

A STUDY OF METHODS OF OBSTETRIC INSTRUCTION.

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CITY OF NEW YORK.

A GLANCE over the whole historical period of medicine distinguishes three great epochs: first, that lasting from Hippocrates to Galen—about 600 years; second, that lasting from Galen to Paracelsus—about 1300 years; and third, that of modern times—about 400 years. During the first epoch rational methods of observation and of study, and a true scientific spirit, brought the art of medicine to a high degree of development. During the second epoch medicine slipped back, under the influence of the eclectic methodism of Galen, into a craft for mystics and superstitious priests. Finally, in modern times, medicine has made a renewed progress on a scientific basis of clinical observation and of rational study.

The science and art of obstetrics have passed through the same three stages. Midwifery, as taught in the schools of Greece, and later in those of the Roman world, reached a higher plane, as judged by modern standards, than did its sister arts, medicine and surgery. But in the Dark Ages it sank below the other branches of medicine. The gathered

knowledge and experience of years were forgotten, and the art of obstetrics became the trade of midwifery, and was followed exclusively by ignorant and superstitious women. Midwives had existed practically always, and probably always will exist, and there is no reason inherent in the class which can produce a Marie Lachapelle—no reason why midwives should not practise their profession to the benefit of their patients and to the good of the human race. In modern times obstetrics has been raised again to a plane level with that of medicine and surgery. It and its kindred branch, gynecology, have made very material advances above the conditions that prevailed two or even one hundred years ago.

Among the primitive peoples who gained a livelihood by hunting and by waging war upon their neighbors, the most frequent demands for aid to assist the individual in a medical way were in times of peace undoubtedly of an obstetrical nature. The surgery of wounds would hold a place second only to midwifery, and in times of war might even take precedence, while pathological surgery and the great domain of internal medicine were products of a later advance toward civilization.

In the real progress that has been made in the science and art of medicine in the past fifty years surgery has outstripped all other branches. But following closely, if not, indeed, surpassing surgery in point of progress, gynecology has grown from the merest nothing to be an ideal of aggressive and progressive medicine. Obstetrics lost its primitive pre-eminence before medical history began, not because it became less important, but because other branches developed and demanded equal consideration. To-day obstetrics is a science and an art which shares with surgery the advances gained by the discoveries of anæsthetics and of the aseptic treatment of wounds. Neither surgery nor gynecology requires more nicety and exactness in solving their various mechanical, practical, and theoretical problems of diagnosis and of treatment than does obstetrics in its every-day necessities. Obstetrics is surgical, and in the best sense of the word it is gynecological, and it is more—it is medical. The pregnant and puerperal state may be complicated by any medical disease whatever, and certain of these are, in this relation, strictly obstetrical.

Numerous pleas for the blending of obstetrics with gynecology have been made recently, but obstetrics has been treated always as a secondary matter to gynecology, and but few writers plead for better facilities for teaching and learning the art of midwifery. And yet any gynecological surgeon will acknowledge that the vast majority of the diseases of women coming under his care follow parturition as complication or as sequela. Nevertheless, normal labor, so called, is looked upon by most medical men as something too trivial to demand their time or study. It is true that a large percentage of pregnancies term-

inates favorably to both mother and child; the strain put upon the generative organs by pregnancy and parturition is counterbalanced by the healing art of Nature. Unless the complications arising in the remaining small percentage of cases are serious but little attention is given them by either patient or physician, and lacerations of the cervix and perineum are passed over unnoticed, while displacements and subinvolutions of the uterus are not even appreciated until in later years the woman's existence has become unbearable, and she applies to the gynecologist for aid. The true relationship of obstetrics to gynecology is one of prevention and prophylaxis. Gynecology would be a minor branch to day if the same pains were taken to instruct students in obstetrics as are given to the teaching of surgery, for example. Gynecology and obstetrics should be bound together, or, rather, they should be one, but in this amalgamation obstetrics should take the lead and gynecology should become the secondary and dependent part. Any complication consequent upon a confinement should be recognized, not after the lapse of months, or perhaps years, but immediately the placenta is born the obstetrician should see that all the organs and their functions return to their normal condition.

To accomplish any reform in the practice of this important subdivision of truly preventive medicine it is necessary first to awaken a general interest in routine work in the art; and secondly, to secure to the general practitioner a more thorough knowledge of the science of obstetrics. The standard of obstetric practice should be, and it can be, raised to such a point that gynecological cases may come from unavoidable causes, and not from the ignorance and neglect of obstetric practitioners.

