

With the onset of the war Southern contributions ceased, but FLINT and DA COSTA and WEIR MITCHELL continued contributions. DA COSTA's papers on heart and lung diseases, and the method of distinguishing them, culminated with the great treatise on "Medical Diagnosis" (1866). The so-called Gerhard's sign and Wentrich's phenomena, were described long before the German papers appeared, in his papers on "Auscultatory Percussion." Moreover, who does not know of DA COSTA's "Irritable Heart"? The contributions of this distinguished clinician are as bright, as fresh and scientific as those of forty years ago.

The war brought with it a literature equal to that of any previous war, and diseases of camp life were ably discussed, notably by J. J. WOODWARD. It, too, is responsible for the epoch-making work of WEIR MITCHELL, resulting in many substantial contributions to medicine which will always be quoted, and in that original production—his work and that of MOOREHOUSE and KEEN—on "Diseases and Injuries of the Nerves." MITCHELL's labors resulted in the production of the broadest and most scientific communications yet presented on nervous diseases. His inductive propositions of the relation of eye-strain to nervous disorders were none the less true, although revolutionary. The culmination of his years of close observation and accurate reasoning, in the promulgation of the theorem of rest in the treatment of disease, is one of the most brilliant as well as scientific pieces of work of this era, and places practical American medicine on a plane with that of any country. MITCHELL, too, has been an infective center, and from his wards and laboratory have come most valuable contributions.

In 1870 appeared WOOD's studies on "Thermic Fever," a paper in which the nature of the process was determined. PEPPER at this time and later was making scientific contributions, notably on anemia, lung diseases, relapsing typhlitis and other affections. The excellent work of three-quarters of a century seems to have been a preparation for that of the last quarter. To review it for our present purpose would be to make invidious distinction, with our space so limited. Moreover, the work has been so recently done it is familiar to all. To place in array the work of that prince of clinicians, WILLIAM OSLER, would be to occupy four times the space allotted to us. The infective center of enthusiastic research in past years has been spoken of. It is just as important to refer to these centers, from which—to the glory of this era—are coming solid contributions to the medicine of the century. OSLER is the center of one area of infection. WELCH is stimulating labor in another. Who is not familiar with the notable contributions from the Johns Hopkins school? FITZ and COUNCILMAN and SHATTUCK are in another arena, and the contributions to medicine from Boston are of the greatest value. Pancreatic disease, intestinal obstruction, appendicitis, diseases of the blood, are subjects upon which great light has been thrown by this coterie. DELAFIELD and JANEWAY and KINNICUTT have their arenas, and with the great laboratories at their command, are bound to yield brilliant results.

From the Pepper Laboratory in Philadelphia and the other hospital laboratories, stimulated by TYSON and WILSON and HARE and MILLS, a great group of contributors are furnishing scientific contributions of the highest merit. But the older centers have their rivals, and STOCKTON at Buffalo, DOCK at Ann Arbor, FORCHEIMER at Cincinnati, HOOVER at Cleveland, WESTBROOK at Minneapolis, DAVIS, BILLINGS and HERRICK at Chicago, are spreading the infection of enthusiastic effort, and adding immeasurably to our knowledge.

So, as we increase in wealth, our means to study increase, and before long the labors of the enthusiast in the center of the country will be as valuable as that on the seaboard. For the future of medicine, the outlook was never brighter, and it remains only to congratulate the AMERICAN MEDICAL ASSOCIATION and the great journal which it commands, that to them is given the privilege, to render incalculable service to the science of medicine at the dawn of a new century.

JOHN H. MUSSER.

PROGRESS IN GYNECOLOGY.

At the dawn of the nineteenth century the then nebulous profession of the United States had to its credit but few achievements in what long afterward came to be known as gynecology. Those achievements, however, in the intelligence of their conception, in the skill of their execution and in the brilliancy of their results might well have been accepted as prophecies of those broader activities by which America has gained a well-earned primacy in this department of the healing art.

