collected that the chain-saw had failed in the hands of such men as Mr. Fergusson and M. Roux.

In conclusion, I have to offer my thanks to those gentlemen who countenanced and assisted me in this operation. Mr. Arnott and Mr. Walton I have to thank greatly for their advice and assistance; but to Mr. Fergusson I feel most deeply indebted, not only for the great assistance he rendered me on the occasion, but for his kind and useful suggestions both prior and subsequent to it, and for the interest he took in the patient of his old pupil. To Dr. Gavin Milroy (who paid me the compliment of placing the patient under my care) my thanks are due for the attention he bestowed upon him; and to my former fellow-student and friend, Mr. Hyde Cooke, I am under deep obligations for the kindness and attention he gave to the case, and for his notes of its history and subsequent progress.

Caroline-street, Bedford-square, Nov. 1848.

REPORT OF

CASES OF PHLEBITIS, WITH REMARKS ON THE PATHOLOGY OF THAT DISEASE.

By JOHN W. TRIPE, M.D. &c., London.

Phlebitis of several veins of both arms, of the subclavians, venæ innominatæ, and the superior cava.

CASE 1.—Mrs. S—, aged forty-six, had been for some years past affected with symptoms of dilatation of the left side of the heart, bronchitis, and ovarian dropsy. On the 20th of July, 1845, she was suddenly attacked with pain of the anterior and inner aspects of the right elbow. She had not been exposed to cold, nor had she received any injury of the part.

July 25th.—The right forearm is much swelled, oedematous, and of a red colour, as if attacked with erysipelas, and it is traversed by a hard cord, which takes the course of the median vein. Tongue is furred, appetite bad, thirst rather urgent, and bowels costive. A few leeches were sprinkled along the course of the vein, and followed by hot fomentations. An ordinary febrifuge mixture, with a dose of calomel and colocynth, was administered. Her diet was to consist of beef-tea, milk, and meat, if her appetite would allow of it.

27th.—The oedema and erythema have extended as high as the shoulder, the latter involving nearly the whole of the arm. The pain has been more acute, and is confined, or nearly so, to the course of the basilic vein; a hard, painful cord can be traced in the same direction. The forearm is not so red or painful as it was on the 25th. The fever is still synchoidal; the erythema and pain have almost left the arm, but the oedema still remains; pain is caused, and hardness felt, on passing the finger along the course of the inflamed vein. Repeat the medicines. Shortly after my visit I was desired to visit her again, in consequence of the supervention of dyspnoea and great prostration. Decubitus on her back; urgent dyspnoea, amounting almost to orthopnoea; excessive prostration, great restlessness, anxiety, and cough were now complained of. Her face was much congested; lips purplish; pulse quick, small, soft, and somewhat irregular; tongue much drier than previously. No fresh disease could be detected by a stethoscopic examination of the heart and lungs; the heart's action was, however, unusually weak, and somewhat irregular. An ether mixture was prescribed.

Aug. 1st.—Is worse; she cannot now lie down, and is therefore propped up in bed with pillows, and her head is thrown back. The dyspnoea and the lividity of her face are slightly increased, lips purplish, and eyes injected and staring—a horrible contrast presented by her white teeth. The face, neck, and upper part of the thorax are oedematous; the superficial veins of the arms, face, neck, and thorax are much congested; the external jugular veins are very full, and remain so when the upper extremities of them are compressed. Pulse as yesterday. Five grains of carbonate of ammonia were given, with one drachm of tincture of bark, every four hours. Beef-tea, &c., as before.

2nd.—Worse; the oedema of the face, neck, and thorax is increased, also of the upper extremities; cough, restlessness, and anxiety much augmented. Small crepitation was detected in several small, isolated portions of the right lung. Continue diet and medicines. One grain of calomel, with two of Dover's powder, every two hours.

4th.—Slightly improved; dyspnoea less; oedema of the face and neck slightly diminished. At the root of the neck, and immediately beneath the clavicle, are several patches of minute varicose and congested venous radicles, which assume

a peculiar arborescent and crescentic arrangement. Oedema of the arms not lessened; fever still typhoid, and the tongue is dry, but it becomes moistened by drinking. The anxiety and restlessness are not so extreme, and the pulse is somewhat firmer, stronger, and slower. Crepitation is still audible, but does not spread. Repeat the medicines and diet.

5th.—Is better, except that she complains of pain in the left axilla, which is red, partly filled up, and painful on pressure. Oedema of the neck and right arm are lessened, but that of the left is, if anything, increased, and the superficial veins are more tense.