The most fruitful soil to work upon is the undergraduate, and we will now consider the various methods of teaching at present in vogue.

Medical instruction can be divided into two classes: the theoretical, or that of the science, and the practical, or that of the art, of medicine. Theoretical instruction includes the method by didactic lectures, that by reading of text-books, and the method of recitations. The student acquires knowledge in the first by listening to a systematic statement of the subject treated of, and in the second, by reading the same from a printed page. In the recitation this process is reversed, and an opportunity is given the student to express in his own words the ideas that he has gained from a course of reading or of lectures, or from both. In the recitation the student comes into personal touch with the instructor and derives an advantage from immediate and personal criticism which is impossible in reading or in listening to lectures. Practical instruction is conducted by means of "clinical lectures," in which the professor discusses certain patients before a class, and by means of "practical courses" which are a kind of "clinical recitation." In these courses the student himself questions and examines the patient and then dis-

cusses the case with the instructor. Practical courses can be given either in the wards of a hospital or in a dispensary (the "Poliklinik" of the Germans). In general, it is found best to combine hospital and dispensary instruction in the same course, because of the very different kinds of diseases to be found in each—in one, all bed patients; in the other, only those who are able to be out of doors.

Obstetric instruction is conducted on the same general lines, and theoretical lectures, text books and recitations all hold their important place in a well-organized system of obstetric teaching. Instruction at the bedside in hospitals and in out-patient services has also been brought to a high degree of development, although, as will be seen later on, all countries and all schools do not possess equal facilities for teaching midwifery in a practical way. It is as true of obstetrics as of any branch of medicine, that if the best results are to be obtained, no one of these several methods of instruction can take the place of any one of the others. It has been claimed that an out-patient service had no advantage over a hospital-ward service, because all obstetric patients are, of necessity, bed patients, and, therefore, of the same kind. It has also been claimed that a distinct disadvantage rests in such a service, because less personal supervision can be given the student by an instructor in an out-patient service. The refutation of the first objection is well outlined in the *Lancet*, for September 23, 1893,¹ where obstetric teaching in England is discussed editorially, as follows:

The question is sometimes raised as to whether it is better for a student to attend his case in the outdoor maternity department connected with his medical school, or that he should migrate to one of the lying-in hospitals for the purpose. Each system has its advantages. In the former case he is left largely to his own devices, and the necessity of thinking for himself is obviously of great educational value, if he starts with a fair theoretical knowledge. On the other hand, in a lying-in hospital this sense of responsibility is more or less absent, and though he may in a given time see more cases he may not improbably play no more important rôle than that of a spectator, and consequently be little prepared to act on his own resources in the emergencies that will surely be met with afterward in practice. The advantages of both systems may, perhaps, in the future be combined . . . it would certainly be a great advantage for students to see some cases attended in hospital before commencing attendance on patients at their own homes; but attendance in hospital should not take the place of work in the outdoor department, as in no other way is the faculty of self-reliance so likely to become developed.

The second objection, that students receive too little instruction in out-patient work, can be overcome by supplying a careful system of observing cases, with sufficient instructors to direct the work of the pupils. Just as thorough instruction and supervision can be given in a tenement as in a hospital ward, although a larger staff and an expenditure of more time may be demanded by the "polyclinic" system. A

¹ *Lancet*, 1893, vol. ii., No. 13.

combination of both systems will most advantageously prepare a student for the practice of obstetrics.

We will now consider in how far different countries fulfil the requirements for giving instruction in obstetrics.

The obstetrical institutions of France are all under government control. Medical students are taught in the wards of the lying-in hospitals, both those that are directly under the control of the Faculty and also those that are independent of the schools of medicine. These hospitals have out-patient departments, which are conducted by midwives specially appointed by the government. Each midwife reserves from her domain certain rooms, not exceeding three in number, for the reception of those patients who may be sent to her. Only cases which will probably run a normal course are thus referred.¹ Certain general hospitals have obstetric out-patient departments likewise run by special midwives. There has been at least one practical obstetric school in Paris for students of medicine ever since the opening of the one in connection with the Hotel Dieu, in 1720.² At present the regular obstetric course of the Faculty of Paris lasts one month, and consists of the following courses:³

1. Course of twenty-five lessons, in part theoretical lectures, in part practical exercises on the obstetric manikin.

2. Two lectures are given each week by the chief of clinic on cases of dystocia or other cases of pathological interest occurring in the service.

