

*Hodge (H. L.)*

*With the Compliments of the Author.*

# ADDRESS IN SURGERY:

DELIVERED BEFORE

THE MEDICAL SOCIETY OF THE STATE OF  
PENNSYLVANIA,

AT ITS ANNUAL SESSION,

Held in Harrisburg, June, 1877.

BY

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EXTRACTED FROM THE TRANSACTIONS.

PHILADELPHIA:  
COLLINS, PRINTER, 705 JAYNE STREET.  
1877.



## ADDRESS IN SURGERY.

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GENTLEMEN OF THE PENNSYLVANIA STATE MEDICAL SOCIETY :

THE year which has just passed was one of the most eventful that has occurred in the history of medicine and surgery in this country. It was the centennial year of our national existence. A year which the nation has well celebrated in many and diverse ways. There was nothing, however, which interested us more, as medical men, than the assembling of the International Medical Congress in the chief city of this commonwealth.

Able addresses were delivered on surgery, medicine, obstetrics, hygiene, etc., and many valuable papers were read. The discussions in the Sections, by the distinguished men, who are acknowledged leaders in their several countries, will ever be remembered with pleasure by those whose privilege it was to listen to them. Some of the topics which were under discussion are still on trial and must be examined to-day by the evidence which was then given, and by that which has been since acquired by patient labor and careful thought.

There is no more important topic in surgery than the *healing of wounds*. Some surgeons always apply ointments and cerates; some the cold water dressing; some use the open method and expose the wound to the air<sup>1</sup> or place it in a bath of warm water;<sup>2</sup> some fill the wound with cotton and allow it to remain until forced out by the granulations; and some employ agents to destroy germs in the atmosphere and to prevent their entrance to the wound. The claims made for this last method by Professor Lister, its originator and earnest advocate, are so high and the success attained by its practice so great that it becomes all thoughtful men to give it careful attention.

<sup>1</sup> Dr. Ed. Schwartz, *Revue Mensuelle de Médecine et de Chirurgie*, March, 1877. *London Medical Record*, May 15, 1877.

<sup>2</sup> Dr. F. H. Hamilton. Section on Surgery, International Medical Congress, held in Philadelphia Sept. 1876.

The germ-theory of putrefaction is based upon the labors of Pasteur, and has been described by Professor Lister in the following words: "That putrefaction is not occasioned by the chemical action of oxygen or any other gas, but is a species of fermentation analogous to that of sugar under the influence of the growing yeast plant, being brought about by the development of microscopical organisms, the germs of which, from their extreme minuteness, float in abundance in the air as constituents of its dust."<sup>1</sup> This theory has not yet been proven to the satisfaction of all. The success of the practice does not depend upon the truth of the theory. We must judge the success of the practice by comparing the results obtained by it with those obtained by other methods. This can in part be done by every operator for himself.<sup>2</sup> It has been alleged by some that the improved results are due to greater cleanliness and increased personal attention of the operator. This, I am sure, does not account for the difference. In the wards of the Pennsylvania Hospital and in his private practice, my old and honored teacher, Dr. George W. Norris, taught his pupils, both by precept and by example, that "cleanliness was next to godliness," and that the surgeon should himself attend personally and carefully to the cases upon which he had operated. This practice I have always faithfully followed, and believe that to it is due in a large measure the success which I have secured. Yet, although my results were already highly satisfactory, I am convinced that in those cases in which I have employed Lister's treatment, I have obtained better results than I had ever obtained before. The accompanying temperature and pulse sheets from two recent cases, show how slight may be the fever following important surgical operations when done by the *antiseptic method*. The first is from a case after amputation of the mammary gland on account of carcinoma, in which the disease had extended to the axilla and beneath the pectoral muscle. The wound healed nearly throughout the whole of its extent by primary union, and from the rest there was only a slight serous discharge until it healed.

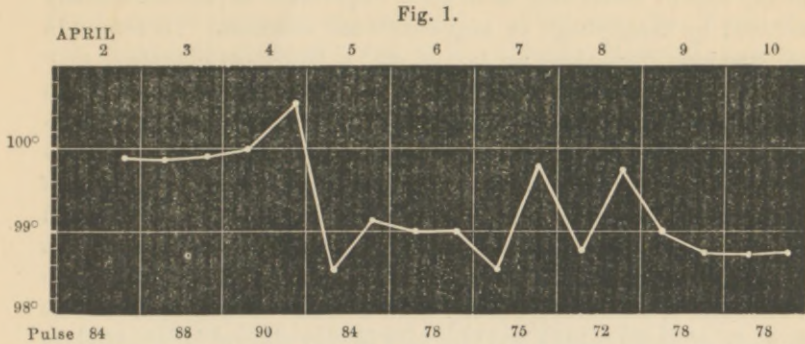
The second is from a case of coxalgia in which a large abscess of the thigh was opened, and the contents—pus and fibrinous shreds—were freely removed. From the time of the operation no more pus was formed, and the walls of the abscess rapidly consolidated, and the health greatly improved.

The antiseptic treatment is not as difficult or complicated as is generally supposed. It does not take much longer to dress a case

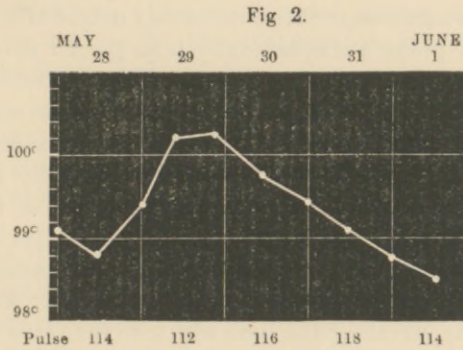
<sup>1</sup> Lancet, March 13, 1875.

<sup>2</sup> Professor von Nussbaum, *Ärztliches Intelligenz-Blatt*, March 13, 1877. London Medical Record, May 15, 1877.

than by other methods, and the dressings need not be so frequently changed. All that is necessary is carbolic acid<sup>1</sup> in solution (1 to 40),



a steam atomizer, carbolized catgut, varnished oiled silk, India-rubber cloth, carbolized gauze, and drainage tubes. These specimens, which



are before you, have been imported from Edinburgh, and have been made under the direction and supervision of Professor Lister.

Various substitutes for carbolic acid in the antiseptic treatment have been proposed and are now on trial. Prominent among these are boracic acid,<sup>2</sup> salicylic acid,<sup>3</sup> and a mixture of the sulphite of soda and glycerin.<sup>4</sup>

<sup>1</sup> Prof. Lister prefers phenol, a pure form of carbolic acid, because it is more soluble, and much less disagreeable in odor. Lister's Address before the Section on Surgery at the International Medical Congress, held in Philadelphia, Sept. 1876.

<sup>2</sup> Dr. Leonard Cane. *Lancet*, May 20, 1876.

Clinical Results of the Lister treatment of wounds, and on the substitution of salicylic acid for carbolic acid, by Prof. C. Thiersch. *Clinical Lectures*, selected by permission from the series published by Prof. Richard Volkmann, of Halle. New Sydenham Society, 1877.

<sup>4</sup> Dr. Minnick of the Venice Hospital. *Gaz. des Hôp.*, Sept. 7, 1876.

