

CHAPTER VIII

WOMEN IN MEDICINE AND SURGERY

As woman was the first nurse, so was she also the first practitioner of the healing art. Among savages the world over it is the women, in the great majority of cases, who have the care of the sick and wounded, and who, by reason of their superior knowledge of simples for the cure of diseases, occupy the position of doctors. In certain parts of the uncivilized world there are, it is true, shamans or medicine men; but these are conjurers or exorcists, who profess to expel disease, or rather the evil spirits causing the disease, by sorcery or incantation, rather than physicians who essay to cure ailments or relieve suffering by the use of substances which experience has showed to possess remedial properties. In a word, the shaman is a kind of a religious functionary who imposes on the ignorance of his tribe and who holds his position by the fear he excites, and not by any knowledge he possesses of the healing art. It was the same, we may believe, in the early history of our race—women, and not men, were the first physicians; and they were also most probably the first surgeons.

According to Greek mythology, the god of the medical art was Æsculapius, a male; but his six daughters, as antiquity beautifully expressed it, were not only goddesses but were also medical mistresses—*artifices medici*—of suffering humanity. Of these Hygiea was specially distinguished as the goddess of health, or, rather, as the conservator of good health, while Panacea was invoked as the restorer of health after it had been impaired or lost.

One of the most beautiful pictures in the Iliad is that representing the daughter of Augea, King of the Epei, caring for the wounded and suffering Greeks on the plain before Troy. She was:

“His eldest born, hight Agamede, with golden hair,
A leech was she, and well she knew all herbs on ground that
grew.”

Nothing deterred by the din of battle around her, she provided cordial potions for the disabled warrior and prepared

“The gentle bath and washed their gory wounds.”

What a beautiful prototype of another ministering angel in the same land nearly thirty centuries later, amid similar scenes of suffering—of one who, though unsung by immortal bard, the world will never let die—the courageous, the self-sacrificing Florence Nightingale.

That there were in Greece from the earliest times numerous women possessed of a high degree of medical skill is evidenced by many of the ancient writers. They were what we would call medical herbalists, and not a few of them exhibited a natural genius for determining the curative virtues of rare plants and a remarkable sagacity in preparing from them juices, infusions and soothing anodynes. Others there were who, in addition to evincing the cunning of leechcraft in the therapeutic art, were distinguished for nimble hands in treating painful lesions and festering sores, and who, when occasion required, were experts in “quickly drawing the barb from the flesh and healing the wound of the soldier.”

In the Odyssey special mention is made of the surpassing expertness of the Egyptian female leech, Polydamna, whose name signifies the subduer of many diseases. The land of the Nile, the poet tells us, “teems with drugs,” and

“There ev'ry man in skill medicinal
Excels, for these are sons of Pæon all.”

In this favored cradle of civilization, to which Greece owed so much of its knowledge and culture, there were many women who, like Polydamna, achieved distinction in the healing art, and many, too, we have reason to think, who communicated their knowledge to their sisters in the fair land of Hellas.

But not only were there in Greece women physicians like Agamede, who were noted for their general medicinal knowledge and practice, but there were also others who made a specialty of treating ailments peculiar to their own sex. This we learn from a passage in the *Hippolytus* of Euripides, wherein the nurse of Phædra addressed the suffering queen in the following words:

"If under pains
Thou labor, such as may not be revealed,
To succor thee thy female friends are here.
But if the other sex may know thy sufferings
Let the physician try his healing art."

More positive information, however, is afforded us by the ancient Roman author Hyginus, who, in writing of the Greek maiden, Agnodice, tells us how the medical profession was legalized for all the free-born women of Athens. Instead of a literal translation of Hyginus, the version of his story is given in the quaint language of one Mrs. Celleor, a noted midwife in the reign of James II.

"Among the subtile Athenians," writes Mrs. Celleor, "a law at one time forbade women to study or practice medicine or physick on pain of death, which law continued some time, during which many women perished, both in child-bearing and by private diseases, their modesty not permitting them to admit of men either to deliver or cure them. But God finally stirred up the spirit of Agnodice, a noble maid, to pity the miserable condition of her own sex, and hazard her life to help them; which, to enable herself to do, she apparelled her like a man and became the scholar

of Hierophilos, the most learned physician of the time; and, having learnt the art, she found out a woman that had long languished under private diseases, and made proffer of her service to cure her, which the sick person refused, thinking her to be a man; but, when Agnodice discovered that she was a maid, the woman committed herself into her hands, who cured her perfectly; and after her many others, with the like skill and industry, so that in a short time she became the successful and beloved physician of the whole sex.”

When it became known that Agnodice was a woman “she was like to be condemned to death for transgressing the law—which, coming to the ears of the noble women, they ran before the Areopagites, and, the house being encompassed by most women of the city, the ladies entered before the judges and told them they would no longer account them for husbands and friends, but for cruel enemies, that condemned her to death who restored to them their health, protesting they would all die with her if she were put to death. This caused the magistrates to disannul the law and make another, which gave gentlewomen leave to study and practice all parts of physick to their own sex, giving large stipends to those that did it well and carefully. And there were many noble women who studied that practice and taught it publicly in their schools as long as Athens flourished in learning.”¹

After the time of Agnodice many Greek women won distinction in medicine, some as practitioners in the healing art, others as writers on medical subjects. Nor were their activities confined to the land of Hellas. They were also found succoring the infirm and instructing the poor and ignorant in Italy, Egypt and Asia Minor. Among these was Theano, the wife of Pythagoras, who, after her husband's death, assumed charge of his school of philosophy,

¹ Quoted in *Medical Women*, p. 11, by Sophia Jex-Blake, M. D., Edinburgh, 1886. Cf. Hyginus, *Fabularum Liber*, No. 274.

and who, like her husband and teacher, was distinguished for her attainments in medicine. The names of many others occur in the pages of Hippocrates, Galen and Pliny; and frequent references are made to the works and prescriptions of women doctors who enjoyed more than ordinary celebrity during their time. Of these female practitioners many confined their practice to the diseases of women and children, while others excelled in surgery and pharmacy, as well as in general medical practice.

Among the medical women whom antiquity especially honored, particularly during the Greco-Roman period, were Origenia, Aspasia—not the famous wife of Pericles—and Cleopatra, who was not, however, as is often asserted, the ill-fated queen of Egypt. Likewise deserving of special mention was Metradora, of whom there is still preserved in Florence a manuscript work on the diseases of women,¹ and Antiochis, to whom her admiring countrymen erected a statue bearing the following inscription: “Antiochis, daughter of Diodotos of Tlos; the council and the commune of the city of Tlos, in appreciation of her medical ability, erected at their own expense this statue in her honor.”

Pliny, the naturalist, felicitates the Romans on having been for nearly six hundred years free from the brood of doctors. These he does not hesitate to berate roundly. His statement regarding the non-existence of physicians, it must be observed, is somewhat exaggerated. It is true that during the first five centuries there were no professional doctors who lived entirely on their practice. There were, however, many men who had by long experience gained an

¹ Charles Daremberg, who, at the time of his death in 1872, was professor of the history of medicine in the Faculty of Medicine in Paris, had the intention of publishing this work *Περὶ τῶν γυναικῶν παθήσων*.—On the Diseases of Women—but his premature death prevented him from executing his project. It is to be hoped that some one else, interested in woman's medical work, may at an early date give this production to the public with an appropriate commentary.

extensive knowledge of drugs and simples, and who were able to dress wounds and treat diseases with considerable success.

The first Greek freeman to practice medicine in Rome was one Archagatos, about two centuries B.C. He was soon followed by one of his countrymen named Asclepiades. These two soon built up a great reputation as successful practitioners, and were held in the highest esteem by the people of Rome. In consequence of this and of the favorable conditions offered foreigners for the practice of the healing art, there was soon a large influx of physicians and surgeons from Greece, not only into Rome but also into other parts of Italy.

Not long after the arrival of Greek doctors in the capital of the Roman world we learn of certain women physicians in Rome who were held in high repute. Among these were Victoria and Leoparda, both mentioned by the medical writer, Theodorus Priscianus. To Victoria, Priscianus dedicates the third book of his *Rerum Medicarum*, and in the preface to this book he refers to her as one who has not only an accurate knowledge of medicine, but also as one who is a keen observer and experienced practitioner.

The word *medica*, which occurs in Latin authors of the classical period, testifies to the existence of the woman doctor as early as the age of Augustus.

