

and is so gradual that it is difficult to decide on the exact moment for depletion; but if the surface is warm and the face flushes, the difficulty ceases. The headache continuing after reaction is fully established constitutes fever. We now know what to do. Twelve or fourteen ounces of blood should be taken from the arm in the upright posture, saline purgatives prescribed, low diet and mental quietude rigidly enforced. If the headache be not relieved, small nauseating doses of tartar emetic are very valuable, and we are not justified in withholding mercury, and it ought to be given until there is tenderness of the gums. This is one of the fevers (synocha) which so many physicians have remarked yield on the appearance of salivation. The application of cold lotions to the head are useless, perhaps injurious, in simple congestive headache, before reaction, for the effect must be to repel the blood from the external vessels. This form of headache rarely continues a month without producing mischief. If the headache be the consequence of a blow or fall, it must be treated actively as soon as the depressing effect of concussion ceases; if nausea or vomiting succeeds, and the skin be hot, we may be certain that inflammation of the cranial contents is in progress.

The exanthemata and adynamic fevers commence with this form of headache, and for several days it alone is complained of. The hurried, slovenly practitioner overlooks the cause, and irreparable injury may be done by the loss of even a few ounces of blood; venesection to any extent is almost fatal, and even local bleeding jeopardizes the recovery of the patient; for to the congestion we have added a poison depressing the heart's action, and still further impeding reaction, which the additional cause of loss of blood renders almost impossible. How many cases of typhus gravior have I seen terminate unfavourably, solely, I may venture to say, from the application of ten or twelve leeches to the temples, to relieve the intense headache of the very early stage. The proper remedy at this period is the exhibition of an emetic of ipecacuanha, to which may be added eight or ten grains of sesquicarbonate of ammonia. The treatment of these diseases does not enter into my remarks on headaches. Their invasion is sometimes so violent that convulsions attend, but convulsions do not foretell so dangerous a form of exanthemata as when we find a child after a few hours' illness become insensible, speechless, with a very weak pulse, and a cold surface. These symptoms are more common from the poison of scarlatina than from any other; all those so affected have died within thirty-six hours of the attack, no matter what remedies were employed, except one treated by galvanism. The symptoms were very properly regarded as congestion in the most intense form without the power of reaction. The electro-galvanic battery was employed exactly as it is for the congestion of those poisoned by opium; a flexible tube was afterwards passed into the stomach, and port wine and ether introduced, and also friction to the surface, with hot dry flannel cloths. In alluding to the treatment for the coma which follows exposure to cold, the necessity of employing this powerful remedy was omitted. There is also another remedy for the simple congestive headache, which should not be despised, although it is constantly employed by empirics; it is popularly termed "traction," or dry cupping. Those who have never seen it employed cannot imagine what a powerful effect it must have when used in the following manner. The back of the neck, between the shoulders, and, if deemed necessary, even down to the loins, is smeared with spermaceti ointment; the exhausted glass is then fixed; it moves with the greatest facility over the anointed surface, acting powerfully on the cutaneous bloodvessels, leaving every portion of the skin over which it has travelled of a vivid redness. Dr. Graves speaks highly of it in his last-published work, as applicable to the hysterical (congestive?) headaches of females.

The only difficulty in treating this form of headache is when it has existed for several weeks without the attending fever; for when once fever appears it ceases to be recognised as a mere variety of headache.

NEW HOSPITAL FOR SICK CHILDREN IN PARIS.—A second hospital for sick children has just been organized at Paris, by the transformation of the "Hospital St. Marguerite" in the Faubourg St. Antoine (a poor and populous district). This hospital contained 355 beds for adults; the latter will be distributed among the other charitable institutions, and 425 children will be admitted in their stead. This will afford great facilities for the numerous families of artisans living in the Faubourg St. Antoine. These changes have taken place at the suggestion of the Empress.

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.

ST. BARTHOLOMEW'S HOSPITAL.

Ununited Fracture of the Femur; Dieffenbach's Peg Operation, combined with a connecting wire.

(Under the care of Mr. STANLEY.)

