lint, wetted in water, were gently applied around the injured members, beginning from their ungual ends until a complete splint was thus formed. The stripes of lint were applied layer upon layer as high up as the wrist joint. The whole hand was then enveloped in wet lint, and supported on a pillow so that a constant stream of water might flow over it from the irrigator. Considerable hæmorrhage occurred during the first twelve hours. For a few days afterwards active inflammation existed, which was controlled, however, and in eight days the edges of the wound showed healthy granulations. Irrigation was still continued for a few days longer, after which wet lint alone was applied. About the middle of June the wound was quite healed; and when he left the hospital he had a useful hand. He could flex and extend the index finger, and bring the thumb in contact with it firmly. The thumb was partially dislocated forwards, and did not allow of much movement.

CASE III. Lacerated Wound of the Joints between the First and Second Phalanges of the Index and Middle Fingers: Both Saved. A boy, aged 16 years, was admitted in Guy's under my care in February, 1857. A severe injury had been inflicted on his right hand by a circular saw, just before admission. The little and ring fingers were merely hanging by stripes of integument; and my dresser, Mr. Broad, removed these through the first phalanx. The joints between the first and second phalanges of the index finger and middle were cut open on their dorsal aspect; but as there was no further injury to them, Mr. Broad determined to attempt their reparation. In this he was successful; for by enveloping the injured fingers in stripes of wet lint cicatrization was effected in thirty-four days, and the boy enjoyed the movements of flexion and extension of the fingers.

As the value and usefulness of the hand depends in a great measure upon the integrity of the thumb, I may be excused if I devote a few moments to the consideration of the injuries of this important member in particular.

I believe it may be laid down as a rule that no portion of a phalanx or of the metacarpal bone should be removed by the surgeon, even should the bone project beyond the lacerated integuments, and appear to be so denuded, that to save it would be looked upon by the majority of observers as hopeless. This rule is based upon practical experience, and the results obtained in leaving cases of compound comminuted fracture to the reparative powers of nature. One case among several I will relate.

CASE IV. A young man was brought to the hospital, whose thumb was shattered by the explosion of a pistol. The ungual phalanx and about half of the first were carried away, together with the soft parts, as high as the ball of the thumb, and the integuments were hanging in shreds. The stump of the first phalanx projected considerably, and it did not seem possible that it could ever have been again covered by skin. I determined, however, to assist nature in saving all that remained; for, had the parts been neatly trimmed, and the bone covered with integuments, the stump of the first phalanx required to be removed at its articulation with the metacarpal bone. In this case the hand was well cleaned, and stripes of lint applied from the carpus towards the ungual phalanx, so as to bring the lacerated integuments as much over the stump as possible. Superficial sloughing of the lacerated surface took place, granulations were soon developed, and about an eighth of an inch of the stump of the phalanx exfoliated. After this the wound healed rapidly, and the lad obtained a most useful hand, enjoying all the movements of the second phalanx. He came under my observation a few years after this accident; and I was gratified to feel the power he enjoyed in grasping my hand between the stump of his thumb and fingers. He was then pursuing the employment of an engineer, an occupation requiring considerable manipulative dexterity.

I trust my hearers will excuse the detail of this case, hoping that its result may deter the younger members of the profession from an officious interference with the reparative powers of the animal economy. No case, at first sight, presented more discouraging prospects; yet I never had one attended with more satisfactory results.

In severe lacerations of the soft parts of the fingers and hands, I believe we are not justified in pursuing any other treatment than an attempt to save the parts. However ragged and lacerated the integuments, it is surprising how nature restores the injured member; and in the treatment of these cases the wet lint dressing assists the reparative powers admirably.

A machine is employed in some manufactories under the term of a "devil," to tear rags into fine shreds. Boys are em-

ployed to feed this machine, which consists of a roller covered with spikes, and which performs rapid revolutions. These boys often get their hands drawn in, and the result is most frightful laceration.