But the most important documents bearing on women physicians, not only in the city of Rome but also in Italy, Gaul and the Iberian peninsula, are the large body of epigraphic monuments which have recently been brought to light, and which prove beyond all doubt that women were not only obstetricians, but that they were successful practitioners in the entire field of medical art. Thus a funeral tablet found in Portugal tells of a woman who was a most excellent physician—*medica optima*—while another describes the deceased not only as a woman incomparable for

her virtues, but also as a mistress of medical science, *antistes disciplinæ in medicina fuit*.

The Greek word for *medica*—*iatromaia*—occasionally found in some of the inscriptions, seems to refer specially to women of Greek origin or birth. This is particularly true of a monument erected to one Valiæ, who is designated as *Kalista iatromaia*—the best doctor.¹

Among the many women who became converts to Christianity during the early ages of the church a goodly number were physicians. Unfortunately, our information respecting these votaries of the healing art is not as complete as we could wish. One of the most noted of them is St. Theodosia, whose name is given in the Roman martyrology for the twenty-ninth of May. She was the mother of the martyr, St. Procopius, and was distinguished for her knowledge of medicine and surgery, both of which she practiced in Rome with the most signal success. She died a heroic death by the sword during the persecution of Diocletian.

Another woman who was as eminent for her knowledge of medicine as for her holiness of life was St. Nicerata, who lived in Constantinople during the reign of the emperor Arcadius. She is said to have cured St. John Chrysostom of an affection of the stomach from which he was a sufferer.

To the Roman lady Fabiola, remarkable as the daughter of one of the most illustrious patrician families of Rome, but more remarkable for her sanctity and her boundless charity toward the poor, was due the erection of the first hospital—a noble structure which she founded in Ostia, at the mouth of the Tiber, which was then the port of entry to the capital of the Roman empire. Here the noble matron received the poor and suffering from all parts, and did

¹ Cf. Herten et Rossi *Inscriptiones Urbis Romæ Latinæ*, p. 1245, No. 9478, Berlin, 1882.

everything in her power to afford them succor in their wants and infirmities.

It is difficult for us now, when hospitals and charitable institutions of all kinds are so common, to understand what an innovation Fabiola's unheard-of institution was considered by her contemporaries. For her method of treating the needy and the suffering was as different from that which had hitherto obtained as were the debasing lessons of heathendom from the elevating precepts of the Gospels.

No wonder that the news of this godlike work was soon wafted to the uttermost bounds of the earth; that, in the words of St. Jerome, "summer should announce in Britain what Egypt and Parthia had learned in the spring." No wonder that the same eloquent hermit of Bethlehem should proclaim the foundress of this home of the indigent and the afflicted to be "the glory of the church, the astonishment of the Gentiles, the mother of the poor and the consolation of the saints." No wonder that, in contemplating her countless acts of charity, he should ignore the fact that Fabiola was a daughter of the Fabii and a descendant of the renowned Quintus Maximus, who, by his sage counsel, had saved his country from her enemies, and that, recalling the words of Virgil, he should declare: "If I had a hundred tongues and a hundred mouths and iron lungs, I should not be able to enumerate all the maladies to which Fabiola gave the most prodigal care and tenderness—to the extent even of making the poor who were in health envy the good fortune of those who were sick."¹ No wonder that Fabiola's funeral, which brought together the whole of Rome, was more like an apotheosis than the transfer of the remains of the deceased to their last resting-place, and that Jerome should declare, "the glory of Furius and Papirius

¹ "Non mihi si linguæ centum, oraque centum, ferrea vox . . . omnia morborum percurrere nomina possim quæ Fabiola in tanta miserorum refrigeria commutavit ut multi pauperum sani languentibus inviderent." *Epistola ad Oceanum*.

and Scipio and Pompey, when they triumphed over the Gauls, the Sammites, Numantia and Pontus" was less than that which was spontaneously accorded to Fabiola, the solace of the sick and the comforter of the distressed. For she had in her hospital at Ostia established a type of institution that was to effect more for ameliorating the condition of suffering humanity than anything that had before been dreamed of; something that was to contribute immensely to the efforts of physicians and surgeons in minimizing the sad ravages of wounds and disease; something whose beneficent effects were to be felt through the centuries and in every part of the world down to the wards of the military hospital at Scutari, guarded by the watchful eyes of Florence Nightingale, and to the leper-tenanted lazarettos, blessed by the ministrations of Father Damien and the Sisters of Charity, on the desolate shores of plague-stricken Molokai.

After the fall of the Roman empire and through the long period of the Middle Ages, when the monasteries and convents were almost the only centers of learning and culture for the greater part of Europe, the practice of medicine was to a great extent in the hands of monks and nuns. For every religious house was then a hospital as well as a school, a place where drugs and ointments were compounded and distributed, as well as a place where manuscripts were transcribed and illuminated. At a time when there were but few professional physicians and when these few were widely separated from one another, the only places where the poor could always be sure to find free medical treatment as well as abundant alms were those sanctuaries of knowledge and charity where the love of one's neighbor was never lost sight of in the love of science and literature. And during this time, too, the care of the sick was regarded as a duty incumbent on everyone, but particularly on those devoted to the service of God in religion. It was considered, above all, as a duty devolving

on women, especially on the lady in the castle and on the nun in the convent.

The old romance of *Sir Isumbras* gives us a charming picture of the nuns of long ago receiving the wounded knight and ministering unto him until he was made whole and strong, as witness the following verses:

“The nonnes of him they were full fayne,
 For that he had the Saracenes slayne
 And those haythene houndes.
 And of his paynnes sare ganne them rewe.
 Ilke a day they made salves new
 And laid them till his woundes;
 They gave him metis and drynkis lythe,
 And heled the knyghte wunder swythe.”

So universally during mediæval times was the healing art considered as pertaining to woman's calling that it became a part of the curriculum in convent schools; and no girl's education was considered complete unless she had an elementary knowledge of medicine and of that part of surgery which deals with the treatment of wounds. For during those troublous times a woman was liable to be called upon at any time to nurse the sick wayfarer or dress the wounds of those who had been maimed in battle or in the tourney.

Illustrations of these facts are found in many of the romances and fabliaux of the Middle Ages. Thus, when a sick or wounded man was given hospitality in a chateau or castle it was not the seigneur, but his wife and daughters, as being better versed in medicine and surgery, who acted as nurses and doctors and took entire charge of the patient until his recovery.

In the exquisite little story of *Aucassin et Nicolette*, the heroine is pictured as setting the dislocated shoulder of her lover in the following simple but touching language:

“Nicolette searched his hurt, and perceived that his shoulder was out of joint. She handled it so deftly with

her white hands, and used such skillful surgery that, by the grace of God, who loveth all true lovers, the shoulder came back to its place. Then she plucked flowers and fresh grasses and green leafage, and bound them tightly about the setting with the hem torn from her shift, and he was altogether healed.”

And in the mediæval Latin poem, *Waltharius*, written by a German monk, Ekkehard, reference is made to a sanguinary contest in which one of the combatants falls to the earth seriously wounded. Seeing this, Alpharides, in a loud voice, summons a young girl, who timidly comes forward and dresses the unfortunate man's wound.¹

Still more to our purpose is a passage from the famous epic poem, *Tristan and Isolde*, written by *Godfrey of Strasburg*, in which Isolde, accompanied by her mother and cousin, is represented as administering restoratives to Tristan, who had fallen exhausted after his combat with the dragon. It shows that women, in accompanying an army to the field of battle, always went provided with bandages and medicaments for dressing wounds and fractured limbs. Similarly Angelica, in *Orlando Furioso*, and Ermina, in *Jerusalem Delivered*, are portrayed as surgeons with deftness of hand and leeches with rare knowledge and skill.

The frequent introduction of women doctors into the poems and romances of the Middle Ages would of itself, if other evidence were wanting, suffice to show what an important rôle women played in medicine and surgery at a time when, in many parts of Europe, women were far better educated and far more cultured than men—“when the knights and barons of France and Germany were inclined to look upon reading and writing as unmanly and almost degrading accomplishments, fit only for priests or

¹ Hæc inter timidam revocat clamore puellam Alpharides, veniens quæ saucia quæque ligavit.

—Ekkehardi Primi *Waltharius*, Berlin, 1873.

monks, and especially for priests or monks not too well born."¹

In the instances just quoted, as well as those mentioned by Homer and Euripides, the writers do no more than faithfully reflect conditions which then obtained, and truthfully report what were the occupations of women when their status was so different from what it is to-day. But, fortunately, we do not have to rely on works of the imagination for our knowledge respecting the women practitioners of the healing art, either during the Homeric period or during that which intervened between the downfall of Rome and the dawn of the Renaissance. For the history of medicine during mediæval times affords too many examples of women who became famous for their knowledge of medicine, as well as for their success in surgical and medical practice, to leave any doubt about the matter. Besides this, we have still the writings of many of these women, and are thus able to judge of their competency in those branches of knowledge on which they shed so great luster.