3. A clinical demonstration of any foetal malformation is given to the students whenever possible.

4. A public obstetric clinic is held twice a week in the amphitheatre.

5. All parturients are delivered by the students under the direction of skilled assistants.

6. The professor is accompanied each morning on his rounds by all the students. The latter are questioned concerning their work of the past twenty-four hours. The cases recently delivered or actually in labor are reviewed and criticised.

7. All the babies born during the week are vaccinated by the students.

The official "law" under which the above course is required is the following rule of the Medical Faculty of Paris, passed in March, 1891:

" . . . each student must take a course in one of the obstetrical clinics of the faculty. The duration of the course is one month, and the student must himself deliver two women during that time." In addition to this required course, the attending obstetricians at the hospitals other than the Faculty clinics, the so-called *Accoucheurs des*

¹ Pinard: "Du Fonctionnement de la Maternité de Larebolsière," etc., Paris, 1887.

² Puschmann: "Geschichte des klinischen Unterrichts," *Klinisches Jahrbuch*, I., 1889.

³ Lepage: "Fonctionnement de la Maison d'Accouchements Baudeloque," *Clinique de la Faculté*, Paris, 1892, 1893, 1894.

Hôpitaux, give private instruction to any students who may apply. It is therefore possible for students to supplement the regular course of instruction by work with special teachers who are paid a fee by the student. Such a course of two and a half months' duration is outlined by Budin¹ as follows:

a. Course of theoretical lessons, including obstetric operations and manipulations on a manikin, is given by an assistant professor.

b. Extra lectures on laboratory work in its clinical application to obstetrics are given by the chief of the laboratories of histology, microbiology, and chemistry.

c. All labors are attended by the students, who write the histories; also pregnant women are examined by them. This course is under the supervision of an assistant.

d. Daily clinical instruction is given in the wards, with criticism of the written histories and oral examination of the students by the professor himself.

e. Work in laboratories is open to advanced students.

f. Most capable students are sent out to assist the midwives in complicated cases occurring in the out-patient service.

The instruction of midwives in France is very thorough and is carried on in all of the lying-in hospitals. Practical courses for midwives had been given in Paris for some time before the founding of the first obstetric school in 1720. After the course of instruction certain of the midwives enter private practice for themselves; others attach themselves to the out-patient departments of the various hospitals, and are paid by the government. Although certain courses have always, since 1720, been open to medical students, it is only within the last few years that they have had equal facilities with the midwife students to work in the obstetric hospitals of France.

This system of instruction has called forth criticism from various French writers,² who object to its limitations and who claim that the courses of instruction given by the *Accoucheurs des Hôpitaux* should be accepted by the Faculty as equivalent to the courses at the Faculty clinics. These critics compare the French with German methods, and draw conclusions unfavorable to France. Lejars³ thus sums up the German method: "The right to teach is awarded as freely as possible, with the single reservation that an official control is kept with a strict-

¹ Budin: "La nouvelle Maternité de la Charité et l'Enseignement obstétrical" (Leçon d'ouverture du Cours faite le 29. October, 1891). Le Bulletin Médicale, 1891, v.

² Champétier de Ribes, Doléris, et Budin: "Rapport fait à la Société des Accoucheurs des Hôpitaux an nom d'une Commission" (Budin, rapporteur), Archives de Tocologie et de Gynécologie, 1891, xviii. Verrier: "De la nécessité de l'Enseignement pratique de l'Obstétrique par la création de Cliniques libres et disséminées et par l'organisation de la Polyclinique," Nouvelles Archives d'Obstétrique et de Gynécologie, 1886, i.

³ Lejars: "l'Enseignement de la Chirurgie et de l'Anatomie dans les Universités de Langue Allemande," Le Progrès Médical, 1888, 1889, viii. ix.

ness sufficient to insure a guarantee" (of the character of the course given). These various criticisms have led the authorities to increase the requirements for the Doctor's degree. The Conseil de Surveillance adopted, in June, 1892, the plan for reform in medical teaching as suggested by M. Brouardel, the dean of the Faculty. Article I. of this plan states, among other things, that "During the first two years of the course the students must be connected with the general services of medicine and of surgery. During three months of the third year the students must be connected with the services of obstetrics."¹ The principal improvements in the system of obstetric teaching in France are thus outlined by Ribemont-Dessaignes and Lepage in the preface of their new text-book:² "The teaching of obstetrics in France has taken on a remarkable development during the last few years—the formation of midwifery services in many Parisian hospitals, the transformation by the Faculty of the chair of theoretical obstetrics into a chair of clinical obstetrics, the requirement from all candidates for the Doctor's degree of a definite course of work, having increased the facilities for study, to the great advantage of the students."

