WOMAN IN SCIENCE

CHAPTER I

WOMAN'S LONG STRUGGLE FOR THINGS OF THE MIND

WOMAN AND EDUCATION IN ANCIENT GREECE

I purpose to review the progress and achievements of woman in science from her earliest efforts in ancient Greece down to the present time. I shall relate how, in every department of natural knowledge, when not inhibited by her environment, she has been the colleague and the emulatress, if not the peer, of the most illustrious men who have contributed to the increase and diffusion of human learning. But a proper understanding of this subject seems to require some preliminary survey of the many and diverse obstacles which, in every age of the world's history, have opposed woman's advancement in general knowledge. Without such preliminary survey it is impossible to realize the intensity of her age-long struggle for freedom and justice in things of the mind or fully to appreciate the comparative liberty and advantages she now enjoys in almost every department of intellectual activity. Neither could one understand why woman's achievements in science, compared with those of men, have been so few and of so small import, especially in times past, or why it is that, as a student of nature or as an investigator in the various realms of pure and applied science, we hear so little of her before the second half of the nineteenth century.

To exhibit the nature of the difficulties woman has had to contend with in every age and in every land, in order to secure what we now consider her inalienable rights to things of the mind, it is not necessary to review the history of female education, or to enter into the details of her gradual progress forward and upward in the New and Old Worlds. But it is necessary that we should know what was the attitude of mankind toward woman's education during the leading epochs of the world's history and what were, until almost our own day, the opinions of men—scholars and rulers included—respecting the nature and the duties of woman and what was considered, almost by all, her proper sphere of action. Understanding the numerous and cruel handicaps which she had so long to endure, the opposition to her aspirations which she had to encounter, even during the most enlightened periods of the world's history, and that, too, from those who should have been the first to extend to her a helping hand, we can the better appreciate the extent of her recent intellectual enfranchisement and of the value of the work she has accomplished since she has been free to exercise those God-given faculties which were so long held in restraint.

The first great bar to the mental development of woman was the assumed superiority of the male sex, the opinion, so generally accepted, that, in the scheme of creation, woman was but "an accident, an imperfection, an error of nature"; that she was either a slave conducing to man's comfort, or, at best, a companion ministering to his amusement and pleasure.

From the earliest times she was regarded as man's inferior and relegated to a subordinate position in society. She was, so it was averred, but a diminutive man—a kind of mean between the lord of creation and the rest of the animal kingdom. By some she was considered a kind of half man; by others, as was cynically asserted, she was looked upon as a *mas occasionatus*—a man marred in the making. She was, both mentally and physically, what Spencer would call a man whose evolution had been arrested, while man, as in the modern language of Darwin, was a woman, whose evolution had been completed.

When such views prevailed, it was inevitable that, so long as physical force was the *force majeure*, a woman should be relegated to the position of a slave or to that of "a mere glorified toy." Every man then said, in effect, if not in words, of the woman who happened to be in his power what Petruchio said of Katherine:

> "I will be master of what is mine own,
> She is my goods, my chattels; she is my house,
> My household stuff, my field, my barn,
> My horse, my ox, my ass, my everything."

Even after civilization had superseded savagery and barbarism, it was still inevitable, so long as such views found acceptance, that woman should continue to be held in vassalage and ignorance and to suffer all the disabilities and privations of "the lesser man." She was studiously excluded from civic and social functions and compelled to pass her life in the restricted quarters of the harem or gyneceum. This was the case among the Athenians, as well as among other peoples; for, during the most brilliant period of their history, women, when not slaves or hetæræ, were considered simply child-bearers or housekeepers.[1] A girl's education, when she received any at all, was limited to reading, writing and music, and for a knowledge of these subjects she was dependent on her mother. From her earliest years the Athenian maiden was made to realize that the great fountains of knowledge, which were always available for her brothers, were closed to her. Her duty was to become proficient in the use of the needle and the distaff, and, later on, to learn how to embroider, to ply the loom and make garments for herself and for the other members of her family.

Until she was seven years old, she was brought up with her brothers under the eye of her mother. During this period of childhood she had a certain amount of freedom, but,

after her seventh year, she was kept in the gyneconitis—women's quarters—"under the strictest restraint, in order," as Xenophon informs us in his *Œconomicus*, "that she might see as little, hear as little and ask as few questions as possible." On rare occasions she was permitted to be a spectator at a religious procession, or to take part in certain of the choral dances that constituted so important a part in the religious ceremonies of ancient Greece. Whether in public or in private, silence was always considered an imperative duty for a woman.

But more than this. Not only was she expected to observe silence herself, but she was also expected so to conduct herself that no one would have occasion to speak about her. Pericles, in a celebrated discourse, gave expression to the prevailing opinion regarding this phase of female excellence when, on a notable occasion, he addressed to a certain number of women the following words: "Great will be your glory in not falling short of your natural character; and greatest will be hers who is least talked of among men whether for good or for evil."[2]

From the foregoing observations it will be seen that the general attitude of the Athenians toward woman was anything but favorable to her intellectual development, or to her exerting any influence beyond the limits of her own household. And what is said of the Greeks can be affirmed, with still greater emphasis, of the other nations of antiquity. Indeed, it can be safely asserted that, had they all entered into a solemn compact systematically to discredit woman's mental capacity and to repress all her noblest aspirations, they could not have succeeded more effectually than by the methods they severally adopted. In ancient Greece the condition of woman was little better than it is in India to-day under the law of Manu, where the husband, no matter how unworthy he may be, must be regarded by the wife as a god.

And yet, notwithstanding the dominant force of public opinion and the strange traditional prejudices that possessed for the majority of people all the semblance and commanding power of truth, woman was here and there able to break through the barriers that impeded her progress in her quest of knowledge and to defy the social conventions that precluded her from being seen or heard in the intellectual arena.

One of the first and most notable of Greek women to assert her independence and to emerge from the intellectual eclipse which had so long kept her sex in obscurity, was the Lesbian Sappho, who, as a lyric poet, stands, even to-day, without a superior. So great was her renown among the ancients that she was called "The Poetess," as Homer was called "The Poet." Solon, on hearing one of her songs sung at a banquet, begged the singer to teach it to him at once that he might learn it and die. Aristotle did not hesitate to endorse a judgment that ranked her with Homer and Archilochus, while Plato, in his Phædrus, exalts her still higher by proclaiming her "the tenth Muse." Horace and Ovid and Catullus strove to reproduce her passionate strains and rhythmic beauty; but their

efforts were little better than paraphrase and feeble imitation. Her features were stamped on coins, "though she was but a woman," and, after her death, altars were raised and temples erected in honor of this "flower of the Graces," of

> "That mighty songstress, whose unrivaled powers
> Weave for the Muse a crown of deathless flowers."

Second only to the "violet-crowned, pure, sweetly-smiling Sappho," as her rival, Alcæus, calls her, were Gorgo, Andromeda and Corinna. The last of these was the teacher of Pindar, the celebrated lyric poet, whom she defeated five times in poetic contests in Thebes.[3] She was one of the nine lyrical muses, corresponding to "the celestial nine," who dwelt on the sacred slopes of Helicon.[4] Telesilla and Praxilla were two others. The last named was by her countrymen ranked with Anacreon.

Scarcely inferior to Corinna were those ardent pupils of Sappho, who had flocked from the sunny isles of the Ægean and the laurel-crowned hills of Greece around "the fair-haired Lesbian" in her island home, which was, at the same time, a school of poetry and music. The most gifted of these were Danophila, the Pamphylian, and Erinna, whose hexameters were said by the ancients to reveal a genius equal to that of Homer. She died at the early age of nineteen and has always excited a pathetic interest because, like so many others of her sex since her time—women and maidens of the loftiest spiritual aspirations,—she was condemned to the spindle and the distaff when she wished to devote her life to the service of the Muses. The following is her own epitaph:

> "These are Erinna's songs, how sweet, though slight!
> For she was but a girl of nineteen years.
> Yet stronger far than what most men can write;
> Had death delayed, whose fame had equaled hers?"