7th.—Much improved; dyspnoea almost gone; anxiety and restlessness much diminished; oedema of the right arm, upper part of the thorax, neck, and face, has nearly disappeared, and this arm looks nearly in a natural state, while the left is red as low as the elbow, and oedematous from the shoulder to the fingers. The superficial veins are very much congested, and a hard, painful cord can be traced along the inner side of the arm. The crepitation of the lung is disappearing, and the gums are slightly affected with the mercurial. Omit the calomel.

9th.—Still improved; the fever again synchoidal; oedema and congestion of the left arm continue as before, but the erythema and pain have descended as low as the wrist. Ordered, two grains of quinine, with a little diluted sulphuric acid, three times a day.

By the 20th, the patient was quite convalescent; the redness had nearly disappeared; complains much of general debility; no trace of inflammation can now be detected in the lungs; pulse is regular, moderately full, and firm; no dyspnoea or congestion of the venous system, most of the patches of small congested veins having disappeared, although one or two are still evident on the upper part of the thorax. On examining the arms, the veins which were inflamed can be traced as hardened cords.

March, 1846.—I was again called to this patient, on account of her old disease—dilatation of the heart—having become more troublesome. She died, after a few weeks' attendance, from impeded circulation, and effusion into the serous cavities. On making a post-mortem examination, the cava, innominata, and axillary veins, were found to be healthy. The others were not examined. The only trace of any inflammatory action found was at the junction of the right internal jugular with the subclavian vein, where a small quantity of pus was found, the jugular vein being there blocked up.

The first morbid appearances which can be detected in phlebitis consist in an alteration in the epithelium which lines the inner coat of the vein, by which it is raised from the subjacent coat, and cast off in shreds, and in an unusual redness of the coats of the vein. This latter is most probably induced by imbibition, and not by congestion, as vessels have never been detected in the inner coat. In a short time, a dense network of vessels becomes visible in the cellular tissue connecting the coats together, and in that forming the sheath of the vein. Next, an exudation of inflammatory matter is poured out into the cavity of the vein, forming a fibrinous clot, which is loosely connected with the inner coat; and fresh layers being poured out, the calibre of the vessel is gradually filled up. Not unfrequently fibrine is also effused into the cellular tissue surrounding the vein. Should the inflammation stop at this, the adhesive stage, the case will terminate favourably; but more commonly the disease progresses to the next stage—viz., that of the formation of pus.

The pus appears to be formed partly of an alteration in the circulating fluid, but chiefly by the transformation of the newly formed epithelial cells into pus corpuscles, (Hasse,) and by the formation of the pus globules in the ordinary way in the effused fibrinous fluid. The mingling with the blood generally causes its coagulation, and it is thus isolated from the mass of the circulating fluid. This process, by which the interior of the vein becomes filled up, is termed by Cruveilhier the "sequestration" of veins. Should, however, this sequestration not happen, and the pus corpuscles, their nuclei, or softened fibrine, pass into the general circulation, secondary abscesses will be formed in that organ through which the blood next passes, and from thence in some of the other organs, or in some of the synovial or serous cavities. Collections of pus in some of the synovial cavities have been occasionally found in connexion with phlebitis, without any similar disease in any of the viscera.

The inflammation comparatively rarely ceases at the stage of adhesion; it usually passes on to the suppurative stage. Dr. Watson and some others have been of opinion that the contrary is the case, but more accurate examinations of recent pathologists seem to show that the sequestration of the veins has been mistaken for the true adhesive variety.

The question as to which of these varieties the present case belongs is very interesting, as it presents some features of both. The fever was synchoid; no abscesses or disorganization occurred around the inflamed veins; the circulation was not impeded for more than about two months, and whilst the disease was confined to the right arm it did not pass into the suppurative stage. I think, then, that in regard to the larger veins, it is very probable that they were closed chiefly by coagulation of the blood around some small clots of effused fibrine, for it is a well ascertained fact, that sequestration occurs in the larger veins more readily than in the small, being in proportion to the amount of blood which passes through the vessel in a given time. It (sequestration) has been observed in the pulmonary veins and arteries, in the innominate, superior and inferior cavæ, and in the right auricle of the heart.

The same considerations which induced me to believe that the disease was confined to the adhesive stage, whilst it was limited to the right arm, together with the absence (except at one small spot) of any morbid appearances at the post-mortem examination, cause me to consider that the inflammation was limited to the adhesive stage during its whole progress. The fever having changed to a typhoid type for a few days does not alter my opinion, as I believe that change to have depended on the contamination of the blood, as shown by the abscesses in the lungs.

