Suppurating sacs.

CASE 3.—A woman suffering from great abdominal pain, accompanied with vomiting and great prostration, was brought to the hospital for treatment after being ill two days. A tense round tumour, of the size of a walnut, was situated close to the inner end of Poupart's ligament, which was the seat of considerable pain. She stated that the swelling had existed for a long time, varied in size according to posture, and could be diminished by pressure, but that it had never been so tense and painful as it then was. The vomiting being obstinate, and pain now affecting the abdomen, I determined to operate on what seemed a femoral hernia.

On cutting through the layers of tissue necessary to open the tumour, about an ounce of pus escaped, but no bowel or omentum was present. A very small neck formed a communication with the abdomen; but, as there were no contents in the sac, it was unnecessary to enlarge this. The pus was thoroughly evacuated, the sac washed out with tepid water, a water dressing applied, and patient sent to bed.

The symptoms at once abated; vomiting ceased, and the patient made a rapid recovery.

CASE 4.—On the 17th of November, a woman, aged fifty, was brought to the hospital with strangulated femoral hernia. I have rarely seen a femoral hernia thrown so far up on the abdomen over Poupart's ligament. It was hard and nodulated, and there was very little resonance on percussion. All the symptoms of strangulation were present.

When the sac was opened, the protrusion was found to consist of a very small knuckle of dark-coloured intestine, and a large piece of omentum, which was very tightly grasped by the femoral ring. On dividing the stricture I reduced the contents without difficulty.

Next day the symptoms had passed off, and the bowels were naturally opened.

In a few days the wound healed, but soon afterwards a hard tumour appeared on the wall of the abdomen, similar to the hernia for which she was admitted. Two days later the tumour got softer, and some symptoms of strangulation recurred. I opened up the wound and gave exit to a quantity of healthy pus. Relief to all the symptoms was at once experienced. The wound was kept open and poulticed, and soon the swelling on the abdominal wall began to diminish. Granulations sprang up in the interior of the abscess, which soon contracted, and ultimately the parts about Poupart's ligament became so much matted together that the hernial opening became completely obliterated, and a radical cure of the hernia was the fortunate result.

ON A NEW FORM OF LEG-SUSPENDER AND BED-GUARD.

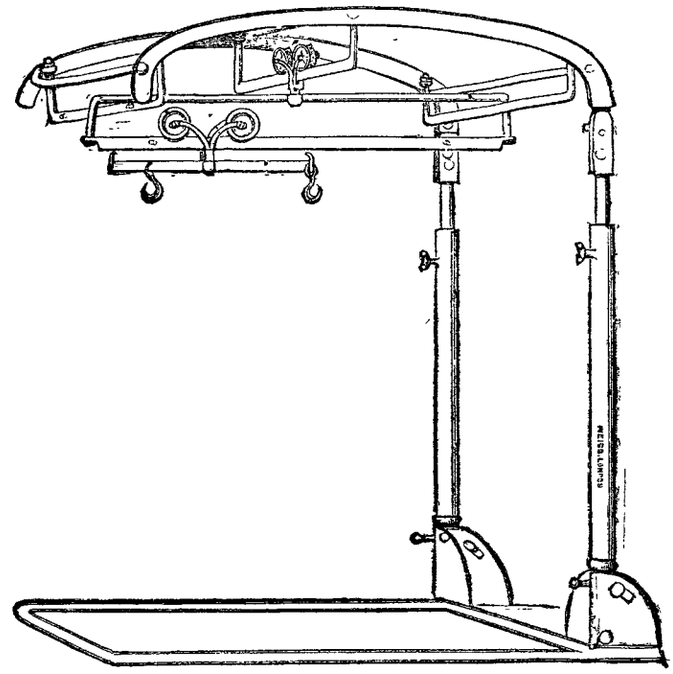
BY HENRY GREENWAY, M.R.C.S.

THE tediousness of lying in one position during several weeks has frequently been complained of by patients suffering from fractures of the lower extremity. On various occasions attempts have been made to remedy this discomfort, but in each instance the relief has been but partial. I am not aware with whom the idea of suspending fractured limbs first originated, but I believe it has been ascribed to Mr. Luke.

In 1850, whilst at King's College Hospital, I devised a jointed cradle for the purpose of slinging a fracture apparatus I then invented (since modified), but as it did not possess any important advantages over cradles already in use, and as my aim on that occasion was to produce an instrument whereby certain severe fractures of the leg could be successfully treated, its description was not included in the published account of the fracture apparatus. About the same time Mr. Salter brought out his "leg-sling." By this contrivance a patient not only enjoys the swinging motion of the limb, but is enabled to draw himself up or down in the bed. In this lay the chief novelty of the invention. Although this longitudinal movement was a great gain, and proved a boon to the patient, yet, on consideration, it will be seen that, comparatively speaking, it is seldom brought into play,—I should judge not much oftener than a half-dozen times in a day. The advantages of this appliance are of a limited nature.

