seeing that the disease which the operation cured was one inevitably fatal.

ABDOMINAL SURGERY.

Antiseptics took away the great risk of abdominal surgery, and made it possible to do anything in the abdomen, provided that hæmorrhage was stopped, and irreparable injury avoided. Tait proceeded to remove not only ovarian tumours, but tubes and ovaries damaged by inflammation, and in certain cases healthy tubes and ovaries. His example was followed by operators all over the civilised world, and has been fruitful. This extension of abdominal surgery has revealed the nature of the pathological conditions which cause and keep up pelvic peritonitis. It has taught us what a common thing ectopic gestation is, and how Nature often cures it. It has enabled us to do away with the injurious effects of uterine fibroids, either by removing the tumours themselves or by stopping their growth and making them dwindle. At the present time there seems, indeed, a possibility that, as regards at least the inflammatory diseases of the uterine appendages, abdominal surgery may, like Saturn

coming to be as safe as the removal of ovarian tumours. This is an improvement which, like everything in abdominal surgery, depends upon anæsthetics and antiseptics, for these made it possible, but the special step in advance consisted in small points of technique. The difficulty was that a stump made of uterine tissue contracted after it was tied, and therefore that no ligature round part of the uterus could be relied on to stop hæmorrhage. The practice now is to stop bleeding by securing the uterine arteries; and this simple modification, one practised simultaneously and independently by several operators, seems likely to lead to success in dealing with fibroids such as 15 or 20 years ago hardly anyone hoped for. The prompt treatment of ruptured ectopic pregnancy by operation has been now done so often and so successfully that it is one which will soon be like that of strangulated hernia, an operation which every general practitioner ought to be able and ready to do. The introduction of methods of local examination have revealed minor changes in the pelvic organs, which account for many of the pelvic pains from which women suffer. Thus the speculum revealed erosions, and helped much in the early diagnosis of cancer; the sound demonstrated retroflexion. These, together with the teaching of abdominal surgery to which we have referred, have made the "irritable uterus" a ghost of the past. Modern methods of hysterectomy have enabled us to cure cancer far more frequently than was at one time hoped.

GYNÆCOLOGICAL SURGERY.

By ALBAN DORAN, F.R.C.S.,
Surgeon to the Samaritan Free Hospital.

THE BRITISH MEDICAL JOURNAL AND OVARIOTOMY IN 1837. IN 1837 this JOURNAL, then in its embryonic form known as the *Transactions of the Provincial Medical and Surgical Association*, published a remarkable paper read before that Association during the previous year, a communication of bright omen, almost indeed prophetic. The author was Dr. Jeaffreson, of Framlingham, and the paper was entitled a Case of Ovarian Tumour Successfully Removed. His previous experience needs no comment. "During about thirty years, the extent of my professional life," he writes, "I may have witnessed the progress of about twenty cases of this disease, but these have been invariably fatal in their termination, after years of protracted suffering of greater or less severity, according to the importance of the organ which might have had its function interrupted by the pressure." Under the circumstances the operation was, indeed, a gallant feat. Time has justified him, not only for doing ovariectomy, but also for his treatment of the pedicle by ligature. So great was the dread of the peritoneum in 1837, that our bold pioneer noted how "a very small portion of omentum protruded with the sac (that is, the collapsed ovarian cyst), but was very readily returned." He clearly looked upon the prolapse of omentum as a possibly grave complication.

GYNÆCOLOGY IN 1837.

Otherwise gynæcology was not widely taught nor practised. The teachers at the London schools—Blundell, Lee, Rigby, Davis, and Ramsbotham—were great as obstetricians, but taught little or nothing systematically about diseases of women. The speculum, introduced years before from France, was already in use though ill understood. Drs. Fleming and Marshall Hall, however, had recently devised and performed a plastic operation for prolapse—anterior colpotomy, in fact—and, what is more, Velpeau openly admitted the excellence of this English operation.