Abscesses of the lungs, which are very rare, except as a result of phlebitis, may be caused by the passage either of pus or of softened fibrine into the general circulation; in this case it most probably originated from the latter cause.

There can be but little doubt of the nature and seat of the disease, as the symptoms indicative of phlebitis were so marked that they could not be referred to any other origin. Thus, the redness of the upper extremities was not confined to the course of any particular vessels, but was general, whilst the œdema did not at first extend beyond the extremity affected, though it subsequently involved the face, neck, and left upper extremity, notwithstanding that there was not then any erythema of any of these parts. The veins of the same parts also became congested and varicose, especially the smaller veins and radicles, showing that the passage of the blood was impeded in some vessel into which all these emptied themselves.

The origin of the redness and pain at the upper part of the left arm, and the extension of the erythema and pain from above, downwards, even to the veins of the back of the hand, appear to afford almost certain proof (especially when considered in conjunction with the other symptoms) that the disease really was phlebitis of the large veins within the thorax, as well as of the arm and forearm.

The readiness with which a vein closed by the inflammatory process becomes again pervious, is well worthy of attentive consideration, and shows what the powers of Nature can do, when assisted by proper and well-directed medical aid. In this case, the urgent symptoms which arose from an impediment to the passage of the blood through the innominate and cava, were relieved in eight days; and the blood circulated through the vessels of the arm in a little more than two months, although they were evidently closed by inflammatory exudation. Hasse mentions, in his own case, that the vessels appeared to transmit blood through them in five weeks after the active symptoms of the disease had ceased.

When phlebitis affects the larger veins, as the cavæ, innominate, or porta, the result is usually fatal; but the recovery of this patient—when the symptoms were such as to indicate almost immediate death; when the return of the blood from the upper half of the body was so much impeded; and when the system had been so far contaminated, that abscesses in the lungs were produced—affords some ground for hope, even in extreme cases.

In regard to the treatment, we generally have little else to do than to support the strength, and allay as much as possible the sympathetic irritation. The calomel was administered in this case to fulfil two indications: in the first place, to control the inflammation of the lungs which was set up around the particles of the deposited pus; and secondly, because the result of the inflammatory action was considered to consist chiefly, if not entirely, in fibrinous exudation.

Phlebitis of the trunk of the portal vein, and of the uterine sinuses.

CASE 2.—April 18th, 1846.—Mrs. J— had rather profuse flooding, previously and subsequently to the birth of her fifth child. As the flooding continued after the birth of the child, the hand was introduced, for the purpose of removing the placenta, which was found to be adherent throughout its whole surface. The hæmorrhage ceased immediately after-

wards, but recurred in about half an hour, and persisted until a very large quantity of blood was lost. Ergot of rye, and tincture of the sesquichloride of iron, were exhibited every two hours, and after the lapse of twelve hours, with a good result.

April 19th.—The hæmorrhage recurred, but not to so great an extent as yesterday; several very large clots were passed. A similar treatment to that mentioned was again adopted, and with good results.

22nd.—She feels very weak; has had an attack or two of shivering in the night; complains much of severe, aching pains of the joints and limbs, and of great thirst; her tongue is furred, and pulse quick and anæmic. Ordered, tincture of colchicum, twenty drops; sesquicarbonate of ammonia, five grains; tincture of opium, ten drops, every four hours, in camphor water.

23rd.—Had a return of hæmorrhage during the night, but not to much extent. Her aspect is indicative of great danger, countenance being very anxious and pale; her cheeks present a circumscribed flush; she appears to have grown old during the night; her eyes are injected; tongue pale and enlarged; pulse quick, small, and anæmic; skin clammy; severe cephalalgia, and clonus hystericus; the abdomen is enlarged, and painful, the intestines being filled with flatus; the pain is increased by pressure, but firm pressure does not give more pain than slight force; decubitus on her back, with her legs straightened.—Four p.m.: Had, about an hour ago, a most violent rigor, which lasted about a quarter of an hour, and was succeeded by a feeling of heat, and then by sweating; she is now bathed in perspiration.—Ten p.m.: Is quite delirious; thinks that she will die; skin clammy; pulse 150, small, and jerking; has had another rigor, which lasted half an hour.

24th.—Appears somewhat better; countenance more composed, but it is still anxious. She had another rigor during the night, followed, as before, by a hot and sweating stage; pulse 130, frequent; headach less. Ordered, tincture of sesquichloride of iron, twenty drops, in infusion of gentian, every four hours. Four ounces of port-wine during the day; beef-tea; and ten grains of Dover's powder, to be taken at bedtime.

