(Article XXV.)

A CENTURY OF AMERICAN MEDICINE.
1776—1876.

III.
OBSTETRICS AND GYNÆCOLOGY.

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The progress of philosophy, theology, politics, and science has never, in the history of the world, been marked by steady, monotonous, and gradual advancement. For long periods it has appeared to be so, but now and then, once in a century perhaps, each of these departments has felt the impetus imparted to it by the influence of some rare and stupendous genius, which, in a brief period, has effected more than years of patient toil had before accomplished. Some man, towering in intellect above his fellows, ordained by nature to lead into unexplored regions, and to dominate new fields of thought, has here and there made his appearance, and marked his epoch as an era. In more modern times philosophy has felt the influence of Bacon, theology that of Luther, science that of Newton, and politics that of Napoleon.

So has it been with the progress of each of the departments of the healing art. Surgery, medicine, chemistry, anatomy, physiology, and the collateral science of botany, has each in turn, since the revival of learning, felt the propulsive influence of Paré, Boerhaave, Berzelius, Morgagni, Harvey, and Linnæus.

Such an impetus was given to obstetrics late in the eighteenth century. Until that time this department was chiefly allotted to women, and the few male practitioners who devoted themselves to it occupied a lower professional position than those engaged in medicine and surgery. He who was to establish the dignity of obstetrics, to elevate it to the position of a science, and to open the way to its rapid progress, appeared in the person of William Hunter, whose work upon the gravid uterus was published in 1774. It is true that the writings of Smellie and Levret, great contributions to obstetrics as an art, preceded it; but it is equally true that Hunter laid the corner-stone of the science in giving to the profession a work which may be said to have been to obstetrics what that of Euclid was to mathematics. It was the forerunner of the subsequent eminently valuable labours of Naeglé, and the inspiration of those of Denman and his school.

Two years before the foundation of this republic the new era of modern obstetrics was established, which has now lasted for a century. Its influence, immediately and decidedly felt in Europe, gave little evidence of its existence here, however, for the next quarter of a century, probably,

[1] The author desires to acknowledge his obligations to Dr. S. Beach Jones, Jr., for valuable assistance in the preparation of this report.

in great part, for the following reasons. Its inauguration found on this continent an infant nation engaged in a struggle for independence with the formidable power of Great Britain, which taxed every resource for the following seven years: sparsely settled, without financial resources, and unprovided with the materials for sustaining a lengthy war, it became necessary for self-protection that the private resources, the individual efforts, the undivided energies of its people should be concentrated upon one single, sacred object. From this it resulted that until the year 1783 attention was entirely abstracted from the pursuits of peace—agriculture, manufacture, science, art, were all neglected.

The establishment of peace found the country entirely unprepared at once to resume those pursuits to which it had so long been a stranger. The people were impoverished, the land was unproductive, the credit of the country was not yet established, and its exchequer was empty. The immediate material wants of the inhabitants claimed their almost undivided attention, and it is not a matter of surprise that for some time we find few records of national or private efforts put forth in behalf of science in this field or in any other. As an art, practised chiefly by midwives, obstetrics was a vigorous plant, deep-rooted and strong; as a science, a delicate shoot, which feebly struggled with adverse circumstances for life; while the very seed of the sister branch of gynæcology may be said to have been unsowed.

In spite of the prejudices of the community, at an early period even in colonial times a very small number of physicians, recognizing the claims of obstetrics, devoted themselves to its practice. In 1753, according to Bartlett,[1] Dr. James Lloyd, a pupil of Smellie and Hunter, settled in Boston, and in the following year systematically began the practice of midwifery. He was the first practitioner so devoting himself of whom records can be found. In 1762 the same course was pursued by Dr. William Shippen, Jr., of Philadelphia; and these two pioneers in obstetric science began the great work here which Smellie, Hunter, and others were striving for abroad, of placing this important branch upon a level with the sister departments of medicine and surgery. The success of their efforts may be judged by the facts that in 1762 Dr. Shippen delivered a course upon obstetrics; that in 1767 Dr. J. V. B. Tennant was appointed to a special chair on this subject in New York; and that, thus introduced as a distinct department into the curriculum, the subject has to the present day been recognized as one of paramount importance and dignity.

During this period essays were written by Orne, Osgood, and Holyoke[2] upon pudendal hematocele, the Sigaultian operation, rupture of the uterus, retroversion of the gravid uterus, extra-uterine pregnancy, and descriptive of cases in practice, evidencing an effort in the right direction.

In 1791[3] the operation of gastrotomy for removal of an extra-uterine fœtus was successfully performed by William Baynham upon the wife of a Virginia planter. The same gentleman[4] operated with similar success upon a negro slave in 1799. Before Baynham's first case the operation had been only once performed in this country, namely, in colonial times,

[1] Med. Communication and Dissertations of Mass. Med. Soc., vol. ii. p. 235.
[2] Outline History of Gynæcology in New England, by H. R. Storer.
[3] N. Y. Med. and Philos. Journ., Jan. 1809, vol. i. p. 161.
[4] Ibid., Jan. 1809, vol. i. p. 165.

by John Bard, of New York, in 1759.[1] Subsequently it was repeated by Wishart[2] and Alex. H. Stevens.[3]

The dawn of the nineteenth century found the United States ripe for progress and advancement, and while it was yet young the lamp of medical science began to burn with a brightness which it had not shown before, and which promised well for the future. We will not stop to inquire whether this improvement in progress was due to the fact that a nation, fatigued, exhausted, and impoverished by a severe conflict, had now had time for recuperation; or whether, in the language of the learned Beck,[4] this was due to the "influence which our peculiar form of government exerts over the character and progress of science." Let the sequel of this sketch prove, too, whether there be any truth in his assertion that "it is unquestionably true that our medicine participates largely of that spirit of independence which characterizes the civil and political institutions of our country." However much patriotic zeal may prompt an inclination to accept this view, let no American ignore the fact already stated, that the way to progress in obstetrics was pointed out by the great Englishman, Hunter; and that in the very first year of the new century a similar impulse was given to gynæcology by the eminent Frenchman, Récamier.

The greatest advances which have been made in the science and art of medicine in modern times have all been due to the subordination of facts to physical investigation and demonstration. The prodigious strides made in pathological anatomy during the time intervening between Morgagni and Virchow have been due to the microscope. The great modern advance which has been made in the diagnosis, prognosis, and treatment of cardiac and pulmonary affections, has resulted from the discovery of auscultation and percussion. Diseases of the deep structures of the eye have been comprehended through the instrumentality of the ophthalmoscope. The laryngoscope has brought order out of confusion in affections of the larynx; and clinical thermometry has done more than anything else in our century to remove diagnosis and prognosis from the domain of speculation, and place them upon a scientific basis. At the commencement of the present century such an influence was evoked in behalf of gynæcology in the speculum uteri, with which Récamier, in 1801, began the study of the diseases of female sexual organs.

The history of few instruments which have come down to us from ancient times can be so clearly traced as this. Directly back through the ages which intervene between our civilization and that of the Greeks, its existence can be detected; and yet its merits and advantages had been gradually so lost sight of that Récamier may be said to have re-discovered it at the time just mentioned. The labours of this man, more than those of any other in modern times, have advanced gynæcology, and given to it its present position of dignity and usefulness.

The duty of presenting a summary of America's contribution to obstetrics and gynæcology from the time of Hunter and Récamier to our own, is truly an arduous one. So extensive is the literature which has been contributed to these subjects that even a faithful examination of it is difficult. Much more difficult is the task of separating the wheat from

[1] Parry on Extra-Uterine Pregnancy, p. 224.
[2] Phil. Journ. of Med. and Phys. Science, 1825, N. S., vol. i. p. 129.
[3] N. Y. Journ. Med., May, 1846, p. 341.
[4] Historical Sketch of the State of Medicine in the American Colonies.

the chaff in the material presenting itself, for, verily, there is a surprising amount of both to be found.

In 1806, Dr. George Clark[1] reported a case of extra-uterine pregnancy, where, the head of the child presenting in the rectum, he passed his entire hand into the bowel, and, seizing the head, extracted it. Some time afterward the body and secundines were spontaneously expelled. In this case the operation proved the practicability of introducing the whole hand into the rectum without doing serious damage to that viscus, and demonstrated the utility of so doing in just such cases as that here recorded. In this course he has since been imitated by Duncan, of Edinburgh, and Janvrin, of New York. Simon's recent advocacy of the procedure, for other purposes, is well known.

The year 1807 was signalized by two important occurrences in American medicine, the introduction of ergot into the materia medica as an oxytoxic, and the publication of the first work on midwifery which appeared in this country. Long before that time ergot had been known, and in Germany, France, and Italy had even been empirically used by midwives as a uterine stimulant. The name of the drug, indeed, in the German tongue is *mutterkorn*. To John Stearns, first president of the N. Y. Academy of Medicine, belongs the credit of demonstrating its oxytoxic effects to the medical profession, and giving it its deserved position as the most reliable and valuable of this class of agents. His first communication, dated Jan. 25, 1807, was written from his residence in Saratoga County to Mr. S. Akerly, and published in the *N. Y. Medical Repository*.[2] This attracted great attention, gave rise to many others of similar character, and very soon obstetrics had at its disposal a most valuable agent, capable of accomplishing a result with almost certainty which none other, discovered either before or since, has been able to effect. Ergot to-day stands unrivalled as an oxytoxic among drugs, and the good which has resulted from its use in post-partum hemorrhage is incalculable.

The first work upon obstetrics which appeared from the pen of a native author was that of Dr. Samuel Bard, of New York. This was published in 1807, and in 1819 had reached the fifth edition. In his preface Bard especially disclaims all originality, and declares that his work is a compend for the use of midwives and practitioners. The style of this work, though quaint, is strikingly simple, and the author appears to have been a careful, conscientious, and conservative practitioner.

"I confess," says he, "not without severe regret, that towards the end of thirty years' practice, I found much less occasion for the use of instruments than I did in the beginning; and I believe we may certainly conclude that the person who, in proportion to the extent of his practice, meets with most frequent occasion for the use of instruments, knows least of the powers of nature, and that he who boasts of his skill and success in their application is a very dangerous man."

It was during this, the first decade of the nineteenth century, that the greatest of all the contributions which the United States has had the good fortune to make to gynæcology, came forth from the then far west; a region from which so great an advance would at that early period have been least expected. This was the performance of ovariotomy by Ephraim McDowell, of Danville, Kentucky. The magnitude and im-

[1] Phila. Med. Museum, 1806, vol. ii. p. 292.
[2] Vol. v., 2d Hexade, p. 308.

portance of the procedure, the obscurity of its originator, and the fact that its practicability had long before been stated by eminent European authorities, all combined to render McDowell an object of distrust and obloquy. Many, both here and abroad, sympathized with the sarcastic expression of the then editor of the *Medico-Chirurgical Review*:[1] "A back settlement of America—Kentucky—has beaten the mother country, nay, Europe itself, with all the boasted surgeons thereof, in the fearful and formidable operation of gastrotomy, with extraction of diseased ovaries." Had this been stated in sober earnest, it would have been a modest and simple expression of what time, after a most searching examination, has proved to be the truth. It was, however, written in the bitterest spirit of sarcasm, the cloven foot of which is soon made apparent by the occurrence of this sentence: "Our skepticism, and we must confess it, is not yet removed."

Upon reflection, with the facts of the case clearly before us, the success of the western surgeon is not a matter of so great surprise. He was no illiterate, inexperienced, and rash adventurer, but a surgeon who had sat in his student days at the feet of John Bell and other eminent men, at that time composing the faculty of medicine at Edinburgh. "Every seminary of learning," says Sir Joshua Reynolds in one of his academical discourses, "is surrounded with an atmosphere of floating knowledge, where every mind may imbibe somewhat congenial to its own original conceptions." In Edinburgh the young American student imbibed some of this floating knowledge, and undoubtedly had the seed sown which afterwards ripened so lustily; for at that very time hints and suggestions as to ovariotomy were often thrown out by his teachers. Returning home, however, he bided his time. Before essaying his great conception he had already achieved a high reputation as a surgeon for lithotomy and hernia, and for fourteen years he cherished and reflected upon the idea of operating for extirpation of an ovarian tumour before an occasion offered for so doing.

It is evidently at variance with all the evidence at our disposal in reference to this discovery, to conclude that it was made by a sudden stroke of genius on the part of its discoverer. It should not be forgotten that what is styled genius is only the power of suddenly drawing deductions from premises slowly, carefully, patiently stowed away in the mind, studiously analyzed, and thoughtfully considered. Sir Isaac Newton expressed this opinion when, being complimented upon his genius, he replied that, "if he had made any discoveries it was owing more to patient attention than to any other talent." In our day metaphysicians are agreed in defining genius as a power of concentrating the mind in prolonged, fixed, and continued attention. Buffon tersely styles it a "protracted patience."

In 1809 the long-wished-for opportunity presented itself to McDowell,[2] and he operated successfully; then again in 1813, and again in 1816; although he did not publish these cases till 1817. What a commentary upon the grand nature of the man was this calm deliberation and hesitancy to rush into print! He had performed an operation never before attempted in the history of the world, and with three successive good results, and yet he did not hasten to blazon it abroad!

A great deal has been said, and very properly said, concerning the

[1] Dr. James Johnson, Med.-Chir. Rev., N. S. vol. v., Oct. 1826, p. 620.
[2] Eclectic Repository and Analytic. Rev., April, 1817, p. 242.

fact that McDowell got the suggestion of ovariotomy from abroad, and only developed it afterwards in his own country. Even had McDowell never lived, America seemed destined to be connected with this great surgical triumph from its inauguration; for in July, 1821, Nathan Smith, then Professor of Surgery in Yale College, performed ovariotomy[1] entirely without the knowledge of the fact that he had been preceded by one of his own countrymen in 1809, and by a German in 1819.

