where, in the one case menorrhagia, in the other amenorrhœa, preceded the breaking up of the general health.

With respect to the remarkable and profuse vaginal discharge in the first patient, I conclude that it consisted chiefly of softened tubercular matter. For cases confirmatory of this supposition, I must refer the reader to the writings of Carswell and Louis. The loading of the Fallopian tubes with strumous deposit, and their consequent dilatation and tortuosity, seems to have been observed more frequently than the occurrence of the same deposit in the uterus itself. Ulceration of the vagina, such as was noticed in Case II, is rare; and when it does take place, it is generally due to the action of the discharge, which, as first stated, probably consists of softened tuberculous matter. In Case I, fæcal matter was found in the recto-uterine pouch of the peritoneum, owing to the extensive ulceration which had taken place into the gut. That this is not of very frequent occurrence in scrofulous disease, is evident, as Dr. Watson (vol. ii, p. 182; third edition) says that *only once* has he known it to happen.

These brief remarks I think sufficiently point out the comparative rarity of cases like the above. If reference is made to Mr. Ancell's Table, showing the frequency of the development of tubercles in the various organs of the body in upwards of one thousand cases, and the relative frequency in each organ, a mere fractional part of the whole number will be found to come under the head of "Female Organs of Generation". Yet, as Mr. Ancell candidly owns, this table is only one step in the right direction: and we quite agree with him that the adoption of the numerical method on a far larger scale, and an uniform plan for the registration of *post mortem* appearances, are absolutely necessary in order to arrive at correct conclusions as to the relative frequency of tubercles in the different organs.

II. GANGLIONS IN RELATION WITH THE RADIAL ARTERY.

Under the care of PRESCOTT G. HEWETT, Esq.

M. CHASSAIGNAC has recently, we believe, directed attention to the fact that ganglions lying on the outer side of the wrist are sometimes situated beneath the radial artery, and that care is required in these cases to ascertain the position of this artery before a puncture is made. Two instances have recently been under Mr. Prescott Hewett's care, which illustrate the truth of this observation. In both, ganglions connected, in all probability, with the tendon of the supinator longus muscle, were observed to have raised the radial artery, which could be felt pulsating on the superficial surface of the swelling. In one case, that of a boy six years of age, the swelling was of small size; it was punctured at one side beneath the artery, and was soon cured. In the other case, that of an adult, the swelling was of large size. No treatment was adopted, as the man was only passing through London.

ST. BARTHOLOMEW'S HOSPITAL.

COMPOUND FRACTURE OF THE THIGH, WITH INJURY TO, AND ABSCESS IN, THE OPPOSITE KNEE-JOINT.

Under the care of E. STANLEY, Esq.

[*From Notes by* E. BARKER, Esq., *House-Surgeon.*]

THOMAS J., aged 10, was admitted under Mr. Stanley's care in the evening of September 30th, on account of an accident in which his right leg had become entangled in the spokes of a cabwheel. He had suffered a compound fracture of the right thigh a little below the junction of the upper and middle third. The fracture ran in an oblique direction, and the upper fragment was protruding from the wound. There was much collapse; both limbs were cold. In the left leg (which was much bruised, in consequence of his having been dashed against the ground), the tibial arteries could be felt pulsating feebly, but no pulsation could be felt in the other limb. He was said to have lost much blood, but there was no great hæmorrhage at the time of his admission. The boy complained of feeling drowsy. As it seemed doubtful whether the artery had not been wounded, Mr. Stanley was sent for. Before his arrival, however, the pulse had reappeared in the tibial arteries of the injured limb; the idea of the necessity of amputation was therefore abandoned, and the limb was put up in splints, extension having been made under chloroform. Effusion into the knee-joint came on in the course of a few days, leading to the suspicion of fracture of the lower epiphysis of the femur. His situation, however, of course precluded any examination. He remained in a very listless, languid condition, exceedingly irritable and tender to the touch everywhere. On October 5th, the left leg was seen to be excessively œdematous and swollen, with much blood effused all around it. On October 8th, effusion was noticed in the left knee-joint, and there was a sensation of fluid at the lower part of the thigh. He was ordered nourishing diet and port wine; and an incision was made on the outer side of the limb, down to the tendon of the rectus muscle. This, however, did not give exit to any matter. On the 12th, more incisions were made, in the hope of finding matter in the neighbourhood of the joint which was setting up irritation and causing effusion in its cavity; but, as this was frustrated, it was determined to open the cavity of the knee-joint, which was accordingly done on October 19th, when a quantity of purulent fluid was evacuated by a free incision into the outer side of the knee. Things went on after this pretty well till November 1st, when, as the house-surgeon was going round the ward, he observed that the boy was unnaturally pallid, and, on turning down the bedclothes, discovered that he had lost a very large quantity of blood from the wound of the compound fracture. The source of this hæmorrhage remained obscure; it had ceased before it was discovered, and therefore, of course, no steps were then taken to find the bleeding vessel; and it did not recur. Since then he has been going on quite well. The wound in the knee-joint, after having remained open for more than three weeks, had been, on the last report (November 23rd), closed for some days; and an attempt was about to be made to restore the movements of the joint by passive motion. The fracture is in process of consolidation.

