1883, her ligaments were shortened. The operation was like the former, except that the left ligament broke while being pulled out, and the canal had to be laid open to the extent of about half an inch before it could be again caught up. In this case, except during the operation, the spray was not used. Pus appeared on the fourth day; and by degrees the slack of the ligaments sloughed away, as, indeed, they also did in the first and third cases. The discharge was never great; and the patient was sent home on the twenty-third day after operation, she having been more or less out of bed for some days previously.

The note taken a fortnight afterwards is as follows. The patient had been going about freely for the past week, and had menstruated without headache, or any disturbance whatever. She stated that she felt perfectly well. The uterus was found somewhat anteverted; the cervix high up, and the whole organ lying nearly horizontally across the cavity of the pelvis, yet easily movable. This condition of comfort continued for nearly three months, when many of her old symptoms reappeared. On July 2nd the following note was taken. The uterus was in the position formerly described as existing after the operation; the cervix was smaller and softer; the cavity was three inches in depth, and considerable leucorrhœa existed. The patient complained of backache, and pain in the left ovarian region, on much exertion, and had occasional attacks of morning diarrhœa. When questioned as to improvement, she unwillingly admitted that she had less diarrhœa, much less headache, was much more able to walk freely, and the bladder-trouble was gone. She had become very stout, but thought herself far from being well.

CASE III.—Mrs. M., aged 45, began to menstruate at 18, and was regular and natural in her periods, until pregnancy, one month after marriage, at 25. She had four children naturally, the last thirteen years ago. She did not recover well from this confinement, and ever since suffered from profuse leucorrhœa, backache, bearing down, and inability to walk. Ten years ago retroversion was diagnosed, and all sorts of pessaries and other forms of treatment were tried by one medical man after another, without any permanent relief. For the past year she had been almost entirely confined to bed. I saw her first on October 20th, 1883, and made the following note of the condition of the pelvic organs. The whole uterus was much hypertrophied, its position was that of exaggerated retroversion, the fundus lying, as it were, on the perineum. The patient complained of great backache, and bearing down, whenever she was more than a few minutes in the erect attitude, and of great difficulty and pain during defecation. The uterus was 3½ inches in depth, and was restored to the normal position with difficulty and pain. There were no bladder-symptoms. The patient was very thin and haggard, and took little or no food. She was watched and treated for some months by Dr. Turner and myself, all the means we could think of being tried without more than passing benefit. Most pessaries were gradually borne down by the heavy uterus; those which continued to sustain it becoming unbearable by the patient. Means used to lessen the bulk and congestion of the organ had no permanently good effect. She was operated on on February 20th last; and, although the spray was used during the operation and at every subsequent dressing, and the wounds remained quite sweet, the slack of the ligaments sloughed on both sides, preventing the wounds from healing for nearly six weeks. Otherwise, a good recovery was made. After being six weeks in the country, she came back to town, and was examined on June 25th. She was then able to walk pretty freely and be out of bed all day, was looking much better, and had little or none of the great mental depression from which she formerly suffered. Defecation was quite normal; but she had a rather frequent desire to micturate; not, however, accompanied by pain during the act. The uterus was normal in position, with a tendency to anteversion, 3 inches in depth, not tender, and moderately movable. There was a fold of loose tissue in the posterior vaginal fornix. No menstruation had occurred since two months before the operation. It may be mentioned that this patient continued to wear a large Hodge's pessary for three months after the replacement, owing to a fear on her part that, without it, her old symptoms might return.

It is somewhat difficult to arrive at a sound conclusion in regard to new operative means for the relief of disease. Men are apt to range themselves for and against a new method, and give their experiences shaded or brightened by preconceived notions on the subject. In giving the details of the above cases, I have tried to make plain unvarnished statements, and leave you to draw your own conclusions from them. Permit me, in closing, to advert to one or two points in connection with the operation, drawn from my personal experience, and state my own belief in regard to its results.

1. It is better to use the spray, and to keep the wound aseptic until it has wholly or nearly healed. There is hardly any hope of its healing

by first intention; but, if kept aseptic, it heals more quickly than it would otherwise do.

2. The loose part of the cord should not be folded up in the wound, but the greater part of it cut off, so as to avoid the presence of sloughing tissue in the wound. Properly secured by sound stitches, and with the uterus supported by a good pessary, there is no danger of the cut ends being drawn into the abdomen, they being soon secured by adhesion.

3. The ends of the ligaments can be most easily reached by standing on the side on which you are operating, as the outer edge of the ring is more easily felt by the finger when one stands on the same side.

4. Contrary to Dr. Alexander's recommendation, I have found that the end of the round ligament is more easily isolated by grasping it with a broad pair of dressing-forceps. The cross fibres which prevent it from running out can then be cut or torn gently away, one by one, until it begins to come out freely. In my second case, where the fingers were used, the ligament broke, and the canal had to be opened up before it could be again seized.

5. In this region, an elastic bandage put round the waist and thighs will be found more effective in keeping the wound aseptic than a large dressing with an ordinary or flannel bandage, as the former adapts itself to the varying position of the limbs, and prevents air from being drawn under the dressings.