Yet instruction in gynæcology was not absolutely neglected in England in 1837. Marshall Hall issued an excellent synopsis of diseases of women in his *Theory and Practice of Medicine* that very year. So systematic is his brief summary, that its errors can be plainly seen; for truth is easier to extract out of error than out of confusion. The speculum was in use, anteversion and retroversion recognised, whilst, as we have seen, operations for prolapse were already practised. There was great cocksureness about the differences between inflammation of the uterine substance, of its mucous and peritoneal coats and of the cervix. Particularly interesting are Marshall Hall's notes on what he calls, as we do still, "inflammation of the appendages." "The symptoms are local tenderness and tumour, and perhaps fluctuation;

SIR JAMES YOUNG SIMPSON.

and the French Revolution, be devoured by its own children; for the vaginal extirpation of the diseased parts has come to be preferred by some to operation by the abdomen. If what is now the lead of a few should come to be the generally-adopted practice, and abdominal section be discarded as the treatment of inflamed Fallopian tubes, will that show that the surgery of Tait and his followers in those diseases was all a mistake? By no means; for it was the abdominal surgery that made the diagnosis and the vaginal operation possible. Abdominal operations revealed the nature of the disease and showed how adhesions were to be dealt with, and without this knowledge no one would ever have attempted to remove inflamed uterine appendages by the vagina.

UTERINE FIBROIDS.

It seems now as if the removal of uterine fibroids were

sometimes the bladder or its cervix, or the rectum, is compressed, and the tumour is felt on an examination *per vaginam*. The case sometimes terminates by resolution, sometimes by suppuration, the pus having its issue in the iliac region, into the intestine, in the peritoneum, etc." That is what was taught in 1837, and Marshall Hall taught rightly in days when teachers had little means at their disposal of verifying their teaching. It is strange to find that so great an authority, who knew how to teach well and to work on scientific lines, nevertheless supported Gooch's mischievous fad about "irritable uterus." What illusions in gynaecology do our living teachers unwittingly support? What will be said about them in 1957, about the men who did so much, thanks to themselves and Lord Lister, yet remained deluded about what will seem so plain sixty years hence?

THE "ULCER" AND SPECULUM ERA.

In the Forties gynaecology made some progress, especially in the direction of uterine therapeutics. This expression has been much condemned; but it properly implies cleanliness, care, good position of the patient so as to favour exploration, and good instruments to allow of the safe application of chemicals and injections. It is vain to abuse a good thing because wrong use has been made of it. Before the triumphs of ovariectomy, surgeons in particular were apt to ridicule the gynaecologist with his speculum and stick of caustic, forgetting that uterine therapeutics meant good dressing and enforced one of the soundest surgical principles, which insists that an operation may relatively be "minor," but is never an absolutely minor affair. At this period great attention was paid to the anatomy, physiology, and pathology of the cervix, os externum, and os internum. Sir James Simpson and Dr. Henry Bennet took much interest in the question. Fifty years have passed, but it is by no means settled yet. The association of mischief in the region of the cervix with sterility and dysmenorrhœa, and the nature of obstructions to the menstrual flow, whether from spasm or from flexions, have been hotly disputed, and many of the combatants yet live and have younger followers. The "stick and speculum" epoch represented a necessary stage in the history of gynaecology. Those instruments were not more abused or misunderstood than many another instrument, and their employment led to great improvements in our knowledge and treatment of diseases of women.

The explanation of the state and progress of gynaecology between 1840 and 1860 is not difficult. There were as yet few surgeons bold enough to open the peritoneal cavity and inspect the internal organs. But before 1837 Récamier, Lisfranc, Velpeau, and others had urged the inspection of the internal parts and those regions accessible to the speculum and had devised instruments to facilitate inspection. Operations for ruptured perineum, fistulae, and prolapse therefore became frequent, and the discovery of anaesthetics greatly facilitated these procedures. By means of the speculum gynaecologists got a sight of the cervix and os externum. In consequence they learnt much, but assumed too much. They attributed to what they saw diseases and pain really seated in deeper organs, which they dared not expose. Hence we must not ridicule old authorities like Dr. Henry Bennet, who traced "nineteen out of twenty cases" of women's diseases to inflammation and ulceration of the neck of the womb. Dr. Tyler Smith was nearer the truth when he laid stress on "over-secretion of the mucous glands of the cervix." Dr. Robert Lee distrusted "ulceration," and looked on it as an element of cervical endometritis. Hodge, of Philadelphia, before 1860 strongly opposed the pathology of "ulceration," and still more the clinical ideas associated with it. A common feature in practice thirty years ago was the lady who had been told by a doctor that she had an ulcerated womb. She felt very bad indeed till another authority told her that there was no ulcer; then spontaneous recovery occurred. Even now charitable ladies come across mendicant females who seek alms on the score that they have "ulcers." The physicians of these times were led into error not only by reason of want of means to explore higher than the cervix, but also because women are bad hands at explaining subjective symptoms. Many of the authorities above mentioned wrote chapters on "irritable uterus," chapters worth reading if only to teach us how careful