As early as 1764 JOHN BARD of New York operated for extrauterine pregnancy, while WILLIAM BOYNHAM of Virginia operated by celiotomy for the same condition in 1791, repeating the operation with equally satisfactory results eight years later. It would seem indeed that America laid the foundation for latter-day practice in the treatment of this condition, for, according to JENKS, CLARK (1806) delivered an extrauterine fetus through the rectum, introducing his whole hand into the bowel for the purpose—thus anticipating SIMON by many decades in that method of exploration. JOHN KING of South Carolina incised (1816) the vault of the vagina and applied the forceps, by means of which, and abdominal pressure, he removed the living product of an extrauterine fetation—saving not only the child, but the mother. The operations for extrauterine pregnancy, up to this time, and for several decades later, were confined to either the matured or degenerated fruits of conception. In 1849, however, HARBERT, another American surgeon, first suggested the operation of celiotomy for ruptured tubal pregnancy in the early stages, but the practice was not adopted until after STEPHEN ROGERS of New York (1866) again urged its claims. It was thus that American initiative laid the foundation for a practice which bore its first fruition in the hands of TAIT fifteen years later, and which must be looked upon to-day as one of the most beneficent that science has vouchsafed to woman.

The intelligent daring of the surgeons of New York, of Virginia, and of South Carolina, in the management of extrauterine pregnancy found a worthy exemplar in a young surgeon of the wild interior in the treatment of a then hitherto fatal condition. EPHRAIM McDOWELL of Danville, Ky., did the first ovariectomy in the history of the world, in 1809. This operation, which was given to the profession seven years later, was but slowly adopted. It was, however, finally taken up by a galaxy of brilliant men such as NATHAN SMITH of Yale (1821), ALBAN G. SMITH of Danville (1823), DAVID L. ROGERS of New York (1824), J. C. WARREN of Boston (1850), ALEXANDER DUNLAP of Ohio (1843), WASHINGTON L. ATLEE of Philadelphia (1844).

JULIUS F. MINER of Buffalo devised (1869) the operation of removing intraligamentary cysts by enucleation. The various other modifications which have been made in the original procedure of McDOWELL have been abandoned, and the operation, as he did it in his first case, is, with slight exceptions, the accepted operation by latter-day surgeons. The universal adoption of this American operation by the profession of all countries has given to womankind an increase of years beyond the possibility of computation.

The plastic surgery of the female genital organs had its origin in the genius of SIMS, who (1842) laid the foundation of that department of gynecology. The story of his adaptation of the pewter spoon, of the evolution of the duck-bill speculum, and of the first aseptic suture material—silver wire—with its fastening by perforated shot, is a part of the romantic history of medicine in our great Republic. By these devices vesicovaginal fistula became a curable condition, and pathologic states of the vagina, the cervix, and the uterus became intelligible and remediable. Thus, SIMS himself gave (1856) to the profession the operation of colporrhaphy for the relief of descensus uteri, of cystocele, and of rectocele. In the wake of this extension came the operation for the repair of the lacerated cervix by EMMET (1869)—one of the most valuable resources of the surgical art. A little later BOZEMAN and EMMET devised the operation for drainage of the bladder for the cure of chronic inflammation by incision of the vesicovaginal septum. The adoption of the Sims speculum—or the principle that it exemplified—made possible the successful revival of vaginal hysterectomy, after futile efforts at its adoption early in the century and after it had fallen into disuse during a period of forty years.

Numerous other operative expedients have been brought similarly within the range of possibility. Thus the operation of ureterovesical implantation, devised by PARVIN of Philadelphia (1866), could not have been done before 1842, and what is true of this operation is true of a large number of other measures for the repair of the vagina, the cervix, and the bladder.

Intrauterine surgery, first made possible by the more or less imperfect instrument of RÉCAMIER, acquired a new impetus under the facilities afforded by the invention of SIMS. Intrauterine explorations became exact after JOHN BALL of Brooklyn (1873)

first practiced dilatation of the cervix by divulsion, and in the wake of this advance followed the various intrauterine operations, such as curettement, morcelllement, etc.