The scope of this paper will not admit of a record of the names of the immediate followers of these surgeons; suffice it to say that before the year 1850 eighteen operators had successfully performed thirty-six operations, with twenty-one recoveries and fifteen deaths.

In England ovariotomy was never performed till 1836; in Germany it was first performed in 1819, and in France in 1844.

It will thus be seen that this operation, remarkable at once for its simplicity and efficiency, did not rapidly advance to a recognized place as one of the resources of surgery, but slowly and painfully overcame the prejudices and doubts of worthy men, and the misrepresentations of detractors. In effecting this result, America by no means stood alone. Nevertheless it was to Americans, the successors of McDowell, that it was in great part due. The names most intimately connected with the work are those of John L. and W. L. Atlee, Dunlap, Peaslee, and Kimball. To the Atlees too much credit in this regard cannot be accorded. Profoundly impressed with the importance and future usefulness of the procedure, they pressed onward in the work of establishing its claims with that dignified indifference to the criticisms of opponents which always characterizes successful innovators. They operated upon all suitable cases, when each venture insured a storm of censure; when every fatal result was cited in evidence of their recklessness; when persistence robbed them of the esteem of many whose good feeling they could not but value.

"On the 17th September, 1843," writes Alexander Dunlap, of Springfield, Ohio, "I performed my first ovariotomy, and carefully wrote out the case for publication, and sent it to a medical journal. They sent it back, with a note, stating that they could not publish the case of such an unjustifiable operation. I threw it into the waste-basket, determined to write no more for medical journals; but, being satisfied that I was right, to continue the operation. From that time, for a number of years, I was looked upon by most of the profession out west as a kind of an Ishmaelite in the regular profession in regard to surgery, and in that operation in particular. . . . I have now operated 106 times for ovariotomy (1876), with 27 deaths and 79 cures." Peaslee operated first in 1850 and Kimball in 1855.

Let it be borne in mind that these operators, with a few others, for a long time, stood almost alone. In those days it was as difficult to find a physician bold enough to sustain the operation as it now is to find one who dares decry it, and the wisest and most eminent surgeons of our country did not hesitate to declare,[2] "that in a few years the measure will be consigned to the oblivion it so richly merits." This, indeed, was a mild expression of disapprobation compared with many others from the best men in our ranks. Let us rather draw the veil over the exhibition of vituperation and personal abuse which disgraced the opposition, and

[1] Am. Med. Recorder, 1822, vol. v. p. 124.
[2] Liston and Mütter's Surgery, 1847, p. 422.

strive to forget that the bigotry and narrow-mindedness which endeavoured to crush the great discovery of Copernicus still lived in our day, to strive against ovariotomy. "Pride," says Sir William Hamilton, "has led men to close their eyes against the most evident truths which were not in harmony with their adopted opinions. It is said that there was not a physician in Europe above the age of forty who would admit Harvey's discovery of the circulation of the blood."

To-day, when ovariotomy is generally accepted as a valuable surgical resource, it is difficult for one to appreciate the reasons for the tardiness with which it overcame European prejudices, and forced its claims upon the notice and confidence of men who have since learned to accord to the procedure its true value. So entirely has this disposition on the part of trans-Atlantic surgeons been now overcome that a very general and, we are forced to say, a very reasonable feeling of surprise has been excited in America at what has seemed to be an inclination to ignore her indisputable rights in the matter.

"Till 1858," says an ovariotomist of Great Britain, as well known for his personal excellence as for his skill and success as an operator, writing as late as 1873, "I could find nothing whatever anywhere to encourage, but everything to deter one from attempting it. Ovariotomy was then, as an operation, simply nowhere."[1] This was a mistake. Ovariotomy since 1809 was somewhere; namely, in the land in which McDowell had performed thirteen operations with eight undoubted successes before 1830; W. L. Atlee[2] fourteen operations prior to 1851; J. L. Atlee[3] double ovariotomy in 1843; and where over twenty-five other surgeons had removed ovarian tumours each one or more times prior to the year in which this eminent commentator began to discover the whereabouts of the procedure. The only extraordinary thing connected with the matter is that so important an operation could for almost an entire half century have so completely concealed its huge proportions from the ken of so acute an observer, and that too in a country teeming with medical periodicals and a nation not prone to hide its light under a bushel.

England, France, and Germany have each in turn been claimants of an operation, which after the most critical and thorough search stands fully accredited to America. "In faith, 'twas strange, 'twas passing strange," and yet 'twas true, that a surgeon of the Western wilds, with what Piorry once styled "une audace Americaine," stole a march upon the polished savans of the old world, as if in the silent watches of the night.

It is difficult to estimate the amount of good which this operation has bestowed upon humanity! Practised to-day in every civilized country in the world, yielding the statistics of seventy to seventy-five per cent. of recoveries, and daily being improved in its various steps, it may well be regarded as one of the greatest surgical triumphs of the century. "It may be shown," says Peaslee, "that in the United States and Great Britain alone, ovariotomy has, within the last thirty years, directly contributed more than thirty thousand years of active life to woman, all of which would have been lost had ovariotomy never been performed." To have done this even for one generation alone is glory enough for one mortal, and his country, apparently in recognition of this fact, leaves his

[1] Mr. Thos. Keith, Brit. Med. Journ., Dec. 20, p. 739.
[2] Am. Journ. Med. Sci., N. S., vol. xxix. p. 387.
[3] Ibid., N. S., vol. vii. p. 44.

grave without a mark, and his memory to be preserved only in the hearts of the thousands of grateful women whom his genius has saved from death.

Should the day ever arrive in which the memory of McDowell shall be honoured by a monument, surely no one will deny to it the right to that inscription which declares upon the statue of Washington; he "has rendered his name dear to his fellow-citizens, and given the world an immortal example of true glory."

In the year 1816,[1] John King, of Edisto Island, South Carolina, performed one of the most remarkable operations for removal of an extra-uterine fœtus ever placed on record. The case was one of abdominal pregnancy; the head presented in the pelvis, outside of the vagina; he cut through the walls of the latter, and applying the forceps, while abdominal pressure was exerted upon the child from above, had the rare good fortune to save both mother and child.

Towards the close of the eighteenth century there arose a man whose genius left its impress upon American obstetrics more decidedly than that of any other has done before or since. Decided in opinion, vigorous in expression, terse in argument, and trenchant in style, he did a great deal towards elevating the department to which he devoted himself. William Potts Dewees was born in 1768 and died in 1841, after a long and laborious professional career, during which he exerted a powerful influence as Professor of Midwifery in the University of Pennsylvania, and a writer upon obstetrics, gynæcology, and pediatrics.

In after times it is impossible to estimate the degree of influence which has been exerted by such a man as Dewees. It is a matter of tradition only, and we can merely point to the *literæ scriptæ* which outlive him. He contributed a Treatise on the Diseases of Females (1826), which went to the tenth edition; a Treatise on the Physical and Medical Treatment of Children (1825), which reached the tenth edition; and a Comprehensive System of Midwifery (1824), which went into a twelfth edition. Of the last Prof. Hugh L. Hodge[2] declared "it takes a stand decidedly in advance of Denman, Osborne, Burns, and other English authorities in general use in our country at that period, and even of Baudelocque himself in throwing aside from his excellent system much that was useless, and, it may be said, imaginative."

Dewees had two able successors in Meigs and Hodge, both of whom reached old age in the active performance of their professional duties, and left indelible traces of their influence by reason of their strong intellectual qualifications, valuable literary contributions, and rare personal worth.

Charles D. Meigs was born in Bermuda in 1792, and commenced practice in 1815. For many years he filled the chair of obstetrics in the Jefferson Medical College of Philadelphia, and contributed largely to medical literature. His most important works were Woman, her Diseases and Remedies (1847); Obstetrics, the Science and Art (1849); a Treatise on Acute and Chronic Diseases of the Neck of the Uterus (1850); and on the Nature, Signs, and Treatment of Childbed Fevers (1854).

Meigs[3] drew special attention to cardiac thrombosis as a cause of those

[1] Med. Repository, 1817, N. S., vol. iii. p. 388. See also "An analysis of the subject of extra-uterine fœtation, and of the retroversion of the gravid uterus, by John King, Esq., of South Carolina." Norwich, 1818, 8vo. pp. 176.

[2] Memoir in Amer. Journ. of Med. Sci., Jan. 1843.

[3] Med. Examiner, March, 1849, p. 141.

sudden deaths which occur in childbed, and which had generally been attributed to syncope. "I had noticed, on various occasions, the total want of any means of explaining such disasters," says he, referring to sudden deaths post partum, "and remained as much in the dark as my compeers, until I discovered that the incident depends most commonly on the sudden coagulation of the blood that occupies, for the time, the right auricle of the heart, and, in some of the cases, even that which is in the ventricle, and the pulmonary artery."[1]

It has been remarked by an eminent American author that Meigs "just escaped the honour, which is now, and will hereafter be given to the eminent Virchow, of Berlin, of a great pathological discovery." Even admitting the truth of this statement, it is certainly well that the justice of the award should here be questioned. Meigs proclaimed the fact in no uncertain or wavering tones, but boldly, decidedly, repeatedly, and by every method. Why is the honour not his? What else could he have done to deserve it? Many of his countrymen will sympathize with the voice which speaks now, after death, in this unmistakable manner. "I have a just right to claim the merit of being the first writer to call the attention of the medical profession to these sudden concretions of these concrescible elements of the blood in the heart and great vessels." It may be said that he did not follow his discovery into detail as regarded secondary deposits of emboli. What of that? He does not claim to have done so. What he does claim is clearly and unquestionably claimed with justice.

The style of Meigs was peculiarly quaint and antique. Yet he possessed in a remarkable degree the power of fixing salient points upon the mind of the reader or listener, and burning into the memory the maxims which he deemed of greatest importance. Meigs died June 22, 1869.

Hugh L. Hodge practised in Philadelphia from 1818 to 1873, during which period he exerted a wide and decided influence as Professor of Obstetrics and Diseases of Women in the University of Pennsylvania, and as the author of a number of valuable works upon these and kindred subjects. His most valuable contributions to literature were Cases and Observations regarding Puerperal Fever (1833); Diseases Peculiar to Women, including Displacement of the Uterus (1860); Principles and Practice of Obstetrics (1864); and Essays upon Synclitism of the Fœtal Head (1870–71).[2] In his essays and lectures Hodge made prominent, by precept and illustration, the value of forceps as compressors in ordinary delivery, and after perforation; synclitism of the fœtal head; the importance of the induction of premature labour where even without pelvic deformity repeated fœtal deaths have occurred from premature ossification; the prophylactic influence of mechanical support in prevention of habitual abortion, and its efficacy in cases of uterine fibroid; and added to the *armamentarium obstetricum* "Hodge's Forceps," the instrument more generally used in this country than any other; a compressor cranii; a craniotomy scissors; and placental forceps—all attesting rare mechanical ingenuity.

For gynæcology Hodge accomplished much by the origination and development of two ideas which have already done a great deal of good, and will in the future do more than they have yet accomplished. The

[1] Treatise on Obstetrics, 5th ed., p. 352.
[2] Am. Journ. Med. Sci., Oct. 1870, p. 325, and July, 1871, p. 17.

first of these involved the recognition of the fact that that state of the uterus characterized by enlargement, tenderness, displacement, congestion, and hypersecretion is not "inflammation," and should not be treated as such; the second, that a double vaginal lever can supplement the exhausted uterine supports under these circumstances, and by sustaining the uterus give great relief to all these conditions. With regard to the first of these views, nothing more can be stated here than the expression of the belief that it constitutes one of the most important facts in uterine pathology. As to the second, something is necessary. Prior to the time when Hodge began a course of careful, laborious, and conscientious experiments upon the shape, material, uses, and varieties of pessaries (1830), these instruments had been used both in this country and in Europe. Indeed, even as long ago as the period of the Greek civilization they had been employed. But the disk, the globe, and similar instruments were badly contrived, did not depend upon any true mechanical principle, and accomplished little by comparison with what Hodge's improved instruments have since done. He introduced the philosophical double lever, gave accurate and precise rules for replacing and sustaining the displaced uterus by it, insisted upon every pessary sustaining itself against the vagina instead of against the rami of the pubes, particularly urged that after being placed both uterus and pessary should be movable in the pelvis, and thus brought a subject which had before belonged to the realms of empiricism into the precincts of science. Hodge's pessary is unquestionably the parent stem from which the host of excellent modifications now existing took their rise. It may safely be averred that he accomplished more for mechanical support of the uterus than any one has ever done before or since his time. He first constructed these instruments out of silver which was plated lightly with gold, but in time he used vulcanite or hard rubber entirely.

Hodge once gave to a friend this account of the consummation of the discovery of the lever pessary: "He had been contemplating for a long time the subject of new shapes for pessaries, and after many experiments had found nothing satisfactory. One evening, while sitting alone in the room where the meetings of the Medical Faculty of the University were held, his eyes rested on the upright steel support by the fireplace, designed to hold the shovel and tongs. The shovel and tongs were kept in position by a steel hook, and as he surveyed the supporting curve of this hook, the longed-for illumination came; the shape, apparently so paradoxical, revealed itself in the glowing light and flickering flame of the burning grate, and the Hodge lever pessary was the result."[1] A sudden effort of genius, was it? No: this was the moment at which the detached thoughts, long and carefully stored away in the inventor's mind, combined to form a harmonious whole. The steel hook did for his mind what the swinging church lamps did for that of Galileo in suggesting the pendulum.

