

sitate to admit this case as an example of pneumo-thorax from secretion (exhalation). The other case detailed by Dr. Graves appears, however, an admirable example of this interesting lesion, and corroborates, in some measure, the views of M. Gendrin, that an exhalation or secretion of air is frequent in connexion with pleuritis. Gendrin appears, however, to attribute this phenomenon to active rather than mild examples of this disease. Dr. Graves' case appertains to the latter.

ART. XIII.—*Surgical Report of Cases, treated in the Meath Hospital during the past Year.* By WILLIAM HENRY PORTER, Lecturer on Anatomy and Surgery in the School of Anatomy, Medicine, and Surgery, Park-street, Dublin.

THE general practice of all hospitals must be nearly the same, and as the leading characters and treatment of the ordinary forms of disease are pretty accurately understood, very detailed reports are neither necessary nor instructive, unless when adduced for the purpose of establishing some important pathological fact, or introducing some improvement in practice. But in every establishment of this kind, particular cases will occasionally occur, not only novel in their nature, and therefore curious, but by reason of their infrequency, difficult and uncertain in their management. By the publication of such cases, in an authentic form, the hospital surgeon may confer the greatest benefit on his profession, for he enables the practitioner, of extensive opportunities, who has met with similar cases, to compare the observation and experience of others with his own, and thereby approach the truth; whilst to the younger practitioner, he furnishes a guide and assistance in the difficulties of his profession, which, though far from perfect, may nevertheless be valuable. In this spirit and with this view I have selected the following cases, each possessing its own peculiar interest, and on which I

forbear to offer comment or observation, wishing to render the details as short as shall be consistent with clearness; and knowing that the case, which to the practitioner at the bed side will appear rare, or difficult, uncertain, or important, may to the reader in his closet, deprived of the numerous aids derived from personal inspection, seem to possess little more than ordinary interest, and unworthy of being obtruded on the profession.

1. Aneurism occasioned by the sequestrum, in a case of necrosis of the tibia.
2. Functional derangement of the brain, the result of injury, cured by the operation of the trepan.
3. Curious and interesting case of bronchotomy.
4. Disease of the lymphatics of the left arm, amputation at the shoulder joint.

CASE I.—Aneurism in a Case of Necrosis.—Death from Mortification and Hemorrhage.—Post Mortem Appearances.

John Jackson, æt. 29, of delicate habits, and had been a hard drinker, admitted January 2nd, 1833.

History.—He stated that several years previously (perhaps fourteen or fifteen) he had been seized with a violent pain in the left knee, which, as well as the lower part of the thigh, shortly afterwards swelled to a great size, but without redness. This tumefaction subsided a little under the use of blisters, but the knee always remained larger than that of the opposite limb. About a year afterwards a small swelling appeared four or five inches above the knee, on the inside, which he opened himself, and gave exit to some purulent matter; a fistulous opening has remained there discharging ever since. In the month of August, 1832, he had a very alarming hemorrhage from this fistulous opening, but there was no recurrence of it until the night before his admission into hospital, when he bled with great violence; the blood, at intervals, spirting forth to a considerable distance, at others trickling down the limb, but in neither case was he able to restrain it. He supposed himself to have lost

several quarts, and fainted from exhaustion seven or eight times.

Symptoms on admission.—His face appeared quite blanched and expressive of the greatest anxiety ; extreme exhaustion ; thirst ; pulse small and thrilling, 150. On removing the sheet in which the limb was wrapped, a small, livid, fistulous opening was seen on the outside of the lower third of the right thigh, slowly discharging a thin, serous blood, on pressing which the finger seemed to sink into a deep cavity ; pulsation was quite distinct, and bruit de soufflet audible for some distance round it, as if from aneurism : the femur, at its lower third, could be felt enlarged, and the popliteal space filled up, but the pulsation of the artery below it was distinctly perceptible. The weakness of the patient prevented any farther or more accurate examination, and it seemed to be a case of popliteal aneurism complicated with diseased bone ; the sac having probably burst into the cavity of the abscess in connexion with the bone. He complained of intense pain in the knee and throughout the tumour.