CASE V. An injury of this description occurred to a little boy who was brought into Guy's Hospital under my care. Both hands and fingers were frightfully lacerated, the integuments hanging from them in shreds. At first sight, they seemed to be hopelessly damaged. The injury was chiefly, however, on their palmar aspect, and the movements of flexion and extension were not destroyed. The fingers had suffered most, and the ungual and second phalanges of the right index finger were nearly torn off. If, under the circumstances above described, the parts most injured had been removed, little more would have been preserved than the palm of the hands; for, upon examining each finger, if any portion of them had been removed, the amputation must have been performed at the heads of the metacarpal bones. I therefore determined to attempt the reparation of the injury; and, with this view, after the removal of the injured portions of the right index finger, the other fingers and thumb were dressed with wet lint, and the integument which remained was brought over the parts as neatly as was practicable. In these vertical lacerations it is remarkable how the skin contracts laterally, and becomes drawn into a narrow stripe upon the dorsal aspect of the finger when the wound is on the palmar surface; and, in this case, this effect was so marked as, upon some of the fingers, to expose the theca and the tendons, as if a dissection had been made of them. Slight sloughing of the lacerated edges took place, but a few days sufficed to bring about a healthy granulating action, and cicatrization proceeded favourably. After the hands were healed the boy enjoyed a considerable amount of movement in the fingers; indeed, to a far greater extent than would have been anticipated after the first examination of the injury.

The injuries of the hand to which I believe the treatment described to be adapted may be thus classified:—

1. All incised and lacerated wounds of the integuments.
2. The same wounds complicated with similar injuries of the muscles or tendons.
3. Incised and lacerated wounds, by which the joints are cut open.
4. Compound fractures of the bones of the metacarpus and phalanges, with severe contusion, and those accidents by which one or more of the fingers are torn off by machinery, leaving, as in the thumb for example, more or less of the bone of that important organ exposed without any covering of soft parts.
5. Injuries produced by the explosion of gunpowder from firearms, with or without shot, by the force of which the soft parts are more or less lacerated, contused, and destroyed, and the bones fractured.

CASES OF NERVE-DISORDER, RECORDED WITH REFERENCE TO THE PROBABLE OPERATION OF MALARIA AS A CAUSE.

By C. HANDFIELD JONES, M.B., F.R.S., Physician to St. Mary's Hospital.

SERIES II (continued.)

CASE XIII. W. M., aged 40, coachman, was admitted May 14th, 1856. He had been ill three weeks. He had never had ague, but was in a part of Kent where it prevailed very much six months ago. He vomits all his food, and, after each vomiting, has a fever all over him for two or three hours, with perspirations. The epigastrium is tender. He is better with light food. The tongue is moist and clean, except a streak of coating in the centre; the urine is very red; the bowels are open. He is very weak. He has a pain in his forehead, "as if he had all the troubles of the world". He attributes his illness to a bad smell proceeding from a sick person. He was put on the use of strychnia and quinine, the former being changed after three days for six minims of liquor opii sedativus. At this time, he had less of the febrile paroxysms, but attacks of shaking occurred every evening. In four days more, the sickness had quite ceased; he had no pain in his head; and there had been but trifling shaking on the previous evening. On the same plan, he improved still further, and ceased attendance.

REMARKS. It seems scarce doubtful that this was an instance of aguish impregnation roused, though after a long

interval, into activity by debilitating urban influences: indeed, he stated that the pain in his head existed from the time of his visit to Kent. This circumstance—viz., the power of the conditions under which the individual is placed subsequent to his exposure to the malaria to develop the morbid effects—is of great importance for us to attend to. It may entirely depend on these whether the poison imbibed is to be active or harmless. Of this Dr. Copland has given an excellent example (*vide Art. Disease*, p. 571). I should think it almost certain that a slight aguish impregnation may be rendered by depressing circumstances as potent for evil as a more virulent one when the latter were absent. The utter uncertainty of the length of time requisite to effect a malarious impregnation makes the importance of the subsequent conditions still greater. Who shall say that sleeping a single night in some malarious locality (and I now speak of our own country) may not establish a predisposition which various depressing causes shall promote till it becomes the cause of serious illness, or of lingering wasting ill health?

CASE XIV. S. R., aged 26, a female, single, of healthy aspect, was admitted July 2nd, 1857. She had been ill two months. She is giddy and faint, "so awfully faint"; has pain about the lower part of the sternum, extending to the interscapular region of the back, much aggravated by food, but not more by a chop than by bread. She never vomits. There is some epigastric tenderness. The catamenia have been absent for seven or eight months. The bowels are regular; the skin cool; the pulse weak; tongue whitish, with red tip. She has much pain in the feet, especially in the left. A week later, she stated that the left side, arm, and leg, were quite numb and in pain when she came out into the air, but were easier when the parts were warm. She had suffered from this all the last winter; during the cold weather, she could not dress herself at one time for a period of fourteen days. She took the following draughts for a week:—

R Bismuthi subnitrat. gr. xv; sodæ sesquicarbon. gr. v; liquoris opii sedativi m̄vii; aquæ ʒiiss. M. Fiat haustus ter die sumendus.