From the standpoint of medical instruction, Germany and Austria are one. The instruction in obstetrics is given universally in these countries in a so-called "Frauenklinik," which is a hospital devoted to all that is "specifically peculiar to physiological and to pathological woman."³ The first of these "woman's hospitals" was founded in Göttingen in 1751, and similar institutions were added to nearly all the "schools" in the German-speaking world during the fifty years following. The system of instruction consists of the following courses:

- a. Course of theoretical lectures, given by the professor.
- b. Touch course on pregnant women, given by the first assistant under direction and personal supervision of the professor himself. These two courses should be finished before taking the remaining work.
- c. Practical midwifery course includes the personal care of labor cases and the keeping of the histories of the same. These labors are conducted under the personal charge of an assistant.
- d. Clinical lecture, given daily by the professor. The written histories are taken up and criticised, and, when possible, obstetric operations are done before the class, and complications of puerperium and of pregnancy are shown.
- e. Obstetric Poliklinik, the out-patient department, renders assistance to midwives in complicated cases occurring in their private practice. The subsequent care of such cases is left to the midwife. An assistant

¹ Doléris: "L'Enseignement de la Gynécologie en France," *Nouvelles Archives d'Obstétrique et de Gynécologie*, 1892, vii.

² Ribemont-Dessaignes et Lepage: *Précis d'Obstétrique*, Paris, 1893.

³ Hoffmeier: "Ueber den Unterricht in den Kliniken für Geburtshilfe und Frauenkrankungen," *Klinisches Jahrbuch*, iv., 1892.

is detailed to do these operations, and he is assisted by one or two of the advanced students.

f. Operation course on the manikin is being neglected in the larger "klinik." Such a course is still given in the smaller ones.

This system requires of the individual student about two hours daily during two semesters, except when he is on actual labor duty or on the "poliklinik," when all his time is consumed. He is required to give enough time to such duties to allow him to attend to at least four cases of labor. As a matter of fact, many students do more work than this minimum required for the State examination.

The instruction of midwives in Germany is good, and is carried on in some of the "Frauenkliniken" side by side with the teaching of medical students; others of these hospitals are exclusively devoted to the midwives. The course of instruction is modelled on the same general plans on which the students of medicine are taught, except that the whole time of these pupil midwives is given up to the study of midwifery. In a plea for absolute uniformity in these courses Hermann W. Freund¹ draws up the following details:

1. Instruction should last at least nine months—better one year.
2. The general use of a single text-book should be required.
3. Instruction in antiseptics and in the observation and care of normal labors should be considered the principal factor, and the chief weight of the examination should be placed on this.
4. The proper course to pursue with difficult cases, and the methods of antiseptics in private practice should be learned by instruction in "polyclinics," out-patient departments.
5. Instruction on the manikin should be restricted to the smallest possible limits. Version should not be taught.

The most neglected branch of instruction in Germany is the theoretical, and, owing especially to the expressed opinion of no less an authority than Billroth,² the theoretical lecture has in some universities been entirely discarded.

The machinery by which obstetric instruction is given in England consists of lying-in hospitals, with usually an out-patient department attached and of out-patient departments connected with the general hospitals, which, as a rule, do not take obstetric in-patients. The majority of the lying-in hospitals and their out-patient departments are entirely concerned with the teaching of midwives and monthly nurses; in some of them, however, the medical student is received as a pupil. Most of the practical instruction of medical students is carried on

¹ Freund: "Die Entwicklung der Deutschen Geburtshilfe aus der Hebammenkunst," Klinisches Jahrbuch, 111, 1891.

² Billroth: "Lehren und Lernen der medicinischen Wissenschaften an den Universitäten der Deutschen Nation," Wien, 1876.

in the out-patient "lying-in charities" of the general hospitals. The system of instruction has consisted of:

I. Course of theoretical lectures.

II. Practical course in which the student is required to attend from six to thirty cases, according to the licensing body to which he proposes to apply.

