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LORD'S LECTURES

BEACON LIGHTS OF HISTORY.

BY JOHN LORD, LL.D.

AUTHOR OF "THE OLD ROMAN WORLD," "MODERN EUROPE," ETC., ETC.

VOLUME III.

ANCIENT ACHIEVEMENTS.

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BEACON LIGHTS OF HISTORY.

GOVERNMENTS AND LAWS.

GREEK AND ROMAN JURISPRUDENCE.

624 B.C.-550 A.D.

There is not much in ancient governments and laws to interest us, except such as were in harmony with natural justice, and were designed for the welfare of all classes in the State. A jurisprudence founded on the edicts of absolute kings, or on the regulations of a priestly caste, is necessarily partial, and may be unenlightened. But those laws which are gradually enacted for the interests of the whole body of the people,—for the rich and poor, the powerful and feeble alike,—have generally been the result of great and diverse experiences, running through centuries, the work of wise men under constitutional forms of government. The jurisprudence of nations based on equity is a growth or development according to public wants and necessities, especially in countries having popular liberty and rights, as in England and the United States.

We do not find in the history of ancient nations such a jurisprudence, except in the free States of Greece and among the Romans, who had a natural genius or aptitude for government, and where the people had a powerful influence in legislation, until even the name of liberty was not invoked.

Among the Egyptians, Assyrians, and Babylonians the only laws were the edicts of kings or the regulations of priests, mostly made with a view of cementing their own power, except those that were dictated by benevolence or the pressing needs of the people, who were ground down and oppressed, and protected only as slaves were once protected in the Southern States of America. Wise and good monarchs doubtless issued decrees for the benefit of all classes, such as conscience or knowledge dictated, whenever they felt their great responsibilities, as in some of the absolute

monarchies of Europe; but they never issued their decrees at the suggestions or demands of those classes for whom the laws were made. The voice of the people was ignored, except so far as it moved the pity or appealed to the hearts and consciences of their rulers; the people had, and claimed, no *rights*. The only men to whom rulers listened, or by whom they were controlled, were those whom they chose as counsellors and ministers, who were supposed to advise with a view to the sovereign's benefit, and that of the empire generally.

The same may be said in general of other Oriental monarchies, especially when embarked in aggressive wars, where the will of the monarch was supreme and unresisted, as in Persia. In India and China the government was not so absolute, since it was checked by feudatory princes, almost independent like the feudal barons and dukes of mediaeval Europe.

Nor was there probably among Oriental nations any elaborate codification of the decrees and laws as in Greece and Rome, except by the priests for their ritual service, like that which marked the jurisprudence of the Israelites. There were laws against murder, theft, adultery, and other offences, since society cannot exist anywhere without such laws; but there was no complicated jurisprudence produced by the friction of competing classes striving for justice and right, or even for the interests of contending parties. We do not look to Egypt or to China for wise punishment of ordinary crimes; but we do look to Greece and Rome, and to Rome especially, for a legislation which shall balance the complicated relations of society on principles of enlightened reason. Moreover, those great popular rights which we now most zealously defend have generally been extorted in the strife of classes and parties, sometimes from kings, and sometimes from princes and nobles. Where there has been no opposition to absolutism these rights have not been secured; but whenever and wherever the people have been a power they have imperiously made their wants known, and so far as they have been reasonable they have been finally secured,--perhaps after angry expostulations and, disputations.

Now, it is this kind of legislation which is remarkable in the history of Greece and Rome, secured by a combination of the people against the ruling classes in the interests of justice and the common welfare, and finally endorsed and upheld even by monarchs themselves. It is from this legislation that modern nations have learned wisdom; for a permanent law in a free country may be the result of a hundred years of discussion or contention,--a compromise of parties, a lesson in human experience. As the laws of Greece and Rome alone among the ancients are rich in moral wisdom and adapted more or less to all nations and ages in the struggle for equal rights and wise social regulations, I shall confine myself to them. Besides, I aim not to give useless and curious details, but to show how far in general the enlightened nations of antiquity made attainments in those things which we call civilization, and particularly in that great department which concerns so nearly all human interests,--that of the regulation of mutual social relations; and this by modes and with results which have had their direct influence upon our modern times.

When we consider the native genius of the Greeks, and their marvellous achievements in philosophy, literature, and art, we are surprised that they were so inferior to the Romans in jurisprudence,--although in the early days of the Roman republic a deputation of citizens was sent to Athens to study the laws of Solon. But neither nations nor individuals are great in everything. Before Solon lived, Lycurgus had given laws to the Spartans. This lawgiver, one of the descendants of Hercules, was born, according to Grote, about eight hundred and eighty years before Christ, and was the uncle of the reigning king. There is, however, no certainty as to the time when he lived; it was probably about the period when Carthage was founded by the Phoenicians. He instituted the Spartan senate, and gave an aristocratic form to the constitution. But the senate, composed of about thirty old men who acted in conjunction with the two kings, did not differ materially from the council of chiefs, or old men, found in other ancient Grecian States; the Spartan chiefs simply modified or curtailed the power of the kings. In the course of time the senate, with the kings included in it, became the governing body of the State, and this oligarchical form of government lasted several hundred years. We know but little of the especial laws given by Lycurgus. We know the distinctions of society,--citizens and helots, and their mutual relations,--the distribution of lands to check luxury, the public men, the public training of youth, the severe discipline to which all were subjected, the cruelty exercised towards slaves, the attention given to gymnastic exercises and athletic sports,--in short, the habits and customs of the people rather than any regular system of jurisprudence. Lycurgus was the trainer of a military brotherhood rather than a law-giver. Under his régime the citizen belonged to the State rather than to his family, and all the ends of the State were warlike rather than peaceful,--not looking to the settlement of quarrels on principles of equity, or a development of industrial interests, which are the great aims of modern legislation.

The influence of the Athenian Solon on the laws which affected individuals is more apparent than

that of the Spartan Lycurgus, the earliest of the Grecian legislators. But Solon had a predecessor in Athens itself,--Draco, who in 624 was appointed to reduce to writing the arbitrary decisions of the archons, thus giving a form of permanent law and a basis for a court of appeal. Draco's laws were extraordinarily severe, punishing small thefts and even laziness with death. The formulation of any system of justice would have, as Draco's did, a beneficial influence on the growth of the State; but the severity of these bloody laws caused them to be hated and in practice neglected, until Solon arose. Solon was born in Athens about 638 B.C., and belonged to the noblest family of the State. He was contemporary with Pisistratus and Thales. His father having lost his property, Solon applied himself to merchandise,--always a respectable calling in a mercantile city. He first became known as a writer of love poems; then came into prominence as a successful military commander of volunteer forces in a disastrous war; and at last he gained the confidence of his countrymen so completely that in a period of anarchy, distress, and mutiny,--the poor being so grievously oppressed by the rich that a sixth part of the produce of land went to the landlord,--he was chosen archon, with authority to revise the laws, and might have made himself king. He abolished the custom of selling the body of a debtor for debt, and even annulled debts in a state of general distress,--which did not please the rich, nor even the poor, since they desired a redivision of lands such as Lycurgus had made in Sparta. He repealed the severe laws of Draco, which inflicted capital punishment for so many small offences, retaining the extreme penalty only for murder and treason. In order further to promote the interests of the people, he empowered any man whatever to enter an action for one that was injured. He left the great offices of state, however, in the hands of the rich, giving the people a share in those which were not so important. He re-established the council of the Areopagus, composed of those who had been archons, and nine were appointed annually for the general guardianship of the laws; but he instituted another court or senate of four hundred citizens, for the cognizance of all matters before they were submitted to the higher court. Although the poorest and most numerous class were not eligible for office, they had the right of suffrage, and could vote for the principal officers. It would at first seem that the legislation of Solon gave especial privileges to the rich, but it is generally understood that he was the founder of the democracy of Athens. He gave the Athenians, not the best possible code, but the best they were capable of receiving. He intended to give to the people as much power as was strictly needed, and no more; but in a free State the people continually encroach on the privileges of the rich, and thus gradually the chief power falls into their hands.

Whatever the power which Solon gave to the people, and however great their subsequent encroachments, it cannot be doubted that he was the first to lay the foundations of constitutional government,--that is, one in which the people took part in legislation and in the election of rulers. The greatest benefit which he conferred on the State was in the laws which gave relief to poor debtors, those which enabled people to protect themselves by constitutional means, and those which prohibited fathers from selling their daughters and sisters for slaves,--an abomination which had long disgraced the Athenian republic.

Some of Solon's laws were of questionable utility. He prohibited the exportation of the fruits of the soil in Attica, with the exception of olive-oil alone,--a regulation difficult to be enforced in a mercantile State. Neither would he grant citizenship to immigrants; and he released sons from supporting their parents in old age if the parents had neglected to give them a trade. He encouraged all developments of national industries, knowing that the wealth of the State depended on them. Solon was the first Athenian legislator who granted the power of testamentary bequests when a man had no legitimate children. Sons succeeded to the property of their parents, with the obligation of giving a marriage dowry to their sisters. If there were no sons, the daughters inherited the property of their parents; but a person who had no children could bequeath his property to whom he pleased. Solon prohibited costly sacrifices at funerals; he forbade evil-speaking of the dead, and indeed of all persons before judges and archons; he pronounced a man infamous who took part in a sedition.

When this enlightened and disinterested man had finished his work of legislation, 494 B.C, he visited Egypt and Cyprus, and devoted his leisure to the composition of poems. He also, it is said, when a prisoner in the hands of the Persians, visited Croesus, the rich king of Lydia, and gave to him an admonitory lesson on the vicissitudes of life. After a prolonged absence, Solon returned to Athens about the time of the usurpation of his kinsman Peisistratus (560 B.C.), who, however, suffered the aged legislator and patriot to go unharmed, and even allowed most of his laws to remain in force.

The constitution and laws of Athens continued substantially for about a hundred years after the archonship of Solon, when the democratic party under Cleisthenes gained complete ascendancy. Some modification of the laws was then made. The political franchise was extended to all free native Athenians. The command of the military forces was given to ten generals, one from each tribe, instead of being intrusted to one of the archons. The Ecclesia, a formal assembly of the citizens, met

more frequently. The people were called into direct action as *dikasts*, or jurors; all citizens were eligible to the magistracy, even to the archonship; ostracism,--which virtually was exile without disgrace,--became a political necessity to check the ascendancy of demagogues.

Such were the main features of the constitution and jurisprudence of Athens when the struggle between the patricians and plebeians of Rome began, to which we now give our attention. It was the real beginning of constitutional liberty in Rome. Before this time the government was in the hands either of kings or aristocrats. The patricians were descendants of the original Latin, Sabine, and Etruscan families; the plebeians were the throng of common folk brought in by conquest or later immigration,--mostly of Latin origin. The senate was the ruling power after the expulsion of the kings, and senators were selected from the great patrician families, who controlled by their wealth and influence the popular elections, the army and navy, and all foreign relations. Consuls, the highest magistrates, who commanded the armies, were annually elected by the people; but for several centuries the consuls belonged to great families. The constitution was essentially aristocratic, and the aristocracy was based on wealth. Power was in the hands of nobles, whether their ancestors were patricians or plebeians, although in the early ages of the Republic they were mostly patricians by birth. But with the growth of Rome new families that were not descended from the ancient tribes became prominent,--like the Claudii, the Julii, and the Servilii,--and were incorporated with the nobility. There are very few names in Roman history before the time of Marius which did not belong to this noble class. The *plebs*, or common people, had at first no political privileges whatever, not even the right of suffrage, and were not allowed to marry into patrician rank. Indeed, they were politically and socially oppressed.

The first great event which gave the plebs protection and political importance was the appointment of representatives called "tribunes of the people,"--a privilege extorted from the patricians. The tribunes had the right to be present at the deliberations of the senate; their persons were inviolable, and they had the power of veto over obnoxious laws. Their power continually increased, until they were finally elected from the senatorial body. In 421 B.C. the plebs had gained sufficient influence to establish the *connubium*, by which they were allowed to intermarry with patricians. In the same year they were admitted to the quaestorship, which office entitled the possessor to a seat in the senate. The quaestors had charge of the public money. In 336 B.C. the plebeians obtained the praetorship, a judicial office.

In the year 286 B.C. the distinctions vanished between plebeians and patricians, and the term *populus* instead of *plebs*, was applied to all Roman people alike. Originally the *populus* comprised strictly Roman citizens, those who belonged to the original tribes, and who had the right of suffrage. When the plebeians obtained access to the great offices of the state, the senate represented the whole people as it formerly represented the *populus*, and the term *populus* was enlarged to embrace the entire community.

The senate was an august body, and was very powerful. It was both judicial and legislative, and for several centuries was composed of patricians alone. Its members always belonged to the aristocracy, whether of patrician or plebeian descent, and were supposed to be rich. Under Augustus it required one million two hundred thousand sesterces annually to support the senatorial dignity. The senate, the members of which were chosen for life, had the superintendence of matters of religion and foreign relations; it commanded the levies of troops; it regulated duties and taxes; it gave audience to ambassadors; it determined upon the way that war should be conducted; it decreed to what provinces governors should be sent; it declared martial law in the appointment of dictators; and it decreed triumphs to fortunate generals. The senators, as a badge of distinction, wore upon their tunics a broad purple stripe, and they had the privilege of the best seats in the theatres. Their decisions were laws (*leges*). A large part of them had held curule offices, which entitled them to a seat in the senate for life. The curule officers were the consuls, the praetors, the aediles, the quaestors, the tribunes; so that an able senator was sure of a great office in the course of his life. A man could scarcely be a senator unless he had held a great office, nor could he often have held a great office unless he were a senator. Thus it would seem that the Roman constitution for three hundred years after the expulsion of the kings was essentially aristocratic. The *plebs* had but small consideration till the time of the Gracchi.

But after the institution of tribunes a change in the constitution gradually took place, so that it was neither aristocratic nor popular exclusively, but was composed of both elements, and was a system of balance of power between the various classes. The more complete the balance of power, the closer is the resemblance to a constitutional government. When one class acted as a check against another class, as gradually came to pass, until the subversion of liberties by successful generals, the senate,

the magistrates, and the people in their assemblies shared between them the political power, but the senate had a preponderating influence. The judicial, the legislative, and the executive authority was as well defined in Roman legislation as it is in English or American. No person was above the authority of the laws; no one class could subvert the liberties and prerogatives of another class,--even the senate could not override the constitution. The consuls, elected by the centuries, presided over the senate and over the assemblies of the people. There was no absolute power exercised at Rome until the subversion of the constitution, except by dictators chosen by the senate in times of imminent danger. Nor could senators elect members of their own body; the censors alone had the right of electing from the ex-magistrates, and of excluding such as were unworthy. The consuls could remain in office but a year, and could be called to account when their terms of office had expired. The tribunes of the people ultimately could prevent a consul from convening the senate, could seize a consul and imprison him, and could veto an ordinance of the senate itself. The nobles had no exclusive privilege like the feudal aristocracy of mediaeval Europe, although it was their aim to secure the high magistracies to the members of their own body. The term *nobilitas* implied that some one of a man's ancestors had filled a curule magistracy. A patrician, long before the reforms of the Gracchi, had become a man of secondary importance, but the nobles were aristocrats to the close of the republic, and continued to secure the highest offices; they prevented their own extinction by admitting into their ranks those who distinguished themselves,--that is, exercising their influence in the popular elections to secure the magistracies from among themselves.

The Roman constitution then, as gradually developed by the necessities and crises that arose, which I have not space to mention, was a wonderful monument of human wisdom. The nobility were very powerful from their wealth and influence, but the people were not ground down. There were no oppressive laws to reduce them to practical slavery; what rights they gained they retained. They constantly extorted new privileges, until they were sufficiently powerful to be courted by demagogues. It was the demagogues, generally aristocratic ones, like Catiline and Caesar, who subverted the liberties of the people by buying votes. But for nearly five hundred years not a man arose whom the Roman people feared, and the proud symbol "SPQR," on the standards of the armies of the republic, bore the name of the Roman Senate and People to the ends of the earth.

When, however, the senate came to be made up of men whom the great generals selected; when the tribunes played into the hands of the very men they were created to oppose; when the high-priest of a people, originally religious, was chosen politically and without regard to moral or religious consideration; when aristocratic nobles left their own ranks to steal the few offices which the people controlled,--then the constitution, under which the Romans had advanced to the conquest of the world, became subverted, and the empire was a consolidated despotism.

Under the emperors there was no constitution, since they combined in their own persons all the great offices of state, and controlled the senate, the army, the tribunals of the law, the distant provinces, the city itself, and regulated taxes and imposed burdens as they pleased. The senate lost its independence, the courts their justice, the army its spirit, and the people their hopes. And yet the old forms remained; the senate met as in the days of the Gracchi, and there were consuls and praetors as before.

However much we may deplore the subversion of the Roman constitution and the absolute reign of the emperors, in which most historians see a political necessity, there was yet under these emperors, whether good or bad, the reign of law, the bequest of five hundred years' experience. The emperors reigned despotically, but under the forms of legislation. Nor did they attempt to subvert laws which did not interfere with their own political power. What is called jurisprudence they even improved, as that later imperial despot Napoleon gave a code to the nation he ruled. It is this science of jurisprudence, for which the Romans had a genius, that gives them their highest claim to be ranked among the benefactors of mankind. They created legal science. Its aim was justice,--equity in the relations between man and man. This was the pride of the Roman world, even under the rule of tyrants and madmen, and this has survived all the calamities of fifteen hundred years. The Roman laws--founded by the Republic, but symmetrically completed by the Empire--have more powerfully affected the interests of civilization than have the philosophy and arts of Greece. Roman jurisprudence was not perfectly developed until five hundred years after the Christian era, when Justinian consolidated it into the Code, the Pandects, and the Institutes. The classical jurists, like Gaius, Ulpian, and Paulus, may have laid the foundation, but the superstructure was raised under the auspices of the imperial despots.

The earliest code of Roman laws was called the Twelve Tables, framed from the report of the commissioners sent to Athens and other Greek States, to collect what was most useful in their legal

systems. The laws of the Twelve Tables were the basis of all the Roman laws, civil and religious. But the edicts of the praetors, who were the great equity judges as well as the common-law magistrates, proclaimed certain changes which custom and the practice of the courts had introduced; and these, added to the *leges populi*, or laws proposed by the consul and passed by the centuries, the *plebiscita*, or laws proposed by the tribunes and passed by the tribes, and the *senatus consulta*, or decrees of the senate, gradually swelled the laws to a great number. Three thousand engraved plates of brass containing these various laws were deposited in the capitol.

Subtleties and fictions were in the course of litigations introduced by the lawyers to defeat the written statutes, and jurisprudence became complicated as early as the time of Cicero. Even the opinions of eminent lawyers were adopted by the legal profession as authoritative, and were recognized by the courts. The evils of a complicated jurisprudence were so evident in the seventh century of the city, that Q. Mucius Scaevola, a great lawyer, when consul, published a scientific elaboration of the civil law. Cicero studied law under him, and his contemporaries, Varus and Aelius Gallus, wrote learned treatises, from which extracts appear in the Digest made under the Emperor Justinian, 528 A.D. Julius Caesar contemplated a complete revision of the laws, but did not live long enough to carry out his intentions. His legislation, so far as he directed his mind to it, was very just. Among other laws established by him was one which ordained that creditors should accept lands as payment for their outstanding debts, according to the value determined by commissioners. In his time the relative value of money had changed, and was greatly diminished. The most important law of Augustus, deserving of all praise, was that which related to the manumission of slaves; but he did not interfere with the social relations of the people after he had deprived them of political liberty. He once attempted, by his *Lex Julia*, to counteract the custom which then prevailed, of abstaining from legal marriage and substituting concubinage instead, by which the free population declined; but this attempt to improve the morals of the people met with such opposition from the tribes and centuries that the next emperor abolished popular assemblies altogether, which Augustus had feared to do. The senate in the time of the emperors, composed chiefly of lawyers and magistrates, and entirely dependent upon them, became the great fountain of law. By the original constitution the people were the source of power, and the senate merely gave or refused its approbation to the laws proposed; but under the emperors the *comitia*, or popular assemblies, disappeared, and the senate passed decrees which had the force of laws, subject to the veto of the Emperor. It was not until the time of Septimus Severus and Caracalla (second century A.D.) that the legislative action of the senate ceased, and the edicts and rescripts of emperors took the place of all legislation.

The golden age of Roman jurisprudence was from the birth of Cicero to the reign of the Emperor Alexander Severus, 222 A.D.; before this period it was an occult science, confined to praetors, pontiffs, and patrician lawyers. But in the latter days of the republic law became the fashionable study of Roman youth, and eminent masters arose. The first great lawyer who left behind him important works was Q. Mucius Scaevola, who wrote a treatise in eighteen books on the civil law. "He was," says Cicero, "the most eloquent of jurists and the most learned of orators." This work, George Long thinks, had a great influence on contemporaries and on subsequent jurists, who followed it as a model. It is the oldest work from which there are any excerpts in the Digest.

Servius Sulpicius, the friend of Cicero and his fellow-student in oratory, surpassed his teachers Balbus and Gallus, and was the equal in reputation of the great Mucius Scaevola, the Pontifex Maximus, who said it was disgraceful for a patrician and a noble to be ignorant of the law with which he had to do. Cicero ascribes the great superiority of Servius as a lawyer to the study of philosophy, which disciplined and developed his mind, and enabled him to deduce his conclusions from his premises with logical precision. He left behind him one hundred and eighty treatises, and had numerous pupils, among whom A. Ofilius and Alfenus Varus, Cato, Julius Caesar, Antony, and Cicero were great lawyers. Labeo, in the time of Augustus, wrote four hundred books on jurisprudence, spending six months in the year in giving instruction to his pupils and in answering legal questions, and the other six months in the country in writing books. Like all the great Roman jurists, he was versed in literature and philosophy, and so devoted to his profession that he refused political office. His rival Capito was equally learned in all departments of the law, and left behind him as many treatises as Labeo. These two jurists were the founders of celebrated schools, like the ancient philosophers, and each had distinguished followers. Gaius, who flourished in the time of the Antonines, was a great legal authority; and the recent discovery of his Institutes has revealed the least mutilated fragment of Roman jurisprudence which exists, and one of the most valuable, which sheds great light on ancient Roman law; it was found in the library of Verona. No Roman jurist had a higher reputation than Papinian, who was praefectus praetorio under Septimius Severus (193 A.D.),--an office which made him second only to the Emperor, a sort of grand vizier, whose power extended over all departments of the State; he was beheaded by Caracalla. The great commentator Cujacius

declares that he was the first of all lawyers who have been, or who are to be; that no one ever surpassed him in legal knowledge, and no one will ever equal him. Paulus was his contemporary, and held the same office as Papinian. He was the most fertile of Roman law-writers, and there is more taken from him in Justinian's Digest than from any other jurist, except Ulpian. There are two thousand and eighty-three excerpts from this writer,—one sixth of the whole Digest. No legal writer, ancient or modern, has handled so many subjects. In perspicuity he is said to be inferior to Ulpian, one of the most famous of jurists, who was his contemporary. Ulpian has also exercised a great influence on modern jurisprudence from the copious extracts of his writings in the Digest. He was the chief adviser of Alexander Severus, and like Paulus was praefectus praetorio. The number of excerpts in the Digest from him is said to be two thousand four hundred and sixty-two, and they form a third part of it. Some fragments of his writings remain. The last of the great civilians associated with Gaius, Papinian, Paulus, and Ulpian, as oracles of jurisprudence, was Modestinus, who was a pupil of Ulpian. He wrote both in Greek and Latin. There are three hundred and forty-five excerpts in the Digest from his writings, the titles of which show the extent and variety of his labors.

These eminent lawyers shed great glory on the Roman civilization. In the earliest times men sought distinction on the fields of battle, but in the latter days of the republic honor was conferred for forensic ability. The first pleaders of Rome were not jurisconsults, but aristocratic "patrons," who looked after their "clients,"—men of lower social grade, who in return for protection and assistance rendered service, sometimes political by voting, sometimes pecuniary, sometimes military. But when law became complicated, a class of men arose to interpret it. These men were held in great honor, and reached by their services the highest offices,—like Cicero and Hortensius. No remuneration was given originally for forensic pleading beyond the services which the client gave to a patron, but gradually the practice of the law became lucrative. Hortensius, as well as Cicero, gained an immense fortune; he had several villas, a gallery of paintings, a large stock of wines, parks, fish-ponds, and aviaries. Cicero had villas in all parts of Italy, a house on the Palatine with columns of Numidian marble, and a fortune of twenty millions of sesterces, equal to eight hundred thousand dollars. Most of the great statesmen of Rome in the time of Cicero were either lawyers or generals. Crassus, Pompey, P. Sextus, M. Marcellus, P. Clodius, Asinius Pollio, C. Cicero, M. Antonius, Julius Caesar, Caelius, Brutus, Catullus, were all celebrated for their forensic efforts. Candidates for the bar studied four years under a distinguished jurist, and were required to pass a rigorous examination. The judges were chosen from members of the bar, as well as in later times the senators. The great lawyers were not only learned in the law, but possessed great accomplishments. Varro was a lawyer, and was the most learned man that Rome ever produced. But under the emperors the lawyers were chiefly distinguished for their legal attainments, like Paulus and Ulpian.

During this golden age of Roman jurisprudence many commentaries were written on the Twelve Tables, the Perpetual Edict, the Laws of the People, and the Decrees of the senate, as well as a vast mass of treatises on every department of the law, most of which have perished. The Institutes of Gaius, already mentioned, are the most valuable that remain, and have thrown great light on some important branches previously involved in obscurity. Their use in explaining the Institutes of Justinian is spoken of very highly by Mackenzie, since the latter are mainly founded on the long-lost work of Gaius. The great lawyers who flourished from Trajan to Alexander Severus, like Gaius, Ulpian, Paulus, Papinian, and Modestinus, had no successors who can be compared with them, and their works became standard authorities in the courts of law.

After the death of Alexander Severus, 235 A.D., no great accession was made to Roman law until Theodosius II., 438 A.D., caused the constitutions, from Constantine to his own time, to be collected and arranged in sixteen books. This was called the Theodosian Code, which in the West was held in high esteem. It was very influential among the Germanic nations, serving as the chief basis of their early legislation; it also paved the way for the more complete codification that followed in the Justinian Code, which superseded it.

To Justinian belongs the immortal glory of reforming the jurisprudence of the Romans. "In the space of ten centuries," says Gibbon, "the infinite variety of laws and legal opinions had filled many thousand volumes, which no fortune could purchase, and no capacity could digest. Books could not easily be found, and the judges, poor in the midst of riches, were reduced to the exercise of their illiterate discretion." The emperors had very early begun to issue ordinances, under the authority of the various offices gathered into their hands; and these, together with the answers to appeals from the lower courts made to the emperors directly, or to the sort of supreme court which they established, were called *imperial constitutions* and *rescripts*. Justinian determined to unite in one body all the rules of law, whatever may have been their origin; and in the year 528 appointed ten jurisconsults, among whom was the celebrated Tribonian, to select and arrange the imperial

constitutions and rescripts, leaving out what was obsolete or useless or contradictory, and to make such alterations as the circumstances required. This was called the *Code*, divided into twelve books, and comprising the constitutions from Hadrian to Justinian. It was published in fourteen months after it was undertaken.

Justinian thereupon authorized Tribonian, then quaestor, *vir magnificus magisteria dignitate inter agentes decoratus*,--"for great titles were now given to the officers of the crown,"--to prepare, with the assistance of sixteen associates, a collection of extracts from the writings of the most eminent jurists, so as to form a body of law for the government of the empire, with power to select and omit and alter; and this immense work was done in three years, and published under the title of Digest, or Pandects. Says Lord Mackenzie:

"All the judicial learning of former times was laid under contribution by Tribonian and his colleagues. Selections from the works of thirty-nine of the ablest lawyers, scattered over two thousand separate treatises, were collected in one volume; and care was taken to inform posterity that three millions of lines were abridged and reduced in these extracts to the modest number of one hundred and fifty thousand. Among the selected jurists only three names belonged to the age of the republic,--the civilians who flourished under the first emperors are seldom appealed to; so that most of the writers whose works have contributed to the Pandects lived within a period of one hundred years. More than a third of the whole Pandects is from Ulpian, and next to him the principal writers are Paulus, Papinian, Salvius Julianus, Pomponius, Q. Cervidius Scaevola, and Gaius. Though the variety of subjects is immense, the Digest has no claims to scientific arrangement. It is a vast cyclopedia of heterogeneous law badly arranged; everything is there, but everything is not in its proper place."

Neither the Digest nor the Code was adapted to elementary instruction; it was therefore necessary to prepare a treatise on the principles of Roman law. This was intrusted to Tribonian and two professors, Theophilus and Dorotheus. It is probable that Tribonian merely superintended the work, which was founded chiefly on the Institutes of Gaius, divided into four books. It has been universally admired for its method and elegant precision. It was intended merely as an introduction to the Pandects and the Code, and was entitled the Institutes.

The *Novels*, or *New Constitutions*, of Justinian were subsequently published, being the new ordinances of the Emperor and the changes he thought proper to make, and were therefore of high authority. The Code, Pandects, Institutes, and Novels of Justinian comprise the Roman law as received in Europe, in the form given by the school of Bologna, and is called the "*Corpus Juris Civilis*." Savigny says:--

"It was in that form that the Roman law became the common law of Europe; and when, four centuries later, other sources came to be added to it, the *Corpus Juris* of the school of Bologna had been so universally received, and so long established as a basis of practice, that the new discoveries remained in the domain of science, and served only for the theory of the law. For the same reason, the Ante-Justinian law is excluded from practice."

After Justinian the old texts were left to moulder as useless though venerable, and they have nearly all disappeared. The Code, the Pandects, and the Institutes were declared to be the only legitimate authority, and alone were admitted to the tribunals or taught in the schools. The rescripts of the early emperors recognized too many popular rights to suit the despotic character of Justinian; and the older jurists, like the Scaevolae, Sulpicius, and Labeo, were distasteful from their sympathy with free institutions. Different opinions have been expressed by the jurisconsults as to the merits of the Justinian collection. By some it is regarded as a vast mass of legal lumber; by others, as a beautiful monument of human labor. After the lapse of so many centuries it is certain that a large portion of it is of no practical utility, since it is not applicable to modern wants. But again, no one doubts that it has exercised a great and good influence on moral and political science, and introduced many enlightened views concerning the administration of justice as well as the nature of civil government, and thus has modified the codes of the Teutonic nations that sprang up on the ruins of the old Roman world. It was used in the Greek empire until the fall of Constantinople. It never entirely lost authority in Italy, although it remained buried for centuries, till the discovery of the Florentine copy of the Pandects at the siege of Amalfi in 1135. Peter Valence, in the eleventh century, made use of it in a law-book which he published.

With the rise of the Italian cities, the study of Roman law revived, and Bologna became the seat from which it spread over Europe. In the sixteenth century the science of theoretical law passed from Italy to France, under the auspices of Francis I., when Cujas, or Cujacius, became the great

ornament of the school of Bourges and the greatest commentator on Roman law until Dumoulin appeared. Grotius, in Holland, excited the same interest in civil law that Dumoulin did in France, followed by eminent professors in Leyden and the German universities. It was reserved for Pothier, in the middle of the eighteenth century, to reduce the Roman law to systematic order,—one of the most gigantic tasks that ever taxed the industry of man. The recent discoveries, especially that made by Niebuhr of the long-lost work of Gaius, have given a great impulse to the study of Roman law in Germany; and to this impulse no one has contributed so greatly as Savigny of Berlin.

The great importance of the subject demands a more minute notice of the principles of the Roman law than the limits of this work properly allow. I shall therefore endeavor to abridge what has been written by eminent authorities, taking as a basis the late work of Lord Mackenzie and the learned and interesting essay of Professor Maine.

The Institutes of Justinian began with the law of persons, recognizing the distinction of ranks. All persons are capable of enjoying civil rights, but not all in the same degree. Greater privileges are allowed to men than to women, to freemen than to slaves, to fathers than to children.

In the eye of the law all Roman citizens were equal wherever they lived, whether in the capital or the provinces. Citizenship embraced both political and civil rights. Political rights had reference to the right of voting in the comitia; but this was not considered the essence of citizenship, which was the enjoyment of the *connubium*, and *commercium*. By the former the citizen could contract a valid marriage and acquire the rights resulting from it, particularly the paternal power; by the latter he could acquire and dispose of property. Citizenship was acquired by birth and by manumission; it was lost when a Roman became a prisoner of war, or had been exiled for crime, or became a citizen of another State. An unsullied reputation was required by law for a citizen to exercise his rights to their full extent.

The Roman jurists acknowledged all persons originally free by natural law; and while they recognized slavery, they ascribed the power of masters entirely to the law and custom of nations. Persons taken in war were considered at the absolute control of their captors, and were therefore, *de facto*, slaves; the children of a female slave followed the condition of their mother, and belonged to her master. But masters could manumit their slaves, who thus became Roman citizens with some restrictions. After the emancipation of a slave, he was bound to render certain services to his former master as patron, and if the freedman died intestate his property reverted to his patron.

Marriage was contracted by the simple consent of the parties, though in early times equality of condition was required. The *lex Canuleia*, A.U.C. 309, authorized connubium between patricians and plebeians, and the *lex Julia*, A.U.C. 757, allowed it between freedmen and freeborn. By the *conventio in manum*, a wife passed out of her family into that of her husband, who acquired all her property; without it, the woman remained in the power of her father, and retained the free disposition of her property. Polygamy was not permitted; and relationship within certain degrees rendered the parties incapable of contracting marriage. (These rules as to forbidden degrees have been substantially adopted in England.) Celibacy was discouraged. Concubinage was allowed, if a man had not a wife, and provided the concubine was not the wife of another man; this heathenish custom was abrogated by Justinian. The wife was entitled to protection and support from her husband, and she retained her property independent of him. On her marriage the father gave his daughter a dowry in proportion to his means, the management of which, with its usufruct during marriage, belonged to the husband; but he could not alienate real estate without the wife's consent, and on the dissolution of marriage the *dos* reverted to the wife. Divorce existed in all ages at Rome, and was very common at the beginning of the empire; to check its prevalence, laws were passed inflicting severe penalties on those whose bad conduct led to it. Every man, whether married or not, could adopt children under certain restrictions, and they passed entirely under paternal power. But the marriage relation among the Romans did not accord after all with those principles of justice which we see in other parts of their legislative code. The Roman husband, like the father, was a tyrant. The facility of divorce destroyed mutual confidence, and inflamed every trifling dispute; for a word or a message or a letter or the mandate of a freedman was quite sufficient to secure a separation. It was not until Christianity became the religion of the empire that divorce could not be easily effected without a just cause. This facility of divorce was a great stigma on the Roman laws, and the degradation of woman was the principal consequence. But woman never was honored in any Pagan land, although her condition at Rome was better than it was at Athens. She always was regarded as a possession rather than as a person; her virtue was mistrusted, and her aspirations were scorned; she was hampered and guarded more like a slave than the equal companion of man. But the progress of legislation, as a whole, was in her favor, and she continued to gain new privileges until the fall of the empire. The

Roman Catholic Church regards marriage as one of the sacraments, and through all the Middle Ages and down to our own day the great authority of the Church has been one of the strongest supports of that institution, as necessary to Christianity as to civilization. We Americans have improved on the morality of Jesus, of the early and later Church, and of the great nations of modern Europe; and in many of our States persons are allowed to slip out of the marriage tie about as easily as they get into it.

Nothing is more remarkable in the Roman laws than the extent of paternal power. It was unjust, and bears the image of a barbarous age. Moreover, it seems to have been coeval with the foundation of the city. A father could chastise his children by stripes, by imprisonment, by exile, by sending them to the country with chains on their feet. He was even armed with the power of life and death. "Neither age nor rank," says Gibbon, "nor the consular office, could exempt the most illustrious citizen from the bonds of filial subjection. Without fear, though not without danger of abuse, the Roman legislators had reposed unbounded confidence in the sentiments of paternal love, and the oppression was tempered by the assurance that each generation must succeed in its turn to the awful dignity of parent and master." By an express law of the Twelve Tables a father could sell his children as slaves. But the abuse of paternal power was checked in the republic by the censors, and afterward by emperors. Alexander Severus limited the right of the father to simple correction, and Constantine declared the father who should kill his son to be guilty of murder. The rigor of parents in reference to the disposition of the property of children was also gradually relaxed. Under Augustus, the son could keep absolute possession of what he had acquired in war; under Constantine, he could retain any property acquired in the civil service, and all property inherited from the mother could also be retained. In later times, a father could not give his son or daughter to another by adoption without their consent. Thus this *patria potestas* was gradually relaxed as civilization advanced, though it remained a peculiarity of Roman law to the latest times, and was severer than is ever seen in the modern world. Fathers were bound to maintain their children when they had no separate means to supply their wants, and children were also bound to maintain their parents if in want. These reciprocal duties, creditable to the Roman lawgivers, are recognized in the French Code, but not in the English, which also recognizes the right of a father to bequeath his whole estate to strangers,--a thing which Roman fathers had not power to do. The age when children attained majority among the Romans was twenty-five years. Women were condemned to the perpetual tutelage of parents, husbands, or guardians, as it was supposed they never could attain to the age of reason and experience. The relation of guardian and ward was strictly observed by the Romans. They made a distinction between the right to govern a person and the right to manage his estate, although the tutor or guardian could do both. If the pupil was an infant, the tutor could act without the intervention of the pupil; if the pupil was above seven years of age, he was considered to have an imperfect will. The youth ceased to be a pupil, if a boy, at fourteen; if a girl, at twelve. The tutor managed the estate of the pupil, but was liable for loss occasioned by bad management. He could sell movable property when expedient, but not real estate, without judicial authority. The tutor named by the father was preferred to all others.

The Institutes of Justinian pass from persons to things, or the law relating to real rights; in other words, that which pertains to property. Some things common to all, like air, light, the ocean, and things sacred, like temples and churches, are not classed as property.

Two things were required for the transfer of property, for it is the essence of property that the owner of a thing should have the right to transfer it,--first, the consent of the owner to transfer the thing upon some just ground; and secondly, the actual delivery of the thing to the person who is to acquire it. Movable property was presumed to be the property of the possessors, until positive evidence was produced to the contrary. A prescriptive title to movables was acquired by possession for one year, and to immovables by possession for two years. Undisturbed possession for thirty years constituted in general a valid title.

When a Roman died, his heirs succeeded to all his property by hereditary right. If he left no will, his estate devolved upon his relatives in a certain order prescribed by law. The power of making a testament only belonged to citizens above puberty. Children under the paternal power could not make a will. Males above fourteen and females above twelve, when not under power, could make wills without the authority of their guardian; but pupils, lunatics, prisoners of war, criminals, and various other persons were incapable of making a testament. The testator could divide his property among his heirs in such proportions as he saw fit; but if there was no distribution, all the heirs participated equally. A man could disinherit either of his children by declaring his intentions in his will, but only for grave reasons,--such as grievously injuring his person or character or feelings, or attempting his life. No will was effectual unless one or more persons were appointed heirs to

represent the deceased. Wills were required to be signed by the testator, or some person for him, in the presence of seven witnesses who were Roman citizens. If a will was made by a parent for distributing his property solely among his children, no witnesses were required; and the ordinary formalities were dispensed with among soldiers in actual service, and during the prevalence of pestilence. The testament was opened in the presence of the witnesses, or a majority of them; and after they had acknowledged their seals a copy was made, and the original was deposited in the public archives.

According to the Twelve Tables, the powers of a testator in disposing of his property were unlimited; but in process of time, laws were enacted to restrain immoderate or unnatural bequests. By the Falcidian law, in the time of Augustus, no one could leave in legacies more than three fourths of his estate, so that the heirs could inherit at least one fourth. Again, a law was passed by which the descendants were entitled to one third of the succession, and to one half if there were more than four. In France, if a man die leaving one lawful child, he can dispose of only half his estate by will; if he leaves two children, he can dispose only of one third; if he leaves three or more children, then he can dispose by will of only one fourth of his estate. In England, a man can disinherit both his wife and children. These, and many other matters,--bequests in trust, succession of men dying intestate, heirs at law, etc.,--were regulated by the Romans in ways on which our modern legislators have improved little or none.

In the matter of contracts the Roman law was especially comprehensive, and the laws of France and Scotland are substantially based upon the Roman system. The Institutes of Gaius and Justinian distinguish four sorts of obligations,--*aut re, aut verbis, aut literis, aut consensu*. Gibbon, in his learned chapter, prefers to consider the specific obligations of men to each other under promises, benefits, and injuries. Lord Mackenzie treats the subject in the order of the Institutes:--

"Obligations contracted *re*--by the intervention of *things*--are called by the moderns real contracts, because they are not perfected till something has passed from one party to another. Of this description are the contracts of loan, deposit, and pledge,--security for indebtedness. Till the subject is actually lent, deposited, or pledged, it does not form the special contract of loan, deposit, or pledge."

Next to the perfection of contracts by *re*,--the intervention of things,--were obligations contracted by *verbis*, spoken *words*, and by *literis*, or writings. The *verborum obligatio* was contracted by uttering certain words of formal style,--an interrogation being put by one party, and an answer given by the other. These stipulations were binding. In England all guarantees must be in writing.

The *obligatio literis* was a written acknowledgment of debt, chiefly employed when money was borrowed; but the creditor could not sue upon a note within two years from its date, without being called upon also to prove that the money was in fact paid to the debtor.

Contracts perfected by consent, *consensu*, had reference to sale, hiring; partnership, and mandate, or orders to be carried out by agents. All contracts of sale were good without writing.

Acts which caused damage to another opened a new class of cases. The law obliged the wrongdoer to make reparation, and this responsibility extended to damages arising not only from positive acts, but from negligence or imprudence. In cases of libel or slander, the truth of the allegation might be pleaded in justification. In all cases it was necessary to show that an injury had been committed maliciously; but if damage arose in the exercise of a right, as killing a slave in self-defence, no claim for reparation could be maintained. If any one exercised a profession or trade for which he was not qualified, he was liable to all the damage his want of skill or knowledge might occasion,--a provision that some of our modern laws might advantageously revive. When any damage was done by a slave or an animal, the owner of the same was liable for the loss, though the mischief was done without his knowledge and against his will. If anything was thrown from a window giving on the public thoroughfare so as to injure any one by the fall, the occupier was bound to repair the damage, though done by a stranger. Legal claims might be transferred to a third person by sale, exchange, or donation; but to prevent speculators from purchasing debts at low prices, it was ordered that the assignee should not be entitled to exact from the debtor more than he himself had paid to acquire the debt, with interest,--a wise and just regulation.

By the ancient constitution, the king had the prerogative of determining civil causes. The right then devolved on the consuls, afterward on the praetor, and in certain cases on the curule and plebeian ediles, who were charged with the internal police of the city.

The praetor, a magistrate next in dignity to the consuls, acted as supreme judge of the civil courts,

assisted by a council of juriconsults to determine questions in law. At first one praetor was sufficient, but as the limits of the city and empire extended, he was joined by a colleague. After the conquest of Sicily, Sardinia, and the two Spains, new praetors were appointed to administer justice in the provinces. The praetor held his court in the comitium, wore a robe bordered with purple, sat in a curule chair, and was attended by lictors.

The praetor delegated his power to three classes of judges, called respectively *judex*, *arbiter*, and *recuperator*. When parties were at issue about facts, it was the custom for the praetor to fix the question of law upon which the action turned, and then to remit to a delegate, or judge, to inquire into the facts and pronounce judgment according to them. In the time of Augustus there were four thousand judices, who were merely private citizens, generally senators or men of consideration. The *judex* was invested by the magistrate with a judicial commission for a single case only. After being sworn to duty, he received from the praetor a formula containing a summary of all the points under litigation, from which he was not allowed to depart. He was required not merely to investigate facts, but to give sentence; and as law questions were more or less mixed up with the case, he was allowed to consult one or more juriconsults. If the case was beyond his power to decide, he could decline to give judgment. The *arbiter*, like the *judex*, received a formula from the praetor, and seemed to have more extensive power. The *recuperators* heard and determined cases, but the number appointed for each case was usually three or five.

The *centumvirs* constituted a permanent tribunal composed of members annually elected, in equal numbers, from each tribe; and this tribunal was presided over by the praetor, and divided into four chambers, which under the republic was placed under the ancient quaestors. The *centumvirs* decided questions of property, embracing a wide range of subjects. The Romans had no class of men like the judges of modern times; the superior magistrates were changed annually, and political duties were mixed with judicial. The evil was partially remedied by the institution of legal assessors, selected from the most learned juriconsults. Under the empire the praetors were greatly increased; under Tiberius there were sixteen who administered justice, besides the consuls, six ediles, and ten tribunes of the people. The Emperor himself became the supreme judge, and he was assisted in the discharge of his judicial duties by a council composed of the consuls, a magistrate of each grade, and fifteen senators. At first, the duties of the praetorian prefects were purely military, but finally they discharged important judicial functions. The prefect of the city, in the time of the emperors, was a great judicial personage, who heard appeals from the praetors themselves.

In all cases brought before the courts, the burden of proof was with the party asserting an affirmative fact. Proof by writing was generally considered most certain, but proof by witnesses was also admitted. Pupils, lunatics, infamous persons, interested parties, near relatives, and slaves could not bear evidence, nor any person who had a strong enmity against either party. The witnesses were required to give their testimony on oath. In most cases two witnesses were enough to prove a fact. When witnesses gave conflicting testimony, the judge regarded those who were most worthy of credit rather than those who were most numerous. In the English courts the custom used to be as with the Romans, of refusing testimony from those who were interested; but this has been removed. On the failure of regular proof, the Roman law allowed a party to refer the facts in a civil action to the oath of his adversary.