Another important topic in the progress of operative surgery is the *means proposed to render operations bloodless*. The prevention of any loss of blood may be of great importance in patients already reduced by hemorrhage or long-continued sickness. Therefore, in amputations, operations on bones, etc., a bloodless operation may often be the means of saving life. It also is of great value in operations of nicety, which require careful dissection, as neurotomy, ligation of arteries, etc. The apparatus for securing a bloodless operation, as originally proposed by Professor Esmarch, of Kiel, consists of an elastic bandage to press the blood and lymph out of the limb, and of an elastic tube to be applied instead of a tourniquet. This apparatus, which I hold in my hand, was made in Paris, and is the form generally used abroad. The elastic bandage is made of India-rubber and silk, and is very elegant in appearance, but not so useful as a plain strip of pure gum-sheeting, as it will absorb blood and pus and soon become foul. The circular tube has attached to it a steel chain and hook which is apt to cause at times injurious pressure on account of the unyielding nature of the metallic portion. I much prefer a simple elastic tube passed several times around the limb and then tied in a knot. The apparatus answers its purpose perfectly and no blood need be lost in an amputation. The value of the apparatus lies not in the elastic bandage but in the elastic tube or tourniquet. This is not generally recognized and too much stress has been laid upon the value of the elastic bandage. After various experiments and practical experience in its use in operations, I am sure that the bloodless operation depends upon the perfection of an elastic tube as a tourniquet. An ordinary bandage or merely elevating the limb will take the place in part at least of the elastic bandage; but nothing substitutes the elastic tourniquet. It is my constant practice to use it alone, and thus I obtain all the advantages of the bloodless operation without any risk of pressing injurious fluids into the circulation.

It has been objected to the use of Esmarch's apparatus that more blood than usual is lost in ligating the vessels, because the smaller ones cannot be detected until the elastic tube is removed altogether, and then the hemorrhage is not controlled and much blood is lost before the vessels can be ligated. There is no need for this, the tube can be loosened as gradually as the screw tourniquet, and as readily tightened by an assistant holding the ends in his hands after he has removed all but a single coil around the limb.

Another use of the Esmarch apparatus has been proposed by Dr.

Walter Reid.<sup>1</sup> By it he has reported the cure in fifty minutes of a case of popliteal aneurism. He applied the elastic bandage to the limb, the turns over the aneurism being loosely made, and then placed the elastic ligature around the thigh. Since then Mr. Wagstaffe<sup>2</sup> has reported a successful case at St. Thomas' Hospital, London, and Mr. F. A. Heath<sup>3</sup> another at the Manchester Royal Infirmary. Mr. T. Wright<sup>4</sup> and Mr. Thomas Smith<sup>5</sup> have each reported a successful case, and Mr. Bradley<sup>6</sup> and Mr. Thomas Smith<sup>5</sup> unsuccessful cases. It is too soon yet to express an opinion of the merits of this practice. These cases, however, give fair promise of the future usefulness of the method.

Another of the advantages which may be obtained in surgical operations from India-rubber is the use of the *elastic ligature*. It is applicable to all the purposes of the ordinary silk ligature when the design is to cut through the tissues quickly. There is seldom any need of tightening it, its own elasticity keeps tightening it all the time. I have found it very useful in fistula in ano, nævi, and capillary aneurisms. Even the inverted uterus has been twice successfully removed by it. One case has been reported by Dr. Arles,<sup>7</sup> and another by Prof. Courty.<sup>8</sup>

The importance of having *an accurate means of measuring the length of the lower extremities* has long been acknowledged, and many methods to supply this want have been suggested. The most common method is to measure from the anterior superior spinous process of the ilium to the internal malleolus. Others prefer to measure from the umbilicus, and others from the sternum. Several apparatuses have been designed for this purpose. During the past year two new ones have been published, one by Dr. B. F. Gibbs<sup>9</sup> and one by Dr. T. G. Morton.<sup>10</sup> Both of these are exceedingly ingenious,

<sup>1</sup> Lancet, Sept. 25, 1875. Also, Address in Surgery, by W. F. Favell, M.R.C.S. Engl., before British Medical Association at meeting held in Sheffield. Brit. Med. Journ., Aug. 5, 1876.

<sup>2</sup> Lancet, 1876, vol. ii. p. 461.

<sup>3</sup> Brit. Med. Journ., 1876, p. 570.

<sup>4</sup> Lancet, Feb. 3, 1877, vol. i. p. 163.

<sup>5</sup> Lancet, May 26, 1877.

<sup>6</sup> Brit. Med. Journ., 1876, p. 171.

<sup>7</sup> Revue Scientifique, Sept. 2, 1876.

<sup>8</sup> Annales de Gynecologie, Sept. 1876. Amer. Journ. of Med. Sci., Jan. 1877.

A new anthropometer, or a simple apparatus for determining the inequalities of the length of the legs, by B. F. Gibbs, M.D., Surgeon U. S. Navy. Amer. Journ. of Med. Sci., Jan. 1877.

<sup>10</sup> Description of an apparatus, devised by Dr. Thomas G. Morton, for measuring any irregularity in the length of the lower extremities, by Stacy B. Collins, M.D., Assistant Surgeon of Orthopædic Hospital, Philadelphia. Amer. Journ. of Med. Sci., Jan. 1877.

and are designed to place the body perfectly straight, and keep it thus while the measurement is made with mathematical accuracy. In long-continued inclinations of the pelvis and in old diseases of the hip causing deformity, the inclination of the pelvis cannot be overcome, and ankylosis at the hip will prevent the body being placed as desired. It is better, simply, to make use of two measurements, one from the anterior superior spine of the ilium or great trochanter to the internal malleolus, and the other from the umbilicus to the internal malleolus. The two measurements will often be very different. But their very differences when rightly studied give additional information, and we may arrive at a full understanding of the case without any costly apparatus. In illustration of this, I cite the following case: A man came to me on account of very great lameness. He walked with great apparent shortening of the left limb. He had had coxalgia many years before, and until lately had been able to work as a carpenter, but the deformity was increasing and now prevented him from working. The left limb was greatly adducted. By measurement from the anterior superior spine of the ilium, the limb was found to be of the same length as the other. By measurement from the umbilicus there was a shortening of full three and a half inches. Were one of the measurements true and the other false? No! they were both true and both of value. The one told that there had been no alteration in the bones, that their length was normal; and the other showed that great obliquity of the pelvis had been induced in order to overcome the adduction of the limb so as to bring the foot to the ground and prevent it from resting on its fellow of the opposite side. The case was very instructive as showing the value of the two measurements; and the practice, based upon their results, of dividing the adductors subcutaneously and then forcibly abducting the limb, proved eminently successful.

