vourable circumstances could not be more forcibly illustrated than by this case, in which the only channel for the direct supply of blood to the leg was, at any rate, seriously injured, and the principal vein broken off, leaving no channel for the return of blood, except the internal saphena vein; and yet where mortification was delayed until the establishment of the collateral circulation, and the deep parts retained their vitality throughout.

II. RECURRENT FIBRO-PLASTIC TUMOUR COMMENCING IN A GANGLION OF THE WRIST.

Under the care of PRESCOTT G. HEWETT, Esq.

At p. 902 of last year's volume will be found the account of a case (continued from p. 239) in which a fibro-plastic tumour, originating, as it appeared, in a ganglion connected with one of the extensor tendons of the thumb, had been treated in various ways, and had at length been entirely excised, and a cure effected. This cure, however, has proved to be only temporary; for, although the wound healed perfectly, and the patient's health improved considerably after his discharge, the tumour soon reappeared in the neighbourhood of the cicatrix; and, when he presented himself at the Hospital a few days ago, a disease exactly resembling the original one had been reproduced, and was growing rapidly. The surgeons of the Hospital, in consultation, recommended the amputation of the limb; but the patient would not (at any rate, at present) consent to this measure, and he left the house on the following day. It is very probable that we may have an opportunity of laying before our readers the further progress of this case.

III. NECROSIS OF THE LOWER END OF THE FEMUR: OPERATION: PYÆMIA.

Under the care of E. CUTLER, Esq.

Joseph S., aged 17, a very fine healthy looking young man, was admitted on November 3rd under Mr. Cutler's care, on account of necrosis of the femur in the popliteal space, which had existed for five years. The cause of the disease was unknown. There was a sinus on the inner side of the lower part of the thigh, in which a loose piece of bone could be plainly felt.

On November 18th, Mr. Cutler proceeded to extract this exfoliated portion by dilating the sinus. This was done carefully, on account of the proximity of the vessels; and a piece of bone, about three inches in length, comprising a thin shell of the surface of the bone, was extracted without accident. On November 20th, he was very feverish, and was attacked with a severe rigor; and this was succeeded by great pain in the head and delirium, accompanied by redness of the skin of the left side of the neck and face, and, later on, gradual protrusion of the eyeball. He became intensely jaundiced, and displayed other unequivocal symptoms of pyæmia, of which he died on November 26th, nine days after the operation.

On examination of the body, it was found most intensely jaundiced. The wound at the inner side of the ham was filled with pus of an intensely yellow colour. The cellular tissue about the wound was very much condensed, apparently from old inflammation. The wound led down directly upon the popliteal space of the femur immediately beneath the femoral vessels, which were separated from the wound only by a very thin layer of the condensed cellular tissue. The popliteal space of the femur, from which the dead bone had been removed, was covered by granulations. A minute spicula of loose bone, which lay at the upper part of the wound, was the only visible remnant of diseased bone; but the part of the femur from which it had separated was somewhat softened. No exposed bone could be found. The veins of the limb, as far as they could be traced, were quite healthy. There were extensive secondary abscesses in the liver and lungs; and one in the cellular tissue behind the left eyeball.

REMARKS. It is well known that necrosis, when it attacks the lower end and back part of the femur (a very usual seat of this affection), terminates, as a rule, in superficial exfoliation, without the deposition of any new bone; and that the operation required to remove the dead bone is, therefore, one of considerable risk, from the proximity of the artery, which is not defended by any intervening substance, and may, even when not hit by the incision, very easily be lacerated by the sharp points of the sequestrum. This accident has frequently occurred; and a preparation illustrating some of the dangers of operations on this part of the femur exists in the Museum of St. George's Hospital, where, in trephining the femur, the operator has wounded the artery either with the instrument or with a sharp point of bone. The operation (which was performed many years ago) proved fatal. In the case before us, perhaps the condensation of the areolar tissue might have protected the vessels from mischief, even had the sequestrum required more force to extract it. The fatal event of the case is a rare exception to the usual innocence of operations of this kind, and is remarkable as occurring in a case where the cancellous tissue of the bone did not appear to be exposed, where no incisions had been made into the bone at the time of the operation, where no phlebitis or diffuse inflammation had followed; and, finally, where the patient was young, temperate, and healthy.

UNIVERSITY COLLEGE HOSPITAL.

WE regret to observe, on looking over our report of Mr. Erichsen's case of ovariotomy, in last week's number of the JOURNAL, that we omitted to state that the chemical analysis of the contents of the tumour, of which the result is there given, was made by Dr. Harley. As this analysis was a matter of considerable labour and care, it is only right that it should be attributed to the proper author.

Original Communications.

CASES OF DIPHTHERIA.

By J. R. HUGHES, M.D.Edin., Denbigh.