Never before nor since did such a wave of feminine genius pass over the fragrant valleys and vine-clad plains of Greece. Never in any other place or time shone so brilliant a galaxy of women of talent and imagination; never was there a more perfect flowering of female intelligence of the highest order. According to tradition, there appeared in the favored land of Hellas, when the entire population of the country was not equal to that of a fair-sized modern city, within the brief space of a century, no fewer than seventy-six women poets. When we remember that the Renaissance produced only about sixty female poets, though in a more extended territory and with a much larger population, and that none of them could approach the incomparable Sappho, or even many of her pupils, in the perfection of their work, we can realize the splendor of the achievements of the female intellect in the Hellenic world during the golden age of feminine poetic art.[5]

One would think that this phenomenal outburst of mental vigor, and especially the marvelous achievements of Sappho, Corinna and those of their pupils and followers, would have compelled the world for all subsequent time to recognize the innate power of the female mind, and perceive the wisdom—not to say justice—of according to women the same advantages for the development of their inborn gifts as were afforded to men. They had proved that, under favorable conditions, there was essentially no difference between the male and the female intellect, and that genius knows no sex. And this they demonstrated not only in poetry, but also in philosophy and in other branches of human knowledge as well.

Among those who had especially distinguished themselves were Hipparchia, the wife of the philosopher Crates; Themista, the wife of Leon and a correspondent of Epicurus, who was pronounced "a sort of female Solon"; Perictione, a disciple of Pythagoras, who distinguished herself by her writings on *Wisdom* and *The Harmony of Woman*, and Leontium, a disciple and companion of Epicurus, who wrote a work against Theophrastus, which was pronounced by Cicero a model of style.

And was not the school of Pythagoras at Crotona continued after his death by his daughter and his wife, Theano? And did not this fact alone manifest woman's capacity for abstract thought, as effectively as the Lesbian school had demonstrated her talent for consummate verse?[6]

But it was all to no purpose. The comparative freedom and advantages which Sappho, Corinna and their friends had enjoyed was soon—for some reason scarcely comprehensible by us—taken from all the women of Greece except the peculiar class known in history as *hetæræ*—companions. These we should now rank among the *demimonde*, but the Greek point of view was different from ours. The hetæræ were the friends and companions of the men who spent most of their time in public resorts, and they accompanied them to the gymnasium, to banquets, the games, to the theater and other similar assemblies from which the wives and daughters of the Athenians, during the golden age of Greece, were rigorously excluded. For so great was the seclusion in which the wives of the Greeks then lived that they never attended public spectacles and never left the house, unless accompanied by a female slave. They were not permitted to see men except in the presence of their husbands, nor could they have a seat even at their own tables, if their husbands happened to have male guests.

It was by reason of this strict seclusion and the enforced ignorance to which they were subjected that we hear very little of the virtuous women of this period of Greek history. We have records of a few instances of filial and conjugal affection, but, outside of this, the names of the wives and daughters of even the most distinguished citizens have long since passed into oblivion. Only the hetæræ attracted public notice, and only among them, during the period to which reference is now made, do we find any women who

achieved distinction by their intellectual attainments, or by the influence which they exerted over those with whom they were associated.

But strange as it may appear, these extra-matrimonial connections, far from incurring the censure which they would now provoke, received the cordial recognition of both legislators and moralists, and even those who were considered the most virtuous among men openly entered into these relations without exposing themselves to the slightest stigma or reproach. Many of the hetæræ, contrary to what is sometimes thought, were "of highly moral character, temperate, thoughtful and earnest, and were either unattached or attached to one man, and to all intents and purposes married. Even if they had two or three attachments but behaved in other respects with temperance and sobriety, such was the Greek feeling in regard to their peculiar position that they did not bring down upon themselves any censure from even the sternest of the Greek moralists."[7]

The most famous men of Greece, married as well as unmarried, had their "companions," many of whom were as distinguished for their accomplishments as for their wit and beauty. Thus Epicurus had Leontium, Menander Glycera, Isocrates Metaneira, Aristotle Herpyllis, and Plato Archlanassa, while Aristippus, the philosopher, Diogenes, the cynic, and Demosthenes, the great orator, each had a companion bearing the name of Lais.[8] More than this. So strongly had many of the hetæræ impressed themselves on the esthetic sense of the beauty-loving Greeks that not a few of them had statues erected in their honor, especially in Athens and Corinth, and thus shared in the honor that hitherto had been reserved exclusively for the goddess of beauty and love, fair Aphrodite.

The hetæræ from Ionia and Ætolia were particularly conspicuous for their intelligence and culture. And all of them, whencesoever they came, enjoyed unrestricted liberty and, unlike the wives of the citizens of Athens, had free access to the Portico and the Academy and the Lyceum, and were permitted to attend the lectures of the philosophers on the same footing as the men. Thus, to mention only a few, Thais was a pupil of Alciphron, Nicarete of Stilpo, and Lasthenia of Plato.

And so keen were their intellects and so marked was their progress in the most abstract studies, that many of them were recognized as the most distinguished pupils of their masters. This accounts, in part, for the popularity of their salons, at which were gathered the most eminent statesmen, poets, artists, philosophers and orators of the day. The nearest approach in modern times to such trysting-places, where beauty, wit and talent found a congenial atmosphere, were the celebrated salons of Ninon de Lenclos, Mlle. de l'Espinasse and Mme. du Deffand. At these reunions were discussed, not only the news of the day, but also, and especially, art, science, literature and politics, and always to the advantage of both guests and hostesses.

Possessing such freedom and enjoying such splendid opportunities for culture and intellectual advancement, it is not surprising that the hetæræ played so remarkable a rôle in the social and civic life of Greece, and that they were able to wield such influence over their associates, and that they often attained even the highest royal honors. Nor is it surprising to read in Plato's *Symposium* the splendid tribute which Socrates renders to Diotima of Mantinea, when, in discussing the true nature of divine and eternal beauty, he speaks of her as his teacher.

Many of the hetæræ were not only the models but also the inspirers of the most famous painters and sculptors of antiquity. Thus, Lais was the companion and inspirer of Apelles, the most noted painter of Greece, while Phryne, said to have been the most beautiful woman who ever lived, was the inspirer of the peerless Praxitiles, who, in reproducing her form, succeeded in bequeathing to the world what was undoubtedly the most lovely representation of "the human form divine" that ever came from a sculptor's chisel.[9]

On account of the relations of the hetæræ, especially those of the fourth and fifth centuries B.C., with the greatest men of their time, the writers of antiquity thought them of sufficient importance to preserve their history. One author has left us an account of no fewer than one hundred and thirty-five of them. But, of all those whose names have come down to us, by far the most noted, accomplished and influential was the famous Aspasia of Miletus. In many respects she was the most remarkable woman Greece ever produced. Of rare talent and culture, of extraordinary tact and finesse, of a fascinating personality combined with the grace and sensibility of her sex, together with a masculine power of intellect, "this gracious Ionian," as has well been said, "stands with Sappho on the pinnacle of Hellenic culture, each in her own field the highest feminine representative of an esthetic race."

At an early age she won the passionate love of the great statesman Pericles, after which she entered upon that marvelous career which secured for her a place in the front rank of the most eminent women of all time. "Her house became the resort of all the great men of Athens. Socrates was often there. Phidias and Anaxagoras were intimate acquaintances, and probably Sophocles and Euripides were in constant attendance. Indeed, never had any woman such a salon in the whole history of man. The greatest sculptor that ever lived, the grandest man of all antiquity, philosophers and poets, sculptors and painters, statesmen and historians, met each other and discussed congenial subjects in her rooms. And probably hence has arisen the tradition that she was the teacher of Socrates in philosophy and politics, and Pericles in rhetoric. Her influence was such as to stimulate men to their best, and they attributed to her all that was best in themselves. Aspasia seems especially to have thought earnestly on the duties and destiny of women. The cultivated men who thronged her assemblies had no hesitation in breaking through the conventionalities of Athenian society, and brought their wives to

the parties of Aspasia; and she discussed with them the duties of wives. She thought they should be something more than mere mothers and housewives. She urged them to cultivate their minds, and be in all respects fit companions for their husbands."[10]

She is said to have written some of the best speeches of Pericles—among them his noted funeral oration over those who had died in battle before the walls of Potidæa. As to Socrates, he himself explicitly refers to her, in the *Memorabilia*, as his teacher. She is a notable character in the Socratic dialogues and appears several times in those of Æschines, while there is every reason to believe that she strongly influenced the views of Plato, as expressed by him in the *Republic* respecting the equality of woman with man.