On the 25th she was better; but from the 26th to the 31st she became every day worse; the rigors, followed by hot and sweating stages, recurred, two or three attacks happening every day. On the 27th, she had an attack of diarrhœa, which reduced her very much, the matters evacuated being thin, watery, foetid, and flaky. It was checked, in twenty-hours, by a chalk-and-opium mixture; but it recurred on the 29th and 30th, the motions being of the same kind. The pulse gradually became quicker and more feeble; the tongue slightly furred, and very pale; and the countenance again became very anxious and flushed. She complains, also, of a horrible sensation of weakness and sinking, and of an abominable taste in the mouth. There is considerable pain of the hepatic and of the pubic regions, which is increased by pressure. The respiration is hurried, and there is slight cough. On examining the heart, no abnormal sound could be detected, but the rhonchi of bronchitis can be heard all over both lungs, the crepitation of pneumonia in several small spots, and a pleuritic friction-sound on the left side. She continued to get weaker and worse; and died on May 3rd, at three a.m.

Post-mortem examination.—This was conducted in rather a hurried manner, as the friends were present, and impatient for its conclusion.

The uterus was found larger than it would naturally have been, and its sinuses were filled with pus and fibrine. The internal iliac arteries and inferior cava contained several clots of blood and fibrine, and the right ovarian vein was filled up. The inferior mesenteric and portal veins were inflamed; their interior, being of a deep red colour, had here and there fibrinous clots attached to their walls, whilst the cavity was filled up by sequestration. Many of the branches within the liver were similarly diseased. In the liver and lungs were several small abscesses, and the pleura on the anterior and lower part of each lung presented several patches of lymph. The peritonæum and intestines were healthy, but the peritonæal cavity contained about three pints of a pale, yellow, clear fluid.

There are many points of exceeding interest in this case. We must inquire the causes; first, of the hæmorrhage; secondly, of the phlebitis; thirdly, of the unusual course pursued by the disease; fourthly, we must notice the coincidence of the symptoms with the post-mortem examination.

In regard to the hæmorrhage, its source could not be found, as there was not any laceration of the uterus, nor any portion

of the placenta left adherent; I am therefore inclined to attribute it to the absence of due contraction of the organ, after the placenta was removed. In regard to the cause of the phlebitis, it is a question whether it arose from the removal of the placenta, from loss of blood, or from some peculiar condition of the atmosphere. It is most probable that all had some influence in producing the result, as the act of removing the placenta, although it does not ordinarily induce phlebitis, yet necessarily acts as a predisposing, if not, occasionally, an exciting cause. As to the influence of the loss of blood, it is well known to surgeons that a large loss of blood predisposes any patient who has been operated upon, to an attack of phlebitis: this is emphatically pointed out by Sir B. Brodie, in his lectures on pathology and surgery. The influence exerted by the atmosphere on the disease has been long recognised, and we usually find erysipelas and phlebitis to prevail at the same time.

The peculiar course which the disease pursued, is, I believe, quite unique, as it apparently commenced in the uterine veins, and extended to the inferior mesenteric through the anastomoses which occur between its small branches and those of the internal iliac. This, however, is a mere conjecture, as I was not allowed time to trace this out.

The diagnosis of the disease was readily made out, as the symptoms were so characteristic. Thus the shivering pain of the pubic region, fever, &c., were indicative of phlebitis of the uterine sinuses, whilst the irregular ague fits, the peculiar diarrhoea, the pain of the right hypochondrium, and the subsequent ascites formed so remarkable a combination of symptoms, that they necessarily led to the belief that the disease consisted in inflammation of the trunk of the portal vein. The presence of ascites, and the peculiar diarrhoea may be considered as the diagnostic marks by which phlebitis of the trunk of the porta may be distinguished from hepatic abscess, as irregular attacks resembling ague may, and frequently do arise during the progress of the latter disease. Jaundice, which is usually one of the prominent symptoms, was absent in this case, probably in consequence of the speedy death of the patient. The auscultatory signs of inflammation of the lung are frequently absent, even when the lung is studded with abscesses—in consequence of the morbid process being confined to the immediate vicinity of the purulent deposit.

Commercial-road East, 1848.

ON THE UTILITY OF ALKALIES IN THE TREATMENT OF RHEUMATISM.

By J. I. FURNIVALL, M.D., Holloway.

SOME remarks on the treatment of rheumatism by alkalies are published in *THE LANCET* of 25th November last. I have now, for nearly twenty years, been in the habit of treating rheumatism by means of alkalies, (the liquor potassæ, the carbonate, bicarbonate of potass or sodæ;) and as cases have multiplied in my practice during that long period, I have become more and more satisfied of their efficacy in preventing the supervention of heart disease; while as to their value in curing rheumatism, I beg to refer to reports published about a year ago, by Dr. Wright, of Birmingham.