Henry Miller was born in Kentucky, in 1800, commenced practice in 1821, and published a work upon Human Parturition in 1849, and upon the Principles and Practice of Obstetrics in 1858. He was for a long period Professor of Obstetrics and Diseases of Women in the University of Louisville, and both as teacher and writer decidedly influenced the department to which he devoted his energies. We owe to him the

[1] Discourse Commemorative of H. L. Hodge, M.D., by R. A. F. Penrose, M.D. Phila., 1873.

method of making the application of fluid caustics to the cavity of the body of the uterus by saturating with them a cotton wrapped rod or probe, and he was among the first to adopt the use of the speculum uteri in the great West, and the first to employ in that part of our country anæsthesia in midwifery.

In 1819 the chair of obstetrics in the College of Physicians and Surgeons of New York was filled by one who will long be remembered for his eloquence, erudition, and rare geniality—John W. Francis. Unfortunately for the department which now engages our attention, Dr. Francis turned his literary efforts in the direction of general medicine, literature, and pathology. Little remains to us of his obstetrical writings except his copious annotations of Denman's Midwifery, which he edited in 1821. A perusal of these makes one regret that he did not leave behind him more extensive contributions to this department embodying more of his large experience and acute observation.

The next systematic writer upon this department in the United States was Gunning S. Bedford, who practised in New York from 1830 to 1868; was for over twenty years Professor of Obstetrics in the University Medical College, and published a work on Diseases of Women and Children in 1855, and another on the Principles and Practice of Obstetrics in 1861.

In the year 1841, Bedford established, in connection with the University Medical College of New York, the first clinic for the diseases peculiar to women ever held in this country. This he maintained with great ability, energy, and enthusiasm, and from it he gleaned the material for a work which created a very decided sensation both in this country and in Europe. This clinic, under the care of his able successors, Charles A. Budd and M. A. Pallen, still exists. But it has been the parent of many other similar ones not only in New York but throughout our country. No medical school, indeed, is now considered complete without such a sphere for the instruction of students, and a vast deal of good has resulted from his move in this direction.

Thus far this essay has chiefly dealt with the labours of those of a past generation who, in the early part of the century, sustained the department of which we write; and the careers as well as the works of individuals have been noted. From this point we are called upon to undertake the more delicate and far more difficult task of dealing with the labours of our contemporaries. The chief reason for the difficulty and delicacy of this duty grows out of the fact that nothing is harder than to arrive at a just appreciation of the merits of contemporaries, more especially on the part of those labouring in the same field. Prejudice, personal bias, and that tendency which all men feel to undervalue what is at their own doors, and exalt that to which distance lends enchantment, all combine to defeat a just, fair, and generous estimate. Then, too, the umpire, however conscientious and unprejudiced he may be, lacks the great assistance which the test of experience alone can give in deciding as to the value of new procedures and the credit which should be accorded to their discoverers. He has not the opportunity of learning the verdict of time as to what is and who are the fittest to survive; of that "wise beneficent law by which the improvement and perfection of the human race alone can be secured; that law in consequence of which the best specimens of a species survive, and become the progenitors of generations more perfect than those preceding them." The only feelings which can sustain him who makes the effort and render him impervious to

the shafts of criticism, is an abiding faith in the rectitude of his intentions, and in the sincerity of his efforts to render to every man, without prejudice or favour, what he honestly regards as his just dues.

The plan which suggests itself as best is to notice, 1st, the original discoveries which have proved of greatest practical value; 2d, the most striking and important contributions to periodical literature and systematic works upon the subject; 3d, instruments and mechanical contrivances of greatest importance.

In the year 1841 a most important contribution was made to the treatment of peritonitis by Alonzo Clark,[1] of New York, in the introduction of the plan now known as the "opium treatment." In the spring of that year Dr. Clark saw several cases of this disease treated by Armstrong's method—a full bleeding, and a full dose of opium, to prolong the effects of the bleeding. He was impressed with the idea that opium was the curative agent, not the bleeding. In the next three years he treated all the cases he met on that idea, giving opium, or an opiate, in full and frequent doses, and nothing else. The result was that just eight out of nine cases were cured. A success very encouraging, but not quite so marked, attended the similar, subsequent use of the drug. With this experience he resolved to give it a trial in puerperal peritonitis. The opportunity, however, did not occur till 1848. The first trial was successful, the patient taking 100 grs. of opium in four days. Between that date and 1852 nothing occurred that was decisive regarding the merits of the plan. But in the latter year an epidemic of puerperal fever occurred at Bellevue Hospital, in which the exclusive opium treatment was fully tested by him. In the first case it failed, or rather through the timidity of the House Physician, it was not tried—only three grains of opium were given in twenty-four hours. A few days later four cases came under his care at once. He assigned them to another member of the House Staff, a man of more decided character, now a distinguished surgeon and sanitarian, with detailed instructions. All of these were cured. It was in the course of this outbreak that the opium treatment for puerperal peritonitis was shown to be the best that had then, or has since, been proposed. This physician assisted in the treatment of puerperal fever in the same hospital twelve years earlier, in which, out of thirty attacked, twenty-nine died. Nothing was then known of the antiphlogistic power of opium.

The quantity of opium, or one of its alkaloids, required to subdue and control the inflammatory process varies greatly. In some cases two grains of powdered opium every two hours answers the purpose, while in others eighty drops of Magendie's solution (xvj grs. of morphia to one ounce of water) every two hours for six or seven doses are required. Dr. Clark records a case in which the patient took during "the first twenty-six hours, of opium and sulphate of morphia, a quantity equivalent to 106 grains of opium; in the second twenty-four hours she took 472 grains, on the third day, 236 grains, on the fourth day, 120 grains, on the fifth day, 54 grains, on the sixth day, 22 grains, and on the seventh, 8 grains."

By this system a tolerance of the drug is rapidly effected, pain is annihilated, nervous and mental disquietude relieved, and the most satisfactory results commonly attained. While it is put in practice, however, a physician should constantly remain by the bedside to detect the devel-

[1] New York Journ. of Med., Jan. 1858, p. 82; and Ramsbotham's Syst. of Obstetrics, Am. ed., Phila., 1855, p. 533.

opment of dangerous narcotism, and combat it by appropriate means. It is surely not claiming too much for Clark's method to assert that it surpasses in efficacy all others which have yet been made known to the profession.

In 1844, Dr. J. C. Nott,[1] of Mobile, published a case of "coccygeal neuralgia," in which he practised extirpation of the bone, which proved to be carious, with entire relief to his patient. This was the first time that either this disease or its remedy had been described. At a later period Sir James Simpson, not knowing of Nott's essay, described the disease under the name of coccyodynia or coccygodynia, and advocated the same method of treatment.

Although a decided impulse was given to gynæcology by the introduction of the speculum by Récamier, a great need was felt of something which would expose the uterus and vagina to more complete and satisfactory investigation. For want of this the cure of vaginal fistulæ had thus far proved impracticable, and many operations upon the uterus itself difficult of accomplishment. In 1852 there appeared an article from the pen of a hitherto unknown author, which changed all this, and threw a flood of light into dark places. This was an essay upon vesico-vaginal fistula, by J. Marion Sims,[2] then of Montgomery, Alabama, in which he introduced a speculum which developed a new principle of examination of the uterus and vagina. The discovery of a method of cure for vaginal fistulæ was a great stride onward, but the method of examination by retraction of the perineum and posterior vaginal wall, while the body of the patient is so placed as to secure distention of the vagina by air, has served to give to gynæcology an impulse second in importance only to that given by Récamier. Récamier's discovery lifted this department from the field of speculation to that of science. Sims has served to advance it very greatly beyond the point which it would have occupied if reliance were still placed upon previous methods.

Important discoveries are not made suddenly as if by one leap on the part of some great intellect. They are arrived at slowly, step by step, and by the workings of many minds; as many unseen influences slowly mature a harvest which in due time falls to one sickle. The inspiration of discoverers is the offspring of the times in which they live; such men are exponents of the mental workings of their period, mouth-pieces of the civilization which developed them. The resultant of the premises evolved from ten great minds of one decade are often combined in the deductions of a single genius in another. Hence it is that discoveries are often simultaneously made in various parts of the world by men who have had no communication with each other, and that their origination is invariably disputed by rival claimants. Morse discovered the telegraph, but ever since Franklin's kite brought down the lightning from the skies, many others had been preparing the way for him. Wells discovered anæsthesia, but for many years before, school-boys had for their amusement been painlessly bruising themselves under the influence of laughing-gas, never dreaming that the means of securing unconsciousness of pain which they adopted would one day become systematized and utilized as a great boon to humanity.

These remarks find no more perfect illustration in the discoveries of

[1] New Orleans Medical Journal, May 1844, p. 58; and Am. Journ. Med. Sci., Oct., 1844, p. 544.

[2] American Journ. Med. Sciences, Jan. 1852, p. 59.

surgery than that of the cure of vesico-vaginal fistula. The writings of the Greek, Roman, and Arabian schools of medicine are singularly silent with reference to an accident which has a striking faculty of pressing itself upon the attention, and must have been very common before the days of the Chamberlaynes. From the times of Paré, however, it attracted the special care of surgeons, and year after year efforts were made to close these small, but important, lesions. It would take too much space to tell of the efforts of Paré, Roonhuysen, Vœlter, Fatio, and many others; suffice it that at the beginning of the nineteenth century nothing had been accomplished. In the eighteenth, however, "coming events cast their shadow before," and the glimmer of the dawn became visible in the operations, and occasional successes of Desault, Naeglé, Schreger, Lallemand, and Roux. In 1834 Gossett, of London, absolutely discovered the method of cure, and, his labours being forgotten, Metzler, of Prague, in 1846, again did so. And now, too, Hayward and Mettauer, of this country, began to get good results. But sporadic, desultory, haphazard results mark a different era from systematic and certain ones, and the matter may be said to have been really little advanced till Marion Sims published to the world his method of treating these accidents, which was at once so simple and systematic as to place the procedure at the disposal of every surgeon.

No more forcible comment can be made upon the perfection of Sims' procedure than the mere citation of the fact that even now it stands, for the great majority of surgeons, virtually unaltered, and as simple in details as when it left the master-hand.

Various modifications have been suggested both in this country and in Europe. Chief among these are the clamps of Battey, Atlee, and Bozeman. The last of these only deserves special mention on account of the excellent results which have been obtained with it by its originator, Nathan Bozeman. This operator, who was the earliest to follow Sims in this field of surgery, and who has devoted himself to it with an earnestness which has been surpassed by that of no other, has always preferred a modification of the knee-elbow position to that on the side, and has approximated the pared edges of the fistulous orifice by passing his sutures through a leaden shield, or, as he styles it, a "button suture." By this method very gratifying results are obtained, and after an experience of more than twenty years with it, its originator still employs it with confidence in its advantages over the suture alone.

The medical profession in New York, recognizing the value of Sims' discoveries, warmly endorsed an effort on his part to establish a Woman's Hospital in that city, where, thanks to the well-known generosity of its citizens, such an institution was founded in 1855. From this institution, through the labours of Sims and his able coadjutor Thomas Addis Emmet, a great deal has emanated for the advancement of gynæcology. To these two men a great deal of credit is due for establishing and disseminating an exact and systematic method in the study of the diseases of women. The greater facility afforded for operations upon the vagina and uterus by Sims' method of examination, has accomplished an improvement in all such procedures, and these two operators, who were first in the field with this advantage on their side, have been greatly instrumental in this result. Operations upon the perineum, upon fistulæ, upon constricted and tortuous uterine necks, upon voluminous and atonic vaginæ, have all felt this influence. Posterior instead of lateral section of the cervix for

anteflexions of body and neck, is a good example of such an improvement as has been thus effected.

Until the establishment of Marion Sims as a specialist in diseases of women in New York about the year 1852, no one in this country had heretofore devoted himself to this department to the exclusion of general practice. By him and by T. A. Emmet and H. R. Storer more than any others, this practice was established. That a great deal of good has resulted from the devotion of able minds to the special investigation of this subject, no candid observer can doubt. And yet every thoughtful man who wishes well to the department, must view with concern the unwise haste with which young practitioners, who have had neither time nor opportunity to acquire experience in general medicine, strive to devote themselves to it. Can it ever be that he who knows little of the management of the diseases which affect the peritoneum, stomach, lungs, and liver, can deal efficiently with the disorders of an organ or set of organs which are especially affiliated with them in all their variations of disease, in all their physiological functions? He who deals efficiently with the whole, may in detail deal with all its parts, but he who learns to deal with a part alone, can never be equal to coping with the whole.

Before the introduction of Sims' method of uterine examination, the use of the vaginal tampon, the most important of all hemostatic means in connection with the non-pregnant uterus and with this organ up to the fifth month of pregnancy, was difficult, painful, and unreliable. The introduction of a silk handkerchief, a kite-tail tampon, a mass of cotton, a muslin bandage, and all similar materials, was very unsatisfactory. The most perfect facility and efficiency attend tamponing the vagina with wet cotton while the patient lies upon the side, and the vagina is dilated by means of the duck-bill speculum. Pieces of cotton soaked in water, pressed and flattened out by the fingers, each about the size of a very small biscuit, are pressed into the vaginal cul-de-sac by means of forceps till this is filled. Then other pieces are packed firmly around the cervix until only the os is visible—a smaller pad is then pressed firmly against or introduced within the cervical canal, and the whole vagina is then filled to its lowest portion.