There has been during the year an evident increased tendency to prefer *ether to chloroform as an anæsthetic*. Indeed, although many trials have been made with various other substances, the confidence in ether seems to be gaining, while that in all other agents is comparatively declining. This is more especially evident in Great Britain. Many surgeons who formerly used chloroform are now using ether. Lately, Dr. Sawyer has published a paper showing the advantages of ether over chloroform,<sup>1</sup> and Dr. H. Macnaughton Jones, after carefully examining the effects of the different anæ-

<sup>1</sup> Advantages of Ether over Chloroform, Dr. James Sawyer. Brit. Med. Journ., Dec. 11, 1875.

thetics as employed in the large hospitals of Great Britain, has recently determined to use ether exclusively.<sup>1</sup>

The English have always shown great care in their administration of an anæsthetic, and to a visitor it is interesting to notice in their hospitals the great variety of ingeniously constructed instruments which they employ for this purpose. The ether inhaler, devised by Dr. Allis and exhibited by him to this Society, at the annual meeting in Pottsville, June, 1875, has attracted attention in England, and among others has been commended by Dr. Martin Oxley.<sup>2</sup>

The manner in which morphia, atropia, and nitrous oxide gas modify the anæsthetic effects of chloroform and ether has recently been studied.<sup>3</sup> In 1863, Prof. von Nussbaum pointed out that chloroform anæsthesia could be maintained during several hours by means of the hypodermic injection of morphia. And Prof. Claude Bernard found, while experimenting upon a dog, that by the hypodermic injection of morphia the anæsthesia would return after the effects of chloroform previously administered had almost disappeared. He also found, that, if the morphia be injected before the chloroform is administered, a smaller quantity of chloroform will be required, and that insensibility will be more profound. The conclusions which may fairly be drawn from the experience of those who have employed this combination in surgical operations are, that the anæsthesia can be more rapidly induced, that it is of longer duration with a smaller quantity of the anæsthetic, and, on the other hand, that there is a danger in some cases of impairment of the respiration.

Sir Henry Thompson<sup>4</sup> earnestly recommends Mr. Clover's plan of administering nitrous oxide gas for thirty seconds and then ether. He has found the process to be rapid and usually without subsequent sickness. Formerly, in the operation of lithotripsy, he employed no anæsthetic, now he prefers this combination. In England it is easier to make use of such agents involving special apparatus than in this country, because it is the sole business of certain persons to administer the anæsthetic, and to provide the apparatus.

<sup>1</sup> Medical Responsibility in the Choice of Anæsthetics, with a Table of the Anæsthetic employed, its Mode of Administration and Results in nearly Fifty Large Hospitals in the United Kingdom, by H. Macnaughton Jones, M.D., M.Ch., etc. etc. London and Dublin, 1876.

<sup>2</sup> Lancet, Dec. 18, 1875.

<sup>3</sup> On the Modification of the Anæsthetic Process by Hypodermic Injection of Narcotics, by J. C. Reeve, M.D. Amer. Journ. of Med. Sci., April, 1876. Administration of Anæsthetics, J. T. Clover, Esq. Brit. Med. Journ., Jan. 1, 1876.

<sup>4</sup> Lancet, Jan. 8, 1876.

*The conservative surgery of limbs* has continued to make good progress.<sup>1</sup> The publication within the last month of Dr. Culbertson's Prize Essay on Excision of the Larger Joints of the Extremities, by the American Medical Association, marks an era in the literature of the subject. In it he has collected, tabulated, and collated 596 cases of excision of the hip, 745 of the knee, 326 of the ankle, 984 of the shoulder, 1075 of the elbow, and 182 of the wrist, making 3908 in all. The work proves his right to the motto he had chosen "*Labor omnia vincit.*" My own experience of the good results to be obtained by the excision of joints, especially when done because of disease, leads me to believe that these operations will continue to receive more and more favor at the hands of the profession.

*Subcutaneous Osteotomy.*—In 1870 Mr. William Adams,<sup>2</sup> of London, divided the neck of the femur subcutaneously on account of ankylosis of the hip-joint. Since then he has collected twenty-two cases; in these the operation was successful in twenty, there was one death from pyæmia and one from chronic suppuration. His instruments, which I show you, are exceedingly simple. They are a narrow knife like that used in tenotomy, but longer and stronger, and a long narrow saw with a pistol-shaped handle.

The neck of the femur is often greatly absorbed in cases of hip-disease resulting in ankylosis, and cannot, therefore, be readily divided. In other cases the deformity is chiefly the result of contraction of the psoas muscle, and a division of the neck of the femur will not relieve the deformity. In such cases Mr. Gant has modified the operation. He uses the same instruments, but divides the femur below the lesser trochanter. Mr. Maunder also divides the femur below the lesser trochanter, but instead of a saw, uses a chisel and mallet.<sup>3</sup> He also has met with good success; but the employment of a chisel and mallet exposes the wound in a greater degree to the air, and thus takes away from its subcutaneous character and safety.

Generally, after the operation, the bones unite and remain firm in a position which removes the deformity; but useful motion has been obtained by Mr. Jessop, of Leeds, Mr. Lind, of Manchester, and Dr. Sands, of New York.

<sup>1</sup> Address on Resection of Joints before Congress of German Surgeons, by Prof. Hueter of Griefswald, and discussion by Prof. Gurlt and Prof. von Langenbeck. *Medical Examiner*, April 19 and 26, 1877.

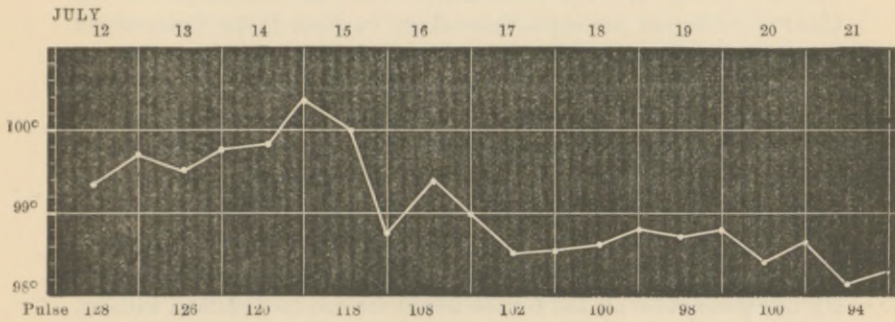
<sup>2</sup> Paper read before International Medical Congress, Philadelphia, Sept. 1876. Paper read before Royal Medical and Chirurgical Society, Oct. 10, 1876. *Lancet*, Oct. 14, 1876; *Amer. Journ. Med. Sci.*, Jan. 1877.

<sup>3</sup> *Medical Times and Gazette*, June 17, 1876.

The operation is also applicable to cases of deformities of bones from other causes, such as badly united fractures, and promises to take the place of the operations proposed by Dr. J. Rhea Barton, and Dr. Lewis Sayre, and also of the operation of perforating the bone subcutaneously, and then fracturing it as suggested and practised by Dr. Brainard, of Chicago, and repeated by Drs. Peace, Pancoast, Gross, and others.

After subcutaneous osteotomy there is hardly any more constitutional disturbance than after subcutaneous tenotomy. The accompanying wood-cut shows the pulse and temperature of a case recently

Fig. 3.



operated upon by me. At the Children's Hospital the femur has been divided subcutaneously by Dr. John Ashhurst, Jr., and myself several times, without any serious symptoms, and with good results.

*Neurotomy.*—Great progress has been made of late in the study of affections of the nerves. This is in a large measure due to the experiments, clinical observations, and writings of Dr. Brown-Séquard and Dr. S. Weir Mitchell. The advantages to be gained in certain cases by nerve-section are becoming more understood, and the causes of failures better appreciated. An ordinary section, and even the removal of a large portion of a nerve, is generally followed by the reunion of the nerve not only by fibrous tissue, but even by the nerve substance, owing to its regeneration as shown by Dr. Bertolet<sup>1</sup> in some cases submitted to him by Dr. Mitchell, and by myself.

