,000	55
12	Bī-dshahr and Juvī-m	Bī-dshahr	3,000	23
13	Bovanāt	Suriān	500	23
14	Darāb	Darāb	5,000	62
15	Dashti			
	(1) Bardistan	Bander Dair	1,000	28
	(2) Buluk	Bushgān		18
	(3) Māndistan	Kāki	1,500	40
	(4) Tassūj	Tang Bagh	500	11
10	(5) Shumbeh	Shumbeh		15
16	Dashtistān	TT 017 1		10
	(1) Angāli	Haftjūsh	1 500	10
	(2) Ahrom	Ahrom	1,500	5
	(3) Borazjan	Borazjan	4,000	19
	(4) Bushire <sup>1</sup>	Bushire	25,000	20
	(5) Daliki (6) Gonāvah	Daliki	1,500	7
		Gonāvah Bandan Din	1,000	12
	(7) Hayāt Daūd	Bander Rig	1,000	6
	(8) Khurmuj	Khurmuj Kalab Galabbah	1,000	5
	(9) Rūd Hillah (10) Shahara Karath	Kelat Sukhteh		10
	(10) Shaban Kareh	Deh Kohneh	1 000	27
	(11) Tangistan	Tangistan	1,000	31
	(12) Zengeneh (13) Zirāh	Samal Zirāb	750	4
17		Zirāh Cherkes	EOO	6
17	Dizkurd		500	6 3
18 19	Famur Ferrashband	Pagah Ferrashband	300	
19 20	Ferrasndand Fessa	Ferrasnband Fessa	1,000	14 40
20 21	Fessa Firuzabad	Fessa Firuzabad	5,000	
21 22	Gillehdār	Gillehdār	4,000 1,000	20 43
22	Unicilual	Gillelludi	1,000	43

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23	Hūmeh of Shiraz	Zerkān	1,000	89
24	Istahbanat	Istahbanat	10,000	12
25	Jahrum	Jahrum	10,000	33
26	Jireh	Ishfāyikān	10,000	23
$\frac{1}{27}$	Kamfiruz	Palangeri		34
28	Kamin	Kalilek		11
29	Kazerun	Kazerun	8,000	46
30	Kavār	Kavār	0,000	26
31	Kir and Karzīn	Kir	1,000	20
31 32	Khafr	Kli Khafr	1,000	23 41
-		-	,	
33	Khajeh	Zanjiran	500	15
34	Khisht	Khisht	2,500	25
35	Khunj	Khunj	1,500	27
36	Kongān	Bander Kongān		12
37	Kuh Gilū and Behbahan	Behbahan	10,000	182
38	Kurbāl	Gavkan	600	67
39	Kuh i Marreh Shikeft	Shikeft		41
40	Kunkuri	Kazian		29
41	Laristan			
	(1) Lar	Lar	8,000	34
	(2) Bikhah Ihsham	Bairam		11
	(3) Bikhah Fal	Ishkenān		10
	(4) Jehāngiriyeh	Bastak	4,000	30
	(5) Shib Kūh	Bander Chārak		36
	(6) Fūmistan or Gavbandi	Gāvbandi		13
	(7) Kauristān	Kauristān		4
	(8) Lingah <sup>1</sup>	Bander Lingah	10,000	11
	(9) Mazāyijan	Mazāyijan		6
42	Mahūr Milāti	Jemalgird		5
43	Maimand	Maimand	5,000	14
44	Maliki	Bander Assalu	1,000	25
45	Mamasenni (Shūlistan)	Dunuor rissuite	1,000	20
10	(1) Bekesh			8
	(2) Javīdi or Jāvi			6
	(3) Dushmanziaris			16
	(4) Rustami	Kal'ah Safid		26
		Kai ali Sallu		
	(5) Fahlian			7
10	(6) Kākān	2.67		5
46	Māyin	Māyin		8
47	Mervast and Herāt	Mervast		14
48	Mervdasht			
	(1) Upper Khafrek			14
	(2) Lower Khafrek	Fathabad	1,250	16
	(3) Mervdasht			22
49	Meshhed Mader Sulimān	Murghāb	800	6
50	Nīrīz	Nīrīz	9,000	24
51	Ramjird	Jashian		36
52	Rūdan and Ahmedī	Dehbariz		21
53	Sab'ah (the seven)			
	(1) Bīvunj (Bī-vanej)	Durz		14
	(2) Hasanabad	Hasanabad		7
	(3) Tarom	Tarun	2,000	15
	(4) Fāraghān	Fāraghān	1,500	13
	(5) Forg	Forg	3,000	18
	(6) Fin and Guhrah	Fīn	3,000	13
	(7) Gileh Gāh (abandoned)	Ziaret	1,000	11
54	Sarchahān		1,000	11
54 55	Sarchanan Sarhad Chahār Dungeh			
55	(1) Dasht Ujān			
	-	Kūshk		31
	(2) Dasht Khosro va Shirin (2) Dasht Khūngasht	KUSIIK		31
	(3) Dasht Khūngasht (4) Dasht Kuchly Zand			
EC	(4) Dasht Kushk Zard			
56	Sarhad Shesh Nahīyeh	171		
	(1) Pādinā (foot of Mount Dinā	Khūr		
	(2) Hennā	Hennā		
	(3) Samiram	Samiram		
	(4) Felārd	Felārd		24
	(5) Vardasht	Germabad		
	(6) Vank	Vank		
	Sarvistan	Sarvistan	4,500	23
57			53,607 <sup>2</sup>	
57 58	Shiraz (town) in 1884		55,007	• •
	Shiraz (town) in 1884 Siyākh	Darinjān	33,007	13

The above sixty districts are grouped into eighteen sub-provinces under governors appointed by the governor-general of Fars, but the towns of Bushire, Lingah and Bander Abbasi, together with the villages in their immediate neighbourhood, form a separate government known as that of the "Persian Gulf Ports" (Benādir i Khalij i Fars), under a governor appointed from Teheran. The population of the province has been estimated at 750,000 and the yearly revenue it pays to the state amounts to about £150,000. Many districts are fertile, but some, particularly those in the south-eastern part of the province, do not produce sufficient grain for the requirements of the sparse population. In consequence of droughts, ravages of locusts and misgovernment by local governors the province has been much impoverished and hundreds of villages are in ruins and deserted. About a third of the population is composed of turbulent and lawless nomads who, when on the march between their winter and summer camping grounds, frequently render the roads insecure and occasionally plunder whole districts, leaving the inhabitants without means of subsistence.

The province produces much wheat, barley, rice, millet, cotton, but the authorities every now and then prohibiting the export of cereals, the people generally sow just as much as they think will suffice for their own wants. Much tobacco of excellent quality, principally for consumption in Persia, is also grown (especially in Fessa, Darab and Jahrom) and a considerable quantity of opium, much of it for export to China, is produced. Salt, lime and gypsum are abundant. There are also some oil wells at Daliki, near Bushire, but several attempts to tap the oil have been unsuccessful. There are no valuable oyster-banks in Persian waters, and all the Persian Gulf pearls are obtained from banks on the coast of Arabia and near Bahrein.

(A. H.-S.)

- 1 Are forming separate administrative division of "Persian Gulf Ports."
- 2 Persian census in 1884; 25,284 males, 28,323 females.

FARTHING (A.S. *feórtha*, fourth, *+ing*, diminutive), the smallest English coin, equal to the fourth of a penny. It became a regular part of the coinage from the reign of Edward I., and was, up to the reign of Mary, a silver coin. No farthing was struck in the reign of Elizabeth, but a silver three-farthing piece was issued in that reign, with a profile bust of the queen crowned, with a rose behind her head, and inscribed "E.D.G. Rosa sine spina." The copper farthing was first introduced in the reign of James I., a patent being given to Lord Harington of Exton in 1613 for the issue of copper tokens of this denomination. It was nominally of six grains' weight, but was usually heavier. Properly, however, the copper farthing dates from the reign of Charles II., in whose reign also was issued a tin farthing, with a small copper plug in the centre, and an inscription on the edge, "Nummorum famulus 1684." No farthings were actually issued in the reign of Queen Anne, though a number of patterns were prepared (see NUMISMATICS: medieval section, England). In 1860 the copper farthing was superseded by one struck in bronze. In 1842 a proclamation was issued giving currency to half-farthings, and there were several issues, but they were demonetized in 1869. In 1897 the practice was adopted of darkening farthings before issue, to prevent their being mistaken for halfsovereigns.

**FARTHINGALE** (from the O. Fr. *verdagalle*, or *vertugalle*, a corruption of the Spanish name of the article, *verdagado*, from *verdago*, a rod or stick), a case or hoop, originally of bent rods, but afterwards made of whalebone, upon which were hung the voluminous skirts of a woman's dress. The fashion was introduced into England from Spain in the 16th century. In its most exaggerated shape, at the beginning of the 17th century, the top of the farthingale formed a flat circular surface projecting at right angles to the bodice (see COSTUME).

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**FARUKHABAD**, FARRAKHABAD, or FURRUCKABAD, a city and district of British India in the Agra division of the United Provinces. The city is near the right bank of the Ganges, 87 m. by rail from Cawnpore. It forms a joint municipality with Fatehgarh, the civil headquarters of the district with a military cantonment. Pop. (1901) 67,338. At Fatehgarh is the government guncarriage factory; and other industries include cotton-printing and the manufacture of gold lace, metal vessels and tents.

The DISTRICT OF FARUKHABAD has an area of 1685 sq. m. It is a flat alluvial plain in the middle Doab. The principal rivers are: the Ganges, which has a course of 87 m. either bordering on or passing through the district, but is not at all times navigable by large boats throughout its entire course; the Kali-nadi (84 m.) and the Isan-nadi (42 m.), both tributaries of the Ganges; and the Arind-nadi, which, after a course of 20 m. in the south of the district, passes into Cawnpore. The principal products are rice, wheat, barley, millets, pulses, cotton, sugar-cane, potatoes, &c. The grain crops, however, are insufficient for local wants, and grain is largely imported from Oudh and Rohilkhand. The district is, therefore, liable to famine, and it was severely visited by this calamity six times during the 19th century—in 1803-1804, 1815-1816, 1825-1826, 1837-1838, 1868-1869 and 1899-1900. Farukhabad is one of the healthiest districts in the Doab, but fevers are prevalent during August and September. The average annual mean temperature is almost 80° F.; the average annual rainfall, 29.4 in.

In the early part of the 18th century, when the Mogul empire was breaking up, Mahommed Khan, a Bangash Afghan from a village near Kaimganj, governor of Allahabad and later of Malwa, established a considerable state of which the present district of Farukhabad was the nucleus, founding the city of Farukhabad in 1714. After his death in 1743, his son and successor Kaim Khan was embroiled by Safdar Jang, the nawab wazir of Oudh, with the Rohillas, in battle with whom he lost his life in 1749. In 1750 his brother, Ahmad Khan, recovered the Farukhabad territories; but Safdar Jang called in the Mahrattas, and a struggle for the possession of the country began, which ended in 1771, on the death of Ahmad Khan, by its becoming tributary to Oudh. In 1801 the nawab wazir ceded to the British his lands in this district, with the tribute due from the nawab of Farukhabad, who gave up his sovereign rights in 1802. In 1804 the Mahrattas, under Holkar, ravaged this tract, but were utterly routed by Lord Lake at the town of Farukhabad. During the mutiny Farukhabad shared the fate of other districts, and passed entirely out of British hands for a time. The native troops, who had for some time previously evinced a seditious spirit, finally broke into rebellion on the 18th of June 1857, and placed the titular nawab of Farukhabad on the throne. The English military residents took shelter in the fort, which they held until the 4th of July, when, the fort being undermined, they endeavoured to escape by the river. One boat succeeded in reaching Cawnpore, but only to fall into the hands of Nana. Its occupants were made prisoners, and perished in the massacre of the 10th of July. The other boat was stopped on its progress down the river, and all those in it were captured or killed, except four who escaped. The prisoners were conveyed back to Fatehgarh, and murdered there by the nawab on the 19th of July. The rebels were defeated in several engagements, and on the 3rd of January 1858 the English troops recaptured Fatehgarh fort; but it was not till May that order was thoroughly re-established. In 1901 the population was 925,812, showing an increase of 8% in one decade. Part of the district is watered by distributaries of the Ganges canal; it is traversed throughout its length by the Agra-Cawnpore line of the Rajputana railway, and is also served by a branch of the East Indian system. Tobacco, opium, potatoes and fruit, cotton-prints, scent and saltpetre are among the principal exports.

**FASCES,** in Roman antiquities, bundles of elm or birch rods from which the head of an axe projected, fastened together by a red strap. Nothing is known of their origin, the tradition that represents them as borrowed by one of the kings from Etruria resting on insufficient grounds. As the emblem of official authority, they were carried by the lictors, in the left hand and on the left shoulder, before the higher Roman magistrates; at the funeral of a deceased magistrate they were carried behind the bier. The lictors and the fasces were so inseparably connected that they came to be used as synonymous terms. The fasces originally represented the power over life and limb possessed by the kings, and after the abolition of the monarchy, the consuls, like the kings, were preceded by twelve fasces. Within the precincts of the city the axe was removed, in recognition of the right of appeal (*provocat-io*) to the people in a matter of life and death; outside Rome, however, each consul retained the axe, and was preceded by his own lictors, not merely by a single *accensus* (supernumerary), as was

originally the case within the city when he was not officiating. Later, the lictors preceded the officiating consul, and walked behind the other. Valerius Publicola, the champion of popular rights, further established the custom that the fasces should be lowered before the people, as the real representatives of sovereignty (Livy ii. 7; Florus i. 9; Plutarch, *Publicola*, 10); lowering the fasces was also the manner in which an inferior saluted a superior magistrate. A dictator, as taking the place of the two consuls, had 24 fasces (including the axe even within the city); most of the other magistrates had fasces varying in number, with the exception of the censors, who, as possessing no executive authority, had none. Fasces were given to the Flamen Dialis and (after 42 B.C.) even to the Vestals. During the times of the republic, a victorious general, who had been saluted by the title of imperator by his soldiers, had his fasces crowned with laurel (Cicero, *Pro Ligario*, 3). Later, under the empire, when the emperor received the title for life on his accession, it became restricted to him, and the laurel was regarded as distinctive of the imperial fasces (see Mommsen, *Römisches Staatsrecht*, i., 1887, p. 373).

**FASCIA** (Latin for a bandage or fillet), a term used for many objects which resemble a band in shape; thus in anatomy it is applied to the layers of fibrous connective tissue which sheathe the muscles or cover various parts or organs in the body, and in zoology, and particularly in ornithology, to bands or stripes of colour. In architecture the word is used of the bands into which the architrave of the Ionic and Corinthian orders is subdivided; their origin would seem to have been derived from the superimposing of two or more beams of timber to span the opening between columns and to support a superincumbent weight; the upper beam projected slightly in front of the lower, and similar projections were continued in the stone or marble beam though in one block. In the Roman Corinthian order the fasciae, still projecting one in front of the other, were subdivided by small mouldings sometimes carved. The several bands are known as the first or upper fascia, the second or middle fascia and the third or lower fascia. The term is sometimes applied to flat projecting bands in Renaissance architecture when employed as string courses. It is also used, though more commonly in the form "facia," of the band or plate over a shop-front, on which the name and occupation of the tradesman is written.

**FASCINATION** (from Lat. *fascinare*, to bewitch, probably connected with the Gr.  $\beta \alpha \sigma \kappa \alpha (\nu \epsilon i \nu, to speak ill of, to bewitch)$ , the art of enchanting or bewitching, especially through the influence of the "evil eye," and so properly of the exercise of an evil influence over the reason or will. The word is thus used of the supposed paralysing attraction exercised by some reptiles on their victims. It is also applied to a particular hypnotic condition, marked by muscular contraction, but with consciousness and power of remembrance left. In a quite general sense, fascination means the exercise of any charm or strong attraction.

**FASCINE** (from the Lat. *fascina, fascis,* a bundle of sticks), a large faggot of brushwood used in the revetments of earthworks and for other purposes of military engineering. The British service pattern of fascine is 18 ft. long; it is tied as tightly as possible at short intervals, and the usual diameter is 9 in. Similar bundles of wood formed part of the foundations of the early lake-dwellings, and in modern engineering fascines are used in making rough roads over marshy ground and in building river and sea walls and breakwaters.

**FASHION** (adapted from Fr. *façon*, Lat. *factio*, making, *facere*, to do or make), the action of making, hence the shape or form which anything takes in the process of making. It is thus used in the sense of the pattern, kind, sort, manner or mode in which a thing is done. It is particularly used of the common or customary way in which a thing is done, and so is applied to the manner or custom prevalent at or characteristic of a particular period, especially of the manner of dress, &c., current at a particular period in any rank of society, for which the French term is *modes* (see COSTUME).

**FASHODA** (renamed, 1904, KODOK), a post on the west bank of the Upper Nile, Anglo-Egyptian Sudan, in 9° 53' N., 32° 8' E., 459 m. S., by river, of Khartum. It is the headquarters of the mudiria (province) of the Upper Nile. The station is built on a flat peninsula connected by a narrow strip of land with a ridge which runs parallel with the river. The surrounding country is mostly deep swamp and the station is most unhealthy; mosquitoes are present in millions. The climate is always damp and the temperature rarely below 98° in the shade. The government offices are well-built brick structures. In front of the station is a long low island, and when the Nile is at its lowest this channel becomes dry. Several roads from Kordofan converge on the Nile at this point, and near the station is the residence of the *mek*, or king, of the Shilluk tribe, whose designation of the post was adopted when it was decided to abandon the use of Fashoda. At Lul, 18 m. farther up stream, is an Austrian Roman Catholic mission station.

An Egyptian military post was established at Fashoda in 1865. It was then a trading station of some importance, slaves being the chief commodity dealt in. In 1883-1884 the place fell into the hands of the Mahdists. On the 10th of July 1898 it was occupied by a French force from the Congo under Commandant J.B. Marchand, a circumstance which gave rise to a state of great tension between Great Britain and France. On the 11th of December following the French force withdrew, returning home via Abyssinia (see AFRICA, § 5, and Egypt: *History*, and *Military Operations*).

**FAST AND LOOSE,** a cheating game played at fairs by sharpers. A strap, usually in the form of a belt, is rolled or doubled up with a loop in the centre, and laid edgewise on a table. The swindler then bets that the loop cannot be caught with a stick or skewer as he unrolls the belt. As this looks to be easy to do the bet is often taken, but the sharper unrolls the belt in such a manner as to make the catching of the loop practically impossible. Centuries ago it was much practised by gipsies, a circumstance alluded to by Shakespeare in *Anthony and Cleopatra* (iv. 12):

"Like a right gipsy, hath, at fast and loose, Beguiled me to the very heart of loss."

From this game is taken the colloquial expression "to play fast and loose." At the present day it is called "prick the garter" or "prick the loop."

**FASTI,** in Roman antiquities, plural of the Latin adjective *fastus*, but more commonly used as a substantive, derived from *fas*, meaning what is binding, or allowable, by divine law, as opposed to *jus*, or human law. *Fasti dies* thus came to mean the days on which law business might be transacted without impiety, corresponding to our own "lawful days"; the opposite of the *dies fasti* were the *dies nefasti*, on which, on various religious grounds, the courts could not sit. The word *fasti* itself then came to be used to denote lists or registers of various kinds, which may be divided into two great classes.

1. Fasti Diurni, divided into urbani and rustici, a kind of official year-book, with dates and directions for religious ceremonies, court-days, market-days, divisions of the month, and the like. Until 304 B.C. the lore of the *calendaria* remained the exclusive and lucrative monopoly of the priesthood; but in that year Gnaeus Flavius, a pontifical secretary, introduced the custom of publishing in the forum tables containing the requisite information, besides brief references to victories, triumphs, prodigies, &c. This list was the origin of the public Roman calendar, in which the days were divided into weeks of eight days each, and indicated by the letters A-H. Each day was marked by a certain letter to show its nature; thus the letters F., N., N.P., F.P., Q. Rex C.F., C., EN., stood for fastus, nefastus, nefastus in some unexplained sense, fastus priore, quando rex (sacrorum) comitiavit fastus, comitialis and intercisus. The dies intercisi were partly fasti and partly nefasti. Ovid's Fasti is a poetical description of the Roman festivals of the first six months, written to illustrate the Fasti published by Julius Caesar after he remodelled the Roman year. Upon the cultivators fewer feasts, sacrifices, ceremonies and holidays were enjoined than on the inhabitants of cities; and the rustic fasti contained little more than the ceremonies of the calends, nones and ides, the fairs, signs of zodiac, increase and decrease of the days, the tutelary gods of each month, and certain directions for rustic labours to be performed each month.

2. Fasti Magistrales, Annales or Historici, were concerned with the several feasts, and everything relating to the gods, religion and the magistrates; to the emperors, their birthdays, offices, days consecrated to them, with feasts and ceremonies established in their honour or for their prosperity. They came to be denominated *magni*, by way of distinction from the bare calendar, or *fasti diurni*. Of this class, the *fasti consulares*, for example, were a chronicle or register of time, in which the several years were denoted by the respective consuls, with the principal events which happened during their consulates. The fasti triumphales and sacerdotales contained a list in chronological order of persons who had obtained a triumph, together with the name of the conquered people, and of the priests. The word *fasti* thus came to be used in the general sense of "annals" or "historical records." A famous specimen of the same class are the fasti Capitolini, so called because they were deposited in the Capitol by Alexander Farnese, after their excavation from the Roman forum in 1547. They are chiefly a nominal list of statesmen, victories, triumphs, &c., from the expulsion of the kings to the death of Augustus. A considerable number of fasti of the first class have also been discovered; but none of them appear to be older than the time of Augustus. The Praenestine calendar, discovered in 1770, arranged by the famous grammarian Verrius Flaccus, contains the months of January, March, April and December, and a portion of February. The tablets give an account of festivals, as also of the triumphs of Augustus and Tiberius. There are still two complete calendars in existence, an official list by Furius Dionysius Philocalus (A.D. 354), and a Christian version of the official calendar, made by Polemius Silvius (A.D. 448). But some kinds of fasti included under the second general head were, from the very beginning, written for publication. The Annales Pontificumdifferent from the *calendaria* properly so called-were "annually exhibited in public on a white table, on which the memorable events of the year, with special mention of the prodigies, were set down in the briefest possible manner." Any one was allowed to copy them. Like the pontifices, the augurs also had their books, *libri augurales*. In fact, all the state offices had their fasti corresponding in character to the consular fasti named above.

For the best text and account of the fragments of the Fasti see *Corpus Inscriptionum Latinarum*, i. (2nd ed.); on the subject generally, Teuffel-Schwabe, *Hist. of Roman Literature*, §§ 74, 75, and article by Bouché-Leclercq in Daremberg and Saglio, *Dictionnaire des antiquités*.

**FASTING** (from "fast," derived from old Teutonic *fastêjan*; synonyms being the Gr. νηστεύειν, late Lat. *jejunare*), an act which is most accurately defined as an abstention from meat, drink and all natural food for a determined period. So it is defined by the Church of England, in the 16th homily, on the authority of the Council of Chalcedon<sup>1</sup> and of the primitive church generally. In a looser sense the word is employed to denote abstinence from certain kinds of food merely; and this meaning, which in ordinary usage is probably the more prevalent, seems also to be at least tolerated by the Church of England when it speaks of "fast or abstinence days," as if fasting and abstinence were synonymous.<sup>2</sup> More vaguely still, the word is occasionally used as an equivalent for moral self-restraint generally. This secondary and metaphorical sense (νηστεύειν κακότητος) occurs in one of the fragments of

Empedocles. For the physiology of fasting, see DIETETICS; NUTRITION; also CORPULENCE.

Starvation itself (see also HUNGER AND THIRST) is of the nature of a disease which may be prevented by diet; nevertheless there are connected with it a few peculiarities of scientific and practical interest. "Inedia," as it is called in the nomenclature of diseases by the London College of Physicians, is of two kinds, arising from *want of food* and from *want of water*. When entirely deprived of nutriment the human body is ordinarily capable of supporting life under ordinary circumstances for little more than a week. In the spring of 1869 this was tried on the person of a "fasting girl" in South Wales. The parents made a show of their child, decking her out like a bride on a bed, and asserting that she had eaten no food for two years. Some reckless enthusiasts for truth set four trustworthy hospital nurses to watch her; the Celtic obstinacy of the parents was roused, and in defence of their imposture they allowed death to take place in eight days. Their trial and conviction for manslaughter may be found in the daily periodicals of the date; but, strange to say, the experimental physiologists and nurses escaped scot-free. There is no doubt that in this instance the unnatural quietude, the grave-like silence, and the dim religious light in which the victim was kept contributed to deter death.

One thing which remarkably prolongs life is a supply of water. Dogs furnished with as much as they wished to drink were found by M. Chossat (Sur l'inanition, Paris, 1843) to live three times as long as those who were deprived of solids and liquids at the same time. Even wetting the skin with sea-water has been found useful by shipwrecked sailors. Four men and a boy of fourteen who got shut in the Tynewydd mine near Porth, in South Wales, in the winter of 1876-1877 for ten days without food, were not only alive when released, but several of them were able to walk, and all subsequently recovered. The thorough saturation of the narrow space with aqueous vapour, and the presence of drain water in the cutting, were probably their chief preservatives—assisted by the high even temperature always found in the deeper headings of coal mines, and by the enormous compression of the confined air. This doubtless prevented evaporation, and retarded vital processes dependent upon oxidation. The accumulation of carbonic acid in the breathed air would also have a similar arrestive power over destructive assimilation. These prisoners do not seem to have felt any of the severer pangs of hunger, for they were not tempted to eat their candles. With the instinctive feeling that darkness adds a horror to death, they preferred to use them for light. At the wreck of the "Medusa" frigate in 1816, fifteen people survived on a raft for thirteen days without food.

It is a paradoxical fact, that the supply of the stomach even from the substance of the starving individual's body should tend to prolong life. In April 1874 a case was recorded of exposure in an open boat for 32 days of three men and two boys, with only ten days' provisions, exclusive of old boots and jelly-fish. They had a fight in their delirium, and one was severely wounded. As the blood gushed out he lapped it up; and instead of suffering the fatal weakness which might have been expected from the haemorrhage, he seems to have done well. Experiments were performed by a French physiologist, M. Anselmier (*Archives gén. de médecine*, 1860, vol. i. p. 169), with the object of trying to preserve the lives of dogs by what he calls "artificial autophagy." He fed them on the blood taken from their own veins daily, depriving them of all other food, and he found that the fatal cooling incident to starvation was thus postponed, and existence prolonged. Life lasted till the emaciation had proceeded to six-tenths of the animal's weight, as in Chossat's experiments, extending to the fourteenth day, instead of ending on the tenth day, as was the case with other dogs which were not bled.

Various people have tried, generally for exhibition purposes, how long they could fast from food with the aid merely of water or some medicinal preparation; but these exhibitions cannot be held to have proved anything of importance. A man named Jacques in this way fasted at Edinburgh for thirty days in 1888, and in London for forty-two days in 1890, and for fifty days in 1891; and an Italian named Succi fasted for forty days in 1890.

*Religious Fasts.*—Fasting is of special interest when considered as a discipline voluntarily submitted to for moral and religious ends. As such it is very widely diffused. Its modes and motives vary considerably according to climate, race, civilization and other circumstances; but it would be difficult to name any religious system of any description in which it is wholly unrecognized.<sup>3</sup> The origin of the practice is very obscure.<sup>4</sup> In his *Principles of Sociology* Herbert Spencer collected, from the accounts we have of various savage tribes in widely separated parts of the globe, a considerable body of evidence, from which he suggested that it may have arisen out of the custom of providing refreshments for the dead, either by actually feeding the corpse, or by leaving eatables and drinkables for its use. It is suggested that the fasting which was at first the natural and inevitable result of such sacrifice on behalf

of the dead may eventually have come to be regarded as an indispensable concomitant of all sacrifice, and so have survived as a well-established usage long after the original cause had ceased to operate.<sup>5</sup> But this theory is repudiated by the best authorities; indeed its extreme precariousness at once becomes evident when it is remembered that, now at least, it is usual for religious fasts to precede rather than to follow sacrificial and funeral feasts, if observed at all in connexion with these. Spencer himself (p. 284) admits that "probably the practice arises in more ways than one," and proceeds to supplement the theory already given by another-that adopted by E.B. Tylor-to the effect that it originated in the desire of the primitive man to bring on at will certain abnormal nervous conditions favourable to the seeing of those visions and the dreaming of those dreams which are supposed to give the soul direct access to the objective realities of the spiritual world.<sup>6</sup> Probably, if we leave out of sight the very numerous and obvious cases in which fasting, originally the natural reflex result of grief, fear or other strong emotion, has come to be the usual conventional symbol of these, we shall find that the practice is generally resorted to, either as a means of somehow exalting the higher faculties at the expense of the lower, or as an act of homage to some object of worship. The axiom of the Amazulu, that "the continually stuffed body cannot see secret things," meets even now with pretty general acceptance; and if the notion that it is precisely the food which the worshipper foregoes that makes the deity more vigorous to do battle for his human friend be confined only to a few scattered tribes of savages, the general proposition that "fasting is a work of reverence toward God" may be said to be an article of the Catholic faith.<sup>7</sup>

Although fasting as a religious rite is to be met with almost everywhere, there are comparatively few religions, and those only of the more developed kind, which appoint definite public fasts, and make them binding at fixed seasons upon all the faithful. Brahmanism, for example, does not appear to enforce any stated fast upon the laity.<sup>8</sup> Among the ancient Egyptians fasting seems to have been associated with many religious festivals, notably with that of Isis (Herod. ii. 40), but it does not appear that, so far as the common people were concerned, the observance of these festivals (which were purely local) was compulsory. The  $v\eta\sigma\tau\epsilon(\alpha)$  on the third day of the Thesmophoria at Athens was observed only by the women attending the festival (who were permitted to eat cakes made of sesame and honey). It is doubtful whether the fast mentioned by Livy (xxxvi. 37) was intended to be general or sacerdotal merely.

Jewish Fasts.—While remarkable for the cheerful, non-ascetic character of their worship, the Jews were no less distinguished from all the nations of antiquity by their annual solemn fast appointed to be observed on the 10th day of the 7th month (Tisri), the penalty of disobedience being death. The rules, as laid down in Lev. xvi. 29-34, xxiii. 27-32 and Numb. xxix. 7-11, include a special injunction of strict abstinence ("ye shall afflict your souls"<sup>9</sup>) from evening to evening. This fast was intimately associated with the chief feast of the year. Before that feast could be entered upon, the sins of the people had to be confessed and (sacramentally) explated. The fast was a suitable concomitant of that contrition which befitted the occasion. The practice of stated fasting was not in any other case enjoined by the law; and it is generally understood to have been forbidden on Sabbath.<sup>10</sup> At the same time, private and occasional fasting, being regarded as a natural and legitimate instinct, was regulated rather than repressed. The only other provision about fasting in the Pentateuch is of a regulative nature, Numb. xxx. 14 (13), to the effect that a vow made by a woman "to afflict the soul" may in certain circumstances be cancelled by her husband.

The history of Israel from Moses to Ezra furnishes a large number of instances in which the fasting instinct was obeyed both publicly and privately, locally and nationally, under the influence of sorrow, or fear, or passionate desire. See, for example, Judg. xx. 26; 1 Sam. vii. 6 (where the national fast was conjoined with the ceremony of pouring out water before the Lord); Jer. xxxvi. 6, 9; and 2 Sam. xii. 16.<sup>11</sup> Sometimes the observance of such fasts extended over a considerable period of time, during which, of course, the stricter *jejunium* was conjoined with *abstinentia* (Dan. x. 2). Sometimes they lasted only for a day. In Jonah iii. 6, 7, we have an illustrative example of the rigour with which a strict fast might be observed; and such passages as Joel ii. and Isa. lviii. 5 enable us to picture with some vividness the outward accompaniments of a Jewish fast day before the exile.

During the exile many occasional fasts were doubtless observed by the scattered communities, in sorrowful commemoration of the various sad events which had issued in the downfall of the kingdom of Judah. Of these, four appear to have passed into general use—the fasts of the 10th, 4th, 5th and 7th months—commemorating the beginning of the siege of Jerusalem, the capture of the city, the destruction of the temple, the assassination of Gedaliah. As time rolled on they became invested with increasing sanctity; and though the

prophet Zechariah, when consulted about them at the close of the exile (Zech. viii. 19), had by no means encouraged the observance of them, the rebuilding of the temple does not appear to have been considered an achievement of sufficient importance to warrant their discontinuance. It is worthy of remark that Ezekiel's prophetic legislation contains no reference to any fast day; the book of Esther (ix. 31), on the other hand, records the institution of a new fast on the 13th of the 12th month.

In the post-exile period private fasting was much practised by the pious, and encouraged by the religious sentiment of the time (see Judith viii. 6; Tob. xii. 8, and context; Sirach xxxiv. 26, Luke ii. 37 and xviii. 12). The last reference contains an allusion to the weekly fasts which were observed on the 2nd and 5th days of each week, in commemoration, it was said, of the ascent and descent of Moses at Sinai. The real origin of these fasts and the date of their introduction are alike uncertain; it is manifest, however, that the observance of them was voluntary, and never made a matter of universal obligation. It is probable that the Sadducees, if not also the Essenes, wholly neglected them. The second book (Seder Moed) of the Mishna contains two tractates bearing upon the subject of fasting. One (Yoma, "the day") deals exclusively with the rites which were to be observed on the great day of expiation or atonement the other (Taanith, "fast") is devoted to the other fasts, and deals especially with the manner in which occasional fasting is to be gone about if no rain shall have fallen on or before the 17th day of Marcheschwan. It is enacted that in such a case the rabbis shall begin with a light fast of three days (Monday, Thursday, Monday), i.e. a fast during which it is lawful to work, and also to wash and anoint the person. Then, in the event of a continued drought, fasts of increasing intensity are ordered; and as a last resort the ark is to be brought into the street and sprinkled with ashes, the heads of the Nasi and Ab-beth-din being at the same time similarly sprinkled.<sup>12</sup> In no case was any fast to be allowed to interfere with new-moon or other fixed festival. Another institution treated with considerable fulness in the treatise *Taanith* is that of the אנשי מעמד (*viri stationis*), who are represented as having been laymen severally representing the twenty-four classes or families into which the whole commonwealth of the laity was divided. They used to attend the temple in rotation, and be present at the sacrifices; and as this duty fell to each in his turn, the men of the class or family which he represented were expected in their several cities and places of abode to engage themselves in religious exercises, and especially in fasting. The suggestion will readily occur that here may be the origin of the Christian stationes. But neither Tertullian nor any other of the fathers seems to have been aware of the existence of any such institution among the Jews; and very probably the story about it may have been a comparatively late invention. It ought to be borne in mind that the Aramaic portion of the *Megillath Taanith* (a document considerably older than the treatises in the Mishna) gives a catalogue only of the days on which fasting was forbidden. The Hebrew part (commented on by Maimonides), in which numerous fasts are recommended, is of considerably later date. See Reland, Antig. Hebr. p. iv. c. 10; Derenbourg, Hist. de Palestine, p. 439.

Practice of the Early Christian Church.-Jesus Himself did not inculcate asceticism in His teaching, and the absence of that distinctive element from His practice was sometimes a subject of hostile remark (Matt. xi. 19). We read, indeed, that on one occasion He fasted forty days and forty nights; but the expression, which is an obscure one, possibly means nothing more than that He endured the privations ordinarily involved in a stay in the wilderness. While we have no reason to doubt that He observed the one great national fast prescribed in the written law of Moses, we have express notice that neither He nor His disciples were in the habit of observing the other fasts which custom and tradition had established. See Mark ii. 18, where the correct reading appears to be-"The disciples of John, and the Pharisees, were fasting" (some customary fast). He never formally forbade fasting, but neither did He ever enjoin it. He assumed that, in certain circumstances of sorrow and need, the fasting instinct would sometimes be felt by the community and the individual; what He was chiefly concerned about was to warn His followers against the mistaken aims which His contemporaries were so apt to contemplate in their fasting (Matt. vi. 16-18). In one passage, indeed, He has been understood as practically commanding resort to the practice in certain circumstances. It ought to be noted, however, that Matt. xvii. 21 is probably spurious; and that in Mark ix. 29 the words "and fasting" are omitted by Westcott and Hort as well as by Tischendorf on the evidence of the Cod. Sinaiticus (first hand) and Cod. Vaticanus.<sup>13</sup> The reference to "the fast" in Acts xxvii. 9 has generally been held to indicate that the apostles continued to observe the yearly Jewish fast. But this inference is by no means a necessary one. According to Acts xiii. 2, 3, xiv. 23, they conjoined fasting with prayer at ordinations, and doubtless also on some other solemn occasions; but at the same time the liberty of the Christian "in respect of an holiday, or of the new moon, or of the Sabbath" was strongly insisted on, by one of them at least, who declared that meat whether taken or abstained from commendeth not to God (Col. ii. 16-23; 1 Cor. viii. 8; Rom. xiv. 14-22; 1 Tim. iv. 3-5). The

fastings to which the apostle Paul alludes in 2 Cor. vi. 5, xi. 27, were rather of the nature of inevitable hardships cheerfully endured in the discharge of his sacred calling. The words which appear to encourage fasting in 1 Cor. vii. 5 are absent from all the oldest manuscripts and are now omitted by all critics;<sup>14</sup> and on the whole the precept and practice of the New Testament, while recognizing the propriety of occasional and extraordinary fasts, seem to be decidedly hostile to the imposition of any of a stated, obligatory and general kind.

The usage of the Christian church during the earlier centuries was in this, as in so many other matters, influenced by traditional Jewish feeling, and by the force of old habit, quite as much as by any direct apostolic authority or supposed divine command. Habitual temperance was of course in all cases regarded as an absolute duty; and "the bridegroom" being absent, the present life was regarded as being in a sense one continual "fast." Fasting in the stricter sense was not unknown; but it is certain that it did not at first occupy nearly so prominent a place in Christian ritual as that to which it afterwards attained. There are early traces of the customary observance of the Wednesday and Friday fasts-the dies stationum (Clem. Alex. Strom. vii. 877), and also of a "quadragesimal" fast before Easter. But the very passage which proves the early origin of "quadragesima," conclusively shows how uncertain it was in its character, and how unlike the Catholic "Lent." Irenaeus, quoted by Eusebius (v. 24), informs us with reference to the customary yearly celebration of the mystery of the resurrection of our Lord, that disputes prevailed not only with respect to the day, but also with respect to the manner of fasting in connexion with it. "For some think that they ought to fast only one day, some two, some more days; some compute their day as consisting of *forty* hours night and day; and this diversity existing among those that observe it is not a matter that has just sprung up in our times, but long ago among those before us." It was not pretended that the apostles had legislated on the matter, but the general and natural feeling that the anniversaries of the crucifixion and the resurrection of Christ ought to be celebrated by Christians took expression in a variety of ways according to the differing tastes of individuals. No other stated fasts, besides those already mentioned, can be adduced from the time before Irenaeus; but there was also a tendency-not unnatural in itself, and already sanctioned by Jewish practice-to fast by way of preparation for any season of peculiar privilege. Thus, according to Justin Martyr (Apol. ii. 93), catechumens were accustomed to fast before baptism, and the church fasted with them. To the same feeling the quadragesimal fast which (as already stated) preceded the joyful feast of the resurrection, is to be, in part at least, attributed. As early as the time of Tertullian it was also usual for communicants to prepare themselves by fasting for receiving the eucharist. But that Christian fasts had not yet attained to the exaggerated importance which they afterwards assumed is strikingly shown in the well-known Shepherd of Hermas (lib. iii. sim. v.), where it is declared that "with merely outward fasting nothing is done for true virtue"; the believer is exhorted chiefly to abstain from evil and seek to cleanse himself from feelings of covetousness, and impurity, and revenge: "on the day that thou fastest content thyself with bread, vegetables and water, and thank God for these. But reckon up on this day what thy meal would otherwise have cost thee, and give the amount that it comes to to some poor widow or orphan, or to the poor." The right of bishops to ordain special fasts, "ex aliqua sollicitudinis ecclesiasticae causa" (Tertullian), was also recognized.

Later Practice of the Church.—According to an expression preserved by Eusebius (H.E. v. 18), Montanus was the first to give laws (to the church) on fasting. Such language, though rhetorical in form, is substantially correct. The treatise of Tertullian,-Concerning Fasting: against the Carnal,—written as it was under Montanistic influence, is doubly interesting, first as showing how free the practice of the church down to that time had been, and then as foreshadowing the burdensome legislation which was destined to succeed. In that treatise (c. 15) he approves indeed of the church practice of not fasting on Saturdays and Sundays (as elsewhere, De corona, c. 3, he had expressed his concurrence in the other practice of observing the entire period between Easter and Pentecost as a season of joy); but otherwise he evinces great dissatisfaction with the indifference of the church as to the number, duration and severity of her fasts.<sup>15</sup> The church thus came to be more and more involved in discussions as to the number of days to be observed, especially in "Lent," as fast days, as to the hour at which a fast ought to terminate (whether at the 3rd or at the 9th hour), as to the rigour with which each fast ought to be observed (whether by abstinence from flesh merely, abstinentia, or by abstinence from lacticinia, xerophagia, or by literal jejunium), and as to the penalties by which the laws of fasting ought to be enforced. Almost a century, however, elapsed between the composition of the treatise of Tertullian (cir. 212) and the first recorded instances of ecclesiastical legislation on the subject. These, while far from indicating that the church had attained unanimity on the points at issue, show progress in the direction of the later practice of catholicism. About the year 306 the synod of Illiberis in its 26th canon decided in favour of the observance of the Saturday fast.<sup>16</sup> The council of Ancyra in 314, on

the other hand, found it necessary to legislate in a somewhat different direction,—by its 14th canon enjoining its priests and clerks at least to taste meat at the love feasts.<sup>17</sup> The synod of Laodicea framed several rules with regard to the observance of "Lent," such as that "during Lent the bread shall not be offered except on Saturday and Sunday" (can. 49), that "the fast shall not be relaxed on the Thursday of the last week of Lent, thus dishonouring the whole season; but the fast shall be kept throughout the whole period" (can. 50), that "during the fast no feasts of the martyrs shall be celebrated" (can. 51), and that "no wedding or birthday feasts shall be celebrated during Lent" (can. 52). The synod of Hippo (393 A.D.) enacted that the sacrament of the altar should always be taken fasting, except on the Thursday before Easter. Protests in favour of freedom were occasionally raised, not always in a very wise manner, or on very wise grounds, by various individuals such as Eustathius of Sebaste (c. 350), Aerius of Pontus (c. 375), and Jovinian, a Roman monk (c. 388). Of the Eustathians, for example (whose connexion with Eustathius can hardly be doubted), the complaint was made that "they fast on Sundays, but eat on the fast-days of the church." They were condemned by the synod of Gangra in Paphlagonia in the following canons:-Can. 19, "If any one fast on Sunday, let him be anathema."<sup>18</sup> Can. 20, "If any one do not keep the fasts universally commanded and observed by the whole church, let him be anathema." Jovinian was very moderate. He "did not allow himself to be hurried on by an inconsiderate zeal to condemn fasting, the life of celibacy, monachism, considered purely in themselves.... He merely sought to show that men were wrong in recommending so highly and indiscriminately the life of celibacy and fasting, though he was ready to admit that both under certain circumstances might be good and useful" (Neander). He was nevertheless condemned (390) both by Pope Siricius at a synod in Rome, and by Ambrose at another in Milan. The views of Aerius, according to the representations of his bitter opponent Epiphanius (Haer. 75, "Adv. Aerium"), seem on this head at least, though unpopular, to have been characterized by great wisdom and sobriety. He did not condemn fasting altogether, but thought that it ought to be resorted to in the spirit of gospel freedom according as each occasion should arise. He found fault with the church for having substituted for Christian liberty a yoke of Jewish bondage.<sup>19</sup>

Towards the beginning of the 5th century we find Socrates (439) enumerating (H.E. v. 22) a long catalogue of the different fasting practices of the church. The Romans fasted three weeks continuously before Easter (Saturdays and Sundays excepted). In Illyria, Achaia and Alexandria the quadragesimal fast lasted six weeks. Others (the Constantinopolitans) began their fasts seven weeks before Easter, but fasted only on alternate weeks, five days at a time. Corresponding differences as to the manner of abstinence occurred. Some abstained from all living creatures; others ate fish; others fish and fowl. Some abstained from eggs and fruit; some confined themselves to bread; some would not take even that. Some fasted till three in the afternoon, and then took whatever they pleased. "Other nations," adds the historian, "observe other customs in their fasts, and that for various reasons. And since no one can show any written rule about this, it is plain the apostles left this matter free to every one's liberty and choice, that no one should be compelled to do a good thing out of necessity and fear." When Leo the Great became pope in 440, a period of more rigid uniformity began. The imperial authority of Valentinian helped to bring the whole West at least into submission to the see of Rome; and ecclesiastical enactments had, more than formerly, the support of the civil power. Though the introduction of the four Ember seasons was not entirely due to him, as has sometimes been asserted, it is certain that their widespread observance was due to his influence, and to that of his successors, especially of Gregory the Great. The tendency to increased rigour may be discerned in the 2nd canon of the synod of Orleans (541), which declares that every Christian is bound to observe the fast of Lent, and, in case of failure to do so, is to be punished according to the laws of the church by his spiritual superior; in the 9th canon of the synod of Toledo (653), which declares the eating of flesh during Lent to be a mortal sin; in Charlemagne's law for the newly conquered Saxony, which attaches the penalty of death to wanton disregard of the holy season.<sup>20</sup> Baronius mentions that in the 11th century those who ate flesh during Lent were liable to have their teeth knocked out. But it ought to be remembered that this severity of the law early began to be tempered by the power to grant dispensations. The so-called Butter Towers (Tours de beurre) of Rouen, 1485-1507, Bourges and other cities, are said to have been built with money raised by sale of dispensations to eat lacticinia on fast days.

It is probable that the apparent severity of the medieval Latin Church on this subject was largely due to the real strictness of the Greek Church, which, under the patriarch Photius in 864, had taken what was virtually a new departure in its fasting praxis. The rigour of the fasts of the modern Greek Church is well known; and it can on the whole be traced back to that comparatively early date. Of the nine fundamental laws of that church (ἐννέα παραγγέλματα τῆς ἐκκλησίας) two are concerned with fasting. Besides fasts of an occasional and extraordinary nature, the following are recognized as of stated and universal obligation:

-(1) The Wednesday and Friday fasts throughout the year (with the exception of the period between Christmas and Epiphany, the Easter week, the week after Whitsunday, the third week after Epiphany); (2) The great yearly fasts, viz. that of Lent, lasting 48 days, from the Monday of Sexagesima to Easter eve; that of Advent, 39 days, from November 15 to Christmas eve; that of the Theotokos (νηστεία τῆς Θεοτόκου), from August 1 to August 15; that of the Holy Apostles, lasting a variable number of days from the Monday after Trinity; (3) The minor yearly fasts before Epiphany, before Whitsunday, before the feasts of the transfiguration, the invention of the cross, the beheading of John the Baptist. During even the least rigid of these the use of flesh and lacticinia is strictly forbidden; fish, oil and wine are occasionally conceded, but not before two o'clock in the afternoon. The practice of the Coptic church is almost identical with this. A week before the Great Fast (Lent), a fast of three days is observed in commemoration of that of the Ninevites, mentioned in the book of Jonah. Some of the Copts are said to observe it by total abstinence during the whole period. The Great Fast continues fifty-five days; nothing is eaten except bread and vegetables, and that only in the afternoon, when church prayers are over. The Fast of the Nativity lasts for twenty-eight days before Christmas; that of the Apostles for a variable number of days from the Feast of the Ascension; and that of the Virgin for fifteen days before the Assumption. All Wednesdays and Fridays are also fast days except those that occur in the period between Easter and Whitsunday. The Armenians are equally strict; but (adds Rycaut) "the times seem so confused and without rule that they can scarce be recounted, unless by those who live amongst them, and strictly observe them, it being the chief care of the priest, whose learning principally consists in knowing the appointed times of fasting and feasting, the which they never omit on Sundays to publish unto the people."<sup>21</sup>

At the council of Trent no more than a passing allusion was made to the subject of fasting. The faithful were simply enjoined to submit themselves to church authority on the subject; and the clergy were exhorted to urge their flocks to the observance of frequent jejunia, as conducive to the mortification of the flesh, and as assuredly securing the divine favour. R.F.R. Bellarmine (De jejunio) distinguishes jejunium spirituale (abstinentia a vitiis), jejunium morale (parsimonia et temperantia cibi et potus), jejunium naturale (abstinentia ab omni prorsus cibo et potu, quacunque ratione sumpto), and jejunium ecclesiasticum. The last he defines simply as an abstinence from food in conformity with the rule of the church. It may be either voluntary or compulsory; and compulsory either because of a vow or because of a command. But the definition given by Alexander Halensis, which is much fuller, still retains its authority:---"Jejunium est abstinentia a cibo et potu secundum formam ecclesiae, intuitu satisfaciendi pro peccato et acquirendi vitam aeternam." It was to this last clause that the Reformers most seriously objected. They did not deny that fasting might be a good thing, nor did they maintain that the church or the authority might not ordain fasts, though they deprecated the imposition of needless burdens on the conscience. What they protested against was the theory of the opus operatum et meritorium as applied to fasting. As matter of fact, the Reformed churches in no case gave up the custom of observing fast days, though by some churches the number of such days was greatly reduced. In many parts of Germany the seasons of Lent and Advent are still marked by the use of emblems of mourning in the churches, by the frequency of certain phrases (Kyrie eleison, Agnus Dei) and the absence of others (Hallelujah, Gloria in excelsis) in the liturgical services, by abstinence from some of the usual social festivities, and by the non-celebration of marriages. And occasional fasts are more or less familiar. The Church of England has retained a considerable list of fasts; though Hooker (E.P. v. 72) had to contend with some who, while approving of fastings undertaken "of men's own free and voluntary accord as their particular devotion doth move them thereunto," yet "yearly or weekly fasts such as ours in the Church of England they allow no further than as the temporal state of the land doth require the same for the maintenance of seafaring men and preservation of cattle; because the decay of the one and the waste of the other could not well be prevented but by a politic order appointing some such usual change of diet as ours is."

In the practice of modern Roman Catholicism the following are recognized as fasting days, that is to say, days on which one meal only, and that not of flesh, may be taken in the course of twenty-four hours:—The forty days of Lent (Sundays excepted), all the Ember days, the Wednesdays and Fridays in Advent, and the vigils of certain feasts, namely, those of Whitsuntide, of St Peter and St Paul, of the Assumption of the Blessed Virgin Mary, of All Saints and of Christmas day. The following are simply days of abstinence, that is to say, days on which flesh at all events must not be eaten:—The Sundays in Lent, the three Rogation days, the feast of St Mark (unless it falls in Easter week), and all Fridays which are not days of fasting. In the Anglican Church, the "days of fasting or abstinence" are the forty days of Lent, the Ember days, the Rogation days, and all the Fridays in the year, except Christmas day. The evens or vigils before Christmas, the Purification of the Blessed Virgin Mary, the

Annunciation of the Blessed Virgin Mary, Easter day, Ascension day, Pentecost, St Matthias, the Nativity of St John Baptist, St Peter, St James, St Bartholomew, St Matthew, St Simon and St Jude, St Andrew, St Thomas, and All Saints are also recognized as "fast days." By the 64th canon it is enacted that "every parson, vicar or curate, shall in his several charge declare to the people every Sunday at the time appointed in the communion-book [which is, after the Nicene creed has been repeated] whether there be any holy-days or fast-days the week following." The 72nd canon ordains that "no minister or ministers shall, without licence and direction of the bishop under hand and seal, appoint or keep any solemn fasts, either publicly or in any private houses, other than such as by law are or by public authority shall be appointed, nor shall be wittingly present at any of them under pain of suspension for the first fault, of excommunication for the second, and of deposition from the ministry for the third." While strongly discouraging the arbitrary multiplication of public or private fasts, the English Church seems to leave to the discretion of the individual conscience every question as to the manner in which the fasts she formally enjoins are to be observed. In this connexion the homily Of Fasting may be again referred to. By a statute of the reign of Queen Elizabeth it was enacted that none should eat flesh on "fish days" (the Wednesdays, Fridays and Saturdays throughout the year) without a licence, under a penalty. In the Scottish Presbyterian churches days of "fasting, humiliation and prayer" are observed by ecclesiastical appointment in each parish once or twice every year on some day of the week preceding the Sunday fixed for the administration of the sacrament of the Lord's Supper. In some of the New England States, it has been usual for the governor to appoint by proclamation at some time in spring a day of fasting, when religious services are conducted in the churches. National fasts have more than once been observed on special occasions both in this country and in the United States of America.

On the subject of fasting the views of Aerius are to a large extent shared by modern Protestant moralists. R. Rothe, for example, who on this point may be regarded as a representative thinker, rejects the idea that fasting is a thing meritorious in itself, and is very doubtful of its value even as an aid to devotional feeling. Of course when bodily health and other circumstances require it, it becomes a duty; and as a means of self-discipline it may be used with due regard to the claims of other duties, and to the fitness of things. In this last aspect, however, habitual temperance will generally be found to be much more beneficial than occasional fasting. It is extremely questionable, in particular, whether fasting be so efficient as it is sometimes supposed to be in protecting against temptation to fleshly sin. The practice has a well-ascertained tendency to excite the imagination; and in so far as it disturbs that healthy and well-balanced interaction of body and mind which is the best or at least the normal condition for the practice of virtue, it is to be deprecated rather than encouraged (*Theologische Ethik*, sec. 873-875).

Mahommedan Fasts.—Among the Mahommedans, the month Ramadan, in which the first part of the Koran is said to have been received, is by command of the prophet observed as a fast with extraordinary rigour. No food or drink of any kind is permitted to be taken from daybreak until the appearance of the stars at nightfall. Extending as it does over the whole "month of raging heat," such a fast manifestly involves considerable self-denial; and it is absolutely binding upon all the faithful whether at home or abroad. Should its observance at the appointed time be interfered with by sickness or any other cause, the fast must be kept as soon afterwards as possible for a like number of days. It is the only one which Mahommedanism enjoins; but the doctors of the law recommend a considerable number of voluntary fasts, as for example on the tenth day of the month Moharram. This day, called the "Yom Ashoora," is held sacred on many accounts:--"because it is believed to be the day on which the first meeting of Adam and Eve took place after they were cast out of paradise; and that on which Noah went out from the ark; also because several other great events are said to have happened on this day; and because the ancient Arabs, before the time of the prophet, observed it by fasting. But what, in the opinion of most modern Moslems, and especially the Persians, confers the greatest sanctity on the day of Ashoora is the fact of its being that on which El-Hoseyn, the prophet's grandson, was slain a martyr at the battle of the plain of Karbala." It is the practice of many Moslems to fast on this day, and some do so on the preceding day also. Mahomet himself called fasting the "gate of religion," and forbade it only on the two great festivals, namely, on that which immediately follows Ramadan and on that which succeeds the pilgrimage. (See Lane, *Modern Egyptians*, chaps, iii., xxiv.)

<sup>&</sup>lt;sup>1</sup> "The Fathers assembled there ... decreed in that council that every person, as well in his private as public fast, should continue all the day without meat and drink, till after the evening prayer. And whosoever did eat or drink before the evening prayer was ended should be accounted and reputed not to consider the purity of his fast. This canon teacheth so evidently how fasting was used in the primitive church as by words it cannot be more plainly expressed" (*Of Good Works;* 

## and first, of Fasting.)

- 2 As indeed they are, etymologically; but, prior to the Reformation, a conventional distinction between *abstinentia* and *jejunium naturale* had long been recognized. "Exceptio eduliorum quorundam portionale jejunium est" (Tertullian).
- 3 Confucianism ought perhaps to be named as one. Zoroastrianism is frequently given as another, but hardly correctly. In the Liber *Sad-der*, indeed (Porta xxv.), we read, "Cavendum est tibi a jejunio; nam a mane ad vesperam nihil comedere non est bonum in religione nostra"; but according to the Père de Chinon (Lyons, 1671) the Parsee religion enjoins, upon the priesthood at least, no fewer than five yearly fasts. See Hyde, *Veterum Persarum religio*, pp. 449, 548 (ed. 1700).
- 4 During the middle ages the prevalent notion was that it had its origin in paradise. The germ at least of this idea is to be found in Tertullian, who says: "Acceperat Adam a Deo legem non gustandi de arbore agnitionis boni et mali, moriturus si gustasset; verum et ipse tunc in psychicum reversus ... facilius ventri quam Deo cessit, pabulo potius quam praecepto annuit, salutem gula vendidit, manducavit denique et periit, salvus alioquin si uni arbusculae jejunare maluisset" (*De jejuniis*, c. 3).
- 5 *Principles of Sociology*, i. pp. 170, 284, 285. Compare the passage in the appendix from Hanusch, *Slavischer Mythus*, p. 408.
- 6 Spencer, Prin. of Sociology, i. 256, &c.; E.B. Tylor, Primitive Culture, i. 277, 402; ii. 372, &c.
- 7 Hooker, E.P. v. 72. In the Westminster Assembly's Larger Catechism fasting is mentioned among the duties required by the second commandment.
- 8 The Brahmans themselves on the eleventh day after the full moon and the eleventh day after the new "abstain for sixty hours from every kind of sustenance"; and some have a special fast every Monday in November. See Picart, *The Religion and Manners of the Brahmins*.
- 9 נפש is here to be taken as substantially equivalent to "desire," "appetite."
- See Judith viii. 6. "And yet it may be a question whether they (the Jews) did not always fast upon Sabbath," says Hooker (*E.P.* v. 72, 7), who gives a curious array of evidence pointing in this direction. He even makes use of Neh. viii. 9-12, which might be thought to tell the other way. Justinian's phrase, "Sabbata Judaeorum a Mose in omne aevum jejunio dicata" (l. xxxvi. c. 2; comp. Suetonius, *Augustus*, 76) may be accounted for by the fact that the day of atonement is called Sabbat Sabbatôn ("a perfect Sabbath").
- 11 There is, as Graf (*Gesch. Bücher des A.T.* p. 41) has pointed out, no direct evidence that the fast on the 10th of the 7th month was ever observed before the exile. But the inference which he draws from this silence of the historical books is manifestly a precarious one at best. Bleek calls Lev. xvi. "ein deutliches Beispiel Mosaïscher Abfassung" (*Einleitung*, p. 31, ed. 1878).
- 12 The allusion to the ark warns us to be cautious in assuming the laws of the Mishna to have been ever in force.
- 13 The idea, however, is found in the *Clementine Homilies*, ix. 9. Compare Tertullian *De jejuniis*, c.
  8: "Docuit etiam adversus diriora daemonia jejuniis praeliandum."
- 14 On the manuscript evidence the words "I was fasting," in Acts x. 30, must also be regarded as doubtful. They are rejected by Lachmann, Tregelles and Tischendorf.
- 15 Quinam isti (adversarii) sint, semel nominabo: exteriores et interiores botuli psychicorum.... Arguunt nos quod *jejunia propria* custodiamus, quod stationes plerumque in vesperam *producamus*, quod etiam *xerophagias* observemus, siccantes cibum ab omni carne et omni jurulentia et uvidioribus quibusque pomis, nec quid vinositatis vel edamus vel potemus; lavacri quoque abstinentiam congruentem arido victui.
- **16** The language of the canon is ambiguous; but this interpretation seems to be preferable, especially in view of canon 23, which enacts that *jejunii superpositiones* are to be observed in all months except July and August. See Hefele, *Councils*, i. 148 (Engl. trs.).
- 17 Compare the 52nd [51st] of the Apostolical canons. "If any bishop or presbyter or deacon, or indeed any one of the sacerdotal catalogue, abstains from flesh and wine, not for his own exercise but out of hatred of the things, forgetting that all things were very good ... either let him reform, or let him be deprived and be cast out of the church. So also a layman." To this particular canon Hefele is disposed to assign a very early date.
- 18 Compare canon 64 of the (supposed) fourth synod of Carthage: "He who fasts on Sunday is not accounted a Catholic" (Hefele, ii. 415).
- 19 Priscillian, whose widespread heresy evoked from the synod of Saragossa (418) the canon, "No one shall fast on Sunday, nor may any one absent himself from church during Lent and hold a festival of his own," appears, on the question of fasting, not to have differed from the Encratites and various other sects of Manichean tendency (*c.* 406).
- 20 Cap. iii. pro partib. Saxoniae: "Si quis sanctum quadragesimale jejunium pro despectu

Christianitatis contempserit et carnem comederit, morte moriatur. Sed tamen consideretur a sacerdote ne forte causa necessitatis hoc cuilibet proveniat, ut carnem comedat." See Augusti, *Christliche Archäologie*, x. p. 374.

21 See Fink's article "Fasten" in Ersch and Gruber's *Encyclopädie*; Lane, *Modern Egyptians*; and Rycaut, *Present State of the Armenian Church*.