Dr. GILMAN KIMBALL, of Lowell, Mass., was the first, according to KOEBERLE of Strasburg, to publish (*Boston Med. and Surg. Jour.*, May, 1855) a case of vaginal extirpation of the uterus for fibroids, "successfully performed upon a correctly established diagnosis." He made valuable contributions, not only upon this subject, but upon such topics as gastrotomy and ovariectomy.

In 1865 ROBERT BATTEY of Rome, Ga., "conceived the idea of producing an artificial menopause for the remedy of disease," and he adopted this conception as the basis of practice, Aug. 17, 1872, by removing the unenlarged ovaries through an incision made into the cul-de-sac of Douglas. In the adoption of this original surgical conception, BATTEY, jointly with TAIT in England and HEGAR in Germany, contributed to the material advancement of pelvic surgery. While the object arrived at by his operation was different from that which actuated each of the others, and while the central idea of his practice has been departed from by the profession, he was instrumental in demonstrating the feasibility of oöphorectomy, and the after-history of many of his cases showed the beneficence of his procedure. BATTEY operated by vaginal section for the cure of otherwise incurable "neuroses"; TAIT operated by celiotomy for the removal of organically diseased ovaries; HEGAR's object was to control hemorrhage. It is from these several starting-points that intrapelvic surgery may be said to have developed. In the course of development the central ideas of these three original operators received modifications at the hands of the profession. Of the various ideas, those of BATTEY have been assailed the most vigorously and have undergone the most radical changes.

In the first place, the vaginal route was abandoned for good reason, as an avenue of approach, and in the next place many of the so-called "neuroses" associated with intrapelvic symptoms were found to have no dependence on ovarian states as etiologic factors. But over and above this criticism, and over and above these contrary theories, stood the fact that many of BATTEY's "neurotic" cases, that had defied all other kinds of treatment, were cured by and remained well after the extirpation of the ovaries. Facts such as these withstand the assaults of theorists and remain to be explained in the light of a widening science, after the passions of controversy and ambition shall have subsided. Science is now revealing that many of the small ovaries of BATTEY's cases were, after all, very much diseased, and science is beginning to show, in a demonstrable way, what for a time it seemed to discredit, viz., the relation between these really diseased ovaries and the very "neuroses" of which BATTEY wrote. It is no unsafe prediction to say that a widening experience and a judicial frame of mind on the part of the profession will give to the doctrine of BATTEY a clearer definition and as honorable a place in the arcana of science as may be hoped for by those

with whom his name has been associated in the controversies of the past.

The development of gynecology in America has been characterized by the same cycles that it has defined in other countries. The so-called "mechanic doctrine" of uterine pathology, taught with transient success by HEWITT in England, was in a measure anticipated by HODGE of Philadelphia, who devised (1830) a pessary for the correction of retrodisplacements of the ovary. It is to be said for the doctrine of HODGE that it was founded in rational pathology, and for his device that it was and is the least objectionable of any that has been given to the profession for the purpose. It would doubtless stand to-day as the chief expedient for the correction of these displacements if it were not that its use has been supplanted in the hands of intelligent gynecologists, by the vastly more rational and more satisfactory surgical means. Even yet, in the absence of proper operative facilities, it is probably the means of bringing more relief to women of this unfortunate class than any other instrument in the hands of the general practitioner.

The American Gynecological Society was organized in 1876 and has since devoted itself to the exclusive cultivation of this department of science. Its membership has embraced and now includes many of the most distinguished gynecologists of America, while its annual volumes are among the most valuable contributions to the literature. The American Association of Obstetricians and Gynecologists was organized in 1888 for the purpose of bringing into association not only the practitioners of gynecology but those identified with the allied branches of abdominal surgery and obstetrics. Its membership now embraces a majority of the teachers of those branches in the medical schools of America, and each annual volume of the "Transactions" is uniformly a record of most progressive work. These two organizations are strictly national in their scope and membership.

The Southern Surgical and Gynecological Association was organized in 1888, and had for its *raison d'être*, first, the necessity of a society which would meet in the great territory of the South, which was but rarely visited by the strictly national organizations; and second, the desirability of considering in the same arena topics relating not only to this special department, but also to the general subject of surgery. The membership in this society is not sectional, and its Transactions are of universal value to the profession.