She was continually consulted regarding affairs of state, and her influence in social and political matters was profound and far-reaching. This is evidenced by the abuse heaped upon her by the comic dramatists of the time. Referring to the ascendancy which she had over Pericles, she was called Dejanira, the wife of Hercules; Hera, the queen of the gods and wife of the Olympian Jove. It was asserted by her enemies that the Samian war had been brought about at her instigation and that the Peloponnesian war had been undertaken to avenge an insult which had been offered her. These and similar statements which, when not absurd, were greatly exaggerated, show the boundless influence she wielded over Pericles, and what an important part she took in the government of Greece in the zenith of its glory.

But, however great her influence, we are warranted in asserting that it was never exercised in an illegitimate manner. She was ever, as history informs us, the good, the wise, the learned, the eloquent Aspasia. It was her goodness, her wisdom, her rare and varied accomplishments, her clear insight and noble purposes that gave her the wonderful power she possessed and which enabled her, probably more than any one person, to make the age of Pericles not only the most brilliant age of Greek history, but also the most brilliant age of all time.[11]

But, notwithstanding the beneficent influence which Aspasia ever exerted on those about her, notwithstanding the heroic efforts she had made to liberate her own sex from the restrictions that had so long harassed and degraded it, the wives and daughters of the citizens of Athens were still kept in almost absolute seclusion and denied the opportunities of mental culture which were so generously accorded the free-born hetæræ from Asia Minor and the islands of the Ægean. Socrates, as we learn from Xenophon, asserted woman's equality with man, while Plato taught that mentally there was no essential difference between man and woman. He concluded, accordingly, that women of talent should have the same educational advantages as men. In *The Republic* as well as in the *Laws*, when he refers to education—which he would make compulsory for "all and sundry, as far as possible"—his views are far in advance of those which

have been entertained until the last half century. He would have girls as well as boys thoroughly instructed in music and gymnastic—"music for the mind and gymnastic for the body."[12]

In the *Laws* he contends that "women ought to share, as far as possible, in education and in other ways with men. For consider:—if women do not share in their whole life with men, then they must have some other order of life."

Again he asserts "Nothing can be more absurd than the practice which prevails in our own country of men and women not following the same pursuits with all their strength and with one mind, for thus the state, instead of being a whole, is reduced to a half."[13]

In *The Republic* he expresses the same idea when he affirms that "the gifts of nature are alike diffused in both"—men and women—"all the pursuits of men are the pursuits of women."[14]

These opinions of Socrates and Plato are so at variance with those of their contemporaries, and so contrary to the custom that then obtained of excluding all but free-born hetæræ from the advantages of education and culture, that we cannot but think that they were due to the profound influence which had been exercised directly or indirectly by Aspasia on both of these great philosophers. Be this as it may, neither the efforts of Aspasia nor the teachings of Socrates and Plato were able to remove the bars to intellectual development from which the women of Greece had so long suffered. A change in customs and laws concerning the rigid, oriental seclusion of women did not come until much later, and then it was under a new régime—that of the Cæsars—while complete equality of men and women in school and college was not recognized until long centuries afterward.

It is interesting to speculate regarding what Greece would have become had she developed her women as she developed her men. Never in the history of the world were there in any one city so many eminent men—poets, orators, statesmen, painters, sculptors, architects, philosophers—as in Athens, and yet not a single native-born Athenian woman ever attained the least distinction in any department of art or science or literature. We cannot conceive for a moment that Greece's fertility in great men and barrenness in great women was due to the fact that the mothers of such illustrious men were ordinary housewives and entirely devoid of the talent and genius which gave immortality to their distinguished sons. The careers of Aspasia and the achievements of Sappho, Corinna, Myrtides, Erinna, Praxilla, Telesilla, Myrus, Anytæ and Nossidis, Theano and her daughter, to mention no others, absolutely preclude such an assumption.

The women in Greece, there can be no doubt about it, were as richly endowed by nature as were the men, and only lacked the opportunities that men enjoyed to achieve, in every

sphere of intellectual activity, a corresponding measure of success. They were extraordinary types, these women of ancient Greece; for among them we find the dignified Roman matron, the chatelaine of the Middle Ages, the brilliant woman of the Renaissance and the cultured mistress of the French *salon*. But all their talent, power and genius counted for naught.

Had the civilization of Greece been a woman's civilization, as well as a man's civilization, had there been a federation of all the Greek states, as Aspasia seems to have striven for, instead of a number of small and independent city-states; had the women of Hellas been allowed the same liberty of action in intellectual work as was granted to the Italian women during and after the revival of letters, and had they been encouraged to develop all their latent powers that were so systematically suppressed, and to work in unison with the men for the welfare and advancement of a united nation, it is difficult to imagine what a dazzling intellectual zenith a supremely gifted people, "full summ'd in all their powers," would have attained. Their capacity for work and for achieving great things would have been doubled and their power as a political organization would have been practically irresistible.

"We are the only women that bring forth men," said Gorgo, the wife of Leonidas. The Spartan mothers, who had more of liberty than their Athenian sisters, did, indeed, bring forth warriors of undying renown; but it was the mothers of Athens who, notwithstanding all their grievous disabilities, gave to the world all the greatest masters in art, literature, and philosophy—the men who through the ages have been the leaders and the teachers of humanity, and who seem destined to hold their exalted position until the end of time.

The failure of the men of Greece to avail themselves of the immense potential power, which they always kept latent in their women, was the occasion of a terrible nemesis in the end. For this failure, coupled with the frightful license introduced by a class of educated women, like the hetæræ, without legal status or domestic ties, and the wave of corruption that subsequently followed the advent of the countless dissolute women who flocked to the Hellenic cities from every part of the East, paved the way for the nation's downfall and for its ultimate conquest by the resistless Roman legions that swept the once glorious but ill-fated country of Pericles and Aspasia.

WOMAN AND EDUCATION IN ANCIENT ROME

The condition of women in Rome, especially from 150 B.C. to 150 A.D., was quite different from what it was in Athens, even during her palmiest days. Owing to the lack of authentic documents we know but little of the history of the Roman people during the

first five hundred years of their existence, but we do know that during this period many and important changes were effected regarding the social and civil status of women.

In the first place the Roman matron had much more freedom than was accorded the Greek wife during the age of Pericles. Far from being kept in oriental seclusion, like her Athenian sister, she was at liberty to receive and dine with the friends of her husband, and to appear in public whenever she desired. She went to the theater and the Forum; she took part in all reputable entertainment, whether public or private. Besides this, she had more and greater legal rights than Greek women had ever known, and was treated rather as the peer and companion of man than as his toy or his slave.

Besides this, foreign women were never so conspicuous in Rome as in Athens. Even after Greece had become a Roman province, and after *Græcia capta Romam cepit*—when Greek ideas and Greek customs were introduced into the capital of the Roman world—it was still the Roman matron that was supreme. And, although many Greek women, some of them of rare beauty and culture, found their way to Rome, especially under the empire, they were always kept in the background and never succeeded in achieving anything approaching the ascendancy which distinguished them during the time of Aspasia. Their influence in literature and politics was almost *nil*.

In the case of the women of Rome, on the contrary, it may well be questioned whether woman has ever wielded a greater influence than she did during the three centuries that followed the reign of Augustus. But she did not attain to this position of preëminence without a long and bitter struggle. Every advance toward the goal of social and intellectual equality was strenuously contested by the men, who wished to limit the activities of their wives to the spindle, the distaff and the loom and the other occupations of the household. For, as in Greece, the generally accepted view was that woman, in the language of Gibbon, "was created to please and obey. She was never supposed to have reached the age of reason or experience." And her noblest epitaph, it was averred, was couched in the following words:

"She was gentle, pious, loved her husband, was skillful at the loom and a good housekeeper."[15]

As to her mental work, far from being considered on its own merits or as a factor in the world's growth, it was flouted as

"Mere woman's work
Expressing the comparative respect
Which means the absolute scorn."