**FASTOLF, SIR JOHN** (d. 1459), English soldier, has enjoyed a more lasting reputation as in some part the prototype of Shakespeare's Falstaff. He was son of a Norfolk gentleman, John Fastolf of Caister, is said to have been squire to Thomas Mowbray, duke of Norfolk, before 1398, served with Thomas of Lancaster in Ireland during 1405 and 1406, and in 1408 made a fortunate marriage with Millicent, widow of Sir Stephen Scrope of Castle Combe in Wiltshire. In 1413 he was serving in Gascony, and took part in all the subsequent campaigns of Henry V. in France. He must have earned a good repute as a soldier, for in 1423 he was made governor of Maine and Anjou, and in February 1426 created a knight of the Garter. But later in this year he was superseded in his command by John Talbot. After a visit to England in 1428, he returned to the war, and on the 12th of February 1429 when in charge of the convoy for the English army before Orleans defeated the French and Scots at the "battle of herrings." On the 18th of June of the same year an English force under the command of Fastolf and Talbot suffered a serious defeat at Patay. According to the French historian Waurin, who was present, the disaster was due to Talbot's rashness, and Fastolf only fled when resistance was hopeless. Other accounts charge him with cowardice, and it is true that John of Bedford at first deprived him of the Garter, though after inquiry he was honourably reinstated. This incident was made unfavourable use of by Shakespeare in Henry VI. (pt. i. act iv. sc. i.). Fastolf continued to serve with honour in France, and was trusted both by Bedford and by Richard of York. He only came home finally in 1440, when past sixty years of age. But the scandal against him continued, and during Cade's rebellion in 1451 he was charged with having been the cause of the English disasters through minishing the garrisons of Normandy. It is suggested that he had made much money in the war by the hire of troops, and in his later days he showed himself a grasping man of business. A servant wrote of him: -"cruel and vengible he hath been ever, and for the most part without pity and mercy" (Paston Letters, i. 389). Besides his share in his wife's property he had large estates in Norfolk and Suffolk, and a house at Southwark, where he also owned the Boar's Head Inn. He died at Caister on the 5th of November 1459. There is some reason to suppose that Fastolf favoured Lollardry, and this circumstance with the tradition of his braggart cowardice may have suggested the use of his name for the boon companion of Prince Hal, when Shakespeare found it expedient to drop that of Oldcastle. In the first two folios the name of the historical character in the first part of Henry VI. is given as "Falstaffe" not Fastolf. Other points of resemblance between the historic Fastolf and the Falstaff of the dramatist are to be found in their service under Thomas Mowbray, and association with a Boar's Head Inn. But Falstaff is in no true sense a dramatization of the real soldier.

The facts of Fastolf's early career are to be found chiefly in the chronicles of Monstrelet and Waurin. For his later life there is much material, including a number of his own letters, in the *Paston Letters*. There is a full life by W. Oldys in the *Biographia Britannica* (1st ed., enlarged by Gough in Kippis's edition). See also Dawson Turner's *History of Caister Castle*, Scrope's *History of Castle Combe*, J. Gairdner's essay *On the Historical Element in Shakespeare's Falstaff*, ap. *Studies in English History*, Sidney Lee's article in the *Dictionary of National Biography*, and D.W. Duthie, *The Case of Sir John Fastolf and other Historical Studies* (1907).

(C. L. K.)

**FAT** (O.E. *fáett*; the word is common to Teutonic languages, cf. Dutch *vet*, Ger. *Fett*, &c., and may be ultimately related to Greek  $\pi(\omega v \text{ and } \pi u \alpha \rho \delta \varsigma$ , and Sanskrit *pivan*), the name given to certain animal and vegetable products which are oily solids at ordinary temperatures, and are chemically distinguished as being the glyceryl esters of various fatty acids, of which the most important are stearic, palmitic, and oleic; it is to be noticed that they are non-

nitrogenous. Fat is a normal constituent of animal tissue, being found even before birth; it occurs especially in the intra-muscular, the abdominal and the subcutaneous connective tissues. In the vegetable kingdom fats especially occur in the seeds and fruits, and sometimes in the roots. Physiological subjects concerned with the part played by fats in living animals are treated in the articles Connective Tissues; NUTRITION; CORPULENCE; METABOLIC DISEASES. The fats are chemically similar to the fixed oils, from which they are roughly distinguished by being solids and not liquids (see OILS). While all fats have received industrial applications, foremost importance must be accorded to the fats of the domestic animals—the sheep, cow, ox and calf. These, which are extracted from the bones and skins in the first operation in the manufacture of glue, are the raw materials of the soap, candle and glycerin industries.

**FATALISM** (Lat. *fatum*, that which is spoken, decreed), strictly the doctrine that all things happen according to a prearranged fate, necessity or inexorable decree. It has frequently been confused with determinism (*q.v.*), which, however, differs from it categorically in assigning a certain function to the will. The essence of the fatalistic doctrine is that it assigns no place at all to the initiative of the individual, or to rational sequence of events. Thus an oriental may believe that he is fated to die on a particular day; he believes that, whatever he does and in spite of all precautions he may take, nothing can avert the disaster. The idea of an omnipotent fate overruling all affairs of men is present in various forms in practically all religious systems. Thus Homer assumes a single fate (Moĩpa), an impersonal power which makes all human concerns subject to the gods: it is not powerful over the gods, however, for Zeus is spoken of as weighing out the fate of men (*II.* xxii. 209, viii. 69). Hesiod has three Fates (Moĩpaı), daughters of Night, Clotho, Lachesis and Atropos. In Aeschylus fate is powerful even over the gods. The Epicureans regarded fate as blind chance, while to the Stoics everything is subject to an absolute rational law.

The doctrine of fate appears also in what are known as the higher religions, *e.g.* Christianity and Mahommedanism. In the former the ideas of personality and infinite power have vanished, all power being conceived as inherent in God. It is recognized that the moral individual must have some kind of initiative, and yet since God is omnipotent and omniscient man must be conceived as in some sense foreordained to a certain moral, mental and physical development. In the history of the Christian church emphasis has from time to time been laid specially on the latter aspect of human life (cf. the doctrines of election, foreordination, determinism). Even those theologians, however, who have laid special stress on the limitations of the human will have repudiated the strictly fatalistic doctrine which is characteristic of Oriental thought and is the negation of all human initiative (see PREDESTINATION; AUGUSTINE, SAINT; WILL). In Islam fate is an absolute power, known as *Kismet*, or *Nasib*, which is conceived as inexorable and transcending all the physical laws of the universe. The most striking feature of the Oriental fatalism is its complete indifference to material circumstances: men accept prosperity and misfortune with calmness as the decree of fate.

**FATE**, in Roman mythology, the spoken word (*fatum*) of Jupiter, the unalterable will of heaven. The plural (*Fata*, the Fates) was used for the "destinies" of individuals or cities, and then for the three goddesses who controlled them. Thus, Fata Scribunda were the goddesses who wrote down a man's destiny at his birth. In this connexion, however, Fata may be singular, the masculine and feminine *Fatus*, *Fata*, being the usual forms in popular and ceremonial language. The Fates were also called Parcae, the attributes of both being the same as those of the Greek Moerae.

FATEHPUR, FATHIPUR or FUTTEHPOOR, a town and district of British India, in the Allahabad division of the United Provinces. The town is 73 m. by rail N.W. of Allahabad. Pop. (1901) 19,281. The district has an area of 1618 sq. m. It is situated in the extreme south-eastern corner of the Doab or tract of country between the Ganges and the Jumna, which respectively mark its northern and southern boundaries. The whole district consists of an alluvial plain formed by the deposits of the two great rivers. The central part is almost perfectly level, and consists of highly cultivated land interspersed with jungle and with tracts impregnated with saltpetre (usar). A ridge of higher land, forming the watershed of the district, runs along it from east to west at an average distance of about 5 m. from the Ganges. Fatehpur therefore consists of two inclined planes, the one 5 m. broad, sloping down rapidly to the Ganges, and the other from 15 to 20 m. broad, falling gradually to the Jumna. The country near the banks of the two rivers is cut up into ravines and nullahs running in all directions, and is almost entirely uncultivable. Besides the Ganges and Jumna the only rivers of importance are the Pandu, a tributary of the Ganges, and the Arind and Nun, which both fall into the Jumna. The climate is more humid than in the other districts of the Doab, and although fevers are common, it is not considered an unhealthy district. The average annual rainfall is 34 in.

The tract in which this district is comprised was conquered in 1194 by the Pathans; but subsequently, after a desperate resistance, it was wrested from them by the Moguls. In the 18th century it formed a part of the *subah* of Korah, and was under the government of the wazir of Oudh. In 1736 it was overrun by the Mahrattas, who retained possession of it until, in 1750, they were ousted by the Pathans of Fatehpur. In 1753 it was reconquered by the nawab of Oudh. In 1765, by a treaty between the East India Company and the nawab, Korah was made over to the Delhi emperor, who retained it till 1774, when it was again restored to the nawab wazir's dominions. Finally in 1801, the nawab, by treaty, reconveyed it to the Company in commutation of the amount which he had stipulated to pay in return for the defence of his country. In June 1857 the district rose in rebellion, and the usual murders of Europeans took place. Order was established after the fall of Lucknow, on the return of Lord Clyde's army to Cawnpore. In 1901 the population was 686,391, showing a decrease of 2% in the decade. The district is traversed by the main line of the East Indian railway from Allahabad to Cawnpore. Trade is mainly agricultural, but the town of Fatehpur is noted for the manufacture of ornamental whips, and Jafarganj for artistic curtains, &c.

FATEHPUR SIKRI, a town in the Agra district in the United Provinces of India, on the road from Agra to Jaipur. Pop. (1901) 7147. It is a ruined city, and is interesting only from an archaeological point of view. It was founded by Akbar in 1569 as a thank-offering for the birth of a son, Selim, afterwards the emperor Jahangir, foretold by Selim Chisti, a famous Mahommedan saint. The principal building is the great mosque, which is said by Fergusson to be hardly surpassed by any in India. "It measures 550 ft. east and west by 470 ft. north and south, over all. The mosque itself, 250 ft. by 80 ft., is crowned by three domes. In its courtyard, which measures 350 ft. by 440 ft., stand two tombs. One is that of Selim Chisti, built of white marble, and the windows with pierced tracery of the most exquisite geometrical patterns. It possesses besides a deep cornice of marble, supported by brackets of the most elaborate design. The other tomb, that of Nawab Islam Khan, is soberer and in excellent taste, but quite eclipsed by its surroundings. Even these parts, however, are surpassed in magnificence by the southern gateway. As it stands on a rising ground, when looked at from below its appearance is noble beyond that of any portal attached to any mosque in India, perhaps in the whole world." Among other more noteworthy buildings the following may be mentioned. The palace of Jodh Bai, the Rajput wife of Akbar, consists of a courtyard surrounded by a gallery, above which rise buildings roofed with blue enamel. A rich gateway gives access to a terrace on which are the "houses of Birbal and Miriam"; and beyond these is another courtyard, where are Akbar's private apartments and the exquisite palace of the Turkish sultana. Here are also the Panch Mahal or five-storeyed building, consisting of five galleries in tiers, and the audience chamber. The special feature in the architecture of the city is the softness of the red sandstone, which could be carved almost as easily as wood, and so lent itself readily to the elaborate Hindu embellishment. Fatehpur Sikri was a favourite residence of Akbar throughout his reign, and his establishment here was of great magnificence. After Akbar's death Fatehpur Sikri was deserted within 50 years of its foundation. The reason for this was that frequent cause in the East, lack of water. The only water obtainable was so brackish and corroding as to cause great mortality among the

inhabitants. The buildings are situated within an enclosure, walled on three sides and about 7 m. in circumference. They are all now more or less in ruins, and their elaborate painting and other decoration has largely perished, but some modern restoration has been effected.

See E.B. Havell, A Handbook to Agra and the Taj, Sikandra, Fatehpur Sikri, &c. (1904).

FATHER, the begetter of a child, the male parent. The word is common to Teutonic languages, and, like the other words for close family relationship, mother, brother, son, sister, daughter, appears in most Indo-European languages. The O. Eng. form is *fæder*, and it appears in Ger. Vater, Dutch vader, Gr. πατήρ, Lat. pater, whence Romanic Fr. père, Span. padre, &c. The word is used of male ancestors more remote than the actual male parent, and of ancestors in general. It is applied to God, as the Father of Jesus Christ, and as the Creator of the world, and is thus the orthodox term for the First Person of the Trinity. Of the transferred uses of the word many have religious reference; thus it is used of the Christian writers, usually confined to those of the first five centuries, the Fathers of the Church (see below), of whom those who flourished at the end of, or just after the age of, the apostles are known as the Apostolic Fathers. One who stands as a spiritual parent to another is his "father," e.g. godfather, or in the title of bishops or archbishops, Right or Most Reverend Father in God. The pope is, in the Roman Church, the Holy Father. In the Roman Church, father is strictly applied to a "regular," a member of one of the religious orders, and so always in Europe, in English usage, often applied to a confessor, whether regular or secular, and to any Roman priest, and sometimes used of sub-members of a religious society or fraternity in the English Church. Of transferred uses, other than religious, may be mentioned the application to the first founders of an institution, constitution, epoch, &c. Thus the earliest settlers of North America are the Pilgrim Fathers, and the framers of the United States constitution are the Fathers of the Constitution. In ancient Rome the members of the senate are the *Patres conscripti*, the "Conscript fathers." The senior member or doyen of a society is often called the father. Thus the member of the English House of Commons, and similarly, of the House of Representatives in the United States, America, who has sat for the longest period uninterruptedly, is the Father of the House.

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FATHERS OF THE CHURCH. The use of the word "father" as a title of respect is found in the Old Testament, where it is applied to patriarchs (Gen. l. 24 (Septuagint); Exod. iii. 13, 15; Deut. i. 8), priests (Judg. xvii. 10, xviii. 19), prophets (2 Kings ii. 12, vi. 21, xiii. 14), and distinguished ancestors (Ecclus. xliv. 1). In the time of our Lord the scribes claimed the name with an arrogance which He disapproved (Matt. xxiii. 9); in the rabbinic literature "the fathers" are the more eminent of the earlier rabbis whose sayings were handed down for the guidance of posterity.<sup>1</sup> The Christian Church, warned perhaps by the words of Christ, appears at first to have avoided a similar use of the term, while St Paul, St Peter and St John speak of their converts as spiritual children (1 Cor. iv. 14 f., Gal. iv. 19, 1 Pet. v. 13, 1 John ii. 12); they did not assume, so far as we know, the official style of "fathers in God." Nor is this title found in the age which succeeded to that of the apostles. When Polycarp, bishop of Smyrna, was martyred (A.D. 155), the crowd shouted, "This is the father of the Christians"<sup>2</sup>; but the words were probably prompted by the Jews, who took a prominent part in the martyrdom, and who naturally viewed Polycarp in the light of a great Christian rabbi, and gave him the title which their own teachers bore. In the next century members of the episcopal order were sometimes addressed in this manner: thus Cyprian is styled papas or papa by his Roman correspondents.<sup>3</sup> The bishops who sat in the great councils of the 4th century were known as "the 318 fathers" of Nicaea, and "the 150 fathers" of Constantinople. Meanwhile the custom was growing up of appealing to eminent Church writers of a past generation under this name. Thus Athanasius writes (ad Afros vi.): "We have the testimony of fathers (the two Dionysii, bishops of Alexandria and Rome, who wrote in the previous century) for the use of the word ὁμοούσιος." Such quotations were multiplied, as theologians learnt to depend increasingly upon their predecessors, until the testimony of "our holy father" Athanasius, or Gregory the Divine, or John the Golden-mouthed, came to be regarded as decisive in reference to controverted points of faith and practice.

In the narrower sense thus indicated the "fathers" of the Church are the great bishops and other eminent Christian teachers of the earlier centuries, who were conspicuous for soundness of judgment and sanctity of life, and whose writings remained as a court of appeal for their successors. A list of fathers drawn up on this principle will begin with the Christian writers of the 1st century whose writings are not included in the New Testament: where it ought to end is a more difficult point to determine. Perhaps the balance of opinion is in favour of regarding Gregory the Great (d. 604) as the last of the Latin fathers, and John of Damascus (d. c. 760) as the last of the fathers of the Greek Church. A more liberal estimate might include John Scotus Erigena or even Anselm or Bernard of Clairvaux in the West and Photius in the East. The abbé Migne carried his Latin patrology down to the time of Innocent III. (d. 1216), and his Greek patrology to the fall of Constantinople (1453); but, while this large extension of the field is much to the advantage of his readers, it undoubtedly stretches the meaning of *patrologia* far beyond its natural limits. For ordinary purposes it is best to make the patristic period conterminous with the life of the ancient Catholic Church. In the West the Church enters the medieval stage of its history with the death of Gregory, while in the East even John of Damascus is rather a compiler of patristic teaching than a true "father."

A further question arises. Are all the Christian writers of a given period to be included among the "fathers," or those only who wrote on religious subjects, and of whose orthodoxy there is no doubt? Migne, following the example of the editors of *bibliothecae patrum* who preceded him, swept into his great collection all the Christian writings which fell within his period; but he is careful to state upon his title-page that his patrologies include the ecclesiastical writers as well as the fathers and doctors of the Church. For a comprehensive use of the term "ecclesiastical writers" he has the authority of Jerome, who enumerates among them<sup>4</sup> such heresiarchs or leaders of schism as Tatian, Bardaisan, Novatus, Donatus, Photinus and Eunomius. This may not be logical, but long usage has made it permissible or even necessary. It is often difficult, if not impracticable, to draw the line between orthodox writers and heterodox; on which side, it might be asked, is Origen to be placed? and in the case of a writer like Tertullian who left the Church in middle life, are we to admit certain of his works into our patrology and refuse a place to others? It is clear that in the circumstances the terms "father," "patristic," "patrology" must be used with much elasticity, since it is now too late to substitute for them any more comprehensive terms.

By the "fathers," then, we understand the whole of extant Christian literature from the time of the apostles to the rise of scholasticism or the beginning of the middle ages. However we may interpret the lower limit of this period, the literature which it embraces is immense. Some method of subdivision is necessary, and the simplest and most obvious is that which breaks the whole into two great parts, the ante-Nicene and the post-Nicene. This is not an arbitrary cleavage; the Council of Nicaea (A.D. 325) is the watershed which actually separates two great tracts of Christian literature. The ante-Nicene age yields priceless records of the early struggles of Christianity; from it we have received specimens of the early apologetic and the early polemic of the Church, the first essays of Christian philosophy, Christian correspondence, Christian biblical interpretation: we owe to it the works of Justin, Irenaeus, the Alexandrian Clement, Origen, Tertullian, Cyprian. In these products of the 2nd and 3rd centuries there is much which in its own way was not surpassed by any of the later patristic writings. Yet the post-Nicene literature, considered as literature, reaches a far higher level. Both in East and West, the 4th and 5th centuries form the golden age of dogmatic theology, of homiletic preaching, of exposition, of letter-writing, of Church history, of religious poetry. Two causes may be assigned for this fact. The conversion of the empire gave the members of the Church leisure and opportunities for the cultivation of literary taste, and gradually drew the educated classes within the pale of the Christian society. Moreover, the great Christological controversies of the age tended to encourage in Christian writers and preachers an intellectual acuteness and an accuracy of thought and expression of which the earlier centuries had not felt the need.

The ante-Nicene period of patristic literature opens with the "apostolic fathers,"<sup>5</sup> *i.e.* the Church writers who flourished toward the end of the apostolic age and during the half century that followed it, including Clement of Rome, Ignatius of Antioch, Polycarp of Smyrna and the author known as "Barnabas." Their writings, like those of the apostles, are epistolary; but editions of the apostolic fathers now usually admit also the early Church order known as the *Didachē*, the allegory entitled the *Shepherd*, and a short anonymous apology addressed to one Diognetus. A second group, known as the "Greek Apologists," embraces Aristides, Justin, Tatian, Athenagoras and Theophilus; and a third consists of the early polemical writers, Irenaeus and Hippolytus. Next come the great Alexandrians, Clement,

Origen, Dionysius; the Carthaginians, Tertullian and Cyprian; the Romans, Minucius Felix and Novatian; the last four laid the foundations of a Latin Christian literature. Even the stormy days of the last persecution yielded some considerable writers, such as Methodius in the East and Lactantius in the West. This list is far from complete; the principal collections of the ante-Nicene fathers include not a few minor and anonymous writers, and the fragments of many others whose works as a whole have perished.

In the post-Nicene period the literary output of the Church was greater. Only the more representative names can be mentioned here. From Alexandria we get Athanasius, Didymus and Cyril; from Cyrene, Synesius; from Antioch, Theodore of Mopsuestia, John Chrysostom and Theodoret; from Palestine, Eusebius of Caesarea and Cyril of Jerusalem; from Cappadocia, Basil, Gregory of Nyssa and Gregory of Nazianzus. The Latin West was scarcely less productive; it is enough to mention Hilary of Poitiers, Ambrose of Milan, Augustine of Hippo, Leo of Rome, Jerome, Rufinus, and a father lately restored to his place in patristic literature, Niceta of Remesiana.<sup>6</sup> Gaul alone has a goodly list of Christian authors to show: John Cassian, Vincent of Lerins, Hilary of Arles, Prosper of Aquitaine, Salvian of Marseilles, Sidonius Apollinaris of Auvergne, Caesarius of Arles, Gregory of Tours. The period ends in the West with two great Italian names, Cassiodorus and Pope Gregory I., after Leo the greatest of papal theologians.

The reader to whom the study is new will gain some idea of the bulk of the extant patristic literature, if we add that in Migne's collection ninety-six large volumes are occupied with the Greek fathers from Clement of Rome to John of Damascus, and seventy-six with the Latin fathers from Tertullian to Gregory the Great.<sup>7</sup>

For a discussion of the more important fathers the student is referred to the articles which deal with them separately. In this place it is enough to consider the general influence of the patristic writings upon Christian doctrine and biblical interpretation. Can any authority be claimed for their teaching or their exegesis, other than that which belongs to the best writers of every age. The decree of the council of Trent<sup>8</sup> (ut nemo ... contra unanimum consensum patrum ipsam scripturam sacram interpretari audeat) is studiously moderate, and yet it seems to rule that under certain circumstances it is not permitted to the Church of later times to carry the science of biblical interpretation beyond the point which it had reached at the end of the patristic period. Roman Catholic writers,<sup>9</sup> however, have explained the prohibition to apply to matters of faith only, and in that case the Tridentine decree is little else than another form of the Vincentian canon which has been widely accepted in the Anglican communion: curandum est ut id teneamus quod ubique, quod semper, quod ab omnibus creditum est. The fathers of the first six or seven centuries, so far as they agree, may be fairly taken to represent the main stream of Christian tradition and belief during the period when the apostolic teaching took shape in the great creeds and dogmatic decisions of Christendom. The English reformers realized this fact; and notwithstanding their insistence on the unique authority of the canon of Scripture, their appeal to the fathers as representatives of the teaching of the undivided Church was as wholehearted as that of the Tridentine divines. Thus the English canon of 1571 directs preachers "to take heed that they do not teach anything in their sermons as though they would have it completely held and believed by the people, save what is agreeable to the doctrine of the Old and New Testaments, and what the Catholic Fathers and ancient Bishops have gathered from that doctrine." Depreciation of the fathers was characteristic, not of the Anglican reformation, but of the revolt against some of its fundamental principles which was led by the Puritan reaction.<sup>10</sup>

Now that the smoke of these controversies has passed away, it is possible to form a clearer judgment upon the merits of the patristic writings. They are no longer used as an armoury from which opposite sides may draw effective weapons, offensive or defensive; nor on the other hand are they cast aside as the rubbish of an ignorant and superstitious age. All patristic students now recognize the great inequality of these authors, and admit that they are not free from the faults of their times; it is not denied that much of their exegesis is untenable, or that their logic is often feeble and their rhetoric offensive to modern taste. But against these disadvantages may be set the unique services which the fathers still render to Christian scholars. Their works comprise the whole literature of our faith during the decisive centuries which followed the apostolic age. They are important witnesses to the text of the New Testament, to the history of the canon, and to the history of interpretation. It is to their pages that we owe nearly all that we know of the life of ancient Christianity. We see in them the thought of the ancient Church taking shape in the minds of her bishops and doctors; and in many cases they express the results of the great doctrinal controversies of their age in language which leaves little to be desired.<sup>11</sup>

AUTHORITIES.-The earliest writer on patristics was Jerome, whose book De viris illustribus gives a brief account of one hundred and thirty-five Church writers, beginning with St Peter and ending with himself. Jerome's work was continued successively by Gennadius of Marseilles, Isidore of Seville, and Ildefonsus of Toledo; the last-named writer brings the list down to the middle of the 7th century. Since the revival of learning books on the fathers have been numerous; among the more recent and most accessible of these we may mention Smith and Wace's Dictionary of Christian Biography, Hauck-Herzog's Realencyklopädie, Bardenhewer's Patrologie and Geschichte der altkirchlichen Litteratur, Harnack's Geschichte der altchristlichen Litteratur bei Eusebius and Ehrard's Die altchristliche Litteratur und ihre Erforschung. A record of patristic collections and editions down to 1839 may be found in Dowling's Notitia Scriptorum SS. Patrum. The contents of the volumes of Migne's patrologies are given in the Catalogue général des livres de l'abbé Migne, and a useful list in alphabetical order of the writers in the Greek Patrologia has been compiled by Dr J.B. Pearson (Cambridge, 1882). Migne's texts are not always satisfactory, but since the completion of his great undertaking two important collections have been begun on critical lines-the Vienna edition of the Latin Church writers,<sup>12</sup> and the Berlin edition of the Greek writers of the ante-Nicene period.<sup>13</sup>

For English readers there are three series of translations from the fathers, which cover much of the ground; the Oxford *Library of the Fathers*, the *Ante Nicene Christian Library* and the *Select Library of Nicene and Post-Nicene Fathers*. Satisfactory lexicons of patristic Greek and Latin are still a desideratum: but assistance may be obtained in the study of the Greek fathers from Suicer's *Thesaurus*, the *Lexicon of Byzantine Greek* by E.A. Sophocles, and the *Lexicon Graecum suppletorium et dialecticum* of Van Herwerden; whilst the new great *Latin Lexicon*, published by the Berlin Academy, is calculated to meet the needs of students of Latin patristic literature. For a fuller list of books useful to the reader of the Greek and Latin fathers see H.B. Swete's *Patristic Study* (2nd ed., 1902).

(H. B. S.)

- 3 Studia biblica, iv. p. 273.
- 4 In his book *De viris illustribus*.
- 5 The term *patres apostolici* is due to the patristic scholars of the 17th century: see Lightfoot, *St Clement of Rome*, i. p. 3. "Sub-apostolic" is perhaps a more accurate designation.
- 6 The *editio princeps* of Niceta's works was published by Dr A.E. Burn in 1905.
- 7 The Greek patrology contains, however, besides the text, a Latin translation, and in both patrologies there is much editorial matter.
- 8 Sess. iv.
- 9 E.G. Möhler, Symbolism (E. tr.) § 42.
- 10 See J.J. Blunt, *Right Use of the Fathers*, p. 15 ff.
- 11 See Stanton, *Place of Authority in Religion*, p. 165 f.
- 12 Corpus scriptorum ecclesiasticorum Latinorum.
- 13 Griechischen christlichen Schriftstellern der ersten drei Jahrhunderte.

**FATHOM** (a word common, in various forms, to Scandinavian and Teutonic languages; cf. Danish *favn*, Dutch *vaam* and Ger. *Faden*, and meaning "the arms extended"; the ultimate origin is a root *pet*, seen in the Gr.  $\pi\epsilon\tau\alpha\nu\nu\dot{\nu}\nu\alpha\iota$ , to spread), a measure of length, being the distance from the tip of one middle finger to the tip of the other, when the arms are stretched out to their widest extent. This length has been standardized to a measure of 6 ft., and as such is used mainly in soundings as a unit for measuring the depth of the sea. "Fathom" is also used in the measurement of timber, when it is equivalent to 6 ft. sq.; similarly, in mining, a fathom is a portion of ground running the whole thickness of the vein of ore, and is 6 ft. in breadth and thickness. The verb "to fathom," *i.e.* to sound or measure with a fathom-line, is used figuratively, meaning to go into a subject deeply, to penetrate, or to explore thoroughly.

<sup>1</sup> See Buxtorf, s.v. *Abh*, and cf. the title of the tract *Pirke Aboth* (ed. Taylor, p. 3).

<sup>2</sup> Polyc. Mart. 8.

**FATIMITES**, or FATIMIDES, the name of a dynasty called after Fatima, daughter of the prophet Mahomet, from whom and her husband the caliph Ali, son of Abu Talib, they claimed descent. The dynasty is also called 'Obaidi (Ubaidī) after 'Obaidallah, the first sovereign, and 'Alawī, a title which it shares with other dynasties claiming the same ancestry. For a list of sovereigns see Egypt, section *History* (Mahommedan period); three, however, must be prefixed who reigned in north-western Africa before the annexation of Egypt: al-Mahdī 'Obaidallah 297 (909); al-Qā'im Mahommed 322 (934); al-Mansūr Ismā'īl 334 (945).

The dynasty owed its rise to the attachment to the family of the prophet which was widespread in the Moslem world, and the belief that the sovereignty was the right of one of its members. Owing, however, to the absence of the principle of primogeniture there was difference of opinion as to the person whose claim should be enforced, and a number of sects arose maintaining the rights of different branches of the family. The Fatimites were supported by those who regarded the sovereignty as vested in Ismā'il, son of Ja'far al-Sādiq, great-great-grandson of Alī, through his second son Hosain (Husain). Of this Ismā'īl the first Fatimite caliph was supposed to be the great-grandson. The line of ancestors between him and Ismā'il is, however, variously given, even his father's name being quite uncertain, and in some of the pedigrees even Ismā'il does not figure. Apparently when the family first became of political importance their Alid descent was not disputed at Bagdad, and the poet al-Sharif al-Radī (d. A.H. 406: A.D. 1015), in whose family the office of Naqīb (registrar of the Alids) was hereditary, appears to have acknowledged it (*Dīwān*, ed. Beirut, p. 972). When their success became a menace to the caliphs of Bagdad, genealogists were employed to demonstrate the falsity of the claim, and a considerable literature, both official and unofficial, rose in consequence. The founder of the dynasty was made out to be a scion of a family of heretics from whom the terrible Carmathian sect had originated: later on (perhaps owing to the rôle played by Jacob, son of Killis, in bringing the Fatimites to Egypt), the founder was made out to have been a Jew, either as having been adopted by the heretic supposed to be his father, or as having been made to personate the real 'Obaidallah, who had been killed in captivity. While the stories that make him of either Jewish or Carmathian origin may be neglected, as the product of malice, the uncertainty of the genealogies offered by their partisans renders any positive solution of the problem impossible. What seems to be clear is that secretly within the Abbasid empire propaganda was carried on in favour of one or other Alid aspirant, and the danger which any such aspirant incurred by coming forward openly led to his whereabouts being concealed except from a very few adherents. What is known then is that towards the end of the 3rd Islamic century the leader of the sect of Ismā'ī-lites (Assassins, q.v.) who afterwards mounted a throne, lived at Salamia, near Emesa (Homs), having agents spread over Arabia, Persia and Syria, and frequently receiving visits from pious adherents, who had been on pilgrimage to the grave of Hosain (Husain). Such visitors received directions and orders such as are usual in secret societies. One of these agents, Abū Abdallah al-Hosain called al-Shī'i, said to have filled the office of censor (*muhtasib*) at Basra, received orders to carry on a mission in Arabia, and at Mecca is said to have made the acquaintance of some members of the Berber tribe Kutama, south of the bay of Bougie. These persons persuaded him to travel home with them in the character of teacher of the Koran, but according to some authorities the ground had already been prepared there for a political mission. He arrived in the Kutama country in June 893, and appears very soon to have been made chief, thereby exciting the suspicion of the Aghlabite ruler of Kairawān, Ibrāhīm b. Ahmad, which, however, was soon allayed. His success provoked a civil war among the Berbers, but he was protected by a chief named Hasan b. Hārūn, and displayed sufficient military ability to win respect. Nine years after his arrival he made use of the unrest following on the death of the Aghlabite Ibrāhīm to attack the town of Mila, which he took by treachery, and turned into his capital; the son and successor of Ibrāhīm, Abu'l-'Abbās 'Abdallah, sent his son al-Aḥwal to deal with the new power, and he defeated al-Shī'ī in some battles, but in 903 al-Ahwal was recalled by his brother Ziyādatallah, who had usurped the throne, and put to death.

At some time after his first successes al-Shī'ī sent a messenger (apparently his brother) to the head of his sect at Salamia, bidding him come to the Kutama country, and place himself at the head of affairs, since al-Shī'ī's followers had been taught to pay homage to a Mahdī who would at some time be shown them. It is said that 'Obaidallah, who now held this post, was known to the court at Bagdad, and that on the news of his departure orders were sent to the governor of Egypt to arrest him; but by skilful simulation 'Obaidallah succeeded in escaping this danger, and with his escort reached Tripoli safely. Instructions had by this time reached the Aghlabite Ziyādatallah to be on the watch for the Mahdī, who was finally arrested at Sijilmāsa (Tafilalt) in the year A.H. 292 (A.D. 905); his companion, al-Shī'ī's brother, had been arrested at an earlier point, and the Mahdī's journey to the south-west must have been to elude pursuit. The invitation to the Mahdī turned out to have been premature; for Ziyādatallah had sent a powerful army to oppose al-Shī'ī, which, making Constantine its headquarters, had driven al-Shī'ī into the mountains: after six months al-Shī'ī secured an opportunity for attacking it, and won a complete victory. Early in 906 another army was sent to deal with al-Shī'ī, and an earnest appeal came from the caliph Muqtafī (Moktafi), addressed to all the Moslems of Africa, to aid Ziyādatallah against the usurper. The operations of the Aghlabite prince were unproductive of any decided result, and by September 906 al-Shī'ī had got possession of the important fortress Tubna and some others. Further forces were immediately sent to the front by Ziyādatallah, but these were defeated by al-Shī'ī and his officers, to whom other towns capitulated, till Ziyādatallah found it prudent to retire from Al-Urbus or Laribus, which had been his headquarters, and entrench himself in Raqqāda, one of the two capitals of his kingdom, Kairawān being the other. Ziyādatallah is charged by the chroniclers with dissoluteness and levity, and even cowardice: after his retreat the fortresses and towns in what now constitute the department of Constantine and in Tunisia fell fast into al-Shī'ī's hands, and he was soon able to threaten Raqqāda itself.

By March 909 Raqqāda had become untenable, and Ziyādatallah resolved to flee from his kingdom; taking with him his chief possessions, he made for Egypt, and thence to 'Irak: his final fate is uncertain. The cities Raqqāda and Kairawān were immediately occupied by Al-Shī'ī, who proceeded to send governors to the other places of importance in what had been the Aghlabite kingdom, and to strike new coins, which, however, bore no sovereign's name. Orders were given that the Shī'ite peculiarities should be introduced into public worship.

In May 909 al-Shī'ī led a tremendous army westwards to the kingdom of Tahert, where he put an end to the Rustamite dynasty, and appointed a governor of his own: he thence proceeded to Sijilmāsa where 'Obaidallah lay imprisoned, with the intention of releasing him and placing him on the throne. After a brief attempt at resistance, the governor fled, and al-Shī'ī entered the city, released 'Obaidallah and presented him to the army as the long-promised Imām. The day is given as the 26th of August 909. 'Obaidallah had been in prison more than three years. Whether his identity with the Mahdī for whom al-Shī'ī had been fighting was known to the governor of Sijilmāsa is uncertain. If it was, the governor and his master the Aghlabite sovereign might have been expected to make use of their knowledge and outwit al-Shī'ī by putting his Mahdī to death. Opponents of the Fatimites assert that this was actually done, and that the Mahdī presented to the army was not the real 'Obaidallah, but (as usual) a Jewish captive, who had been suborned to play the rôle.

The chief command was now assumed by 'Obaidallah, who took the title "al-Mahdī, Commander of the Faithful," thereby claiming the headship of the whole Moslem world: Raqqāda was at the first made the seat of the court, and the Shī'īte doctrines were enforced on the inhabitants, not without encountering some opposition. Revolts which arose in different parts of the Aghlabite kingdom were, however, speedily quelled.

The course followed by 'Obaidallah in governing independently of al-Shī'ī soon led to dissatisfaction on the part of the latter, who, urged on it is said by his brother, decided to dethrone their Mahdī, and on the occasion of an expedition to Ténés, which al-Shī'ī-commanded, organized a conspiracy with that end. The conspiracy was betrayed to 'Obaidallah, who took steps to defeat it, and on the last day of July 911 contrived to assassinate both al-Shī'ī and his brother. Thus the procedure which had characterized the accession of the 'Abbāsid dynasty was repeated. It has been conjectured that these assassinations lost the Fatimites the support of the organization that continued to exist in the East, whence the Carmathians figure as an independent and even hostile community, though they appear to have been amenable to the influence of the African caliph.

'Obaidallah had now to face the dissatisfaction of the tribes whose allegiance al-Shī'ī had won, especially the Kutāma, Zenāta and Lawāta: the uprising of the first assumed formidable proportions, and they even elected a Mahdī of their own, one Kādū b. Mu'ārik al-Māwatī, who promulgated a new revelation for their guidance. They were finally defeated by 'Obaidallah's son Abu'l-Qāsim Mahommed, who took Constantine, and succeeded in capturing the new Mahdī, whom he brought to Raqqāda. Other opponents were got rid of by 'Obaidallah by ruthless executions. By the middle of the year 913 by his own and his son's efforts he had brought his kingdom into order. After the style of most founders of dynasties he then selected a site for a new capital, to be called after his title Mahdia (q.v.), on a peninsula called Hamma (Cape Africa) S.S.E. of Kairawān. Eight years were spent in fortifying this place, which in 921 was made the capital of the empire.

After defeating internal enemies 'Obaidallah turned his attention to the remaining 'Abbāsid possessions in Africa, and his general Habāsah b. Yūsuf in the year 913 advanced along the northern coast, taking various places, including the important town of Barca, his progress, it

is said, being marked by great cruelty. He then advanced towards Egypt, and towards the end of July 914, being reinforced by Abu'l-Qāsim, afterwards al-Qā'im, entered Alexandria. The danger led to measures of unusual energy being taken by the Bagdad caliph Moqtadir, an army being sent to Egypt under Mu'nis, and a special post being organized between that country and Bagdad to convey messages uninterruptedly. The Fatimite forces were defeated, partly owing to the insubordination of the general Habāsah, in the winter of 914, and returned to Barca and Kairawān with great loss.

A second expedition was undertaken against Egypt in the year 919, and on the 10th of July Alexandria was entered by Abu'l-Qāsim, who then advanced southward, seizing the Fayum and Ushmūnain (Eshmunain). He was presently reinforced by a fleet, which, however, was defeated at Rosetta in March of the year 920 by a fleet despatched from Tarsus by the 'Abbāsid caliph Moqtadir, most of the vessels being burned. Through the energetic measures of the caliph, who sent repeated reinforcements to Fostat, Abu'l-Qāsim was compelled in the spring of 921 to evacuate the places which he had seized, and return to the west with the remains of his army, which had suffered much from plague as well as defeat on the field. On his return he found that the court had migrated from Raqqāda to the new capital Mahdia (q.v.). Meanwhile other expeditions had been despatched by 'Obaidallah towards the west, and Nekor (Nakur) and Fez had been forced to acknowledge his sovereignty.

The remaining years of 'Obaidallah's reign were largely spent in dealing with uprisings in various parts of his dominions, the success of which at times reduced the territory in which he was recognized to a small area.

'Obaidallah died on the 4th of March 933, and was succeeded by Abu'l-Qāsim, who took the title al-Qā'im biamr allah. He immediately after his accession occupied himself with the reconquest of Fez and Nekor, which had revolted during the last years of the former caliph. He also despatched a fleet under Ya'qūb b. Isḥāq, which ravaged the coast of France, took Genoa, and plundered the coast of Calabria before returning to Africa. A third attempt made by him to take Egypt resulted in a disastrous defeat at Dhāt al-Humān, after which the remains of the expedition retreated in disorder to Barca.

The later years of the reign of Qā'im were troubled by the uprising of Abū Yazīd Makhlad al-Zenātī, a leader who during the former reign had acquired a following among the tribes inhabiting the Jebel Aures, including adherents of the 'Ibādī sect. After having fled for a time to Mecca, this person returned in 937 to Tauzar (Touzer), the original seat of his operations, and was imprisoned by Qā'im's order. His sons, aided by the powerful tribe Zenāta, succeeded in forcing the prison, and releasing their father, who continued to organize a conspiracy on a vast scale, and by the end of 943 was strong enough to take the field against the Fatimite sovereign, whom he drove out of Kairawān. Abū Yazīd proclaimed himself a champion of Sunnī doctrine against the Shī'is, and ordered the legal system of Malik to be restored in place of that introduced by the Fatimites. Apparently the doctrines of the latter has as yet won little popularity, and Abū Yazīd won an enormous following, except among the Kutāma, who remained faithful to Qā'im. On the last day of October 944, an engagement was fought between Kairawān and Mahdia at a place called al-Akhawān, which resulted in the rout of Qā'im's forces, and the caliph's being shortly after shut up in his capital, the suburbs of which he defended by a trench. Abū Yazīd's forces were ill-suited to maintain a protracted siege, and since, owing to the former caliph's forethought, the capital was in a condition to hold out for a long time, many of them deserted and the besiegers gained no permanent advantage. After the siege had lasted some ten months Abū Yazīd was compelled to raise it (September 945); the struggle, however, did not end with that event, and for a time the caliph and Abū Yazīd continued to fight with varying fortune, while anarchy prevailed over most of the caliph's dominions. On the 13th of January 946, Abū Yazīd shut up Qā'im's forces in Susa which he began to besiege, and attempted to take by storm.

On the 18th of May 945, while Abū Yazīd was besieging Susa, the caliph al-Qā'im died at Mahdia, and was succeeded by his son Ismā'īl, who took the title Manşūr. He almost immediately relieved Susa by sending a fleet, which joining with the garrison inflicted a severe defeat on Abū Yazīd, who had to evacuate Kairawān also; but though the cities were mainly in the hands of Fatimite prefects, Abū Yazīd was able to maintain the field for more than two years longer, while his followers were steadily decreasing in numbers, and he was repeatedly driven into fastnesses of the Sahara. In August 947 his last stronghold was taken, and he died of wounds received in defending it. His sons carried on some desultory warfare against Manşūr after their father's death. A town called Manṣūra or Ṣābrā was built adjoining Kairawān to celebrate the decisive victory over Abū Yazīd, which, however, did not long preserve its name. The exhausted condition of north-west Africa due to the protracted civil war required some years of peace for recuperation, and further exploits are not

recorded for Manşūr, who died on the 19th of March 952.

His son, Abū Tamīm Ma'add, was twenty-two years of age at the time, and succeeded his father with the title Mo'izz lidīn allah. His authority was acknowledged over the greater part of the region now constituting Morocco, Algeria and Tunisia, as well as Sicily, and he appears to have had serious thoughts of endeavouring to annex Spain. At an early period in his reign he made Jauhar, who had been secretary under the former caliph, commander of the forces, and the services rendered by this person to the dynasty made him count as its second founder after al-Shī'ī. In the years 958 and 959 he was sent westwards to reduce Fez and other places where the authority of the Fatimite caliph had been repudiated, and after a successful expedition advanced as far as the Atlantic. As early as 966 the plan of attempting a fresh invasion of Egypt was conceived, and preparations made for its execution; but it was delayed, it is said at the request of the caliph's mother, who wished to make a pilgrimage to Mecca first; and her honourable treatment by Kāfūr when she passed through Egypt induced the caliph to postpone the invasion till that sovereign's death.

In August 972 Mo'izz resolved to follow Jauhar's pressing invitation to enter his new capital Cairo. With his arrival there the centre of the Fatimite power was transferred from Mahdia and Kairawan to Egypt, and their original dominion became a province called al-Maghrib, which immediately fell into the hands of a hereditary dynasty, the Zeirids, acknowledging Fatimite suzerainty. The first sovereign was Bulukkin, also called Abu'l-Futūh Yūsuf, appointed by Mo'izz as his viceroy on the occasion of his departure for Egypt: separate prefects were appointed for Sicily and Tripoli; and at the first the minister of finance was to be an official independent of the governor of the Maghrib. On the death of Bulukkin in 984 he was succeeded by a son who took the royal title al-Mansur, under whose rule an attempt was made by the Kutāma, instigated by the caliph, to shake off the yoke of the Zeirids, who originated from the Sanhaja tribe. This attempt was defeated by the energy of Manşūr in 988; and the sovereignty of the Fatimites in the Maghrib became more and more confined to recognition in public prayer and on coins, and the payment of tribute and the giving of presents to the viziers at Cairo. The fourth ruler of the Zeirid dynasty, called Mo'izz, endeavoured to substitute 'Abbāsid suzerainty for Fatimite: his land was invaded by Arab colonies sent by the Fatimite caliph, with whom in 1051 Mo'izz fought a decisive engagement, after which the dominion of the Zeirids was restricted to the territory adjoining Mahdia; a number of smaller kingdoms rising up around them. The Zeirids were finally overthrown by Roger II. of Sicily in 1148.

After the death of al-Ādid, the last Fatimite caliph in Egypt, some attempts were made to place on the throne a member of the family, and at one time there seemed a chance of the Assassins, who formed a branch of the Fatimite sect, assisting in this project. In 1174 a conspiracy for the restoration of the dynasty was organized by 'Umarah of Yemen, a court poet, with the aid of eight officials of the government: it was discovered and those who were implicated were executed. Two persons claiming Fatimite descent took the royal titles al-Mo'taşim billah and al-Ḥāmid lillah in the years 1175 and 1176 respectively; and as late as 1192 we hear of pretenders in Egypt. Some members of the family are traceable till near the end of the 7th century of Islam.

The doctrines of the Fatimites as a sect, apart from their claim to the sovereignty in Islam, are little known, and we are not justified in identifying them with those of the Assassins, the Carmathians or the Druses, though all these sects are connected with them in origin. A famous account is given by Maqrīzī of a system of education by which the neophyte had doubts gently instilled into his mind till he was prepared to have the allegorical meaning of the Koran set before him, and to substitute some form of natural for revealed religion. In most accounts of the early days of the community it is stated that the permission of wine-drinking and licentiousness, and the community of wives and property formed part of its tenets. There is little in the recorded practice of the Fatimite state to confirm or justify these assertions; and they appear to have differed from orthodox Moslems rather in small details of ritual and law than in deep matters of doctrine.

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(D. S. M.\*)

**FAUBOURG**, the French name for a portion of a town which lies outside the walls, hence properly a suburb. The name survives in certain parts of Paris, such as the Faubourg St Antoine, and the Faubourg St Germain, &c., which have long since ceased to be suburbs and have become portions of the town itself. The origin of the word is doubtful. The earlier spelling *faux-bourg*, and the occurrence in medieval Latin of *falsus-burgus* (see Ducange, *Glossarium*, s.v. "Falsus-Burgus"), was taken as showing its obvious origin and meaning, the sham or quasi-borough. The generally accepted derivation is from *fors*, outside (Lat. *foris*, outside the gates), and *bourg*. It is suggested that the word is the French adaptation of the Ger. *Pfahlbürger*, the burghers of the pale, *i.e.* outside the walls but within the pale.

**FAUCES** (a Latin plural word for "throat"; the singular *faux* is rarely found), in anatomy, the hinder part of the mouth, which leads into the pharynx; also an architectural term given by Vitruvius to narrow passages on either side of the tablinum, through which access could be obtained from the atrium to the peristylar court in the rear.

FAUCHER, LÉONARD JOSEPH [LÉON] (1803-1854), French politician and economist, was born at Limoges on the 8th of September 1803. When he was nine years old the family removed to Toulouse, where the boy was sent to school. His parents were separated in 1816, and Léon Faucher, who resisted his father's attempts to put him to a trade, helped to support himself and his mother during the rest of his school career by designing embroidery and needlework. As a private tutor in Paris he continued his studies in the direction of archaeology and history, but with the revolution of 1830 he was drawn into active political journalism on the Liberal side. He was on the staff of the Temps from 1830 to 1833, when he became editor of the Constitutionnel for a short time. A Sunday journal of his own, Le Bien public, proved a disastrous financial failure; and his political independence having caused his retirement from the Constitutionnel, he joined in 1834 the Courrier français, of which he was editor from 1839 until 1842, when the paper changed hands. Faucher belonged in policy to the dynastic Left, and consistently preached moderation to the more ardent Liberals. On resigning his connexion with the *Courrier français* he gave his attention chiefly to economic questions. He advocated a customs union between the Latin countries to counter-balance the German Zollverein, and in view of the impracticability of such a measure narrowed his proposal in 1842 to a customs union between France and Belgium. In 1843 he visited England to study the English social system, publishing the results of his investigations in a famous series of Études sur l'Angleterre (2 vols., 1845), published originally in the Revue des deux mondes. He helped to organize the Bordeaux association for free-trade propaganda, and it was as an advocate of free trade that he was elected in 1847 to the chamber of deputies for Reims. After the revolution of 1848 he entered the Constituent Assembly for the department of Marne, where he opposed many Republican measures-the limitation of the hours of labour, the creation of the national relief works in Paris, the abolition of the death penalty and others. Under the presidency of Louis Napoleon he became minister of public works, and then minister of the interior, but his action in seeking to influence the coming elections by a circular letter addressed to the prefects was censured by the Constituent Assembly, and he was compelled to resign office on the 14th of May 1849. In 1851 he was again minister of the interior until Napoleon declared his intention of resorting to universal suffrage. After the coup d'état of December he refused a seat in the consultative commission instituted by Napoleon. He had been elected a member of the Academy of Moral and Political Science in 1849, and his retirement from politics permitted a return to his writings on economics. He had been to Italy in search of health in 1854, and was returning to Paris on business when he was seized by typhoid at Marseilles, where he died on the 14th of December 1854.

His miscellaneous writings were collected (2 vols., 1856) as *Melanges d'économie politique et de finance*, and his speeches in the legislature are printed in vol. ii. of *Léon Faucher*, *biographie et correspondance* (2 vols., 2nd ed., Paris, 1875).

FAUCHET, CLAUDE (1530-1601), French historian and antiquary, was born at Paris on the 3rd of July 1530. Of his early life few particulars are known. He applied himself to the study of the early French chroniclers, and proposed to publish extracts which would throw light on the first periods of the monarchy. During the civil wars he lost a large part of his books and manuscripts in a riot, and was compelled to leave Paris. He then settled at Marseilles. Attaching himself afterwards to Cardinal de Tournon, he accompanied him in 1554 to Italy, whence he was several times sent on embassies to the king, with reports on the siege of Siena. His services at length procured him the post of president of the chambre des monnaies, and thus enabled him to resume his literary studies. Having become embarrassed with debt, he found it necessary, at the age of seventy, to sell his office; but the king, amused with an epigram, gave him a pension, with the title of historiographer of France. Fauchet has the reputation of an impartial and scrupulously accurate writer; and in his works are to be found important facts not easily accessible elsewhere. He was, however, entirely uncritical, and his style is singularly inelegant. His principal works (1579, 1599) treat of Gaulish and French antiquities, of the dignities and magistrates of France, of the origin of the French language and poetry, of the liberties of the Gallican church, &c. A collected edition was published in 1610. Fauchet took part in a translation of the Annals of Tacitus (1582). He died at Paris about the close of 1601.

FAUCHET, CLAUDE (1744-1793), French revolutionary bishop, was born at Dornes (Nièvre) on the 22nd of September 1744. He was a curate of the church of St Roch, Paris, when he was engaged as tutor to the children of the marquis of Choiseul, brother of Louis XV.'s minister, an appointment which proved to be the first step to fortune. He was successively grand vicar to the archbishop of Bourges, preacher to the king, and abbot of Montfort-Lacarre. The "philosophic" tone of his sermons caused his dismissal from court in 1788 before he became a popular speaker in the Parisian sections. He was one of the leaders of the attack on the Bastille, and on the 5th of August 1789 he delivered an eloquent discourse by way of funeral sermon for the citizens slain on the 14th of July, taking as his text the words of St Paul, "Ye have been called to liberty." He blessed the tricolour flag for the National Guard, and in September was elected to the Commune, from which he retired in October 1790. During the next winter he organized within the Palais Royal the "Social Club of the Society of the Friends of Truth," presiding over crowded meetings under the selfassumed title of procureur général de la vérité. Nevertheless, events were marching faster than his opinions, and the last occasion on which he carried his public with him was in a sermon preached at Notre Dame on the 14th of February 1791. In May he became constitutional bishop of Calvados, and was presently returned by the department to the Legislative Assembly, and afterwards to the Convention. At the king's trial he voted for the appeal to the people and for the penalty of imprisonment. He protested against the execution of Louis XVI. in the Journal des amis (January 26, 1793), and next month was denounced to the Convention for prohibiting married priests from the exercise of the priesthood in his diocese. He remained secretary to the Convention until the accusation of the Girondists in May 1793. In July he was imprisoned on the charge of supporting the federalist movement at Caen, and of complicity with Charlotte Corday, whom he had taken to see a sitting of the Convention on her arrival in Paris. Of the second of these charges he was certainly innocent. With the Girondist deputies he was brought before the revolutionary tribunal on the 30th of October, and was guillotined on the following day.

See *Mémoires ... ou Lettres de Claude Fauchet* (5th ed., 1793); *Notes sur Claude Fauchet* (Caen, 1842).

**FAUCIT, HELENA SAVILLE** (1817-1898), English actress, the daughter of John Saville Faucit, an actor, was born in London. Her first London appearance was made on the 5th of January 1836 at Covent Garden as Julia in *The Hunchback*. Her success in this was so definitely confirmed by her subsequent acting of Juliet, Lady Teazle, Beatrice, Imogen and Hermione, that within eighteen months she was engaged by Macready as leading lady at Covent Garden. There, besides appearing in several Shakespearian characters, she created the heroine's part in Lytton's Duchess de la Vallière (1836), Lady of Lyons (1838), Richelieu (1839), The Sea Captain (1839), Money (1840), and Browning's Strafford (1837). After a visit to Paris and a short season at the Haymarket, she joined the Drury Lane company under Macready early in 1842. There she played Lady Macbeth, Constance in King John, Desdemona and Imogen, and took part in the first production of Westland Marston's Patrician's Daughter (1842) and Browning's Blot on the Scutcheon (1843). Among her successful tours was included a visit to Paris in 1844-1845, where she acted with Macready in several Shakespearian plays. In 1851 she was married to Mr (afterwards Sir) Theodore Martin, but still acted occasionally for charity. One of her last appearances was as Beatrice, on the opening of the Shakespeare Memorial at Stratford-on-Avon on the 23rd of April 1879. In 1881 there appeared in Blackwood's Magazine the first of her Letters on some of Shakespeare's Heroines, which were published in book form as On Some of Shakespeare's Female Characters (1885). Lady Martin died at her home near Llangollen in Wales on the 31st of October 1898. There is a tablet to her in the Shakespeare Memorial with a portrait figure, and the marble pulpit in the Shakespeare church—with her portrait as Saint Helena was given in her memory by her husband.

See Sir Theodore Martin's Helena Faucit (1900).

FAUJAS DE SAINT-FOND, BARTHÉLEMY (1741-1819), French geologist and traveller, was born at Montélimart on the 17th of May 1741. He was educated at the Jesuits' College at Lyons; afterwards he went to Grenoble, applied himself to the study of law, and was admitted advocate to the parliament. He rose to be president of the seneschal's court (1765), a post which he honourably filled, but the duties of which became irksome, as he had early developed a love of nature and his favourite relaxation was found in visits to the Alps. There he began to study the forms, structure, composition and superposition of rocks. In 1775 he discovered in the Velay a rich deposit of pozzuolana, which in due course was worked by the government. In 1776 he put himself in communication with Buffon, who was not slow to perceive the value of his labours. Invited by Buffon to Paris, he quitted the law, and was appointed by Louis XVI. assistant naturalist to the museum, to which office was added some years later (1785, 1788) that of royal commissioner for mines. One of the most important of his works was the Recherches sur les volcans éteints du Vivarais et du Velay, which appeared in 1778. In this work, rich in facts and observations, he developed his theory of the origin of volcanoes. In his capacity of commissioner for mines Faujas travelled in almost all the countries of Europe, everywhere devoting attention to the nature and constituents of the rocks. It was he who first recognized the volcanic nature of the basaltic columns of the cave of Fingal (Staffa), although the island was visited in 1772 by Sir Joseph Banks, who remarked that the stone "is a coarse kind of Basaltes, very much resembling the Giants' Causeway in Ireland" (Pennant's Tour in Scotland and Voyage to the Hebrides). Faujas's Voyage en Angleterre, en Écosse et aux Îles Hébrides (1797) is full of interest—containing anecdotes of Sir Joseph Banks and Dr John Whitehurst, and an amusing account of "The Dinner of an Academic Club" (the Royal Society), and has been translated into English (2 vols., 1799). Having been nominated in 1793 professor at the Jardin des Plantes, he held this post till he was nearly eighty years of age, retiring in 1818 to his estate of Saint-Fond in Dauphiné. Faujas took a warm interest in the balloon experiments of the brothers Montgolfier, and published a very complete Description des expériences de la machine aérostatique de MM. Montgolfier, &c. (1783, 1784). He contributed many scientific memoirs to the Annales and the Mémoires of the museum of natural history. Among his separate works, in addition to those already named are—*Histoire naturelle de la province de Dauphiné* (1781, 1782); Minéralogie des volcans (1784); and Essai de géologie (1803-1809). Faujas died on the 18th of July 1819.

to fail; the original l of the Latin being replaced in English in the 15th century), a failing, mistake or defect.

In geology, the term is given to a plane of dislocation in a portion of the earth's crust; synonyms used in mining are "trouble," "throw" and "heave"; the German equivalent is *Verwerfung*, and the French *faille*. Faults on a small scale are sometimes sharply-defined planes,<sup>1</sup> as if the rocks had been sliced through and fitted together again after being shifted (fig. 1). In such cases, however, the harder portions of the dislocated rocks will

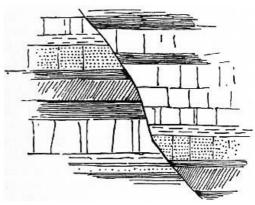


FIG. 1.—Section of clean-cut fault.

usually be found "slickensided." More frequently some disturbance has occurred on one or both sides of the fault. Sometimes in a series of strata the beds on the side which has been pushed up are bent down against the fault, while those on the opposite side are bent up (fig. 2). Most commonly the rocks on both sides are considerably broken, jumbled and crumpled, so that the line of fracture is marked by a belt or wall-like mass of fragmentary rock, *faultrock*, which may be several yards in breadth. Faults are to be distinguished from joints and fissures by the fact that there must have been a movement of the rock on one side of the fault-plane relatively to that on the other side. The trace of a fault-plane at the surface of the earth is a line (or belt of fault-rock), which in geological mapping is often spoken of as a "fault-line" or "line of fault." Fig. 3 represents the plan of a simple fault; quite frequently, however, the main fault subdivides at the extremities into a number of minor faults (fig. 4), or the main fault may be accompanied by lateral subordinate faults (fig. 5), some varieties of which have been termed *flaws* or *Blatts*.

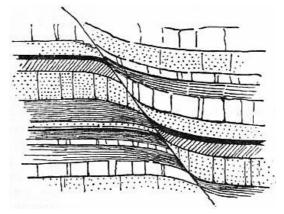


FIG. 2.—Section of strata, bent at a line of fault.

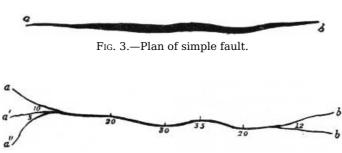
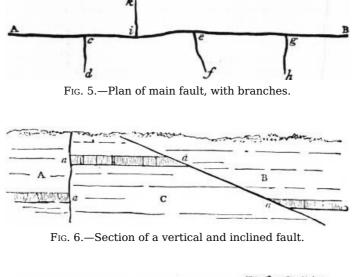


FIG. 4.—Plan of a fault splitting into minor faults.

"Fault-planes" are sometimes perpendicular to the horizon, but more usually they are inclined at a greater or lesser angle. The angle made by the fault-plane with the vertical is the *hade* of the fault (if the angle of inclination were measured from the horizon, as in determining the "dip" of strata, this would be expressed as the "dip of the fault"). In figs. 1 and 2 the faults are hading towards the right of the reader. The amount of dislocation as measured along a fault-plane is the *displacement* of the fault (for an illustration of these terms see fig. 18, where they are applied to a thrust fault); the vertical displacement is the *throw* (Fr. *rejet*); the horizontal displacement, which even with vertical movement must arise in all cases where the faults are not perpendicular to the horizon and the strata are not horizontal, is known as the *heave*. In fig. 6 the displacement is equal to the throw in the fault A; in the fault B the displacement is more than twice as great as in A, while the throw is the

same in both; the fault A has no heave, in B it is considerable. The rock on that side of a fault which has dropped relatively to the rock on the other is said to be upon the downthrow side of the fault; conversely, the relatively uplifted portion is the upthrow side. The two fault faces are known as the "hanging-wall" and the "foot-wall."



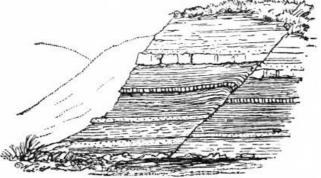


FIG. 7.—Reversed fault, Liddesdale.

The relationship that exists between the hade and the direction of throw has led to the classification of faults into "normal faults," which hade under the downthrow side, or in other words, those in which the hanging-wall has dropped; and "reversed faults," which hade beneath the upthrow side, that is to say, the foot-wall exhibits a relative sinking. Normal faults are exemplified in figs. 1, 2, and 6; in the latter the masses A and B are on the downthrow sides, C is upthrown. Fig. 7 represents a small reversed fault. Normal faults are so called because they are more generally prevalent than the other type; they are sometimes designated "drop" or "gravity" faults, but these are misleading expressions and should be discountenanced. Normal faults are regarded as the result of stretching of the crust, hence they have been called "tension" faults as distinguished from reversed faults, which are assumed to be due to pressure. It is needful, however, to exercise great caution in accepting this view except in a restricted and localized sense, for there are many instances in which the two forms are intimately associated (see fig. 8), and a whole complex system of faults may be the result of horizontal (tangential) pressure alone or even of direct vertical uplift. It is often tacitly assumed that most normal and reversed faults are due to simple vertical movements of the fractured crust-blocks; but this is by no means the case. What is actually observed in examining a fault is the *apparent* direction of motion; but the present position of the dislocated masses is the result of *real* motion or series of motions, which have taken place along the fault-plane at various angles from horizontal to vertical; frequently it can be shown that these movements have been extremely complicated. The striations and "slickensides" on the faces of a fault indicate only the direction of the last movement.