Most students receive a greater credit from their practical course than the maximum required by any licensing board. The course of theoretical lectures varies in length from three to six months, and is very generally the latter. The practical course usually lasts one month, and includes the examination of pregnant women as well as the care of parturients and puerperæ.

There have been many criticisms of this system by various writers in the English journals. Dr. Wm. L. Reid,¹ Physician to the Glasgow Maternity Hospital, objects to the system because the majority of students take their midwifery lectures in their fourth winter, while they take their practical courses during their second or third summer or autumn; because, further, while some read for the latter, others do not, but "trust to first seeing a case with a student who has already attended one or two cases." This critic has been in Berlin, where he was pleased with the methods of Karl Schroeder, and the following attempt to adapt German methods to the English system is interesting. Reid gives the following ideal course of instruction:

Systematic course first, then practical course. The student should call once or twice a day at a lying-in hospital during a fixed period, until he has watched six cases pass off in the labor-room under the care of the house surgeon or head nurse. At this stage, also, he should practise palpation, learn to pass the catheter, and with great precautions be taught diagnosis by touch. He should then, along with another student, be sent to outdoor cases, each case being visited during or soon after labor by the outdoor surgeon. He ought to attend a dozen such, sending for the district physician when anything beyond the ordinary is observed. A clinical lecture should be given three times a week during the summer, or both summer and winter, and all the students should find it to their interest to attend. These lectures ought to be purely clinical, and refer to the cases which the students are seeing along with the physicians every forenoon in the wards. When the outdoor or district physician is called to a case, he should attend the next clinical lecture, sending the lecturer a short note of the facts beforehand. The students who attended should be asked to give an account of the case from beginning to end, and the lecturer should ask questions of them or other members of the class, and make a running commentary. In case of doubt as to fact, the physician who had consulted with the students would be then and there referred to.

Dr. Robert R. Rentoul,² writing four years later, points out the lack of uniformity in the requirements for medical students, varying from

¹ Reid: "The Clinical Teaching of Midwifery and the Diseases of Women," *Edinburgh Medical Journal*, 1886, xxxvii.

² Rentoul: "The Training of the Medical Student in Midwifery." *Lancet*, 1891, i.

nothing at all at Oxford to that of a six months' theoretical course and thirty labors, as required by the Royal College of Physicians of Ireland. More in detail these requirements are shown in the following table:

Name of examining body.	Lectures on midwifery, etc.	No. of labors required.
Royal College of Physicians and Surgeons, Eng.	3 months.	20
Society of Apothecaries (London)	3 "	20
University of London	1 course.	20
" " Oxford	0	0
" " Cambridge	1 course.	20
" " Durham	3 months.	20
Victoria University	6 "	20
Royal Coll. Surg. and Apoth. Hall, Ireland	6 "	30
Royal Coll. Phys. and Surg., Ireland	6 "	30
Royal University, Ireland	6 "	20
University of Dublin	6 "	Not stated.
Royal Coll. Phys. and Surg. Edin., and Fac. Phys. and Surg. Glasgow	3 "	6
University of Edinburgh	6 "	6
" " Glasgow	6 "	12
" " Aberdeen	3 "	6
" " St. Andrews	3 "	6

This writer states that midwives receive a more thorough instruction, and suggests these reforms: First, that lying-in hospitals should have paid district medical officers, who would each have a senior pupil under his immediate charge, and, secondly, "each student should be required to attend for three months indoor practice of a lying-in hospital or to have been present at not less than twelve confinements, at least three of which he should have conducted personally under the direct supervision of a registered practitioner." Finally, a recent editorial in the *Lancet*,¹ already quoted from, discusses this matter in the same spirit. The certificate required by the examining boards can be obtained by service in the out-patient department of one of the general hospital medical schools, or from any legally qualified practitioner to whom the student may act as an assistant, or thirdly, by becoming a resident pupil in a lying-in hospital. After showing the errors of giving too little instruction, which can so easily creep into an out-patient service, the article continues:

Of late years, at many of our schools the system has been greatly altered. It is for the most part, we believe, no longer possible for a student to have his name placed on the list of maternity pupils on the strength of a merely perfunctory attendance on a course of midwifery lectures. He is required to show that he has profited by it, and, in some schools at all events, students are not allowed to attend their cases till they have satisfied the obstetric physician in charge of the maternity department by the test of actual examination that they have acquired a sufficient knowledge of elementary midwifery, and more especially of that part of it relating to the observance of antiseptic principles.