As early as 450 B.C., when the laws of the Twelve Tables were promulgated, the girls of Rome received instruction in reading, writing and arithmetic. "Up before dawn, with a lamp to light the way, and an attendant to carry her satchel, the little Roman maiden of seven years, or over, would trudge off to the portico where the schoolmaster wielded his rod.[16] For some years this life continued, with but few holidays, and those far between, until she attained some proficiency in the rudiments. Then, most probably, her education in the scholastic sense came to an end. Her brothers and boy schoolmates, if their parents wished it, could proceed from the primary school to the secondary, where geography, history and ethics were taught; where the art of elocution was assiduously practiced and the works of the great Greek and Roman poets were carefully read and expounded; but it was enough for the girl to have learned how to read, write and cipher; she had then to learn her domestic duties."[17]

With the extension of the empire and the consequent enormous increase in wealth and the rapid progress in social and intellectual freedom, there was a notable change in the character of the education given to women, at least to those of the wealthier and patrician families. This was, in great measure, due to the wave of Hellenism which, shortly after the conquest of Greece, broke upon the Roman capital with such irresistible force. To the large and rapidly increasing number of women of keen intellect and lofty aspirations, whose minds had hitherto been confined to the comparatively barren field of Roman letters, the splendid creations of Greek genius came as a revelation. To become thoroughly versed in Greek poetry and proficient in the teachings of Greek philosophy was the ambition of scores of Roman women, who soon became noted for the extent and variety of their attainments, as well as for their rare culture and charming personality.

Among the pioneers of the intellectual movement in Rome, and one of the most beautiful types of the learned women of her time, was the celebrated daughter of the elder Scipio Africanus—Cornelia, mother of the Gracchi. She is famous on account of her devotion to her two sons, Tiberius and Caius. She was their teacher; and it was her educated and refined mind that, more than anything else, contributed to the formation of those splendid

characters for which they were so highly esteemed by their countrymen. Plutarch informs us that these noble sons of a noble mother "were brought up by her so carefully that they became beyond dispute the most accomplished of Roman youth; and, thus, they owed perhaps more to their excellent upbringing than to their natural parts."[18] One is not surprised to learn that this noble lady was almost idolized by the Romans, and that they erected a statue to her with the inscription, "Cornelia, Mother of the Gracchi."

Scarcely less distinguished and accomplished was another Cornelia, the wife of Pompey, the Great. "Besides her youthful beauty," writes Plutarch, in his *Life of Pompey*, "she possessed other charms, for she was well versed in literature, in playing on the lyre, and in geometry, and she had been used to listen to philosophical discourses with profit. Besides this, she had a disposition free from all affectation and display of pedantry—blemishes which such acquirements usually breed in women."[19]

Then there was the cultured and devoted Aurelia, the mother of Julius Cæsar. It is safe to say that this eminent man was as much indebted to his mother for his success and greatness as were Tiberius and Caius Gracchus to the benign influence and careful teachings of the gentle and virtuous Cornelia. Highly educated and of commanding personalities, both these women, like many others of their time, contributed much to the making of Roman history by the success they achieved in molding the characters of some of the greatest men of their own or of any age.

It is a splendid tribute that Cicero, in his *Orator*, pays to Lælia when he tells of the purity of her language and the charm of her conversation. "When I listen," he declares, "to my mother-in-law, Lælia—for women preserve the traditional purity of accent the best because, being limited in their intercourse with the multitude, they retain their early impressions—I could imagine that I hear Plautus or Nævius speaking, the pronunciation is so plain and simple, so perfectly free from all affectation and display; from which I infer that such was the accent of her father and his ancestors—not harsh like the pronunciation to which I have just referred, not broad nor rustic nor rugged, but terse, smooth and flowing."[20]

These are a few of the cultured and learned women who shed glory on their country by the refining influence which they exerted in the quiet and unostentatious precincts of the family circle. But there were others who chose a wider field for their activities, and who, by reason of their unerring judgment, well-poised and highly cultivated minds, had so won the confidence of the nation's greatest leaders that they were frequently consulted on important affairs of state. Thus, Cicero tells us of an interview which he had at Antium with Brutus and Cassius. Besides the men, there were present on this occasion three women, who took an active part in the discussion. These were Servilia, the mother of Brutus, Porcia, the wife of Brutus and the daughter of Cato, and Tertulla, the wife of Cassius and sister of Brutus. The views of the women were not without

effect, and so confident was Servilia of her power that she engaged to have a certain clause in one of the decrees of the Senate expunged. This is but one of many similar instances which might be adduced from the lives of the women of Rome who took an active part in politics. As we learn from Tacitus, their counsels and assistance were considered of peculiar value by the Commonwealth. For, when some of the sterner old moralists wished to exclude women from all participation in public affairs, the Senate, after a heated debate, decided by a large majority that the coöperation of women in questions of administration, far from being a menace, as some contended, was so beneficial to the state that it should be continued.

Among other noteworthy makers of Roman history, besides those just mentioned, is Livia, the wife of Augustus and the mother of Tiberius. So great was her influence and so persistent was her activity in government affairs, that it is sometimes asserted that she was the prime mover of most of the public acts of both these rulers. This woman, whom Ovid describes as having the features of Venus and the manner of Juno, and who, he declares, "held her head above all vices," was credited with having the benevolence of Ceres, the purity of Diana and the wisdom and craft of Minerva—"a woman," as was said by one of her contemporaries, "in all things more comparable to the gods than to men, who knew how to use her power so as to turn away peril and advance the most deserving."

Then there was the gracious, the virtuous, the self-sacrificing Octavia, sister of the Emperor Augustus, who was so successful in composing grave differences between her brother and her husband, and who so exerted her influence for peace during the troublous times in which she lived that she lives in history as a peacemaker. In marked contrast to this gentle and sympathetic woman was the energetic and heroic Agrippina, the wife of Germanicus. In many respects she was the most commanding personality of her age, and exhibited in an eminent degree those sterling qualities which we are wont to associate with the strong, dignified, courageous women of ancient Rome, who gave to the world so many and so great men in every sphere of human endeavor. "She was," as Tacitus informs us, "a greater power in the army than legates and commanders, and she, a woman, had quelled a mutiny which the emperor's authority could not check."[21] She was, indeed, as has well been said, "a woman to whom one might address an epic but never a sonnet."

I have referred to these distinguished women because they are embodiments of the best types of the noble, patrician families who made the great Roman empire the admiration of all time, and because they exhibit the wonderful advance that had been made in the general status of women since the days of Pericles and Aspasia. I have referred to them, also, to show what women are capable of achieving in the difficult and complicated affairs of public life, when they are accorded the necessary freedom of action and when they are properly equipped for work by education and by association with men of

learning and experience. Comparing the secluded and illiterate Greek wife with the free and highly accomplished Roman matron, we find almost as much difference between the two as there is between a child and a fully developed woman—all the difference there was between the unsophisticated young wife, not quite fifteen, of whom Xenophon gives us such a charming picture,[22] and the highly educated and competent mother of the Gracchi.

Of the Greek maiden we are told that, before her marriage she "had been most carefully brought up to see and hear as little as possible and to ask the fewest questions"; that her whole experience before her marriage "consisted in knowing how to take the wool and make a dress, and in seeing how her mother's handmaidens had their daily spinning tasks assigned to them." Cornelia, on the contrary, was not only, as we have seen, highly accomplished, but also one who, after her husband's death, was quite prepared, as Plutarch assures us, to undertake the management of the extensive property which he left his family, and who, we may well believe, would also have been qualified, had the occasion demanded it, to perform with distinction the same duties that fell to the lot of the gifted wives of Germanicus and Augustus.

Nothing in the history of Greek and Roman womanhood more strikingly illustrates than the two instances given the vast difference in the status of the wives of Greece and Rome, or exhibits more clearly the advantages accruing to early training and thorough mental development. If there was any difference in talent or intellect between the Greek and the Roman woman it was, so far as we can determine, in favor of the Greek. The sole reason, then, for such a marked difference in their capacity for work and for achieving distinction in intellectual and administrative fields of action arose from the lack of education in the Athenian wife and the fullest measure of educational freedom enjoyed by the Roman. That Aspasia, in spite of all the odds against her, was able to rise to such a pinnacle of glory does not prove that she was the superior of her countrywomen—the mothers of the greatest poets, artists and philosophers of all time—but it exhibits rather her good fortune in being able to effect a partnership with the greatest statesman of Greece, and one who was at the same time fully able to appreciate all her rare mental attainments and give her marvelous genius free scope for development by coöperating with him in making the period during which he held the reign of power the most brilliant one in the annals of human progress.