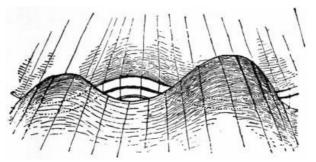


FIG. 8.—Diagram of gently undulating strata cut by a fault, with alternate throw in opposite directions.

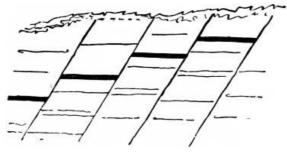


FIG. 9.—Section of strata cut by step faults.

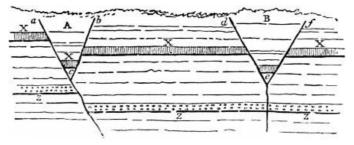
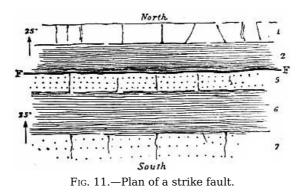


FIG. 10.—Trough faults.



A broad monoclinal fold is sometimes observed to pass into a fault of gradually increasing throw; such a fault is occasionally regarded as pivoted at one end. Again, a faulted mass may be on the downthrow side towards one end, and on the upthrow side towards the other, the movement having taken place about an axis approximately normal to the fault-plane, the "pivot" in this case being near the centre. From an example of this kind it is evident that the same fault may at the same time be both "normal" and "reversed" (see fig. 8). When the principal movement along a highly inclined fault-plane has been approximately horizontal, the fault has been variously styled a *lateral-shift, transcurrent fault, transverse thrust* or a *heave fault.* The horizontal component in faulting movements is more common than is often supposed.

A single normal fault of large throw is sometimes replaced by a series of close parallel faults, each throwing a small amount in the same direction; if these subordinate faults occur within a narrow width of ground they are known as *distribution faults*; if they are more widely separated they are called *step faults* (fig. 9). Occasionally two normal faults hade towards one another and intersect, and the rock mass between them has been let down; this is described as a *trough fault* (fig. 10). A fault running parallel to the strike of bedded rocks is a *strike fault*; one which runs along the direction of the dip is a *dip fault*; a so-called *diagonal fault* takes a direction intermediate between these two directions. Although the effects of these types of fault upon the outcrops of strata differ, there are no intrinsic differences between the faults themselves.

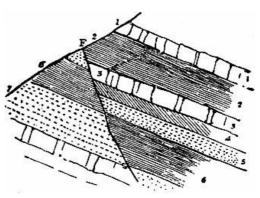


FIG. 12.—Section across the plan, fig. 11.

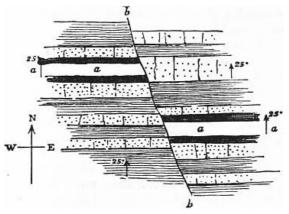


FIG. 13.—Plan of strata cut by a dip fault.

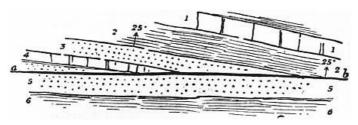


FIG. 14.—Plan of strata traversed by a diminishing strike fault.

The effect of normal faults upon the outcrop may be thus briefly summarized:-a strike fault that hades with the direction of the dip may cause beds to be cut out at the surface on the upthrow side; if it hades against the dip direction it may repeat some of the beds on the upthrow side (figs. 11 and 12). With dip faults the crop is carried forward (down the dip) on the upthrow side. The perpendicular distance between the crop of the bed (dike or vein) on opposite sides of the fault is the "offset." The offset decreases with increasing angle of dip and increases with increase in the throw of the fault (fig. 13). Faults which run obliquely across the direction of dip, if they hade with the dip of the strata, will produce offset with "gap" between the outcrops; if they hade in the opposite direction to the dip, offset with "overlap" is caused: in the latter case the crop moves forward (down dip) on the denuded upthrow side, in the former it moves backward. The effect of a strike fault of diminishing throw is seen in fig. 14. Faults crossing folded strata cause the outcrops to approach on the upthrow side of a syncline and tend to separate the outcrops of an anticline (figs. 15, 16, 17).



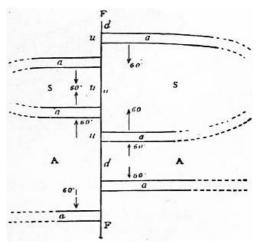


FIG. 15.—Plan of an anticline (A) and syncline (S), dislocated by a fault.

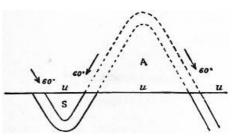


FIG. 16.—Section along the upcast side of the fault in fig. 15.

a fault has been so reduced by denudation as to leave no sharp upstanding ridge; but examples are known where the upthrown side still exists as a prominent cliff-like face of rock, a "faultscarp"; familiar instances occur in the Basin ranges of Utah, Nevada, &c., and many smaller examples have been observed in the areas affected by recent earthquakes in Japan, San Francisco and other places. But although there may be no sharp cliff, the effect of faulting upon topographic forms is abundantly evident

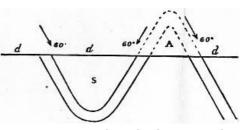


Fig. 17.—Section along the downcast side of same fault.

wherever a harder series of strata has been brought in juxtaposition to softer rocks. By certain French writers, the upstanding side of a faulted piece of ground is said to have a *regard*, thus the faults of the Jura Mountains have a *"regard français,"* and in the same region it has been observed that in curved faults the convexity is directed the same way as the *regard*. Occasionally one or more parallel faults have let down an intervening strip of rock, thereby forming *"fault valleys"* or *Graben (Grabensenken)*; the Great Rift Valley is a striking example. On the other hand, a large area of rock is sometimes lifted up, or surrounded by a system of faults, which have let down the encircling ground; such a fault-block is known also as a *horst*; a considerable area of Greenland stands up in this manner.

Faults have often an important influence upon water-supply by bringing impervious beds up against pervious ones or vice versa, thus forming underground dams or reservoirs, or allowing water to flow away that would otherwise be conserved. Springs often rise along the outcrop of a fault. In coal and metal mining it is evident from what has already been said that faults must act sometimes beneficially, sometimes the reverse. It is a common occurrence for fault-fissures and fault-rock to appear as valuable mineral lodes through the infilling or impregnation of the spaces and broken ground with mineral ores.

In certain regions which have been subjected to very great crustal disturbance a type of fault is found which possesses a very low hade-sometimes only a few degrees from the horizontal-and, like a reversed fault, hades beneath the upthrown mass; these are termed thrusts, overthrusts, or overthrust faults (Fr. recouvrements, failles de chevauchement, charriages; Ger. Überschiebungen, Übersprünge, Wechsel, Fallenverwerfungen). Thrusts should not be confused with reversed faults, which have a strong hade. Thrusts play a very important part in the N.W. highlands of Scotland, the Scandinavian highlands, the western Alps, the Appalachians, the Belgian coal region, &c. By the action of thrusts enormous masses of rock have been pushed almost horizontally over underlying rocks, in some cases for several miles. One of the largest of the Scandinavian thrust masses is 1120 m. long, 80 m. broad, and 5000 ft. thick. In Scotland three grades of thrusts are recognized, maximum, major, and minor thrusts; the last have very generally been truncated by those of greater magnitude. Some of these great thrusts have received distinguishing names, e.g. the Moine thrust (fig. 19) and the Ben More thrust; similarly in the coal basin of Mons and Valenciennes we find the faille de Boussu and the Grande faille du midi. Overturned folds are frequently seen passing into thrusts. Bayley Willis has classified thrusts as (1) Shear thrusts, (2) Break thrusts, (3) Stretch thrusts, and (4) Erosion thrusts.

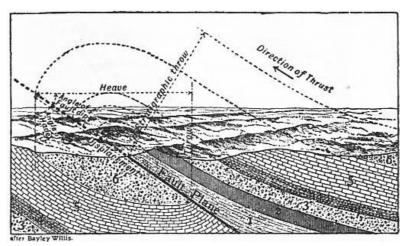


FIG. 18.—Diagram to illustrate the terminology of faults and thrusts.

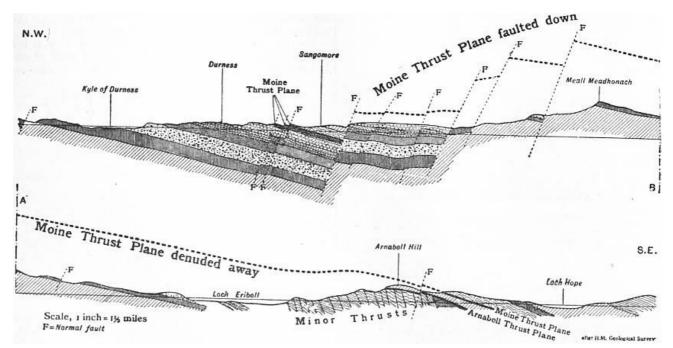


FIG. 19.—Section of a very large thrust in the Durness Eriboll district, Scotland.

Dr J.E. Marr ("Notes on the Geology of the English Lake District," *Proc. Geol. Assoc.*, 1900) has described a type of fault which may be regarded as the converse of a thrust fault. If we consider a series of rock masses A, B, C—of which A is the oldest and undermost—undergoing thrusting, say from south to north, should the mass C be prevented from moving forward as rapidly as B, a low-hading fault may form between C and B and the mass C may lag behind; similarly the mass B may lag behind A. Such faults Dr Marr calls "lag faults." A mass of rock suffering thrusting or lagging may yield unequally in its several parts, and those portions tending to travel more rapidly than the adjoining masses in the same sheet may be cut off by fractures. Thus the faster-moving blocks will be separated from the slower ones by faults approximately normal to the plane of movement: these are described as "tear faults."

Faults may occur in rocks of all ages; small local dislocations are observable even in glacial deposits, alluvium and loess. A region of faulting may continue to be so through more than one geological period. Little is known of the mechanism of faulting or of the causes that produce it; the majority of the text-book explanations will not bear scrutiny, and there is room for extended observation and research. The sudden yielding of the strata along a plane of faulting is a familiar cause of earthquakes.

See E. de Margerie and A. Heim, *Les Dislocations de l'écorce terrestre* (Zürich, 1888); A. Rothpletz, *Geotektonische Probleme* (Stuttgart, 1894); B. Willis, "The Mechanics of Appalachian Structure," *13th Ann. Rep. U.S. Geol. Survey* (1891-1892, pub. 1893). A prolonged discussion of the subject is given in *Economic Geology*, Lancaster, Pa., U.S.A., vols. i. and ii. (1906, 1907).

(A. GE.; J. A. H.)

1 The *fault-plane* is not a plane surface in the mathematical sense; it may curve irregularly in more than one direction.

**FAUNA**, the name, in Roman mythology, of a country goddess of the fields and cattle, known sometimes as the sister, sometimes as the wife of the god Faunus; hence the term is used collectively for all the animals in any given geographical area or geological period, or for an enumeration of the same. It thus corresponds to the term "flora" in respect to plant life.

FAUNTLEROY, HENRY (1785-1824), English banker and forger, was born in 1785. After seven years as a clerk in the London bank of Marsh, Sibbald & Co., of which his father was one of the founders, he was taken into partnership, and the whole business of the firm was left in his hands. In 1824 the bank suspended payment. Fauntleroy was arrested on the charge of appropriating trust funds by forging the trustees' signatures, and was committed for trial, it being freely rumoured that he had appropriated £250,000, which he had squandered in debauchery. He was tried at the Old Bailey, and, the case against him having been proved, he admitted his guilt, but pleaded that he had used the misappropriated funds to pay his firm's debts. He was found guilty and sentenced to be hanged. Seventeen merchants and bankers gave evidence as to his general integrity at the trial, and after his conviction powerful influence was brought to bear on his behalf, and his case was twice argued before judges on points of law. An Italian named Angelini even offered to take Fauntleroy's place on the scaffold. The efforts of his many friends were, however, unavailing, and he was executed on the 30th of November 1824. A wholly unfounded rumour was widely credited for some time subsequently to the effect that he had escaped strangulation by inserting a silver tube in his throat, and was living comfortably abroad.

See A. Griffith's *Chronicles of Newgate*, ii. 294-300, and Pierce Egan's *Account of the Trial of Mr Fauntleroy*.

FAUNUS (i.e. the "kindly," from Lat. favere, or the "speaker," from fari), an old Italian rural deity, the bestower of fruitfulness on fields and cattle. As such he is akin to or identical with Inuus ("fructifier") and Lupercus (see LUPERCALIA). Faunus also revealed the secrets of the future by strange sounds from the woods, or by visions communicated to those who slept within his precincts in the skin of sacrificed lambs; he was then called Fatuus, and with him was associated his wife or daughter Fatua. Under Greek influence he was identified with Pan, and just as there was supposed to be a number of Panisci, so the existence of many Fauni was assumed-misshapen and mischievous goblins of the forest, with pointed ears, tails and goat's feet, who loved to torment sleepers with hideous nightmares. In poetical tradition Faunus is an old king of Latium, the son of Picus (Mars) and father of Latinus, the teacher of agriculture and cattle-breeding, and the introducer of the religious system of the country, honoured after death as a tutelary divinity. Two festivals called Faunalia were celebrated in honour of Faunus, one on the 13th of February in his temple on the island in the Tiber, the other in the country on the 5th of December (Ovid, Fasti, ii. 193; Horace, Odes, iii. 18. 10). At these goats were sacrificed to him with libations of wine and milk, and he was implored to be propitious to fields and flocks. The peasants and slaves at the same time amused themselves with dancing in the meadows.

FAURE, FRANÇOIS FÉLIX (1841-1899), President of the French Republic, was born in Paris on the 30th of January 1841, being the son of a small furniture maker. Having started as a tanner and merchant at Havre, he acquired considerable wealth, was elected to the National Assembly on the 21st of August 1881, and took his seat as a member of the Left, interesting himself chiefly in matters concerning economics, railways and the navy. In November 1882 he became under-secretary for the colonies in M. Ferry's ministry, and retained the post till 1885. He held the same post in M. Tirard's ministry in 1888, and in 1893 was made vice-president of the chamber. In 1894 he obtained cabinet rank as minister of marine in the administration of M. Dupuy. In the January following he was unexpectedly elected president of the Republic upon the resignation of M. Casimir-Périer. The principal cause of his elevation was the determination of the various sections of the moderate republican party to exclude M. Brisson, who had had a majority of votes on the first ballot, but had failed to obtain an absolute majority. To accomplish this end it was necessary to unite among themselves, and union could only be secured by the nomination of some one who offended nobody. M. Faure answered perfectly to this description. His fine presence and his tact on ceremonial occasions rendered the state some service when in 1896 he received the Tsar of Russia at Paris, and in 1897 returned his visit, after which meeting the

momentous Franco-Russian alliance was publicly announced. The latter days of M. Faure's presidency were embittered by the Dreyfus affair, which he was determined to regard as *chose jugée*. But at a critical moment in the proceedings his death occurred suddenly, from apoplexy, on the 16th of February 1899. With all his faults, and in spite of no slight amount of personal vanity, President Faure was a shrewd political observer and a good man of business. After his death, some alleged extracts from his private journals, dealing with French policy, were published in the Paris press.

See E. Maillard, *Le Président F. Faure* (Paris, 1897); P. Bluysen, *Félix Faure intime* (1898); and F. Martin-Ginouvier, *F. Faure devant l'histoire* (1895).

**FAURÉ, GABRIEL** (1845- ), French musical composer, was born at Pamiers on the 13th of May 1845. He studied at the school of sacred music directed by Niedermeyer, first under Dietsch, and subsequently under Saint-Saëns. He became "maître de chapelle" at the church of the Madeleine in 1877, and organist in 1896. His works include a symphony in D minor (Op. 40), two quartets for piano and strings (Opp. 15 and 45), a suite for orchestra (Op. 12), sonata for violin and piano (Op. 13), concerto for violin (Op. 14), berceuse for violin, élégie for violoncello, pavane for orchestra, incidental music for Alexandre Dumas' *Caligula* and De Haraucourt's *Shylock*, a requiem, a cantata, *The Birth of Venus*, produced at the Leeds festival in 1898, a quantity of piano music, and a large number of songs. Fauré occupies a place by himself among modern French composers. He delights in the *imprévu*, and loves to wander through labyrinthine harmonies. There can be no denying the intense fascination and remarkable originality of his music. His muse is essentially aristocratic, and suggests the surroundings of the boudoir and the perfume of the hot-house.

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FAURIEL, CLAUDE CHARLES (1772-1844), French historian, philologist and critic, was born at St Étienne on the 21st of October 1772. Though the son of a poor joiner, he received a good education in the Oratorian colleges of Tournon and Lyons. He was twice in the armyat Perpignan in 1793, and in 1796-1797 at Briancon, as private secretary to General J. Servan de Gerbey (1741-1808); but he preferred the civil service and the companionship of his friends and his books. In 1794 he returned to St Étienne, where, but only for a short period, he filled a municipal office; and from 1797 to 1799 he devoted himself to strenuous study, more especially of the literature and history, both ancient and modern, of Greece and Italy. Having paid a visit to Paris in 1799, he was introduced to Fouché, minister of police, who induced him to become his private secretary. Though he discharged the duties of this office to Fouché's satisfaction, his strength was overtasked by his continued application to study, and he found it necessary in 1801 to recruit his health by a three months' trip in the south. In resigning his office in the following year he was actuated as much by these considerations as by the scruples he put forward in serving longer under Napoleon, when the latter, in violation of strict republican principles, became consul for life. This is clearly shown by the fragments of Memoirs discovered by Ludovic Lalanne and published in 1886.

Some articles which Fauriel published in the *Décade philosophique* (1800) on a work of Madame de Staël's—*De la littérature considerée dans ses rapports avec les institutions sociales*—led to an intimate friendship with her. About 1802 he contracted with Madame de Condorcet a liaison which lasted till her death (1822). It was said of him at the time that he gave up all his energies to love, friendship and learning. The salon of Mme de Condorcet was throughout the Consulate and the first Empire a rallying point for the dissentient republicans. Fauriel was introduced by Madame de Staël to the literary circle of Auteuil, which gathered round Destutt de Tracy. Those who enjoyed his closest intimacy were the physiologist Cabanis (Madame de Condorcet's brother-in-law), the poet Manzoni, the publicist Benjamin Constant, and Guizot. Later Tracy introduced to him Aug. Thierry (1821) and perhaps Thiers and Mignet. During his connexion with Auteuil, Fauriel's attention was naturally turned to philosophy, and for some years he was engaged on a history of Stoicism, which was never completed, all the papers connected with it having accidentally perished in 1814. He also studied Arabic, Sanskrit and the old South French dialects. He published in

1810 a translation of the *Parthenais* of the Danish poet Baggesen, with a preface on the various kinds of poetry; in 1823 translations of two tragedies of Manzoni, with a preface "*Sur la théorie de l'art dramatique*"; and in 1824-1825 his translation of the popular songs of modern Greece, with a "*Discours préliminaire*" on popular poetry.

The Revolution of July, which put his friends in power, opened to him the career of higher education. In 1830 he became professor of foreign literature at the Sorbonne. The *Histoire de la Gaule méridionale sous la domination des conquerants germains* (4 vols., 1836) was the only completed section of a general history of southern Gaul which he had projected. In 1836 he was elected a member of the Academy of Inscriptions, and in 1837 he published (with an introduction the conclusions of which would not now all be endorsed) a translation of a Provençal poem on the Albigensian war. He died on the 15th of July 1844. After his death his friend Mary Clarke (afterwards Madame J. Möhl) published his *Histoire de la littérature provençale* (3 vols., 1846)—his lectures for 1831-1832. Fauriel was biased in this work by his preconceived and somewhat fanciful theory that Provence was the cradle of the *chansons de geste* and even of the Round Table romances; but he gave a great stimulus to the scientific study of Old French and Provençal. *Dante et les origines de la langue et de la littérature italiennes* (2 vols.) was published in 1854.

Fauriel's *Mémoires*, found with Condorcet's papers, are in the Institute library. They were written at latest in 1804, and include some interesting fragments on the close of the consulate, Moreau, &c. Though anonymous, Lalanne, who published them (*Les Derniers Jours du Consulat*, 1886), proved them to be in the same handwriting as a letter of Fauriel's in 1803. The same library has Fauriel's correspondence, catalogued by Ad. Régnier (1900). Benjamin Constant's letters (1802-1823) were published by Victor Glachant in 1906. For Fauriel's correspondence with Guizot see *Nouvelle Rev.* (Dec. 1, 1901, by V. Glachant), and for his love-letters to Miss Clarke (1822-1844) the *Revue des deux mondes* (1908-1909) by E. Rod. See further Sainte-Beuve, *Portraits contemporains*, ii.; Antoine Guillois, *Le Salon de Mme Helvétius* (1894) and *La Marquise de Condorcet* (1897); O'Meara, *Un Salon à Paris: Mme Möhl* (undated); and J.B. Galley, *Claude Fauriel* (1909).

FAUST, or FAUSTUS, the name of a magician and charlatan of the 16th century, famous in legend and in literature. The historical Faust forms little more than the nucleus round which a great mass of legendary and imaginative material gradually accumulated. That such a person existed there is, however, sufficient proof.<sup>1</sup> He is first mentioned in a letter, dated August 20, 1507, of the learned Benedictine Johann Tritheim or Trithemius (1462-1516), abbot of Spanheim, to the mathematician and astrologer Johann Windung, at Hasfurt, who had apparently written about him. Trithemius, himself reputed a magician, and the author of a mystical work (published at Darmstadt in 1621 under the title of Steganographica and burnt by order of the Spanish Inquisition), speaks contemptuously of Faust, who called himself Magister Georgius Sabellicus Faustus Junior, as a fool rather than a philosopher (fatuum non philosophum), a vain babbler, vagabond and mountebank who ought to be whipped, and who had fled from the city rather than confront him. The insane conceit of the man was proved by his boast that, were all the works of Aristotle and Plato blotted from the memory of men, he could restore them with greater elegance, and that Christ's miracles were nothing to marvel at, since he could do the like whenever and as often as he pleased; his debased character by the fact that he had been forced to flee from the school of which he had been appointed master by the discovery of his unnatural crimes. The same unflattering estimate is contained in the second extant notice of Faust, in a letter of the jurist and canon Konrad Mudt (Mutianus Rufus), of the 3rd of October 1513, to Heinrich Urbanus. Mudt, like Trithemius, simply regards Faust as a charlatan. Similar is the judgment of another contemporary, Philipp Begardi, who in the fourth chapter of his Index sanitatis (Worms, 1539) ranks Faust, with Theophrastus Paracelsus, among the "wicked, cheating, useless and unlearned doctors."

It was Johann Gast (d. 1572), a worthy Protestant pastor of Basel, who like Mudt claims to have come into personal contact with Faust, who in his *Sermones convivales* (Basel, 1543) first credited the magician with genuine supernatural qualities. Gast, a man of some learning and much superstition, believed Faust to be in league with the devil, by whom about 1525 he was ultimately carried off, and declared the performing horse and dog by which the necromancer was accompanied to be familiar and evil spirits. Further information was given to the world by Johann Mannel or Manlius (d. 1560), councillor and historian to the emperor

Maximilian II., in his Locorum communium collectanea (Basel, undated). Manlius reports a conversation of Melanchthon, which there is no reason to suspect of being other than genuine, in which the Reformer speaks of Faust as "a disgraceful beast and sewer of many devils," as having been born at Kundling (Kundlingen or Knittlingen), a little town near his own native town (of Bretten), and as having studied magic at Cracow. The rest of the information given can hardly be regarded as historical, though Melanchthon, who, like Luther, was no whit less superstitious than most people of his time, evidently believed it to be so. According to him, among other marvels, Faust was killed by the devil wringing his neck. While he lived he had taken about with him a dog, which was really a devil. A similar opinion would seem to have been held of Faust by Luther also, who in Widmann's Faust-book is mentioned as having declared that, by God's help, he had been able to ward off the evils which Faust with his sorceries had sought to put upon him. The passage, with the omission of Faust's name, occurs word for word in Luther's Table-talk (ed. C.E. Förstemann, vol. i. p. 50). It is not improbable, then, that Widmann, in supplying the name of the necromancer omitted in the Table-talk, may be giving a fuller account of the conversation. Bullinger also, in his Theatrum de beneficiis (Frankf., 1569) mentions Faust as one of those "of whom the Scriptures speak, in various places, calling them magi." Lastly Johann Weiher, Wierus or Piscinarius (1515-1588)—a pupil of Cornelius Agrippa, body physician to the duke of Cleves and a man of enlightenment, who opposed the persecution of witches—in his De praestigiis daemonum (Basel, 1563, &c.), speaks of Faust as a drunken vagabond who had studied magic at Cracow, and before 1540 had practised "this beautiful art shamelessly up and down Germany, with unspeakable deceit, many lies and great effect." He goes on to tell how the magician had revenged himself on an unhappy parish priest, who had refused to supply him any longer with drink, by giving him a depilatory which removed not only the beard but the skin, and further, how he had insulted a poor wretch, for no better reason than that he had a black beard, by greeting him as his cousin the devil. Of his superhuman powers Weiher evidently believes nothing, but he tells the tale of his being found dead with his neck wrung, after the whole house had been shaken by a terrific din.

The sources above mentioned, which were but the first of numerous works on Faust, of more or less value, appearing throughout the next two centuries, give a sufficient picture of the man as he appeared to his contemporaries: a wandering charlatan who lived by his wits, cheiromantist, astrologer, diviner, spiritualist medium, alchemist, or, to the more credulous, a necromancer whose supernatural gifts were the outcome of a foul pact with the enemy of mankind. Whatever his character, his efforts to secure a widespread notoriety had, by the time of his death, certainly succeeded. By the latter part of the 16th century he had become the necromancer *par excellence*, and all that legend had to tell about the great wizards of the middle ages, Virgil, Pope Silvester, Roger Bacon, Michael Scot, or the mythic Klingsor, had become for ever associated with his name. When in 1587, the oldest Faust-book was published, the Faust legend was, in all essential particulars, already complete.

The origin of the main elements of the legend must be sought far back in the middle ages and beyond. The idea of a compact with the devil, for the purpose of obtaining superhuman power or knowledge, is of Jewish origin, dating from the centuries immediately before and after the Christian era which produced the Talmud, the Kabbalah and such magical books as that of Enoch. In the mystical rites—in which blood, as the seat of life, played a great part that accompanied the incantations with which the Jewish magicians evoked the Satanim-the lowest grade of those elemental spirits (shedim) who have their existence beyond the dimensions of time and space—we have the prototypes and originals of all the ceremonies which occupy the books of magic down to the various versions of the *Höllenzwang* ascribed to Faust. The other principle underlying the Faust legend, the belief in the essentially evil character of purely human learning, has existed ever since the triumph of Christianity set divine revelation above human science. The legend of Theophilus—a Cilician archdeacon of the 6th century, who sold his soul to Satan for no better reason than to clear himself of a false charge brought against him by his bishop-was immensely popular throughout the middle ages, and in the 8th century formed the theme of a poem in Latin hexameters by the nun Hroswitha of Gandersheim, who, especially in her description of the ritual of Satan's court, displays a sufficiently lively and original imagination. Equally widespread were the legends which gathered round the great name of Gerbert (Pope Silvester II.). Gerbert's vast erudition, like Roger Bacon's so far in advance of his age, naturally cast upon him the suspicion of traffic with the infernal powers; and in due course the suspicion developed into the tale, embellished with circumstantial and harrowing details, of a compact with the archfiend, by which the scholar had obtained the summit of earthly ambition at the cost of his immortal soul. These are but the two most notable of many similar stories,<sup>2</sup> and, in an age when the belief in witchcraft and the ubiquitous activity of devils was still universal, it is natural that they should have been retold in all good faith of a notorious wizard who was

himself at no pains to deny their essential truth. The Faust legend, however, owes something of its peculiar significance also to the special conditions of the age which gave it birth: the age of the Renaissance and the Reformation. The opinion that the religious reformers were the champions of liberty of thought against the obscurantism of Rome is the outgrowth of later experience. To themselves they were the protagonists of "the pure Word of God" against the corruptions of a church defiled by the world and the devil, and the sceptical spirit of Italian humanism was as abhorrent to them as to the Catholic reactionaries by whom it was again trampled under foot. If then, in Goethe's drama, Faust ultimately develops into the type of the unsatisfied yearning of the human intellect for "more than earthly meat and drink," this was because the great German humanist deliberately infused into the old story a spirit absolutely opposed to that by which it had originally been inspired. The Faust of the early Faust-books, of the ballads, the dramas and the puppet-plays innumerable which grew out of them, is irrevocably damned because he deliberately prefers human to "divine" knowledge; "he laid the Holy Scriptures behind the door and under the bench, refused to be called doctor of Theology, but preferred to be styled doctor of Medicine." The orthodox moral of the earliest versions is preserved to the last in the puppet-plays. The Voice to the right cries: "Faust! Faust! desist from this proposal! Go on with the study of Theology, and you will be the happiest of mortals." The Voice to the left answers: "Faust! Faust! leave the study of Theology. Betake you to Necromancy, and you will be the happiest of mortals!" The Faust legend was, in fact, the creation of orthodox Protestantism; its moral, the inevitable doom which follows the wilful revolt of the intellect against divine authority as represented by the Holy Scriptures and its accredited interpreters. Faust, the contemner of Holy Writ, is set up as a foil to Luther, the champion of the new orthodoxy, who with well-directed inkpot worsted the devil when he sought to interrupt the sacred work of rendering the Bible into the vulgar tongue.

It was doubtless this orthodox and Protestant character of the Faust story which contributed to its immense and immediate popularity in the Protestant countries. The first edition of the Historia von D. Johann Fausten, by an unknown compiler, published by Johann Spies at Frankfort in 1587, sold out at once. Though only placed on the market in the autumn, before the year was out it had been reprinted in four pirated editions. In the following year a rhymed version was printed at Tübingen, a second edition was published by Spies at Frankfort and a version in low German by J.J. Balhorn at Lübeck. Reprints and amended versions continued to appear in Germany every year, till they culminated in the pedantic compilation of Georg Rudolf Widmann, who obscured the dramatic interest of the story by an excessive display of erudition and by his well-meant efforts to elaborate the orthodox moral. Widmann's version of 1599 formed the basis of that of Johann Nicholaus Pfitzer, published at Nuremberg in 1674, which passed through six editions, the last appearing in 1726. Like Widmann, Pfitzer was more zealous for imparting information than for perfecting a work of art, though he had the good taste to restore the episode of the evocation of Helen, which Widmann had expunged as unfit for Christian readers. Lastly there appeared, about 1712, what was to prove the most popular of all the Faust-books: The League with the Devil established by the world-famous Arch-necromancer and Wizard Dr Johann Faust. By a Christian Believer (Christlich Meynenden). This version, which bore the obviously false date of 1525, passed through many editions, and was circulated at all the fairs in Germany. Abroad the success of the story was scarcely less striking. A Danish version appeared in 1588; in England the History of the Damnable Life and Deserved Death of Dr John Faustus was published some time between 1588 and 1594; in France the translation of Victor Palma Cayet was published at Paris in 1592 and, in the course of the next two hundred years, went through fifteen editions; the oldest Dutch and Flemish versions are dated 1592; and in 1612 a Czech translation was published at Prague.

Besides the popular histories of Faust, all more or less founded on the original edition of Spies, numerous ballads on the same subject were also soon in circulation. Of these the most interesting for the English reader is A *Ballad of the life and death of Dr Faustus the great congerer*, published in 1588 with the imprimatur of the learned Aylmer, bishop of London. This ballad is supposed to have preceded the English version of Spies's Faust-book, mentioned above, on which Marlowe's drama was founded.

To Christopher Marlowe, it would appear, belongs the honour of first realizing the great dramatic possibilities of the Faust legend. *The Tragicall History of D. Faustus as it hath bene acted by the Right Honourable the Earle of Nottingham his servants* was first published by Thomas Bushall at London in 1604. As Marlowe died in 1593, the play must have been written shortly after the appearance of the English version of the Faust story on which it was based. The first recorded performance was on the 30th of September 1594.

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which preceded Goethe's masterpiece. Like most of Marlowe's work it is, indeed, very unequal. At certain moments the poet seems to realize the great possibilities of the story, only to sacrifice them to the necessity for humouring the prevailing public taste of the age. Faustus, who in one scene turns disillusioned from the ordinary fountains of knowledge, or flies in a dragon-drawn chariot through the Empyrean to search out the mysteries of the heavens, in another is made to use his superhuman powers to satisfy the taste of the groundlings for senseless buffoonery, to swindle a horse-dealer, or cheat an ale-wife of her score; while Protestant orthodoxy is conciliated by irrelevant insults to the Roman Church and by the final catastrophe, when Faustus pays for his revolt against the Word of God by the forfeit of his soul. This conception, which followed that of the popular Faust histories, underlay all further developments of the Faust drama for nearly two hundred years. Of the serious stage plays founded on this theme, Marlowe's Faustus remains the sole authentic example until near the end of the 18th century; but there is plenty of evidence to prove that in Germany the Comedy of Dr Faust, in one form or another, was and continued to be a popular item in the repertories of theatrical companies until far into the 18th century. It is supposed, with good reason, that the German versions were based on those introduced into the country by English strolling players early in the 17th century. However this may be, the dramatic versions of the Faust legend followed much the same course as the prose histories. Just as these gradually degenerated into chap-books hawked at fairs, so the dramas were replaced by puppet-plays, handed down by tradition through generations of showmen, retaining their original broad characteristics, but subject to infinite modification in detail. In this way, in the puppet-shows, the traditional Faust story retained its popularity until far into the 19th century, long after, in the sphere of literature, Goethe had for ever raised it to quite another plane.

It was natural that during the literary revival in Germany in the 18th century, when German writers were eagerly on the look-out for subjects to form the material of a truly national literature, the Faust legend should have attracted their attention. Lessing was the first to point out its great possibilities;<sup>3</sup> and he himself wrote a Faust drama, of which unfortunately only a fragment remains, the MS. of the completed work having been lost in the author's lifetime. None the less, to Lessing, not to Goethe, is due the new point of view from which the story was approached by most of those who, after about the year 1770, attempted to tell it. The traditional Faust legend represented the sternly orthodox attitude of the Protestant reformers. Even the mitigating elements which the middle ages had permitted had been banished by the stern logic of the theologians of the New Religion. Theophilus had been saved in the end by the intervention of the Blessed Virgin; Pope Silvester, according to one version of the legend, had likewise been snatched from the jaws of hell at the last moment. Faust was irrevocably damned, since the attractions of the studium theologicum proved insufficient to counteract the fascinations of the classic Helen. But if he was to become, in the 18th century, the type of the human intellect face to face with the deep problems of human life, it was intolerable that his struggles should issue in eternal reprobation. Error and heresy had ceased to be regarded as crimes; and stereotyped orthodoxy, to the age of the Encyclopaedists, represented nothing more than the atrophy of the human intellect. Es irrt der Mensch so lang er strebt, which sums up in one pregnant line the spirit of Goethe's *Faust*, sums up also the spirit of the age which killed with ridicule the last efforts of persecuting piety, and saw the birth of modern science. Lessing, in short, proclaimed that the final end of Faust must be, not his damnation, but his salvation. This revolutionary conception is the measure of Goethe's debt to Lessing. The essential change which Goethe himself introduced into the story is in the nature of the pact between Faust and Mephistopheles, and in the character of Mephistopheles himself. The Mephistopheles of Marlowe, as of the old Faust-books, for all his brave buffoonery, is a melancholy devil, with a soul above the unsavoury hell in which he is forced to pass a hopeless existence. "Tell me," says Faust, in the puppet-play, to Mephistopheles, "what would you do if you could attain to everlasting salvation?" And the devil answers, "Hear and despair! Were I able to attain everlasting salvation, I would mount to heaven on a ladder, though every rung were a razor edge!" Goethe's Mephistopheles would have made no such reply. There is nothing of the fallen angel about him; he is perfectly content with his past, his present and his future; and he appears before the throne of God with the same easy insolence as he exhibits in Dame Martha's back-garden. He is, in fact, according to his own definition, the Spirit of Denial, the impersonation of that utter scepticism which can see no distinction between high and low, between good and bad, and is therefore without aspiration because it knows no "divine discontent." And the compact which Faust makes with this spirit is from the first doomed to be void. Faustus had bartered away his soul for a definite period of pleasure and power. The conception that underlies the compact of Faust with Mephistopheles is far more subtle. He had sought happiness vainly in the higher intellectual and spiritual pursuits; he is content to

seek it on a lower plane since Mephistopheles gives him the chance; but he is confident that nothing that "such a poor devil" can offer him could give him that moment of supreme satisfaction for which he craves. He goes through the traditional mummery of signing the bond with scornful submission; for he knows that his damnation will not be the outcome of any formal compact, but will follow inevitably, and only then, when his soul has grown to be satisfied with what Mephistopheles can purvey him.

> "Canst thou with lying flattery rule me Until self-pleased myself I see, Canst thou with pleasure mock and fool me, Let that hour be the last for me! When thus I hail the moment flying: 'Ah, still delay, thou art so fair!' Then bind me in thy chains undying, My final ruin then declare!"<sup>4</sup>

It is because Mephistopheles fails to give him this self-satisfaction or to absorb his being in the pleasures he provides, that the compact comes to nothing. When, at last, Faust cries to the passing moment to remain, it is because he has forgotten self in enthusiasm for a great and beneficent work, in a state of mind the very antithesis of all that Mephistopheles represents. In the old Faust-books, Faust had been given plenty of opportunity for repentance, but the inducements had been no higher than the exhibition of a throne in heaven on the one hand and the tortures of hell on the other. Goethe's *Faust*, for all its Christian setting, departs widely from this orthodox standpoint. Faust shows no signs of "repentance"; he simply emerges by the innate force of his character from a lower into a higher state. The triumph, foretold by "the Lord" in the opening scene, was inevitable from the first, since, though

> "'Man errs so long as he is striving, A good man through obscurest aspiration Is ever conscious of the one true way.'"

A man, in short, must be judged not by the sins and follies which may be but accidents of his career, but by the character which is its essential outcome.

This idea, which inspired also the kindred theme of Browning's *Paracelsus*, is the main development introduced by Goethe into the Faust legend. The episode of Gretchen, for all its tragic interest, does not belong to the legend at all; and it is difficult to deny the pertinency of Charles Lamb's criticism, "What has Margaret to do with Faust?" Yet in spite of all that may be said of the irrelevancies, and of the discussions of themes of merely ephemeral interest, with which Goethe overloaded especially the second part of the poem, his *Faust* remains for the modern world the final form of the legend out of which it grew, the magnificent expression of the broad humanism which, even in spheres accounted orthodox, has tended to replace the peculiar *studium theologicum* which inspired the early Faustbooks.

See Karl Engel, Zusammenstellung der Faust-Schriften vom 16. Jahrhundert bis Mitte 1884 —a second edition of the Bibliotheca Faustiana (1874)—(Oldenburg, 1885), a complete bibliography of all published matter concerned, even somewhat remotely, with Faust; Goethe's Faust, with introduction and notes by K.J. Schröer (2nd ed., Heilbronn, 1886); Carl Kiesewetter, Faust in der Geschichte und Tradition (Leipzig, 1893). The last book, besides being a critical study of the material for the historical and legendary story of Faust, aims at estimating the relation of the Faust-legend to the whole subject of occultism, ancient and modern. It is a mine of information on necromancy and its kindred subjects, as well as on eminent theurgists, wizards, crystal-gazers and the like of all ages.

(W. A. P.)

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<sup>1</sup> The opinion, long maintained by some, that he was identical with Johann Fust, the printer, is now universally rejected.

<sup>2</sup> Many are given in Kiesewetter's *Faust*, p. 112, &c.

<sup>3</sup> In the *Literaturbrief* of Feb. 16, 1759.

<sup>4</sup> Bayard Taylor's trans.

**FAUSTINA, ANNIA GALERIA,** the younger, daughter of Antoninus Pius, and wife of Marcus Aurelius Antoninus. She is accused by Dio Cassius and Capitolinus of gross profligacy, and was reputed to have instigated the revolt of Avidius Cassius against her husband. She died in 175 or 176 (so Clinton, *Fasti rom.*) at Halala, near Mount Taurus, in Cappadocia, whither she had accompanied Aurelius. Charitable schools for orphan girls (hence called *Faustinianae*) were founded in her honour, like those established by her father Antoninus in honour of his wife, the elder Faustina. Her statue was placed in the temple of Venus, and she was numbered among the tutelary deities of Rome. From the fact that Aurelius was always devoted to her and was heartbroken at her death, it has been inferred that the unfavourable estimate of the historians is prejudiced or at least mistaken.

See Capitolinus, *Marcus Aurelius*; Dio Cassius lxxi. 22, lxxiv. 3; E. Renan, in *Mélanges d'histoire et des voyages*, 169-195.

**FAVARA**, a town of Sicily, in the province of Girgenti, 5 m. E. of Girgenti by road. Pop. (1901) 20,398. It possesses a fine castle of the Chiaramonte family, erected in 1280. The town has a considerable agricultural trade, and there are sulphur and other mines in the neighbourhood.

FAVART, CHARLES SIMON (1710-1792), French dramatist, was born in Paris on the 13th of November 1710, the son of a pastry-cook. He was educated at the college of Louis-le-Grand, and after his father's death carried on the business for a time. His first success in literature was La France délivrée par la Pucelle d'Orléans, a poem which obtained a prize of the Académie des Jeux Flor ux. After the production of his first vaudeville, Les Deux Jumelles (1734), circumstances enabled him to relinquish business and devote himself entirely to the drama. He provided many pieces anonymously for the lesser theatres, and first put his name to La Chercheuse d'esprit, which was produced in 1741. Among his most successful works were Annette et Lubin, Le Coq du village (1743), Ninette à la cour (1753), Les Trois Sultanes (1761) and L'Anglais à Bordeaux (1763). Favart became director of the Opéra Comique, and in 1745 married Marie Justine Benoîte Duronceray (1727-1772), a beautiful young dancer, singer and actress, who as "Mlle Chantilly" had made a successful début the year before. By their united talents and labours the Opéra Comique rose to such a height of success that it aroused the jealousy of the rival Comédie Italienne and was suppressed. Favart, left thus without resources, accepted the proposal of Maurice de Saxe, and undertook the direction of a troupe of comedians which was to accompany his army into Flanders. It was part of his duty to compose from time to time impromptu verses on the events of the campaign, amusing and stimulating the spirits of the men. So popular were Favart and his troupe that the enemy became desirous of hearing his company and sharing his services, and permission was given to gratify them, battles and comedies thus curiously alternating with each other. But the marshal, who was an admirer of Mme Favart, began to persecute her with his attentions. To escape him she went to Paris, and the wrath of Saxe fell upon the husband. A lettre de cachet was issued against him, but he fled to Strassburg and found concealment in a cellar. Mme Favart meanwhile had been established by the marshal in a house at Vaugirard; but as she proved a fickle mistress she was suddenly arrested and confined in a convent, where she was brought to unconditional surrender in the beginning of 1750. Before the year was out the marshal died, and Mme Favart reappeared at the Comédie Italienne, where for twenty years she was the favourite actress. To her is largely due the beginnings of the change in this theatre to performances of a lyric type adapted from Italian models, which developed later into the genuine French comic opera. She was also a bold reformer in matters of stage costume, playing the peasant with bare arms, in wooden shoes and linen dress, and not, as heretofore, in court costume with enormous hoops, diamonds and long white kid gloves. With her husband, and other authors, she collaborated in a number of successful pieces, and one *—La Fille mal gardée*—she produced alone.

Favart survived his wife twenty years. After the marshal's death in 1750 he had returned to Paris, and resumed his pursuits as a dramatist. It was at this time that the abbé de Voisenon

became intimate with him and took part in his labours, to what extent is uncertain. He had grown nearly blind in his last days, and died in Paris on the 12th of May 1792. His plays have been several times republished in various editions and selections (1763-1772, 12 vols.; 1810, 3 vols.; 1813; 1853). His correspondence (1759-1763) with Count Durazzo, director of theatres at Vienna, was published in 1808 as *Mémoires et correspondance littéraire, dramatique et anecdotique de C.S. Favart.* It furnishes valuable information on the state of the literary and theatrical worlds in the 18th century.

Favart's second son, CHARLES NICOLAS JOSEPH JUSTIN FAVART (1749-1806), was an actor of moderate talent at the Comédie Française for fifteen years. He wrote a number of successful plays:—*Le Diable boiteux* (1782), *Le Mariage singulier* (1787) and, with his father, *La Vieillesse d'Annette* (1791). His son Antoine Pierre Charles Favart (1780-1867) was in the diplomatic service, and assisted in editing his grandfather's memoirs; he was a playwright and painter as well.

FAVERSHAM, a market town and river-port, member of the Cinque Port of Dover, and municipal borough in the Faversham parliamentary division of Kent, England, on a creek of the Swale, 9 m. W.N.W. of Canterbury on the South-Eastern & Chatham railway. Pop. (1901) 11,290. The church of St Mary of Charity, restored by Sir G.G. Scott in 1874, is of Early English architecture, and has some remains on one of the columns of frescoes of the same period, while the 14th-century paintings in the chancel are in better preservation. Some of the brasses are very fine, and there is one commemorating King Stephen, as well as a tomb said to be his. He was buried at the abbey he founded here, of which only a wall and the foundations below ground remain. At Davington, close to Faversham, there are remains, incorporated in a residence, of the cloisters and other parts of a Benedictine priory founded in 1153. Faversham has a free grammar school founded in 1527 and removed to its present site in 1877. Faversham Creek is navigable up to the town for vessels of 200 tons. The shipping trade is considerable, chiefly in coal, timber and agricultural produce. The oyster fisheries are important, and are managed by a very ancient gild, the Company of Free Dredgermen of the Hundred and Manor of Faversham. Brewing, brickmaking and the manufacture of cement are also carried on, and there are several large powder mills in the vicinity. The town is governed by a mayor, 4 aldermen and 12 councillors. Area, 686 acres.

There was a Romano-British village on the site of Faversham. The town (Fauresfeld, Faveresham) owed its early importance to its situation as a port on the Swale, to the fertile country surrounding it, and to the neighbourhood of Watling Street. In 811 it was called the king's town, and a witenagemot was held here under Æthelstan. In 1086 it was assessed as royal demesne, and a market was held here at this date. An abbey was built by Stephen in 1147, in which he and Matilda were buried. They had endowed it with the manor and hundred of Faversham; this grant caused many disputes between the abbot and men of Faversham concerning the abbot's jurisdiction. Faversham was probably a member of Dover from the earliest association of the Cinque Ports, certainly as early as Henry III., who in 1252 granted among other liberties of the Cinque Ports that the barons of Faversham should plead only in Shepway Court, but ten years later transferred certain pleas to the abbot's court. In this reign also the abbot appointed the mayor, but from the reign of Edward I. he was elected by the freemen and then installed by the abbot. The corporation was prescriptive, and a hallmote held in 1293 was attended by a mayor and twelve jurats. All the liberties of the Cinque Ports were granted to the barons of Faversham by Edward I. in 1302, and confirmed by Edward III. in 1365, and by later monarchs. The governing charter till 1835 was that of Henry VIII., granted in 1545 and confirmed by Edward VI.

**FAVORINUS** (2nd century A.D.), Greek sophist and philosopher, flourished during the reign of Hadrian. A Gaul by birth, he was a native of Arelate (Arles), but at an early age began his lifelong travels through Greece, Italy and the East. His extensive knowledge, combined with great oratorical powers, raised him to eminence both in Athens and in Rome. With Plutarch, who dedicated to him his treatise  $\Pi$ ερì τοῦ πρώτου ψυχροῦ, with Herodes Atticus, to whom he 214

bequeathed his library at Rome, with Demetrius the Cynic, Cornelius Fronto, Aulus Gellius, and with Hadrian himself, he lived on intimate terms; his great rival, whom he violently attacked in his later years, was Polemon of Smyrna. It was Favorinus who, on being silenced by Hadrian in an argument in which the sophist might easily have refuted his adversary, subsequently explained that it was foolish to criticize the logic of the master of thirty legions. When the servile Athenians, feigning to share the emperor's displeasure with the sophist, pulled down a statue which they had erected to him, Favorinus remarked that if only Socrates also had had a statue at Athens, he might have been spared the hemlock. Of the very numerous works of Favorinus, we possess only a few fragments (unless the Κορινθιακός  $\lambda \dot{0} \gamma \sigma c$  attributed to his tutor Dio Chrysostom is by him), preserved by Aulus Gellius, Diogenes Laërtius, Philostratus, and Suïdas, the second of whom borrows from his Παντοδαπή ίστορία (miscellaneous history) and his Ἀπομνημονεύματα (memoirs). As a philosopher, Favorinus belonged to the sceptical school; his most important work in this connexion appears to have been Πυρρώνειοι τρόποι (the Pyrrhonean Tropes) in ten books, in which he endeavours to show that the methods of Pyrrho were useful to those who intended to practise in the law courts.

See Philostratus, *Vitae sophistarum*, i. 8; Suïdas, *s.v.*; frags. in C.W. Müller, *Frag. Hist. Graec.* iii. 4; monographs by L. Legré (1900), T. Colardeau (1903).

FAVRAS, THOMAS DE MAHY, MARQUIS DE (1744-1790), French royalist, was born on the 26th of March 1744, at Blois. He belonged to a poor family whose nobility dated from the 12th century. At seventeen he was a captain of dragoons, and saw some service in the closing campaign of the Seven Years' War. In 1772 he became first lieutenant of the Swiss guards of the count of Provence (afterwards Louis XVIII.). Unable to meet the expenses of his rank, which was equivalent to the grade of colonel in the army, he retired in 1775. He married in 1776 Victoria Hedwig Caroline, princess of Anhalt-Bernburg-Schaumburg, whose mother, deserted by her husband Prince Carl Ludwig in 1749, had found refuge with her daughter in the house of Marshal Soubise. After his marriage he went to Vienna to press the restitution of his wife's rights, and spent some time in Warsaw. In 1787 he was authorized to raise a patriotic legion to help the Dutch against the stadtholder William IV. and his Prussian allies. Returning to Paris at the outbreak of the Revolution, he became implicated in schemes for the escape of Louis XVI. from Paris and the dominance of the National Assembly. He was commissioned by the count of Provence through one of his gentlemen, the comte de la Châtre, to negotiate a loan of two million francs from the bankers Schaumel and Sartorius. Favras took into his confidence certain officers by whom he was betrayed; and, with his wife, he was arrested on Christmas Eve 1789 and imprisoned in the Abbaye. A fortnight later they were separated, Favras being removed to the Châtelet. It was stated in a leaflet circulated throughout Paris that Favras had organized a plot of which the count of Provence was the moving spirit. A force of 30,000 was to be raised, La Fayette and Bailly, the mayor of Paris, were to be assassinated, and Paris was to be starved into submission by cutting off supplies. The count hastened publicly to disavow Favras in a speech delivered before the commune of Paris and in a letter to the National Assembly, although there is no reasonable doubt of his complicity in the plot that did exist. In the course of a trial of nearly two months' duration the witnesses disagreed, and even the editor of the Révolutions de Paris (No. 30) admitted that the evidence was insufficient but an armed attempt of the Royalists on the Châtelet on the 26th of January, which was defeated by La Fayette, roused the suspicious temper of the Parisians to fury, and on the 18th of February 1790, in spite of the courageous defence of his counsel, Favras was condemned to be hanged. He refused to give any information of the alleged plot, and the sentence was carried out on the Place de Grève the next day, to the delight of the populace, since it was the first instance when no distinction in the mode of execution was allowed between noble and commoner. Favras was generally regarded as a martyr to his refusal to implicate the count of Provence, and Madame de Favras was pensioned by Louis XVI. She left France, and her son Charles de Favras served in the Austrian and the Russian armies. He received an allowance from Louis XVIII. Her daughter Caroline married Rüdiger, Freiherr von Stillfried Ratènic, in 1805.

The official *dossier* of Favras's trial for high treason against the nation disappeared from the Châtelet, but its substance is preserved in the papers of a clerk.

*de l'histoire de Paris pendant la Révolution Française* (vol. i., 1890, pp. 175-177); M. Tourneux, *Bibl. de l'histoire de Paris pendant la Révolution Française* (vol. i. pp. 196-198, 1890). His brother, M. Mahy de Cormère, published a *Mémoire justificatif* in 1790 and a *Justification* in 1791. See also a memoir by Eduard, Freiherr v. Stillfried Ratènic (Vienna, 1881), and an article by Alexis de Valon in the *Revue des deux mondes* (15th June 1851).

**FAVRE, JEAN ALPHONSE** (1815-1890), Swiss geologist, was born at Geneva on the 31st of March 1815. He was for many years professor of geology in the academy at Geneva, and afterwards president of the Federal Commission with charge of the geological map of Switzerland. One of his earliest papers was *On the Anthracites of the Alps* (1841), and later he gave special attention to the geology of Savoy and of Mont Blanc, and to the ancient glacial phenomena of those Alpine regions. His elucidation of the geological structure demonstrated that certain anomalous occurrences of fossils were due to repeated interfoldings of the strata and to complicated overthrust faults. In 1867 he published *Recherches géologiques dans les parties de la Savoie, du Piémont et de la Suisse voisines du Mont Blanc.* He died at Geneva in June 1890.

His son ERNEST FAVRE (b. 1845) has written on the palaeontology and geology of Galicia, Savoy and the Fribourg Alps, and of the Caucasus and Crimea.

FAVRE, JULES CLAUDE GABRIEL (1809-1880), French statesman, was born at Lyons on the 21st of March 1809, and began his career as an advocate. From the time of the revolution of 1830 he openly declared himself a republican, and in political trials he seized the opportunity to express his opinions. After the revolution of 1848 he was elected deputy for Lyons to the Constituent Assembly, where he sat among the moderate republicans, voting against the socialists. When Louis Napoleon was elected President of France, Favre made himself conspicuous by his opposition, and on the 2nd of December 1851 he tried with Victor Hugo and others to organize an armed resistance in the streets of Paris. After the coup d'état he withdrew from politics, resumed his profession, and distinguished himself by his defence of Felice Orsini, the perpetrator of the attack against the life of Napoleon III. In 1858 he was elected deputy for Paris, and was one of the "Five" who gave the signal for the republican opposition to the Empire. In 1863 he became the head of his party, and delivered a number of addresses denouncing the Mexican expedition and the occupation of Rome. These addresses, eloquent, clear and incisive, won him a seat in the French Academy in 1867. With Thiers he opposed the declaration of war against Prussia in 1870, and at the news of the defeat of Napoleon III. at Sedan he demanded from the Legislative Assembly the deposition of the emperor. In the government of National Defence he became vice-president under General Trochu, and minister of foreign affairs, with the onerous task of negotiating peace with victorious Germany. He proved to be less adroit as a diplomat than he had been as an orator, and committed several irreparable blunders. His famous statement on the 6th of September 1870 that he "would not yield to Germany an inch of territory nor a single stone of the fortresses" was a piece of oratory which Bismarck met on the 19th by his declaration to Favre that the cession of Alsace and of Lorraine was the indispensable condition of peace. He also made the mistake of not having an assembly elected which would have more regular powers than the government of National Defence, and of opposing the removal of the government from Paris during the siege. In the peace negotiations he allowed Bismarck to get the better of him, and arranged for the armistice of the 28th of June 1871 without knowing the situation of the armies, and without consulting the government at Bordeaux. By a grave oversight he neglected to inform Gambetta that the army of the East (80,000 men) was not included in the armistice, and it was thus obliged to retreat to neutral territory. He gave no proof whatever of diplomatic skill in the negotiations for the treaty of Frankfort, and it was Bismarck who imposed all the conditions. He withdrew from the ministry, discredited, on the 2nd of August 1871, but remained in the chamber of deputies. Elected senator on the 30th of January 1876, he continued to support the government of the republic against the reactionary opposition, until his death on the 20th of January 1880.

His work include many speeches and addresses, notably *La Liberté de la Presse* (1849), *Défense de F. Orsini* (1866), *Discours de réception à l'Académie française* (1868), *Discours sur la liberté intérieure* (1869). In *Le Gouvernement de la Défense Nationale*, 3 vols., 1871-1875, he explained his rôle in 1870-1871. After his death his family published his speeches in 8 volumes.

See G. Hanotaux, *Histoire de la France contemporaine* (1903, &c.); also E. Benoît-Lévy, *Jules Favre* (1884).

FAVUS (Lat. for honeycomb), a disease of the scalp, but occurring occasionally on any part of the skin, and even at times on mucous membranes. The uncomplicated appearance is that of a number of yellowish, circular, cup-shaped crusts (scutula) grouped in patches like a piece of honeycomb, each about the size of a split pea, with a hair projecting in the centre. These increase in size and become crusted over, so that the characteristic lesion can only be seen round the edge of the scab. Growth continues to take place for several months, when scab and scutulum come away, leaving a shining bare patch destitute of hair. The disease is essentially chronic, lasting from ten to twenty years. It is caused by the growth of a fungus, and pathologically is the reaction of the tissues to the growth. It was the first disease in which a fungus was discovered—by J.L. Schönlein in 1839; the discovery was published in a brief note of twenty lines in Müllers Archiv for that year (p. 82), the fungus having been subsequently named by R. Remak Achorion Schönleinii after its discoverer. The achorion consists of slender, mycelial threads matted together, bearing oval, nucleated gonidia either free or jointed. The spores would appear to enter through the unbroken cutaneous surface, and to germinate mostly in and around the hair-follicle and sometimes in the shaft of the hair. In 1892 two other species of the fungus were described by P.G. Unna and Frank, the Favus griseus, giving rise to greyish-yellow scutula, and the Favus sulphureus celerior, causing sulphur-yellow scutula of a rapid growth. Favus is commonest among the poorer Jews of Russia, Poland, Hungary, Galicia and the East, and among the same class of Mahommedans in Turkey, Asia Minor, Syria, Persia, Egypt, Algiers, &c. It is not rare in the southern departments of France, in some parts of Italy, and in Scotland. It is spread by contagion, usually from cats, often, however, from mice, fowls or dogs. Lack of personal cleanliness is an almost necessary factor in its development, but any one in delicate health, especially if suffering from phthisis, seems especially liable to contract it. Before treatment can be begun the scabs must be removed by means of carbolized oil, and the head thoroughly cleansed with soft soap. The cure is then brought about by the judicious use of parasiticides. If the nails are affected, avulsion will probably be needed before the disease can be reached.

**FAWCETT, HENRY** (1833-1884), English politician and economist, was born at Salisbury on the 25th of August 1833. His father, William Fawcett, a native of Kirkby Lonsdale, in Westmorland, started life as a draper's assistant at Salisbury, opened a draper's shop on his own account in the market-place there in 1825, married a solicitor's daughter of the city, became a prominent local man, took a farm, developed his north-country sporting instincts, and displayed his shrewdness by successful speculations in Cornish mining. His second son, Henry, inherited a full measure of his shrewdness, along with his masculine energy, his straightforwardness, his perseverance and his fondness for fishing. The father was active in electioneering matters, and his wife was an ardent reformer. Henry Fawcett was educated locally and at King's College school, London, and proceeded to Peterhouse, Cambridge, in October 1852, migrating in 1853 to Trinity Hall. He was seventh wrangler in 1856, and was elected to a fellowship at his college.

He had already attained some prominence as an orator at the Cambridge Union. Before he left school he had formed the ambition of entering parliament, and, being a poor man, he resolved to approach the House of Commons through a career at the bar. He had already entered Lincoln's Inn. His prospects, however, were shattered by a calamity which befell him in September 1858, when two stray pellets from his father's fowling-piece passed through the glasses he was wearing and blinded him for life. Within ten minutes after his accident he

had made up his mind "to stick to his old pursuits as much as possible." He kept up all recreations contributing to the enjoyment of life; he fished, rowed, skated, took abundant walking and horse exercise, and learnt to play cards with marked packs. Soon after his accident he established his headquarters at Trinity Hall, Cambridge, entered cordially into the social life of the college, and came to be regarded by many as a typical Cambridge man. He gave up mathematics (for which he had little aptitude), and specialized in political economy. He paid comparatively little attention to economic history, but he was in the main a devout believer in economic theory, as represented by Ricardo and his school. The later philosophy of the subject he believed to be summed up in one book, Mill's Principles of *Political Economy*, which he regarded as the indispensable "vade mecum" of every politician. He was not a great reader, and Mill probably never had a serious rival in his regard, though he was much impressed by Buckle's History of Civilization and Darwin's Origin of Species when they severally appeared. He made a great impression in 1859 with a paper at the British Association, and he soon became a familiar figure there and at various lecture halls in the north as an exponent of orthodox economic theory. Of the sincerity of his faith he gave the strongest evidence by his desire at all times to give a practical application to his views and submit them to the test of experiment. Among Mill's disciples he was, no doubt, far inferior as an economic thinker to Cairnes, but as a popularizer of the system and a demonstrator of its principles by concrete examples he had no rival. His power of exposition was illustrated in his Manual of Political Economy (1863), of which in twenty years as many as 20,000 copies were sold. Alexander Macmillan had suggested the book, and it appeared just in time to serve as a credential, when, in the autumn of 1863, Fawcett stood and was elected for the Chair of Political Economy at Cambridge. The appointment attached him permanently to Cambridge, gave him an income, and showed that he was competent to discharge duties from which a blind man is often considered to be debarred. He was already a member of the Political Economy Club, and was becoming well known in political circles as an advanced Radical. In January 1863, after a spirited though abortive attempt in Southwark, he was only narrowly beaten for the borough of Cambridge. Early in 1864 he was adopted as one of the Liberal candidates at Brighton, and at the general election of 1865 he was elected by a large majority. Shortly after his election he became engaged to Millicent, daughter of Mr Newson Garrett of Aldeburgh, Suffolk, and in 1867 he was married. Mrs Fawcett (b. 1847) became well known for her social and literary work, and especially as an advocate, in the press and on the platform, of women's suffrage and the higher education and independent employment of women. And after her husband's death, as well as during his lifetime, she was a prominent leader in these movements.