we must be when we draw inferences from clinical symptoms. The "ulcer" involved free application of chemicals, with the assistance of the speculum. Of course these practices led to grave quackery, but the authorities who advocated them were in no sense quacks. They simply drew false conclusions. A lady suffering from what she was told was an "ulcer," felt all the better after being "burned." Sickly hospital patients kept at rest, and, treated kindly, got well, and it was concluded that the "ulcer" was cured. At last the suspicions of good observers were justified by Runge and Veit and other pathologists, who showed that the "ulcer of the cervix" was no ulcer at all, but the replacement of the pavement epithelium of the surface of the cervix by the columnar epithelium of the cervical canal. This discovery did great service, and tinkering with caustics is no longer held justifiable. But one good came out of the evil—a sounder knowledge of the anatomy, histology, and pathology of the cervix, which has led to improvements in treatment.

THE AGE OF FLEXIONS AND THE APOGEE OF THE PESSARY.

Just as in the Forties there were authorities who laid too much stress on inflammation of the cervix, so in the early Fifties over-great importance was laid on flexions and displacements. No doubt Dr. Graily Hewitt has to answer for propagating much pathological and clinical error. His views, however, were the result of careful investigation, and his treatment forced the gynaecologist to explore the pelvis very thoroughly, to use the sound properly, and to watch his patient closely for months or years. Hewitt, having encouraged men to search for flexions, which, he maintained, spontaneously grew worse, and caused obstructions and inflammation, lived to see a new school who, thanks to his improved methods of exploration, examined flexions yet more intelligently, and found that they do not necessarily grow worse of themselves, nor cause any obstruction or inflammation. One very objectionable result of the new doctrines on flexion was the abuse of the pessary and multiplication of its patterns. At the worst, however, it implied an eager endeavour to bestow comfort on women troubled with pelvic lesions. The free use of stems, at this epoch, greatly generalised a very practical knowledge of pelvic inflammations, which these appliances so frequently produced that they soon became as freely abandoned.

Matthews Duncan was the great opponent of the flexion-obstruction theory and the abuse of the pessary. Three or four types of that instrument are still largely used, and thanks to extended experience they give rest and comfort to thousands of women if intelligently applied by competent practitioners. Unfortunately there are still far too many varieties of pessary figured in makers' lists, which is not so much the fault of the dealers as of those who demand what they must therefore supply.

CONFLICTS ABOUT DYSMENORRHOEA.

There is no adequate space in these columns for recording the progress made in our knowledge of menstruation and its diseases. Simpson, Robert Barnes, Matthews Duncan, and others studied this complicated question most carefully. Fierce controversies arose about the relation of mechanical and other obstructions to painful menstruation. They formed a familiar feature of this epoch, and continued far into the era of abdominal section. They involved grave questions of practice and treatment, and the merits and evils of dilators and instruments for cutting the os uteri were severally discussed. One benefit of the introduction of the dilator has been that it has come to be used as a valuable aid in exploring the uterine cavity for evidence of disease. The whole question remains unsettled. In fact, notwithstanding much good recent work, the precise nature of the catamenial process is by no means evident, nor is it certain how far dysmenorrhœa may be a neurosis, and how far a true aberration of a distinct local process.

GREAT ADVANCES IN PLASTIC SURGERY.