REMARKS. We hope to give the termination of this interesting case at some future time; meanwhile, what we wish to call our readers' attention to is the difficulty which was at first experienced in deciding whether the artery was wounded or not. The total absence of pulse in the artery of the injured side, while that in the opposite artery was plainly felt, would have led, if too hastily acted on, to a conclusion which would, in all probability, have been found erroneous. The hæmorrhage, which occurred so long after the accident, was not clearly proved to have been arterial, and might have been caused merely by some accidental change of posture, or other slight cause; still, coupled with the other features of the case, it was suspicious. Mr. Stanley mentioned at the time that he had seen instances in which the pulse had been suspended temporarily in arteries of injured limbs, and where the spontaneous restoration of the circulation had shown that this had been the result of some temporary loss of tone from contusion, and not laceration. The child's recovery appears now almost certain; and we hope to have to report that the motion of the injured knee has been restored—a circumstance which does occur in childhood not very unfrequently, after abscess in the joint.

ERRATUM. In last week's Report from St. Mary's Hospital, at p. 964, column 1, last line but two of Case IV, for "cuticular" read "articular".

Original Communications.

DIPHTHERITIC CONJUNCTIVITIS.

By AUGUSTIN PRICHARD, Esq., Surgeon to the Bristol Royal Infirmary, and the Bristol Eye Dispensary.

I CAN find in no systematic or other treatise on the Diseases of the Eye which I have had an opportunity of examining,* a description of a pathological state which I wish to bring before the notice of the Association, and with which I and doubtless many of my fellow associates have been familiar for some years. Writers upon ophthalmic surgery must have noticed it, if they were practically acquainted with their subject on an extensive scale; but they do not appear to have considered it a disease sufficiently distinct to require a separate description. I allude to acute conjunctival inflammation, with fibrinous

* I have looked through, for this purpose, the authors named in the following formidable list:—Demours, De Sauvage, Guthrie, Wharton Jones, Jüngken, Lawrence, Mackenzie, Middlemore, Morgan, Sanders, Scarpa, Slade, Vetch, Walker, Ware, Wardrop, Warner, Watson, and Weller; besides the "Cyclopædia" and "Library of Medicine", the "Dictionnaire de Médecine"; and West, Underwood, Evanson and Mansell, and Syer, on the Diseases of Children; and other general works on the practice of medicine and surgery.

exudation, and it may very properly be called "Diphtheritic Conjunctivitis".

We are all acquainted—many of us too well—with the two peculiar diseases of the trachea and pharynx: croup, or "tracheitis", and "angina membranacea", or "diphtheritis", both characterised by the effusion of coagulable lymph upon the mucous surface; the former (croup) being an acute idiopathic inflammation, with fibrinous exudation, of the mucous membrane of the trachea in apparently healthy subjects, often in children remarkably strong and stout for their age; and the latter (angina membranacea) occurring sometimes in an epidemic form, and seen generally in children who have been exposed to the contagion of scarlatina, or who have actually had that disease; and it is the same disorder as the "inflammation diphtherique", described by M. Bretonneau in his memoir read before the Royal Academy of Medicine.

The pathological condition of the two diseases is the same; that is, an inflamed mucous membrane (in one instance in the trachea and bronchial tubes, in the other about the pharynx and isthmus faucium) secretes coagulable lymph instead of serum or mucus or pus, as is commonly the case; but why in some strong healthy subjects, and in some cachectic and weakly ones, this peculiar change in the product of mucous inflammation takes place, I can form no opinion.

