tissues are sodden and their vitality destroyed by the continuous pressure of an impacted face, she herself thoroughly exhausted, but should be done at once. The child's viability is destroyed, though alive, is practically dead, and it devolves upon us to deliver the unfortunate woman as safely and quickly as possible.

The two following cases are taken from my note book: January, 1872, I was requested by a brother physician, (who had broken his forceps in attempting to deliver a patient) to bring my craniotomy instruments. On my arrival I found the patient had been in labor since the previous Wednesday; the day of my call was Saturday. She had been at first in the care of a mid-wife, who had allowed the patient to remain in labor from Wednesday to Saturday; the family, seeing no termination, in spite of the repeated assurance of the mid wife that everything was all right, insisted upon a physician being called. The physician, having diagnosed a posterior position of the chin, attempted to deliver with the forceps, which resulted in a broken pair of instruments. On examination, I found the chin just engaging in the superior strait, free from the mouth of the uterus, presenting in the left oblique diameter, posteriorly. I attempted to force an anterior rotation, the woman's pains being good, I held the face in the anterior-mento for fully half an hour; believing the position permanent, I withdrew my hand, examination a few moments later, revealed the chin in its original posterior position. I then used one blade of the forceps as a vectis, applying it against the posterior cheek of the child, but with no results. Craniotomy was performed and the patient delivered within twenty minutes.

In August, 1885, I was called to assist a brother physician in a case. The patient had been in labor since the previous evening. Examination revealed a posterior chin presentation, not yet out of the mouth of the uterus and just about engaging. The medical attendant, prior to my arrival, had attempted to produce an anterior rotation of the chin without avail. By the time I arrived at the bedside, the patient was exhausted and incessantly crying to be relieved. I determined to perform version at once; ether was administered and within ten minutes a living child was born. Mother and child did well.

It will be seen that in neither case had the chin or presenting part entered the cavity—that has been my experience. Mento-posterior presentations of the chin do not enter deeply into the pelvic cavity, on account of presenting at the superior strait larger diameters than could pass through any of the diameters of the strait.

221 S. 17th St., Philadelphia.

* Fenrose on Face Presentations.

MINOR UTERINE SURGERY.

Read in the Section of Obstetrics and Diseases of Women, at the Forty-second Annual Meeting of the American Medical Association, held at Washington, D. C., May 1891.

BY J. M. BALDY, M.D.,

PROFESSOR OF GYNECOLOGY IN THE PHILADELPHIA POLYCLINIC AND COLLEGE FOR GRADUATES IN MEDICINE.

In these days of major uterine and pelvic surgery, the minor operations on the uterus, of which we used to hear so much, have been in great measure lost sight of by students of the diseases of women. In consequence of this very fact of being overshadowed by newer and more alluring procedures, fortunately many of the abuses of the old days have disappeared from the practice of those working in gynecology in our large medical centers. Unfortunately this is not equally true of the vast majority of practitioners either in the cities or in the rural districts; the old teachings and the old books still manifest too much influence. The time has come when we should carefully look back over our work of the past few years and see what lessons it has taught us.

The one great fact which stands staring us in the face in this connection, is that most of the troubles which we have been in the habit of considering as situated in the uterus, are not in that organ at all. Thus with one sweep we are able to dispose of a large proportion of the so-called uterine diseases. It is then manifestly improper and dangerous to direct treatment to the uterus, when that organ is perfectly healthy and the trouble is situated in the neighboring tissues—most probably of an inflammatory nature. In a large proportion of the remaining so-called uterine diseases the womb itself is undoubtedly affected, but the lesion in the uterus is only secondary to a lesion in the uterine appendages, or if it was the seat of the primary disease, its continuance is surely due to the inflammatory condition of the contiguous organs. Here again, a treatment directed against the uterus itself is both irrational and dangerous. This leaves us but a comparatively small number of cases of pure uterine disease; such is the true situation. Uterine disease, such as metritis, endometritis, pathological displacements, etc., uncomplicated by other and more serious troubles, is the exception rather than the rule, and in a large dispensary practice during the past few years the small number of such cases which have come under observation, has been a matter of surprise to me.

It would seem, then, that the old methods proposed for the treatment of uterine diseases were not in themselves necessarily faulty, although most of them have undoubtedly been carried to excess, but that the trouble lay in faulty diagnosis and consequent application of methods of treatment unsuitable for the true disease. If the true lesion be overlooked and many of the

minor operations be performed, the result is sure to be disastrous in a certain proportion of cases. How often an acute pelvic inflammation will be lit up, will depend, in great part, on how carefully the given manipulation is carried out.

