foot is natural. The subsequent bleeding is not alarming; the pain is by no means urgent; swelling results; synovial discharge follows; and, so far as experience demonstrates, the wound is healed and the

Fig. 4.

patient convalescent and able to stand in from six weeks to two months.

Now be good enough not to go away with the idea that every case of talipes varus is to be treated in this heroic fashion; this operation is a *dernier ressort* for obstinacy; an ordinary outside splint suffices for babies, with a gum and chalk bandage. In pedestrians, I have used the splint here engraved with admirable results (Fig. 5). The boot with

Fig. 5.

plantar hinge is in this instance applied to a valgus left foot; the crucial strap of elastic or leather inverts the foot; for varus the steel rod is to the inner side, and the crucial band to the outer; supplying an evertive force. No strap arrangement maintains discipline of natural contour more efficiently. This boot is by no means inelegant, and is made by Messrs. Arnold and Sons. The instruments are supplied by Savigny and Co.

The consideration of tenotomy, and the special treatment for talipes calcaneus and equinus, I will enter upon at a future date.

I will, lastly, read to you an extract from a letter received from the boy's father:

"I beg to take the liberty of offering you, in the name of my wife and myself, sincere thanks for the great benefits my son F. E. has received in the Westminster Hospital. All previous attempts to effect a

cure having failed, we are delighted to know that he is now able to run about with ease and comfort."

[Since the delivery of this lecture, I have treated a case of talipes equinus (nineteen years' duration) by an accurate excision of the key-stone of the tarsal arch.]

REMARKS ON BATTEY'S OPERATION.

By J. MARION SIMS, M.D.,*

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HAVING now given a synopsis of the twelve operations performed by Dr. Battey, I propose to add the seven by myself, and then to analyse the whole, with the hope of deducing more exact rules for our future guidance.

II.—DR. SIMS'S CASES.

CASE I.—Mrs. C., aged 35, the widow of a physician, came from Choofoo, in China, to place herself under my care in 1874. She had been in bad health for a long time. She had had dysmenorrhœa for many years, and menorrhagia for the last two years. She had retroflexion, with hypertrophy of the posterior wall of the uterus; and the left ovary, about the size of an English walnut, was excessively tender to the touch and the seat of constant pain. She was never free from ovarian pain at any time, and it was greatly aggravated during the menstrual flow. She had worn different sorts and sizes of Hodge's pessary, never with benefit, but always with increase of ovarian pain. She suffered much more with an instrument than she did without one. The uterus could be easily replaced and retained in proper position with Hodge's pessary. But it was impossible to adjust one that would not make pressure on the ovary. Nearly a month was spent in fruitless efforts in this direction. At last, I concluded to confine my efforts to the relief of the dysmenorrhœa and the profuse menstruation.

To ascertain the cause of the profuse flow, I introduced a small sponge-tent. When it was removed next morning, it was found to be distended to its fullest extent everywhere, except where it lay in contact with the os internum. Here, for the third of an inch, it was of the same size as when introduced, showing that, at the os internum, there was a circular band of undilatable gristly tissue that did not yield to the force of the expanding sponge. After this, I incised the cervix, and treated it in my usual way after incision. After the next menstruation, the sponge-tent was again tried. This produced sufficient dilatation of the cervical canal to pass the finger to the cavity of the uterus, when I ascertained that there was no polypus and no fibroid tumour, but merely fungoid granulations (hypertrophied utricular glands) to account for the profuse menstruation. These were removed with the curette, and menstruation was restored to its normal state. This was all that I expected to do for my patient, and I was about to dismiss her to return to China (for she was a missionary), relieved of her painful and profuse menstruation, but without any amelioration of the ovarian neuralgia and uterine displacement. As she really felt no better than when she left China, she did not wish to return still an invalid. Indeed, the Board of Foreign Missions would not permit her to return unless her health were restored. I then told her she could be positively cured by an operation, which unfortunately would be attended with some risk to life. I explained to her that the diseased ovary could be removed by abdominal section, and that its pedicle could be secured in the lower angle of the incision in such a way as to hold the uterus in its normal position. She willingly assumed all the responsibility of the operation, and begged for its performance at once. With the assistance of Dr. Harry Sims, Dr. Nicoll, and Dr. W. T. Walker, the operation was performed by abdominal section on February 18th, 1875. The ovary, having undergone cystic degeneration, collapsed in the effort to remove it. The pedicle was secured in the lower angle of the abdominal incision, and the remains of the ovary were clipped off. The operation was followed by an attack of pelvic cellulitis, terminating in abscess of the left broad ligament, which opened by the side of the pedicle at the lower edge of the abdominal incision. But, in the course of a month, she recovered entirely from the abscess and other ill-effects of the operation. Fortunately, the abscess did not break up the adhesion between the pedicle and the abdominal parietes. The uterus seemed to be held up in its