One of the most noted of them was the Benedictine abbess, St. Hildegard, of Bingen on the Rhine, who was emi-

¹ That the Germans, at the time under discussion, regarded learning as having an effeminating effect on men is well illustrated by the following characteristic anecdote: "When Amasvintha, a very learned woman who was a daughter of the Ostrogoth King, Theodoric, selected three masters for the instruction of her son, the people became indignant. 'Theodoric,' they exclaimed, 'never sent the children of the Goths to school, learning making a woman of a man and rendering him timorous. The saber and the lance are sufficient for him.'" Procopius, *De Bello Gothico*, I, 2, Leipsic, 1905.

If we may judge by a letter from Pace to Dean Colet, the noted classical scholar and founder of St. Paul's school in London, such views found acceptance in England as late as the time of More and Erasmus. For we are told of a British parent who expressed his opinion on the education of men in these words: "I swear by God's body I'd rather that my son should hang than study letters. The study of letters should be left to rustics."

ment not only as a theologian but also as a writer whose treatises on various branches of science are justly regarded as the most important productions of the kind during the Middle Ages prior to the time of Albertus Magnus. Besides this, she not only wrote many books on *materia medica*, on pathology, physiology and therapeutics, but, as a practitioner, she gloriously sustained the best traditions of her sex in both theoretical and practical medicine.

Her work entitled *Liber Simplicis Medicinæ*, which deals with what in the Saint's time was called "simples"—for the belief was then current that each plant or herb was or provided a specific for some disease—contains accounts of many plants used in *materia medica*, as well as statements of their importance in therapeutics. Her descriptions often indicate an observer of exceptionally keen perception and one whose knowledge of science was far in advance of her epoch. The same observations may be made respecting Hildegard's work, *Liber Compositæ Medicinæ*, in which she treats of the causes, signs and treatment of diseases.¹

Still more remarkable, in many respects, is a treatise in nine books, entitled *Physica* or *Liber Subtilitatum Diverſarum Naturarum Creaturarum*, which, among other things, treats of the various elements, of plants, trees, minerals, fish, birds, quadrupeds, and of the manner in which they may be of service to man. Of so great importance was this book considered that several editions of it were printed as early as the sixteenth century. No less an authority than the late Rudolph Virchow, the founder of cellular pathology, characterizes it as an early *materia medica*, curiously complete, considering the age to which it belongs.² And Hæser, in his history of medicine.

¹ This work was for a long time regarded as lost, but a manuscript copy was recently found in Copenhagen, and it has since been published by Teubner of Leipsic, under the title of *Hildegard's Causæ et Curæ*.

² *Archiv für Pathologische Anatomie und Physiologie und für Klinische Medicin*, Band 18, p. 286, Berlin.

directs attention to the historical value of the book, declaring it to be "an independent German treatise, based chiefly on popular experience."

Dr. F. A. Reuss, of the University of Würzburg, at the conclusion of his *Prolegomena* to the *Physica* published in Migne's *Patrologia*, expresses himself as follows regarding the writings and medical knowledge of the illustrious abbess of Bingen: "Among all the saintly *religieuses* who, during the Middle Ages, practiced medicine or wrote treatises on it, the first, without contradiction, is Hildegard. According to the monk Theodoric, who was an eye witness, she had to so high a degree the gift of healing that no sick person had recourse to her without being restored to health. There is among the books of this prophetic virgin a work which treats of physics and medicine. Its title is *De Natura Nominis Elementorum Diversarumque Creaturarum*, and it embodies, as the same Theodoric fully explains, the secrets of nature which were revealed to the saint by the prophetic spirit. All who wish to write the history of the medical and natural sciences should read this book, in which the holy virgin, initiated into all the secrets of nature which were then known, and having received special assistance from above, thoroughly examines and scrutinizes all that which was, until then, buried in darkness and concealed from the eyes of mortals. It is certain that Hildegard was acquainted with many things of which the doctors of the Middle Ages were ignorant, and which the investigators of our own age, after rediscovering them, have announced as something entirely new."¹

The life and works of St. Hildegard throw a flood of light on many subjects that have long been veiled in mystery. It explains why the convents of the later Middle Ages were so famed as curative centers and why the sick flocked to them for relief from far and near. It reveals the real agencies employed in effecting the extraordinary

¹ *S. Hildegardis Opera Omnia*, Ed. Migne, p. 1122, Paris, 1882.

cures that were reported in so many religious houses—cures so extraordinary that they were usually regarded by the multitude as miraculous—and discloses the secret of the success of so many nuns in the alleviation of physical and mental sufferings. It was not because they were thaumaturges, but because they were good nurses, and because of their thorough knowledge of the healing art, that they were able to diagnose and prescribe for diseases of all kinds with a success which, in the estimation of the multitude, savored of the supernatural.

There was also another reason for the fame of convents as sanctuaries of health. They were usually situated in healthy locations where there was an abundance of pure water, fresh air and cheerful sunshine. Then there were likewise a wholesome diet, good sanitary conditions, and, above all, regularity of life.

The same can be said of the hospitals connected with the convents. They were not like some of the public hospitals of the eighteenth and nineteenth centuries in many of the large cities of Europe—repulsive, prison-like structures, with narrow windows and devoid of light and air and the most necessary hygienic appliances—institutions that were hospitals in name, but which were in reality too frequently breeding places of disease and death.¹

¹“In the municipal and state institutions of this period the beautiful gardens, roomy halls and springs of water of the old cloistral hospital of the Middle Ages were not heard of, still less the comforts of their friendly interiors.” *A History of Nursing*, Vol. I, p. 500, M. Adelaide Nutting and Lavinia L. Dock, New York, 1907.

The mortality in some of the state hospitals from the latter part of the seventeenth to the middle of the nineteenth century was appalling, often as high as fifty and sixty per cent. This was due not only to shockingly unsanitary conditions, but also to inordinate overcrowding. A large proportion of the beds, incredible as it may seem, were purposely made for four patients, and six were frequently crowded into them. “The extraordinary spectacle was then to be seen of two or three small-pox cases, or several surgical cases,

Unlike these, the hospitals presided over by nuns of the type of Hildegard were splendid roomy structures with large windows and abundance of light, pure air, with special provisions for the privacy of the patients, and with sanitary arrangements that not only precluded the dissemination of disease but which contributed materially to those marvelous cures which the good people of the time attributed to supernatural agencies rather than to the medical knowledge and skill of the devoted nuns,¹ who were the real conquerors of disease and death.

But the inmates of the cloister were not the only women who, during the Middle Ages, achieved distinction by their writings on medical subjects and by their signal success in the practice of the healing art. In various parts of Europe, but especially in Italy and France, there were at this time among women, outside as well as inside convent walls, many daughters of Æsculapius and sisters of Hygeia who stood in such high repute among their contemporaries that they received the same honors and emoluments as were accorded to their masculine colleagues.

This was particularly the case in Salerno, which was the venerated mother of all Christian medical schools, and which, for nine centuries, was universally regarded as "the unquestioned fountain and archetype of orthodox medicine." Situated on the Gulf of Salerno, and laved by the

lying on one bed." John Howard, in his *Prisons and Hospitals*, pp. 176-177. Warrington, 1874, tells us of two hospitals that were so crowded that he had "often seen five or six patients in one bed, and some of them dying."

It is gratifying to learn that the chief agents in changing this revolting condition, due to faulty construction and management of hospitals, were women. Prominent among these benefactors of humanity were Mme. Necker, Florence Nightingale, and the wise and alert superiors of the various nursing sisterhoods.

¹ How like Chaucer's prioress who

"Was so charitable and so piteous,
And al was conscience and tender herte."

cerulean waters of the Tyrrhenian sea, the *Civitas Hippocratica*, as it was called on its medals, rejoiced in a salubrious climate, and was celebrated throughout the world as the "City sacred to Phœbus, the sedulous nurse of Minerva, the fountain of physic, the votary of medicine, the handmaid of Nature, the destroyer of disease and the strong adversary of death."¹ For to this favored city flocked from all quarters the lame and the halt and those afflicted with the tortures of disease and the disabilities of advancing years. The noble and the simple, crowned heads as well as the poorest of the poor, were found there, all of them in quest of life's most precious boon—health and strength.