On November 8th, 1876, M. Notta<sup>2</sup> reported to the Surgical Society

<sup>1</sup> Neurotomy. By S. Weir Mitchell, M.D., of Philadelphia. With an Examination of the Regenerated Nerves and Notes upon Neural Repair, by R. M. Bertolet, M.D., Pathologist to the Philadelphia Hospital. American Journal of Medical Science, April, 1876.

<sup>2</sup> London Medical Record, Dec. 15, 1876.

of Paris, a case of excision of the median nerve, on account of a neuroma. In order to secure the union of the nerve, he applied a suture to it and drew its ends together. In the light of the examinations made by Dr. Bertolet, this would appear to be unnecessary. It also added to the complications of the operation the dangers of a punctured wound of the nerve, and the irritation and inflammation arising from traction and the presence of a suture in the nerve-substance.

Dr. Richet has attempted to explain the reason of the continuation or quick return of sensibility in the fingers after the section of only one of the main nerve trunks of the arm. He has called it "collateral innervation," and has pointed out that the median, radial, and ulnar anastomose amongst themselves to form loops from which come off the filaments which end in the touch-corpuscles.<sup>1</sup> In my own cases of neurotomy the area of sensibility lost by nerve section has been so small and so quickly recovered from, that I was led, some years ago, to suggest in a case of division of the radial that the return of sensibility was due to the median and ulnar by anastomosis. I have also become convinced that it is advisable in all cases of neuralgia, when possible, to make the section of the nerve at a point after it has pierced the deep fascia and become superficial. By this precaution all the benefit hoped for can be obtained without any loss whatever of the power of motion in any part of the limb. No motor filaments are divided, because none pass through the deep fascia. Those fibres which pass through the fascia are only those which go to the skin, and are concerned merely with sensation. The operation on these small nerves requires a good anatomical knowledge and surgical care and skill in order to find them. The preservation of the movements of a limb, and especially those of the fingers, is worthy of any effort. I have thus operated with success upon the radial, internal saphenous, and digital nerves, and in no case has any impairment of the power of movement resulted. If the main trunk containing both motor and sentient filaments had been divided, all motion would have been lost.

*Reflex Epilepsy.*—Very closely connected with the last subject is that of reflex epilepsy. This form of epilepsy has been very carefully studied by Dr. Brown-Séquard, and many new facts in connection with it pointed out by him. I have myself had two cases, both of which I have been able to relieve by operation. In one the epileptic attacks followed, and were due to a contused wound of the eyebrow. The convulsions were not severe, and could for a time

<sup>1</sup> British Medical Journal, April 1, 1876.

be controlled by the use of bromide of potassium; but they were permanently relieved by excision of the scar. The other was a very bad case, in which all medicines failed, but the operation was followed by the most brilliant results. A child had been struck on the side of the head by a piece of brick. The contused wound readily healed, but epilepsy quickly followed. The child had been under the most skilful care of Dr. O. P. Rex and Dr. H. C. Wood in consultation. The most powerful medicinal agents had been employed without success. The child had scores of convulsions every day, and these were accompanied by epileptical mania, in which the violence became so great as to threaten serious danger to his own life, and to the lives of those waiting upon him. I was sent for, as it had become evident that drugs could not relieve him, and that the only hope would be in operative interference. My friends were disposed to think that the skull and membranes of the brain had been injured, and that the operation of trephining would be necessary. Upon examination, however, I could find no depression of the skull. The scar in the scalp was movable and very sensitive. Pressure upon it was soon followed by an epileptic attack with mania. The conclusion, therefore, seemed to me clear that it was a case of reflex epilepsy, and that the simple removal of the scar would benefit the patient. With the consent of my colleagues, I therefore merely excised the scar, and brought the edges of the wound together. They united by first intention. The convulsions at once diminished greatly in number and in violence. The mania soon disappeared. The convulsions occurred at longer and longer intervals, and now, as I learn from his father, he has had none for several months.

Of late years the most remarkable triumphs of surgery have been those in which operations have been performed upon the abdominal viscera. After making full allowance for the tendency to report successful cases only, there is strong evidence that the *abdominal section* may be done with greater success than was formerly supposed, and that important viscera may be removed without serious disturbance to life. These operations when undertaken to save life, which would otherwise be lost, are not only justifiable, but are imperatively demanded; but, when performed where life is not in danger, are only to be condemned.

*Abdominal Section in Cases of Extra-Uterine Fœtation.*—In this operation there has been great difference of opinion in regard to the management of the placenta. Some operators have preferred to remove it, others have allowed it to remain. If removed, there is

danger of violent hemorrhage; if allowed to remain, there is danger of septicæmia. In 52 cases, in which the treatment of the placenta is given, collected by Dr. Parry<sup>1</sup> in his excellent book, the mortality in those cases in which the placenta was removed, 24 in number, was 50 per cent.; whereas in those in which it was allowed to remain, 28 in number, the mortality was only 35.71 per cent. The recent cases support his conclusion in favor of leaving the placenta *in situ*. Dr. Thomas, who, in his first case,<sup>2</sup> attempted to remove the placenta, and was deterred on account of hemorrhage, has in a later case<sup>3</sup> allowed the placenta to remain *in situ*, and strongly expresses himself as being now in favor of this method. Both of these cases were successful. In a case reported by Mr. Thomas R. Jessop,<sup>4</sup> the placenta was allowed to remain, and he had the great satisfaction of saving the lives of both mother and child. This is, indeed, a remarkable case. In all the cases collected by Dr. Parry, there are only two in which the lives of both mother and child were saved. In Mr. Jessop's the mother was greatly reduced by long-continued vomiting and frequent attacks of pain. If the operation had not been done, it was thought that she would have lived but a few days. Under these circumstances of extreme prostration the success is the more remarkable.

Another probable cause of the favorable results in Dr. Thomas' and Mr. Jessop's cases was that the umbilical cord was brought through the wound, and the wound kept partly opened for the sake of drainage. In both cases the discharges became very offensive, and signs of septicæmia occurred. Dr. Thomas employed a drainage-tube, and injected into the peritoneal cavity warm carbolized water, and within forty-eight hours there was a marked improvement. Mr. Jessop did not make use of such measures, and trusted simply to the opening in the wound, allowing the discharge to escape.

In the present state of our knowledge it would appear that in these cases: 1. The placenta should not be removed; 2. Free drainage should be established; 3. Antiseptic injections of carbolized water should be employed.

*Abdominal Section in Cases Requiring an Opening into the Stomach.*—This operation has been done repeatedly with success for

<sup>1</sup> Extra-uterine Pregnancy, by John S. Parry, M.D., Philadelphia, 1876.

<sup>2</sup> New York Med. Journ., June, 1875.

<sup>3</sup> Amer. Journ. of Obstet., Oct. 1876. Trans. of Amer. Gynæcol. Soc., vol. i., for the year 1876.

<sup>4</sup> Extra-uterine Fœtation; Removal by Abdominal Section of a Living Fœtus; Recovery of Mother and Child. Lancet, Nov. 4, 1876; Trans. of Obstet. Soc. of London, vol. xviii., for the year 1876.

the removal of foreign bodies in the stomach. During the last year another successful case has been reported. On the 9th of April, 1876, Mr. Labbé<sup>1</sup> removed a fork from the stomach about two years after it had been swallowed. He attributes his success in this case, in a large measure, to the precaution of having fixed the stomach to the abdomen before opening it.