It has thrice been our pleasing duty to record the complete success of Dieffenbach's operation for ununited fracture, as undertaken by hospital surgeons in London. The first was performed by Mr. Stanley, at St. Bartholomew's Hospital, upon an ununited fracture of the tibia, (*THE LANCET*, vol. ii. 1851, p. 344;) the second by Mr. Hilton, at Guy's Hospital, upon a similar fracture in an old subject, (*THE LANCET*, vol. ii. 1852, p. 152;) and the third by Mr. Fergusson, at King's College Hospital, upon an ununited fracture of the ulna, (*THE LANCET*, vol. ii. 1852, p. 154.) We hope soon to be able to add a fourth successful case to our list, as Mr. Stanley has lately had recourse again to the same operation, which he has, however, slightly modified. The only case of failure of which we have a recollection, one indeed which presented unusual difficulties, is the case of a boy treated by Mr. Bowman at King's College Hospital. The perusal of this case will fully repay the reader; it will be found in the second volume of *THE LANCET* for 1852, p. 154. The operation performed by Mr. Stanley a few days ago is, however, of a more important character than those to which we have above alluded; for the femur is the seat of the fracture, and the examples of success when the thigh is concerned are so rare, that a little apprehension might justly be felt. We beg our readers to refer back in this journal to two cases, which will strongly illustrate this opinion; one was under the care of Mr. Fergusson at King's College Hospital, (*THE LANCET*, vol. ii. 1850, p. 652;) and the other was treated by Mr. Gay at the Royal Free Hospital, (*THE LANCET*, vol. ii. 1850, p. 578.) The cases in which Dieffenbach's operation was performed upon the femur are not numerous. We may perhaps call attention for a few moments to a very recent instance, as recorded in the *Edinburgh Monthly Journal* for March, 1854.

Mr. Mackenzie exhibited before the Medical and Chirurgical Society of Edinburgh a femur on which he had practised Dieffenbach's operation for the cure of ununited fracture. The patient had fractured his thigh between two and three years before admission, and was treated in America; he thinks that the apparatus was too loosely put on. The bone was broken about midway between the knee and hip, and the lower fragment had retracted about an inch and a half on the inner side and behind the upper. The limb was, when seen by Mr. Mackenzie, quite flexible at the seat of the fracture, and entirely useless. The ends of the fragments were drilled with a small gouge, and a peg, two inches and a half long, was driven home with a hammer. Extensive inflammation and constitutional disturbance took place, the surgeon being obliged to remove the peg at the end of eight days. Profuse suppuration now undermined the whole textures of the thigh, and fears were entertained for the patient's life. He rallied, however; firm union ensued, and in some months the man began to walk. A sinus had nevertheless persisted, in spite of the improvement, and the patient, after having made efforts at walking for some weeks, was attacked with erythema of the limb and suppuration of the knee-joint. Hectic having come on, the thigh was amputated immediately above the seat of the fracture. The preparation exhibited showed the fractured ends firmly united by a large osseous deposit. It was mentioned that this was the only case in which Dieffenbach's operation had been performed upon the thigh-bone in Edinburgh; nor should it be forgotten that Mr. Square, of Plymouth, undertook the same operation upon an ununited femur, but was

eventually obliged to perform amputation. Let us now turn to Mr. Stanley's case.

Edward W—, aged twenty-seven years, was admitted into Darker ward on the 13th of August, 1853. The patient has been mostly employed in the country, is married, and of very temperate habits; both his father and his mother are alive, no kind of taint seems to pervade the family, and the man himself looks healthy and robust.

He states that thirteen months before admission a tree which was being felled rolled over his thigh, and broke it towards the upper third. He was conveyed to his house, and the limb, after having been set, was put up by a surgeon. The fracture seems to have been simple, and the apparatus used for keeping the fragments in apposition was, according to the patient's account, one long splint placed under the thigh, and two short ones on either side. This was left on, without being disturbed, for six or eight weeks; the splints were then taken off, and the man thinks that after a little handling of the leg he heard something snapping at the seat of the fracture. As it appears that no consolidation was found, the same splints were put on again; but some swelling now took place from the knee downwards. The application of a roller somewhat controlled the œdema, and the apparatus was now left on for twelve weeks more, the patient remaining all the while in good health. He maintains that no blame can be attached to himself as to the non-union of the fragments, as he lay very quiet for the whole of the period above mentioned. It became, however, evident that the ends of the fragments did not evince the slightest disposition to consolidation, and after various ways of obtaining it were tried, the patient applied at this hospital.

It was found, on examination, that the fracture was situated a few inches below the trochanter major, on the left side, and that the ends of the fragments were riding upon one another. Mr. Stanley ordered a gum-and-starch bandage to be carefully applied, hoping that the pressure of the apparatus would promote the throwing out of callus. This bandage was allowed to remain for several weeks, and on being taken off, it became evident that no union had occurred.

It was now thought that a system of direct pressure upon the spot where the ends of the fragments were in apposition might perhaps sufficiently excite the parts, and bring on inflammatory action, and a subsequent formation of callus. Mr. Stanley had, therefore, an apparatus constructed which allowed the patient to get up and walk about on crutches, while the fragments were kept in close apposition, and a certain amount of pressure exerted upon them. Small doses of mercury were given at that period, as this metal had, in several recorded instances, had the effect of promoting the secretion of callus.

This system was persevered in for a number of weeks, but it did not conduce to the desired effects; and Mr. Stanley now resolved to have recourse to Dieffenbach's plan, modified by the addition of a wire, intended to excite inflammation in the bone, besides securing the fragments in perfect apposition.