Never did the far-famed sanctuary of the god of medicine in Epidaurus witness such an influx of invalids as gathered in the hospitals of Salerno and pressed through the streets of the Hippocratic city, seeking the aid of those doctors whose marvelous cures had given them a world-wide reputation. Small wonder, then, that the *Regimen Santatis Salernitanum*—that famous code of health of the school of Salerno—has been translated into almost all the languages of modern Europe, and that since 1480 no fewer than two hundred and fifty editions of it have been published. "Not to have been familiar with it from beginning to end, not to have been able to quote it orally as occasion might require, would, during the Middle Ages, have cast serious suspicion upon the professional culture of any phy-

¹ Cf. *Lib. de Virtutibus et Laudibus*, by Ægidius, head physician to Philip Augustus of France, in which occur the following verses:

Urbs Phœbo sacrata, Minervæ sedula nutrix,
Fons physicæ, pugil eucrasis, cultrix medicinæ,
Assecla Naturæ, vitæ paranympa, salutis
Promula fida; magis Lachesis soror, Atropos hostis.
Morbi pernicies, gravis adversaria mortis.

quoted in the appendix, p. xxxii, to S. de Renzi's, *Storia Documentata della Scuola Medica di Salerno*, Naples, 1857,

sician."¹ But the noblest claims of the Hippocratic city to the gratitude of humanity yet remain to be told. A German traveler in the thirteenth century wrote:

"Laudibus æternum nullum negat esse Salernum
Illuc pro morbis totus circumfluit orbis."²

This was because Salerno was universally recognized as the "day star" and "morning glory" of the best culture in the healing art, and, still more, because of the thorough instruction she gave in her schools of medicine and the pre-eminence she so long held in every department of medical lore.

The course of study in medicine was long and thorough, and the candidate applying for a degree had to pass a rigid examination and give proof not only of his proficiency in every branch of the healing art, but also of perfect acquaintance with the various branches of science and letters as well. At the time of Frederick II, who organized all the different schools of Salerno into a single university, a three years' course in philosophy and literature was required before one could present himself for entrance into the school of medicine. The courses in medicine lasted five years, at least, after which a year of practice with an old physician was required. In addition to this, if the candidate wished to practice surgery he was obliged to devote one year to the study of human anatomy and to the dissection of human bodies. Considering the progress of knowledge since the time of Frederick II, it must be admitted that the legal requirements enforced by the faculty of Salerno compare favorably with those of the best of our medical schools of to-day.

Still more to the credit of Salerno, long known as the

¹ Cf. The introduction to the English translation of the *Regimen Sanitatis Salernitanum*, p. 28, by J. Ordranax, Philadelphia, 1870.

² "Immortal praise adorns Salerno's name
To seek whose shrine the world once came,"

Athens of the two Sicilies, was her boundless liberality toward scholarship and culture regardless of sex. For, with a chivalrous admiration for intellect, wherever found, and with a sense of intellectual justice that has put to shame all medical schools outside of Italy, until less than fifty years ago, the school of Salerno was the first to throw open its portals to women as well as men, and give to an admiring world a number of women—those celebrated *mulieres Salernitanæ*—who were eminent not only as physicians, but also as professors of the theory and practice of medicine. For this reason, if for no other, it can be truly affirmed that “No school of medicine in any age or country, if only for this, can ever over-peer her in renown; and, even as formerly in the universities of Europe, at the bare mention of the name of the learned Cujacius, every scholar instinctively uncovered himself, so at the very name of Salernum, the fount and nurse of rational medicine, every physician should recall her memory ‘with mute thanks and secret ecstasy’ as among the most spotless and venerated chapters in the history of his art.”¹

The most noted professor and successful practitioner among the women of Salerno was *Trotula*, wife of the distinguished physician, John Platearius, and a member of the old noble family of the Ruggiero. She flourished during the eleventh century and enjoyed a reputation as a physician that was not inferior to that of the most noted doctors of her time. Besides occupying a chair in the school of medicine and having an extensive practice, she was the author of many works on medicine which had a great vogue among her contemporaries. Some of them, especially those relating to diseases of her own sex,² were published

¹ See *Storia Documentata della Scuola Medica di Salerno*, ut sup., p. 474 et seq., and p. lxxvi et seq. of Appendix; also Ordranax, ut sup., p. 16.

² Probably her most noted work is the one which bears the title *De Morbis Mulierum et Eorum Cura*—The Diseases of Women and Their Cure.

several times after the invention of printing, and many manuscript copies of her works are still found in various libraries of Europe. But she did not confine her practice to the diseases of women. She was also well versed in general medicine and exhibited, besides, as her works testify, marked skill as a surgeon in many cases that would even now be considered as peculiarly difficult of treatment.

One of her books was entitled *De Compositione Medicamentorum*—the Compounding of Medicaments—and it was this work, doubtless, that gave her much of the fame she enjoyed beyond the confines of Italy. Rutebœuf, a noted French trouvère of the thirteenth century, gives us a quaint picture of a scene frequently witnessed in his day. Crowds were frequently attracted by herbalists—venders of simples—who, stationed at street corners or in other public places, near tables covered with a cloth of flaring colors, were wont to descant, somewhat after the style of certain of our patent-medicine hawkers and quack-salvers, upon the extraordinary curative properties of the various drugs and panaceas which they had for sale.

“Good people,” one of these traveling herb doctors would begin, “I am not one of those poor preachers, nor one of those poor herbalists who carry boxes and sachets and spread them out on a carpet. No, I am a disciple of a great lady named Madame Trotte of Salerno, who performs such marvels of every kind. And know ye that she is the wisest woman in the four quarters of the world.”

Ordericus Vitalis, an English Benedictine monk, in his *Historia Ecclesiastica*, tells us of the impression made by Trotula on Rudolfo Malacorona, one of those famous itinerant scholars of the Middle Ages, who spent their lives in wandering from one university to another in pursuit of knowledge. He had been a student from his youth and was a man of remarkable attainments in every department of learning. After visiting and conferring with the learned men of the most celebrated universities of France and

Italy, he finally arrived at Salerno, where, he informs us, he found no one who could cope with him in disputation except *quandam sapientem matronam*—a certain very learned woman.¹ This was Trotula, who, by reason of the extraordinary cures she effected, was known among her contemporaries as *magistra operis*—a consummate practitioner. When, however, we consider the thorough course of study that every one aspiring to a degree in medicine was obliged to complete, women as well as men, it is not so surprising that Trotula should be regarded both as a learned woman and as a successful physician.

Among other women doctors who did honor to Salerno and whose names have come down to us were three who are known in history as Abella, Rebeca de Guarna and Mercuriade. All of them achieved a great reputation by their writings on medical subjects, especially Mercuriade, who distinguished herself in surgery as well as in medicine. Still another woman deserving special mention is Francesca, wife of Matteo de Romana, of Salerno. After passing a very severe examination before a board composed of physicians and surgeons, she was accorded the doctorate in surgery. An official document of the time referring to this event reads as follows: "Whereas the laws permit women to practice medicine, and whereas, from the viewpoint of good morals, women are best adapted to the treatment of their own sex, we, after having received the oath of fidelity, permit the said Francesca to practice the said art of healing," etc.²

¹"Physicæ quoque scientiam tam copiose habuit ut in urbe Psaleritana, ubi maxime medicorum scholæ ab antiquo tempore habentur, neminem in medicinali arte, præter quandam sapientem matronam, sibi parem inveniret." Migne, *Patrologiæ Latinæ*, Tom. 188, Col. 260.

²As this decree is of singular interest and importance, a copy of the original is here given in full:

"Karolus, etc., Universis per Justitieratum Principatus citra Seras Montorii constitutis presentes litteras inspecturis fidelibus pa-

In view of the facts above mentioned regarding the University of Salerno—the excellence of its work, its liberality and breadth of view, its attitude toward the higher education of women, and its preëminence for so many centuries as a school of medicine—is it surprising that it was, until comparatively recent times, considered “the *mater et caput* of medical authority in ethical matters,” and that, so late as 1748, the Medical Faculty of Paris should address an official letter to the faculty of Salerno requesting its judgment regarding the rights of precedence as between physicians and surgeons? But what is surprising, and what, too,

ternis et suis salutem, etc. In actionibus nostris utilitati publice libenter oportune perspiciamus et honestatem morum in quantum suadet modestia conservamus. Sane Francisca uxor Mathei de Romana de Salerno in Regia Curia presens exposuit quod ipsa circa principale exercitium chirurgie sufficiens circumspecto in talibus iudicio reputatur. Propter quod excellentie nostre supplicavit attentius ut licentiam sibi dignaremur concedere in arte hujusmodi practicandi. Quia igitur per scriptum publicum universitatis terre Salerni presentatum eidem Regie Curie, inventum est lucide quod Francisca prefata fidelis est et genere orta fidelium ac examinata per medicos Regios paternos nostrosque chirurgicos, in eadem arte chirurgie tamquam ydiota sufficiens est inventa, licet alienum sit feminis conventibus interesse virorum, ne in matronalis pudoris contumelia irruant et primum culpam vetite transgressionis incurrant. Quia tamen de juris indicto medicine officium mulieribus est concessum expedienter attento quod ad mulieres curandas egrotas de honestate morum viris sunt femine aptiores, not recepto prius ab eadem Francisca solito fidelitatis et quod iuxta traditiones ipsius artis curabit fidelitèr corporaliter Jramento, licentiam curandi et practicandi sibi in eadem arte per Justitiatum jam dictum auctoritate presentium impartimus. Quare fidelitati vestre precipimus quatenus eandem Franciscam curare et praticari in prefata arte per Justitiatum predictum ad honorem et fidelitatem paternam et nostram ac utilitatem fidelium presentium earumdam libere permittatis, nullum sibi in hoc impedimentum vel obstaculum interentes. Datum Neapoli per dominum Bartholomeum de Capua, etc., Anno domini mcccxxi, die x Septembris v, indictionis Regnorum dicti domini patris nostri anno xiii.