Plato, referring to the oriental seclusion to which Athenian wives were condemned, speaks of them as "a race used to living out of the sunshine," and that, too, among a people that habitually lived out of doors. We have already seen how much greater freedom Roman women enjoyed and how much more important was the rôle they played in public as well as private life; but we have not told all. They not only went to, but presided over, public games and religious ceremonies. They were admitted to aristocratic clubs and had, under the empire, a regular assembly or senate of their own,

known as the *Conventus Matronarum*. Hortensia, the daughter of the great orator Hortensius, pleaded the cause of her sex before the tribunal of the triumvirs, and so eloquent and effective was her speech that she not only won her case, but also won the praise of the critic, Quintilian, for her splendid oratorical effort.

Yet more. A certain woman in the Roman possessions in Africa had so impressed her fellow citizens by her intellectual capacity and administrative ability that she was chosen as one of the two chief magistrates of the place. She is known in history as Messia Castula, *duumvira*. It is true that the men of the older school, who would limit woman's activities to the distaff and the loom, strongly objected to the increasing freedom and power of women, and endeavored to counteract their influence; but all to no purpose. And it was the crabbed old Cato, the Censor, who growled in undisguised disgust:—"We Romans rule over all men and our wives rule over us."

But great as were the freedom and educational advantages of the Roman women, the startling fact remains that, with the exception of a few fragmentary verses of slight merit and of questionable authenticity, we have absolutely no tangible evidence of the Roman woman's literary ability while under pagan influence. We have seen, in considering her intellectual attainments—especially after the introduction of Greek art and letters into the City of the Seven Hills—that every woman who pretended to culture was obliged to be familiar with the Greek as well as with the Latin authors, that her education was deemed incomplete without a knowledge of Greek poetry, oratory, history and philosophy, but the fact is indisputable that Roman women were not producers like their Greek sisters, and that in no instance did their productions reach anything like the supreme excellence of the creations of a Corinna or a Sappho. There was, it is true, Sulpicia, of whom Martial writes: "Let every girl, whose wish it is to please a single man, read Sulpicia; let every man, whose wish it is to please a single maid, read Sulpicia;" but, if the few amatory verses that are credited to her represent the highest flights of the Roman women in the domain of poetry, then, indeed, were they far behind not only Sappho and Corinna, but also far behind scores of their pupils. Martial does indeed speak of a young maiden in whom were combined the eloquence of Plato with the austere philosophy of the Porch, and who wrote verses worthy of a chaste Sappho; but this was evidently a great exaggeration, for we have no other evidence of her existence.

The creative work of Roman women was, so far as we are able to judge, quite as limited in prose as it was in poetry. Agrippina, the mother of Nero, was one of the few prose writers whose name has come down to us. From her memoirs it was that Tacitus received much of the material incorporated in his *Annals*.

That some of the women had literary ability of a high order is indicated by a letter of Pliny to one of his correspondents, in which occurs the following passage:

"Pomponius Saturninus recently read me some letters which he averred had been written by his wife. I believed that Plautus or Terence was being read in prose. Whether they were really his wife's, as he maintains, or his own, which he denies, he deserves equal honor, either because he composes them or because he has made his wife, whom he married when a mere girl, so learned and so polished."[23]

Scarcely less distinguished for her taste in literature, and for her talent as a letter writer, was Pliny's wife, Calphurnia, who, at his request, wrote to him in his absence every day and sometimes even twice a day. According to Cicero, his daughter Tulia was "the best and most learned of women"; but her literary work, it is probable, did not extend much beyond her letters to her illustrious father. Nevertheless, what would we not give to possess these letters—to have as complete a collection of them as we have of those of the great orator and philosopher. They would be of inestimable value and would be absolutely beyond compare, except, possibly, with the letters of Mme. du Deffand or of Elizabeth Barrett Browning of a much later age.

Considering the number of educated women that lived in the latter days of the Republic and during the earlier part of the Empire, and their well known culture and love of letters, it is reasonable to suppose that they may have written much in both prose and verse of which we have no record. Literary productions must have more than ordinary value to survive two thousand years, and especially two thousand years of such revolutions and upheavals as have convulsed the world since the time of the *Pax Romana*, when all the world was at peace under Augustus.

How much of the literary work of the women of to-day will receive recognition twenty centuries hence? Some of it may, it is true, find a place in the fireproof libraries of the time; but who, outside of a few antiquarians, will take the trouble to read it or estimate its value? A few anthologies containing our gems of prose and poetry will probably be all that our fortieth century readers will deem worthy of notice. In view of the chaotic condition of Europe for so many centuries, the wonder is not that we have so little of the literary remains of Greece and Rome, but rather that we have anything at all.

As one might expect, the literary women of Rome, as well as those who ventured to take part in public affairs, had their critics. The satirists of the time were as unsparing of their ridicule as they were long afterward when Molière wrote his *Femmes Savantes* and his *Précieuses Ridicules*. And as for men of the old conservative type, a learned woman was as much an object of horror as is a militant suffragette in conservative England to-day. "No learned wife for me," exclaims Martial, "but rather a well-fed slave."[24]

And Juvenal had no more love for educated women than have some of our contemporaries for a blue-stocking housekeeper. He gives his opinion of them in the

following characteristic fashion:

"That woman is a worse nuisance than usual who, as soon as she reclines on her couch, praises Virgil; makes excuses for doomed Dido; pits bards against one another and compares them, and weighs Homer and Mars in the balance. Teachers of literature give way, professors are vanquished, the whole mob is hushed, and so great is the torrent of words that no lawyer or auctioneer may speak, nor any other woman."[25]

But if learned women had their enemies and detractors they also had friends and defenders. Among these was the Stoic philosopher, C. Musonius Rufus, who lived in the time of Nero. Like Plato, he contended that women should have the same training as men and that the faculties of both should be equally developed. The gist of his teaching is contained in the statement that:

"If the same virtues must pertain to men and women, it follows, necessarily, that the same training and education must be suitable for both."[26]

Our brief sketch of women's work in ancient Rome would be incomplete without some reference to the famous *Ecclesia Domestica*—Church of the Household—on the Aventine, and the distinguished women who were its chief ornaments. During the time of Pope Damasus, and not long before the sacking of Rome by Alaric, the *Ecclesia Domestica* was a kind of conventual home to which had retired, or in which were frequently gathered, some of the most noble and learned women of the city. Among the most notable of these were Marcella and her friends, Paula and Eustochium.

For beauty of character and nobility of purpose and rare mental endowments they recall the best traditions of a Cornelia or a Calphurnia, while so great was their purity of life and so unbounded was their charity to the poor and suffering that they were honored by being numbered among the saints of the early church. But what specially distinguished them among all the great women of the Roman world was their great and varied learning. In this respect they probably were far in advance of all their predecessors. For, in addition to a thorough knowledge of Latin and Greek literature, history and philosophy, they had, under the great theologian and orientalist, St. Jerome, become proficient in Hebrew and deeply versed in Scripture.

Special mention should be made of Paula and her daughter Eustochium; for it is probable that, had it not been for their influence on Jerome, and their active coöperation in his great life work, we should not have the Latin version of the Scriptures that is to-day known as the Vulgate. This is evinced from the letters of the saint himself and from what we know of the lives of these two remarkable women, who, as St. Jerome informs us in the epitaph which he had engraved on Paula's tomb in the Church of the Nativity in

Bethlehem, were descended from the Scipios, the Gracchi and the Pauli on the mother's side, and on the father's side from the half-mythical kings of Sparta and Mycenæ.[27]

They aided him not only by their sympathy and by purchasing for him, often at a great price, the manuscripts he needed for his colossal undertaking, but also assisted him by their thorough knowledge of Latin, Greek and Hebrew in translating the Sacred Books from the original Hebrew into Latin. So great was Jerome's confidence in their scholarship and so high was his appreciation of their ability and judgment that he did not hesitate to submit his translations to them for their criticism and approval. After he had completed his version of the first Book of Kings, he turned it over to them, saying: "Read my Book of Kings—read also the Latin and Greek translations and compare them with my version." And they did read and compare and criticise. And more than this, they frequently suggested modifications and corrections which the great man accepted with touching humility and incorporated in a revised copy.

More wonderful still, the Latin Psalter, as it has come down to us, is not, as is generally supposed, the translation from the Hebrew of Jerome, but rather a corrected version made from the Septuagint by his illustrious collaborators—Paula and Eustochium.