The operation took place on March 11th, 1854, whilst the patient was under the influence of chloroform. Mr. Stanley made a semilunar incision, about six inches in length, on the external part of the thigh, laying open the seat of the fracture. The ends of the fragments were easily brought into view, as the pressure which had been used in the attempts to obtain union had considerably thinned the soft parts over the ununited portions of bone. On examining the wound, a large piece of muscle was found lying between the ends of the fragments; this great obstacle to union having been removed, Mr. Stanley introduced pegs of ivory, about two inches long, into the extremities of the broken portions of bone, one peg in the upper and two in the lower fragment. A hole was now bored towards the end of the latter, and a double iron wire covered with silver was passed through the whole thickness of the bone. The wire was drawn through the shaft to a pretty great length, and the two extremities brought down and introduced into a perforation made through the end of the upper fragment. These extremities were carefully drawn through this second hole, and when they had been pulled out to some length, the ends were twisted, and connected with the loop hanging out of the original osseous perforation in the lower fragment. The flap was then brought down, and one suture applied.

Mr. Stanley had the limb placed in a suitable apparatus, and the patient has progressed pretty well since the operation. The two principal features that have marked the course of the case are a slight attack of erysipelas and sudden hæmorrhage. But it may be hoped that these untoward events will not interfere with the success of the operation, and we hope soon to give an account of the successful issue of the case.

KING'S COLLEGE HOSPITAL.

Excision of the Elbow Joint.

(Performed by Mr. FERGUSSON.)

Of all the joints the resection of which has been performed, the elbow has yielded the most satisfactory results; but it should not for one moment be imagined that the patient can in a short time recover with an useful arm. It should, on the contrary, be remembered that the healing of the wounds made in the operation, and the subsequent establishment of an artificial joint, may take two years; eighteen months being a comparatively short period. But the inconvenience of waiting the lapse of time just mentioned is hardly to be opposed to the advantage of saving a limb, so that the question of time need not give the surgeon any trouble. Very little danger is, besides, incurred in resection of the elbow joint; and even in cases of failure, the patients find themselves but very little worse off than before the operation. This can, however, not be said of all the joints, though the shoulder may be excepted. As to the hip, the knee and wrist, we have reported a sufficient number of cases to show that success is not impossible, but that it is rarely attained, and sometimes obtained by running a certain amount of risk. Resections about the ankle have, however, presented some encouraging features, and many surgeons are quite prepared, when proper means offer themselves, to venture upon the removal of one or more of the articular extremities entering into the formation of the ankle.

In the management of the cases of excision of the elbow joint, which we have this day to record, there is one feature to which we may perhaps direct attention—viz., the early application of passive motion to the resected joint. This precaution seems to be of some importance, for the object of the excision is the production of an artificial joint, and prevention of ankylosis, which latter process would, in many instances, eventually take place without surgical interference. To use passive motion, therefore, at the very time when fibrinous exudation is most abundantly taking place, may conduce to a partial and loose union, which will be extremely favourable to the establishment of a false joint. The only risk is to excite more inflammation in the articulation than is necessary for fibrinous deposit, the result being the transformation of the lymph into pus, and the subsequent weakening of the patient. Much will, however, depend on the manner in which the motion is performed, and very good effects may be expected where matters are carried on with due caution and judgment. It will be perceived that Mr. Fergusson was careful in both the resections of which we are going to speak, to keep the ulnar nerve out of harm's way; this is a matter of much importance, as much inconvenience might subsequently attend the lesion of the nerve. The operations were very lately performed; we subjoin a few details of the cases as noted down by Mr. Dickinson, one of Mr. Fergusson's dressers:—

Fanny R—, aged twenty-five years, married, a delicate-looking woman, was admitted February 8, 1854. The patient is of healthy parentage, has always lived well, and experienced no ailments previously to her present affection. She states that about ten months ago she was troubled with shooting pains across the bend of the right elbow, for which she could assign no cause; these pains gradually increased, and extended along the upper arm to the shoulder. Soon afterwards the elbow joint began to enlarge, but was not particularly painful, except the part was roughly touched. Eight months before admission the pain became so intense that the patient applied a blister, which gave relief. The symptoms soon, however, recurred in an aggravated form, and she then became an out-patient to the Homœopathic Hospital.

Here she was ordered to use her arm as much as possible, and took certain drops. Under this treatment the woman became rapidly worse; the slightest movement of the joint gave much pain, the part inflamed, and she was incapable of raising her hand except by means and assistance of the other arm. For a few weeks before being admitted into King's College this patient was in attendance as out-patient to Mr. Fergusson, when iodine was applied, and a gutta percha splint fitted to the joint so as to ensure complete rest.

State on admission.—There is great pain in the elbow-joint, the latter is much enlarged, and an abscess has formed behind the lower border of the olecranon. The patient experiences great pain, cannot use the elbow, and flexion and extension can be passively performed only to a small extent. The limb is bent at an obtuse angle, the hand in a state of semi-pronation, and the muscles of the upper arm atrophied. Appetite and sleep good; catamenia regular.