All this being true, there still remain a certain proportion of diseases, which are uterine pure and simple. The fact, that in the past so many mistakes in diagnosis have been made, and that disastrous results have followed the application of certain treatments, should not blind us to the value of these same methods in cases in which they are properly applicable; and yet at the same time a proper limit should be put to their use.

The Uterine Sound.—On the whole it had been better for womankind had this instrument never been invented. For the application of the electric current it has its uses, and in an occasional case where one is uncertain as to the connection of the uterus with a given tumor, it may possibly give some definite information. For the purpose of measuring the depth of the uterine cavity or for locating the position of the fundus, as it is generally used, it is absolutely superfluous; any one who is forced to use it for these purposes, excepting in rarely exceptional cases, must confess to himself his lack of even an ordinary amount of manual dexterity. For replacing a displaced womb it is a dangerous instrument and its use is very painful. A movable uterus can be invariably replaced by bi-manual manipulation, with the patient on the back, or in the knee-chest position, with the aid of a tenaculum and a repositor. If the organ is adherent it no longer comes under the head of simple uterine disease and should then be dealt with by other and safer procedures. The instrument may be used with perfect safety in careful hands, but as ordinarily employed it is capable of causing considerable traumatism and of carrying septic material into the uterine cavity.

Dilatation.—This operation is one which has been much abused. It is capable of much good or much harm, depending upon whether it is used carefully and in suitable cases, or not. Personally, I have never had any permanent bad results follow its use. On the contrary, I have seen severe dysmenorrhœa relieved and even permanently cured; in not a small proportion of cases have I observed pregnancy follow dilatation. Patients have come to me suffering from a pelvic inflammation following a dilatation, performed by others, but everything pointed to the fact that the pelvic disease had existed first and that the operation had been performed, probably under a mistaken diagnosis, for the relief of symptoms produced by the diseased appendages. In but one case have I had an inflammatory attack follow this operation when there was no complicating disease. In that case I made an incomplete dilatation without ether, upon the dis-

pensary table, in a young woman, married for five years and sterile. The inflammatory attack cleared up within a week, she soon conceived and a month ago I delivered her safely of a large, healthy baby. She made a perfect and uncomplicated recovery. I should be exceedingly loath to discard the dilators from my armamentarium, and can only attribute serious accidents following their use, to a wrong diagnosis or a faulty use of the instrument.

Intra-Uterine Medication.—There is undoubtedly a limited field for the application of drugs to the uterine cavity. It should not be forgotten, however, that it is often only supplementary to other treatment. It is just as rational to expect results from local applications to the uterine mucous membrane, as from applications to the mucous membrane of the nose and throat. The fault here is much the same as in the other minor operations; either a wrong diagnosis is made, and local applications are used to the exclusion of other and probably better methods of treatment, or they have been injudiciously and rudely applied. Certainly in a chronic endometritis we may expect some good from them, especially after the application of the curette.

The Curette.—This instrument, in properly selected cases, is invaluable. In my own hands the dull curette has proven worthless and I much prefer a sharp one. Of course the instrument is capable of harm, but so is every other one used in surgery. If even ordinary precautions are taken in selecting cases and manipulating the curette, no damage will follow its application. For affections of the endometrium following labor, or of a fungoid character, it is exceedingly useful: I know of nothing which will take its place. In removal of retained clots, etc., in the puerperium the finger will be found to be more certain.

Operations on the Cervix.—The splitting up of the cervix for dysmenorrhœa and sterility has fallen into deserved disuse: all that can be accomplished in that direction, can be done with the dilators. Emmet's operation for the closure of lacerated cervix should meet much the same fate, at least in the vast majority of cases. The only excuse for the number of such operations which are being continually performed, is a fear of subsequent cancer. A simple uncomplicated cervical tear, causes no more trouble or inconvenience to the patient, than does a woman's ear which has been torn through by her earring. The ear would be repaired for cosmetic effects; the cervix is hidden from view, and that factor would not come into consideration. Most women have lacerations of the cervix of more or less degree. If the lips are thickened, everted and eroded, they will need treatment. Oftentimes simple scarification, followed by the application of iodine and glycerine tampons, will re-

duce this condition and leave a clean, healthy tear; one which will remain so until the end of time. If the lips cannot be brought into a healthy condition or if the uterus is subinvolved and the endometrium diseased, the case may resolve itself into an operative one; but even here a trial with electricity will often disappoint the surgeon. In my practice it is rare to see a lacerated cervix which calls for surgical repair. Cases which come to me from other men, who have advised an operation, get well without it. Oftentimes the symptoms, for which the operation was proposed, were found to be due not to the torn cervix at all, but to other troubles, principally constitutional.

