gnised by him, had caused irritation, and had led to the first attack of babbling.

I have thought it right to recapitulate the above circumstances, because it appears to me a most important as well as interesting matter to establish or refute the inference they bear—viz., that it is possible for a person who is comatose, with contracted pupils, eyes half shut, incapable of being roused, and, moreover (as now known), with such extensive lesion of the brain, &c., to be, nevertheless, at the same time really conscious of what is passing before him.

To my own mind, although staggered by the actual examination and handling of the extensive lesions after death, yet, nevertheless, the personal knowledge of most of the fact narrated, establishes the affirmative, and compels me to arrive at the conclusion, that this gentleman was at times partly, if not wholly conscious of the events which passed before him up to a very short time before his death.

I am fully aware that many who did not witness the facts, may hesitate, and rightly so, to agree at once in such a conclusion; yet I think it will be admitted by all that the facts themselves are not easily explained in any other way.

The possibility of such a condition of consciousness existing in cases of injury to the head had, however, attracted the attention, and been commented upon by one of the highest authorities known—viz., Hennen, and he, in his "Military Surgery," p. 305, says: "The powers of speech are often lost, while those of memory remain, and the sight is impaired while the hearing is perfect, and *vice versa*. I have met with numerous instances of this, and have had patients who told me that they could hear and distinguish my voice from that of others, and have repeated my words as a proof of the fact, and of the retention of memory, while they could not distinguish my person or give utterance to their thoughts."

That the *sudden* effusion of so much blood within the skull would rapidly terminate life, I think there can be no doubt; and it is, therefore, only to its *gradual* introduction into, and encroachment upon the circumscribed space in which the brain is contained, that we can understand how life continued so long; and in the same way we must explain the effect produced on the various faculties—viz., that the brain, although injured at its anterior and middle lobes, *was yet capable of carrying on its functions*, is proved by the six hours' consciousness, but as the pressure from the effused blood became hour by hour greater, at last consciousness was apparently lost; nevertheless, as the substance of the more important portions of the brain was not injured, it is possible to conceive that the brain in some way accommodated itself from time to time to the excessively slow, yet gradually increasing, pressure to which it was subjected, and that thereby it permitted of the occasional manifestation of partial consciousness.

The fourth point deserving notice is the condition of the pupil, which throughout the whole time remained contracted, and until the last day slightly sensible to light, yet at the moment of death it was distended to its utmost.

The condition of the pupil, in concussion and compression, is acknowledgedly so uncertain that no judgment of the absolute condition of the patient can be arrived at from this symptom; but because it is so now, it does not follow that it is to remain a matter of such ambiguous import, and for that reason I wish to record the fact, that in this case the pupil was contracted during the whole illness, yet widely dilated *immediately after, or, indeed, I may say, at the precise moment of death*.

The fifth subject possessed of interest is the size and situation of the clots, in connexion with the source from whence the blood constituting them was derived.

The source from whence the blood had been derived, which constituted the enormous clots found in this case, was one of the earliest things which occupied our attention at the post-mortem examination, and at the first moment it was the united supposition that it had proceeded from a ruptured sinus. This point was minutely examined, and it was satisfactorily evident to each of us present, that such was *not* the case, but that it had proceeded from the vessels passing between the dura mater and the suture. The interspaces between the edges of the dura were deeply coloured with blood; the sinus were entire.

It has been stated by the highest authorities, (Sir Benjamin Brodie and Abernethy,) that blood is never effused between the dura mater and bone in such quantity as to produce a dangerous pressure on the brain, except when the middle meningeal artery has been lacerated. That such effusion and dangerous pressure, however, may occur, and that artery be uninjured, is now proved beyond a doubt, and therefore I am desirous of directing attention to the fact.

The occurrence of a disjunction of the bones constituting the lambdoidal suture constitutes the sixth point to which I am desirous of drawing attention.

It is stated by Sir B. Brodie, in the "Medico-Chirurgical Transactions," vol. xiv., p. 332, that "the disjunction of the sutures is much more rare than fracture of the cranium. It is evident that this cannot happen except to those who are not much advanced in life, and in whom the sutures are not completely consolidated." And the importance of the injury is testified to by Pott, who, in his "Chirurgical Works," p. 185, says, in reference to disjunction of the suture, "It sometimes happens, more particularly in young subjects, that we find a suture considerably disjoined; in which circumstance I do not remember ever to have seen one single instance of recovery."

The age of this gentleman was twenty-seven. The sutures in the other part of the skull were well consolidated. This, however, is the second case that has fallen under my notice, for I find in my note-book the record of a post-mortem examination of the body of a woman, about thirty years of age, who, as some said, had fallen down-stairs, or as others insinuated, had been murdered, in Cook's-court, Carey-street, in which the like injury had been received—viz., a disjunction of the lambdoidal suture, and in this case I find it recorded, "that the handle of the scalpel can be placed between the edges of the suture."