* Continued from page 794 of last number.

proper place by the ligament, and, in a few weeks, Mrs. C. returned home perfectly cured.

Dr. Scott of San Francisco saw Mrs. C. on her way from China to New York, and found her condition as I have described it before operation. He also saw her again in San Francisco three months after the operation, on her return to China, and he wrote to me that the uterus was in its normal position, and that the cure was perfect. I have lately heard from Mrs. C. since her arrival in China, and she remains permanently cured. When I did this operation, I supposed I was the first to perform it for the cure of retroversion; but I was mistaken. Dr. Köberle of Strasburg was the first to suggest it and the first to perform it.

CASE II.—Miss L., aged 40, enjoyed excellent health all her life till about ten years ago, when she was taken suddenly with dysenteric diarrhoea, which was thought to be of malarious origin. The diarrhoea, which lasted off and on for three months, was regularly intermittent, and was followed by neuralgia in various parts of the body. It left her with an irritable rectum, and she had suffered pain ever since whenever the bowels were moved. She had all the symptoms of fissura ani, or of ulcer just within the sphincter muscle. She had been repeatedly treated for ulcer, and she had been twice operated on for fissure, and yet her sufferings had never been relieved by any of these operations. Her bowels were moved regularly and spontaneously every morning. Before the movement of the bowels, she was free from pain; but, the moment they were evacuated, she was seized with violent pain, radiating from the rectum down the lower extremities and up through the abdominal viscera. This enteralgia would continue without abatement all day, and often even till bedtime. Indeed, from the time it seized her, she was never clear of it while awake, for every night she fell asleep conscious of suffering. She usually slept soundly all night from the exhaustion of the daily pain. On waking, she found herself free from pain; but it invariably returned with the morning movement of the bowels, and ran the same course as the day before, to pass away when she fell asleep again at night. On some days, the pain was worse than on others. It did not seem to be influenced by fasting or eating. Miss L. had consulted distinguished physicians at home and abroad. One said she had an ulcer, and made local applications to cure it; another, a fissure, and operated; another, malarial neuralgia, and gave quinine, iron, arsenic, etc.; another, dyspepsia, and treated her accordingly; another, retroversion; and another said there was nothing wrong with the uterus; another, that it was all nervousness, and gave bromides, antispasmodics, tonics, strychnine, iron, and phosphorus; another said she had chronic pelvic cellulitis, and treated her eight months for it, but the ever-recurring pain came daily. In 1872, the rectum was again treated by nitrate of silver for ulcer. In December 1872, she sailed for Europe, and went at once to the south of France, where she was treated with local applications for ulcer of the rectum. In February 1873, while etherised, another operation was made on the rectum; but the pain persisted. She consulted an eminent professor in Switzerland, who said there was no ulcer in the rectum, but that the neuralgic pains depended on misplacement and fibroid of the uterus, and she was sent to Kreuznach, where she underwent a course of treatment for six weeks, but with no relief. She then went to Paris, where an eminent physician said she had no tumour, but merely a displacement, with some inflammation of the uterus. Two other distinguished physicians were called in consultation, who thought that all her sufferings were evidently due to fissure, and she was chloroformed and operated upon for this. The bowels were then constipated for ten days; but when they were moved, the pain returned with increased violence. Then, on consultation, they concluded that there was no organic disease to account for the pain, and that it was hysterical neuralgia. After this, she consulted a very distinguished French surgeon, who said he could find no cause for the pain. He recommended fresh air, exercise, and amusement. She then went to Rome for three or four months; returned to Paris in June 1874; spent the summer in England and Scotland; and returned home in September 1874. But wherever she went, or whatever she did, the rectal pain returned daily always under the same circumstances. But it was not always of the same intensity or duration. During her European tour, as at home, she had occasional attacks of diarrhoea, and now and then attacks of neuralgic headache, all coming on without any apparent exciting cause.