At a meeting of the American Medical Association in 1853, a prize was awarded to a very remarkable and valuable essay by Dr. W. L. Atlee,[1] entitled, "The Surgical Treatment of Certain Fibrous Tumours of the Uterus heretofore considered beyond the resources of Art." In this Dr. Atlee advocated the removal, by enucleation, of tumours which up to this time were looked upon as incurable, and by his brilliant results he led the way to a plan of treatment which has been productive of a great deal of good. His plan of treating these growths is now very commonly adopted by practitioners who appear to forget to whom the heroic and life-saving method is due. Even as early as 1850, Prof. Mussey of Ohio remarked, "Of all the achievements of modern surgery, we meet with none more striking or extraordinary than the operations performed by Professor Atlee for the removal of intra-uterine fibrous tumours."

In 1854, a gold medal was awarded by the Ohio State Medical Society to Dr. M. B. Wright of Cincinnati, for an essay entitled "Difficult Labours and their Treatment." In this essay the operation of bimanual version was so fully, so clearly, so unmistakably described, that it is difficult to understand how many of his countrymen could have since per-

[1] Trans. Am. Med. Association, 1853, vol. vi. p. 547.

mitted themselves to style the procedure by any other name than "Wright's Method." An examination of the written testimony bearing upon the subject, certainly seems to give endorsement to the following claim on the part of Wright.

"I claim the credit, if credit there be, of having first suggested to the profession, and demonstrated in practice, the value of bimanual version."[1]

It must be understood that Wright neither claims nor deserves the credit of the discovery of bimanual version as a procedure, but only that of the method of its performance. Flamand long before him described cephalic version by this method, but Wright improved upon and simplified the procedure. This is Wright's description of his plan:—[2]

"Suppose the patient to have been placed upon her back, across the bed, and with her hips near its edge—the presentation to be the right shoulder, with the head in the left iliac fossa—the right hand to have been introduced into the vagina, and the arm, if prolapsed, having been placed, as near as may be, in its original position across the breast. We now apply our fingers upon the top of a shoulder, and our thumb in the opposite axilla, or on such part as will give us command of the chest, and enable us to apply a degree of lateral force. Our left hand is also applied to the abdomen of the patient, over the breech of the fœtus. Lateral pressure is made upon the shoulders in such a way as to give to the body of the fœtus a curvilinear movement. At the same time, the left hand, applied as above, makes pressure so as to dislodge the breech, as it were, and move it towards the centre of the uterine cavity."

All controversial topics should be avoided in an essay like the present, but it would be discourteous to a distinguished English obstetrician not to note the fact that he has doubted the claim of Wright to originality in this matter. In a letter published in the *Amer. Journ. of Obstetrics*, etc., for Feb. 1873, Dr. Braxton Hicks, of London, says:—

"Now the distinctive point of the plan I have introduced was just this, that *both hands are used together*, one supplementing the other, so that when the internal hand began to lose power the external one would begin to gain power, and *vice versa*. This principle was applied by me to both partial and complete version, and it is (as far as I have been able to discover) a curious fact that in the practice of neither German nor other obstetricians has the use of the two hands simultaneously been described. The only use of the outside hand has been hitherto to steady the uterus to prevent recession. This character it is which Dr. Richardson[3] has overlooked, and it is for this that I am desirous of claiming for *myself* whatever of originality it possesses."

This claim is perfectly clear, and can be answered without difficulty or circumlocution. Wright says "at the same time the left[4] hand, applied as above, makes pressure so as to dislodge the breech, as it were, and move it towards the centre of the uterine cavity." Surely no one can suppose that this means that the left hand merely steadies the uterus. Cazeaux declares that Flamand got hold of the head with the hand in the vagina, "if the efforts made by the other hand through the abdominal walls, have not proved sufficient to make it descend into the excavation."

There is no question as to the fact that Dr. Hicks has done a great deal of good in simplifying podalic version by this method. But the exten-

[1] Letter to the author of this review in Jan. 1876.
[2] Trans. Ohio State Med. Soc., 1854, p. 82.
[3] Who maintains Wright's claim.
[4] The right hand is in the vagina.

sion and utilization of a method is not here at issue; it is the origination of the principle which is in question.

Even had Wright not made this advance, it seemed destined to be made in America, for in the next year Penrose,[1] of Philadelphia, in an article entitled "Cephalic version in shoulder presentations, with the arm in the vagina," described bimanual version without a knowledge of the fact that he had been anticipated by Wright.

During the course of the same year a very valuable contribution was made to the treatment of septicæmia following ovariotomy, by E. R. Peaslee,[2] of New York. His method was the introduction of a catheter or similar tube into the peritoneal cavity and boldly washing out this serous sac, interference with which had for all time been regarded with so much dread. Experience with the plan, extended now over a period of twenty years, stamps it as a reliable method of meeting one of the most dangerous consequences of this grave operation, and corroborates the high estimate which was put upon it in the early days of its existence. Unquestionably many lives have been saved by a timely resort to it. In one of Peaslee's early cases the use of intra-peritoneal injections was kept up for fifty-nine days, and in another for seventy-eight days. In both of these cases recovery took place as a reward for the prolonged and persevering efforts of the fearless innovator.

In 1856, Sims made known his operation for narrowing the vagina for the cure of prolapsus uteri. In this he had been anticipated by Dieffenbach, Heming, and other Europeans, but his method was an improvement over others, and was a revival of what had fallen into almost entire disuse.

In the same year,[3] Dr. James T. White, of Buffalo, reduced by taxis an inversion of the uterus of eight days' standing. In his report of this case he took occasion to predict that the profession would soon alter its views with regard to the practicability of reposition in chronic cases, a prophecy which was happily fulfilled, in great degree in consequence of his own labours, two years afterwards.

Daillez,[4] who published a thesis upon this subject as early as 1803, reported a case of reduction by taxis as late as the eighth month after occurrence of the accident; another is reported in 1847; and even as late as 1852, Canney and Barrier are declared to have accomplished it. But the plan was not systematized and placed upon the basis of a recognized and legitimate procedure until 1858, when White of Buffalo, and Tyler Smith of London, simultaneously replaced uteri in the condition of chronic inversion, and gave to the procedure the position of a standard operation.

Up to the present date White has successfully reduced by taxis twelve cases, extending from seven months to twenty-two years in duration.

In 1858, Gaillard Thomas[5] published an essay upon the treatment of prolapse of the funis by gravitation developed as a remedial measure by placing the patient in the genu-pectoral position. This plan, which it appears had been formerly in use, had been so entirely lost sight of, that for ten years after its introduction by him, the fact of

[1] Medical Examiner, July, 1855, p. 405.
[2] Am. Journ. Med. Sci., April, 1863, p. 355, and July, 1864, p. 47. See also Amer. Journ. Obstet., 1870, vol. iii. p. 300.
[3] Buffalo Med. Journ., vol. xi. p. 596.
[4] Colombat, Dis. of Women, Am. ed., p. 186.
[5] Trans. of N. Y. Acad. of Medicine, vol. ii. p. 21.

its previous existence was not known. Since the time of his article it has come into general use as the most rational and simple method of treating this accident during the earlier stages of labour.

The intractable nature of, and extreme distress attendant upon chronic cystitis, are too well known to require mention. For a long time the attention of American surgeons has been directed to the relief of this condition by surgical means. In 1846,[1] Willard Parker created a recto-vaginal fistula in the male for the removal of a stone, and being struck by the relief afforded to a cystitis which existed, he subsequently repeated the operation for the relief of the latter condition in men between that time and 1867, when he read an essay upon the subject before the New York State Medical Society. "The object in view," says he, "was to open a channel by which the urine could drain off as fast as secreted, and thus afford rest to the bladder, the first essential indication in the treatment of inflammation." In 1867, Paul F. Eve followed Parker's example in thus operating upon the male. But in 1861,[2] Nathan Bozeman applied the procedure to the female bladder with the result of curing chronic cystitis

Without a knowledge of any of these facts the same idea suggested itself to the minds of Sims and Emmet[3] as early as 1858, and at a later period, 1861, the latter of these gentlemen, at the suggestion of the former made three years before, practised the operation for chronic cystitis in the female. Although the origination of the method does not belong to Emmet, to him is justly due the credit of having systematized the procedure, and placed it upon the basis of a recognized surgical resource. Whether it is destined to give way before the less serious procedure of distending the urethra, and thus establishing incontinence of urine, time will prove. That it is in itself a most valuable operation, no one can doubt who has seen the relief afforded by it to women nearly exhausted by ceaseless vesical tenesmus, loss of sleep, and nervousness.

In Smellie's[4] *Collection of Preternatural Cases and Observations in Midwifery*, vol. iii. p. 232, will be found evidence of the fact that that great obstetrician recognized the value of gravitation, developed by placing the patient in the genu-pectoral position, as an aid to the operation of podalic version. He mentions his having repeatedly resorted to this posture in performing version, but does not claim originality for it, as he styles it "Daventer's method." The first case in which Smellie resorted to it occurred in 1753. In Wright's pamphlet, already alluded to, published in 1854, and entitled "Difficult Labors and their Treatment," the following passage occurs on page 23: "The hand can be more readily introduced into the uterus, and the feet reached, however, with the patient on her elbows and knees, than when on the back or sides. There may be cases, in which advantage would be gained, by placing the patient in this position, preparatory to cephalic version."

It will be observed that Smellie resorted to the knee-elbow position as an adjuvant to podalic version, and that Wright very cautiously offers it as a mere suggestion. To P. R. Maxon, of Syracuse, N. Y., belongs the credit of having established the claims of this method in the performance of cephalic version in cases of transverse presentation. He thus

[1] Transact. of N. Y. State Med. Soc., 1867, p. 345.
[2] Ibid., 1871, p. 326.
[3] Amer. Practitioner, Feb. 1872, p. 65.
[4] Ibid., Jan. 1876, p. 59.

describes the procedure in the case of a lady who had previously lost three children by podalic version.

"Remembering the fate of the other children, and finding this one very large, I suggested the feasibility of correcting this shoulder presentation in the same manner as I had corrected the abdominal in the first instance. With his (the attending physician's) consent, I made the effort in the following manner: I folded several quilts compactly, laying them upon one another to the height of about one foot, and assisted her to kneel upon the quilts with her head and shoulders resting upon the bed and her face forwards, so as to bring her body to an angle with the bed of nearly 90°. I then pressed my hand gently against the shoulders, which readily receded, until I was enabled to clasp the vertex with my fingers, and with the assistance of the next pain to so "engage" it that, when the patient was placed upon her left side and the quilts removed, a perfectly natural presentation presented itself. In a few hours the labour terminated in the delivery of a healthy boy, weighing ten pounds."

No one who has not resorted to Maxon's method can appreciate the great facility with which a shoulder or even an arm presentation may be altered into one of the vertex; and no one who has done so will doubt the great value of the plan. Of course, after the amniotic fluid has been long evacuated, and the uterus has firmly clasped the fœtal body, such a change will often prove impossible; but in many cases, before this unfortunate chain of circumstances has occurred, the operation of podalic version with all its serious consequences to mother and child may be avoided, and a natural parturition be substituted for an unnatural one.

In 1861[1] Sims described the disease known as vaginismus, which had, however, been previously noted by Burns, Simpson, Debout, and several others, and recommended for its relief a procedure which, while it involves little risk to the patient, insures a certain removal of the disorder. This consists in ablation of the remains of the hymen and section of the tissues at the perineal extremity of the ostium vaginæ.

Several European authorities have advocated in preference to this plan forcible distention of the ostium vaginæ and modification of the local nervous hyperæsthesia by alterative applications. A comparison of the two methods at the bedside will be greatly in favour of the former.

In 1862[2] E. Noeggerath, of New York, proposed and practised the method of reduction of an inverted uterus by digital compression of both horns. He based this procedure upon the pathological fact that inversio uteri generally begins by inversion of the horns. Experiment proves the method of Noeggerath to be a valuable and reliable one, which should rank among the important contributions which have been made to this subject.

In 1867[3] Theophilus Parvin described an operation for uretero-vaginal fistula, a condition which had previously attracted little attention. This consisted in first turning the displaced distal extremity of the ureter into the bladder, and then closing the vaginal opening. The case reported was the first of this kind upon which the operator had essayed the method, and it proved entirely successful.

In 1868[4] a valuable suggestion, illustrated by a case, was made by T. A. Emmet for the management of cases in which partial success attends reposition of an inverted uterus. This consisted in keeping the

[1] Trans. Obstet. Soc. London, vol. ii. p. 356.
[2] Bulletin N. Y. Acad. Med., vol. i. p. 410.
[3] Western Journ. of Med., vol. ii. p. 603.
[4] Am. Journ. of Med. Sciences, January, 1868, p. 91.

partially replaced body within the cervix by closing the os externum uteri by silver sutures. By this method the advance gained at one sitting is not lost, and the case is better prepared than it would otherwise be for further efforts.

In 1869[1] Julius F. Miner, of Buffalo, made a valuable contribution to the management of the pedicle of tumours removed by ovariotomy. His method consisted in stripping off from the tumour the expansion of the pedicle instead of ligating and severing it. In many cases Miner's method is of inestimable value, and allows of a successful issue to cases which would otherwise prove exceedingly difficult if not impossible of management.

J. Marion Sims[2] in the same year published an important essay entitled the "Microscope in Diagnosis and Treatment of Sterility." His observations bore especially upon the deleterious effects exerted upon the vitality of the zoosperms by ichorous discharges from the endometrium. Treatment, of course, was to be directed to the eradication of the disorder which gave rise to this devitalizing secretion.

In 1870[3] Gaillard Thomas performed the operation of vaginal ovariotomy, removing an ovarian cyst the size of a large orange through an opening made through the vagina and Douglas's pouch. This was the first time that this procedure was ever advised or practised for this purpose. His patient recovered.