A compress of lint was put over the opening, with a bandage rolled from the foot, over and above it. Lemon juice *ad libitum*.

Jan. 3rd. There was some bleeding during the night, which oozed through the compress and bandage. He was this morning seized with severe vomiting. Pulse 150, full and hard.

4th. Vomited all night. This morning intense pain in the thigh ; face quite bleached with a yellowish tinge, and an indescribable expression of anxiety ; thirst very urgent ; pulse 142. In consultation amputation was decided on as offering the only possible chance, however slender, but he steadily refused to submit, although warned that a few hours would render the adoption of this only remedy impossible. He had effervescing draughts, with tincture of opium.

5th. Symptoms nearly the same, with increasing debility.

6th. No cessation of the vomiting ; great pain in the limb ; the thigh above the bandage greatly swollen and yellowish ; on its posterior surface gangrenous nearly as high as the buttock ; immediately under the compress a patch of sphacelus. The

vomiting continued, and a constant, though feeble hemorrhage, trickled from the limb. He gradually became weaker, and died about nine o'clock, P. M.

Dissection.—On opening the popliteal space, it was found filled with thick grumous clots, extending up as high as the lower third of the femur, in contact anteriorly with the bone, and with something that appeared to be part of the sac, but whether of an aneurismal sac, or the cyst of a former abscess, could not be determined. An opening existed in the popliteal artery, a little below the spot where it enters the space. The thigh bone was found diseased in its lower half, being considerably enlarged, its surface rough, and a large portion of the posterior or popliteal aspect destroyed, so as to permit the introduction of the fingers into a large cavity within; the edges of the bone on each side of this opening were thick and very full of rough sharp points; in the upper part of the excavation the sharp point of a sequestrum was discovered, moveable, and accurately corresponding to the aperture in the artery, which it evidently seemed to have occasioned. The knee joint filled with a yellowish serum, unlike ordinary synovia; its capsular ligament thickened. The cellular tissue of the entire thigh filled with a reddish serum.

CASE II.—*Fracture of the Os-frontis.*—*Symptoms of Idiocy and Paralysis, supervening after some interval.*—*Operation of the Trepan.*—*Slow but ultimately perfect Recovery.*

Edward Hughes, æt. 35, a strong healthy countryman, admitted into hospital June 26th, 1833; he had been returning from a fair on the evening of the 8th May previously, and in a scuffle with some persons who attempted to rob him, received a blow of a large stone nearly in the centre of the forehead, which knocked him down, and caused a depressed fracture of the os frontis. He was not rendered senseless by the blow, nor for some time afterwards was there any perceptible consequence, as during the six subsequent weeks he was able to work, and had his intellects perfect and natural. His friends then observed him to become drowsy, listless, and incoherent:

when undisturbed he was quite idiotic, but when roused he appeared to possess some memory. His manner of answering a question was very remarkable; he hesitated, seemed to recollect with difficulty, and answered as if in doubt. He tottered in his gait, and had a remarkable tremor in his left arm and hand: the tongue, when protruded, was drawn to the left, and there was also strabismus of the left eye.

Considering that the subsequent symptoms had some direct connexion with the injury of the skull, I determined on exposing and examining the bone, and being then governed by circumstances. I found an irregular fracture of nearly an inch in length, one side of which was depressed to the depth of little more than three lines. The trephine was then applied, in order to permit of the elevation of the depressed bone, but the internal table was found to have been so extensively broken, that three crowns of the instrument were removed before all the fragments could be exposed and taken away; one large portion had penetrated the dura mater, and entered the substance of the brain, the removal of which was followed by considerable hemorrhage, appearing to come from some vessel of the brain itself, and which could only be controlled by the application of several compresses, and such a degree of pressure as evidently affected the functions of the organ. He bore the operation tolerably well, and continued during the remainder of the day listless and in a half sleep; pulse slow, small, and weak.

June 29th. (The day after the operation.) Had remained tranquil during the night, and turned himself from one side to the other in the bed; but to external objects was nearly insensible; his evacuations passed involuntarily; pulse weak and labouring. On the removal of the compresses and dressings he became more lively, and his pulse more full.