It is the easiest thing in the world to relight a pelvic inflammation whilst repairing a cervix, and I have seen this result follow such practice only too often.

Taking it all in all, I decidedly approve of minor uterine surgery in the field to which it is applicable, but it must be borne in mind that this field is a limited one, and one which becomes more and more narrow as our diagnostic resources increase.

THE RELATION OF CONCUSSION OF THE BRAIN AND SPINAL CORD TO IN- FLAMMATORY AND OTHER MORBID CONDITIONS IN THESE ORGANS.

Read in the Section of Surgery and Anatomy, at the Forty-second Annual Meeting of the American Medical Association, held at Washington, D. C., May 5, 1891.

BY B. A. WATSON, A.M., M.D.,

CONSULTING SURGEON TO THE BAYONNE HOSPITAL, SURGEON TO JERSEY CITY HOSPITAL, ETC.

It is certainly apparent to all the members of the medical profession that brain and spinal surgery has received during the last quarter of this century an unusual and likewise unprecedented amount of attention. It is likewise equally apparent that great progress has been made by those who are devoted to this branch of surgery; it therefore becomes highly necessary, that he, who is about to enter this field of medical literature, should first discover some dark spot or disputed question, on which he thinks he may possibly throw a few rays of scientific light. The traumatism of the brain and its membranes have been more fully studied than those of the spinal cord. Undoubtedly this may be accounted for in part by the fact, that the first mentioned organ is much more frequently the seat of these lesions than the latter. I shall therefore direct the greater portion of my attention especially to any lesions following traumatic injuries of the spinal cord and its membranes.

It seems necessary to call attention to certain

errors as a preliminary to the consideration of our first inquiry. One of the most important of these has been expressed by Mr. Erichsen in the following language:¹ "The consideration of the effects that may be produced on the spinal cord by *slight blows*, whether applied to the back or to a distant part of the body, is not altogether a matter of modern surgical study arising from the prevalence of railway accidents, but had, long antecedent to the introduction of modern means of locomotion, arrested the attention of observant practitioners." Since the above statement was made it has been clearly demonstrated to be erroneous by anatomical and experimental investigations. The anatomical studies have shown that the spinal cord is the best protected organ in the body, and experimentation has fully confirmed this position. The experiments which I made on dogs—the total number being 141—which were arranged and conducted for the especial purpose of producing concussive lesion in the spinal cord and its membranes fully convinced me that it required a *very severe blow*, which must even be delivered on certain limited areas of the body, in order to accomplish this object. I am likewise satisfied that this conclusion must necessarily follow a careful study of my report entitled "An Experimental Study of Lesions Arising from Severe Concussions."²

It should be furthermore stated that the lesions produced in the spinal cord and its membranes were rarely apparent to the unaided eye, but were readily revealed under the microscope. This statement, however, does not apply to those cases in which there were either fractures or dislocations involving the vertebræ; since the lesions here were comparatively coarse.

The statement that a rupture of the spinal membranes has occurred, or that there has been a gross hæmorrhage into the substance of the spinal cord, or between the cord and its membranes, is certainly not entitled to credence unless coupled with the acknowledgment of either a fracture or a dislocation of a vertebræ. This statement is based on my examination of the lesions found in the spinal cord, and its membranes, and I am so thoroughly convinced on this point, that I feel fully warranted in making this positive statement. The so-called "railway spine" includes true concussion arising from blows, falls, gunshot wounds, lightning strokes, electric shocks, etc., likewise contusions on the back, sudden flexions of the spinal column, sprains, wrenches, and twists. Dr. John A. Lidell says, in discussing the consecutive effects of some of these injuries, that:³ "Among the remote effects of *sprains, wrenches and twists* of the spinal column, are chronic inflammation of the vertebral

¹ On Concussion of the Spine. A New and Revised Edition. London: Longmans, Green & Co. 1882.

² P. Blakiston, Son & Co., Philadelphia, 1890.