The Fine Arts are stimulated by the study of the classical past.

To the same end as the new learning contributed in perhaps even a higher degree the bloom of the Fine Arts. Sculpture, painting, and, especially, architecture had been busily cultivated since the revival of town life, and reached in the thirteenth century a monumental climax in the Gothic cathedral. No society and no period has ever raised itself a more impressive memorial. Much of our too ready contempt for the Middle Ages will subside if we pause to reflect that the great Gothic cathedrals are pure mediæval products, developed by mediæval architects, practically without help from any age. Sculpture and painting, too, gave expression to mediæval ideals, but in a halting way and with very deficient equipment, until the revival of learning called attention to the models left by Rome and Greece. Then began a passionate study of antique forms and presently of living men and women, which gave these arts a firm footing in life itself. It was in Italy, in such centres as Pisa and Florence, that the arts were first fructified by contact with the classic genius, and though the revival soon spread to other countries, Italy, which started the movement, retained its preëminence for many generations. Almost every city among that vivacious people developed a particular school or style of architecture, sculpture, and painting. A marvellous wealth and diversity of production, the joy of every modern student, characterizes the period, but cannot be followed here. Suffice it to glance at the single case of Florence. She boasted Brunellesco, the architect; Donatello and Michael Angelo, the sculptors; and aside from Giotto (d. 1336), who still moved among mediæval forms and conceptions, Masaccio, Fra Filippo Lippi, Botticelli, and Leonardo da Vinci, the painters. And these are only the more conspicuous names of the great galaxy which shed its splendor upon the Arno city.

# IV. The Return to Nature and the Progress of Science and Mechanical Inventions.

The influences already enumerated—the increasing wealth The birth and independence of the burgher class, the wider outlook secured by the discoveries, the new ideas derived from Greece and Rome—revived the scientific spirit, which means, in essence, the desire for exact information about the world in which we live. Mediæval men had not looked about in nature with open or very curious eyes, and had been content to accept the bookish theories of the universe inculcated by theology. But with the quickening of intelligence men began to make personal observations and record natural facts, and not only came upon much that was at variance with the teaching of the Church, but upon many things that were entirely new. The Portuguese and Spanish voyages, besides charting hitherto unknown seas and coasts, accumulated a vast heap of information about peoples, languages, plants, and animals. Such studies as geography, ethnology, botany, and astronomy were gradually revolutionized. This prolonged and vigorous stimulation of thought finally culminated in the epoch-making discovery of the true relation of our world to the other heavenly bodies. Although the theory of the Greek astronomer Ptolemy of the rotundity of the earth was never entirely forgotten, mediæval men had generally held that the earth was flat and was the centre of the universe. Hardly had Columbus and his followers proved that Ptolemy was right, when a Polish astronomer, Copernicus (1473-1543), took another forward Copernicus step by establishing that our earth turned on its axis and system. together with the other planets revolved around the sun.

The new knowledge of nature and the growing acquaint- Inventions. ance with her laws greatly stimulated invention. It requires no explanation that man should at all times welcome

the simplification of a recurring task by means of some mechanical manipulation. Even savages are engaged in making inventions, and the Middle Ages were not so torpid as not to show this inherent tendency of our race, which was naturally stirred into a heightened activity with the advent of the Renaissance. Let us enumerate some of these inventions, noting briefly how they made life less of a burden and more of a pleasure, and man himself a more effective master of his environment. The compass-probably borrowed from the Chinese-came into general use among mariners, and took much of the terror from the trackless seas; a method of musical notation, which has secured the systematic development of the art of music, was devised, probably in Italy; in the Netherlands a body of artists, and notably Jan van Eyck, developed a durable method of painting by dissolving the color pigments in oil; and paper made from the pulp of rice straw, linen, and the inner bark of trees replaced the much more expensive parchment prepared from the hides of animals. Particularly important was the invention of gunpowder and printing, for they proved revolutionary agencies of the first magnitude. This deserves to be set forth more explicitly.

Gunpowder and printing.

If the Middle Ages were completely dominated by the feudal lords, it was largely because the landholding gentry, clad in armor and mounted on horseback, constituted the military force. The peasants, fighting on foot, armed sometimes only with scythes and clubs, were no match for them. With the invention of gunpowder—it came into gradual use during the fourteenth century-a weapon was put into the hands of the infantry which, coupled with improvements in drill and discipline, made them more than a match for the highborn cavaliers, while the use of artillery destroyed the impregnability of the moated castles from behind which their owners had defied society and its laws. And just as gunpow-

der impaired the military prestige of the nobility, so printing put an end to the intellectual monopoly of the upper orders and, above all, the clergy. The invention of this art is generally ascribed to John Gutenberg of the city of Mainz, whose first book printed with movable types appeared about 1450. So long as learning and literature could be acquired only from hand-copied parchments, they were beyond the reach of all except the nobles and the rich corporations of the Church. Printing with movable types and on paper immensely cheapened the manufacture of books, and put them within the means of the middle classes. Merchants began to acquire libraries, reading became more general, knowledge more diffused. Thus gunpowder and printing tended to close the gap between lords and commoners, and contributed powerfully to the gradual democratization of society.

# V. The Development of Individuality.

In this enumeration of new interests and activities little In the has yet been said as to how they affected the point of view man is from which men looked at themselves and the world. We subordinated to the group. have agreed that the Renaissance created the modern man, but something remains to be said as to how he differs from his mediæval ancestor. The mediæval European lived among rude, agricultural conditions, where thought was little stimulated and had consequently fallen into stereotyped forms. Society was stamped with the principle of caste. Every man was associated with a particular class, and unhesitatingly accepted its conditions; he was a cleric, a nobleman, a peasant, a citizen, and within his city the member of a guild. His rights and obligations, his manners, and even his dress derived from the group to which he belonged.