Referring to the results of these cases only, it seems to me that we cannot promise much in the way of certain and immediate relief from this operation. It remedies the position, but not the condition, of the uterus. I caught at it because, although often using severe means, I have been very unsuccessful in curing chronic hypertrophy of the womb, especially when accompanied, as it so often is, by some form of displacement. The results of this operation, as I have given them, although far from brilliant, are such as to lead me to continue practising it in obstinate cases, in the hope that, the malposition being remedied, the disordered condition may be more readily subdued.

A CASE OF ALEXANDER'S OPERATION OF SHORTENING THE ROUND LIGAMENTS IN A CASE OF AGGRAVATED PROLAPSE AND RETROFLEXION.

Read in the Section of Obstetric Medicine at the Annual Meeting of the British Medical Association.

By GEORGE ELDER, M.D.,

Surgeon to the Hospital for Women, Nottingham.

THE patient upon whom this operation was performed, has been known to me, since 1872, as an almost constant attendant at one or other of our local medical charities; and latterly, as spending most of her time either as an in-patient of one of these institutions, or at home, confined to bed.

Her history is briefly as follows. Prior to the age of 36 years, her health had always been good, and her ability to do her share of hard work unimpaired. Of this she had more than usually falls to the lot of working men's wives, as her husband's drinking habits compelled her to work enough for both.

Whilst lifting a heavy weight, she felt something in "her inside give way;" and, from that time till date of operation, her life had been spent as previously mentioned. In addition to the ordinary discomforts arising from a heavy retroflected and prolapsed uterus, aggravated by the effects of a badly ruptured perineum, her most urgent complaint was one of incontinence of urine, amounting to constant dribbling when in the erect position. Her life was rendered miserable by this state of matters, and to remedy it many and varied forms of treatment were used.

For nine months at a stretch, she lay in bed in one of our hospitals; so that it cannot be said, at least, in this instance, that whatever good the operation has done, might fairly be attributed to the necessary lying in bed.

Hot-water injections, position, pessaries of all kinds, intra-uterine stems, medicated tampons, with the administration, internally, of appropriate remedies, were, singly and in combination, tried, with little permanent good effect; and it was when almost despairing of anything short of extirpation of the peccant organ being of any service, that she came under my notice again last February. My attention had been drawn to Alexander's operation by reading a paper by Mr. Lediard, of Carlisle, and the case under notice seemed a crucial one to test it.

On March 15th I cut down upon both round ligaments, finding no difficulty in reaching and separating them from surrounding tissue, and,

whilst the uterus was held in normal position, pulled them out fully an inch and a half. Held in this position, the upper part of the ligaments was sutured to both sides of the wound; and, to prevent the possibility of their slipping, the loose portions were made tight by placing under them pieces of a gum-elastic catheter. Suturing other parts of the wound, and dressing with iodoform and absorbent cotton-wool, finished the operation.

The after-progress of the case, whilst in the hospital, was satisfactory. On April 5th, the wounds were all but healed, and she would then have been dismissed but for trouble arising from internal hæmorrhoids, which she was desirous of having removed. This I did, and she left for a convalescent home on May 16th.

On May 5th, the uterus was in good position, and braced up behind the symphysis.

From this date she got about in the ward, but, as a precautionary measure, a small ring-pessary was placed in position. Since her return from the convalescent home she has been engaged in all kinds of domestic work, completely relieved of her former sufferings.

On June 22nd, I found the uterus normal in position, and distinctly diminished in size.

REMARKS.—There could not possibly be a better test-case than the one narrated; and, so far, the result has been almost better than might have been anticipated. By means of a simple operation, devoid of danger, Dr. Alexander has given the profession a new method of treating aggravated cases of prolapse and retroflexion, which I hope they will try; and if, as I hope, time confirms its worth, then it will be one of the most valued means at our disposal for combating a class of cases amongst the most disappointing in our practice.

Mr. BURTON (Liverpool) had had considerable experience in Alexander's operation, having, since October last, performed it either thirteen or fourteen times. Eleven or twelve were cases of retroversion, one of prolapsus with cystocele in a young virgin, one of complete prolapsus in an elderly woman. From his observation, he was inclined to look upon the operation as one, in certain cases, that offered better prospects to the patient than any other plan of treatment. He must express his thanks to Dr. Reid for the careful manner in which the subject had been brought before the Section. He thought his (Dr. Reid's) cases were very severe ones of longstanding retroversion, in which a morbid condition had been brought about by the displacement. That could not possibly be cured in a short time, and he had little doubt that Dr. Reid's cases would still continue to improve, as, the uterus being put right as to position, the chronic and painful hyperplasia must necessarily improve in time. In regard to his own cases, he was very well satisfied with the results obtained, and thought he had seen benefits that could not have been achieved by any other method in as short a time. He had commenced operating with the spray, but had now given it up, and his results in regard to healing by first intention were not any the worse for the change. His results on this point were different from those met with by Dr. Reid, as in almost all cases union was obtained by first intention (all the cases but three). He was careful to dry the wound, and close by suture as accurately as possible, then place on a layer of Gamgee tissue smeared with about an ounce of glycerine and bichloride of mercury (1 to 1,500), and over this a larger layer of the tissue dry. He then placed over this a sponge, for the sake of pressure, and to prevent the accumulation of serum; and over all an elastic bandage. The bandage was removed in forty-eight hours. In one case, secondary hæmorrhage came on, thirty-six hours after operation, from sloughing of the cut end of the ligament, that peeped out of the lower angle of the wound; and he now took the precaution of ligaturing the ligament before cutting off the "slack."