In 1872[4] R. Davis, of Wilkesbarre, Pa., in the same manner successfully removed an ovarian cyst weighing nine pounds. In rupturing adhesions, which were abundant, his hand was passed high up into the peritoneal cavity, the sac extending several inches above the umbilicus, and forming a tumour about the size of a pregnant uterus at seven months of utero-gestation. His patient recovered.

In 1873[5] J. T. Gilmore, of Mobile, Ala., performed the same operation successfully. The temperature of his patient never rose to 100° F.

In 1874[6] Robert Battey, of Atlanta, Ga., removed in the same way a cyst the size of a small orange. The patient rapidly recovered.

By the same method, Battey has nine times extirpated the ovaries in pursuance of a plan which will now be mentioned, and Marion Sims has done so three times.

In 1872 Robert Battey[7] published an essay advocating extirpation of the ovaries with the intent of prematurely inducing the menopause in cases in which menstruation is productive of very bad results. To use his own words, it is "an operation for the removal of the normal human ovaries, with a view to establish at once the 'change of life,' for the effectual remedy of certain otherwise incurable maladies."

Too short a time has thus far elapsed for this bold innovation to have received its just estimate. It is not saying too much, however, even now to declare that its future will probably be one of a great deal of usefulness when it has been circumscribed by proper limits and the class of

[1] Buffalo Med. and Surg. Journ., June, 1869, p. 418. See also American Journ. Med. Sci., Oct. 1872. p. 391.
[2] N. Y. Med. Journ., January, 1869, p. 393.
[3] Amer. Journ. Med. Sciences, April, 1870, p. 387.
[4] Trans. State Med. Soc. of Penna., 1874, p. 221.
[5] N. O. Med. and Surg. Journ., Nov. 1873, p. 341.
[6] Personal communication.
[7] Atlanta Med. and Surg. Journ., Sept. 1872, p. 321.

cases to which it is appropriate has been clearly defined. Thus far Battey's operation has been practised in the United States

by Robert Battey . . .	10 times.	8 recoveries.	2 deaths.
" Marion Sims	5 "	4 "	1 "
" Gaillard Thomas . . .	1 "	1 "	0 "

Battey[1] thus expresses himself concerning some of the important points connected with this subject:—

"I have operated in widely different circumstances. In one case the patient had amenorrhœa, convulsions, recurrent hematocele, repeated pelvic abscesses, incipient tuberculosis from pulmonary congestions, etc. Several of the cases passed under the head of ovarian neuralgia; several had intractable dysmenorrhœa with pelvic deposits of old lymph; one had ovarian insanity, etc. All had exhausted the available resources of the art to no useful purpose. *I operate upon no case that any other respectable medical man proposes to cure.* In most of my cases the full results of the menopause have not yet been developed. This is the work of many months, and sometimes two or three years are necessary to its full and perfect realization. In no case has the patient failed to realize such a degree of relief and benefit following the operation as to amply compensate her for all the pains and dangers incident thereto, to say nothing of the promise of full and ample recovery at the completion of the physiological 'change.' In two of my cases this *change* has seemed to occur at once in all its completeness; but it is always my expectation that it will occur gradually, and extending through two or even three years to its final completion. In my first case (now three years ago) the restoration to health is eminently satisfactory. It is true that she is not absolutely and perfectly well, but she is fully relieved of the convulsions, the violent periodical congestions, the hematoceles, the pelvic abscesses, etc., for which I operated. I submit to you the question in all sincerity, if I confine myself to cases where life is endangered, or where health and happiness are destroyed—cases which are utterly hopeless of other remedy this side the grave—ought the profession to demand at my hands the restoration of these forlorn invalids to a state of complete and absolute health in every particular?"

In 1873[2] John Ball, of Brooklyn, published the results of a plan of treating constrictions and tortuosities of the canal of the cervix uteri resulting from versions and flexions, by rapid dilatation, by expanding instruments of steel. Ellinger, of Germany, has likewise adopted this heroic method, but Ball declares that he has employed it for several years, and without the knowledge that any one else was testing it. The procedure is thus described by its originator:—

"My method of procedure is first to evacuate the bowels pretty thoroughly beforehand, so as to prevent all effort in that direction for two or three days; I then place the patient upon her back, with her hips near the edge of the bed, and, when she is profoundly under the influence of an anæsthetic, I commence by introducing a three-bladed, self-retaining speculum, which brings in view the os uteri, which I seize with a double-hooked tenaculum, and draw down toward the vulva, when I first introduce a metal bougie as large as the canal will admit, followed in rapid succession by others of larger size until I reach No. 7, which represents the size of my dilator. I then introduce the dilator, and stretch the cervix in every direction, until it is enlarged sufficiently to admit a No. 16 bougie, which is all that is generally necessary. Then I introduce a hollow, gum-elastic uterine pessary, of about that size, and retain it in position by a stem, secured outside of the vulva, for about a week, in which time it has done its work, and is ready to be removed.

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[1] Amer. Practitioner, Oct. 1875, p. 207.
[2] N. Y. Med. Journ., Oct. 1873, p. 363.

"During this time I keep the patient perfectly quiet, and usually upon her back, which is generally found to be the most comfortable position."

To the uninitiated this procedure appears fraught with great danger, but the originator declares that out of between twenty and thirty cases he has met with but one fatal issue. He says:—

"According to my own experience, it causes much less constitutional disturbance than the use of tents; and I think it safer even than the metrotome, and free from some serious objections to the use of the latter; as, for instance, when incisions are made through the tissues of the cervix, unless carried deep enough to prevent reunion, they must of necessity form a cicatrix, which will interfere, more or less, with the dilatation of the parts. And, when the operation does not succeed, the patient is left in a worse condition than before; while, in the rapid and forcible dilatation of the cervix, there is no sacrifice of the integrity of the parts, and, being done under the influence of an anæsthetic, there is no shock of the nervous system, and generally but little subsequent suffering."

In 1874 an important contribution to the pathology and treatment of diseases of the cervix uteri emanated from T. A. Emmet.[1] It had long been known, that, as the head of the child passed the os externum uteri, lacerations of its muscular walls often occurred; but up to this time it had not been recognized how uniformly this condition is confounded with the so-called ulceration of the cervix, and how commonly the eversion of the lips of the cervix resulting from it is mistaken for hypertrophy of the cervical tissues. Emmet advocated for this condition vivification of the edges of the lacerated parts, and approximation of them by suture. This procedure is one of most beneficent character, and one which must take rank as an important advance in gynæcological surgery.

The medical literature of the first quarter of the present century contains several allusions to an operation styled gastro-elytrotomy, a procedure intended to avoid cutting through the uterus and peritoneum, and yet allowing of the removal of the child through the abdominal walls and above the true pelvis.

This operation has attracted the attention of four obstetricians: Jorg in 1806, Ritgen in 1820, Physick in 1822, and A. Baudelocque in 1823. Kilian, in speaking of Jorg's conception of the operation, says that he merely suggested it; and even if he had performed it, his results would not have been admitted in a fair appreciation of the operation, since he did not propose avoiding the peritoneum, a prominent feature of the method. The same writer alludes to one operation by Ritgen which ended fatally. In 1870, Gaillard Thomas, without a knowledge of the fact that he had been anticipated in the procedure, delivered in this way a living child. The operation was at that time thus described by him:[2]—

"The patient being placed upon a table, anæsthesia was produced, so as to quiet her restlessness and jactitation, with a few inhalations of ether. I then passed my hand up the vagina and dilated the cervix slowly and cautiously, so that at a three-quarter distention no injury was done to its tissue. With a bistoury I then cut through the abdominal muscles, the incision being carried from the spine of the pubis to the anterior superior spinous process of the ileum. The lips of the wound were now separated, and by two fingers the peritoneum was lifted with great readiness, so that the vagino-uterine junction was reached. The vagina was now lifted by a steel sound passed within it, and cut, and the opening thus made was enlarged by the fingers. The cervix was

[1] N. Y. Med. Journ., July, 1874.
[2] Amer. Journ. Obstet., vol. iii. p. 125.

then lifted into the right iliac fossa by the blunt hook, while the fundus was depressed in an opposite direction. I then passed my right hand into the iliac fossa, and introduced two fingers into the uterus, while the left hand, placed on the outer surface of the uterus, depressed the pelvic extremity of the fœtal ovoid. The knee was readily seized, and delivery easily and rapidly accomplished."

In 1876,[1] Alexander J. C. Skene, of Brooklyn, performed this operation with a brilliancy of result never before attained by any one. The patient was a small rachitic woman, aged thirty-one years, who had been three times delivered, once by craniotomy and twice by premature delivery at the seventh and eighth months. One of the last two children had lived a few minutes, and one for several months. In her fourth pregnancy Dr. Skene let gestation advance to full term; then, finding an arm and the cord presenting, he performed gastro-elytrotomy, saving the mother and a vigorous child weighing ten pounds. Both made a perfect recovery.

This completes the list of those contributions to obstetrics and gynæcology on the part of this country which appear to be especially marked by originality and by practical utility. But how difficult is it to decide what really deserves the credit of original conception? "Is there anything whereof it may be said—See, this is new? it hath been already of old time which was before us. There is no remembrance of former things." As the husbandman turns up to the light and brings into activity and usefulness the mould which, though buried for ages, was in by-gone times ploughed by his predecessors, so do the seekers after new ideas bring to light the thoughts of those whose discoveries have been long ago forgotten. Who is to decide how long a time must intervene between the periods of successive discovery to warrant for the latest aspirant the claim of originality?

The peculiar features of the contributions just enumerated seem to warrant their arrangement in a special category, but this does not argue in them greater value than that attaching to those of somewhat different character which come to be considered now. Indeed, some of the latter type have exerted a more powerful and widespread influence than many of the former, and have been productive of greater good to medicine and humanity.

In June, 1842, Jos. Warrington's "Obstetric Catechism" which for a time was used as an epitome of the subject of midwifery by students, appeared.

The year 1843 was marked by the appearance of an essay[2] which was productive of a great deal of good, from the pen of the eminent poet-physician, Oliver Wendell Holmes. At that period the then authoritative works upon obstetrics, those of Dewees and Meigs, both maintained the non-contagiousness of puerperal fever. Holmes boldly joined issue upon this momentous point, and, although devoting much less attention to this department than the authors mentioned, his observations led him to a more correct conclusion.

In 1845 an important contribution to a subject which even now has received little attention, was made by Isaac E. Taylor, of New York, in an essay upon Rheumatism of Uterus and Ovaries.[3] In this some strik-

[1] Amer. Journ. Obstet., vol. viii. p. 636.
[2] New England Quarterly Journ. of Med. and Surg., April, 1843, p. 503.
[3] Amer. Journ. Med. Sci., July, 1845, p. 45.

ing cases of rheumatic disorder of the muscular structure of the pregnant uterus were recorded.

During this year W. L. Atlee published a synopsis[1] of 101 ovariotomies, and an essay upon Intra-Uterine Fibroids.[2]

During the next year an essay appeared from Samuel Kneeland, Jr.,[3] of Boston, maintaining a close relationship between epidemic erysipelas and puerperal fever. It is well known how much favour this view has since met with.

The year 1846 was marked by a discovery in this country which may be said to overshadow any other of its contributions to medicine. I allude to anæsthesia, discovered by Horace Wells, a dentist of Connecticut, and subsequently made practicable and useful by W. T. G. Morton, likewise a dentist, of Boston. Only the relations of this subject to obstetrics and gynæcology find legitimate place in this essay.

In January, 1847, anæsthesia by ether was first employed for assuaging the pains of labour by Prof. Simpson, of Edinburgh; in April of the same year it was employed in this country, by Dr. N. C. Keep, of Boston; and in May, by Dr. Channing, of Boston, in a case of instrumental labour. The introduction of this beneficent agent into the lying-in chamber constitutes an era in the history of obstetrics. It is somewhat singular that after the discovery of anæsthesia in this country; after the prediction, long before its discovery, by one of America's greatest physicians, that "'a medicine would be discovered that should suspend sensibility altogether, and leave irritability, or the powers of motion, unimpaired, and thereby destroy labour-pains altogether;" after it had been employed here in hundreds of cases for surgical operations, this link of the chain should have been forged by a European. Yet such was the case, and far be it from any American to begrudge him one atom of the glory which he deserves, or to endeavour to dim its lustre by "faint praise."

Boston was the field in which the first demonstrations of anæsthesia, as an agent of practical value, were made, and there appeared the first and most ardent advocate of its use in obstetrics in this country. Dr. Walter Channing was elected to the chair of obstetrics in Harvard, in 1833, and was recognized as a leader in this department, both from his teachings and writings. He warmly espoused the subject, and in 1848 published a treatise on Etherization in Childbirth, illustrated by 581 cases. This volume numbers 400 pages, and served to bring the subject fully before the whole civilized world. So well did it serve its purpose that no similar work has since appeared either from an American or European author.

What a striking contrast is presented between the rapid acceptance of this discovery by the whole medical world and the tardy, unwilling, bitter reception of ovariotomy! The first patient in Boston submitted to operation under anæsthesia, was etherized by Morton in October, 1846. Writing in April, 1847, Hayward declares that ether "has probably been used in this way by several thousand individuals in this city within the last six months," and, in 1848, Channing,[5] of the same city, illustrates the utility of this agent in the lying-in chamber alone by the citation of over five hundred cases.

[1] Amer. Journ. Med. Sci., April, 1845, p. 309.
[2] Trans. Amer. Med. Assoc., vol. iii. p. 380.
[3] Amer. Journ. Med. Sci., April, 1846, p. 324.
[4] Rush, Med. Inquiries and Observations, 3d ed., vol. iv. p. 376.
[5] Etherization in Childbed, Boston, 1848.