30th. His evacuations are still passed unconsciously; tongue covered with a dark fur in the centre; pulse 86, and strong; no pain in the head; can swallow well, and appears much more sensible. He lies in a kind of slumber, but is very easily roused.

July 1st. No pain in the head ; pulse 110. This day, for the first time, he became conscious of his natural wants.

It is unnecessary to detail the treatment which was strictly and actively antiphlogistic, or the symptoms, which were those of progressive improvement until the 16th July, when he had several severe rigors, and trembled violently ; pulse rapid and fluttering ; eyes peculiarly wild ; he is drowsy and stupid.

18th. Pulse small, weak, and very irregular. He is quite unconscious of his natural wants, and appears nearly idiotic. The tremors are very remarkable, particularly of the left arm and leg, which he cannot keep quiet for a moment by any effort. The bottom of the wound is covered with white granulations resembling fungus, and the discharge very profuse, and rather fetid. He was ordered calomel and opium with a view to affect the mouth.

28th. In proportion as the effects of the mercury became developed, the patient's health improved, and on this day he might be pronounced quite convalescent. The trembling of the limbs has totally disappeared, and all pain removed ; he is, however, very weak.

Aug. 10th. He is now completely recovered, and is perfectly rational ; he walks about as strong as ever, and assists in doing several things about the hospital : he wears a large plate over the wound, which is nearly healed. He remembers most of the circumstances that occurred during his illness.

This man was able, in the November following, to walk to Dublin, a distance of twenty-three miles. He called on me, and expressed himself as being in as good health as he had been at any period previous to the accident.

CASE III.—Case of Bronchotomy, for the removal of a Foreign Body, supposed to be in the Larynx. Relief not obtained. Difficulty of determining the Nature of the Case. Subsequent Recovery imperfect.

James M'Mahon, æt. 14, hitherto very healthy, admitted into hospital August 27th. In the previous June, whilst eating

some beef-hash, a piece of bone or gristle seemed to have stopped in his throat, and he was instantly seized with all the symptoms of suffocation, violent cough, &c. He remained in this state for some days, with great pain and difficulty of swallowing, and of turning the head to the left side. He got some medicines from his mother, but being still unrelieved, he was brought to an hospital, where a probang was passed down the œsophagus with some slight temporary benefit. In a short time, however, the symptoms returned with increased violence, and he was then recommended by a clergyman for admission into the Meath Hospital.

Symptoms on Admission.—Deglutition so difficult and painful as to make him refrain from drinking, although very thirsty ; he cannot turn his head to the left side without great suffering ; voice nearly lost ; breathing loud and sibilous ; the wheezing greatly increased during the spasmodic paroxysms, which are very frequent. The face is pale and livid, the lips purplish. He opens his mouth badly, but as far as the condition of the fauces can be ascertained, there are no traces of inflammation. On passing the finger into the fauces, the epiglottis can be felt of its natural size, and healthy. Pulse rapid ; skin hot and dry. The cause of all this distress appeared to be very obscure, but as the commencement of the disease seemed traceable to some accident in the process of deglutition, and rendered it probable that some foreign body was impacted in the ventricle of the larynx, I proposed the operation, to which the boy's mother for two days refused to consent. At the end of this period, the symptoms having become aggravated, the operation was performed.

This was one of the most difficult and embarrassing operations in which I had ever been engaged, the annoyance having been principally caused by the first incision having been accidentally made a little to the right of the mesial line of the neck. Some large veins were thus exposed that could not be completely avoided, and the hemorrhage was so great as not only to ob-

secure a view of the parts, but to threaten danger from the quantity of blood lost. The trachea was extremely small, and was difficult to fix, and when after some delay it was opened, a quantity of blood rushing into the trachea rendered the patient's condition very precarious: violent cough succeeded, with respiration quick, difficult, and laborious. The larynx and trachea moved rapidly up and down the neck, and although after the opening had been cleared, a great quantity of thick mucus was expelled, I had never seen an operation by which the patient seemed to be less relieved.