Afterwards she had strychnine, quinine, and iron, in combination with liquor opii sedativus. Under this treatment, she improved a good deal, and ceased attendance after August 6th. The numbness of the left side was much better after the first fortnight of the tonics. The opium did not confine the bowels.

REMARKS. The gastralgic disorder in this case was associated with a left side affection of similar character. The latter, when I saw her, was not rheumatism, though she stated that there was occasionally swelling of the hand and foot. I have observed in several cases that severe cold has acted in a depressing manner on the nervous system, intensifying its disorders. Two marked cases of aguish disease came under my observation during the severe cold of last winter.

CASE XV. R. W., aged 67, a charwoman, single, was admitted July 5th. She has had jaundice several times; the last attack was in April. She had been getting ill three months. Every third day she has a violent pain at the epigastrium and lower part of the chest, like cramp, which strikes through to the shoulders and down the spine. She shivers at times, and has damp sweats. Urine dark. The bowels are costive; the tongue white; the pulse large, compressible. The treatment consisted in occasional calomel and colocynth aperients, and in the steady administration of full doses of quinine, and citrate of iron and quinine. The last decided attack was on July 26th, just a week after the preceding. After some treatment directed against deafness, from which she suffered, she was discharged October 11th, in better health than for years.

REMARKS. The phenomena of aguish disorder were marked plainly enough in this case, which, for anything that appeared, was solely of London origin.

CARE XVI. E. S., aged 36, married, of rather sanguine habit, was admitted May 11th, 1857. She had been affected by pityriasis all her life. At the catamenial periods (which occur regularly), and, at the intervening fortnights, she has copious vomiting of stuff like brown water, which lasts for twelve hours, and is preceded by violent headache. In the intervals, she is tolerably well. The skin is warm; the pulse of good force, excited; the lips red; the bowels act two or three times a day, motions healthy; the urine is natural. She can digest her food well, only beef lies heavy. She is very apt to take cold, and has bad cough; no râles are heard in the posterior parts of the lungs. She is worse after any exertion. She lives at Chiswick, near the river, in an open meadow. I

was at first quite inclined to view the case as one of hepatic derangement, and prescribed nitro-muriatic acid and taraxacum, with biweekly doses of calomel.

May 18th. The urine was found exceedingly pale, aqueous, not albuminous.

May 25th. Cascarella infusion, with half a drachm of tincture of cinchona, was given, in place of the water of the mixture. The calomel was continued.

June 14th. She is not improving. An attack of vomiting occurred a week ago, when she brought up much thick stuff, like brown phlegm. Tongue clean. She has dreadful weight "round the chest" for several days before the vomiting comes on. The bowels are much relaxed, as they always are in warm weather.

R Strychniæ gr. 1-20; quinae disulphatis gr. ij; acidi sulphurici diluti q. s.; liquoris opii sedat. m̄v; aquæ ʒj. M. Fiat haustus ter die sumendus.

June 22nd. An attack of vomiting occurred on the 19th, but lasted only five hours, instead of all day. The medicine was continued; and she was ordered to take five minims of liquor potassæ arsenitis twice a day with her meals.

July 6th. She is much better; has had one attack of vomiting, lasting a very short time, when she scarcely brought up anything.

July 16th. An attack of vomiting occurred on the 10th, which kept her in bed all day. She is much better and stronger; the vomiting is not near so violent as it used to be.

R Strychniæ gr. 1-16; quinae disulphatis gr. iv; ferri sulphatis gr. iv; acidi sulphurici diluti q. s.; liquoris opii sedat. m̄v; aquæ ʒj. M. Fiat haustus ter die sumendus.

July 30th. She is very much better than she has been for some time, and has no sickness. She continued to improve till she was discharged, apparently well, August 27th.