Before 1860 the great age of gynaecology had dawned. The advance of plastic surgery, the foundation of the Obstetrical Society, and the establishment of ovariectomy as a justifiable operation were the distinguishing features of this epoch. Plastic surgery advanced under strange conditions, now

appily gone and for ever. This very period marked the last decade of negro slavery. One of its special curses involved early pregnancy and neglected labour in women of a neglected, self-neglecting, and indolent race. Marion Sims and Bozemann practised in the Southern States of the American Union in those days. They had ample opportunities of studying ruptured perineum and vesico-vaginal fistula in female slaves. They greatly advanced this important department of operative surgery, and as these operations demand the use of instruments needed for many other operations in the same parts Sims effected great improvements in the use and form of the speculum and other aids to diagnosis. He also introduced important innovations in postural exploration, "Sims's position" having aided thousands in diagnosing pelvic disease. In England Baker Brown gave a stimulus to plastic surgery, especially perineorrhaphy.

Sir Spencer Wells.

THE INFLUENCE OF THE OBSTETRICAL SOCIETY ON GYNÆCOLOGY.

The foundation of the Obstetrical Society of London in 1859 aided the cause of gynæcology. Amongst its founders were Dr. Robert Barnes, still among us, a standard authority on diseases of women; Dr. C. H. F. Routh, yet living; Sir Spencer Wells, so recently departed from us; and Sir William Fergusson. In respect to the views of that great surgeon, it is remarkable that he spoke at the inaugural meeting in the following terms, which give the impression, till the remainder of his speech is read, that he meant to lead up to operative gynæcology: "It might seem curious that one in that department of the profession to which he had chiefly devoted his attention should come to such a meeting." Yet the rest of his speech includes no mention of ovariectomy, but is an apology for pure obstetrics, which then really required the support of so distinguished an advocate, strange though that fact seems in these days. In short, Sir William Fergusson did not perceive in 1852 that modern gynæcological surgery had begun, Spencer Wells and Clay having already set to

work in earnest. Great men are often bad prophets; Fergusson did not foresee how ovariectomy was destined to revolutionise abdominal surgery, just as Pitt failed to recognise the French Revolution till several years after its beginning. By the way, there is a speculum which bears the name of Ferguson, though with one "s"; the inventor was Dr. Ferguson, well-known in North London in those days. The pioneers of the Society displayed unsurgical timidity about the treatment of ovarian cysts, as may be seen by a glance at the first volume of its *Transactions*, but they only acted up to their lights.

In 1884 a celebrated schism occurred in the Obstetrical Society, and the British Gynæcological Society was founded. An Obstetrical Society was founded in Edinburgh, after which town it is named, in 1840, nineteen years before its homologue in London, and in 1890 the North of England Obstetrical and Gynæcological Society was established. All

Dr. Marion Sims.

the four institutions just named exist and flourish. The great general Societies, especially the Royal Medical and Chirurgical, Medical, and Pathological, have repeatedly held discussions on the surgery and pathology of the female organs. Indeed, Spencer Wells made much use of the first named, especially for the announcement of his series of ovariectomies.

THE ESTABLISHMENT OF OVARIOTOMY.

1858 is a great date in gynæcology, for in that year Sir Spencer Wells began his remarkable series which established ovariectomy as a justifiable operation. The circumstances associated with this surgical triumph are familiar to most of us; no epoch in the history of surgery is better known. It revolutionised abdominal surgery, which is at this moment still in a state of active development. The pioneering efforts of Houston and McDowell had been fitfully followed up in the early part of the century; just at the Queen's accession came a temporary rally. In 1836 Jeaffreson performed the successful ovariectomy reported in the *Journal* in 1837, as

already related; in the same year King, of Saxmundham, and West, of Tonbridge, scored similar triumphs. In 1838 Crisp, of Harleston, Suffolk, had similar good fortune; in 1839 West operated on his second and third cases, but lost the latter. Dr. Clay, of Manchester, it must never be forgotten, set to work in an earnest and methodical manner in 1842, before the days of anaesthetics, and had fair results; his technique was undoubtedly good, but for reasons never made plain he did not succeed in making a strong impression on the profession. Hence Clay's work was, and is doubtless still, underrated.