This operation has also been done on account of stricture of the œsophagus more than twenty times, but never was life prolonged more than forty days until this last year, when a case was operated upon by M. Vermeuil<sup>2</sup> on the 24th of May, and was shown to the *Académie de Médecine*, October 24th. The conditions which contributed to the favorable issue in this very remarkable case were, 1. The youth and good health of the patient, a lad of 17. 2. The stricture was due to an injury and not to disease. The patient had swallowed by accident a solution of caustic potassa. 3. The stomach was brought into close contact with the abdominal walls by acupuncture needles, and then stitched tightly to the abdominal walls by fourteen metallic sutures before it was opened.

Since the report of the successful result in the above case, the operation has been resorted to in a comparatively greater number of cases than formerly. At a recent meeting of German surgeons Dr. Schoenberg,<sup>3</sup> of Königsberg, reports a successful case, Dr. Trendelenburg<sup>3</sup> a case upon which he had operated several weeks before, and which was still doing well, and Dr. Kuester<sup>3</sup> an unsuccessful case. Mr. Callender,<sup>4</sup> of London, reports an unsuccessful one, and M. Lannelongue<sup>5</sup> has published a paper upon this operation in which he gives a case of a patient who died on the twenty-sixth day from an extension of the epithelioma of the œsophagus to the bronchial tubes. This gives us five additional cases. These, with the case of M. Vermeuil, making six, appear to give two complete successes, one doing well for several weeks the result not completed, one well from the operation but death from extension of original disease, and two deaths. This makes a favorable exhibit for an operation which formerly had always been followed by death.

*Abdominal Section in Cases of Intussusception.*—Since the publication of Mr. Hutchinson's first case in 1873, this operation appears to have been comparatively frequently repeated. During the

<sup>1</sup> *Gaz. Hebdom.*, May 5, 1876; *Amer. Journ. Med. Sci.*, July, 1876.

<sup>2</sup> *L'Union Médicale*, Oct. 26, 1876; *Gaz. Hebdom.*, 27 Oct. 1876; *Le Mouvement Médicale*, 28 Oct. 1876; *Amer. Journ. of Med. Sci.*, Jan. 1877.

<sup>3</sup> *Med. Exam.*, May 3, 1877.

<sup>4</sup> *Lancet*, April 14, 1877.

<sup>5</sup> *Gaz. Hebdom.*, April 13, 1877.

last year Mr. Howard Marsh,<sup>1</sup> Dr. Fagge and Mr. Howse,<sup>2</sup> and Dr. Sands,<sup>3</sup> have reported successful cases; and Mr. Hutchinson,<sup>4</sup> Mr. Bell,<sup>5</sup> Mr. Howse<sup>6</sup> and Mr. Marsh<sup>7</sup> unsuccessful cases. These cases are exceedingly instructive, especially as regards the age of the patient, and the stage of the disease at which the operation may be performed with hope of success. Of the cases collected by Dr. John Ashhurst, Jr.,<sup>8</sup> in his excellent statistical paper on this subject published in 1874, the operation had not proved successful in any infant under one year of age. In the three recent cases of recovery mentioned above, two were under one year of age. Mr. Marsh's patient was seven months, Dr. Sands's six months, the other case, Dr. Fagge's and Mr. Howse's, was thirty-three years old. The operation, therefore, is justifiable even at a very early age. In regard to the stage of the disease, at which the operation may be performed; of the successful cases, Mr. Marsh's was operated on after the disorder had existed for fourteen days, Dr. Fagge's and Mr. Howse's after eighteen days, and Dr. Sands's after eighteen hours. Heretofore in the recorded cases the operation had never been done within three days of the beginning of the disorder. In operating as early as he did, Dr. Sands appears to have made a decided advance in the treatment of this disease. If the bowel cannot be reduced by other means, delay increases the dangers from peritonitis and softening of the intestine. In publishing his case Dr. Sands has collected eight<sup>9</sup> cases in addition to the thirteen collected by Dr. Ashhurst, and gives the mortality of all as sixty-five per cent. One case is not enough to judge from, but only enough to give a hope that an early operation may prove the means of reducing this mortality. The dangers of prolonged attempts to reduce an intussusception by forcible injections of water, or inflation by air or gas are greater than has been generally thought. The bowel may thus be ruptured. Mr. Howse<sup>10</sup> records two cases in which this accident occurred. In one of these the symptoms of intussusception had existed for less than twenty-four hours. A knowledge of this should keep the operator from making his efforts by these means too powerful or too

<sup>1</sup> Med.-Chir. Trans., vol. lix., 1876.

<sup>2</sup> Med.-Chir. Trans., vol. lix., 1876.

<sup>3</sup> New York Med. Journ., June, 1877.

<sup>4</sup> Med.-Chir. Trans., vol. lix., 1876.

<sup>5</sup> Lancet, Jan. 1, 1876.

<sup>6</sup> Med.-Chir. Trans., vol. lix., 1876.

<sup>7</sup> St. Bartholomew's Hospital Reports, vol. xii., 1876; Brit. Med. Journ., Sept. 16, 1876.

<sup>8</sup> Amer. Journ. Med. Sci., July, 1874.

<sup>9</sup> These eight include the cases given above, and also one by Mr. Duncan published in Edinburgh Med. Journ., June, 1874.

<sup>10</sup> Med.-Chir. Trans., vol. lix., 1876.

prolonged. When judiciously employed, it has been followed with the best results. Recently Dr. Stuart Eldridge<sup>1</sup> reports a successful case in Yokohama, and Dr. Southey<sup>2</sup> also one at St. Bartholomew's Hospital, London. Dr. Eldridge's method of inflating by the reverse action of an aspirator, or the method of using the bellows is more efficient than any attempt by blowing with the mouth, and yet not so violent and sudden as the French method by means of the expansive gas obtained from siphon bottles of soda-water.

*Extirpation of the Kidney.*—M. Marvaud<sup>3</sup> recently relates the case of an Arab woman in which the right kidney was stabbed and drawn out of the wound in the lumbar region by the knife which caused it. A ligature was applied, and, after some weeks, the kidney was separated. The patient recovered.

Another case<sup>4</sup> has been reported in which a renal cyst was mistaken for an ovarian tumor. Ovariectomy was undertaken, and the cyst and kidney were removed. The patient recovered.

These and the older<sup>5</sup> cases like them show that the extirpation of the kidney can be successfully accomplished both by an operation in the lumbar region and also anteriorly through the peritoneal cavity, and that a patient can live afterwards without serious consequences with only one kidney. Under circumstances of impacted renal calculus, abscess of the kidney, and certain wounds like the above, the operation of cutting down upon the kidney and removing it, if necessary, is, in my judgment, justifiable, if the diagnosis be clear.

*Extirpation of the Spleen.*—Attention has lately been drawn again to splenectomy by reason of another successful case by Dr. Pean,<sup>6</sup> on account of disease. On July 18, 1876, he exhibited to the French Academy of Medicine<sup>7</sup> his two cases, in which he had successfully removed the spleen on account of great enlargement of that organ. One of these was done in 1867 and the other in 1876.

<sup>1</sup> Amer. Journ. of Med. Sci., Oct 1876.

