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ADDRESSES.

THE DEPARTMENT OF GYNECOLOGY AND OBSTETRICS IN A UNIVERSITY MEDICAL SCHOOL.*

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I HAVE chosen for the subject of my address a theme which can hardly fail to be of interest to such an audience as it is my privilege to appear before today. It is, "The Department of Gynecology and Obstetrics in a University Medical School."

Whenever a comparative stranger is called to an institution such as ours, a natural curiosity will always exist as to his proposed plan of campaign. And, if he be in earnest and filled with his subject, he will be only too eager to gratify this curiosity.

The present incumbent of the chair of Gynecology and Obstetrics in the Medical Department of this great University is fully cognizant of the honor conferred upon him by the choice of the faculty, and realizes clearly the arduous task which lies before him, if he hopes to equal the good work of his predecessors—SAGER, DUNSTER, MARTIN—each and all of them able and conscientious men who gave up the best part of their lives to their beloved University. Long may she honor them for their good work.

Nor can I allow this occasion to pass without publicly expressing my regard and appreciation of the gentleman I have succeeded, PROFESSOR J. N. MARTIN. Many of you know him personally, and can testify to his rare gifts as a teacher, his skill as a bold and conscientious surgeon, and

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his kindness to his pupils. I know that you will join with me in the prayer that he be soon restored to health.

At this, the beginning of the twentieth century, it may be well to look backwards and consider the position of Gynecology and Obstetrics in our medical schools fifty years ago. More than once, during the last five years, have I heard the complaint from the student that he had not been afforded sufficient opportunities of perfecting himself in the bimanual examination of the female generative organs, or that he did not feel competent upon graduation to conduct a normal case of labor, since he had seen only two or three cases of confinement, and that most of his knowledge was theoretical. It is true that from the very nature of things it will always be a difficult problem to furnish abundant obstetric and gynecologic material to the student. No matter with what delicacy the examination of the female patient may be conducted, the natural modesty of the sex, causing them to shrink from such examinations, ever stands in the way of our supply of material. Even in the large medical centers this same difficulty has to be overcome, and the greatest care exercised, and the number of examinations of each patient strictly limited, else the patient will seek some clinic to which the students are not admitted.

But what were the conditions fifty years ago? Certainly not so much complaint then as now, because it was not considered necessary or the proper thing to thoroughly examine a woman's pelvis.

In PROFESSOR CHARLES D. MEIGS'S "Textbook on the Diseases of Women" (published some fifty years ago), we find a case reported at some length which accurately portrays the attitude of the teacher of gynecology at that time. He speaks of being called to a young woman of about twenty, who was flooding profusely. He graphically describes how he sat by her bed all through the night administering sulphuric acid and other remedies to relieve the hemorrhage, which was of such a severe nature as to render the patient unconscious at times. He reassured her mother, saying that when the time came he could stop the hemorrhage at will. Finally the patient's condition became so alarming that he was obliged to pack the vagina to control the hemorrhage. Commenting upon the case, he says that the delay was for the purpose of saving her the mortification of the *touch* (touch being in italics), and that he would act in a similar manner in another case of the same nature. Not one word to the class about what caused the hemorrhage. Evidently the diagnosis was never made. Simply the case was related in order to impress upon their minds the necessity of refraining from vaginal examination as long as possible. Yet PROFESSOR MEIGS was an authority on the subjects upon which he lectured. DOCTOR MARCY, of Boston, in a recent paper, states that in his student days (1864) he was taught to "make a small hole in a sheet placed over the patient and through this to examine, and, if thought necessary, to thrust in the long cylindrical speculum, in the almost futile hope of

adding to his knowledge." Even as late as 1869 he was obliged to seek in Germany opportunities for physical examinations nowhere permitted in America.