On her return home, after nearly ten years of severe and unrelieved suffering, she determined never to consult another physician; but, during a visit to Brooklyn in January 1875, she was in such agony that her friends induced her to send for one of the most eminent physicians of that city, who investigated her case minutely, and told her frankly that he could find no rectal ulcer or fissure and no other organic cause for the pain. In February, she consulted a distinguished New York physician, who thought the pain might be due to retroversion. But, as

he was about to leave the city, he had no time to investigate the case. She then returned to her Brooklyn physician, who advised her to see me. I saw her on March 20th, 1875. She was suffering intensely, as already described. Like many others who had seen Miss L. before me, I thought there must be a fissure or an ulcer within the sphincter. The first thing I did was to etherise her, dilate the sphincter, and explore the rectum with a Sims's speculum, looking up to the very beginning of the sigmoid flexure; but, to my great surprise, I found nothing to account for her severe suffering. I then turned my attention to the uterine system. The uterus was retroverted. The fundus was hypertrophied, and its posterior wall, along the cervix and body, was very sensitive to pressure. The left ovary seemed to be a little enlarged, and was tender on pressure. One great trouble in the way of investigation was vaginismus, the gentlest touch producing intense agony. For a whole month, I made strenuous efforts to rectify the malposition, but I failed utterly to fit an instrument that would hold the uterus in its normal position. The narrow, short, virgin vagina appeared to be the chief obstacle. I tried the intrauterine stem, and failed. After these fruitless efforts, I suspended the treatment during the summer, and saw Miss L. again in the fall. I then etherised her to make a more minute examination of the uterus and its surroundings. I wished to determine whether there were adhesions, and to ascertain more precisely the size and relations of the ovaries. The vaginal pain had always caused a spasmodic contraction of the abdominal muscles, which had rendered all previous examinations unsatisfactory. But, under the anæsthetic, these muscles were relaxed, and the examination revealed the fact that the uterus could be easily anteverted, that there were no adhesions, and that the left ovary was twice as large as it should be. Having now located the exact position and relations of the ovary when the uterus was elevated into its proper place with the uterine repositors, I desired to repeat this examination when my patient was not anæsthetised, for the purpose of ascertaining the degree of ovarian sensitiveness. I wished to see if, by bimanual pressure, the ovary was possibly the starting-point of the ever-recurring recto-entalgia. Accordingly, about a week after the investigation under the anæsthetic, I repeated the examination without an anæsthetic. Notwithstanding the vaginal pain, which was always severe, the uterus was placed in its proper position with the uterine repositors. The left index finger was then passed behind the cervix up to the region of the ovary to the left side of the Douglas' cul-de-sac, the repositors, *in situ*, still holding the uterus in its normal position. Then forcible pressure was made with the fingers of the right hand from above, pressing the abdominal parietes down in the direction of the index finger in the vagina. The ovary was then suddenly compressed between the two opposing forces, with the effect of producing instantaneously the peculiar pain that followed the movement of the bowels every morning. The pain from digital pressure radiated from the ovary all over the abdomen, precisely as it did from defæcation. I had for a long time been talking to Miss L. about Battey's operation in her case. This examination satisfied me that her's was a suitable case for the operation; that it was, in fact, her only hope of being perfectly restored to health. I, therefore, rested from all further temporising efforts, and advised Battey's operation. She did not hesitate a second about it, and made up her mind at once to have it done.

At that time, I had the idea that the proper way to do this operation was by the vagina. But in this instance, as in the one previously detailed, I proposed to do it by the abdominal section, for the purpose of fastening the pedicle in the lower angle of the external incision, and thereby of curing the retroversion.