<sup>2</sup> Brit. Med. Journ., May 19, 1877.

<sup>3</sup> Rev. de Méd. Militaire, Octobre; Canadian Journ. of Med. Sci., March, 1876; Amer. Journ. of Med. Sci., April, 1876.

<sup>4</sup> Giorn. Med. di Torino, July, 1875; Gaz. Méd., No. 6, 1876; New York Med. Journ., June, 1876; Amer. Journ. of Med. Sci., July, 1876.

<sup>5</sup> Amer. Journ. of Med. Sci., January, 1873, and July, 1874. Also Dr. Otis, Med. and Surg. Hist. of War of the Rebellion, Part Second, Surgical Vol. p. 172.

<sup>6</sup> L'Union Méd., July 29, 1876; Amer. Journ. of Med. Sci., Oct. 1876.

<sup>7</sup> Bull. de l'Académie, No. 29; Med. Times and Gaz., July 29, 1876; Amer. Journ. of Med. Sci., Oct. 1876.

Prof. Billroth,<sup>1</sup> led by Dr. Pean's success, has also recently repeated the operation, but his patient only survived for four hours and a half. Mr. H. Brown<sup>2</sup> has also recently repeated the operation, and the patient died in half an hour. Beside the ordinary dangers of abdominal section, such as peritonitis and septicæmia, there is added in extirpation of the spleen a great tendency to hemorrhage, on account of its great vascularity in an enlarged condition. One cause of Dr. Pean's<sup>3</sup> success is due to the care with which he guarded against this contingency. The most complete list of operations for the removal of the spleen is that tabulated by Dr. Otis.<sup>4</sup> Of the 26 cases collected by him, 10 were on account of disease; of these 10, 4 recovered and 6 died. If we add to these the above we have 13 cases, 5 recovered and 8 died. Diseases of the spleen are usually of such a slow character, and so much under the control of hygienic and medicinal measures, that it is difficult to conceive of a case so dangerous as to demand this operation.

It is very different in the traumatic cases. In these the immediate dangers of the injury are very great, and the probability of success apparently greater. In Dr. Otis' table there are 16 cases of partial or complete removal of the spleen, on account of injury, and these all recovered. After making due allowance for unsuccessful cases not being reported, it is evident that the operation in suitable traumatic cases may be resorted to with a fair prospect of success.

*Excision of the lower end of the Rectum.*—Within the last year the lower extremity of the rectum has been excised, on account of cancer, successfully by Prof. Furmeaux Jordan,<sup>5</sup> Dr. C. K. Briddon,<sup>6</sup> and Dr. R. J. Levis,<sup>7</sup> and M. Koeberlé.<sup>8</sup> In two other cases Dr. Levis<sup>9</sup> has since operated; one died on the fourth day, and the other died from the shock of the operation; and in April last Prof. D.

<sup>1</sup> Wiener Med. Woch., 1877, No. 5; Med. Times and Gaz., April 7, 1877.

<sup>2</sup> Medical Examiner, May 19, 1877.

<sup>3</sup> De la Splénotomie chez l'Homme avec une Etude sur la Physiologie de la Rate d'après un récent Memoire de M. Ch. Robin, et une nouvelle observation de Splénotomie pratique avec succès par M. le Dr. Pean (1876) par le Dr. Ern. Barrault, Paris. Leçons de Clinique Chirurg., par M. le Dr. Pean, Paris, 1876.

<sup>4</sup> Med. and Surg. History of the War of the Rebellion, Part Second, Surgical Volume, pp. 152, 153.

<sup>5</sup> Brit. Med. Journ., June 17, 1876; Braithwaite's Retrospect, January, 1877.

<sup>6</sup> Med. Record, January 6, 1877.

<sup>7</sup> Archives of Clin. Surg., February, 1877; Med. and Surg. Reporter, June 9, 1877.

<sup>8</sup> Lancet, April 14, 1877.

<sup>9</sup> Med. and Surg. Reporter, June 9, 1877.

Hayes Agnew<sup>1</sup> operated, and the patient died on the seventh day. We thus have four cases of success and three deaths. Dr. John B. Roberts,<sup>2</sup> in the excellent paper which he has just published upon this operation, gives, upon the authority of Dr. Schmidt's table of the older cases, the mortality as 30.3 per cent. The cases of this year, as given above, increase this ratio somewhat. The operation, however, in cases of cancer, especially of the epithelial form, and if done early, will no doubt often prolong life, and lessen the intense suffering due to this disorder when situated at the anus and lower part of the rectum.

*Excision of the Sacrum.*—Prof. R. Volkmann<sup>3</sup> has reported a very remarkable case, in which, on account of a myeloid tumor of the sacrum, he successfully *excised a large portion of the sacrum*. There was at no time any inflammation of the spinal cord, and its membranes, although the spinal canal was freely laid open. The patient was heard from after four months doing well. The sacrum was divided by a chisel below the left sacro-iliac synchondrosis, and the incision so curved as to surround and remove the tumor, leaving a strip of the right side of the sacrum about two centimetres wide, and the coccyx untouched. There seem to have followed some inability to retain the urine for any length of time, and severe pain on defecation; but no other ill effects occurred, and even the above proved to be temporary. Dr. Otis,<sup>4</sup> U. S. A., has collected twenty-nine cases of operations upon the sacrum “for the removal of injured or diseased bone, or the extraction of impacted projectiles.” Only one of these appears to compare in extent with Prof. Volkmann's case. Dr. Otis states that “Prof. Rothmund is said to have successfully removed a necrosed piece of the sacrum, three by four and a half inches, with the osteotome.” The two cases can hardly be compared, for the removal of a piece of necrosed bone, however large, is very much simpler than the removal of a bony tumor.

*Fibrous Tumors of the Uterus.*—The treatment of tumors of the uterus is, at present, prominently before the profession. Dr. Washington L. Atlee's valuable paper on this subject before the Obste-

<sup>1</sup> Phila. Med. Times, June 23, 1877.

<sup>2</sup> Excision of the lower end of the Rectum in cases of Cancer. Med. and Surg. Reporter, June 9, 1877.

<sup>3</sup> Centralblatt für Chirurgie, No. 46; Med. Times and Gaz., Dec. 23, 1876; Amer. Journ. of Med. Sci., April, 1877.