Collectio Salernitana, Tom. III, p. 338, by G. Henschel, C. Daremberg, and S. de Benzi, Naples, 1852-59.

passes all understanding, is that the University of London, after being empowered by royal charter to do all things that could be done by any university, was legally advised that it could not grant degrees to women without a fresh charter, because no university had ever granted such degrees.¹

While women were winning such laurels in Salerno in every department of the healing art, their sisters north of the Alps were not idle. As early as 1292 there were in Paris no less than eight women doctors—called *mirettes* or *mediciennes*—whose names have come down to us, not to speak of those who practiced in other parts of France. There was also a certain number of women who devoted themselves to surgery and called by the old Latin authors of the time *cyrurgicæ*.

In Paris, however, conditions for studying and practicing medicine and surgery were far from being as favorable to women as they were in Salerno. As there were no schools open to them for the study of these branches, they had to depend entirely for such knowledge as they were able to acquire on the aid they could get from practicing doctors, the reading of medical books and their own experience. The consequence was that they were not at all so well equipped for their work as were the women who enjoyed all the exceptional advantages offered the students at Salerno. None of them was noted for scholarship, none of them was a writer of books, and only one of them—

¹ *Universities in the Middle Ages*, Vol. II, Part II, p. 712, by H. Rashdall, Oxford, 1895. The most exhaustive work on the University of Salerno and its famous doctors, men and women, is a joint work in five volumes entitled *Collectio Salernitana; ossia Documenti Inediti e Trattati di Medicina appartenenti alla scuola Salernitana, raccolti e illustrati*, by G. Henschel, C. Daremberg e S. Renzi, Naples, 1852-59. Cf. also, *Storia Documentata della Scuola Medica di Salerno*, by S. de Renzi, Naples, 1857; *L'Ecole de Salerne*, by C. Meaux, with introduction by C. Daremberg, Paris, 1880, and Piero Giacosa's *Magistri Salernitani Nondum Editi*, Turin, 1891.

Jacobe Felicie, about whom more presently—rose above mediocrity.

The reason for the great difference between the conditions of the women doctors of Paris and those of Salerno is not far to seek. The Faculty of Medicine in Paris was, from the beginning of its existence, unalterably opposed to female medical practitioners. As early as 1220 it promulgated an edict prohibiting the practice of medicine by any one who did not belong to the faculty, and, according to its constitutions and by-laws, only unmarried men were eligible to membership.

For a long time the edict remained a dead letter. But eventually, as the faculty grew in power and influence, it was able to enforce the observance of its decrees. One of its first victims was Jacobe Felicie, just mentioned, who was hailed before court for practicing medicine in contravention of its edict issued many years before.

Jacobe Felicie was a woman of noble birth, and had won distinction by her success in the healing art. As the testimony at her trial revealed, she never treated the sick for the sake of gain. In nearly all cases the sick who had addressed themselves to her had been abandoned by their own physicians. All the witnesses who had been called testified that they had been cured by Jacobe Felicie, and all expressed their deepest gratitude to her for her care and devotion. But, in spite of all these facts, and in spite of the brilliant defence that this worthy woman made, she was condemned to pay a heavy fine—condemned because, as the indictment read, she had presumed to put her sickle into the harvest of others—*falcem in messem mittere alienam*—and this was a crime.¹ The faculty was a close corporation and insisted that its members should have a monopoly of all the honors and emoluments that were to accrue from the treatment of the sick and suffering. What

¹ *Chartularium Universitatis Parisiensis*, Tom. II, p. 150, and pp. 255 and 267, by Denifle and Chatelain, Paris, 1889-1891.

a curious adumbration of similar proceedings within the memory of many still living!

The prosecution of *Jacobe Felicie* recalls that of *Agnodice* in Greece long ages before. And the plea urged for the necessity of a female physician—that many a woman would rather die than reveal the secrets of her infirmity to a man¹—was the same as that offered by the women of Athens before the council of the Areopagus. It was the same agonizing cry that had been heard thousands of times before and which has been heard thousands of times since. *Isabella of Castile* was not the first of the long list of victims who, for lack of a doctor of their own sex, have been sacrificed through womanly modesty, and, more's the pity, she will not be the last.

Unfortunately for the women of France, the result of the prosecution of *Mme. Felicie* was the very reverse of that instituted against *Agnodice*; for the latter came off victorious, while the former was condemned and punished. So crushing was the blow dealt to women practitioners, outside of obstetrics, that they did not recover from its effects for more than five hundred years. For it was not until 1868 that the *Ecole de Medicine* of Paris opened its doors to women, and it was not until nearly twenty years later that female physicians were able to enter the hospitals of the French capital as *internes*.²

Until quite recent years there is very little to be said of women physicians in England and Germany. Their practice, outside of that of certain herb doctors, was confined

¹ "Mulier antea permetteret se mori, quam secreta infirmitatis sui homini revelare propter honestatem sexus muliebris et propter verecundiam quam revelando pateretur." *Chartularium Universitatis Parisiensis*, Tom. II, p. 264, Paris, 1891.

² It may interest the reader to know that the first two women to get the doctorate in the Paris School of Medicine were Miss Elizabeth Garret, an English woman, and Miss Mary Putnam, an American. The first woman permitted to practice in the Paris hospitals was likewise an American, Miss Augusta Klumpke, of San Francisco.

chiefly to midwifery. There was no provision made in either of these countries for the education of women in medicine and surgery, and such a thing as a college where they could receive instruction in the healing art was unknown. It is true that an ecclesiastical law of Edgar, King of England, permitted women as well as men to practice medicine, but this law was subsequently abolished by Henry V.¹

During the reign of Henry VIII a law was again enacted in favor of women physicians; for at that time an act was passed for the relief and protection of "Divers honest psones, as well men as women, whom God hath endued with the knowledge of the nature, kind and operation of certeyne herbes, rotes and waters, and the using and ministering them to suche as be payned with customable diseases, for neighbourhode and Goddes sake and of pitie and charitie, because *that* 'The Companie and Fellowship of Surgeons of London, *mynding only their owne lucre and nothing the profit or case of the diseased or patient,* have sued, vexed and troubled' the aforesaid 'honest psones,' who were henceforth to be allowed 'to practyse, use and mynistrer in and to any outwarde sore, swelling or disease, any herbes, oyntments, bathes, pultes or emplasters, according to their cooning, experience and knowledge—without sute, vexation, penaltie or loss of their goods.'"²

The italicized words in this quotation prove that the women doctors of England had the same difficulties as their sisters in France, and that the real reason of the opposition of the male practitioners was that they wished to monopo-

¹ "Possunt et vir et femina medici esse." Cf. Chiappelli, *Medicina negli Ultimi Tre Secoli del Medio Evo*, Milan, 1885.

² Quoted in *Woman's Work and Woman's Culture*, p. 87, Josephine E. Butler, London, 1869. Dom Gasquet in his *English Monastic Life*, p. 175, tells us that in the Wiltshire convents "the young maids learned needlework, the art of confectionery, surgery—for anciently there were no apothecaries or surgeons; the gentlewomen did cure their poor neighbors—physic, drawing, etc."

lize the practice of medicine. They, like the medical faculty of Paris, strenuously objected to women "putting the sickle into their harvest," and they, accordingly, left nothing undone to circumvent the intrusion of those whom they always regarded as undesirable competitors.