In 1847, I. E. Taylor contributed an essay drawing attention to the causation of exophthalmos and enlargement of the thyroid gland by excessive lactation; and Fordyce Barker one upon diseased states of the uterine neck.

In 1850 the first attempt at the establishment of an obstetric clinic in this country was made by J. P. White, of Buffalo. In furtherance of this mode of instruction, the act of human parturition was displayed ocularly to some sixteen students, the professor explaining its features during its accomplishment. A perfect storm of popular, and to a certain extent of professional indignation, was excited by this, which was only stemmed by the dignified and bold attitude of the united faculty of the University of Buffalo, and the support lent by enlightened obstetricians thonghout the land.

The whole subject was fully brought out in the trial of the People *v.* Dr. H. N. Loomis, a report[1] of which to-day constitutes a curious episode in the medical literature of the century. In this will be found a letter signed by seventeen physicians, characterizing the demonstration as "wholly unnecessary, and grossly offensive, alike to morality and common decency."

During the next year a full synopsis[2] of all the known cases of ovariotomy which had up to that time been performed appeared from W. L. Atlee. This embodied 222 cases, and constituted the most valuable statistical table which had yet appeared.

In the same year a masterly essay upon the Corpus Luteum of Menstruation and Pregnancy[3] was submitted to the American Medical Association, and was awarded the prize. Its author was John C. Dalton, of New York.

In 1853 Thomas F. Cock published a Manual of Obstetrics,[4] a *multum in parvo* of the most reliable maxims in that art, which even now constitutes the *vade mecum* of many of our students.

Two years afterwards a paper[5] was read by Fordyce Barker before the New York Academy of Medicine upon the Treatment of Puerperal Convulsions, which fully presented all that was then known upon a subject which has since called forth so much discussion. In the same year R. A. F. Penrose published an interesting and valuable essay upon a Case of Triplets, with the Mechanism of Labour.[6]

In the same year James Deane, of Massachusetts, published an essay upon "The Hygienic Condition of the Survivors of Ovariotomy," which was particularly valuable at a time when this operation was being weighed in the balance and its beneficent results doubted by many of the most sincere investigators.

In 1856[7] there appeared the most exhaustive and valuable essay upon ovariotomy which had yet been published. This was the prize essay of Geo. H. Lyman, of Boston, entitled, "History and Statistics of Ovariotomy, and the Circumstances under which this Operation may be regarded as Safe and Expedient." It appeared at a most opportune moment, and, characterized as it was by a fair and manly spirit, a remarkable degree of accuracy, and entire absence of narrow and prejudiced

[1] Jewett, Thomas & Co., Buffalo, 1850.
[2] Trans. Amer. Med. Assoc., vol. iv. p. 286.
[3] Ibid., p. 547.
[4] W. Wood & Co., N. Y.
[5] Transactions, vol. i. p. 273.
[6] Med. Exam., Feb. 1855, p. 77.
[7] Publications of Mass. Med. Soc., May, 1865.

views, it did a great deal of good in reference to the important subject with which it dealt Although twenty years have elapsed since its publication, it can still be read with profit and be regarded as a safe guide in reference to many essential points.

During the years 1848 and 1856 there appeared in the *American Journal of the Medical Sciences*[1] some very valuable essays of statistical character upon rupture of the uterus by J. D. Trask, of Astoria, Long Island. These were valuable by the faithfulness and accuracy which characterized them, and the thoroughness with which the subject was treated. The same author has now nearly ready for publication a paper bringing the subject down to the present day.

In the latter of these years I. E. Taylor, in a report of Two Cases of Recto-Vaginal Fistula, cured by a New Operation,[2] advocated severance of the sphincter ani in such cases after the manner of Rhea Barton.

During the succeeding year two valuable papers appeared, one by Emil Noeggerath upon Metastatic After-Pains,[3] and another by J. Marion Sims, upon Silver Sutures in Surgery.[4]

In 1858 J. Foster Jenkins,[5] of Yonkers, made an important contribution to the literature of the subject of spontaneous umbilical hemorrhage in the newly born, and William Read, of Boston, one upon the influence of the Placenta upon the Development of the Uterus during Pregnancy.[6]

During the following year three essays well worthy of note appeared; two by Noeggerath, upon the Local Disinfecting Treatment of the Cavity of the Uterus for the Treatment of Puerperal Fever,[7] and on the Operation of Turning by External Manipulations;[8] one by Sims upon Amputation of the Cervix, Stump covered with Vaginal Membrane.[9]

In 1861 William Read published a paper[10] upon The Formation of Knots in the Umbilical Cord, and Fordyce Barker[11] one on the Use of Anæsthetics in Midwifery. The latter of the subjects was one requiring at that time all the light which could be shed upon it by conscientious observers.

In this year there appeared[12] an interesting paper by Samuel R. Percy, of N. Y., demonstrating the tenacity of vitality possessed by the human zoosperm. His statements are here given in his own words:—

"I was called to attend a lady with uterine disease, but I considered it best to postpone all treatment, as on the next week her husband would leave home to be absent two or three months. On the Monday following he left, but she did not call upon me until a week from the day following. On examination with the speculum I found a mass of what I supposed to be muco-purulent matter, proceeding from the os uteri. Wishing to ascertain its character, I examined it with the microscope, and was surprised to find that it was semen, and that it contained living spermatozoa and many dead ones. Communicating in a proper way my discovery, I questioned her as to the time of her last intercourse with her husband. It was on the Monday morning before leaving,

[1] N. S., vol. xv. pp. 104 and 383, and xxxii. p. 81.
[2] N. Y. Med. Journ. [3] N. Y. Journ. Med., May, 1857, p. 287.
[4] Trans. N. Y. Acad. Med., Nov. 1857.
[5] Trans. Amer. Med. Assoc., vol. xi. p. 263.
[6] Am. Journ. Med. Science, April, 1858, p. 309.
[7] Contrib. to Midwifery and Dis. of Women, New York, 1859.
[8] N. Y. Journ. of Med., Nov. 1859, p. 329.
[9] Trans. N. Y. State Med. Society, 1861, p. 367.
[10] Am. Journ. Med. Sci., Oct. 1861, p. 381.
[11] Trans. N. Y. Acad. Med., vol. ii. p. 251.
[12] Amer. Med. Times, March, 1861, p. 160.

nearly eight and a half days previous. I would stake my reputation on her honour." Dr. Percy further says: "Knowing that the zoosperms of the frog are frequently found living days after the frog's death, and even when it has been frozen, I can conceive no reason why human spermatozoa may not retain their vitality for some time, especially when protected by warmth and placed in the situation where nature designed them. But to test this matter, I placed some semen in the lower part of a piece of moistened membrane, tied it, and placed it within the vagina of a mongrel bitch. Upon removing it, upon the sixth day, most of the zoosperms were possessed of vitality, though there were many dead ones. These facts may have an important bearing in a medico-legal way."

During the next year the subject of Pelvic Hæmatocele began to attract considerable attention in America. From the year 1831, in which it was first described by Récamier, of Paris, it had not ceased to attract considerable attention in France, and between that period and 1858 Bernutz, Vigues, Nelaton, Gallard, and Voisin had written their well-known essays upon it. Up to this year, however, only one case had been reported amongst us, and it constituted an era in the subject for three essays to appear in one year. One was by John Byrne, of Brooklyn; one by Fordyce Barker; and one by E. Noeggerath. All these were read before the N. Y. Academy of Medicine, and appeared in its Transactions.

During this year I. E. Taylor published a valuable essay[1] upon the non-shortening of the supra and infra-vaginal portion of the cervix uteri up to the full term of gestation. In this the author contested the views of Stoltz, of Strasbourg, to the effect that gradual expansion of the cervical canal during the latter months of pregnancy effaced or obliterated that portion of the uterus.

In 1863, H. R. Storer,[2] of Boston, added to the literature of the subject of anæsthesia in midwifery and medical surgery an essay of considerable value; Barker one upon Albuminuria[3] as affecting Pregnancy, Parturition, and the Puerperal State; and E. N. Chapman a report[4] entitled a Selection of Remarkable Cases.

The next year saw the publication of two able papers upon Ovarian Tumours and Ovariotomy,[5] by E. R. Peaslee; an essay upon Spinal Irritation,[6] by Charles F. Taylor; and an excellent treatise upon Chronic Inflammation and Displacement of the Unimpregnated Uterus, by W. H. Byford, of Chicago.

In 1865, T. A. Emmet published upon the Treatment of Dysmenorrhœa and Sterility,[7] resulting from Anteflexion of the Uterus, and upon the Radical Operation for Procedentia;[8] I. E. Taylor upon Placenta Prævia;[9] and Peaslee[10] gave Statistics of 150 Cases of Ovariotomy.

The work of Byford, mentioned as having appeared in 1864, had already met with so brilliant a success that it now reappeared, enlarged and improved, under the title of the Medical and Surgical Treatment of Women.

[1] Am. Med. Times, vol. iv. p. 342.
[2] Boston Med. and Surg. Journ., vol. lxix. p. 249.
[3] Bulletin N. Y. Acad. Med., vol. ii. pp. 36 and 67.
[4] Med. and Surg. Reporter, Phila.
[5] Bull. N. Y. Acad. Med., vol. ii. p. 226.
[6] Trans. N. Y. State Med. Soc., 1864, p. 126.
[7] New York Med. Journ., June, 1865, p. 205.
[8] Ibid., April, 1865, p. 1.
[9] Trans. N. Y. State Med. Soc., 1865, p. 62.
[10] Am. Journ. Med. Sci., Jan. 1865, p. 89.

During the next year, I. E. Taylor[1] reported sixty cases of recto-vaginal and recto-labial fistulæ treated by the plan already mentioned, and Emmet[2] published an essay upon Atresia Vaginæ.

This year was specially marked by the appearance of a work which more profoundly aroused the gynæcologists of Europe, as well as of America, than any other which had appeared since those of Bennet and Simpson. This was a work entitled Clinical Notes on Uterine Surgery, by J. Marion Sims. The clear, forcible, and persuasive style of this work, the record of successful operations which it contained, and the stamp of earnest and original thought which it bore upon every page, served to give it a circulation which demanded its translation into almost all the modern languages of Europe, and to make it an essential in the library of every progressive gynæcologist. Ten years have elapsed since its publication, and yet it may safely be stated that no work now extant constitutes a more perfect guide to the gynæcological surgeon.

In this year appeared, too, an excellent treatise of over fifty pages upon Vesico-vaginal Fistula, by M. Schuppert, of New Orleans. This contained an exhaustive *resumé* of the history of the operation, was fully illustrated, and embodied the extensive experience of one who has made himself well known as a successful operator in this field of surgery.

In this year, also, especial attention was called to the subject of extirpation of the uterus for fibroids, by the publication of a successful case, by H. R. Storer,[3] in which this organ and both ovaries were removed. This grave procedure, recommended, but never practised, as early as 1787, by Wrisberg, was in the present century performed by Clay, of Manchester, and Kœberlé, of Strasbourg. In 1854, the first operation was performed in this country for this purpose, by Kimball,[4] of Lowell, the tumour weighing six pounds, and the patient recovering. He has been followed by Burnham, Cutter, Peaslee, Darby, Sims, Atlee, Wood, Sands, Buckingham, Storer, Hackenberg, Weber, Thomas, Chadwick, and others. The statistics of the procedure in this country have not been collected, but it is safe to say that no such results can be reported as have recently come to us from Paris, where M. Péan has met with a success of seven out of nine, or an equivalent of seventy-eight out of one hundred. Kimball has thus far performed ten operations, with four recoveries and six deaths. In New York city the operation has been repeatedly performed, but never yet with a favourable issue.

In 1867, Dr. E. D. Miller,[5] of Boston, published an essay introducing into practice the scarification of the lining membrane of the body of the uterus, and described an instrument for performing this operation; and a valuable paper was read before the American Medical Association by Stephen Rogers,[6] of New York, advocating gastrotomy after rupture of the cyst of extra-uterine pregnancy, for the purpose of ligating bleeding vessels, and thus giving the patient a chance for life. As early as 1849 this course had been suggested by W. W. Harbert in the *Western Journal of Medicine and Surgery;* but to Rogers belongs the credit of pressing the claims of the idea upon the profession in a way to attract to it the grave attention which it deserves.

[1] Trans. N. Y. State Med. Soc., 1866, p. 97.
[2] Richmond Med. Journ., Aug. 1866, p. 89.
[3] Am. Journ. Med. Sci., Jan 1866, p. 110.
[4] Bost. Med. and Surg. Journ., May, 1855, p. 249.
[5] Ibid., March, p. 133.
[6] Trans. Am. Med. Assoc. 1867, vol. xviii. p. 85.

Montrose A. Pallen, formerly of St. Louis, now of New York, read in the same year an interesting paper on the Treatment of Certain Uterine Abnormities, before the American Medical Association, and published a *Resumé*[1] of forty-six operations for dysmenorrhœa by the division of the cervix uteri.

Wm. T. Lusk[2] also made a contribution entitled Uræmia, a Common Cause of Death in Uterine Cancer.

In this year H. Lenox Hodge,[3] in a case of tubo-uterine pregnancy, performed a very remarkable and successful operation for removal of the fœtus. The pregnancy had advanced to the eighth month, and a thin septum divided the true and unoccupied uterus from the adjoining vicarious one so as to prevent delivery. Hodge cut through this, and delivered the child *per vias naturales*. The child lived about ten hours, and the mother recovered.

In 1868 the first journal ever devoted especially to the interest of obstetrics and gynæcology in America appeared in New York. The establishment and early maintenance of this excellent quarterly, styled *The American Journal of Obstetrics and Diseases of Women and Children*, were entirely the results of the energy and enterprise of a single member of the profession, B. F. Dawson. After eight years of existence it has established its right to be considered one of the most valuable periodicals of the country, and under its present editor, Paul F. Munde, fully maintains its position.