The Western Surgical and Gynecological Society is a Trans-Mississippi organization of the same character. In practically all of the large cities there are organizations devoted to this special field of work, some of them continuing to exist under the more generic title of "obstetric societies." The Proceedings of these associations compose an important modicum of the medical literature of the country.

Gynecology has been and is represented in the periodical literature by several important publications, devoted exclusively to this expanding department of practice. The first journal devoted exclusively to

this subject was issued in 1869, under the editorship of Drs. H. R. STORER, G. H. BIXBY and W. LEWIS, and was known as the *Journal of the Gynecological Society of Boston*. A year previous, however, the *American Journal of Obstetrics and Diseases of Women and Children* began its career under the management of Dr. B. F. DAWSON. Issued originally as a quarterly, it has become, under the management successively of MUNDE and WELLS, a large monthly, filled with original matter of a high grade. The *American Gynecological and Obstetrical Journal*, which began publication in 1885, is to-day, under the brilliant management of its editor and proprietor, Dr. J. DUNCAN EMMET, an exponent of the best literature of the subject in America. Other journals have been devoted to this subject, and a few of them are yet extant. Practically the entire periodical medical press of the country conducts a department devoted to the review of gynecologic literature, while original contributions on the subject are, as a rule, a feature of each issue of every general medical journal in the country.

The status of gynecology in medical education in the United States is nowhere doubtful. No medical school in the country is without a professorship in this department, the first one having been established by Dartmouth College about thirty years ago, the incumbent at that time being the celebrated Dr. PEASLEE. In many instances gynecology was attached to obstetrics, in charge of a single professor, but with the growth of the subject, such an arrangement has been found impracticable and exists to-day only as an anachronism in a few institutions of ultraconservative affectations. In a few colleges the surgical character of the subject has been emphasized by changing the title of the professorship to that of abdominal and pelvic surgery. It may be observed everywhere that gynecology is broadening its scope in accordance with these conceptions, and the dawn of the next century will recognize in the gynecologist not an obstetrician upon whom accident imposes the necessity of doing some reparative tinkering about the female genitalia, but an accomplished surgeon who is something more than a surgeon. This has been brought about through the teachings of the distinguished teachers, past and present, in this department.

It is quite out of the question in an article such as this to recount the achievements or even the names of the American pioneers in gynecology. The galaxy was a brilliant one and embraced such names as ISAAC E. TAYLOR of New York, who did an original operation for rectovaginal fistula (1856); WALTER CHANNING, who wrote (1833) about the "Irritable Uterus"—that in later years comprised the basis of the French school of practice; GUNNING S. BEDFORD, who established the first clinic for women in America; J. C. NOTT, who removed (1844) the coccyx for coccygodynia; HORATIO R. STORER, who was a pioneer in advocating the recognition and adoption of gynecologic practice in hospitals for the insane; E. R. PEASLEE, who (1854) advocated and adopted the principle of drainage and intraperitoneal irrigation after ovariectomy twenty years before LISTER propa-

gated his doctrine and before the adoption of the practice in other countries; JAMES P. WHITE, who (1856) demonstrated the reduction and consequent curability by that means of chronic inversion of the uterus; T. GAILLARD THOMAS, whose work was the accepted text-book on gynecology in America for two decades, the earlier edition of which yet stands as a model of scientific arrangement and finished English; J. C. REEVE of Dayton, whose original investigations in anesthesia are among the most valuable contributions to the subject. It is not practicable to continue the list, embracing as it does the names of FORDYCE BARKER, WM. GOODELL, W. H. BYFORD, A. REEVES JACKSON, EDWARD W. JENKS, JULIUS F. MINER, D. HAYES AGNEW, and many others equally illustrious, who are now with the silent majority. It were invidious to mention those who, although advanced in years, yet abide to watch the fruition of their work in the hands of those who now toil in the vineyard.

CHARLES A. L. REED.

PROGRESS IN OBSTETRICS.