Fawcett entered parliament just in time to see the close of Palmerston's career and to hail the adoption by Gladstone of a programme of reform to which most of the laissez-faire economists gave assent. He was soon known as a forcible speaker, and guickly overcame the imputation that he was academic and doctrinaire, though it is true that a certain monotony in delivery often gave a slightly too didactic tone to his discourses. But it was as the uncompromising critic of the political shifts and expedients of his leaders that he attracted most attention. He constantly insisted upon the right of exercising private judgment, and he especially devoted himself to the defence of causes which, as he thought, were neglected both by his official leaders and by his Radical comrades. Re-elected for Brighton to the parliament of 1868-1874, he greatly hampered the government by his persistence in urging the abolition of clerical fellowships and the payment of election expenses out of the rates, and by opposing the "permissive compulsion" clauses of the Elementary Education Bill, and the exclusion of agricultural children from the scope of the act. His hatred of weak concessions made him the terror of parliamentary wirepullers, and in 1871 he was not undeservedly spoken of in *The Times* as the most "thorough Radical now in the House." His liberal ideals were further shocked by the methods by which Gladstone achieved the abolition of Army Purchase. His disgust at the supineness of the cabinet in dealing with the problems of Indian finance and the growing evil of Commons Enclosures were added to the catalogue of grievances which Fawcett drew up in a powerful article, "On the Present Position of the Government," in the Fortnightly Review for November 1871. In 1867 he had opposed the expenses of a ball given to the sultan at the India office being charged upon the Indian budget. In 1870 he similarly opposed the taxation of the Indian revenue with the cost of presents distributed by the duke of Edinburgh in India. In 1871 he went alone into the lobby to vote against the dowry granted to the princess Louise. The soundness of his principles was not impeached, but his leaders looked askance at him, and from 1871 he was severely shunned by the government whips. Their suspicion was justified when in 1873 Fawcett took a leading share in opposing Gladstone's scheme for university education in Ireland as too denominational, and so contributed largely to a conclusive defeat of the Gladstone ministry.

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From 1869 to 1880 Fawcett concentrated his energies upon two important subjects which

had not hitherto been deemed worthy of serious parliamentary attention. The first of these was the preservation of commons, especially those near large towns; and the second was the responsibility of the British government for the amendment of Indian finance. In both cases the success which he obtained exhibited the sterling sense and shrewdness which made up such a great part of Fawcett's character. In the first case Fawcett's great triumph was the enforcement of the general principle that each annual Enclosure Act must be scrutinized by parliament and judged in the light of its conformity to the interests of the community at large. Probably no one did more than he did to prevent the disafforestation of Epping Forest and of the New Forest. From 1869 he regularly attended the meetings of the Commons Preservation Society, and he remained to the end one of its staunchest supporters. His intervention in the matter of Indian finance, which gained him the sobriquet of the "member for India," led to no definite legislative achievements, but it called forth the best energies of his mind and helped to rouse an apathetic and ignorant public to its duties and responsibilities. Fawcett was defeated at Brighton in February 1874. Two months later, however, he was elected for Hackney, and retained the seat during his life. He was promptly replaced on the Indian Finance Committee, and continued his searching inquiries with a view to promote a stricter economy in the Indian budget, and a more effective responsibility in the management of Indian accounts.

As an opponent of the Disraeli government (1874-1880) Fawcett came more into line with the Liberal leaders. In foreign politics he gave a general adhesion to Gladstone's views, but he continued to devote much attention to Indian matters, and it was during this period that he produced two of his best publications. His Free Trade and Protection (1878) illustrated his continued loyalty to Cobdenite ideas. At the same time his admiration for Palmerston and his repugnance to schemes of Home Rule show that he was not by any means a peace-at-anyprice man. He thought that the Cobdenites had deserved well of their country, but he always maintained that their foreign politics were biased to excess by purely commercial considerations. As befitted a writer whose linguistic gifts were of the slenderest, Fawcett's English was a sound homespun, clear and unpretentious. In a vigorous employment of the vernacular he approached Cobbett, whose writing he justly admired. The second publication was his Indian Finance (1880), three essays reprinted from the Nineteenth Century, with an introduction and appendix. When the Liberal party returned to power in 1880 Gladstone offered Fawcett a place in the new government as postmaster-general (without a seat in the cabinet). On Egyptian and other questions of foreign policy Fawcett was often far from being in full harmony with his leaders, but his position in the government naturally enforced reserve. He was, moreover, fully absorbed by his new administrative functions. He gained the sympathy of a class which he had hitherto done little to conciliate, that of public officials, and he showed himself a most capable head of a public department. To his readiness in adopting suggestions, and his determination to push business through instead of allowing it to remain permanently in the stage of preparation and circumlocution, the public is mainly indebted for five substantial postal reforms:-(1) The parcels post, (2) postal orders, (3) sixpenny telegrams, (4) the banking of small savings by means of stamps, (5) increased facilities for life insurance and annuities. In connexion with these last two improvements Fawcett, in 1880, with the assistance of Mr James Cardin, took great pains in drawing up a small pamphlet called Aids to Thrift, of which over a million copies were circulated gratis. A very useful minor innovation of his provided for the announcement on every pillar-box of the time of the "next collection." In the post office, as elsewhere, he was a strong advocate of the employment of women. Proportional representation and the extension of franchise to women were both political doctrines which he adopted very early in his career, and never abandoned. Honours were showered upon him during his later years. He was made an honorary D.C.L. of Oxford, a fellow of the Royal Society, and was in 1883 elected lord rector of Glasgow University. But the stress of departmental work soon began to tell upon his health. In the autumn of 1882 he had a sharp attack of diphtheria complicated by typhoid, from which he never properly recovered. He resumed his activities, but on the 6th of November 1884 he succumbed at Cambridge to an attack of congestion of the lungs. He was buried in Trumpington churchyard, near Cambridge, and to his memory were erected a monument in Westminster Abbey, a statue in Salisbury market-place, and a drinking fountain on the Thames embankment.

In economic matters Fawcett's position can best be described as transitional. He believed in co-operation almost as a panacea. In other matters he clung to the old *laissez-faire* theorists, and was a strong anti-socialist, with serious doubts about free education, though he supported the Factory Acts and wished their extension to agriculture. Apparent inconsistencies were harmonized to a great extent by his dominating anxiety to increase the well-being of the poor. One of his noblest traits was his kindliness and genuine affection for the humble and oppressed, country labourers and the like, for whom his sympathies seemed always on the increase. Another was his disposition to interest himself in and to befriend younger men. In the great affliction of his youth Fawcett bore himself with a fortitude which it would be difficult to parallel. The effect of his blindness was, as the event proved, the reverse of calamitous. It brought the great aim and purpose of his life to maturity at an earlier date than would otherwise have been possible, and it had a mellowing influence upon his character of an exceptional and beneficent kind. As a youth he was rough and canny, with a suspicion of harshness. The kindness evoked by his misfortune, a strongly reciprocated family affection, a growing capacity for making and keeping friends-these and other causes tended to ripen all that was best, and apparently that only, in a strong but somewhat stern character. His acerbity passed away, and in later life was reserved exclusively for official witnesses before parliamentary committees. Frank, helpful, conscientious to a fault, a shrewd gossip, and a staunch friend, he was a man whom no one could help liking. Several of his letters to his father and mother at different periods of his career are preserved in Leslie Stephen's admirable *Life* (1885), and show a goodness of heart, together with a homely simplicity of nature, which is most touching. In appearance Fawcett was gaunt and tall, over 6 ft. 3 in. in height, large of bone, and massive in limb.

(T. Se.)

**FAWCETT, JOHN** (1768-1837), English actor and playwright, was born on the 29th of August 1768, the son of an actor of the same name (d. 1793). At the age of eighteen he ran away from school and appeared at Margate as Courtall in *The Belle's Stratagem*; afterwards he joined Tate Wilkinson's company and turned from tragedy to low comedy parts. In 1791 he appeared at Covent Garden, and in 1794 at the Haymarket. Colman, then manager of that house, wrote a number of parts designed to suit his talents, and two of Fawcett's greatest successes were as Dr. Pangloss in *The Heir at Law* (1797) and as Dr Ollapod in *The Poor Gentleman* (1798). He retired from the stage in 1830.

**FAWKES, FRANCIS** (1720-1777), English poet and divine, was born at Warmsworth, near Doncaster, Yorkshire, where his father was rector, and was baptized on the 4th of April 1720. After studying at Jesus College, Cambridge, where he graduated M.A. in 1745, he took holy orders, and was successively curate of Bramham, curate of Croydon, vicar of Orpington, and rector of Hayes, and finally was made one of the chaplains to the princess of Wales. His first publication is said to have been *Bramham Park, a Poem*, in 1745; a volume of poems and translations appeared in 1761; and *Partridge Shooting*, an eclogue, in 1764. His translations of the minor Greek poets—Anacreon, Sappho, Bion and Moschus, Musaeus, Theocritus and Apollonius—acquired for him considerable fame, but they are less likely to be remembered than his fine song, "Dear Tom, this brown jug, that now foams with mild ale." Fawkes died on the 26th of August 1777.

**FAWKES, GUY** (1570-1606), English "gunpowder plot" conspirator, son of Edward Fawkes of York, a member of a good Yorkshire family and advocate of the archbishop of York's consistory court, was baptized at St Michael le Belfrey at York on the 16th of April 1570. His parents were Protestants, and he was educated at the free school at York, where, it is said, John and Christopher Wright and the Jesuit Tesimond *alias* Greenway, afterwards implicated in the conspiracy, were his schoolfellows. On his father's death in 1579 he inherited his property. Soon afterwards his mother married, as her second husband, Dionis Baynbrigge of Scotton in Yorkshire, to which place the family removed. Fawkes's stepfather was connected with many Roman Catholic families, and was probably a Roman Catholic himself, and Fawkes himself became a zealous adherent of the old faith. Soon after he had come of age he disposed of his property, and in 1593 went to Flanders and enlisted in the Spanish army,

assisting at the capture of Calais by the Spanish in 1596 and gaining some military reputation. According to Father Greenway he was "a man of great piety, of exemplary temperance, of mild and cheerful demeanour, an enemy of broils and disputes, a faithful friend and remarkable for his punctual attendance upon religious observances," while his society was "sought by all the most distinguished in the archduke's camp for nobility and virtue." He is described as "tall, with brown hair and auburn beard."

In 1604 Thomas Winter, at the instance of Catesby, in whose mind the gunpowder plot had now taken definite shape, introduced himself to Fawkes in Flanders, and as "a confident gentleman," "best able for this business," brought him on to England as assistant in the conspiracy. Shortly afterwards he was initiated into the plot, after taking an oath of secrecy, meeting Catesby, Thomas Winter, Thomas Percy and John Wright at a house behind St Clement's (see GUNPOWDER PLOT and CATESBY, ROBERT). Owing to the fact of his being unknown in London, to his exceptional courage and coolness, and probably to his experience in the wars and at sieges, the actual accomplishment of the design was entrusted to Fawkes, and when the house adjoining the parliament house was hired in Percy's name, he took charge of it as Percy's servant, under the name of Johnson He acted as sentinel while the others worked at the mine in December 1604, probably directing their operations, and on the discovery of the adjoining cellar, situated immediately beneath the House of Lords, he arranged in it the barrels of gunpowder, which he covered over with firewood and coals and with iron bars to increase the force of the explosion. When all was ready in May 1605 Fawkes was despatched to Flanders to acquaint Sir William Stanley, the betrayer of Deventer, and the intriguer Owen with the plot. He returned in August and brought fresh gunpowder into the cellars to replace any which might be spoilt by damp. A slow match was prepared which would give him a quarter of an hour in which to escape from the explosion. On Saturday, the 26th of October, Lord Monteagle (q, v) received the mysterious letter which revealed the conspiracy and of which the conspirators received information the following day. They, nevertheless, after some hesitation, hoping that the government would despise the warning, determined to proceed with their plans, and were encouraged in their resolution by Fawkes, who visited the cellar on the 30th and reported that nothing had been moved or touched. He returned accordingly to his lonely and perilous vigil on the 4th of November. On that day the earl of Suffolk, as lord chamberlain, visited the vault, accompanied by Monteagle, remarked the quantity of faggots, and asked Fawkes, now described as "a very tall and desperate fellow," who it was that rented the cellar. Percy's name, which Fawkes gave, aroused fresh suspicions and they retired to inform the king. At about ten o' clock Robert Keyes brought Fawkes from Percy a watch, that he might know how the anxious hours were passing, and very shortly afterwards he was arrested, and the gunpowder discovered, by Thomas Knyvett, a Westminster magistrate. Fawkes was brought into the king's bedchamber, where the ministers had hastily assembled, at one o'clock. He maintained an attitude of defiance and of "Roman resolution," smiled scornfully at his questioners, making no secret of his intentions, replied to the king, who asked why he would kill him, that the pope had excommunicated him, that "dangerous diseases require a desperate remedy," adding fiercely to the Scottish courtiers who surrounded him that "one of his objects was to blow back the Scots into Scotland." His only regret was the failure of the scheme. "He carrieth himself," writes Salisbury to Sir Charles Cornwallis, ambassador at Madrid, "without any feare or perturbation ...; under all this action he is noe more dismayed, nay scarce any more troubled than if he was taken for a poor robbery upon the highway," declaring "that he is ready to die, and rather wisheth 10,000 deaths, than willingly to accuse his master or any other." He refused stubbornly on the following days to give information concerning his accomplices; on the 8th he gave a narrative of the plot, but it was not till the 9th, when the fugitive conspirators had been taken at Holbeche, that torture could wring from him their names. His imperfect signature to his confession of this date, consisting only of his Christian name and written in a faint and trembling hand, is probably a ghastly testimony to the severity of the torture ("per gradus ad ima") which James had ordered to be applied if he would not otherwise confess and the "gentler tortures" were unavailing,-a horrible practice unrecognized by the law of England, but usually employed and justified at this time in cases of treason to obtain information. He was tried, together with the two Winters, John Grant, Ambrose Rokewood, Robert Keyes and Thomas Bates, before a special commission in Westminster Hall on the 27th of January 1606. In this case there could be no defence and he was found guilty. He suffered death in company with Thomas Winter, Rokewood and Keyes on the 31st, being drawn on a hurdle from the Tower to the Parliament House, opposite which he was executed. He made a short speech on the scaffold, expressing his repentance, and mounted the ladder last and with assistance, being weak from torture and illness. The usual barbarities practised upon him after he had been cut down from the gallows were inflicted on a body from which all life had already fled.

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The lantern said to be Guy Fawkes's is in the Bodleian library at Oxford.

(P. C. Y.)

**FÁY, ANDRÁS** (1786-1864), Hungarian poet and author, was born on the 30th of May 1786, at Kohány in the county of Zemplin, and was educated for the law at the Protestant college of Sárospatak. His *Mesék (Fables)*, the first edition of which appeared at Vienna in 1820, evinced his powers of satire and invention, and won him the well-merited applause of his countrymen. These fables, which, on account of their originality and simplicity, caused Fáy to be regarded as the Hungarian Aesop, were translated into German by Petz (Raab, 1825), and partly into English by E.D. Butler, *Hungarian Poems and Fables* (London, 1877). Fáy wrote also numerous poems, the chief of which are to be found in the collections *Bokréta* (*Nosegay*) (Pest, 1807), and *Fris Bokréta* (*Fresh Nosegay*) (Pest, 1818). He also composed plays and romances and tales. In 1835 Fáy was elected to the Hungarian diet, and was for a time the leader of the opposition party. It is to him that the Pest Savings Bank owes its origin, and he was one of the chief founders of the Hungarian National theatre. He died on the 26th of July 1864. His earlier works were collected at Pest (1843-1844, 8 vols.). The most noteworthy of his later works is a humorous novel entitled *Jávor orvos és Bakator Ambrus szolgáia (Jávor the Doctor and his servant Ambrose Bakator*), (Pest 1855, 2 vols.).

**FAYAL** (*Faial*), a Portuguese island in the Atlantic Ocean, forming part of the Azores archipelago. Pop. (1900) 22,262; area, 63 sq. m. Fayal, *i.e.* "the beech wood," was so called from the former abundance of the *Myrica faya*, which its discoverers mistook for beech trees. It is one of the most frequented of the Azores, for it lies directly in the track of vessels crossing the Atlantic, and has an excellent harbour at Horta (*q.v.*), a town of 6574 inhabitants. Cedros (3278) and Féteira (2002) are the other chief towns. The so-called "Fayal wine," which was largely exported from the Azores in the 19th century, was really the produce of Pico, a larger island lying to the east. The women of Fayal manufacture fine lace from the agave thread. They also execute carvings in snow-white fig-tree pith, and carry on the finer kinds of basket-making. A small valley, called Flemengos, perpetuates the name of the Flemish settlers, who have left their mark on the physical appearance of the inhabitants. (See Azores.)

**FAYETTEVILLE**, a city and the county-seat of Washington county, Arkansas, U.S.A., about 150 m. N.W. of Little Rock. Pop. (1890) 2942; (1900) 4061; (1910) 4471. It is served by the St Louis & San Francisco railway. The city lies about 1400 ft. above the sea, in the Ozark Mountain region. There is much fine scenery in the neighbourhood, there are mineral springs near by, and the place has become known as a summer resort. Fayetteville is the seat of the University of Arkansas (incorporated 1871; opened 1872; co-educational), which includes the following departments: at Fayetteville, a college of liberal arts, science and engineering, a conservatory of music and art, a preparatory school, and an agricultural college and agricultural experiment station; at Little Rock, a medical school and a law school, and at Pine

Bluff, the Branch Normal College for negroes. In 1908 the university had 122 instructors and a total enrolment of 1725 students. In Fayetteville there are a National cemetery with 1236 soldiers' graves (782 "unknown") and a Confederate cemetery with 725 graves and a memorial monument. In the vicinity of Fayetteville there are deposits of coal; and the city is in a fine fruit-growing region, apples being the principal crop. Much of the surrounding country is still covered with timber. Among manufactures are lumber, spokes, handles, waggons, lime, evaporated fruit and flour.

The first settlement on the site of what is now Fayetteville was made between 1820 and 1825; when Washington county was created in 1828 the place became the county-seat, and it was called Washington Court-house until 1829, when it received its present name. The citizens of Fayetteville were mainly Confederate sympathizers; Fayetteville was raided by Federal cavalry on the 14th of July 1862, and was permanently occupied by Federal troops in the autumn of the same year. Confederate cavalry under Brigadier-General William Lewis Cabell attacked the city on the 18th of April 1863, but were driven off. The town was burned in August 1863, and shelled on the 3rd of November 1864, after the battle of Pea Ridge, by a detachment of General Price's army. Fayetteville was incorporated as a town in 1841, and in 1859 received a city charter, which was abolished by act of the Legislature in 1867; under a general law of 1869 the town was re-incorporated; and in 1906 it became a city of the first class.

FAYETTEVILLE, a city and the county-seat of Cumberland county, North Carolina, U.S.A., on the W. bank of the Cape Fear river (at the head of steamboat navigation), about 80 m. N.W. of Wilmington. Pop. (1890) 4222; (1900) 4670, including 2221 negroes; (1910) 7045. It is served by the Atlantic Coast Line railway and the short Raleigh & Southport railway, and by steamboat lines to Wilmington. A scheme was set on foot for the improvement by canalization of the Cape Fear river above Wilmington under a Federal project of 1902, which provided for a channel 8 ft. deep at low water from Wilmington to Fayetteville. Below Wilmington the improvement of the river channel, 270 ft. wide and 16 ft. deep, was completed in 1889, and the project of 1889 provided for an increase in depth to 20 ft. Pine forests surround the town, and oaks and elms of more than a century's growth shade its streets. Fayetteville has two hospitals (each with a training school for nurses), and is the seat of a state coloured normal school and of the Donaldson military school. Several creeks and the upper Cape Fear river furnish considerable water-power, and in or near Fayetteville are manufactories of cotton goods, silk, lumber, wooden-ware, turpentine, carriages, wagons, ploughs, edge tools and flour. In the earlier half of the 19th century Fayetteville was a great inland market for the western part of the state, for eastern Tennessee and for south-western Virginia. There is a large vineyard in the vicinity; truck-gardening is an important industry in the surrounding country; and Fayetteville is a shipping centre for small fruits and vegetables, especially lettuce, melons and berries. The municipality owns its water-works and its electriclighting plant. The vicinity was settled between 1729 and 1747 by Highlanders, the settlement called Cross Creek lying within the present limits of Fayetteville. In 1762, by an act of the assembly, a town was laid out including Cross Creek, and was named Campbelltown (or "Campbeltown"); but in 1784, when Lafayette visited the town, its name was changed in his honour to Fayetteville, though the name Cross Creek continued to be used locally for many years. Flora McDonald, the famous Scottish heroine, came to Campbelltown in April 1775 with her husband and children, and here she seems to have lived during the remainder of that year. The general assembly of the state met at Fayetteville in 1787, 1788 and 1789 (Newbern, Tarboro, Hillsboro and Fayetteville all being rivals at this time for the honour of becoming the permanent capital); and in 1789 the Federal constitution was here ratified for North Carolina. In 1831 most of the town was burned. At the outbreak of the Civil War, the state authorities seized the United States Arsenal at Fayetteville, which contained 37,000 muskets and a complete equipment for a battery of light artillery. In March 1865 General W.T. Sherman and his army took possession of the town, destroyed the arsenal, and did considerable damage to property. Fayetteville was chartered as a city in 1893. A serious flood occurred in August 1908.

**FAYRER, SIR JOSEPH,** Bart. (1824-1907), English physician, was born at Plymouth on the 6th of December 1824. After studying medicine at Charing Cross hospital, London, he was in 1847 appointed medical officer of H.M.S. "Victory," and soon afterwards accompanied the 3rd Lord Mount-Edgcumbe on a tour through Europe, in the course of which he saw fighting at Palmero and Rome. Appointed an assistant surgeon in Bengal in 1850, he went through the Burmese campaign of 1852 and was political assistant and Residency surgeon at Lucknow during the Mutiny. From 1859 to 1872 he was professor of surgery at the Medical College of Calcutta, and when the prince of Wales made his tour in India he was appointed to accompany him as physician. Returning from India, he acted as president of the Medical Board of the India office from 1874 to 1895, and in 1896 he was created a baronet. Sir Joseph Fayrer, who became a fellow of the Royal Society in 1877, wrote much on subjects connected with the practice of medicine in India, and was especially known for his studies on the poisonous snakes of that country and on the physiological effects produced by their virus (*Thanatophidia of India*, 1872). In 1900 appeared his *Recollections of my Life*. He died at Falmouth on the 21st of May 1907.

**FAYUM**, a mudiria (province) of Upper Egypt, having an area of 490 sq. m. and a population (1907) of 441,583. The capital, Medinet-el-Fayum, is 81 m. S.S.W. of Cairo by rail. The Fayum proper is an oasis in the Libyan Desert, its eastern border being about 15 m. west of the Nile. It is connected with that river by the Bahr Yusuf, which reaches the oasis through a gap in the hills separating the province from the Nile Valley. South-west of the Fayum, and forming part of the mudiria, is the Gharak depression. Another depression, entirely barren, the Wadi Rayan, covering 280 sq. m., lies west of the Gharak. The whole region is below sealevel, and save for the gap mentioned is encircled by the Libyan hills. The lowest part of the province, the north-west end, is occupied by the Birket el Kerun, or Lake of the Horns, whose surface level is 140 ft. below that of the sea. The lake covers about 78 sq. m.

Differing from the typical oasis, whose fertility depends on water obtained from springs, the cultivated land in the Fayum is formed of Nile mud brought down by the Bahr Yusuf. From this channel, 15 m. in length from Lahun, at the entrance of the gap in the hills, to Medina, several canals branch off and by these the province is irrigated, the drainage water flowing into the Birket el Kerun. Over 400 sq. m. of the Fayum is cultivated, the chief crops being cereals and cotton. The completion of the Assuan dam by ensuring a fuller supply of water enabled 20,000 acres of land, previously unirrigated and untaxed, to be brought under cultivation in the three years 1903-1905. Three crops are obtained in twenty months. The province is noted for its figs and grapes, the figs being of exceptionally good quality. Olives are also cultivated. Rose trees are very numerous and most of the attar of roses of Egypt is manufactured in the province. The Fayum also possesses an excellent breed of sheep. Lake Kerun abounds in fish, notably the *bulti* (Nile carp), of which considerable quantities are sent to Cairo.

Medinet el-Fayum (or Medina), the capital of the province, is a great agricultural centre, with a population which increased from 26,000 in 1882 to 37,320 in 1907, and has several large bazaars, mosques, baths and a much-frequented weekly market. The Bahr Yusuf runs through the town, its banks lined with houses. There are two bridges over the stream: one of three arches, which carries the main street and bazaar, and one of two arches over which is built the Kait Bey mosque. Mounds north of the town mark the site of Arsinoë, earlier Crocodilopolis, where was worshipped the sacred crocodile kept in the Lake of Moeris. Besides Medina there are several other towns in the province, among them Senuris and Tomia to the north of Medina and Senaru and Abuksa on the road to the lake, all served by railways. There are also, especially in the neighbourhood of the lake, many ruins of ancient villages and cities. The Fayum is the site of the Lake of Moeris (q.v.) of the ancient Egyptians —a lake of which Birket el Kerun is the shrunken remnant.

See *The Fayum and Lake Moeris*, by Major (Sir) R.H. Brown, R.E. (London, 1892), a valuable contribution as to the condition of the province at that date, its connexion with Lake Moeris and its possibilities in the future; *The Assuân Reservoir and Lake Moeris* (London, 1904), by Sir William Willcocks—with text in English, French and Arabic—a consideration of irrigation possibilities; *The Topography and Geology of the Fayum Province of Egypt*, by H.J.L. Beadnell (Cairo, 1905).

FAZOGLI, or FAZOKL, a district of the Anglo-Egyptian Sudan, cut by 11° N. and bounded E. and S. by Abyssinia. It forms part of the foot-hills of the Abyssinian plateau and is traversed by the Blue Nile and its affluent the Tumat. Immediately south is the auriferous Beni Shangul country. The chief gold-washings lie (in Abyssinian territory) on the west slope of the hills draining to the White Nile. Here is the steep Jebel-Dul, which appears to contain rich goldbearing reefs, as gold is found in all the ravines on its flanks. The auriferous region extends into Sudanese territory, gold dust being found in all the khors coming from Jebel Faronge on the S.E. frontier. The inhabitants of Fazogli, who are governed, under the Sudan administration, by their own meks or kings, are Berta and other Shangalla tribes with an admixture of Funj blood, the country having been conquered by the Funj rulers of Sennar at the close of the 15th century. There are also Arab settlements. Fazogli, the residence of the principal mek, is a straggling town built some 800 yds. from the left bank of the Blue Nile near the Tumat confluence, 434 m. by river above Khartum and opposite Famaka, the headquarters of the Egyptians in this region between 1839 and 1883. Above Famaka and near the Abyssinian frontier is the prosperous town of Kiri, while Abu Shaneina on the Nile below Fazogli is the spot where the trade route from Beni Shangul strikes the river. The chief imports from Abyssinia are coffee, cattle, transport animals and gold. Durra and tobacco are the principal crops. The local currency includes rings of gold, specially made as a circulating medium.

**FEA, CARLO** (1753-1836), Italian archaeologist, was born at Pigna in Piedmont on the 2nd of February 1753, and studied law in Rome. He received the degree of doctor of laws from the university of La Sapienza, but archaeology gradually absorbed his attention, and with the view of obtaining better opportunities for his researches in 1798 he took orders. For political reasons he was obliged to take refuge in Florence; on his return in 1799 he was imprisoned by the Neapolitans, at that time in occupation of Rome, as a Jacobin, but shortly afterwards liberated and appointed Commissario delle Antichità and librarian to Prince Chigi. He died at Rome on the 18th of March 1836.

Fea revised, with notes, an Italian translation of J.J. Winckelmann's Geschichte der Kunst, and also added notes to some of G.L. Bianconi's works. Among his original writings the principal are:—*Miscellanea filologica, critica, e antiquaria; L'Integrità del Panteone rivendicata a M. Agrippa; Frammenti di fasti consolari; Iscrizioni di monumenti pubblichi;* and *Descrizione di Roma*.

**FEARNE, CHARLES** (1742-1794), English jurist, son of Charles Fearne, judge-advocate of the admiralty, was born in London in 1742, and was educated at Westminster school. He adopted the legal profession, but, though well fitted by his talents to succeed as a barrister, he neglected his profession and devoted most of his attention and his patrimony to the prosecution of scientific experiments, with the vain hope of achieving discoveries which would reward him for his pains and expense. He died in 1794, leaving his widow and family in necessitous circumstances. His *Essay on the Learning of Contingent Remainders and Executory Devises*, the work which has made his reputation as a legal authority, and which has passed through numerous editions, was called forth by a decision of Lord Mansfield in the case of *Perrin* v. *Blake*, and had the effect of reversing that decision.

A volume entitled *Fearne's Posthumous Works* was published by subscription in 1797 for the benefit of his widow.

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**FEASTS AND FESTIVALS.** A festival or feast<sup>1</sup> is a day or series of days specially and publicly set apart for religious observances. Whether its occurrence be casual or periodic,

whether its ritual be grave or gay, carnal as the orgies of Baal and Astarte, or spiritual as the worship of a Puritan Sabbath, it is to be regarded as a festival or "holy day" as long as it is professedly held in the name of religion.

To trace the festivals of the world through all their variations would be to trace the entire history of human religion and human civilization. Where no religion is, there can of course be no feasts; and without civilization any attempt at festival-keeping must necessarily be fitful and comparatively futile. But as religion develops, festivals develop with it, and assume their distinctive character; and an advancing civilization, at least in its earlier stages, will generally be found to increase their number, enrich their ritual, fix more precisely the time and order of their recurrence, and widen the area of their observance.

Some uncivilized tribes, such as the Juángs of Bengal, the Fuegians and the Andamanese, have been described as having no word for God, no idea of a future state, and consequently no religious ceremonies of any kind whatever. But such cases, doubtful at the best, are confessedly exceptional. In the vast majority of instances observed and recorded, the religiosity of the savage is conspicuous. Even when incapable of higher manifestations, it can at least take the form of reverence for the dead; the grave-heap can become an altar on which offerings of food for the departed may be placed, and where in acts of public and private worship the gifts of survivors may be accompanied with praises and with prayers. That the custom of ghost-propitiation by some sort of sacrifice is even now very widely diffused among the lower races at least, and that there are also many curious "survivals" of such a habit to be traced among highly civilized modern nations, has been abundantly shown of late by numerous collectors of folk-lore and students of sociology; and indications of the same phenomena can be readily pointed out in the Rig-Veda, the Zend-Avesta and the Pentateuch, as well as in the known usages of the ancient Egyptians, Greeks and Romans.<sup>2</sup> In many cases the ceremonial observed is of the simplest; but it ever tends to become more elaborate; and above all it calls for repetition, and repetition, too, at regular intervals. Whenever this last demand has made itself felt, a calendar begins to take shape. The simplest calendar is obviously the lunar. "The Naga tribes of Assam celebrate their funeral feasts month by month, laying food and drink on the graves of the departed." But it soon comes to be combined with the solar. Thus the Karens, "while habitually making oblations, have also annual feasts for the dead, at which they ask the spirits to eat and drink." The natives of the Mexican valley in November lay animals, edibles and flowers on the graves of their dead relatives and friends. The common people in China have a similar custom on the arrival of the winter solstice. The ancient Peruvians had the custom of periodically assembling the embalmed bodies of their dead emperors in the great square of the capital to be feasted in company with the people. The Athenians had their annual Nekúgia or Neµégeia and the Romans their Feralia and Lemuralia. The Egyptians observed their three "festivals of the seasons," twelve "festivals of the month," and twelve "festivals of the half month," in honour of their dead. The Parsees, too, were required to render their afringans (blessings which were to be recited over a meal to which an angel or the spirit of a deceased person was invited) at each of the six seasons of the year, and also on certain other days.<sup>3</sup>

In the majority of recorded instances, the religious feeling of the savage has been found to express itself in other forms besides that of reverence towards the dead. The oldest literatures of the world, at all events, whether Aryan or Semitic, embody a religion of a much higher type than ancestor worship. The hymns of the Rig-Veda, for example, while not without traces of the other, yet indicate chiefly a worship of the powers of nature, connected with the regular recurrence of the seasons. Thus in iv. 57 we have a hymn designed for use at the commencement of the ploughing time;<sup>4</sup> and in the Aitareya-Brâhmana, the earliest treatise on Hindu ceremonial, we already find a complete series of sattras or sacrificial sessions exactly following the course of the solar year. They are divided into two distinct sections, each consisting of six months of thirty days each. The sacrifices are allowed to commence only at certain lucky constellations and in certain months. So, for instance, as a rule, no great sacrifice can commence during the sun's southern progress. The great sacrifices generally take place in spring, in the months of April and May.<sup>5</sup> In the Parsee Scriptures<sup>6</sup> the year is divided into six seasons or gahanbârs of two months each, concluding with February, the season at which "great explatory sacrifices were offered for the growth of the whole creation in the last two months of the year." We have no means of knowing precisely what were the arrangements of the Phoenician calendar, but it is generally admitted that the worship was solar, the principal festivals taking place in spring and in autumn. Among the most characteristic celebrations of the Egyptians were those which took place at the  $\dot{\alpha}\varphi\alpha\nu\iota\sigma\mu\dot{\sigma}\zeta$  or disappearance of Osiris in October or November, at the search for his remains, and their discovery about the winter solstice, and at the date of his supposed entrance into the moon at the beginning of spring. The Phrygian festivals were also arranged on the theory that the deity was asleep during the winter and awake during the summer; in the autumn they celebrated his retiring to rest, and in spring with mirth and revelry they roused him from his slumbers.<sup>7</sup> The seasonal character of the Teutonic Ostern, the Celtic Beltein and the Scandinavian Yule is obvious. Nor was the habit of observing such festivals peculiar to the Aryan or the Semitic race. The Mexicans, who were remarkable for the perfection of their calendar, in addition to this had an elaborate system of movable and immovable feasts distributed over the entire year; the principal festivals, however, in honour of their chief gods, Tezcatlipoca, Huitzilopochtli and Tlaloc, were held in May, June and December. Still more plainly connected with the revolutions of the seasons was the public worship of the ancient Peruvians, who, besides the ordinary feast at each new moon, observed four solar festivals annually. Of these the most important was the Yntip-Raymi (Sunfeast), which, preceded by a three days' fast, began with the summer solstice, and lasted for nine days. Its ceremonies have been often described. A similar but less important festival was held at the winter solstice. The Cusqui-Raymi, held after seedtime, as the maize began to appear, was celebrated with sacrifices and banquets, music and dancing. A fourth great festival, called Citua, held on the first new moon after the autumnal equinox, was preceded by a strict fast and special observances intended for purposes of purification and expiation, after which the festivities lasted until the moon entered her second quarter.

Greek Festivals.—Perhaps the annual Attic festival in honour of Erechtheus alluded to in the Iliad (ii. 550) ought to be regarded as an instance of ancestor-worship; but the seasonal character of the  $\flat o \rho \tau \eta$  or new-moon feast in Od. xx. 156, and of the  $\theta \alpha \lambda \dot{\sigma} \alpha$  or harvestfestival in Il. ix. 533, is generally acknowledged. The older Homeric poems, however, give no such express indications of a fully-developed system of festivals as are to be met with in the so-called "Homeric" hymns, in the Works and Days of Hesiod, in the pages of Herodotus, and so abundantly in most authors of the subsequent period; and it is manifest that the calendar of Homer or even of Herodotus must have been a much simpler matter than that of the Tarentines, for example, came to be, of whom we are told by Strabo that their holidays were in excess of their working days. Each demos of ancient Greece during the historical period had its own local festivals (ἑορταὶ δημοτικαί), often largely attended and splendidly solemnized, the usages of which, though essentially alike, differed very considerably in details. These details have in many cases been wholly lost, and in others have reached us only in a very fragmentary state. But with regard to the Athenian calendar, the most interesting of all, our means of information are fortunately very copious. It included some 50 or 60 days on which all business, and especially the administration of justice, was by order of the magistrates suspended. Among these  $i\epsilon\rho\rho\mu\eta\nu(\alpha)$  were included—in Gamelion (January), the Lenaea or festival of vats in honour of Dionysus; in Anthesterion (February), the Anthesteria, also in honour of Dionysus, lasting three days (Pithoigia, Choes and Chytri); the Diasia in honour of Zeus, and the lesser *Eleusinia*; in Elaphebolion (March), the Pandia (? of Zeus), the *Elaphebolia* of Artemis, and the greater *Dionysia*; in Munychion, the *Munychia* of Artemis as the moon goddess (Mouvuxía) and the *Delphinia* of Apollo; in Thargelion (May), the *Thargelia* of Apollo and the *Plynteria* and *Callynteria* of Athena; in Scirophorion (June), the Diipolia of Zeus and the Scirophoria of Athena; in Hekatombaion, hecatombs were offered to Apollo the summer-god, and the Cronia of Cronus and the Panathenaea of Athena were held; in Metageitnion, the Metageitnia of Apollo; in Boëdromion, the Boëdromia of Apollo the helper,<sup>8</sup> the Nekusia or Nemeseia (the festival of the dead), and the greater Eleusinia; in Pyanepsion, the Pyanepsia of Apollo, the Oschophoria of Dionysus (probably), the Chalkeia or Athenaea of Athena, the Thesmophoria of Demeter, and the Apaturia; in Maimacterion, the Maimacteria of Zeus; and in Poseideon (December), the lesser Dionysia.

Of these some are commemorative of historical events, and one at least may perhaps be regarded as a relic of ancestor-worship; but the great majority are nature-festivals, associating themselves in the manner that has already been indicated with the phenomena of the seasons, the equinoxes and the solstices.<sup>9</sup> In addition to their numerous public festivals, the Greeks held various family celebrations, also called  $\dot{\epsilon}o\rho\tau\alpha i$ , in connexion with weddings, births and similar domestic occurrences. For the great national  $\pi\alpha\nu\eta\gamma \dot{\nu}\rho\epsilon\iota\varsigma$ —Olympian, Pythian, Nemean and Isthmian—see the article GAMES, CLASSICAL.

Roman Festivals.—For the purpose of holding comitia and administering justice, the days of the Roman year were regarded as being either dies fasti or dies nefasti—the dies fasti being the days on which it was lawful for the praetors to administer justice in the public courts, while on the dies nefasti neither courts of justice nor meetings of comitia were allowed to be held. Some days were fasti during one portion and nefasti during another; these were called dies intercisi. For the purposes of religion a different division of the year was made; the days were treated as festi or as profesti,—the former being consecrated to acts of public worship, such as sacrifices, banquets and games, while the latter (whether fasti or nefasti) were not specially claimed for religious purposes. The *dies festi* or *feriae publicae*<sup>10</sup> were either *stativae, conceptivae* or *imperativae*. The *stativae* were such as were observed regularly, each on a definite day; the *conceptivae* were observed annually on days fixed by the authorities for the time being; the *imperativae* were publicly appointed as occasion called for them. In the Augustan age the *feriae stativae* were very numerous, as may be seen from what we possess of the *Fasti* of Ovid. The number was somewhat fluctuating. Festivals frequently fell into desuetude or were revived, were increased or diminished, were shortened or prolonged at the will of the emperor, or under the caprice of the popular taste. Thus Augustus restored the Compitalia and Lupercalia; while Marcus Antoninus in his turn found it expedient to diminish the number of holidays.

The following is an enumeration of the stated festivals as given by Ovid and contemporary writers. The first day of January was observed somewhat as is the modern New Year's day: clients sent presents to their patrons, slaves to their masters, friends and relatives to one another. On the 9th the Agonalia were held, apparently in honour of Janus. On the 11th the *Carmentalia* were kept as a half-holiday, but principally by women; so also on the 15th. On the 13th of February were the Faunalia, on the 15th the Lupercalia, on the 17th the Quirinalia, on the 18th the Feralia, on the 23rd (at one time the last day of the Roman year) the Terminalia, on the 24th the Regifugium or Fugalia, and on the 27th the Equiria (of Mars). On the 1st of March were the Matronalia, on the 14th a repetition of the Equiria, on the 15th the festival of Anna Perenna, on the 17th the Liberalia or Agonalia, and from the 19th to the 23rd the *Quinquatria* (of Minerva). On the 4th of April were the *Megalesia* (of Cybele), on the 12th the Cerealia, on the 21st the Palilia, on the 23rd the Vinalia, on the 25th the Robigalia, and on the 28th the Floralia. The 1st of May was the festival of the Lares Praestites; on the 9th, 11th and 13th the Lemuria were celebrated; on the 12th the Ludi Martiales, and on the 15th those of Mercury. June 5 was sacred to Semo Sancus; the Vestalia occurred on the 9th, the Matralia on the 11th, and the Quinquatrus Minusculae on the 13th. The Ludi Apollinares were on the 5th, and the Neptunalia on the 23rd of July. On the 13th of August were the Nemoralia, in honour of Diana; on the 18th the Consualia, on the 19th the Vinalia Rustica, and on the 23rd the Vulcanalia. The Ludi Magni, in honour of Jupiter, Juno and Minerva, began on September 4. The Meditrinalia (new wine) were on the 11th of October, the Faunalia on the 13th, and the Equiria on the 15th. The Epulum Jovis was on 13th November. The December festivals were—on the 5th Faunalia, and towards the close Opalia, Saturnalia, Larentalia.

The calendar as it stood at the Augustan age was known to contain many comparatively recent accessions, brought in under the influence of two "closely allied powers, the foreign priest and the foreign cook" (Mommsen). The *Megalesia*, for example, had been introduced 204 B.C. The *Ludi Apollinares* could not be traced farther back than 208 B.C. The *Floralia* and *Cerealia* had not come in much earlier. Among the oldest feasts were undoubtedly the *Lupercalia*, in honour of Lupercus, the god of fertility; the *Equiria*, in honour of Mars; the *Palilia*; the great September festival; and the *Saturnalia*.

Among the feriae conceptivae were the very ancient *feriae Latinae*, held in honour of Jupiter on the Alban Mount, and attended by all the higher magistrates and the whole body of the senate. The time of their celebration greatly depended on the state of affairs at Rome, as the consuls were not allowed to take the field until they had held the *Latinae*, which were regarded as days of a sacred truce. The *feriae sementivae* were held in the spring, and the *Ambarvalia* in autumn, both in honour of Ceres. The *Paganalia* of each *pagus*, and the *Compitalia* of each *vicus* were also *conceptivae*. Of *feriae imperativae*,—that is to say, festivals appointed by the senate, or magistrates, or higher priests to commemorate some great event or avert some threatened disaster,—the best known is the *Novendiale*, which used to be celebrated as often as stones fell from heaven (Livy xxi. 62, xxv. 7, &c.). In addition to all those already mentioned, there occasionally occurred *ludi votivi*, which were celebrated in fulfilment of a vow; *ludi funebres*, sometimes given by private persons; and *ludi seculares*, to celebrate certain periods marked off in the Etrusco-Roman religion.

Feasts of the Jews.—By Old Testament writers a festival or feast is generally called either שבת (compare the Arabic Hadj), from אער to rejoice, or אועד, from איעד, to appoint. The words שבת and שבת are also occasionally used. In the Talmud the three principal feasts are called origin the most important and characteristic was the weekly Sabbath, but special importance was also attached from a very early date to the lunar periods. It is probable that other festivals also, of a seasonal character, were observed (see Exod. v. 1). In common with most others, the Mosaic system of annual feasts groups itself readily around the vernal and autumnal equinoxes. In Lev. xxiii, where the list is most fully given, they seem to be arranged with a conscious reference to the sacred number seven (compare Numb. xxviii.).

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Those belonging to the vernal equinox are three in number; a preparatory day, that of the Passover, leads up to the principal festival, that of unleavened bread, which again is followed by an after-feast, that of Pentecost (see Passover, Pentecost). Those of the autumnal equinox are four; a preparatory day on the new moon of the seventh month (the Feast of Trumpets) is followed by a great day of rest, the day of Atonement (which, however, was hardly a *festival* in the stricter sense of the word), by the Feast of Tabernacles, and by a great concluding day (Lev. xxiii. 36; John vii. 37). If the feast of the Passover be excepted, it will be seen that all these celebrations or commemorations associate themselves more readily with natural than with historical events.<sup>11</sup> There was also a considerable number of post-Mosaic festivals, of which the principal were that of the Dedication (described in 1 Macc. iv. 52-59; comp. John x. 22) and that of Purim, the origin of which is given in the book of Esther (ix. 20 seq.). It has probably no connexion with the Persian festival Furdigán (see EstHer).<sup>12</sup>

Earlier Christian Festivals.--While making it abundantly manifest that Christ and his disciples observed the appointed Jewish feasts, the New Testament nowhere records the formal institution of any distinctively Christian festival. But we have unambiguous evidence of the actual observance, from a very early period, of the first day of the week as a holy day (John xx. 19, 26; 1 Cor. xvi. 2; Acts xx. 7; Rev. i. 10). Pliny in his letter to Trajan describes the Christians of Bithynia as meeting for religious purposes on a set day; that this day was Sunday is put beyond all reasonable doubt by such a passage as that in the *Apology* of Justin Martyr, where he says that "on Sunday (τῆ τοῦ ἡλίου λεγομένη ἡμέρα) all the Christians living either in the city or the country met together." The Jewish element, in some churches at least, and especially in the East, was strong enough to secure that, along with the *dies* dominica, the seventh day should continue to be kept holy. Thus in the Apostolic Constitutions (ii. 59) we find the Saturday specially mentioned along with the Sunday as a day for the assembling of the church; in v. 15 it is ordained that there shall be no fasting on Saturday, while in viii. 33 it is added that both on Saturday and Sunday slaves are to have rest from their labours. The 16th canon of the council of Laodicea almost certainly means that solemn public service was to be held on Saturday as well as on Sunday. In other quarters, however, the tendency to regard both days as equally sacred met with considerable resistance. The 36th canon of the council of Illiberis, for example, deciding that Saturday should be observed as a fast-day, was doubtless intended to enforce the distinction between Saturday and Sunday. At Milan in Ambrose's time Saturday was observed as a festival; but Pope Innocent is found writing to the bishop of Eugubium to urge that it should be kept as a fast. Ultimately the Christian church came to recognize but one weekly festival.

The numerous yearly festivals of the later Christian church, when historically investigated, can be traced to very small beginnings. Indeed, while it appears to be tolerably certain that Jewish Christians for the most part retained all the festivals which had been instituted under the old dispensation, it is not at all probable that either they or their Gentile brethren recognized any yearly feasts as of distinctively Christian origin or obligation. It cannot be doubted, however, that gradually, in the course of the 2nd century, the universal church came to observe the anniversaries of the death and resurrection of Christ-the  $\pi \dot{\alpha} \sigma \chi \alpha$ σταυρώσιμον and the πάσχα ἀναστάσιμον, as they were respectively called (see EASTER and GOOD FRIDAY). Not long afterwards Whitsunday also came to be fixed in the usage of Christendom as a great annual festival. Even Origen (in the 8th book Against Celsus) enumerates as Christian festivals the Sunday, the  $\pi\alpha\rho\alpha\sigma\kappa\epsilon$ uń, the Passover with the feast of the Resurrection, and Pentecost; under which latter term, however, he includes the whole period between Easter and Whitsuntide. About Cyprian's time we find individual Christians commemorating their departed friends, and whole churches commemorating their martyrs; in particular, there are traces of a local and partial observance of the feast of the Innocents. Christmas day and Epiphany were among the later introductions, the feast of the Epiphany being somewhat the earlier of the two. Both are alluded to indeed by Clemens Alexandrinus (i. 340), but only in a way which indicates that even in his time the precise date of Christ's birth was unknown, that its anniversary was not usually observed, and that the day of his baptism was kept as a festival only by the followers of Basilides (see EPIPHANY).

When we come down to the 4th century we find that, among the 50 days between Easter and Pentecost, Ascension Day has come into new prominence. Augustine, for example, enumerates as anniversaries celebrated by the whole church those of Christ's passion, resurrection and ascension, along with that of the outpouring of the Holy Ghost, while he is silent with regard to Christmas and Epiphany. The general tendency of this and the following centuries was largely to increase the festivals of the Church, and by legislation to make them more fixed and uniform. Many passages, indeed, could be quoted from Chrysostom, Jerome and Augustine to show that these fathers had not by any means forgotten that comparative freedom with regard to outward observances was one of the distinctive excellences of Christianity as contrasted with Judaism and the various heathen systems (compare Socrates, H.E. v. 22). But there were many special circumstances which seemed to the leaders of the Church at that time to necessitate the permission and even legislative sanction of a large number of new feasts. The innovations of heretics sometimes seemed to call for rectification by the institution of more orthodox observances; in other instances the propensity of rude and uneducated converts from paganism to cling to the festal rites of their forefathers proved to be invincible, so that it was seen to be necessary to seek to adapt the old usages to the new worship rather than to abolish them altogether;<sup>13</sup> moreover, although the empire had become Christian, it was manifestly expedient that the old holidays should be recognized as much as possible in the new arrangements of the calendar. Constantine soon after his conversion enacted that on the *dies dominica* there should be no suits or trials in law; Theodosius the Great added a prohibition of all public shows on that day, and Theodosius the younger extended the prohibition to Epiphany and the anniversaries of martyrdoms, which at that time included the festivals of St Stephen, and of St Peter and St Paul, as also that of the Maccabees. In the 21st canon of the council of Agde (506), besides Easter, Christmas, Epiphany, Ascension and Pentecost, we find the Nativity of John the Baptist already mentioned as one of the more important festivals on which attendance at church was regarded as obligatory. To these were added, in the centuries immediately following, the feasts of the Annunciation, the Purification, and the Assumption of the Virgin; as well as those of the Circumcision, of St Michael and of All Saints.

Festivals were in practice distinguished from ordinary days in the following ways: all public and judicial business was suspended,<sup>14</sup> as well as every kind of game or amusement which might interfere with devotion; the churches were specially decorated; Christians were expected to attend public worship, attired in their best dress; love feasts were celebrated, and the rich were accustomed to show special kindness to the poor; fasting was strictly forbidden, and public prayers were said in a standing posture.

Later Practice.—In the present calendar of the Roman Catholic Church the number of feast days is very large. Each is celebrated by an appropriate office, which, according to its character, is either duplex, semi-duplex or simplex. A duplex again may be either of the first class or of the second, or a major or a minor. The distinctions of ritual for each of these are given with great minuteness in the general rubrics of the breviary; they turn chiefly on the number of Psalms to be sung and of lessons to be read, on the manner in which the antiphons are to be given and on similar details. The duplicia of the first class are the Nativity, the Epiphany, Easter with the three preceding and two following days, the Ascension, Whitsunday and the two following days, Corpus Christi, the Nativity of John Baptist, Saints Peter and Paul, the Assumption of the Virgin, All Saints, and, for each church, the feast proper to its patron or title and the feast of its dedication. The duplicia of the second class are the Circumcision, the feast of the Holy Name of Jesus, of the Holy Trinity, and of the Most Precious Blood of Christ, the feasts of the Purification, Annunciation, Visitation, Nativity and Conception of the Virgin, the Natalitia of the Twelve Apostles, the feasts of the Evangelists, of St Stephen, of the Holy Innocents, of St Joseph and of the Patrocinium of Joseph, of St Lawrence, of the Invention of the Cross and of the Dedication of St Michael. The Dominicae majores of the first class are the first Sunday in Advent, the first in Lent, Passion Sunday, Palm Sunday, Easter Sunday, Dominica in Albis, Whitsunday and Trinity Sunday; the Dominicae majores of the second class are the second, third and fourth in Advent, Septuagesima, Sexagesima and Quinquagesima Sundays, and the second, third and fourth Sundays in Lent.

In the canons and decrees of the council of Trent repeated allusions are made to the feast days, and their fitness, when properly observed, to promote piety. Those entrusted with the cure of souls are urged to see that the feasts of the Church be devoutly and religiously observed, the faithful are enjoined to attend public worship on Sundays and on the greater festivals at least, and parish priests are bidden to expound to the people on such days some of the things which have been read in the office for the day. Since the council of Trent the practice of the Church with respect to the prohibition of servile work on holidays has varied considerably in different Catholic countries, and even in the same country at different times. Thus in 1577, in the diocese of Lyons, there were almost forty annual festivals of a compulsory character. By the concordat of 1802 the number of such festivals was for France reduced to four, namely, Christmas day, Ascension day, the Assumption of the Virgin, and All Saints day.

The calendar of the Greek Church is even fuller than that of the Latin, especially as regards the  $\dot{\epsilon}o\rho\tau\alpha\dot{\iota}\tau\omega\nu\dot{\alpha}\gamma\iota\omega\nu$ . Thus on the last Sunday in Advent the feast of All Saints of the Old Covenant is celebrated; while Adam and Eve, Job, Elijah, Isaiah, &c., have separate days. The distinctions of ritual are analogous to those in the Western Church. In the Coptic Church there are seven great festivals, Christmas, Epiphany, the Annunciation, Palm Sunday, Easter Sunday, Ascension and Whitsunday, on all of which the Copts "wear new clothes (or the best they have), feast and give alms" (Lane). They also observe, as minor festivals, Maundy Thursday, Holy Saturday, the feast of the Apostles (11th July), and that of the Discovery of the Cross.

In common with most of the churches of the Reformation, the Church of England retained a certain number of feasts besides all Sundays in the year. They are, besides Monday and Tuesday both in Easter-week and Whitsun-week, as follows: the Circumcision, the Epiphany, the Conversion of St Paul, the Purification of the Blessed Virgin, St Matthias the Apostle, the Annunciation of the Blessed Virgin, St Mark the Evangelist, St Philip and St James (Apostles), the Ascension, St Barnabas, the Nativity of St John Baptist, St Peter the Apostle, St James the Apostle, St Bartholomew, St Matthew, St Michael and all Angels, St Luke the Evangelist, St Simon and St Jude, All Saints, St Andrew, St Thomas, Christmas, St Stephen, St John the Evangelist, the Holy Innocents. The 13th canon enjoins that all manner of persons within the Church of England shall from henceforth celebrate and keep the Lord's day, commonly called Sunday, and other holy days, according to God's holy will and pleasure, and the orders of the Church of England prescribed in that behalf, that is, in hearing the Word of God read and taught, in private and public prayers, in acknowledging their offences to God and amendment of the same, in reconciling themselves charitably to their neighbours where displeasure hath been, in oftentimes receiving the communion of the body and blood of Christ, in visiting of the poor and sick, using all godly and sober conversation. (Compare Hooker, E.P. v. 70.) In the Directory for the Public Worship of God which was drawn up by the Westminster Assembly, and accepted by the Church of Scotland in 1645, there is an appendix which declares that there is no day commanded in Scripture to be kept holy under the gospel but the Lord's day, which is the Christian Sabbath; festival days, vulgarly called holy-days, having no warrant in the Word of God, are not to be continued; nevertheless it is lawful and necessary, upon special emergent occasions, to separate a day or days for public fasting or thanksgiving, as the several eminent and extraordinary dispensations of God's providence shall administer cause and opportunity to his people.

Several attempts have been made at various times in western Europe to reorganize the festival system on some other scheme than the Christian. Thus at the time of the French Revolution, during the period of Robespierre's ascendancy, it was proposed to substitute a tenth day (Décadi) for the weekly rest, and to introduce the following new festivals: that of the Supreme Being and of Nature, of the Human Race, of the French people, of the Benefactors of Mankind, of Freedom and Equality, of the Martyrs of Freedom, of the Republic, of the Freedom of the World, of Patriotism, of Hatred of Tyrants and Traitors, of Truth, of Justice, of Modesty, of Fame and Immortality, of Friendship, of Temperance, of Heroism, of Fidelity, of Unselfishness, of Stoicism, of Love, of Conjugal Fidelity, of Filial Affection, of Childhood, of Youth, of Manhood, of Old Age, of Misfortune, of Agriculture, of Industry, of our Forefathers, of Posterity and Felicity. The proposal, however, was never fully carried out, and soon fell into oblivion.

Mahommedan Festivals.—These are chiefly two—the 'Eed es-Sagheer (or minor festival) and the 'Eed el-Kebeer (or great festival), sometimes called 'Eed el-Kurban. The former, which lasts for three days, immediately follows the month Ramadan, and is generally the more joyful of the two; the latter begins on the tenth of Zu-l-Heggeh (the last month of the Mahommedan year), and lasts for three or four days. Besides these festivals they usually keep holy the first ten days of Moharram (the first month of the year), especially the tenth day, called Yom Ashoora; the birthday of the prophet, on the twelfth day of the third month; the birthday of El-Hoseyn, in the fourth month; the anniversary of the prophet's miraculous ascension into heaven, in the seventh month; and one or two other anniversaries. Friday, called the day of El-Gumah (the assembly), is a day of public worship; but it is not usual to abstain from public business on that day except during the time of prayer.

Hindu and Buddhist Festivals.—In modern India the leading popular festivals are the Holí, which is held in March or April and lasts for five days, and the Dasahara, which occurs in October. Although in its origin Buddhism was a deliberate reaction against all ceremonial, it does not now refuse to observe festivals. By Buddhists in China, for example, three days in the year are especially observed in honour of the Buddha,—the eighth day of the second month, when he left his home; the eighth day of the fourth month, the anniversary of his birthday; and the eighth of the twelfth, when he attained to perfection and entered Nirvāna. In Siam the eighth and fifteenth days of every month are considered holy, and are observed as days for rest and worship. At Trut, the festival of the close of the year, visiting and playgoing are universal. The new year (January) is celebrated for three days; in February is another holiday; in April is a sort of Lent, ushering in the rainy season; on the last day of June

presents are made of cakes of the new rice; in August is the festival of the angel of the river, "whose forgiveness is then asked for every act by which the waters of the Meinam have been rendered impure." See Bowring's *Siam* and Carné's *Travels in Indo-China and the Chinese Empire*. Copious details of the elaborate festival-system of the Chinese may be found in Doolittle's *Social Life of the Chinese*.

LITERATURE.—For Christian feasts see K.A. H. Kellner, *Heortologie* (Freiburg im Breisgau, 1906); Hippolyte Delehaye, *Les Légendes hagiographiques* (Brussels, 1905); J. Rendel Harris, *The Cult of the Heavenly Twins* (Cambridge, 1906); de Rossi-Duchesne, *Martyrologium Hieronymianum*.

- 1 "To feast" is simply to keep a festum or festival. The etymology of the word is uncertain; but probably it has no connexion with the Gr.  $\dot{\epsilon}\sigma\tau_{i}\tilde{\alpha}v$ .
- 2 See Spencer, *Principles of Sociology*, i. 170, 280, 306.
- 3 Haug, Parsis, 224, 225.
- <sup>4</sup> "May the heavens, the waters, the firmament, be kind to us; may the lord of the field be gracious to us.... May the oxen (draw) happily, the men labour happily; may the traces bind happily, wield the goad happily" (Wilson's translation, iii. 224).
- 5 See Haug's Aitareya-brâhmanam of the Rig-Veda; Max Müller's Chips from a German Workshop, i. 115.
- 6 Visperad. See Haug, *Parsis*, 192; Richardson's *Dissertation on the Language, &c., of Eastern Nations*, p. 184; Morier's *Journey through Persia*.
- 7 Plutarch, *De Iside et Osiride*; Macrobius, *Saturnalia*, i. 21.
- 8 In this month the anniversaries of the battle of Marathon, and of the downfall of the thirty tyrants, were also publicly celebrated.
- 9 See Schoemann, *Griechische Altertümer*, ii. 439 seq.; Mommsen *Heortologie*.
- 10 *Feriae privatae*, such as anniversaries of births, deaths, and the like, were observed by separate clans, families or individuals.
- 11 In the "parallel" passages, there is considerable variety in the designation and arrangement of these feasts. While Ex. xii. approximates most closely to Lev. xxiii. and Num. xxviii., Ex. xxiii. has stronger affinities with Deut. xvi. The relations of these passages are largely discussed by Graf, *Die geschichtlichen Bücher des A. T.*, pp. 34-41, and by other recent critics.
- 12 On the whole subject of Jewish festivals see Reland, *Antiq. Hebr.*; Knobel, *Leviticus* (c. 23); George, *Die jüdischen Feste*; Edersheim, *The Temple; its Ministry and Services*; Ewald, *Altertümer des Volkes Israël*; articles in Bible dictionaries.
- 13 As, at a later period (601), Gregory the Great instructed his Anglo-Saxon missionaries so to Christianize the temples, festivals, &c., of the heathen "ut durae mentes gradibus vel passibus, non autem saltibus, eleventur."
- 14 Manumission, however, was lawful on any day.

**FEATHER** (O. Eng. *fether*, Ger. *Feder*, from an Indo-European root seen also in Gr.  $\pi\tau\epsilon\rho\delta\nu$ , and  $\pi\epsilon\tau\epsilon\sigma\theta\alpha\iota$ , to fly), a horny outgrowth of the skin of birds homologous with the scale of the reptile. The body-covering of birds is, without exception, comprised of feathers, and by this character alone birds may be distinguished from all other animals.

The most perfect form of feather is made up of a long, tapering rod, fringed on either side, for the greater part of its length, by a secondary series of slender and tapering rods forming a more or less acute angle with the central axis. This fringe is known as the *vexillum* or "vane" (fig. 1 *a*). The central axis is divisible into two distinct parts,—a hollow, cylindrical, transparent *calamus*, or "quill," the base of which is inserted into the skin, and a solid, quadrangular *rhachis* or "shaft" which supports the vane. At the lower end of the quill is a small hole—the lower *umbilicus*—through which the nutritive pulp passes during the growth of the feather: while at the upper end, where it passes into the shaft, a similar hole will be found,—the upper *umbilicus*—and from this the last remains of the capsules which contained the nutritive pulp may sometimes be seen protruding. If the quill is cut open a series of these capsules will be found fitting one into the other throughout the whole length of the tubular chamber.