The well-known history of ovariectomy in metropolitan hospitals shows that much might then have been learnt from Dr. Clay. The surgeons who did isolated operations showed more courage than enterprise; none of them established ovariectomy by operating on a good number of cases. Mr. Solly warned his pupils against the danger of the ligature; it is curious that the idea of simply tying the ovarian vessels separately never seems to have entered the head of that eminent surgeon. Unfortunately, in 1850, Dr. Duffin began to advocate the extraperitoneal treatment of the ovarian pedicle. He pointed out the supposed danger of leaving the tied end of the pedicle to decompose in the peritoneal cavity, and insisted on the importance of keeping the strangulated stump outside. He jumped to the conclusion that the pedicle was completely strangulated, and must necessarily decompose, being ignorant of the remarkable process by which the distal end of the stump of the pedicle is saved from decomposing. The nature of germs being then unknown, he did not see that the pedicle was in far greater danger of putrefaction if fixed in the wound. Spencer Wells himself adopted Duffin's views, and thus complete intraperitoneal ligature was thrown back for about fifteen years. Even as late as 1870, a great surgeon, still living, stated that "nothing but the large amount of success which has recently followed the adoption of this most unsurgical method appears to me to justify it." Mr. Baker Brown, renowned in those days for his great skill in plastic operations on the genitals, was an unsuccessful ovariectomist. Yet Spencer Wells undoubtedly learnt much from seeing that ill-fated surgeon perform ovariectomy. As a manipulator, Baker Brown could not be excelled, and Wells often spoke of the care with which he managed to separate adhesions. But Brown dreaded the peritoneum, and that fear made him avoid precautions which he believed must increase danger. In striking contrast and most instructive to the surgeon is the boldness of Spencer Wells, who feared not to sponge the contents of the abdomen till they were clean, and the courage of Mr. Lawson Tait, who, in later years, introduced flushing of the peritoneum.

Sir Spencer Wells's plan of campaign is too well known to require description in detail. Contriving to obtain plenty of cases he set to work fearlessly, soon gaining a high reputation. He was not only a bold surgeon but also a careful man, extremely particular about minute precautions. It is significant that his boldest innovation, the "toilet of the peritoneum" was one of the best features in his surgery, and led to yet more effectual methods of cleansing the abdominal cavity, whilst the clamp which he used because he dreaded to return the ligatured pedicle was soon discarded by his own assistants. In insisting on the short incision he was right, in so far that an unnecessarily long wound used to be made for the extraction of a cyst. The intrinsic danger of a long incision was exaggerated by his earlier followers. Wells himself, like a true surgeon, was always ready to learn. Within a few years of his triumphs Keith and several foreign surgeons followed his example. Later, Lawson Tait overstepped the limits of ovarian tumours, as will presently be related. His bold defiance of the peritoneum has been justified by results. Like Spencer Wells, he is a believer in short incisions. Experience has shown that the abdominal wound should be as short as will allow of a clear view of the seat of operation, and at the same time permit the easy extraction of the tumour without any bruising of the edges of the wound.

DRAINAGE: THE SURGERY OF UTERINE FIBROIDS.

Keith, the immediate follower of Wells in point of date, first distinguished himself specially in the field of ovariectomy by his advocacy of the drainage tube. This instrument was more needed before the days of antisepsis and asepsis than at

present. Olshausen even speaks of it this year as a "cunning delusion" (eine arge Täuschung), but its introduction was an advance. Keith's fame, however, rests greatly on his extension of abdominal surgery to the treatment of uterine myoma. At first the results of removal of fibroids were most discouraging. The use of the *serrenaud* was gradually perfected; now an age has come when operators endeavour to dispense with it. Thanks chiefly to foreign surgeons, the retroperitoneal treatment of the stump, brought to great perfection by Olshausen, and total removal of the uterus, practised by Péan, Doyen of Rheims, Martin, and others, have been widely undertaken with excellent results, and the former, at least, is now largely adopted in the United Kingdom. The removal of small fibroid uteri through the vagina is rightly looked upon with disfavour in this country, it being doubtful whether a myoma small enough to allow of such an operation is large enough to justify surgical intervention of any kind, save for intractable hæmorrhage.

INFLUENCE OF LISTERISM ON GYNÆCOLOGY.