REMARKS. The result of the treatment proved that this case was one of nerve-disorder, and not of hepatic congestion and obstruction. The diagnosis was not clear at first, and would have been still more difficult but for the knowledge I had acquired of the existing *constitutio anni*. The locality of her dwelling is the only circumstance that affords some ground for suspecting the operation of malaria. However, whether her disorder was produced by malaria, or by some other obscure influence, it is clear that the pathological state was the same, and required the same treatment. The brown coloration of the matter vomited was probably from blood exuded together with it.

CASE XVII. E. T., aged 35, of rather sanguine aspect, married, and having had five children, was admitted February 9th, 1857. She has been ill one month. She has some cough, and spits much blood (a teaspoonful in one day), and some phlegm, but less of this than blood. The blood comes up with nausea, but no vomiting, and is of a very bright colour. This hæmorrhage has been going on the whole month that she has been ill. The first of her illness was that she felt extreme debility, and fainted several times a-day. About eight days after this, blood came up. She has copious cold sweats at night, and feels very shivery in the morning. The pulse is soft and yielding; the bowels costive. The catamenia were delayed one week when the blood first came up. The chest is deformed; there is right lateral curvature; the right front is flattened. There is no dulness anywhere; weak breathing all through both lungs. There is some epigastric tenderness. She always experiences extreme exhaustion a quarter of an hour after taking food; it lies heavy, but causes not much pain. The tongue is white. A sinapism was applied to the epigastrium.

R Quinae disulphatis gr. iij; liquoris opii sedat. m̄iv; acidi sulphurici diluti q. s.; aquæ ʒi. M. Fiat haustus ter die sumendus.

The food was ordered to be taken cold.

February 12th. No more blood has been brought up, except a few streaks. She feels rather better. There is much pain under the scapulæ; the breath is short in the mornings; bowels open; pulse very weak. She lay unconscious in a faint yesterday for an hour and a half.

February 16th. She has such extreme weakness that she cannot describe it. A long faint occurred on the 14th, and she almost lost consciousness on the 15th. The bowels are confined; the tongue is nearly clean. A teaspoonful of blood came up yesterday, but no more since last date.

R Ferri et quinae citratis gr. v; tincture nucis vomicæ m̄v; aquæ ʒi. M. Fiat haustus ter die sumendus.

February 19th. She has fainted twice since last date, but feels much better; the bowels are open.

February 26th. She is getting on a great deal better; no more blood has been brought up. She has had no fainting, and is decidedly stronger.

March 12th. She feels much better while taking the medicine, but is worse without. A drachm of blood came up twice last week. On exertion, she has sharp pain in the left side. She has been at Walworth lately, but is not so well there as at Paddington, and loses her appetite.

March 23rd. She has been not nearly so well the last three days; she complains of extreme weakness. She has brought up a great deal of blood again this week. The tongue is clean. She is still residing at Walworth. While in the consulting-room, she threw her head back in the chair, and appeared quite unconscious for a short time. The pulse, however, did not fail; nor did her face become pale (I think it was flushed). The mixture was continued; and she was ordered to take ten grains of assafoetida four times a day.

April 2nd. She is very weak; has extreme leucorrhœa. The pulse appears steady, of fair force. She is still at Walworth. A pint and a half of blood was brought up on March 29th.

R Cinchonæ gr. vi; strychniæ gr. 1-16; ferri sulph. gr. v; acid. sulph. dil. q. s; aquæ ʒi. M. Fiat haustus ter die sumendus.

An alum tampon was applied.

April 9th. She is improving very fast now. No blood has been brought up. She has been taking food well the last three days; she has stayed the last eight in Paddington. Pulse soft, quiet.

April 20th. She went back three days ago to Walworth, and was a great deal better; there was no return of the hæmorrhage. The medicine, however, made her giddy, and was not taken.