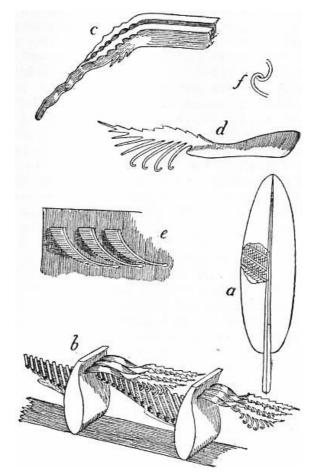


Fig. 1.—Diagrams of Feather-Barbs.

- a, Outline of a feather showing the relation of the barbs and barbules to the central axis or shaft.
- *b*, Section across two of the barbs shown in *a*, highly magnified.
- c, Two barbules of the posterior series—seen only in cross-section in b.
- *d*, A barbule of the anterior series.
- e, Section across the base of three anterior barbules showing attachment to barb.
- f, A portion of the hooklet of the anterior series showing the method of interlocking with the barbules of the posterior series.

The rods comprising the lateral fringe, or vane, are known as the *rami* or the "barbs," and will be found, on microscopic examination, to be lath-shaped and to taper to a point. Further, each barb supports a double series of smaller outgrowths known as the *radii*, or "barbules"; so that each barb may be likened to a feather in miniature. These "barbules," however, differ markedly in structure on the two sides of the barb, those pointing towards the tip of the feather—the "anterior barbules"—being ribbon-shaped from the base outwards for about half their length, when they become cut up to form a series of long and very delicate hooklets (fig. 1 *d*). On the opposite side of the barb the barbules are also ribbon-shaped for about half their length, but the ribbon is curved trough-fashion, so that the whole series of posterior barbules forms a number of deep valleys, and into these the hooklets are thrust so as to catch hold of the upper edges of the troughs, which are set so that the upper edge is towards the upper, and the lower edge towards the under surface of the feather. The manner in which this beautiful mechanism works may be seen in fig. 1 *b*.

In one of the primary or "quill" feathers of the wing of a crane, each barb of the inner side of the vane was found to bear about 600 pairs of barbules, which would make about 800,000 barbules for the inner web of the vane alone, or more than a million for the whole feather (H.F. Gadow). It is to the agency of these hooklets alone that the closely-knit, elastic vanes of the flight feathers and the body feathers are due. Where these hooklets are wanting the barbs do not adhere together, resulting in a loose "discontinuous" vane such as, for example, is found in the plumes of the ostrich. Many feathers, in addition to the main axis, bear a second, generally much shorter axis, supporting a loose discontinuous vane; this shorter branch is known as the "aftershaft" and arises from the under surface of the feather. Only in the cassowary and emu among adult birds is the aftershaft as large as the main shaft.

There are several different kinds of feathers—contour feathers, semiplumes, downfeathers, filoplumes and powder-down. Contour feathers, as their name implies, are those which form the contour or outline of the body, and are all that can generally be seen. Those which form the "flight feathers" of the wing, and the tail feathers, are the most perfectly developed. Semiplumes are degenerate contour feathers. The down-feathers are generally completely hidden by the contour feathers: they form in many birds, such as gulls and ducks, a thick underclothing comparable to the under-fur of mammals such as the seals. In all cases they are of a loose, soft, "fluffy" structure, the barbs being of great length and slenderness, while the barbules are often long and provided with knob-like thickenings answering to the hooklets of the more perfectly developed contour feathers; these thickenings help to "felt" the separate down-feathers together, the barbs of one down-feather interlocking with those of its neighbour. Down-feathers differ from semiplumes both in their relation to contour feathers and in that they do not possess a main axis, all the barbs arising from a common centre.

Filoplumes are degenerate structures having a superficial resemblance to hairs, but they always bear a minute vane at the tip. They occur in all birds, in clusters of varying number, about the bases of contour feathers. In some birds they attain a great length, and may project beyond the contour feathers, sometimes forming conspicuous white patches, as for example in the necks of cormorants. In their early stages of development they often possess a large aftershaft made up of a number of barbs, but these quickly disappear, leaving only the degenerate main shaft. The eyelashes and bristles round the mouth found in many birds appear to be akin to filoplumes.

Powder-down feathers are degenerate down-feathers which appear to secrete a dry, waxy kind of powder. This powder rapidly disintegrates and becomes distributed over the plumage, adding thereto a quite peculiar bloom. In birds of the heron tribe powder-down feathers have reached a high degree of development, forming large patches in the breast and thighs, while in some hawks, and in the parrots, these mysterious feathers are scattered singly over the greater part of the body.

The nature of the covering of nestling birds is of a more complex character than has hitherto been suspected. The majority of young birds, as is well known, either emerge from

minorito been suspected. The majority of young birds, do is wen known, ethici emerge nom	
	the egg clothed in down-feathers, or they develop these within a day or two
Nestling	afterwards. But this covering, though superficially similar in all, may, as a
down.	matter of fact, differ widely in its constitution, even in closely related forms,
	while only in a very few species can the complete history of these feathers

be made out.

The brown or tawny owl (Syrnium aluco) is one of these. At hatching, the young of this species is thickly clad in white, woolly down-feathers, of the character known as umbelliform -that is to say, the central axis or main shaft is wanting, so that the barbs all start from a common centre. These feathers occupy the position of the ultimate contour feathers. They are shortly replaced by a second down-like covering, superficially resembling, and generally regarded as, true down. But they differ in that their barbs spring from a central axis as in typical contour feathers. Feathers of this last description indeed have now made their appearance in the shape of the "flight" or quill feathers (remiges) and of the tail feathers. This plumage is worn until the autumn, when the downy feathers give place to the characteristic adult plumage. The down feathers which appear at hatching-time are known as pre-pennae, or pre-plumulae, as the case may be; the first generation of pre-pennae, in the case of the tawny owl for example, is made up of *protoptyles*, while the succeeding plumage is made up of *mesoptyles*, and these in turn give place to the *teleoptyles* or adult feathers. The two forms of nestling plumage—pre-pennae and pre-plumulae—may be collectively called "neossoptyles," a term coined by H.F. Gadow to distinguish the plumage of the nestling from that of the adult-the "teleoptyle" plumage.

As a rule the nestling develops but one of these generations of neossoptyles, and this generally answers to the mesoptyle plumage, though this is of a degenerate type. In some birds, as in the Megapodes, the "protoptyle" or first of these two generations of pre-pennae is developed and shed while the chick is yet in the shell, so that at hatching the mesoptyle plumage is well developed. But in the majority of birds, probably, the mesoptyle plumage only is developed, while the earlier, and apparently more degenerate, dress is suppressed. In the penguins both of these nestling plumages are developed, but the mesoptyle dress has

degenerated so that umbelliform feathers now take the place of feathers having a central axis.

The Anatidae show traces of the earlier, first generation of feathers in one or two species only, *e.g. Cloëphaga rubidiceps*. In all the remaining species mesoptyles only occur. And this is true also of the game-birds. In both the Tinamous, the duck-tribe and the game-birds this mesoptyle plumage shows, in different species, every gradation between feathers having a well-developed main shaft and aftershaft, and those which are mere umbelliform tufts.

As development proceeds and the contour feathers make their appearance they thrust the mesoptyle feathers out of their follicles—the pockets in the skin in which they were rooted and these will often be found adhering to the tips of the contour feathers for many weeks after the bird has left the nest. This occurs because the development of the contour feather begins before that of the mesoptyles has completed.

The plumage in nestling birds is still further complicated by the fact that it may be almost, or entirely, composed of pre-plumulae; that is to say, of down-feathers which are later succeeded by adult *down-feathers*. This is the case among the accipitrine birds for example, and thereby it differs entirely from that of the owls, which develop neither pre-plumulae nor adult down. The cormorants are, so far as is known, the only birds which have a nestling plumage composed entirely of pre-plumulae.

In variety and brilliancy the colours of birds are not surpassed by those of any other group of animals. Yet the pigments to which these colours are due are but few in number, while a

Iarge number of the most resplendent hues are produced by structuralThe coloursof feathers.by structuralpeculiarities of the colourless horny surface of the feathers, and hence areknown as subjective or optical colours.

The principal colour pigments are (a) *melanin pigments*, derived possibly from the haemoglobin of the blood, but more probably from the blood plasma, and (b) *lipochrome* or "fat" pigments, which are regarded as reserve products; though in the case of birds it is exceedingly doubtful whether they have this significance.

The melanin pigments (*zoomelanin*) occur in the form of granules and give rise to the black, brown and grey tones; or they may combine with those of the lipochrome series.

The lipochrome pigments (*zoonerythrin* and *zooxanthin*) tend to be diffused throughout the substance of the feather, and give rise respectively to the red and yellow colours.

In addition to these must be reckoned *turacin*, a reddish-purple pigment consisting of the same elements as zoomelanin, but remarkable for the fact that it contains from 5 to 8% of copper, which can be extracted by a weak alkaline solution, such as ammonia, and with the addition of acetic acid it can be filtered off as a metallic red or blue powder. The presence of metallic copper is indicated by the green flame of these red feathers when burnt. Turacin was discovered by Sir A.H. Church in the quill-feathers of the wings of Touracoes or "plantain eaters." These feathers, he showed, lose their colour after they have become wet, but regain it on drying. But turacin is not, as was supposed, confined to the feathers of the plantain eaters, since it has been obtained from a cuckoo, *Dasylophus superciliosus*.

What effect food may have on colour in birds in a wild state we have no means of knowing, but it is significant that flamingoes and linnets in confinement never regain their bright hues after their first moult in captivity. If cayenne pepper be mixed with the food of certain strains of canaries, from the time the birds are hatched onwards, the yellow colour of the feathers becomes intensified, till it takes on a deep orange hue. Bullfinches, if fed on hemp-seed, turn black. According to Darwin, the natives of the Amazonian region feed the common green parrot on the fat of large Siluroid fishes, and as a result the feathers become beautifully variegated with red and yellow. Similarly, in the Malay Archipelago, the natives of Gilolo change the colours of another parrot.

With but rare exceptions bright colours are confined to the exposed portions of the plumage, but in some of the Bustards the down is of a bright pink colour.

Structural colours include all metallic or prismatic colours, blue, green, white, some yellows, and, in part, glossy black. In metallic feathers the radii (barbules) are modified in

structural<br/>colours.various ways, frequently to form flattened, overlapping plates or tiles, while<br/>the surfaces of the plates are either smooth, finely striated or pitted. But,<br/>save only in the case of white feathers, beneath this colourless, glazed outer<br/>coat there is always a layer of pigment.

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The only green pigment known to occur in feathers is *turacoverdin*, found in the feathers of

the plantain eaters; it contains a relatively large amount of iron, but no copper. In all other cases the green colour of feathers is due to yellow, orange or greyish-brown pigment occurring with a special superstructure consisting of narrow ridges, as in some parrots and pittas (ant-thrushes), or the surface of the barbs and barbules is smooth and transparent, while between it and the pigment there exists a layer of small polygonal, colourless bodies having highly refractory, and often striated, surfaces.

Blue is unknown as a pigment in feathers. Blue feathers contain only orange or brownish pigment (Gadow), the blue colour being caused by the combination of pigment corpuscles and colourless striated polygonal bodies, as in green feathers.

While in many birds the coloration takes the form either of a uniform hue or of bands and patches of colour more or less brilliant, in others the coloration is sombre, and made up of dark longitudinal stripes or transverse bars on a lighter ground. The latter is the more primitive, and there seems good reason to believe that longitudinal stripes preceded transverse bars. This is indicated by the fact that the nestlings of the more primitive groups are longitudinally striped, and that young hawks in their first plumage are so striped, while the adults are barred.

There is also evidence to show that the evolution of brilliant plumage began with the males, and has, in many cases, been more or less perfectly acquired by the females, and also by the young, as for example in the kingfishers, where parents and offspring wear the same livery. Often, where the parents are alike in plumage, the young wear a different and duller livery, as in the case of the common starling (*Sturnus vulgaris*). But where the female differs from the male in coloration the young resemble the female parent.

The physiological explanation of complete disappearance of pigment in adult life, *e.g.* gannet, is not yet apparent.

At least once annually birds renew their feathers completely by a process known as a moult. Until the new feathers have attained at least half their full length they are invested in

a soft sheath, and, as development proceeds, the sheath breaks up from the

*Moulting.* tip of the feather downwards, so that for a time the new feathers have almost a brush-like appearance. Generally this replacement takes place gradually, new and old feathers occurring side by side, and on this account it is not always possible to see whether a moult is proceeding without raising the old feathers.

The "quill" feathers of the wing and tail are renewed in pairs, so that flight is little, if at all, impaired, the change taking place in the wing from the region of the wrist inwards, as to the primaries, and from the body outwards, towards the tip of the wing, as to the secondaries. In certain birds, however, as in the duck tribe and the rails, for example, all the quill-feathers of the wing are shed at once, so that for some time flight is impossible.

In the penguins this simultaneous method of moulting is carried still further. That is to say, the old feathers covering the body are not replaced gradually, but *en masse*. This method of ecdysis is, however, still further remarkable in that the old feathers do not drop out, to be succeeded by spine-like stumps which, later, split at the tip, liberating the barbs of the new feathers. They are, on the contrary, thrust out upon the tips of the new feathers, the barbs of which are never enclosed within an envelope such as that just described. When their growth has practically completed, and not till then, the old feathers are removed in large patches by the aid of the bird's beak; exposing thereby a perfectly developed plumage. In the cassowary, and emeu, the old feathers similarly adhere for a time to the tips of the new; but in these birds the feathers are moulted singly as in other birds.

Some birds moult twice within the year, the additional moult taking place in the spring, as in the case of the "warblers" (Sylviidae) and Limicolae, for example. But when this is the case the spring moult is only partial, since the quill feathers of the wings and the tail feathers are not renewed.

At this spring moult a special "nuptial" plumage is often assumed, as for example in many of the Limicolae, *e.g.* god-wits, knots, dunlin, ruff.

The sequel to this habit of assuming a nuptial dress is an interesting one. Briefly, this plumage, at first assumed at the mating period by the males only, and doffed soon after the young appear, has become retained for longer and longer periods, so that the succeeding plumage, often conspicuously dull compared with the nuptial dress, is worn only for a few weeks, instead of many months, as in the case of many of the ducks, for example; wherein the males, as soon as the young are hatched, assume what C. Waterton has aptly called an "eclipse" dress. This, instead of being worn till the following spring, as in the waders, is shed

again in the autumn and replaced by what answers to the waders' "nuptial" dress. In the game-birds but a trace of this "eclipse" plumage remains; and this, apparently, only in jungle-fowl, the common grey partridge (*Perdix cinerea*) and the blackcock (*Lyrurus*), in whose case the head and neck for a short period following the breeding season are clothed only by dull feathers. Further, this more highly developed plumage becomes transferred, first to the female, then to the young, so that, in many groups, the dull phase of plumage is entirely eliminated.

But the assumption at the breeding season of a conspicuously brilliant plumage is not always due to a moult. In many birds, notably many Passerines, this change is brought about by shedding the tips of the feathers, which are of a duller hue than the rest of the feather. In this way the bright rose pink of the linnet's breast, the blue and black head of the chaffinch, and the black throat and chestnut-and-black markings of the back of the sparrow, are assumed—to mention but a few instances. These birds moult but once a year, in the autumn, when the new feathers have broad brown fringes; as the spring advances these drop off, and with them the barbicels from the barbules of the upper surface of the feather, thus revealing the hidden tints.

According to some authorities, however, some birds acquire a change of colour without a moult by the ascent of pigment from the base of the feather. The black head assumed by many gulls in the spring is, for example, said to be gained in this way. There is, however, not only no good evidence in support of the contention, but the whole structure of the feather is against the probability of any such change taking place.

Feathers correspond with the scales of reptiles rather than with the hairs of mammals, as is shown by their development. They make their first appearance in the developing chick at

The development of feathers. about the sixth day of incubation, in the shape of small papillae. In section each papilla is found to be made up of a cluster of dermal cells—that is to say, of cells of the deeper layer of the skin—capped by cells of the epidermis. These last form a single superficial layer of flattened cells—the *epitrichium*—overlaying the cells of the Malpighian layer, which are

cylindrical in shape and rapidly increase to form several layers. As development proceeds the papillae assume a cone-shape with its apex directed backwards, while the base of this cone sinks down into the skin, or rather is carried down by the growth of the Malpighian cells, so that the cone is now sunk in a deep pit. Thereby these Malpighian cells become divided into two portions: (1) those taking part in the formation of the walls of the pit or "feather follicle," and (2) those enclosed within the cone. These last surround the central mass or core formed by the dermis. This mass constitutes the nutritive pulp for the development of the growing feather, and is highly vascular. The cells of the Malpighian layer within the cone now become differentiated into three layers. (1) An inner, extremely thin, forming a delicate sheath for the pulp, and found in the fully developed feather in the form of a series of hollow, transparent caps enclosed within the calamus; (2) a thick layer which forms the feather itself; and (3) a thin layer which forms the investing sheath of the feather. It is this sheath which gives the curious spine-covered character to many nestling birds and birds in moult. As growth proceeds the cells of this middle layer arrange themselves in longitudinal rows to form the barbs, while the barbules are formed by a secondary splitting. At their bases these rudimentary barbs meet to form the calamus. Finally the tips of the barbs break through the investing sheath and the fully formed down-feather emerges.

A part of the pulp and Malpighian cells remains over after the complete growth of the down-feather, and from this succeeding generations of feathers are developed. The process of this development differs from that just outlined chiefly in this: that of the longitudinal rows which in the down-feather form the barbs, two on the dorsal and two on the ventral aspect of the interior of the cylinder become stronger than the rest, combining to form the main- and after-shaft respectively. The remainder of the rods form the barbs and barbules as in the down-feather.

The reproductive power of the feather follicle appears to be almost inexhaustible, since it is not diminished appreciably by age, nor restricted to definite moulting periods, as is shown by the cruel and now obsolete custom of plucking geese alive, no less than three times annually, for the sake of their feathers. The growth of the feathers is, however, certainly affected by the general health of the bird, mal-nutrition causing the appearance of peculiar transverse Vshaped grooves, at more or less regular intervals, along the whole length of the feather. These are known as "hunger-marks," a name given by falconers, to whom this defect was well known.

It would seem that while the feather germ may be artificially stimulated to produce three successive generations of feathers within a year, it may, on the other hand, be induced artificially to maintain a continuous activity extending over long periods. That is to say, the normal quiescent period, and periodic moult, may be suspended, so that the feather 227

maintains a steady and continuous growth till it attains a length of several feet. The only known instance of this kind is that furnished by a domesticated breed of jungle-fowl known as the "Japanese long-tailed fowls" or as "Yokohamas." In this breed the upper tail coverts are in some way, as yet unknown to Europeans, induced to go on growing until they have attained a length of from 12 to 18 or even 20 ft.! In this abnormal growth the "hackles" of the lower part of the back also share, though they do not attain a similar length.

The feathers of birds are not uniformly distributed over the body, but grow only along certain definite tracts known as *pterylae*, leaving bare spaces or *apteria*. These pterylae differ considerably in their conformation in different groups of birds, and hence are of service in systematic ornithology.

The principal pterylae are as follows:-

(1) The head tract (*pt. capitis*), which embraces the head only.

(2) The spinal tract (*pt. spinalis*), which extends the whole length of the vertical column. It is one of the most variable in its modifications, especially in so far as the region from the base of the neck to the tail is concerned. In its simplest form it runs down the back in the form of a band of almost uniform width, but generally it expands considerably in the lumbar region, as in Passeres. Frequently it is divided into two portions; an upper, terminating in the region of the middle of the back in a fork, and a lower, which commences either as a fork, *e.g.* plover, barbet, or as a median band, *e.g.* swallow. Very commonly the dorsal region of this tract encloses a more or less extensive featherless space (*apterion*), *e.g.* swift, auk. While, as a rule, the dorsal region of this tract is relatively narrow, it is in some of great breadth, *e.g.* grebe, pigeon, coly.

(3) The ventral tract (*pt. ventralis*), which presents almost as many variations as the spinal tract.

In its simplest form it runs from the throat backwards in the form of a median band as far as the base of the neck where it divides, sending a branch to each side of the breast. This branch commonly again divides into a short, broad outer branch which lodges the "flank" feathers, and a long, narrow, inner branch which runs backwards to join its fellow of the opposite side in front of the cloacal aperture. This branch lodges the abdominal feathers. The median space which divides the inner branches of the tract may be continued forwards as far as the middle of the neck, or even up to the throat, e.g. plover. Only in a few cases is the neck continuously covered by the fusion of the dorsal and ventral tracts, e.g. flamingo, Anseres, Ciconidae, Pygopodes.

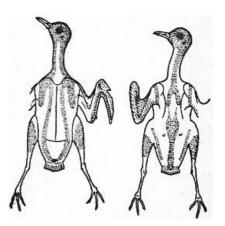


FIG. 2.—Pterylosis of the plover.

For convenience sake the cervical portions of the spinal and ventral tracts are generally regarded as separate tracts, the *pt. colli dorsalis* and *pt. colli ventralis* respectively.

- (4) The humeral tract (*pt. humeralis*), which gives rise to the "scapular" feathers.
- (5) The femoral tract (*pt. femoralis*), which forms an oblique band across the thigh.
- (6) The crural tract (*pt. cruralis*), which clothes the rest of the leg.
- (7) The tail tract (pt. caudalis), including the tail feathers and their coverts; and

(8) The wing tract (*pt. alaris*). The wing tract presents many peculiar features. Each segment—arm, forearm and hand—bears feathers essential to flight, and these are divided into *remiges*, or "quill" feathers, and *tectrices*, or "coverts."

The remiges of the arm, more commonly described as "tertiaries," are, technically, collectively known as the *parapteron* and *hypopteron*, and are composed respectively of long, quill-like feathers forming a double series, the former arranged along the upper, and the latter along the lower aspect of the humerus. They serve to fill up the gap which, in long-winged birds, would otherwise occur during flight between the quill-feathers of the forearm and the body, a gap which would make flight impossible. In short-winged birds these two series are extremely reduced.

The remiges range in number from 16, as in humming-birds, to 48 as in the albatross, according, in short, to the length of the wing. But these numerical differences depend, in flying birds, rather upon the length of the forearm, since the quills of the hand never exceed 12 and never fall below 10, though the tenth may be reduced to a mere vestige.

The quills of the forearm are known as "secondaries," those of the hand as "primaries." The former are attached by their bases at relatively wide distances apart to the ulna, while the primaries are crowded close together and attached to the skeleton of the hand. The six or seven which rest upon the fused metacarpals II.-III. are known as "metacarpals." The next succeeding feather is borne by the phalanx of digit III. and hence is known as the addigital. Phalanx i. of digit II. always supports two quills, the "middigitals," while the remaining feathers—one or two—are borne by the last phalanx of digit II. and are known as pre-digitals, while the whole series of primaries are known as the metacarpo-digitals.

In their relation one to another the remiges, it must be noted, are always so placed that they overlap one another, the free edge of each, when the wing is seen from its upper surface, being turned towards the tip of the wing. Thus, in flight, the air passes through the wing as it is raised, while in the downstroke the feathers are forced together to form a homogeneous surface.

Birds which fly much have the outer primaries of great length, giving the wing a pointed shape, as in swifts, while in species which fly but little, or frequent thickets, the outer primaries are very short, giving the wing a rounded appearance. This adaptation to environment is commonly lost sight of by taxonomers, who not infrequently use the form of the wing as a factor in classification.

The tectrices, or covert feathers of the wing, are arranged in several series, decreasing in size from behind forwards. The number of rows on the dorsal aspect and the method of their overlap, afford characters of general importance in classification.

The first row of the series is formed by the *major coverts*; these, like the primaries, have their free-edges directed towards the tip of the wing, and hence are said to have a distal overlap. The next row is formed by the *median coverts*. These, on the forearm, commonly overlap as to the outer half of the row distally, and as to the inner half proximally. On the hand this series is incomplete. Beyond the median are four or five rows of coverts known as the *minor coverts*. These may have either a proximal or a distal overlap. The remaining rows of small feathers are known as the *marginal coverts*, and they always have a distal overlap.

The three or four large quill-like feathers borne by the thumb form what is known as the "bastard-wing," *ala spuria*.

The coverts of the under follow an arrangement similar to that of the upper surface, but the minor coverts are commonly but feebly developed, leaving a more or less bare space which is covered by the great elongation of the marginal series.

One noteworthy fact about the coverts of the under side of the wing is that all save the major and median coverts have what answers to the dorsal surfaces of the feather turned towards the body, and what answers to the ventral surface of the feather turned towards the under surface of the wing. In the major and median coverts, however, the ventral surfaces of these feathers are turned ventralwards, that is to say, in the extended wing they, like the remiges, have the ventral surfaces turned downwards or towards the body in the closed wing.

But the most remarkable fact in connexion with the pterylosis of the wing is the fact that in all, save the Passerine and Galliform types, and some few other isolated exceptions, the secondary series of remiges appears always to lack the fifth remex, counting from the wrist inwards, inasmuch as, when such wings are examined, there is always found, in the place of the fifth remex, a pair of major coverts only, while throughout the rest of the series each such pair of coverts embraces a quill.

This extraordinary fact was first discovered by the French naturalist Z. Gerbe, and was later rediscovered by R.S. Wray. Neither of these, however, was able to offer any explanation thereof. This, however, has since been attempted, simultaneously, by P.C. Mitchell and W.P. Pycraft. The former has aptly coined the word *diastataxic* to denote the gap in the series, and *eutaxic* to denote such wings as have an uninterrupted series of quills. While both authors agree that there is no evidence of any loss in the number of the quills in diastataxic wings, they differ in the interpretation as to which of the two conditions is the more primitive and the means by which the gap has been brought about.

According to Mitchell the diastataxic is the more primitive condition, and he has conclusively shown a way in which diastataxic wings may become eutaxic. Pycraft on the other hand contends that the diastataxic wing has been derived from the eutaxic type, and has produced evidence showing, on the one hand, the method by which this transition is effected, and on the other that by which the diastataxic wing may again recover the eutaxic condition, though in this last particular the evidence adduced by Mitchell is much more complete. The matter is, however, one of considerable difficulty, but is well worth further investigation. ways. All are degenerate and quite useless as organs of flight. In some cases indeed they have become reduced to mere vestiges.

Those of the ostrich and Rhea are the least degraded.

In the ostrich ankylosis has prevented the flexion of the hand at the wrist joint so that the quills—primaries and secondaries—form an unbroken series of about forty in number. Of these sixteen belong to the primary or metacarpo-digital series, a number exceeding that of any other bird. What the significance of this may be with regard to the primitive wing it is impossible to say at present. The coverts, in their disposition, bear a general resemblance to those of Carinate wings; but they differ on account of the great length of the feathers and the absence of any definite overlap.

The wing of the South American Rhea more nearly resembles that of flying birds since the hand can be flexed at the wrist joint, and the primaries are twelve in number, as in grebes, and some storks, for example.

The coverts, as in the African ostrich, are remarkable for their great length, those representing the major series being as long as the remiges, a fact probably due to the shortening of the latter. They are not, however, arranged in quincunx, as is the rule among the Carinatae, but in parallel, transverse rows, in which respect they resemble the owls.

In both ostrich and Rhea, as well as in all the other struthious birds, the under surface of the wing is entirely bare.

The wing of the cassowary, emeu and apteryx has undergone complete degeneration; so much so that only a vestige of the hand remains.

Remiges in the cassowary are represented by a few spine-like shafts—three primaries and two secondaries. These are really hypertrophied calami. This is shown by the fact that in the nestling these remiges have a normal calamus, rhachis and vane; but as development proceeds the rhachis with its vane sloughs off, while the calamus becomes enormously lengthened and solid.

In the emeu the wing is less atrophied than in the cassowary, but is not yet completely degenerate. Altogether seventeen remiges are represented, of which seven correspond to primaries. Since, however, these feathers have each an aftershaft as long as the main shaft—like the rest of the body feathers—it may be that they answer not to remiges, but to major coverts.

The wing of apteryx, like that of the cassowary, has become extremely reduced. The remiges are thirteen in number, four of which answer to primaries. These feathers are specially interesting, inasmuch as they retain throughout life a stage corresponding to that seen in the very young cassowary, the calamus being greatly swollen, and supporting a very degenerate rhachis and vane.

The penguins afford another object-lesson in degeneration of this kind. Here the wing has become transformed into a paddle, clothed on both sides with a covering of small, close-set feathers. A pollex is wanting, as in the cassowary, emeu and apteryx, while it is impossible to say whether remiges are represented or not.

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(W. P. P.)

*Commercial Applications of Feathers.*—The chief purposes for which feathers become commercially valuable may be comprehended under four divisions:—(1) bed and upholstery feathers; (2) quills for writing; (3) ornamental feathers; and (4) miscellaneous uses of feathers.

Bed and Upholstery Feathers.—The qualities which render feathers available for stuffing beds, cushions, &c., are lightness elasticity, freedom from matting and softness. These are combined in the most satisfactory degree in the feathers of the goose and of several other allied aquatic birds, whose bodies are protected with a warm downy covering. Goose feathers and down, when plucked in spring from the living bird, are most esteemed, being at once more elastic, cleaner and less liable to taint than those obtained from the bodies of killed geese. The down of the eider duck, Anas mollissima, is valued above all other substances for lightness, softness and elasticity; but it has some tendency to mat, and is consequently more used for quilts and in articles of clothing than unmixed for stuffing beds. The feathers of swans, ducks and of the common domestic fowl are also largely employed for beds; but in the case of the latter bird, which is of course non-aquatic, the feathers are harsher and less downy than are those of the natatorial birds generally. Feathers which possess strong or stiff shafts cannot without some preliminary preparation be used for stuffing purposes, as the stiff points they present would not only be highly uncomfortable, but would also pierce and cause the escape of the feathers from any covering in which they might be enclosed. The barbs are therefore stripped or cut from these feathers, and when so prepared they, in common with soft feathers and downs, undergo a careful process of drying and cleaning, without which they would acquire an offensive smell, readily attract damp, and harbour vermin. The drying is generally done in highly heated apartments or stoves, and subsequently the feathers are smartly beaten with a stick, and shaken in a sieve to separate all dust and small debris.

Quills for Writing.—The earliest period at which the use of quill feathers for writing purposes is recorded is the 6th century; and from that time till the introduction of steel pens in the early part of the 19th century they formed the principal writing implements of civilized communities. It has always been from the goose that quills have been chiefly obtained, although the swan, crow, eagle, owl, hawk and turkey all have more or less been laid under contribution. Swan quills, indeed are better and more costly than are those from the goose, and for fine lines crow quills have been much employed. Only the five outer wing feathers of the goose are useful for writing, and of these the second and third are the best, while leftwing quills are also generally more esteemed than those of the right wing, from the fact that they curve outward and away from the writer using them. Quills obtained in spring, by plucking or otherwise, from living birds are by far the best, those taken from dead geese, more especially if fattened, being comparatively worthless. To take away the natural greasiness to remove the superficial and internal pellicles of skin, and to give the necessary gualities of hardness and elasticity, guills require to undergo some processes of preparation. The essential operation consists in heating them, generally in a fine sand-bath, to from 130° to 180° F. according to circumstances, and scraping them under pressure while still soft from heat, whereby the outer skin is removed and the inner shrivelled up. If the heating has been properly effected, the quills are found on cooling to have become hard, elastic and somewhat brittle. While the quills are soft and hot, lozenge-shaped patterns, ornamental designs, and names are easily and permanently impressed on them by pressure with suitable instruments or designs in metal stamps.

*Ornamental Feathers.*—Feathers do not appear to have been much used, in Europe at least, for ornamental purposes till the close of the 13th century. They are found in the conical caps worn in England during the reigns of Edward III. and Richard II.; but not till the period of

Henry V. did they take their place as a part of military costume. Towards the close of the 15th century the fashion of wearing feathers in both civil and military life was carried to an almost ludicrous excess. In the time of Henry VIII. they first appeared in the bonnets of ladies; and during Elizabeth's reign feathers began to occupy an important place as headdress ornaments of women. From that time down to the present, feathers of endless variety have continued to be leading articles of ornamentation in female head-attire; but, except for military plumes, they have long ceased to be worn in ordinary male costume. At the present day, the feathers of numerous birds are, in one way or another, turned to account by ladies for the purpose of personal ornament. Ostrich feathers, however, hold, as they have always held, a pre-eminent position among ornamental feathers; and the ostrich is the only bird which may be said to be reared exclusively for the sake of its feathers. Ostrich farming is one of the established industries of South Africa, and is also practised in Kordofan and other semi-desert regions of North Africa, in Argentina, and in Arizona and California in North America. The feathers are generally plucked from the living animal—a process which does not appear to cause any great inconvenience. In the male bird, the long feathers of the rump and wings are white, and the short feathers of the body are jet black; while the rump and wing feathers of the female are white tinged with a dusky grey, the general body colour being the latter hue. The feathers of the male are consequently much more valuable than those of the female, and they are separately classified in commerce. The art of the plumassier embraces the cleaning, bleaching, dyeing, curling and making up of ostrich and other plumes and feathers. White feathers are simply washed in bundles in hot soapy water, run through pure warm water, exposed to sulphurous fumes for bleaching, thereafter blued with indigo solution, rinsed in pure cold water, and hung up to dry. When dry the shafts are pared or scraped down to give the feathers greater flexibility, and the barbs are curled by drawing them singly over the face of a blunt knife or by the cautious application of a heated iron. Dullcoloured feathers are usually dyed black. Feathers which are dyed light colours are first bleached by exposure in the open air. Much ingenuity is displayed in the making up of plumes, with the general result of producing the appearance of full, rich, and long feathers from inferior varieties and from scraps and fragments of ostrich feathers; and so dexterously can factitious plumes be prepared that only an experienced person is able to detect the fabrication.

In addition to those of the ostrich, the feathers of certain other birds form articles of steady commercial demand. Among these are the feathers of the South American ostrich, *Rhea americana*, the marabout feathers of India obtained from *Leptoptilos argala* and *L. javanica*, the aigrettes of the heron, the feathers of the various species of birds of paradise, and of numerous species of humming-birds. Swan-down and the skins of various penguins and grebes and of the albatross are used, like fur, for muffs and collarettes.

The Chinese excel in the preparation of artificial flowers and other ornaments from bright natural-coloured or dyed feathers; and the French also skilfully work fragments of feathers into bouquets of artificial flowers, imitation butterflies, &c.

*Miscellaneous Applications of Feathers.*—Quills of various sizes are extensively employed as holders for the sable and camel hair brushes used by artists, &c. Feather brushes and dusters are made from the wing-feathers of the domestic fowl and other birds; those of a superior quality, under the name of vulture dusters, being really made of American ostrich feathers. A minor application of feathers is found in the dressing of artificial fly-hooks for fishing. As steel pens came into general use it became an object of considerable importance to find applications for the supplanted goose-quills, and a large field of employment for them was found in the preparation of toothpicks.

(J. PA; W. P. P.)

**FEATHERSTONE,** an urban district in the Osgoldcross parliamentary division of the West Riding of Yorkshire, England, 6 m. E. of Wakefield on the Lancashire & Yorkshire railway. Pop. (1901) 12,093. The industrial population is employed in large collieries in the vicinity; and here, on the 7th of September 1893, serious riots during a strike resulted in the destruction of some of the colliery works belonging to Lord Masham, and were not quelled without military intervention and some bloodshed.

FEATLEY (or FAIRCLOUGH) DANIEL (1582-1645), English divine, was born at Charlton, Oxfordshire, on the 15th of March 1582. He was a scholar of Corpus Christi College, Oxford, and probationer fellow in 1602, after which he went to France as chaplain to the English ambassador. For some years he was domestic chaplain to George Abbot, archbishop of Canterbury, and held also the rectories of Lambeth (1619), Allhallows, Bread Street (c. 1622), and Acton (1627), this last after leaving the archbishop's service in 1625. His varied activities included a "scholastick duel" with James I. in 1625, and the publication of (1) the report of a conference with some Jesuits in 1624, (2) a devotional manual entitled Ancilla Pietatis (1626), (3) Mystica Clavis, a Key opening divers Difficult Texts of Scripture in 70 Sermons (1636). He was appointed provost of Chelsea College in 1630, and in 1641 was one of the sub-committee "to settle religion." In the course of this work he had a disputation with four Baptists at Southwark which he commemorated in his book Καταβαπτισταὶ καταπτυστοί, The Dippers dipt or the Anabaptists duckt and plunged over head and ears (1645). He sat in the Westminster Assembly 1643, and was the last of the Episcopal members to remain. For revealing its proceedings he was expelled and imprisoned. He died at Chelsea on the 17th of April 1645.

**FEBRONIANISM,** the name given to a powerful movement within the Roman Catholic Church in Germany, in the latter part of the 18th century, directed towards the "nationalizing" of Catholicism, the restriction of the monarchical power usurped by the papacy at the expense of the episcopate, and the reunion of the dissident churches with Catholic Christendom. It was thus, in its main tendencies, the equivalent of what in France is known as Gallicanism (q.v.). The name is derived from the pseudonym of "Justinus Febronius" adopted by Johann Nikolaus von Hontheim (q.v.), coadjutor bishop of Treves (Trier), in publishing his work *De statu ecclesiae et legitima potestate Romani pontificis*. This book, which roused a vast amount of excitement and controversy at the time, exercised an immense influence on opinion within the Roman Catholic Church, and the principles it proclaimed were put into practice by the rulers of that Church in various countries during the latter part of the 18th and the beginning of the 19th century.

The main propositions defended by "Febronius" were as follows. The constitution of the Church is not, by Christ's institution, monarchical, and the pope, though entitled to a certain primacy, is subordinate to the universal Church. Though as the "centre of unity" he may be regarded as the guardian and champion of the ecclesiastical law, and though he may propose laws, and send legates on the affairs of his primacy, his sovereignty (principatus) over the Church is not one of jurisdiction, but of order and collaboration (ordinis et consociationis). The Roman (ultramontane) doctrine of papal infallibility is not accepted "by the other Catholic Churches" and, moreover, "has no practical utility." The Church is based on the one episcopacy common to all bishops, the pope being only primus inter pares. It follows that the pope is subject to general councils, in which the bishops are his colleagues (conjudices), not merely his consultors; nor has he the exclusive right to summon such councils. The decrees of general councils need not be confirmed by the pope nor can they be altered by him; on the other hand, appeal may be made from papal decisions to a general council. As for the rights of the popes in such matters as appeals, reservations, the confirmation, translation and deposition of bishops, these belong properly to the bishops in provincial synods, and were usurped by the papacy gradually as the result of a variety of causes, notably of the False Decretals. For the health of the Church it is therefore necessary to restore matters to their condition before the False Decretals, and to give to the episcopate its due authority. The main obstacle to this is not the pope himself, but the Curia, and this must be fought by all possible means, especially by thorough popular education (primum adversus abusum ecclesiasticae potestatis remedium), and by the assembling of national and provincial synods, the neglect of which is the main cause of the Church's woes. If the pope will not move in the matter, the princes, and notably the emperor, must act in co-operation with the bishops, summon national councils even against the pope's will, defy his excommunication, and in the last resort refuse obedience in those matters over which the papacy has usurped jurisdiction.

It will be seen that the views of Febronius had but little originality. In the main they were those that predominated in the great general councils of Constance and Basel in the 15th century; but they were backed by him with such a wealth of learning, and they fitted so well into the intellectual and political conditions of the time, that they found a widespread acceptance. The book, indeed, was at once condemned at Rome (February 1764), and by a

brief of the 21st of May the pope commanded all the bishops of Germany to suppress it. The papal condemnation met with a very mixed reception; in some dioceses the order to prohibit the book was ignored, in others action upon it was postponed pending an independent examination, in yet others (nine in all) it was at once obeyed "for political reasons," though even in these the forbidden book became the "breviary of the governments." The Febronian doctrine, in fact, exactly fitted the views of the German bishops, which were by no means disinterested. It must be remembered that the bishops were at this time great secular princes rather than Catholic prelates; with rare exceptions, they made no pretence of carrying out their spiritual duties; they shared to the full in the somewhat shallow "enlightenment" of the age. As princes of the Empire they had asserted their practical independence of the emperor; they were irked by what they considered the unjustifiable interference of the Curia with their sovereign prerogatives, and wished to establish their independence of the pope also. In the ranks of the hierarchy, then, selfish motives combined with others more respectable to secure the acceptance of the Febronian position. Among secular rulers the welcome given to it was even less equivocal. Even so devout a sovereign as Maria Theresa refused to allow "Febronius" to be forbidden in the Habsburg dominions; her son, the emperor Joseph II., applied the Febronian principles with remorseless thoroughness. In Venice, in Tuscany, in Naples, in Portugal, they inspired the vigorous efforts of "enlightened despots" to reform the Church from above; and they gave a fresh impetus to the movement against the Jesuits, which, under pressure of the secular governments, culminated in the suppression of the Society by Pope Clement XIV. in 1773. "Febronius," too, inspired the proceedings of two notable ecclesiastical assemblies, both held in the year 1786. The reforming synod which met at Pistoia under the presidency of the bishop, Scipione de' Ricci, is dealt with elsewhere (see PISTOIA). The other was the so-called congress of Ems, a meeting of the delegates of the four German archbishops, which resulted, on the 25th of August, in the celebrated "Punctation of Ems," subsequently ratified and issued by the archbishops. This document was the outcome of several years of controversy between the archbishops and the papal nuncios, aroused by what was considered the unjustifiable interference of the latter in the affairs of the German dioceses. In 1769 the three archbishop-electors of Mainz, Cologne and Treves (Trier) had drawn up in thirty articles their complaints against the Curia, and after submitting them to the emperor Joseph II., had forwarded them to the new pope, Clement XIV. These articles, though "Febronius" was prohibited in the archdioceses, were wholly Febronian in tone; and, indeed, Bishop von Hontheim himself took an active part in the diplomatic negotiations which were their outcome. In drawing up the "Punctation" he took no active part, but it was wholly inspired by his principles. It consisted of XXIII. articles, which may be summarized as follows. Bishops have, in virtue of their God-given powers, full authority within their dioceses in all matters of dispensation, patronage and the like; papal bulls, briefs, &c., and the decrees of the Roman Congregations are only of binding force in each diocese when sanctioned by the bishop; nunciatures, as hitherto conceived, are to cease; the oath of allegiance to the pope demanded of bishops since Gregory VII.'s time is to be altered so as to bring it into conformity with episcopal rights; annates and the fees payable for the pallium and confirmation are to be lowered and, in the event of the pallium or confirmation being refused, German archbishops and bishops are to be free to exercise their office under the protection of the emperor; with the Church tribunals of first and second instance (episcopal and metropolitan) the nuncios are not to interfere, and, though appeal to Rome is allowed under certain "national" safe-guards, the opinion is expressed that it would be better to set up in each archdiocese a final court of appeal representing the provincial synod; finally the emperor is prayed to use his influence with the pope to secure the assembly of a national council in order to remove the grievances left unredressed by the council of Trent.

Whether this manifesto would have led to a reconstitution of the Roman Catholic Church on permanently Febronian lines must for ever remain doubtful. The French Revolution intervened; the German Church went down in the storm: and in 1803 the secularizations carried out by order of the First Consul put an end to the temporal ambitions of its prelates. Febronianism indeed, survived. Karl Theodor von Dalberg, prince primate of the Confederation of the Rhine, upheld its principles throughout the Napoleonic epoch and hoped to establish them in the new Germany to be created by the congress of Vienna. He sent to this assembly, as representative of the German Church, Bishop von Wessenberg, who in his diocese of Constance had not hesitated to apply Febronian principles in reforming, on his own authority, the services and discipline of the Church. But the times were not favourable for such experiments. The tide of reaction after the Revolutionary turmoil was setting strongly in the direction of traditional authority, in religion as in politics; and that ultramontane movement which, before the century was ended, was to dominate the Church, was already showing signs of vigorous life. Moreover, the great national German Church of which Dalberg had a vision-with himself as primate-did not appeal to the German princes, tenacious of their newly acquired status as European powers. One by one these entered into concordats with Rome, and Febronianism from an aggressive policy subsided into a speculative opinion. As such it survived strongly, especially in the universities (Bonn especially had been, from its foundation in 1774, very Febronian), and it reasserted itself vigorously in the attitude of many of the most learned German prelates and professors towards the question of the definition of the dogma of papal infallibility in 1870. It was, in fact, against the Febronian position that the decrees of the Vatican Council were deliberately directed, and their promulgation marked the triumph of the ultramontane view (see VATICAN COUNCIL, ULTRAMONTANISM, PAPACY). In Germany, indeed, the struggle against the papal monarchy was carried on for a while by the governments on the so-called Kulturkampf, the Old Catholics representing militant Febronianism. The latter, however, since Bismarck "went to Canossa," have sunk into a respectable but comparatively obscure sect, and Febronianism, though it still has some hold on opinion within the Church in the chapters and universities of the Rhine provinces, is practically extinct in Germany. Its revival under the guise of so-called Modernism drew from Pope Pius X. in 1908 the scathing condemnation embodied in the encyclical Pascendi gregis.

AUTHORITIES.—See Justinus Febronius, *De statu ecclesiae et legitima potestae Romani pontificis* (Bullioni, 1765), second and enlarged edition, with new prefaces addressed to Pope Clement XIII., to Christian kings and princes, to the bishops of the Catholic Church, and to doctors of theology and canon law; three additional volumes, published in 1770, 1772 and 1774 at Frankfort, are devoted to vindications of the original work against the critics. In the *Revue des deux mondes* for July 1903 (tome xvi. p. 266) is an interesting article under the title of "L'Allemagne Catholique," from the papal point of view, by Georges Goyau. For the congress of Ems see Herzog-Hauck, *Realencyklopädie* (Leipzig, 1898), s.v. "Emser Kongress." Further references are given in the article on Hontheim (q.v.).

(W. A. P.)

**FEBRUARY**, the second month of the modern calendar. In ordinary years it contains 28 days; but in bissextile or leap year, by the addition of the intercalary day, it consists of 29 days. This month was not in the Romulian calendar. In the reign of Numa two months were added to the year, namely, January at the beginning, and February at the end; and this arrangement was continued until 452 B.C., when the decemvirs placed February after January. The ancient name of *Februarius* was derived from *februare*, to purify, or from *Februa*, the Roman festival of general expiation and lustration, which was celebrated during the latter part of this month. In February also the Lupercalia were held, and women were purified by the priests of Pan Lyceus at that festival. The Anglo-Saxons called this month Sprout-Kale from the sprouting of the cabbage at this season. Later it was known as *Solmonath*, because of the return of the sun from the low latitudes. The most generally noted days of February are the following:—the 2nd, Candlemas day, one of the fixed quarter days used in Scotland; the 14th, St Valentine's day; and the 24th, St Matthias. The church festival of St Matthias was formerly observed on the 25th of February in bissextile years, but it is now invariably celebrated on the 24th.

**FEBVRE, ALEXANDRE FRÉDÉRIC** (1835- ), French actor, was born in Paris, and after the usual apprenticeship in the provinces and in several Parisian theatres in small parts, was called to the Comédie Française in 1866, where he made his début as Philip II. in *Don Juan d'Autriche*. He soon became the most popular leading man in Paris, not only in the classical répertoire, but in contemporary novelties. In 1894 he toured the principal cities of Europe, and, in 1895, of America. He was also a composer of light music for the piano, and published several books of varying merit. He married Mdlle Harville, daughter of one of his predecessors at the Comédie Française, herself a well-known actress.

FÉCAMP, a seaport and bathing resort of northern France, in the department of Seine-Inférieure, 28 m. N.N.E. of Havre on the Western railway. Pop. (1906) 15,872. The town, which is situated on the English Channel at the mouth of the small river Fécamp, consists almost entirely of one street upwards of 2 m. in length. It occupies the bottom and sides of a narrow valley opening out towards the sea between high cliffs. The most important building is the abbey church of La Trinité, dating for the most part from 1175 to 1225. The central tower and the south portal (13th century) are the chief features of its simple exterior; in the interior, the decorative work, notably the chapel-screens and some fine stained glass, is remarkable. The hotel-de-ville with a municipal museum and library occupy the remains of the abbey buildings (18th century). The church of St Étienne (16th century) and the Benedictine liqueur distillery,<sup>1</sup> a modern building which also contains a museum, are of some interest. A tribunal and chamber of commerce, a board of trade-arbitrators and a nautical school, are among the public institutions. The port consists of an entrance channel nearly 400 yds. long leading to a tidal harbour and docks capable of receiving ships drawing 26 ft. at spring-tide, 19 ft. at neap-tide. Fishing for herring and mackerel is carried on and the town equips a large fleet for the codbanks of Newfoundland and Iceland. The chief exports are oilcake, flint, cod and Benedictine liqueur. Imports include coal, timber, tar and hemp. Steam sawing, metal-founding, fish-salting, shipbuilding and repairing, and the manufacture of ship's-biscuits and fishing-nets are among the industries.

The town of Fécamp grew up round the nunnery founded in 658 to guard the relic of the True Blood which, according to the legend, was found in the trunk of a fig-tree drifted from Palestine to this spot, and which still remains the most precious treasure of the church. The original convent was destroyed by the Northmen, but was re-established by Duke William Longsword as a house of canons regular, which shortly afterwards was converted into a Benedictine monastery. King Richard I. greatly enlarged this, and rebuilt the church. The town achieved some prosperity under the dukes of Normandy, who improved its harbour, but after the annexation of Normandy to France it was overshadowed by the rising port of Havre.

FECHNER, GUSTAV THEODOR (1801-1887), German experimental psychologist, was born on the 19th of April 1801 at Gross-Särchen, near Muskau, in Lower Lusatia, where his father was pastor. He was educated at Sorau and Dresden and at the university of Leipzig, in which city he spent the rest of his life. In 1834 he was appointed professor of physics, but in 1839 contracted an affection of the eyes while studying the phenomena of colour and vision, and, after much suffering, resigned. Subsequently recovering, he turned to the study of mind and the relations between body and mind, giving public lectures on the subjects of which his books treat. He died at Leipzig on the 18th of November 1887. Among his works may be mentioned: Das Büchlein vom Leben nach dem Tode (1836, 5th ed., 1903), which has been translated into English; Nanna, oder über das Seelenleben der Pflanzen (1848, 3rd ed., 1903); Zendavesta, oder über die Dinge des Himmels und des Jenseits (1851, 2nd ed. by Lasswitz, 1901); Über die physikalische und philosophische Atomenlehre (1853, 2nd ed., 1864); Elemente der Psychophysik (1860, 2nd ed., 1889); Vorschule der Ästhetik (1876, 2nd ed., 1898); Die Tagesansicht gegenüber der Nachtansicht (1879). He also published chemical and physical papers, and translated chemical works by J.B. Biot and L.J. Thénard from the French. A different but essential side of his character is seen in his poems and humorous pieces, such as the Vergleichende Anatomie der Engel (1825), written under the pseudonym of "Dr Mises." Fechner's epoch-making work was his Elemente der Psychophysik (1860). He starts from the Spinozistic thought that bodily facts and conscious facts, though not reducible one to the other, are different sides of one reality. His originality lies in trying to discover an exact mathematical relation between them. The most famous outcome of his inquiries is the law known as Weber's or Fechner's law which may be expressed as follows:- "In order that the intensity of a sensation may increase in arithmetical progression, the stimulus must increase in geometrical progression." Though holding good within certain limits only, the law has been found immensely useful. Unfortunately, from the tenable theory that the intensity of a sensation increases by definite additions of stimulus, Fechner was led on to postulate a unit

<sup>1</sup> The liqueur is said to have been manufactured by the Benedictine monks of the abbey as far back as 1510; since the Revolution it has been produced commercially by a secular company. The familiar legend D.O.M. (*Deo Optimo Maximo*) on the bottles preserves the memory of its original makers.

of sensation, so that any sensation s might be regarded as composed of n units. Sensations, he argued, thus being representable by numbers, psychology may become an "exact" science, susceptible of mathematical treatment. His general formula for getting at the number of units in any sensation is  $s = c \log R$ , where s stands for the sensation, R for the stimulus numerically estimated, and c for a constant that must be separately determined by experiment in each particular order of sensibility. This reasoning of Fechner's has given rise to a great mass of controversy, but the fundamental mistake in it is simple. Though stimuli are composite, sensations are not. "Every sensation," says Professor James, "presents itself as an indivisible unit; and it is quite impossible to read any clear meaning into the notion that they are masses of units combined." Still, the idea of the exact measurement of sensation has been a fruitful one, and mainly through his influence on Wundt, Fechner was the father of that "new" psychology of laboratories which investigates human faculties with the aid of exact scientific apparatus. Though he has had a vast influence in this special department, the disciples of his general philosophy are few. His world-conception is highly animistic. He feels the thrill of life everywhere, in plants, earth, stars, the total universe. Man stands midway between the souls of plants and the souls of stars, who are angels. God, the soul of the universe, must be conceived as having an existence analogous to men. Natural laws are just the modes of the unfolding of God's perfection. In his last work Fechner, aged but full of hope, contrasts this joyous "daylight view" of the world with the dead, dreary "night view" of materialism. Fechner's work in aesthetics is also important. He conducted experiments to show that certain abstract forms and proportions are naturally pleasing to our senses, and gave some new illustrations of the working of aesthetic association. Fechner's position in reference to predecessors and contemporaries is not very sharply defined. He was remotely a disciple of Schelling, learnt much from Herbart and Weisse, and decidedly rejected Hegel and the monadism of Lotze.

See W. Wundt, G. Th. Fechner (Leipzig, 1901); A. Elsas, "Zum Andenken G. Th. Fechners," in Grenzbote, 1888; J.E. Kuntze, G. Th. Fechner (Leipzig, 1892); Karl Lasswitz, G. Th. Fechner (Stuttgart, 1896 and 1902); E.B. Titchener, Experimental Psychology (New York, 1905); G.F. Stout, Manual of Psychology (1898), bk. ii. ch. vii.; R. Falckenberg, Hist. of Mod. Phil. (Eng. trans., 1895), pp. 601 foll.; H. Höffding, Hist. of Mod. Phil. (Eng. trans., 1900), vol. ii. pp. 524 foll.; Liebe, Fechners Metaphysik, im Umriss dargestellt (1903).

(H. St.)

FECHTER, CHARLES ALBERT (1824-1879), Anglo-French actor, was born, probably in London, on the 23rd of October 1824, of French parents, although his mother was of Piedmontese and his father of German extraction. The boy would probably have devoted himself to a sculptor's life but for the accident of a striking success made in some private theatricals. The result was an engagement in 1841 to play in a travelling company that was going to Italy. The tour was a failure, and the company broke up; whereupon Fechter returned home and worked assiduously at sculpture. At the same time he attended classes at the Conservatoire with the view of gaining admission to the Comédie Française. Late in 1844 he won the grand medal of the Académie des Beaux-Arts with a piece of sculpture, and was admitted to make his debut at the Comédie Française as Seide in Voltaire's Mahomet and Valère in Molière's *Tartuffe*. He acquitted himself with credit; but, tired of the small parts he found himself condemned to play, returned again to his sculptor's studio in 1846. In that year he accepted an engagement to play with a French company in Berlin, where he made his first decisive success as an actor. On his return to Paris in the following year he married the actress Eléonore Rabut (d. 1895). Previously he had appeared for some months in London, in a season of French classical plays given at the St James's theatre. In Paris for the next ten years he fulfilled a series of successful engagements at various theatres, his chief triumph being his creation at the Vaudeville on the 2nd of February 1852 of the part of Armand Duval in La Dame aux camélias. For nearly two years (1857-1858) Fechter was manager of the Odéon, where he produced *Tartuffe* and other classical plays. Having received tempting offers to act in English at the Princess's theatre, London, he made a diligent study of the language, and appeared there on the 27th of October 1860 in an English version of Victor Hugo's Ruy Blas. This was followed by The Corsican Brothers and Don César de Bazan; and on the 20th of March 1861 he first attempted Hamlet. The result was an extraordinary triumph, the play running for 115 nights. This was followed by Othello, in which he played alternately the Moor and Iago. In 1863 he became lessee of the Lyceum theatre, which he opened with The Duke's Motto; this was followed by The King's Butterfly, The Mountebank (in which his son Paul, a boy of seven, appeared), *The Roadside Inn, The Master of Ravenswood, The Corsican Brothers* (in the original French version, in which he had created the parts of Louis and Fabian dei Franchi) and *The Lady of Lyons.* After this he appeared at the Adelphi (1868) as Obenreizer in *No Thoroughfare*, by Charles Dickens and Wilkie Collins, as Edmond Dantes in *Monte Cristo*, and as Count de Leyrac in *Black and White*, a play in which the actor himself collaborated with Wilkie Collins. In 1870 he visited the United States, where (with the exception of a visit to London in 1872) he remained till his death. His first appearance in New York was at Niblo's Garden in the title rôle of *Ruy Blas.* He played in the United States between 1870 and 1876 in most of the parts in which he had won his chief triumphs in England, making at various times attempts at management, rarely successful, owing to his ungovernable temper. The last three years of his life were spent in seclusion on a farm which he had bought at Rockland Centre, near Quakertown, Pennsylvania, where he died on the 5th of August 1879. A bust of the actor by himself is in the Garrick Club, London.

FECKENHAM, JOHN (c. 1515-1584), English ecclesiastic, last abbot of Westminster, was born at Feckenham, Worcestershire, of ancestors who, by their wills, seem to have been substantial yeomen. The family name was Howman, but, according to the English custom, Feckenham, on monastic profession, changed it for the territorial name by which he is always known. Learning his letters first from the parish priest, he was sent at an early age to the claustral school at Evesham and thence, in his eighteenth year, to Gloucester Hall, Oxford, as a Benedictine student. After taking his degree in arts, he returned to the abbey, where he was professed; but he was at the university again in 1537 and took his B.D. on the 11th of June 1539. Returning to Evesham he was there when the abbey was surrendered to the king (27th of January 1540); and then, with a pension of  $\pounds 10$  a year, he once more went back to Oxford, but soon after became chaplain to Bishop Bell of Worcester and then served Bonner in that same capacity from 1543 to 1549. In 1544 Bonner gave him the living of Solihull; and Feckenham established a reputation as a preacher and a disputant of keen intellect but unvarying charity. About 1549 Cranmer sent him to the Tower of London, and while there "he was borrowed out of prison" to take part in seven public disputations against Hooper, Jewel and others. Released by Queen Mary (5th of September 1553), he returned to Bonner and became prebendary of St Paul's, rector of Finchley, then of Greenford Magna, chaplain and confessor to the queen, and dean of St Paul's (10th of March 1554). He took part, with much charity and mildness, in the Oxford disputes against Cranmer, Latimer and Ridley; but he had no liking for the fierce bigotry and bloody measures then in force against Protestants. Feckenham used all his influence with Mary "to procure pardon of the faults or mitigation of the punishment for poor Protestants" (Fuller), and he was sent by the queen to prepare Lady Jane Grey for death. When Elizabeth was sent to the Tower (18th of March 1554), Feckenham interceded for her life and liberty, even at the cost of displeasing the queen.

The royal abbey of Westminster having been restored to its primitive use, Feckenham was appointed abbot, and the old life began again within its hallowed walls on the 21st of November 1556. The abbey school was reopened and the shrine of St Edward restored. On the accession of Elizabeth Feckenham consistently opposed all the legislation for changes in religion, and, when the hour of trial came, he refused the oath of supremacy, rejecting also Elizabeth's offer to remain with his monks at Westminster if he would conform to the new laws. The abbey was dissolved (12th of July 1559), and within a year Feckenham was sent by Archbishop Parker to the Tower (20th of May 1560), according to Jewel, "for having obstinately refused attendance on public worship and everywhere declaiming and railing against that religion which we now profess" (Parker Society, first series, p. 79). Henceforth, except for some brief periods when he was a prisoner at large, Feckenham spent the rest of his life in confinement either in some recognized prison, or in the more distasteful and equally rigorous keeping of the bishops of Winchester and Ely. After fourteen years' confinement, he was released on bail and lived in Holborn, where his benevolence was shown by all manner of works of charity. "He relieved the poor wheresoever he came, so that flies flock not thicker to spilt honey than beggars constantly crowd about him" (Fuller). He set up a public aqueduct in Holborn, and a hospice for the poor at Bath; he distributed every day to the sick the milk of twelve cows, took care of orphans, and encouraged manly sports on Sundays among the youth of London by giving prizes. In 1577 he was committed to the care of Cox of Ely with strict rules for his treatment; and the bishop (1578) could find no fault with him except that "he was a gentle person but in the popish religion too, too obstinate." In

1580 he was removed to Wisbeach Castle, and there exercised such an influence of charity and peace among his fellow-prisoners that was remembered when, in after years, the notorious Wisbeach Stirs broke out under the Jesuit Weston. Even here Feckenham found a means of doing public good; at his own cost he repaired the road and set up a market cross in the town. After twenty-four years of suffering for his conscience he died in prison and was buried in an unknown grave in the parish church at Wisbeach on the 16th of October 1584.

The fullest account of Feckenham is to be found in E. Taunton's *English Black Monks of St Benedict* (London, 1897), vol. i. pp. 160-222.

(E. TN.)

**FEDCHENKO**, **ALEXIS PAVLOVICH** (1844-1873), Russian naturalist and traveller, well known for his explorations in central Asia, was born at Irkutsk, in Siberia, on the 7th of February 1844; and, after attending the gymnasium of his native town, proceeded to the university of Moscow, for the study more especially of zoology and geology. In 1868 he travelled through Turkestan, the district of the lower Syr-Darya and Samarkand; and shortly after his return he set out for Khokand, where he visited a large portion of territory till then unknown. Soon after his return to Europe he perished on Mont Blanc while engaged in an exploring tour in Switzerland, on the 15th of September 1873.