<sup>4</sup> Med. and Surg. History of the War of the Rebellion, Part Second, Surg. Vol. p. 251 and note.

trical Section of the International Congress, was listened to with much attention, and elicited an active discussion among gentlemen present, who had devoted much time and thought to the treatment of such cases. The question of most importance in this connection is in reference to their extirpation by the abdominal section. This question can only be accurately studied by considering the history of such cases when left alone, when treated by other measures, and by the collection of full statistics of the operation. When left alone these tumors increase slowly, and even during the menstrual life they may remain stationary, may diminish, or, if submucous, may even be expelled. They seldom cause death. After the menopause they often decrease in size, and cause less inconvenience and danger. Under the influence of certain drugs, especially ergot, their progress at times is arrested, and, in some cases, they will be absorbed. Electrolysis<sup>1</sup> also appears to exercise over some of these tumors a controlling influence. Under such circumstances a serious operation is seldom required. It is only when life is in jeopardy that extirpation of the tumor is demanded. The largest number of operations reported by any one operator has lately been published by Dr. Pean.<sup>2</sup> He has himself operated twenty-six times by the abdominal section on account of uterine tumors. In this number are included 17 cases of fibrous tumors, 6 cases of fibro-cystic tumors, 2 cases of what he calls utero-cystic tumors, and 1 case of a peri-uterine fibrous tumor. Of these 26 cases, 17 recovered and 9 died, giving a mortality of 34.6 per cent. Dr. Kimball, of Lowell, has operated 12 times; of these, 6 recovered and 6 died. Dr. H. R. Storer, of Boston, has had 5 cases; of these, 1 recovered and 4 died. Dr. Thomas Wood, of Cincinnati, 5 cases; of these, 3 recovered and 2 died. Dr. Sims, of New York, 3 cases; of these, all died. Many others have reported one and two cases, and many unsuccessful cases have not been reported at all. Dr. Thomas<sup>3</sup> states that "the operation has been repeatedly performed in New York, but never with a favorable issue." In June, 1876, Dr. C. B. King,<sup>4</sup> of Allegheny City, had a successful case. And in the same month Dr. R. Stansbury Sutton,<sup>5</sup> of the same city, removed a sub-peritoneal fibroid

<sup>1</sup> Report on the Treatment of Solid Uterine Fibroids by Electrolysis, by Drs. Gilman Kimball, of Lowell, and Ephraim Cutter, of Boston, made by Dr. T. G. Thomas; Transactions of New York Obst. Soc.; Amer. Journ. of Obst., Jan. 1877.

<sup>2</sup> Leçons de Clinique Chirurg., by M. le Dr. Pean, Paris, 1876.

<sup>3</sup> A Century of American Medicine, Obstetrics and Gynæcology; Amer. Journ. of Med. Sci., July, 1876.

<sup>4</sup> Amer. Journ. of Med. Sci., Jan. 1877.

<sup>5</sup> Chicago Med. Journ. and Examiner, December, 1876; Amer. Journ. of Med. Sci., Jan. 1877.

of the uterus through an incision in the posterior wall of the vagina. This appears to have been the first case in which a uterine fibroid was removed in this manner. The patient died on the fourth day. During the year also Dr. C. H. F. Routh,<sup>1</sup> of London, and Mr. Knowsley Thornton,<sup>2</sup> of London, have each reported a successful case. It is difficult to obtain data for a general ratio of mortality after this operation. It is no doubt very high. Dr. Kimball is reported to have estimated it as high as 9 deaths out of every 10 cases. The ratio of success obtained by Dr. Pean is so much greater than that by any other operator, as to lead one to believe that his peculiar method<sup>3</sup> of operating has advantages over that adopted by others. If a case should present itself to me in which I thought the operation justifiable, I should certainly follow his plan. He is extremely careful to avoid hemorrhage and unnecessary traction on a large tumor. If the tumor be large he removes it part by part, having securely ligated the base of each piece with wire ligatures before he cuts it away. If there should be a very vascular envelope he turns this aside, and controls the hemorrhage from it by means of forceps which he has invented for the purpose. He always leaves at least a small portion of the neck of the uterus, and does not encroach upon the vagina. He fixes the stump in the inferior angle of the external wound, like the pedicle in ovariectomy.

*Ovarian Tumors.*—As members of this State Society we take an especial interest in the operation of ovariectomy. The high position which it now holds is due in a great measure to the long-continued advocacy and successful practice of our fellow members, Dr. John Atlee, of Lancaster, and Dr. Washington L. Atlee, of Philadelphia. The statistics of the operation appear to be still further improving. Mr. T. Spencer Wells,<sup>4</sup> at a late meeting of the Royal Medical and Chirurgical Society, has reported the results of 300 cases in addition to the 500 cases already reported. In his sixth series of 100 cases the mortality was 28 per cent.; in the seventh series 24 per cent.; and in the eighth series 24 per cent. Dr. Keith,<sup>5</sup> in his last published 50 cases, had attained the remarkable success of 92 per cent. of

<sup>1</sup> Trans. of the Obstet. Soc. of Lond., vol. xviii. (for the year 1876), 1877.

<sup>2</sup> Med. Times and Gaz., April 7, 1877; Obstet. Journ. of Great Britain and Ireland, June, 1877.

<sup>3</sup> Hysterotomie, De l'ablation partielle ou totale de l'uterus par la gastrotomie; Etude sur les tumeurs qui peuvent necessiter cette operation, par J. Pean et L. Urdy, Paris, 1873. Leçons de Clinique Chirurgicale, by M. le Dr. Pean, Paris, 1876, p. 692.

Brit. Med. Journ., Mar. 3, 1877.

<sup>5</sup> Lancet, Dec. 30, 1876.

recoveries. The present success is due, in part, to the greater skill which has been attained in the diagnosis of these tumors, and in part to the method and care in executing the operation. In regard to the diagnosis in an obscure case, great advantage is often derived from tapping. In the minds of many men of experience there is a great dread of the dangers of tapping, especially in a multilocular tumor. If the tapping be done after the old method there certainly is reason for anxiety, but if done carefully by a siphon trocar, I believe that the operation is almost void of danger. In the *Transactions of the Obstetrical Society of Philadelphia*,<sup>1</sup> I have described an exceedingly efficient but simple siphon trocar, which I have employed in many cases of tapping and in ovariectomy. I have never seen the least ill results follow its use. No air can enter the cyst when it is employed; and the cyst wall does not split, because the fluid begins to flow the instant the puncture is made.

During the past year there has been much discussion in reference to the best method of treating the pedicle in ovariectomy. No conclusion has as yet been reached. The adherents of the different methods appear to be satisfied each with his own way. Mr. Wells, who has operated more frequently than any one else, uses the clamp. Dr. Atlee also prefers the clamp. My own success with the clamp has been so good that I would hesitate to change. Yet, Dr. Keith, who has had the greatest percentage of success in a large number of cases, gives the preference to the actual cautery. The recent introduction of Dr. Paquelin's thermo-cautery<sup>2</sup> may aid in rendering this method more popular. This apparatus, which I show you, consists of movable platinum heads of various forms, which are hollow and attached to a wooden handle; the heads are moderately heated in an ordinary spirit lamp, and then into their interior the vapor of benzole is thrown by the ordinary spray bellows, and the temperature of the cautery at once rises to a red and soon to a white heat. The apparatus is efficient for all purposes of the actual cautery, it does not cool when in contact with the tissues, is clean, compact, easily carried, and readily managed. On these accounts, it is likely to supplant in a great measure the old irons and the galvano-cautery. Dr. Keith does not think that the success in ovariectomy depends upon the manner of treating the pedicle, but rather upon the careful accomplishment of every part of the operation. It seems to me that the different ways of treating the pedicle have been proved to be of comparatively little moment, and that it is of far more importance

<sup>1</sup> Amer. Journ. of Obstet., Nov. 1874; Monthly Abstr. of Med. Sci., Apr. 1875.

<sup>2</sup> Lancet, Jan. 20, 1877, with wood-cut.

that no fluids should be allowed to remain in the peritoneal cavity that all hemorrhage should be completely arrested, and that no impure air, such as that of a large hospital ward, should come in contact with the peritoneum.