Under the Roman republic there was no appeal in civil suits, but under the emperors a regular system was established. Under Augustus there was an appeal from all the magistrates to the prefect of the city, and from him to the praetorian prefect or even to the Emperor. In the provinces there was an appeal from the municipal magistrates to the governors, and from them to the Emperor, as Paul appealed from Festus to Caesar. Under Justinian no appeal was allowed from a suit which did not involve at least twenty pounds in gold.

In regard to criminal courts among the Romans during the republic, the only body which had absolute power of life and death was the *comitia centuriata*. The senate had no jurisdiction in criminal cases, so far as Roman citizens were concerned. It was only in extraordinary emergencies that the senate, with the consuls, assumed the responsibility of inflicting summary punishment. Under the emperors, the senate was armed with the power of criminal jurisdiction; and as the senate was the tool of the emperor, he could crush whomsoever he pleased.

As it was inconvenient, when Rome had become a very great city, to convene the *comitia* for the trial of offenders, the expedient was adopted of delegating the jurisdiction of the people to persons invested with temporary authority, called *quaestors*. These were finally established into regular and permanent courts, called *quaestores perpetui*. Every case submitted to these courts was tried by a judge and jury. It was the duty of the judge to preside and regulate proceedings according to law;

and it was the duty of the jury, after hearing the evidence and pleadings, to decide on the guilt or innocence of the accused. As many as fifty persons frequently composed the jury, whose names were drawn out of an urn. Each party had a right to challenge a certain number, and the verdict was decided by a majority of votes. At first the judices were chosen from the senate, and afterward from the equestrians, and then again from both orders. But in process of time the quaestores perpetui gave place to imperial magistrates. The accused defended himself in person or by counsel.

The Romans divided *crimes* into public and private. Private crimes could be prosecuted only by the party injured, and were generally punished by pecuniary fines, as among the old Germanic nations.

Of public crimes the *crimen laesae majestatis*, or treason, was regarded as the greatest; and this was punished with death and with confiscation of goods, while the memory of the offender was declared infamous. Greater severity could scarcely be visited on a culprit. Treason comprehended conspiracy against the government, assisting the enemies of Rome, and misconduct in the command of armies. Thus Manlius, in spite of his magnificent services, was hurled from the Tarpeian Rock, because he was convicted of an intention to seize upon the government. Under the empire not only any attempt on the life of the Emperor was treason, but disrespectful words or acts. The criminal was even tried after death, that his memory might become infamous; and this barbarous practice was perpetuated in France and Scotland as late as the beginning of the seventeenth century. In England men have been executed for treasonable words. Besides treason there were other crimes against the State, such as a breach of the peace, extortion on the part of provincial governors, embezzlement of public property, stealing sacred things, bribery,--most of which offences were punished by pecuniary penalties.

But there were also crimes against individuals, which were punished with the death penalty. Wilful murder, poisoning, and parricide were capitally punished. Adultery was punished by banishment, besides a forfeiture of considerable property; Constantine made it a capital offence. Rape was punished with death and confiscation of goods, as in England till a late period, when transportation for life became the penalty. The punishments inflicted for forgery, coining base money, and perjury were arbitrary. Robbery, theft, patrimonial damage, and injury to person and property were private trespasses, and not punished by the State. After a lapse of twenty years without accusation, crimes were supposed to be extinguished. The Cornelian, Pompeian, and Julian laws formed the foundation of criminal jurisprudence. This however never attained the perfection that was seen in the Civil Code, in which the full maturity of Roman wisdom was reached. The emperors greatly increased the severity of punishments, as was probably necessary in a corrupt state of society. After the decemviral laws fell into disuse, the Romans in the days of the republic passed from extreme rigor to great lenity, as is observable in the transition from the Puritan régime to our own times in the United States. Capital punishment for several centuries was exceedingly rare, and was frequently prevented by voluntary exile. Under the empire, again, public executions were frequent and revolting.

Fines were a common mode of punishment with the Romans, as with the early Germans. Imprisonment in a public jail was rare, the custom of bail being in general use. Although retaliation was authorized by the Twelve Tables for bodily injuries, it was seldom exacted, since pecuniary compensation was taken in lieu. Corporal punishments were inflicted upon slaves, but rarely upon citizens, except for military crimes; but Roman citizens could be sold into slavery for various offences, chiefly military, and criminals were often condemned to labor in the mines or upon public works. Banishment was common,--*aquae et ignis interdictio*; and this was equivalent to the deprivation of the necessities of life and incapacitating a person from exercising the rights of citizenship. Under the emperors persons were confined often on the rocky islands off the coast, or in a compulsory residence in a particular place assigned. Thus Chrysostom was sent to a dreary place on the banks of the Euxine, and Ovid was banished to Tomi. Death, when inflicted, was by hanging, scourging, and beheading; also by strangling in prison. Slaves were often crucified, and were compelled to carry their cross to the place of execution. This was the most ignominious and lingering of all deaths; it was abolished by Constantine, from reverence to the sacred symbol. Under the emperors, execution took place also by burning alive and exposure to wild beasts; it was thus the early Christians were tormented, since their offence was associated with treason. Persons of distinction were treated with more favor than the lower classes, and their punishments were less cruel and ignominious; thus Seneca, condemned for privity to treason, was allowed to choose his mode of death. The criminal laws of modern European States followed too often the barbarous custom of the Roman emperors until a recent date. Since the French Revolution the severity of the penal codes has been much modified.

The penal statutes of Rome however, as Gibbon emphatically remarks, "formed a very small

portion of the Code and the Pandects; and in all judicial proceedings the life or death of the citizen was determined with less caution and delay than the most ordinary question of covenant or inheritance." This was owing to the complicated relations of society, by which obligations are created or annulled, while duties to the State are explicit and well known, being inscribed not only on tables of brass, but on the conscience itself. It was natural, with the growth and development of commerce and dominion, that questions should arise which could not be ordinarily settled by ancient customs, and the practice of lawyers and the decisions of judges continually raised new difficulties, to be met only by new edicts. It is a pleasing fact to record, that jurisprudence became more just and enlightened as it became more intricate. The principles of equity were more regarded under the emperors than in the time of Cato. It is in the application of these principles that the laws of the Romans have obtained so high consideration; their abuse consisted in the expense of litigation, and the advantages which the rich thus obtained over the poor.

But if delays and forms led to an expensive and vexatious administration of justice, these were more than compensated by the checks which a complicated jurisprudence gave to hasty or partial decisions. It was in the minuteness and precision of the forms of law, and in the foresight with which questions were anticipated in the various transactions of business, that the Romans in their civil and social relations were very much on a level with modern times. It would be difficult to find in the most enlightened of modern codes greater wisdom and foresight than appear in the legacy of Justinian as to all questions pertaining to the nature, the acquisition, the possession, the use, and the transfer of property. Civil obligations are most admirably defined, and all contracts are determined by the wisest application of the natural principles of justice. Nothing can be more enlightened than the laws which relate to leases, to sales, to partnerships, to damages, to pledges, to hiring of work, and to quasi-contracts. The laws pertaining to the succession to property, to the duties of guardians, to the rights of wards, to legacies, to bequests in trust, and to the general limitation of testamentary powers were singularly clear. The regulations in reference to intestate succession, and to the division of property among males and females, were wise and just; we find no laws of entail, no unequal rights, no absurd distinction between brothers, no peculiar privileges given to males over females, or to older sons. Particularly was everything pertaining to property and contracts and wills guarded with the most jealous care. A man was sure of possessing his own, and of transmitting it to his children. In the Institutes of Justinian we see on every page a regard to the principles of natural justice: but moreover we find that malicious witnesses should be punished; that corrupt judges should be visited with severe penalties; that libels and satires should subject their authors to severe chastisement; that every culprit should be considered innocent until his guilt was proved.

No infringement on personal rights could be tolerated. A citizen was free to go where he pleased, to do whatsoever he would, if he did not trespass on the rights of another; to seek his pleasure unobstructed, and pursue his business without vexatious incumbrances. If he was injured or cheated, he was sure of redress; nor could he be easily defrauded with the sanction of the laws. A rigorous police guarded his person, his house, and his property; he was supreme and uncontrolled within his family. This security to property and life and personal rights was guaranteed by the greatest tyrants. Although political liberty was dead, the fullest personal liberty was enjoyed under the emperors, and it was under their sanction that jurisprudence in some of the most important departments of life reached perfection. If injustice was suffered it was not on account of the laws, but owing to the depravity of men, the venality of the rich, and the tricks of lawyers; the laws were wise and equal. The civil jurisprudence of the Romans could be copied with safety by the most enlightened of European States; indeed, it is already the foundation of their civil codes, especially in France and Germany.

That there were some features in the Roman laws which we in these Christian times cannot indorse, and which we reprehend, cannot be denied. Under the republic there was not sufficient limit to paternal power, and the *pater familias* was necessarily a tyrant. It was unjust that the father should control the property of his son, and cruel that he was allowed an absolute control not only over his children, but also his wife. Yet the limits of paternal power were more and more curtailed, so that under the later emperors fathers were not allowed to have more authority than was perhaps expedient.

The recognition of slavery as a domestic institution was another blot, and slaves could be treated with the grossest cruelty and injustice without possibility of redress. But here the Romans were not sinners beyond all other nations, and our modern times have witnessed a parallel. It was not the existence of slavery, however, which was the greatest evil, but the facility by which slaves could be made. The laws pertaining to debt were severe, and were most disgraceful in dooming a debtor to the absolute power of a creditor. To subject men of the same race to slavery for trifling debts which

they could not discharge, was the great defect of the Roman laws. But even these cruel regulations were modified, so that in the corrupt times of the empire there was no greater practical severity than was common in England as late as one hundred years ago. The temptations to fraud were enormous in a wicked state of society, and demanded a severe remedy. It is possible that our modern laws may show too great leniency to debtors who are not merely unfortunate, but dishonest. The problem is not yet solved, whether men should be severely handled who are guilty of reckless and unprincipled speculations and unscrupulous dealings, or whether they should be allowed immunity to prosecute their dangerous and disgraceful courses.

Moreover, the penal code of the Romans in reference to breaches of trust or carelessness or ignorance, by which property was lost or squandered, may have been too severe, as is still the case in England in reference to hunting game on another's grounds. It was hard to doom a man to death who drove away his neighbor's cattle, or even entered in the night his neighbor's house; but severe penalties alone will keep men from crimes where there is a low state of virtue and religion, and general prosperity and contentment become impossible where there is no efficient protection to property. Society was never more secure and happy in England than when vagabonds could be arrested, and when petty larcenies were visited with certain retribution. Every traveller in France and England feels that in regard to the punishment of crime, those older countries, restricted as are their political privileges, are in most questions of secure and comfortable living vastly superior to our own. The Romans lost under the emperors their political rights, but gained protection and safety in their relations with society. Where quiet and industrious citizens feel safe in their homes, are protected from scoundrels in their dealings, have ample scope for industrial enterprise, and are free to choose their private pleasures, they resign themselves to the loss of electing their rulers without great unhappiness. There are greater evils in the world than the deprivation of the elective franchise, lofty and glorious as is this privilege. The arbitrary rule of the emperors was fatal to political aspirations and rights and the growth of a genuine manhood; yet it is but fair to note that the evils of political slavery were qualified and set off by the excellence of the civil code and the privileges of social freedom.

The great practical evil connected with Roman jurisprudence was the intricacy and perplexity and uncertainty of the laws, together with the expense involved in litigation. The class of lawyers was large, and their gains were extortionate. Justice was not always to be found on the side of right. The law was uncertain as well as costly. The most learned counsel could be employed only by the rich, and even judges were venal, so that the poor did not easily find adequate redress. But all this is the necessary attendant on a factitious state of society, and by many is regarded as being quite as characteristic of modern, civilized Christian England and America as it was of Pagan Rome. Material civilization leads to an undue estimate of money; and when money purchases all that artificial people desire, then all classes will prostitute themselves for its possession, and justice, dignity, and elevation of sentiment will be forced to retreat,--as hermits sought a solitude when society had reached its lowest degradation, out of pure despair of its renovation.

AUTHORITIES.

The authorities for this chapter are very numerous. Since the Institutes of Gaius have been recovered, many eminent writers on Roman law have appeared, especially in Germany and France. Many might be cited, but for all ordinary purposes of historical study the work of Lord Mackenzie on Roman Law, together with the articles of George Long in Smith's Dictionary, will be found most useful. Maine's Treatise on Ancient Law is exceedingly interesting and valuable. Gibbon's famous chapter should also be read by every student. There is a fine translation of the Institutes of Justinian, which is quite accessible, by Dr. Harris of Oxford. The Code, Pandects, Institutes, and Novels are of course the original authority, with the long-lost Institutes of Gaius.

In connection with the study of the Roman law, it would be well to read Sir George Bowyer's Commentaries on the Modern Civil Law. Also Irving, Introduction to the Study of the Civil Law; Lindley, Introduction to the Study of Jurisprudence; Wheaton's Elements of International Law; and Vattel, *Le Droit des Gens*.

THE FINE ARTS.

ARCHITECTURE, SCULPTURE, PAINTING.

500-430 B.C.

My object in the present lecture is not a criticism of the principles of art so much as an enumeration of its various forms among the ancients, to show that in this department of civilization they reached remarkable perfection, and were not inferior to modern Christian nations.

The first development of art among all the nations of antiquity was in architecture. The earliest buildings erected were houses to protect people from heat, cold, and the fury of the elements of Nature. At that remote period much more attention was given to convenience and practical utility than to beauty or architectural effect. The earliest houses were built of wood, and stone was not employed until temples and palaces arose. Ordinary houses were probably not much better than log-huts and hovels, until wealth was accumulated by private persons.

The earliest monuments of enduring magnificence were the temples of powerful priests and the palaces of kings; and in Egypt and Assyria these appear earliest, as well as most other works showing civilization. Perhaps the first great monument which arose after the deluge of Noah was the Tower of Babel, built probably of brick. It was intended to be very lofty, but of its actual height we know nothing, nor of its style of architecture. Indeed, we do not know that it was ever advanced beyond its foundations; yet there are some grounds for supposing that it was ultimately finished, and became the principal temple of the Chaldaean metropolis.

From the ruins of ancient monuments we conclude that architecture received its earliest development in Egypt, and that its effects were imposing, massive, and grand. It was chiefly directed to the erection of palaces and temples, the ruins of which attest grandeur and vastness. They were built of stone, in blocks so huge and heavy that even modern engineers are at loss to comprehend how they could have been transported and erected. All the monuments of the Pharaohs are wonders, especially such as appear in the ruins of Karnak,--a temple formerly designated as that of Jupiter Ammon. It was in the time of Sesostris, or Rameses the Great, the first of the Pharaohs of the nineteenth dynasty, that architecture in Egypt reached its greatest development. Then we find the rectangular-cut blocks of stone in parallel courses, the heavy pier, the cylindrical column with its bell-shaped capital, and the bold and massive rectangular architraves extending from pier to pier and column to column, surmounted by a deep covered coping or cornice.

The imposing architecture of Egypt was chiefly owing to the impressive vastness of the public buildings. It was not produced by beauty of proportion or graceful embellishments; it was designed to awe the people, and kindle sentiments of wonder and astonishment. So far as this end was contemplated it was nobly reached; even to this day the traveller stands in admiring amazement before those monuments that were old three thousand years ago. No structures have been so enduring as the Pyramids; no ruins are more extensive and majestic than those of Thebes. The temple of Karnak and the palace of Rameses the Great were probably the most imposing ever built by man. This temple was built of blocks of stone seventy feet in length, on a platform one thousand feet long and three hundred wide, with pillars sixty feet in height. But this and other structures did not possess that unity of design which marked the Grecian temples. Alleys of colossal sphinxes formed the approach. At Karnak the alley was six thousand feet long, and before the main body of the edifice stood two obelisks commemorative of the dedication. The principal structures of Egyptian temples do not follow the straight line, but begin with pyramidal towers which flank the gateways; then follow, usually, a court surrounded with colonnades, subordinate temples, and houses for the priests. A second pylon, or pyramidal tower, leads to the interior and most considerable part of the temple,--a portico inclosed with walls, which receives light only through the entablature or openings in the roof. Adjoining this is the cella of the temple, without columns, enclosed by several walls, often divided into various small chambers with monolithic receptacles for idols or mummies or animals. The columns stand within the walls. The colonnade is not, as among the Greeks, an expansion of the temple; it is merely the wall with apertures. The walls, composed of square blocks, are perpendicular only on the inside, and bevelled externally, so that the thickness at the bottom sometimes amounts to twenty-four feet; thus the whole building assumes a pyramidal form, the fundamental principle of Egyptian architecture. The columns are more slender than the early Doric, are placed close together,

and have bases of circular plinths; the shaft diminishes upward, and is ornamented with perpendicular or oblique furrows, but not fluted like Grecian columns. The capitals are of the bell form, ornamented with all kinds of foliage, and have a narrow but high abacus. They abound with sculptured decorations, the designs of which were borrowed from the vegetation of the country. The highest of the columns of the temple of Luxor is five and a quarter times the greatest diameter.

But no monuments have ever excited so much curiosity and wonder as the Pyramids, not in consequence of any particular beauty or ingenuity in their construction, but because of their immense size and unknown age. None but sacerdotal monarchs would ever have erected them; none but a fanatical people would ever have toiled upon them. We do not know for what purpose they were raised, unless as sepulchres for kings. They are supposed to have been built at a remote antiquity, between two thousand and three thousand years before Christ. Lepsius thought that the oldest of these Pyramids were built more than three thousand years before Christ. The Pyramid of Cheops, at Memphis, covers a square whose side is seven hundred and sixty-eight feet, and rises into the air nearly five hundred feet. It is a solid mass of stone, which has suffered less from time than the mountains near it. Possibly it stands over an immense substructure, in which may yet be found the lore of ancient Egypt; it may even prove to be the famous labyrinth of which Herodotus speaks, built by the twelve kings of Egypt. According to this author, one hundred thousand men worked on this monument for forty years.

The palaces of the kings are mere imitations of the temples, their only difference of architecture being that their rooms are larger and in greater numbers. Some think that the famous labyrinth was a collective palace of many rulers.

Of Babylonian architecture we know little beyond what the Hebrew Scriptures and ancient authors tell us. But though nothing survives of ancient magnificence, we know that a city whose walls, according to Herodotus, were eighty-seven feet in thickness, three hundred and thirty-seven in height, and sixty miles in circumference, and in which were one hundred gates of brass, must have had considerable architectural splendor. This account of Babylon, however, is probably exaggerated, especially as to the height of the walls. The tower of Belus, the Palace of Nebuchadnezzar, and the Obelisk of Semiramis were probably wonderful structures, certainly in size, which is one of the conditions of architectural effect.

The Tyrians must have carried architecture to considerable perfection, since the Temple of Solomon, one of the most magnificent in the ancient world, was probably built by artists from Tyre. It was not remarkable for size,—it was, indeed, very small,—but it had great splendor of decoration. It was of quadrangular outline, erected upon a solid platform of stone, and bearing a striking resemblance to the oldest Greek temples, like those of Aegina and Paestum. The portico of the Temple as rebuilt by Herod was one hundred and eighty feet high, and the Temple itself was entered by nine gates, thickly coated with silver and gold. The inner sanctuary was covered on all sides with plates of gold, and was dazzling to the eye. The various courts and porticos and palaces with which it was surrounded gave to it a very imposing effect.

Architectural art in India was not so impressive and grand as in Egypt, and was directed chiefly to the erection of temples. Nor is it of very ancient date. There is no stone architecture now remaining in India, according to Sir James Fergusson, older than two and a half centuries before Christ; and this is in the form of Buddhist temples, generally traced to the great Asoka, who reigned from 272 B.C. to 236 B.C., and who established Buddhism as a state religion. There were doubtless magnificent buildings before his time, but they were of wood, and have all perished. We know, however, nothing about them.

The Buddhist temples were generally excavated out of the solid rock, and only the façades were ornamented. These were not larger than ordinary modern parochial churches, and do not give the impression of extraordinary magnificence. Besides these rock-hewn temples in India there remain many examples of a kind of memorial monument called *stupas*, or *topes*. The earliest of these are single columns; but the later and more numerous are in the shape of cones or circular mounds, resembling domes, rarely exceeding one hundred feet in diameter. Around the apex of each was a balustrade, or some ornamental work, about six feet in diameter. These topes remind one of the Pantheon at Rome in general form, but were of much smaller size. They were built on a stone basement less than fifty feet in height, above which was the brickwork. In process of time they came to resemble pyramidal towers rather than rounded domes, and were profusely ornamented with carvings. The great peculiarity of all Indian architectural monuments is excessive ornamentation rather than beauty of proportion or grand effect.

In course of time, however, Indian temples became more and more magnificent; and a Chinese traveller in the year 400 A.D. describes one in Gaudhava as four hundred and seventy feet high, decorated with every sort of precious substance. Its dome, as it appears in a bas-relief, must have rivalled that of St. Peter's at Rome; but no trace of it now remains. The topes of India, which were numerous, indicate that the Hindus were acquainted with the arch, both pointed and circular, which was not known to the Egyptians or the Greeks. The most important of these buildings, in which are preserved valuable relics, are found in the Punjab. They were erected about twenty years before Christ. In size, they are about one hundred and twenty-seven feet in diameter. Connected with the circular topes are found what are called *rails*, surrounding the topes, built in the form of rectangles, with heavy pillars. One of the most interesting of these was found to be two hundred and seventy-five feet long, having square pillars twenty-two feet in height, profusely carved with scenes from the life of Buddha, topped by capitals in the shape of elephants supporting a succession of horizontal stone beams, all decorated with a richness of carving unknown in any other country. The Amravati rail, one of the finest of the ancient monuments of India, is found to be one hundred and ninety-five by one hundred and sixty-five feet, having octagonal pillars ornamented with the most elaborate carvings.

From an architectural point of view, the rails were surpassed by the *chaityas*, or temple-caves, in western India. These were cut in the solid rock. Some one thousand different specimens are to be found. The facades of these caves are perfect, generally in the form of an arch, executed in the rock with every variety of detail, and therefore imperishable without violence. The process of excavation extended through ten centuries from the time of Asoka; and the interiors as well as the façades were highly ornamented with sculptures. The temple-caves are seldom more than one hundred and fifty feet deep and fifty feet in width, and the roofs are supported by pillars like the interior of Gothic cathedrals, some of which are of beautiful proportions with elaborated capitals. Though these rock-hewn temples are no larger than ordinary Christian churches, they are very impressive from the richly decorated carvings; they were lighted from a single opening in the façade, sometimes in the shape of a horseshoe.

Besides these chaityas, or temples, there are still more numerous *viharas*, or monasteries, found in India, of different dates, but none older than the third century before Christ. They show a central hall, surrounded on three sides by cells for the monks. On the fourth side is an open verandah; facing this is generally a shrine with an image of Buddha. These edifices are not imposing unless surrounded by galleries, as some were, supported by highly decorated pillars. The halls are constructed in several stories with heavy masonry, in the shape of pyramids adorned with the figures of men and animals. One of these halls in southern India had fifteen hundred cells. The most celebrated was the Nalanda monastery, founded in the first century by Nagarjuna, which accommodated ten thousand priests, and was enclosed by a wall measuring sixteen hundred feet by four hundred. It was to Central India what Mount Casino was to Italy, and Cluny was to France, in the Middle Ages,--the seat of learning and art.

It was not until the Mohammedan conquest in India that architecture received a new impulse from the Saracenic influence. Then arose the mosques, minarets, and palaces which are a wonder for their magnificence, and in which are seen the influence of Greek art as well as that of India. There is an Oriental splendor in these palaces and mosques which has called out the admiration of critics, although it is different from those types of beauty which we are accustomed to praise. But these later edifices were erected in the Middle Ages, coeval with the cathedrals of Europe, and therefore do not properly come under the head of ancient art, in which the ancient Hindus, whether of Aryan or Turanian descent, did not particularly excel. It was in matters of religion and philosophy that the Hindus felt most interest, even as the ancient Jews thought more of theology than of art and science.

Architecture, however, as the expression of genius and high civilization, was carried to perfection only by the Greeks, who excelled in so many things. It was among the ancient Dorians, who descended from the mountains of northern Greece eighty years after the fall of Troy, that architectural art worthy of the name first appeared. The Pelasgi erected Cyclopean structures fifteen hundred years before Christ, as seen in the massive walls of the Acropolis at Athens, constructed of huge blocks of hewn stone, and in the palaces of the princes of the heroic times. The lintel of the doorway of the Mycenaean treasury is composed of a single stone twenty-seven feet long and sixteen broad. But these edifices, which aimed at splendor and richness merely, were deficient in that simplicity and harmony which have given immortality to the temples of the Dorians. In this style of architecture everything was suitable to its object, and was grand and noble. The great thickness of the columns, the beautiful entablature, the ample proportion of the capital, the great horizontal lines of the architrave and cornice predominating over the vertical lines of the columns, the severity of geometrical forms produced for the most part by straight lines, gave an imposing simplicity to the

Doric temple.

How far the Greek architects were indebted to the Egyptian we cannot tell, for though columns are found amid the ruins of the Egyptian temples, they are of different shape from any made by the Greeks. In the structures of Thebes we find both the tumescent and the cylindrical columns, from which amalgamation might have been produced the Doric column. The Greeks seized on beauty wherever they found it, and improved upon it. The Doric column was not probably an entirely new creation, but shaped after models furnished by the most original of all the ancient nations, even the Egyptians. The Doric temples were uniform in plan. The columns were fluted, and were generally about six diameters in height; they diminished gradually upward from the base, with a slightly convex swelling; they were surmounted by capitals regularly proportioned according to their height. The entablature which the column supported was also of a certain number of diameters in height. So regular and perfect was the plan of the temple, that "if the dimensions of a single column and the proportion the entablature should bear to it were given to two individuals acquainted with the style, with directions to compose a temple, they would produce designs exactly similar in size, arrangement, and general proportions." The Doric order possessed a peculiar harmony, but taste and skill were nevertheless necessary in order to determine the number of diameters a column should have, and also the height of the entablature.

The Doric was the favorite order of European Greece for one thousand years, and also of her colonies in Sicily and Magna Graecia. It was used exclusively until after the Macedonian conquest, and was chiefly applied to temples. The massive temples of Paestum, the colossal magnificence of the Sicilian ruins, and the more elegant proportions of the Athenian structures, like the Parthenon and Temple of Theseus, show the perfection of the Doric architecture. Although the general style of all the Doric temples is so uniform, hardly two temples were alike. The earlier Doric was more massive; the later was more elegant, and its edifices were rich in sculptured decorations. Nothing could surpass the beauty of a Doric temple in the time of Pericles. The stylobate, or general base upon which the columnar story stood, from two thirds to a whole diameter of a column in height, was built in three equal courses, which gradually receded upward and formed steps, as it were, of a grand platform. The column, simply set upon the stylobate, without base or pedestal, was from four to six diameters in height, with twenty flutes, having a capital of half a diameter. On this rested the entablature, two column-diameters in height, which was divided into architrave (lower mouldings), frieze (broad middle space), and cornice (upper mouldings). The great beauty of the temple was the portico in front,—a forest of columns supporting the triangular pediment, about a diameter and a half to the apex, making an angle at the base of about fourteen degrees. From the pediment projects the cornice, while in the apex and at the base of the flat three-cornered gable are sculptured ornaments, generally the figures of men or animals. The whole outline of columns supporting the entablature is graceful, while the variety of light and shade arising from the arrangement of mouldings and capitals produces a grand effect.

The Parthenon, the most beautiful specimen of the Doric, has never been equalled, and it still stands august in its ruins, the glory of the old Acropolis and the pride of Athens. It was built of white Pentelic marble, and rested on a basement of limestone. It was two hundred and twenty-seven feet in length, one hundred and one in breadth, and sixty-five in height, surrounded with forty-eight fluted columns, six feet and two inches at the base and thirty-four feet in height, while within the peristyle, at either end, was an interior range of columns standing before the end of the cella. The frieze and the pediment were elaborately ornamented with reliefs and statues, and the cella, within and without, was adorned with the choicest sculptures of Phidias. The remains of the exquisite sculptures of the pediment and the frieze were in the early part of this century brought from Greece by Lord Elgin, purchased by the English government, and placed in the British Museum, where, preserved from further dilapidation, they stand as indisputable evidence of the perfection of Greek art. The grandest adornment of the temple was the colossal statue of Minerva in the eastern apartment of the cella, forty feet in height, composed of gold and ivory; the inner walls of the chamber were decorated with paintings, and the whole temple was a repository of countless treasure. But the Parthenon, so regular to the eye with its vertical, oblique, and horizontal lines, was curved in every line, with the exception of the gable,—with its entablature, architrave, frieze, and cornice, together with the basement, all arched upwards; and even the columns had a slight convexity of vertical line, amounting to 1/550 of the entire height of shaft, though so slightly as not to be perceptible. These curved lines gave to the structure a peculiar grace which cannot be imitated, as well as an effect of solidity.

Nearly coeval with the Doric was the Ionic order, invented by the Asiatic Greeks, still more graceful, though not so imposing. The Acropolis is a perfect example of this order. The column is

nine diameters in height, with a base, while the capital is more ornamented than the Doric. The shaft is fluted with twenty-four flutes and alternate fillets (flat longitudinal ridges), and the fillet is about a quarter the width of the flute. The pediment is flatter than that of the Doric order, and more elaborate. The great distinction of the Ionic column is a base, and a capital formed with volutes (spiral scrolls), the shaft also being more slender. Vitruvius, the greatest authority among the ancients in architecture, says that "the Greeks, in inventing these two kinds of columns, imitated in the one the naked simplicity and dignity of man, and in the other the delicacy and ornaments of woman; the base of the Ionic was the imitation of sandals, and the volutes of ringlets." The discoveries of many of the Ionic ornamentations among the remains of Assyrian architecture indicate the Oriental source of the Ionic ideas, just as the Doric style seems to have originated in Egypt. The artistic Greeks, however, always simplified and refined upon their masters.

The Corinthian order exhibits a still greater refinement and elegance than the other two, and was introduced toward the end of the Peloponnesian War. Its peculiarity consists in columns with foliated capitals modelled after the acanthus leaf, and still greater height, about ten diameters, surmounted with a more ornamented entablature. Of this order the most famous temple in Greece was that of Minerva at Tegea, built by Scopas of Paros, but destroyed by fire four hundred years before Christ.

Nothing more distinguished Greek architecture than the variety, the grace, and the beauty of the mouldings, generally in eccentric curves. The general outline of the moulding is a gracefully flowing cyma, or wave, concave at one end and convex at the other, like an Italic *f*, the concavity and convexity being exactly in the same curve, according to the line of beauty which Hogarth describes.

The most beautiful application of Greek architecture was in the temples, which were very numerous and of extraordinary grandeur, long before the Persian War. Their entrance was always from the west or the east. They were built either in an oblong or round form, and were mostly adorned with columns. Those of an oblong form had columns either in the front alone, or in the eastern and western fronts, or on all the four sides. They generally had porticos attached to them, and were without windows, receiving their light from the door or from above. The friezes were adorned with various sculptures, as were sometimes the pediments, and no expense was spared upon them. The most important part of the temple was the cell (*cella*, or temple proper, a square chamber), in which the statue of the deity was kept, generally surrounded with a balustrade. In front of the cella was the vestibule, and in the rear or back a chamber in which the treasures of the temple were kept. Names were applied to the temples as well as to the porticos, according to the number of columns in the portico at either end of the temple,—such as the tetrastyle (four columns in front), or hexastyle (when there were six). There were never more than ten columns across the front. The Parthenon had eight, but six was the usual number. It was the rule to have twice as many columns along the sides as in front. Some of the temples had double rows of columns on all sides, like that of Diana at Ephesus and of Quirinus at Rome. The distance between the columns varied from one diameter and a half to four diameters. About five eighths of a Doric temple were occupied by the cella, and three eighths by the portico.

That which gives to the Greek temples so much simplicity and harmony,—the great elements of beauty in architecture,—is the simple outline in parallelogrammic and pyramidal forms, in which the lines are uninterrupted through their entire length. This simplicity and harmony are more apparent in the Doric than in any of the other orders, but pertain to all the Grecian temples of which we have knowledge. The Ionic and Corinthian, or the voluted and foliated orders, do not possess that severe harmony which pervades the Doric; but the more beautiful compositions are so consummate that they will ever be taken as models of study.

There is now no doubt that the exteriors of the Grecian temples were ornamented in color,—perhaps with historical pictures, etc.—although as the traces have mostly disappeared it is impossible to know the extent or mode of decoration. It has been thought that the mouldings also may have been gilded or colored, and that the background of the sculptures had some flat color laid on as a relief to the raised figures. We may be sure, however it was done, that the effect was not gaudy or crude, but restrained within the limits of refinement and good taste by the infallible artistic instinct of those masters of the beautiful.

It is not the magnitude of the Greek temples and other works of art which most impresses us. It is not for this that they are important models; it is not for this that they are copied and reproduced in all the modern nations of Europe. They were generally small compared with the temples of Egypt, and with the vast dimensions of Roman amphitheatres; only three or four would compare in size with a Gothic cathedral,—the Parthenon, the Temple of Olympian Zeus at Athens, and the Temple of Diana at Ephesus; even the Pantheon at Rome is small, compared with the later monuments of the Caesars.

The traveller is always disappointed in contemplating the ruins of Greek buildings so far as size is concerned. But it is their matchless proportions, their severe symmetry, the grandeur of effect, the undying beauty, the graceful form which impress us, and make us feel that they are perfect. By the side of the Colosseum they are insignificant in magnitude; they do not cover acres, like the baths of Caracalla. Yet who has copied the Flavian amphitheatre; who erects an edifice after the style of the Thermae? All artists, however, copy the Parthenon. That, and not the colossal monuments of the Caesars, reappears in the capitals of Europe, and stimulates the genius of a Michael Angelo or a Christopher Wren.

The flourishing period of Greek architecture was during the period from Pericles to Alexander,--one hundred and thirteen years. The Macedonian conquest introduced more magnificence and less simplicity. The Roman conquest accelerated the decline in severe taste, when different orders began to be used indiscriminately.

In this state the art passed into the hands of the masters of the world, and they inaugurated a new era in architecture. The art was still essentially Greek, although the Romans derived their first knowledge from the Etruscans. The Cloaca Maxima, or Great Sewer, was built during the reign of the second Tarquin,--the grandest monument of the reign of the kings. It is not probable that temples and other public buildings in Rome were either beautiful or magnificent until the conquest of Greece, after which Grecian architects were employed. The Romans adopted the Corinthian style, which they made even more ornamental; and by the successful combination of the Etruscan arch with the Grecian column they laid the foundation of a new and original style, susceptible of great variety and magnificence. They entered into architecture with the enthusiasm of their teachers, but in their passion for novelty lost sight of the simplicity which is the great fascination of a Doric temple. Says Memes:--

"They [the Romans] deemed that lightness and grace were to be attained not so much by proportion between the vertical and the horizontal as by the comparative slenderness of the former. Hence we see a poverty in Roman architecture in the midst of profuse ornament. The great error was a constant aim to lessen the diameter while they increased the elevation of the columns. Hence the massive simplicity and severe grandeur of the ancient Doric disappear in the Roman, the characteristics of the order being frittered down into a multiplicity of minute details."

When the Romans used the Doric at all, they used a base for the column, which was never done at Athens. They also altered the Doric capital, which cannot be improved. Again, most of the Grecian Doric temples were peripteral,--surrounded with pillars on all the sides. But the Romans built with porticos on one front only, which had a greater projection than the Grecian. They generally were projected three columns, while the Greek portico had usually but a single row. Many of the Roman temples are circular, like the Pantheon, which has a portico of eight columns projected to the depth of three. Nor did the Romans construct hypaethral or uncovered temples with internal columns, like the Greeks. The Pantheon is an exception, since the dome has an open eye; and one great ornament of this beautiful structure is in the arrangement of internal columns placed in the front of niches, composed of antaë, or pier-formed ends of walls, to carry an entablature round under an attic on which the cupola rests. The Romans also adopted coupled columns, broken and recessed entablatures, and pedestals, which are considered blemishes. They again paid more attention to the interior than to the exterior decoration of their palaces and baths,--as we may infer from the ruins of Hadrian's villa at Tivoli and the excavations of Pompeii.

The pediments (roof-angles) used in Roman architectural works are steeper than those made by the Greeks, varying in inclination from eighteen to twenty-five degrees, instead of fourteen. The mouldings are the same as the Grecian in general form, although they differ from them in contour; they are less delicate and graceful, but were used in great profusion. Roman architecture is overdone with ornament, every moulding carved, and every straight surface sculptured with foliage or historical subjects in relief. The ornaments of the frieze consist of foliage and animals, with a variety of other things. The great exuberance of ornament is considered a defect, although when applied to some structures it is exceedingly beautiful. In the time of the first Caesars Roman architecture had, from the huge size of the buildings, a character of grandeur and magnificence. Columns and arches appeared in all the leading public buildings,--columns generally forming the external and arches the internal construction. Fabric after fabric arose on the ruins of others. The Flavii supplanted the edifices of Nero, which ministered to debauchery, by structures of public utility.

The Romans invented no new principle in architecture, unless it be the arch, which was known, though not practically applied, by the Assyrians, Egyptians, and Greeks. The Romans were a

practical and utilitarian people, and needed for their various structures greater economy of material than was compatible with large blocks of stone, especially for such as were carried to great altitudes. The arch supplied this want, and is perhaps the greatest invention ever made in architecture. No instance of its adoption occurs in the construction of Greek edifices before Greece became a part of the Roman empire. Its application dates back to the Cloaca Maxima, and may have been of Etrurian invention. Some maintain that Archimedes of Sicily was the inventor of the arch; but to whomsoever the glory of the invention is due, it is certain that the Romans were the first of European nations to make a practical application of its wonderful qualities. It enabled them to rear vast edifices with the humblest materials, to build bridges, aqueducts, sewers, amphitheatres, and triumphal arches, as well as temples and palaces. The merits of the arch have never been lost sight of by succeeding generations, and it is an essential element in the magnificent Gothic cathedrals of the Middle Ages. Its application extends to domes and cupolas, to floors and corridors and roofs, and to various other parts of buildings where economy of material and labor is desired. It was applied extensively to doorways and windows, and is an ornament as well as a utility. The most imposing forms of Roman architecture may be traced to a knowledge of the properties of the arch, and as brick was more extensively used than any other material, the arch was invaluable. The imperial palace on Mount Palatine, the Pantheon (except its portico and internal columns), the temples of Peace, of Venus and Rome, and of Minerva Medica, were of brick. So were the great baths of Titus, Caracalla, and Diocletian, the villa of Hadrian, the city walls, the villa of Mecaenas at Tivoli, and most of the palaces of the nobility,--although, like many of the temples, they were faced with stone. The Colosseum was of travertine, a cheap white limestone, and faced with marble. It was another custom to stucco the surface of brick walls, as favorable to decorations. In consequence of the invention of the arch, the Romans erected a greater variety of fine structures than either the Greeks or Egyptians, whose public edifices were chiefly confined to temples. The arch entered into almost every structure, public or private, and superseded the use of long stone-beams, which were necessary in the Grecian temples, as also of wooden timbers, in the use of which the Romans were not skilled, and which do not really pertain to architecture: an imposing edifice must always be constructed of stone or brick. The arch also enabled the Romans to economize in the use of costly marbles, of which they were very fond, as well as of other stones. Some of the finest columns were made of Egyptian granite, very highly polished.

The extensive application of the arch doubtless led to the deterioration of the Grecian architecture, since it blended columns with arcades, and thus impaired the harmony which so peculiarly marked the temples of Athens and Corinth; and as taste became vitiated with the decline of the empire, monstrous combinations took place, which were a great fall from the simplicity of the Parthenon and the interior of the Pantheon.

But whatever defects marked the age of Diocletian and Constantine, it can never be questioned that the Romans carried architecture to a perfection rarely attained in our times. They may not have equalled the severe simplicity of their teachers the Greeks, but they surpassed them in the richness of their decorations, and in all buildings designed for utility, especially in private houses and baths and theatres.

The Romans do not seem to have used other than semicircular arches. The Gothic, or Pointed, or Christian architecture, as it has been variously called, was the creation of the Middle Ages, and arose almost simultaneously in Europe after the first Crusade, so that it would seem to be of Eastern origin. But it was a graft on the old Roman arch, in the curve of the ellipse rather than the circle.

Aside from this invention of the arch, to which we are indebted for the most beautiful ecclesiastical structures ever erected, we owe everything in architecture to the Greeks and Romans. We have found out no new principles which were not known to Vitruvius. No one man was the inventor or creator of the wonderful structures which ornamented the cities of the ancient world. We have the names of great architects, who reared various and faultless models, but they all worked upon the same principles, and these can never be subverted; so that in architecture the ancients are our schoolmasters, whose genius we revere the more we are acquainted with their works. What more beautiful than one of those grand temples which the cultivated heathen Greeks erected to the worship of their unknown gods!--the graduated and receding stylobate as a base for the fluted columns, rising at regular distances in all their severe proportion and matchless harmony, with their richly carved capitals supporting an entablature of heavy stones, most elaborately moulded and ornamented with the figures of plants and animals; and rising above this, on the ends of the temple, or over a portico several columns deep, the pediment, covered with chiselled cornices, with still richer ornaments rising from the apices and at the feet, all carved in white marble, and then spread over an area larger than any modern churches, making a forest of columns to bear aloft those

ponderous beams of stone, without anything tending to break the continuity of horizontal lines, by which the harmony and simplicity of the whole are regulated! So accurately squared and nicely adjusted were the stones and pillars of which these temples were composed, that there was scarcely need even of cement. Without noise or confusion or sound of hammers did those temples rise, since all their parts were cut and carved in the distant quarries, and with mathematical precision. And within the cella, nearly concealed by surrounding columns, were the statues of the gods, and the altars on which incense was offered, or sacrifices made. In every part, interior and exterior, do we see a matchless proportion and beauty, whether in the shaft or the capital or the frieze or the pilaster or the pediment or the cornices, or even the mouldings,--everywhere grace and harmony, which grow upon the mind the more they are contemplated. The greatest evidence of the matchless creative genius displayed in those architectural wonders is that after two thousand years, and with all the inventions of Roman and modern artists, no improvement has been made; and those edifices which are the admiration of our own times are deemed beautiful as they approximate the ancient models, which will forever remain objects of imitation. No science can make two and two other than four; no art can make a Doric temple different from the Parthenon without departing from the settled principles of beauty and proportion which all ages have indorsed. Such were the Greeks and Romans in an art which is one of the greatest indices of material civilization, and which by them was derived from geometrical forms, or the imitation of Nature.

The genius displayed by the ancients in sculpture is even more remarkable than their skill in architecture. Sculpture was carried to perfection only by the Greeks; but they did not originate the art, since we read of sculptured images from the remotest antiquity. The earliest names of sculptors are furnished by the Old Testament. Assyria and Egypt are full of relics to show how early this art was cultivated. It was not carried to perfection as early, probably, as architecture; but rude images of gods, carved in wood, are as old as the history of idolatry. The history of sculpture is in fact identified with that of idols. The Egyptians were probably the first who made any considerable advances in the execution of statues. Those which remain are rude, simple, uniform, without beauty or grace (except a certain serenity of facial expression which seems to pervade all their portraiture), but colossal and grand. Nearly two thousand years before Christ the walls of Thebes were ornamented with sculptured figures, even as the gates of Babylon were made of sculptured bronze. The dimensions of Egyptian colossal figures surpass those of any other nation. The sitting statues of Memnon at Thebes are fifty feet in height, and the Sphinx is twenty-five,--all of granite. The number of colossal statues was almost incredible. The sculptures found among the ruins of Karnak must have been made nearly four thousand years ago. They exhibit great simplicity of design, but have not much variety of expression. They are generally carved from the hardest stones, and finished so nicely that we infer that the Egyptians were acquainted with the art of hardening metals for their tools to a degree not known in our times. But we see no ideal grandeur among any of the remains of Egyptian sculpture; however symmetrical or colossal, there is no diversity of expression, no trace of emotion, no intellectual force,--everything is calm, impassive, imperturbable. It was not until sculpture came into the hands of the Greeks that any remarkable excellence in grace of form or expression of face was reached. But the progress of development was slow. The earliest carvings were rude wooden images of the gods, and more than a thousand years elapsed before the great masters were produced whose works marked the age of Pericles.

It is not my object to give a history of the development of the plastic art, but to show the great excellence it attained in the hands of immortal sculptors.