During the afternoon and throughout the night the breathing continued very laborious, frequently obstructed by mucus, which required to be constantly removed. Whenever the canula became foul, or the air passage from any other cause interfered with, a paroxysm of suffocation supervened, and he appeared at the point of death. No sleep during the night.

August 30th. He appears much easier, and will occasionally lie for half an hour or more perfectly tranquil, but the moment the wound is in the slightest degree obstructed, he falls into a paroxysm of suffocation, and works and struggles almost convulsively. The wound is somewhat swollen, and he cannot endure the presence of the tube, but on its withdrawal, as it is difficult by any contrivance to keep the edges open and free, a fresh paroxysm of difficult breathing is produced. Two pupils sit at his bed side night and day, and it sometimes requires all their exertions to keep the wound sufficiently open, and save him when attacked by one of these paroxysms. Ordered small doses of tartarized antimony.

31st. Had a very severe attack from the accumulation of mucus, and the closure of the wound, which was relieved by the forcible dilatation of its lips by means of forceps. An abominable fetor exhaled from the wound, like that observed in cases of abscess and ulceration of the larynx. Some slight stethoscopic indications of bronchitis, but the sound of the respiration through the wound is heard all over the chest, and renders every other indistinct.

September 6th. He has been gradually improving since the last report. Very large tubes have been obtained, and two or three of them lie by his bedside, that one may be always ready, clean, and free from obstruction. Still nothing had been accomplished by the operation. The moment a finger was laid on the orifice of the tube, respiration stopped: if withdrawn for an instant the convulsive breathing was renewed, and it became evident, that the obstruction (whatever it might be) was situated above the wound, and probably in the immediate neighbourhood of the rima glottidis. I resolved on making a close examination of the parts, which I did by means of eye and probe without discovering any thing; but still dissatisfied, I passed a large sized bougie from the wound through the rima, and out by the mouth. The instrument passed with facility from above and from below, and not the slightest indication of the existence of any mechanical obstruction could be observed. Yet the larynx remained perfectly incapable of performing its function of transmitting air to the lungs.

For several days afterwards, I passed the bougie without the least good effect. He continued gradually improving in health and strength, and the paroxysms of suffocation occurred less frequently, as he had acquired some dexterity in introducing the tube for himself, and thus anticipating any serious attack. I find, however, that occasionally he incurred considerable danger when the mucus accumulated during sleep, and in the night of the eleventh such an occurrence had nearly deprived him of life. All the functions, circulation, digestion, &c. regular and natural.

16th. He sleeps now nearly the entire night through: is able to take out the tube and clean it himself, therefore, no longer requiring attendance as formerly: he is up and walking about the wards, but not the least symptom of air passing even in the smallest quantity through the rima.

This patient was retained in Hospital for more than six weeks subsequently, with the double purpose of watching

whether some foreign substance might not be accidentally expelled, and thus throw some light upon the case, and lest some sudden and severe paroxysm, attacking him when removed from professional assistance, should prove fatal. During this period he was seized with acute bronchitis, in consequence of exposure to cold, for which he underwent a full course of calomel and opium, and recovered, but still the affection of the larynx continued: not a particle of air passed through the rima, and he left the hospital with every probability of being obliged to wear the tube, and exist by artificial respiration during the remainder of his days.

During the night of the 21st December, in consequence of the tube being nearly closed up by inspissated mucus, he was seized with a dreadful paroxysm of suffocation, and must have perished but for the timely assistance of Mr. Crampton, who was called to him. On the following day he was re-admitted into hospital, more for the purpose of receiving occasional relief in these paroxysms than in the hope of any permanent benefit. Here he again suffered from an acute attack of bronchitis, for which he was treated as before, and recovered. Towards the latter end of January, he unexpectedly found, that on closing the tube, a small quantity of air passed by the larynx, and he could speak in a feeble tone, but sufficiently distinct to be understood. The process of natural respiration seemed slowly and gradually about to be restored, and occasionally he could remain with the tube closed for half an hour or more. On the 28th January he left the hospital.

I have lately seen this patient, and though greatly improved he still wears the tube, nor would he dare to sleep without it; there is, however, every reason to believe, that he will shortly be able to dispense with it altogether, and the function of the larynx be completely recovered.