¹ *Lancet*, loc. cit.

The growing tendency in England to combine teaching in the wards of a hospital with work in an out-patient department is shown by the following statement:

The experiment that is about to be tried at St. Mary's Hospital, of establishing lying-in wards for the reception of lying-in women as in-patients, will therefore be watched with much interest, and should it prove successful, as we trust it may, a similar plan will no doubt be generally adopted by the other medical schools.

In the remaining countries of Europe similar systems of teaching are carried out. Russia, Hungary, Switzerland, and more recently Italy, are very largely under the influence of Germany and Austria, and the German methods of accurate observation and of strict attention to detail have been more or less completely and successfully transplanted to the rest of Europe.

In this country the medical schools and most hospitals are not supported by the Government, and the intimate relationship that exists in Continental Europe between the universities and hospitals, both being Government institutions, is not possible here. Our schools are private corporations, like the universities of England. Unlike the English schools of medicine, however, they possess no great hospitals, and any plan of clinical instruction proposed by the Faculty must be subject to the approval of the separate Board of Trustees who may at the moment control the hospital in which it is the good fortune of the particular professor involved to hold the position of attending physician. All the medical schools of this country conduct a more or less complete out-patient or dispensary service, and the richer institutions have buildings especially devoted to this important department. Bedside instruction and general clinical lectures are also given by the vast majority of professors of practice and of surgery in some neighboring hospital; and such fact is very much to the credit of the trustees of those hospitals, for they share in no way the fees of the students.

The system of obstetric teaching varies very much in different localities. In some States there is as yet no examination at all required of candidates for a license to practise, but the possessor of any degree of Doctor of Medicine is given such a permit upon the simple payment of a registration fee. In other States an examination is now required, but in no State does the law require more than a theoretical test of the applicant's ability to manage scientifically a case of midwifery. The States having thus neglected to enforce any practical obstetric training from their qualified physicians, all progress in this direction has been left to the medical schools, and every advance has resulted from competition between rival institutions.

The course of theoretical lectures as given in our best medical schools leaves nothing to be desired, neither in its supply of diagrams and

models nor in its collections of museum specimens. The best text-books by American and English authors, and good translations of the most recent German books, are also in the hands of our students. In addition, a good system of recitations either forms a part of the regular course or is sought by the student in a private arrangement between himself and his instructor. It is in the matter of practical obstetric work that our schools are weak. The nearest approach to such work given in the large majority of our schools is a course on the obstetrical manikins of Schultze and of Budin. A very complete and carefully detailed series of lessons on these manikins is now almost universally given; that described by Edgar¹ is a very good example of them all. But such instruction is really only theoretical, and can never educate the sense of touch to differentiate the many phases of the pregnant and puerperal state. The proper delicacy of perception can only be procured by the frequently-repeated examination of obstetric cases in all the stages of labor and of the pregnant condition. The manikin has already been classed with old-fashioned methods by the teachers of the most progressive medical country, Germany, especially by those who command the use of a numerous *clientèle* of patients.

In all the large cities of the United States there are a sufficient number of lying-in institutions to more than care for the patients who apply; but the number of these which give any instruction to medical students is small indeed. Out-patient departments devoted to obstetrics are much less common than maternity hospitals, but they are a recent development, and most of them were started for the main purpose of giving clinical instruction. In New York City, for example, there are at least thirteen institutions which have a lying-in department or which are wholly devoted to such work, and only five of these give any instruction whatever. Four out of five instruct the students of a single college only. Most lying-in hospitals give a very satisfactory course of practical work to nurses who come from the great training-schools of the general hospitals, but the future physician is sadly neglected. In American medical schools, the system of instruction in obstetrics reserves no place for the clinical lecture nor for the frequent criticism by the professor of work done and recorded by the student, and only exceptionally is there any provision for the student personally to conduct cases of labor or to examine pregnant women or to watch a patient and her baby through the puerperal period.

There is no instruction open to midwives in the United States, and it is left entirely to the local boards of health whether they will accept the registration fee of any particular applicant. This country is more than a century behind Europe in its lack of control of the midwives

¹ Edgar: "The Manikin in the Teaching of Practical Obstetrics." New York Medical Journal, 1890, III.

who practise in our great cities. During 1892 there were 67.39 stillbirths to every 1000 of puerperal cases in New York City; in the report of the Board of Health for that year, Dr. John T. Nagle,¹ the Register of Records, comments on this fact thus:

Schools for instructing midwives seem to be essential in this city . . . More adequate measures (*i. e.*, more than afforded at present by the Maternity hospitals and kindred institutions) are needed in this direction, and it would seem that if they (such institutions) combined to form a large Maternity hospital, in connection with a school that would give theoretical and practical instruction in obstetrics, it would be a desirable measure and supply a necessary want.