REMARKS. The prominent phenomena in this case were extreme nervous depression and debility, and gastric hæmorrhage. The leipthymia which frequently occurred, once in my presence, seemed to be the result of a temporary failure of the functional power of the brain, quite analogous to the numbness which occasionally affects a sensory nerve. The hæmorrhage was owing to a sudden flushing of the capillary plexus of the gastric mucous surface with blood induced by paralysis of the vaso-motor nerves of the part. The primary disorder was therefore lowering of the nervous power generally, and the bleeding was a secondary accident. Residence in a low unhealthy locality appeared to be the main cause of the nervous prostration, and of course removal from it was the best remedy. Quinine and strychnia also seemed to aid materially in restoring the failing power; the hæmorrhage really appeared to be controlled by these agents. I feel very sure that the hæmorrhage did not proceed from pulmonary tubercles, vicarious menstruation, cardiac disease, or cirrhosis of the liver. Gastric ulcer of course suggests itself as a very possible cause; and it cannot be affirmed that it was not present. However, it may be remarked that the hæmorrhage in gastric ulcer is not so continuous, or of so frequent recurrence, as it was in the above instance, nor is it associated with such prominent symptoms of nervous depression and failing powers. A patient who has gastric ulcer may fall into syncope at the time when a profuse gush of blood occurs; but neither this nor the bleeding are often repeated. The more I see of this aguish disorder the more I come to look at prostration of nervous power, *not produced by any organic disease*, as the most characteristic feature. Patients remark themselves they cannot think what makes them so weak; they express a fear that they are going to be paralysed; and, in truth, the nerve disorder tends in that direction. The powerful tonics which she took with advantage from April 2nd to 9th afterwards disagreed. I have observed the same in other cases; it seems that as more power is regained the system is less tolerant of high doses.

I add to the foregoing case the sequel of a very similar one recorded in Series I, No. 5 (ASSOCIATION MEDICAL JOURNAL, 1856, p. 474). After she ceased to be under my care she went over to Ireland, where she remained a short time. She never brought up any blood after this voyage, and improved gradually; so that at the date I saw her (four months subsequent to her departure) she was well and cheerful. For the last two months of this period she had returned to service in London. Here again change of air accomplished what medication utterly failed to effect.

A case recently attracted my attention where hæmatemesis in small quantities went on for about six months, recurring at short but irregular intervals, and continuing for several days at a time. It was associated with severe pain of one knee, and

great nervous depression. After an ineffectual trial of blisters, etc., amputation was advised by a surgeon of repute, but the patient refused consent. No astringents had any effect in arresting the hæmorrhage, which at last ceased (I rather think under the use of carbonate of iron), and the pain in the knee became easier, so that she was able to move about with a crutch, after having been for months confined to bed. The knee was never swelled, nor did it present to my eye much appearance of organic disease. I strongly suspect that this was an instance similar to the one recorded above.

CASE XVIII. H. H., aged 13, a healthy looking boy, has been ailing as at present two years, but has been worse during the last two months. The tongue is clean; the bowels open. He is very languid, and suffers with pain in the abdomen, commencing in the region of the cæcum, and following pretty regularly the course of the transverse and descending colon. The pain is "wretched agony"; it lasts from five minutes to fifteen, and is not relieved by blisters. His father thought he would have died some days ago. He is not attacked nearly so much at night when lying quiet. Exertion brings on the pain. The skin is cool; the pulse weak. He was put, March 19th, on the use of eight grains of citrate of quinine and iron three times a day, under which he benefited materially, but did not lose the pain; he had some also in the chest and shoulders.

April 9th. He is not near so well, and feels weak.

R Ammonie muriatis gr. x; spiritus ætheris sulph. comp. m xv; decocti cinchonæ ʒi. M. Fiat haustus ter die sumendus.

Marked improvement took place immediately, and he ceased attendance after May 10th.

REMARKS. The success of the muriate of ammonia indicates that the abdominal pain was of rheumatic nature, and seated in the muscular coat of the bowel. In cases apparently similar, the citrate of iron and quinine given steadily has generally accomplished a cure (*vide* Cases I and III, Series I, ASSOCIATION MEDICAL JOURNAL, 1856, p. 445). It appears to me that the detection of the rheumatic element in many instances is scarcely to be made without the testing action of remedies. Not unfrequently, also, pure neuralgia shades so gradually into rheumatic, and the attendant conditions are so similar, that it is difficult not to believe there is a real affinity between them.

CASE XIX. E. M., aged 32, housemaid, in a healthy situation in Paddington, was admitted August 27th, 1856. She had been ill fourteen days, but worse during the last seven. She feels ill all over, and without strength. She has sometimes great fever, sometimes is so cold "that she could get into the fire." There is no periodicity in these febrile attacks. The head feels giddy; she was quite "light-headed" on the night of August 24th. The skin is warm; the pulse and tongue nearly natural. The bowels acted thrice yesterday, but scantily, and with pain; she passes much "slime", and a little blood last week. She has tenderness on pressure about the descending colon. The urine is clear this week. She had had cough and expectoration lately. The throat sore; the right tonsil is enlarged. She was ordered to take two drachms of castor oil, with six minims of laudanum every night.

