health is fair. He believes that his brother was murdered in the work-house, and that the assassins are now after himself. He fancies that they are constantly watching him, hiding themselves in the ceiling and under the floors and even suspended in mid-air over head. He heard them constantly plotting how they may kill him. One of their favourite modes of attack is by shooting vitriol, ammonia, and "black poison" at him, besides using to his injury other magic and black arts. These persecutions go on principally at night, and the arrangements which he makes for warding them off are worthy of remark. He secures small pieces of wood in the day-time, by which he wedges the door of his room at night, and places his bed so that, should anyone attempt to enter, he must be awakened. He envelopes his head with his pillow-case, which drops over his face, stuffs his ears and nostrils with cotton-wool and his mouth with a pocket-handkerchief, and thus, he believes, he keeps out any drug or vapour when he is asleep. All the key-holes, ventilators, and open spaces about the doors and shutters are also carefully covered with blankets or sheets. It takes him more than an hour every night to complete these arrangements, and when he lies down under his mattress he considers he is in circumstances of comparative safety. He frequently complains of pains in the head and burning sensations on his skin, which he attributes to his unseen enemies shooting poison on him. He complains during the day, but is worse at night, and every morning recounts some new plan of attack that his tormentors have been attempting. He has been under treatment for eighteen months; but in his, as in similar cases, it is almost impossible to carry out a system of treatment, and no improvement has taken place in the case. He threatens to commit suicide, to put an end to his sufferings; but has never made any actual attempt.

REMARKS.—These cases have several characters in common. 1. They all occur on subjects who have suffered from syphilis. 2. The character of the delusion is similar. They all believe themselves the victims of conspiracy, persecution, and cruelty undeserved. 3. They are all subjects of hallucinations of touch, hearing, and sight. 4. They are all suicidal, two of them having made actual attempts on their own lives. 5. They are all dangerous to others when under the influence of their delusions, and were quite unsafe to be at large. 6. They are all worst at night, which circumstance may be dwelt upon as indicating the syphilitic nature of the disease. 7. They all suffered severely from cephalalgia: their abnormal sensations were in the brain. 8. The treatment produced but little effect, and it is feared they can only be looked upon as incurable; but still, by the relief of symptoms, much of the distressing character of the disease may be assuaged.

ON THE TREATMENT OF GUN-SHOT WOUNDS BY CHLORIDE OF ZINC.

BY CAMPBELL DE MORGAN, F.R.S.,
Surgeon to the Middlesex Hospital.

THE present war affords a great opportunity for testing the merits of the various antiseptics which have of late been recommended and adopted. Carbolic acid has, so far as I can learn, been as yet almost exclusively employed. It would be impossible, amidst such scenes of wholesale destruction, to use this agent with the care and nicety on which its undoubted benefits largely depend. Profuse and foul suppuration, with its constant attendant, pyæmia, is but too common. I should much like, under these circumstances, that a trial should be given to the chloride of zinc—an agent which I still employ, in preference to all others, in a large number of cases, and to which I often return after the use of others.

Like other antiseptics, it often prevents suppuration, and allows the most rapid and quiet healing in cases which would appear at first incapable of running a favourable course. It never acts on the system at large, and it can be used by any ordinary nurse without other qualification than that of attention to orders.

In recent wounds, where the skin is not much thinned, I use a solution of from thirty to forty grains to the ounce of distilled water. I use this freely, especially in the crevices and dark corners of a wound, in the cavities of bone, as well as elsewhere; and I sponge it into the wound until the whole surface is creamy. This causes an exudation of blood for a time. Any large vessels which bleed in consequence of the application may be secured; the small ones need not be cared about. The wound may be put together in the ordinary way; and it should be covered with linen or lint wetted with a solution of five grains of chloride of zinc to the ounce of water. Care should be taken that the covering is kept constantly wet. If the wound be a crushed one, which will not unite, it may be sponged out as before, and then covered with the weak solution.