During this year there appeared three works in this department of medicine; first, the Obstetric Clinic of George T. Elliot, classic in style, and replete with the wise counsels of a master in the obstetric art; second, a Treatise upon Vesico-vaginal and Recto-vaginal Fistulæ, by T. A. Emmet; and third, a Practical Treatise upon the Diseases of Women, by Gaillard Thomas.

Two good papers likewise appeared, one upon Intra-uterine Injections, by M. A. Pallen,[4] and one upon the Treatment of the Uræmic Convulsions of Pregnancy by Morphia, by F. D. Lente.[5]

In 1868, H. R. Storer,[6] of Boston, advocated inclosing the pedicles of ovarian tumours in the abdominal walls. This method, which he styled "pocketing the pedicle," consisted of fixing it in the abdominal opening and completely covering it by the cutaneous tissues.

The year 1869 was rich in essays of considerable value. Chief among these may be mentioned one upon Ovariocentesis Vaginalis,[7] and another upon Chronic Metritis in its relation to Malignant Disease of the Uterus, by Noeggerath; one by Wm. Goodell,[8] of Philadelphia, upon Concealed Accidental Hemorrhage of the Gravid Womb; one upon the Surgery of the Cervix in connection with the treatment of certain Uterine Diseases, by T. A. Emmet;[9] one upon Hypodermic use of Ergot in Post-

[1] Humboldt, Med. Archives, 1867, vol. i. p. 7.
[2] N. Y. Med. Journ., June, 1867, p. 205.
[3] Parry, op. cit. p. 266.
[4] St. Louis Med. and Surg. Journ., July, 1868, p. 294.
[5] Med. Record, April 15.
[6] Ibid., Jan. 15, 1868, p. 519.
[7] Amer. Journ. Obstetrics, May and November.
[8] Ibid., vol. ii. pp. 1, 505, and 610.
[9] Ibid., February, 1869, p. 339.

partum Hemorrhage, by F. D. Lente;[1] one upon Face Presentations, by I. E. Taylor;[2] one upon Intra-uterine Injections, by Joseph Kammerer;[3] one by J. G. Pinkham,[4] of Lynn, on Scarification of the Fundus Uteri in Chronic Metritis and Endometritis, which had been previously advised by Miller; one by H. R. Storer[5] upon a Method of Exploring and Operating upon the Female Rectum by Eversion of the Anterior Rectal Wall by a finger in the Vagina; and one upon the Pathological Sympathies of the Uterus, by V. A. Taliaffero,[6] of Ga.

The literature of fibro-cystic tumour of the uterus is very recent. In 1869 Koeberlé, of Strasbourg, tells us that only fourteen cases had been recorded, and of these two were discovered *post-mortem*. In that year C. C. Lee,[7] of New York, collected nineteen cases, and published them in an interesting paper.

In the same year[8] Gaillard Thomas published the account of a case of inversion successfully reduced by dilatation of the constricting neck through an opening in the abdomen made by section through its walls. This procedure has not met with favour, and has not since that time been repeated by any one but its author.

During this year a society, which exerted considerable influence in arousing attention to the subject of Gynæcology in New England, was formed in Boston, chiefly through the exertions of Horatio R. Storer, and called the Gynæcological Society of Boston. Before the year had expired a journal emanated from this society styled the Journal of the Gynæcological Society of Boston. It now no longer exists, but during its period of publication it exercised a decided influence in this department of medicine.

Societies devoted to obstetrics and gynæcology have likewise been established in Louisville, Philadelphia, and New York. They are still in active operation, and furnish in their proceedings and reports a valuable fund of information to the general reader of the medical periodicals of the country.

We now arrive at the commencement of the present decade, and during the six years of it which have now expired, so numerous have been the contributions to this department, that only a small proportion, consisting of the most valuable, can be noticed. During the first year of this period, there appeared Byford's Treatise on the Theory and Practice of Obstetrics, the first systematic work upon this subject which had appeared since that of Bedford, which is elsewhere noticed. An excellent paper likewise appeared from C. C. P. Clark,[9] of Oswego, upon the Management of the Obstetric Forceps, replete with the sagacious observations of an original and candid observer; and an important essay upon Anal Fissure in Women, by H. R. Storer.[10]

[1] N. Y. Med. Record, vol. iv. p. 411.
[2] N. Y. Med. Journ., November, 1869, p. 125.
[3] Read before Co. Med. Soc.
[4] Journal Gynæcological Society, Boston, vol. i. p. 23.
[5] Ibid., vol. i. p. 24.
[6] Ibid., vol. i. p. 341.
[7] Med. Record, vol. iv. p. 495.
[8] Amer. Journ. Obstetrics, November, 1869, p. 423.
[9] Trans. N. Y. State Med. Soc., 1870, p. 249.
[10] Journal Gynæcological Society, Boston, vol. ii. p. 221.

The next year produced a carefully prepared and interesting essay by Wm. Goodell,[1] entitled A Critical Inquiry into the Management of the Perineum during Labour; one of great practical value by the late John S. Parry[2] upon Sudden Enlargement of Ovarian Cysts from Hemorrhage into them; one upon Dysmenorrhœa and its Treatment by M. A. Pallen;[3] a report of a Case of Simultaneous Intra- and Extra-uterine Pregnancy going to Full Term, by S. Pollak;[4] a paper upon Mechanical Treatment of Displacement of Unimpregnated Uterus, by George Pepper, of Philadelphia;[5] a very valuable essay upon Placental Extraction and Placental Expression, by Parvin;[6] and an equally valuable one by Nathan Bozeman[7] upon Urethrocele, Catarrh, and Ulceration of the Bladder in Females.

The next year was marked by the appearance of three works devoted to this department of medicine; first, one upon Ovarian Tumours, their Pathology, Diagnosis, and Treatment, by E. R. Peaslee; second, one upon Hysterology, by E. N. Chapman; and third, one upon Electro-cautery in Uterine Surgery, by John Byrne. The first of these is certainly the most systematic and complete treatise which has thus far appeared upon this subject, and the last, although small in dimensions, deals exhaustively with the important matter upon which it touches.

During this year there appeared a remarkable essay upon Latent Gonorrhœa in Females, by Noeggerath. In this the author strongly assumes the position which is here announced in his own words.[8]

"I have undertaken to show that the wife of every husband who, at any time of his life before marriage, has contracted a gonorrhœa, with very few exceptions, is affected with latent gonorrhœa, which sooner or later brings its existence into view through some one of the forms of disease about to be described. . . . . I believe I do not go too far when I assert that, of every 100 wives who marry husbands who have previously had gonorrhœa, scarcely 10 remain healthy; the rest suffer from it or some other of the diseases which it is the task of this paper to describe. And, of the ten that are spared, we can positively affirm that in some of them, through some accidental cause, the hidden mischief will sooner or later develop itself."

The disorders supposed by the author to result from latent gonorrhœa are perimetric inflammations, both acute and chronic; ovaritis; and catarrh of the genital tract.

In the same year Parry[9] published an essay upon the comparative merits of craniotomy and Cæsarean section in pelves with a conjugate diameter of 2¼ inches or less.

The idea of draining the peritoneal cavity by creating an opening *per vaginam* into its most dependent portion, the pouch of Douglas, has often presented itself to the minds of ovariotomists. As early as 1855[10] the practice was adopted by Peaslee, and subsequently by Kimball, of

[1] Amer. Journ. Med. Sci., Jan. 1871, p. 53.
[2] Amer. Journ. Obstetrics, Nov. 1871, p. 454.
[3] Missouri Med. and Surg. Report.
[4] St. Louis Med. and Surg. Journal, May, 1871, p. 193.
[5] Amer. Journ. Obstetrics, Aug. 1871, p. 258.
[6] Trans. Ind. State Med. Soc., 1871, p. 11.
[7] Amer. Journal Obstetrics, Feb. 1871, p. 636.
[8] Published in Bonn.
[9] Amer. Journ. Obstet., Feb. 1873, p. 644.
[10] Handyside, of Edinburgh, first did this in 1846.

Lowell; W. W. Green and Tewkesbury, of Portland; Miner, of Buffalo; Thomas, of New York, and others. This plan of accomplishing drainage of the peritoneal sac has by no means met with general approval or adoption. Nor is it probable that it will ever do so, for between the peritoneum and vagina there is an interspace which is filled by areolar and adipose tissue into which an escape of putrid fluid must often enter and from which it would readily be absorbed.

In 1872 Marion Sims[1] revived the method and by passing into the peritoneum, through the vagina, tubes of small calibre admitting of perfect drainage, and the use of disinfectant injections he hoped to overcome more perfectly than had hitherto been done, the fatal consequences of septicæmia. The reviver of this plan of drainage still has sanguine hopes of its success, and commonly resorts to it.

In the year 1873, Thomas M. Drysdale of Philadelphia, after a careful and conscientious study of the subject, described a peculiar characteristic corpuscle as contained in ovarian fluid. This he regarded as diagnostic of ovarian cystoma. He sums up his views upon the matter in these words:—

"I claim then, that a granular cell has been discovered by me in ovarian fluid, which differs in its behaviour with acetic acid and ether from any other known granular cell found in the abdominal cavity, and which, by means of these reagents, can be readily recognized as the cell which has been described; and further, that by the use of the microscope, assisted by these tests, we may distinguish the fluid removed from ovarian cysts from all other abdominal dropsical fluids."

These views are by no means generally accepted by microscopists, but their author feels sure of his position, and W. L. Atlee, many of whose diagnoses have in great degree rested upon them, has full faith in its correctness.

In this year a remarkable paper entitled, "How do the Spermatozoa enter the Uterus,"[2] by Joseph R. Beck, of Indiana, appeared. The author, meeting with a female patient, the subject of prolapsus uteri, who was so excitable as to have the sexual orgasm produced by digital examination, examined visually as this occurred, and thus reports what he saw: "The os and cervix uteri had been firm, hard, and generally in a normal condition, with the os closed so as not to admit the uterine probe without difficulty; but immediately the os opened to the extent of fully an inch, made five or six successive gasps, drawing the external os into the cervix each time powerfully, and at the same time becoming quite soft to the touch. All these phenomena occurred within the space of twelve seconds' time certainly, and in an instant all was as before; the os had closed, the cervix hardened, and the relation of the parts had become as before the orgasm." Similar observations had been previously made by Sitzmann,[3] of Germany, and published in 1846.

In the next year W. L. Atlee gave to the profession a work entitled General and Differential Diagnosis of Ovarian Tumours, with special reference to the operation of ovariotomy, and occasional pathological and therapeutical considerations. This embodied his vast experience,

[1] New York Med. Journ., Dec. 1872, p. 561.
[2] St. Louis Med. and Surg. Journ., New Series, vol. ix. p. 449.
[3] A. Flint, Physiology of Man, vol. v. p. 339.

and recorded the results of his numerous operations for the removal of tumours of the uterus and ovaries.

In this year likewise appeared the work of D. Hayes Agnew, of Philadelphia, upon Laceration of the Female Perineum and Vesico-vaginal Fistula, their history and treatment. This likewise was the production of a man of mature thought and great experience and knowledge of the subject with which he dealt. To this author the profession is indebted for a great deal of honest and valuable labour in reference to the surgery of the female genital organs.

A lengthy report, in book form, of the Columbia Hospital for Women, in Washington, D. C., was made by J. H. Thompson, and a valuable essay was published by T. A. Emmet,[1] upon Laceration of the Perineum, involving the Sphincter Ani, and an Operation for securing Union of the Muscle. Emmet in this essay urges upon operators the necessity of inserting the first suture low down, on a level at least with a horizontal line running along the lowest edge of the anus, so as to lift the ends of the broken muscle up, and cause them to approximate. This constitutes the pivotal point of the operation.

In this year, also, appeared an essay by W. T. Lusk,[2] on the Etiology and Indication for Treatment of Irregular Uterine Action during Labour.

The year 1874 was very prolific in contributions to this department. In it appeared a work which has met with great and deserved success by Fordyce Barker, upon the Puerperal Diseases, and an essay by the same author, upon[3] The Age when the Capacity for Child-bearing ceases.

In this year two articles appeared from one of America's greatest ovariotomists, Gilman Kimball,[4] of Lowell, upon Pelvic Drainage after Ovariotomy; a noteworthy report by the late A. K. Gardner, of a case in which ten quarts of urine were at one operation removed from the female bladder; a paper by H. Lenox Hodge,[5] upon Injection of Tincture of Iodine into the Cavity of the Uterus in Hemorrhage after Delivery; a report by Goodell[6] on The Means employed at Preston Retreat for the Prevention and Treatment of Puerperal Diseases; a most valuable and masterly essay on the Mechanism and Treatment of Breech Presentations, by R. A. F. Penrose;[7] a description of an operation styled Vaginocerviplasty,[8] a substitute for amputation of the cervix uteri in certain forms of intra-vaginal elongation, by Pallen; an additional paper, on The Physiological Lengthening of the Cervix Uteri at, before, during, and after Delivery, by I. E. Taylor;[9] one by Marion Sims,[10] upon Enucleation of Intra-uterine Fibroids, and one upon Erysipelas in Child-bed Fever, by Thomas C. Minor, of Cincinnati.