Accounts of the explorations and discoveries of Fedchenko have been published by the Russian government,—his *Journeys in Turkestan* in 1874, *In the Khanat of Khokand* in 1875, and *Botanical Discoveries* in 1876. See Petermann's *Mittheilungen* (1872-1874).

**FEDERAL GOVERNMENT** (Lat. *foedus*, a league), a form of government of which the essential principle is that there is a union of two or more states under one central body for certain permanent common objects. In the most perfect form of federation the states agree to delegate to a supreme federal government certain powers or functions inherent in themselves in their sovereign or separate capacity, and the federal government, in turn, in the exercise of those specific powers acts directly, not only on the communities making up the federation, but on each individual citizen. So far as concerns the residue of powers unallotted to the central or federal authority, the separate states retain unimpaired their individual sovereignty, and the citizens of a federation consequently owe a double allegiance, one to the state, and the other to the federal government (J. Bryce, *Studies in History and Jurisprudence*, ii. 490). The word "confederation," as distinct from "federation" has been sometimes, though not universally, used to distinguish from such a federal state (*Bundesstaat*) a mere union of states (*Staatenbund*) for mutual aid, and the promotion of interests common to all (see Confederation).

The history of federal government practically begins with Greece. This, however, is due to the fact that the Greek federations are the only ones of which we have any detailed information. The obvious importance, especially to scattered villages or tribes, of systematic joint action in the face of a common danger makes it reasonable to infer that federation in its elementary forms was a widespread device. This view is strengthened by what we can gather of the conditions obtaining in such districts as Aetolia, Acarnania and Samnium, as in modern times among primitive peoples and tribes. The relatively detailed information which we possess concerning the federal governments of Greece makes it necessary to pay special attention to them.

In ancient Greece the most striking tendency of political development was the maintenance of separate city states, each striving for absolute autonomy, though all spoke practically the same language and shared to some extent in the same traditions, interests and dangers. This centrifugal tendency is most marked in the cases of the more important states, Athens, Sparta, Argos, Corinth, but Greek history is full of examples of small states deliberately sacrificing what must have been obvious commercial advantage for the sake of a precarious autonomy. Such examples as existed of even semi-federal union were very loose in structure, and the selfishness of the component units was the predominant feature. Thus the Spartan hegemony in the Peloponnese was not really a federation except in the broadest sense. The states did, it is true, meet occasionally for discussion, but their relation, which had no real existence save in cases of immediate common danger, was really that between a paramount leader and unwilling and suspicious allies. The Athenian empire again was a thinly disguised autocracy. The synod (see Delian League) of the "allies" soon degenerated into a mere form; of comprehensive united policy there was none, at all events after the League had achieved its original purpose of expelling the Persians from Europe.

None the less it is possible, even in the early days of political development in Greece, to find some traces of a tendency towards united action. Thus the unions of individual villages, known as synoecisms, such as took place in Attica and Elis in early times were partly of a federal character: they resulted in the establishment of a common administration, and no doubt in some degree of commercial and military unity. On the other hand, it is likely that these unions lacked the characteristic of federation in that the units could hardly be described as having any sovereign power: at the most they had some municipal autonomy as in the case of the Cleisthenic demes. The union was rather national than federal. Again the Amphictyonic unions had one of the characteristic elements of federation, namely that they were free sovereign states combining for a particular purpose with an elaborate system of representation (see AMPHICTYONY). But these unions, at all events in historic times, were mainly concerned with religion, and the authority of the councils did not seriously affect the autonomy of the individual states.

Thus among the city-states as well as among scattered villages the principle of cohesion was not unknown. On the other hand the golden mean between an easily dissoluble relationship, more like an alliance than a federation, and a national system resulting from synoecism was practically never attained in early Greek history. There are, however, examples in Greece proper, and one, Lycia in Asia Minor, of real federal unions. The chief Greek federations were those of Thessaly, Boeotia, Acarnania, Olynthus, Arcadia, Aetolia, Achaea, the most important as well as the most complete in respect of organization being the Aetolian League and the Achaean League.

1. The Thessalian League originated in the deliberate choice by village aristocracies of a single monarch who belonged from time to time to several of the so-called Heracleid families. Soon after the Persian War this monarchy (dynasty of the Aleuadae, Herod, v. 63 and vii. 6) disappeared, and in 424 we find Athens in alliance with a sort of democratic federal council representing  $\tau \delta \kappa \sigma v \delta v \Theta \epsilon \tau \tau \alpha \lambda \omega v$  (cf. Thuc. i. 102, ii. 22, iv. 78), and probably composed of delegates from the towns. The local feudal nobles, however, seem to have put an end to this government by council, and a dictator (*tagus*) was appointed, with authority over the whole military force of the federation. Three such officers, Lycophron, Jason and Alexander, all of Pherae, endeavoured vainly to administer the collective affairs of the federation, the last by means of a revived republican council. The final failure of this scheme coincided with the disappearance of Thessaly as a sovereign state (see THESSALY).

2. The form and the history of the Boeotian federation are treated fully under Boeotia (q.v.). It may probably have originated in religious associations, but the guiding power throughout was the imperial policy of Thebes, especially during its short-lived supremacy after 379 B.C.

3. The federation of Acarnania is of peculiar interest as being formed by scattered villages or tribes, without settled, still less fortified, habitation. In the early part of the 4th century a κοινὸν τῶν Ἀκαρνάνων met at Stratus (Xen. *Hell.* iv. 6. 4). Late in the same century towns began to form, without, however, disturbing the federation, which existed as late as the 2nd century B.C., governed by a representative council (βουλά), and a common assembly (κοινόν) at which any citizen might be present.

4. The foundation of the Olynthian federation was due to the need of protection against the northern invaders (see OLYNTHUS). It was in many respects based on liberal principles, but Olynthus did not hesitate to exercise force against recalcitrants such as Acanthus.

5. The 4th century Arcadian league, which was no doubt a revival of an older federation, was the result of the struggle for supremacy between Thebes and Sparta. The defeat of Sparta at Leuctra removed the pressure which had kept separate the Arcadian tribes, and  $\tau \delta$  κοινόν  $\tau \tilde{\omega} v \lambda \rho \kappa \delta \delta \omega v$  was established in the new city, Megalopolis (*q.v.*, also Arcadia).

6 and 7. The Aetolian and Achaean leagues (see Aetolia, and Achaean League) were in all respects more important than the preceding and constitute a new epoch in European politics. Both belong to a period in Greek history when the great city states had exhausted themselves in the futile struggle against Macedon and Rome, and both represent a conscious popular determination in the direction of systematic government. This characteristic is curious in the

Aetolian tribes which were famous in all time for habitual brigandage; there was, however, among them the strong link of a racial feeling. The governing council ( $\tau \delta \kappa \kappa \nu \delta \nu \tau \tilde{\omega} \nu A i \tau \omega \lambda \tilde{\omega} \nu$ ) was the permanent representative body; there was also a popular assembly ( $\pi \alpha \nu \alpha \iota \tau \omega \lambda \iota \kappa \delta \nu$ ), partly of a primary, partly of a representative kind, any one being free to attend, but each state having only one official representative and one vote. Of all the federal governments of Greece, this league was the most certainly democratic in constitution. There was a complete system of federal officers, at the head of whom was a Strategus entrusted with powers both military and civil. This officer was annually elected, and, though the chief executive authority, was strictly limited in the federal deliberations to presidential functions (cf. Livy xxxv. 25, "ne praetor, quum de bello consuluisset, ipse sententiam diceret"). The Achaean League was likewise highly organized; joint action was strictly limited, and the individual cities had sovereign power over internal affairs. There were federal officers, all the military forces of the cities were controlled by the league, and federal finance was quite separate from city finance.

8. Of the Lycian federation, its origin and duration, practically nothing is known. We know of it in 188-168 B.C. as dependent on Rhodes, and, from 168 till the time when the emperor Claudius absorbed it in the provincial system, as an independent state under Roman protection. The federation was a remarkable example of a typical Hellenic development among a non-Hellenic people. Strabo (p. 665) informs us that the federation, composed of twenty-three cities, was governed by a council ( $\sigma \nu v \delta \rho \iota o \nu$ ) which assembled from time to time at that city which was most convenient for the purpose in hand. The cities were represented according to size by one, two or three delegates, and bore proportionate shares in financial responsibility. The Lycian league was, therefore, in this respect rather national than federal.

Of ancient federal government outside Greece we know very little. The history of Italy supplies a few examples, of which the chief is perhaps the league of the cities of Latium (q.v.; see also ETRURIA).

See E.A. Freeman, *Federal Government in Greece and Rome* (2nd ed., 1893, J.B. Bury), and works quoted in the special articles.

Among the later European confederations the Swiss republic is one of the most interesting. As now constituted it consists of twenty-two sovereign states or cantons. The government is vested in two legislative chambers, a senate or council of state (Ständerat), and a national council (Nationalrat), constituting unitedly the federal assembly. The executive council (Bundesrat) of seven members elects the president and vice-president for a term of three years (see SwitzerLand: Government). Before the French Revolution the German empire was a complex confederation, with the states divided into electoral colleges, consisting-(1) of the ecclesiastical electors and of the secular electors, including the king of Bohemia; (2) of the spiritual and temporal princes of the empire next in rank to the electors; and (3) of the free imperial cities. The emperor was elected by the first college alone. This imposing confederation came to an end by the conquests of Napoleon; and the Confederation of the Rhine was established in 1806 with the French emperor as protector. But in 1815 the Germanic confederation (*Deutscher Bund*) was established by the congress of Vienna, which in its turn has been displaced by the present German empire. This, in its new organization, conferred on Germany the long-coveted unity and coherence the lack of which had been a source of weakness. The constitution dates, in its latest form, from the treaties entered into at Versailles in 1871. A federation was then organized with the king of Prussia as president, under the hereditary title of German emperor. Delegates of the various federated governments form the Bundesrath; the Reichstag, or popular assembly, is directly chosen by the people by universal suffrage; and the two assemblies constitute the federal parliament. This body has power to legislate for the whole empire in reference to all matters connected with the army, navy, postal service, customs, coinage, &c., all political laws affecting citizens, and all general questions of commerce, navigation, passports, &c. The emperor represents the federation in all international relations, with the chancellor as first minister of the empire, and has power, with consent of the Bundesrath, to declare war in name of the empire.

The United States of America more nearly resembles the Swiss confederacy, though retaining marks of its English origin. The original thirteen states were colonies wholly independent of each other. By the Articles of Confederation and Perpetual Union adopted by the Continental Congress in 1777, and in effect in 1781-1789, the states bound themselves in a league of common defence. By the written Constitution, drafted in 1787 and in operation since 1789, a stronger and more centralized union was established—in theory a federal republic formed by the voluntary combination of sovereign states. A common citizenship was

recognized for the whole union; but the federal government was to exercise only such powers as were expressly delegated to it (Amendment of 1791). The powers of the central government are entrusted to three distinct authorities—executive, legislative and judicial. The president, elected for a term of four years by electors chosen for that purpose by each state, is the executive head of the republic. The vice-president, *ex officio* president of the Senate, assumes the presidency in case of resignation or death. Legislative power is vested in a Congress, consisting of two Houses: a Senate, composed of two members elected by each state for a term of six years; and a House of Representatives, consisting of representatives in numbers proportionate to the population of each state, holding their seats for two years. The supreme judicial authority is vested in a Supreme Court, which consists of a chief justice and eight associate justices, all appointed for life by the president, subject to confirmation by the Senate.

The extension of responsible constitutional government by Great Britain to her chief colonies, under a governor or viceregal representative of the crown, has been followed in British North America by the union of the Canadian, maritime and Pacific provinces under a federal government—with a senate, the members of which are nominated by the crown, and a house of commons elected by the different provinces according to their relative population. The governor-general is appointed by the crown for a term of five years, and represents the sovereign in all matters of federal government. The lieutenant-governors of the provinces are nominated by him; and all local legislation is carried on by the provincial parliaments. The remarkable federation of the Dominion of Canada which was thus originated presented the unique feature of a federal union of provinces practically exercising sovereign rights in relation to all local self-government, and sustaining a constitutional autonomy, while cherishing the colonial relationship to Great Britain.

The Commonwealth of Australia (q.v.), proclaimed in 1901, is another interesting example of self-governing states federating into a united whole. There is, however, a striking difference to be observed in the powers of the federal governments of Canada and Australia. The federal parliament of Canada has jurisdiction over all matters not specially assigned to the local legislatures, while the federal parliament of Australia has only such jurisdiction as is expressly vested in it or is not expressly withdrawn from the local legislatures. This jurisdiction is undoubtedly extensive, comprising among others, power to legislate concerning trade and industry, criminal law, taxation, quarantine, marriage and divorce, weights and measures, legal tender, copyrights and patents, and naturalization and aliens. There was also an early attempt to federate the South African colonies, and an act was passed for that purpose (South African Act 1877), but it expired on the 18th of August 1882, without having been brought into effect by the sovereign in council; in 1908, however, the Closer Union movement (see South Africa) ripened, and in 1909 a federating Act was successfully passed.

See also Bluntschli, *The Theory of the State*; W. Wilson, *The State*; Wheaton, *International Law*.

**FEDERALIST PARTY**, in American politics, the party that organized the national government of the United States under the constitution of 1787. It may be regarded as, in various important respects, the lineal predecessor of the American Whig and Republican parties. The name *Federalists* (see ANTI-FEDERALISTS) was first given to those who championed the adoption of the Constitution. They brought to the support of that instrument "the areas of intercourse and wealth" (Libby), the influence of the commercial towns, the greater planters, the army officers, creditors and property-holders generally,—in short, of interests that had felt the evils of the weak government of the Confederation,—and also of some few true nationalists (few, because there was as yet no general national feeling), actuated by political principles of centralization independently of motives of expediency and self-interest. Most of the Federalists of 1787-1788 became members of the later Federalist Party.

The Federalist Party, which may be regarded as definitely organized practically from 1791, was led, leaving Washington aside, by Alexander Hamilton (q.v.) and John Adams. A nationalization of the new central government to the full extent warranted by a broad construction of the powers granted to it by the constitution, and a correspondingly strict construction of the powers reserved to the states and the citizens, were the basic principles of Hamilton's policy. The friends of individual liberty and local government naturally found in

the assumption by the central government of even the minimum of its granted powers constant stimulus to their fears (see DEMOCRATIC PARTY); while the financial measures of Hamilton-whose wish for extreme centralization was nowise satisfied by the government actually created in 1787-were calculated to force an immediate and firm assumption by that government, to the limit, of every power it could be held to possess. To the Republicans (Democratic Republicans) they seemed intended to cause a usurpation of powers ungranted. Hence these measures became the issues on which the first American parties were formed. Their effect was supplemented by the division into French and British sympathizers; the Republicans approving the aims and condoning the excesses of the French Revolution, the Federalists siding with British reaction against French democracy. The Federalists controlled the government until 1801. They, having the great opportunity of initiative, organized it in all its branches, giving it an administrative machinery that in the main endures to-day; established the doctrine of national neutrality toward European conflicts (although the variance of Federalist and Republican opinion on this point was largely factitious); and fixed the practice of a liberal construction of the Constitution,  $^1$ —not only by Congress, but above all by the United States Supreme Court, which, under the lead of John Marshall (who had been appointed chief-justice by Pres. John Adams), impressed enduringly on the national system large portions of the Federalist doctrine. These are the great claims of the party to memory. After 1801 it never regained power. In attempts to do so, alike in national and in state politics, it impaired its morale by internal dissension, by intrigues, and by inconsistent factious opposition to Democratic measures on grounds of ultra-strict construction. It took up, too, the Democratic weapon of states' rights, and in New England carried sectionalism dangerously near secession in 1808, and in 1812-1814, during the movement, in opposition to the war of 1812, which culminated in the Hartford Convention (see HARTFORD). It lost, more and more, its influence and usefulness, and by 1817 was practically dead as a national party, although in Massachusetts it lingered in power until 1823. It is sometimes said that Federalism died because the Republicans took over its principles of nationality. Rather it fell because its great leaders, John Adams and Alexander Hamilton, became bitter enemies; because neither was even distantly comparable to Jefferson as a party leader; because the party could not hold the support of its original commercial, manufacturing and general business elements; because the party opposed sectionalism to a growing nationalism on the issues that ended in the war of 1812; and, above all, because the principles of the party's leaders (e.g. of Hamilton) were out of harmony, in various respects, with American ideals. Their conservatism became increasingly a reactionary fear of democracy; indeed, it is not a strained construction of the times to regard the entire Federalist period from the American point of view as reactionary—a reaction against the doctrines of natural rights, individualism, and states' rights, and the financial looseness of the period of the War of Independence and the succeeding years of the Confederation. The Federalists were charged by the Republicans with being aristocrats and monarchists, and it is certain that their leaders (who were really a very remarkable body of men) distrusted democratic government; that their Sedition Law was outrageous in itself, and (as well as the Alien Law) bad as a party measure; that in disputes with Great Britain they were true English Tories when contrasted with the friendly attitude toward America held by many English Liberals; and that they persisted in New England as a pro-British, aristocratic social-cult long after they lost effective political influence. In short, the country was already thoroughly democratic in spirit, while Federalism stood for obsolescent social ideas and was infected with political "Toryism" fatally against the times.

Besides the standard general histories see O.G. Libby, *Geographical Distribution of the Vote of the Thirteen States on the Federal Constitution*, 1787-1788 (Madison, Wis., 1894); the *Memoirs* of Oliver Wolcott (ed. by Gibbs); C.D. Hazen, *Contemporary American Opinion of the French Revolution* ("J.H.U. Studies," Baltimore, 1897); Henry Adams, *Documents relating to New England Federalism*, 1800-1815 (Boston, 1878); A.E. Morse, *The Federalist Party in Massachusetts* (Princeton, N.J., 1909); and the biographies and writings of George Cabot, Fisher Ames, Gouverneur Morris, John Jay, Rufus King, Timothy Pickering, Theodore Sedgwick, C.C. Pinckney and J.A. Bayard.

<sup>1</sup> Even the Democratic party has generally been liberal; although less so in theory (hardly less so in practice) than its opponents.

FEDERICI, CAMILLO (1749-1802), Italian dramatist and actor, was born at Garessio, a small town in Piedmont, on the 9th of April 1749. His real name was Giovanni Battista Viassolo, and that by which he is now known and which he transmitted to his children was taken from the title of one of his first pieces, Camillo e Federico. He was educated at Turin, and showed at an early age a great fondness for literature and especially for the theatre. The praises bestowed on his early attempts determined his choice of a career, and he obtained engagements with several companies both as writer and actor. He made a happy marriage in 1777, and soon after left the stage and devoted himself entirely to composition. He settled at Padua, and the reputation of his numerous comedies rapidly spread in Italy, and for a time seemed to eclipse that of his predecessors. Most of his pieces were of the melodramatic class, and he too often resorted to the same means of exciting interest and curiosity. He caught, however, something of the new spirit which was manifesting itself in German dramatic literature in the works of Schiller, Iffland and Kotzebue, and the moral tone of his plays is generally healthy. Fortune did not smile upon him; but he found a helpful friend in a wealthy merchant of Padua, Francis Barisan, for whose private theatre he wrote many pieces. He was attacked in 1791 with a dangerous malady which disabled him for several years; and he had the misfortune to see his works, in the absence of any copyright law, published by others without his permission. At length, in 1802, he undertook to prepare a collected edition; but of this four volumes only were completed when he was again attacked with illness, and died at Padua (December 23).

The publication of his works was completed in 14 volumes in 1816. Another edition in 26 volumes was published at Florence in 1826-1827. A biographical memoir of Federici by Neymar appeared at Venice in 1838.

**FEE**, an estate in land held of a superior lord on condition of the performance of homage or service (see FEUDALISM). In English law "fee" signifies an estate of inheritance (*i.e.* an estate descendable to the heirs of the grantee so long as there are any in existence) as opposed to an estate for life. It is divisible into three species: (1) fee simple; (2) conditional fee; (3) fee tail. (See ESTATE.) A fee farm rent is the rent reserved on granting a fee farm, *i.e.* land in fee simple, to be held by the tenant and his heirs at a yearly rent. It is generally at least one-fourth of the value of the land at the time of its reservation. (See RENT.)

The word "fee" has also the sense of remuneration for services, especially the *honorarium* paid to a doctor, lawyer or member of any other profession. It is also used of a fixed sum paid for the right to enter for an examination, or on admission to membership of a university or other society. This sense of the word is taken by the *New English Dictionary* to be due to a use of "fee" in its feudal sense, and to represent a sum paid to the holder of an office "in fee."

The etymology of the Med. Lat. feudum, feodum or feum, of its French equivalent fief, and English "fee," in Scots law "feu" (q.v.), is extremely obscure. (See the New English Dictionary, s.v. "Fee.") There is a common Teutonic word represented in Old English as feoh or *féo*, in Old High German as *fehu*, meaning property in the shape of cattle (cf. modern Ger. Vieh, Dutch vee). The old Aryan péku gives Sanskrit paçu, Lat. pecus, cattle, whence pecunia, money. The O. Eng. feoh, in the sense of money, possibly survives in "fee," honorarium, though this is not the view of the New English Dictionary. The common explanation of the Med. Lat. feudum or feodum, of which Ducange (Glossarium, s.v.) gives an example from a constitution of the emperor Charles the Fat of the year 884, is that it is formed from the Teutonic *fehu*, property, and *ôd*, wealth (cf. ALLODIUM and UDAL). This would apparently restrict the original meaning to movable property, while the early applications of *feudum* are to the enjoyment of something granted in return for service (beneficium). Another theory takes the origin to be *fehu* alone, in a particular sense of wages, payment for services. This leaves the *d*- of *feudum* unexplained. Some have taken the origin to be a verbal form *feudare* = feum dare. Another theory finds the source in the O. High Ger. fehôn, to eat, feed upon, "take for one's enjoyment."

**FEHLING, HERMANN VON** (1812-1885), German chemist, was born at Lübeck on the 9th of June 1812. With the intention of taking up pharmacy he entered Heidelberg University about 1835, and after graduating went to Giessen as *préparateur* to Liebig, with whom he elucidated the composition of paraldehyde and metaldehyde. In 1839 on Liebig's recommendation he was appointed to the chair of chemistry in the polytechnic at Stuttgart, and held it till within three years of his death, which happened at Stuttgart on the 1st of July 1885. His earlier work included an investigation of succinic acid, and the preparation of phenyl cyanide (benzonitrile), the simplest nitrile of the aromatic series; but later his time was mainly occupied with questions of technology and public health rather than with pure chemistry. Among the analytical methods worked up by him the best known is that for the estimation of sugars by "Fehling's solution," which consists of a solution of cupric sulphate mixed with alkali and potassium-sodium tartrate (Rochelle salt). He was a contributor to the *Handwörterbuch* of Liebig, Wöhler and Poggendorff, and to the Graham-Otto *Textbook of Chemistry*, and for many years was a member of the committee of revision of the *Pharmacopoeia Germanica*.

**FEHMARN**, an island of Germany, belonging to the Prussian province of Schleswig-Holstein, in the Baltic, separated from the north-east corner of Holstein by a strait known as the Fehmarn-Sund, less than a quarter of a mile in breadth. It is a gently undulating tract of country, about 120 sq. m. in area, bare of forest but containing excellent pasture-land, and rears cattle in considerable numbers. Pop. 10,000.

FEHMIC COURTS (Ger. Femgerichte, or Vehmgerichte, of disputed origin, but probably, according to J. Grimm, from O. High Ger. feme or feime, a court of justice), certain tribunals which, during the middle ages, exercised a powerful and sometimes sinister jurisdiction in Germany, and more especially in Westphalia. Their origin is uncertain, but is traceable to the time of Charlemagne and in all probability to the old Teutonic free courts. They were, indeed, also known as free courts (Freigerichte), a name due to the fact that all free-born men were eligible for membership and also to the fact that they claimed certain exceptional liberties. Their jurisdiction they owed to the emperor, from whom they received the power of life and death (Blutbann) which they exercised in his name. The sessions were often held in secret, whence the names of secret court (heimliches Gericht, Stillgericht, &c.); and these the uninitiated were forbidden to attend, on pain of death, which led to the designation forbidden courts (verbotene Gerichte). Legend and romance have combined to exaggerate the sinister reputation of the Fehmic courts; but modern historical research has largely discounted this, proving that they never employed torture, that their sittings were only sometimes secret, and that their meeting-places were always well known. They were, in fact, a survival of an ancient and venerable German institution; and if, during a certain period, they exercised something like a reign of terror over a great part of Germany, the cause of this lay in the sickness of the times, which called for some powerful organization to combat the growing feudal anarchy. Such an organization the Westphalian free courts, with their discipline of terror and elaborate system of secret service, were well calculated to supply. Everywhere else the power of life and death, originally reserved to the emperor alone, had been usurped by the territorial nobles; only in Westphalia, called "the Red Earth" because here the imperial blood-ban was still valid, were capital sentences passed and executed by the Fehmic courts in the emperor's name alone.

The system, though ancient, began to become of importance only after the division of the duchy of Saxony on the fall of Henry the Lion, when the archbishop of Cologne, duke of Westphalia from 1180 onwards, placed himself as representative of the emperor at the head of the Fehme. The organization now rapidly spread. Every free man, born in lawful wedlock, and neither excommunicate nor outlaw, was eligible for membership. Princes and nobles were initiated; and in 1429 even the emperor Sigismund himself became "a true and proper *Freischöffe* of the Holy Roman Empire." By the middle of the 14th century these *Freischöffen* (Latin *scabini*), sworn associates of the Fehme, were scattered in thousands throughout the

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length and breadth of Germany, known to each other by secret signs and pass-words, and all of them pledged to serve the summons of the secret courts and to execute their judgment.

The organization of the Fehme was elaborate. The head of each centre of jurisdiction (Freistuhl), often a secular or spiritual prince, sometimes a civic community, was known as the Stuhlherr, the archbishop of Cologne being, as stated above, supreme over all (Oberststuhlherr). The actual president of the court was the Freigraf (free count) chosen for life by the Stuhlherr from among the Freischöffen, who formed the great body of the initiated. Of these the lowest rank were the Fronboten or Freifronen, charged with the maintenance of order in the courts and the duty of carrying out the commands of the Freigraf. The immense development of the Fehme is explained by the privileges of the Freischöffen; for they were subject to no jurisdiction but those of the Westphalian courts, whether as accused or accuser they had access to the secret sessions, and they shared in the discussions of the general chapter as to the policy of the society. At their initiation these swore to support the Fehme with all their powers, to guard its secrets, and to bring before its tribunal anything within its competence that they might discover. They were then initiated into the secret signs by which members recognized each other, and were presented with a rope and with a knife on which were engraved the mystic letters S.S.G.G., supposed to mean Strick, Stein, Gras, Grün (rope, stone, grass, green).

The procedure of the Fehmic courts was practically that of the ancient German courts generally. The place of session, known as the *Freistuhl* (free seat), was usually a hillock, or some other well-known and accessible spot. The Freigraf and Schöffen occupied the bench, before which a table, with a sword and rope upon it, was placed. The court was held by day and, unless the session was declared secret, all freemen, whether initiated or not, were admitted. The accusation was in the old German form; but only a Freischöffe could act as accuser. If the offence came under the competence of the court, *i.e.* was punishable by death, a summons to the accused was issued under the seal of the Freigraf. This was not usually served on him personally, but was nailed to his door, or to some convenient place where he was certain to pass. Six weeks and three days' grace were allowed, according to the old Saxon law, and the summons was thrice repeated. If the accused appeared, the accuser stated the case, and the investigation proceeded by the examination of witnesses as in an ordinary court of law. The judgment was put into execution on the spot if that was possible. The secret court, from whose procedure the whole institution has acquired its evil reputation, was closed to all but the initiated, although these were so numerous as to secure quasipublicity; any one not a member on being discovered was instantly put to death, and the members present were bound under the same penalty not to disclose what took place. Crimes of a serious nature, and especially those that were deemed unfit for ordinary judicial investigation—such as heresy and witchcraft—fell within its jurisdiction, as also did appeals by persons condemned in the open courts, and likewise the cases before those tribunals in which the accused had not appeared. The accused if a member could clear himself by his own oath, unless he had revealed the secrets of the Fehme. If he were one of the uninitiated it was necessary for him to bring forward witnesses to his innocence from among the initiated, whose number varied according to the number on the side of the accuser, but twenty-one in favour of innocence necessarily secured an acquittal. The only punishment which the secret court could inflict was death. If the accused appeared, the sentence was carried into execution at once; if he did not appear, it was quickly made known to the whole body, and the Freischöffe who was the first to meet the condemned was bound to put him to death. This was usually done by hanging, the nearest tree serving for gallows. A knife with the cabalistic letters was left beside the corpse to show that the deed was not a murder.

That an organization of this character should have outlived its usefulness and issued in intolerable abuses was inevitable. With the growing power of the territorial sovereigns and the gradual improvement of the ordinary process of justice, the functions of the Fehmic courts were superseded. By the action of the emperor Maximilian and of other German princes they were, in the 16th century, once more restricted to Westphalia, and here, too, they were brought under the jurisdiction of the ordinary courts, and finally confined to mere police duties. With these functions, however, but with the old forms long since robbed of their impressiveness, they survived into the 19th century. They were finally abolished by order of Jerome Bonaparte, king of Westphalia, in 1811. The last *Freigraf* died in 1835.

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**FEHRBELLIN**, a town of Germany, in the kingdom of Prussia, on the Rhine, 40 m. N.W. from Berlin on the railway to Neu-Ruppin. Pop. (1905) 1602. It has a Protestant and a Roman Catholic church and some small industries, among them that of wooden shoes. Fehrbellin is memorable in history as the scene of the famous victory gained, on the 18th of June 1675, by the great elector, Frederick William of Prussia, over the Swedes under Field-Marshal Wrangel. A monument was erected in 1879 on the field of battle, near the village of Hakenberg, to commemorate this great feat of arms.

See A. von Witzleben and P. Hassel, *Zum 200-jährigen Gedenktag von Fehrbellin* (Berlin, 1875); G. Sello, "Fehrbellin," in *Deutsche Zeitschrift für Geschichtswissenschaften*, vii.; M. Jähns, "Der Grosse Kurfürst bei Fehrbellin, &c.," in *Hohenzollern Jahrbuch*, i.

**FEIJÓO Y MONTENEGRO, BENITO JERÓNIMO** (1676-1764), Spanish monk and scholar was born at Santa María de Melias, near Orense, on the 8th of October 1676. At the age of twelve he entered the Benedictine order, devoted himself to study, and waged war against the superstition and ignorance of his countrymen in the *Teatro crí-tico* (1726-1739) and the *Cartas eruditas* (1742-1760). These exposures of a retrograde system called forth embittered protests from narrow-minded patriots like Salvador José Maner, and others; but the opposition was futile, and Feijóo's services to the cause of knowledge were universally recognized long before his death, which took place at Oviedo on the 26th of September 1764. He was not a great genius, nor a writer of transcendent merit; his name is connected with no important discovery, and his style is undistinguished. But he uprooted many popular errors, awakened an interest in scientific methods, and is justly regarded as the initiator of educational reform in Spain.

**FEITH, RHIJNVIS** (1753-1824), Dutch poet, was born of an aristocratic family at Zwolle, the capital of the province Overijssel, on the 7th of February 1753. He was educated at Harderwijk and at the university of Leiden, where he took his degree in 1770. In 1772 he settled at his birthplace, and married. In 1780, in his twenty-seventh year, he became burgomaster of Zwolle. He built a luxurious villa, which he named Boschwijk, in the outskirts of the town, and there he lived in the greatest comfort. His first important production was *Julia*, in 1783, a novel written in emulation of *Werther*, and steeped in *Weltschmerz* and despair. This was followed by the tragedy of *Thirsa* (1784); *Ferdinand and Constantia* (1785), another *Werther* novel; and *The Patriots* (1784), a tragedy. Bilderdijk and other writers attacked his morbid melancholy, and Johannes Kinker (1764-1845) parodied his novels, but his vogue continued. In 1791 he published a tragedy of *Lady Jane Grey*; in 1792 a didactic poem, *The Grave*, in four cantos; in 1793 *Inez de Castro*; in 1796 to 1814 five volumes of *Odes and Miscellaneous Poems*; and in 1802 *Old Age*, in six cantos. He died at Zwolle on the 8th of February 1824.

His works were collected (Rotterdam, 11 vols.) in 1824, with a biographical notice by N.G. van Kampen.

**FEJÉR, GYORGY** (1766-1851), Hungarian author, was born on the 23rd of April 1766, at Keszthely, in the county of Zala. He studied philosophy at Pest, and theology at Pressburg; eventually, in 1808, he obtained a theological professorship at Pest University. Ten years later (1818) he became chief director of the educational circle of Raab, and in 1824 was appointed librarian to the university of Pest. Fejér's works, which are nearly all written either in Latin or Hungarian, exceed one hundred and eighty in number. His most important work, *Codex diplomaticus Hungariae ecclesiasticus ac civilis*, published from 1829 to 1844, in eleven so-called tomes, really exceeds forty volumes. It consists of old documents and charters from A.D. 104 to the end of 1439, and forms an extraordinary monument of patient industry. This work and many others relating to Hungarian national history have placed Fejér in the foremost rank of Hungarian historians. He died on the 2nd of July 1851. His latest works were *A Kunok eredete* (*The Origin of the Huns*), and *A politikai forradalmak okai* (*The Causes of Political Revolutions*), both published in 1850. The latter production, on account of its liberal tendencies, was suppressed by the Austrian government.

See *Magyar Irók: Életrajz-gyüjtemény* (Pest, 1856), and *A Magyar nemzeti irodalomtörténet vázlata* (Pest, 1861).

**FELANITX,** or FELANICHE, a town of Spain, in the south-east of the island of Majorca, Balearic Islands; about 5 m. inland from its harbour, Puerto Colon. Pop. (1900) 11,294. A range of low hills intervenes between Felanitx and the Mediterranean; upon one summit, the Puig de San Sebastian, stands a Moorish castle with a remarkable series of subterranean vaults. From the 3rd century B.C., and possibly for a longer period, earthenware water-coolers and other pottery have been manufactured in the town, and many of the vessels produced are noteworthy for their beauty of form and antiquity of design. There is a thriving trade in wine, fruit, wheat, cattle, brandy, chalk and soap.

FELDKIRCH, a small town in the Austrian province of the Vorarlberg, some 20 m. S. of the S. end of the Lake of Constance. It is situated in a green hollow, on the Ill river, between the two narrow rocky gorges through which it flows out into the broad valley of the Rhine. Hence, though containing only about 4000 inhabitants (German-speaking and Romanist), the town is of great military importance, since it commands the entrance into Tirol from the west, over the Arlberg Pass (5912 ft.), and has been the scene of many conflicts, the last in 1799, when the French, under Oudinot and Masséna, were driven back by the Austrians under Hotze and Jellachich. It is a picturesque little town, overshadowed by the old castle of Schattenburg (now a poor-house), built about 1200 by the count of Montfort, whose descendant in 1375 sold it to the Habsburgs. The town contains many administrative offices, and is the residence of a suffragan bishop, who acts as vicar-general of the diocesan, the bishop of Brixen. Among the principal buildings are the parish church, dating from 1487, and possessing a "Descent from the Cross" (1521), which has been attributed to Holbein, the great Jesuit educational establishment called "Stella Matutina," and a Capuchin convent and church. There is a considerable amount of transit trade at Feldkirch, which by rail is 11 m. from Buchs (Switzerland), through the principality of Liechtenstein, 24 m. from Bregenz, and  $99\frac{1}{2}$  m. from Innsbruck by tunnel beneath the Arlberg Pass. The town also possesses numerous industrial establishments, such as factories for cotton-spinning, weaving, bellfounding, dyeing, &c.

(W. A. B. C.)

**FÉLIBIEN, ANDRÉ** (1610-1695), sieur des Avaux et de Javercy, French architect and historiographer, was born at Chartres in May 1619. At the age of fourteen he went to Paris to

continue his studies; and in 1647 he was sent to Rome in the capacity of secretary of embassy to the Marquis de Marueil. His residence at Rome he turned to good account by diligent study of its ancient monuments, by examination of the literary treasures of its libraries, and by cultivating the acquaintance of men eminent in literature and in art, with whom he was brought into contact through his translation of Cardinal Barberini's Life of Pius V. Among his friends was Nicholas Poussin, whose counsels were of great value to him. On his return to France he married, and was ultimately induced, in the hope of employment and honours, to settle in Paris. Both Fouquet and Colbert in their turn recognized his abilities; and he was one of the first members (1663) of the Academy of Inscriptions. Three years later Colbert procured him the appointment of historiographer to the king. In 1671 he was named secretary to the newly-founded Academy of Architecture, and in 1673 keeper of the cabinet of antiques in the palace of Brion. To these offices was afterwards added by Louvois that of deputy controller-general of roads and bridges. Félibien found time in the midst of his official duties for study and research, and produced many literary works. Among these the best and the most generally known is the Entretiens sur les vies et sur les ouvrages des plus excellents peintres anciens et modernes, which appeared in successive livraisons, the first in 1666, and the fifth in 1688. It was republished with several additions at Amsterdam in 1706, and again at Trévoux in 1725. Félibien wrote also Origine de la peinture (1660), Principes de l'architecture, de la sculpture, de la peinture, &c. (1676-1690), and descriptions of Versailles, of La Trappe, and of the pictures and statues of the royal residences. Among other literary works, he edited the Conférences of the Academy of Painting, and translated the Castle of the Soul from the Spanish of St Theresa. His personal character commanded the highest esteem, agreeing with the motto which he adopted-Bene facere et vera dicere. He died in Paris on the 11th of June 1695.

His son, Jean François Félibien (c. 1658-1733), was also an architect who left a number of works on his subject; and a younger son, Michel Félibien (c. 1666-1719), was a Benedictine of Saint Germain-des-Prés whose fame rests on his *Histoire de l'abbaye royale de S. Denys en France*, and also his *L'Histoire de la ville de Paris* in 5 vols., a work indispensable to the student of Paris.

## FELIX, the name of five popes.

FELIX I., pope from January 269 until his death in January 274. He has been claimed as a martyr, and as such his name is given in the Roman calendar and elsewhere, but his title to this honour is by no means proved, and he has been probably confused with another bishop of the same name. He appears in connexion with the dispute in the church of Antioch between Paul of Samosata, who had been deprived of his bishopric by a council of bishops for heresy, and his successor Domnus. Paul refused to give way, and in 272 the emperor Aurelian was asked to decide between the rivals. He ordered the church building to be given to the bishop who was "recognized by the bishops of Italy and of the city of Rome" (Felix). See Eusebius, *Hist. Ecc.* vii. 30.

FELIX II., antipope, was in 356 raised from the archdeaconate of Rome to the papal chair, when Liberius was banished by the emperor Constantius for refusing to subscribe the sentence of condemnation against Athanasius. His election was contrary to the wishes both of the clergy and of the people, and the consecration ceremony was performed by certain prelates belonging to the court. In 357 Constantius, at the urgent request of an influential deputation of Roman ladies, agreed to the release of Liberius on condition that he signed the semi-Arian creed. Constantius also issued an edict to the effect that the two bishops should rule conjointly, but Liberius, on his entrance into Rome in the following year, was received by all classes with so much enthusiasm that Felix found it necessary to retire at once from Rome. Regarding the remainder of his life little is known, and the accounts handed down are contradictory, but he appears to have spent the most of it in retirement at his estate near Porto. He died in 365.

FELIX III., pope, was descended from one of the most influential families of Rome, and was a direct ancestor of Gregory the Great. He succeeded Simplicius in the papal chair on the 2nd of March 483. His first act was to repudiate the Henoticon, a deed of union, originating, it is supposed, with Acacius, patriarch of Constantinople, and published by the emperor Zeno with the view of allaying the strife between the Monophysites and their opponents in the Eastern church. He also addressed a letter of remonstrance to Acacius; but the latter proved

refractory, and sentence of deposition was passed against him. As Acacius, however, had the support of the emperor, a schism arose between the Eastern and Western churches, which lasted for 34 years. Felix died in 492.

FELIX IV., pope, a native of Beneventum, was, on the death of John in 526, raised to the papal chair by the emperor Theodoric in opposition to the wishes of the clergy and people. His election was followed by serious riots. To prevent a recrudescence of these, Felix, on his death-bed, thought it advisable to nominate his own successor. His choice fell upon the archdeacon Boniface (pope as Boniface II.). But this proceeding was contrary to all tradition and roused very serious opposition. Out of two old buildings adapted by him to Christian worship, Felix made the church of SS. Cosimo and Damiano, near the Via Sacra. He died in September 530.

FELIX V., the name taken by Amadeus (1383-1451), duke of Savoy, when he was elected pope in opposition to Eugenius IV. in 1439. Amadeus was born at Chambéry on the 4th of December 1383, and succeeded his father, Amadeus VII., as count of Savoy in 1391. Having added largely to his patrimonial possessions he became very powerful, and in 1416 the German king Sigismund erected Savoy into a duchy; after this elevation Amadeus added Piedmont to his dominions. Then suddenly, in 1434, the duke retired to a hermitage at Ripaille, near Thonon, resigning his duchy to his son Louis (d. 1465), although he seems to have taken some part in its subsequent administration. It is said, but some historians doubt the story, that, instead of leading a life of asceticism, he spent his revenues in furthering his own luxury and enjoyment. In 1439, when Pope Eugenius IV. was deposed by the council of Basel, Amadeus, although not in orders, was chosen as his successor, and was crowned in the following year as Felix V. In the stormy conflict between the rival popes which followed, the German king, Frederick IV., after some hesitation sided with Eugenius, and having steadily lost ground Felix renounced his claim to the pontificate in 1449 in favour of Nicholas V., who had been elected on the death of Eugenius. He induced Nicholas, however, to appoint him as apostolic vicar-general in Savoy, Piedmont and other parts of his own dominions, and to make him a cardinal. Amadeus died at Geneva on the 7th of January 1451.

**FELIX,** a missionary bishop from Burgundy, sent into East Anglia by Honorius of Canterbury (630-631). Under King Sigebert his mission was successful, and he became first bishop of East Anglia, with a see at Dunwich, where he died and was buried, 647-648. It is noteworthy that the Irish monk Furseus preached in East Anglia at the same time, and Bede notices the admiration of Felix for Aidan.

See Bede, *Hist. Eccl.* (Plummer), ii. 15, iii. 18, 20, 25; *Saxon Chronicle* (Earle and Plummer), s.a. 636.

**FELIX,** of Urgella (fl. 8th century), Spanish bishop, the friend of Elipandus and the propagator of his views in the great Adoptian Controversy (see Adoptianism).

**FELIX**, of Valois (1127-1212), one of the founders of the monastic order of Trinitarians or Redemptionists, was born in the district of Valois, France, on the 19th of April 1127. In early manhood he became a hermit in the forest of Galeresse, where he remained till his sixty-first year, when his disciple Jean de Matha (1160-1213) suggested to him the idea of establishing an order of monks who should devote their lives to the redemption of Christian captives from the Saracens. They journeyed to Rome about the end of 1197, obtained the sanction of the pope, and on their return to France founded the monastery of Cerfroi in Picardy. Felix remained to govern and propagate the order, while Jean de Matha superintended the foreign journeys. A subordinate establishment was also founded by Felix in Paris near a chapel dedicated to St Mathurin, on which account his monks were also called St Mathurins. He died at Cerfroi on the 4th of November 1212, and was canonized.

**FELIX, ANTONIUS,** Roman procurator of Judaea (A.D. 52-60), in succession to Ventidius Cumanus. He was a freedman either of the emperor Claudius—according to which theory Josephus (*Antiq.* xx. 7) calls him Claudius Felix—or more probably of the empress Antonia. On entering his province he induced Drusilla, wife of Azizus of Homs (Emesa), to leave her husband and live with him as his wife. His cruelty and licentiousness, coupled with his accessibility to bribes, led to a great increase of crime in Judaea. To put down the Zealots he favoured an even more violent sect, the Sicarii ("Dagger-men"), by whose aid he contrived the murder of the high-priest Jonathan. The period of his rule was marked by internal feuds and disturbances, which he put down with severity. The apostle Paul, after being apprehended in Jerusalem, was sent to be judged before Felix at Caesarea, and kept in custody for two years (Acts xxiv.). On returning to Rome, Felix was accused of having taken advantage of a dispute between the Jews and Syrians of Caesarea to slay and plunder the inhabitants, but through the intercession of his brother, the freedman Pallas, who had great influence with the emperor Nero, he escaped unpunished.

See Tacitus, Annals, xx. 54, Hist. v. 9; Suetonius, Claudius, 28; E. Schürer, History of the Jewish People (1890-1891); article in Hastings' Dict. of the Bible (A. Robertson); commentaries on the Acts of the Apostles; Sir W.M. Ramsay, St Paul the Traveller; Carl v. Weizsäcker, Apostolic Age (Eng. trans., 1894); art. JEWS.

**FÉLIX, LIA** (1830-), French actress, was the third sister and the pupil of the great Rachel. She had hardly been given any trial when, by chance, she was called on to create the leading woman's part in Lamartine's *Toussaint Louverture* at the Porte St Martin on the 6th of April 1850. The play did not make a hit, but the young actress was favourably noticed, and several important parts were immediately entrusted to her. She soon came to be recognized as one of the best comediennes in Paris. Rachel took Lia to America with her to play second parts, and on returning to Paris she played at several of the principal theatres, although her health compelled her to retire for several years. When she reappeared at the Gaiété in the title-rôle of Jules Barbier's *Jeanne d'Arc* she had an enormous success.

**FELIXSTOWE**, a seaside resort of Suffolk, England; fronting both to the North Sea and to the estuary of the Orwell, where there are piers. Pop. of urban district of Felixstowe and Walton (1901), 5815. It is 85 m. N.E. by E. from London by a branch line from Ipswich of the Great Eastern railway; and is in the Woodbridge parliamentary division of the county. It has good golf links, and is much frequented by visitors for its bracing climate and sea-bathing. There is a small dock, and phosphate of lime is extensively dug in the neighbourhood and exported for use as manure. The neighbouring village of Walton, a short distance inland, receives many visitors. The vicinity has yielded numerous Roman remains, and there was a Roman fort in the neighbourhood (now destroyed by the sea), forming part of the coast defence of the Litus Saxonicum in the 4th century.

**FELL, JOHN** (1625-1686), English divine, son of Samuel Fell, dean of Christ Church, Oxford, was born at Longworth in Berkshire and received his first education at the free school at Thame in Oxfordshire. In 1636 he obtained a studentship at Christ Church, and in 1640 he was specially allowed by Archbishop Laud on account of his "known desert," when wanting one term's residence, to proceed to his degree of B.A. He obtained his M.A. in 1643 and took holy orders (deacon 1647, priest 1649). During the Civil War he bore arms for the king and held a commission as ensign. In 1648 he was deprived of his studentship by the parliamentary visitors, and during the next few years he resided chiefly at Oxford with his brother-in-law, Dr T. Willis, at whose house opposite Merton College he and his friends Allestree and Dolben kept up the service of the Church of England through the Commonwealth.

At the Restoration Fell was made prebendary of Chichester, canon of Christ Church (July 27, 1660), dean (Nov. 30), master of St Oswald's hospital, Worcester, chaplain to the king, and D.D. He filled the office of vice-chancellor from 1666 to 1669, and was consecrated bishop of Oxford, in 1676, retaining his deanery in commendam. Some years later he declined the primacy of Ireland. Fell showed himself a most capable and vigorous administrator in his various high employments, and a worthy disciple of Archbishop Laud. He restored in the university the good order instituted by the archbishop, which in the Commonwealth had given place to anarchy and a general disregard of authority. He ejected the intruders from his college or else "fixed them in loyal principles." "He was the most zealous man of his time for the Church of England," says Wood, "and none that I yet know of did go beyond him in the performance of the rules belonging thereunto." He attended chapel four times a day, restored to the services, not without some opposition, the organ and surplice, and insisted on the proper academical dress which had fallen into disuse. He was active in recovering church property, and by his directions a children's catechism was drawn up by Thomas Marshall for use in his diocese. "As he was among the first of our clergy," says Burnet, "that apprehended the design of bringing in popery, so he was one of the most zealous against it." He was forward in making converts from the Roman Catholics and Nonconformists. On the other hand, it is recorded to his honour that he opposed successfully the incorporation of Titus Oates as D.D. in the university in October 1679; and according to the testimony of William Nichols, his secretary, he disapproved of the Exclusion Bill. He excluded the undergraduates, whose presence had been irregularly permitted, from convocation. He obliged the students to attend lectures, instituted reforms in the performances of the public exercises in the schools, kept the examiners up to their duties, and himself attended the examinations. He encouraged the students to act plays. He entirely suppressed "coursing," i.e. disputations in which the rival parties "ran down opponents in arguments," and which commonly ended in blows and disturbances. He was an excellent disciplinarian and possessed a special talent for the education of young men, many of whom he received into his own family and watched over their progress with paternal care. Tom Browne, author of the Dialogues of the Dead, about to be expelled from Oxford for some offence, was pardoned by Fell on the condition of his translating extempore the 33rd epigram from Martial:-

> "Non amo te, Sabidi, nec possum dicere quare; Hoc tantum possum dicere, non amo te."

To which he immediately replied with the well-known lines:-

"I do not love you, Dr Fell, But why, I cannot tell, But this I know full well, I do not love you, Dr Fell."<sup>1</sup>

Delinquents, however, were not always treated thus mildly by Fell, and Acton Cremer, for the crime of courting a wife while only a bachelor of arts, was set as an imposition the translation into English of the whole of Scheffer's history of Lapland. As vice-chancellor, Fell himself visited the drinking taverns and ordered out the students. In the university elections he showed great energy in suppressing corruption.

Fell's building operations almost rivalled the plans of the great ecclesiastical architects of the middle ages. In his own college he completed in 1665 the north side of Wolsey's great quadrangle, already begun by his father but abandoned during the Commonwealth; he rebuilt in 1672 the east side of the Chaplain's quadrangle "with a straight passage under it leading from the cloister into the field," occupied now by the new Meadow Buildings; the lodgings of the canon of the 3rd stall in the passage uniting the Tom and Peckwater

quadrangles (c. 1674); a long building joining the Chaplain's quadrangle on the east side in 1677-1678; and lastly the great tower gate, begun in June 1681 on the foundation laid by Wolsey and finished in November 1682, to which the bell "great Tom," after being recast, was transferred from the cathedral in 1683. In 1670 he planted and laid out the Broad Walk. He spent large sums of his own on these works, gave £500 for the restoration of Banbury church, erected a church at St Oswald's, Worcester, and the parsonage house at Woodstock at his own expense, and rebuilt Cuddesdon palace. Fell disapproved of the use of St Mary's church for secular purposes, and promoted the building of the Sheldonian theatre by Archbishop Sheldon. He was treasurer during its construction, presided at the formal opening on the 9th of July 1669, and was nominated with Wren curator in July 1670. In the theatre was placed the University Press, the establishment of which had been a favourite project of Laud, which now engaged a large share of Fell's energy and attention, and which as curator he practically controlled. "Were it not you ken Mr Dean extraordinarily well," writes Sir L. Jenkins to J. Williamson in 1672, "it were impossible to imagine how assiduous and drudging he is about his press."<sup>2</sup> He sent for type and printers from Holland, declaring that "the foundation of all success must be laid in doing things well, which I am sure will not be done with English letters." Many works, including a Bible, editions of the classics and of the early fathers, were produced under his direction and editing, and his press became noted not only in England but abroad. He published annually one work, generally a classical author annotated by himself, which he distributed to all the students of his college on New Year's day. On one occasion he surprised the Press in printing surreptitiously Aretino's Postures, when he seized and destroyed the plates and impressions. Ever "an eager defender and maintainer of the university and its privileges," he was hostile to the Royal Society, which he regarded as a possible rival, and in 1686 he gave an absolute refusal to Obadiah Walker, afterwards the Roman Catholic master of University College, though licensed by James II., to print books, declaring he would as soon "part with his bed from under him" as his press. He conducted it on strict business principles, and to the criticism that more great works were not produced replied that they would not sell. He was, however, not free from fads, and his new spelling (of which one feature was the substitution of *i* for *y* in such words as *eies*, *daies*, *maiest*) met with great disapproval.

Fell also did much to encourage learning in the university. While still a young man at Christ Church he had shown both his zeal and his charity by reading gratuitously with the poor and neglected students of the college. He bore himself a high reputation as a Grecian, a Latinist and a philologist, and he found time, in spite of his great public employments, to bring out with the collaboration of others his great edition of St Cyprian in 1682, an English translation of *The Unity of the Church* in 1681, editions of *Nemesius of Emesa* (1671), of *Aratus and of Eratosthenes* (1672), *Theocritus* (1676), *Alcinous on Plato* (1677), *St Clement's Epistles to the Corinthians* (1677), *Athenagoras* (1682), *Clemens Alexandrinus* (1683), *St Theophilus of Antioch* (1684), *Grammatica rationis sive institutiones logicae* (1673 and 1685), and a critical edition of the New Testament in 1675. The first volumes of *Rerum Anglicarum scriptores* and of *Historiae Britannicae*, &c. were compiled under his patronage in 1684. He had the MSS. of St. Augustine in the Bodleian and other libraries at Oxford generously collated for the use of the Benedictines at Paris, then preparing a new edition of the father.

Fell spent such large sums in his building, in his noble patronage of learning, and in charities, that sometimes there was little left for his private use. Occasionally in his schemes he showed greater zeal than prudence. He was the originator of a mission to India which was warmly taken up by the East India Company. He undertook himself to train as missionaries four scholars at Oxford, procured a set of Arabic types, and issued from these the Gospels and Acts in the Malay language in 1677. But this was scarcely the best method of communicating the gospel to the natives of India, and the mission collapsed. He affected to despise public opinion, and was masterful and despotic in his dealings with others, especially with those upon whom he was conferring favours. Having generously undertaken at his own charge to publish a Latin version of Wood's History and Antiquities of the University of Oxford, with the object of presenting the history of the university in a manner worthy of the great subject to European readers, and of extending its fame abroad, he arrogated to himself the right of editing the work. "He would correct, alter, dash out what he pleased.... He was a great man and carried all things at his pleasure." In particular he struck out all the passages which Wood had inserted in praise of Hobbes, and substituted some disparaging epithets. He called the philosopher's Leviathan "monstrosissimus" and "publico damno notissimus." To the printed remonstrance of Hobbes, Fell inserted an insulting reply in the History to "irritabile illud et vanissimum Malmesburiense animal," and to the complaint of Wood at this usage answered only that Hobbes "was an old man, had one foot in the grave; that he should mind his latter end, and not trouble the world any more with his papers." In small things as in great he loved to rule and direct. "Let not Fell," writes R. South to R. Bathurst, "have the

fingering and altering of them (i.e. his Latin verses), for I think that, bating the want of siguidems and quinetiams, they are as good as his Worship can make." Wood styles him "a valde vult person." He was not content with ruling his own college, but desired to govern the whole university. He prevented Gilbert Ironside, who "was not pliable to his humour," from holding the office of vice-chancellor. He "endeavoured to carry all things by a high hand; scorn'd in the least to court the Masters when he had to have anything pass'd the convocation. Severe to other colleges, blind as to his own, very partiall and with good words, and flatterers and tell-tales could get anything out of him." According to Bishop Burnet, who praises his character and his administration, Fell was "a little too much heated in the matter of our disputes with the dissenters." "He had much zeal for reforming abuses, and managed it perhaps with too much heat and in too peremptory a way." "But," he adds, "we have so little of that among us that no wonder if such men are censured by those who love not such patterns nor such severe task-masters." And Wood, whose adverse criticism must be discounted a little on account of the personal dispute,-after declaring that Fell "was exceeding partial in his government even to corruption; went thro' thick and thin; grasped at all yet did nothing perfect or effectually; cared not what people said of him, was in many things very rude and in most pedantic and pedagogical,"-concludes with the acknowledgment, "yet still aimed at the public good." Roger North, who paid Fell a visit at Oxford, speaks of him in terms of enthusiasm:-"The great Dr Fell, who was truly great in all his circumstances, capacities, undertakings and learning, and above all for his superabundant public spirit and goodwill.... O the felicity of that age and place when his authority swayed!"

In November 1684, at the command of the king, Fell deprived Locke, who had incurred the royal displeasure by his friendship with Shaftesbury, and was suspected as the author of certain seditious pamphlets, of his studentship at Christ Church, summarily and without hearing his defence. Fell had in former years cultivated Locke's friendship, had kept up a correspondence with him, and in 1663 had written a testimonial in his favour; and the ready compliance of one who could on occasion offer a stout resistance to any invasion of the privileges of the university has been severely criticised. It must, however, be remembered in extenuation that the legal status of a person on the foundation of a collegiate body had not then been decided in the law-courts. With regard to the justice of the proceeding Fell had evidently some doubts, and he afterwards expressed his regret for the step which he was now compelled to take. But such scruples, however strong, would, with a man of Fell's political and religious opinions, yield immediately to an order from the sovereign, who possessed special authority in this case as a visitor to the college; and such subservience, however strange to modern notions, would probably only be considered natural and proper at that period.

Fell, who had never married, died on the 10th of July 1686, worn out, according to Wood, by his overwhelming public duties. He was buried in the divinity chapel in the cathedral, below the seat which he had so often occupied when living, where a monument and an epitaph, now moved elsewhere, were placed to his memory. "His death," writes John Evelyn, "was an extraordinary losse to the poore church at this time"; but for himself Fell was fortunate in the time of his departure; for a few months more of life would have necessitated a choice, most painful to a man of his character and creed, between fidelity to his sovereign and to his church. With all his faults, which were the defects which often attend eminent qualities such as his, Fell was a great man, "the greatest governor," according to Speaker Onslow, "that has ever been since his time in either of the universities," and of his own college, to which he left several exhibitions for the maintenance of poor scholars, he was a second founder. He was a worthy upholder of the Laudian tradition at Oxford, an enlightened and untiring patron of learning, and a man of exemplary morals and great piety which remained unsullied in the midst of a busy life and much contact with the world. A sum of money was left by John Cross to perpetuate Fell's memory by an annual speech in his praise, but the Felii laudes have been discontinued since 1866. There are two interesting pictures of Fell at Christ Church, one where he is represented with his two friends Allestree and Dolben, and another by Vandyck. The statue placed on the N.E. angle of the Great Quadrangle bears no likeness to the bishop, who is described by Hearne as a "thin grave man."

Besides the learned works already mentioned Fell wrote the lives of his friends Dr Henry Hammond (1661), Richard Allestree, prefixed to his edition of the latter's sermons (1684), and Dr Thomas Willis, in Latin. His *Seasonable advice to Protestants showing the necessity of maintaining the Established Religion in opposition to Popery* was published in 1688. Some of his sermons, which Evelyn found dull, were printed, including *Character of the Last Daies*, preached before the king, 1675, and a *Sermon preached before the House of Peers Dec. 22, 1680. The Interest of England stated* (1659), advocating the restoration of the king,<sup>3</sup> and *The* 

*Vanity of Scoffing* (1674), are also attributed to him. Fell probably had some share in the composition of *The Whole Duty of Man*, and in the subsequent works published under the name of the author of *The Whole Duty*, which included *Reasons of the Decay of Christian Piety*, *The Ladies Calling*, *The Gentleman's Calling*, *The Government of the Tongue*, *The Art of Contentment*, and *The Lively Oracles given us*, all of which were published in one volume with notes and a preface by Fell in 1684.

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(P. C. Y.)

- J.T. Browne, *Works* (9th ed. by J. Drake), iv. 99-100; T. Forde, *Virtus rediviva* (1661), 106.
- 2 *Cal. of State Pap. Dom.*, 1672, p. 478, and 1670, p. 26.
- 3 F. Maseres, *Tracts of the Civil War*, ii. 673.

**FELL.** (1) (Through the O. Fr. *fel*, from Low Lat. *fello*, felon), savage, ruthless, deadly; only used now in poetry. (2) (Of Scandinavian origin, cf. Danish *fjeld*, probably connected with a Teutonic root appearing in German *fels*, rock), a hill, as in the names of mountains in the Lake District in England, *e.g.* Scawfell; also a lofty moorland down. (3) (A word common to Teutonic languages, cf. Ger. *fell*, and Dutch *vel*, cognate with Lat. *pellis*, skin), the pelt or hide of an animal, with the hair or wool and skin; also used of any thick shaggy covering, like a matted fleece. (4) To cause to "fall," a word common to Teutonic languages and akin to the root of the Lat. *fallere* and Gr.  $\sigma \varphi \alpha \lambda \lambda \epsilon \nu$ , to cause to stumble, to deceive. As a substantive "fell" is used of a flat seam laid level with the surface of the fabric; also, in weaving, of the end of the web.