The Greeks had an intuitive perception of the beautiful, and to this great national trait we ascribe the wonderful progress which sculpture made. Nature was most carefully studied by the Greek artists, and that which was most beautiful in Nature became the object of their imitation. They even attained to an ideal excellence, since they combined in a single statue what could not be found in a single individual,--as Zeuxis is said to have studied the beautiful forms of seven virgins of Crotona in order to paint his famous picture of Venus. Great as was the beauty of Phryne or Aspasia or Lais, yet no one of them could have served for a perfect model; and it required a great sensibility to beauty in order to select and idealize what was most perfect in the human figure. Beauty was adored in Greece, and every means were used to perfect it, especially beauty of form, which is the characteristic excellence of Grecian statuary. The gymnasia were universally frequented; and the great prizes of the games, bestowed for feats of strength and agility, were regarded as the highest honors which men could receive,--the subject of the poet's ode and the people's admiration. Statues of the victors perpetuated their fame and improved the sculptor's art. From the study of these statues were produced those great creations which all subsequent ages have admired; and from the application of the principles seen in these forms we owe the perpetuation of the ideas of grace and beauty such as no other people besides the Greeks had ever discovered, or indeed scarcely

appreciated. The sculpture of the human figure became a noble object of ambition in Greece, and was most munificently rewarded. Great artists arose, whose works adorned the temples of Greece so long as she preserved her independence, and when that was lost, her priceless productions were scattered over Asia and Europe. The Romans especially seized what was most prized, whether or not they could tell what was most perfect. Greece lived in her marble statues more than in her government or laws; and when we remember the estimation in which sculpture was held among the Greeks, the great prices paid for masterpieces, the care and attention with which they were guarded and preserved, and the innumerable works which were produced, filling all the public buildings, especially consecrated places, and even open spaces and the houses of the rich and great, calling from all classes admiration and praise,--we cannot think it likely that so great perfection will ever be reached again in those figures which are designed to represent beauty of form. Even the comparatively few statues which have survived the wars and violence of two thousand years, convince us that the moderns can only imitate; they can produce no creations equal to those by Athenian artists. "No mechanical copying of Greek statues, however skilful the copyist, can ever secure for modern sculpture the same noble and effective character it possessed among the Greeks, for the simple reason that the imitation, close as may be the resemblance, is but the result of the eye and hand, while the original is the expression of a true and deeply felt sentiment. Art was not sustained by the patronage of a few who affect to have what is called *taste*; in Greece the artist, having a common feeling for the beautiful with his countrymen, produced his works for the public, which were erected in places of honor and dedicated in temples of the gods."

It was not until the Persian wars awakened among the Greeks the slumbering consciousness of national power, and Athens became the central point of Grecian civilization, that sculpture, like architecture and painting, reached its culminating point of excellence under Phidias and his contemporaries. Great artists had previously made themselves famous, like Miron, Polycletus, and Ageladas; but the great riches which flowed into Athens at this time gave a peculiar stimulus to art, especially under the encouragement of such a ruler as Pericles, whose age was the golden era of Grecian history.

Phidias, or Phidias, was to sculpture what Aeschylus was to tragic poetry,--the representative of the sublime and grand. He was born four hundred and eighty-four years before Christ, and was the pupil of Ageladas. He stands at the head of the ancient sculptors, not from what we know of him, for his masterpieces have perished, but from the estimation in which he was held by the greatest critics of antiquity. It was to him that Pericles intrusted the adornment of the Parthenon, and the numerous and beautiful sculptures of the frieze and the pediment were the work of artists whom he directed. His great work in that wonderful edifice was the statue of the goddess Minerva herself, made of gold and ivory, forty feet in height, standing victorious, with a spear in her left hand and an image of victory in her right, with helmet on her head, and her shield resting by her side. The cost of this statue may be estimated when we consider that the gold alone used upon it was valued at forty-four talents, equal to five hundred thousand dollars of our money,--an immense sum in that age. Some critics suppose that this statue was overloaded with ornament, but all antiquity was unanimous in its admiration. The exactness and finish of detail were as remarkable as the grandeur of the proportions. Another of the famous works of Phidias was a colossal bronze statue of Athene Promachos, sixty feet in height, on the Acropolis between the Propylaea and the Parthenon. But both of these yielded to the colossal statue of Zeus in his great temple at Olympia, represented in a sitting posture, forty feet high, on a pedestal of twenty feet. The god was seated on a throne. Ebony, gold, ivory, and precious stones formed, with a multitude of sculptured and painted figures, the wonderful composition of this throne. In this his greatest work the artist sought to embody the idea of majesty and repose,--of a supreme deity no longer engaged in war with Titans and Giants, but enthroned as a conqueror, ruling with a nod the subject world, and giving his blessing to those victories which gave glory to the Greeks. So famous was this statue, which was regarded as the masterpiece of Grecian art, that it was considered a calamity to die without having seen it; and this served for a model for all subsequent representations of majesty and power in repose among the ancients. It was removed to Constantinople by Theodosius I., and was destroyed by fire in the year 475 A.D. Phidias executed various other famous works, which have perished; but even those that were executed under his superintendence which have come down to our times,--like the statues which ornamented the pediment of the Parthenon,--are among the finest specimens of art that exist, and exhibit the most graceful and appropriate forms which could have been selected, uniting grandeur with simplicity, and beauty with accuracy of anatomical structure. His distinguishing excellence was ideal beauty, and that of the sublimest order.

Of all the wonders and mysteries of ancient art the colossal statues of ivory and gold were perhaps the most remarkable, and the difficulty of executing them has been set forth by the ablest of modern

critics, like Winckelmann, Heyne, and De Quincey. "The grandeur of their dimensions, the perfection of their workmanship, the richness of their materials, their majesty, beauty, and ideal truth, the splendor of the architecture and pictorial decoration with which they were associated,—all conspired to impress the beholder with wonder and awe, and induce a belief of the actual presence of the god."

After the Peloponnesian War a new school of art arose in Athens, which appealed more to the passions. Of this school was Praxiteles, who aimed to please without seeking to elevate or instruct. No one has probably ever surpassed him in execution. He wrought in bronze and marble, and was one of the artists who adorned the Mausoleum of Artemisia. Without attempting the sublime impersonation of the deity, in which Phidias excelled, he was unsurpassed in the softer graces and beauties of the human form, especially in female figures. His most famous work was an undraped statue of Venus, for his native town of Cnidus, which was so remarkable that people flocked from all parts of Greece to see it. He did not aim at ideal majesty so much as at ideal gracefulness; his works were formed from the most beautiful living models, and hence expressed only the ideal of sensuous charms. It is probable that the Venus de Medici of Cleomenes was a mere copy of the Aphrodite of Praxiteles, which was so highly extolled by the ancient authors; it was of Parian marble, and modelled from the celebrated Phryne. His statues of Dionysus also expressed the most consummate physical beauty, representing the god as a beautiful youth crowned with ivy, and expressing tender and dreamy emotions. Praxiteles sculptured several figures of Eros, or the god of love, of which that at Thespieae attracted visitors to the city in the time of Cicero. It was subsequently carried to Rome, and perished by a conflagration in the time of Titus. One of the most celebrated statues of this artist was an Apollo, many copies of which still exist. His works were very numerous, but chiefly from the circle of Dionysus, Aphrodite, and Eros, in which adoration for corporeal attractions is the most marked peculiarity, and for which the artist was fitted by his dissolute life.

Scopas was the contemporary of Praxiteles, and was the author of the celebrated group of Niobe, which is one of the chief ornaments of the gallery of sculpture at Florence. He flourished about three hundred and fifty years before Christ, and wrought chiefly in marble. He was employed in decorating the Mausoleum which Artemisia erected to her husband,—one of the wonders of the world. His masterpiece is said to have been a group representing Achilles conducted to the island of Leuce by the divinities of the sea, which ornamented the shrine of Domitius in the Flaminian Circus. In this, tender grace, heroic grandeur, daring power, and luxurious fulness of life were combined with wonderful harmony. Like the other great artists of this school, Scopas exhibited the grandeur and sublimity for which Phidias was celebrated, but a greater refinement and luxury, as well as skill in the use of drapery.

Sculpture in Greece culminated, as an art, in Lysippus, who worked chiefly in bronze. He is said to have executed fifteen hundred statues, and was much esteemed by Alexander the Great, by whom he was extensively patronized. He represented men not as they were, but as they appeared to be; and if he exaggerated, he displayed great energy of action. He aimed to idealize merely human beauty, and his imitation of Nature was carried out in the minutest details. None of his works are extant; but as he alone was permitted to make the statue of Alexander, we infer that he had no equals. The Emperor Tiberius transferred one of his statues (that of an athlete) from the baths of Agrippa to his own chamber, which so incensed the people that he was obliged to restore it. His favorite subject was Hercules, and a colossal statue of this god was carried to Rome by Fabius Maximus, when he took Tarentum, and afterward was transferred to Constantinople; the Farnese Hercules and the Belvidere Torso are probably copies of this work. He left many eminent scholars, among whom were Chares (who executed the famous Colossus of Rhodes), Agesander, Polydorus, and Athenodorus who sculptured the group of the "Laocoön." The Rhodian school was the immediate offshoot from the school of Lysippus at Sicyon; and from this small island of Rhodes the Romans, when they conquered it, carried away three thousand statues. The Colossus was one of the wonders of the world (seventy cubits in height); and the Laocoön (the group of the Trojan hero and his two sons encoiled by serpents) is a perfect miracle of art, in which pathos is exhibited in the highest degree ever attained in sculpture. It was discovered in 1506, near the baths of Titus, and is one of the choicest remains of ancient plastic art.

The great artists of antiquity did not confine themselves to the representation of man, but also carved animals with exceeding accuracy and beauty. Nicias was famous for his dogs, Myron for his cows, and Lysippus for his horses. Praxiteles composed his celebrated lion after a living animal. "The horses of the frieze of the Elgin Marbles," says Flaxman, "appear to live and move; to roll their eyes, to gallop, prance, and curvet; the veins of their faces and legs seem distended with circulation. The beholder is charmed with the deer-like lightness and elegance of their make; and although the relief is not above an inch from the background, and they are so much smaller than nature, we can

scarcely suffer reason to persuade us they are not alive." The Greeks also carved gems, cameos, medals, and vases, with unapproachable excellence. Very few specimens have come down to our times, but those which we possess show great beauty both in design and execution.

Grecian statuary began with ideal representations of the deities, and was carried to the greatest perfection by Phidias in his statues of Jupiter and Minerva. Then succeeded the school of Praxiteles, in which the figures of gods and goddesses were still represented, but in mortal forms. The school of Lysippus was famous for the statues of celebrated men, especially in cities where Macedonian rulers resided. Artists were expected henceforth to glorify kings and powerful nobles and rulers by portrait statues. From this period, however, plastic art degenerated; nor were works of original genius produced, but rather copies or varieties from the three great schools to which allusion has been made. Sculpture may have multiplied, but not new creations; although some imitations of great merit were produced, like the Hermaphrodite, the Torso, the Farnese Hercules, and the Fighting Gladiator. When Corinth was sacked by Mummius, some of the finest statues of Greece were carried to Rome; and after the civil war between Caesar and Pompey, the Greek artists emigrated to Italy. The fall of Syracuse introduced many works of priceless value into Rome; but it was from Athens, Delphi, Corinth, Elis, and other great centres of art that the richest treasures were brought. Greece was despoiled to ornament Italy.

The Romans did not create a school of sculpture. They borrowed wholly from the Greeks, yet made, especially in the time of Hadrian, many beautiful statues. They were fond of this art, and all eminent men had statues erected to their memory. The busts of emperors were found in every great city, and Rome was filled with statues. The monuments of the Romans were even more numerous than those of the Greeks, and among them some admirable portraits are found. These sculptures did not express that consummation of beauty and grace, of refinement and sentiment, which marked the Greeks; but the imitations were good. Art had reached its perfection under Lysippus; there was nothing more to learn. Genius in that department could soar no higher. It will never rise to loftier heights.

It is noteworthy that the purest forms of Grecian art arose in its earlier stages. From a moral point of view, sculpture declined from the time of Phidias. It was prostituted at Rome under the emperors. The specimens which have often been found among the ruins of ancient baths make us blush for human nature. The skill of execution did not decline for several centuries; but the lofty ideal was lost sight of, and gross appeals to human passions were made by those who sought to please corrupt leaders of society in an effeminate age. The turgidity and luxuriance of art gradually passed into tameness and poverty. The reliefs on the Arch of Constantine are rude and clumsy compared with those on the column of Marcus Aurelius.

It is not my purpose to describe the decline of art, or enumerate the names of the celebrated masters who exalted sculpture in the palmy days of Pericles or even Alexander. I simply speak of sculpture as an art which reached a great perfection among the Greeks and Romans, as we have a right to infer from the specimens that have been preserved. How many more must have perished, we may infer from the criticisms of the ancient authors. The finest productions of our own age are in a measure reproductions; they cannot be called creations, like the statue of the Olympian Jove. Even the Moses of Michael Angelo is a Grecian god, and Powers's Greek Slave is a copy of an ancient Venus. The very tints which have been admired in some of the works of modern sculptors are borrowed from Praxiteles, who succeeded in giving to his statues an appearance of living flesh. The Museum of the Vatican alone contains several thousand specimens of ancient sculpture which have been found among the débris of former magnificence, many of which are the productions of Greek artists transported to Rome. Among them are antique copies of the Cupid and the Faun of Praxiteles, the statue of Demosthenes, the Minerva Medica, the Athlete of Lysippus, the Torso Belvedere sculptured by Apollonius, the Belvidere Antinous, of faultless anatomy and a study for Domenichino, the Laocoön, so panegyricized by Pliny, the Apollo Belvedere, the work of Agasias of Ephesus, the Sleeping Ariadne, with numerous other statues of gods and goddesses, emperors, philosophers, poets, and statesmen of antiquity. The Dying Gladiator, which ornaments the capitol, is alone a magnificent proof of the perfection to which sculpture was carried centuries after the art had culminated at Athens. And these are only a few which stand out among the twenty thousand recovered statues that now embellish Italy, to say nothing of those that are scattered over Europe. We have the names of hundreds of artists who were famous in their day. Not merely the figures of men are chiselled, but of animals and plants. Nature in all her forms was imitated; and not merely Nature, but the dresses of the ancients are perpetuated in marble. No modern sculptor has equalled, in delicacy of finish, the draperies of those ancient statues as they appear to us even after the exposure and accidents of two thousand years. No one, after a careful study of the museums of

Europe, can question that of all the nations who have claimed to be civilized, the ancient Greeks and Romans deserve a proud pre-eminence in an art which is still regarded as among the highest triumphs of human genius. All these matchless productions of antiquity are the result of native genius alone, without the aid of Christian ideas. Nor with the aid of Christianity are we sure that any nation will ever soar to loftier heights than did the Greeks in that proud realm which was consecrated to Paganism.

We are not so certain in regard to the excellence of the ancients in the art of painting as we are in regard to sculpture and architecture, since so few specimens of painting have been preserved. We have only the testimony of the ancients themselves; and as they had so severe a taste and so great a susceptibility to beauty in all its forms, we cannot suppose that their notions were crude in this great art which the moderns have carried to such great perfection. In this art the moderns doubtless excel, especially in perspective and drawing, and light and shade. No age, we fancy, can surpass Italy in the fifteenth and sixteenth centuries, when the genius of Raphael, Correggio, and Domenichino blazed with such wonderful brilliancy.

Painting in some form, however, is very ancient, though not so ancient as are the temples of the gods and the statues that were erected to their worship. It arose with the susceptibility to beauty of form and color, and with the view of conveying thoughts and emotions of the soul by imitation of their outward expression. The walls of Babylon were painted after Nature with representations of different species of animals and of combats between them and man. Semiramis was represented as on horseback, striking a leopard with a dart, and her husband Ninus as wounding a lion. Ezekiel describes various idols and beasts portrayed upon the walls, and even princes painted in vermilion, with girdles around their loins. In ages almost fabulous there were some rude attempts in this art, which probably arose from the coloring of statues and reliefs. The wooden chests of Egyptian mummies are covered with painted and hieroglyphic presentations of religious subjects; but the colors were laid without regard to light and shade. The Egyptians did not seek to represent the passions and emotions which agitate the soul, but rather to authenticate events and actions; and hence their paintings, like hieroglyphics, are but inscriptions. It was their great festivals and religious rites which they sought to perpetuate, not ideas of beauty or of grace. Thus their paintings abound with dismembered animals, plants, and flowers, with censers, entrails,—whatever was used in their religious worship. In Greece also the original painting consisted in coloring statues and reliefs of wood and clay. At Corinth, painting was early united with the fabrication of vases, on which were rudely painted figures of men and animals. Among the Etruscans, before Rome was founded, it is said there were beautiful paintings, and it is probable that these people were advanced in art before the Greeks. There were paintings in some of the old Etruscan cities which the Roman emperors wished to remove, so much admired were they even in the days of the greatest splendor. The ancient Etruscan vases are famous for designs which have never been exceeded in purity of form, but it is probable that these were copied from the Greeks.

Whether the Greeks or the Etruscans were the first to paint, however, the art was certainly carried to the greatest perfection among the former. The development of it was, like all arts, very gradual. It probably began by drawing the outline of a shadow, without intermediate markings; the next step was the complete outline with the inner markings,—such as are represented on the ancient vases, or like the designs of Flaxman. They were originally practised on a white ground; then light and shade were introduced, and then the application of colors in accordance with Nature. We read of a great painting by Bularchus, of the battle of Magnete, purchased by a king of Lydia seven hundred and eighteen years before Christ. As the subject was a battle, it must have represented the movement of figures, although we know nothing of the coloring or of the real excellence of the work, except that the artist was paid munificently. Cimon of Cleona is the first great name connected with the art in Greece. He is praised by Pliny, to whom we owe the history of ancient painting more than to any other author. Cimon was not satisfied with drawing simply the outlines of his figures, such as we see in the oldest painted vases, but he also represented limbs, and folds of garments. He invented the art of foreshortening, or the various representations of the diminution of the length of figures as they appear when looked at obliquely; and hence was the first painter of perspective. He first made muscular articulations, indicated the veins, and gave natural folds to drapery.

A much greater painter than he was Polygnotus of Thasos, the contemporary of Phidias, who came to Athens about the year 463 B.C.,—one of the greatest geniuses of any age, and one of the most magnanimous, who had the good fortune to live in an age of exceeding intellectual activity. He painted on panels, which were afterward let into the walls, being employed on the public buildings of Athens, and on the great temple of Delphi, the hall of which he painted gratuitously. He also decorated the Propylaea, which was erected under the superintendence of Phidias. The pictures of

Polygnotus had nothing of that elaborate grouping, aided by the powers of perspective, so much admired in modern art. His greatness lay in statuesque painting, which he brought nearly to perfection by ideal expression, accurate drawing, and improved coloring. He used but few colors, and softened the rigidity of his predecessors by making the mouth of beauty smile. He gave great expression to the face and figure, and his pictures were models of excellence for the beauty of the eyebrows, the blush upon the cheeks, and the gracefulness of the draperies. He strove, like Phidias, to express character in repose. He imitated the personages and the subjects of the old mythology, and treated them in an epic spirit, his subjects being almost invariably taken from Homer and the Epic cycle.

Among the works of Polygnotus, as mentioned by Pliny, are his paintings in the Temple at Delphi, in the Propylaea of the Acropolis, in the Temple of Theseus, and in the Temple of the Dioscuri at Athens. He painted in a truly religious spirit, and upon symmetrical principles, with great grandeur and freedom, resembling Michael Angelo more than any other modern artist.

The use of oil was unknown to the ancients. The artists painted upon wood, clay, plaster, stone, parchment, but not upon canvas, which was not used till the time of Nero. They painted upon tablets or panels, and not upon the walls,—the panels being afterward framed and encased in the walls. The stylus, or cestrum, used in drawing and for spreading the wax colors was pointed on one end and flat on the other, and generally made of metal. Wax was prepared by purifying and bleaching, and then mixed with colors. When painting was practised in watercolors, glue was used with the white of an egg or with gums; but wax and resins were also worked with water, with certain preparations. This latter mode was called encaustic, and was, according to Plutarch, the most durable of all methods. It was not generally adopted till the time of Alexander the Great. Wax was a most essential ingredient, since it prevented the colors from cracking. Encaustic painting was practised both with the cestrum and the pencil, and the colors were also burned in.

Fresco, or water-color, on fresh plaster, was used for coloring walls, which were divided into compartments or panels. The composition of the stucco, and the method of preparing the walls for painting, is described by the ancient writers: "They first covered the walls with a layer of ordinary plaster, over which, when dry, were successively added three other layers of a finer quality, mixed with sand. Above these were placed three layers of a composition of chalk and marble-dust, the upper one being laid on before the under one was dry; by which process the different layers were so bound together that the whole mass formed one beautiful and solid slab, resembling marble, and was capable of being detached from the wall and transported in a wooden frame to any distance. The colors were applied when the composition was still wet. The fresco wall, when painted, was covered with an encaustic varnish, both to heighten the color and to preserve it from the effects of the sun or the weather; but this process required so much care, and was attended with so much expense, that it was used only in the better houses and palaces." The later discoveries at Pompeii show the same correctness of design in painting as in sculpture, and also considerable perfection in coloring. The great artists of Greece—Phidias and Euphranor, Zeuxis and Protogenes, Polygnotus and Lysippus—were both sculptors and painters, like Michael Angelo; and the ancient writers praise the paintings of these great artists as much as their sculpture. The Aldobrandini Marriage, found on the Esquiline Mount during the pontificate of Clement VIII., and placed in the Vatican by Pius VII., is admired both for drawing and color. Polygnotus was praised by Aristotle for his designs, and by Lucian for his color.

Dionysius and Mikon were the great contemporaries of Polygnotus, the former being celebrated for his portraits. His pictures were deficient in the ideal, but were remarkable for expression and elegant drawing. Mikon was particularly skilled in painting horses, and was the first who used for a color the light Attic ochre, and the black made from burnt vine-twigs. He painted three of the walls of the Temple of Theseus, and also the walls of the Temple of the Dioscuri.

A greater painter still was Apollodorus of Athens. Through his labors, about 408 B.C., dramatic effect was added to the style of Polygnotus, without departing from his pictures as models. "The acuteness of his taste," says Fuseli, "led him to discover that as all men were connected by one general form, so they were separated each by some predominant power, which fixed character and bound them to a class. Thence he drew his line of imitation, and personified the central form of the class to which his object belonged, and to which the rest of its qualities administered without being absorbed. Agility was not suffered to destroy firmness, solidity, or weight; nor strength and weight, agility. Elegance did not degenerate into effeminacy, nor grandeur swell to hugeness." His aim was to deceive the eye of the spectator by the semblance of reality: he painted men and things as they really appeared. He also made a great advance in coloring: he invented chiaro-oscuro. Other painters

had given attention to the proper gradation of light and shade; he heightened this effect by the gradation of tints, and thus obtained what the moderns call *tone*. He was the first who conferred due honor on the pencil,--*primusque gloriam penicillo jure contulit*.

This great painter was succeeded by Zeuxis, who belonged to his school, but who surpassed him in the power to give ideal form to rich effects. He began his great career four hundred and twenty-four years before Christ, and was most remarkable for his female figures. His Helen, painted from five of the most beautiful women of Croton, was one of the most renowned productions of antiquity, to see which the painter demanded money. He gave away his pictures, because, with an artist's pride, he maintained that their price could not be estimated. There is a tradition that Zeuxis laughed himself to death over an old woman painted by him. He arrived at illusion of the senses, regarded as a high attainment in art,--as in the instance recorded of his grapes, at which the birds pecked. He belonged to the Asiatic school, whose headquarters were at Ephesus,--the peculiarities of which were accuracy of imitation, the exhibition of sensuous charms, and the gratification of sensual tastes. He went to Athens about the time that the sculpture of Phidias was completed, which modified his style. His marvellous powers were displayed in the contrast of light and shade, which he learned from Apollodorus. He gave ideal beauty to his figures, but it was in form rather than in expression. He taught the true method of grouping, by making each figure the perfect representation of the class to which it belonged. His works were deficient in those qualities which elevate the feelings and the character. He was the Euripides rather than the Homer of his art. He exactly imitated natural objects, which are incapable of ideal representation. His works were not so numerous as they were perfect in their way, in some of which, as in the Infant Hercules strangling the Serpent, he displayed great dramatic power. Lucian highly praises his Female Centaur as one of the most remarkable paintings of the world, in which he showed great ingenuity of contrasts. His Jupiter Enthroned is also extolled by Pliny, as one of his finest works. Zeuxis acquired a great fortune, and lived ostentatiously.

Contemporaneous with Zeuxis, and equal in fame, was Parrhasius, a native of Ephesus, whose skill lay in accuracy of drawing and power of expression. He gave to painting true proportion, and attended to minute details of the countenance and the hair. In his gods and heroes, he did for painting what Phidias did in sculpture. His outlines were so perfect as to indicate those parts of the figure which they did not express. He established a rule of proportion which was followed by all succeeding artists. While many of his pieces were of a lofty character, some were demoralizing. Zeuxis yielded the palm to him, since Parrhasius painted a curtain which deceived his rival, whereas the grapes of Zeuxis had deceived only birds. Parrhasius was exceedingly arrogant and luxurious, and boasted of having reached the utmost limits of his art. He combined the magic tone of Apollodorus with the exquisite design of Zeuxis and the classic expression of Polygnotus.

Many were the eminent painters that adorned the fifth century before Christ, not only in Athens, but in the Ionian cities of Asia. Timanthes of Sicyon was distinguished for invention, and Eupompus of the same city founded a school. His advice to Lysippus is memorable: "Let Nature, not an artist, be your model." Protogenes was celebrated for his high finish. His Talissus took him seven years to complete. Pamphilus was celebrated for composition, Antiphilus for facility, Theon of Samos for prolific fancy, Apelles for grace, Pausias for his chiaro-oscuro, Nicomachus for his bold and rapid pencil, Aristides for depth of expression.

The art probably culminated in Apelles, who was at once a rich colorist and portrayer of sensuous charm and a scientific artist, while he added a peculiar grace of his own, which distinguished him above both his predecessors and contemporaries. He was contemporaneous with Alexander, and was alone allowed to paint the picture of the great conqueror. Apelles was a native of Ephesus, studied under Pamphilus of Amphipolis, and when he had gained reputation he went to Sicyon and took lessons from Melanthius. He spent the best part of his life at the court of Philip and Alexander, and painted many portraits of these great men and of their generals. He excelled in portraits, and labored so assiduously to perfect himself in drawing that he never spent a day without practising. He made great improvement in the mechanical part of his art, inventing some colors, and being the first to varnish pictures. By the general consent of ancient authors, Apelles stands at the head of all the painters of their world. His greatest work was his Venus Anadyomene, or Venus rising out of the sea, in which female grace was personified; the falling drops of water from her hair gave the appearance of a transparent silver veil over her form. This picture cost one hundred talents, was painted for the Temple of Aesculapius at Cos, and afterward placed by Augustus in the temple which he dedicated to Julius Caesar. The lower part of it becoming injured, no one could be found to repair it; nor was there an artist who could complete an unfinished picture which Apelles left. He feared no criticism, and was unenvious of the fame of rivals.

After Apelles, the art of painting declined, although great painters occasionally appeared, especially from the school of Sicyon, which was renowned for nearly two hundred years. The destruction of Corinth by Mummius, 146 B.C., gave a severe blow to Grecian art. This general destroyed, or carried to Rome, more works than all his predecessors combined. Sulla, when he spoiled Athens, inflicted a still greater injury; and from that time artists resorted to Rome and Alexandria and other flourishing cities for patronage and remuneration. The masterpieces of famous artists brought enormous prices, and Greece and Asia were ransacked for old pictures. The paintings which Aemilius Paulus brought from Greece required two hundred and fifty wagons to carry them in the triumphal procession. With the spoliation of Greece, the migration of artists began; and this spoliation of Greece, Asia, and Sicily continued for two centuries. We have already said that such was the wealth of Rhodes in works of art that three thousand statues were found there by the conquerors; nor could there have been less at Athens, Olympia, and Delphi. Scaurus had all the public pictures of Sicyon transported to Rome. Verres plundered every temple and public building in Sicily.

Thus Rome was possessed of the finest paintings in the world, without the slightest claim to the advancement of the art. And if the opinion of Sir Joshua Reynolds is correct, art could advance no higher in the realm of painting, as well as of statuary, than the Greeks had already borne it. Yet the Romans learned to place as high value on the works of Grecian genius as the English do on the paintings of the old masters of Italy and Flanders. And if they did not add to the art, they gave such encouragement that under the emperors it may be said to have been flourishing. Varro had a gallery of seven hundred portraits of eminent men. The portraits as well as the statues of the great were placed in the temples, libraries, and public buildings. The baths especially were filled with paintings.

The great masterpieces of the Greeks were either historical or mythological. Paintings of gods and heroes, groups of men and women, in which character and passion could be delineated, were the most highly prized. It was in the expression given to the human figure--in beauty of form and countenance, in which all the emotions of the soul, as well as the graces of the body were portrayed--that the Greek artists sought to reach the ideal, and to gain immortality. And they painted for a people who had both a natural and a cultivated taste and sensibility.

Among the Romans portrait, decorative, and scene painting engrossed the art, much to the regret of such critics as Pliny and Vitruvius. Nothing could be in more execrable taste than a colossal painting of Nero, one hundred and twenty feet high. From the time of Augustus landscape decorations were common, and were carried out with every species of license. Among the Greeks we do not read of landscape painting. This has been reserved for our age, and is much admired, as it was at Rome in the latter days of the empire. Mosaic work, of inlaid stones or composition of varying shades and colors, gradually superseded painting in Rome; it was first used for floors, and finally walls and ceilings were ornamented with it. It is true, the ancients could show no such exquisite perfection of colors, tints, and shades as may be seen to-day in the wonderful reproductions of world-renowned paintings on the walls of St. Peter's at Rome; but many ancient mosaics have been preserved which attest beauty of design of the highest character,--like the Battle of Issus, lately discovered at Pompeii; and this brilliant art had its origin and a splendid development at the hands of the old Romans.

Thus in all those arts of which modern civilization is proudest, and in which the genius of man has soared to the loftiest heights, the ancients were not merely our equals,--they were our superiors. It is greater to originate than to copy. In architecture, in sculpture, and perhaps in painting, the Greeks attained absolute perfection. Any architect of our time, who should build an edifice in different proportions from those that were recognized in the great cities of antiquity, would make a mistake. Who can improve upon the Doric columns of the Parthenon, or upon the Corinthian capitals of the Temple of Jupiter? Indeed, it is in proportion as we accurately copy the faultless models of the age of Pericles that excellence with us is attained and recognized; when we differ from them we furnish grounds of just criticism. So in sculpture,--the finest modern works are inspired by antique models. It is only when the artist seeks to bring out the purest and loftiest sentiments of the soul, such as only Christianity can inspire, that he may hope to surpass the sculpture of antiquity in one department of that art alone,--in expression, rather than in beauty of form, on which no improvement can be made. And if we possessed the painted Venus of Apelles, as we can boast of having the sculptured Venus of Cleomenes, we should probably discover greater richness of coloring as well as grace of figure than appear in that famous picture of Titian which is one of the proudest ornaments of the galleries of Florence, and one of the greatest marvels of Italian art.

Winckelmann's History of Ancient Art; Müller's Ancient Art and its Remains; A.J. Guattani, Antiquités de la Grande Grèce; Mazois, Antiquités de Pompeii; Sir W. Gill, Pompeiana; Donaldson's Antiquities of Athens; Vitruvius, Stuart, Chandler, Clarke, Dodwell, Cleghorn, De Quincey, Fergusson, Schliemann,--these are some of the innumerable authorities on Architecture among the ancients.

In Sculpture, Pliny and Cicero are the most noted critics. There is a fine article in the Encyclopaedia Britannica on this subject. In Smith's Dictionary are the Lives and works of the most noted masters. Müller's Ancient Art alludes to the leading masterpieces. Montfauçon's Antiquité Expliquée en Figures; Specimens of Ancient Sculpture, by the Society of Dilettanti, London, 1809; Ancient Marbles of the British Museum, by Taylor Combe; Millin, Introduction à l'Étude des Monuments Antiques; Monuments Inédits d'Antiquité figurée, recueillis et publiés par Raoul-Rochette; Gerhard's Archäologische Zeitung; David's Essai sur le Classement Chronologique des Sculpteurs Grecs les plus célèbres.

In Painting, see Müller's Ancient Art; Fuseli's Lectures; Sir Joshua Reynolds's Lectures; Lanzi's History of Painting in Italy (translated by Roscoe); and the Article on "Painting," Encyclopaedia Britannica, and Article "Pictura," Smith's Dictionary, both of which last mentioned refer to numerous German, French, and other authorities, should the reader care to pursue the subject. Vitruvius (on Architecture, translated by Gwilt) writes at some length on ancient wall-paintings. The finest specimens of ancient paintings are found in catacombs, the baths, and the ruins of Pompeii. On this subject Winckelmann is the great authority.

ANCIENT SCIENTIFIC KNOWLEDGE.

ASTRONOMY, GEOGRAPHY, ETC.

2000-100 B.C.

It would be absurd to claim for the ancients any great attainments in science, such as they made in the field of letters or the realm of art. It is in science, especially when applied to practical life, that the moderns show their great superiority to the most enlightened nations of antiquity. In this great department of human inquiry modern genius shines with the lustre of the sun. It is this which most strikingly attests the advance of civilization. It is this which has distinguished and elevated the races of Europe, and carried them in the line of progress beyond the attainments of the Greeks and Romans. With the magnificent discoveries and inventions of the last three hundred years in almost every department of science, especially in the explorations of distant seas and continents, in the analysis of chemical compounds, in the wonders of steam and electricity, in mechanical appliances to abridge human labor, in astronomical researches, in the explanation of the phenomena of the heavens, in the miracles which inventive genius has wrought,--seen in our ships, our manufactories, our printing-presses, our observatories, our fortifications, our laboratories, our mills, our machines to cultivate the earth, to make our clothes, to build our houses, to multiply our means of offence and defence, to make weak children do the work of Titans, to measure our time with the accuracy of the planetary orbits, to use the sun itself in perpetuating our likenesses to distant generations, to cause a needle to guide the mariner with assurance on the darkest night, to propel a heavy ship against wind and tide without oars or sails, to make carriages ascend mountains without horses at the rate of thirty miles an hour, to convey intelligence with the speed of lightning from continent to continent and under oceans that ancient navigators never dared to cross,--these and other wonders attest an ingenuity and audacity of intellect which would have overwhelmed with amazement the most adventurous of Greeks and the most potent of Romans.

But the great discoveries and inventions to which we owe this marked superiority are either

accidental or the result of generations of experiment, assisted by an immense array of ascertained facts from which safe inductions can be made. It is not, probably, the superiority of the European races over the Greeks and Romans to which we may ascribe the wonderful advance of modern society, but the particular direction which genius was made to take. Had the Greeks given the energy of their minds to mechanical forces as they did to artistic creations, they might have made wonderful inventions. But it was not so ordered by Providence. At that time the world was not in the stage of development when this particular direction of intellect could have been favored. The development of the physical sciences, with their infinite multiplicity and complexity, required more centuries of observation, collection and collation of facts, deductions from known phenomena, than the ancients had had to work with; while the more ethereal realms of philosophy, ethics, aesthetics, and religion, though needing keen study of Nature and of man, depended more upon inner spiritual forces, and less upon accumulated detail of external knowledge. Yet as there were some subjects which the Greeks and Romans seemed to exhaust, some fields of labor and thought in which they never have been and perhaps never will be surpassed, so some future age may direct its energies into channels that are as unknown to us as clocks and steam-engines were to the Greeks. This is the age of mechanism and of science; and mechanism and science sweep everything before them, and will probably be carried to their utmost capacity and development. After that the human mind may seek some new department, some new scope for its energies, and an age of new wonders may arise,--perhaps after the present dominant races shall have become intoxicated with the greatness of their triumphs and have shared the fate of the old monarchies of the East. But I would not speculate on the destinies of the European nations, whether they are to make indefinite advances until they occupy and rule the whole world, or are destined to be succeeded by nations as yet undeveloped,--savages, as their fathers were when Rome was in the fulness of material wealth and grandeur.

I have shown that in the field of artistic excellence, in literary composition, in the arts of government and legislation, and even in the realm of philosophical speculation, the ancients were our school-masters, and that among them were some men of most marvellous genius, who have had no superiors among us. But we do not see among them the exhibition of genius in what we call science, at least in its application to practical life. It would be difficult to show any department of science which the ancients carried to any considerable degree of perfection. Nevertheless, there were departments in which they made noble attempts, and in which they showed large capacity, even if they were unsuccessful in great practical results.

Astronomy was one of these. In this science such men as Eratosthenes, Aristarchus, Hipparchus, and Ptolemy were great lights of whom humanity may be proud; and had they been assisted by our modern inventions, they might have earned a fame scarcely eclipsed by that of Kepler and Newton. The old astronomers did little to place this science on a true foundation, but they showed great ingenuity, and discovered some truths which no succeeding age has repudiated. They determined the circumference of the earth by a method identical with that which would be employed by modern astronomers; they ascertained the position of the stars by right ascension and declination; they knew the obliquity of the ecliptic, and determined the place of the sun's apogee as well as its mean motion. Their calculations on the eccentricity of the moon prove that they had a rectilinear trigonometry and tables of chords. They had an approximate knowledge of parallax; they could calculate eclipses of the moon, and use them for the correction of their lunar tables. They understood spherical trigonometry, and determined the motions of the sun and moon, involving an accurate definition of the year and a method of predicting eclipses; they ascertained that the earth was a sphere, and reduced the phenomena of the heavenly bodies to uniform movements of circular orbits. We have settled by physical geography the exact form of the earth, but the ancients arrived at their knowledge by astronomical reasoning. Says Whewell:--

"The reduction of the motions of the sun, moon, and five planets to circular orbits, as was done by Hipparchus, implies deep concentrated thought and scientific abstraction. The theories of eccentrics and epicycles accomplished the end of explaining all the known phenomena. The resolution of the apparent motions of the heavenly bodies into an assemblage of circular motions was a great triumph of genius, and was equivalent to the most recent and improved processes by which modern astronomers deal with such motions."

Astronomy was probably born in Chaldaea as early as the time of Abraham. The glories of the firmament were impressed upon the minds of the rude primitive races with an intensity which we do not feel, with all the triumphs of modern science. The Chaldaean shepherds, as they watched their flocks by night, noted the movements of the planets, and gave names to the more brilliant constellations. Before religious rituals were established, before great superstitions arose, before poetry was sung, before musical instruments were invented, before artists sculptured marble or

melted bronze, before coins were stamped, before temples arose, before diseases were healed by the arts of medicine, before commerce was known, those Oriental shepherds counted the anxious hours by the position of certain constellations. Astronomy is therefore the oldest of the ancient sciences, although it remained imperfect for more than four thousand years. The old Assyrians, Egyptians, and Greeks made but few discoveries which are valued by modern astronomers, but they laid the foundation of the science, and ever regarded it as one of the noblest subjects that could stimulate the faculties of man. It was invested with all that was religious and poetical.

The spacious level and unclouded horizon of Chaldaeia afforded peculiar facilities of observation; and its pastoral and contemplative inhabitants, uncontaminated by the vices and superstitions of subsequent ages, active-minded and fresh, discovered after a long observation of eclipses--some say extending over nineteen centuries--the cycle of two hundred and twenty-three lunations, which brings back the eclipses in the same order. Having once established their cycle, they laid the foundation for the most sublime of all the sciences. Callisthenes transmitted from Babylon to Aristotle a collection of observations of all the eclipses that preceded the conquests of Alexander, together with the definite knowledge which the Chaldaeans had collected about the motions of the heavenly bodies. Such knowledge was rude and simple, and amounted to little beyond the fact that there were spherical revolutions about an inclined axis, and that the poles pointed always to particular stars. The Egyptians also recorded their observations, from which it would appear that they observed eclipses at least sixteen hundred years before the beginning of our era,--which is not improbable, if the speculations of modern philosophers respecting the age of the world are entitled to credit. The Egyptians discovered by the rising of Sirius that the year consists of three hundred and sixty-five and one-quarter days; and this was their sacred year, in distinction from the civil, which consisted of three hundred and sixty-five days. They also had observed the courses of the planets, and could explain the phenomena of the stations and retrogradations; and it is asserted too that they regarded Mercury and Venus as satellites of the sun. Some have maintained that the obelisks which the Egyptians erected served the purpose of gnomons for determining the obliquity of the ecliptic, the altitude of the pole, and the length of the tropical year. It is thought even that the Pyramids, by the position of their sides toward the cardinal points, attest Egyptian acquaintance with a meridional line. The Chinese boast of having noticed and recorded a series of eclipses extending over a period of thirty-eight hundred and fifty-eight years; and it is probable that they anticipated the Greeks two thousand years in the discovery of the Metonic cycle,--or the cycle of nineteen years, at the end of which time the new moons fall on the same days of the year. The Chinese also determined the obliquity of the ecliptic eleven hundred years before our era. The Hindus at a remote antiquity represented celestial phenomena with considerable exactness, and constructed tables by which the longitude of the sun and moon were determined, and dials to measure time. Bailly thinks that thirty-one hundred and two years before Christ astronomy was cultivated in Siam which hardly yields in accuracy to that which modern science has built on the theory of universal gravitation.

But the Greeks after all were the only people of antiquity who elevated astronomy to the dignity of a science. They however confessed that they derived their earliest knowledge from the Babylonian and Egyptian priests, while the priests of Thebes claimed to be the originators of exact astronomical observations. Diodorus asserts that the Chaldaeans used the Temple of Belus, in the centre of Babylon, for their survey of the heavens. But whether the Babylonians or the Egyptians were the earliest astronomers is of little consequence, although the pedants make it a grave matter of investigation. All we know is that astronomy was cultivated by both Babylonians and Egyptians, and that they made but very limited attainments. They approximated to the truth in reference to the solar year, by observing the equinoxes and solstices and the heliacal rising of particular stars.

The early Greek philosophers who visited Egypt and the East in search of knowledge, found very little to reward their curiosity or industry,--not much beyond preposterous claims to a high antiquity, and to an esoteric wisdom which has not yet been revealed. Plato and Eudoxus spent thirteen years in Heliopolis for the purpose of extracting the scientific knowledge of the Egyptian priests, yet they learned but little beyond the fact that the solar year was a trifle beyond three hundred and sixty-five days. No great names have come down to us from the priests of Babylon or Egypt; no one gained an individual reputation. The Chaldaean and Egyptian priests may have furnished the raw material of observation to the Greeks, but the latter alone possessed the scientific genius by which undigested facts were converted into a symmetrical system. The East never gave valuable knowledge to the West; it gave the tendency to religious mysticism, which in its turn tended to superstition. Instead of astronomy, it gave astrology; instead of science, it gave magic, incantations, and dreams. The Eastern astronomers connected their astronomy with divination from the stars, and made their antiquity reach back to two hundred and seventy thousand years. There were soothsayers in the time of Daniel, and magicians, exorcists, and interpreters of signs. They were not men of scientific

research, seeking truth; it was power they sought, by perverting the intellect of the people. The astrology of the East was founded on the principle that a star or constellation presided over the birth of an individual, and that it either portended his fate, or shed a good or bad influence upon his future life. The star which looked upon a child at the hour of his birth was called the "horoscopus," and the peculiar influence of each planet was determined by the astrologers. The superstitions of Egypt and Chaldaea unfortunately spread among both the Greeks and Romans, and these were about all that the Western nations learned from the boastful priests of occult Oriental science. Whatever was known of real value among the ancients is due to the earnest inquiries of the Greeks.

And yet their researches were very unsatisfactory until the time of Hipparchus. The primitive knowledge was almost nothing. The Homeric poems regarded the earth as a circular plain bounded by the heaven, which was a solid vault or hemisphere, with its concavity turned downward. This absurdity was believed until the time of Herodotus, five centuries after; nor was it exploded fully in the time of Aristotle. The sun, moon, and stars were supposed to move upon or with the inner surface of the heavenly hemisphere, and the ocean was thought to gird the earth around as a great belt, into which the heavenly bodies sank at night. Homer believed that the sun arose out of the ocean, ascended the heaven, and again plunged into the ocean, passing under the earth, and producing darkness. The Greeks even personified the sun as a divine charioteer driving his fiery steeds over the steep of heaven, until he bathed them at evening in the western waves. Apollo became the god of the sun, as Diana was the goddess of the moon. But the early Greek inquirers did not attempt to explain how the sun found his way from the west back again to the east; they merely took note of the diurnal course, the alternation of day and night, the number of the seasons, and their regular successions. They found the points of the compass by determining the recurrence of the equinoxes and solstices; but they had no conception of the ecliptic,--of that great circle in the heaven formed by the sun's annual course,--and of its obliquity when compared with our equator. Like the Egyptians and Babylonians, the Greeks ascertained the length of the year to be three hundred and sixty-five days; but perfect accuracy was lacking, for want of scientific instruments and of recorded observations of the heavenly bodies. The Greeks had not even a common chronological era for the designation of years. Herodotus informs us that the Trojan War preceded his time by eight hundred years: he merely states the interval between the event in question and his own time; he had certain data for distant periods. The Greeks reckoned dates from the Trojan War, and the Romans from the building of their city. The Greeks also divided the year into twelve months, and introduced the intercalary circle of eight years, although the Romans disused it afterward, until the calendar was reformed by Julius Caesar. Thus there was no scientific astronomical knowledge worth mentioning among the primitive Greeks.

Immense research and learning have been expended by modern critics to show the state of scientific astronomy among the Greeks. I am amazed equally at the amount of research and its comparative worthlessness; for what addition to science can be made by an enumeration of the puerilities and errors of the Greeks, and how wasted and pedantic the learning which ransacks all antiquity to prove that the Greeks adopted this or that absurdity!^[1]

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The style of modern historical criticism is well exemplified in the discussions of the Germans whether the Arx on the Capitoline Hill occupied the northeastern or southwestern corner, which take up nearly one half of the learned article on the Capitoline in Smith's Dictionary.

The earliest historic name associated with astronomy in Greece was Thales, the founder of the Ionic school of philosophers. He is reported to have made a visit to Egypt, to have fixed the year at three hundred and sixty-five days, to have determined the course of the sun from solstice to solstice, and to have calculated eclipses. He attributed an eclipse of the moon to the interposition of the earth between the sun and moon, and an eclipse of the sun to the interposition of the moon between the sun and earth,--and thus taught the rotundity of the earth, sun, and moon. He also determined the ratio of the sun's diameter to its apparent orbit. As he first solved the problem of inscribing a right-angled triangle in a circle, he is the founder of geometrical science in Greece. He left, however, nothing to writing; hence all accounts of him are confused,--some doubting even if he made the discoveries attributed to him. His philosophical speculations, which science rejects,--such as that water is the principle of all things,--are irrelevant to a description of the progress of astronomy. That he was a great light no one questions, considering the ignorance with which he was surrounded.