It was argued by the men that women, to begin with, lacked the strength and capacity necessary for medical practice. It was also urged that it was indelicate and unwomanly for the gentler sex to engage in the healing art, and that, for their own good, they should be excluded from it at all costs. Those who were willing to waive these objections contended that women had not the knowledge necessary for the profession of medicine and should be excluded on the score of ignorance. When women sought to qualify themselves for medical practice by seeking instruction under licenced practitioners or in medical schools, they found a deaf ear turned to their requests. The doctors declined to teach them and the medical schools, one and all, closed their doors against them.

Thus it was that in England, France and Germany the practice of medicine and surgery was always practically in the hands of men until only a generation ago. Even the English midwives gradually "fell from their high estate," and were left far behind the female obstetricians of Germany and France. For these two countries can point to a number of midwives who, by their knowledge, successful practice, and the books they wrote, achieved a celebrity that still endures.

Chief among these in Germany were Regina Joseph von Siebold, her daughter Carlotta, and Frau Teresa Frei, all of whom, in the early part of the last century, enjoyed an enviable reputation in the Fatherland.

The first named, after following a course of lectures on physiology and the diseases of women and children, and passing a brilliant examination in the medical college of Darmstadt, devoted herself to the practice of obstetrics,

and with so great success that the University of Giessen in 1819 conferred on her the degree of doctor of obstetrics. Her daughter, Carlotta, after studying obstetrics under her mother, went to the University of Göttingen, where she devoted herself to physiology, anatomy and pathology. After passing an examination and successfully defending a number of theses in the University of Giessen, she was also proclaimed a doctor of obstetrics. At a later date Frau Frei received a similar degree.¹

More noted as *accoucheuses* and gynecologists than the three distinguished women just mentioned were Mme. Marie Louise La Chapelle and Mme. Marie Bovin, who, shortly after the French Revolution, entered upon those wonderful careers in their chosen specialties which have given them so unique a place in the annals of medicine.

Mme. La Chapelle was particularly celebrated for the

¹ The first woman to receive the doctorate of medicine in Germany was Frau Dorothea Christin Erxleben. Hers, however, was a wholly exceptional case, and required the intervention of no less a personage than Frederick the Great. In 1754, Frau Erxleben, who had made a thorough course of humanities under her father, presented herself before the faculty of the University of Halle, where she passed an oral examination in Latin which lasted two hours. So impressed were the examiners by her knowledge and eloquence that they did not hesitate to adjudge her worthy of the coveted degree, which was accorded her by virtue of a royal edict.

Her reception of the doctorate was made the occasion of a most enthusiastic demonstration in her honor. Felicitations poured in upon her from all quarters in both prose and verse. One of them, in lapidary style, runs as follows:

“Stupete nova litteraria,
In Italia nonnumquam,
In Germania nunquam
Visa vel audita
At quo rarius eo carius.”

This, freely translated, adverts to the fact that an event, which before had been witnessed only in Italy, was then being celebrated in Germany for the first time, and was, for that very reason, specially deserving of commemoration.

numerous improvements she effected in lying-in hospitals, for the large number of skilled midwives whom she furnished, not only to France, but also to the whole of Europe, and, above all, for the excellent treatises which she wrote on obstetrics, which gave her a reputation second to none among her contemporaries, men or women. Her *Pratique des Accouchements*, in three volumes, based on the immense number of fifty thousand cases at which she presided, reveals an operator of rarest skill and genius. This production was long regarded as a standard work on the topics discussed, and for years exerted an immense influence in the medical world.

Less skillful as an operator, but of greater ability as a doctor than Mme. La Chapelle, was her illustrious contemporary, Mme. Bovin. Possessing extraordinary insight as an investigator and marvelous sagacity as a diagnostician, Mme. Bovin achieved the distinction of being the first really great woman doctor of modern times. Her marvelous success as a practitioner—Dupuytren said she had an eye at the tip of her finger—her extended knowledge of the entire range of gynecology, but above all her numerous treatises on the subject matter of her life work, gave her a prestige that none of her sex had ever before enjoyed, and commanded the admiration of the doctors of the world. Her *Memorial de l'Art des Accouchements* passed through many editions and was translated into several European languages. And so highly were her scientific attainments valued in Germany that the University of Marburg recognized them by conferring on her—*honoris causa*—the degree of doctor of medicine and, had its rules permitted the admission of women, the Royal Academy of Medicine would have honored her with a place among its members. She was also the recipient of many other honors, besides being a member of several learned societies. But the greatest monument to her genius is a large illustrated treatise in two volumes, in which she

exhibits a wonderful knowledge of anatomy, physiology, surgery, pathology and therapeutics. It gave her a large following in Germany as well as in France, and there were not wanting distinguished German *accoucheurs* who followed Mme. Bovin's teachings to the letter.

The remarkable German and French women just named were all practically self-made women. They won fame as they had acquired knowledge—chiefly by courage, in spite of the countless obstacles that beset their paths. They owed nothing to schools or universities, nothing to government patronage or assistance, nothing to the medical fraternity as a whole. Universities would not admit them to their lecture rooms or laboratories, and the various medical faculties opposed them as intruders into their jealously guarded domain, and as competitors whose aspirations were to be frustrated, whatever the means employed. It is true that, when some of the women mentioned had won world-wide renown by their achievements, they were made the recipients of belated honors by certain universities and learned societies; but these societies and universities were then honoring themselves as much as the women who received their degrees and diplomas of membership.

How different it was in Italy, which, since the fall of the Roman Empire, has ever been in the van of civilization, and which has always continued the best traditions of Græco-Roman learning and culture—Italy, which has been the home of such supreme masters of literature, science, art as Dante, Petrarch, Galileo, Leonardo da Vinci, Raphael, Michaelangelo, Brunnelleschi—Italy, the mother of universities, the birthplace of the Renaissance, and the recognized leader of intellectual progress among the nations of the world. Here in the favored land of the Muses and the Graces, women enjoyed all the rights and privileges accorded to men; here the doors of schools and universities were open to all regardless of sex; and art, science, literature, law, medicine, jurisprudence counted its votaries

among women as well as among men; here, far from encountering jealousy and opposition in the pursuit of knowledge or in the practice of the professions, women never found aught but generous emulation and sympathetic co-operation.

For a thousand years women were welcomed into the arena of learning and culture on the same footing as men. In Salerno, Bologna, Padua, Pavia, they competed for the same honors and were contestants for the same prizes that stimulated the exertions of the sterner sex. Position and emolument were the guerdons of merit and ability, and the victor, whether man or woman, was equally acclaimed and showered with equal honor. Women asked for no favors in the intellectual arena and expected none. All they desired were the same opportunities and the same privileges as were granted the men, and these were never denied them. From the time when Trotula taught in Salerno to the present, when Giuseppina Catani is professor of general pathology in the medical faculty of Bologna, the women of Italy always had access to the universities and were at liberty to follow any course of study they might elect. We thus find them achieving distinction in civil and canon law, in medicine, in theology even, as well as in art, science, literature, philosophy and linguistics. No department of knowledge had any terrors for them, and there was none in which some of them did not win undying fame. They held chairs of language, jurisprudence, philosophy, physics, mathematics, medicine and anatomy, and filled these positions with such marked ability that they commanded the admiration and applause of all who heard them.

This is not the place to tell of the triumphs of the women professors in the Italian universities, or to recount the achievements of those who were honored with degrees within their classic walls. Let it suffice to recall the names of a few of those who won renown in medicine and sur-

gery and whose names are still in their own land pronounced with respect and veneration.

One of the most noted practitioners in Southern Italy, after the death of Trotula and her compeers, was one Margarita, who had studied medicine in Salerno. One of her patients was no less a personage than Ladislaus, King of Naples. Among those that had diplomas for the practice of surgery were Maria Incarnata, of Naples, and Thomasia de Matteo, of Castro Isiae.

That women enjoyed in Rome the same privileges in the practice of medicine and surgery as their sisters in the southern part of the peninsula is manifest from an edict issued by Pope Sixtus IV in confirmation of a law promulgated by the Medical Faculty of Rome, which reads as follows: "No man or woman, whether Christian or Jew, unless he be a master or a licentiate in medicine, shall presume to treat the human body either as a physician or as a surgeon."¹

In central and northern Italy—in Florence, Turin, Padua, Venice—as well as in the southern part, we find constantly recurring instances of women practicing medicine and surgery and winning for themselves an enviable reputation as successful practitioners.

But after the decline of Salerno, consequent on the establishment by Frederick II of a school of medicine in Naples, the great center of medicine and surgery, as of civil and canon law, was Bologna.² So renowned did it become

¹ "Nemo masculus aut fœmina, seu Christianus vel Judæus, nisi Magister vel Licentiatius in Medicina foret, auderet humano corpori mederi in physica vel in chyrurgia." Marini, *Archiatri Pontifioi*, Tom. I, p. 199, Roma, 1784.