It is safe to say that no two women were ever engaged in a more important or more difficult literary undertaking—one requiring keener critical sense or more profound learning—than were Paula and Eustochium, or one in which their efforts were crowned with more brilliant success than were those of these two supreme exemplars of the grace, the knowledge, the culture, the refinement of Roman womanhood—the crowning glories of womanhood throughout the ages.

St. Jerome showed his grateful recognition of the invaluable assistance received from his devoted and talented co-workers by dedicating to them a great number of his most important books. This scandalized the pharisaical men of the time, who looked askance at all learned women and resented particularly the preëminence given to Paula and her accomplished daughter. But their reproaches provoked a reply from the saint that was worthy of the most chivalrous champion of woman, and revealed, at the same time, all the nobility of soul of the roused "Lion of Bethlehem." It is not only a defence of his course, but also a splendid tribute to his two illustrious friends, and a tribute also to the great and good women of all time.

"There are people, O Paula and Eustochium," exclaims the Christian Cicero, vibrant with emotion and in a burst of eloquence that recalls one of the burning philippics of Marcus Tullius, "who take offence at seeing your names at the beginning of my works. These people do not know that Olda prophesied when the men were mute; that while Barach was atremble, Deborah saved Israel; that Judith and Esther delivered from supreme peril the children of God. I pass over in silence Anna and Elizabeth and the

other holy women of the Gospel, but humble stars when compared with the great luminary, Mary. Shall I speak now of the illustrious women among the heathen? Does not Plato have Aspasia speak in his dialogues? Does not Sappho hold the lyre at the same time as Alcæus and Pindar? Did not Themista philosophize with the sages of Greece? And the mother of the Gracchi, your Cornelia, and the daughter of Cato, wife of Brutus, before whom pale the austere virtue of the father and the courage of the husband —are they not the pride of the whole of Rome? I shall add but one word more. Was not it women to whom our Lord first appeared after His resurrection? Yes, men could then blush for not having sought what the women had found."[28]

Time has spared a joint letter of Paula and Eustochium to their friend Marcella—a letter which exhibits so well the rare culture and literary ability of the writers that we cannot but lament that we have not more of the correspondence which was carried on between the learned inmates of the Church of the Household on the Aventine and Paula's convent home near the Church of the Nativity in Bethlehem. Such a collection would be beyond price, as it would complete the picture of the age so well sketched by St. Jerome; and, as a contribution to the literary world, it would have a value not inferior to that of those exquisite classics of a later age—the letters of Madame Sevigné to her daughter.[29]

WOMAN AND EDUCATION DURING THE MIDDLE AGES

The period of nearly a thousand years intervening between the downfall of Rome in A.D. 476 and the taking of Constantinople by the Turks in 1453 is usually known in history as the Middle Ages. By some it is considered as synonymous with the Dark Ages, because of the decline of learning and civilization during this long interval of time. The former designation seems preferable, for, as we shall see, the latter is more or less misleading. During the "wandering of the nations" in the fourth and fifth centuries, and the long and fierce struggles between the barbarian hordes from the north with the decadent peoples of the once great Roman empire, there was, no doubt, a partial eclipse of the sun of civilization; but the consequent darkness was not so dense nor so general and long-continued as is sometimes imagined. The progress of intellectual culture was, indeed, greatly retarded, but there was no time when the light of learning was entirely extinguished. For even during the most troublous times there were centers of culture in one part of Europe or another. At one time the center was in Italy, at another in Gaul, and, at still another, it was in Britain or Ireland or Germany.

But whether it was in the south, or the west or the north of Europe that letters flourished, it was always the convent or the monastery that was the home of learning and culture. Within these holy precincts the literary treasures of antiquity were preserved and multiplied. Here monks and nuns labored and studied, always keeping lighted the sacred torch of knowledge—*Et quasi cursores vitaï lampada tradunt*—and passing it on to the

generations that succeeded them. That any of the great literary masterpieces of Greece and Rome have come to us, in spite of the destructive agencies of time and the wreck of empires, is due wholly to the unremitting toil through long ages of the zealous and intelligent inmates of the cloister.

Of the monastic institutions for men there is no occasion to speak, except in so far as they contributed to the intellectual advancement of woman. In some cases the women of the cloister owed much to ecclesiastics for their literary training; but there are not wanting instances in which the nuns took the lead in education and had the direction of schools which gave to the church priests and bishops of recognized scholarship.

Practically the only schools for girls during the Middle Ages were the convents. Here were educated rich and poor, gentle and simple. And in these homes of piety and learning the inmates enjoyed a peace and a security that it was impossible to find elsewhere. They were free from the dangers and annoyances that so often menaced them in their own homes and were able to pursue their studies under the most favorable auspices.

Among the first convent schools to achieve distinction were those of Arles and Poitiers in Gaul, in the latter part of the sixth century. The Abbess of Poitiers is known to us as St. Radegund. She not only had a knowledge of letters rare for her age, but wrote poems of such merit that they were until recently accepted as the productions of her master, the poet Fortunatus,[30] who subsequently became bishop of Poitiers.

Far more notable, however, than the convents of Arles and Poitiers was the celebrated convent of St. Hilda at Whitby. Hilda, the foundress and first abbess of Whitby, was a princess of the blood-royal and a grand-niece of Edwin, the first Christian king of Northumbria. Her convent and adjoining monastery for monks soon became the most noted center of learning and culture in Britain. And so great was her reputation for knowledge and wisdom that not only priests and bishops, but also princes and kings sought her counsel in important matters of church and state.

As to the monks subject to her authority, she inspired them with so great a love of knowledge, and urged them to so thorough a study of the Scriptures, that her monastery became, as Venerable Bede informs us, a school not only for missionaries but for bishops as well. He speaks in particular of six ecclesiastical dignitaries who were sent forth from this noble institution—all of whom were bishops. Five of them he describes as men of singular merit and sanctity—"*singularis meriti et sanctitatis viros*," while the sixth, he declared, was a man of rare ability and learning—"*doctissimus et excellentis ingenii*." Of this number was St. John of Beverly, who, we are told, "attained a degree of popularity rare even in England, where the saints of old were so universally and so readily popular."[31] Hilda governed her double monastery with

singular wisdom and success; and, so great was the love and veneration she inspired among all classes that she merited the epithet of "Mother of her Country."

Celebrated, however, as Hilda was for her great educational work at Whitby, she is probably better known to the world as the one who first recognized and fostered the rare gifts of the poet Cædmon. "It is on the lips of this cowherd," as Montalembert beautifully expresses it, "that the Anglo-Saxon speech first bursts into poetry. Indeed, nothing in the whole history of European literature is more original or more religious than this first utterance of the English muse."[32]

As soon as Hilda discovered the extraordinary poetic faculty of Cædmon, she did not hesitate to regard it "as a special gift of God, worthy of all respect and of the most tender care." And, in order that she might the more readily develop the splendid talents of this literary prodigy, the keen discerning abbess received Cædmon into the monastery of monks, and had him translate the entire Bible into Anglo-Saxon. "As soon as the Sacred Text was read for him he forthwith," as Bede declares, "ruminated it as a clean animal ruminates its food, and transformed it into songs so beautiful that all who heard were delighted."

As his poetical faculty became more developed, his profoundly original genius became more marked, and his inspiration more earnest and impassioned. It was this Northumbrian cowherd, transformed into a monk of Whitby, who sang before the abbess Hilda the revolt of Satan and Paradise Lost, a thousand years earlier than Milton, in verses which may still be admired even beside the immortal poem of the British Homer. So remarkable, indeed, in some instances is the similarity in the productions of the two poets that F. Palgrave, one of the most competent of English critics, does not hesitate to declare that certain of Cædmon's verses resembled so closely certain passages of the Paradise Lost that some of Milton's lines seem almost like a translation from the work of his distinguished predecessor. And M. Taine, in his *History of English Literature*, referring to the "string of short, accumulated, passionate images, like a succession of lightning flashes," of the old Anglo-Saxon poet, asserts that "Milton's Satan exists in Cædmon's as the picture exists in the sketch."[33]

Well could Cædmon's first biographer, the Venerable Bede, say of him, "Many Englishmen after him have tried to compose religious poems, but no one has ever equaled the man who had only God for a master." And not without warrant does the eloquent Montalembert, in the masterly work just quoted, pen the following statement: "Apart from the interest which attaches to Cædmon from a historical and literary point of view, his life discloses to us essential peculiarities in the outward organization and intellectual life of those great communities which in the seventh century studded the coast of Northumbria, and which, with all their numerous dependents, found often a

more complete development under the crozier of such a woman as Hilda than under the superiors of the other sex."[34]

Space precludes my telling of other convents which were centers of literary activity, and of nuns who distinguished themselves by their learning and by the benign influence which they exerted far beyond the walls of the cloister. I cannot, however, refrain from referring to that group of learned English nuns who are chiefly known by their Latin correspondence with St. Boniface, the Apostle of Germany, and by the assistance which they gave him in his arduous labors. Conspicuous among these was St. Lioba, who, at the request of Boniface, left her home in England to found a convent at Bischopsheim in Germany, which, under the direction of its learned and zealous abbess, soon became the most important educational center in that part of Europe. Teachers were formed here for other schools in Germany and Lioba's biographer tells us that there were few *monasteria feminarum*—monasteries of women—within the sphere of Boniface's missionary activities for which Lioba's pupils were not sought as instructresses.