Anaximander, who followed Thales in philosophy, held to puerile doctrines concerning the motions and nature of the stars, which it is useless to repeat. His addition to science, if he made any, was in treating the magnitudes and distances of the planets. He constructed geographical charts, and

attempted to delineate the celestial sphere, and to measure time with a gnomon, or time-pillar, by the motion of its shadow upon a dial.^[2]

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Dr. E.H. Knight, in his "American Mechanical Dictionary" (i. 692), cites the Scriptural account of the beautiful altar seen by King Ahaz of Jerusalem, in Damascus, when he went thither to greet Tiglath-Pileser, the Assyrian who had helped him against his Samarian enemy. Ahaz erected a similar altar at Jerusalem, and also a

sun-dial,

the same one mentioned in the account of the miraculous cure of his son Hezekiah. "This," says Dr. Knight, "was probably the first dial on record, and is one hundred and forty years before Thales, and nearly four hundred before Plato and Aristotle, and just a little previous to the lunar eclipses observed at Babylon, as recorded by Ptolemy.... The Hebrew word [for this dial] is said by Colonel White of the Bengal army to signify a

staircase

, which much strengthens the inference that it was like the equinoctial dial of the Indian nations and of Mesopotamia, from whence its pattern is assumed to have been derived."

Anaximenes of Miletus taught, like his predecessors, crude notions of the sun and stars, and speculated on the nature of the moon, but did nothing to advance his science on true grounds, except by the construction of sun-dials. The same may be said of Heraclitus, Xenophanes, Parmenides, and Anaxagoras: they were great men, but they gave to the world mere speculations, some of which are very puerile. They all held to the idea that the heavenly bodies revolved around the earth, and that the earth was a plain; but they explained eclipses, and supposed that the moon derived its light from the sun. Some of them knew the difference between the planets and the fixed stars. Anaxagoras scouted the notion that the sun was a god, and supposed it to be a mass of ignited stone,--for which he was called an atheist.

Socrates, who belonged to another school, avoided all barren speculations concerning the universe, and confined himself to human actions and interests. He looked even upon geometry in a very practical way, valuing it only so far as it could be made serviceable to land-measuring. As for the stars and planets, he supposed it was impossible to arrive at a true knowledge of them, and regarded speculations upon them as useless.

It must be admitted that the Greek astronomers, however barren were their general theories, laid the foundation of science. Pythagoras taught the obliquity of the ecliptic, probably learned in Egypt, and the identity of the morning and evening stars. It is supposed that he maintained that the sun was the centre of the universe, and that the earth revolved around it; but this he did not demonstrate, and his whole system was unscientific, assuming certain arbitrary principles, from which he reasoned deductively. "He assumed that fire is more worthy than earth; that the more worthy place must be given to the more worthy; that the extremity is more worthy than the intermediate parts,--and hence, as the centre is an extremity, the place of fire is at the centre of the universe, and that therefore the earth and other heavenly bodies move round the fiery centre." But this was no heliocentric system, since the sun moved, like the earth, in a circle around the central fire. This was merely the work of the imagination, utterly unscientific, though bold and original. Nor did this hypothesis gain credit, since it was the fixed opinion of philosophers that the earth was the centre of the universe, around which the sun, moon, and planets revolved. But the Pythagoreans were the first to teach that the motions of the sun, moon, and planets are circular and equable. Their idea that the celestial bodies emitted a sound, and were combined into a harmonious symphony, was exceedingly crude, however beautiful "The music of the spheres" belongs to poetry, as well as to the speculations of Plato.

Eudoxus, in the fifth century before Christ, contributed to science by making a descriptive map of the heavens, which was used as a manual of sidereal astronomy to the sixth century of our era.

The error of only one hundred and ninety days in the periodic time of Saturn shows that there had been for a long time close observations. Aristotle--whose comprehensive intellect, like that of Bacon, took in all forms of knowledge--condensed all that was known in his day into a treatise concerning the heavens. He regarded astronomy as more intimately connected with mathematics than any other branch of science. But even he did not soar far beyond the philosophers of his day, since he held to the immobility of the earth,--the grand error of the ancients. Some few speculators in science (like

Heraclitus of Pontus, and Hicetas) conceived a motion of the earth itself upon its axis, so as to account for the apparent motion of the sun; but they also thought it was in the centre of the universe.

The introduction of the gnomon (time-pillar) and dial into Greece advanced astronomical knowledge, since they were used to determine the equinoxes and solstices, as well as parts of the day. Meton set up a sun-dial at Athens in the year 433 B.C., but the length of the hour varied with the time of the year, since the Greeks divided the day into twelve equal parts. Dials were common at Rome in the time of Plautus, 224 B.C.; but there was a difficulty in using them, since they failed at night and in cloudy weather, and could not be relied on. Hence the introduction of water-clocks instead.

Aristarchus is said to have combated (280 B.C.) the geocentric theory so generally received by philosophers, and to have promulgated the hypothesis "that the fixed stars and the sun are immovable; that the earth is carried round the sun in the circumference of a circle of which the sun is the centre; and that the sphere of the fixed stars, having the same centre as the sun, is of such magnitude that the orbit of the earth is to the distance of the fixed stars as the centre of the sphere of the fixed stars is to its surface." Aristarchus also, according to Plutarch, explained the apparent annual motion of the sun in the ecliptic by supposing the orbit of the earth to be inclined to its axis. There is no evidence that this great astronomer supported his heliocentric theory with any geometrical proof, although Plutarch maintains that he demonstrated it. This theory gave great offence, especially to the Stoics; and Cleanthes, the head of the school at that time, maintained that the author of such an impious doctrine should be punished. Aristarchus left a treatise "On the Magnitudes and Distances of the Sun and Moon;" and his methods to measure the apparent diameters of the sun and moon are considered theoretically sound by modern astronomers, but practically inexact owing to defective instruments. He estimated the diameter of the sun at the seven hundred and twentieth part of the circumference of the circle which it describes in its diurnal revolution, which is not far from the truth; but in this treatise he does not allude to his heliocentric theory.

Archimedes of Syracuse, born 287 B.C., is stated to have measured the distance of the sun, moon, and planets, and he constructed an orrery in which he exhibited their motions. But it was not in the Grecian colony of Syracuse, but of Alexandria, that the greatest light was shed on astronomical science. Here Aristarchus resided, and also Eratosthenes, who lived between the years 276 and 196 B.C. The latter was a native of Athens, but was invited by Ptolemy Euergetes to Alexandria, and placed at the head of the library. His great achievement was the determination of the circumference of the earth. This was done by measuring on the ground the distance between Syene, a city exactly under the tropic, and Alexandria, situated on the same meridian. The distance was found to be five thousand stadia. The meridional distance of the sun from the zenith of Alexandria he estimated to be $7^{\circ} 12'$, or a fiftieth part of the circumference of the meridian. Hence the circumference of the earth was fixed at two hundred and fifty thousand stadia,—which is not very different from our modern computation. The circumference being known, the diameter of the earth was easily determined. The moderns have added nothing to this method. He also calculated the diameter of the sun to be twenty-seven times greater than that of the earth, and the distance of the sun from the earth to be eight hundred and four million stadia, and that of the moon seven hundred and eighty thousand stadia,—a close approximation to the truth.

Astronomical science received a great impulse from the school of Alexandria, the greatest light of which was Hipparchus, who flourished early in the second century before Christ. He laid the foundation of astronomy upon a scientific basis. "He determined," says Delambre, "the position of the stars by right ascensions and declinations, and was acquainted with the obliquity of the ecliptic. He determined the inequality of the sun and the place of its apogee, as well as its mean motion; the mean motion of the moon, of its nodes and apogee; the equation of the moon's centre, and the inclination of its orbit. He calculated eclipses of the moon, and used them for the correction of his lunar tables, and he had an approximate knowledge of parallax." His determination of the motions of the sun and moon, and his method of predicting eclipses evince great mathematical genius. But he combined with this determination a theory of epicycles and eccentrics which modern astronomy discards. It was however a great thing to conceive of the earth as a solid sphere, and to reduce the phenomena of the heavenly bodies to uniform motions in circular orbits. "That Hipparchus should have succeeded in the first great steps of the resolution of the heavenly bodies into circular motions is a circumstance," says Whewell, "which gives him one of the most distinguished places in the roll of great astronomers." But he did even more than this: he discovered that apparent motion of the fixed stars round the axis of the ecliptic, which is called the Precession of the Equinoxes,—one of the

greatest discoveries in astronomy. He maintained that the precession was not greater than fifty-nine seconds, and not less than thirty-six seconds. Hipparchus also framed a catalogue of the stars, and determined their places with reference to the ecliptic by their latitudes and longitudes. Altogether he seems to have been one of the greatest geniuses of antiquity, and his works imply a prodigious amount of calculation.

Astronomy made no progress for three hundred years, although it was expounded by improved methods. Posidonius constructed an orrery, which exhibited the diurnal motions of the sun, moon, and five planets. Posidonius calculated the circumference of the earth to be two hundred and forty thousand stadia, by a different method from Eratosthenes. The barrenness of discovery from Hipparchus to Ptolemy,--the Alexandrian mathematician, astronomer, and geographer in the second century of the Christian era,--in spite of the patronage of the royal Ptolemies of Egypt, was owing to the want of instruments for the accurate measure of time (like our clocks), to the imperfection of astronomical tables, and to the want of telescopes. Hence the great Greek astronomers were unable to realize their theories. Their theories however were magnificent, and evinced great power of mathematical combination; but what could they do without that wondrous instrument by which the human eye indefinitely multiplies its power? Moreover, the ancients had no accurate almanacs, since the care of the calendar belonged not so much to the astronomers as to the priests, who tampered with the computation of time for sacerdotal objects. The calendars of different communities differed. Hence Julius Caesar rendered a great service to science by the reform of the Roman calendar, which was exclusively under the control of the college of pontiffs, or general religious overseers. The Roman year consisted of three hundred and fifty-five days; and in the time of Caesar the calendar was in great confusion, being ninety days in advance, so that January was an autumn month. He inserted the regular intercalary month of twenty-three days, and two additional ones of sixty-seven days. These, together with ninety days, were added to three hundred and sixty-five days, making a year of transition of four hundred and forty-five days, by which January was brought back to the first month in the year after the winter solstice; and to prevent the repetition of the error, he directed that in future the year should consist of three hundred and sixty-five and one-quarter days, which he effected by adding one day to the months of April, June, September, and November, and two days to the months of January, Sextilis, and December, making an addition of ten days to the old year of three hundred and fifty-five. And he provided for a uniform intercalation of one day in every fourth year, which accounted for the remaining quarter of a day.

Caesar was a student of astronomy, and always found time for its contemplation. He is said even to have written a treatise on the motion of the stars. He was assisted in his reform of the calendar by Sosigines, an Alexandrian astronomer. He took it out of the hands of the priests, and made it a matter of pure civil regulation. The year was defined by the sun, and not as before by the moon.

Thus the Romans were the first to bring the scientific knowledge of the Greeks into practical use; but while they measured the year with a great approximation to accuracy, they still used sun-dials and water-clocks to measure diurnal time. Yet even these were not constructed as they should have been. The hour-marks on the sun-dial were all made equal, instead of varying with the periods of the day,--so that the length of the hour varied with the length of the day. The illuminated interval was divided into twelve equal parts; so that if the sun rose at five A.M., and set at eight P.M., each hour was equal to eighty minutes. And this rude method of measurement of diurnal time remained in use till the sixth century. Clocks, with wheels and weights, were not invented till the twelfth century.

The last great light among the ancients in astronomical science was Ptolemy, who lived from 100 to 170 A.D., in Alexandria. He was acquainted with the writings of all the previous astronomers, but accepted Hipparchus as his guide. He held that the heaven is spherical and revolves upon its axis; that the earth is a sphere, and is situated within the celestial sphere, and nearly at its centre; that it is a mere point in reference to the distance and magnitude of the fixed stars, and that it has no motion. He adopted the views of the ancient astronomers, who placed Saturn, Jupiter, and Mars next under the sphere of the fixed stars, then the sun above Venus and Mercury, and lastly the moon next to the earth. But he differed from Aristotle, who conceived that the earth revolves in an orbit around the centre of the planetary system, and turns upon its axis,--two ideas in common with the doctrines which Copernicus afterward unfolded. But even Ptolemy did not conceive the heliocentric theory,--the sun the centre of our system. Archimedes and Hipparchus both rejected this theory.

In regard to the practical value of the speculations of the ancient astronomers, it may be said that had they possessed clocks and telescopes, their scientific methods would have sufficed for all practical purposes. The greatness of modern discoveries lies in the great stretch of the perceptive powers, and the magnificent field they afford for sublime contemplation. "But," as Sir G. Cornewall

Lewis remarks, "modern astronomy is a science of pure curiosity, and is directed exclusively to the extension of knowledge in a field which human interests can never enter. The periodic time of Uranus, the nature of Saturn's ring, and the occultation of Jupiter's satellites are as far removed from the concerns of mankind as the heliacal rising of Sirius, or the northern position of the Great Bear." This may seem to be a utilitarian view, with which those philosophers who have cultivated science for its own sake, finding in the same a sufficient reward, can have no sympathy.

The upshot of the scientific attainments of the ancients, in the magnificent realm of the heavenly bodies, would seem to be that they laid the foundation of all the definite knowledge which is useful to mankind; while in the field of abstract calculation they evinced reasoning and mathematical powers that have never been surpassed. Eratosthenes, Archimedes, and Hipparchus were geniuses worthy to be placed by the side of Kepler, Newton, and La Place, and all ages will reverence their efforts and their memory. It is truly surprising that with their imperfect instruments, and the absence of definite data, they reached a height so sublime and grand. They explained the doctrine of the sphere and the apparent motions of the planets, but they had no instruments capable of measuring angular distances. The ingenious epicycles of Ptolemy prepared the way for the elliptic orbits and laws of Kepler, which in turn conducted Newton to the discovery of the law of gravitation,-the grandest scientific discovery in the annals of our race.

Closely connected with astronomical science was geometry, which was first taught in Egypt,-the nurse and cradle of ancient wisdom. It arose from the necessity of adjusting the landmarks disturbed by the inundations of the Nile. There is hardly any trace of geometry among the Hebrews. Among the Hindus there are some works on this science, of great antiquity. Their mathematicians knew the rule for finding the area of a triangle from its sides, and also the celebrated proposition concerning the squares on the sides of the right-angled triangle. The Chinese, it is said, also knew this proposition before it was known to the Greeks, among whom it was first propounded by Thales. He applied a circle to the measurement of angles. Anaximander made geographical charts, which required considerable geometrical knowledge. Anaxagoras employed himself in prison in attempting to square the circle. Thales, as has been said, discovered the important theorem that in a right-angled triangle the squares on the sides containing the right angle are together equal to the square on the opposite side of it. Pythagoras discovered that of all figures having the same boundary, the circle among plane figures and the sphere among solids are the most capacious. Hippocrates treated of the duplication of the cube, and wrote elements of geometry, and knew that the area of a circle was equal to a triangle whose base is equal to its circumference and altitude equal to its radius. The disciples of Plato invented conic sections, and discovered the geometrical foci.

It was however reserved for Euclid to make his name almost synonymous with geometry. He was born 323 B.C., and belonged to the Platonic sect, which ever attached great importance to mathematics. His "Elements" are still in use, as nearly perfect as any human production can be. They consist of thirteen books. The first four are on plane geometry; the fifth is on the theory of proportion, and applies to magnitude in general; the seventh, eighth, and ninth are on arithmetic; the tenth on the arithmetical characteristics of the division of a straight line; the eleventh and twelfth on the elements of solid geometry; the thirteenth on the regular solids. These "Elements" soon became the universal study of geometers throughout the civilized world; they were translated into the Arabic, and through the Arabians were made known to mediaeval Europe. There can be no doubt that this work is one of the highest triumphs of human genius, and it has been valued more than any single monument of antiquity; it is still a text-book, in various English translations, in all our schools. Euclid also wrote various other works, showing great mathematical talent.

Perhaps a greater even than Euclid was Archimedes, born 287 B.C. He wrote on the sphere and cylinder, terminating in the discovery that the solidity and surface of a sphere are two thirds respectively of the solidity and surface of the circumscribing cylinder. He also wrote on conoids and spheroids. "The properties of the spiral and the quadrature of the parabola were added to ancient geometry by Archimedes, the last being a great step in the progress of the science, since it was the first curvilinear space legitimately squared." Modern mathematicians may not have the patience to go through his investigations, since the conclusions he arrived at may now be reached by shorter methods; but the great conclusions of the old geometers were reached by only prodigious mathematical power. Archimedes is popularly better known as the inventor of engines of war and of various ingenious machines than as a mathematician, great as were his attainments in this direction. His theory of the lever was the foundation of statics till the discovery of the composition of forces in the time of Newton, and no essential addition was made to the principles of the equilibrium of fluids and floating bodies till the time of Stevin, in 1608. Archimedes detected the mixture of silver in a crown of gold which his patron, Hiero of Syracuse, ordered to be made; and he invented a water-

screw for pumping water out of the hold of a great ship which he had built. He contrived also the combination of pulleys, and he constructed an orrery to represent the movement of the heavenly bodies. He had an extraordinary inventive genius for discovering new provinces of inquiry and new points of view for old and familiar objects. Like Newton, he had a habit of abstraction from outward things, and would forget to take his meals. He was killed by Roman soldiers when Syracuse was taken; and the Sicilians so soon forgot his greatness that in the time of Cicero they did not know where his tomb was.

Eratosthenes was another of the famous geometers of antiquity, and did much to improve geometrical analysis. He was also a philosopher and geographer. He gave a solution of the problem of the duplication of the cube, and applied his geometrical knowledge to the measurement of the magnitude of the earth,—being one of the first who brought mathematical methods to the aid of astronomy, which in our day is almost exclusively the province of the mathematician.

Apollonius of Perga, probably about forty years younger than Archimedes, and his equal in mathematical genius, was the most fertile and profound writer among the ancients who treated of geometry. He was called the Great Geometer. His most important work is a treatise on conic sections, which was regarded with unbounded admiration by contemporaries, and in some respects is unsurpassed by any thing produced by modern mathematicians. He however made use of the labors of his predecessors, so that it is difficult to tell how far he is original. But all men of science must necessarily be indebted to those who have preceded them. Even Homer, in the field of poetry, made use of the bards who had sung for a thousand years before him; and in the realms of philosophy the great men of all ages have built up new systems on the foundations which others have established. If Plato or Aristotle had been contemporaries with Thales, would they have matured so wonderful a system of dialectics? Yet if Thales had been contemporaneous with Plato, he might have added to the great Athenian's sublime science even more than did Aristotle. So of the great mathematicians of antiquity; they were all wonderful men, and worthy to be classed with the Newtons and Keplers of our times. Considering their means and the state of science, they made as *great* though not as *fortunate* discoveries,—discoveries which show patience, genius, and power of calculation. Apollonius was one of these,—one of the master intellects of antiquity, like Euclid and Archimedes; one of the master intellects of all ages, like Newton himself. I might mention the subjects of his various works, but they would not be understood except by those familiar with mathematics.

Other famous geometers could also be named, but such men as Euclid, Archimedes, and Apollonius are enough to show that geometry was cultivated to a great extent by the philosophers of antiquity. It progressively advanced, like philosophy itself, from the time of Thales until it had reached the perfection of which it was capable, when it became merged into astronomical science. It was cultivated more particularly by the disciples of Plato, who placed over his school this inscription: "Let no one ignorant of geometry enter here." He believed that the laws by which the universe is governed are in accordance with the doctrines of mathematics. The same opinion was shared by Pythagoras, the great founder of the science, whose main formula was that *number* is the essence or first principle of all things. No thinkers ever surpassed the Greeks in originality and profundity; and mathematics, being highly prized by them, were carried to the greatest perfection their method would allow. They did not understand algebra, by the application of which to geometry modern mathematicians have climbed to greater heights than the ancients; but then it is all the more remarkable that without the aid of algebraic analysis they were able to solve such difficult problems as occupied the minds of Archimedes and Apollonius. No positive science can boast of such rapid development as geometry for two or three hundred years before Christ, and never was the intellect of man more severely tasked than by the ancient mathematicians.

No empirical science can be carried to perfection by any one nation or in any particular epoch; it can only expand with the progressive developments of the human race itself. Nevertheless, in that science which for three thousand years has been held in the greatest honor, and which is one of the three great liberal professions of our modern times, the ancients, especially the Greeks, made considerable advance. The science of medicine, having in view the amelioration of human misery and the prolongation of life itself, was very early cultivated. It was, indeed, in old times another word for *physics*,—the science of Nature,—and the *physician* was the observer and expounder of physics. The physician was supposed to be acquainted with the secrets of Nature,—that is, the knowledge of drugs, of poisons, of antidotes to them, and the way to administer them. He was also supposed to know the process of preserving the body after death. Thus Joseph, seventeen hundred years before the birth of Christ, commanded his physician to embalm the body of his father; and the process of embalming was probably known to the Egyptians before the period when history begins. Helen, of

Trojan fame, put into wine a drug that "frees man from grief and anger, and causes oblivion of all ills." Solomon was a great botanist,--a realm with which the science of medicine is indissolubly connected. The origin of Hindu medicine is lost in remote antiquity. The Ayur Veda, written nine hundred years before Hippocrates was born, sums up the knowledge of previous periods relating to obstetric surgery, to general pathology, to the treatment of insanity, to infantile diseases, to toxicology, to personal hygiene, and to diseases of the generative functions.

Thus Hippocrates, the father of European medicine, must have derived his knowledge not merely from his own observations, but from the writings of men unknown to us and from systems practised for an indefinite period. The real founders of Greek medicine are fabled characters, like Hercules and Aesculapius,--that is, benefactors whose fictitious names alone have descended to us. They are mythical personages, like Hermes and Chiron. Twelve hundred years before Christ temples were erected to Aesculapius in Greece, the priests of which were really physicians, and the temples themselves hospitals. In them were practised rites apparently mysterious, but which modern science calls by the names of mesmerism, hydropathy, the use of mineral springs, and other essential elements of empirical science. And these temples were also medical schools. That of Cos gave birth to Hippocrates, and it was there that his writings were begun. Pythagoras--for those old Grecian philosophers were the fathers of all wisdom and knowledge, in mathematics and empirical sciences as well as philosophy itself--studied medicine in the schools of Egypt, Phoenicia, Chaldea, and India, and came in conflict with sacerdotal power, which has ever been antagonistic to new ideas in science. He travelled from town to town as a teacher or lecturer, establishing communities in which *medicine* as well as *numbers* was taught.

The greatest name in medical science in ancient or in modern times, the man who did the most to advance it, the greatest medical genius of whom we have any early record, was Hippocrates, born on the island of Cos, 460 B.C., of the great Aesculapian family. He received his instruction from his father. We know scarcely more of his life than we do of Homer himself, although he lived in the period of the highest splendor of Athens. Even his writings, like those of Homer, are thought by some to be the work of different men. They were translated into Arabic, and were no slight means of giving an impulse to the Saracenic schools of the Middle Ages in that science in which the Saracens especially excelled. The Hippocratic collection consists of more than sixty works, which were held in the highest estimation by the ancient physicians. Hippocrates introduced a new era in medicine, which before his time had been monopolized by the priests. He carried out a system of severe induction from the observation of facts, and is as truly the creator of the inductive method as Bacon himself. He abhorred theories which could not be established by facts; he was always open to conviction, and candidly confessed his mistakes; he was conscientious in the practice of his profession, and valued the success of his art more than silver and gold. The Athenians revered Hippocrates for his benevolence as well as genius. The great principle of his practice was *trust in Nature*; hence he was accused of allowing his patients to die. But this principle has many advocates among scientific men in our day; and some suppose that the whole successful practice of Homoeopathy rests on the primal principle which Hippocrates advanced, although the philosophy of it claims a distinctly scientific basis in the principle *similia similibus curantur*. Hippocrates had great skill in diagnosis, by which medical genius is most severely tested; his practice was cautious and timid in contrast with that of his contemporaries. He is the author of the celebrated maxim, "Life is short and art is long." He divides the causes of disease into two principal classes,--the one comprehending the influence of seasons, climates, and other external forces; the other including the effects of food and exercise. To the influence of climate he attributes the conformation of the body and the disposition of the mind; to a vicious system of diet he attributes innumerable forms of disease. For more than twenty centuries his pathology was the foundation of all the medical sects. He was well acquainted with the medicinal properties of drugs, and was the first to assign three periods to the course of a malady. He knew but little of surgery, although he was in the habit of bleeding, and often employed the knife; he was also acquainted with cupping, and used violent purgatives. He was not aware of the importance of the pulse, and confounded the veins with the arteries. Hippocrates wrote in the Ionic dialect, and some of his works have gone through three hundred editions, so highly have they been valued. His authority passed away, like that of Aristotle, on the revival of science in Europe. Yet who have been greater ornaments and lights than these two distinguished Greeks?

The school of Alexandria produced eminent physicians, as well as mathematicians, after the glory of Greece had departed. So highly was it esteemed that Galen in the second century,--born in Greece, but famous in the service of Rome,--went there to study, five hundred years after its foundation. It was distinguished for inquiries into scientific anatomy and physiology, for which Aristotle had prepared the way. Galen was the Humboldt of his day, and gave great attention to

physics. In eight books he developed the general principles of natural science known to the Greeks. On the basis of the Aristotelian researches, the Alexandrian physicians carried out extensive inquiries in physiology. Herophilus discovered the fundamental principles of neurology, and advanced the anatomy of the brain and spinal cord.

Although the Romans had but little sympathy with science or philosophy, being essentially political and warlike in their turn of mind, yet when they had conquered the world, and had turned their attention to arts, medicine received a good share of their attention. The first physicians in Rome were Greek slaves. Of these was Asclepiades, who enjoyed the friendship of Cicero. It is from him that the popular medical theories as to the "pores" have descended. He was the inventor of the shower-bath. Celsus wrote a work on medicine which takes almost equal rank with the Hippocratic writings.

Medical science at Rome culminated in Galen, as it did at Athens in Hippocrates. Galen was patronized by Marcus Aurelius, and availed himself of all the knowledge of preceding naturalists and physicians. He was born at Pergamos about the year 130 A.D., where he learned, under able masters, anatomy, pathology, and therapeutics. He finished his studies at Alexandria, and came to Rome at the invitation of the Emperor. Like his imperial patron, Galen was one of the brightest ornaments of the heathen world, and one of the most learned and accomplished men of any age. He left five hundred treatises, most of them relating to some branch of medical science, which give him the name of being one of the most voluminous of authors. His celebrity is founded chiefly on his anatomical and physiological works. He was familiar with practical anatomy, deriving his knowledge from dissection. His observations about health are practical and useful; he lays great stress on gymnastic exercises, and recommends the pleasures of the chase, the cold bath in hot weather, hot baths for old people, the use of wine, and three meals a day. The great principles of his practice were that disease is to be overcome by that which is contrary to the disease itself,—hence the name Allopathy, invented by the founder of Homoeopathy to designate the fundamental principle of the general practice,—and that nature is to be preserved by that which has relation with nature. His "Commentaries on Hippocrates" served as a treasure of medical criticism, from which succeeding annotators borrowed. No one ever set before the medical profession a higher standard than Galen advanced, and few have more nearly approached it. He did not attach himself to any particular school, but studied the doctrines of each. The works of Galen constituted the last production of ancient Roman medicine, and from his day the decline in medical science was rapid, until it was revived among the Arabs.

The physical sciences, it must be confessed, were not carried by the ancients to any such length as geometry and astronomy. In physical geography they were particularly deficient. Yet even this branch of knowledge can boast of some eminent names. When men sailed timidly along the coasts, and dared not explore distant seas, the true position and characteristics of countries could not be ascertained with the definiteness that it is at present. But geography was not utterly neglected in those early times, nor was natural history.

Herodotus gives us most valuable information respecting the manners and customs of Oriental and barbarous nations; and Pliny wrote a Natural History in thirty-seven books, which is compiled from upwards of two thousand volumes, and refers to twenty thousand matters of importance. He was born 23 A.D., and was fifty-six when the eruption of Vesuvius took place, which caused his death. Pliny cannot be called a scientific genius in the sense understood by modern savants; nor was he an original observer,—his materials being drawn up second-hand, like a modern encyclopaedia. Nor did he evince great judgment in his selection: he had a great love of the marvellous, and his work was often unintelligible; but it remains a wonderful monument of human industry. His Natural History treats of everything in the natural world,—of the heavenly bodies, of the elements, of thunder and lightning, of the winds and seasons, of the changes and phenomena of the earth, of countries and nations, of seas and rivers, of men, animals, birds, fishes, and plants, of minerals and medicines and precious stones, of commerce and the fine arts. He is full of errors, but his work is among the most valuable productions of antiquity. Buffon pronounced his Natural History to contain an infinity of knowledge in every department of human occupation, conveyed in a dress ornate and brilliant. It is a literary rather than a scientific monument, and as such it is wonderful. In strict scientific value, it is inferior to the works of modern research; but there are few minds, even in these times, who have directed inquiries to such a variety of subjects as are treated in Pliny's masterpiece.

If we would compare the geographical knowledge of the ancients with that of the moderns, we confess to the immeasurable inferiority of the ancients.

Eratosthenes, though more properly an astronomer, and the most distinguished among the

ancients, was also a considerable writer on geography, indeed, the first who treated the subject systematically, although none of his writings have reached us. The improvements he pointed out were applied by Ptolemy himself. His work was a presentation of the geographical knowledge known in his day, so far as geography is the science of determining the position of places on the earth's surface. When Eratosthenes began his labors, in the third century before Christ, it was known that the surface of the earth was spherical; he established parallels of latitude and longitude, and attempted the difficult undertaking of measuring the circumference of the globe by the actual measurement of a segment of one of its great circles.

Hipparchus (beginning of second century before Christ) introduced into geography a great improvement; namely, the relative situation of places, by the same process that he determined the positions of the heavenly bodies. He also pointed out how longitude might be determined by observing the eclipses of the sun and moon. This led to the construction of maps; but none have reached us except those that were used to illustrate the geography of Ptolemy. Hipparchus was the first who raised geography to the rank of a science. He starved himself to death, being tired of life.

Posidonius, who was nearly a century later, determined the arc of a meridian between Rhodes and Alexandria to be a forty-eighth part of the whole circumference,—an enormous calculation, yet a remarkable one in the infancy of astronomical science. His writings on history and geography are preserved only in quotations by Cicero, Strabo, and others.

Geographical knowledge however was most notably advanced by Strabo, who lived in the Augustan era; although his researches were chiefly confined to the Roman empire. Strabo was, like Herodotus, a great traveller, and much of his geographical information is the result of his own observations. It is probable he was much indebted to Eratosthenes, who preceded him by three centuries. The authorities of Strabo were chiefly Greek, but his work is defective from the imperfect notions which the ancients had of astronomy; so that the determination of the earth's figure by the measure of latitude and longitude, the essential foundation of geographical description, was unknown. The enormous strides which all forms of physical science have made since the discovery of America throw all ancient descriptions and investigations into the shade, and Strabo appears at as great disadvantage as Pliny or Ptolemy; yet the work of Strabo, considering his means, and the imperfect knowledge of the earth's surface and astronomical science in his day, was really a great achievement. He treats of the form and magnitude of the earth, and devotes eight books to Europe, six to Asia, and one to Africa. The description of places belongs to Strabo, whose work was accepted as the text-book of the science till the fifteenth century, for in his day the Roman empire had been well surveyed. He maintained that the earth is spherical, and established the terms *longitude* and *latitude*, which Eratosthenes had introduced, and computed the earth to be one hundred and eighty thousand stadia in circumference, and a degree to be five hundred stadia in length, or sixty-two and a-half Roman miles. His estimates of the length of a degree of latitude were nearly correct; but he made great errors in the degrees of longitude, making the length of the world from east to west too great, which led to the belief in the practicability of a western passage to India. He also assigned too great length to the Mediterranean, arising from the difficulty of finding the longitude with accuracy. But it was impossible, with the scientific knowledge of his day, to avoid errors, and we are surprised that he made so few.

Whatever may be said of the accuracy of the great geographer of antiquity, it cannot be denied that he was a man of immense research and learning. His work in seventeen books is one of the most valuable that have come down from antiquity, both from the discussions which run through it, and the curious facts which can be found nowhere else. It is scarcely fair to estimate the genius of Strabo by the correctness and extent of his geographical knowledge. All men are comparatively ignorant in science, because science is confessedly a progressive study. The great scientific lights of our day may be insignificant, compared with those who are to arise, if profundity and accuracy of knowledge be made the test. It is the genius of the ancients, their grasp and power of mind, their original labors, which we are to consider.

Thus it would seem that among the ancients, in those departments of science which are inductive, there were not sufficient facts, well established, from which to make sound inductions; but in those departments which are deductive, like pure mathematics, and which require great reasoning powers, there were lofty attainments,—which indeed gave the foundation for the achievements of modern science.

An exceedingly learned work (London, 1862) on the Astronomy of the Ancients, by Sir George Cornwall Lewis, though rather ostentatious in the parade of authorities, and minute on points which are not of much consequence, is worth consulting. Delambre's History of Ancient Astronomy has long been a classic, but is richer in materials for a history than a history itself. There is a valuable essay in the Encyclopaedia Britannica, which refers to a list of special authors. Whewell's History of the Inductive Sciences may also be consulted with profit. Duglison's History of Medicine is a standard, giving much detailed information, and Leclerc among the French and Speugel among the Germans are esteemed authorities. Strabo's Geography is the most valuable of antiquity; see also Polybius: both of these have been translated and edited for English readers.

MATERIAL LIFE OF THE ANCIENTS.

MECHANICAL AND USEFUL ARTS.

4000-50 B.C.

While the fine arts made great progress among the cultivated nations of antiquity, and with the Greeks reached a refinement that has never since been surpassed, the ancients were far behind modern nations in everything that has utility for its object. In implements of war, in agricultural instruments, in the variety of manufactures, in machinery, in chemical compounds, in domestic utensils, in grand engineering works, in the comfort of houses, in modes of land-travel and transportation, in navigation, in the multiplication of books, in triumphs over the forces of Nature, in those discoveries and inventions which abridge the labors of mankind and bring races into closer intercourse,—especially by such wonders as are wrought by steam, gas, electricity, gunpowder, the mariner's compass, and the art of printing,—the modern world feels its immense superiority to all the ages that have gone before. And yet, considering the infancy of science and the youth of nations, more was accomplished by the ancients for the comfort and convenience and luxury of man than we naturally might suppose.

Egypt was the primeval seat of what may be called material civilization, and many arts and inventions were known there when the rest of the world was still in ignorance and barbarism. More than four thousand years ago the Egyptians had chariots of war and most of the military weapons known afterward to the Greeks,—especially the spear and bow, which were the most effective offensive weapons known to antiquity or the Middle Ages. Some of their warriors were clothed in coats of brass equal to the steel or iron cuirass worn by the Mediaeval knights of chivalry. They had the battle-axe, the shield, the sword, the javelin, the metal-headed arrow. One of the early Egyptian kings marched against his enemies with six hundred thousand infantry, twenty thousand cavalry, and twenty-three thousand chariots of war, each drawn by two horses. The saddles and bridles of their horses were nearly as perfect as ours are at the present time; the leather they used was dyed in various colors, and adorned with metal edges. The wheels of their chariots were bound with hoops of metal, and had six spokes. Umbrellas to protect from the rays of the sun were held over the heads of their women of rank when they rode in their highly-decorated chariots. Walls of solid masonry, thick and high, surrounded their principal cities, while an attacking or besieging army used movable towers. Their disciplined troops advanced to battle in true military precision, at the sound of the trumpet.

The public works of Egyptian kings were on a grand scale. They united rivers with seas by canals which employed hundreds of thousands of workmen. They transported heavy blocks of stone, of immense weight and magnitude, for their temples, palaces, and tombs. They erected obelisks in single shafts nearly one hundred feet in height, and they engraved the sides of these obelisks from top to bottom with representations of warriors, priests, and captives. They ornamented their vast temples with sculptures which required the hardest metals. Rameses the Great, the Sesostris of the Greeks, had a fleet of four hundred vessels in the Arabian Gulf, and the rowers wore quilted helmets. His vessels had sails, which implies the weaving of flax and the twisting of heavy ropes; some of his

war-galleys were propelled by forty-four oars, and were one hundred and twenty feet in length.

Among their domestic utensils the Egyptians used the same kind of buckets for wells that we find to-day among the farmhouses of New England. Skilful gardeners were employed in ornamenting grounds and in raising fruits and vegetables. The leather cutters and dressers were famous for their skill, as well as workers in linen. Most products of the land, as well as domestic animals, were sold by weight in carefully adjusted scales. Instead of coins, money was in rings of gold, silver, and copper. The skill used by the Egyptians in rearing fowls, geese, and domestic animals greatly surpassed that known to modern farmers. According to Wilkinson, they caught fish in nets equal to the seines employed by modern fishermen. Their houses as well as their monuments were built of brick, and were sometimes four or five stories in height, and secured by bolts on the doors. Locks and keys were also in use, made of iron; and the doorways were ornamented. Some of the roofs of their public buildings were arched with stone. In their mills for grinding wheat circular stones were used, resembling in form those now employed, generally turned by women, but sometimes so large that asses and mules were employed in the work. The walls and ceilings of their buildings were richly painted, the devices being as elaborate as those of the Greeks. Besides town-houses, the rich had villas and gardens, where they amused themselves with angling and spearing fish in the ponds. The gardens were laid in walks shaded with trees, and were well watered from large tanks. Vines were trained on trellis-work supported by pillars, and sometimes in the form of bowers. For gathering fruit, baskets were used somewhat similar to those now employed. Their wine-presses showed considerable ingenuity, and after the necessary fermentation the wine was poured into large earthen jars, corresponding to the amphorae of the Romans, and covered with lids made air-tight by resin and bitumen. The Egyptians had several kinds of wine, highly praised by the ancients; and wine among them was cheap and abundant. Egypt was also renowned for drugs unknown to other nations, and for beer made of barley, as well as wine. As for fruits, they had the same variety as we have at the present day, their favorite fruit being dates. "So fond were the Egyptians of trees and flowers that they exacted a contribution from the nations tributary to them of their rarest plants, so that their gardens bloomed with flowers of every variety in all seasons of the year." Wreaths and chaplets were in common use from the earliest antiquity. It was in their gardens, abounding with vegetables as well as with fruits and flowers, that the Egyptians entertained their friends.

In Egyptian houses were handsome chairs and fauteuils, stools and couches, the legs of which were carved in imitation of the feet of animals; and these were made of rare woods, inlaid with ivory, and covered with rich stuffs. Some of the Egyptian chairs were furnished with cushions and covered with the skins of leopards and lions; the seats were made of leather, painted with flowers. Footstools were sometimes made of elegant patterns, inlaid with ivory and precious woods. Mats were used in the sitting-rooms. The couches were of every variety of form, and utilized in some instances as beds. The tables were round, square, and oblong, and were sometimes made of stone and highly ornamented with carvings. Bronze bedsteads were used by the wealthy classes.

In their entertainments nothing was omitted by the Egyptians which would produce festivity,—music, songs, dancing, and games of chance. The guests arrived in chariots or palanquins, borne by servants on foot, who also carried parasols over the heads of their masters. Previous to entering the festive chamber water was brought for the feet and hands, the ewers employed being made often of gold and silver, of beautiful form and workmanship. Servants in attendance anointed the head with sweet-scented ointment from alabaster vases, and put around the heads of the guests garlands and wreaths in which the lotus was conspicuous; they also perfumed the apartments with myrrh and frankincense, obtained chiefly from Syria. Then wine was brought, and emptied into drinking-cups of silver or bronze, and even of porcelain, beautifully engraved, one of which was exclusively reserved for the master of the house. While at dinner the party were enlivened with musical instruments, the chief of which were the harp, the lyre, the guitar, the tambourine, the pipe, the flute, and the cymbal. Music was looked upon by the Egyptians as an important science, and was diligently studied and highly prized; the song and the dance were united with the sounds of musical instruments. Many of the ornamented vases and other vessels used by the Egyptians in their banquets were not inferior in elegance of form and artistic finish to those made by the Greeks at a later day. The Pharaoh of the Jewish Exodus had drinking-vessels of gold and silver, exquisitely engraved and ornamented with precious stones.

Some of the bronze vases found at Thebes and other parts of Egypt show great skill in the art of compounding metals, and were highly polished. Their bronze knives and daggers had an elastic spring, as if made of steel. Wilkinson expresses his surprise at the porcelain vessels recently discovered, as well as admiration of them, especially of their rich colors and beautiful shapes. There is a porcelain bowl of exquisite workmanship in the British Museum inscribed with the name of

Rameses II., proving that the arts of pottery were carried to great perfection two thousand years before Christ. Boxes of elaborate workmanship, made of precious woods finely carved and inlaid with ivory, are also preserved in the different museums of Europe, all dating from a remote antiquity. These boxes are of every form, with admirably fitting lids, representing fishes, birds, and animals. The rings, bracelets, and other articles of jewelry that have been preserved show great facility on the part of the Egyptians in cutting the hardest stones. The skill displayed in the sculptures on the hard obelisks and granite monuments of Egypt was remarkable, since they were executed with hardened bronze.

Glass-blowing was another art in which the Egyptians excelled. Fifteen hundred years before Christ they made ornaments of glass, and glass vessels of large size were used for holding wine. Such was their skill in the manufacture of glass that they counterfeited precious stones with a success unknown to the moderns. We read of a counterfeited emerald six feet in length. Counterfeited necklaces were sold at Thebes which deceived strangers. The uses to which glass was applied were in the manufacture of bottles, beads, mosaic work, and drinking-cups, and their different colors show considerable knowledge of chemistry. The art of cutting and engraving stones was doubtless learned by the Israelites in their sojourn in Egypt. So perfect were the Egyptians in the arts of cutting precious stones that they were sought by foreign merchants, and they furnished an important material in commerce.

From the earliest times the Egyptians were celebrated for their manufacture of linen, which was one of the principal articles of commerce; and cotton and woollen cloths as well as linen were woven. Cotton was used not only for articles of dress, but for the covering of chairs and other kinds of furniture. The great mass of the mummy cloths is of coarse texture; but the "fine linen" spoken of in the Scripture was as fine as muslin, in some instances containing more than five hundred threads to an inch, while the finest productions of the looms of India have only one hundred threads to the inch. Not only were the threads of linen cloth of extraordinary fineness, but the dyes were equally remarkable, and were unaffected by strong alkalies. Spinning was principally the occupation of women, who also practised the art of embroidery, in which gold thread was used, supposed to be beaten out by the hammer; but in the arts of dyeing and embroidery the Egyptians were surpassed by the Babylonians, who were renowned for their cloths of various colors.

The manufacture of paper was another art for which the Egyptians were famous, made from the papyrus, a plant growing in the marsh-land of the Nile. The papyrus was also applied to the manufacture of sails, baskets, canoes, and parts of sandals. Some of the papyri, on which is hieroglyphic writing dating from two thousand years before our era, are in good preservation. Sheep-skin parchment also was used for writing.

The Egyptians were especially skilled in the preparation of leather for sandals, shields, and chairs. The curriers used the same semicircular knife which is now in use. The great consumption of leather created a demand far greater than could be satisfied by the produce of the country, and therefore skins from foreign countries were imported as part of the tribute laid on conquered nations or tribes.

More numerous than the tanners in Egypt were the potters, among whom the pottery-wheel was known from a remote antiquity, previous to the arrival of Joseph from Canaan, and long before the foundation of the Greek Athens. Earthenware was used for holding wine, oils, and other liquids; but the finest production of the potter were the vases, covered with a vitreous glaze and modelled in every variety of forms, some of which were as elegant as those made later by the Greeks, who excelled in this department of art.

Carpenters and cabinet-makers formed a large class of Egyptian workmen for making coffins, boxes, tables, chairs, doors, sofas, and other articles of furniture, frequently inlaid with ivory and rare woods. Veneering was known to these workmen, probably arising from the scarcity of wood. The tools used by the carpenters, as appear from the representations on the monuments, were the axe, the adze, the hand-saw, the chisel, the drill, and the plane. These tools were made of bronze, with handles of acacia, tamarisk, and other hard woods. The hatchet, by which trees were felled, was used by boat-builders. The boxes and other articles of furniture were highly ornamented with inlaid work.

Boat-building in Egypt also employed many workmen. Boats were made of the papyrus plant, deal, cedar, and other woods, and were propelled both by sails and oars. One ship-of-war built for Ptolemy Philopater is said by ancient writers to have been 478 feet long, to have had forty banks of oars, and to have carried 400 sailors, 4,000 rowers, and 3,000 soldiers. This is doubtless an exaggeration, but indicates great progress in naval architecture. The construction of boats varied according to the

purpose for which they were intended. They were built with ribs as at the present day, with small keels, square sails, with spacious cabins in the centre, and ornamented sterns; there was usually but one mast, and the prows terminated in the heads of animals. The boats of burden were somewhat similar to our barges; the sails were generally painted with rich colors. The origin of boat-building was probably the raft, and improvement followed improvement until the ship-of-war rivalled in size our largest vessels, while Egyptian merchant vessels penetrated to distant seas, and probably doubled the Cape of Good Hope.