Ovariectomy had not been established twenty years when the principles of Pasteur and Lister became applied to surgery with the grand results now so evident to all of us. Abdominal surgery profited more than any other department of the art; its evolution from ovariectomy to renal, hepatic, and intestinal surgery now advanced by leaps and bounds, and the ovariectomists of that time played a leading share in advancing Listerism. Many modifications in the old "strict antiseptic precautions" were brought about by these operators. Thus the spray was found to be inconvenient and not indispensable. Some French authorities proved by experiment that strong antiseptic solutions applied directly to the peritoneum were apt to destroy the endothelium, and thus encouraged instead of preventing the entry of germs into the system. This discovery was one of the chief factors in the introduction of sterilisation and the "aseptic" system. Bacteriology, that remarkable new science, has taught the gynaecologist the precise significance of certain precautions and the uselessness of others, and, on the other hand, has learnt much from the experiences of Spencer Wells and his followers. Thus the dangerous elements in pus have been detected, whilst the reason why pus is so often spilt into the peritoneum without any alarming results is comprehensible now that it is known that septic germs enclosed within a pyosalpinx or ovarian abscess soon lose their virulence and die off altogether.

TUMOURS OF THE TUBE: DECIDUOMA MALIGNUM.

The abdominal surgery of the last twenty years has led to many other valuable discoveries. Some living British and foreign workers have distinguished a remarkable affection, papilloma of the Fallopian tube, and have further found that primary cancer of the tube is not so rare as was once taught. A much more serious matter was the discovery of "deciduoma malignum" by Sänger in 1889. This term signifies malignant degeneration of portions of the fetal appendages left attached to the uterus after delivery. Metastases develop rapidly. Many alleged cases have been published since 1889. In this country several authorities suspect that in many instances the disease was simply sarcoma of the uterus coincident with and stimulated by gestation.

ECTOPIC GESTATION.

Amongst other developments of abdominal surgery we must not dwell here on that essentially obstetrical subject, operation for advanced extrauterine pregnancy; but it must be remembered in association with this matter that operations in the earlier stages of ectopic gestation have practically developed out of similar procedures for the removal of inflamed appendages. For diagnosis or even distinction between the two conditions is not always possible, nor are pathologists certain that hæmatosalpinx belongs exclusively to either.

PELVIC INFLAMMATION: RADICAL SURGICAL MEASURES.

Amongst the earlier and more direct results of the establishment of ovariectomy was a great increase in our knowledge of inflammations above the level of the cervix. Already (before

1858) pelvic peritonitis was becoming distinguished from pelvic cellulitis. Bernutz and Goupil, Matthews Duncan, and others, especially made their mark by good work in this field. Duncan, early in the reign, had availed himself of opportunities of dissecting the internal parts of women who died after labour in Paris hospitals, where the mortality was then very great. He thus distinguished "cellulitis," "parametritis," or "perimetric phlegmon" with great precision. Owing to the attention then paid to the cervix deeper inflammations were somewhat neglected till the age of ovariectomy set in. Then dilated tubes and inflamed ovaries were exposed to the naked eye. Sir C. Clarke, in 1821, had spoken of suppurating ovaries as things known to "everyone at all accustomed to examine dead bodies." It must be noted that what he saw after death had often given no evidence of its existence during life. Drs. Kingston Fowler and Lewers repeated Clarke's researches some ten years since. The truth lies between two extremes; inflammation of the appendages is usually curable, but may require operation. Specimens of

Mr. Tait removed the appendages for the cure of menorrhagia from fibroid with good results. A few days earlier Hegar did the same operation for "ovarian neuralgia," but the patient died. Not many days later Dr. Battey removed the ovaries in order to induce a premature menopause in a young lady subject to grave neurotic symptoms associated with the menstrual molimen. Thus three varieties of one operation were introduced within six months. Removal of the appendages for old-standing disease, the first variety, is undoubtedly advisable in many patients. It has been greatly abused, and its extension is clearly more serious than its limitation. We mean that the newer practice of removing the uterus as well as the appendages is very doubtful surgery. On the Continent it is much practised; in the United Kingdom it is very unpopular; several Americans have recently declared against it. The second variety is removal of the appendages for the cure of bleeding fibroids. Under limitations now fairly known this operation is still quite justifiable, but it is not so much practised now since hysterectomy for fibroid has been made a

William Jeaffreson (from a photograph kindly lent by Mr. J. Cody Jeaffreson).

very advanced destructive inflammatory changes in the tube and ovary are now familiar objects in museums. We feel that the patient must be better without them, and after histories support that opinion. On the other hand, Dr. Howard Kelly candidly admitted, three years ago, that over 15 per cent. of the last 200 cases of pelvic inflammation under his care had no pelvic disease at all, though all were expressly sent him for operation. Again, "pyosalpinx" is a true and definite morbid condition, but bacteriologists have shown, as was noted in the paragraph on Listerism in relation to gynecology, that the pus confined in the obstructed tube becomes, after a time, almost or quite harmless.