I TRUST the imperfect knowledge of the nature, character, pathology, and nosology of diphtheria, as well as the importance of the subject to the public, are sufficient apology for reporting in the columns of the BRITISH MEDICAL JOURNAL the histories of two cases.

CASE I. A boy, aged 4½, a strong, healthy-looking lad, the son of a farmer. He lived where all the requisites of health were apparently combined,—pure air, commodious, clean, well-ventilated house, abundant supply of sparkling mountain spring water; and he was provided with all domestic wants and comforts. The house was situated by itself on an elevated, inclined ground; it was dry; the subsoil was gravelly; the neighbourhood generally well drained. There was no evident cause of miasma, or apparent unhealthiness of the vicinity, to create a malignant case. There had been, two months previously, a few cases of scarlatina in the village, about a mile off, with which there had been no traceable intercourse or communication. On November 23rd, on returning into the house after standing by a spring pool for about half an hour on a very cold day, he complained of cold feet, and soon became languid, heavy, and drowsy. During the following night he was feverish and restless, had headache, and occasionally vomited, but slept the night comparatively comfortably.

Nov. 24th. I first saw him. The skin was piercingly hot; no exanthemata were to be seen on any part. He had stiff neck; the chin was held to the left side. There was swelling over the right parotid and submaxillary glands and the neighbouring lymphatics. The tongue was very slightly furred. Deglutition was easy; he swallowed four ounces of fluid in my presence with perfect ease. I could not ascertain the state of the fauces without using force. The palate looked healthy. There was a peculiar and well-marked breath-odour, more allied than anything I can imagine to the smell of a human body in the incipient stage of putrefaction. I never perceived a similar odour in aggravated or scarlatinal sore throat. He was rather thirsty; had taken no food; the bowels were costive; the urine scanty. The face was not flushed, and the expression was good; the pulse was quick, 100; he had no nervous excitement. I then considered it an acute case of cynanche parotidea. I ordered bran poultices to the neck, a bath, gentle aperients, and stimulating diaphoretics.

Nov. 25th. The boy's father came to my surgery to say that his bowels were still costive; I ordered five grains of calomel; otherwise he was about the same.

Nov. 26th. I again visited him. He looked paler and more prostrated; the skin was not so hot; the swelling in the neck had not increased; he had no difficulty in swallowing;

the tongue was slightly furred, the breath-odour more intense. I forced his mouth open for a more complete examination of the fauces and palate. The back part of the palate was of a *clear white*, exactly as if it had been cauterised with nitrate of silver. When my friend, Dr. Roberts of St. Asaph, and myself, again visited him the same day and made an examination of the throat, a piece of about the size of a half-crown, and as thick as a shilling, was peeled off the palate by my finger. The surface was as white as parchment. The right tonsil was felt filling the right half of the fauces to the uvula; the left tonsil was of natural size. A considerable quantity of sero-bloody purulent matter flowed into the mouth in making the examination; it came, I think, from the right tonsil. When the coriaceous-looking membrane was held to the light, it presented pits or depressions, the marks of the outlets of the mucous follicles. He had taken no food of any kind; the bowels had been moved; pulse 120. I ordered a mixture of quinine and chlorate of potass, and alternate injections of beef-tea and wine and eggs, should he continue to refuse to take food. The part affected was rubbed with nitrate of silver.

Nov. 27th. He was moribund, comatose, and convulsed, and died on the fourth day from the onset of the attack. During the last twenty-four hours of his consciousness, he partook liberally of wine and egg and beef-tea. The power of swallowing remained easy to the last.

POST-MORTEM EXAMINATION forty-eight hours after death. The roof of the mouth was pearly white; the tongue clean. The tongue, tonsils, pharynx, œsophagus, and trachea, down to the bifurcation, were removed together. The right tonsil was enlarged; the surface was rugged, soft, moist, and villous, bespeckled over with black spots; it appeared to be in an incipient stage of sphacelation, rather offensive. The left tonsil was healthy. The spot on the palate where the piece of membrane came off during life was equally covered with the same coriaceous layer; the pearly white appearance on the roof of the mouth could not easily be scraped or peeled off. The surface of the pharynx and the epiglottis were covered by a membrane of the same kind, of about the thickness of a sixpence, but softer, and more easily torn from the submucous tissue, which appeared granular and inflamed. The larynx was considerably inflamed, and covered with frothy mucus, but it lost the membranaceous appearance two or three rings down. The right parotid submaxillary and lymphatic glands were enlarged. The lungs were healthy, as well as the other organs of the body. The head was not examined. My colleagues, as well as myself, agreed that the pathological changes observed in the throat were not sufficient to cause death. The following were the different pathological appearances, and conclusions thereon:—

1. The thickening of the epithelial mucous layer by exudative product gave the white parchment appearance to the mucous membrane.

2. That desquamation of the exudative, hypertrophied, epithelial mucous layer may account for the membranaceous expectoration in these cases.