When obstetrics at the close of the nineteenth century shall render the dawn of the twentieth her inheritance, she will do so with great pleasure and with no little pride, for out of the few imperfect talents she received from the eighteenth, the nineteenth century has developed many perfected ones, and added more. Truly, when entering the Valhalla of Effort will she be greeted with the hallalujah: Well done, thou good and faithful servant, unto you it has been given to be faithful over a few things, and to have enabled many to enter into the joys of blessings otherwise impossible.

Why so great rejoicing and so loud a panegyric? For never since the beginning of the age of gestation and labor has its mortality and morbidity been so low or so favorable as at the present moment—the close of the nineteenth century. Well may the twentieth century receive with pride such a legacy; her women rejoice.

Judging by the light possessed to-day, we can readily appreciate why obstetrics was not so perfectly developed a century ago as to-day, and, therefore, rendered less perfect services, which for a long time failed to overcome the prejudices that existed in the minds of the "female world," society, against the man midwife, the accoucheur. In the Colonies, with two or three exceptions, there were no schools, and even these were without the concentration of clinic and manikin material common to the schools of Europe, now common to ours. Necessarily, they were more especially didactic, and in many cases with texts teeming with hypotheses and theories of cause, effect, and therapeutics which were theoretically more perfect of effect than practically.

Opportunity to make inquiries and to learn midwifery, for the student, was practically limited to the observations he could make in the practice of his preceptor and in those of his friends. His instruction was, like that of his text-books, derived mostly from English and French sources, imperfect when viewed in the light of the advanced state of obstetric knowl-

edge of to-day, but authoritative in his day, and tended to make him but a reflection of the imperfect accoucheur of his time. He did fairly well with normal labor, yet for those cases where special therapeutics and operative training were urgent, namely, in all forms of abnormalities of gestation, labor and the puerperium, he was necessarily as short-coming in his results as his prototype. As a consequence, society continued to be imbued with and but reflected the same sentiment toward the accoucheur that was brought from and entertained in Europe, and even in royal circles; the female world looked on the midwife with more favor than on the accoucheur. This curtailed opportunity and naturally checked advance.

To give an idea of the state of the sentiments entertained by the female world, DR. SHIPPEN, who had studied with the famous DR. SMELLIE, and who delivered the first special course on midwifery in America, in his lectures "pointed out what was necessary to make a man midwife an adept in his profession, and to gain the good opinion of the female world." This was in 1762. So prevalent was the prejudice that sixty years afterward DEWEES again mentions it.

Handicapped as they were from lack of conveniences, these early days sparkle with many cases of individual effort in successful obstetric surgery, which speak most eloquently for their originality, daring and skill. (See "Progress in Gynecology.") About 1794, CHARLES MCKNIGHT of New York, contrary to opinion, removed by celiotomy, with recovery, a 9-months fetus from an extrauterine pregnancy, thus anticipating the evils from chronic encapsulation, or suppuration leading to fistulæ through which the fetal parts were cast off or were extracted. These latter characteristics were the usual sequelæ of the "leave-it-to-nature treatment" following ruptures of extrauterine pregnancies. Early text-book authority suggests the let-alone treatment for the like uterine ruptures where the fetus had escaped into the abdominal cavity, unless extraction could be accomplished by turning and drawing the fetus through the uterine rent and the parturient canal. These early extrauterine operations must have exercised some influence, for in 1800, American authority recommends: "if can not extract per vias naturales, then try gastrotomy."

Though these triumphs were brilliant, they could not be general; they could only serve as guiding stars to direct and encourage further effort, with what success contemporaneous abdominal surgery amply testifies. For obstetrics to more truly and generally progress and win for herself greater confidence, it was necessary to inquire along such lines as would produce some method or means wherewith to overcome the intense physical suffering—pain accompanying operative labors—and the great mortality and morbidity following all forms of labor, both the normal and the abnormal. This great step was finally achieved by the almost simultaneous introduction of the law of asepsis, 1847, and the introduction of artificial, general anesthesia, 1846—two of the greatest steps marking the advance of medicine since its conception. With these, and only through these, could come increased light, life, and opportunity.