It was in the year 1872 that the removal of the appendages for diseases other than new growths of the ovary was first practised. In February of that year Mr. Lawson Tait removed a suppurating ovary with success. In the summer

Charles Clay.

relatively safe proceeding. The last variety, removal of the appendages for the cure of neuroses even as severe as epilepsy, has had authoritative supporters, but is now considered by most gynecologists as unjustifiable on the grounds both of principle and experience.

VAGINAL HYSTERECTOMY FOR CANCER.

The extreme practice of removing the uterus as well as the appendages for chronic inflammatory disease was much encouraged by the results of a more justifiable proceeding, vaginal hysterectomy for cancer. This latter operation has triumphed over assumptions. Terrible mortality was predicted; but distinguished German authorities soon demonstrated that this radical proceeding is fairly safe. The most extraordinary feature of this operation is the relative immunity of the patient from recurrence as compared with what is seen in cases of cancer of the breast. That gland

is situated in a position very favourable for operation. Yet, though such extensive clearing away of neighbouring structures as Mitchell Banks and others advocate can be practised with little immediate danger, recurrence is not rarely rapid. The uterus lies in a position where free excision of surrounding parts is impossible for evident reasons. Nevertheless, when cancerous, its removal, provided the disease be not advanced, often ensures a long interval of immunity. Some operators maintain that it is actually safer than amputation of the cervix, which Sir John Williams advocates as not more likely to be followed by recurrence. Finally, we must note that vagino-abdominal surgery has certainly become established. The vagina, once made aseptic, allows of drainage, so that in some respects a vaginal wound communicating with the peritoneum is safer than the abdominal wound in the median line.

NEW THERAPEUTICS IN NEUROSES: MORE PLASTIC SURGERY.

The Weir-Mitchell treatment has certainly proved useful in many cases where a great amount of neurosis is associated with a trifling pelvic disorder. Much has still to be learnt about what was termed "irritable womb" in 1837, but "treatment" not operation is the more justifiable. Since the era of ovariectomy plastic operations have made relatively small advance, chiefly because practitioners are more skilful obstetricians now than at the beginning of the reign. Mr. Lawson Tait's flap-splitting operation for ruptured perineum is a comparatively recent operation, and is certainly good surgery. Emmet, of New York, introduced his operation for the repair of lacerated cervix. This "trachelorrhaphy" has still its advocates. Its inventor admits that it has been grossly abused, and that in justifiable cases it is often ill-performed, while the treatment of the patient before and after is often faulty.

ELECTRICITY IN GYNÆCOLOGY.

In 1886 there was much excitement about Dr. Apostoli's experiences of electricity as a therapeutic agent in gynæcology. British authorities flocked to Paris, and Dr. Keith seriously set to work to prove the merits of the method in the case of uterine fibroids. It must be admitted that before this date electrical treatment of tumours of the uterus was empirical and dangerous. Keith, after some experience, declared that electricity could not dissolve a fibroid, but it could place a woman who suffered inconvenience from such a tumour in the position of a woman who had a fibroid which gave her no trouble. Other authorities cannot claim such good results, and many patients, finding bad symptoms returning, apply to another doctor, who may succeed or fail with some different treatment. Operators declare that such cases show local signs of being much the worse for electricity, an objection which the followers of Apostoli state to be groundless. The employment of electricity for the cure of pelvic inflammation is a doubtful proceeding, but it appears to be of real benefit in endometritis and in other conditions where the electrode can actually touch the diseased tissues. Unfortunately it is hard to believe in the accuracy of the conclusions at which many able advocates of electricity have arrived. These gentlemen are recognised as authorities on diseases of women, but on what grounds can they be accepted as authorities on electricity? On the other hand, the professional electrician is no authority in physic, and above all cannot well be admitted into gynæcological wards.

PLASTIC SURGERY FOR UTERINE DISPLACEMENTS.