With this kind of instruction it is not strange that very little progress was made in the knowledge of pelvic pathology. We must remember that in spite of the pioneer work of such men as McDOWELL, and the two ATLEES, up to 1851 there had been but twenty-seven cases of ovariectomy in this country, and only two hundred and eighty-eight cases in the whole world. The operation was looked upon with disfavor by surgeons and those who lectured upon diseases of women. MEIGS, in his book published in 1848, condemns the operation very emphatically. Although the number of cases of ovariectomy showed a marked increase in the decade from 1860 to 1870, the operation was slow in being established as a justifiable surgical procedure, although with or without tapping the outcome of the disease was invariably fatal, unless relief came through the use of the knife. In Bedford's "Textbook on the Diseases of Women and Children" (published in 1870), we find a mere passing mention of the surgical treatment of ovariectomy, but stress is laid upon the good effects of ointments and internal medication. He concludes the clinical consideration of a case of ovarian tumor as follows: "I might mention a favorite practice, in these cases, of DOCTOR HAMILTON, said to have been successful in his hands, and, indeed, I think I myself have recognized good results from it. It consists of patting the tumor with the ends of the fingers, together with pressure several times a day, and the internal administration of the muriate of lime." And this in a city in which the famous Woman's Hospital had been established, under the auspices of MARION SIMS, fifteen years before. The founding of this special hospital, and the original work of its three men, SIMS, EMMET, and THOMAS, gave an impetus to gynecology in America which soon placed it in the highest rank. The advent of Listerism and the gradual dissemination of the knowledge that the peritoneal cavity could be opened with safety, led to a large number of abdominal sections for various lesions, and to a more accurate perception of pelvic pathology.

Perfection of operative technique rapidly followed, and the number of imperative and elective operations on the internal and external female genital organs assumed enormous proportions. Instead of major operations being performed by the comparative few, every physician, while he would hesitate to amputate a limb, opened the peritoneal cavity without hesitation or the slightest fear. This necessarily resulted in poor work, and the gynecologist was blamed for hasty and unnecessary operations, when, in reality, the blame should have been placed upon the novice, who operated without the adequate training which would qualify him to decide as to the necessity of operation in a given case.

The diagnosis and operative treatment of pelvic lesions were taken up by the general surgeons, who hastened to perfect themselves in a field

which they had formerly neglected, until now a large amount of gynecology is done, and done well, by the general surgeon, who possibly at times forgets the debt he owes the pioneers and specialists who paved the way for his easily-acquired knowledge. But there is not, and should not be, any real controversy between the general surgeon and the gynecologist. Both should be good general surgeons; only one has chosen to devote himself to a particular field. That the skilled gynecologist is recognized as a competent abdominal surgeon is well illustrated by the fact that the surgeon chosen to operate upon the late PRESIDENT MCKINLEY was a distinguished gynecologist and abdominal surgeon.

Necessarily, the student has profited by this increased knowledge of pelvic pathology. He is not urged at the present day to refrain as long as possible from making a pelvic examination, but is taught that without such a thorough examination diagnosis is impossible.

It is needless for me to state that in our medical school exceptional opportunities exist for the most thorough teaching of gynecology. The material at the University Hospital is large and varied, and, because of the exceptionally wise system in vogue, every patient can be utilized to the best advantage for teaching purposes without in the slightest degree interfering with the benefits accruing to the patient from hospital treatment. Only those who have taught in schools where the teaching material is semi-private in its nature can fully appreciate what an immense advantage a hospital system such as ours offers. Each case, operative and nonoperative, can be thoroughly and systematically studied, both by the one in charge and by the student. The ever-increasing amount of material will allow of the grouping and consideration of different varieties of the same disease at one and the same clinic. In order that this may be done, however, it will be necessary to increase the hospital facilities which are far from adequate to accommodate the number of patients who apply for admission. A few years ago my honored colleague, PROFESSOR HERDMAN, read before the American Academy of Medicine a paper in which he set forth the clinical advantages offered at the University of Michigan. At that time he made this apt quotation from MACAULEY: 'It is not the conning over large libraries that makes the learned man, but a thorough digestion of a few well-selected books.' As applied to medicine, nothing can be truer. I have seen men who in general practice had had an immense experience with certain diseases, such as, for instance, typhoid fever, yet knew but little of the disease, because each case had been passed over in a superficial and perfunctory manner. Yet, if this man had been well grounded in physical diagnosis, if his powers of observation had been trained in the proper manner, what an immense fund of knowledge could have been gleaned from the number of cases circumstances had forced upon him. He certainly could have become much more proficient because of this vast experience. As it is best for the student to make his

selection of good books from a vast library, so it is conducive to the best interests of both teacher and student that the cases to be used for clinical instruction be selected and grouped from the largest possible material.