In regard to agriculture the Egyptians were the most advanced of the nations of antiquity, since the fertility of their soil made the occupation one of primary importance. Irrigation was universally practised, the Nile furnishing water for innumerable canals. The soil was often turned up with the hoe rather than the plough. The grain was sown broadcast, and was trodden in by goats. Their plough was very simple, and was drawn by oxen; the yoke being attached to the horns. Although the soil was rich, manures were frequently used. The chief crops were those of wheat, barley, beans, peas, lentils, vetches, lupines, clover, rice, indigo, cotton, lettuce, flax, hemp, cumin, coriander, poppy, melons, cucumbers, onions, and leeks. We do not read of carrots, cabbages, beets, or potatoes, which enter so largely into modern husbandry. Oil was obtained from the olive, the castor-berry, simsin, and colseed. Among the principal trees which were cultivated were the vine, olive, locust, acacia, date, sycamore, pomegranate, and tamarisk. Grain, after harvest, was trodden out by oxen, and the straw was used as provender. To protect the fields from inundation dykes were built.

All classes in Egypt delighted in the sports of the field, especially in the hunting of wild animals, in which the arrow was most frequently used. Sometimes the animals were caught in nets, in enclosed places near water-brooks. The Egyptians also had numerous fish-ponds, since they were as fond of angling as they were of hunting. Hunting in Egypt was an amusement, not an occupation as among nomadic people. Not only was hunting for pleasure a great amusement among Egyptians, but also among Babylonians and Persians, who coursed the plains with dogs. They used the noose or lasso also to catch antelopes and wild cattle, which were hunted with lions; the bow used in the chase was similar to that employed in war. All the subjects of the chase were sculptured on the monuments with great spirit and fidelity, especially the stag, the ibex, the porcupine, the wolf, the hare, the lion, the fox, and the giraffe. The camel is not found among the Egyptian sculptures, nor the bear. Of the birds found in their sculptures were vultures, eagles, kites, hawks, owls, ravens, larks, swallows, turtle-doves, quails, ostriches, storks, plovers, snipes, geese, and ducks, many of which were taken in nets. The Nile and Lake Birket el Keroun furnished fish in great abundance. The profits of the fisheries were enormous, and were farmed out by the government.

The Egyptians were very fond of ornaments in dress, especially the women. They paid great attention to their sandals; they wore their hair long and plaited, bound round with an ornamented fillet fastened by a lotus bud; they wore ear-rings and a profusion of rings on the fingers and bracelets for the arms, made of gold and set with precious stones. The scarabaeus, or sacred beetle, was the adornment of rings and necklaces; even the men wore necklaces and rings and chains. Both men and women stained the eyelids and brows. Pins and needles were among the articles of the toilet, usually made of bronze; also metallic mirrors finely polished. The men carried canes or walking-sticks,--the wands of Moses and Aaron.

As the Egyptians paid great attention to health, physicians were held in great repute; and none were permitted to practise but in some particular branch, such as diseases of the eye, the ear, the head, the teeth, and the internal maladies. They were paid by government, and were skilled in the knowledge of drugs. The art of curing diseases originated, according to Pliny, in Egypt. Connected with the healing art was the practice of embalming dead bodies, which was carried to great perfection.

In elegance of life the Greeks and Romans, however, far surpassed any of the nations of antiquity, if not in luxury itself, which was confined to the palaces of kings. In social refinements the Greeks were not behind any modern nation, as one infers from reading Becker's *Charicles*. Among the Greeks was the network of trades and professions, as in Paris and London, and a complicated social life in which all the amenities known to the modern world were seen, especially in Athens and Corinth and the Ionian capitals. What could be more polite and courteous than the intercourse carried on in Greece among cultivated and famous people? When were symposia more attractive than when the *élite* of Athens, in the time of Pericles, feasted and communed together? When was art ever brought in support of luxury to greater perfection? We read of libraries and books and booksellers, of social games, of attractive gardens and villas, as well as of baths and spectacles, of markets and fora in Athens. The common life of a Pericles or a Cicero differed but little from that of

modern men of rank and fortune.

In describing the various arts which marked the nations of antiquity, we cannot but feel that in a material point of view the ancient civilization in its important features was as splendid as our own. In the decoration of houses, in social entertainments, in cookery, the Romans were our equals. The mosaics, the signet rings, cameos, bracelets, bronzes, vases, couches, banqueting-tables, lamps, colored glass, potteries, all attest great elegance and beauty. The tables of thuga root and Delian bronze were as expensive as modern sideboards; wood and ivory were carved in Rome as exquisitely as in Japan and China; mirrors were made of polished silver. Glass-cutters could imitate the colors of precious stones so well that the Portland vase, from the tomb of Alexander Severus, was long considered as a genuine sardonyx. The palace of Nero glittered with gold and jewels; perfumes and flowers were showered from ivory ceilings. The halls of Heliogabalus were hung with cloth of gold, enriched with jewels; his beds were silver, and his tables of gold. A banquet dish of Drusillus weighed five hundred pounds of silver. Tunics were embroidered with the figures of various animals; sandals were garnished with precious stones. Paulina wore jewels, when she paid visits, valued at \$800,000. Drinking-cups were engraved with scenes from the poets; libraries were adorned with busts, and presses of rare woods; sofas were inlaid with tortoise-shell, and covered with gorgeous purple. The Roman grandees rode in gilded chariots, bathed in marble baths, dined from golden plate, drank from crystal cups, slept on beds of down, reclined on luxurious couches, wore embroidered robes, and were adorned with precious stones. They ransacked the earth and the seas for rare dishes for their banquets, and ornamented their houses with carpets from Babylon, onyx cups from Bithynia, marbles from Numidia, bronzes from Corinth, statues from Athens,—whatever, in short, was precious or rare or curious in the most distant countries.

What a concentration of material wonders was to be seen in all the countries that bordered on the Mediterranean,—not merely in Italy and Greece, but in Sicily and Asia Minor, and even in Gaul and Spain! Every country was dotted with cities, villas, and farms. Every country was famous for oil, or fruit, or wine, or vegetables, or timber, or flocks, or pastures, or horses. More than two hundred and fifty cities or towns in Italy alone are historical, and some were famous.

The excavations of Pompeii attest great luxury and elegance of life. Cortona, Clusium, Veii, Ancona, Ostia, Praeneste, Antium, Misenum, Baiae, Puteoli, Neapolis, Brundisium, Sybaris, were all celebrated.

And still more remarkable were the old capitals of Greece, Asia Minor, and Africa. Syracuse was older than Rome, and had a fortress of a mile and a half in length. Carthage, under the emperors, nearly equalled its ancient magnificence. Athens was never more splendid than in the time of the Roman Antonines. In spite of successive conquests, there still towered upon the Acropolis the most wonderful temple of antiquity, built of Pentelic marble, and adorned with the sculptures of Phidias. Corinth was richer and more luxurious than Athens, and possessed the most valuable pictures of Greece, as well as the finest statues; a single street for three miles was adorned with costly edifices. And even the islands which were colonized by Greeks were seats of sculpture and painting, as well as of schools of learning. Still grander were the cities of Asia Minor. Antioch had a street four miles in length, with double colonnades; and its baths, theatres, museums, and temples excited universal admiration. At Ephesus was the grand temple of Diana, four times as large as the Parthenon at Athens, covering as much ground as Cologne Cathedral, with one hundred and twenty-eight columns sixty feet high. The Ephesian theatre was capable of seating sixty thousand spectators. Tarsus, the birthplace of Paul, was no mean city; and Damascus, the old capital of Syria, was both beautiful and rich.

Laodicea was famous for tapestries, Hierapolis for its iron wares, Cybara for its dyes, Sardis for its wines, Smyrna for its beautiful monuments, Delos for its slave-trade, Cyrene for its horses, Paphos for its temple of Venus, in which were a hundred altars. Seleucia, on the Tigris, had a population of four hundred thousand. Caesarea in Palestine, founded by Herod the Great, and the principal seat of government to the Roman prefects, had a harbor equal in size to the renowned Piraeus, and was secured against the southwest winds by a mole of such massive construction that the blocks of stone, sunk under the water, were fifty feet in length, eighteen in width, and nine in thickness. The city itself was constructed of polished stone, with an agora, a theatre, a circus, a praetorium, and a temple to Caesar. Tyre, which had resisted for seven months the armies of Alexander, remained to the fall of the empire a great emporium of trade; it monopolized the manufacture of imperial purple. Sidon was equally celebrated for its glass and embroidered robes. The Sidonians cast glass mirrors, and imitated precious stones. But the glory of both Tyre and Sidon was in ships, which visited all the coasts of the Mediterranean, and even penetrated to Britain and India.

But greater than Tyre or Antioch, or any eastern city, was Alexandria, the capital of Egypt. Egypt even in its decline was still a great monarchy; and when the sceptre of three hundred kings passed from Cleopatra the last of the Ptolemies, to Augustus Caesar the conqueror at Actium, the military force of Egypt is said to have amounted to seven hundred thousand men. The annual revenues of this State under the Ptolemies amounted to about seventeen million dollars in gold and silver, besides the produce of the earth. A single feast cost Philadelphus more than half a million of pounds sterling, and he had accumulated treasures to the amount of seven hundred and forty thousand talents, or about eight hundred and sixty million dollars. What European monarch ever possessed such a sum? The kings of Egypt, even when tributary to Rome, were richer in gold and silver than was Louis XIV. in the proudest hour of his life.

The ground-plan of Alexandria was traced by Alexander himself, but it was not completed until the reign of Ptolemy Philadelphus. Its circumference was about fifteen miles; the streets were regular, and crossed one another at right angles, being wide enough for free passage of both carriages and foot passengers. Its harbor could hold the largest fleet ever congregated; its walls and gates were constructed with all the skill and strength known to antiquity; its population numbered six hundred thousand, and all nations were represented in its crowded streets. The wealth of the city may be inferred from the fact that in one year sixty-two hundred and fifty talents, or more than six million dollars, were paid to the public treasury for port dues. The library was the largest in the world, numbering over seven hundred thousand volumes; and this was connected with a museum, a menagerie, a botanical garden, and various halls for lectures, altogether forming the most famous university in the Roman empire. The inhabitants were chiefly Greek, and had all the cultivated tastes and mercantile thrift of that quick-witted people. In a commercial point of view Alexandria was the most important city in the world, and its ships whitened every sea. Unlike most commercial cities, it was intellectual, and its schools of poetry, mathematics, medicine, philosophy, and theology were more renowned than even those of Athens during the third and fourth centuries. Alexandria, could it have been transported in its former splendor to our modern world, would be a great capital in these times.

And all these cities were connected with one another and with Rome by magnificent roads, perfectly straight, and paved with large blocks of stone. They were originally constructed for military purposes, but were used by travellers, and on them posts were regularly established; they crossed valleys upon arches, and penetrated mountains; in Italy, especially, they were great works of art, and connected all the provinces. There was an uninterrupted communication from the wall of Antoninus through York, London, Sandwich, Boulogne, Rheims, Lyons, Milan, Rome, Brundisium, Dyrrachium, Byzantium, Ancyra, Tarsus, Antioch, Tyre, Jerusalem,--a distance of thirty-seven hundred and forty miles; and these roads were divided by milestones, and houses for travellers erected upon them at points of every five or six miles.

Commerce under the Roman emperors was not what it now is, but still was very considerable, and thus united the various provinces together. The most remote countries were ransacked to furnish luxuries for Rome; every year a fleet of one hundred and twenty vessels sailed from the Red Sea for the islands of the Indian Ocean. But the Mediterranean, with the rivers which flowed into it, was the great highway of the ancient navigator. Navigation by the ancients was even more rapid than in modern times before the invention of steam, since oars were employed as well as sails. In summer one hundred and sixty-two Roman miles were sailed over in twenty-four hours; this was the average speed, or about seven knots. From the mouth of the Tiber vessels could usually reach Africa in two days, Massilia in three, and the Pillars of Hercules in seven; from Puteoli the passage to Alexandria had been effected, with moderate winds, in nine days. These facts, however, apply only to the summer, and to favorable winds. The Romans did not navigate in the inclement seasons; but in summer the great inland sea was white with sails. Great fleets brought corn from Gaul, Spain, Sardinia, Africa, Sicily, and Egypt. This was the most important trade; but a considerable commerce was carried on also in ivory, tortoise-shell, cotton and silk fabrics, pearls and precious stones, gums, spices, wines, wool, and oil. Greek and Asiatic wines, especially the Chian and Lesbian, were in great demand at Rome. The transport of earthenware, made generally in the Grecian cities, of wild animals for the amphitheatre, of marble, of the spoils of eastern cities, of military engines and stores, and of horses, required very large fleets and thousands of mariners, which probably belonged chiefly to great maritime cities. These cities with their dependencies required even more vessels for communication with one another than for Rome herself,--the great central object of enterprise and cupidity.

In this survey of ancient cities I have not yet spoken of the great central city,--the City of the Seven Hills, to which all the world was tributary. Whatever was costly or rare or beautiful, in Greece or

Asia or Egypt, was appropriated by her citizen kings, since citizens were provincial governors. All the great highways, from the Atlantic to the Tigris, converged to the capital,--all roads led to Rome; all the ships of Alexandria and Carthage and Tarentum, and other commercial capitals, were employed in furnishing her with luxuries or necessities. Never was there so proud a city as this "Epitome of the Universe." London, Paris, Vienna, Constantinople, St. Petersburg, Berlin, are great centres of fashion and power; but they are rivals, and excel only in some great department of human enterprise and genius, as in letters, or fashions, or commerce, or manufactures,--centres of influence and power in the countries of which they are capitals, yet they do not monopolize the wealth and energies of the world. London may contain more people than did ancient Rome, and may possess more commercial wealth; but London represents only the British monarchy, not a universal empire. Rome, however, monopolized every thing, and controlled all nations and peoples; she could shut up the schools of Athens, or disperse the ships of Alexandria, or regulate the shops of Antioch. What Lyons and Bordeaux are to Paris, Corinth and Babylon were to Rome,--mere dependent cities. Paul, condemned at Jerusalem, stretched out his arms to Rome, and Rome protected him. The philosophers of Greece were the tutors of Roman nobility. The kings of the East resorted to the palaces of Mount Palatine for favors or safety; the governors of Syria and Egypt, reigning in the palaces of ancient kings, returned to Rome to squander the riches they had accumulated. Senators and nobles took their turn as sovereign rulers of all the known countries of the world. The halls in which Darius and Alexander and Pericles and Croesus and Solomon and Cleopatra had feasted, became the witness of the banquets of Roman proconsuls. Babylon, Thebes, and Athens were only what Delhi and Calcutta are to the English of our day,--cities to be ruled by the delegates of the imperial Senate. Rome was the only "home" of the proud governors who reigned on the banks of the Thames, of the Seine, of the Rhine, of the Nile, of the Tigris. After they had enriched themselves with the spoils of the ancient monarchies they returned to their estates in Italy, or to their palaces on the Aventine. What a concentration of works of art on the hills, and around the Forum, and in the Campus Martius, and other celebrated quarters! There were temples rivalling those of Athens and Ephesus; baths covering more ground than the Pyramids, surrounded with Corinthian columns, and filled with the choicest treasures ransacked from the cities of Greece and Asia; palaces in comparison with which the Tuileries and Versailles are small; theatres which seated a larger audience than any present public buildings in Europe; amphitheatres more extensive and costly than Cologne, Milan, and York Minster cathedrals combined, and seating eight times as many spectators as could be crowded into St. Peter's Church; circuses where, it is said, three hundred and eighty-five thousand persons could witness the games and chariot-races at a time; bridges, still standing, which have furnished models for the most beautiful at Paris and London; aqueducts carried over arches one hundred feet in height, through which flowed the surplus water of distant lakes; drains of solid masonry in which large boats could float; pillars more than one hundred feet in height, coated with precious marbles or plates of brass, and covered with bas-reliefs; obelisks brought from Egypt; fora and basilicas connected together, and extending more than three thousand feet in length, every part of which was filled with "animated busts" of conquerors, kings, statesmen, poets, publicists, and philosophers; mausoleums greater and more splendid than that Artemisia erected to the memory of her husband; triumphal arches under which marched in stately procession the victorious armies of the Eternal City, preceded by the spoils and trophies of conquered empires.

Such was the proud capital,--a city of palaces, a residence of nobles who were virtually kings, enriched with the accumulated treasures of ancient civilization. Great were the capitals of Greece and Asia, but how pre-eminent was Rome, since all were subordinate to her! How bewildering and bewitching to a traveller must have been the varied wonders of the city! Go where he would, his eye rested on something which was both a study and a marvel. Let him drive or walk about the suburbs,--there were villas, tombs, aqueducts looking like our railroads on arches, sculptured monuments, and gardens of surpassing beauty and luxury. Let him approach the walls,--they were great fortifications extending twenty-one miles in circuit, according to the measurement of Ammon as adopted by Gibbon, and forty-five miles according to other authorities. Let him enter any of the various gates that opened into the city from the roads which radiated to all parts of Italy and the world,--they were of monumental brass covered with bas-reliefs, on which the victories of generals for a thousand years were commemorated. Let him pass through any of the crowded thoroughfares,--he saw houses towering scarcely ever less than seventy feet, as tall as those of Edinburgh in its oldest sections. Most of the houses in which this vast population lived, according to Strabo, possessed pipes which gave a never-failing supply of water from the rivers that flowed into the city through the aqueducts and out again through the sewers into the Tiber. Let the traveller walk up the Via Sacra,--that short street, scarcely half a mile in length,--and he passed the Flavian Amphitheatre, the Temple of Venus and Rome, the Arch of Titus, the Temples of Peace, of Vesta, and of Castor, the Forum Romanum, the Basilica Julia, the Arch of Severus, the Temple of Saturn, and stood before the majestic ascent to the

Capitoline Jupiter, with its magnificent portico and ornamented pediment, surpassing the façade of any modern church. On his left, as he emerged from beneath the sculptured Arch of Titus, was the Palatine Mount, nearly covered by the palace of the Caesars, the magnificent residences of the higher nobility, and various temples, of which that of Apollo was the most magnificent, built by Augustus, of solid white marble from Luna. Here were the palaces of Vaccus, of Flaccus, of Cicero, of Catiline, of Scaurus, of Antoninus, of Clodius, of Agrippa, and of Hortensius. Still on his left, in the valley between the Palatine and the Capitoline, though he could not see it, concealed from view by the great Temples of Vesta and of Castor, and the still greater edifice known as the Basilica Julia, was the quarter called the Velabrum, extending to the river, where the Pons Aemilius crossed it,--a low quarter of narrow streets and tall houses where the rabble lived and died. On his right, concealed from view by the Aedes Divi Julii and the Forum Romanum, was that magnificent series of edifices extending from the Temple of Peace to the Temple of Trajan, including the Basilica Pauli, the Forum Julii, the Forum Augusti, the Forum Trajani, the Basilica Ulpia,--a space more than three thousand feet in length, and six hundred in breadth, almost entirely surrounded by porticos and colonnades, and filled with statues and pictures,--displaying on the whole probably the grandest series of public buildings clustered together ever erected, especially if we include the Forum Romanum and the various temples and basilicas which connected the whole,--a forest of marble pillars and statues. Ascending the steps which led from the Temple of Concord to the Temple of Juno Moneta upon the Arx, or Tarpeian Rock, on the southwestern summit of the hill, itself one of the most beautiful temples in Rome, erected by Camillus on the spot where the house of M. Manlius Capitolinus had stood, and one came upon the Roman mint. Near this was the temple erected by Augustus to Jupiter Tonans, and that built by Domitian to Jupiter Custos. But all the sacred edifices which crowned the Capitoline were subordinate to the Templum Jovis Capitolini, standing on a platform of eight thousand square feet, and built of the richest materials. The portico which faced the Via Sacra consisted of three rows of Doric columns, the pediment profusely ornamented with the choicest sculptures, the apex of the roof surmounted by the bronze horses of Lysippus, and the roof itself covered with gilded tiles. The temple had three separate cells, though covered with one roof; in front of each stood colossal statues of the three deities to whom it was consecrated. Here were preserved what was most sacred in the eyes of Romans, and it was itself the richest of all the temples of the city.

What a beautiful panorama was presented to the view from the summit of this consecrated hill, only mounted by a steep ascent of one hundred steps! To the south was the Via Sacra extending to the Colosseum, and beyond it the Appia Via, lined with monuments as far as the eye could reach. A little beyond the fora to the east was the Carinae, a fashionable quarter of beautiful shops and houses, and still farther off were the Baths of Titus, extending from the Carinae to the Esquiline Mount. To the northeast were the Viminal and Quirinal hills, after the Palatine the most ancient part of the city, the seat of the Sabine population, abounding in fanes and temples, the most splendid of which was the Temple of Quirinus, erected originally to Romulus by Numa, but rebuilt by Augustus, with a double row of columns on each of its sides, seventy-six in number. Near by was the house of Atticus, and the gardens of Sallust in the valley between the Quirinal and Pincian, afterward the property of the Emperor. Far back on the Quirinal, near the wall of Servius, were the Baths of Diocletian, and still farther to the east the Pretorian Camp established by Tiberius, and included within the wall of Aurelian. To the northeast the eye lighted on the Pincian Hill covered with the gardens of Lucullus, to possess which Messalina caused the death of Valerius Asiaticus, into whose possession they had fallen. In the valley which lay between the fora and the Quirinal was the celebrated Subura, the quarter of shops, markets, and artificers,--a busy, noisy, vulgar section, not beautiful, but full of life and enterprise and wickedness. The eye then turned to the north, and the whole length of the Via Flaminia was exposed to view, extending from the Capitoline to the Flaminian gate, perfectly straight, the finest street in Rome, and parallel to the modern Corso; it was the great highway to the north of Italy. Monuments and temples and palaces lined this celebrated street; it was spanned by the triumphal arches of Claudius and Marcus Aurelius. To the west of it was the Campus Martius, with its innumerable objects of interest,--the Baths of Agrippa, the Pantheon, the Thermae Alexandrinae, the Column of Marcus Aurelius, and the Mausoleum of Augustus. Beneath the Capitoline on the west, toward the river, was the Circus Flaminius, the Portico of Octavius, the Theatre of Balbus, and the Theatre of Pompey, where forty thousand spectators were accommodated. Stretching beyond the Thermae Alexandrinae, near the Pantheon, was the magnificent bridge which crossed the Tiber, built by Hadrian when he founded his Mausoleum, to which it led, still standing under the name of the Ponte S. Angelo. The eye took in eight or nine bridges over the Tiber, some of wood, but generally of stone, of beautiful masonry, and crowned with statues. In the valley between the Palatine and the Aventine, was the great Circus Maximus, founded by the early Tarquin; it was the largest open space, inclosed by walls and porticos, in the city; it

seated three hundred and eighty-five thousand spectators. How vast a city, which could spare nearly four hundred thousand of its population to see the chariot-races! Beyond was the Aventine itself. This also was rich in legendary monuments and in the palaces of the great, though originally a plebeian quarter. Here dwelt Trajan before he was emperor, and Ennius the poet, and Paula the friend of Saint Jerome. Beneath the Aventine, and a little south of the Circus Maximus, were the great Baths of Caracalla, the ruins of which, next to those of the Colosseum, made on my mind the strongest impression of all I saw that pertains to antiquity, though these were not so large as those of Diocletian. The view south took in the Caelian Hill, the ancient residence of Tullus Hostilius. This hill was the residence of many distinguished Romans, among whose palaces was that of Claudius Centumalus, which towered ten or twelve stories into the air. But grander than any of these palaces was that of Plautius Lateranus, on whose site now stands the basilica of St. John Lateran,--the gift of Constantine to the bishop of Rome,--one of the most ancient of the Christian churches, in which, for fifteen hundred years, daily services have been performed.

Such were the objects of interest and grandeur that met the eye as it was turned toward the various quarters of the city, which contained between three and four millions of people. Lipsius estimates four millions as the population, including slaves, women, children, and strangers. Though this estimate is regarded as too large by Merivale and others, yet how enormous must have been the number of the people when there were nine thousand and twenty-five baths, and when those of Diocletian could accommodate thirty-two hundred bathers at a time! The wooden theatre of Scaurus contained eighty thousand seats; that of Marcellus twenty thousand; the Colosseum would seat eighty-seven thousand persons, and give standing space for twenty-two thousand more. The Circus Maximus would hold three hundred and eighty-five thousand spectators. If only one person out of four of the free population witnessed the games and spectacles at a time, we thus must have four millions of people altogether in the city. The Aurelian walls are now only thirteen miles in circumference, but Lipsius estimates the original circumference at forty-five miles, and Vopiscus at nearly fifty. The diameter of the city must have been eleven miles, since Strabo tells us that the actual limit of Rome was at a place between the fifth and sixth milestone from the column of Trajan in the Forum,--the central and most conspicuous object in the city except the capitol.

Modern writers, taking London and Paris for their measure of material civilization, seem unwilling to admit that Rome could have reached such a pitch of glory and wealth and power. To him who stands within the narrow limits of the Forum, as it now appears, it seems incredible that it could have been the centre of a much larger city than Europe can now boast of. Grave historians are loath to compromise their dignity and character for truth by admitting statements which seem, to men of limited views, to be fabulous, and which transcend modern experience. But we should remember that most of the monuments of ancient Rome have entirely disappeared. Nothing remains of the Palace of the Caesars, which nearly covered the Palatine Hill; little of the fora which, connected together, covered a space twice as large as that inclosed by the palaces of the Louvre and Tuileries, with all their galleries and courts; almost nothing of the glories of the Capitoline Hill; and little comparatively of those Thermae which were a mile in circuit. But what does remain attests an unparalleled grandeur,--the broken pillars of the Forum; the lofty columns of Trajan and Marcus Aurelius; the Pantheon, lifting its spacious dome two hundred feet into the air; the mere vestibule of the Baths of Agrippa; the triumphal arches of Titus and Trajan and Constantine; the bridges which span the Tiber; the aqueducts which cross the Campagna; the Cloaca Maxima, which drained the marshes and lakes of the infant city; and, above all, the Colosseum. What glory and shame are associated with that single edifice! That alone, if nothing else remained of Pagan antiquity, would indicate a grandeur and a folly such as cannot now be seen on earth. It reveals a wonderful skill in masonry and great architectural strength; it shows the wealth and resources of rulers who must have had the treasures of the world at their command; it shows the restless passions of the people for excitement, and the necessity on the part of government of yielding to this taste. What leisure and indolence marked a city which could afford to give up so much time to the demoralizing sports! What facilities for transportation were afforded, when so many wild beasts could be brought to the capitol from the central parts of Africa without calling out unusual comment! How imperious a populace that compels the government to provide such expensive pleasures! The games of Titus, on the dedication of the Colosseum, lasted one hundred days, and five thousand wild beasts were slaughtered in the arena. The number of the gladiators who fought surpasses belief. At the triumph of Trajan over the Dacians, ten thousand gladiators were exhibited, and the Emperor himself presided under a gilded canopy, surrounded by thousands of his lords. Underneath the arena, strewn with yellow sand and sawdust, was a solid pavement, so closely cemented that it could be turned into an artificial lake, on which naval battles were fought. But it was the conflict of gladiators which most deeply stimulated the passions of the people. The benches were crowded with eager

spectators, and the voices of one hundred thousand were raised in triumph or rage as the miserable victims sank exhausted in the bloody sport.

Yet it was not the gladiatorial sports of the amphitheatre which most strikingly attested the greatness and splendor of the city; nor the palaces, in which as many as four hundred slaves were sometimes maintained as domestic servants for a single establishment,--twelve hundred in number according to the lowest estimate, but probably five times as numerous, since every senator, every knight, and every rich man was proud to possess a residence which would attract attention; nor the temples, which numbered four hundred and twenty-four, most of which were of marble, filled with statues, the contributions of ages, and surrounded with groves; nor the fora and basilicas, with their porticos, statues, and pictures, covering more space than any cluster of public buildings in Europe, a mile and a half in circuit; nor the baths, nearly as large, still more completely filled with works of art; nor the Circus Maximus, where more people witnessed the chariot races at a time than are nightly assembled in all the places of public amusement in Paris, London, and New York combined,--more than could be seated in all the cathedrals of England and France. It is not these which most impressively make us feel the amazing grandeur of the old capital of the world. The triumphal processions of the conquering generals were still more exciting to behold, for these appealed more directly to the imagination, and excited those passions which urged the Romans to a career of conquest from generation to generation. No military review of modern times equalled those gorgeous triumphs, even as no scenic performance compares with the gladiatorial shows; the sun has never shone upon any human assemblage so magnificent and so grand, so imposing and yet so guilty. Not only were displayed the spoils of conquered kingdoms, and the triumphal cars of generals, but the whole military strength of the capital; an army of one hundred thousand men, flushed with victory, followed the gorgeous procession of nobles and princes. The triumph of Aurelian, on his return from the East, gives us some idea of the grandeur of that ovation to conquerors. "The pomp was opened by twenty elephants, four royal tigers, and two hundred of the most curious animals from every climate, north, south, east, and west. These were followed by sixteen hundred gladiators, devoted to the cruel amusement of the amphitheatre. Then were displayed the arms and ensigns of conquered nations, the plate and wardrobe of the Syrian queen. Then ambassadors from all parts of the earth, all remarkable in their rich dresses, with their crowns and offerings. Then the captives taken in the various wars,--Goths, Vandals, Samaritans, Alemanni, Franks, Gauls, Syrians, and Egyptians, each marked by their national costume. Then the Queen of the East, the beautiful Zenobia, confined by fetters of gold, and fainting under the weight of jewels, preceding the beautiful chariot in which she had hoped to enter the gates of Rome. Then the chariot of the Persian king. Then the triumphal car of Aurelian himself, drawn by elephants. Finally the most illustrious of the Senate and the army closed the solemn procession, amid the acclamations of the people, and the sound of musical instruments. It took from dawn of day until the ninth hour for the procession to pass to the capitol; and the festival was protracted by theatrical representations, the games of the circus, the hunting of wild beasts, combats of gladiators, and naval engagements."

Such were the material wonders of the ancient civilizations, culminating in their latest and greatest representative, and displayed in its proud capital,--nearly all of which became later the spoil of barbarians, who ruthlessly marched over the classic world, having no regard for its choicest treasures. Those old glories are now indeed succeeded by a prouder civilization,--the work of nobler races after sixteen hundred years of new experiments. But why such an eclipse of the glory of man? The reason is apparent if we survey the internal state of the ancient empires, especially of society as it existed under the Roman emperors.

AUTHORITIES.

Herodotus, Strabo, Pliny, Polybius, Diodorus Siculus, Titus Livius, Pausanias, on the geography and resources of the ancient nations. See an able chapter on Mediterranean prosperity in Louis Napoleon's History of Caesar. Smith's Dictionary of Ancient Geography is exhaustive. Wilkinson has revealed the civilization of ancient Egypt. Professor Becker's Handbook of Rome, as well as his Gallus and Charicles shed much light on manners and customs. Dyer's History of the City of Rome is the fullest description of its wonders that I have read. Niebuhr, Bunsen, and Platner, among the Germans, have written learnedly, but also have created much doubt about things supposed to be established. Mommsen, Curtius, and Merivale are also great authorities. Nor are the magnificent chapters of Gibbon to be disregarded by the student of Roman history, notwithstanding his elaborate and inflated style.

THE MILITARY ART.

WEAPONS, ENGINES, DISCIPLINE.

1300-100 A.D.

In surveying the nations of antiquity nothing impresses us more forcibly than the perpetual wars in which they were engaged, and the fact that military art and science seem to have been among the earliest things that occupied the thoughts of men. Personal strife and tribal warfare are coeval with the earliest movements of humanity.

The first recorded act in the Hebraic history of the world after the expulsion of Adam from Paradise is a murder. In patriarchal times we read of contentions between the servants of Abraham and of Lot, and between the petty kings and chieftains of the countries where they journeyed. Long before Abraham was born, violence was the greatest evil with which the world was afflicted. Before his day mighty conquerors arose and founded kingdoms. Babylon and Egypt were powerful military States in pre-historic times. Wars more or less fierce were waged before nations were civilized. The earliest known art, therefore, was the art of destruction, growing out of the wicked and brutal passions of men,—envy and hatred, ambition and revenge; in a word, selfishness. Race fought with race, kingdom with kingdom, and city with city, in the very infancy of society. In secular history the greatest names are those of conquerors and heroes in every land under the sun; and it was by conquerors that those grand monuments were erected the ruins of which astonish every traveller, especially in Egypt and Assyria.

But wars in the earliest ages were not carried on scientifically, or even as an art. There was little to mark them except brute force. Armies were scarcely more than great collections of armed men, led by kings, either to protect their States from hostile invaders, or to acquire new territory, or to exact tribute from weaker nations. We do not read of military discipline, or of skill in strategy and tactics. A battle was lost or won by individual prowess; it was generally a hand-to-hand encounter, in which the strongest and bravest gained the victory.

One of the earliest descriptions of war is to be found in the Iliad of Homer, where individual heroes fought with one another, armed with the sword, the lance, and the javelin, protected by shields, helmets, and coats of mail. They fought on foot, or from chariots, which were in use before cavalry. The war-horse was driven before he was ridden in Egypt or Palestine; but the Aryan barbarians in their invasion rode their horses, and fought on horseback, like the modern Cossacks.

Until the Greeks became familiar with war as an art, armies were usually very large, as if a great part of the population of a country followed the sovereign who commanded them. Rameses the Great, the Sesostris of the Greeks, according to Herodotus led nearly a million of men in his expeditions. He was the most noted of ancient warriors until Cyrus the Persian arose, and was nearly contemporaneous with Moses. The Trojan war is supposed to have taken place during the period when the Israelites were subject to the Ammonites; and about the time that the Philistines were defeated by David, the Greeks were forced by war to found colonies in Asia Minor.

After authentic history begins, war is the main subject with which it has to deal; and for three thousand years history is simply the record of the feats of warriors and generals, of their conquests and defeats, of the rise and fall of kingdoms and cities, of the growth or decline of military virtues. No arts of civilization have preserved nations from the sword of the conqueror, and war has been both the amusement and the business of kings. From the earliest ages, the most valued laurels have been bestowed for success in war, and military fame has eclipsed all other glories. The cry of the mourner has been unheeded in the blaze of conquest; even the aspirations of the poet and the labors of the artist have been as nought, except to celebrate the achievements of heroes.

It is interesting then to inquire how far the ancients advanced in the arts of war, which include

military weapons, movements, the structure of camps, the discipline of armies, the construction of ships and of military engines, and the concentration and management of forces under a single man. What was that mighty machinery by which nations were subdued, or rose to greatness on the ruin of States and Empires? The conquests of Rameses, of David, of Nebuchadnezzar, of Cyrus, of Alexander, of Hannibal, of Caesar, and other heroes are still the subjects of contemplation among statesmen and schoolboys. The exploits of heroes are the pith of history.

The art of war must have made great progress in the infancy of civilization, when bodily energies were most highly valued, when men were fierce, hardy, strong, and uncorrupted by luxury; when mere physical forces gave law alike to the rich and the poor, to the learned and the ignorant; and when the avenue to power led across the field of battle.

We must go to Egypt for the earliest development of art and science in all departments; and so far as the art of war consists in the organization of physical forces for conquest or defence, under the direction of a single man, it was in Egypt that this was first accomplished, about seventeen hundred years before Christ, as chronologists think, by Rameses the Great.

This monarch, according to Wilkinson, the greatest and most ambitious of the Egyptian kings, to whom the Greeks gave the name of Sesostris, showed great ability in collecting together large bodies of his subjects, and controlling them by a rigid military discipline. He accustomed them to heat and cold, hunger and thirst, fatigue, and exposure to danger. With bodies thus rendered vigorous by labor and discipline, they were fitted for distant expeditions. Rameses first subdued the Arabians and Libyans, and annexed them to the Egyptian monarchy. While he inured his subjects to fatigue and danger, he was careful to win their affections by acts of munificence and clemency. He then made his preparations for the conquest of the known world, and collected an army, according to Diodorus Siculus, of six hundred thousand infantry, twenty-four thousand cavalry, and twenty-seven thousand war-chariots. It is difficult to understand how a small country like Egypt could furnish such an immense force. If the account of the historian be not exaggerated, Rameses must have enrolled the conquered Libyans and Arabians and other nations among his soldiers. He subjected his army to a stern discipline and an uncomplaining obedience to orders,—the first principle in the science of war, which no successful general in the world's history has ever disregarded, from Alexander to Napoleon. With this powerful army his march was irresistible. Ethiopia was first subdued, and an exaction made from the conquered of a tribute of gold, ivory, and ebony. In those ancient times a conquering army did not resettle or colonize the territories it had subdued, but was contented with overrunning the country and exacting tribute from the people. Such was the nature of the Babylonian and Persian conquests. After overrunning Ethiopia and some other countries near the Straits of Babelmandeb, the conqueror proceeded to India, which he overran beyond the Ganges, and ascended the high table-land of Central Asia; then proceeding westward, he entered Europe, nor halted in his devastating career until he reached Thrace. From thence he marched to Asia Minor, conquering as he went, and invaded Assyria, seating himself on the throne of Ninus and Semiramis. Then, laden with booty from the Eastern world, he returned to Egypt after an absence of thirty years and consolidated his empire, building those vast structures at Thebes, which for magnitude have never been surpassed. Thus was Egypt enriched with the spoil of nations, and made formidable for a thousand years. Rameses was the last of the Pharaohs who pursued the phantom of military renown, or sought glory in distant expeditions.

We are in ignorance as to the details of the conquests and the generals who served under Rameses. There is doubtless some exaggeration in the statements of the Greek historian, but there is no doubt that this monarch was among the first of the great conquerors to establish a regular army, and to provide a fleet to co-operate with his land forces.

The strength of the Egyptian army consisted mainly in archers. They fought either on foot or in chariots; cavalry was not much relied upon, although mention is frequently made of horsemen as well as of chariots. The Egyptian infantry was divided into regiments, and Wilkinson tells us that they were named according to the arms they bore,—as "bowmen, spearmen, swordsmen, clubmen, slingers." These regiments were divided into battalions and companies, commanded by their captains. The infantry, heavily armed with spears and shields, formed a phalanx almost impenetrable of twelve men deep, who marched with great regularity. Each company had its standard-bearer, who was an officer of approved valor; the royal standards were carried by the royal princes or by persons of the royal household. The troops were summoned by the sound of trumpet, and also by the drum, both used from the earliest period. The offensive weapons were the bow, the spear, the javelin, the sword, the club, or mace, and the battle-axe. The chief defensive weapon was the shield, about three feet in length, covered with bull's hide, having the hair outward and studded with nails. The shape of

the bow was not essentially different from that used in Europe in the Middle Ages, being about five feet and a half long, round, and tapering at the ends; the bowstring was of hide or catgut. The arrows of the archers averaged about thirty inches in length, and were made of wood or reeds, tipped with a metal point, or flint, and winged with feathers. Each Bowman was furnished with a plentiful supply of arrows. When arrows were exhausted, the Bowman fought with swords and battle-axes; his defensive armor was confined chiefly to the helmet and a sort of quilted coat. The spear was of wood, with a metal head, was about five or six feet in length, and used for thrusting. The javelin was lighter, for throwing. The sling was a thong of plaited leather, broad in the middle, with a loop at the end. The sword was straight and short, between two and three feet in length, with a double edge, tapering to a sharp point, and used for either cut or thrust; the handle was frequently inlaid with precious stones. The metal used in the manufacture of swords and spear-heads was bronze, hardened by a process unknown to us. The battle-axe had a handle about two-and-a-half feet in length, and was less ornamented than other weapons. The cuirass, or coat of armor, was made of horizontal rows of metal plate, about an inch in breadth, well secured together by bronze pieces. The Egyptian chariot held two persons,--the charioteer, and the warrior armed with his bow-and-arrow and wearing a cuirass, or coat of mail. The warrior carried also other weapons for close encounter, when he should descend from his chariot to fight on foot. The chariot was of wood, the body of which was light, strengthened with metal; the pole was inserted in the axle; the two wheels usually had six spokes, but sometimes only four; the wheel revolved on the axle, and was secured by a lynch-pin. The leathern harness and housings were simple, and the bridles, or reins, were nearly the same as are now in use.

"The Egyptian chariot corps, like the infantry," says Wilkinson, "were divided into light and heavy troops, both armed with bows,--the former chiefly employed in harassing the enemy with missiles; the latter called upon to break through opposing masses of infantry." The infantry, when employed in the assault of fortified towns, were provided with shields, under cover of which they made their approaches to the place to be attacked. In their attack they advanced under cover of the arrows of the bowmen, and instantly applied the scaling-ladder to the ramparts. The testudo, a wooden shelter, was also used, large enough to contain several men. The battering-ram and movable towers resembled those of the Romans a thousand years later.

It would thus appear that the ancient Egyptians, in the discipline of armies, in military weapons offensive and defensive, in chariots and horses, and in military engines for the reduction of fortified towns, were scarcely improved upon by the Greeks and Romans, or by the Europeans in the Middle Ages. Yet the Egyptians were an ingenious rather than a warlike people, fond of peace, and devoted to agricultural pursuits.

More warlike than they were the Assyrians and the Persians, although we fail to discover any essential difference in the organization of armies, or in military weapons. The great difference between the Persian and the Egyptian armies was in the use of cavalry. From their earliest settlements the Persians were skilful horsemen, and these formed the guard of their kings. Under Cyrus, the Persians became the masters of the world, but they rapidly degenerated, not being able to withstand the luxurious life of the conquered Babylonians; and when they were marshalled against the Greeks, and especially against the disciplined forces of Alexander, they were disgracefully routed in spite of their enormous armies, which could not be handled, and became mere mobs of armed men.

The art of war made a great advance under the Greeks, although we do not notice any striking superiority of arms over the Eastern armies led by Sesostrius or Cyrus. The Greeks were among the most warlike of all the races of men; they had a genius for war. The Grecian States were engaged in perpetual strifes with one another, and constant contention developed military strength; and yet the Greeks, until the time of Philip, had no standing armies. They relied for offence and defence on the volunteer militia, which was animated by intense patriotic ideas. All armies in the nature of things are more or less machines, moved by one commanding will; but the Greek armies owed much of their success to the individual bravery of their troops, who were citizens of States under constitutional forms of government.

The most remarkable improvement in the art of war was made by the Spartans, who, in addition to their strict military discipline, introduced the *phalanx*,--files of picked soldiers, eight deep, heavily armed with spear, sword, and shield, placed in ranks of eight, at intervals of about six feet apart. This phalanx of eight files and eight ranks,--sixty-four men,--closely locked when the soldiers received or advanced to attack, proved nearly impregnable and irresistible. It combined solidity and the power of resistance with mobility. The picked men were placed in the front and rear; for in skilful

evolutions the front often became the rear, and the rear became the front. Armed with spears projecting beyond the front, and with their shields locked together, the phalanx advanced to meet the enemy with regular step, and to the cadence of music; if beaten, it retired in perfect order. After battle, each soldier was obliged to produce his shield as a proof that he had fought or retired as a soldier should. The Athenian phalanx was less solid than that of Sparta,--Miltiades having decreased the depth to four ranks, in order to lengthen his front,--but was more efficient in a charge against the enemy. The Spartan phalanx was stronger in defence, the Athenian more agile in attack. The attack was nearly irresistible, as the soldiers advanced with accelerated motion, corresponding to the double-quick time of modern warfare. This was first introduced by Miltiades at Marathon.

Philip of Macedon adopted the Spartan phalanx, but made it sixteen deep, which gave it greater solidity, and rendered it still more effective. He introduced the large oval buckler and a larger and heavier spear. When the phalanx was closed for action, each man occupied but three square feet of ground: as the pikes were twenty-four feet in length, and projected eighteen feet beyond the front, the formation presented an array of points such as had never been seen before. The greatest improvement effected by Philip, however, was the adoption of standing armies instead of the militia heretofore in use throughout the Grecian States. He also attached great importance to his cavalry, which was composed of the flower of the nobility, about twelve hundred in number, all covered with defensive armor; these he formed into eight squadrons, and constituted them his body-guard. The usual formation of the regular cavalry was in the form of a wedge, so as to penetrate and break the enemy's line,--a manoeuvre probably learned from Epaminondas of Thebes, a great master in the art of war, who defeated the Spartan phalanx by forming his columns upon a front less than their depth, thus enabling him to direct his whole force against a given point. By these tactics he gained the great victory at Leuctra, as Napoleon likewise prevailed over the Austrians in his Italian campaign. In like manner Philip's son Alexander, following the example of Epaminondas, concentrated his forces upon the enemy's centre, and easily defeated the Persian hosts by creating a panic. There was no resisting a phalanx sixteen files deep, with their projecting pikes, aided by the heavily armed cavalry, all under the strictest military discipline and animated by patriotic ardor. This terrible Macedonian phalanx was a great advance over the early armies of the Greeks, who fought without discipline in a hand to hand encounter, with swords and spears, after exhausting their arrows. They had learned two things of great importance,--a rigid discipline, and a concentration of forces which made an army a machine. Under Alexander, the grand phalanx consisted of 16,384 men, made up of four divisions and smaller phalanxes.

In Roman armies we see a still further advance in the military art, as it existed in the time of Augustus, which required centuries to perfect. The hardy physique and stern nature of the Romans, exercised and controlled by their organizing genius, evolved the Roman legion, which learned to resist the impetuous assaults of the elephants of the East, the phalanx of the Greeks, and the Teutonic barbarians. The indomitable courage of the Romans, trained under severest discipline and directed by means of an organization divided and subdivided and officered almost as perfectly as our modern corps and divisions and brigades and regiments and companies and squads, marched over and subdued the world.