A curious development of plastic surgery is associated with the name of a living British gynæcologist, Dr. Alexander, of Liverpool. He and Dr. Adams, of Glasgow, advocate and practise the shortening of the round ligaments in the inguinal canals, in order to rectify backward displacements. Remarkable variations of the new practice have been adopted abroad. Another class of operation for the same object is the sewing of the uterus to the anterior abdominal walls, known as hysteropexy or hysterorrhaphy. This innovation, which is not without danger to the patient, has its advocates, nor do they fail to show good results. Still, neither hysteropexy nor shortening of the round ligaments is an established operation, held by all to be justifiable. The fact is, that the true cause and significance of flexions and displacements of the uterus are matters by no means thoroughly understood. The total

amputation of a prolapsed uterus, often performed on the Continent, is not considered good surgery in this country.

THE REHABILITATION OF THE CURETTE.

Lastly, the curette has led to fresh discoveries, since it has been employed of late years intelligently as a surgical instrument. Thanks to improvements in microscopy, scrapings from the uterine wall can now be examined with a view to investigate suspicions of malignancy, and other points connected with the physiology and pathology of the endometrium. The history of this instrument is worth bearing in mind. It was introduced by Récamier not very long after the date of the Queen's accession, but a few years later fell into almost complete disfavour. Owing in great part to the valuable results of the intelligent use of Volkmann's spoon, the curette once more came into fashion, and is now extensively employed, not only in midwifery, but also in the treatment of endometritis, and also, as above remarked, as an aid to diagnosis. Along with the curette the use of the uterine dilator has advanced, its benefits being now distinguished and its dangers counteracted. Drainage of the uterine cavity, one of the most important features in uterine therapeutics, is greatly facilitated by the proper use of the curette and the dilator.

GYNÆCOLOGY TRIUMPHANT IN THE VICTORIAN ERA.

The above record is undoubtedly remarkable. Gynæcology was literally the inventor of the new abdominal surgery, which it has taught to general surgeons, who have proved willing and ready pupils, not slow to avail themselves right ably of its resources. The blots on gynæcology are due to ignorance, which it has dissipated in the course of its triumphal advance, and to a few ill-advised persons whom it has disowned without ignoring how far they did good. Let us prize the more purely British triumphs above recorded, without forgetting the labours of European and Transatlantic gynæcologists. They have learnt from us, and we have much to learn from them. In particular, they excel in the perfection of asepsis in the operating theatre. Special credit must be given to the Johns Hopkins Hospital, Baltimore, the appliances contrived by Howard Kelly and other gynæcologists on its staff having been widely adopted in our country.

PHYSIOLOGY.

The foundation stone of physiology was laid by William Harvey more than three centuries ago, when he propounded the doctrine that correct observation must be guided and controlled by experiment. It was his own faithful adherence to this principle that enabled him to present to the world his discovery of the circulation of the blood. But the science which he founded remained in a lamentably unfinished state as the years rolled by, and it is only the last sixty years that have seen its rapid and triumphant progress, because it is only during that time that the study of vital processes has been lifted from the regions of mysticism, and the work carried out on the lines formulated by its founder.

FROM HARVEY TO JOHANNES MÜLLER.

It would of course be incorrect to say that no progress was made in the years that intervened between Harvey and Johannes Müller. Malpighi, who completed Harvey's work by the discovery of the capillaries, came soon after him: Glisson, Mayow, Boerhaave, Spallanzani, Borelli, Lower are other names that will at once suggest themselves to the student of physiological history. Further, Haller's great treatise on *Irritability* marks a very important turning point. Though it was Glisson who introduced this word, and, to some extent, the notion, in the latter half of the seventeenth century, it was Haller who placed it on the firm basis of experiment; and it was his experiments, in spite of the active opposition of Whytt, then Professor of Medicine at Edinburgh, which dealt the deathblow to Stahlism and other similar conceptions of an immaterial *anima* endowed with unlimited spontaneous powers. Even in Whytt's writings the doctrine had dwindled to one of vital force, and this term is adopted in the writings of John Hunter. Indeed, this idea prevailed till the time of Justus von Liebig, and Johannes Müller himself was frankly vitalistic. It was the work of the