The wound, which has been brought together, may become in twelve or twenty-four hours filled with fluid. This should be let out by loosening a stitch; it will be found to consist of fluid bloody exudation. The wound may be brought together again, and the weak solution used as before.

With no more care than this, I have had rapid cure without suppuration in crushed and lacerated wounds; perfect union by first intention in large operations, as high amputation of the thigh, etc.; and very commonly union with only slight suppuration in the course of the wound, and this where ligatures have been placed on all the vessels requiring them.

When a wound becomes foul in the interior, it should be syringed out several times a day with the weak solution.

No doubt pyæmia will ensue, in spite of all these applications; but it is rendered much less prevalent. This must be so, when the discharges are kept a great degree free from putrefaction.

RECENT IMPROVEMENTS IN THE PELVIC BAND (AN INSTRUMENT FOR AIDING LABOUR).*

BY PROTHEROE SMITH, M.D.,
Physician to the Hospital for Women, etc.

HAVING fully described the pelvic band in a paper read before the British Medical Association at Leeds last year, and having exhibited it at meetings of the Obstetrical Societies of London and Edinburgh, as well as before the Société de Chirurgie of Paris, etc., it will only now be necessary to mention certain alterations and improvements in the instrument by which the end proposed—viz., to give efficient aid in labour—is better and more readily attained. I stated last year my views as to the dual character of the force employed in parturition: since then, Professor Haughton has demonstrated, by a series of ingenious experiments, that, of the two forces engaged, that of the lumbo-abdominal voluntary muscles exceeds that of the uterus in the ratio of nearly ten to one.

I claim this first principle as the basis of my argument for the expediency of supplying an artificial force to subsidise that of the lumbo-abdominal muscles, when impaired or lost by the constriction of dress or by anæsthetics. My own experience proves that my conclusions from these premises are just. It has enabled me to practise midwifery with infinitely less labour and anxiety to myself, and with greatly diminished peril to my patients. Moreover, it has lessened the duration of parturition and the consequent attendance of the accoucheur. It has relieved the uterus of the undue demands on its powers through absence of the voluntary muscular forces; it has induced efficient contraction of the uterus after speedy expulsion of the placenta; it has prevented and controlled *post partum* hæmorrhage; it has readily rectified the anteverted condition of the uterus when it has depended on laxity of the abdominal walls and want of lumbar curve. It prevents, if worn during the later months of pregnancy, the separation of the sheaths of the recti, and the distressing hernia which follows such separation.

It may be well here to enumerate a few of the advantages claimed for the pelvic band in labour. By it a fixed point is secured for the exercise of mechanical force, from which, by the aid of powerful springs, with a well-adjusted belt, it supplies a power which no circular bandage, whether tightened by springs or otherwise, is able to effect. By these means supplemental expulsive force can be employed during the pains, and relaxed in the intervals or employed permanently, as *post partum* and otherwise is often needed, thus simulating the action of the abdominal muscles in a normal state during parturition. It will readily be seen how, when the voluntary muscular force is wanting permanently from the result of pressure, or temporarily from the abuse of anæsthetics, the want of this paramount force throws the burden of the act of expulsion on the overtaxed uterus. Thus this overworked viscus succumbs to the undue strain, and does not recover itself as do the other muscles after their efforts during parturition. Hence the long period necessary for the "getting up", the risk of subinvolution, prolapsus, and other displacements and disorders of the uterus, which often follow the accouchement of the civilised woman.