² Thomas Aquinas, the Angel of the Schools, who had taught in Salerno, and was well acquainted with the leading universities of Europe, was wont to say "Quattuor sunt urbes cæteris præeinentes, Parisius in Scientiis, Salernum in Medicinis, Bononia in legibus, Aurelianis in actoribus—" there are four preëminent cities: Paris,

as a teaching and intellectual center that it was, as Sarti informs us, known throughout Europe as *Civitas Docta*—the learned city—and *Mater Studiorum*—the mother of studies. On its coins were stamped the words *Bononia Docet*—Bologna teaches—and on the city seal, which is still used for certain public documents, were the words *Legum Bononia Mater*—Bologna, the Mother of Laws.

Here, more than in Salerno, more than in any other city in the world, was, for long centuries, witnessed a blooming of female genius that has, since the time of Gratian and Irnerius, given the University of Bologna preëminence in the estimation of all friends of woman's education and woman's culture. For here, within the walls of what was for centuries the most celebrated university in Christendom, women had, for the first time, an opportunity of devoting themselves at will to the study of any and all branches of knowledge. And it can be truthfully affirmed that no seat of learning can point to such a long list of eminent scholars and teachers among the gentler sex as is to be found on the register of Bologna's famous university. For here, to name only a few, achieved distinction, either as students or as professors, such noted women as Bitisia Gozzadina, Bettina and Novella Calendrini, Dorotea Bocchi, Giovanna and Maddalena Bianchetti, Virginia Malvezzi, Maria Vittoria Dosi, Elisabetta Sirani, Ippolita Grassi, Properzia de Rossi, Maria Mastellagri, Laura Bassi, Maddelena Noe-Cantedi, Clotilda Tambroni and Anna Manzolini. In this honor list we have a group of savantes in the sciences; Salerno, in medicine; Bologna, in law; Orleans, in actors. Op. 17. *De Virtutibus et Vitiis*, Cap. ult.

The mediæval poet, Galfrido, expressed the same idea in verse when he wrote:

“In morbis sanat medici virtute Salernum
 Ægros: in causis Bononia legibus armat
 Nudos: Parisius dispensat in artibus illos
 Panes, unde cibatur robustos: Aurelianus
 Educat in cunis actorum lacte tenellos.”

that were famed throughout Europe for their attainments in law, philosophy, science, ancient and modern languages, medicine, and surgery—the rivals, and sometimes the superiors, in scholarship of the ablest men among their distinguished colleagues.

It would be a pleasure to recount the achievements of these justly celebrated daughters of Italy; but lack of space precludes the mention of more than one of them. This was Maria dalle Donne, who was born of poor peasants near Bologna, and who at an early age exhibited intelligence of a superior order. After pursuing her studies under the ablest masters, she obtained from the University of Bologna, *maxima cum laude*, the degree of doctor in philosophy and medicine. On account of her knowledge of surgery, as well as of medicine, she was soon afterward put in charge of the city's school for midwives. When Napoleon, in 1802, passed through Bologna he was so struck by the exceptional ability of the young *dottoressa* that, on the recommendation of the savant Caterzani, he had instituted for her in the university a chair of obstetrics—a position which she held until the time of her death, in 1842, with the greatest credit to herself and to the institution with which she was identified.

Maria dalle Donne is a worthy link between that long line of women doctors, beginning with Trotula, who have so honored their sex in Italy, and those still more numerous practitioners in the healing art who, shortly after her death, began to spring up in all parts of the civilized world.¹

¹ It may be remarked that it was a woman, Lady Mary Montagu, who introduced inoculation with small-pox virus into Western Europe, and that it was also a woman—a simple English milkmaid—who communicated to Jenner the information which led to his discovery of a prophylactic against small-pox. But of far greater importance was the introduction into Europe of that priceless febrifuge and antiperiodic—chinchona bark. This was due to the Countess of Chinchon, vicereine of Peru. Having been cured by its virtues of an

For it was about this time that the movement which had long been agitated in behalf of the higher education of women began suddenly to assume extraordinary vitality, not only throughout Europe but in America as well. And to no women did this movement appeal so strongly as to those who had long been looking forward to an opportunity to qualify themselves for the learned professions, especially medicine. No sooner did they descry the first flush of dawn on their long-deferred hopes than they began to consider ways and means for putting their fondly nurtured projects into execution.

Seven years, almost to the day, after the death of Maria dalle Donne, Miss Elizabeth Blackwell, a young woman in America, of English birth, decided to enter college with a view of studying medicine and surgery. But, at the very outset, she encountered all kinds of unforeseen difficulties—difficulties that would have caused a less courageous and determined woman to give up her plans in despair. She was told, in the first place, that it was highly improper for a woman to study medicine and that no decent woman would think of becoming a medical practitioner. As to a *lady* studying or practicing surgery that, of course, was out of the question.

But a more serious obstacle than the conventionalities in the case was the difficulty of finding a medical college that was willing to admit a woman to its lecture rooms and laboratories. Miss Blackwell applied to more than a dozen aggravated case of tertian fever in 1638, while living in Lima, she lost no time, on her return to Spain, in making known to the world the marvelous curative properties of the precious quinine-producing bark. The powder made from the bark was most appropriately called *Pulvis Comitessæ*—the countess's powder—and by this name it was long known to druggists and in commerce. Thanks to Linnæus, the memory of the gracious lady will always be kept green, because her name is now borne by nearly eight score species of the beautiful trees which constitute the great and incomparable genus *Chinchona*. See *A Memoir of the Lady Ana de Osorio, Countess of Chinchon, and Vice-Queen of Peru*, by Clements R. Markham, London, 1874.

of the leading institutions of America, and received a positive refusal to her request. Finally, when hope had almost vanished, she received word from a small college in Geneva, New York, announcing that her application had been favorably considered and that she would be admitted as a student whenever she presented herself.

The truth is that the faculty of the college was opposed to the young woman's admission, but wished to escape the odium incident to a direct refusal by referring the question to the class with a proviso which, it was believed, would necessarily exclude her. "But in this it was greatly surprised and disappointed. For the entire medical class, to the number of about one hundred and fifty, decided unanimously in favor of the fair applicant's admission. And they did more than this. They put themselves on record regarding the equality of educational opportunities for women and men in a way that must have put their timid professors to shame. Their resolution, accompanying an invitation to the young woman to become a member of the student body, was worded as follows:

"Resolved, That one of the radical principles of a republican government is the universal education of both sexes; that to every branch of scientific education the door should be equally open to all; that the application of Elizabeth Blackwell to become a member of our class meets our entire approbation, and, in extending our unanimous invitation, we pledge ourselves that no conduct of ours shall cause her to regret her attendance at this institution.' "

The students were as good as their word. Their conduct, as Miss Blackwell wrote years afterward, was always admirable and that of "true Christian gentlemen." But the women of Geneva were shocked at the female medical student. They stared at her as a curious animal; and the theory was fully established that she was "either a bad woman, whose designs would gradually become evident, or

that, being insane, an outbreak of insanity would soon be apparent."¹

In due time Miss Blackwell finished her course in medicine and surgery, and graduated at the head of her class. The orator of the day, who was a member of the faculty, naturally referred to the new departure that had been made—the admission of a woman for the first time to a complete medical education—and among other things declared that the experiment, of which every member of the faculty was proud, “had proved that the strongest intellect and nerve and the most untiring perseverance were compatible with the softest attributes of feminine delicacy and grace.”²

The awarding of the degree of M.D. for the first time to a woman in America excited general comment and widespread interest, not only in the United States, but in Europe as well. The public press was not unfavorable in its opinion of the new departure, and even *Punch* could not resist writing some verses, sympathetic, albeit humorous, in honor of the fair M.D.³

¹ *Pioneer Work in Opening the Medical Profession to Women*, p. 70, by Dr. Elizabeth Blackwell, London, 1895. ² *Ibid.*, p. 91.

³ “Young ladies all, of every clime,
 Especially of Britain
 Who wholly occupy your time
 In novels or in knitting,
 Whose highest skill is but to play,
 Sing, dance or French to clack well,
 Reflect on the example, pray,
 Of excellent Miss Blackwell.

 “For Doctrix Blackwell, that’s the way
 To dub in rightful gender—
 In her profession, ever may
 Prosperity attend her.
 Punch a gold-headed parasol
 Suggests for presentation
 To one so well deserving all
 Esteem and Admiration.”