FELLAH (pl. Fellahin), Arabic for "ploughman" or "tiller," the word used in Arabicspeaking countries to designate peasantry. It is employed especially of the peasantry of Egypt, "Fellahin" in modern English usage being almost equivalent to "Egyptians." In Egypt the name is applied to the peasantry as opposed to the Arabs of the desert (and even those who have settled on the land), the Turks and the townsfolk. Fellah is used by the Arabs as a term of reproach, somewhat like the English "boor," but rather implying a slavish disposition; the fellahin, however, are not ashamed of the name and may pride themselves on being of good fellah descent, as a "fellah of a fellah." They may be classified as Hamito-Semites, and preserve to some extent the blood of the ancient Egyptians. They form the bulk of the population of Egypt and are mainly Mahommedan, though some villages in Upper Egypt are almost exclusively Copt (Christian). Their hybridism is well shown by their great divergence of colour, fellahin in the Delta being sometimes lighter than Arabs, while in Upper Egypt the prevailing complexion is dark brown. The average fellah is somewhat above medium height, big-boned, of clumsy but powerful build, with head and face of fine oval shape, cheek-bones high, forehead broad, short flattish nose with wide nostrils, and black but not woolly hair. The eyebrows are always straight and smooth, never bushy. The mouth is thick-lipped and large but well formed. The eyes are large and black, and are remarkable for the closeness of the eyelashes. The women and girls are particularly noted for their graceful and slender figures and their fine carriage, due to the custom of carrying burdens, especially water-jars, on their heads. The men's heads are usually shaved. The women are not as a rule closely 242

veiled: they generally paint the lips a deep blue, and tattoo a floral device on the chin, sometimes on the forehead and other parts of the body. All but the poorest wear necklaces of cheap pearls, coins or gilt disks. The men wear a blue or brown cotton shirt, linen drawers and a plain skull-cap, or on occasion the tarbush or fez, round which sometimes a turban is wound; the women wear a single cotton smock. The common fellah's home is a mere mud hut, roofed with durra straw. Inside are a few mats, a sheepskin, baskets and some earthenware and wooden vessels. He lives almost entirely on vegetables, millet bread, beans, lentils, dates and onions. But some of the sheikhs are wealthy, and have large houses built of crude brick and whitewashed with lime, with courtyard, many apartments and good furniture. The fellah is laborious in the fields, and abominates absence from his occupations, which generally means loss of money to him. Military service on the old oriental plan was both ruinous and distasteful to him; hence voluntary mutilations to avoid conscription were formerly common and the ingrained prejudice against military service remains. Trained by British officers the fellahin make, however, excellent soldiers, as was proved in the Sudan campaigns of 1896-98. The fellah is intelligent, cheerful and sober, and as hospitable as his poverty allows. (See Copts and Egypt.)

FELLENBERG, PHILIPP EMANUEL VON (1771-1844), Swiss educationist, was born on the 27th of June 1771 at Bern, in Switzerland. His father was of patrician family, and a man of importance in his canton, and his mother was a grand-daughter of the Dutch admiral Van Tromp. From his mother and from Pfeffel, the blind poet of Colmar, he received a better education than falls to the lot of most boys, while the intimacy of his father with Pestalozzi gave to his mind that bent which it afterwards followed. In 1790 he entered the university of Tübingen, where he distinguished himself by his rapid progress in legal studies. On account of his health he afterwards undertook a walking tour in Switzerland and the adjoining portions of France, Swabia and Tirol, visiting the hamlets and farmhouses, mingling in the labours and occupations of the peasants and mechanics, and partaking of their rude fare and lodging. After the downfall of Robespierre, he went to Paris and remained there long enough to be assured of the storm impending over his native country. This he did his best to avert, but his warnings were disregarded, and Switzerland was lost before any efficient means could be taken for its safety. Fellenberg, who had hastily raised a levy en masse, was proscribed; a price was set upon his head, and he was compelled to fly into Germany. Shortly afterwards, however, he was recalled by his countrymen, and sent on a mission to Paris to remonstrate against the rapacity and cruelty of the agents of the French republic. But in this and other diplomatic offices which he held for a short time, he was witness to so much corruption and intrigue that his mind revolted from the idea of a political life, and he returned home with the intention of devoting himself wholly to the education of the young. With this resolution he purchased in 1799 the estate of Hofwyl, near Bern, intending to make agriculture the basis of a new system which he had projected, for elevating the lower and rightly training the higher orders of the state, and welding them together in a closer union than had hitherto been deemed attainable. For some time he carried on his labours in conjunction with Pestalozzi, but incompatibility of disposition soon induced them to separate. The scheme of Fellenberg at first excited a large amount of ridicule, but gradually it began to attract the notice of foreign countries; and pupils, some of them of the highest rank, began to flock to him from every country in Europe, both for the purpose of studying agriculture and to profit by the high moral training which he associated with his educational system. For forty-five years Fellenberg, assisted by his wife, continued his educational labours, and finally raised his institution to the highest point of prosperity and usefulness. He died on the 21st of November 1844.

See Hamm, *Fellenberg's Leben und Wirken* (Bern, 1845); and Schoni, *Der Stifter von Hofwyl, Leben und Wirken Fellenberg's*.

**FELLER, FRANÇOIS XAVIER DE** (1735-1802), Belgian author, was born at Brussels on the 18th of August 1735. In 1752 he entered a school of the Jesuits at Reims, where he

manifested a great aptitude for mathematics and physical science. He commenced his novitiate two years afterwards, and in testimony of his admiration for the apostle of India added Xavier to his surname. On the expiry of his novitiate he became professor at Luxembourg, and afterwards at Liége. In 1764 he was appointed to the professorship of theology at Tyrnau in Hungary, but in 1771 he returned to Belgium and continued to discharge his professorial duties at Liége till the suppression of the Jesuits in 1773. The remainder of his life he devoted to study, travel and literature. On the invasion of Belgium by the French in 1794 he went to Paderborn, and remained there two years, after which he took up his residence at Ratisbon, where he died on the 23rd of May 1802.

Feller's works exceed 120 volumes. In 1773 he published, under the assumed name Flexier de Reval (an anagram of Xavier de Feller), his *Catéchisme philosophique*; and his principal work *Dictionnaire historique et littéraire* (published in 1781 at Liége in 8 volumes, and afterwards several times reprinted and continued down to 1848), appeared under the same name. Among his other works the most important are *Cours de morale chrétienne et de littéraire*, published at Luxembourg and Liége from 1774 to 1794 in 70 volumes, was edited and in great part written by him.

**FELLING,** an urban district in the Jarrow parliamentary division of Durham, England, forming an eastern suburb of Gateshead. Pop. (1901) 22,467. Its large industrial population is employed in the neighbouring collieries and the various attendant manufactures.

**FELLOE**, the outer rim of a wheel, to which the spokes are attached. The word is sometimes spelled and usually pronounced "felly." It is a Teutonic word, in O. Eng. *felg*, cognate with Dutch *velge*, Ger. *Felge*; the original Teutonic root from which these are derived probably meant "to fit together."

FELLOW, properly and by origin a partner or associate, hence a companion, comrade or mate, as in "fellow-man," "fellow-countryman," &c. The word from the 15th century has also been applied, generally and colloquially, to any male person, often in a contemptuous or pitying sense. The Old English féolage meant a partner in a business, i.e. one who lays (lag) money or property (*féoh*, fee) together for a common purpose. The word was, therefore, the natural equivalent for socius, a member of the foundation of an incorporated college, as Eton, or a college at a university. In the earlier history of universities both the senior and junior members of a college were known as "scholars," but later, as now, "scholar" was restricted to those members of the foundation still in statu pupillari, and "fellow" to those senior graduate members who have been elected to the foundation by the corporate body, sharing in the government and receiving a fixed emolument out of the revenues of the college. It is in this sense that "fellow" is used at the universities of Oxford and Cambridge and Trinity, Dublin. At these universities the college teaching is performed by those fellows who are also "tutors." At other universities the term is applied to the members of the governing body or to the holders of certain sums of money for a fixed number of years to be devoted to special study or research. By analogy the word is also used of the members of various learned societies and institutions.

FELLOWS, SIR CHARLES (1799-1860), British archaeologist, was born in August 1799 at Nottingham, where his family had an estate. When fourteen he drew sketches to illustrate a trip to the ruins of Newstead Abbey, which afterwards appeared on the title-page of Moore's Life of Lord Byron. In 1820 he settled in London, where he became an active member of the British Association. In 1827 he discovered the modern ascent of Mont Blanc. After the death of his mother in 1832 he passed the greater portion of his time in Italy, Greece and the Levant. The numerous sketches he executed were largely used in illustrating Childe Harold. In 1838 he went to Asia Minor, making Smyrna his headquarters. His explorations in the interior and the south led him to districts practically unknown to Europeans, and he thus discovered ruins of a number of ancient cities. He entered Lycia and explored the Xanthus from the mouth at Patara upwards. Nine miles from Patara he discovered the ruins of Xanthus, the ancient capital of Lycia, finely situated on hills, and abounding in magnificent remains. About 15 m. farther up he came upon the ruins of Tlos. After taking sketches of the most interesting objects and copying a number of inscriptions, he returned to Smyrna through Caria and Lydia. The publication of A Journal written during an Excursion in Asia Minor (London, 1839) roused such interest that Lord Palmerston, at the request of the British Museum authorities, asked the British consul at Constantinople to get leave from the sultan to ship a number of the Lycian works of art. Late in 1839 Fellows, under the auspices of the British Museum, again set out for Lycia, accompanied by George Scharf, who assisted him in sketching. This second visit resulted in the discovery of thirteen ancient cities, and in 1841 appeared An Account of Discoveries in Lycia, being a Journal kept during a Second Excursion in Asia Minor. A third visit was made late in 1841, after Fellows had obtained a firman by personal application at Constantinople. He shipped a number of works of art for England, and in the fourth and most famous expedition (1844) twenty-seven cases of marbles were despatched to the British Museum. His chief discoveries were at Xanthus, Pinara, Patara, Tlos, Myra and Olympus. In 1844 he presented to the British Museum his portfolios, accounts of his expeditions, and specimens of natural history illustrative of Lycia. In 1845 he was knighted "as an acknowledgment of his services in the removal of the Xanthian antiquities to this country." He paid his own expenses in all his journeys and received no public reward. Fellows was twice married. He died in London on the 8th of November 1860.

In addition to the works above mentioned, Fellows published the following: *The Xanthian Marbles; their Acquisition and Transmission to England* (1843), a refutation of false statements that had been published; *An Account of the Ionic Trophy Monument excavated at Xanthus* (1848); a cheap edition of his two *Journals*, entitled *Travels and Researches in Asia Minor, particularly in the Province of Lycia* (1852); and *Coins of Ancient Lycia before the Reign of Alexander; with an Essay on the Relative Dates of the Lycian Monuments in the British Museum* (1855). See C. Brown's *Lives of Nottinghamshire Worthies* (1882), pp. 352-353, and *Journ. of Roy. Geog. Soc.*, 1861.

FELO DE SE (M.L. a felon, i.e. murderer, of himself), one who commits murder upon himself. The technical conditions of murder apply to this crime; e.g., "if one commits any unlawful malicious act, the consequence of which is his own death, as if attempting to kill another he runs upon his antagonist's sword, or shooting at another the gun bursts and kills himself," he is a *felo de se*. The horror inspired by this crime led to the revolting punishment of an "ignominious burial on the highway, with a stake driven through the body." This was abolished by an act of 1823, which ordered the burial of the body of a person found to be *felo* de se within 24 hours after the coroner's inquest, between the hours of 9 and 12 at night, and without Christian rites of sepulture. This act was again superseded in 1882 by the Interments (Felo de se) Act, which permits the interment of any felo de se in the churchyard or other burial ground of the parish or place in which by the law or custom of England he might have been interred but for the verdict. The interment is carried out in accordance with the Burial Laws Amendment Act 1880 (see Burial and Burial Acts). The act does not authorize the performance of any of the rites of Christian burial, but a special form of service may be used. Formerly the goods and chattels, but not the land, of a *felo de se* were forfeited to the crown, but such forfeitures were abolished by the Forfeiture Act 1870. (See also SUICIDE.)

FELONY (O. Fr. felonie, from felon, a word meaning "wicked," common to Romanic languages, cf. Italian *fello, fellone*, the ultimate origin of which is obscure, but is possibly connected either with Lat. fel, gall, or fallere, to deceive. The English "fell" cruel or fierce, is also connected; and the Greek  $\phi \tilde{\eta} \lambda \upsilon \varsigma$ , an impostor, has also been suggested). Legal writers have sought to throw light on the nature of felony by examining the supposed etymology of the word. Coke says it is crimen animo felleo perpetratum [a crime committed with malicious or evil intent (fee lohn)]. Spelman connects it with the word fee, signifying fief or feud; and felony in this way would be equivalent to pretium feudi, an act for which a man lost or gave up his fee (see Stephen's Commentaries, vol. iv. p. 7). And acts involving forfeiture were styled felonies in feudal law, although they had nothing of a criminal character about them. A breach of duty on the part of the vassal, neglect of service, delay in seeking investiture, and the like were felonies: so were injuries by the lord against the vassal. Modern writers are now disposed to accept Coke's definition. In English law, crimes are usually classified as treason, felony, misdemeanour and summary offence. Some writers-and with some justicetreat treason merely as a grave form of felony and it is so dealt with in the Juries Detention Act 1897. But owing to legislation in and since the time of William and Mary, the procedure for the trial of most forms of treason differs from that of felony. The expression summary offence is ambiguous. Many offences which are at common law or by statute felonies, or misdemeanours indictable at common law or by statute, may under certain conditions be tried by a court of summary jurisdiction (q.v.), and many merely statutory offences which would ordinarily be punishable summarily may at the election of the accused be tried by a jury on indictment (Summary Jurisdiction Act 1879, s. 17).

The question whether a particular offence is felony or misdemeanour can be answered only by reference to the history of the offence and not by any logical test. For instance, killing a horse in an unlicensed place is still felony under a statute of 1786. But most crimes described as felonies are or have been capital offences at common law or by statute, and have also entailed on the offender attaint and forfeiture of goods. A few felonies were not punishable by death, *e.g.* petty larceny and mayhem. Where an offence is declared a felony by statute, the common law punishments and incidents of trial attach, unless other statutory provision is made (Blackstone, *Commentaries*, iv. 94).

The chief common law *felonies* are: homicide, rape, larceny (*i.e.* in ordinary language, theft), robbery (i.e. theft with violence), burglary and kindred offences. Counterfeiting the coin has been made a felony instead of being treason; and forgery of most documents has been made a felony instead of being, as it was at common law, a misdemeanour. At the beginning of the 19th century felony was almost equivalent to capital crime; but during that century capital punishment was abolished as to all felonies, except wilful murder, piracy with violence (7 W. IV. & 1 Vict. c. 88, s. 2) and offences against the Dockyards, &c., Protection Act 1772; and by the Forfeiture Act 1870, a felon no longer forfeits land or goods on conviction, though forfeiture on outlawry is not abolished. The usual punishment for felony under the present law is penal servitude or imprisonment with or without hard labour. "Every person convicted of any felony for which no punishment is specially provided by the law in force for the time being is liable upon conviction thereof to be sentenced to penal servitude for any period not exceeding seven years, or to be imprisoned with or without hard labour for any term not exceeding two years" (Stephen, Dig. Cr. Law (6th ed.), art 18, Penal Servitude Act 1891). A felon may not be fined or whipped on conviction nor put under recognizance to keep the peace or be of good behaviour except under statutory provision. (See Offences against the Person Act 1861, ss. 5. 71.)

The result of legislative changes is that at the present time the only practical distinctions between felony and misdemeanour are:—

1. That a private person may arrest a felon without judicial authority and that bail on arrest is granted as a matter of discretion and not as of right. Any one who has obtained a drove of oxen or a flock of sheep by false pretences may go quietly on his way and no one, not even a peace officer, can apprehend him without a warrant, but if a man offers to sell another a bit of dead fence supposed to have been stolen, he not only may but is required to be apprehended by that person (Greaves, *Criminal Law Consolidation Acts*). (See ARREST, BAIL.)

2. That on an indictment for felony counts may not be joined for different felonies unless they form part of the same transaction. (See INDICTMENT.)

3. That on a trial for felony the accused has a right peremptorily to challenge, or object to, the jurors called to try him, up to the number of twenty. (See JURY.)

4. That a felon cannot be tried *in absentia*, and that the jury who try him may not separate during the trial without leave of the court, which may not be given in cases of murder.

5. That a special jury cannot be empanelled to try a felony.

6. That peers charged with felony are tried in a special manner. (See PEERAGE.)

7. That the costs of prosecuting all felonies (except treason felony) are paid out of public funds: and that a felon may be condemned to pay the costs of his prosecution and to compensate up to £100 for any loss of property suffered by any person through or by means of the felony. In the Criminal Code Bills of 1878-1880 it was proposed to abolish the term felony altogether: and in the Queensland Criminal Code 1899 the term "crime" is substituted, and within its connotation are included not only treason and piracy but also perjury.

8. That a sentence of a felon to death, or to penal servitude or imprisonment with hard labour or for over twelve months, involves loss of and disqualification for certain offices until the sentence has been served or a free pardon obtained. (Forfeiture Act 1870.)

It is a misdemeanour (i.) to compound a felony or to agree for valuable consideration not to prosecute or to show favour in such prosecution; (ii.) to omit to inform the authorities of a felony known to have been committed (see MISPRISION), and, (iii.) not to assist in the arrest of a felon at the call of an officer of the law. (See CRIMINAL LAW; MISDEMEANOUR; MISPRISION.)

**FELSITE,** in petrology, a term which has long been generally used by geologists, especially in England, to designate fine-grained igneous rocks of acid (or subacid) composition. As a rule their ingredients are not determinable by the unaided eye, but they are principally felspar and quartz as very minute particles. The rocks are pale-coloured (yellowish or reddish as a rule), hard, splintery, much jointed and occasionally nodular. Many felsites contain porphyritic crystals of clear quartz in rounded blebs, more or less idiomorphic felspar, and occasionally biotite. Others are entirely fine-grained and micro- or crypto-crystalline. Occasionally they show a fluxional banding; they may also be spherulitic or vesicular. Those which carry porphyritic quartz are known as quartz-felsites; the term soda-felsites has been applied to similar fine-grained rocks rich in soda-felspar.

Although there are few objections to the employment of felsite as a field designation for rocks having the above characters, it lacks definiteness, and has been discarded by many petrologists as unsuited for the exact description of rocks, especially when their microscopic characters are taken into consideration. The felsites accordingly are broken up into "granite-porphyries," "orthophyres" and "orthoclase-porphyries," "felsitic-rhyolites," "keratophyres," "granophyres," "micro-granites," &c. But felsite or microfelsite is still the generally accepted designation for that very fine-grained, almost crypto-crystalline substance which forms the ground-mass of so many rhyolites, dacites and porphyries.

In the hand specimen it is a dull, lustreless, stony-looking aggregate. Under the microscope even with high powers and the very thinnest modern sections, it often cannot be resolved into its components. In places it may contain determinable minute crystals of quartz; less commonly it may show grains which can be proved to be felspar, but usually it consists of an ultra-microscopic aggregate of fibres, threads and grains, which react to polarized light in a feeble and indefinite manner. Spherulitic, spotted, streaky and fluidal structures may appear in it, and many different varieties have been established on such characters as these but without much validity.

Its association with the acid rocks, its hardness, method of weathering and chemical composition, indicate that it is an intermixture of quartz and acid felspar, and the occasional presence of these two minerals in well-defined grains confirms this. Moreover, in many dikes, while the ground-mass is microcrystalline and consists of quartz and felspar near the centre of the mass, towards the margins, where it has been rapidly chilled by contact with the cold surrounding rocks, it is felsitic. The very great viscosity of acid magmas prevents their molecules, especially when cooling takes place suddenly, from arranging themselves to form discrete crystals, and is the principal cause of the production of felsitic ground-masses. In extreme cases these conditions hinder crystallization altogether, and glassy rocks result. Some rocks are felsitic in parts but elsewhere glassy; and it is not always clear whether the felsite is an original substance or has arisen by the devitrification of primary glass. The presence of perlitic structure in some of these felsites points to the latter conclusion, and the results of an examination of ancient glasses and of artificial glass which has been slowly cooled are in accordance with this view. It has been argued that felsite is a eutectic mixture

of quartz and felspar, such that when solidification takes place and the excess of felspar (or quartz) has crystallized out it remains liquid till the temperature has fallen to its freezing point, and then consolidates simultaneously. This may be so, but analyses show that it has not always the same composition and consequently that the conditions which determine its formation are not quite simple. Felsitic rocks are sometimes silicified and have their matrix replaced by granular aggregates of cloudy quartz.

(J. S. F.)

**FELSPAR**, or FELDSPAR, a name applied to a group of mineral silicates of much importance as rock-constituents. The name, taken from the Ger. *Feldspath*, was originally written with a "d" but in 1794 it was written "felspar" by R. Kirwan, on the assumption that it denoted a mineral of the "fels" rather than of the "field," and this corrupted form is now in common use in England. By some of the earlier mineralogists it was written "feltspar," from the Swedish form *fältspat*.

The felspar-group is divided into two subgroups according to the symmetry of the crystals. Although the crystals of all felspars present a general resemblance in habit, they are usually regarded as belonging to two systems, some felspars being monoclinic and others anorthic. Figures of the crystals are given in the articles on the different species. Two cleavages are generally well marked. In the monoclinic or monosymmetric felspars these, being parallel to the basal pinacoid and clinopinacoid, necessarily make an angle of 90°, whence the name orthoclase applied to these minerals; whilst in the anorthic or asymmetric felspars the corresponding angle is never exactly 90°, and from this obliquity of the principal cleavages they are termed plagioclase (see ORTHOCLASE and PLAGIOCLASE). There are consequently two series of felspars, one termed orthoclastic or orthotomous, and the other plagioclastic or clinotomous. F.E. Mallard suggested that all felspars are really asymmetric, and that orthoclase presents only a pseudo-monosymmetric habit, due to twinning. Twin-crystals are very common in all the felspars, as explained under their respective headings.

The two divisions of the felspar-group founded on differences of crystalline symmetry are subdivided according to chemical composition. All the felspars are silicates containing aluminium with some other metallic base or bases, generally potassium, sodium or calcium, rarely barium, but never magnesium or iron. The monoclinic series includes common potashfelspar or orthoclase (KAlSi<sub>3</sub>O<sub>8</sub>) and hyalophane, a rare felspar containing barium (K<sub>2</sub>BaAl<sub>4</sub>Si<sub>8</sub>O<sub>24</sub>). The anorthic series includes at one end the soda-felspar albite (NaAlSi<sub>3</sub>O<sub>8</sub>) and at the other extremity the lime-felspar anorthite (CaAl<sub>2</sub>Si<sub>2</sub>O<sub>8</sub>). It was suggested by G. Tschermak in 1864 that the other plagioclastic felspars are isomorphous mixtures in various proportion of albite (Ab) and anorthite (An). These intermediate members are the lime-soda felspars known as oligoclase, andesine, labradorite and bytownite. There are also placed in the anorthic class a potash-felspar called microcline, and a rare soda-potash-felspar known as anorthoclase.

The specific gravity of the felspars has been shown by G. Tschermak and V. Goldschmidt to vary according to their chemical composition, rising steadily from 2.57 in orthoclase to 2.75 in anorthite. All the felspars have a hardness of 6 to 6.5, being therefore rather less hard than quartz. Pure felspar is colourless, but the mineral is usually white, yellow, red or green. Certain felspars are used as ornamental stones on account of their colour (see AMAZON STONE). Other felspars are prized for their pearly opalescence (see MOONSTONE), or for their play of iridescent colours (see LABRADORITE), or for their spangled appearance, like aventurine (see SUN-STONE).

Felspar is much used in the manufacture of porcelain by reason of its fusibility. In England the material employed is mostly orthoclase from Scandinavia, often known as "Swedish spar." The high translucency of "ivory porcelain" depends on the large proportion of felspar in the body. The mineral is also an important constituent of most ceramic glazes. The melting points of felspars have been investigated by Prof. J. Joly, Prof. C. A. Doelter y Cisterich and especially by A.L. Day and E.T. Allen in the Geophysical Laboratory of the Carnegie Institute at Washington.

Among the applications of felspar is that of pure orthoclase in the manufacture of artificial teeth.

Felspar readily suffers chemical alteration, yielding kaolin (q.v.). The turbidity of

orthoclase is usually due to partial kaolinization. Secondary mica is also a common result of alteration, and among other products are pinite, epidote, saussurite, chlorite, wollastonite and various zeolites.

See Albite, Amazon Stone, Andesine, Anorthite, Bytownite, Labradorite, Microcline, Moonstone, Oligoclase, Orthoclase, Plagioclase, Sun-stone.

FELSTED, or FELSTEAD, a village of Essex, England, between Dunmow and Braintree, and 10 m. from Chelmsford; with a station on the Great Eastern railway. Felsted is only noteworthy by reason of its important public school, dating back to its foundation as a grammar school in 1564 by Richard 1st Baron Rich, who as lord chancellor and chancellor of the court of augmentations had enriched himself with the spoil of the adjoining abbey and priory of Little Leez at the dissolution of the monasteries. It became a notable educational centre for Puritan families in the 17th century, numbering a hundred or more pupils, under Martin Holbeach (1600-1670), headmaster from 1627-1649, and his successors C. Glasscock (from 1650 to 1690), and Simon Lydiatt (1690 to 1702). John Wallis and Isaac Barrow were educated here, and also four sons of Oliver Cromwell, Robert, Oliver, Richard (the Protector), and Henry. Another era of prosperity set in under the headmastership of William Trivett (1745-1830) between 1778 and 1794; but under his successors W.J. Carless (from 1794 to 1813) and E. Squire (from 1813 to 1829) the numbers dwindled. As the result of the discovery by T. Surridge (headmaster 1835-1850), from research among the records, that a larger income was really due to the foundation, a reorganization took place by act of parliament, and in 1851, under the headmastership of Rev. A.H. Wratislaw, the school was put under a new governing body (a revised scheme coming into operation in 1876). The result under Rev. W.S. Grignon (1823-1907), the headmaster from 1856 to 1875, who may be considered almost the second founder, was the rapid development of Felsted into one of the regular public schools of the modern English type. New buildings on an elaborate scale arose, the numbers increased to more than 200, and a complete transformation took place, which was carried on under his successors D.S. Ingram (from 1875 to 1890), H.A. Dalton (to 1906), and F. Stephenson, under whom large extensions to the buildings and playing-fields were made.

See John Sargeaunt, *History of Felsted School* (1889); and *Alumni Felstedienses*, by R.J. Beevor, E.T. Roberts and others (1903).

**FELT** (cognate with Ger. *Filz*, Du. *vilt*, Swed. and Dan. *filt*; the root is unknown; the word has given Med. Lat. *filtrum*, "filter"), a fabric produced by the "matting" or "felting" together of fibrous materials such as wools, hairs, furs, &c. Most textile fibres (see FIBRES) possess the quality of matting to some extent, but wools, furs and some few hairs are the only fibres which can be felted satisfactorily. It is probable that the quality of felting must be attributed to the scale structure and waviness of the wools, furs and hairs referred to. When it is desired to incorporate non-felting fibres in felt cloths, wool must be employed to "carry" them.

There are two distinct classes of felts, viz. woven or "thread-structure" felts, and "fibre" or true felts. In the manufacture of thread-structure felts, wools possessing the quality of felting in a high degree are naturally selected, carefully scoured so that the felting quality is not seriously damaged, spun into woollen yarn possessing the necessary fibre arrangement and twist, woven into cloth of such a character that subsequently satisfactory shrinking or felting may be effected, and finally scoured, milled in the stocks of machine of both, dyed and finished on the lines of an ordinary woven fabric. The lighter styles of woven felts may be composed of a single cloth only, but for the heavier styles two or more cloths are woven, one on top of the other, at one and the same time, arrangements being made to stitch the cloths together during the weaving operation.

Fibre felts are exceedingly interesting from the historical point of view. It is now generally admitted that the art of weaving preceded that of spinning, and it must further be conceded

that the art of felting preceded that of weaving, so that the felt fabric is probably one of the oldest of the various styles of recognized fabrics. The inhabitants of the middle and northern regions of Asia seem to have employed felt from time immemorial, as clothing and also as a covering for their habitations. Most of the classical writers refer to it and some of them actually describe its manufacture. Felt was also largely employed by the ancients for their hats, outer garments, and sometimes as a species of armour.

Fibre felts may be divided into three classes, viz. ordinary felts; hat felts; and impregnated felts. As all felts are based upon the ordinary felt, the process of manufacture of this will first be described. Of the wools employed the principal are:-East Indian, German or mid-European, New Zealand cross-breds, and Australian, Cape and Buenos Aires merinos. Vegetable fibres and silk are also employed, but wool must be used to "carry" them; thus a good felting wool may be made to carry its own weight of cotton, hemp, &c. Hairs and furs are principally used in the hat felts. The average loss upon the wool from the raw state to the finished felt is 40 to 50%. The order of the manufacturing processes is as follows:-mixing, willowing, teasing, scribbling and carding. It is interesting to note that it is not usual to scour felting wools. This is not because they are really clean-some are dirty-but because the felting property is liable to be interfered with in the scouring operation. Some wools, however, must be scoured to ensure satisfactory working in the machines. From the card the wool is delivered as a gossamer-like film from 50 to 60 in. wide on to an endless sheet from 30 to 60 yds. long, upon which the felt is built up film upon film until the required thickness perhaps 4 in.—is obtained. To harden this somewhat tender sheet of felt it is now passed through an ironing process, effected by either steam-heated rollers-to which a rotatory and vibratory motion is given-playing upon the continually drawn-through cloth; or a huge vibrating flat-iron, to which the cloth is automatically fed, held in position and then wound up while the following length to be treated is drawn under the iron. Soaping, fulling or "felting" and the ordinary finishing operations-including dyeing and printing if desirable-now follow, so that ultimately a strong firm fabric is turned out. It must be admitted, however, that the strength is much greater lengthwise than cross-wise, owing to the parallelization of the fibres induced in the scribbling and carding operations. Of course, the true felting or contraction occurs in the fulling or felting stock, the fabric being perpetually "hammered" in the presence of fulling agents such as soap, fuller's earth, &c., for a considerable time. The reduction in width, length and thickness is remarkable. This may be controlled within certain limits. The principal styles of ordinary fibre-felts are—linings for coats, furniture and rubber shoes; saddlery; seatings for carriages and pews; carpets, surrounds and under-felts for carpets; mantles, dresses and table-cloths; felt-slippers; mattress felts; chest-preservers, and shoulder-pads; steam-engine packing, motor-car and anti-vibration felts, shipbuilding felts; drawing-roller felts and gun-wad felts.

Hat felts may be divided into two classes, viz. those made from wool and fur respectively. Wool "bodies" used for the lower quality hats are manufactured in the same way as ordinary felts, but the "shape" upon which the film issuing from the carder is built up takes the form of a double cone and thus approximates to the shape of the two hats ultimately formed. The shape is further controlled and developed in the fulling or felting operation. In the fur hat felts an air-blast is employed to carry the finely separated fibres on to the shape required, upon which shape the fibres are held in position by suction until the required thickness is obtained. The structure is then further developed and "stiffened," *i.e.* impregnated with certain stiffening agents according to requirements. If desirable the exterior fibres blown on to any shape may be of a different material from the body fabric.

Impregnated felts are simply felts made in the ordinary way but subsequently impregnated with certain agents which give a special quality to the fabric. Messrs McNeill & Co., of London, were the originators of "asphalted-felt" for roofing and, among other styles, place on the market sheathing felt, inodorous felt, dry hair felt, foundation felt, &c., &c. A later development, however, is the impregnated iron-felt manufactured by Messrs Mitchells, Ashworth, Stansfield & Co., of Waterfoot, near Manchester, who not only produce from 70 to 80% of the ordinary felts manufactured in Great Britain, but also place on the market several specialties of which this "iron-felt" is largely used in the construction of bridges, &c., and as a substitute for rubber, it being apparently more durable.

(A. F. B.)

**FELTHAM**, or FELLTHAM, **OWEN** (d. 1668), English moralist, was the son of Thomas Feltham or Felltham of Mutford in Suffolk. The date of his birth is given variously as 1602 and 1609. He is famous chiefly as the author of a volume entitled *Resolves, Divine, Moral and Political*, containing one hundred short and pithy essays. To later issues of the *Resolves* Feltham appended *Lusoria*, a collection of forty poems. Hardly anything is known of his life except that T. Randolph, the adopted "son" of Ben Jonson, addressed a poem of compliment to him, and became his friend, and that Feltham attacked Ben Jonson in an ode shortly before the aged poet's death, but contributed a flattering elegy to the *Jonsonus Virbius* in 1638. Early in life Feltham visited Flanders, and published observations in 1652 under the title of *A Brief Character of the Low Countries*. He was a strict high-churchman and a royalist; he even described Charles I. as "Christ the Second." Hallam stigmatized Feltham as one of our worst writers. He has not, indeed, the elegance of Bacon, whom he emulated, and he is often obscure and affected; but his copious imagery and genuine penetration give his reflections a certain charm. To the middle classes of the 17th century he seemed a heaven-sent philosopher and guide, and was only less popular than Francis Quarles the poet.

Eleven editions of the *Resolves* appeared before 1700. Later. editions by James Cumming (London, 1806; much garbled; has account of Feltham's life and writings), and O. Smeaton in "Temple Classics" series (London, 1904).

**FELTON, CORNELIUS CONWAY** (1807-1862), American classical scholar, was born on the 6th of November 1807, in West Newbury, Massachusetts. He graduated at Harvard College in 1827, having taught school in the winter vacations of his sophomore and junior years. After teaching in the Livingstone high school of Geneseo, New York, for two years, he became tutor at Harvard in 1829, university professor of Greek in 1832, and Eliot professor of Greek literature in 1834. In 1860 he succeeded James Walker as president of Harvard, which position he held until his death, at Chester, Pennsylvania, on the 26th of February 1862. Dr Felton edited many classical texts. His annotations on Wolf's text of the *Iliad* (1833) are especially valuable. *Greece, Ancient and Modern* (2 vols., 1867), forty-nine lectures before the Lowell Institute, is scholarly, able and suggestive of the author's personality. Among his miscellaneous publications are the American edition of Sir William Smith's *History of Greece* (1855); translations of Menzel's *German Literature* (1840), of Munk's *Metres of the Greeks and Romans* (1844), and of Guyot's *Earth and Man* (1849); and *Familiar Letters from Europe* (1865).

FELTON, JOHN (c. 1595-1628), assassin of the 1st duke of Buckingham, was a member of an old Suffolk family established at Playford. The date of his birth and the name of his father are unknown, but his mother was Eleanor, daughter of William Wright, mayor of Durham. He entered the army, and served as lieutenant in the expedition to Cadiz commanded by Sir Edward Cecil in 1625. His career seems to have been ill-starred and unfortunate from the beginning. His left hand was early disabled by a wound, and a morose temper rendered him unpopular and prevented his advancement. Every application made to Buckingham for his promotion was refused, on account of an enmity, according to Sir Simonds D'Ewes, which existed between Felton and Sir Henry Hungate, a favourite of Buckingham. To his personal application that he could not live without a captaincy Buckingham replied harshly "that he might hang." Whether he took part in the expedition to Rhé in 1627 is uncertain, but there is no doubt that he continued to be refused promotion, and that even his scanty pay earned during the Cadiz adventure was not received. Exasperated by his ill-treatment, his discontent sharpened by poverty, and his hatred of Buckingham intensified by a study of the Commons "Remonstrances" of the previous June, and by a work published by Eglesham, the physician of James I., in which Buckingham was accused of poisoning the king, Felton determined to effect his assassination. He bought a tenpenny knife on Tower Hill, and on his way through Fleet Street he left his name in a church to be prayed for as "a man much discontented in mind." He arrived at Portsmouth at 9 o'clock in the morning of the 23rd of August 1628, and immediately proceeded to No. 10 High Street, where Buckingham was lodged. Here mingling with the crowd of applicants and unnoticed he stabbed the duke, who immediately fell dead. Though escape would have been easy he confessed the deed and was seized and conveyed to the Tower, his journey thither, such was the unpopularity of the duke, being accompanied by cries of "God bless thee" from the people. Charles and Laud desired he should be racked, but the illegal torture was prevented by the judges. He was tried before the king's bench on the 27th of November, pleaded guilty, and was hanged the next day, his body being exposed in chains subsequently at Portsmouth.

FELTRE, MORTO DA, Italian painter of the Venetian school, who worked at the close of the 15th century and beginning of the 16th. His real name appears to have been Pietro Luzzo; he is also known by the name Zarato or Zarotto, either from the place of his death or because his father, a surgeon, was in Zara during the son's childhood: whether he was termed Morto (dead) from his joyless temperament is a disputed point. He may probably have studied painting first in Venice, but under what master is uncertain. At an early age he went to Rome, and investigated the ancient, especially the subterranean remains, and thence to Pozzuoli, where he painted from the decorations of antique crypts or "grotte." The style of fanciful arabesque which he formed for himself from these studies gained the name of "grottesche," whence comes the term "grotesque"; not, indeed, that Morto was the first painter of arabesque in the Italian Renaissance, for art of this kind had, apart from his influence, been fully developed, both in painting and in sculpture, towards 1480, but he may have powerfully aided its diffusion southwards. His works were received with much favour in Rome. He afterwards went to Florence, and painted some fine grotesques in the Palazzo Pubblico. Returning to Venice towards 1505, he assisted Giorgione in painting the Fondaco dei Tedeschi, and seems to have remained with him till 1511. If we may trust Ridolfi, Morto eloped with the mistress of Giorgione, whose grief at this transaction brought him to the grave; the allegation, however, is hardly reconcilable with other accounts. It may have been in 1515 that Morto returned to his native Feltre, then in a very ruinous condition from the ravages of war in 1509. There he executed various works, including some frescoes, still partly extant, and considered to be almost worthy of the hand of Raphael, in the loggia beside San Stefano. Towards the age of forty-five, Morto, unquiet and dissatisfied, abandoned painting and took to soldiering in the service of the Venetian republic. He was made captain of a troop of two hundred men; and fighting valorously, he is said to have died at Zara in Dalmatia, in 1519. This story, and especially the date of it, are questionable: there is some reason to think that Morto was painting as late as 1522. One of his pictures is in the Berlin museum, an allegorical subject of "Peace and War." Andrea Feltrini was his pupil and assistant as a decorative painter.

**FELTRE** (anc. *Feltria*), a town and episcopal see of Venetia, Italy, in the province of Belluno, 20 m. W.S.W. of it by rail, situated on an isolated hill, 885 ft. above sea-level. Pop. (1901) 5468 (town), 15,243 (commune). The cathedral has a fine polygonal apse of the 16th century. The Palazzo del Consiglio, now a theatre, is attributed to Palladio. At one end of the chief square of the town, the Piazza Maggiore, is the cistern by which the town is supplied with water, and a large fountain. There are some remains of the medieval castle. The ancient Feltria, which lay on the road (Via Claudia) from Opitergium to Tridentum, does not seem to have been a place of any importance under the Romans. Vittorino dei Rambaldoni da Feltre (1378-1446) was a famous educator and philosopher of his time.

**FELUCCA** (an Italian word; in forms like the Span. *faluca*, Fr. *felouque*, it appears in other languages; it is probably of Arabic origin, cf. *fulk*, a ship, and *falaka*, to be round; the modern Arabic form is *falūkah*), a type of vessel used in the Mediterranean for coasters or fishing-

boats. It is a long, low and narrow undecked vessel, built for speed, and propelled by oars or sails. The sails are lateen-shaped and carried on one or two masts placed far forward (see BOAT).

**FEMALE**, the correlative of "male," the sex which performs the function of conceiving and bearing as opposed to the begetting of young. The word in Middle English is *femelle*, adopted from the French from the Lat. *femella*, which is a diminutive, and in classical Latin used strictly as such, of *femina*, a woman. The present termination in English is due to a connexion in ideas with "male." In various mechanical devices, where two corresponding parts work within the other, the receiving part is often known as the "female," as for example in the "male" and "female screw." The O. Fr. *feme*, modern *femme*, occurs in legal phraseology in *feme covert*, a married woman, *i.e.* one protected or covered by a husband, and in *feme sole*, one not so protected, a widow or spinster (see WOMEN and HUSBAND AND WIFE).

**FEMERELL**, properly FUMERELL (from O. Fr. *fumeraille*, Lat. *fumus*, smoke), the old English term given to the lantern in the ridge of a hall roof for the purpose of letting out the smoke of the fire kindled on a central hearth.

**FENCING.** If by "fencing"—the art of fence, *i.e.* of defence or offence—were meant generally the dexterous use of the sword, the subject would be wide indeed; as wide, in fact, as the history of the sword (q.v.) itself. But, in its modern acceptation, the meaning of the word has become considerably restricted. The scope of investigation must therefore be confined to one kind of swordsmanship only: to that which depends on the regulated, artificial conditions of "single combat." It is indeed this play, hemmed in by many restrictions, which we have come to mean more specially by "fencing." It differs, of course, in many respects, from what may be called the art of fighting in the light of nature. But as its restrictions are among the very elements which work to the perfection of the play, it is undoubtedly in the history of swordsmanship as applied to duelling (see DUEL) that we shall trace the higher development of the art.

It may be said that the history of fencing, therefore, would be tantamount to the history of private duelling. Now, this is an ethical subject; one, again, which would carry the investigation too far; and it need not be taken up farther back than the middle of the 16th century, when, on the disuse of the medieval wager of battle, the practice of *private duelling* began to take an assured footing in a warlike society. It is curious to mark that the first cultivation of refined cunning in fence dates from that period, which corresponds chronologically with the general disuse of armour, both in battle and in more private encounters. It is still more curious to note that, in order to fit himself to meet what was an illegal but aristocratic obligation, the gallant of those days had to appeal to a class of men hitherto little considered: to those plebeian adepts, in fact, who for generations had cultivated skill in the use of hand weapons, on foot and without armour. Thus it came to pass that the earliest masters of fence in all countries, namely, the masters of the art of conducting skilfully what was essentially considered as an honourable encounter, were almost invariably to be found among a somewhat dishonoured gentry-gladiators, free companions, professional champions, more or less openly recognized, or bravoes of the most uncompromising character.

In Germany, which may be considered the cradle of systematic swordsmanship, these teachers of the sword had, as early as the 15th century, formed themselves into gilds; among which the best known were the *Marxbrüder*, or the Associates of St Marcus of Löwenberg, who had their headquarters at Frankfort, and branches in all the more important towns.

Similarly, in Spain and in northern Italy, professional swordsmen were at various times allowed to form themselves into recognized or at least tolerated associations.

In England "swordmen" had been looked upon with especial disfavour by the powers that were, until Henry VIII., who was a great lover of all manly exercises, found it likewise advisable to turn their obnoxious existence to a disciplined and profitable channel by regularizing their position. The most redoubtable masters were allowed to form themselves into a company, with powers to increase their numbers with suitable and duly tried men, in imitation of the world-famed German *Marxbrüder* or *Marcusbrüder*. Under these conditions they were granted the lucrative monopoly of teaching the art of fight in England. The enormous privileges that the king, in course of time, conferred on his Corporation of Masters of Defence very soon enabled it to put down or absorb all the more ferocious of independent swashbucklers, and thereby to impart to the profession a moderate degree of respectability under the coat of arms granted by the royal heralds: gules a sword pendant argent.

It was in the midst of such corporations and in the fighting dens of independent swordsmen, therefore, that sprouted the first buds of systematic swordsmanship. Among the professional fencers, curiously and happily for the historian, there seem to have been a few with a literary turn of mind.

The oldest manuscripts of fence belong to Italy and Germany. They deal with the methods of carrying out single combats on foot, with any of the most generally accepted weaponslong sword and short sword, dagger and every kind of knives, mace, long and short staff, axes, &c.,-and with the tricks of wrestling recommendable therefor. Among the most comprehensive in their scope may be mentioned Il Fior di battaglia di Maestro Fiore dei *Liberi da Premariaco*; a work which, although illustrated with truly Italian taste and grace, shows, as far as its fighting style is concerned, unmistakable marks of German influence. The text of the MS. bears the date 1410, but the writer was known to be flourishing as a master of fence as early as 1383. A reprint of this invaluable codex has been published, under the care of Francesco Donati, by the Istituto Italiano d' Arti Grafiche. Another is the better known Thalhofer's Fecht Buch, gerichtliche und andere Zweykämpfe darstellend (1467), a reprint of which, with its 268 plates in facsimile, was brought out by Gustave Hergsell in Prague. The oldest printed book is likewise German: Ergründung der ritterlicher Kunst der Fechterei, von Andreas Paurnfeindt, Freifechter zu Wien (1516). This work, which is exceedingly rare, is a very complete exponent of the ways of wielding long and short blades to the utmost of their lethal capacity. It was reproduced (under various titles, very confusing to the bibliographer) in Frankfort, Augsburg, Strassburg, and finally done into French under the name of La Noble science des joueurs d'épée, published in Paris and Antwerp, 1535.

Following the Germans, the oldest printed books of fence are Italian. The first French book on the sword is known to be a translation from the German. Curiously enough, the second, and one of the most notable, *Le Traité de l'épée seule, mère de toutes armes*, of the Sieur de St Didier, published in Paris in 1573, can be shown to be a transparent adaptation of two Italian treatises, the *Trattato di scienza d' arme* of Camillo Agrippa, and Grassi's *Ragione di adoperar sicuramente l'arme*, &c.

It is about this time, namely, the latter half of the 16th century, that swordsmanship pure and simple may be said to find its origin; for then a great change is perceptible in the nature and tendency of fence books: they dissociate themselves from indecorous wrestling tricks, and approximate more and more to the consideration of what we understand by swordsmanship. The older works expounded the art of fighting generally; taught the reader a number of valuable, if not "gentlemanlike," dodges for overcoming an adversary *at all manner of weapons*: now the lucubrations of fence-masters deal almost exclusively with the walking sword, that is, the duelling weapon—with the rapier in fact, both with and without its lieutenant, the dagger.

It must be remembered that at this period private duelling and cavalier quarrelsomeness amounted to a perfect mania. The fencing master was no longer merely a teacher of efficacious, if rascally, tricks; he was becoming a model of gallant deportment; in many cases he was even a recognized arbiter on matters of honour. He was often a gentleman himself: at all events he posed as such.

Although the Germans were always redoubtable adepts at the rougher games of swordsmanship, it is in Italy that is to be found development of that nimbler, more regulated, more cunning, better controlled, kind of play which we have learned to associate with the term "fencing." It was from Italy that the art of fence first spread over Europe: not from Spain, as it has been asserted by many writers. The Italians—if we take their early books as evidence, and the fact that their phraseology was adopted by all Europe—were the first to

perceive (as soon as the problem of armour-breaking ceased to be the most important one in fight) the superior efficiency of the point. They accordingly reduced the breadth of their sword, modified the hilt portion thereof to admit of readier thrust action, and relegated the cut to quite a secondary position in their system. With this lighter weapon they devised in course of time that brilliant cunning play known as rapier fence.

The rapier was ultimately adopted everywhere by men of courtly habit; but, in England at least, it was not accepted without murmur and vituperation from the older fighting class of swordsmen, especially from the members and admirers of the English Corporation of Defence Masters. As a body Englishmen were as conservative then as they are now. They knew the value of what they had as their own, and distrusted innovations, especially from foreign quarters. The old sword and the buckler were reckoned as your true English weapons: they always went together-in fact sword and buckler play in the 16th century was evidently held to be as national a game as boxing came to be in a later age. Many are the allusions in contemporary dramatic literature to this characteristic national distrust of continental innovations. There is the well-known passage in Porter's play, The Two Angry Women of Abingdon, for instance: "Sword and buckler fight," says a sturdy Briton (in much the same tone of disgust as a British lover of fisticuffs might now assume when talking of a French "Mounseer's" foil play), "begins to grow out of use. I am sorry for it. I shall never see good manhood again. If it be once gone, this poking fight with rapier and dagger will come up. Then the tall man (that is, a courageous man and a good sword-and-buckler man) will be spitted like a cat or a rabbit!" The long-sword, that is, the two-hander, was also an essentially national weapon. It was a right-down pleasing and sturdy implement, recalling in good steel the vernacular quarter-staff of old. It required thews and sinews, and, incidentally, much beef and ale. The long-sword man looked perhaps with even greater disfavour than the smaller swashbuckler upon the new-fangled "bird-spit." "Tut, man," says Justice Shallow, typical laudator of the good bygone days, on hearing of the ridiculous Frenchman's skill with his rapier, "I could have told you more. In these times you stand on distance, your passes, stoccadoes, and I know not what; 'tis the heart, Master Page; 'tis here, 'tis here. I have seen the time, with my long-sword, I would have made you four tall fellows skip like rats."

Now, sword-and-buckler and long-sword play was no doubt a manly pursuit and a useful. But, as an every-day companion, the long-sword was incongruous to a fastidious cavalier; and, again, the buckler, indispensable adjunct to the broad swashing blade of home production, was hardly more suitable. In Elizabethan days it soon became obvious that the buckler was inadmissible as an item of gentlemanly attire. It was accordingly left to the body attendant; and the gallant took kindly to the fine rapier of Milanese or Toledan make. On the other hand, it is not difficult to understand the rapid popularity gained among the gentry by this nimble rapier, so much reviled by the older fighting men. The rapier, in fact, came in with the taste for "cavalíero" style, and may be looked upon as its fit outward symbol already in the days of Queen Mary. In Elizabeth's reign it was firmly established as your only gentlemanlike weapon.

The rapier was decidedly a foreigner; yet it suited the Elizabethan age, for it was decorative as well as practical. Its play was picturesque, fantastic—almost euphuistic, one might say—in comparison with the matter-of-fact hanger of older days. Its phraseology had a quaint, rich, southern smack, which connoted outlandish experience and gave those conversant with its intricate distinctions that marvellous character, at once precious and ruffling, which was so highly appreciated by the cavalier youth of the time. The rapier in its heyday was an admirable weapon to look at, a delicious one to wield. And, besides, in proper hands, it was undoubtedly one that was most conclusive. It was, in short, as elegant and deadly as its predecessors were sturdy and brutal.

By the time that the most perfect, namely, the Italian, rapier fence came to be generally taught in England—that is, during the last third of Elizabeth's reign—the theory of swordsmanship, as applied to a single combat, after having passed through many phases of imperfection, was already tolerably simple and practical. (The exact story of its evolution may be found in a work now included in Bohn's Libraries, *Schools and Masters of Fence*.) What may be considered as one of the cardinal actions of regulated sword-play on foot, namely, the lunge, had already been discovered. Although a great many movements which, according to modern notions, would be considered not only unnecessary but actually pernicious, still formed part of the system, it may be doubted whether, considering the character of the weapon, anything very much better could be devised, even in our present state of knowledge.

For it must be remembered that the evolution of the forms of the sword and of the theories concerning its most efficient use are closely connected. It is, in fact, sometimes difficult to decide whether the change in the shape of the weapon was the result of a development of a theory; or whether new theories were elaborated to fit alterations in these shapes due to fashion or any other reason.

When systematic fence came over to England it was already much simplified (it should be noted that improvement in the art, from its earliest days down to the present time, seems always to have been in the direction of simplification); yet, for more than a century from the appearance of the first real treatise, simplification never reached that point which would render impossible a belief in the undoubted efficacy of those "secret thrusts," of that "universal parry," of those ineluctable passes, which every master professed to teach. These precious secrets remain long, among a certain shady class of swordsmen, an object of untiring study, carried on with much the same faith and zest as the quest of the alchemist for his powder of projection, or of the Merchant Adventurer for El Dorado. There can, of course, be no such thing as an insuperable pass, a secret thrust or parry; every attack can be parried, every parry can be deceived by suitable movements. Yet there was some justification for the belief in the existence of secrets of swordsmanship in days when, as a rule, lessons of fence were given in jealous privacy; constant practice at one particular pass, especially with the long rapier, which required a great deal of muscular strength, might render any peculiarly fierce, sudden and audacious stroke excessively dangerous to one who did not happen to have opposed that stroke before. Undoubtedly there was little in Elizabethan fencing-schools of what we understand in modern days by loose-play between the pupils; practice was almost invariably conducted between scholar and teacher in private; and thus the opportunities for watching or testing any particular fencer's play were few. Such an opportunity would, as a rule, only occur on occasions of an earnest fight; and the possessor of a specially handy thrust (if it came off at all) would of course take good care that his opponent should not live to ponder over the secret. The secret, such as it was, remained. In this quise it was inevitable that an almost superstitious belief in "secret foynes," in the *botte secrète* of certain practised duellists, should arise.

Be that as it may, there is no doubt that towards the end of the 16th century there were many free-lances in the field of arms who professed to teach, in exchange for much gold, strokes that were not to be parried. From one truculent personage, whom Brantôme mentions, Tappa the Milanese, you could learn how to cut (if it so took your fancy) both eyes out of your adversary's face with a *rinverso tondo*, or circular "reverse of the point." From Caizo, another Italian teacher, at one time much favoured by the French court, lessons were to be had in the special art of ham-stringing. Caizo's botte secrète seems to have been nothing more nor less than a falso manco, that is, a left-handed drawing cut, at the inside of the knee. But, as practised and taught by him, it was infallible. This stroke has come down to us as *le coup de Jarnac*—a stroke, be it said, which, notwithstanding its bad name, was quite as fair as any in rapier fence. One Le Flamand, a French master in Paris, was reputed the inventor of a jerky time-thrust at the adversary's brows, which was a certainty. This special foyne, which was merely an *imbrocata* at the head, has become legendary in the fencing world as la botte de Nevers. English fencers have their own legends about "the very butcher of a silk button," and this brings us to the first writer on the rapier in England, Vincenzio Saviolo, the great expounder of that Italianated fence which was so obnoxious to the old masters, withal so much admired of Elizabethan courtiers; the man, in short, who-there seems to be much internal evidence to show it-was Shakespeare's fencing master.

Vincenzio was not the only foreign master of note established in London during the latter part of Elizabeth's reign. One, Signor Rocco, had, we hear, a very gorgeously appointed academy in Warwick Lane, near St Paul's, where he coined money rapidly at the expense of gulls and gallants alike. But this man came to grief ultimately in an encounter with the longsword with an old-fashioned English master of defence. Another popular teacher was a certain "Geronimo"; but he also met with a melancholy and premature end by the hands of one Cheefe, "a tall man in his fight and natural English," says George Silver, the champion of the Corporation of Masters of Defence. Saviolo, however, seems to have remained unconquered. In his work (*Vincentio Saviolo, his practise, in two bookes, the first intreating of the use of the Rapier and Dagger, the second of Honor and honorable quarrels.* London. Printed by John Wolfe, 1595) are expounded in a most typical manner the principles of rapier play.

The fencing phraseology of Elizabethan times is highly picturesque, but with difficulty intelligible in the absence of practical demonstration. Without going into technical details it may be pointed out that the long Elizabethan rapier, however admirably balanced it might otherwise be, was still too heavy to admit of quick parries with the blade itself. Thrusts, as a rule, had to be avoided by body movements, by ducking, or by a vault aside (*incartata*), or beaten away with the left hand, the hand being protected with a gauntlet or armed with a dagger. In fact, one may say that the chief characteristic of Elizabethan sword-play was the

concerted action of the left hand parrying while the right delivered the attack. Benvolio's description of Tybalt's fight is graphic:—

"With piercing steel he tilts at bold Mercutio's breast, Who, all as hot, turns deadly point to point, And with a martial scorn, with one hand beats Cold death aside, and with the other Sends it back to Tybalt, whose dexterity Retorts it...."

Of these body movements, in Saviolo's days, the most approved were: the *incartata*, just mentioned; the pass (the "passado," in the ruffling Anglo-Italian jargon), that is, passing of one foot in front of the other whilst delivering the attack; the *botta lunga*, or lunge; and the *caricado*, which was a far-reaching combination of the two. Of systematic sword movements there were six: *stocata*, a thrust delivered with nails upwards; *imbrocata*, with nails down; *punta-reversa*, any thrust delivered from the left side of the body; *mandritto*, a cut from the right; *rinverso*, one from the left; *stramazone*, a right-down blow with the point of the sword.

The new art of fence, as systematized by the principles of rapier play, was on the whole already accepted in England during the last decade of the 16th century, and was, as we know, destined to endure. Nevertheless, there were still many partisans of the older school: lovers of the national short-sword and the buckler. Their tenets are to be found embodied, in very strenuous language, by the George Silver mentioned above, a member, it would seem, of the now dwindling company of Masters of Defence, in his small work: *Paradoxe of Defence, wherein is proved the true ground of fight to be in the short ancient weapons, etc.* Printed in London, 1599. (The work has been reprinted by Messrs George Bell & Sons.)

The Italians were undoubtedly the leaders in sword-play; but, towards the beginning of the 17th century, the Spaniards developed a peculiar school of their own, which for a short while was all the mode in England as well as in France. The last trace, be it stated, of that school is now extinct. Yet the Spaniard of cavalier days was undoubtedly a formidable duellist; that was no doubt owing to the quality of the man, not of his art. The Italian's fence was artistic; the Spaniard's dexterity was essentially scientific. In Spain were to be found typically those "Captains of Complements," who not only understood in their most intricate mazes the proper "dependencies" for the cartel, but also the mathematical certainties for the "reason demonstrative." These Spanish books are marvellously pedantic; one may as well say it, frankly ridiculous. Spanish masters instructed their scholars on mathematical lines, with the help of diagrams drawn on the floor within a circle, the radius of which bore certain cryptic proportions to length of human arms and Spanish swords. The circle was inscribed in squares and intersected by sundry chords bearing occult but, it was held, incontrovertible relations to probabilities of strokes and parries. The scholar was to step from certain intersections to certain others. If this stepping was correctly done the result was a foregone victory. "A villain," exclaims Mercutio, indignantly, "who fights by the book of arithmetic." Elizabethan comedies bring us many an echo of its great expounder of mathematical swordsmanship, the magnificent Carranza, the primer inventor de la Ciencia de las Armas, the writer of treatises so abstruse on "the first and second cause," in questions of honour and swording, that they have never been quite understood to this day.

Perhaps the most curious matter in connexion with the Spanish fence is that the most splendid treatise of the sword published in the French language is in reality purely Spanish (we have seen that the first was German, and the second an adaptation of Italian treatises). This third work, *Académie de l'épée de Girard Thibault, d'Anvers, etc.*, is indeed a monument; one of the biggest books ever printed, and beyond compare the biggest book of fence. It was issued in 1628 by the Leiden Elzevirs, and took fifteen years to complete. Nine reigning princes and a vast number of private gentlemen subscribed to meet its stupendous expenses.

This work was spoken of as a "monument." It may, in some respects, be looked upon as the funeral monument of the old rapier fence; for soon after that period rose an entirely new school, one adapted to the use of a less portentous weapon, the small-sword of French pattern; a school destined to endure, and to lead to the perfection of our modern *escrime*.

The evolution of this new school is an instance of the influence of fashion upon the shape of the sword, and hence upon theories concerning its use. The French school of fencing may be said to owe its origin to the adoption, under Louis XIV., of the short court-sword in place of the over-long wide-hilted rapier of the older style. With a weapon of such reduced dimensions, of such reduced weight, the advantage of the dagger as a fencing adjunct at once ceased to be felt. The dagger, last Gothic remnant, disappeared accordingly; and there arose rapidly a new system of play, in which most of the defensive actions were performed by the blade alone; in which, at the same time (the reduction in the size and weight of the weapon rendering the efficiency of the edge almost nugatory in comparison with that of the point), all cutting action was ultimately discarded.

It is from that date, namely, from the last third of the 17th century, that the sword, as a fighting implement, becomes differentiated into two very different directions. The military weapon becomes the back-sword or sabre; the walking companion and duelling weapon becomes what we now understand by the small-sword. Two utterly different kinds of fence are practised: one, that of the back-sword; the other, what we would now call foil-play.

The magnificent old cut and thrust rapier still flourished, it is true, in parts of Italy and Spain; but by the end of the 17th century it had already become an object of ridicule in the eyes of all persons addicted to *bon ton*—and it must be remembered that *bon ton*, on the Continent everywhere and even in England, at that time, was French *ton*. The walking sword, fit for a gentleman's side, was therefore the small-sword of Versailles pattern. Its use had to be learnt from French masters of deportment; the old magniloquent Italo-Spanish rapier jargon was forgotten; French terms, barbarized into *carte, tierce, sagoon, flanquonade*, and so forth, were alone understood. In fact, French fencing became as indispensable an accomplishment to the Georgian gentlemen as the fine Italianated foyning had been to the Elizabethan.

The new French sword-play was, it must be owned, very neat, quiet, precise, and, if anything, even more deadly than the old fence. It was perfect as a decorous mode of fight, and as well suited to the lace ruffles, to the high perruque and the red heels of the "beau" as the long cup-hilted rapier had been to the booted and spurred "cavalier." The essence of its play was nimbleness of wrist; it required quickness of spirit rather than muscular vigour. It is to be noted, however, that the same sort of popular opposition met the invasion of French fencing, in post-Restoration days, that had been offered to the new-fangled Italian rapier a century earlier. During the Parliamentary period the rapier and its attendant dagger had practically disappeared; they were not true warlike weapons, their chief virtue was for duelling or sudden encounters. But the stout English back-sword survived; and with it a very definite school of back-sword play. Under Charles II., the amusement of stage or prizefighting with swords had become à la mode. Courteous assaults at many weapons, of course rebated, had been frequent functions under the auspices of the Corporation of Masters of Defence during the second half of the 16th century; it is (be it remarked) in such swordmatches on the scaffold that we find the origin of our modern prize-fights at fisticuffs. The first instance known of a challenge at sharps on the fighting stage is seen in a cartel sent by George Silver and Toby his son, as champions of the Corporation of Masters of Defence, to the obnoxious "Signors" Saviolo and Geronimo. As a matter of fact, the latter, having apparently no wish to improve their excellent social position or to risk forfeiting it, declined this invitation to a public trial of skill. But the idea was right martial and pleasing to the English mind, and the fashion of prize-fighting took the firm hold it retained on English minds till stringent legislation, not so very long ago, was brought to bear upon it. Be it as it may, this prize-fighting with swords endured until middle Georgian days; when, under the impetus given to fistic displays then by the renowned Figg (who was at one and the same time the most formidable of English fencers and the first on the long list of English pugilistic champions), back-swording became relegated to the provinces, and ultimately dwindled into our bastard "single-stick."

Fencing, in its restricted sense of purely thrusting play, was always an "academic" art in England. The first great advocate and exponent of the new small-sword fence, as taught by the new French school, was Sir William Hope of Balcomy, at one time deputy governor of Edinburgh Castle, who wrote a great number of quaint treatises of great interest to the "operative" as well as to the "speculative" fencer. Yet, oddly enough, Sir William Hope was instrumental in endeavouring to push through parliament a bill for the establishment of a court of honour, the office of which was to have been the deciding of honourable quarrels, whenever possible, without appeal to fencing skill. The House, however, being at the time excited and busy on the question of the union of Scotland and England, the bill never became act.