In August, 1864, I left instructions at Weiss's for an instrument to be made, whereby I hoped to gain every movement that could be desired. These instructions were carried out, but my success was only partial. I have since made a number of experiments in order to attain the desired end, and I am happy in now being able to bring before the profession an invention whereby a patient is enabled to move his injured limb about the bed with nearly the same freedom as he would his sound one.

The accompanying engraving will give some idea of the nature of the apparatus. In general terms it may be described as consisting of a base or foot, two telescope pillars, and an overhanging top, to which is attached travelling gear, affording longitudinal, transverse, rotatory, and swinging movements. Also a contrivance attached to the base, whereby the pillars are supported, and any tendency to inclination corrected.



The *base*, which is placed on the battens of a bed, underneath the mattress, is a stiff iron frame, nearly square in form, at the outer angles of which are fixed *quadrant-shaped plates*. Attached to these are two *pillar stumps*, their lower, flattened ends being hinged to the plates, and their upper or free ends rounded so as to fit into the lower part of the tubular pillars. These stumps and plates not only support the pillars and parts above, but by means of screws, have the power of correcting any inclination—an occurrence which would happen if the battens of the bed, on which the base lay, dipped in the middle. (Only a very small, intermediate portion of the stumps can be seen in the sketch.) The *telescope pillars* are partly tubular and partly solid. Each tubular portion, at its lower end, fits on to the upper part of the pillar stump; the solid portion of each pillar is attached to the upper framework by a joint which is fixed with a pin when the apparatus is in use. (This joint is placed for the purpose of portability, as by it the pillars can be folded underneath the top.) With the telescope arrangement the height of the apparatus can be regulated at pleasure, by means of a check-pin at the upper end of the tube. The *top*, which is supported by the pillars on its outer side only, is an iron framework of about the same dimensions as the base (nearly two feet square), which it overhangs. Attached to this framework is the *travelling-gear*, by which the various motions are obtained. The first portion of this gear consists of three flat bars placed longitudinally, and fastened to the top by their turned-up ends. The middle one of the three is the longitudinal truck-rail; the other two are bearing-bars. On the truck-rail are placed the trucks which allow the patient to move upwards or downwards in the bed. Passing through the holder of these trucks, underneath the rail, is an arm, the ends of which are turned downwards to support the transverse truck-rail. The ends of the horizontal portion of the arm rest on the bearing-bars, and consequently glide over them when the before-mentioned trucks are in motion. On the transverse rail run a pair of trucks similar to those above; these allow the limb to be moved sideways. Attached to the holder of these trucks, underneath their rail, is the rotary bar. This works on a pivot, and enables the patient to direct his limb across the bed diagonally. On this bar are placed two hooks, from which suspension of the limb is made, and a swinging move-

ment obtained. In the event of the limb not being properly balanced when the hooks are placed at the ends of the bar, the hook on the depressed end should be moved to the notch nearer the centre of the bar, as shown in the sketch. The equilibrium will be thus obtained, as in a steel-yard.

The mode of connecting the limb with the suspender may be left pretty much to the choice of the surgeon. If the fracture be treated with the ordinary side-splints, or the starched bandage, then the limb had better be laid on a slightly curved back-piece, (supplied with the suspender,) and slung with straps from the hooks before-mentioned. Where the limb is treated with a back-splint, as M'Intyre's, or lies in a fracture apparatus having a back piece, the connexion can be made by the aid of straps without the addition of another back piece.

I was once asked by a medical man whether I could devise a method by which a patient with a fractured leg could turn over on his side? A very slight addition to this apparatus would enable such patient to accomplish that feat; but as the act of turning would necessitate muscular exertion, and thus displace the fragments, I have not thought it necessary or prudent to carry out the idea.

In the application of this apparatus, the base should be placed *underneath* the mattress in the required position for the limb, and tied on its outer side to the frame or battens of the bed. If possible, this should be done before the patient is placed on the bed. The fracture having been attended to, the remaining portions of the apparatus are placed in position by dropping the pillars on to the stumps which appear at the edge of the mattress. Connexion can then be made between the limb and the suspender, and any inclination of the top from the horizontal position can be rectified in the manner before stated.

At what height the limb should be raised above the surface of the bed, is a question on which difference of opinion exists. As a rule, the patient is most at ease when the limb is only slung sufficiently high to clear the bedclothes underneath.