R Quinæ disulph. gr. iij; acidi nitrici m i; liquoris opii m iv; aquæ ʒi. M. Fiat haustus ter die sumendus.

September 6th. She is better, and has less sickness (a few days before it had occurred every night). She complains of a curious burning sensation all round the tongue, which is natural. The mixture was continued, fifteen minims of liquor ferri persesquinitratis being added to each ounce. The oil was also continued.

September 13th. She is better; has no pain in the tongue now, and is getting much stronger.

September 24th. She is gaining strength, and is not like the same person. She was now discharged.

REMARKS. Though not a severe case of disease, this has some well-marked features of malarious character. There was decided fever, dysentery, and a neuralgia. It is on the *concurrency* of these that I wish chiefly to lay stress as illustrating the nature of the morbid action; and the argument would not have been of more weight if the symptoms had been far more severe. A miniature may be as true to nature as a large picture. Lingual neuralgia is not very common. I have, however, met with three or four cases of it lately; and I have been informed of one where half the tongue was affected, together with the corresponding palate and face.

CASE XX. S. B., aged 21, housemaid, was admitted on 1026

September 10th, 1856. She was a weakly girl, too much confined to the house. She has been suffering for eighteen months with an eruption of the following description. Oedematous swellings, attended with slight redness, appear on different parts, lasting only a short while. I saw her one day with one or both eyes half closed by swelling of the lids; sometimes the eruption affects the scalp, sometimes the throat, causing a choking sensation, sometimes the joints or other parts. The catamenia are regular; the eruption is worse at those periods. The health is otherwise pretty good. The warmth of bed seems to promote the occurrence of the eruption. She was treated by nerve tonics in various combinations till March 26th, when she was discharged quite well, having been improving steadily for some time. In the course of treatment one or two furuncles appeared. Citrate of iron and quinine, liquor potassæ arsenitis, carbonate of ammonia, strychnine, etc., were employed: on their sustained steady use the success of the case depended.

REMARKS. The result of this case goes far, I think, to demonstrate that disordered innervation and not a blood poison was the main cause of the eruptive oedema. By toning the nerves the latter ceased. Had eliminants been employed, it may be confidently asserted that no such desirable end would have been attained. The fleeting nature of the eruption also strongly indicates a nerve action as the essential movement. There was no indication here of any malarious influence, no febricitation, neuralgia, or peculiar prostration. The case is one of some value, as in this respect contrasting with most of the others, and yet, in its shifting nervoid character, exhibiting a decided affinity. I consider it as one of simple asthenia of the vaso-motor cutaneous nerves, to be distinguished from similar states produced by a poison.

CASE XXI. E. W., aged 29, married, was admitted, May 7th, 1857. She resides at Kensal Town, close to the canal. She has been ill six months. She complains of great sinking and weakness at the epigastrium; of flushes of heat followed by chills; great exhaustion on the least excitement; and low spirits. Her food seems to do her no good; she has no power for anything. The tongue is white; it is parched in the morning. The skin is cool; pulse weak. She is very drowsy. She has never been well since she was in her present residence. Strychnia, with iron, and compound spirit of sulphuric ether, was given for eleven days; at the end of which time she reported herself better and stronger, but did not attend again. Most probably the injurious influence was far too powerful to be overcome by drugs.

CASE XXII. H. H., aged 36, married, was admitted April 30th, 1857. She resides near a canal; and has been ill six months. She is hyperæsthetic; the tongue is clean; the pulse quiet; the skin cool. She has languid, aching pain in every part of her, most severe in head. She is feverish, and cannot sleep at night. Some days she vomits bilious matter, and has violent headache. The urine is high coloured. She thinks she shall lose her senses. She has never been well since she has lived near the canal. Last summer she was ill in the same way; she went down to Windsor, and in three weeks was quite recovered. Citrate of iron and quinine, with tincture of nuxvomica, were given, but when I last saw her, on May 7th, she was not any better, and complained of drenching sweats at night.

To these I may add the sequel of a case reported in the previous series (ASSOCIATION MEDICAL JOURNAL, 1856, p. 314), the last given. She was a laundress, and lived on the bank of the same canal as is alluded to above. Medicine could only afford some temporary relief to her distressing symptoms, which were even more severe than those in Cases XXI and XXII. She removed to another locality, and in three weeks reported herself quite a different woman. She still continued her washing occupation.