Therefore, I would urge that the good work go on; that our material, which has increased in such a marvelous way since the opening of the University Hospital in 1891, be still further multiplied. Let us remember that in the larger medical centers, on account of the competition of other medical schools, and hospitals to which no students are admitted, it is sometimes difficult to be provided with teaching material. These institutions would never think of keeping cases waiting to enter the hospital because of lack of room. Teaching material is not so plenty that it is turned away, but adequate space is at once found for its accommodation. Just because we are so favorably situated, so that we have more cases than we can care for, we must not be too self-satisfied, and rest on our laurels. Money, in the shape of endowments, is pouring into the larger medical schools, and we must increase our facilities if we would expect to maintain our position at the front. We must remember, also, that because our school is situated in rather a small center the natural impression exists that our clinical material must be correspondingly small. It is distinctly humiliating to have students give as their reason for graduating at some other college that they desire greater clinical advantages. It would be more humiliating if it were true, but it is not particularly pleasing as it is. I have talked with a number of students who had made the change, and they were dissatisfied, and found out after it was too late that, because of the accessibility of the cases and their adaptability to clinical teaching at our school, they had made a mistake and would better have remained.

I hope to live to see the time when our University Hospital will have reached such a size that students will flock here, not only from all parts of this country, but from abroad, because of the superb clinics it offers.

In the very nature of things, the larger amphitheater operating clinic is bound to disappear almost entirely from medical teaching. The diagnostic clinic before a comparatively large class still has, and will always have, a distinct place, since, through questions and answers, the entire class can take part in and profit by the exercises. But not so with the grandstand operative clinic. No matter how skillful the operator may be, he will fail to interest his audience if they cannot see what he is doing. Consequently, if the student be without interest in the work before him, he is wasting his own and his instructor's time. The necessary details and technique of important operations should be taught to small sections of the class, so that each student can see the minutest move on the part of the operator. It is oftentimes difficult to arrange the sectional work to this end, but I am convinced that it can be accomplished, and we should always have this ideal before us.

The dry didactic lecture, in my opinion, will also become a thing of

the past. Of course, a certain amount of didactic work will always be required, as in no other way can the instructor give a systematic *résumé* of the most recent advances in his department. But long lecture courses, the subject matter of which could be learned as well from textbooks, must give way to instruction in which the student comes in close contact with the disease which is being studied. Lantern-slide demonstrations should be employed whenever possible, because it is easier, in this age at least, to keep up the interest by appealing to the eye as well as to the ear.

Again, I must insist upon the necessity of educating the student's tactile sense, so that he will be able to interpret what the examining finger finds within the pelvis. I consider the so-called "touch course" among the most important for the actual needs of the student, for he will be called upon to make use of it as soon as he begins to practice.

I would also suggest that in the department which we are considering, it would be well to provide elective courses in the special pathology of the genital organs, in bacteriology as applied to the diseases of women, and a special operative course might be added to the curriculum whenever possible. While I would not make a specialist of a student at the expense of his general training, I think it is within the province of a university medical school to provide special work for the advanced student whose tastes are in this direction.

You will notice, perhaps, that I have, up to this time, dwelt upon only one aspect of the subject. Obstetrics is as important, if not more so, than is gynecology. Possibly it has been somewhat neglected of late, because of the glitter and glamour of operative gynecology. It is not a matter of mere chance that obstetrics and gynecology are included in the same professorial chair. As one writer has put it, "they cannot be separated, for they involve the study of the same organs, and of many of the diseases of the same organs, only under different circumstances."

Long before the advent of antisepsis it had been demonstrated that puerperal fever was caused by something introduced into the birth canal by the accoucheur, but the mortality of the lying-in chamber was frightfully large until the inauguration of the antiseptic technique. Since that time it has become possible to make use of the lying-in hospital material for teaching purposes, without any particularly added danger to the patient. It is not so very long ago that obstetrics was taught entirely by means of the didactic lecture, and the first case of labor seen only after graduation. In other words, the science of obstetrics was well taught, but the art was entirely neglected so far as the student was concerned. EDGAR tells us that up to 1886 not a single medical school in New York city required its students to witness cases of confinement before graduation, while ten years later six medical schools in the same city required the student to attend at least six cases of confinement before receiving a diploma. This clearly shows the trend of modern obstetric teaching. The instruc-

tion is becoming more and more a series of demonstrations, either at the bedside or by the use of manikins and models. Just as in gynecologic teaching, the hands should be taught to execute the theoretic knowledge which has been learned through lectures and recitations. A student may know the signs of pregnancy, but this knowledge will be of little avail until he has been drilled in the methods of palpating the pregnant abdomen. He should be taught the use of the pelvimeter, both on the living patient and on the bony pelvis. He should perform the principal obstetric operations upon the manikin under the guidance of a competent instructor. He should learn by means of glue casts the manner of repairing immediate tears of the perineum. In other words, manual training methods should be applied as far as possible to obstetric teaching.