3. The coriaceous membrane had been evidently successively renewed, as the roof of the mouth, where it had been peeled off during life, was equally covered.

4. In some parts, as the pharynx, the submucous membrane was bare and granular, but there was no defined ulcer, in the common acceptation of the term.

5. The right tonsil was soft, and in an incipient stage of sphacelation; hence the peculiar breath-odour during life.

REMARKS. This case pursued a most curious and insidious course. There was painless deglutition, though the tonsils were inflamed and enlarged; no cough nor difficulty of breathing though the epiglottis was diseased and inflamed. What could be the reason? The most probable way of solving the question is, by taking into consideration the impaired nutrition of the parts, as well as the effect of the hypertrophied epithelial membrane covering the papillæ in physically blunting their sensibility. How far this affection, diphtheria, is a distinct kind of zymotic disease, having for its cause and origin a different kind of blood-poison from the modified malignant scarlatina, to which, I have no doubt, it is more allied than any other disease of the order exanthemata, I have had too limited experience for a satisfactory analyses. The course, symptoms, and pathological appearances were as clearly different from scarlatina as from the rest of this order.

CASE II. J. J., aged 20, dairymaid, a strong and healthy looking woman, was taken ill twenty-two days after the death of the above patient, in whose family she lived.

December 18th, 1858, I visited her. She said that, on the 16th, she was taken suddenly with headache, shivering, and considerable prostration, which disabled and obliged her to go to bed. During the following night, she was exceedingly hot and thirsty; her throat became sore, and the voice so husky, that she could not be understood when speaking. She had frequent vomiting; the bowels had not been moved after several doses of castor oil. On examining the throat, I found the right tonsil enlarged, and bespeckled over with few irregular white spots (as if caustic had been applied), varying in size from a pin's head to a small ivory button; the mucous membrane of the palate appeared milky; the external cervical glands were puffy; the pharynx looked healthy; the voice was hoarse; pulse 90. The bowels were costive; the urine scanty; the skin hot; there was no rash. She had no pain in swallowing. I ordered hot bran poultices to be applied to the neck, and repeated the castor oil till the bowels were moved; and gave a mixture of tincture of sesquichloride of iron. She had so improved by the second day, that it was thought unnecessary for me again to visit her.

REMARKS. I have no doubt the above case was one of simple modified diphtheria as regards the pathological results. The two cases fully illustrate that there are varieties of degrees and intensity of the morbific influence of diphtheritic poison, or that the latter case was abated and shortened in its course and effects by tincture of sesquichloride of iron.

DIPHTHERITE; ITS NATURE AND TREATMENT.

By C. E. BERNARD, M.D., Weston-super-Mare.

As Diphtherite has held, and holds a prominent place amongst prevailing disorders, and is yet destined, no doubt, to invade districts hitherto free, possibly the following remarks thereupon will not be out of place. I would not claim for them any great amount of originality. The object is more to separate the grain from the chaff, and place it so that they who run may read. Anything new in them will, of course, discover itself.

The term Diphtheria, or Diphtherite, is itself in some degree objectionable; first, because being new it conveys to the mind of many the idea of a new disease, and a new disorder suggests a new remedy, and a resort to the last *new system* upon the principle *similia similibus;* and the advocates of the 'opathies' and 'ologies' see a favourable opportunity of advancing and recommending that heresy which may chance to be the peculiar weakness of each; and were the professors as active as the disciples, mischief might result. But fortunately the disease in question is too serious a matter for trifling. But independent of this collateral complication, the simple fact of a patient supposing that he labours under a new and hitherto unknown disease, adds materially to the constitutional *prostration* by which the setting in of the disease itself is characterised, just about in the same proportion as we would wish to elevate the vital power by—hope and confidence. It is useless to argue with the sick, and often more so with those about them. It is manifest, of course, that no form in which disease presents itself can be really new to the practitioner, whose diagnosis and treatment are based upon sound and recognised principles. It gets classified immediately, and is but a rare variety. Who, indeed, at the present moment can so distinctly draw the line as to separate all cases of diphtheria from diseases of almost daily occurrence at some season or other of the year? But the truth is that the disease, even under its present name, is not new.

Without going back to ancient authority, it is thirty-five years since Bretonneau published his work, "*Des Inflammations spéciales du Tissu muqueux, et en particulier de la Diphthérite,*" etc., and this was several years before spasmodic cholera prevailed epidemically in this country; nevertheless, the "*new* throat disease" is an every day expression. To deprive it of its novelty would, in my opinion, take some of the venom from its sting. The term *Angina membranacea* seems scientific, and characteristic of the special nature of the malady.

The mortality arising from the disease in question is great, if we are to believe *all reports*. Wherefore, it would be safer to believe only such as are vouched by medical authority. Every practitioner knows that some of the worst cases of scarlet fever are those in which the rash comes out sparingly or not at all; and, doubtless, many such are smuggled, by the