The medical profession has escaped from a similar degeneration and lack of development only by the educational trips to Europe of some of its individual members, during which they have acquired all that was good in the countries visited. There has arisen in consequence a popular feeling that a trip abroad is a necessary ending to perfect a medical education. And in fact, the number of English-speaking students who collect each year in Vienna has led some of the "privat-docents" of that city to give practical courses, in which the instruction is conducted wholly in the English language. Many writers in our journals call attention to the advantages of the obstetric courses in Dublin, Prague, or other European medical centres,² but few have anything to record concerning the establishment of similar methods in this country. There are some notable exceptions to this rule of general mediocrity in American methods of obstetric teaching. Dr. Rohé, of Baltimore,³ calls attention to the College of Physicians and Surgeons of that city as the pioneer medical school to found a lying in hospital for the principal purpose of giving instruction. This was in 1874, and this hospital consists now of both an in-patient and an out-patient department. In Philadelphia the same combination of hospital and dispensary has been in use since 1887, *cf.* Parvin.⁴ And Edward Reynolds⁵ has described in detail the methods of Harvard University, in connection with which schools the out-patient service of the Boston Lying in Hospital was established in 1881. In New York City there are three undergraduate medical colleges and one medical college for women. All of these require practical courses in obstetrics. Two of these medical colleges require such work only in out-patient service, while each of the two remaining institutions possess a special lying-in hospital, and their students are instructed exclusively in the wards of these hospitals. The

¹ Nagle: "Report to President of Health Board." City Record, February, 1894.

² Kelly: "The Opportunities Offered by Prague, Heidelberg, and Dublin to the American Medical Student." International Medical Magazine, 1893, II.

³ Rohé: "The Practical Teaching of Obstetrics in the United States." Transactions of the American Association of Obstetricians and Gynecologists, 1890, III.

⁴ Parvin: "The Necessity for Practical Obstetrics in the Course of Instruction given by Medical Schools." The College and Clinical Record, 1888, IX.

⁵ Reynolds: "Modern Methods in Teaching Clinical Obstetrics," Boston, 1889.

courses given are a great advance beyond the methods of a decade ago, and we simply offer the criticism that no one of them possesses the ideal combination of an in-patient and an out-patient service. Other schools have also improved the courses given in this department, but much remains to be accomplished. The facilities of learning practical midwifery in this country should be equal to those of any other; and it should be the boast of our schools that the only thing not taught here and to be learned better abroad is the German or the French language, and not any detail of the science or art of medicine.

If we were to outline an ideal course of obstetric teaching we would choose:

1. Theoretical lectures as given in the United States.
2. Recitation system as practised in the same.
3. Manikin course as given in France, Germany, and very generally in America.
4. Touch course on pregnant women as universally conducted in France and Germany, at present beginning to be used in the United States.
5. Practical work in hospital wards, not limited to simple observation, but each student actually to carry on the labors and their subsequent treatment under rigid supervision.
6. Clinical lecture on the same material as given in France and Germany, and almost absolutely neglected in America.
7. "Polyclinic" or out-patient department as carried on in England and partially introduced into the United States.

The general result to be gained is: First, as thorough a theoretical knowledge as possible by the first three theoretical courses just outlined above. Secondly, the student should receive as complete a practical application of this knowledge as may be by seeing experts conduct confinement cases. Then, by doing the same under expert direction in hospital wards, where every facility for cleanliness and nursing is at hand, his flagrant errors would be corrected and his unskilled hand begin to appreciate minute details. He should finally put in practice in the tenements, but under careful supervision, the principles he will have learned. This object should be accomplished by the four final practical courses of the ideal system already outlined.

The questions involved in any plan for instructing midwives are similar, but infinitely more difficult to answer. The deepest foundations on which to build up a system are absolutely wanting. The first help should and must come from the State. A law compelling midwives to give evidence of some little knowledge to the local boards of health would compel these women to seek an elementary education in midwifery. If the demand should thus be created the proper schools would soon follow. The raising of the standard of requirements for registration would then become a mere matter of subsequent detail.