To resume: since it began to be practised as a regulated art one may say broadly that sword play has already passed through four main phases. The first belongs to the early Tudor days of sword and buckler encounters, whereof, if the best theoretical treatises appeared in Italy, the sturdiest practical exponents were most probably found in the British Isles. Then came the age of the rapier, coeval with the general disuse of the buckler. There may be discerned the dawn of fencing proper, which will fully arise when, in Caroline times, the outrageous length of the tucke will at last be sufficiently reduced no longer to require the dagger as a helpmate. The third was the age of the small-sword. With its light, elegant and deadly practice we enter a new atmosphere, so to speak, on fencing ground. Suppleness of wrist and precision of fingering replace the ramping and traversing, the heavy forcing play, of the Elizabethan. If the rapier age was well exemplified by Vincent Saviolo, this one was typified, albeit perhaps at a time when it was already somewhat on the wane, by the admirable Angelo Tremamondo Malevolti.

In the early days of the small-sword age men still fenced in play as they fought in earnest. But presently there appeared on the scene (during the last years of the 18th century) an implement destined to revolutionize the art and hopelessly to divide the practice of the school from that of the field: that was the fencing mask. Before this invention, small-sword play in the master's room was perforce comparatively cautious, correct, sure and above all deliberate. The long, excited, argumentative phrases of modern assaults were unknown; and so was the almost inevitably consequent scrimmage. But under the protection of the fencing mask a new school of foil-play was evolved, one in which swiftness and inveteracy of attack and parry, of *riposte, remise, counter-riposte* and *reprise*, assumed an all-important character. With the new style began to assert itself that utter recklessness of "chance hits" which in our days so markedly differentiates foil-practice from actual duelling. And this brings us to the fourth phase, the fencing art, to what may be called the age of the foil.

If anything were required to demonstrate that foil-play has nowadays passed into the state of what may be called fine art in athleticism, it would be found in the rise of the method which French masters particularize as le jeu du terrain, as duelling play in fact; a play which differs as completely from academic foil-fencing as cross-country riding in an unknown district from the *haute école* of horsemanship in the *manège*. By fencing, nowadays, that is by foil-play, we have come to mean not simply fighting for hits, but a strictly regulated game which, being quite conventional, does not take accidental hits into consideration at all. This game requires for its perfect display a combination of artificial circumstances, such as even floors, featherweight weapons, and an unconditional acceptance of a number of traditional conventions. Now, for the more utilitarian purposes of duelling, the major part of the foil fencer's special achievement and brilliancy has to be uncompromisingly sacrificed in the presence of the brutal fact that thrusts in the face, or below the waist, do count, insomuch as they may kill; that *accidental* hits in the arm or the leg cannot be disregarded, for they may, and generally do, put a premature stop to the bout. The "rub on the green" must be accepted, perforce, and indeed often plays as important a part in the issue of the game as the player's skill. The fact, however, that in earnest encounters all conventionalities which determine the value of a hit vanish, does not in any way justify the notion, prevalent among many, that a successful hit justifies any method of planting the same; and that the mere discarding of all convention in practical sword-play is sufficient to convert a bad fencer into a dangerous duellist.

It is the recognition of this fact (which, oddly enough, only came to be generally admitted, and not without reluctance, by the masters of the art during the last quarter of the 19th century) which has led to the elaboration of the modified system of small-sword fence now known as *épée* play. The new system, after passing through various rather extravagant phases of its own, gradually returned to the main principle of sound foil-play, but shorn of all futile conventions as to the relative values of hits. In *épée* play a hit is a hit, whether correctly delivered or reckless, whether intentional or the result of mere chance, and must, at the cost of much caution and patience, be guarded against.

*Per contra* the elaboration by the devotees of the *épée* of a really practical system of fence, that is, one applicable to trials in earnest, has reacted upon the teaching of foil-play by the best masters of the present day—a teaching which, without ceasing to be academical up to a certain point, takes now cognisance of the necessity of defending every part of the body as sedulously as the target of the breast, and, moreover, of warding the many possibilities of chance hits in *contretemps*.

In both plays—in the highly refined, complicated and brilliant fence of the first-class "foil," as well as in the simpler and more cautious operations of the practised duellist—the one golden rule remains, that one so quaintly expressed by M. Jourdain's *maître d'armes* in Molière's comedy: "Tout le secret des armes ne consiste qu'en deux choses, à donner et à ne point recevoir."

The point most usually lost sight of by sanguine and self-reliant scorners of conventionalities is that, although with the sword it may be comparatively easy at any time "to give," it is by no means easy to make sure of "giving without receiving." The mutual

simultaneous hit—the *coup-double*—is, in fact, the dread pitfall of all sword-play. For this reason, in courteous bouts, a hit has no real value, not only when it is actually cancelled by a counter, but when it is delivered in such a way as to admit of a counter. In short, the experience of ages and the careful consideration of probabilities have given birth to the various make-believes and restrictions that go to make sound foil-play. These restrictions are destined to act in the same direction as the warning presence of a sharp point instead of a button; and thus, as far as possible, to prevent those mutual hits—the *contretemps* of the old masters—which mar the greater number of assaults. The proper observance of those conventions, other things being equal, distinguishes the good from the indifferent swordsman, the man who uses his head from him who rushes blindly where angels fear to tread. So much for foil-play.

In modern sword-play, on the other hand, is seen the usual tendency of arts which have reached their climax of complication to return to comparative simplicity. With reference to actual duelling, it is a recognized thing that it would be the height of folly to attempt, sword in hand, the complex attacks, the full-length lunges, the neat but somewhat weak parries of the foil; so much so, that many have been led to assert that, for its ultimate practical purpose (which logically is that of duelling), the refined art of the foil, requiring so many years of assiduous and methodical work, is next to useless. It is alleged, as a proof, that many successful duellists have happened to be indifferent performers on the fencing floor. Some even maintain that a few weeks' special work in that restricted-very restricted-play, which alone can be considered safe on the field of honour, will produce as good a practical swordsman as any who have walked the schools for years. Nothing can be further from the truth: were it but on the ground that the greater includes the less; that the foil-fencer of standing who can perform with ease and accuracy all the intricate movements of the assault, who has trained his hand and eye to the lightning speed of the well-handled foil, must logically prove more than a match for the more purely practical but less trained devotees of the épée de combat. The only difference for him in the two plays is that the latter is incomparably slower in action, simpler; that it demands above all things patience and caution; and especially that, instead of protecting his breast only, the épée fencer must beware of the wily attack, or the chance hit, at every part of his body, especially at his swordhand.

The difference which still exists between the French and Italian schools of small-sword fence—by no means so wide, in point of theory, as popularly supposed—is mainly due to the dissimilarity of the weapons favoured by the two countries. The quillons, which are retained to this day in the Italian *fioretto* and *spada*, conduce to a freer use of wrist-play and a straight arm. The French, on the other hand, having long ago adopted the plain grip both for *fleuret* and *épée*, have come to rely more upon finger-play and a semi-bent arm. Both schools have long laid claims to an overwhelming superiority, on theoretical ground, over their rivals —claims which were unwarrantable. Indeed, of later days, especially since the evolution of a special "duelling play," the two schools show a decided tendency, notwithstanding the difference in the grip of the weapons, towards a mutual assimilation of principles.

As a duelling weapon—as one, that is to say, the practice of which under the restrictive influence of conventions could become elaborated into an art—the sabre (see SABRE-FENCING) returned to favour in some countries at the close of the Napoleonic wars. Considered from the historical point of view, the modern sabre, albeit now a very distant cousin of the small-sword, is as direct a descendant as the latter itself of the old cut-and-thrust rapier. It is curious, therefore, to note that, just as the practice of the "small" or thrusting sword gave rise to two rival schools, the French and the Italian, that of the sabre or cutting sword (it can hardly be called the broadsword, the blade, for the purposes of duelling play, having been reduced to slenderest proportions) became split up into two main systems, Italian and German. And further it is remarkable that the leading characteristics of the latter should still be, in a manner, "severity" and steadfastness; and that the former, the Italian, should rely, as of yore, specially upon agility and insidious cunning.

Concerning the latter-day evolution of that special and still more conventional system of fence, the *Schläger* or *Hau-rapier* play favoured by the German student, from that of the ancestral rapier, the curious will find a critical account in an article entitled "*Schlägerei*" which appeared in the *Saturday Review*, 5th of December 1885.

See also the separate articles on CANE-FENCING (*canne*); ÉPÉE-DE-COMBAT; FOIL-FENCING; SABRE-FENCING; and SINGLE-STICK.

AUTHORITIES.—The bibliography of fencing is a copious subject; but it has been very completely dealt with in the following works: *Bibliotheca dimicatoria*, in the "Fencing, Boxing and Wrestling" volume of the Badminton library (Longmans); *A Bibliography of Fencing and* 

*Duelling*, by Carl A. Thimm (John Lane). For French works more especially: *La Bibliographie de l'escrime*, by Vigeant (Paris, Motteroz); and *Ma Collection d'escrime*, by the same (Paris, Quantin). For Italian books: *Bibliografia generale della scherma*, by Gelli (Firenza, Niccolai). For Spain and Portugal: *Libros de esgrima españoles y portugueses*, by Leguina (Madrid, Los Huérfanos). Both M. Vigeant's and Cav. Gelli's works deal with the subject generally; but their entries are only critical, or even tolerably accurate, in the case of books belonging to their own countries. Concerning the history of the art, Egerton Castle's *Schools and Masters of Fence* (George Bell); Hutton's *The Sword and the Centuries* (Grant Richards); and Letainturier-Fradin's *Les Joueurs d'épée à travers les âges* (Paris, Flammarion) cover the ground, technically and ethically. As typical exponents of the French and Italian schools respectively may be mentioned here: *La Théorie de l'escrime*, by Prévost (Paris, de Brunhof) (this is the work which was adopted in the Badminton volume on Fencing), and *Trattato teorico-pratico della scherma*, by Parise (Rome, Voghera).

(E. Ca.)

**FENDER,** a metal guard or defence (whence the name) for a fire-place. When the open hearth with its logs burning upon dogs or andirons was replaced by the closed grate, the fender was devised as a finish to the smaller fire-places, and as a safeguard against the dropping of cinders upon the wooden floor, which was now much nearer to the fire. Fenders are usually of steel, brass or iron, solid or pierced. Those made of brass in the latter part of the 18th and the earlier part of the 19th centuries are by far the most elegant and artistic. They usually had three claw feet, and the pierced varieties were often cut into arabesques or conventional patterns. The lyre and other motives of the Empire style were much used during the prevalence of that fashion. The modern fender is much lower and is often little more than a kerb; it is now not infrequently of stone or marble, fixed to the floor.

**FÉNELON, BERTRAND DE SALIGNAC,** seigneur de la Mothe (1523-1589), French diplomatist, came of an old family of Périgord. After serving in the army he was sent ambassador to England in 1568. At the request of Charles IX. he endeavoured to excuse to Elizabeth the massacre of St. Bartholomew as a necessity caused by a plot which had been laid against the life of the king of France. For some time after the death of Charles IX. Fénelon was continued in his office, but he was recalled in 1575 when Catherine de' Medici wished to bring about a marriage between Elizabeth and the duke of Alençon, and thought that another ambassador would have a better chance of success in the negotiation. In 1582 Fénelon was charged with a new mission to England, then to Scotland, and returned to France in 1583. He opposed the Protestants until the end of the reign of Henry III., but espoused the cause of Henry IV. He died in 1589. His nephew in the sixth degree was the celebrated archbishop of Cambrai.

Fénelon is the author of a number of writings, among which those of general importance are *Mémoires touchant l'Angleterre et la Suisse, ou Sommaire de la négociation faite en Angleterre, l'an 1571* (containing a number of the letters of Charles and his mother, relating to Queen Elizabeth, Queen Mary and the Bartholomew massacre), published in the *Mémoires* of Castelnau (Paris, 1659); *Négociations de la Mothe Fénelon et de Michel, sieur de Mauvissière, en Angleterre*; and *Dépêches de M. de la Mothe Fénelon, Instructions au sieur de la Mauvissière*, both contained in the edition of Castelnau's *Mémoires*, published at Brussels in 1731. The correspondence of Fénelon was published at Paris in 1838-1841, in 7 vols. 8vo.

See "Lettres de Catherine de' Médicis," edited by Hector de la Ferrière (1880 seq.) in the *Collection de documents inédits sur l'histoire de France*.

FÉNELON, FRANÇOIS DE SALIGNAC DE LA MOTHE (1651-1715), French writer and archbishop of Cambrai, was born at the château of Fénelon in Périgord on the 6th of August 1651. His father, Pons, comte de Fénelon, was a country gentleman of ancient lineage, large family and small estate. Owing to his delicate health the boy's early education was carried on at home; though he was able to spend some time at the neighbouring university of Cahors. In 1666 he came to Paris, under charge of his father's brother, Antoine, marquis de Fénelon, a retired soldier of distinction, well known for his religious zeal. Three years later he entered the famous theological college of Saint Sulpice. Here, while imbibing the somewhat mystical piety of the house, he had an excellent chance of carrying on his beloved classical studies; indeed, at one time he proposed to couple sacred and profane together, and go on a missionary journey to the Levant. "There I shall once more make the Apostle's voice heard in the Church of Corinth. I shall stand on that Areopagus where St. Paul preached to the sages of this world an unknown God. But I do not scorn to descend thence to the Piraeus, where Socrates sketched the plan of his republic. I shall mount to the double summit of Parnassus; I shall revel in the joys of Tempe." Family opposition, however, put an end to this attractive prospect. Fénelon remained at Saint Sulpice till 1679, when he was made "superior" of a "New Catholic" sisterhood in Paris-an institution devoted to the conversion of Huguenot ladies. Of his work here nothing is known for certain. Presumably it was successful; since in the winter of 1685, just after the revocation of the edict of Nantes, Fénelon was put at the head of a number of priests, and sent on a mission to the Protestants of Saintonge, the district immediately around the famous Huguenot citadel of La Rochelle. To Fénelon such employment was clearly uncongenial; and if he was rather too ready to employ unsavoury methods-such as bribery and espionage-among his proselytes, his general conduct was kindly and statesmanlike in no slight degree. But neither in his actions nor in his writings is there the least trace of that belief in liberty of conscience ascribed to him by 18th-century philosophers. Tender-hearted he might be in practice; but toleration he declares synonymous with "cowardly indulgence and false compassion."

Meanwhile the marquis de Fénelon had introduced his nephew into the devout section of the court, dominated by Mme de Maintenon. He became a favourite disciple of Bossuet, and at the bishop's instance undertook to refute certain metaphysical errors of Father Malebranche. Followed thereon an independent philosophical Treatise on the Existence of God, wherein Fénelon rewrote Descartes in the spirit of St Augustine. More important were his *Dialogues on Eloquence*, wherein he entered an eloquent plea for greater simplicity and naturalness in the pulpit, and urged preachers to take the scriptural, natural style of Bossuet as their model, rather than the coldly analytic eloquence of his great rival, Bourdaloue. Still more important was his Treatise on the Education of Girls, being the first systematic attempt ever made to deal with that subject as a whole. Hence it was probably the most influential of all Fénelon's books, and guided French ideas on the guestion all through the 18th century. It holds a most judicious balance between the two opposing parties of the time. On the one side were the précieuses, enthusiasts for the "higher" education of their sex; on the other were the heavy Philistines, so often portrayed by Molière, who thought that the less girls knew the better they were likely to be. Fénelon sums up in favour of the cultivated house-wife; his first object was to persuade the mothers to take charge of their girls themselves, and fit them to become wives and mothers in their turn.

The book brought its author more than literary glory. In 1689 Fénelon was gazetted tutor to the duke of Burgundy, eldest son of the dauphin, and eventual heir to the crown. The character of this strange prince has been drawn once for all by Saint-Simon. Shortly it may be said that he was essentially a mass of contradictions-brilliant, passionate to the point of mania, but utterly weak and unstable, capable of developing into a saint or a monster, but quite incapable of becoming an ordinary human being. Fénelon assailed him on the religious side, and managed to transform him into a devotee, exceedingly affectionate, earnest and religious, but woefully lacking in tact and common sense. In justice, however, it should be added that his health was being steadily undermined by a mysterious internal complaint, and that Fénelon's tutorship came to an end on his disgrace in 1697, before the pupil was fifteen. The abiding result of his tutorship is a code of carefully graduated moral lessons—the Fables, the Dialogues of the Dead (a series of imaginary conversations between departed heroes), and finally *Télémaque*, where the adventures of the son of Ulysses in search of a father are made into a political novel with a purpose. Not, indeed, that Fénelon meant his book to be the literal paper Constitution some of his contemporaries thought it. Like other Utopias, it is an easy-going compromise between dreams and possibilities. Its one object was to broaden Burgundy's mind, and ever keep before his eyes the "great and holy maxim that kings exist for the sake of their subjects, not subjects for the sake of kings." Here and there Fénelon carries his philanthropy to lengths curiously prophetic of the age of Rousseau-fervid denunciation of war, belief in nature and fraternity of nations. And he has a truly 18thcentury belief in the all-efficiency of institutions. Mentor proposes to "change the tastes and habits of the whole people, and build up again from the very foundations." Fénelon is on firmer ground when he leads a reaction against the "mercantile system" of Colbert, with its crushing restrictions on trade; or when he sings the praises of agriculture, in the hope of bringing back labour to the land, and thereby ensuring the physical efficiency of the race. Valuable and far-sighted as were these ideas, they fitted but ill into the scheme of a romance. Seldom was Voltaire wider of the mark than when he called *Télémaque* a Greek poem in French prose. It is too motivé, too full of ingenious contrivances, to be really Greek. As, in Fénelon's own opinion, the great merit of Homer was his "amiable simplicity," so the great merit of *Télémaque* is the art that gives to each adventure its hidden moral, to each scene some sly reflection on Versailles. Under stress of these preoccupations, however, organic unity of structure went very much to the wall, and *Télémaque* is a grievous offender against its author's own canons of literary taste. Not that it altogether lost thereby. There is a curious richness in this prose, so full of rhythm and harmony, that breaks at every moment into verse, as it drags itself along its slow and weary way, half-fainting under an overload of epithets. And although no single feature of the book is Greek, there hangs round it a moral fragrance only to be called forth by one who had fulfilled the vow of his youth, and learnt to breathe, as purely as on "the double summit of Parnassus," the very essence of the antique.

Télémaque was published in 1699. Four years before, Fénelon had been appointed archbishop of Cambrai, one of the richest benefices in France. Very soon afterwards, however, came the great calamity of his life. In the early days of his tutorship he had met the Quietist apostle, Mme Guyon (q.v.), and had been much struck by some of her ideas. These he developed along lines of his own, where Christian Neoplatonism curiously mingles with theories of chivalry and disinterestedness, borrowed from the précieuses of his own time. His mystical principles are set out at length in his Maxims of the Saints, published in 1697 (see QUIETISM). Here he argues that the more love we have for ourselves, the less we can spare for our Maker. Perfection lies in getting rid of self-hood altogether-in never thinking of ourselves, or even of the relation in which God stands to us. The saint does not love Christ as his Redeemer, but only as the Redeemer of the human race. Bossuet (q.v.) attacked this position as inconsistent with Christianity. Fénelon promptly appealed to Rome, and after two years of bitter controversy his book was condemned by Innocent XII. in 1699. As to the merits of the controversy opinion will always be divided. On the point of doctrine all good judges agree that Fénelon was wrong; though many still welcome the obiter dictum of Pope Innocent, that Fénelon erred by loving God too much, and Bossuet by loving his neighbour too little. Of late years, however, Bossuet has found powerful defenders; and if they have not cleared his character from reproach, they have certainly managed to prove that Fénelon's methods of controversy were not much better than his. One of the results of the quarrel was Fénelon's banishment from court; for Louis XIV. had ardently taken Bossuet's side, and brought all the batteries of French influence to bear on the pope. Immediately on the outbreak of the controversy, Fénelon was exiled to his diocese, and during the last eighteen years of his life he was only once allowed to leave it.

To Cambrai, accordingly, all his energies were now directed. Even Saint-Simon allows that his episcopal duties were perfectly performed. Tours of inspection, repeated several times a year, brought him into touch with every corner of his diocese. It was administered with great strictness, and yet on broad and liberal lines. There was no bureaucratic fussiness, no seeking after popularity; but every man, whether great or small, was treated exactly as became his station in the world. And Saint-Simon bears the same witness to his government of his palace. There he lived with all the piety of a true pastor, yet with all the dignity of a great nobleman, who was still on excellent terms with the world. But his magnificence made no one angry, for it was kept up chiefly for the sake of others, and was exactly proportionate to his place. With all its luxuries and courtly ease, his house remained a true bishop's palace, breathing the strictest discipline and restraint. And of all this chastened dignity the archbishop was himself the ever-present, ever-inimitable model—in all that he did the perfect churchman, in all the high-bred noble, in all things, also, the author of *Télémaque*.

The one great blot on this ideal existence was his persecution of the Jansenists (see JANSENISM). His theories of life were very different from theirs; and they had taken a strong line against his *Maxims of the Saints*, holding that visionary theories of perfection were ill-fitted for a world where even the holiest could scarce be saved. To suppress them, and to gain a better market for his own ideas, he was even ready to strike up an alliance with the Jesuits, and force on a reluctant France the doctrine of papal infallibility. His time was much better employed in fitting his old pupil, Burgundy, for a kingship that never came. Louis XIV. seldom allowed them to meet, but for years they corresponded; and nothing is more admirable than the mingled tact and firmness with which Fénelon spoke his mind about the

prince's faults. This exchange of letters became still more frequent in 1711, when the wretched dauphin died and left Burgundy heir-apparent to the throne. Fénelon now wrote a series of memorable criticisms on the government of Louis XIV., accompanied by projects of reform, not always quite so wise. For his practical political service was to act as an alarmbell. Much more clearly than most men, he saw that the Bourbons were tottering to their fall, but how to prevent that fall he did not know.

Not that any amount of knowledge would have availed. In 1712 Burgundy died, and with him died all his tutor's hopes of reform. From this moment his health began to fail, though he mustered strength enough to write a remarkable *Letter to the French Academy* in the autumn of 1714. This is really a series of general reflections on the literary movement of his time. As in his political theories, the critical element is much stronger than the constructive. Fénelon was feeling his way away from the rigid standards of Boileau to "a Sublime so simple and familiar that all may understand it." But some of his methods were remarkably erratic; he was anxious, for instance, to abolish verse, as unsuited to the genius of the French. In other respects, however, he was far before his age. The 17th century has treated literature as it treated politics and religion; each of the three was cooped up in a water-tight compartment by itself. Fénelon was one of the first to break down these partition-walls, and insist on viewing all three as products of a single spirit, seen at different angles.

A few weeks after the Letter was written, Fénelon met with a carriage-accident, and the shock proved too much for his enfeebled frame. On the 7th of January 1715 he died at the age of 63. Ever since, his character has been a much-discussed enigma. Bossuet can only be thought of as the high-priest of authority and common-sense; but Fénelon has been made by turns into a sentimentalist, a mystical saint, an 18th-century philosophe, an ultramontane churchman and a hysterical hypocrite. And each of these views, except the last, contains an element of truth. More than most men, Fénelon "wanders between two worlds-one dead, the other powerless to be born." He came just at a time when the characteristic ideas of the 17th century-the ideas of Louis XIV., of Bossuet and Boileau-had lost their savour, and before another creed could arise to take their place. Hence, like most of those who break away from an established order, he seems by turns a revolutionist and a reactionary. Such a man expresses his ideas much better by word of mouth than in the cold formality of print; and Fénelon's contemporaries thought far more highly of his conversation than his books. That downright, gossiping German princess, the duchess of Orleans, cared little for the Maxims; but she was enraptured by their author, and his "ugly face, all skin and bone, though he laughed and talked quite unaffectedly and easily." An observer of very different mettle, the great lawyer d'Aquesseau, dwells on the "noble singularity, that gave him an almost prophetic air. Yet he was neither passionate nor masterful. Though in reality he governed others, it was always by seeming to give way; and he reigned in society as much by the attraction of his manners as by the superior virtue of his parts. Under his hand the most trifling subjects gained a new importance; yet he treated the gravest with a touch so light that he seemed to have invented the sciences rather than learnt them, for he was always a creator, always original, and himself was imitable of none." Still better is Saint-Simon's portrait of Fénelon as he appeared about the time of his appointment to Cambrai-tall, thin, well-built, exceedingly pale, with a great nose, eyes from which fire and genius poured in torrents, a face curious and unlike any other, yet so striking and attractive that, once seen, it could not be forgotten. There were to be found the most contradictory qualities in perfect agreement with each other-gravity and courtliness, earnestness and gaiety, the man of learning, the noble and the bishop. But all centred in an air of high-bred dignity, of graceful, polished seemliness and wit—it cost an effort to turn away one's eyes.

AUTHORITIES.—The best complete edition of Fénelon was brought out by the abbé Gosselin of Saint Sulpice (10 vols., Paris, 1851). Gosselin also edited the *Histoire de Fénelon*, by Cardinal Bausset (4 vols., Paris, 1850). Modern authorities are *Fénelon à Cambrai* (Paris, 1885), by Emmanuel de Broglie; *Fénelon*, by Paul Janet (Paris, 1892); *Bossuet et Fénelon*, by L. Crouslé (2 vols., Paris, 1894); J. Lemaître, *Fénelon* (1910). In English there are: *Fénelon, his Friends and Enemies*, by E.K. Sanders (1901); and *François de Fénelon*, by Lord St Cyres (1906); see also the *Quarterly Review* for January 1902, and M. Masson, *Fénelon et Madame Guyon* (1907). (St. C.)

**FENESTELLA,** Roman historian and encyclopaedic writer, flourished in the reign of Tiberius. If the notice in Jerome be correct, he lived from 52 B.C. to A.D. 19 (according to

others 35 B.C.-A.D. 36). Taking Varro for his model, Fenestella was one of the chief representatives of the new style of historical writing which, in the place of the brilliant descriptive pictures of Livy, discussed curious and out-of-the-way incidents and customs of political and social life, including literary history. He was the author of an *Annales*, probably from the earliest times down to his own days. The fragments indicate the great variety of subjects discussed: the origin of the appeal to the people (*provocatio*); the use of elephants in the circus games; the wearing of gold rings; the introduction of the olive tree; the material for making the toga; the cultivation of the soil; certain details as to the lives of Cicero and Terence. The work was very much used (mention is made of an abridged edition) by Pliny the elder, Asconius Pedianus (the commentator on Cicero), Nonius, and the philologists.

Fragments in H. Peter, *Historicorum Romanorum fragmenta* (1883); see also monographs by L. Mercklin (1844) and J. Poeth (1849); M. Schanz, *Geschichte der röm. Litt.* ed. 2 (1901); Teuffel, *Hist. of Roman Literature*, p. 259. A work published under the name of L. Fenestella (*De magistratibus et sacerdotiis Romanorum*, 1510) is really by A.D. Fiocchi, canon and papal secretary, and was subsequently published as by him (under the latinized form of his name, Floccus), edited by Aegidius Witsius (1561).

**FENESTRATION** (from O. Fr. *fenestre*, modern *fenêtre*, Lat. *fenestra*, a window, connected with Gr.  $\varphi\alpha(\nu\epsilon\iota\nu, to show)$ , an architectural term applied to the arrangement of windows on the front of a building, more especially when, in the absence of columns or pilasters separating them, they constitute its chief architectural embellishment. The term "fenestral" is given to a frame or "chassis" on which oiled paper or thin cloth was strained to keep out wind and rain when the windows were not glazed.

FENIANS, or FENIAN BROTHERHOOD, the name of a modern Irish-American revolutionary secret society, founded in America by John O'Mahony (1816-1877) in 1858. The name was derived from an anglicized version of *fiann, féinne,* the legendary band of warriors in Ireland led by the hero Find Mac Cumaill (see FINN Mac Cool; and Celt: Celtic Literature: Irish); and it was given to his organization of conspirators by O'Mahony, who was a Celtic scholar and had translated Keating's History of Ireland in 1857. After the collapse of William Smith O'Brien's attempted rising in 1848, O'Mahony, who was concerned in it, escaped abroad, and since 1852 had been living in New York. James Stephens, another of the "men of 1848," had established himself in Paris, and was in correspondence with O'Mahony and other disaffected Irishmen at home and abroad. A club called the Phoenix National and Literary Society, with Jeremiah Donovan (afterwards known as O'Donovan Rossa) among its more prominent members, had recently been formed at Skibbereen; and under the influence of Stephens, who visited it in May 1858, it became the centre of preparations for armed rebellion. About the same time O'Mahony in the United States established the "Fenian Brotherhood," whose members bound themselves by an oath of "allegiance to the Irish Republic, now virtually established," and swore to take up arms when called upon and to yield implicit obedience to the commands of their superior officers. The object of Stephens, O'Mahony and other leaders of the movement was to form a great league of Irishmen in all parts of the world against British rule in Ireland. The organization was modelled on that of the French Jacobins at the Revolution; there was a "Committee of Public Safety" in Paris, with a number of subsidiary committees, and affiliated clubs; its operations were conducted secretly by unknown and irresponsible leaders; and it had ramifications in every part of the world, the "Fenians," as they soon came to be generally called, being found in Australia, South America, Canada, and above all in the United States, as well as in the large centres of population in Great Britain such as London, Manchester and Glasgow. It is, however, noteworthy that Fenianism never gained much hold on the tenant-farmers or agricultural labourers in Ireland, although the scurrilous press by which it was supported preached a savage vendetta against the landowners, who were to be shot down "as we shoot robbers and rats."<sup>1</sup> The movement was denounced by the priests of the Catholic Church.

It was, however, some few years after the foundation of the Fenian Brotherhood before it

made much headway, or at all events before much was heard of it outside the organization itself, though it is probable that large numbers of recruits had enrolled themselves in its "circles." The Phoenix Club conspiracy in Kerry was easily crushed by the government, who had accurate knowledge from an informer of what was going on. Some twenty ringleaders were put on trial, including Donovan, and when they pleaded guilty were, with a single exception, treated with conspicuous leniency. But after a convention held at Chicago under O'Mahony's presidency in November 1863 the movement began to show signs of life. About the same time the Irish People, a revolutionary journal of extreme violence, was started in Dublin by Stephens, and for two years was allowed without molestation by the government to advocate armed rebellion, and to appeal for aid to Irishmen who had had military training in the American Civil War. At the close of that war in 1865 numbers of Irish who had borne arms flocked to Ireland, and the plans for a rising matured. The government, well served as usual by informers, now took action. In September 1865 the Irish People was suppressed, and several of the more prominent Fenians were sentenced to terms of penal servitude; Stephens, through the connivance of a prison warder, escaped to France. The Habeas Corpus Act was suspended in the beginning of 1866, and a considerable number of persons were arrested. Stephens issued a bombastic proclamation in America announcing an imminent general rising in Ireland; but he was himself soon afterwards deposed by his confederates, among whom dissension had broken out. A few Irish-American officers, who landed at Cork in the expectation of commanding an army against England, were locked up in gaol; some petty disturbances in Limerick and Kerry were easily suppressed by the police.

In the United States, however, the Fenian Brotherhood, now under the presidency of W.R. Roberts, continued plotting. They raised money by the issue of bonds in the name of the "Irish Republic," which were bought by the credulous in the expectation of their being honoured when Ireland should be "a nation once again." A large quantity of arms was purchased, and preparations were openly made for a raid into Canada, which the United States government took no steps to prevent. It was indeed believed that President Andrew Johnson was not indisposed to turn the movement to account in the settlement of the Alabama claims. The Fenian "secretary for war" was General T.W. Sweeny (1820-1892), who temporarily (Jan. 1865-Nov. 1866) was struck off the American army list. The command of the expedition was entrusted to John O'Neill, who crossed the Niagara river at the head of some 800 men on the 1st of June 1866, and captured Fort Erie. But large numbers of his men deserted, and at Ridgeway the Fenians were routed by a battalion of Canadian volunteers. On the 3rd of June the remnant surrendered to the American warship "Michigan"; and the tardy issue of President Johnson's proclamation enforcing the laws of neutrality brought the raid to an ignominious end; the prisoners were released, and the arms taken from the raiders were, according to Henri Le Caron, "returned to the Fenian organization, only to be used for the same purpose some four years later." In December 1867, John O'Neill became president of the Brotherhood in America, which in the following year held a great convention in Philadelphia attended by over 400 properly accredited delegates, while 6000 Fenian soldiers, armed and in uniform, paraded the streets. At this convention a second invasion of Canada was determined upon; while the news of the Clerkenwell explosion in London (see below) was a strong incentive to a vigorous policy. Le Caron (q.v.), who, while acting as a secret agent of the English government, held the position of "inspector-general of the Irish Republican Army," asserts that he "distributed fifteen thousand stands of arms and almost three million rounds of ammunition in the care of the many trusted men stationed between Ogdensburg and St Albans," in preparation for the intended raid. It took place in April 1870, and proved a failure not less rapid or complete than the attempt of 1866. The Fenians under O'Neill's command crossed the Canadian frontier near Franklin, Vt., but were dispersed by a single volley from Canadian volunteers; while O'Neill himself was promptly arrested by the United States authorities acting under the orders of President Grant.

Meantime in Ireland, after the suppression of the *Irish People*, disaffection had continued to smoulder, and during the latter part of 1866 Stephens endeavoured to raise funds in America for a fresh rising planned for the following year. A bold move on the part of the Fenian "circles" in Lancashire had been concerted in co-operation with the movement in Ireland. An attack was to be made on Chester, the arms stored in the castle were to be seized, the telegraph wires cut, the rolling stock on the railway to be appropriated for transport to Holyhead, where shipping was to be seized and a descent made on Dublin before the authorities should have time to interfere. This scheme was frustrated by information given to the government by the informer John Joseph Corydon, one of Stephens's most trusted agents. Some insignificant outbreaks in the south and west of Ireland brought "the rebellion of 1867" to an ignominious close. Most of the ringleaders were arrested, but although some of them were sentenced to death none was executed. On the 11th of September 1867, Colonel Thomas J. Kelly, "deputy central organizer of the Irish Republic,"

one of the most dangerous of the Fenian conspirators, was arrested in Manchester, whither he had gone from Dublin to attend a council of the English "centres," together with a companion, Captain Deasy. A plot to effect the rescue of these prisoners was hatched by Edward O'Meaher Condon with other Manchester Fenians; and on the 18th of September, while Kelly and Deasy were being conveyed through the city from the court-house, the prison van was attacked by Fenians armed with revolvers, and in the scuffle police-sergeant Brett, who was seated inside the van, was shot dead. Condon, Allen, Larkin, Maguire and O'Brien, who had taken a prominent part in the rescue, were arrested. All five were sentenced to death; but Condon, who was an American citizen, was respited at the request of the United States government, his sentence being commuted to penal servitude for life, and Maguire was granted a pardon. Allen, Larkin, and O'Brien were hanged on the 23rd of November for the murder of Brett. Attempts were made at the time, and have since been repeated, to show that these men were unjustly sentenced, the contention of their sympathizers being, first, that as "political offenders" they should not have been treated as ordinary murderers; and, secondly, that as they had no deliberate intention to kill the police-sergeant, the shot that caused his death having been fired for the purpose of breaking open the lock of the van, the crime was at worst that of manslaughter. But even if these pleas rest on a correct statement of the facts they have no legal validity, and they afford no warrant for the title of the "Manchester martyrs" by which these criminals are remembered among the more extreme nationalists in Ireland and America. Kelly and Deasy escaped to the United States, where the former obtained employment in the New York custom-house.

In the same month, November 1867, one Richard Burke, who had been employed by the Fenians to purchase arms in Birmingham, was arrested and lodged in Clerkenwell prison in London. While he was awaiting trial a wall of the prison was blown down by gunpowder, the explosion causing the death of twelve persons, and the maiming of some hundred and twenty others. This outrage, for which Michael Barrett suffered the death penalty, powerfully influenced W.E. Gladstone in deciding that the Protestant Church of Ireland should be disestablished as a concession to Irish disaffection. In 1870, Michael Davitt (q.v.) was sentenced to fifteen years' penal servitude for participation in the Fenian conspiracy; and before he was released on ticket of leave the name Fenian had become practically obsolete, though the "Irish Republican Brotherhood" and other organizations in Ireland and abroad carried on the same tradition and pursued the same policy in later years. In 1879, John Devoy, a member of the Fenian Brotherhood, promoted a "new departure" in America, by which the "physical force party" allied itself with the "constitutional movement" under the leadership of C.S. Parnell (q.v.); and the political conspiracy of the Fenians was combined with the agarian revolution inaugurated by the Land League.

See William O'Connor Morris, Ireland from 1798 to 1898 (London, 1898); Two Centuries of Irish History, 1601-1870, edited by R. Barry O'Brien (London, 1907); Henri Le Caron, Twenty-five Years in the Secret Service (London, 1892); Patrick J.P. Tynan, The Irish National Invincibles and their Times (London, 1896); Justin M'Carthy, A History of our own Times (4 vols., London, 1880).

(R. J. M.)

1 William O'Connor Morris, Ireland 1798-1898, p. 195.

**FENNEL**, *Foeniculum vulgare* (also known as *F. capillaceum*), a perennial plant of the natural order Umbelliferae, from 2 to 3 or (when cultivated) 4 ft. in height, having leaves three or four times pinnate, with numerous linear or awl-shaped segments, and glaucous compound umbels of about 15 or 20 rays, with no involucres, and small yellow flowers, the petals incurved at the tip. The fruit is laterally compressed, five-ridged, and has a large single resin-canal or "vitta" under each furrow. The plant appears to be of south European origin, but is now met with in various parts of Britain and the rest of temperate Europe, and in the west of Asia. The dried fruits of cultivated plants from Malta have an aromatic taste and odour, and are used for the preparation of fennel water, valued for its carminative properties. It is given in doses of 1 to 2 oz., the active principle being a volatile oil which is probably the same as oil of anise. The shoots of fennel are eaten blanched, and the seeds are used for flavouring. The fennel seeds of commerce are of several sorts. Sweet or Roman fennel seeds are the produce of a tall perennial plant, with umbels of 25-30 rays, which is cultivated near Nismes in the south of France; they are elliptical and arched in form, about  $\frac{2}{5}$ 

in. long and a quarter as broad, and are smooth externally, and of a colour approaching a pale green. Shorter and straighter fruits are obtained from the annual variety of *F. vulgare* known as *F. Panmorium* (*Panmuhuri*) or Indian fennel, and are employed in India in curries, and for medicinal purposes. Other kinds are the German or Saxon fruits, brownish-green in colour, and between  $\frac{1}{5}$  and  $\frac{1}{4}$  in. in length, and the broader but smaller fruits of the wild or bitter fennel of the south of France. A variety of fennel, *F. dulce*, having the stem compressed at the base, and the umbel 6-8 rayed, is grown in kitchen-gardens for the sake of its leaves.

Giant fennel is the name applied to the plant *Ferula communis*, a member of the same natural order, and a fine herbaceous plant, native in the Mediterranean region, where the pith of the stem is used as tinder. Hog's or sow fennel is the species *Peucedanum officinale*, another member of the Umbelliferae.

**FENNER, DUDLEY** (*c.* 1558-1587), English puritan divine, was born in Kent and educated at Cambridge University. There he became an adherent of Thomas Cartwright (1535-1603), and publicly expounded his presbyterian views, with the result that he was obliged to leave Cambridge without taking his degree. For some months he seems to have assisted the vicar of Cranbrook, Kent, but it is doubtful whether he received ordination. He next followed Cartwright to Antwerp, and, having received ordination according to rite of the Reformed church, assisted Cartwright for several years in preaching to the English congregation there. The leniency shown by Archbishop Grindal to puritans encouraged him to return to England, and he became curate of Cranbrook in 1583. In the same year, however, he was one of seventeen Kentish ministers suspended for refusing to sign an acknowledgment of the queen's supremacy and of the authority of the Prayer Book and articles. He was imprisoned for a time, but eventually regained his liberty and spent the remainder of his life as chaplain in the Reformed church at Middleburgh.

A list of his authentic works is given in Cooper's *Athenae Cantabrigienses* (Cambridge, 1858-1861). They rank among the best expositions of the principles of puritanism.

**FENNY STRATFORD**, a market town in the Buckingham parliamentary division of Buckinghamshire, England, 48 m. N.W. by N. of London on a branch of the London & North-Western railway. Pop. of urban district (1901), 4799. It lies in an open valley on the west (left) bank of the Ouzel, where the great north-western road from London, the Roman Watling Street, crosses the stream, and is 1 m. E. of Bletchley, an important junction on the main line of the North-Western railway. The church of St Martin was built (*c.* 1730) on the site of an older church at the instance of Dr Browne Willis, an eminent antiquary (d. 1760), buried here; but the building has been greatly enlarged. A custom instituted by Willis on St Martin's Day (November 11th) includes a service in the church, the firing of some small cannon called the "Fenny Poppers," and other celebrations. The trade of the town is mainly agricultural.

**FENRIR,** or FENRIS, in Scandinavian mythology, a water-demon in the shape of a huge wolf. He was the offspring of Loki and the giantess Angurboda, who bore two other children, Midgard the serpent, and Hel the goddess of death. Fenrir grew so large that the gods were afraid of him and had him chained up. But he broke the first two chains. The third, however, was made of the sound of a cat's footsteps, a man's beard, the roots of a mountain, a fish's breath and a bird's spittle. This magic bond was too strong for him until Ragnarok (Judgment Day), when he escaped and swallowed Odin and was in turn slain by Vidar, the latter's son.

**FENS**,<sup>1</sup> a district in the east of England, possessing a distinctive history and peculiar characteristics. It lies west and south of the Wash, in Lincolnshire, Huntingdonshire, Cambridgeshire and Norfolk, and extends over more than 70 m. in length (Lincoln to Cambridge) and some 35 m. in maximum breadth. (Stamford to Brandon in Suffolk), its area being considerably over half a million acres. Although low and flat, and seamed by innumerable water-courses, the entire region is not, as the Roman name of *Metaris Aestuarium* would imply, a river estuary, but a bay of the North Sea, silted up, of which the Wash is the last remaining portion. Hydrographically, the Fens embrace the lower parts of the drainage-basins of the rivers Witham, Welland, Nene and Great Ouse; and against these streams, as against the ocean, they are protected by earthen embankments, 10 to 15 ft. high. As a rule the drainage water is lifted off the Fens into the rivers by means of steam-pumps, formerly by windmills.

General History.—According to fairly credible tradition, the first systematic attempt to drain the Fens was made by the Romans. They dug a catchwater drain (as the artificial fenland water-courses are called), the Caer or Car Dyke, from Lincoln to Ramsey (or, according to Stukeley, as far as Cambridge), along the western edge of the Fens, to carry off the precipitation of the higher districts which border the fenland, and constructed alongside the Welland and on the seashore earthen embankments, of which some 150 m. survive. Mr S.H. Miller is disposed to credit the native British inhabitants of the Fens with having executed certain of these works. The Romans also carried causeways over the country. After their departure from Britain in the first half of the 5th century the Fens fell into neglect; and despite the preservation of the woodlands for the purposes of the chase by the Norman and early Plantagenet kings, and the unsuccessful attempt which Richard de Rulos, chamberlain of William the Conqueror, made to drain Deeping Fen, the fenland region became almost everywhere waterlogged, and relapsed to a great extent into a state of nature. In addition to this it was ravaged by serious inundations of the sea, for example, in the years 1178, 1248 (or 1250), 1288, 1322, 1335, 1467, 1571. Yet the fenland was not altogether a wilderness of reed-grown marsh and watery swamp. At various spots, more particularly in the north and in the south, there existed islands of firmer and higher ground, resting generally on the boulder clays of the Glacial epochs and on the inter-Glacial gravels of the Palaeolithic age. In these isolated localities members of the monastic orders (especially at a later date the Cistercians) began to settle after about the middle of the 7th century. At Medeshampstead (i.e. Peterborough), Ely, Crowland, Ramsey, Thorney, Spalding, Peakirk, Swineshead, Tattershall, Kirkstead, Bardney, Sempringham, Bourne and numerous other places, they made settlements and built churches, monasteries and abbeys. In spite of the incursions of the predatory Northmen and Danes in the 9th and 10th centuries, and of the disturbances consequent upon the establishment of the Camp of Refuge by Hereward the Wake in the fens of the Isle of Ely in the 11th century, these scattered outposts continued to shed rays of civilization across the lonely Fenland down to the dissolution of the monasteries in the reign of Henry VIII. Then they, too, were partly overtaken by the fate which befell the rest of the Fens; and it was only in the end of the 18th and the beginning of the 19th century that the complete drainage and reclamation of the Fen region was finally effected. Attempts on a considerable scale were indeed made to reclaim them in the 17th century, and the work as a whole forms one of the most remarkable chapters of the industrial history of England. Thus, the reclamation of the Witham Fens was taken up by Sir Anthony Thomas, the earl of Lindsey, Sir William Killigrew, King Charles I., and others in 1631 and succeeding years; and that of the Deeping or Welland Fens in 1638 by Sir W. Ayloff, Sir Anthony Thomas and other "adventurers," after one Thomas Lovell had ruined himself in a similar attempt in the reign of Queen Elizabeth. The earl of Lindsey received 24,000 acres for his work. Charles I., declaring himself the "undertaker" of the Holland Fen, claimed 8000 out of its 22,000 acres as his share.

A larger work than these, however, was the drainage of the fens of the Nene and the Great Ouse, comprehending the wide tract known as the Bedford level. This district took name from the agreement of Francis, earl of Bedford, the principal land-holder, and thirteen other adventurers, with Charles I. in 1634, to drain the level, on condition of receiving 95,000 acres of the reclaimed land. A partial attempt at drainage had been made (1478-1490) by John Morton, when bishop of Ely, who constructed Morton's Leam, from Peterborough to the sea, to carry the waters of the Nene, but this also proved a failure. An act was passed, moreover, in 1602 for effecting its reclamation; and Lord Chief-Justice Popham (whose name is preserved in Popham's Eau, S.E. of Wisbech) and a company of Londoners began the work in 1605; but the first effectual attempt was that of 1634. The work was largely directed by the Dutch engineer Cornelius Vermuyden, who had begun work in the Fens in 1621, and was knighted in 1628.

Three years after the agreement of the earl of Bedford and his partners with the king, after an outlay of £100,000 on the part of the company, the contract was annulled, on the fraudulent plea that the works were insufficient; and an offer was made by King Charles to undertake its completion on condition of receiving 57,000 acres in addition to the amount originally agreed on. This unjust attempt was frustrated by the breaking out of the civil war; and no further attempt at drainage was made until 1649, when the parliament reinstated the earl of Bedford's successor in his father's rights. After an additional outlay of £300,000, the adventurers received 95,000 acres of reclaimed land, according to the contract, which, however, fell far short of repaying the expense of the undertaking. In 1664 a royal charter was obtained to incorporate the company, which still exists, and carries on the concern under a governor, 6 bailiffs, 20 conservators, and a commonalty, each of whom must possess 100 acres of land in the level, and has a voice in the election of officers. The conservators must each possess not less than 280 acres, the governor and bailiffs each 400 acres. The original adventurers had allotments of land according to their interest of the original 95,000 acres; but Charles II., on granting the charter, took care to secure to the crown a lot of 12,000 acres out of the 95,000, which, however, is held under the directors, whereas the allotments are not held in common, though subject to the laws of the corporation. The level was divided in 1697 into three parts, called the North, Middle, and South Levels-the second being separated from the others by the Nene and Old Bedford rivers.

These attempts failed owing to the determined opposition of the native fenmen ("stiltwalkers"), whom the drainage and appropriation of the unenclosed fenlands would deprive of valuable and long-enjoyed rights of commonage, turbary (turf-cutting), fishing, fowling, &c. Oliver Cromwell is said to have put himself at their head and succeeded in stopping all the operations. When he became Protector, however, he sanctioned Vermuyden's plans, and Scottish prisoners taken at Dunbar, and Dutch prisoners taken by Blake in his victory over Van Tromp, were employed as the workers. Vermuyden's system, however, was exclusively Dutch; and while perfectly suited to Holland it did not meet all the necessities of East Anglia. He confined his attention almost exclusively to the inland draining and embankments, and did not provide sufficient outlet for the waters themselves into the sea.

Holland and other Fens on the west side of the Witham were finally drained in 1767, although not without much rioting and lawlessness; and a striking account of the wonderful improvements effected by a generation later is recorded in Arthur Young's *General View of the Agriculture of the County of Lincoln* (London, 1799). The East, West and Wildmore Fens on the east side of the Witham were drained in 1801-1807 by John Rennie, who carried off the precipitation which fell on the higher grounds by catchwater drains, on the principle of the Roman Car Dyke, and improved the outfall of the river, so that it might the more easily discharge the Fen water which flowed or was pumped into it. The Welland or Deeping Fens were drained in 1794, 1801, 1824, 1837 and other years. Almost the only portion of the original wild Fens now remaining is Wicken Fen, which lies east of the river Cam and southeast of the Isle of Ely.



The Fen Rivers.-The preservation of the Fens depends in an intimate and essential manner upon the preservation of the rivers, and especially of their banks. The Witham, known originally as the Grant Avon, also called the Lindis by Leyland (Itinerary, vol. vii. p. 41), and in Jean Ingelow's High Tide on the Lincolnshire Coast, is some 80 m. long, and drains an area of 1079 sq. m. It owes its present condition to engineering works carried out in the years 1762-1764, 1865, 1881, and especially in 1880-1884. In 1500 the river was dammed immediately above Boston by a large sluice, the effect of which was not only to hinder free navigation up to Lincoln (to which city sea-going vessels used to penetrate in the 14th and 15th centuries), but also to choke the channel below Boston with sedimentary matter. The sluice, or rather a new structure made in 1764-1766, remains; but the river below Boston has been materially improved (1880-1884), first by the construction of a new outfall, 3 m. in length, whereby the channel was not only straightened, but its current carried directly into deep water, without having to battle against the often shifting sandbanks of the Wash; and secondly, by the deepening and regulation of the river-bed up to Boston. The Welland, which is about 70 m. long, and drains an area of 760 sq. m., was made to assume its present shape and direction in 1620, 1638, 1650, 1794, and 1835 and following years. The most radical alteration took place in 1794, when a new outfall was made from the confluence of the Glen (30 m. long) to the Wash, a distance of nearly 3 m. The Nene, 90 m. long, and draining an area of some 1077 sq. m., was first regulated by Bishop Morton, and it was further improved in 1631, 1721, and especially, under plans by Rennie and Telford, in 1827-1830 and 1832. The work done from 1721 onward consisted in straightening the lower reaches of the stream and in directing and deepening the outfall. The Ouse (q, v) or Great Ouse, the largest of the fenland rivers, seems to have been deflected, at some unknown

period, from a former channel connecting via the Old Croft river with the Nene, into the Little Ouse below Littleport; and the courses of the two streams are now linked together by an elaborate network of artificial drains, the results of the great engineering works carried out in the Bedford Level in the 17th century. The old channel, starting from Earith, and known as the Old West river, carries only a small stream until, at a point above Ely, it joins the Cam. The salient features of the plan executed by  $Vermuyden^2$  for the earl of Bedford in the years 1632-1653 were as follows: taking the division of the area made in 1697-1698 into (i.) the North Level, between the river Welland and the river Nene; (ii.) the Middle Level, between the Nene and the Old Bedford river (which was made at this time, *i.e.* 1630); and (iii.) the South Level, from the Old Bedford river to the south-eastern border of the fenland. In the North Level the Welland was embanked, the New South Eau, Peakirk Drain, and Shire Drain made, and the existing main drains deepened and regulated. In the Middle Level the Nene was embanked from Peterborough to Guyhirn, also the Ouse from Earith to Over, both places at the south-west edge of the fenland; the New Bedford river was made from Earith to Denver, and the north side of the Old Bedford river and the south side of the New Bedford river were embanked, a long narrow "wash," or overflow basin, being left between them; several large feeding-drains were dug, including the Forty Foot or Vermuyden's Drain, the Sixteen Foot river, Bevill's river, and the Twenty Foot river; and a new outfall was made for the Nene, and Denver sluice (to dam the old circuitous Ouse) constructed. In the South Level Sam's Cut was dug and the rivers were embanked. Since that period the mouth of the Ouse has been straightened above and below King's Lynn (1795-1821), a new straight cut made between Ely and Littleport, the North Level Main Drain and the Middle Level Drain constructed, and the meres of Ramsey, Whittlesey (1851-1852), &c., drained and brought under cultivation. A considerable barge traffic is maintained on the Ouse below St Ives, on the Cam up to Cambridge, the Lark and Little Ouse, and the network of navigable cuts between the New Bedford river and Peterborough. The Nene, though locked up to Northampton, and connected from that point with the Grand Junction canal, is practically unused above Wansford, and traffic is small except below Wisbech.

The effect of the drainage schemes has been to lower the level of the fenlands generally by some 18 in., owing to the shrinkage of the peat consequent upon the extraction of so much of its contained water; and this again has tended, on the one hand, to diminish the speed and erosive power of the fenland rivers, and, on the other, to choke up their respective outfalls with the sedimentary matters which they themselves sluggishly roll seawards.

The Wash.—From this it will be plain that the Wash (q.v.) is being silted up by riverine detritus. The formation of new dry land, known at first as "marsh," goes on, however, but slowly. During the centuries since the Romans are believed to have constructed the seabanks which shut out the ocean, it is computed that an area of not more than 60,000 to 70,000 acres has been won from the Wash, embanked, drained and brought more or less under cultivation. The greatest gain has been at the direct head of the bay, between the Welland and the Great Ouse, where the average annual accretion is estimated at 10 to 11 lineal feet. On the Lincolnshire coast, farther north, the average annual gain has been not quite 2 ft.; whilst on the opposite Norfolk coast it has been little more than 6 in. annually. On the whole, some 35,000 acres were enclosed in the 17th century, about 19,000 acres during the 18th, and about 10,000 acres during the 19th century.

The first comprehensive scheme for regulating the outfall channels and controlling the currents of the Fen rivers seems to be that proposed by Nathaniel Kinderley in 1751. His idea<sup>3</sup> was to link the Nene with the Ouse by means of a new cut to be made through the marshland, and guide the united stream through a further new cut "under Wotten and Wolverton through the Marshes till over against Inglesthorp or Snetsham, and there discharge itself immediately into the Deeps of Lyn Channel." In a similar way the Witham, "when it has received the Welland from Spalding," was to be carried "to some convenient place over against Wrangle or Friskney, where it may be discharged into Boston Deeps." This scheme was still further improved upon by Sir John Rennie, who, in a report which he drew up in 1839, recommended that the outfalls of all four rivers should be directed by means of fascined channels into one common outfall, and that the land lying between them should be enclosed as rapidly as it consolidated. By this means he estimated that 150,000 acres would be won to cultivation. But beyond one or two abortive or half-hearted attempts, *e.g.* by the Lincolnshire Estuary Company in 1851, and in 1876 and subsequent years by the Norfolk Estuary Company, no serious effort has ever been made to execute either of these schemes.

*Climate.*—The annual mean temperature, as observed at Boston, in the period 1864-1885, is 48.7° F.; January, 36.5°; July, 62.8°; and as observed at Wisbech, for the period 1861-1875, 49.1°. The average mean rainfall for the seventy-one years 1830-1900, at Boston, was 22.9 in.; at Wisbech for the fifteen years 1860-1875, 24.2 in., and for the fifteen years 1866-1880,

26.7 in.; and at Maxey near Peterborough, 21.7 for the nineteen years 1882-1900. Previous to the drainage of the Fens, ague, rheumatism, and other ailments incidental to a damp climate were widely prevalent, but at the present day the Fen country is as healthy as the rest of England; indeed, there is reason to believe that it is conducive to longevity.

*Historical Notes.*—The earliest inhabitants of this region of whom we have record were the British tribes of the Iceni confederation; the Romans, who subdued them, called them Coriceni or Coritani. In Saxon times the inhabitants of the Fens were known (e.g. to Bede) as Gyrvii, and are described as traversing the country on stilts. Macaulay, writing of the year 1689, gives to them the name of Breedlings, and describes them as "a half-savage population ... who led an amphibious life, sometimes wading, sometimes rowing, from one islet of firm ground to another." In the end of the 18th century those who dwelt in the remoter parts were scarcely more civilized, being known to their neighbours by the expressive term of "Slodgers." These rude fen-dwellers have in all ages been animated by a tenacious love of liberty. Boadicea, queen of the Iceni, the worthy foe of the Romans; Hereward the Saxon, who defied William the Conqueror; Cromwell and his Ironsides, are representative of the fenman's spirit at its best. The fen peasantry showed a stubborn defence of their rights, not only when they resisted the encroachments and selfish appropriations of the "adventurers" in the 17th century, in the Bedford Level, in Deeping Fen, and in the Witham Fens, and again in the 18th century, when Holland Fen was finally enclosed, but also in the Peasants' Rising of 1381, and in the Pilgrimage of Grace in the reign of Henry VIII. So long as the Fens were unenclosed and thickly studded with immense "forests" of reeds, and innumerable marshy pools and "rows" (channels connecting the pools), they abounded in wild fowl, being regularly frequented by various species of wild duck and geese, garganies, polchards, shovelers, teals, widgeons, peewits, terns, grebes, coots, water-hens, water-rails, red-shanks, lapwings, god-wits, whimbrels, cranes, bitterns, herons, swans, ruffs and reeves. Vast numbers of these were taken in decoys<sup>4</sup> and sent to the London markets. At the same time equally vast quantities of tame geese were reared in the Fens, and driven by road<sup>5</sup> to London to be killed at Michaelmas. Their down, feathers and quills (for pens) were also a considerable source of profit. The Fen waters, too, abounded in fresh-water fish, especially pike, perch, bream, tench, rud, dace, roach, eels and sticklebacks. The Witham, on whose banks so many monasteries stood, was particularly famous for its pike; as were certain of the monastic waters in the southern part of the Fens for their eels. The soil of the reclaimed Fens is of exceptional fertility, being almost everywhere rich in humus, which is capable not only of producing very heavy crops of wheat and other corn, but also of fattening live-stock with peculiar ease. Lincolnshire oxen were famous in Elizabeth's time, and are specially singled out by Arthur Young,<sup>6</sup> the breed being the shorthorn. Of the crops peculiar to the region it must suffice to mention the old British dye-plant woad, which is still grown on a small scale in two or three parishes immediately south of Boston; hemp, which was extensively grown in the 18th century, but is not now planted; and peppermint, which is occasionally grown, e.g. at Deeping and Wisbech. In the second half of the 19th century the Fen country acquired a certain celebrity in the world of sport from the encouragement it gave to speed skating. Whenever practicable, championship and other racing meetings are held, chiefly at Littleport and Spalding. The little village of Welney, between Ely and Wisbech, has produced some of the most notable of the typical Fen skaters, e.g. "Turkey" Smart and "Fish" Smart.

Apart from fragmentary ruins of the former monastic buildings of Crowland, Kirkstead and other places, the Fen country of Lincolnshire (division of Holland) is especially remarkable for the size and beauty of its parish churches, mostly built of Barnack rag from Northamptonshire. Moreover, in the possession of such buildings as Ely cathedral and the parish church of King's Lynn, other parts of the Fens must be considered only less rich in ecclesiastical architecture. Using these fine opportunities, the Fen folk have long cultivated the science of campanology.

Dialect.—Owing to the comparative remoteness of their geographical situation, and the relatively late period at which the Fens were definitely enclosed, the Fenmen have preserved several dialectal features of a distinctive character, not the least interesting being their close kinship with the classical English of the present day. Professor E.E. Freeman (*Longman's Magazine*, 1875) reminded modern Englishmen that it was a native of the Fens, "a Bourne man, who gave the English language its present shape." This was Robert Manning, or Robert of Brunne, who in or about 1303 wrote *The Handlynge Synne*. Tennyson's dialect poems, *The Northern Farmer*, &c., do not reproduce the pure Fen dialect, but rather the dialect of the Wold district of mid Lincolnshire.

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Drainage of the Great Level of the Fens (2 vols., London, 1828 and 1830); P. Thompson, History of Boston (Boston, 1856); Baldwin Latham, Papers on the Drainage of the Fens, read before the Society of Engineers, 3rd November 1862; N. and A. Goodman, Handbook of Fen Skating (London, 1882); Moore, Associated Architectural Societies' Reports and Papers (1893); Fenland Notes and Queries, and Lincolnshire Notes and Queries, passim; W.H. Wheeler, A History of the Fens of South Lincolnshire, pp. 223 et seq. (2nd ed., Boston, 1897). Various phases of Fen life, mostly of the past, are described in Charles Kingsley's Hereward the Wake (Cambridge, 1866); Baring Gould's Cheap-Jack Zita (London, 1893); Manville Fenn's Dick o' the Fens (London, 1887); and J.T. Bealby's A Daughter of the Fen (London, 1896).

(J. T. BE.)

- 1 The word "fen," a general term for low marshy land or bog, is common to Teutonic languages, cf. Dutch ven or veen, Ger. Fenne, Fehn, Goth. fani, mud; the Indo-European root is seen in Gr. πῆλος, mud, Lat. palus, marsh. The word "bog" is from the Irish or Gaelic bogach, formed from Celtic bog, soft, and meaning therefore soft, swampy ground.
- 2 The principles upon which he proceeded are set forth in his *Discourse touching the Draining of the Great Fennes* (1642), reprinted in *Fenland Notes and Queries* (1898), pp. 26-38 and 81-87.
- 3 Set forth in *The Present State of the Navigation of the Towns of Lyn, Wisbeach, Spalding and Boston* (2nd ed., London, 1851), pp. 82 seq.
- 4 For descriptions of these see Oldfield, Appendix, pp. 2-4, of *A Topographical and Historical Account of Wainfleet* (London, 1829); and Miller and Skertchly, *The Fenland*, pp. 369-375.
- 5 See De Foe's account in *A Tour through the Eastern Counties*, 1722 (1724-1725).
- 6 *General View*, pp. 174-194 and 288-304.

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