With the assistance of Dr. Harry Sims, Dr. Nicoll, and also of Dr. Andréi of San Francisco, the operation was performed on October 25th, 1875. In dragging the left ovary through the abdominal incision, it collapsed. It was a conglomeration of thin cysts. After securing the pedicle in the lower angle of the incision, the remaining portion of the ovary was excised. The wound was closed and dressed in the ordinary way. The recovery from the effects of the operation was rapid. The pulse and temperature never rose over 100. The bowels were moved five days after the operation, without the pain that had for ten years invariably followed. The clamp was removed on the sixth day. She kept her bed for nearly three weeks. The bowels were moved regularly during this time without inconvenience. Then she was allowed to sit up and to move round the room a little. She seemed to be perfectly cured. With the performance of the operation, the vaginismus vanished entirely, which was an unexpected result. But soon she began to suffer when the bowels were moved. The old pain began to recur, and to gradually grow worse from day to day. This was certainly a most discouraging thing, after we had all thought the operation a success. On examination, I found a slight return of the vaginismus, and, on passing the finger into the vagina, I found that the adhesion between the ligament and the parietes of the abdomen had

given way, or was absorbed, and that the uterus was lying back on the rectum precisely as it did before the operation. The operation, after promising so much, and after really doing so much for a month, proved at last to be a failure. True, her suffering was not as great as before the operation. The pain was somewhat ameliorated. She was improved, but not radically cured, as I expected her to be. If the right ovary had been removed with the left, the result might have been different. During the month that the fundus of the uterus was held up by the ligament attached to the abdominal parietes, she was free from pain; but, when the ligament gave way, the uterus fell back and the pain returned. If this accident had not happened, there is every reason to believe that the cure would have been permanent.

CASE III.—Miss W., aged 35, had had dysmenorrhœa nearly all of her menstrual life, and for the last ten years had never been clear of pain in the sacro-pelvic region. She had had the best of medical treatment without the least improvement. Her sufferings had rendered her morbid and morose; and she told her physician, Dr. Jordan, that she would certainly commit suicide if something were not done for her relief. Dr. Jordan then called me to see her. Her dysmenorrhœa was partly due to stenosis of the cervix, particularly at the os internum, but in a greater degree to the ovary. Indeed, the left ovary was the fixed seat of never-ending pain, which was aggravated during the menstrual flow. It was also exceedingly tender on pressure. I believed the ovary to be the principal seat of disease, the origin of all her suffering. Yet I proposed to Dr. Jordan to incise the cervix, with a faint hope that it might in some degree ameliorate the pain of the menstrual flow. For this purpose, I admitted her to the Woman's Hospital, and the operation was performed in October 1874. But she was in no way improved by it. In November 1875, I extirpated the left ovary by the vaginal section. The operation was followed by an attack of pelvic cellulitis, which terminated by resolution. I made the mistake of removing but one ovary, and she was not only not benefited, but made worse by the operation.

[To be continued.]

SOME AFFECTIONS OF THE NERVOUS SYSTEM DEPENDENT UPON A GOUTY HABIT.*

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THE dependence of "nervous derangement" upon a "gouty habit" has long been known; but I do not think that the frequency of such association has been fully recognised; and my object in writing this paper is to recall attention to the subject, and to point out, so far as I am able, the characters of disturbances in the "nervous" functions which would lead to a diagnosis or suspicion of a "gouty" diathesis.

First, let me say a word or two as to both "gout" and "gouty habit". The former means a "special" change, of inflammatory sort, in the tissues of the joints, accompanied by the deposit in those tissues of urate of soda. The latter, the "gouty habit", means the underlying cause of those special symptoms in the joints, a something which may express itself also in various organs and in diverse ways.

We do not know what is the starting point or essential fact of "gouty habit", but this we may remember, that between the simply chemical process of food-digestion in the stomach, and the ultimate making up, and breaking down, and carrying away of the waste, of tissues—be they in brain, or nerve, or heart—there comes in the process of "assimilation"—or "concoction of the juices", as our forefathers called it—and also the conveyance of "excretory" material to excreting organs, and that these involve an infinity of changes in the quality of blood. This blood, which comes from food and goes to tissue, which comes from tissue and goes to excreting organs, may be healthy and lead to the formation of healthy tissue and the performance of healthy function; or it may be so deranged as to pervert the "nutrition" of certain tissues by a specific inflammatory process—"gout"; or it may disturb the "functions" of other organs by the impression which it makes upon them—"gouty habit". In other words, the "gouty habit" is a "toxæmia", chronic in its duration and multimorphic in its phases—a "blood-poisoning" induced *within* the system, and so far forth differing from the toxæmies with which we are so familiar, but which are introduced from *without*. That which has led me to believe that many so-called "nervous affections" are due to this "gouty habit" may be thus summarised. 1. The actual presence of gout in the joints of the