The seventh and last point to which I wish to refer is the existence of the numerous other sources of danger beside the enormous clot—viz., to the laceration of the cerebrum, the fracture of the orbital plate of the frontal bone, and the several spots of effused and coagulated blood situated between the dura mater and the bone, especially that in the middle fossa of the skull on the left side; and my object in doing so is to demonstrate, that had the patient survived sufficiently long to enable us, from the development of other symptoms, such as reaction, fever, puffiness of the scalp over the seat of the clot, &c., to ascertain the injured part, and to devise and carry out the best-directed efforts to remove them by surgical means; yet the numerous other lesions, especially the effused blood beneath the dura mater, in the middle fossa, would have baffled to a certainty all our efforts to relieve him.

Old Broad-street, December, 1857.

REMARKS

ON THE

EXPERIENCE OF THE SURGEONS OF THE "DREADNOUGHT" AS TO PIROGOFF'S OPERATION AT THE ANKLE-JOINT.

By J. CROFT, Esq.,

ASSISTANT-SURGEON TO THE "DREADNOUGHT."

THE success attending the above-mentioned operation at the "Dreadnought" induces me to draw the attention of the profession to the following facts:—

Six times the operation has been performed, and in four instances with most perfect success; but in the two remaining death removed the subjects of operation before cure was completed,—in the first instance by granular disease of the kidneys, and in the second instance by secondary deposits of pus in various joints.

In two of the six cases in which cure was completed, the operation was performed for the removal of scrofulous disease of the articulations between the tarsal bones; and in the two others the operation was for frost-bite of the anterior part of the feet.

Progress towards health was marked by suppuration along the tendons of the tibialis anticus and posticus and the peroneal tendons in each of the cases, but not by exfoliation of bone. The posterior part of the os calcis was united firmly with the tibia, generally in about three weeks; but in one instance—the last in which the operation was performed—union was good at the end of twelve days.

I may here remark, that although the os calcis may be diseased at and about its articulating surfaces in instances of scrofulous disease of the joints of the tarsus, it is rarely that the posterior part is rendered too unhealthy to be made use of in the formation of a stump.

The advantages of this operation over "Syme's" (the only operation with which it can be compared) are, that it may be performed more rapidly as to time, leaves a more vascular flap,

forms a longer stump, and produces a firmer pad for the subject to walk upon.

Less time is occupied in the operation for the somewhat troublesome dissection of the skin of the heel from the os calcis is avoided, and the os calcis sawn through instead.

Greater vascularity of the flap is secured, for the plantar arteries are divided in the hollow of the foot.

The length of the stump is a very important point; it is longer than that in Syme's operation, by the portion of the os calcis left on the flap, which should be quite one inch and a quarter. In the four instances mentioned, the difference in length between the foot operated upon and the sound foot was never more than three-eighths of an inch.

The mode of operation, as performed by Mr. Busk, Mr. Tudor, and myself, is to grasp the projecting portion of foot with the left hand, then to enter the point of the knife *immediately* behind the malleolus, and make a semicircular incision, in front of the point, terminating at a corresponding point behind the opposite malleolus; next, to carry the incision downwards and slightly forwards to the edge of the sole of the foot, straight across the sole, and terminate it at the opposite malleolus, or the point at which the incision was commenced.

Having disarticulated the foot, the soft parts are to be separated from around the os calcis in a line from the posterior margin of the upper articulating surface to the under edge of the articulating surface of the cuboid, and the mass in front of this line to be removed by the saw.

The ends of the tibia and fibula are sawn off in the way usual in Syme's operation. During the process of separating the soft, or rather tough parts, about the os calcis, care should be taken to keep the edge of the knife close to the bone, in order to avoid wounding the posterior tibial or plantar arteries. The portion of the os calcis left on the flap should be placed in contact with the end of the tibia, and if the saw has been entered well behind the calcaneo-astragaloid articulation, and brought out at the under margin of the calcaneo-cuboid articulation, the contact will be accurate. If the bones cannot be placed in accurate contact, thin slices of bone from the upper and back part of the portion of the os calcis should be removed by the saw until they can be adapted. The saw we prefer is Bigg and Milliken's modification of Butcher's Dublin saw.

January, 1858.

A Mirror

OF THE PRACTICE OF MEDICINE AND SURGERY IN THE HOSPITALS OF LONDON.

Nulla est alia pro certo noscendi via, nisi quam plurimas et morborum et dissectionum historias, tam aliorum proprias, collectas habere et inter se comparare.—MORGAGNI. *De Sed. et Caus. Morb.* lib. 14. Proœmium.

LONDON HOSPITAL.

LARGE FIBROUS TUMOUR OF THE TONSIL, IMPEDING DEGLUTITION, REMOVED BY LIGATURE.