It will doubtless be remembered, both from my paper read at Leeds and also from the more complete description which was published this year, together with woodcuts and illustrative cases, in the *Lancet* of June 4th, that the principle of the pelvic band consists in a steel band fitting and grasping the pelvis immovably, and connecting two pads, one on the sacrum, the other on the pubes; and these two antagonistic points of sup-

* Read in the Midwifery Section before the Annual Meeting of the British Medical Association in Newcastle-upon-Tyne, August 1870.

port tend further to fix the pelvic band. On each side of the lumbar spine arise two perpendicular springs, crossed by one or more horizontal springs, so attached to the abdominal belt as to offer the means of employing at will depressing, compressing, or uplifting force, as occasion may require. The chief improvements made in the pelvic band are as follows. The fastening of the pelvic springs to the pubic and sacral pads is effected by screws instead of spring-bolts, and is therefore more easily disengaged, thus facilitating the removal of the instrument after the termination of labour. Instead of the belt being strapped to a buckle on each side of the transverse spring, it is now made in three divisions, each division terminating in a long strap, which, passing through a corresponding roller on each side, is tightened or relaxed at will, and fastened to hooks placed in the middle and sides of the belt. This form of belt answers very well, and is easily managed whilst the patient occupies a position on her back; but, as more applicable to the position ordinarily adopted in this country—on the left side—I have made additions to the pelvic band, and so altered the bandage as to offer the advantages of being used with greater ease by the accoucheur, and of affording increased help and comfort to the patient. This, as you will observe, consists of two flat perforated caoutchouc bags, one placed at the back between the instrument and the loins, the other in front underneath the bandage, and extending upwards mesially from the pubes. When inflated and acted upon by the springs and belt, they increase considerably the power of compression, at the same time that they form soft cushions which allow of the necessary force to be employed without discomfort, whilst imparting to the patients a feeling of great support and help. The belt is so constructed that, by running through rollers at the end of the transverse springs, and also through others placed on each side of the belt itself, the straps when thus returned can, one or all, be tightened with the greatest ease, and fastened without difficulty to hooks fixed to the band behind.

By following the movements observed in natural labour, by these appliances the accoucheur is given the power of materially helping his patient in her hour of sorest need by shortening the period of her sufferings and by greatly lessening her perils and those of her offspring; whilst it is not altogether unworthy of remark that it very much curtails the time, toil, and anxiety, of her medical attendant.

THERAPEUTICAL MEMORANDA.

THE TREATMENT OF "HOUSEMAID'S KNEE".

I BELIEVE that the treatment of inflamed bursa patellæ by the plaster of ammoniacum and mercury is not so generally known and accepted as it deserves to be. The following cases are selected from several in which I have used it with success, and require no comment.

CASE I.—June 20th, 1867. E. J., a young carpenter, came to me with a very largely distended bursa over the left patella, as large as half a cricket-ball. It had been so about ten days, with not much pain or inflammatory symptoms. I had it covered at once with the plaster spread on leather. On July 5th, there was great improvement. The hot weather made a fresh plaster necessary. On the 12th, the swelling was entirely absorbed. He had continued to work throughout, and was now cured.

CASE II.—S. S., a labourer, came to me on November 10th, 1869, with the bursa patellæ acutely inflamed. There were great pain, numbness, and heat. I sent him to bed, and had constant hot fomentations applied for two days to subdue the acute symptoms. On the 12th, the plaster was applied. On the 16th, he was covered with erythema, the irritation commencing and spreading from the plaster. A cooling saline draught was ordered. On the 23rd, he walked four miles to see me. The knee was quite cured.

CASE III.—On July 18th, 1868, a housemaid awoke in the night with acute pain at the knee. I found great pain, heat, and tenderness over the patella. The bursa was much swollen. She was feverish and ill, and was ordered to remain in bed and keep the knee covered with spirit lotion. On the 23rd, the acute symptoms had subsided. The bursa was very distended with fluid. The plaster was applied. On the 30th, the swelling was entirely absorbed. She was at work again.

CASE IV.—On June 18th, 1870, W. M., a carpenter, came to me with a large inflamed bursa over the left patella. It was painful in walking, and had kept him awake two or three nights. There was tenderness on pressure. The plaster was applied. On the 27th, I found the fluid almost absorbed; and on February 3rd he was quite cured.