Like her illustrious countrywoman, St. Hilda, the abbess of Bischopsheim was the friend and counselor of spiritual and temporal rulers. Charlemagne, that eminent patron of scholars, had a great admiration for her and gave her many substantial proofs of his esteem and veneration. "Princes," writes her biographer, "loved her, noblemen received her, and bishops gladly entertained her and conversed with her on the Scriptures and on the institutions of religion, for she was familiar with many writings and careful in giving advice. She was so bent on reading that she never laid aside her book except to pray or to strengthen her slight frame with food or sleep."[35] She was thoroughly conversant with the books of the Old and the New Testaments and was, at the same time, familiar with the writings of the Fathers. It is not surprising, then, that she was regarded as an oracle, and that all classes flocked to her as they did to the abbess of Whitby for guidance and assistance.

From what has been said of the accomplishments and achievements of the Anglo-Saxon nuns just mentioned, it is evident that they were, of a truth, women of exceptional worth and of sterling character. And it is equally clear that their pupils must have shared in the education and culture of their distinguished teachers.[36] Many of them, in addition to having a wide acquaintance with literature, sacred and profane, were also mistresses of several languages. A woman's education, at this time, was not complete unless she could write Latin and speak it fluently. The author of that most interesting early English work, *Ancren Riwle*—Rule of Anchoresses—presupposes in his auditors, for whose benefit his instructions were given, a knowledge of Latin and French, as well as of English. In certain convents Latin was almost the sole medium of communication,—to such an extent, indeed, that a special rule was made prohibiting "the use of the Latin tongue except under special circumstances."

"As long as the conventual system lasted the only schools for girls in England were the convent schools where, says Robert Aske, 'the daughters of gentlemen were brought up in virtue.' From an educational point of view, the suppression of the convents was decidedly a blunder." Thus writes Georgiana Hill in her instructive work on *Women in English Life*, and there are, we fancy, but few readers of her instructive pages who will not be inclined to agree with her conclusions.[37] Lecky speaks of the dissolution of convents at the time of the Reformation as "far from a benefit to women or the world."[38] And Dom Gasquet declares "that destruction by Henry VIII of the conventual schools where the female population, the rich as well as the poor, found their only teachers, was the absolute extinction of any systematic education of women for a long period."[39]

But this is not all. The strangest and saddest result, consequent on the suppression of the convents, was that men were made to profit by the loss which women had sustained. The revenues of the houses that were suppressed had been intended for the sole use and behoof of women, and had been administered by them in this sense for centuries. When they were appropriated by Henry VIII, it never occurred to him or his ministers to make any provision for the education of women in lieu of that which had so ruthlessly been wrested from them. Thus the nunnery of St. Radegund, together with its revenues and possessions, was transformed into Jesus College, Cambridge, while from the suppressed convents of Bromhall in Berkshire and Lillechurch in Kent funds were secured for the foundation and endowment of St. John's College, also at Cambridge. Similarly, the properties of other nunneries, large and small, were appropriated for the foundation of collegiate institutions at Oxford, all of which were for the benefit of men.

And so it was that, in a few short years, the great work of centuries was undone and women were left little better educational facilities than when the Anglo-Saxon nuns began their noble work in a land that was enveloped in "one dark night of unillumined barbarism."

One would have thought that Elizabeth, who was so highly educated, and who did so much for the supremacy of her country on land and sea, would have bethought herself of the necessity of doing something for the education of her female subjects. But no. She did nothing for them, and the founders of the endowed grammar schools, during her reign, gave never a thought to the educational necessities of the girls. They made provision only for the boys. In this respect, however, the "Virgin Queen" was but following in the footsteps of the male sovereigns and legislators who had preceded her, and who, although affecting an interest in having women "sensible and virtuous, seem by their conduct toward the sex to have entered into a general conspiracy to order it otherwise."

The truth is, when anything was achieved for the intellectual advancement of women it was due either to private instruction or to the result of a protracted struggle on the part of women themselves for what they deemed their indefeasible rights. Had they relied on the spontaneous action of men and on legislation in favor of female education to which men had given the initiative, they would to-day be in the same condition of ignorance and seclusion and servitude as was the Athenian woman twenty-five centuries ago, and would occupy a status but little above that of the inmates of oriental harems and zenanas.

The Anglo-Saxon nuns were, as we have seen, specially distinguished for their learning and for the splendid work they performed for the education of their sex during the long period of the Middle Ages. But however great their preëminence in these respects, they were not without rivals. There were, besides the schools, already named, conducted by St. Lioba and her companions, also flourishing schools in Germany under the direction of native nuns, whose success as educators was as marked as that of Lioba or Hilda, and who, in addition to their labors in the class-room, achieved distinction by their productive work. The Anglo-Saxon convents developed few writers, whereas those of Germany produced several who not only shed luster on their sex but who also showed what woman is capable of accomplishing when accorded some measure of encouragement and full liberty of action.

One of the most noted writers of her age was the famous nun of Gandersheim, Hroswitha, who was born in the early part of the tenth century. She was the pupil of the abbess Gerberg, who was of royal lineage, and one of the most zealous promoters of learning and culture in Saxony during the forty-two years of her rule in the convent to which she and her favorite pupil gave undying renown.

Hroswitha's literary work consists of legends and contemporary history in metrical form and of her dramas written in the style of Terence. As a writer of history and legends she ranks with the best authors of her time, while as a writer of dramas she stands absolutely alone. Hers, indeed, were the first dramatic compositions given to the world during the long interval that elapsed between the last comedies of classic antiquity and the first of the miracle plays which had such a vogue between the twelfth and the sixteenth century.

Her dramas, which, of all her works, have attracted the most attention, are seven in number. They deal with the moral and mental conflicts which characterized the period of transition from heathendom to Christianity. Some of them exhibit poetic talent of a high order as well as the inspiration and courage of genius. They reveal also a wide acquaintance with the classic authors of Rome and Greece, besides a knowledge of many of the Christian writers. They are, likewise, distinguished by originality of treatment, complete mastery of the material used, as well as by genuine beauty of rhyme

and rhythm. In form, all the plays preserve the simple directness of their model, Terence, while, in conception, they embody the noblest ideals of Christian teaching. In marked contrast to her model, who invariably exhibits the frailties and lapses of woman, Hroswitha's plays turn on the resistance of her sex to temptation, and on their steadfast adherence to duty and to vows voluntarily assumed. A recent English writer, W. H. Hudson, in an appreciative estimate of the work of this learned Benedictine nun expresses himself as follows:

"It is on the literary side alone that Hroswitha belongs to the classic school. The spirit and essence of her work belong entirely to the Middle Ages; for beneath the rigid garb of a dead language"—she wrote in Latin—"beats the warm heart of a new era. Everything in her plays that is not formal but essential, everything that is original and individual, belongs wholly to the Christianized Germany of the tenth century. Everywhere we can trace the influence of the atmosphere in which she lived; every thought and every motive is colored by the spiritual conditions of her time. The keynote of all her works is the conflict of Christianity with paganism; and it is worthy of remark that in Hroswitha's hands Christianity is throughout represented by the purity and gentleness of woman, while paganism is embodied in what she describes as the vigor of men—*virile robur*."[40]

Among her legends the one entitled *The Lapse and Conversion of Theophilus* has a special interest as being the precursor of the well-known legend of Faust.