The Roman soldier was trained to march twenty miles a day, under a burden of eighty pounds; to swim rivers, to climb mountains, to penetrate forests, and to encounter every kind of danger. He was taught that his destiny was to die in battle: death was at once his duty and his glory. He enlisted in the army with little hope of revisiting his home; he crossed seas and deserts and forests with the idea of spending his life in the service of his country. His pay was only a denarius daily, equal to about sixteen cents of our money. Marriage for him was discouraged or forbidden. However insignificant the legionary was as a man, he gained importance from the great body with which he was identified: he was both the servant and the master of the State. He had an intense *esprit de corps*; he was bound up in the glory of his legion. Both religion and honor bound him to his standards; the golden eagle which glittered in his front was the object of his fondest devotion. Nor was it possible to escape the penalty of cowardice or treachery or disobedience; he could be chastised with blows by his centurion, and his general could doom him to death. Never was the severity of military discipline relaxed; military exercises were incessant, in winter as in summer. In the midst of peace the Roman troops were familiarized with the practice of war.

It was the spirit which animated the Roman legions, and the discipline to which they were inured that gave them their irresistible strength. When we remember that they had not our firearms, we can but be surprised at their efficiency, especially in taking strongly fortified cities. Jerusalem was defended by a triple wall, the most elaborate fortifications, and twenty-four thousand soldiers, besides the aid received from the citizens; and yet it fell in little more than four months before an

army of eighty thousand under Titus. How great must have been the military science that could reduce a place of such strength, in so short a time, without the aid of other artillery than the ancient catapult and battering-ram! Whether the military science of the Romans was superior or inferior to our own, no one can question that it was as perfect as it could be, lacking any knowledge of gunpowder; we surpass them only in the application of this great invention, especially in artillery. There can be no doubt that a Roman army was superior to a feudal army in the brightest days of chivalry. The world has produced no generals greater than Caesar, Pompey, Sulla, and Marius. No armies ever won greater victories over superior numbers than the Roman, and no armies of their size ever retained in submission so vast an empire, and for so long a time. At no period in the history of the Roman empire were the armies so large as those sustained by France in time of peace. Two hundred thousand legionaries, and as many more auxiliaries, controlled diverse nations and powerful monarchies. The single province of Syria once boasted of a military force equal in the number of soldiers to that wielded by the Emperor Tiberius. Twenty-five Roman legions made the conquest of the world, and retained that conquest for five hundred years. The self-sustained energy of Caesar in Gaul puts to the blush the efforts of all modern generals, unless we except Frederic II., Marlborough, Napoleon, Wellington, Grant, Sherman, and a few other great geniuses whom warlike crises have developed; nor is there a better text-book on the art of war than that furnished by Caesar himself in his Commentaries. The great victories of the Romans over barbarians, over Gauls, over Carthaginians, over Greeks, over Syrians, over Persians, were not the result of a short-lived enthusiasm, like those of Attila and Tamerlane, but extended over a thousand years.

The Romans were essentially military in all their tastes and habits. Luxurious senators and nobles showed the greatest courage and skill in the most difficult campaigns. Antony, Caesar, Pompey, and Lucullus at home were enervated and self-indulgent, but at the head of their legions they were capable of any privation and fatigue.

The Roman legion was a most perfect organization, a great mechanical force, and could sustain furious attacks after vigor, patriotism, and public spirit had fled. For three hundred years a vast empire was sustained by mechanism alone. The legion is coeval with the foundation of Rome, but the number of the troops of which it was composed varied at different periods. It rarely exceeded six thousand men; Gibbon estimates the number at six thousand eight hundred and twenty-six men. For many centuries it was composed exclusively of Roman citizens. Up to the year B.C. 107, no one was permitted to serve among the regular troops except those who were regarded as possessing a strong personal interest in the stability of the republic. Marius admitted all orders of citizens; and after the close of the Social War, B.C. 87, the whole free population of Italy was allowed to serve in the regular army. Claudius incorporated with the legion the vanquished Goths, and after him the barbarians filled up the ranks on account of the degeneracy of the times. But during the period when the Romans were conquering the world every citizen was trained to arms, like the Germans of the present day, and was liable to be called upon to serve in the armies. In the early age of the republic the legion was disbanded as soon as the special service was performed, and was in all essential respects a militia. For three centuries we have no record of a Roman army wintering in the field; but when Southern Italy became the seat of war, and especially when Rome was menaced by foreign enemies, and still more when a protracted foreign service became inevitable, the same soldiers remained in activity for several years. Gradually the distinction between the soldier and the civilian was entirely obliterated. The distant wars of the republic--such as the prolonged operations of Caesar in Gaul, and the civil contests--made a standing army a necessity. During the civil wars between Caesar and Pompey the legions were forty in number; under Augustus, but twenty-five. Alexander Severus increased them to thirty-two. This was the standing force of the empire--from one hundred and fifty thousand to two hundred and forty thousand men, stationed in the various provinces.

The main dependence of the legion was on the infantry, which wore heavy armor consisting of helmet, breastplate, greaves on the right leg, and on the left arm a buckler, four feet in length and two and a half in width. The helmet was originally made of leather or untanned skin, strengthened and adorned by bronze or gold, and surmounted by a crest which was often of horse-hair, and so made as to give an imposing look. The crests served not only for ornament, but to distinguish the different centurions. The breastplate, or cuirass, was generally made of metal, and sometimes was highly ornamented. Chain-mail was also used. The greaves were of bronze or brass, with a lining of leather or felt, and reached above the knees. The shield worn by the heavy-armed infantry was not round, like that of the early Greeks, but oval or oblong, adapted to the shape of the body, such as was adopted by Philip and Alexander, and was made of wood or wicker-work. The weapons were a light spear, a pilum, or javelin, over six feet long, terminated by a steel point, and a short cut-and-thrust sword with a double edge. Besides the armor and weapons of the legionary, he usually carried

on the marches provisions for two weeks, three or four stakes used in forming the palisade of the camp, besides various tools,--altogether a burden of sixty or eighty pounds per man. The legion was drawn up eight deep, and three feet intervened between rank and file, which disposition gave great activity, and made it superior to the Macedonian phalanx, the strength of which depended on sixteen ranks of long pikes wedged together. The general period of service for the infantry was twenty years, after which the soldier received a discharge, together with a bounty in money or land.

The cavalry attached to each legion consisted of three hundred men, who originally were selected from the leading men in the State. They were mounted at the expense of the State, and formed a distinct order. The cavalry was divided into ten squadrons. To each legion was attached also a train of ten military engines of the largest size, and fifty-five of the smaller,--all of which discharged stones and darts with great effect. This train corresponded with our artillery.

The Roman legion--whether it was composed of four thousand men, as in the early ages of the republic, or six thousand, as in the time of Augustus--was divided into ten cohorts, and each cohort was composed of Hastati (raw troops), Principes (trained troops), Triarii (veterans), and Velites (light troops, or skirmishers). The soldiers of the first line, called Hastati, consisted of youths in the bloom of manhood, who were distributed into fifteen companies, or maniples. Each company contained sixty privates, two centurions, and a standard-bearer. Two thirds were heavily armed, and bore the long shield; the remainder carried only a spear and light javelins. The second line, the Principes, was composed of men in the full vigor of life, divided also into fifteen companies, all heavily armed, and distinguished by the splendor of their equipments. The third body, the Triarii, was composed of tried veterans, in fifteen companies, the least trustworthy of which were placed in the rear; these formed three lines. The Velites were light-armed troops, employed on out-post duty, and mingled with the horsemen. The Hastati were so called because they were armed with the *hasta*, or spear; the Principes for being placed so near to the front; the Triarii, from having been arrayed behind the first two lines as a body of reserve. The Triarii were armed with the pilum, thicker and stronger than the Grecian lance, four and a half feet long, of wood, with a barbed head of iron,--so that the whole length of the weapon was six feet nine inches. It was used either to throw or thrust with, and when it pierced the enemy's shield the iron head was bent, and the spear, owing to the twist in the iron, still held to the shield. Each soldier carried two of these weapons, and threw the heavy pilum over the heads of their comrades in front, in order to break the enemy's line. In the time of the empire, when the legion was modified, the infantry wore cuirasses and helmets, and carried a sword and dagger. The select infantry were armed with a long spear and a shield; the rest, with a pilum. Each man carried a saw, a basket, a mattock, a hatchet, a leather strap, a hook, a chain, and provisions for three days. The Equites (cavalry) wore helmets and cuirasses, like the infantry, having a broadsword at the right side, and in the hand a long pole. A buckler swung at the horse's flank. They were also furnished with a quiver containing three or four javelins.

The artillery were used both for hurling missiles in battle, and for the attack on fortresses. The *tormentum*, which was an elastic instrument, discharged stones and darts, and was held in general use until the discovery of gunpowder. In besieging a city, the ram was employed for destroying the lower part of a wall, and the *balista*, which discharged stones, was used to overthrow the battlements. The balista would project a stone weighing from fifty to three hundred pounds. The *aries*, or battering-ram, consisted of a large beam made of the trunk of a tree, frequently one hundred feet in length, to one end of which was fastened a mace of iron or bronze resembling in form the head of a ram; it was often suspended by ropes from a beam fixed transversely over it, so that the soldiers were relieved from supporting its weight, and were able to give it a rapid and forcible swinging motion backward and forward. When this machine was further perfected by rigging it upon wheels, and constructing over it a roof, so as to form a *testudo*, which protected the besieging party from the assaults of the besieged, there was no tower so strong, no wall so thick, as to resist a long-continued attack, the great length of the beam enabling the soldiers to work across the defensive ditch, and as many as one hundred men being often employed upon it. The Romans learned from the Greeks the art of building this formidable engine, which was used with great effect by Alexander, but with still greater by Titus in the siege of Jerusalem; it was first used by the Romans in the siege of Syracuse. The *vinea* was a sort of roof under which the soldiers protected themselves when they undermined walls. The *helepolis*, also used in the attack on cities, was a square tower furnished with all the means of assault. This also was a Greek invention; and the one used by Demetrius at the siege of Rhodes, B. C. 306, was one hundred and thirty-five feet high and sixty-eight wide, divided into nine stories. The *turris*, a tower of the same class, was used both by Greeks and Romans, and even by Asiatics. Mithridates used one at the siege of Cyzicus one hundred and fifty feet in height. These most formidable engines were generally made of beams of wood covered on three sides with iron and sometimes with rawhides. They were higher than the walls and

all the other fortifications of a besieged place, and divided into stories pierced with windows; in and upon them were stationed archers and slingers, and in the lower story was a battering-ram. The soldiers in the turrets were also provided with scaling-ladders, sometimes on wheels; so that when the top of the wall was cleared by means of the turrets, it might be scaled by means of the ladders. It was impossible to resist these powerful engines except by burning them, or by undermining the ground upon which they stood, or by overturning them with stones or iron-shod beams hung from a mast on the wall, or by increasing the height of the wall, or by erecting temporary towers on the wall beside them.

Thus there was no ancient fortification capable of withstanding a long siege when the besieged city was short of defenders or provisions. With forces equal between the combatants an attack was generally a failure, for the defenders had always a great advantage; but when the number of defenders was reduced, or when famine pressed, the skill and courage of the assailants would ultimately triumph. Some ancient cities made a most obstinate resistance, like Tarentum; like Carthage, which stood a siege of four years; like Numantia in Spain, and like Jerusalem. When cities were of immense size, population, and resources, like Rome when besieged by Alaric, it was easier to take them by cutting off all ingress and egress, so as to produce famine. Tyre was taken by Alexander only by cutting off the harbor. Cyrus could not have taken Babylon by assault, since the walls were of such enormous height, and the ditch was too wide for the use of battering-rams; he resorted to an expedient of which the blinded inhabitants of that doomed city never dreamed, which rendered their impregnable fortifications useless. Nor probably would the Romans have prevailed against Jerusalem had not famine decimated and weakened its defenders. Fortified cities, though scarcely ever impregnable, were yet more in use in ancient than modern times, and greatly delayed the operations of advancing armies; and it was probably the fortified camp of the Romans, which protected an army against surprises and other misfortunes, that gave such permanent efficacy to the legions.

The chief officers of the legion were the Tribunes; and originally there was one in each legion from the three tribes,--the Ramnes, Luceres, and Tities. In the time of Polybius the number in each legion was six. Their authority extended equally over the whole legion; but to prevent confusion, it was the custom for them to divide into three sections of two, and each pair undertook the routine duties for two months out of six; they nominated the centurions, and assigned each to the company to which he belonged. These tribunes at first were chosen the commanders-in-chief, by the kings and consuls; but during the palmy days of the republic, when the patrician power was pre-eminent, they were elected by the people, that is, the citizens. Later they were named, half by the Senate and half by the consuls. No one was eligible to this great office who had not served ten years in the infantry or five in the cavalry. The tribunes were distinguished by their dress from the common soldier. Next in rank to the tribunes, who corresponded to the rank of brigadiers and colonels in our times, were the Centurions, of whom there were sixty in each legion,--men who were more remarkable for calmness and sagacity than for courage and daring valor; men who would keep their posts at all hazards. It was their duty to drill the soldiers, to inspect arms, clothing, and food, to visit the sentinels and regulate the conduct of the men. They had the power of inflicting corporal punishment. They were chosen for merit solely, until the later ages of the empire, when their posts were bought, as is the case to some extent to-day in the English army. The centurions were of unequal rank,--those of the Triarii before those of the Principes, and those of the Principes before those of the Hastati. The first centurion of the first maniple of the Triarii stood next in rank to the tribunes, and had a seat in the military councils. His office was very lucrative. To his charge was intrusted the eagle of the legion. As the centurion might rise from the ranks by regular gradation through the different maniples of the Hastati, Principes, and Triarii, there was great inducement held out to the soldiers. It would, however, appear that the centurion received only twice the pay of the ordinary legionary. There was not therefore so much difference in rank between a private and a captain as there is in our day. There were no aristocratic distinctions in the ancient world so marked as those existing in the modern. In the Roman legion there was nevertheless a regular gradation of rank, although there were but few distinct offices. The gradation was determined not by length of service, but for merit alone, of which the tribunes were the sole judges; hence the tribune in a Roman legion had more power than that of a modern colonel. As the tribunes named the centurions, so the centurions appointed their lieutenants, who were called sub-centurions. Still below these were two sub-officers, or sergeants, and the *decanus*, or corporal, to every ten men.

There was a change in the constitution and disposition of the legion after the time of Marius, until the fall of the republic. The legions were thrown open to men of all grades; they were all armed and equipped alike; the lines were reduced to two, with a space between every two cohorts, of which there were five in each line; the young soldiers were placed in the rear; the distinction between

Hastati, Principes, and Triarii ceased; the Velites disappeared, their work being done by the foreign mercenaries; the cavalry ceased to be part of the legion, and became a distinct body; and the military was completely severed from the rest of the State. Formerly no one could aspire to office who had not completed ten years of military service, but in the time of Cicero a man could pass through all the great dignities of the State with a very limited experience of military life. Cicero himself did military service in but one campaign.

Under the emperors there were still other changes. The regular army consisted of legions and *supplementa*,--the latter being subdivided into the imperial guards and the auxiliary troops.

The Auxiliaries (*Socii*) consisted of troops from the States in alliance with Rome, or those compelled to furnish subsidies. The infantry of the allies was generally more numerous than that of the Romans, while the cavalry was three times as numerous. All the auxiliaries were paid by the State; their infantry received the same pay as the Roman infantry, but their cavalry received only two thirds of what was paid to the Roman cavalry. The common foot-soldier received in the time of Polybius three and a half asses a day, equal to about three cents; the horseman three times as much. The praetorian cohorts received twice as much as the legionaries. Julius Caesar allowed about six asses a day as the pay of the legionary, and under Augustus the daily pay was raised to ten asses,--little more than eight cents per day. Domitian raised the stipend still higher. The soldier, however, was fed and clothed by the government.

The Praetorian Cohort was a select body of troops instituted by Augustus to protect his person, and consisted of ten cohorts, each of one thousand men, chosen from Italy. This number was increased by Vitellius to sixteen thousand, and they were assembled by Tiberius in a permanent camp, which was strongly fortified. They had peculiar privileges, and when they had served sixteen years received twenty thousand sesterces, or more than one hundred pounds sterling. Each praetorian had the rank of a centurion in the regular army. Like the body-guard of Louis XIV. they were all gentlemen, and formed gradually a great power, like the Janissaries at Constantinople, and frequently disposed of the purple itself.

Our notice of the Roman legion would be incomplete without some description of the camp in which the soldier virtually lived. A Roman army never halted for a single night without forming a regular intrenchment capable of holding all the fighting men, the beasts of burden, and the baggage. During the winter months, when the army could not retire into some city, it was compelled to live in the camp, which was arranged and fortified according to a uniform plan, so that every company and individual had a place assigned. We cannot tell when this practice of intrenchment began; it was matured gradually, like all other things pertaining to all arts. The system was probably brought to perfection during the wars with Hannibal. Skill in the choice of ground, giving facilities for attack and defence, and for procuring water and other necessities, was of great account with the generals. An area of about five thousand square feet was allowed for a company of infantry, and ten thousand feet for a troop of thirty dragoons. The form of a camp was an exact square, the length of each side being two thousand and seventeen feet; there was a space of two hundred feet between the ramparts and the tents to facilitate the marching in and out of soldiers, and to guard the cattle and booty; the principal street was one hundred feet wide, and was called *Principia*. The defences of the camp consisted of a ditch, the earth from which was thrown inward, and of strong palisades of wooden stakes driven into the top of the earthwork so formed; the ditch was sometimes fifteen feet deep, and the *vallum*, or rampart, ten feet in height. When the army encamped for the first time the tribunes administered an oath to each individual, including slaves, to the effect that they would steal nothing out of the camp. Every morning at daybreak the centurions and the equites presented themselves before the tents of the tribunes, and the tribunes in like manner presented themselves before the praetorian, to learn the orders of the consuls, which through the centurions were communicated to the soldiers. Four companies took charge of the principal street, to see that it was properly cleaned and watered; one company took charge of the tent of the tribune; a strong guard attended to the horses, and another of fifty men stood beside the tent of the general, that he might be protected from open danger and secret treachery. The *velites* mounted guard the whole night and day along the whole extent of the *vallum*, and each gate was guarded by ten men; the *equites* were intrusted with the duty of acting as sentinels during the night, and most ingenious measures were adopted to secure their watchfulness and fidelity. The watchword for the night was given by the commander-in-chief. "On the first signal being given by the trumpet, the tents were all struck and the baggage packed; at the second signal, the baggage was placed upon the beasts of burden; and at the third, the whole army began to move. Then the herald, standing at the right hand of the general, demands thrice if they are ready for war, to which they all respond with loud and repeated cheers that they are ready, and for the most part, being filled with martial ardor, anticipate the question, 'and raise

their right hands on high with a shout.'" [3]

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Smith's Dictionary of Antiquities, article "Castra."

From what has come down to us of Roman military life, it appears to have been full of excitement, toil, danger, and hardship. The pecuniary rewards of the soldier were small; he was paid in glory. No profession brought so much honor as the military; and it was from the undivided attention of a great people to this profession, that it was carried to all the perfection which could be attained before the great invention of gunpowder changed the art of war. It was not the number of men employed in the Roman armies which particularly arrests attention, but the genius of organization which controlled and the spirit which animated them. The Romans loved war, but so reduced it to a science that it required comparatively small armies to conquer the world. Sulla defeated Mithridates with only thirty thousand men, while his adversary marshalled against him over one hundred thousand. Caesar had only ten legions to effect the conquest of Gaul, and none of these were of Italian origin. At the great decisive battle of Pharsalia, when most of the available forces of the empire were employed on one side or the other, Pompey commanded a legionary army of forty-five thousand men, and his cavalry amounted to seven thousand more, but among them were included the flower of the Roman nobility; the auxiliary force has not been computed, although it was probably numerous. In the same battle Caesar had under him only twenty-two thousand legionaries and one thousand cavalry. But every man in both armies was prepared to conquer or die. The forces were posted on the open plain, and the battle was really a hand-to-hand encounter, in which the soldiers, after hurling their lances, fought with their swords chiefly; and when the cavalry of Pompey rushed upon the legionaries of Caesar, no blows were wasted on the mailed panoply of the mounted Romans, but were aimed at the face alone, as that only was unprotected. The battle was decided by the coolness, bravery, and discipline of Caesar's veterans, inspired by the genius of the greatest general of antiquity. Less than one hundred thousand men, in all probability, were engaged in one of the most memorable conflicts which the world has seen.

Thus it was by blended art and heroism that the Roman legions prevailed over the armies of the ancient world. But this military power was not gained in a day; it took nearly two hundred years, after the expulsion of the kings, to regain supremacy over the neighboring people, and another century to conquer Italy. The Romans did not contend with regular armies until they were brought in conflict with the king of Epirus and the phalanx of the Greeks, "which improved their military tactics, and introduced between the combatants those mutual regards of civilized nations which teach men to honor their adversaries, to spare the vanquished, and to lay aside wrath when the struggle is ended."

After the consolidation of Roman power in Italy, it took but one hundred and fifty years more to complete the conquest of the world,—of Northern Africa, Spain, Gaul, Illyria, Epirus, Greece, Macedonia, Asia Minor, Pontus, Syria, Egypt, Bithynia, Cappadocia, Pergamus, and the islands of the Mediterranean. The conquest of Carthage left Rome without a rival in the Mediterranean, and promoted intercourse with the Greeks. The Illyrian wars opened to the Romans the road to Greece and Asia, and destroyed the pirates of the Adriatic. The invasion of Cisalpine Gaul, now that part of Italy which is north of the Apennines, protected Italy from the invasion of barbarians. The Macedonian War against Philip put Greece under the protection of Rome, and that against Antiochus laid Syria at her mercy; when these kingdoms were reduced to provinces, the way was opened to further conquests in the East, and the Mediterranean became a Roman lake.

But these conquests introduced luxury, wealth, pride, and avarice, which degrade while they elevate. Successful war created great generals, and founded great families; increased slavery, and promoted inequalities. Meanwhile the great generals struggled for supremacy; civil wars followed in the train of foreign conquests; Marius, Sulla, Pompey, Caesar, Antony, Augustus, sacrificed the State to their own ambitions. Good men lamented and protested, and hid themselves; Cato, Cicero, Brutus, spoke in vain. Degenerate morals kept pace with civil contests. Rome revelled in the spoils of all kingdoms and countries, was intoxicated with power, became cruel and tyrannical, and after sacrificing the lives of citizens to fortunate generals, yielded at last her liberties, and imperial despotism began its reign. War had added empire, but undermined prosperity; it had created a great military monarchy, but destroyed liberty; it had brought wealth, but introduced inequalities; it had filled the city with spoils, but sown the vices of self-interest. The machinery remained perfect, but life had fled. It henceforth became the labor of Emperors to keep together their vast possessions with this machinery, which at last wore out, since there was neither genius to repair it nor patriotism to work it. It lasted three hundred years, but was broken to pieces by the barbarians.

AUTHORITIES.

Wilkinson is the best authority pertaining to Egyptian armies. The highest authority in relation to the construction of an army is Polybius, contemporary with Scipio, when Roman discipline was most perfect. The eighth chapter of Livy is also very much prized. Salmasius and Lepsius wrote learned treatises. Tacitus, Sallust, Livy, Dion Cassius, Pliny, and Caesar reveal incidentally much that we wish to know, the last giving us the liveliest idea of the military habits and tactics of the Romans. Gibbon gives some important facts. The subject of ancient machines is treated by Folard's Commentary attached to his translation of Polybius. Josephus describes with great vividness the siege of Jerusalem. Smith's Dictionary of Antiquities is full of details in everything pertaining to the weapons, the armor, the military engines, the rewards and punishments of the soldiers. The articles "Exercitus," in Smith's Dictionary, and "Army," in the Encyclopedia Britannica, give a practical summary of the best writers.

CICERO.

106-43 B.C.

ROMAN LITERATURE.

Marcus Tullius Cicero is one of the great lights of history, because his genius and influence were directed to the conservation of what was most precious in civilization among the cultivated nations of antiquity.

He was not a warrior, like so many of the Roman Senators, but his excellence was higher than that of a conqueror. "He was doomed, by his literary genius, to an immortality," and was confessedly the most prominent figure in the political history of his time, next to Caesar and Pompey. His influence was greater than his power, reaching down to our time; and if his character had faults, let us remember that he was stained by no crimes and vices, in an age of violence and wickedness. Until lately he has received almost unmixed praise. The Fathers of the Church revered him. To Erasmus, as well as to Jerome and Augustine, he was an oracle.

In presenting this immortal benefactor, I have no novelties to show. Novelties are for those who seek to overturn the verdicts of past ages by offering something new, rather than what is true.

Cicero was born B.C. 106, in the little suburban town of Arpinum, about fifty miles from Rome,--the town which produced Marius. The period of his birth was one of marked national prosperity. Great military roads were built, which were a marvel of engineering skill; canals were dug; sails whitened the sea; commerce was prosperous; the arts of Greece were introduced, and its literature also; elegant villas lined the shores of the Mediterranean; pictures and statues were indefinitely multiplied,--everything indicated an increase of wealth and culture. With these triumphs of art and science and literature, we are compelled to notice likewise a decline in morals. Money had become the god which everybody worshipped. Religious life faded away; there was a general eclipse of faith. An Epicurean life produced an Epicurean philosophy. Pleasure-seeking was universal, and even revolting in the sports of the Amphitheatre. Sensualism became the convertible word for utilities. The Romans were thus rapidly "advancing" to a materialistic millennium,--an outward progress of wealth and industries, but an inward decline in "those virtues on which the strength of man is based," accompanied with seditions among the people, luxury and pride among the nobles, and usurpations on the part of successful generals,--when Cicero began his memorable career.

He was well-born, but not of noble ancestors. The great peculiarity of his youth was his precocity. He was an intellectual prodigy,--like Pitt, Macaulay, and Mill. Like them, he had a wonderful memory. He early mastered the Greek language; he wrote poetry, studied under eminent professors,

frequented the Forum, listened to the speeches of different orators, watched the posture and gestures of actors, and plunged into the mazes of literature and philosophy. He was conscious of his marvellous gifts, and was, of course, ambitious of distinction.

There were only three ways at Rome in which a man could rise to eminence and power. One was by making money, like army contractors and merchants, such as the Equites, to whose ranks he belonged; the second was by military service; and the third by the law,—an honorable profession. Like Caesar, a few years younger than he, Cicero selected the law. But he was a *new man*,—not a patrician, as Caesar was,—and had few powerful friends. Hence his progress was not rapid in the way of clients. He was twenty-five years of age before he had a case. He was twenty-seven when he defended Roscius, which seems to have brought him into notice,—even as the fortune of Erskine was made in the Greenwich Hospital case and that of Daniel Webster in the case of Dartmouth College. To have defended Roscius against all the influence of Sulla, then the most powerful man in Rome, was considered bold and audacious. His fame for great logical power rests on his defence of Milo,—the admiration of all lawyers.

Cicero was not naturally robust. His figure was tall and spare, his neck long and slender, and his mouth anything but sensual. He looked more like an elegant scholar than a popular public speaker. Yet he was impetuous, ardent, and fiery, like Demosthenes, resorting to violent gesticulations. The health of such a young man could not stand the strain on his nervous system, and he was obliged to leave Rome for recreation; he therefore made the tour of Greece and Asia Minor, which every fashionable and cultivated man was supposed to do. Yet he did not abandon himself to the pleasures of cities more fascinating than Rome itself, but pursued his studies in rhetoric and philosophy under eminent masters, or "professors" as we should now call them. He remained abroad two years, returning when he was thirty years of age and settling down in his profession, taking at first but little part in politics. He married Terentia, with whom he lived happily for thirty years.

But the Roman lawyer was essentially a politician, looking ultimately to political office, since only through the great public offices could he enter the Senate,—the object of ambition to all distinguished Romans, as a seat in Parliament is the goal of an Englishman. The Roman lawyer did not receive fees, like modern lawyers, but derived his support from presents and legacies. When he became a political leader, a man of influence with the great, his presents were enormous. Cicero acknowledged, late in life, to have received what would now be equal to more than a million of dollars from legacies alone. The great political leaders and orators were the stipendiaries of Eastern princes and nobles who wanted favors from the Senate, and who knew as well how to reward such services as do the railway kings in our times.

Before Cicero, then, could be a Senator, he must pass through those great public offices which were in the gift of the people. The first step on the ladder of advancement was the office of quaestor, which entailed the duty of collecting revenues in one of the provinces. This office he was sufficiently influential to secure, being sent to Sicily, where he distinguished himself for his activity and integrity. At the end of a year he renewed his practice in the courts at Rome,—being hardly anything more than a mere lawyer for five years, when he was elected an Aedile, to whom the care of the public buildings was intrusted.

It was while he was aedile-elect that Cicero appeared as the public prosecutor of Verres. This was one of the great cases of antiquity, and the one from which the orator's public career fairly dates. His residence in Sicily had prepared him for this duty; and he secured the conviction of this great criminal, whose peculations and corruptions would amaze our modern New Yorkers and all the "rings" of our great cities combined. But the Praetor of Sicily was a provincial governor,—more like Warren Hastings than Tweed. For this public service Cicero gained more *éclat* than Burke did for his prosecution of Hastings; since Hastings, though a corrupt man, laid, after Clive, the foundation of the English empire in India, and was a man of immense talents,—greater than those of any who has since filled his place. Hence the nation screened Hastings. But Verres had no virtues and no great abilities; he was an outrageous public robber, and hoped, from his wealth and powerful connections, to purchase immunity for his crimes. In the hands of such an orator as Cicero he could not escape the penalty of the law, powerful as he was, even at Rome. This case placed Cicero above Hortensius, hitherto the leader of the Roman bar.

It was at this period that the extant correspondence of Cicero began, which is the best picture we have of the manners and habits of the Roman aristocracy at the time. History could scarcely spare those famous letters, especially to Atticus, in which also the private life and character of Cicero shine to the most advantage, revealing no vices, no treacheries,—only egotism, vanity, and vacillation, and a way that some have of speaking about people in private very differently from what they say in

public, which looks like insincerity. In these letters Cicero appears as a very frank man, genial, hospitable, domestic, witty, whose society and conversation must have been delightful. In no modern correspondence do we see a higher perfection in the polished courtesies and urbanities of social life, with the alloy of vanity, irony, and discontent. But in these letters he also evinces a friendship which is immortal; and what is nobler than the capacity of friendship? In these he not only shines as a cultivated scholar, but as a great statesman and patriot, living for the good of his country, though not unmindful of the luxuries of home and the charms of country retirement, and those enjoyments which are ever associated with refined and favored life. We read here of pictures, books, medals, statues, curiosities of every kind, all of which adorned his various villas, as well as his magnificent palace on Mount Palatine, which cost him what would be equal in our money to two hundred and fifty thousand dollars. To keep up this town house, and some fifteen villas in different parts of Italy, and to feast the greatest nobles, like Pompey and Caesar, would imply that his income was enormous, much greater than that of any modern professional man. And yet he seems to have lived, like Bacon and our Webster, beyond his income, and was in debt the greater part of his life,--another flaw in his character; for I do not wish to paint him without faults, but only as a good as well as a great man, for his times. His private character was as lofty as that of Chatham or Canning,--if we could forget his vanity, which after all is not so offensive as the intellectual pride of Burke and Pitt, and of sundry other great lights who might be mentioned, conscious of their gifts and attainments. There is something very different in the egotism of a silly and self-seeking aristocrat from that of a great benefactor who has something to be proud of, and with whose private experiences the greatest national deeds are connected. I speak of this fault because it has been handled too severely by modern critics. What were the faults of Cicero, compared with those of Theodosius or Constantine, to say nothing of his contemporaries, like Caesar, before whom so much incense has been burned?

At the age of forty Cicero became Praetor, or Supreme Judge. This office, when it expired, entitled him to a provincial government,--the great ultimate ambition of a senator; since the administration of a province, even for a single year, usually secured an enormous fortune. But this tempting offer he resigned, since he felt he could not be spared from Rome in such a crisis of public affairs, when the fortunate generals were grasping power and the demagogues were almost preparing the way for despotism. Some might say he was a far-sighted and ambitious statesman, who could not afford to weaken his chances of being made Consul by absence from the capital.

This great office, the consulship, the highest in the gift of the people,--which gave supreme executive control,--was rarely conferred, although elective, upon any but senators of ancient family and enormous wealth. It was as difficult for a "new man" to reach this dignity, under an aristocratic Constitution, as for a commoner a hundred years ago to become prime minister of England. Transcendent talents and services scarcely sufficed. Only generals who had won great military fame, or the highest of the nobles, stood much chance. For a lawyer to aim at the highest office in the State, without a great family to back him, would have been deemed as audacious as for such a man as Burke to aspire to a seat in the cabinet during the reign of George III. A lawyer at Rome, like a lawyer in London, might become a lord chancellor or praetor, but not easily a prime minister: he would be defeated by aristocratic influence and jealousies. Although the people had the right of election, they voted at the dictation of those who had money and power. Yet Cicero obtained the consulship, probably with the aid of senators, which he justly regarded as a great triumph. It was a very unusual thing. It was more marvellous than for a Jew to reign in Great Britain, or, like Mordecai, in the court of a Persian king.

The most distinguished service of Cicero as consul was to ferret out the conspiracy of Catiline. Now, this traitor belonged to the very highest rank in a Senate of nobles; he was like an ancient duke in the British House of Peers. It was no easy thing for a plebeian consul to bring to justice so great a culprit. He was more formidable than Essex in the reign of Elizabeth, or Bassompierre in the time of Richelieu. He was a man of profligate life, but of marked ability and boundless ambition. He had a band of numerous and faithful followers, armed and desperate. He was also one of those oily and aristocratic demagogues who bewitch the people,--not, as in our times, by sophistries, but by flatteries. He was as debauched as Mirabeau, but without his patriotism, though like him he aimed to overturn the Constitution by allying himself with the democracy. The people, whom he despised, he gained by his money and promises; and he had powerful confederates of his own rank, so that he was on the point of deluging Rome with blood, his aim being nothing less than the extermination of the Senate and the magistrates by assassination, and a general division of the public treasure, with personal assumption of public power.

But all his schemes were foiled by Cicero, who added unwearied activity to extraordinary penetration. For this great and signal service Cicero received the highest tribute the State could

render. He was called the savior of his country; and he succeeded in staving off for a time the fall of his country's liberties. It was a mournful sight to him to see the ascendancy which demagogues had already gained, since it betokened the approaching destruction of the Constitution, which, good or bad, was dear to him, and which as an aristocrat he sought to conserve.

Cicero's evil star was not Catiline, but Clodius,--another aristocratic demagogue whose crimes he exposed, although he failed to bring him to justice. Clodius was shielded by his powerful connections; and he was, besides, a popular favorite, as well as a petted scion of one of the greatest families. Clodius showed his hostility to Cicero, and sought revenge by artfully causing the people to pass or revive a law that whoever had inflicted capital punishment on a citizen without a trial should be banished. This seemed to the people to be a protection to their liberties. Now Cicero, when consul, had executed some of the conspirators associated with Catiline, for which he was called the savior of his country. But by the law which was now passed or revived by the influence of Clodius, Cicero was himself a culprit, and it would seem that all the influence of the Senate and his friends could not prevent his exile. He appealed to his friend Pompey, but Pompey turned a deaf ear; and also to Caesar, but Caesar was then outside the walls of the city in command of an army. In fact, both these generals wished him out of the way, although they equally admired and feared him; for each of them was bent on being the supreme ruler of Rome.

So it was permitted for the most illustrious patriot which Rome then held to go into exile. What a comment on the demoralization of the times! Here was the best, the most gifted, and the most accomplished man of the Republic,--a man who had rendered invaluable and acknowledged services, that man of consular dignity and one of the leaders of the Senate,--sent into inglorious banishment, on a mere technicality and for an act which saved the State. And the "magnanimous" Caesar and the "illustrious" Pompey allowed him to go! Where was salvation to a Republic which banished its savior, and for having saved it? The heart sickens over such a fact, although it occurred two thousand years ago. When the citizens of Rome saw that great man depart mournfully from among them, and to all appearance forever, for having rescued them from violence and slaughter, and by their own act,--they ought to have known that the days of the Republic were numbered. But this only a few far-seeing patriots felt. And not only was Cicero banished, but his palace was burned and his villas confiscated. He was not only disgraced, but ruined; he was an exile and a pauper. What a fall! What an unmerited treatment!

Very few people conceive what a dreadful punishment it was in Greece and Rome to be banished; or, as the formula went, "to be interdicted from fire and water,"--the sacred fire of the hearth, the lustral water which served for sacrifices. The exile was deprived of these by being forced to extinguish the hearth-fire,--the elemental, fundamental religion of a Greek and Roman. "He could not, deprived of this, hold property; having no longer a worship, he had no longer a family. He ceased to be a husband and father; his sons were no longer in his power, his wife was no longer his wife, and when he died he had not the right to be buried in the tombs of his ancestors." [4]

[4]

Coulanges: Ancient City.

Is it to be wondered at that even so good and great a man as Cicero should bitterly feel his disgrace and misfortunes? Is it surprising that, philosopher as he was, he should have given way to grief and despondency. He would have been more than human not to have lost his spirits and his hopes. How natural were grief and despair, in such complicated miseries, especially to a religious man! Chrysostom could support *his* exile with dignity; for Christianity had abolished the superstitions of Greece and Rome as to household gods. Cicero could not: he was not great enough for such a martyrdom. It is true we should have esteemed him higher, had he accepted his fate with resignation: no man should yield to despair. Had he been as old as Socrates, and had he accomplished his mission, possibly he would have shown more equanimity. But his work was not yet done. He was cut off in his prime and in the midst of usefulness from his home, his religion, his family, his honor, and his influence; he was utterly ruined. I think the critics make too much of the grief and misery of Cicero in his banishment. We may be disappointed that Cicero was not equal to his circumstances; but we need not be hard on him. My surprise is, not that he was overwhelmed with grief, but that he did not attempt to drown his grief in books and literature. His sole relief was in pathetic and unmanly letters.

The great injustice of this punishment naturally produced a reaction. Nor could the Romans afford to lose the services of their greatest orator. They also craved the excitement of his speeches, more thrilling and delightful than the performance of any actor. So he was recalled. Cicero ought to have

anticipated this; it seems, however, he had that unfortunate temperament which favors alternate depression and exhilaration of spirits, without measure or reason.

His return was a triumph,--a grand ovation, an unbounded tribute to his vanity. His palace was rebuilt at the expense of the State, and his property was restored. His popularity was regained. In fact, his influence was never lost; and, because it was so great, his enemies wished him out of the way. He was one of the few who retain influence after they have lost power.

The excess of his joy on his restoration to home and friends and property and fame and position, was as great as the excess of his grief in his short exile. But this is a defect in temperament, in his mental constitution, rather than a flaw in his character. We could have wished more placidity and equanimity; but to condemn him because he was not great in everything is unjust.

On his return to Rome Cicero resumed his practice in the courts with greater devotion than ever. He was now past fifty years of age, in the prime of his strength and in the height of his forensic fame. But, notwithstanding his success and honors, his life was saddened by the growing dissensions between Caesar and Pompey, the decline of public spirit, and the approaching fall of the institutions in which he gloried. It was clear that one or the other of these fortunate generals would soon become the master of the Roman world, and that liberty was about to perish. His eloquence now became sad; he sings the death-song of departing glories; he wails his Jeremiads over the demoralization which was sweeping away not merely liberty, but religion, and extinguishing faith in the world. To console himself he retired to one of his beautiful villas and wrote that immortal essay, "De Oratore," which has come down to us entire. His literary genius now blazed equally with his public speeches in the Forum and in the Senate. Literature was his solace and amusement, not a source of profit, or probably of contemporary fame. He wrote treatises on the same principles that he talked with friends, or that Fra Angelico painted pictures. He renewed his attempts in poetry, but failed. His poetry is in the transcendent rhythm of his prose compositions, like that of Madame de Staël, and Macaulay, and Rousseau.

But he was dragged from his literary and forensic life to accept the office of a governor of a province. It was forced upon him,--an honor to him without a charm. Had he been venal and unscrupulous, he would have seized it with avidity. He was too conscientious to enrich himself by public corruption, as other Senators did, and unless he could accumulate a fortune the command of a distant province was an honorable exile. He was fifty-six years of age when he became Proconsul of Cilicia, an Eastern province; and all historians have united in praising his proconsulate for its justice, its integrity, and its ability. He committed no extortions, and returned home, when his term of office expired, as poor as when he went. One of the highest praises which can be given to a public man who has chances of enriching himself is, that he remains poor. When a member of Congress, known not to be worth ten thousand dollars, returns to his home worth one hundred thousand dollars, the public have an instinct that he has, somehow or other, been untrue to himself and his country. When a great man returns home from Washington poorer than when he went, his influence is apt to survive his power; and this perpetuated influence is the highest glory of a public man,--the glory of Jefferson, of Hamilton, of Washington, like the voice of Gladstone during his retirement. Now Cicero had pre-eminently this influence as long as he lived; and it was ever exerted for the good of his country. Had his country been free, he would have died in honor. But his country was enslaved, and his voice was drowned, and he had to pay the penalty of speaking the truth about those unscrupulous men who usurped authority.

On his return to Rome the state of public affairs was most alarming. Caesar and Pompey were in antagonism. He must choose between them, and he distrusted both. Caesar was the more able, accomplished, and magnanimous, but he was the more unscrupulous and dangerous. He had ventured to cross the Rubicon,--the first general who ever dared thus openly to assail his country's liberties. Pompey was pompous, overrated, and proud, and had been fortunate in the East. But then he sided with the Constitutional authorities,--that is, with the Senate,--so far as his ambition allowed. So Cicero took his side feebly, reluctantly, as the least of the evils he had to choose, but not without vacillation, which is one of the popular charges against him. "His distraction almost took the form of insanity." "His inconsistency was an incoherence." Never did a more wretched man than Cicero resort to Pompey's camp, where he remained until his cause was lost. He returned, after the battle of Pharsalia, a suppliant at the feet of Caesar, the conqueror. This, to me, is one of his weakest acts. It would have been more lofty and heroic to have perished in the camp of Pompey's sons.

In the midst of these public misfortunes which saddened his soul, his private miseries began. He was now prematurely an old man, under sixty years of age, almost broken down with grief. His beloved daughter Tullia, with whom his life was bound up, died; and he was divorced from his wife

Terentia,--a proceeding the cause of which remains a mystery. Neither in his most confidential letters, nor in his conversations with most intimate friends, does it appear that he ever unbosomed himself, although he was the frankest and most social of men. In his impressive silence he has set one of the noblest examples of a man afflicted with domestic infelicities. He buries his conjugal troubles in eternal silence; although he is forced to give vent to sorrows, so plaintive and bitter that both friend and foe were constrained to pity. He expects no sympathy, even at Rome, for the sundering of conjugal relations, and he communicates no secrets. In his grief and sadness he does, however, a most foolish thing: he marries a young lady one-third his age. She accepted him for his name and rank; he sought her for her beauty, her youth, and her fortune. This union of May with December was of course a failure. Both parties were soon disenchanted and disappointed. Neither party found happiness, only discontent and chagrin. The everlasting incongruities of such a relation--he sixty and she nineteen--soon led to another divorce. *He* expected his young wife to mourn with him the loss of his daughter Tullia. *She* expected that her society and charms would be a compensation for all that he had lost; yea, more, enough to make him the most fortunate and happy of mortals. In truth, he was too old a man to have married a young woman whatever were the inducements. It was the great folly of his life; an illustration of the fact that, as a general thing, the older a man grows the greater fool he becomes, so far as women are concerned; a folly that disgraced and humiliated the two wisest and greatest men who ever sat on the Jewish throne.

In his accumulated sorrows Cicero now plunged for relief into literary labors. It was thus that his private sorrows were the means which Providence employed to transmit his precious thoughts and experiences to future ages, as the most valued inheritance he could bestow on posterity. What a precious legacy to the mind of the world was the book of "Ecclesiastes," yet by what bitter experiences was its wisdom earned!

It was in the short period when Caesar rejoiced in the mighty power which he transmitted to the Roman Emperors that Cicero wrote, in comparative retirement, his history of "Roman Eloquence," his inquiry as to the "Greatest Good and Evil," his "Cato," his "Orator," his "Nature of the Gods," and his treatises on "Glory," on "Fate," on "Friendship," on "Old Age," and his grandest work of all, the "Offices."--the best manual in ethics which has come down to us from heathen antiquity. In his studious retirement he reminds us of Bacon after his fall, when on his estate, surrounded with friends, and in the enjoyment of elegant leisure, he penned the most valued of his immortal compositions. And in those degenerate days at Rome, when liberty was crushed under foot forever, it is beautiful to see the greatest of Roman statesmen and lawyers consoling himself and instructing posterity by his exhaustive treatises on the fundamental principles of law, of morality, and of philosophy.

The assassination of Caesar by Roman senators, which Cicero seems to have foreseen, and in which he rejoiced, at this time shocked and disturbed the world. For nearly two thousand years the verdict of the civilized world respecting this great conqueror has been unanimous. But Mr. Froude has attempted to reverse this verdict, as he has in reference to Henry VIII., and as Carlyle--another idolater of force--has attempted in the cases of Oliver Cromwell and Frederick II. This remarkable word-painter, in his Life of Caesar,--which is, however, interesting from first to last, as everything he writes is interesting,--has presented him as an object of unbounded admiration, as I have already noticed in my lecture on Caesar. Whether in his eagerness to say something new, or from an ill-concealed hostility to aristocratic and religious institutions, or from an admiration of imperialism, or disdain of the people in their efforts at self-government, this able special pleader seems to hail the Roman conqueror as a benefactor to the cause of civilization. But imperialism crushed all alike,--the people, no longer able to send their best men to the Senate through the higher offices perchance to represent their interests, and the nobles, shorn of the administration of the Empire. Soldiers, not civilians, henceforth were to rule the world,--a dreary thought to a great lawyer like Cicero, or a landed proprietor like Brutus. Even if such a terrible revolution as occurred in Rome under Caesar may have been ordered wisely by a Superintending Power for those degenerate times, and as a preservation of the peace of the world, that Christianity might take root and spread in countries where all religions were dead,--still, the prostration of what was dearest to the hearts of all true citizens by the sword was a crime; and men are not to be commended for crime, even if those crimes may be palliated. "It must need be that offences come, but woe to those by whom they come."

