Altogether, about thirteen grains of the extract of the Calabar bean had been administered. It was selected by Dr. Morton, and pronounced by him pure.

Notwithstanding the fatal results of this and some other cases, I am disposed to think, from the experiments of Dr. Watson of this city, and others, that the physiological action of this agent is such as to place its employment in tetanus beyond the pale of empiricism.

AMPUTATION NEAR THE KNEE-JOINT: AND A CLINICAL HISTORY OF A CASE OF NEW GROWTH OF TIBIA.*

By W. A. ELLISTON, M.D.,

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A CASE is just leaving the Hospital, to which I had the pleasure of directing the attention of several members of the Association this morning, and which I think is worthy of some notice, as pointing out the great advantages of a stump formed after the method suggested by Mr. Carden of Worcester, in preference to the modes of amputation at or above the knee-joint. The operation in this case was performed by carrying a fairly deep incision from the left condyle of the femur downwards, for about two inches and a half, and then across the limb just beneath the patella, and upwards to a corresponding point of the inner condyle, carefully dissecting back the integument—thus forming a long anterior flap. The limb was then transfixed behind, and, by cutting almost directly outwards, a short posterior flap was formed; the bone was cleared, and the saw applied through the condyles just above the articular surfaces of the femur. The only points which, taking a retrospective view of the operation, seem to me to be of importance, are, to make the anterior flap of sufficient length to drop in a cap-like manner well over the bone, so that the cicatrix is not in the line of pressure, and at the same time to get the advantage of a short posterior flap, so as to lessen as far as possible the risk of sloughing of an over-long anterior flap; and to make the section of the femur sufficiently low to avoid wounding the medullary canal, and thus to lessen the danger of osteomyelitis. The advantages of this operation over the ordinary methods of amputation (by flap and circular, or by a combination of both) on the lower third of the femur, are, I think, obvious. I need only refer to the great length of the stump, the movements of which will be more under the control of the patient than a shorter one, owing to the proper muscles of the femur not being divided; the entire removal of the cicatrix from the line of pressure; and the advantage of securing as a flap the integument covering the knee and accustomed to bear the weight of the body, and destitute of important vessels and nerves. The operation through the knee-joint itself has been revived and practised by many distinguished surgeons; and, although in this case it was inadmissible, if it were proved that a stump with the condyles is better, it would be the duty of the surgeon to preserve them on all proper occasions; although if in its performance it be necessary, from the nature of the case, to take the flap from the calf of the leg, I am at a loss to understand its advantage.

I desire, also, to call your attention to a few clinical observations in connection with this very interesting case. The patient, a girl 17 years of age, was admitted on December 1st, 1869. The history of her case was, that she had slightly injured her left knee some time previously, and that she had lately suffered much pain in the swelling. The swelling (having the appearance of a small chronic abscess) was close to the head of the fibula, and there was an obscure sense of fluctuation. Constitutional remedies, counterirritants, and the like, were tried without any perceptible effect. About the end of January, an exploratory incision was made; it was thought that a small quantity of pus escaped. No connection, however, could be detected with the fibula (as had been anticipated), nor, indeed, with any denuded bone. Matters went on much the same until the end of February; when, upon introducing a probe into the wound, it was found that it could be easily passed into the head of the tibia, to a depth of three inches. Her general health had much deteriorated; she had much hectic fever, lost flesh, her appetite failed her, and she suffered from sickness and shiverings. On March 4th, after consultation with my colleagues, I decided to cut down upon the inner side of the head of the tibia, and ascertain if any necrosed bone could be detected. I had very little difficulty in gouging a hole into the cavity of the bone, and immediately a large quantity of pus escaped (quite three ounces); no dead loose bone could be felt, and the patient was returned to bed. She expressed herself as immensely relieved by the operation; she rapidly recovered her health and strength,

and it seemed as if the case would terminate most favourably. Slowly but surely, however, a fungoid condition of the granulations of the original wound over the fibula sprang up, resisting all kinds of caustics. I removed a large portion with a ligature, and when this separated it could be seen that this was but a portion of a tumour having a deeper origin than the mere surface. This case seemed to me interesting in many respects; from its insidiousness before it became clear that the seat of the disease was in the tibia itself, rather than in the fibula; also, from the marked and immediate relief from the first operation; and, so far as I can discover, from the somewhat unique fact of a large accumulation of pus in association with a condition which we must regard as suspiciously suggestive of malignant tumour. The dried preparation of the bones is before you. You will perceive on the inner side the puncture which I made. Through an unfortunate omission, the tumour was not examined microscopically, and hence its exact pathology is uncertain; but little doubt was felt by those who had the opportunity of examining its appearance on the surface and in the cavity of the bone, that it was the medullary cancer (so-called at the present day), described by the late Sir W. Lawrence and others as the fungus hæmatodes.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS OF GREAT BRITAIN.

KING'S COLLEGE HOSPITAL.

POISONING BY A DRACHM OF HYDROCHLORIC ACID: TRACHEOTOMY: DEATH.

(Under the care of Dr. G. JOHNSON.)

ONE feature in cases of poisoning by hydrochloric acid, as contrasted with other mineral or vegetable acids, arises from the fact that in the concentrated form it is very volatile, and there seems little doubt that the gas passed into the lungs in the act of swallowing. It is not usual for any laryngeal symptoms to arise in cases where other acids are used, although they are not uncommon when ammonia is swallowed. All the caustic alkalies produce similar effects; but, in addition, ammonia, in consequence of being volatile, causes inflammation of the larynx and air-passages. Another interesting point in the following case was the rapidity with which inflammatory products were formed, for the bronchi were full of pus, and lymph was found in the pleura, although only about ten hours had elapsed from taking the acid.

A. E., a girl, aged 15, was admitted under Dr. Johnson on February 16th, 1871. From her history it seemed that, having had a quarrel with her parents, she took about a teaspoonful of hydrochloric acid at ten o'clock on the morning of her admission. Her father was a brass-worker, and therefore was accustomed to keep that acid; he thought that, from the amount left in the bottle, she could not have taken more than the above-mentioned quantity. Some warm water and salt was at once given her by her friends, with the effect of making her rather sick. When she came to the Hospital about an hour afterwards, she was just able to walk with support; her face was pale and the extremities rather cold. There were no stains of the acid round her mouth, but a few on her dress. The mucous membrane of the mouth and fauces was uniformly of a white or ash-grey colour. She complained of much thirst, but was not sick, nor had she any pain in the stomach or marked tenderness on pressure. She was at once put to bed, and a little milk was given by the mouth. In a short time she seemed to rally a little and to become warmer; her pulse was 84, and pretty full. In two or three hours she seemed to be worse, and to have much difficulty in breathing; moist râles could be heard all over the chest.

About 4 o'clock, tracheotomy was performed by Mr. Wood, but was not succeeded by much benefit. A laryngoscopic examination had previously shown that the epiglottis was swollen, white, and corroded; but not much of the glottis could be seen. The girl was then in a state of collapse; the face was pale, the lips rather livid, and the feet and hands cold. She was sensible, apparently, when spoken to, but did not seem to feel much pain. Death took place at 8 P.M., or about ten hours after taking the poison.

A *post mortem* examination was made by Dr. Kelly about twenty hours after death. The body was well nourished, and there were no external marks of injury. The mucous membrane of the mouth, fauces, pharynx, and œsophagus, was of an ash-grey colour, and the epithelial coat could be easily stripped off, leaving a red injected surface beneath. The stomach was distended, and contained undigested food mixed with a dark-brown grumous fluid; the mucous membrane was quite black,

* Read before the East Anglian Branch.