[1] Med. Record, March, 1873, p. 121.
[2] N. Y. Med. Journ., June, 1873, p. 561.
[3] Phila. Med. Times, vol. v. p. 161.
[4] Boston Med. and Surg. Journ., 1874, N. S., vol. xiii. p. 517, and vol. xiv. pp. 132, 272.
[5] Am. Journ. Obstet.
[6] Amer. Sup. to Obstet. Journ. of Great Britain, 1874, July, p. 49, and August, p. 65.
[7] Ibid., March, 1874, p. 177.
[8] Amer. Journ. Obstet., Feb. 1875, p. 604.
[9] Ibid., May, 1874, p. 119.
[10] N. Y. Med. Journ., April, 1874, p. 337.

In the same year there appeared a work, small in proportions but powerful in style and effect, from the pen of Edward H. Clarke, entitled Sex in Education. Few works in modern times upon medical topics have so thoroughly succeeded in arousing the attention of the community for whose benefit they were undertaken.

In 1875 James D. Trask,[1] of Astoria, N. Y., published an essay upon Injection of Tincture of Iodine into the Cavity of the Uterus in Hemorrhage after Delivery; J. R. Chadwick,[2] of Boston, one upon Injection of Nutritious or Cathartic Fluids into the Intestines through the abdominal walls by means of an aspirator needle when the stomach proves entirely intolerant; A. D. Sinclair,[3] of Boston, one upon Manual Dilatation of the Os Uteri; Noeggerath[4] one upon Vesico-vaginal and Vesico-rectal Touch, a new method of examining the Uterus and Appendages; and Goodell,[5] a Clinical Memoir upon Turning in Pelves narrowed in the Conjugate Diameter, and another[6] upon The Management of Head-last Labours.

In the same year Wm. H. Byford[7] read before the American Medical Association an able report upon The Treatment of Uterine Fibroids by Ergot (Hildebrandt's method); F. D. Lente[8] and Alex. Murray[9] published essays advocating the use of electricity in arresting post-partum hemorrhage; Parry[10] one upon The Use of the Hand to correct unfavourable presentations and positions of the child during labour; and another[11] upon The History of an Outbreak of Puerperal Fever at the Philadelphia Hospital, characterized by diphtheritic deposits on wounds of the genital organs; M. B. Wright[12] one upon Obliquities of the Gravid Uterus; and Lusk,[13] a valuable report upon The Genesis of an Epidemic of Puerperal Fever.

A very interesting and valuable paper appeared during this year from H. F. Campbell,[14] of Georgia, upon Position, Pneumatic Pressure, and Mechanical Appliance in Uterine Displacements. The author advocates replacement of uteri affected by posterior displacement by the assumption on the part of the patient of the knee-chest position, and the introduction of an open glass tube by herself into the vagina while this position is maintained. He declares that the position, favouring as it does gravitation of the uterus and other viscera forwards, aided by the entrance of air into the vagina by the glass tube, will commonly effect reposition of the displaced organ.

During the same year a faithful Report[15] upon Obstetrics and Gynæcology was made by Wm. T. Howard, to the Medical and Chirurgical Faculty of Maryland; an essay upon Ichthyosis of the Tongue and

[1] Am. Journ. Obstet., Feb. 1875, p. 613.
[2] Ibid., Nov. 1875, p. 399.
[3] Boston Med. and Surg. Journ., Feb. 1875, p. 117.
[4] Am. Journ. Obstet., May, 1875, p. 123.
[5] Ibid., Aug. 1875, p. 193.
[6] Phila. Med. Times, May.
[7] Trans. Am. Med. Assoc., vol. xxv. p. 173.
[8] Am. Journ. Obstet., Nov. 1875, p. 518.
[9] Psycholog. and Med.-Legal Journ., June, 1875, p. 345.
[10] Am. Journ. Obstet., May, 1875, p. 138.
[11] Am. Journ. Med. Sci., Jan. 1875, p. 46.
[12] The Clinic, vol. ix. p. 301.
[13] Am. Journ. Obstet., Nov. 1875, p. 369.
[14] Read before Georgia Medical Association, April.
[15] Transactions Med. and Chir. Fac. of Med. 1875, p. 73.

Vulva was published by R. F. Weir;[1] one upon Menstruation and the Law of Monthly Periodicity, by J. Goodman,[2] of Louisville; and one by D. Warren Brickell, of N. O., upon Rupture of the Perineum,[3] with a description of a new operation.

S. S. Todd,[4] of Kansas City, published a good *resumé* of the subject of Anæsthetics in Labour, embodying the views of many prominent obstetricians in this country and in Europe; and Thomas[5] a case of Tubal Pregnancy treated by incision into the sac by the galvano-caustic knife, and immediate removal of fœtus and placenta through the incision thus made.

H. L. Byrd[6] published the details of a new plan of artificial respiration to be practised upon the neonatus. This consists in the artificial production of the inspiratory and expiratory efforts by alternately bending the trunk of the child, held in the two palms, very much backwards and forwards. As the head and shoulders fall below a horizontal line passing through the operator's hands placed under the infant's loins, and the legs and pelvis below the same line on the other side, air rushes into the lungs by reason of the recession of the diaphragm and separation of the ribs. Then as the diaphragm is pushed upwards, and the ribs approximated by the anterior bending of the trunk, so that the child's knees approach the chin, the air is expelled.

An essay appeared during this year also from Ellwood Wilson[7] upon Version in contracted Pelvis. Controversial in style, it demonstrated the truth of the aphorism "ex collisione, scintilla."

Wm. H. Byford[8] in 1876 published an interesting case of Dropsy of the Amnion, and I. E. Taylor[9] read before the N. Y. Academy of Medicine an essay entitled Is Craniotomy, Cephalotripsy, or Cranioclasm preferable to Cæsarean Section in Pelves ranging from 1½ to 2½ inches?

The subject of inversion of the uterus has, during the last half century, attracted considerable attention in this country, and the valuable contributions of White, Noeggerath, Emmet, and others, to it, have been elsewhere noticed. The remarkable fact that a uterus for a long time inverted may, by an effort of nature, replace itself, has received due notice, and the evidence of American physicians has sustained that given of the fact by Spiegelberg, Leroux, De la Barre, Thatcher, Rendu, Shaw, Beaudelocque, and others of Europe.

It must be borne in mind that the possibility of this occurrence has been boldly denied by high authority, and that accumulation of evidence upon it is desirable. The case of spontaneous reposition recorded by De la Barre[10] was presented by him before the Academy of Surgery of Paris, and Beaudelocque was appointed a committee to examine into its authenticity. He reported that the account was "totally false," yet some

[1] N. Y. Med. Journ., March, 1875, p. 240.
[2] Richmond and Louisville Med. Journ., vol. xx. p. 553.
[3] Amer. Journ. of Med. Sciences, April, 1875, p. 322.
[4] Trans. Med. Association of Missouri, 1875, p. 37.
[5] N. Y. Med. Journ., June, 1875, p. 561.
[6] Med. Record, July 31, 1875, p. 519. His first article on this subject appeared in 1870.
[7] Amer. Journ. Obstet., April, 1876, p. 97.
[8] Chicago Med. Journ. and Exam., January, 1876, p. 1.
[9] Med. Record, March 15, 1876.
[10] Archiv. Gén. de Méd., 1865, t. ii. p. 393.

years afterwards he himself met with the occurrence of a similar case which convinced him of his injustice to De la Barre.

Meigs[1] publishes three such cases; Jason Huckins,[2] of Maine, one; and Chestnut,[3] in 1876, records a most striking case, in which, after twelve years of inversion, a uterus was spontaneously replaced. In the last case no doubt as to the diagnosis can be admitted, for during its progress careful examinations were made by Byford, O'Ferral, and others. Indeed by the former a trial at replacement was practised, which lasted for about two hours.

In the May number of the *Obstetrical Journal of Great Britain and Ireland*, appears an excellent lecture upon Face Presentations, by Penrose; and in the January number of the *American Journal of Medical Sciences*, the report of a case of ovariotomy by Gaillard Thomas, in which four days after operation eight and a half ounces of milk were transfused into the patient's veins with good result. Thomas's procedure was based upon the experience of Hodder, of Toronto, Canada, and Joseph W. Howe, of New York. The former transfused milk on three occasions, and the latter on two. In no case did evil consequences result, and in two of Hodder's cases life seemed to be saved by the process. Thomas's case was the sixth on record, and the results were excellent. Since his publication J. W. Howe has experimented on the subject with very unfavourable results. Transfusion of milk practised upon seven dogs, has in every case resulted in death, and in one man suffering from pulmonary consumption in the third stage death from coma occurred a few hours after the operation. The subject demands, and is certainly worthy of, full and careful investigation. It is difficult to reconcile the discrepancy of results which now attaches to it. At present the subject stands thus: up to 1875 six transfusions upon the living subject with no evil result, and with three instances of great benefit: during 1876 one transfusion upon man, and seven upon dogs, with fatal consequences in every case.

In the yearly contributions to medical literature there is a great deal of faithful, arduous, and useful work done, which redounds but little to the immediate advantage of the doers. This is the work done by reviewers. To J. C. Reeve, of Dayton, Ohio, this department of medicine is much indebted in this respect. His reviews of the subject of anæsthesia which have appeared in the *American Journal of the Medical Sciences*, are well known.

The mental development which appears thus far to have resulted from the peculiar education and training which characterize the civilization of this country, exhibits a much more marked tendency to the adaptation of means to immediate practical results, than to a devotion to abstruse study or pains-taking scientific investigation. Hence a fruitful harvest would naturally be expected in the way of ingenious appliances and well-conceived instruments, the outcome of a century of experimentation. This expectation will not be disappointed either in this or any other of the practical departments of medicine.

A vast number of modifications of the obstetric forceps, both short and long, have been made; so large a number, indeed, that even a mention of them would prove impossible. The most valuable and generally popu-

[1] Obstetrics.
[2] Thomas' Dis. of Women, 4th ed. p. 431.
[3] Amer. Practitioner, May, 1876, p. 284.

lar of these is the long forceps of Hodge. Two other excellent modifications are those of the late George T. Elliot and of J. P. White. The two latter are light, yet powerful; elegant in shape; and well adapted to the varied requirements of this most useful of surgical instruments.

Of vaginal specula there is rapidly being created as great a variety as that of forceps. Sims' great invention, developing an entirely new method of examination, certainly takes the lead of all others, and up to the present date none other can be compared with it for practical advantages. This instrument, however, requires two things for its employment—first, a certain degree of skill on the part of the operator in its use; and, second, an assistant to hold it during examination. To avoid the necessity of the second requirement, modifications have been made by Howard, Emmet, Hunter, Bozeman, Byrne, Nott, Otto, Noeggerath, and many others.

It would be useless to enumerate, as an original conception, each instrument employed in the operation for cure of vesico-vaginal fistula, for all of these were invented by Sims, as the pioneer in this procedure.

The uterine repositor of Sims is the best instrument yet devised for replacing the retroflexed or retroverted uterus. It is far superior to the ordinary uterine sound in efficiency, and unattended by its dangers. The same remarks apply to Sims' silver uterine probe, as compared with the unyielding sounds of Simpson, Huguier, and Kiwisch.

In operations upon the vagina and perineum, Emmet's curved scissors are very useful, and greatly facilitate these procedures; and after operations for atresia, Sims' vaginal plug of hard rubber or glass is indispensable.

For dilating a constricted uterine neck, Molesworth has furnished us an excellent instrument in his hydrostatic dilators, which, though acting upon the same principle as the water-bags of Dr. Barnes, are more powerful and manageable.

The syringe of Davidson is a valuable one for accomplishing vaginal irrigation, and the induction of premature delivery.

In many operations for the removal of abdominal tumours, temporary control of hemorrhage can be perfectly accomplished by H. R. Storer's clamp-shield, which becomes, under these circumstances, a valuable instrument. Permanent clamps have been devised by Atlee, Dawson, Thomas, and Greene, of Portland. The last of these consists of a spring clamp, intended to cause ligatures placed around the pedicle to cut through, and thus be liberated.

The galvano-caustic battery, only of late years introduced amongst us as a means of amputating vascular parts like the cervix uteri, etc., has now become very popular, and the ingenuity of Byrne and Dawson has furnished us with instruments at once small, portable, and very powerful. These instruments weigh only five or six pounds, and occupy little more space than an octavo volume. Their present dimensions and certainty of action remove two of the greatest objections attaching to the cumbrous and fickle instruments formerly in use.

For a long time after pessaries were put upon their proper basis as surgical appliances of great value, and as means which were essential to the proper management of uterine displacements, few modifications were made in them. Of late years, however, this has not been so. Hodge's instrument has been usefully modified by Albert H. Smith.[1] Many varieties

[1] Obstet. Journ. of Great Britain, Amer. Sup., 1875, vol. iii. p. 7.

of vaginal stem pessaries have been devised for prolapsus; and Ephraim Cutter, of Boston, has accomplished a valuable improvement in retroversion pessaries by getting support by a stem arching backwards over the perineum, and attaching to a belt worn around the waist.

In certain operations upon the anterior vaginal wall, the apparatus of Bozeman, by which the patient can be kept in a modified genu-pectoral attitude, proves very useful; by its use anæsthesia may be kept up for a long time with perfect comfort to the patient.

John T. Hodgen, of St. Louis, has made the needles employed in operations for vesico-vaginal fistula trocar-pointed, with great advantage. Their power of penetration is great, while at the same time they do little damage by cutting the tissues.

Parvin's polyptome is a very useful instrument for the removal of growths attached in utero, which are out of reach of manipulations practised by the instruments ordinarily in use.

A most valuable improvement in the trocar and canula for tapping the abdomen and abdominal tumours has been effected by S. Fitch, in his "dome trocar." By this instrument complete protection is given to the viscera by a projecting piece which shields them from its sharp point.

An excellent double canulated tube has been introduced for pelvic drainage by George H. Bixby, of Boston. It fulfils every requirement under these circumstances as to thoroughness and facility of employment.