Cicero was now sixty-three, prematurely old, discouraged, and heart-broken. And yet he braced himself up for one more grand effort,--for a life and death struggle with Antony, one of the ablest of Caesar's generals; a demagogue, eloquent and popular, but outrageously cruel and unscrupulous, and with unbridled passions. Had it not been for his infatuated love of Cleopatra, he probably would have succeeded to the imperial sceptre, for it was by the sword that he too sought to suppress the

liberties of the Senate and people. Against him, as the enemy of his country, Cicero did not scruple to launch forth the most terrible of his invectives. In thirteen immortal philippics--some of which, however, were merely written and never delivered, after the fashion of Demosthenes, with whom as an orator and a patriot he can alone be compared--he denounced the unprincipled demagogue and general with every offensive epithet the language afforded,--unveiling his designs, exposing his forgeries, and proving his crimes. Nobler eloquence was never uttered, and wasted, than that with which Cicero pursued, in passionate vengeance, the most powerful and the most unscrupulous man in the Roman Empire. And Cicero must have anticipated the fate which impended over him if Antony were not decreed a public enemy. But the protests of the orator were in vain. He lived to utter them, as a witness of truth; and nothing was left to him but to die.

Of course Antony, when he became Triumvir,--when he made a bargain that he never meant to keep with Octavius and Lepidus for a division of the Empire between them,--would not spare such an enemy as Cicero. The broken-hearted patriot fled mechanically, with a vacillating mind, when his proscription became known to him,--now more ready to die than live, since all hope in his country's liberties was utterly crushed. Perhaps he might have escaped to some remote corner of the Empire. But he did not wish for life, any more than did Socrates when summoned before his judges. Desponding, uncertain, pursued, he met his fate with the heroism of an ancient philosopher. He surrendered his wearied and exhausted body to the hand of the executioner, and his lofty soul to the keeping of that personal and supreme God in whom he believed as firmly as any man, perhaps, of Pagan antiquity. And surely of him, more than of any other Roman, could it be said,--as Sir Walter Scott said of Pitt, and as Gladstone quoted, and applied to Sir Robert Peel,--

"Now is the stately column broke,

The

beacon light

is quenched in smoke;

The trumpet's silver voice is still,

The warder silent on the hill."

With the death--so sad--of the most illustrious of the Romans whose fame was not earned on the battlefield, I should perhaps close my lecture. Yet it would be incomplete without a short notice of those services which--as statesman, orator, and essayist--he rendered to his country and to future ages and nations.

In regard to his services as a statesman, they were rendered chiefly to his day and generation, for he elaborated no system of political wisdom like Burke, which bears (except casually and indirectly) on modern governments and institutions. It was his aim, as a statesman, to continue the Roman Constitution and keep the people from civil war. Nor does he seem to have held, like Rousseau, the *vox populi* as the voice of God. He could find no language sufficiently strong to express his abhorrence of those who led the people for their own individual advancement. He was equally severe on corrupt governors and venal judges. He upheld morality and justice as the only guides in public affairs. He loved popularity, but he loved his country better. He hated anarchy as much as did Burke. Like Bright, he looked upon civil war as the greatest of national calamities. He advocated the most enlightened views, based on the principles of immutable justice. He wished to preserve his country equally from unscrupulous generals and unprincipled politicians.

As for his orations, they also were chiefly designed for his own contemporaries. They are not particularly valuable to us, except as models of rhetorical composition and transcendent beauty and grace of style. They are not so luminous with fundamental principles as they are vivid with invective, sarcasm, wit, and telling exaggeration,--sometimes persuasive and working on the sensibilities, and at other times full of withering scorn. They are more like the pleadings of an advocate than an appeal to universal reason. He lays down no laws of political philosophy, nor does he soar into the region of abstract truth, evolving great deductions in morals. But as an orator he was transcendently effective,

like Demosthenes, though not equal to the Greek in force. His sentences are perhaps too involved for our taste; yet he always swayed an audience, whether the people from the rostrum, or the judges at the bar, or the senators in the Curia. He seldom lost a case; no one could contend with him successfully. He called out the admiration of critics, and even of actors. He had a wonderful electrical influence; his very tones and gestures carried everything before him; his action was superb; and his whole frame quivered from real (or affected) emotion, like Edward Everett in his happiest efforts. He was vehement in gesture, like Brougham and Mirabeau. He was intensely earnest and impressive, like Savonarola. He had exceeding tact, and was master of the passions of his audience. There was an irresistible music in his tones of voice, like that of St. Bernard when he fanned crusades. He was withering in his denunciations, like Wendell Phillips, whom in person he somewhat resembled. He was a fascination like Pericles, and the people could not long spare him from the excitement he produced. It was their desire to hear him speak which had no small share in producing his recall from banishment. They crowded around him as the people did around Chrysostom in Antioch. He amused like an actor, and instructed like a sage. His sentences are not short, terse, epigrammatic, and direct, but elaborate and artificial. Yet with all his arts of eloquence his soul, fired with great sentiments, rose in its inspired fervor above even the melody of voice, the rhythm of language, and the vehemence of action. A listener, who was not a critic, might fancy it was gesture, voice, and language combined; but, after all, it was the *man* communicating his soul to those who hung upon his lips, and securing conviction by his sincerity and appeals to conscience. He must have had a natural gift for oratory, aside from his learning and accomplishments and rhetorical arts,--a talent very rare and approaching to creative genius. But to his natural gifts--like Luther, or Henry Clay, born an orator--he added marvellous attainments. He had a most retentive memory. He was versed in the whole history of the world. He was always ready with apt illustrations, which gave interest and finish to his discourses. He was the most industrious and studious man of his age. His attainments were prodigious. He was master of all the knowledge then known, like Gladstone of our day. He was not so learned a man as Varro; but Varro's works have perished, as the great monuments of German scholars are perhaps destined to perish, for lack of style. Cicero's style embalmed his thoughts and made them imperishable. No writer is immortal who is not an artist; Cicero was a consummate artist, and studied the arrangement of sentences, like the historian Tacitus and the Grecian Thucydides.

But greater than as an artist was he in the loftiness of his mind. He appealed to what is noblest in the soul. Transcendent eloquence ever "raises mortals to the skies" and never "pulls angels down." Love of country, love of home, love of friends, love of nature, love of law, love of God, is brought out in all his discourses, exalting the noblest sentiments which move the human soul. He was the first to give to the Latin language beauty and artistic finish. He added to its richness, copiousness, and strength; he gave it music. For style alone he would be valued as one of the immortal classics. All men of culture have admired it, from Augustine to Bossuet, and acknowledged their obligations to him. We accord to the great poets the formation of languages,--Homer, Dante, Chaucer, Shakspeare; but I doubt if either Virgil or Horace contributed to the formation of the Latin language more than Cicero. Certainly they have not been more studied and admired. In every succeeding age the Orations of Cicero have been one of the first books which have been used as textbooks in colleges. Is it not something to have been one of the acknowledged masters of human composition? What a great service did Cicero render to the education of the Teutonic races! Whatever the Latin language has done for the modern world, Cicero comes in for a large share of the glory. More is preserved of his writings than of any other writer of antiquity.

But not for style alone--seen equally in his essays and in his orations--is he admirable. His most enduring claim on the gratitude of the world is the noble tribute he rendered to those truths which save the world. His testimony, considering he was a pagan, is remarkable in reference to what is sound in philosophy and morals. His learning, too, is seen to most advantage in his ethical and philosophical writings. It is true he did not originate, like Socrates and Plato; but he condensed and sifted the writings of the Greeks, and is the best expounder of their philosophy. Who has added substantially to what the Greeks worked out of their creative brain? I know that no Roman ever added to the domain of speculative thought, yet what Roman ever showed such a comprehension and appreciation of Greek philosophy as did Cicero? He was profoundly versed in all the learning the Grecians ever taught. Like Socrates, he had a contempt for physical science, because science in his day was based on imperfect inductions. There were not facts enough known of the material world to construct sound theories. Physical science at that time was the most uncertain of all knowledge, although there were great pretenders then, as now, who maintained it was the only certainty. But the speculations of scientists disgusted him, for he saw nothing in them upon which to base incontrovertible truth. They were mere dreams and baseless theories on the origin of the universe.

They were even puerile; and they were then, as now, atheistic in their tendency. They mocked the consciousness of mankind. They annihilated faith and Providence. At best, they made all things subject to necessity, to an immutable fate, not to an intelligent and ever-present Creator. But Cicero, like Socrates, believed in God and in providential interference,--in striking contrast with Caesar, who believed nothing. He taught moral obligation, on the basis of accountability to God. He repudiated expediency as the guide in life, and fell back on the principles of eternal right. As an ethical writer he was profounder and more enlightened than Paley. He did not seek to overturn the popular religion, like Grecian Sophists, only (like Socrates) to overturn ignorance, before a sound foundation could be laid for any system of truth. Nor did he ridicule religion, as Lucian did in after-times, but soared to comprehend it, like the esoteric priests of Egypt in the time of Moses or Pythagoras. He cherished as lofty views of God and his moral government as any moralist of antiquity. And all these lofty views he taught in matchless language,--principles of government, principles of law, of ethics, of theology, giving consolation not only to the men of his day, but to Christian sages in after-times. And there is nothing puerile or dreamy or demoralizing in his teachings; they all are luminous for learning as well as genius. He rivalled Bacon in the variety and profundity of his attainments. He gloried in the certitudes which consciousness reveals, as well as in the facts which experience and history demonstrate. With these he consoled himself in trouble; on these he reposed in the hour of danger. Like Pascal he meditated on the highest truths which task the intellect of man, but, unlike him, did not disdain those weapons which *reason* forged, and which no one used more triumphantly than Pascal himself. And these great meditations he transmitted for all ages to ponder, as among the most precious of the legacies of antiquity.

Thus did he live, a shining light in a corrupt and godless age, in spite of all the faults which modern critics have enlarged upon in their ambitious desire for novelties, or in their thoughtless or malignant desire? to show up human frailties. He was a patriot, taking the side of his country's highest interests; a statesman, seeking to conserve the wisdom of his ancestors; an orator, exposing vices and defending the innocent; a philosopher, unfolding the wisdom of the Greeks; a moralist, laying down the principles of immutable justice; a sage, pondering the mysteries of life; ever active, studious, dignified; the charm and fascination of cultivated circles; as courteous and polished as the ornaments of modern society; revered by friends, feared by enemies, adored by all good people; a kind father, an indulgent husband, a generous friend; hospitable, witty, magnificent,--a most accomplished gentleman, one of the best men of all antiquity. What if he was vain and egotistical and vacillating, and occasionally weak? Can you expect perfection in him who "is born of a woman"? We palliate the backslidings of Christians; we excuse the crimes of a Constantine, a Theodosius, a Cromwell: shall we have no toleration for the frailties of a Pagan, in one of the worst periods of history? I have no patience with those critics who would hurl him from the pedestal on which he has stood for two thousand years. Contrast him with other illustrious men. How few Romans or Greeks were better than he! How few have rendered such exalted services! And even if he has not perpetuated a faultless character, he has yet bequeathed a noble example; and, more, has transmitted a legacy in the richness of which we forget the faults of the testator,--a legacy of imperishable thought, clothed in the language of imperishable art,--a legacy so valuable that it is the treasured inheritance of all civilized nations, and one which no nation can afford to lose.

AUTHORITIES.

Plutarch's Life of Cicero, Appian, Dion Cassius, Villeius Paterculus, are the original authorities,--next to the writings of Cicero himself, especially his Letters and Orations. Middleton's Life is full, but one-sided. Forsyth takes the opposite side in his Life. The last work in English is that of Anthony Trollope. In Smith's Biographical Dictionary is an able article. Dr. Vaughan has written an interesting lecture. Merivale has elaborately treated this great man in his valuable History of the Romans. Colley Cibber's Character and Conduct of Cicero, Drumann's Roman History, Rollin's Ancient History, Biographic Universelle. Mr. Froude alludes to Cicero in his Life of Caesar, taking nearly the same view as Forsyth.

CLEOPATRA.

69-30 B.C.

THE WOMAN OF PAGANISM.

It is my object in this lecture to present the condition of woman under the influences of Paganism, before Christianity enfranchised and elevated her. As a type of the Pagan woman I select Cleopatra, partly because she was famous, and partly because she possessed traits and accomplishments which made her interesting in spite of the vices which degraded her. She was a queen, the heir of a long line of kings, and ruled over an ancient and highly civilized country. She was intellectual, accomplished, beautiful, and fascinating. She lived in one of the most interesting capitals of the ancient world, and by birth she was more Greek than she was African or Oriental. She lived, too, in a great age, when Rome had nearly conquered the world; when Roman senators and generals had more power than kings; when Grecian arts and literature were copied by the imperial Romans; when the rich and fortunate were luxurious and ostentatious beyond all precedent; when life had reached the highest point of material splendor, and yet when luxury had not destroyed military virtues or undermined the strength of the empire. The "eternal city" then numbered millions of people, and was the grandest capital ever seen on this earth, since everything was there concentrated,—the spoils of the world, riches immeasurable, literature and art, palaces and temples, power unlimited,—the proudest centre of civilization which then existed, and a civilization which in its material aspects has not since been surpassed. The civilized world was then most emphatically Pagan, in both spirit and forms. Religion as a controlling influence was dead. Only a very few among speculative philosophers believed in any god, except in a degrading sense,—as a blind inexorable fate, or an impersonation of the powers of Nature. The future state was a most perplexing uncertainty. Epicurean self-indulgence and material prosperity were regarded as the greatest good; and as doubt of the darkest kind hung over the future, the body was necessarily regarded as of more value than the soul. In fact, it was only the body which Paganism recognized as a reality; the soul, God, and immortality were virtually everywhere ignored.

It was in this godless, yet brilliant, age that Cleopatra appears upon the stage, having been born sixty-nine years before Christ,—about a century before the new revolutionary religion was proclaimed in Judea. Her father was a Ptolemy, and she succeeded him on the throne of Egypt when quite young,—the last of a famous dynasty that had reigned nearly three hundred years. The Ptolemies, descended from one of Alexander's generals, reigned in great magnificence at Alexandria, which was the commercial centre of the world, whose ships whitened the Mediterranean,—that great inland lake, as it were, in the centre of the Roman Empire, around whose shores were countless cities and villas and works of art. Alexandria was a city of schools, of libraries and museums, of temples and of palaces, as well as a mart of commerce. Its famous library was the largest in the world, and was the pride of the age and of the empire. Learned men from all countries came to this capital to study science, philosophy, and art. It was virtually a Grecian city, and the language of the leading people was Greek. It was rivalled in provincial magnificence only by Antioch, the seat of the old Syrian civilization, also a Greek capital, so far as the governing classes could make it one. Greece, politically ruined, still sent forth those influences which made her civilization potent in every land.

Cleopatra, the last of the line of Grecian sovereigns in Egypt, was essentially Greek in her features, her language, and her manners. There was nothing African about her, as we understand the term African, except that her complexion may have been darkened by the intermarriage of the Ptolemies; and I have often wondered why so learned and classical a man as Story should have given to this queen, in his famous statue, such thick lips and African features, which no more marked her than Indian features mark the family of the Braganzas on the throne of Brazil. She was not even Coptic, like Athanasius and Saint Augustine. On the ancient coins and medals her features are severely classical.

Nor is it probable that any of the peculiarities of the ancient Egyptian kings marked the dynasty of the Ptolemies. No purely Egyptian customs lingered in the palaces of Alexandria. The old deities of Isis and Osiris gave place to the worship of Jupiter, Minerva, and Venus. The wonders of pristine Egypt were confined to Memphis and Thebes and the dilapidated cities of the Nile. The mysteries of the antique Egyptian temples were no more known to the learned and mercantile citizen of Alexandria than they are to us. The pyramids were as much a wonder then as now. The priests and jugglers alike mingled in the crowd of Jews, Syrians, Romans, Greeks, Parthians, Arabs, who

congregated in this learned and mercantile city.

So we have a right to presume that Cleopatra, when she first appeared upon the stage of history as a girl of fourteen, was simply a very beautiful and accomplished Greek princess, who could speak several languages with fluency, as precocious as Elizabeth of England, skilled in music, conversant with history, and surrounded with eminent masters. She was only twenty-one when she was an object of attraction to Caesar, then in the midst of his triumphs. How remarkable must have been her fascinations if at that age she could have diverted, even for a time, the great captain from his conquests, and chained him to her side! That refined, intellectual old veteran of fifty, with the whole world at his feet, loaded down with the cares of government, as temperate as he was ambitious, and bent on new conquests, would not have been chained and enthralled by a girl of twenty-one, however beautiful, had she not been as remarkable for intellect and culture as she was for beauty. Nor is it likely that Cleopatra would have devoted herself to this weather-beaten old general, had she not hoped to gain something from him besides caresses,—namely, the confirmation of her authority as queen. She also may have had some patriotic motives touching the political independence of her country. Left by her father's will at the age of eighteen joint heir of the Egyptian throne with her brother Ptolemy, she soon found herself expelled from the capital by him and the leading generals of the army, because they did not relish her precocious activity in government. Her gathered adherents had made but little advance towards regaining her rights when, in August, 48, Caesar landed in pursuit of Pompey, whom he had defeated at Pharsalia. Pompey's assassination left Caesar free, and he proceeded to Alexandria to establish himself for the winter. Here the wily and beautiful young exile sought him, and won his interest and his affection. After some months of revelry and luxury, Caesar left Egypt in 47 to chastise an Eastern rebel, and was in 46 followed to Rome by Cleopatra, who remained there in splendid state until the assassination of Caesar drove her back to Egypt. Her whole subsequent life showed her to be as cunning and politic as she was luxurious and pleasure-seeking. Possibly she may have loved so interesting and brilliant a man as the great Caesar, aside from the admiration of his position; but he never became her slave, although it was believed, a hundred years after his death, that she was actually living in his house when he was assassinated, and was the mother of his son Caesarion. But Froude doubts this; and the probabilities are that he is correct, for, like Macaulay, he is not apt to be wrong in facts, but only in the way he puts them.

Cleopatra was twenty-eight years of age when she first met Antony,—“a period of life,” says Plutarch, “when woman's beauty is most splendid, and her intellect is in full maturity.” We have no account of the style of her beauty, except that it was transcendent,—absolutely irresistible, with such a variety of expression as to be called infinite. As already remarked, from the long residence of her family in Egypt and intermarriages with foreigners, her complexion may have been darker than that of either Persians or Greeks. It probably resembled that of Queen Esther more than that of Aspasia, in that dark richness and voluptuousness which to some have such attractions; but in grace and vivacity she was purely Grecian,—not like a “blooming Eastern bride,” languid and passive and effeminate, but bright, witty, and intellectual. Shakspeare paints her as full of lively sallies, with the power of adapting herself to circumstances with tact and good nature, like a Madame Récamier or a Maintenon, rather than like a Montespan or a Pompadour, although her nature was passionate, her manner enticing, and her habits luxurious. She did not weary or satiate, like a mere sensual beauty.

“Age cannot wither her, nor custom stale

Her infinite variety.”

She certainly had the power of retaining the conquests she had won,—which rarely happens except with those who are gifted with intellectual radiance and freshness. She held her hold on Antony for eleven years, when he was burdened with great public cares and duties, and when he was forty-two years of age. Such a superior man as he was intellectually, and, after Caesar, the leading man of the empire,—a statesman as well as soldier,—would not have been enslaved so long by Cleopatra had she not possessed remarkable gifts and attainments, like those famous women who reigned in the courts of the Bourbons in the seventeenth and eighteenth centuries, and who, by their wit and social fascinations, gathered around their thrones the most distinguished men of France, and made them friends as well as admirers. The Pompadours of the world have only a brief reign, and at last become repulsive. But Cleopatra, like Maintenon, was always attractive, although she, could not lay claim to the virtues of the latter. She was as politic as the French beauty, and as full of expedients to please her lord. She may have revelled in the banquets she prepared for Antony, as Esther did in those she

prepared for Xerxes; but with the same intent, to please him rather than herself, and win, from his weakness, those political favors which in his calmer hours he might have shrunk from granting. Cleopatra was a politician as well as a luxurious beauty, and it may have been her supreme aim to secure the independence of Egypt. She wished to beguile Antony as she had sought to beguile Caesar, since they were the masters of the world, and had it in their power to crush her sovereignty and reduce her realm to a mere province of the empire. Nor is there evidence that in the magnificent banquets she gave to the Roman general she ever lost her self-control. She drank, and made him drink, but retained her wits, "laughing him out of patience and laughing him into patience," ascendant over him by raillery, irony, and wit.

And Antony, again, although fond of banquets and ostentation, like other Roman nobles, and utterly unscrupulous and unprincipled, as Roman libertines were, was also general, statesman, and orator. He grew up amid the dangers and toils and privations of Caesar's camp. He was as greedy of honors as was his imperial master. He was a sunburnt and experienced commander, obliged to be on his guard, and ready for emergencies. No such man feels that he can afford to indulge his appetites, except on rare occasions. One of the leading peculiarities of all great generals has been their temperance. It marked Caesar, Charlemagne, Gustavus Adolphus, Frederic the Great, Cromwell, and Napoleon. When Alexander gave himself up to banquets, his conquests ended. Even such a self-indulgent, pleasure-seeking man as Louis XIV. always maintained the decencies of society amid his dissipated courtiers. We feel that a man who could discourse so eloquently as Antony did over the dead body of Caesar was something more than a sensualist or a demagogue. He was also the finest-looking man in Rome, reminding the people, it is said, of the busts of Hercules. He was lavish, like Caesar, but, like him, sought popularity, and cared but little what it cost. It is probable that Cicero painted him, in his famous philippics, in darker colors than he deserved, because he aimed to be Caesar's successor, as he probably would have been but for his infatuation for Cleopatra. Caesar sent him to Rome as master of the horse,--a position next in power to that of dictator. When Caesar was assassinated, Antony was the most powerful man of the empire. He was greater than any existing king; he was almost supreme. And after Caesar's death, when he divided his sovereignty of the world with Octavius and Lepidus, he had the fairest chance of becoming imperator. He had great military experience, the broad Orient as his domain, and half the legions of Rome under his control.

It was when this great man was Triumvir, sharing with only two others the empire of the world, and likely to overpower them, when he was in Asia consolidating and arranging the affairs of his vast department, that he met the woman who was the cause of all his calamities. He was then in Cilicia, and, with all the arrogance of a Roman general, had sent for the Queen of Egypt to appear before him and answer to an accusation of having rendered assistance to Cassius before the fatal battle of Philippi. He had already known and admired Cleopatra in Rome, and it is not improbable that she divined the secret of his judicial summons. His envoy, struck with her beauty and intelligence, advised her to appear in her best attire. Such a woman scarcely needed such a hint. So, making every preparation for her journey,--money, ornaments, gifts,--a kind of Queen of Sheba, a Zenobia in her pride and glory, a Queen Esther when she had invited the king and his minister to a banquet,--she came to the Cydnus, and ascended the river in a magnificent barge, such as had never been seen before, and prepared to meet her judge, not as a criminal, but as a conqueror, armed with those weapons that few mortals can resist.

"The barge she sat in, like a burnish'd throne,

Burn'd on the water; the poop was beaten gold;

Purple the sails, and so perfumed that

The winds were love-sick with them: the oars were silver,

Which to the tune of flutes kept stroke, and made

The water, which they beat, to follow faster,

As amorous of their strokes. For her own person,

It beggar'd all description: she did lie

In her pavilion (cloth-of-gold of tissue)

O'er-picturing that Venus, where we see

The fancy outwork nature: on each side her

Stood pretty dimpled boys, like smiling Cupids,

With diverse-color'd fans....

Her gentlewomen, like the Nereides,

So many mermaids, tended her i' the eyes.

... At the helm

A seeming mermaid steers....

... From the barge

A strange invisible perfume hits the sense

Of the adjacent wharves. The city cast

Her people out upon her; and Antony,

Enthroned i' the market-place, did sit alone,

Whistling to th' air; which, but for vacancy,

Had gone to gaze on Cleopatra too,

And made a gap in nature."

On the arrival of this siren queen, Antony had invited her to supper,--the dinner of the Romans,--but she, with woman's instinct, had declined, till he should come to her; and he, with the urbanity of a polished noble,--for such he probably was,--complied, and found a banquet which astonished even him, accustomed as he was to senatorial magnificence, and which, with all the treasures of the East, he could not rival. From that fatal hour he was enslaved. She conquered him, not merely by her display and her dazzling beauty, but by her wit. Her very tones were music. So accomplished was she in languages, that without interpreters she conversed not only with Greeks and Latins, but with Ethiopians, Jews, Arabians, Syrians, Medes, and Parthians. So dazzled and bewitched was Antony, that, instead of continuing the duties of his great position, he returned with Cleopatra to Alexandria, there to keep holiday and squander riches, and, still worse, his precious time, to the shame and scandal of Rome, inglorious and without excuse,--a Samson at the feet of Delilah, or a Hercules throwing away his club to seize the distaff of Omphale, confessing to the potency of that mysterious charm which the sage at the court of an Eastern prince pronounced the strongest power on earth. Never was a strong man more enthralled than was Antony by this bewitching woman, who exhausted every art to please him. She played at dice with him, drank with him, hunted with him, rambled with him, jested with him, angled with him, flattering and reproving him by turn, always having some new device of pleasure to gratify his senses or stimulate his curiosity. Thus passed the winter of 41-40, and in the spring he was recalled to Borne by political dissensions there.

At this stage, however, it would seem that ambition was paramount with him, not love; for his wife Fulvia having died, he did not marry Cleopatra, but Octavia, sister of Octavius, his fellow-triumvir and general rival. It was evidently from political considerations that he married Octavia, who was a stately and noble woman, but tedious in her dignity, and unattractive in her person. And what a commentary on Roman rank! The sister of a Roman grandee seemed to the ambitious general a greater match than the Queen of Egypt. How this must have piqued the proud daughter of the Ptolemies,--that she, a queen, with all her charms, was not the equal in the eyes of Antony to the sister of Caesar's heir! But she knew her power, and stifled her resentment, and waited for her time. She, too, had a political end to gain, and was too politic to give way to anger and reproaches. She was anything but the impulsive woman that some suppose,--but a great actress and artist, as some women are when they would conquer, even in their loves, which, if they do not feign, at least they know how to make appear greater than they are. For about three years Antony cut loose from Cleopatra, and pursued his military career in the East, as the rival of Octavius might, having in view the sovereignty that Caesar had bequeathed to the strongest man.

But his passion for Cleopatra could not long be suppressed, neither from reasons of state nor from the respect he must have felt for the admirable conduct of Octavia, who was devoted to him, and who was one of the most magnanimous and reproachless women of antiquity. And surely he must have had some great qualities to call out the love of the noblest and proudest woman of the age, in spite of his many vices and his abandonment to a mad passion, forgetful alike both of fame and duty. He had not been two years in Athens, the headquarters of his Eastern Department, before he was called upon to chastise the Parthians, who had thrown off the Roman yoke and invaded other Roman provinces. But hardly had he left Octavia, and set foot again in Asia, before he sent for his Egyptian mistress, and loaded her with presents; not gold, and silver, and precious stones, and silks, and curious works of art merely, but whole provinces even,--Phoenicia, Syria, Cilicia, and a part of Judea and Arabia,--provinces which belonged not to him, but to the Roman Empire. How indignant must have been the Roman people when they heard of such lavish presents, and presents which he had no right to give! And when the artful Cleopatra feigned illness on the approach of Octavia, pretending to be dying of love, and wasting her body by fasting and weeping by turns, and perhaps tearing her hair in a seeming paroxysm of grief,--for an actress can do even this,--Antony was totally disarmed, and gave up his Parthian expedition altogether, which was treason to the State, and returned to Alexandria more submissive than ever. This abandonment of duty and official trust disgusted and incensed the Romans, so that his cause was weakened. Octavius became stronger every day, and now resolved on reigning alone. This meant another civil war. How strong the party of Antony must have been to keep together and sustain him amid such scandals, treasons, and disgrace!

Antony, perceiving a desperate contest before him, ending in his supremacy or ruin, put forth all his energies, assisted by the contributions of Cleopatra, who furnished two hundred ships and twenty thousand talents,--about twenty million dollars. He had five hundred war-vessels, beside galleys, one hundred thousand foot and twelve thousand horse,--one of the largest armies that any Roman general had ever commanded,--and he was attended by vassal kings from the East. The forces of Octavius were not so large, though better disciplined; nor was he a match for Antony in military

experience. Antony with his superior forces wished to fight upon the land, but against his better judgment was overruled by Cleopatra, who, having reinforced him with sixty galleys, urged him to contend upon the sea. The rivals met at Actium, where was fought one of the great decisive battles of the world. For a while the fortunes of the day were doubtful, when Cleopatra, from some unexplained motive, or from panic, or possibly from a calculating policy, was seen sailing away with her ships for Egypt. And what was still more extraordinary, Antony abandoned his fleet and followed her. Had he been defeated on the sea, he still had superior forces on the land, and was a match for Octavius. His infatuation ended in a weakness difficult to comprehend in a successful Roman general. And never was infatuation followed by more tragic consequences. Was this madness sent upon him by that awful Power who controls the fate of war and the destinies of nations? Who sent madness upon Nebuchadnezzar? Who blinded Napoleon at the very summit of his greatness? May not that memorable defeat have been ordered by Providence to give consolidation and peace and prosperity to the Roman Empire, so long groaning under the complicated miseries of anarchy and civil war? If an imperial government was necessary for the existing political and social condition of the Roman world,--and this is maintained by most historians,--how fortunate it was that the empire fell into the hands of a man whose subsequent policy was peace, the development of resources of nations, and a vigorous administration of government!

It is generally conceded that the reign of Octavius--or, as he is more generally known, Augustus Caesar--was able, enlightened, and efficient. He laid down the policy which succeeding emperors pursued, and which resulted in the peace and prosperity of the Roman world until vices prepared the way for violence. Augustus was a great organizer, and the machinery of government which he and his ministers perfected kept the empire together until it was overrun by the New Germanic races. Had Antony conquered at Actium, the destinies of the empire might have been far different. But for two hundred years the world never saw a more efficient central power than that exercised by the Roman emperors or by their ministers. Imperialism at last proved fatal to genius and the higher interests of mankind; but imperialism was the creation of Julius Caesar, as a real or supposed necessity; it was efficiently and beneficently continued by his grand-nephew Augustus; and its consolidated strength became an established institution which the civilized world quietly accepted.

The battle of Actium virtually settled the civil war and the fortunes of Antony, although he afterwards fought bravely and energetically; but all to no purpose. And then, at last, his eyes were opened, and Shakspeare makes him bitterly exclaim,--

"All is lost!

This foul Egyptian hath betrayed me.

... Betray'd I am:

O this false soul of Egypt!"

And with his ruin the ruin of his paramour was also settled; yet her resources were not utterly exhausted. She retired into a castle or mausoleum she had prepared for herself in case of necessity, with her most valuable treasures, and sent messengers to Antony, who reported to him that she was dead,--that she had killed herself in despair. He believed it all. His wrath now vanished in his grief. He could not live, or did not wish to live, without her; and he fell upon his own sword. The wound was mortal, but death did not immediately follow. He lived to learn that Cleopatra had again deceived him,--that she was still alive. Even amid the agonies of the shadow of death, and in view of this last fatal lie of hers, he did not upbraid her, but ordered his servants to bear him to her retreat. Covered with blood, the dying general was drawn up by ropes and through a window--the only entrance to the queen's retreat that was left unbarred--into her presence, and soon expired. Shakspeare has Antony greet Cleopatra with the words, "I am dying, Egypt, dying!" This suggestive theme has been enlarged in a modern song of pathetic eloquence:--

I am dying, Egypt, dying,

Ebbs the crimson life-tide fast,

And the dark Plutonian shadows

Gather on the evening blast;

Let thine arms, O Queen, enfold me,

Hush thy sobs and bow thine ear,

Listen to the great heart-secrets

Thou

, and thou

alone

, must hear.

Should the base plebeian rabble

Dare assail my name at Rome,

Where my noble spouse Octavia

Weeps within her widow'd home,

Seek her; say the gods bear witness--

Altars, augurs, circling wings--

That her blood, with mine commingled,

Yet shall mount the throne of kings.

As for thee, star-ey'd Egyptian!

Glorious sorceress of the Nile!

Light the path to Stygian horrors

With the splendors of thy smile

I can scorn the Senate's triumphs,

Triumphing in love like thine.

Ah! no more amid the battle

Shall my heart exulting swell:

Isis and Osiris guard thee!

Cleopatra--Rome--farewell!

Thus perished the great Triumvir, dying like a Roman, whose blinded but persistent love, whatever were its elements, ever shall make his name memorable. All the ages will point to him as a man who gave the world away for the caresses of a woman, and a woman who deceived and ruined him.

As for her,--this selfish, heartless sorceress, gifted and beautiful as she was,--what does she do when she sees her lover dead,--dying for her? Does she share his fate? Not she. What selfish woman ever killed herself for love?

"Some natural tears she shed, but wiped them soon."

She may have torn her clothes, and beaten her breast, and disfigured her face, and given vent to mourning and lamentations. But she does not seek death, nor surrender herself to grief, nor court despair. She renews her strength. She reserves her arts for another victim. She hopes to win Octavius as she had won Julius and Antony; for she was only thirty-nine, and still a queen. And for what? That she might retain her own sovereignty, or the independence of Egypt,--still the most fertile of countries, rich, splendid, and with grand traditions which went back thousands of years; the oldest, and once the most powerful of monarchies. *Her* love was ever subservient to her interests. Antony gave up ambition for love,--whatever that love was. It took possession of his whole being, not pure and tender, but powerful, strange; doubtless a mad infatuation, and perhaps something more, since it never passed away,--admiration allied with desire, the worship of dazzling gifts, though not of moral virtues. Would such a love have been permanent? Probably not, since the object of it did not shine in the beauty of the soul, but rather in the graces and adornments of the body, intensified indeed by the lustre of bewitching social qualities and the brightness of a cultivated intellect. It is hard to analyze a passionate love between highly gifted people who have an intense development of both the higher and the lower natures, and still more difficult when the idol is a Venus Polyhymnia rather than a Venus Urania. But the love of Antony, whether unwise, or mysterious, or unfortunate, was not feigned or forced: it was real, and it was irresistible; he could not help it. He was enslaved, bound hand and foot. His reason may have rallied to his support, but his will was fettered. He may have had at times dark and gloomy suspicions,--that he was played with, that he was cheated, that he would be deserted, that Cleopatra was false and treacherous. And yet she reigned over him; he could not live without her. She was all in all to him, so long as the infatuation lasted; and it had lasted fourteen years, with increasing force, in spite of duty and pressing labors, the calls of ambition and the lust of power. In this consuming and abandoned passion, for fourteen years,--so strange and inglorious, and for a woman so unworthy, even if he were no better than she,--we see one of the great mysteries of our complex nature, not uncommon, but insoluble.

I have no respect for Antony, and but little admiration. I speak of such mad infatuation as a humiliating exhibition of human weakness. Any one under its fearful spell is an object of pity. But I have more sympathy for him than for Cleopatra, although she was doubtless a very gifted woman. He was her victim; she was not his. If extravagant and reckless and sensual, he was frank, generous, eloquent, brave, and true to her. She was artful, designing, and selfish, and used him for her own ends, although we do not know that she was perfidious and false to him. But for her he would have ruled the world. He showed himself capable of an enormous sacrifice. She made no sacrifices for him. She could even have transferred her affections, since she afterwards sought to play her blandishments upon his rival. Conceive of Antony, if you can, as loving any one else than her who led him on to ruin. In the very degradation of love we see its sacredness. In his fidelity we find some palliation. Nor does it seem that Octavia, the slighted wife of Antony, gave way to vengeance. Her sense of injury was overshadowed by her pity. This lofty and dignified matron even took his six surviving children, three of whom were Cleopatra's, and brought them up in her own house as her own. Can Paganism show a greater magnanimity?

The fate of Cleopatra was tragic also. She too destroyed herself, not probably by the bite of asps, as is the popular opinion, but by some potent and subtle poison that she ever carried with her, and which had the effect of benumbing the body and making her insensible to pain. Yet she does not kill herself because she cannot survive the death of Antony, but because she is too proud to be carried to Rome to grace the triumph of the new Caesar. She will not be led a captive princess up the Capitoline Hill. She has an overbearing pride. "Know, sir," says she to Proculeius, "that I

"Will not wait pinion'd at your master's court,

Nor once be chastis'd with the sober eye

Of dull Octavia....

... Rather a ditch in Egypt

Be gentle grave to me!"

But whether pride or whether shame was the more powerful motive in committing suicide, I do not read that she was a victim of remorse. She had no moral sense. Nor did she give way to sentimental grief on the death of Antony. Her grief was blended with disappointment and rage. Nor did she hide her head, but wore a face of brass. She used all her arts to win Octavius. Her resources did not fail her; but she expended them on one of the coldest, most politic, and most astute men that ever lived. And the disappointment that followed her defeat--that she could not enslave another conqueror--was greater than the grief for Antony. Nor during her whole career do we see any signs of that sorrow and humility which, it would seem, should mark a woman who has made so great and fatal a mistake,--cut off hopelessly from the respect of the world and the peace of her own soul. We see grief, rage, despair, in her miserable end, as we see pride and shamefacedness in her gilded life, but not remorse or shame. And when she dies by her own hand, it is not in madness, but to escape humiliation. Suicide was one of the worst features of Pagan antiquity. It was a base and cowardly reluctance to meet the evils of life, as much as indifference to the future and a blunted moral sense.

So much for the woman herself, her selfish spirit, her vile career; but as Cleopatra is one of the best known and most striking examples of a Pagan woman, with qualities and in circumstances peculiarly characteristic of Paganism, I must make a few remarks on these points.

One of the most noticeable of these is that immorality seems to have been no bar to social position. Some of those who were most attractive and sought after were notoriously immoral. Aspasia, whom Socrates and Pericles equally admired, and whose house was the resort of poets, philosophers, statesmen, and artists, and who is said to have been one of the most cultivated women of antiquity, bore a sullied name. Sappho, who was ever exalted by Grecian poets for the sweetness of her verses, attempted to reconcile a life of pleasure with a life of letters, and threw herself into the sea because of a disappointed passion. Lais, a professional courtesan, was the associate of kings and sages as

well as the idol of poets and priests. Agrippina, whose very name is infamy, was the admiration of courtiers and statesmen. Lucilla, who armed her assassins against her own brother, seems to have ruled the court of Marcus Aurelius.

And all these women, and more who could be mentioned, were--like Cleopatra--cultivated, intellectual, and brilliant. They seem to have reigned for their social fascinations as much as by their physical beauty. Hence, that class of women who with us are shunned and excluded from society were not only flattered and honored, but the class itself seems to have been recruited by those who were the most attractive for their intellectual gifts as well as for physical beauty. No woman, if bright, witty, and beautiful, was avoided because she was immoral. It was the immoral women who often aspired to the highest culture. They sought to reign by making their homes attractive to distinguished men. Their houses seem to have been what the *salons* of noble and fascinating duchesses were in France in the last two centuries. The homes of virtuous and domestic women were dull and wearisome. In fact, the modest wives and daughters of most men were confined to monotonous domestic duties; they were household slaves; they saw but little of what we now call society. I do not say that virtue was not held in honor. I know of no age, however corrupt, when it was not prized by husbands and fathers. I know of no age when virtuous women did not shine at home, and exert a healthful influence upon men, and secure the proud regard of their husbands. But these were not the women whose society was most sought. The drudgeries and slaveries of domestic life among the ancients made women unattractive to the world. The women who were most attractive were those who gave or attended sumptuous banquets, and indulged in pleasures that were demoralizing. Not domestic women, but bright women, carried away those prizes which turned the brain. Those who shone were those that attached themselves to men through their senses, and possibly through their intellects, and who were themselves strong in proportion as men were weak. For a woman to appear in public assemblies with braided and decorated hair and ostentatious dress, and especially if she displayed any gifts of eloquence or culture, was to proclaim herself one of the immoral, leisurely, educated, dissolute class. This gives point to Saint Paul's strict injunctions to the women of Corinth to dress soberly, to keep silence in the assemblies, etc. The modest woman was to "be in subjection." Those Pagan converts to the "New Way" were to avoid even the appearance of evil.

Thus under Paganism the general influence of women was to pull men down rather than to elevate them, especially those who were attractive in society. Virtuous and domestic women were not sufficiently educated to have much influence except in a narrow circle. Even they, in a social point of view, were slaves. They could be given in marriage without their consent; they were restricted in their intercourse with men; they were confined to their homes; they had but few privileges; they had no books; they led a life of terror from the caprices of their lords and masters, and hence inspired no veneration. The wives and daughters of the rich tyrannized over their servants, decked themselves with costly ornaments, and were merely gilded toys, whose society was vapid and uninteresting. The wives and daughters of the poor were drudges and menials, without attraction or influence; noisy, quarrelsome, garrulous women, who said the least when they talked the most.

Hence under Paganism home had none of those attractions which, in Christian countries, invest it with such charms. The home of the poor was squalid and repulsive; the home of the rich was gaudy and tinselled enough, but was dull and uninspiring. What is home when women are ignorant, stupid, and slavish? What glitter or artistic splendor can make home attractive when women are mere butterflies or slaves with gilded fetters? Deprive women of education, and especially of that respect which Christian chivalry inspires, and they cannot rise to be the equal companions of men. They are simply their victims or their slaves. What is a home where women are treated as inferiors? Paganism never recognized their equality with men; and if they ever ruled men, it was by appealing to their lower qualities, or resorting to arts and devices which are subversive of all dignity of character. When their personal beauty fled, their power also departed. A faded or homely woman, without intelligence or wit, was a forlorn object in a Pagan home,--to be avoided, derided, despised,--a melancholy object of pity or neglect, so far as companionship goes. She may have been valued as a cook or drudge, but she was only a menial. Of all those sins of omission of which Paganism is accused, the worst was that it gave to women no mental resources to assist them in poverty, or neglect, or isolation, when beauty or fortune deserted them. No home can be attractive where women have no resources; and women can have no resources outside of domestic duties, unless educated to some art or something calculated to draw out their energies and higher faculties by which they win the respect and admiration, not of men only, but of their own sex.

It was this lack of education which Paganism withheld from women which not only destroyed the radiance of home, but which really made women inferior to men. All writers, poets, and satirists alike

speak of the inferiority of women to men,--not physically only, but even intellectually; and some authors made them more vicious than men in natural inclination. And when the mind was both neglected and undervalued, how could respect and admiration be kindled, or continue after sensual charms had passed away? Paganism taught the inequality of the sexes, and produced it; and when this inequality is taught, or believed in, or insisted upon, then farewell to the glory of homes, to all unbought charms, to the graces of domestic life, to everything that gilds our brief existence with the radiance of imperishable joy.

Nor did Paganism offer any consolations to the down-trodden, injured, neglected, uninteresting woman of antiquity. She could not rise above the condition in which she was born. No sympathetic priest directed her thoughts to another and higher and endless life. Nobody wiped away her tears; nobody gave encouragement to those visions of beauty and serenity for which the burdened spirit will, under any oppressions, sometimes aspire to enjoy. No one told her of immortality and a God of forgiveness, who binds up the bleeding heart and promises a future peace and bliss. Paganism was merciful only in this,--that it did not open wounds it could not heal; that it did not hold out hopes and promises it could not fulfil; that it did not remind the afflicted of miseries from which they could not rise; that it did not let in a vision of glories which could never be enjoyed; that it did not provoke the soul to indulge in a bitterness in view of evils for which there was no remedy; that it did not educate the mind for enjoyments which could never be reached; that it did not kindle a discontent with a condition from which there is no escape. If one cannot rise above debasement or misery, there is no use in pointing it out. If the Pagan woman was not seemingly aware of the degradation which kept her down, and from which it was impossible to rise, Paganism did not add stings to her misery by presenting it as an accident which it was easy to surmount. There would be no contentment or submission among animals if they were endowed with the reason of men. Give to a healthy, but ignorant, coarse, uncultivated country girl, surrounded only with pigs and chickens, almost without neighbors, a glimpse of the glories of cities, the wonders of art, the charms of social life, the triumphs of mind, the capacities of the soul, and would she be any happier, if obliged to remain for life in her rustic obscurity and labor, and with no possible chance of improving her condition? Such was woman under Paganism. She could rise only so far as men lifted her up; and they lifted her up only further to consummate her degradation.

But there was another thing which kept women in degradation. Paganism did not recognize the immaterial and immortal soul: it only had regard to the wants of the body. Of course there were exceptions. There were sages and philosophers among the men who speculated on the grandest subjects which can elevate the mind to the regions of immortal truth,--like Socrates, Plato, Epictetus, Marcus Aurelius,--even as there were women who rose above all the vile temptations which surrounded them, and were poets, heroines, and benefactors,--like Telessa, who saved Argos by her courage; and Volumnia, who screened Rome from the vengeance of her angry son; and Lucretia, who destroyed herself rather than survive the dishonor of her house. There are some people who rise and triumph over every kind of oppression and injury. Under Paganism there was the possibility of the emancipation of the soul, but not the probability. Its genius was directed to the welfare of the body,--to utilitarian ends of life, to ornaments and riches, to luxury and voluptuousness, to the pleasures which are brief, to the charms of physical beauty and grace. It could stimulate ambition and inculcate patriotism and sing of love, if it coupled the praises of Venus with the praises of wine. But everything it praised or honored had reference to this life and to the mortal body. It may have recognized the mind, but not the soul, which is greater than the mind. It had no aspirations for future happiness; it had no fears of future misery. Hence the frequency of suicide under disappointment, or ennui, or satiated desire, or fear of poverty, or disgrace, or pain.