CASE V.—Mrs. C., a coachman's wife, accustomed to scrub a brick floor, consulted me on May 28th, 1870, with great enlargement of the

bursa patellæ, which was also painful and tender. After one night's thorough fomentation, she applied the plaster. On June 4th, there was great improvement; and on the 18th she was cured.

CASE VI.—On July 9th, 1870, Mr. L., an old farmer, a very religious dissenter, and, as he said, "pretty often on his knees," came to me with great enlargement of the bursa patellæ, communicating with a large bursa over the head of the tibia, forming a large double swelling. He found great difficulty in moving about, but had not much pain or tenderness. The plaster was applied at once. On the 16th, the swelling was rapidly diminishing; and on the 21st he was almost cured, and did not attend again.

CHARLES ROBERT THOMPSON, Westerham.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS OF GREAT BRITAIN.

MIDDLESEX HOSPITAL.

EXCISION OF WENS: CARBOLIC ACID TREATMENT OF WOUNDS.

(Under the care of Mr. HULKE.)

A TIN-PLATE-WORKER, aged 59, was admitted into Pepys' Ward on the 19th of April, 1870, with several wens on the back, and on the scalp. One in the middle of the loins, and another on the shoulder, of about the size of a large apple, gave him so much annoyance that he desired their removal. That in the loins was soft, and the skin covering it slightly red and tender. Both were split and turned out, and the incisions washed with a carbolic lotion containing one part of the acid in forty of water, and then dressed with the oiled silk, lac, and plaster, as recommended by Mr. Lister. That on the shoulder healed *per primam intentionem*; but subsequently the upper angle opened, and discharged a drop of pus. The incision in the loins suppurated freely. It was this wen which was slightly inflamed before the operation.

STRANGULATED FEMORAL HERNIA: HERNIOTOMY: SAC OPENED: CARBOLIC ACID TREATMENT: IMMEDIATE UNION: RECOVERY.

(Under the care of Mr. HULKE.)

A woman aged 36 was admitted from Finchley into Bird Ward, April 19th, 1870, with a strangulated femoral rupture. The strangulation dated from the afternoon of the previous day. She had been ruptured four years, and had worn a badly fitting truss, which had often let the rupture descend.

The taxis under chloroform having failed, the hernia was operated on by an incision along its inner border. The sac was opened; it contained about half an ounce of bloody serum and a small knuckle of claret-coloured bowel. After this was returned, about an ounce of colourless serum ran from the belly. The wound was closed with silk sutures soaked in an aqueous solution of carbolic acid, and covered with a pledget of cotton-wool dipped in the same solution. On the fifth day, when the dressings were removed, it was found healed; and the sutures were quite dry, without any pus around them. The bowels were first moved on the seventh day. Two days after the operation, her breasts became very swollen and tender (she had been nursing when the strangulation occurred); but this was soon relieved by the local use of belladonna. The only medicine internally given was opium, and this only during the first two days. On May 12th, she returned home. The scar was then soft and healthy.

LARGE SCROTAL HERNIA, ACUTELY STRANGULATED: OPERATION WITHIN THREE HOURS: SAC UNOPENED: CARBOLIC ACID DRESSING: QUICK RECOVERY.

(Under the care of Mr. HULKE.)

An Irish labourer, thirty years of age, was admitted into Clayton Ward on June 27th, 1870, with a strangulated scrotal rupture of about the size of a foetal head. It was excessively tender when handled. The pulse was small and weak. The man lay on his back, with his knees drawn up, and his features pinched. He yelled with pain, and he frequently retched. The taxis had already been tried under chloroform without success. A deep indent over the external abdominal ring separated the scrotal swelling from an oblong portion in the inguinal canal. Chloroform was again given, and the taxis repeated for a few minutes, but again unsuccessfully. An incision was made in the axis of the rupture, over the external ring; this, and also some fibrous