individual at the time or at previous times. 2. The evidence of "gout" in ancestors or collateral relatives. 3. The frequent occurrence of acid eructations with chronic dyspepsia. 4. The emission of pale, limpid, acid urine, of low specific gravity, and with traces of albumen or sugar, or both. 5. The variability of symptoms, both as to kind and place. 6. The presence of some alterations in skin-nutrition, such as eczema and psoriasis. 7. The impossibility of referring the symptoms to any known disease of brain or spinal cord. 8. The immediate relief of such symptoms after treatment by colchicum and saline aperients, although simple purgation and treatment upon many other principles had failed.

In the endeavour to arrange this subject, there is great difficulty to be encountered; but I will adopt the method of describing "groups of symptoms" under five headings.

I. *Mental Disturbances*.—Many cases have come before me in which there was great restlessness; the patient could not be still for a moment; was alternately excited and depressed; slept badly, or not at all; was intensely hysterical; and could not attend to business; while others have complained of failing memory; of want of power of attention; of suicidal thoughts; of intense melancholy; others of sounds in the ears; voices, sometimes distinct, sometimes not; and some or all of these of long continuance; but yet all disappearing under treatment upon the hypothesis I have mentioned. These symptoms often alternate with, or accompany, those which I mention next.

II. *Pain in the Head*.—Some of the most intense head-pain that I have met with has been of this character, and been relieved by treatment of an anti-gouty description. The special features are pain on one side of the head, usually parietal or occipital; "grinding" habitually; but forced into almost intolerable severity by movement, such as the jar of carriage-riding, or running down the stairs of a house; and this without any oversensitive nerve-points; without tenderness of scalp; and without any aggravation by mental exertion. It is not affected by posture or by food; it is relieved by physical rest, and may disappear entirely after treatment of the kind that I have mentioned. It is not anæmic, nor neuralgic, nor dyspeptic (in the ordinary sense of that word), and it yields to nothing in the way of treatment that may be directed against those common varieties of headaches. It is very often associated with some of the other symptoms that I have mentioned, and they must be taken into account when making a diagnosis of the malady.

III. *Modified Sensations*.—I. Of these, vertigo is one of the most common, and it may exist alone. It takes sometimes the form of objective movement, but more frequently that of subjective movement, such as the sense of "swimming" or "floating" away. This vertiginous sensation is sometimes determined by posture, and occurs only when the patient lies on one side, it may be the left or the right; the apparent movement of external objects being from that side towards the other.

2. With vertigo is often associated "noise in the ears", not the sound of "voices", but drumming, hissing, singing sounds, recognised to be in the ears, or in one ear, or in the head, and not appearing to come from outside. There is not, or need not be, any mental delusion with regard to these; the patient knowing well that they are inside his organism.

3. Associated with such vertigo and tinnitus there is frequently deafness, and the feeling of "beating in the ear"; and the symptoms are like those described by Menière; but I have found them in the vast majority of instances associated with a gouty habit. With vertigo and tinnitus there may be much mental depression, or attacks of bewilderment, amounting sometimes to those of *le petit mal*.

4. Modified sensations in the limbs may occur. A large number of people complain of "numbness", "tingling", "creeping", "deadness", or some other altered state of sensibility in the limbs, which, sometimes taking a paralytic, sometimes a hemiplegic, distribution, have caused much anxiety; and the more so, because the suggestion of organic disease of brain or spinal cord has sometimes been conveyed, and yet all these troubles pass away. That which I have observed to be in them the most characteristic of their gouty origin is their variability in kind and locality. To-day, for example, there is "coldness" in the left leg; to-morrow, "a sense of heat"; last week, a "pricking" in the right hand; the week before, a "stinging" feeling on the side of the head, or in the tongue. This wide distribution and variability, so alarming to the patient, is much less alarming to the physician, who recognises in these very facts the elements for a favourable prognosis.

Here, too, I must mention the great frequency with which pains, flying pains, darting pains, often like those of ataxia, are met with in the limbs. So-called "sciatica" is of frequent occurrence, and "pleurodynia", and "myodynia" of all localities are common enough. The sciatica of gouty sort is often double, shifting from side to side with a

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