The cause of the obstructed respiration was never satisfactorily discovered, nor was there any reasonable conjecture offered on the subject. At the period when it was at its great-

est height, the bougie passed with the greatest facility through the rima, which, as well as all the adjacent parts, seemed to be perfectly healthy.

CASE IV.—*Case of Disease of the Lymphatics of the Arm. Amputation at the Shoulder Joint.*

Michael Hughes, ætat. 29, of a scrofulous and emaciated appearance, admitted on the 27th November, 1833, for an affection of his left arm of a very peculiar nature.

The limb is semiflexed and slightly swollen at the elbow, the hand bent downwards at the wrist; the knuckles bent also, and every one of these joints permanently rigid. There is an eruption on the hand, which is itchy and troublesome. The veins of the arm swollen and prominent, but not hard or knotted. The pulse at the wrist so weak as to be scarcely perceptible.

An irregular line of small tumours, resembling tubercles, extends along the arm from the axilla in which the largest is situated; they are of a stony hardness, and firmly attached to the adjacent structures; some of them are ulcerated, others surrounded by a dark blush of inflammation. The pain he experiences is dreadful, and deprives him entirely of rest. He entreats that something may be done for him, and will submit to any operation that holds out even a chance of relief. The history of this case is shortly this. The tumour in the axilla was the first formed, and appeared four years previously, after a day of very hard work; its growth was slow and irregular, sometimes increasing, sometimes diminishing, and never very painful. The gland next below it then swelled, and thus the disease continued to spread along the arm in the direction contrary to the course of absorption. Several months previously he had been in hospital, under the care of my friend Doctor Graves, and was treated with iodine, and (I believe) every other medicine that offered even a chance of success, but without any material benefit. At that period I was consulted on the case, and considering the tumour in the axilla to be the chief, as well as

the original cause of the mischief, hinted, that nothing short of its removal could prove serviceable, although the possibility of such an operation was very questionable, as it seemed evident, that the great axillary vessels were closely connected with the diseased gland; perhaps enveloped by it. He heard some whispering about an operation, and quitted the hospital without leave.

During his absence he applied corrosive sublimate to the tumours, for the purpose (as he expressed it) of cutting them away, and produced some frightfully irritable ulcers. The pain now became so intolerable that he applied to me, and was again admitted into hospital.

Nothing offered any prospect of relief but amputation at the shoulder joint, nor was this exceedingly promising, as he had a slight cough, and observed his expectoration to be triflingly streaked with blood. His chest was minutely examined: it sounded well on percussion, and the respiratory murmur healthy and distinct. It appeared that nothing directly contra-indicating the operation could be proved to exist, and as he solicited that something should be done, it was determined in consultation that the part should be removed.

The operation was performed in the usual way, by making a flap of the deltoid muscle, the tumour in the axilla rendering any other mode of proceeding impossible. In removing the limb, the tumour was divided, and it was discovered that the artery, vein, and plexus of nerves were encompassed by it, a circumstance that rendered the securing of the vessel difficult. A temporary ligature of safety was then placed round all, and the tumour dissected out, the arteries tied, and the flap laid down, and secured by a few stitches. The patient bore the operation very well, but having lost a considerable quantity of blood, became weak, and was almost sinking, his pulse feeble and tremulous, his voice faint, and his limbs cold. Warm wine and water was administered, and jars of hot water to his extremities. A full opiate was ordered, but immediately rejected from his sto-

mach. Altogether his condition was most precarious, until towards evening, when he rallied a good deal, and from that moment every thing, so far as the wound was concerned went on favourably, the ligatures came away at the usual periods, and at the end of five weeks he was recovered so far as to be able to leave the hospital. But the ultimate safety of this patient is very questionable. About three weeks after the operation he was seized with cough and difficulty of breathing, amounting to orthopnœa, he expectorated a considerable quantity of blood, had nocturnal perspirations, and lost flesh, for which symptoms he was removed to the country as soon as the condition of the wound permitted.