I have now seen nine or ten cases of acute conjunctival inflammation in young children, where, instead of the ordinary serum, mucus, or pus, fibrin has been effused, of the same physical characters as that effused in a recent case of acute pleurisy, which has adhered to the lids, and when unchecked by treatment has spread over the surface of the globe and destroyed the sight; but until lately I have never seen any reason to associate this condition with the poison of scarlatina. The cases which I have noticed have been nearly, if not quite, all during the period of the first dentition. When the disease comes on, the lids are first affected, and to them the inflammation is, in the majority of instances, confined. They are much swollen, and, upon everting them, a layer of yellowish-white lymph is found adherent to the mucous surface, fitting it exactly, and reaching to the very margin; this may, with some difficulty, be peeled off, by laying hold of it with a pair of forceps, but the process causes bleeding from the conjunctiva underneath; and I have no doubt but that vessels are soon developed in the false membrane which communicate with those of the lids. I have examined a layer of lymph thus removed under the microscope, and have seen one or two red lines upon it, which I believe to have been vessels; but the specimens are so rare that I have had no opportunity of repeating this examination, and I should be sorry to base any decided statements upon one experiment.

All the cases which I have seen, with the exception of two, have been cut short at this stage by suitable treatment; but in one of these two, which occurred many years ago, the lymph, after being repeatedly reformed on the palpebral conjunctiva, was also secreted on the globe, and became adherent to the sclerotic and cornea, and the sight of that eye was lost. In the other, which I will briefly narrate, both eyes were lost two or three weeks before I saw the child, who ultimately died of the irritation. The history which follows proves the connection of this disease with the "angina membranacea", and with scarlatina, and its pathological identity with the former, and it shows also that under certain circumstances inflammation of the eyes may be a fatal disease. There are other interesting points connected with the account, such as the question of the contagion of this diphtheritic state, or the distinctness of the poison, and the risks of exposure to cold, or to unwholesome or fetid exhalations after scarlatina, which I cannot enter into now; but I may express my belief that this tendency to secrete fibrin from the mucous membranes will be found to be associated with that inflammatory condition of the system following scarlatina, familiar to us all, in which albumen is found in the urine, and patients become dropsical.

In one of the suburbs of Bristol is a street which has apparently been unfinished for a long time; the houses are not of the poorest kind, but the broken end to the rows, and the absence of any thoroughfare, give it a desolate aspect; behind the houses are small gardens with a ditch and open drain. There had been scarlet fever in one of the houses in August last, and in a neighbouring one my patient lived; and the following is the account of her illness and that of her family.

CASE I. Julia Palmer, aged 3 years, was taken ill with fever on Thursday, September 3rd, and the eruption of scarlatina came out on the 4th. She went through the usual course, and got better; but after a while her eyes became weak and suddenly dull, and by the 21st they were quite opaque, and from that time she was blind.

She was admitted my patient on Monday, October the 12th, with lids much swollen, and tears running from her eyes. She evidently had no perception of light; and although she seemed in tolerably fair condition, she was very weak. Upon separating the lids, I could see the globe and the lids thickly covered with layers of coagulable lymph, the cornea being altogether invisible. I ordered her milk diet, and simple fomentations with warm water twice a-day for the eyes, for no active treatment could do more than give her pain and increase her irritability. After two or three days she had some wine and a drop or two of laudanum twice a-day, but she gradually became weaker.

On Thursday, the 15th, she seemed less able to sit up in bed, the swelling of the lids subsided, and blood in minute quantities escaped from the eyes. She was a pitiable object, sitting against the pillow, and constantly moaning and feeling about with her hands, calling upon her mother; and I was not sorry to find that she died on the morning of the 17th.

The body was not examined, but the eyes were removed. There were thick layers of lymph adherent to the sclerotic, and very dense, and apparently organised. The cornea had disappeared, the iris being exposed, and the lens entirely opaque. I have no doubt but that the cornea sloughed on the 15th when the discharge of blood took place, and that pressure from the effused lymph, and the low condition of the vitality of the child, were the cause of its sloughing.

Other members of the family were also affected, and with the following results:—

CASE II. C. P., aged 14 months, was taken ill at the same time, and went through the ordinary stages of scarlatina without bad symptoms; but on recovery was a good deal exposed to cold, for the mother had to carry it to and fro in her arms during the time she was nursing the others. It was taken about the end of the third week in September with croupy symptoms, and died on the 17th of October of fetid sore throat, choked by the false membranes which were secreted from the pharynx, and which the mother used to brush out in considerable quantities.

CASE III. James P., another brother, aged 5 years, was also taken at the same time, and appeared to recover in a satisfactory way. He was taken with a metallic croupy cough about the same time as the last, and died on the 22nd of October, suffocated in the same way by the false membrane.