REMARKS. I by no means wish to conclude positively from these cases that the vicinity of a canal is to be considered absolutely injurious, and by all means to be shunned. I confess I should not like myself to live on its banks. But so many persons in Paddington reside very near it, without seeming to experience any inconvenience, that I suppose it is only those who are in some way predisposed that are likely to suffer. Mr. Dempster's observations in India go to prove that the vicinity of canals is more productive of malaria than places more remote. In both the above cases it will be observed the symptoms were essentially those of prostration of nervous power, and obscurely developed fever.

[To be continued.]

CONCLUSION OF A CASE OF VESICO-UTERINE FISTULA.

By I. HARRINSON, Esq., F.R.C.S., Reading.

[Read before the Reading Pathological Society, October 28th.]

It may be in the remembrance of some members of this Society that, in the year 1842, I had the honour of reading a Case of Vesico-Uterine Fistula. It was published in the then *Provincial Medical and Surgical Journal*, June 11th, 1845. The subject of this grave infirmity having died last week, I have now the opportunity of showing the parts concerned. It may be well to first give a short account of the case as then read.

Mrs. H., aged 41, had been delivered of her seventh child five years before. The labour was severe, protracted to fifty-seven hours, and eventually completed by instrumental aid. Retention of urine followed; and on the thirteenth day she felt something give way, when the urine immediately flowed away. For the subsequent five years, not a drop of urine passed through the natural outlet. After repeated examinations, I discovered that an instrument passed from the bladder through the os uteri into the vagina; that there was a communication between the bladder and the uterus; that there was a vesico-uterine fistula. I then introduced a skein of silk through the opening, and withdrew the threads one by one, with a few days interval, till one only remained. By this one thread the incontinence was remedied.

From this time sixteen years rolled away, till I was called to her in March 1857, suffering from the effects of obstructed circulation from mitral regurgitation; viz., universal oedema, ascites, congested lungs, enlarged liver, etc. The heart's action was tumultuous, with double murmur. The pulse was so irregular as not to be counted. The urine was albuminous. Her urgent symptoms were relieved by the means used; but the heart maintained its irregularity, and the oedema persisted. Incisions were made into the legs from time to time; then in the thighs, and lastly in the abdominal parietes, with surprising relief. More or less inflammation, and then consolidation, frequently followed these incisions. Her powers gradually failed; and she died of oedema of the lungs, on October 19th, 1857. During the last few days of her life, she complained of great pain in the lower part of the abdomen, and that she was unable to retain her urine.

POST MORTEM EXAMINATION. The mitral valves were so much thickened as to render them imperfect, and allow regurgitation. The bladder was thickened, contracted, and internally gangrenous, the mucous membrane being almost entirely removed. A considerable quantity of sabulous matter had accumulated, more particularly around the thread which passed through near the fundus. The uterus was much enlarged; and, on opening it, a polypus, of about the thickness of the little finger and an inch long, was seen growing from the fundus. The vagina was normal. The neck of the uterus was dark coloured, and was involved in the mischief by extension from the bladder. The thread had cut through the anterior lip of the os uteri. About an inch within the os uteri was a considerable opening communicating with the fundus of the bladder. The opening admitted the tip of the little finger; but it was evident that, from the sloughy state of the parts, this view could give no idea of their condition during life. The last thread which she put in still remained.

For the first two years, I changed the thread for her about once a month; for the last fourteen years, she did it herself. Every day she was obliged to draw it down, and cleanse it from the sabulous matter invariably collected around it, in the situation of the vesico-uterine opening. During these last fourteen years she was constantly engaged, first, in the laborious occupation of night nurse at the Royal Berkshire Hospital; and afterwards, in the more arduous duty of monthly nurse among the better classes of society. The presence of the thread possibly had something to do in inducing that state of bladder which aggravated her sufferings during the last few days of her life.

As a palliative, the thread exceeded all expectation. It was my intention, after the catamenia had ceased, to have endeavoured to obliterate the os uteri, and so close this eccentric aqueduct. This period unfortunately never arrived; the catamenia continued with more or less regularity to the last. This persistence was undoubtedly somewhat dependent on the presence of the polypus.

For fourteen years the thread enabled her to support herself