I have seldom used them alone in severe and threatening cases, though Dr. Wright has done so with great success; but considering that the inflammation and pyrexia were the effects or concomitants of the peculiar state of the blood in rheumatic fever, to remove which state alkalies are recommended, I have combined with the alkalies various other remedies—colchicum, to remove pain and lower excitement, mercury sometimes, &c.

The results of my clinical observations have been these,—

First. That no case of supervening heart disease has ever occurred in my practice since I have administered alkalies in rheumatic cases; nor will they, in my opinion, if the concomitant inflammation and fever have at the same time been properly attended to.

Secondly. That many cases of rheumatic fever are on record which have been energetically treated by medical men of eminence, but without the use of alkalies, in which heart disease has ensued, and proved fatal.

Thirdly. That mercury and colchicum, separate or combined, and either or both pushed to their utmost extent, will not secure the patient from heart disease, without the addition of alkalies.

Permit me to refer to some observations which are published

in *THE LANCET* of June 1st, 1844, page 304, and June 29th, 1844, page 450, and of March 31st, 1846, page 328, *et sequent.*

Now, seeing that heart disease is a dreadful affliction, (in the poor man overpoweringly so;) seeing that its supervention is not merely confined to acute cases of rheumatic fever, and that it may arise in all cases of rheumatism, even in those seemingly slight forms of chronic pains; and seeing that alkalies may easily be combined with other remedies in the treatment of rheumatism, I would again press on my medical brethren the necessity of prescribing alkalies in all cases of rheumatism.

Holloway, Dec. 1848.

REMARKS ON THE CONTAGION OF SECONDARY SYPHILIS.

By GEORGE GARSON, Esq., Surgeon, Stromness.

IN March, 1846, I was consulted by a married man for ulceration on the glans penis. He admitted having had intercourse with a strange female about two months previously, and thereafter experienced a smarting sensation about the glans, which was followed by the present sore. There was also a scaly eruption on the scalp; the throat vascular, and swollen.

In June he had two small tumours, each of about the size of a bean, near the anus, which gave him much pain, on account of the discharge and excoriation. He had felt an uneasiness about the anus for some time, which he thought proceeded from piles. The mucous membrane of the mouth was white and flabby.

His wife has suffered some time from heat and swelling about the genitals. When visited in the end of June, she was unable to walk erect, and had swelling and increased temperature of the vulva, with extensive superficial ulceration of the right labia, and great vascularity about the anus; the vagina also very vascular.

May, 1847.—Visited the family, when two children were shown me, having extensive redness, with discharge from the anus; and another, aged nine years, who had been in bad health, accompanied with falling of the hair, which was then very thin, and she had sore throat, as also condylomatous swellings about the anus.

In this same month, I was called on by another member of the same family, aged fourteen, then out in service, but who had lived with his parents during the preceding harvest and winter, and slept in the same bed with his little sister, aged nine years. It was after his residence at home that he first felt uneasiness about the fundament, to which a discharge succeeded. The anus was surrounded by a considerable number of flat swellings, more elevated, and with narrower base, near its verge. He walked very awkwardly, on account of the irritation. Had swellings on each side of his neck, which spontaneously disappeared; also sore-throat, chiefly in the morning; tonsils enlarged, and had the appearance of numerous small, ulcerated points; pharynx covered with a dirty-greyish mucus.

The greater number of these cases were tedious, partly on account of being seldom seen, and partly on account of the poverty and filth of the persons themselves. They were all treated by mercury.

Remarks.—I have thought it a duty to publish these cases, as they appear to me to be of some value in settling the question as to the communicability of secondary syphilis by contact, though not in accordance with the views advocated by Hunter, Ricord, and Acton. There is no doubt on my mind that the father of this family was the source whence all the others received infection; and in none, except his wife, could anything like primary ulceration be traced. Let it be remembered that they lived in a rural district, and that not only the girl of nine, and the boy of fourteen, exhibited the disease, but also two younger children. The combination of symptoms under which the two elder children laboured, in my estimation, show clearly the nature of the disease.

Stromness, May, 1848.

Reviews.

Outlines of Lectures on the Nature, Causes, and Treatment of Insanity. By Sir A. MORISON, M.D. &c. Edited by his Son, T. C. MORISON, Esq. Fourth Edition, with Plates. London: Longman and Co.; Highley. 1848. pp. 481.

THE absence of any instruction in the nature and treatment of mental disease in the usual course of medical education,