Another point, which has recently attracted much attention, is the question of drainage of the peritoneal cavity from Douglas' cul-de-sac, as suggested and practised by Dr. J. Marion Sims. Notwithstanding the great distinction of its originator, the majority of the best authorities are of the opinion that it is better not to use a drain until it is evident that some fluid has been effused and is doing harm. If used from the time of the operation, the presence of a drainage tube tends to irritate the peritoneum and probably to cause effusion of fluids which otherwise would not have occurred; and by the suction action of the diaphragm and abdominal muscles, air is more or less continuously drawn into the peritoneal cavity and thus would tend more surely to the putrefaction of any effused liquids. After the experience of 800 cases, Mr. Spencer Wells says, "drainage should not be a general practice in ovariectomy, but should be reserved for exceptional cases."

During the last two or three years, the antiseptic method has been employed in ovariectomy<sup>2</sup> by Prof. von Nussbaum, in Munich, and by Prof. Schröder, Olshausen, Freund, Wilhelm Braun, and others in Germany, and by Mr. Howse, Dr. Barnes, and Dr. Chambers in England. In last December, Dr. Sims<sup>3</sup> reported a case in which he has employed it in New York. Those who have used it, speak well of it, and think that their success has been increased by it. The cases are still too few to form a decided opinion of its comparative merit. Prof. von Nussbaum reports eight consecutive cases without a death; Prof. Olshausen has had eight, and Prof. Schröder six consecutive successful cases. On the other hand, Mr. Wells, by his ordinary method, instead of trying the antiseptic plan, as he had thought of doing, has had twenty-seven consecutive cases without one death. Enough has been done, however, to show that there is but little reason to anticipate carbolic poisoning from the absorption of carbolic acid, or an excessive serous effusion from the presence of carbolic acid in the peritoneum.

Dr. Goodell and others have lately followed Dr. T. G. Thomas' plan of vaginal ovariectomy. It appears, however, to be more difficult of execution, and is done at the disadvantage of imperfect vision,

<sup>1</sup> Brit. Med. Journ., Mar. 3, 1877.

<sup>2</sup> Obstet. Journ. of Great Britain and Ireland, April, 1877.

<sup>3</sup> Med. Record, Dec. 9, 1876. This was not the first case, as supposed by Dr. Sims, the other cases mentioned above preceded it.

and at a distance from the hands of the operator. Yet if it be thought necessary to operate upon a small ovarian tumor low down in the cavity of the pelvis, the vaginal operation offers a direct access to the tumor, and has been followed by a good degree of success.

Recently a cry has been raised of "no more ovariectomy."<sup>1</sup> It would appear that Dr. Semeleder is so enthusiastic as regards the result of electrolysis in ovarian tumors as to believe that it will nearly, if not entirely, supplant ovariectomy. A paper by him, on this subject, was read before the International Medical Congress in Philadelphia, last September. Dr. Friedrich Fieber<sup>2</sup> states that as long ago as 1868 he treated an ovarian tumor by electrolysis in Vienna, and that Dr. Bühring made mention of electro-puncture in ovarian tumors in a pamphlet in 1848. The results thus far seem, at best, to be those of diminution rather than removal. This does not look as if it would drive ovariectomy from the field. As it has been alleged to be free from danger, some operators have done the operation carelessly, and it has been followed by disastrous consequences. In a case recently recorded,<sup>3</sup> the patient was allowed or directed to come backward and forward from her house to the office for the operations. A trocar and canula was pushed into the cyst; the trocar removed, and an insulated steel wire, connected with the positive pole of a galvanic battery, introduced into the canula and thus into the cyst. The negative pole was applied to the side of the abdomen. The tumor diminished in size, the treatment was continued every second or third day for about six weeks, when she was attacked with peritonitis and died in five days. Such an operation is too serious to be done in the office.

In January, 1876, Prof. Trenholme,<sup>4</sup> of Montreal, removed by abdominal section both ovaries in a case of fibroid tumors of the uterus causing menorrhagia and dysmenorrhœa. The patient recovered, and the hemorrhagic tendency lessened. And, later in the same month, he removed one ovary through the posterior cul-de-sac of the vagina, on account of chronic oöphoritis with displacement. The patient recovered, but remained in the same general condition as before the operation. The relief was not obtained for which the operation was done. Prof. Trenholme appears to have been led to this operation independently, without being aware that Dr. Battey,<sup>5</sup>

<sup>1</sup> Wiener Med. Presse, 1875, No. 52.

<sup>2</sup> American Journal of Obstetrics, October, 1876.

<sup>3</sup> New York Medical Journal, January, 1877.

<sup>4</sup> Obstetrical Journal of Great Britain and Ireland, October, 1876.

<sup>5</sup> Atlanta Medical and Surgical Journal, September, 1872.

of Georgia, had practised and advocated the operation since 1872. Dr. Peaslee<sup>1</sup> has reported recently a case of removal of both ovaries by the abdominal section, on account of severe epileptic attacks. The patient died sixty hours after the operation. In July, 1876, Dr. T. G. Thomas<sup>2</sup> reports that this operation had then been done in the United States by Dr. Battey 10 times, with 8 recoveries and 2 deaths; by Dr. Sims 5 times, with 4 recoveries and 1 death; and by himself once, with recovery. These with the cases given above make 19 cases, with 15 recoveries and 4 deaths. The class of cases to which this operation can be justifiably applied has not yet been clearly defined. Dr. Battey<sup>3</sup> states: "I have operated in widely different circumstances. In one case the patient had amenorrhœa, convulsions, recurrent hœmatocele, 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." In Prof. Trenholme's cases, the operation was done for fibrous tumors of the uterus with hemorrhagia, and for chronic oöphoritis, and in Dr. Peaslee's case for epilepsy. In such cases as these, there is a strong doubt whether the removal of the ovaries will remove the symptoms. There has not yet been time to demonstrate the results in the majority of the cases which have recovered from the operations already done. Dr. Battey<sup>3</sup> does not expect the change to come at once, but to occur gradually "through two or even three years to its final completion." The influence of the ovaries over menstruation is less than many have supposed. Dr. Atlee<sup>4</sup> has reported several cases in which menstruation continued after double ovariectomy; in one of these menstruation was continuing regularly after six years, and in another case it did not cease for ten years.

Without too greatly enlarging the limits of this address, it has been possible only to consider some of the most important questions of the day. Enough has been done, however, to show that great progress is being made. We were warned yesterday, in the opening address of the honored Chairman of the Committee of Arrangements, that all is not progress that is called by that name, and that we should look well to the landmarks which our fathers have set up.

<sup>1</sup> Transactions of American Gynæcological Society, vol. i. for 1876.

<sup>2</sup> American Journal of Medical Sciences, July, 1876, p. 153.

<sup>3</sup> American Practitioner, October, 1875; American Journal of Medical Sciences, July, 1876.

<sup>4</sup> Diagnosis of Ovarian Tumors, Philadelphia, 1873, pp. 35, 36, 37, 38.

The advice is good. We must be careful to distinguish between the true and the false. Yet we must not forget that we are engaged in a warfare with such active enemies as injury, disease and death. The conflict cannot be confined within any landmarks, even though set up by our fathers, whom we delight to honor. To be successful, the warfare must be aggressive. By the introduction of ovariectomy alone, many women are now well and happy, who, but for this operation, would have been victims of tedious disease and death. There are still other sufferers to be saved, new operations to be devised, new victories to be won.