(Under the care of Mr. CURLING.)

THE upper part of the pharynx is not unfrequently the seat of polypi and tumours, which extend backwards and downwards from the nasal cavities; they are known, however, to spring from the inside of this canal, or from one of its margins. Mr. Erichsen states, in his "Science and Art of Surgery," that when truly pharyngeal they are usually of a malignant character, and grow with rapidity. The tonsils are subject to a variety of affections, which may occupy the pharynx, the most common of which is hypertrophy; but true medullary cancer has been observed, in the form of a solitary tumour extending backwards. A fibrous enlargement of the tonsil, or a fibrous tumour occupying its situation, is still more rare. We have the opportunity, nevertheless, of recording two examples of this form of growth, extending into the pharynx, the removal of which in each was accomplished with success, although the form of operation was of necessity widely different. The diagnosis of the true nature

of the growth in the following case was at first somewhat doubtful. The patient's age, his general appearance, and the affection of the glands of his neck, raised a suspicion of its being malignant. Its slow growth, firm consistency, and the absence of pain, on the other hand, were favourable to the view of its innocent character. The circumstance of the glands on both sides of the neck being enlarged, seemed to show that swelling resulted from irritation in the throat generally, consequent on the presence of a tumour of so great a size. If, again, the glandular affection were a secondary growth to the tumour itself, we should expect to find it only on the side of the tonsil affected.

The question now arose, what was to be done in this case? A necessity for attempting its removal seemed urgent, as the tumour was slowly but steadily increasing, and would very shortly not only prevent deglutition, but impede respiration itself. In considering the various methods of removal, the ligature appeared to offer the safest means of effecting that desirable end, more especially if the tumour were supplied by any arteries of great size, as considerable difficulty might be experienced in arresting the bleeding if they were divided by the knife. The *écraseur* was properly objected to, because of the difficulty in getting the chain round the base of the tumour; moreover the instrument is a clumsy one for introduction into the mouth. A preference was given to the tumour tourniquet, which enabled the ligature to make its way gradually through the base of the tumour without the risk of hæmorrhage; this perfectly succeeded, and produced very little irritation or pain. The difficulties of the operation, as we gathered from a clinical lecture delivered on this case, were, first, passing the ligature through the base of the tumour; and secondly, carrying the ligature below its lower part. To effect this, the mouth was enlarged, to allow of greater room for manipulation. It was forty-eight hours before the base of the tumour was cut through; but had Mr. Curling used a stronger ligature, and readjusted it earlier, as he said, it might have been removed in less time—possibly in twenty-four or thirty-six hours.

An examination of the growth showed it to be of an innocent fibrous character, not very vascular, and resembling that in Mr. Tatum's patient. Mr. Syme has described this growth as "fibrous tumour of the fauces," (*THE LANCET*, vol. i. 1856, p. 51); but in the following case the tumour was not distinctly circumscribed nor movable—characters described by Mr. Syme as belonging to these tumours. It was at the upper part only of the growth that it appeared at all circumscribed, so that Mr. Curling could not calculate with safety on removing it by excision, as practised by Mr. Syme. We avail ourselves of the notes of the case, as taken by Mr. Rutledge, house-surgeon to the hospital.

Samuel S—, aged fifty-one, by occupation a baker, was admitted Dec. 15th, 1857. The patient, a man of sallow complexion and unhealthy aspect, states that he has suffered for some years from what he calls "asthma," arising from the inhalation of flour. He has never been liable to sore throat, and his family history indicates healthy parentage. The patient articulates distinctly, but speaks in a tone of voice similar to that usually described "as with plums in the mouth." Deglutition is performed with some difficulty, though he is able to take the ordinary full diet of the hospital. There is an enlargement of the glands adjacent to the inferior maxillary angles; that on the right side is about the size of a pigeon's egg, and that on the left about the size of a hazel-nut. The patient first noticed the disease about twelve months ago; it was brought under his notice by some little impediment to swallowing. This difficulty slowly increased; then with the aid of a looking-glass, about seven months ago, he noticed an enlargement of the tonsil. This view of the case was confirmed by some of his fellow workmen. When he was admitted into the hospital, a tumour was found almost blocking up the pharynx. It extended from the last molar tooth on the right side of the lower jaw, involving the mucous membrane at the posterior extremity of the hard palate, concealing the uvula and left tonsil, and descending so far that its inferior surface was just beyond the reach of the point of the index finger. Its upper border was defined and rounded, and the mucous membrane was apparently extended over a growth which had the firmness and feel of a fibrous tumour. The patient, on Dec. 15th, was placed upon full diet.

Dec. 24th.—Eleven A.M.: The patient had two mutton-chops for dinner, so that he might not require any food for some hours after the operation.—Two P.M.: Mr. Curling made a transverse incision into the right cheek, in continuance of the fissure of the mouth, for about an inch and a half, in order to