Now the Renaissance broke up the group by endowing In the man with an expanding individuality, which made him im- man is emanpatient with the trammels imposed by his class. Business the group.

enterprise and travel made him self-reliant; the new learning, the new science supplied him with an immense number of new facts; he developed the faculty of criticism and applied it to the state, to art, to his fellow-man, even to the Church. Sustained, enlarged, exalted, he ventured forth from the shelter of the group, and proclaimed the right of every man to shape his fortune by his individual efforts. The emancipated man, emancipated from the group and class idea, emancipated from a narrow code of conduct, emancipated from abstruse, theological learning, is the most splendid flower of the Renaissance.

Self-develop-ment and the universal man.

Individuality, the vigorous consciousness of the joys, the sorrows, the power, the resources of self, became the passion of the day. In their extravagant reaction against the restraints imposed by superstition, men came to hold that the individual was justified in breaking through every barrier which stood in the way of his development. Perhaps no age has produced so many remarkable men and women. But the excess of freedom frequently led to license, especially in Italy, and in that country, by the side of the many great men, such as Petrarch and Columbus, lived some of the supreme villains of history, like Alexander VI. and his son, Cæsar Borgia. But even the crimes of a Borgia escape comparison with vulgar offences by reason of their imposing audacity. With perfect logic this belief in the unlimited rights and powers of the ego led to the concept of the universal man. He was the happy individual who by consistent self-development made himself lord of all science and skill-a god. We smile at such presumption now. But it is astonishing how near the Renaissance came toward achieving its ideal. Look at Leonardo da Vinci and Michael Angelo, who practised painting, sculpture, architecture, and engineering. To make the measure full, Michael Angelo was a poet. Subsequent generations of men have moderated their ambition,

but it is undeniable that the Renaissance ideal of universal culture has greatly influenced the whole modern age. Shakespeare and Goethe are later manifestations of it.

### VI. The Political Evolution.

I have already called attention to the fact that the land, The mediaval and with the land the political authority, was held in the monarchy. Middle Ages by the feudal barons. It is true that the states of Europe were organized as monarchies, but the monarchs were largely under the control of their barons, who met in diets or parliaments and discussed peace and war and the other business of the realm. The period tells of many kings who were violent and arbitrary, but of none who were absolute in the sense that they were the sole source of authority. In short, the mediæval governments were oligarchies rather than absolutisms.

Now the agents to which we have given our attention—Growing political impolitical impoliti the development of industry, the revival of learning, the inventions—threatened and undermined this predominance of the nobles. The cities in particular profited by the new influences, and, tired at last of being choked and hampered by their lords, won self-government. We have referred to their victory, which must not, however, be understood to have terminated the strife. Outside the walls, in the countryside, the struggle between the two hostile classes was bound to continue as long as the barons commanded the trade routes, which were the very arteries of town life. But in this pass the cities won an ally, who was none other than the king; for the king, too, hated the nobility, whose lust of power had kept him in dependence on them. The king could see, what was clear as day, that to strengthen the cities was to advance his own cause. He therefore not only helped them obtain their charters of liberty, but also favored their admission to representation in the national councils. As

early as 1160 we find representatives of the cities sitting in the Cortes of Castile; in 1295 the burgesses or commoners were definitely admitted to the English Parliament; in the fourteenth century they were associated as a third estate with the National Assembly of France; and in the fifteenth century they became a house of the German Diet.

Growth of absolutism.

Thus everywhere may be observed the mounting importance of the cities. But every forward step they took meant a new loss for the nobility and by implication a new gain for the burghers' ally, the king. His power grew by leaps and bounds, until it became his ambition to free himself from every check. We shall see all sixteenth-century kings striving toward this goal, and we shall be obliged to acknowledge that this movement toward absolutism was, on the whole, beneficial to civilization, since only in this way could the feudal nobility be crushed, and the sharply separated classes of nobles, clergy, burghers, artisans, and peasants be welded into a single people. The kings supposed they were building only for themselves, but the subsequent development showed that they were really working in the interests of the nation.

#### CHAPTER II

THE EUROPEAN STATES AT THE BEGINNING OF THE MODERN PERIOD

### The Empire.

REFERENCES: LODGE, Close of the Middle Ages, Chapter XVII.; BRYCE, The Holy Roman Empire, Chapter XVII.; HENDERSON, A Short History of Germany, Vol. I., Chapters VII., X.; THE CAMBRIDGE MODERN HIS-TORY, Vol. I., Chapter IX.

THE Roman Empire, which at the birth of Christ em- Decay of the braced the whole civilized world, had lost its hold upon Holy Roman Empire. western Europe after the Teutonic migrations. However, on Christmas Day, 800 A.D., Charlemagne, king of the most powerful of the Teutonic tribes, the Franks, took the title Roman Emperor, and thus revived the traditions of the Empire in the west. Since the resuscitated Empire was dedicated to the advance of religion and closely leagued with the Church, it was presently designated as Holy. The struggle and decay of the Holy Roman Empire is one of the main themes of mediæval history. It consistently lost ground, both as against the Church and the subject-nationalities which it embraced, and at the beginning of the Modern Period had been practically reduced to the national state of Germany. By the year 1500, therefore, the words Empire and Germany have, to all intents and purposes, become interchangeable terms.