Dr. ALEXANDER (Liverpool) desired to refer to several points in connection with the operation. 1. The ligaments were delicate structures, and difficult to find; and operations might fail, in the hands of inexperienced surgeons, from failing to catch them up properly or to separate them. 2. The ligaments must be made to adhere to the parts effectually before the patient was allowed to get up. Some had objected to the long time before the patients were allowed to get out of bed. This was intentional, not dependent on the state of the wound. To allow the patients to get up earlier would have destroyed the effects of the operation. 3. The operation was only designed to put the uterus into position, and to maintain it there, and did not promise a cure to nervous symptoms supposed to depend on the displacement. Cystoceles were not cured by it; and he was very sorry it would not cure that and all other diseases, as some seemed to think it should; but he never thought or said it would.

The PRESIDENT (Dr. Godson) considered that the papers read showed clearly that the operation effected a cure of the displacement;

but whether it did good beyond this was questionable, and it required further operations, and more time to elapse since their performance, in order to form a fair opinion regarding it. For his own part, he should wait until he was more satisfied of the benefit before he undertook the operation.

ON MASTOID INFLAMMATION, AND THE TREATMENT OF OTORRHOEA WITH DRY POWDER.

By CHARLES WARDEN, M.D., F.R.C.S. EDIN.,
Honorary Surgeon to the Birmingham Ear and Throat Hospital.

I OFFER apologies for selecting so very common, well known, and well understood an affection in connection with ear-disease. My object in doing so is, first of all, its frequency; secondly, its occasional, if not generally, serious results; and thirdly, for the purpose of considering its mode of treatment.

I need not detail its symptoms; they are, of course, familiar to all, being those of ordinary inflammation in other structures, namely, heat, pain, redness, and swelling. I will, however, relate the history of a case which I select as typical, one going to abscess of the mastoid region; although the chief point I wish to advance and hope to prove is, that a vast number of cases, which indicate every evidence and threatening of suppuration, do not suppurate; but that, under appropriate treatment, the inflammation is subdued, and the ordinary and generally recognised plan, that recommended by most authors, namely, that of early and deep incision, rendered quite unnecessary and useless.

As to the causes, we may mention the various catarrhal conditions of the meatus and tympanum, in which inflammation may spread and extend to the mastoid cells and brain, in which the cerebrum and cerebellum may be attacked; especially the latter; the exanthemata, external injury, abscesses in the meatus auditorius externus, polypus, and strumous inflammation. The periostitis which accompanies them is characteristic.

The symptoms are, rigors, furred tongue, quick pulse, increased temperature and severe pain, redness and swelling of the post-auricular and supra-auricular regions; sometimes very rapid tumefaction; which is even erysipelatous, and the sterno-mastoid muscle is at times implicated. I have now an example of this condition under my care, in a patient who has had a succession of polypi, several having been removed by myself. The attack was induced, in my opinion, by the application of dry powders packed in the meatus with cotton-wool; this being one of several that have been brought under my notice, arising from the same cause.

Pus generally escapes through the meatus, and, when abscess ensues, it produces even projection of the entire auricle, great constitutional disturbance, most intense pain, strabismus, and even in many instances ptosis.

The case I have to relate is that of H. E., aged 40. He is of strumous aspect, and has strabismus of the left eye. The right ear is affected, and he has been suffering from deafness for five years; it commenced with pain inside the ear-passage; no swelling or heat. Six months before, he had a fall, and fancied he was struck falling on some bricks, but there is no evidence that the part was bruised; nor was he aware of taking cold. He had some treatment and was tolerably well for a year or more, when he again suffered pain and discharge from inside the meatus, which continued for three months. At the expiration of that time swelling began outside, at the back, behind and around the ear, accompanied by heat, pain and redness. The pain became intense beyond endurance when I was requested to see him. On arrival, I found enormous swelling of the mastoid region, with every evidence of suppuration, extending in all directions, radiating from the mastoid all over the face and head on that side. I at once made an opening, and evacuated a large quantity of pus, of a very offensive odour, to his great relief. The wound was kept open, and discharged for a month or six weeks, a drainage-tube being inserted; it afterwards healed and remained sound and well for seven or eight months, and during that period he was in good health, there being not the slightest pain or even tenderness. At the end of that time, he took cold, and all the symptoms returned. He had intense pain, so severe that he could get no sleep; it was again treated by lancing, fomentations, poultices, and opiates. In about a month he recovered from this attack, and again all was well; he then continued right for nine months, when he had another seizure, with the same treatment and result; the discharge from the meatus remained from the first attack. He then continued well for only three months, when he was visited by a fourth attack, which was even more severe than the former ones, but the wound was kept open after lancing for a shorter time, and ceased discharging sooner.