In Hroswitha's time, as in our own, there were people who were strongly opposed to the higher education of women. There were others who would deny them even the elements of an education—who declared that they should be taught anything rather than reading and writing, which were a cause of temptation and sin—that their knowledge should be confined solely to the duties of an ordinary housewife, that their books should consist solely of thimble, thread and needles—"*Et leurs livres, un dé, du fil et des aguilles.*" Some, it is true, were willing to make an exception in favor of nuns; but, as to all others, the less they knew the better it was for their spiritual, if not for their temporal, welfare also.[41] To those who were thus minded, Hroswitha pithily replied that it was not knowledge itself but the bad use of it that was dangerous—"*Nec scientia scibilis Deum offendit, sed injustitia scientis.*"

Among other women who were Hroswitha's equals in knowledge, if not in literary attainments, were several other nuns who illumined the closing centuries of the Middle Ages. Chief among these were St. Hildegard, "the sybil of the Rhine"; Herrad, the noted author of the *Hortus Deliciarum—Garden of Delights*—and Matilda and Gertrude, those remarkable mystical writers, whose descriptions of heaven and hell so closely resemble those in the *Divina Commedia* that many writers are of the opinion that the

great Florentine poet must have been familiar with the accounts which they gave of their visions.

St. Hildegard was for a third of a century the abbess of the convent of St. Rupert at Bingen. So great was her reputation for sanctity and for the extent and variety of her attainments that she was called "the marvel of Germany." She is without doubt one of the most beautiful and imposing as well as one of the greatest figures of the Middle Ages—great beside such eminent contemporaries as Abelard, Martin of Tours and Bernard of Clairvaux. People from all parts of the Christian world sought her counsel; and her convent at Bingen became a Mecca for all classes and conditions of men and women. But nothing shows better the immense influence which she wielded than her letters of which nearly three hundred have been preserved.

Among her correspondents were people of the humble walks of life as well as the highest representatives of Church and State. There were simple monks and noble abbots; dukes, kings and queens; archbishops and cardinals and no fewer than four Popes. Letters came to her from the orient and the occident, from the patriarch of Jerusalem, from Queen Bertha of Greece, from Frederick Barbarossa, Philip the Count of Flanders, St. Bernard, the professors of the University of Paris; from Henry II of England, and from his grand-daughter Eleonora, "The Damsel of Brittany." It is safe to say that no woman during the Middle Ages exercised a wider or more beneficent influence than did this humble Benedictine abbess of Bingen on the Rhine and had unsought so large a number of distinguished correspondents. And, if we accept the criterion that influence is measured by the number and nature of one's relations, it would be difficult to find in any age relations that were more select or more cosmopolitan.

But her astonishing collection of letters is the slightest product of her intellectual activity. She is without doubt the most voluminous woman writer of the Middle Ages. Her works on theology, Scripture and science make no less than six or eight large octavo volumes. The Bollandists, than whom there is no more competent authority, express their amazement at the amount and quality of Hildegard's work. Witness the following language of one of their number: "Although we may not be surprised that our saint was interrogated regarding secret things by so many men eminent both by reason of their dignity and their learning, I am nevertheless forced to recognize with stupefaction that a woman without instruction, and who had not acquired knowledge by study, was consulted concerning the most difficult questions of theology and the most subtle of Holy Scriptures, and that she gave, without hesitation, the answers that were demanded by theology and Scripture."[42]

Is it, then, surprising that the famous William of Auxerre, after a critical examination of her works, should compare her with Peter Lombard, the celebrated "Master of the Sentences,"[43] and one of the most learned of the Schoolmen, and write that Hildegard

is *Sententiarum Magistra*—Mistress of the Sentences—and that "in her works the words are not human but divine"? Has any woman writer ever received higher praise, and from one so competent to express an opinion as the scholarly divine of Auxerre?

Herrad, the gifted abbess of Hohenburg in Alsace, was a contemporary of Hildegard, and, like her, was noted for her culture and wide range of knowledge. She is chiefly known for her *Hortus Deliciarum*, a remarkable work, encyclopædic in character, which she wrote for the nuns of her convent and which was designed to embody in words and in pictures the knowledge of her age.

Nothing that time has bequeathed to us gives us a clearer conception of the manifold activities of a mediæval nunnery, of the industry, talents and enthusiastic love of learning of its inmates, than Herrad's wonderful *Garden of Delights*. Nor is there any other work that gives us a better knowledge of the manners, customs and ideals of the twelfth century, or one that, in its particular sphere, is of more value to the student of art, philology and archæology. It exhibits Herrad's intense interest in the intellectual advancement of her nuns and pupils as well as her superior talent and acquirements. Unfortunately the manuscript copy of this work was destroyed at the time of the bombardment of Strasburg by the Germans in 1870, and our knowledge of it is limited to portions of it which had previously been transcribed or to accounts left of it by those who had examined it before its destruction. Of such exceptional value was this unique work that the editor of the great collection of pictures, which illustrates this remarkable book, does not hesitate to declare that "Few illuminated manuscripts had acquired a fame so well deserved as the *Hortus Deliciarum* of Herrad."[44]

No sketch, however brief, of the literary nuns of mediæval Germany would be complete without some reference to the learned religious of the convent of Helfta, near Eisleben in Saxony. Of the abbess Gertrude we read that her enthusiasm for knowledge was so great that she not only inspired others with the same enthusiasm, but that she was an incessant collector of books, which she had her nuns transcribe. Among her most distinguished subjects were two religious by the name of Matilda, one of whom was her sister, and a third, who, to distinguish her from the abbess, is known as "Gertrude the Great."

The writings of these nuns were inspired by that great mystic movement which then prevailed in various parts of Europe and are among the most impassioned productions of the age. For this reason they still have a special claim on the attention of students of art and literature, as well as those of theology and mysticism. Impressed by the similarity of their ideas and descriptions as compared with those found in Dante's great masterpiece, there are not wanting scholars who contend that the prototype of the Matelda in the earthly paradise of the *Purgatorio* was none other than one of the Matildas of the famous convent of Helfta.[45]

The writings of Hroswitha, Hildegard, Herrad, Gertrude and the Matildas, to speak of no others, are the best evidence of the studious character of the nuns of mediæval times, and of their devotion to the cause of education. They command, likewise, our admiration for the system of training which made such development possible, and show that, in certain departments, the schools as then conducted were on as high a plane as any we have to-day.[46] They show us, too, that nuns and convent-bred women of the age in question were of quite different mental calibre from that of the "gentle lady of chivalry living in her bower, playing upon her lute and waiting patiently for the return of her triumphant knight," and quite different, too, from that of the castle lady-loves—whose sole attractions were often no more than youth and beauty—who inspired the impassioned lyrics of troubadour and minnesinger.

A recent writer sums up in a few words the status and the accomplishments of the lady of the abbey in the following paragraph:

"No institution of Europe has ever won for the lady the freedom and development that she enjoyed in the convent in early days. The modern college for women only feebly reproduces it, since the college for women has arisen at a time when colleges in general are under a cloud. The lady-abbess, on the other hand, was part of the two great social forces of her time, feudalism and the Church. Great spiritual rewards and great worldly prizes were alike within her grasp. She was treated as an equal by the men of her class, as is witnessed by letters we still have from popes and emperors to abbesses. She had the stimulus of competition with men in executive capacity, in scholarship, and in artistic production, since her work was freely set before the general public; but she was relieved by the circumstances of her environment from the ceaseless competition in common life of woman with woman for the favor of the individual man. In the cloister of the great days, as on a small scale in the college for women to-day, women were judged by each other as men are everywhere judged by each other, for sterling qualities of head and heart and character."[47]

Nor is this all. Never was woman more highly honored, never was her power and influence greater than during the period of conventual life extending from Hilda of Whitby to Gertrude and the Matildas of Helfta, and especially during that golden period of monasticism and chivalry when cloister and court were the radiant centers of learning and culture. Abbesses took part in ecclesiastical synods and councils and assisted in the deliberations of national assemblies. In England, they ranked with lords temporal and spiritual, and had the right to attend the king's council or to send proxies to represent them, while in Germany, where they held property directly from the king or emperor, they enjoyed the rights and privileges of barons and, as such, took part in the proceedings of the imperial diet either in person or through their accredited representatives. In Saxony, the abbesses had the right to strike coins bearing their own portraits, notably the abbesses of Gandersheim and Quedlinburg. In England they were