CASES IV and V. B. and A. P., two older sisters, about 9 and 11, went through the scarlatina in the same way, and were taken in like manner with the croupy cough, but they recovered, having had fewer shreds of membrane about their throats. The eldest also had diphtheritic conjunctivitis in a milder form, for flakes of lymph formed in her eyes; and upon one occasion so large a portion was detached from her lid, that it covered the cornea for a while, and they thought she had suddenly become blind.

These five children constituted the whole of that family living at home, and, as has been seen, were thus affected:—

1. The eldest had diphtheritic inflammation of the throat and of the conjunctiva, and recovered.
2. The second had diphtheritic inflammation of the throat, and recovered.
3. The third had diphtheritic inflammation of the throat, and died.
4. The fourth had diphtheritic inflammation of the conjunctivæ, with destruction of the eyes, and died.
5. The fifth had diphtheritic inflammation of the throat, and died.

In this list we have both recoveries and deaths from both sets of cases.

Lastly, as to the treatment of this disease of the eyes. I believe that for its cure, besides great cleanliness, it is essential to strip away all the false membrane from the eye and lids, and to apply to the entire surface a strong solution of nitrate of silver, at least twenty grains to the ounce. This must be repeated daily until the tendency to the reproduction of the lymph has been checked. At the same time I should strongly recommend mild purgatives (containing mercury in some simple form); and if the patient is very full and hot, a leech to the temple will be of service. Poultices, wet pads, too prolonged fomentations, or anything resembling plasters, bandages, or dressings, must be entirely discarded. I think that the nitrate of silver plan will cure the disease if it is followed up in an energetic way. To attack it by any remedy not directly applied to the inflamed organ would be to lose time

and probably the patient's sight as well; and if in parallel cases we could get at the mucous membrane of the larynx and pharynx, and apply the same solution to it, I think the result would be as satisfactory.

N.B. Only one of these five cases was under my care; the other particulars I obtained subsequently from the mother, a very intelligent woman.

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 vii. C. M., aged 39, single, a butler, was admitted August 17th, having been ill five weeks. He has been paralysed to a considerable extent in both hands, so that he cannot dress himself, nor pick up anything. His feet are also weak, and flap down in walking. The hands and arms ache at night, so that he cannot sleep. The paralysis is getting worse. He has derived no benefit from blisters to the neck. He feels very weak all over. The head is hottish, but he has not much pain in it. The tongue is coated at the back; the bowels costive; the skin natural; the pulse large, soft. The urine (examined some days later) was of specific gravity 1014, of good full colour, not albuminous. There was great if not complete loss of sensibility in the parts paralysed. He states that his illness came on gradually, apparently from excess in drinking, not in venery. He never lost his consciousness.

He was treated from the first with five grains of quinine three times a day, which was continued till September 3rd, when he was much better in himself; the power of the right foot much improved, of the left but little; the hands still very weak. Citrate of iron and quinine were then prescribed, in doses of ten grains three times a day, with fifteen minims of tincture of nux vomica.

September 10th. The hands are improved, but are very numb, and get very weak towards night.

September 17th. The feet and hands are stronger. He is very much better in himself; he can lift and hold better than he could; but the more delicate movements he cannot yet manage. He says this is from numbness and stiffness of the fingers.

October 19th. He has been at Kingston, and is very much better. He has had no medicine during the last ten days. He can dress himself, and do anything almost. He still has some "dead thick" numb sensation in the fingers, and some "loose" sensation about the left leg; "it does not come up in walking so well as the other."

November 2nd. He is still further improved.

Remarks. Whatever may have been the exact seat of the palsy in this case, it seems clear that it must be ascribed to a simple failure of nervous power, and not to organic alteration. The excess he had indulged in, I suppose, acted as a predisposing cause, impairing the tone and resisting power of the nerve-structures; and then this gave way completely under the influence of the *constitutio anni*, which seems constantly, at the present day, to depress nervous force. A correct diagnosis of these cases is most important, but not, I think, always easy. The existence of great general debility (apart from the paralysis), and the *juvantia* and *lædentia*, are the chief points to look to.