Now, what are the conditions that confront us in our school as regards obstetrics? While the obstetric material at present is not particularly abundant, I know of no place so favorably situated for the building up of a large obstetric hospital clinic. The State laws are unsurpassed in this regard, and it will require merely systematic work to provide us with all the cases necessary. Steps have been taken to organize an Out-Patient Lying-in Clinic, which will prove of an immense advantage to the student. Under the direct supervision of the members of the department, the latter will be taught how a case of normal labor should be conducted at a private house, and the convalescence can be left in his charge. Through the generosity of the regents, the department will be liberally supplied with manikins and models, which will allow of the most thorough work being done.

To carry out the schedule which I have just outlined, a number of things are necessary. First, there must be complete coöperation between the head of the department and his corps of assistants. They must be a united family, fired by the same spirit of enthusiasm and zeal for the work in hand. While the interests of the department should be paramount, and the personal equation reduced to a minimum, there yet remains much that can be done by the chief which will be conducive to the well-being of his assistants. He must remember that only through him can they advance in knowledge or reputation, since he alone has the assignment of their duties, and the disposition of the material through the use of which their scientific reputations can be made. Give a man the opportunity and let him be a worker and he can move the world. Selfishness and jealousy in the chief of the department are insurmountable barriers to progress. He must be broad-minded, a reader of men, and possessed of executive ability to be a success as the director of such an enterprise. Mutual loyalty must be the watchword between the different members of the staff.

Every instructor must have the confidence and loyalty of his class if he hopes to attain the highest success as a teacher. A man may be learned, a worker, a valuable investigator, yet he may fail as a teacher

because he has not that something which puts him *en rapport* with his class. Give us, then, your confidence. Come to us if things appear unsatisfactory, and I am sure you will always find us reasonable and only anxious for the general good.

A final word must be said of the research work, which should form part of the program of every department in a school such as ours. Research work! What a fascination the words have for every true physician with scientific aspirations. And how much and how good work would be done if circumstances would only allow of it. But it is only in especially favored places that this work can be carried on. The clinical material at the disposal of the department must be used not only for teaching purposes, but for the advancement of human knowledge. The manner in which this is done, or whether it will be done at all, will again depend largely upon the chief. He it is who not only must investigate, but must indicate and map out the lines which the investigation of his assistants must follow. A man, after all, is judged by the outside world mainly by the volume of original work which he turns out. It is taken for granted that he is a good teacher, although that is not always true. The number of endowments which are being made for research work shows that the laity are slowly but surely coming to see the importance of giving encouragement to this kind of labor. It means that the public is beginning to realize that the investigator must give his whole time to his subject, and must not be hampered with questions of the ways and means of earning a living. Let us hope that these endowments are only a beginning, and that the clinical chairs will soon be similarly blessed.

The words of welcome to the incoming class are assigned, I believe, to some other member of the faculty, but I would beg the privilege of a few sentences. Those who are just beginning their studies in any department of a university have one great advantage over the members of the other classes. They have it in their power to employ every moment of their time during their entire course in the most advantageous way. There are some of us who envy you this golden opportunity. We wish that it were possible to recall the fleeting years and start over again. There are many changes we would make. Many hours would be devoted to different purposes. You have but a short time in which to acquire a great deal. Remember that work, systematic, hard, daily, not just-before-the-examination work, can accomplish wonders. Do not procrastinate and think you can make up for lost time by mighty intellectual efforts at the last. Those of us who have tried can testify to its being a dismal failure.

With no mere formal words do we welcome you, but as one friend receives another into a united family circle. May your Alma Mater have cause to be as proud of you at the completion of your course, as you will have cause to love and honor her.