The advantages embodied in this instrument are (in addition to the longitudinal and swinging movements): a transverse motion, the most frequently required; a rotatory motion, which could only be imperfectly obtained in an ordinary two-sided "cradle"; and, the form of the instrument being unilateral, the sound limb is not thrown aside from its fellow by any intervening framework, thus preventing distress in the hip-joint. This peculiarity of form also enables the surgeon or the nurse to dress any wounds, supposing the fracture to be compound, without removing the suspender from the bed.*

Many modifications of this instrument might be suggested. I have one now in use, with a single telescope pillar reaching to the floor, and fastened to the frame of the bed with a screw-clamp; but I consider the present form most to be depended on for stability.

The chief difficulties I had to contend with in the construction were, to gain free longitudinal movement when the line of suspension was out of the centre—that is to say, when the lower trucks were at one end of the transverse rail (as seen in the sketch); also, as to the mode by which attachment to the bedstead should be made. These have both been overcome. If, however, by any accident, the upper trucks drag when the lower trucks are in the position just named, they will right themselves by the patient merely bringing his leg underneath the centre of the transverse rail before he raises or lowers himself in the bed; but if the travelling-gear be made and put together properly, no dragging will take place *whilst the leg or any weight is suspended*, as the upper trucks are thereby prevented rising off their rail. A little oil should be occasionally smeared over the parts subject to friction.

I have instructed the Messrs. Weiss on certain points of detail, apparently unimportant, but on the carrying out of which the proper working of the instrument depends.

I have also desired them to make a simple and inexpensive unilateral framework, without travelling-gear, for relieving any part of the body from the pressure of bedclothes. I have termed this a *bed-guard*. The apparatus just described can be used for this purpose by merely removing the travelling-gear.

Plymouth, Feb. 1866.

* In the event of *both* legs being fractured, I would propose the use of a bilateral framework, made sufficiently wide to extend across an ordinary hospital-bed, thereby enclosing both limbs; the legs to be suspended by straps from travelling-gear of the nature above described, each leg to have its own truck on the transverse rail, with a rotary bar beneath. This contrivance would possess *nearly* all the advantages of the "unilateral leg-suspender," and be suitable for one or both limbs. I have furnished the Messrs. Weiss with a drawing of this apparatus.

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

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

HOSPITAL FOR SICK CHILDREN.

THE SEQUEL IN SOME CASES OF EXCISION AND AMPUTATION.

(Under the care of Mr. T. HOLMES.)

IT is an important and interesting question, Mr. Holmes justly remarks, whether the "cures" which are obtained by operation in chronic diseases are or are not permanent. If such operations relieve the patient from present suffering, and restore him to the ordinary duties of life, they might often be advisable, even though they expose him to considerable immediate danger, and leave him in a situation from which a relapse is very probable. But if, on the contrary, such relapse is rare, the indications for the operation are strengthened, and the more so the more rare the relapse may be. Unfortunately this is a matter on which it is very difficult to collect statistics, though it appears one on which statistics might be useful. Hospital patients soon disappear from view, and it is often impossible to trace them afterwards; and in the case of children, if they are quite well, the parents will frequently not take the trouble of sending them to see the surgeon when he writes to inquire about them, nor perhaps are they able to answer his letter. From these causes a good many of the cases on which Mr. Holmes has operated with apparent success at the Hospital for Sick Children have passed out of view. As some contribution, however, towards an answer to the important question stated above, Mr. Holmes has kindly supplied us with short notes of the condition of fifteen patients who have undergone operations with apparent success for diseases chiefly of the nature which is generally designated as "strumous" during the period in which he has been attached to the hospital, now nearly five years. Six other children, some of whom he has good reason to believe are alive and well, were written to, but he has not heard from any of them. So it appears that out of about twenty such cases, none are known to have died; that out of fifteen of whom certain accounts have been received, one (No. 7) is suffering from spinal disease, but with prospect of recovery; one (No. 1) may very probably have a recurrence of the local disease, after more than four years of complete immunity, and a good use of the limb; and a third (No. 14) has had suppuration near the seat of the operation, but most likely not from recurrence of the disease. The others all remain in good general health, and with favourable local conditions, though perhaps the last on the list from the Hospital for Children (No. 15) can hardly be said as yet to have recovered completely.

This evidence, as far as it goes, is very encouraging as respects the ultimate issue of operations for strumous disease in childhood. If it is true that there are very few of such patients as are operated on for "strumous" (i. e., chronic) disease of bones and joints who do not remain in a good state of general health for many years after the operation, and if, further, the great majority remain free from any return of the local malady, this would furnish the strongest possible motive for recommending such operations in every case where a joint is hopelessly disorganized, or a bone deeply and extensively affected; but unfortunately little attention has been given to the question, and no adequate information has been collected.

In another point of view this series of cases is interesting, as showing how extremely useful are the limbs which are obtained by excision of all the large joints. The great superiority of the leg after excision of the knee (even in a case where the shortening was considerable and increased with the patient's growth) to the condition of a patient after amputation (even