Case viii. H., aged 45, a labourer, was admitted July 9th. Whilst at work, he was seized with violent pain across the loins, and with numbness running down the legs. The urine was retained, so that he could not pass it; and there was involuntary discharge of fæces. When first seen, he was lying on his back at full length, the toes pointing straight out; the skin cold; the legs paralysed and insensible, even when pinched with the nail. He was quite unable to stir. He had no pain nor disorder elsewhere. He was quite conscious. He was ordered to have an enema of turpentine with aloes; and to take immediately five grains of calomel, with ten of compound jalap powder. After the enema and powder had acted freely, the limbs still remained powerless; the pain continued, but was relieved by the use of a croton-oil liniment.

July 11th. He was ordered to have ten grains of disulphate of quina three times a day.

July 12th. Sensation had returned.

July 13th. He is able to sit up in bed.

July 20th. He attended himself at the Dispensary.

July 23rd. He was well. The quinine had been continued during all the time.

Remarks. This case was under the care of my friend Mr. Moullin, whose skilful management of it deserves great praise. It seems to have been very similar to the preceding, the disorder in both being functional, and not referrible to active hyperæmia affecting the nervous centres. Early treatment (not to say correct) is in these cases of much consequence to the obtaining of an early recovery. My case, which had been ill five weeks before I saw him, recovered much more slowly than Mr. Moullin's. Dr. West has dwelt on the same point as regards infantile paralysis. In Dr. Graves's clinical lecture on *Paraplegia*, a case is related where severe paroxysms of gastralgia and vomiting concurred with this form of paralysis, and where a careful *post mortem* examination detected no organic alteration whatever. In such cases, nothing remains but to assume that the *vis nervosa* was primarily disordered, or failed. Such derangements in persons predisposed may be induced by various causes which enfeeble the general power, as, for instance, an attack of fever. In this case it is, I think, the malarious, rather than the typhoid or typhus, which exhibits the sequel of paralysis. This is what might have been expected, as the malarious miasm exerts its prostrating influence peculiarly on the nervous system. It is rather remarkable how small an extent of the nervous system may be affected by the paralysis. A boy, aged 14, was recently under my care, who, after fever, had paralysis of the left little finger; the rest of the hand was only rather weak.

Case ix. E. Ph., cook, aged 43, was admitted December 19th. She had been ill about four weeks. She was first attacked with inflammation of the legs, which got well, and she returned to her work; but six days ago she began to lose the use of the right hand, and two days afterwards that of the left. The paralysis of the left hand for two days was complete, that of the right was not so much. The arms were not affected. The hands were numb, but not in pain. She is much confined to the house, and has been two months in a kitchen without going out. She has felt very weak, and has been overworked lately. She never had ague. She was living, when taken ill, near Reading. There is a small lake a quarter of a mile from the house, and springs of water round it. The passages and cellars were damp. She has suffered much with headache and giddiness, but not at the time of the attack. The skin is warm, moist; pulse 72, soft; the bowels are open. A blister was applied to the neck; and she was ordered to take three times a day five grains of citrate of iron and quinine, with ten minims of tincture of nux vomica; and to have half ordinary diet.

December 23rd. The skin is cold; circulation languid; pulse very weak. The left hand is improving slowly; the right recovered on the day of admission. The blister is very sore.

December 30th. The left hand is all right; the pulse a great deal better and stronger; the skin warm. She went out soon afterwards, quite well.

Remarks. The foregoing is a slight case of functional paralysis, but sufficiently well marked. The failure of nervous power in the motor nerves may have been due simply to fatigue, or, which I think more probable, the fatigue impaired their resisting power, and left them prone to succumb under even a slight degree of endemic influence. I incline to the latter opinion, because I am not aware that any amount of over-exertion alone is adequate to produce paralysis.

The following personal account given by M. Bailly, of his own experience during his stay at Rome, will form a suitable sequel to the foregoing cases. After some previous symptoms, such as morning headache, palpitation after a midday meal, sleeplessness, and momentary giddiness, he suffered as he goes on to relate. "In the morning I was comfortable enough, but towards 3 or 4 P.M. a state of *malaise* began, and went on increasing, without my being able to fix myself its especial seat. I had neither pain in the head nor in the abdomen, nor any rigors. However, there came on, little by little, a weakness of legs, very difficult to conceive as occurring in an individual who, having never been bedridden, and experiencing no local symptoms, could not himself determine in what manner such a weakness was possible, when he examined successively the state of all his functions..... All my functions were performed very well. Every day I went to the hospital to collect observations, and to examine the bodies of those whose illness I had watched; each time I walked about three-quarters of a league to dine at Rome; and, when I had to return home, I despaired sometimes of being able to get to the end of the way; so great