I have since heard of him very frequently, and he continues pretty nearly in the same situation, with cough, and the other pectoral symptoms. Although the direction of the disease externally was in a line contrary to that of absorption, it seems not improbable, that the bronchial glands had also become engaged, and of course the present symptoms are not much under the control of medical treatment.

Although unrelieved by the operation, the case appears interesting, as offering an example of a disease of the lymphatic glands, (as far as I know), not hitherto observed or described. The dissection of the arm exhibited a number of these glands indurated, others ulcerated, but all exhibiting proofs of their malignant nature. Several glands, however, were found healthy, and without any alteration of structure. One in the axilla, close to the large original tumour, was slightly increased in size, and softened in consistence. The artery, vein, and nerves, had passed through the centre of the indurated gland, and the former vessel had been so compressed, that its calibre scarcely equalled that of a small crow-quill. The axillary vein was also compressed, whilst the cephalic was increased in size. Having passed the tumour, the artery again seemed to expand into its natural size, but still the compressed state of the vessel was indicated before the operation, by the smallness and feebleness of

the pulse. The distention of the superficial veins showed, that the circulation through the deeper trunks was more or less impeded. The crookening of the fingers, the rigidity of the joints, and the itchy eruption, probably had some connexion with the pressure exercised by the tumour on the nerves. True, our knowledge of the pathology of these important organs is still so imperfect, that this opinion can have little more weight than mere conjecture, but in three cases of subclavian aneurism, which I had under my care at different times, I observed a similar eruption and crookening of the fingers, which were removed after operation, when the pressure of the tumours was no longer exercised. In these latter cases the joints were certainly not rigid, but then the pressure had only existed a few weeks, whereas in the case of Hughes, it had been in operation four years. These considerations on the effect of pressure on the nerves, appear to me important, for it is only by collecting facts and comparing them with each other, and with the symptoms apparently resulting from them, that any thing approaching to sound pathological knowledge can be established.

I had intended to have added some other cases to this report, as having occurred within the past year; amongst them that of the man whose face was nearly eaten off by a pig, but independent of the length to which these details have been already drawn out, I find, that the interest of this case would not compensate for the disgust its perusal would occasion. It merely tended to shew, first, that a man deprived in this rough manner of his nose, both cheeks, both lips, and part of both ears, might recover notwithstanding; and secondly, it exemplified the uses of the lips to the functions of speech, mastication, and deglutition. It was remarkable, that soon after the accident, he could pronounce the labial letters tolerably well, a power which he lost as the wound progressed in healing, and of which he was entirely deprived before he left the hospital. His articulation of course was very indistinct. He lost more than half of the solids he attempted to chew, for want of the lips to keep

them under the teeth, and a considerable portion of the fluids escaped in his attempts to swallow. His chief regret was the being deprived of the use of tobacco, which he was incapable of using in any form, on account of the loss of his nose and lips. All the saliva secreted by the parotid glands escaped, and several attempts were made to ascertain the quantity produced in a given time, but they were defeated by the irritability of the patient. Although deprived of so large a portion of this fluid, I did not find that the process of digestion was at all impaired.

ART. XIV.—*A Case of Trial for Poisoning by Arsenic.* By THOMAS EDWARD BEATTY, M. D. M. R. I. A., Professor of Medical Jurisprudence to the Royal College of Surgeons in Ireland, Accoucheur to the New Lying-in Hospital, and Consulting Accoucheur to the Baggot-street Hospital, Dublin.

THERE is no part of medical practice, wide as that field is, which more imperiously demands not only a thorough acquaintance with all the particulars relating to it, but also a readiness in making that knowledge available when opportunity requires, than those cases in which we are called on to give an opinion respecting the administration of poison. The difficulty varies in degree according to the circumstances of the case. If we see the patient during life, and have an opportunity of witnessing the symptoms under which he labours; if some remains of the poisonous dose be forthcoming, or if the contents of the stomach, as ejected by vomiting, be preserved; and if after death we have an opportunity of examining the body, much of the obscurity is obviated, and the case is one of comparative simplicity. The difficulty is increased, when the sufferer is dead before we see him, when we can only learn the history of his previous state from ignorant by-standers; and when none of the evacuations