After spending some time abroad studying in the great hospitals of Europe, Miss Blackwell started the practice of medicine in New York City. At first, as she declares in her autobiographical sketches, it was "very difficult, though steady, uphill work. I had," she tells us, "no medical companionship, the profession stood aloof, and society was distrustful of the innovation."

The aloofness of the profession arose from a dread of successful rivalry, and the men did not wish to encourage "the invasion by women of their own preserves." "You cannot expect us," one of them frankly admitted to her, "to furnish you with a stick to break our heads with."

But, undeterred by opposition, Miss Blackwell continued her work, daily making converts to the new movement and receiving substantial aid, as well as sympathetic coöperation, from many people, both men and women, prominent in society and public life. In 1854 she started a free dispensary for poor women. Three years later she founded a hospital for women and children, where young women physicians as well as patients could be received. These were the humble beginnings of the present flourishing institutions known as the New York Infirmary and the College for Women. And in less than ten years after her graduation, Miss Blackwell saw the new departure in medical practice successfully established, not only in New York, but also in other large cities of the United States. In 1869 the early pioneer medical work by women in America was completed.

"During the twenty years which followed the graduation of the first woman physician, the public recognition of the justice and advantage of such a measure had steadily grown. Throughout the northern states the free and equal entrance of women into the profession of medicine was secured. In Boston, New York and Philadelphia special medical schools for women were sanctioned by the

legislatures, and in some long-established colleges women were received as students in the ordinary classes."¹

Meanwhile, the women in Europe were not idle nor heedless of the example set by their brave sisters in America. The University of Zurich threw open its portals to women, and was soon followed by those of Bern and Geneva. The first woman to obtain a degree in medicine in Zurich—it was in 1867—was Nadejda Suslowa, a Russian. She was soon followed by scores of others from Europe and America, who found greater advantages and more sympathy in Swiss universities than elsewhere.

In 1869 the Medico-Chirurgical Academy of St. Petersburg conferred the degree of M.D. upon Madame Kaschewarow, the first female candidate for this honor. When her name was mentioned by the dean it was received with an immense storm of applause which lasted several minutes. The ceremony of investing her with the insignia of her dignity being over, her fellow students and colleagues lifted her on a chair and carried her with triumphant shouts throughout the halls.

The first woman graduate from the University of France was Miss Elizabeth Garrett, of England. She received her degree in medicine in 1870, and the following year the same institution conferred the doctor's degree on Miss Mary C. Putnam, of New York.

After these precedents had been established, the universities of the various countries on the continent, following the examples set by those in the United States and Switzerland, opened one after the other their doors to women, and in most of them accorded them all the privileges of *cives academici* enjoyed by the men.

Great Britain held out against the new movement long after most of the continental countries had fallen into line, nor did she surrender until after a protracted and bitter fight, during which the men leading the opposition ex-

¹ Op. cit., p. 241.

hibited evidences of selfishness and obscurantism that now seem incredible.

The leader in Great Britain of pioneer medical work for women was Miss Sophia Jex-Blake, whose academic pathway was beset with difficulties far sterner than had in the United States confronted her friend and colleague, Miss Blackwell.

Hearing much of the tolerance and liberality of the University of London, she applied to it for admission as a student, but was informed at once that the charter of the institution "had purposely been so worded as to exclude the possibility of examining women for medical degrees."

After this rebuff she made application to the University of Edinburgh, which, like the other Scotch universities, had always boasted of its broad-mindedness and freedom from educational trammels. She was received provisionally, and was, after a while, joined by six other women who had in view the same object as herself. For a time, notwithstanding opposition from certain quarters, everything was quiet and apparently satisfactory. But the gathering storm soon broke, and the seven young women, as they were one day entering the university gates, were actually mobbed by a ruffianly band of students who had all along been opposed to the presence of women in the class and lecture rooms. They pelted the helpless females with street mud and hurled at them all the vile epithets and heaped upon them all the abuse that their foul tongues could command. These outrageous proceedings on the part of the rabble of rowdies were allowed to continue for several days, and, had it not been for a brave band of chivalrous young Irishmen among the students, who formed themselves into a bodyguard for the protection of their fair classmates, and were, in consequence, known as "The Irish Brigade," the hapless women students would not have escaped bodily harm. What a marked contrast between the conduct toward Miss Blackwell of the gallant students

of the modest little American town and that of the cowardly ruffians of the vaunted "Athens of the North!"

But this was not all. The seven young women in question had matriculated as students of the university with the understanding that they were to have all the rights and privileges of the male students. But after the disgraceful conduct of the mob just referred to, they discovered that the authorities of the university were prepared to break faith with them, and prevent them from getting their coveted degrees, and thus debar them from all chance of medical practice.

The reason why the university was induced to annul its contract, after the women on their part had fully complied with all its stipulations, soon became apparent. It was purely and simply to make it impossible for women to secure a license as medical practitioners. Both in and outside of Edinburgh the conviction daily grew stronger that women doctors were a menace to the monopoly so long enjoyed by the medical fraternity, and that the movement in their favor should be crushed by fair means or foul before it got beyond control. The *Spectator* made this clear by stating at the time of the controversy that "every profession in this country"—England—"is more or less of a trades union," and yet the members of these professions "would shake their heads and prate about the necessity of stamping out trades unionism among workmen." "Women," whined one of the doctors, "would snatch the bread from the mouths of poor practitioners." Another doctor who had championed the cause of women physicians, when commenting on the hypocritical objection that it was unbecoming for women to practice medicine or surgery, expressed the same idea in other words. "It appears," he declared, "that it is most becoming and proper for a woman to discharge all the duties which are incidental to our profession for thirty shillings a week; but, if she is to have three or four guineas a day for discharging

the same duties, then they are immoral and immodest and unsuited to the soft nature that should characterize a lady."

After Miss Jex-Blake and her companions learned that the university was determined to refuse them the degrees to which they were entitled, they brought suit against it for breach of contract. But, after a long and expensive trial, the judge rendered a decision against them. They then appealed to Parliament, and, after a protracted and strenuous campaign on the part of friends whom they had enlisted in their cause, they saw their opponents not only dragged at the chariot wheels of progress but forced to help to turn them; for, in 1878, after nearly ten years of a persistent, continuous struggle such as had rarely been witnessed in woman's long battle for things of the mind—a struggle in which the intrepid, dauntless Miss Jex-Blake "made the greatest of all the contributions to the end attained"—the women of Great Britain had the supreme satisfaction of winning what was probably the most glorious victory which their sex had ever won.¹ The war was over and henceforward they were free—as were their sisters in other parts of the world—as the women in Italy had been for a thousand years—to devote themselves at will to the study and practice of the healing art without let or hindrance.

What a wonderful change has taken place in the medical world almost within the space of a single generation! The tiny grain of mustard that was sown by two lone women, the Misses Blackwell and Jex-Blake, in their chosen field of effort has grown and "waxed a great tree."

¹ For an interesting account of the long campaign for the admission of women to medical schools and practice, see *Medical Women—A Thesis and a History*, by Dr. Sophia Jex-Blake, Edinburgh, 1886.

For a more elaborate work on women in medicine, the reader may consult with profit, *Histoire des Femmes Médecins*, by Mlle. Melanie Lepinska, Paris, 1900.

Women doctors are now found in all parts of the civilized world and are numbered by thousands. And so great has been their professional success, so widespread is the desire to secure their services, especially in countries like America and England, where opposition was in the beginning especially bitter, that the proportion of women practitioners in medicine and surgery is now regarded as the best index of a nation's enlightenment.

The healing art of Greece and Rome has broadened out into the noble sciences of medicine and surgery of to-day. For, based as they now are on the sciences of chemistry, botany, biology, hygiene, physiology, anatomy and bacteriology, which have all witnessed such extraordinary developments during the last half century, they both deserve a preëminent place in the history of the sciences. And the success which has crowned woman's efforts in surgery and medicine is not only a conclusive indication of her capacity, so long denied by her self-interested opponents, but also the most convincing indication that she is at last properly occupied in a field of activity from which she was too long excluded. Her contributions as writer and investigator toward the progress of both sciences, even during the short time in which she has been able to give proof of her ability, have been notable and augur well for the share she will have in their future advancement. But more important still is the refining influence she has already exerted on both professions, and the relief she has been able to afford to countless thousands of her own sex who would otherwise have been the voluntary victims of untold misery. Women doctors are, indeed, not only worthy representatives of *Æsculapia Victrix* and of the two sciences which they have so elevated and so ennobled, but are also ministering angels to poor, suffering humanity comparable only with the heroic Sisters of Charity and the devoted nurses of the Red Cross.