And thus, as Paganism did not take cognizance of the soul in its future existence, it disregarded man's highest aspirations. It did not cultivate his graces; it set but a slight value on moral beauty; it thought little of affections; it spurned gentleness and passive virtues; it saw no lustre in the tender eye; it heard no music in the tones of sympathy; it was hard and cold. That which constitutes the richest beatitudes of love it could not see, and did not care for. Ethereal blessedness it despised. That which raises woman highest, it was indifferent to. The cold atmosphere of Paganism froze her soul, and made her callous to wrongs and sufferings. It destroyed enthusiasm and poetic ardor and the graces which shine in misfortune. Woman was not kindled by lofty sentiments, since no one believed in them. The harmonies of home had no poetry and no inspiration, and they disappeared. The face of woman was not lighted by supernatural smiles. Her caresses had no spiritual fervor, and her benedictions were unmeaning platitudes. Take away the soul of woman, and what is she? Rob her of her divine enthusiasm, and how vapid and commonplace she becomes! Destroy her yearnings to be a spiritual solace, and how limited is her sphere! Take away the holy dignity of the soul, and how impossible is a lofty friendship! Without the amenities of the soul there can be no real society.

Crush the soul of a woman, and you extinguish her life, and shed darkness on all who surround her. She cannot rally from pain, or labor, or misfortune, if her higher nature is ignored. Paganism ignored what is grandest and truest in a woman, and she withered like a stricken tree. She succumbed before the cold blasts that froze her noblest impulses, and sunk sullenly into obscurity. Oh, what a fool a man is to make woman a slave! He forgets that though he may succeed in keeping her down, chained and fettered by drudgeries, she will be revenged; that though powerless, she will instinctively learn to hate him; and if she cannot defy him she will scorn him,--for not even a brute animal will patiently submit to cruelty, still less a human soul become reconciled to injustice. And what is the possession of a human body without the sympathy of a living soul?

And hence women, under Paganism,--having no hopes of future joy, no recognition of their diviner attributes, no true scope for energies, no field of usefulness but in a dreary home, no ennobling friendships, no high encouragements, no education, no lofty companionship; utterly unappreciated in what most distinguishes them, and valued only as household slaves or victims of guilty pleasure; adorned and bedecked with trinkets, all to show off the graces of the body alone, and with nothing to show their proud equality with men in influence, if not in power, in mind as well as heart,--took no interest in what truly elevates society. What schools did they teach or even visit? What hospitals did they enrich? What miseries did they relieve? What charities did they contribute to? What churches did they attend? What social gatherings did they enliven? What missions of benevolence did they embark in? What were these to women who did not know what was the most precious thing they had, or when this precious thing was allowed to run to waste? What was there for a woman to do with an unrecognized soul but gird herself with ornaments, and curiously braid her hair, and ransack shops for new cosmetics, and hunt for new perfumes, and recline on luxurious couches, and issue orders to attendant slaves, and join in seductive dances, and indulge in frivolous gossip, and entice by the display of sensual charms? Her highest aspiration was to adorn a perishable body, and vanity became the spring of life.

And the men,--without the true sanctities and beatitudes of married life, without the tender companionship which cultivated women give, without the hallowed friendships which the soul alone can keep alive, despising women who were either toys or slaves,--fled from their dull, monotonous, and dreary homes to the circus and the theatre and the banqueting hall for excitement or self-forgetfulness. They did not seek society, for there can be no high society where women do not preside and inspire and guide. Society is a Christian institution. It was born among our German ancestors, amid the inspiring glories of chivalry. It was made for women as well as men of social cravings and aspirations, which have their seat in what Paganism ignored. Society, under Paganism, was confined to men, at banquets or symposia, where women seldom entered, unless for the amusement of men,--never for their improvement, and still less for their restraint.

It was not until Christianity permeated the old Pagan civilization and destroyed its idols, that the noble Paulas and Marcellas and Fabiolas arose to dignify human friendships, and give fascination to reunions of cultivated women and gifted men; that the seeds of society were sown. It was not until the natural veneration which the Gothic nations seem to have had for women, even in their native forests, had ripened into devotion and gallantry under the teachings of Christian priests, that the true position of women was understood. And after their equality was recognized in the feudal castles of the Middle Ages, the *salons* of the seventeenth and eighteenth centuries established their claims as the inspiring geniuses of what we call society. Then, and not till then, did physical beauty pale before the brilliancy of the mind and the radiance of the soul,--at last recognized as the highest charm of woman. The leaders of society became, not the ornamented and painted *heterae* which had attracted Grecian generals and statesmen and men of letters, but the witty and the genial and the dignified matrons who were capable of instructing and inspiring men superior to themselves, with eyes beaming with intellectual radiance, and features changing with perpetual variety. Modern society, created by Christianity,--since only Christianity recognizes what is most truly attractive and ennobling among women--is a great advance over the banquets of imperial Romans and the symposia of gifted Greeks.

But even this does not satisfy woman in her loftiest aspirations. The soul which animates and inspires her is boundless. Its wants cannot be fully met even in an assemblage of wits and beauties. The soul of Madame de Staël pined amid all her social triumphs. The soul craves friendships, intellectual banquetings, and religious aspirations. And unless the emancipated soul of woman can have these wants gratified, she droops even amid the glories of society. She is killed, not as a hero perishes on a battle-field; but she dies, as Madame de Maintenon said that she died, amid the imposing splendors of Versailles. It is only the teachings and influences of that divine religion which made Bethany the centre of true social banquetings to the wandering and isolated Man of Sorrows,

which can keep the soul alive amid the cares, the burdens, and the duties which bend down every son and daughter of Adam, however gilded may be the outward life. How grateful, then, should women be to that influence which has snatched them from the pollutions and heartless slaveries of Paganism, and given dignity to their higher nature! It is to them that it has brought the greatest boon, and made them triumphant over the evils of life. And how thoughtless, how misguided, how ungrateful is that woman who would exchange the priceless blessings which Christianity has brought to her for those ornaments, those excitements, and those pleasures which ancient Paganism gave as the only solace for the loss and degradation of her immortal soul!

AUTHORITIES.

Plutarch's Lives; Froude's Caesar; Shakspeare's Antony and Cleopatra; Plato's Dialogues; Horace, Martial, and Juvenal, especially among the poets; Lord's Old Roman World; Suetonius's Lives of the Caesars; Dion Cassius; Rollin's Ancient History; Merivale's History of the Romans; Biographic Universelle; Rees's Encyclopedia has a good article.

PAGAN SOCIETY.

GLORY AND SHAME.

50 B.C.

We have now surveyed what was most glorious in the States of antiquity. We have seen a civilization which in many respects rivals all that modern nations have to show. In art, in literature, in philosophy, in laws, in the mechanism of government, in the cultivated face of Nature, in military strength, in aesthetic culture, the Greeks and Romans were our equals. And this high civilization was reached by the native and unaided strength of man; by the power of will, by courage, by perseverance, by genius, by fortunate circumstances. We are filled with admiration by all these trophies of genius, and cannot but feel that only superior races could have accomplished such mighty triumphs.

Yet all this splendid exterior was deceptive; for the deeper we penetrate the social condition of the people, the more we feel disgust and pity supplanting all feelings of admiration and wonder. The Roman empire especially, which had gathered into its strong embrace the whole world, and was the natural inheritor of all the achievements of all the nations, in its shame and degradation suggests melancholy feelings in reference to the destiny of man, so far as his happiness and welfare depend upon his own unaided efforts.

It is a sad picture of oppression, injustice, crime, and wretchedness which I have now to present. Glory is succeeded by shame, strength by weakness, and virtue by vice. The condition of the mass is deplorable, and even the great and fortunate shine in a false and fictitious light. We see laws, theoretically good, practically perverted, and selfishness and egotism the mainsprings of life; we see energies misdirected, and art corrupted. All noble aspirations have fled, and the good and the wise retire from active life in despair and misanthropy. Poets flatter the tyrants who trample on human rights, while sensuality and luxurious pleasure absorb the depraved thoughts of a perverse generation.

The first thing which arrests our attention as we survey the civilized countries of the old world, is the imperial despotism of Rome. The empire indeed enjoyed quietude, and society was no longer rent by factions and parties. Demagogues no longer disturbed the public peace, nor were the provinces ransacked and devastated to provide for the means of carrying on war. So long as men did not oppose the government they were safe from molestation, and were left to pursue their business and pleasure in their own way. Imperial cruelty was not often visited on the humble classes. It was the

policy of the emperors to amuse and flatter the people, while depriving them of political rights. Hence social life was free. All were at liberty to seek their pleasures and gains; all were proud of their metropolis, with its gilded glories and its fascinating pleasures. Outrages, extortions, and disturbances were punished. Order reigned, and all classes felt secure; they could sleep without fear of robbery or assassination. In short, all the arguments which can be adduced in favor of despotism in contrast with civil war and violence, show that it was beneficial in its immediate effects.

Nevertheless, it was a most lamentable change from that condition of things which existed before the civil wars. Roman liberties were prostrated forever; noble sentiments and aspirations were rebuked. Under the Emperors we read of no more great orators like Cicero, battling for human rights and defending the public weal. Eloquence was suppressed. Nor was there liberty of speech even in the Senate. It was treason to find fault with any public acts. From the Pillars of Hercules to the Caspian Sea one stern will ruled all classes and orders. No one could fly from the agents and ministers of the Emperor; he controlled the army, the Senate, the judiciary, the internal administration of the empire, and the religious worship of the people; all offices, honors, and emoluments emanated from him. All influences conspired to elevate the man whom no one could hope successfully to rival. Revolt was madness, and treason absurdity. Nor did the Emperors attempt to check the gigantic social evils of the empire. They did not seek to prevent irreligion, luxury, slavery, and usury, the encroachments of the rich upon the poor, the tyranny of foolish fashions, demoralizing sports and pleasures, money-making, and all the follies which lax principles of morality allowed; they fed the rabble with corn, oil, and wine, and thus encouraged idleness and dissipation. The world never saw a more rapid retrogression in human rights, or a greater prostration of liberties. Taxes were imposed according to the pleasure or necessities of the government. Provincial governors became still more rapacious and cruel; judges hesitated to decide against the government. Patriotism, in its most enlarged sense, became an impossibility; all lofty spirits were crushed. Corruption in all forms of administration fearfully increased, for there was no safeguard against it.

Theoretically, absolutism may be the best government, if rulers are wise and just; but practically, as men are, despotisms are generally cruel and revengeful. Despotism implies slavery, and slavery is the worst condition of mankind.

It cannot be questioned that many virtuous princes reigned at Rome, who would have ornamented any age or country. Titus, Hadrian, Marcus Aurelius, Antoninus Pius, Alexander Severus, Tacitus, Probus, Carus, Constantine, Theodosius, were all men of remarkable virtues as well as talents. They did what they could to promote public prosperity. Marcus Aurelius was one of the purest and noblest characters of antiquity. Theodosius for genius and virtue ranks with the most illustrious sovereigns that ever wore a crown,—with Charlemagne, with Alfred, with William III., with Gustavus Adolphus.

But it matters not whether the Emperors were good or bad, if the régime to which they consecrated their energies was exerted to crush the liberties of mankind. The imperial despotism, whether brilliant or disgraceful, was a mournful retrograde step in civilization; it implied the extinction of patriotism and the general degradation of the people, and would have been impossible in the days of Cato, Scipio, or Metellus.

If we turn from the Emperors to the class which before the dictatorship of Julius Caesar had the ascendancy in the State, and for several centuries the supreme power, we shall find but little that is flattering to a nation or to humanity. Under the Emperors the aristocracy had degenerated in morals as well as influence. They still retained their enormous fortunes, originally acquired as governors of provinces, and continually increased by fortunate marriages and speculations. Indeed, nothing was more marked and melancholy at Rome than the vast disproportion in fortunes. In the better days of the republic, property was more equally divided; the citizens were not ambitious for more land than they could conveniently cultivate. But the lands, obtained by conquest, gradually fell into the possession of powerful families. The classes of society widened as great fortunes were accumulated; pride of wealth kept pace with pride of ancestry; and when plebeian families had obtained great estates, they were amalgamated with the old aristocracy. The equestrian order, founded substantially on wealth, grew daily in importance. Knights ultimately rivalled senatorial families. Even freedmen in an age of commercial speculation became powerful for their riches. The pursuit of money became a passion, and the rich assumed all the importance and consideration which had once been bestowed upon those who had rendered great public services.

As the wealth of the world flowed naturally to the capital, Rome became a city of princes, whose fortunes were almost incredible. It took eighty thousand dollars a year to support the ordinary senatorial dignity. Some senators owned whole provinces. Trimalchio, a rich freedman whom Petronius ridiculed, could afford to lose thirty millions of sesterces in a single voyage without

sensibly diminishing his fortune. Pallas, a freedman of the Emperor Claudius, possessed a fortune of three hundred millions of sesterces. Seneca, the philosopher, amassed an enormous fortune.

As the Romans were a sensual, ostentatious, and luxurious people, they accordingly wasted their fortunes by an extravagance in their living which has had no parallel. The pleasures of the table and the cares of the kitchen were the most serious avocation of the aristocracy in the days of the greatest corruption. They had around them regular courts of parasites and flatterers, and they employed even persons of high rank as their chamberlains and stewards. Carving was taught in celebrated schools, and the masters of this sublime art were held in higher estimation than philosophers or poets. Says Juvenal,--

"To such perfection now is carving brought,

That different gestures by our curious men

Are used for different dishes, hare or hen."

Their entertainments were accompanied with everything which could flatter vanity or excite the passions; musicians, male and female dancers, players of farce and pantomime, jesters, buffoons, and gladiators exhibited, while the guests reclined at table after the fashion of the Orientals. The tables were made of Thuja-root, with claws of ivory or Delian bronze. Even Cicero, in an economical age, paid six hundred and fifty pounds for his banqueting-table. Gluttony was carried to such a point that the sea and earth scarcely sufficed to set off their tables; they ate as delicacies water-rats and white worms. Fish were the chief object of the Roman epicures, of which the *mullus*, the *rhombus*, and the *asellus* were the most valued; it is recorded that a mullus (sea barbel), weighing but eight pounds, sold for eight thousand sesterces. Oysters from the Lucrine Lake were in great demand; snails were fattened in ponds for cooking, while the villas of the rich had their piscinae filled with fresh or salt-water fish. Peacocks and pheasants were the most highly esteemed among poultry, although the absurdity prevailed of eating singing-birds. Of quadrupeds, the greatest favorite was the wild boar,--the chief dish of a grand *coena*,--coming whole upon the table; and the practised gourmand pretended to distinguish by the taste from what part of Italy it came. Dishes, the very names of which excite disgust, were used at fashionable banquets, and held in high esteem. Martial devotes two entire books of his "Epigrams" to the various dishes and ornaments of a Roman banquet.

The extravagance of that period almost surpasses belief. Cicero and Pompey one day surprised Lucullus at one of his ordinary banquets, when he expected no guests, and even that cost fifty thousand drachmas,--about four thousand dollars; his table-couches were of purple, and his vessels glittered with jewels. The halls of Heliogabalus were hung with cloth of gold, enriched with jewels; his table and plate were of pure gold; his couches were of massive silver, and his mattresses, covered with carpets of cloth of gold, were stuffed with down found only under the wings of partridges. His suppers never cost less than one hundred thousand sesterces. Crassus paid one hundred thousand sesterces for a golden cup. Banqueting-rooms were strewed with lilies and roses. Apicius, in the time of Trajan, spent one hundred millions of sesterces in debauchery and gluttony; having only ten millions left, he ended his life with poison, thinking he might die of hunger. Things were valued for their cost and rarity rather than their real value. Enormous prices were paid for carp, the favorite dish of the Romans as of the Chinese. Drusillus, a freedman of Claudius, caused a dish to be made of five hundred pounds weight of silver. Vitellius had one made of such prodigious size that he was obliged to build a furnace on purpose for it; and at a feast which he gave in honor of this dish, it was filled with the livers of the scarrus (fish), the brains of peacocks, the tongues of parrots, and the roes of lampreys caught in the Carpathian Sea.

The nobles squandered money equally on their banquets, their stables, and their dress; and it was to their crimes, says Juvenal, that they were indebted for their gardens, their palaces, their tables, and their fine old plate.

Unbounded pride, insolence, inhumanity, selfishness, and scorn marked this noble class. Of course there were exceptions, but the historians and satirists give the saddest pictures of their cold-hearted depravity. The sole result of friendship with a great man was a meal, at which flattery and sycophancy were expected; but the best wine was drunk by the host, instead of by the guest. Provinces were ransacked for fish and fowl and game for the tables of the great, and sensualism was

thought to be no reproach. They violated the laws of chastity and decorum; they scourged to death their slaves; they degraded their wives and sisters; they patronized the most demoralizing sports; they enriched themselves by usury and monopolies; they practised no generosity, except at their banquets, when ostentation balanced their avarice; they measured everything by the money-standard; they had no taste for literature, but they rewarded sculptors and painters who prostituted art to their vanity or passions; they had no reverence for religion, and ridiculed the gods. Their distinguishing vices were meanness and servility, the pursuit of money by every artifice, the absence of honor, and unblushing sensuality.

Gibbon has eloquently abridged the remarks of Ammianus Marcellinus respecting these people:--

"They contend with each other in the empty vanity of titles and surnames. They affect to multiply their likenesses in statues of bronze or marble; nor are they satisfied unless these statues are covered with plates of gold. They boast of the rent-rolls of their estates; they measure their rank and consequence by the loftiness of their chariots and the weighty magnificence of their dress; their long robes of silk and purple float in the wind, and as they are agitated by art or accident they discover the under garments, the rich tunics embroidered with the figures of various animals. Followed by a train of fifty servants, and tearing up the pavement, they move along the streets as if they travelled with post-horses; and the example of the senators is boldly imitated by the matrons and ladies, whose covered carriages are continually driving round the immense space of the city and suburbs. Whenever they condescend to enter the public baths, they assume, on their entrance, a tone of loud and insolent command, and maintain a haughty demeanor, which perhaps might have been excused in the great Marcellus after the conquest of Syracuse. Sometimes these heroes undertake more arduous achievements: they visit their estates in Italy, and procure themselves, by servile hands, the amusements of the chase. And if at any time, especially on a hot day, they have the courage to sail in their gilded galleys from the Lucrine Lake to their elegant villas on the sea-coast of Puteoli and Cargeta, they compare these expeditions to the marches of Caesar and Alexander; yet should a fly presume to settle on the silken folds of their gilded umbrellas, should a sunbeam penetrate through some unguarded chink, they deplore their intolerable hardships, and lament, in affected language, that they were not born in the regions of eternal darkness. In the exercise of domestic jurisdiction they express an exquisite sensibility for any personal injury, and a contemptuous indifference for the rest of mankind. When they have called for warm water, should a slave be tardy in his obedience, he is chastised with a hundred lashes; should he commit a wilful murder, his master will mildly observe that he is a worthless fellow, and shall be punished if he repeat the offence. If a foreigner of no contemptible rank be introduced to these senators, he is welcomed with such warm professions that he retires charmed with their affability; but when he repeats his visit, he is surprised and mortified to find that his name, his person, and his country are forgotten. The modest, the sober, and the learned are rarely invited to their sumptuous banquets, only the most worthless of mankind,--parasites who applaud every look and gesture, who gaze with rapture on marble columns and variegated pavements, and strenuously praise the pomp and elegance which he is taught to consider as a part of his personal merit. At the Roman table the birds, the squirrels, the fish, which appear of uncommon size, are contemplated with curious attention, and notaries are summoned to attest, by authentic record, their real weight. Another method of introduction into the houses of the great is skill in games, which is a sure road to wealth and reputation. A master of this sublime art, if placed at a supper below a magistrate, displays in his countenance a surprise and indignation which Cato might be supposed to feel when refused the praetorship. The acquisition of knowledge seldom engages the attention of the nobles, who abhor the fatigue and disdain the advantages of study; and the only books they peruse are the 'Satires of Juvenal,' or the fabulous histories of Marius Maximus. The libraries they have inherited from their fathers are secluded, like dreary sepulchres, from the light of day; but the costly instruments of the theatre--flutes and hydraulic organs--are constructed for their use. In their palaces sound is preferred to sense, and the care of the body to that of the mind. The suspicion of a malady is of sufficient weight to excuse the visits of the most intimate friends. The prospect of gain will urge a rich and gouty senator as far as Spoleta; every sentiment of arrogance and dignity is suppressed in the hope of an inheritance or legacy, and a wealthy, childless citizen is the most powerful of the Romans. The distress which follows and chastises extravagant luxury often reduces the great to use the most humiliating expedients. When they wish to borrow, they employ the base and supplicating style of the slaves in the comedy; but when they are called upon to pay, they assume the royal and tragic declamations of the grandsons of Hercules. If the demand is repeated, they readily procure some trusty sycophant to maintain a charge of poison or magic against the insolent creditor, who is seldom released from prison until he has signed a discharge of the whole debt. And these vices are mixed with a puerile superstition which disgraces their understanding. They listen with confidence to the productions of haruspices, who pretend to

read in the entrails of victims the signs of future greatness and prosperity; and this superstition is observed among those very sceptics who impiously deny or doubt the existence of a celestial power."

Such, in the latter days of the empire, was the leading class at Rome, and probably also in the cities which aped the fashions of the capital. Frivolity and luxury loosened all the ties of society. They were bound up in themselves, and had no care for the people except as they might extract more money from them.

As for the miserable class whom the patricians oppressed, their condition became worse every day from the accession of the Emperors. The plebeians had ever disdained those arts which now occupied the middle classes; these were intrusted to slaves. Originally, they employed themselves upon the lands which had been obtained by conquest; but these lands were gradually absorbed or usurped by the large proprietors. The small farmers, oppressed with debt and usury, parted with their lands to their wealthy creditors. Even in the time of Cicero, it was computed that there were only about two thousand citizens possessed of independent property. These two thousand persons owned the world; the rest were dependent and powerless, and would have perished but for largesses. Monthly distributions of corn were converted into daily allowance for bread. The people were amused with games and festivals, fed like slaves, and of course lost at last even the semblance of manliness and independence. They loitered in the public streets, and dissipated in gaming their miserable pittance; they spent the hours of the night in the lowest resorts of crime and misery; they expired in wretched apartments without attracting the attention of government; pestilence, famine, and squalid misery thinned their ranks, and they would have been annihilated but for constant accession to their numbers from the provinces.

In the busy streets of Rome might be seen adventurers from all parts of the world, disgraced by all the various vices of their respective countries. They had no education, and but small religious advantages; they were held in terror by both priests and nobles,—the priest terrifying them with Egyptian sorceries, the nobles crushing them by iron weight; like lazzaroni, they lived in the streets, or were crowded into filthy tenements; a gladiatorial show delighted them, but the circus was their peculiar joy,—here they sought to drown the consciousness of their squalid degradation; they were sold into slavery for trifling debts; they had no homes. The poor man had no ambition or hope; his wife was a slave; his children were precocious demons, whose prattle was the cry for bread, whose laughter was the howl of pandemonium, whose sports were the tricks of premature iniquity, whose beauty was the squalor of disease and filth; he fled from a wife in whom he had no trust, from children in whom he had no hope, from brothers for whom he felt no sympathy, from parents for whom he felt no reverence; the circus was his home, the fights of wild beasts were his consolation; the future was a blank, death was the release from suffering. There were no hospitals for the sick and the old, except one on an island in the Tiber; the old and helpless were left to die, unpitied and unconsolated. Suicide was so common that it attracted no attention.

Superstition culminated at Rome, for there were seen the priests and devotees of all the countries that it governed,—"the dark-skinned daughters of Isis, with drum and timbrel and wanton mien; devotees of the Persian Mithras; emasculated Asiatics; priests of Cybele, with their wild dances and discordant cries; worshippers of the great goddess Diana; barbarian captives with the rites of Teuton priests; Syrians, Jews, Chaldaean astrologers, and Thessalian sorcerers.... The crowds which flocked to Rome from the eastern shores of the Mediterranean brought with them practices extremely demoralizing. The awful rites of initiation, the tricks of magicians, the pretended virtues of amulets and charms, the riddles of emblematical idolatry with which the superstition of the East abounded, amused the languid voluptuaries who had neither the energy for a moral belief nor the boldness requisite for logical scepticism."

We cannot pass by, in this enumeration of the different classes of Roman society, the number and condition of slaves. A large part of the population belonged to this servile class. Originally brought in by foreign conquest, it was increased by those who could not pay their debts. The single campaign of Regulus introduced as many captives as made up a fifth part of the whole population. Four hundred were maintained in a single palace, at a comparatively early period; a freedman in the time of Augustus left behind him forty-one hundred and sixteen; Horace regarded two hundred as the suitable establishment for a gentleman; some senators owned twenty thousand. Gibbon estimates the number of slaves at about sixty millions,—one-half of the whole population. One hundred thousand captives were taken in the Jewish war, who were sold as slaves, and sold as cheap as horses. William Blair supposes that there were three slaves to one freeman, from the conquest of Greece to the reign of Alexander Severus. Slaves often cost two hundred thousand sesterces, yet everybody was eager to possess a slave. At one time the slave's life was at the absolute control of his

master; he could be treated at all times with brutal severity. Fettered and branded, he toiled to cultivate the lands of an imperious master, and at night was shut up in a subterranean cell. The laws hardly recognized his claim to be considered a moral agent,—he was *secundum hominum genus*; he could acquire no rights, social or political,—he was incapable of inheriting property, or making a will, or contracting a legal marriage; his value was estimated like that of a brute; he was a thing and not a person, "a piece of furniture possessed of life;" he was his master's property, to be scourged, or tortured, or crucified. If a wealthy proprietor died under circumstances which excited suspicion of foul play, his whole household was put to torture. It is recorded that on the murder of a man of consular dignity by a slave, every slave in his possession was condemned to death. Slaves swelled the useless rabbles of the cities, and devoured the revenues of the State. All manual labor was done by slaves, in towns as well as the country; they were used in the navy to propel the galleys. Even the mechanical arts were cultivated by the slaves. Nay more, slaves were schoolmasters, secretaries, actors, musicians, and physicians, for in intelligence they were often on an equality with their masters. Slaves were procured from Greece and Asia Minor and Syria, as well as from Gaul and the African deserts; they were white as well as black. All captives in war were made slaves, also unfortunate debtors; sometimes they could regain their freedom, but generally their condition became more and more deplorable. What a state of society when a refined and cultivated Greek could be made to obey the most offensive orders of a capricious and sensual Roman, without remuneration, without thanks, without favor, without redress! What was to be expected of a class who had no object to live for? They became the most degraded of mortals, ready for pillage, and justly to be feared in the hour of danger.

Slavery undoubtedly proved the most destructive canker of the Roman State. It was this social evil, more than political misrule, which undermined the empire. Slavery proved at Rome a monstrous curse, destroying all manliness of character, creating contempt of honest labor, making men timorous yet cruel, idle, frivolous, weak, dependent, powerless. The empire might have lasted centuries longer but for this incubus, the standing disgrace of the Pagan world. Paganism never recognized what is most noble and glorious in man; never recognized his equality, his common brotherhood, his natural rights. It had no compunction, no remorse in depriving human beings of their highest privileges; its whole tendency was to degrade the soul, and to cause forgetfulness of immortality. Slavery thrives best when the generous instincts are suppressed, when egotism, sensuality, and pride are the dominant springs of human action.

The same influences which tended to rob man of the rights which God has given him, and produce cruelty and heartlessness in the general intercourse of life, also tended to degrade the female sex. In the earlier age of the republic, when the people were poor, and life was simple and primitive, and heroism and patriotism were characteristic, woman was comparatively virtuous and respected; she asserted her natural equality, and led a life of domestic tranquillity, employed upon the training of her children, and inspiring her husband to noble deeds. But under the Emperors these virtues had fled. Woman was miserably educated, being taught by a slave, or some Greek chambermaid, accustomed to ribald conversation, and fed with idle tales and silly superstitions; she was regarded as more vicious in natural inclination than man, and was chiefly valued for household labors; she was reduced to dependence; she saw but little of her brothers or relatives; she was confined to her home as if it were a prison; she was guarded by eunuchs and female slaves; she was given in marriage without her consent; she could be easily divorced; she was valued only as a domestic servant, or as an animal to prevent the extinction of families; she was regarded as the inferior of her husband, to whom she was a victim, a toy, or a slave. Love after marriage was not frequent, since woman did not shine in the virtues by which love is kept alive. She became timorous or frivolous, without dignity or public esteem; her happiness was in extravagant attire, in elaborate hair-dressings, in rings and bracelets, in a retinue of servants, in gilded apartments, in luxurious couches, in voluptuous dances, in exciting banquets, in demoralizing spectacles, in frivolous gossip, in inglorious idleness. If virtuous, it was not so much from principle as from fear. Hence she resorted to all sorts of arts to deceive her husband; her genius was sharpened by perpetual devices, and cunning was her great resource. She cultivated no lofty friendships; she engaged in no philanthropic mission; she cherished no ennobling sentiments; she kindled no chivalrous admiration. Her amusements were frivolous, her taste vitiated, her education neglected, her rights violated, her sympathy despised, her aspirations scorned. And here I do not allude to great and infamous examples that history has handed down in the sober pages of Suetonius and Tacitus, or that unblushing depravity which stands out in the bitter satires of those times; I speak not of the adultery, the poisoning, the infanticide, the debauchery, the cruelty of which history accuses the Messalinas and Agrippinas of imperial Rome; I allude not to the orgies of the Palatine Hill, or the abominations which are inferred from the paintings of Pompeii,—I mean the general frivolity and extravagance and demoralization of the women of the Roman empire.

Marriage was considered inexpedient unless large dowries were brought to the husband. Numerous were the efforts of Emperors to promote honorable marriages, but the relation was shunned. Courtesans usurped the privileges of wives, and with unblushing effrontery. A man was derided who contemplated matrimony, for there was but little confidence in female virtue or capacity, and woman lost all her fascination when age had destroyed her beauty; even her very virtues were distasteful to her self-indulgent husband. When, as sometimes happened, the wife gained the ascendancy by her charms, she was tyrannical; her relatives incited her to despoil her husband; she lived amid incessant broils; she had no care for the future, and exceeded man in prodigality. "The government of her house is no more merciful," says Juvenal, "than the court of a Sicilian tyrant." In order to render herself attractive, she exhausted all the arts of cosmetics and elaborate hair-dressing; she delighted in magical incantations and love-potions. In the bitter satire of Juvenal we get an impression most melancholy and loathsome:--

"T were long to tell what philters they provide,

What drugs to set a son-in-law aside,--

Women, in judgment weak, in feeling strong,

By every gust of passion borne along.

To a fond spouse a wife no mercy shows;

Though warmed with equal fires, she mocks his woes,

And triumphs in his spoils; her wayward will

Defeats his bliss and turns his good to ill.

Women support the bar; they love the law,

And raise litigious questions for a straw.

Nay, more, they fence! who has not marked their oil,

Their purple rigs, for this preposterous toil!

A woman stops at nothing; when she wears

Rich emeralds round her neck, and in her ears

Pearls of enormous size,--these justify

Her faults, and make all lawful in her eye.

More shame to Rome! in every street are found

The essenced Lypanti, with roses crowned;

The gay Miletan and the Tarentine,

Lewd, petulant, and reeling ripe with wine!"

In the sixth satire of Juvenal is found the most severe delineation of woman that ever mortal penned. Doubtless he is libellous and extravagant, for only infamous women can stoop to such arts and degradations as would seem to have been common in his time. But with all his probable exaggeration, we are forced to feel that but few women, even in the highest class, except those converted to Christianity, showed the virtues of a Lucretia, a Volumnia, a Cornelia, or an Octavia. The lofty virtues of a Perpetua, a Felicitas, an Agnes, a Paula, a Blessilla, a Fabiola, would have adorned any civilization; but the great mass were, what they were in Greece even in the days of Pericles, what they have ever been under the influence of Paganism, what they ever will be without Christianity to guide them,—victims or slaves of man, revenging themselves by squandering his wealth, stealing his secrets, betraying his interests, and deserting his home.

Another essential but demoralizing feature of Roman society was to be found in the games and festivals and gladiatorial shows, which accustomed the people to unnatural excitement and familiarity with cruelty and suffering. They made all ordinary pleasures insipid; they ended in making homicide an institution. The butcheries of the amphitheatre exerted a fascination which diverted the mind from literature, art, and the enjoyments of domestic life. Very early they were the favorite sport of the Romans. Marcus and Decimus Brutus employed gladiators in celebrating the obsequies of their fathers, nearly three centuries before Christ. "The wealth and ingenuity of the aristocracy were taxed to the utmost to content the populace and provide food for the indiscriminate slaughter of the circus, where brute fought with brute, and man again with man, or where the skill and weapons of the latter were matched against the strength and ferocity of the first." Pompey let loose six hundred lions in the arena in one day; Augustus delighted the people with four hundred and twenty panthers. The games of Trajan lasted one hundred and twenty days, when ten thousand gladiators fought, and ten thousand beasts were slain. Titus slaughtered five thousand animals at a time; twenty elephants contended, according to Pliny, against a band of six hundred captives. Probus reserved six hundred gladiators for one of his festivals, and slaughtered on another two hundred lions, twenty leopards, and three hundred bears; Gordian let loose three hundred African hyenas and ten Indian tigers in the arena. Every corner of the earth was ransacked for these wild animals, which were so highly valued that in the time of Theodosius it was forbidden by law to destroy a Getulian lion. No one can contemplate the statue of the Dying Gladiator which now ornaments the capitol at Rome, without emotions of pity and admiration. If a marble statue can thus move us, what was it to see the Christian gladiators contending with the fierce lions of Africa! "The Christians to the lions!" was the cry of the brutal populace. What a sight was the old amphitheatre of Titus, five hundred and sixty feet long and four hundred and seventy feet wide, built on eighty arches and rising one hundred and forty feet into the air, with its four successive orders of architecture, and enclosing its eighty thousand seated spectators, arranged according to rank, from the Emperor to the lowest of the populace, all seated on marble benches covered with cushions, and protected from the sun and rain by ample canopies! What an excitement, when men strove not with wild beasts alone, but with one another; and when all that human skill and strength, increased by elaborate treatment, and taxed to the uttermost, were put forth in needless slaughter, until the thirsty soil was wet and saturated with human gore! Familiarity with such sights must have hardened the heart and rendered the mind insensible to refined pleasures. What theatres are to the French, what bull-fights are to the Spaniards, what horse-races are to the English, these gladiatorial shows were to the ancient Romans. The ruins of hundreds of amphitheatres attest the universality of the custom, not in Rome alone, but in the provinces.

Probably no people abandoned themselves to pleasures more universally than the Romans, after war had ceased to be their master passion. All classes alike pursued them with restless eagerness.

Amusements were the fashion and the business of life. At the theatre, at the great gladiatorial shows, at the chariot races, emperors and senators and generals were always present in conspicuous and reserved seats of honor; behind them were the patricians, and then the ordinary citizens, and in the rear of these the people fed at the public expense. The Circus Maximus, the Theatre of Pompey, the Amphitheatre of Titus, would collectively accommodate over four hundred thousand spectators. We may presume that over five hundred thousand persons were in the habit of constant attendance on these demoralizing sports; and the fashion spread throughout all the great cities of the empire, so that there was scarcely a city of twenty thousand inhabitants which had not its theatres, amphitheatres, or circus. And when we remember the heavy bets on favorite horses, and the universal passion for gambling in every shape, we can form some idea of the effect of these amusements on the common mind,—destroying the taste for home pleasures, and for all that was intellectual and simple.

What are we to think of a state of society where all classes had continual leisure for these sports! Habits of industry were destroyed, and all respect for employments that required labor. The rich were supported by contributions from the provinces, since they were the great proprietors of conquered lands; the poor had no solicitude for a living, since they were supported at the public expense. All therefore gave themselves up to pleasure. Even the baths, designed for sanatory purposes, became places of resort and idleness, and ultimately of intrigue and vice. In the time of Julius Caesar we find no less a personage than the mother of Augustus making use of the public establishments; and in process of time the Emperors themselves bathed in public with the meanest of their subjects. The baths in the time of Alexander Severus were not only kept open from sunrise to sunset, but even during the whole night. The luxurious classes almost lived in the baths. Commodus took his meals in the bath. Gordian bathed seven times in the day, and Gallienus as often. They bathed before they took their meals, and after meals to provoke a new appetite; they did not content themselves with a single bath, but went through a course of baths in succession, in which the agency of air as well as of water was applied; and the bathers were attended by an army of slaves given over to every sort of roguery and theft. Nor were water and air baths alone used; the people made use of scented oils to anoint their persons, and perfumed the water itself with the most precious essences. Bodily health and cleanliness were only secondary considerations; voluptuous pleasure was the main object. The ruins of the baths of Titus, Caracalla, and Diocletian in Rome show that they were decorated with prodigal magnificence, and with everything that could excite the passions,—pictures, statues, ornaments, and mirrors. The baths were scenes of orgies consecrated to Bacchus, and the frescos on the excavated baths of Pompeii still raise a blush on the face of every spectator who visits them. I speak not of the elaborate ornaments, the Numidian marbles, the precious stones, the exquisite sculptures that formed part of the decorations of the Roman baths, but of the demoralizing pleasures with which they were connected, and which they tended to promote. The baths ultimately became, according to the ancient writers, places of excessive and degrading debauchery.

"Balnea, vina, Venus corrumpunt corpora nostra."

If it were possible to allude to an evil more revolting than the sports of the amphitheatre and circus, or the extravagant luxuries of the table, I would say that the universal abandonment to money-making, for the enjoyment of the factitious pleasures it purchased, was even still more melancholy, since it struck deeper into the foundations which supported society. The leading spring of life was money. Boys were bred from early youth to all the mysteries of unscrupulous gains. Usury was practised to such an incredible extent that the interest on loans in some instances equalled, in a few months, the whole capital; this was the more aristocratic mode of making money, which not even senators disdained. The pages of the poets show how profoundly money was prized, and how miserable were people without it. Rich old bachelors, without heirs, were held in the supremest honor. Money was the first object in all matrimonial alliances; and provided that women were only wealthy, neither bridegroom nor parent was fastidious as to age, or deformity, or meanness of family, or vulgarity of person. The needy descendants of the old patricians yoked themselves with fortunate plebeians, and the blooming maidens of a comfortable obscurity sold themselves, without shame or reluctance, to the bloated sensualists who could give them what they supremely valued,—chariots and diamonds. The giddy women in love with ornaments and dress, and the godless men seeking what they should eat, could only be satisfied with what purchased their pleasures. The haughtiest aristocracy ever known on earth, tracing their lineage to the times of Cato and boasting of their descent from the Scipios and the Pompeys, accustomed themselves at last to regard money as the only test of their own social position. The great Augustine found himself utterly neglected at Rome because of his poverty,—being dependent on his pupils, and they being mean enough to run

away without paying him. Literature languished and died, since it brought neither honor nor emolument. No dignitary was respected for his office, only for his gains; nor was any office prized which did not bring rich emoluments. Corruption was so universal that an official in an important post was sure of making a fortune in a short time. With such an idolatry of money, all trades and professions which were not favorable to its accumulation fell into disrepute, while those who administered to the pleasures of a rich man were held in honor. Cooks, buffoons, and dancers received the consideration which artists and philosophers enjoyed at Athens in the days of Pericles. But artists and scholars were very few indeed in the more degenerate days of the empire; nor would they have had influence. The wit of a Petronius, the ridicule of a Martial, the bitter sarcasm of a Juvenal were lost on a people abandoned to frivolous gossip and demoralizing excesses. The haughty scorn with which a sensual beauty, living on the smiles and purse of a fortunate glutton, would pass in her gilded chariot some of the impoverished descendants of the great Camillus might have provoked a smile, had any one been found, even a neglected poet, to give them countenance and sympathy. But, alas! everybody worshipped at the shrine of Mammon; everybody was valued for what he *had*, rather than for what he *was*; and life was prized, not for those pleasures which are cheap and free as heaven, not for quiet tastes and rich affections and generous sympathies,--the glorious certitudes of love, esteem, and friendship, which, "be they what they may, are yet the fountain-life of all our day,"--but for the gratification of depraved and expensive tastes, of those short-lived enjoyments which ended with the decay of appetite and the *ennui* of realized expectation,--all of the earth, earthy; making a wreck of the divine image which was made for God and heaven, preparing the way for a most fearful retribution, and producing on contemplative minds a sadness allied with despair, driving them to caves and solitudes, and making death the relief from sorrow.

The fourteenth satire of Juvenal is directed mainly to the universal passion for gain and the demoralizing vices it brings in its train, which made Rome a Vanity Fair and even a Pandemonium.

The old Greek philosophers gloried in their poverty; but poverty was the greatest reproach to a Roman. "In exact proportion to the sum of money a man keeps in his chest," says Juvenal, "is the credit given to his oath. And the first question ever asked of a man is in reference to his income, rather than his character. How many slaves does he keep; how many acres does he own; what dishes are his table spread with?--these are the universal inquiries. Poverty, bitter though it be, has no sharper sting than this,--that it makes men ridiculous. Who was ever allowed at Borne to become a son-in-law, if his estate was inferior? What poor man's name appears in any will?"

And with this reproach of poverty there were no means to escape from it. Nor was there alleviation. A man was regarded as a fool who gave anything except to the rich. Charity and benevolence were unknown virtues. The sick and the miserable were left to die unlamented and unknown. Prosperity and success, no matter by what means they were purchased, secured reverence and influence.

Such was imperial Rome, in all the internal relations of life, and amid all the trophies and praises which resulted from universal conquest,--a sad, gloomy, dismal picture, which fills us with disgust as well as melancholy. If any one deems it an exaggeration, he has only to read Saint Paul's first chapter in his epistle to the Romans. I cannot understand the enthusiasm of Gibbon for such a people, or for such an empire,--a grinding and resistless imperial despotism, a sensual and proud aristocracy, a debased and ignorant populace, enormously disproportionate conditions of fortune, slavery flourishing to a state unprecedented in the world's history, women the victims and the toys of men, lax sentiments of public and private morality, a whole people given over to demoralizing sports and spectacles, pleasure the master passion of the people, money the mainspring of society, a universal indulgence in all the vices which lead to violence and prepare the way for the total eclipse of the glory of man. Of what value was the cultivation of Nature, or a splendid material civilization, or great armies, or an unrivalled jurisprudence, or the triumph of energy and skill, when the moral health was completely undermined? A world therefore as fair and glorious as our own must needs crumble away. There were no powerful conservative forces; the poison had descended to the extremities of the social system. A corrupt body must die when vitality has fled. The soul was gone; principle, patriotism, virtue, had all passed away. The barbarians were advancing to conquer and desolate; there was no power to resist them but enervated and timid legions, with the accumulated vices of all the nations of the earth, which they had been learning for four hundred years. Society must needs resolve itself into its original elements when men would not make sacrifices, and so few belonged to their country. The machine was sure to break up at the first great shock. No State could stand with such an accumulation of wrongs, with such complicated and fatal diseases eating out the vitals of the empire. No form of civilization, however brilliant and lauded, could arrest decay and

ruin when public and private virtue had fled. The house was built upon the sand.

The army might rally under able generals, in view of the approaching catastrophe; philosophy might console the days of a few indignant citizens; good Emperors might attempt to raise barriers against corruption,—still, nothing, according to natural laws, could save the empire. Even Christianity could not arrest the ruin. It had converted thousands, and had sowed the seeds of future and better civilizations. It was sent, however, not to save a decayed and demoralized empire, but the world itself. Not until the Germanic barbarians, with their nobler elements of character, had taken possession of the seats of the old civilization, were the real triumphs of Christianity seen. Had the Roman empire continued longer, Christianity might have become still more corrupted; in the prevailing degeneracy it certainly could not save what was not worth preserving. The strong grasp which Rome had laid upon the splendors of all the ancient Pagan Civilizations was to be relaxed. Antiquity had lived out its life. The empire of the Caesars was doomed. Retributive justice must march on in its majestic course. The empire had accomplished its mission; the time came for it to die. The Sibylline oracle must needs be fulfilled: "O haughty Rome, the divine chastisement shall come upon thee; fire shall consume thee; thy wealth shall perish; foxes and wolves shall dwell among thy ruins: and then what land that thou hast enslaved shall be thy ally, and which of thy gods shall save thee? For there shall be confusion over the face of the whole earth, and the fall of cities shall come."

AUTHORITIES.

Mr. Merivale has written fully on the condition of the empire. Gibbon has occasional paragraphs which show the condition of Roman society. Lyman's *Life of the Emperors* should be read, and also DeQuincey's *Lives of the Caesars*. See also Niebuhr, Arnold, Mommsen, and Curtius, though these writers have chiefly confined themselves to republican Rome. But if one would get the truest and most vivid description, he must read the Roman poets, especially Juvenal and Martial. The work of Petronius is too indecent to be read. Ammianus Marcellinus gives us some striking pictures of the later Romans. Suetonius, in his *Lives of the Caesars*, furnishes many facts. Becker's *Gallus* is a fine description of Roman habits and customs. Lucian does not describe Roman manners, but he aims his sarcasm at the hollowness of Roman life, as do the great satirists generally. These can all be had in translations.

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