

seizing the stone, or at using the scoop. Experiments of the same kind could now and then be made on the dead subject, without much interfering with its value for subsequent dissection.

We must apologize for this little digression, which is, however, not quite foreign to the subject, and beg to enter upon the particulars of Mr. Holt's case, which presented, in an unusual manner, a very fortunate combination of favourable circumstances, and which will tend to show, by being compared with Mr. Coulson's lithotomy case, (*THE LANCET*, July 19, p. 60.) that the cutting operation is as advisable in the child, as the crushing in the adult.

—, a healthy countryman, about sixty-five years of age, was admitted, April 14, into the Lithotriptic ward, suffering from stone in the bladder. He stated to Mr. Holt, under whose care he was placed, that five months previous to admission he had been apparently attacked with inflammation of the kidneys, great pain being experienced in the back, and subsequently along the course of the right ureter. This pain was severe, and continued with little intermission for five days, when the patient was suddenly relieved, and enabled to resume his occupation of farm-labourer.

He continued his avocations for three weeks, when he complained of pain after micturition (which had latterly been more frequent than ordinary) at the extremity of the penis; and likewise that his urine was occasionally tinged with blood. These symptoms became so intense, that he was unable to continue his employment or indulge in any rough exercise, and he sought the assistance of a surgeon, who, suspecting the existence of calculus, introduced a sound, and readily felt a foreign body.

One day after the patient's admission, Mr. Holt passed a sound, but was unable to detect any calculus. The man was ordered a dessert-spoonful of castor-oil every morning, and barley-water for beverage. Upon introducing the sound two days afterwards, Mr. Holt directly detected the stone, which appeared to be small and soft. The patient was kept in bed; he continued the castor-oil and barley-water, and was allowed some beef-tea.

On the fourth day after admission, the bowels having been freely relieved, the urine being copious, and the bladder not irritable, Mr. Holt injected this viscus, introduced the lithotrite, and readily caught the stone. The latter was small, very fragile, and easily broken by the slightest pressure of the screw. The crushing was repeated five or six times, without the patient complaining of the slightest pain, and every portion was apparently reduced into minute fragments. Upon passing water immediately afterwards, the patient evacuated readily a considerable quantity of dust, of the lithic-acid character. He was desired to keep in bed, drink plentifully of barley-water, and to take five grains of Dover's powder, suspended in mucilage and water, every fourth hour.

For the first three days after the operation, the patient progressed very favourably, and passed moderate-sized fragments with each evacuation of the bladder. On the fifth day, no more detritus having been rejected, Mr. Holt introduced the scoop, and easily removed several pieces, without any pain to the patient. From this to the tenth day, no unpleasant symptom arose; but the scoop was once more used, in order thoroughly to ascertain whether any pieces were left. Two fragments were detected, and readily brought away. Seven days afterwards, the scoop failed to detect any more fragments, and the patient, having remained perfectly well up to the twenty-second day after the operation, was discharged. On his leaving the hospital, he passed urine only three times a day, was not compelled to get up in the night, was perfectly free from pain, and able to take any amount of exercise.

Mr. Holt remarked that in all the cases in which he had operated, he never met with one more peculiarly adapted to the operation of lithotripsy than the present: the capacious bladder and urethra, the small size and fragile nature of the stone, and excellent health of the patient, all offering the best chance of a speedy and successful termination. In this instance, one operation was found sufficient, the after introduction of the scoop having been had recourse to for the purpose of facilitating the removal of fragments, the non-irritable condition of the bladder being very favourable to its introduction.

It will be seen that Mr. Holt did not use the lithotrite as a sound, as he considered it much better, after having been once satisfied of the existence of a foreign body, to introduce the lithotrite, depress the lower blade, and thus form a pouch of the posterior wall of the bladder, into which the stone readily fell. Indeed, in subsequently searching for fragments, if they are small, it is almost impossible to detect them in any other

way. It is, in fact, in the majority of instances, useless to introduce a sound for the purpose of detecting any fragment that may be detained in the bladder; it is much better to inject the viscus and introduce the scoop, going through the same steps as if the stone were unbroken. By depressing the posterior wall of the bladder, if there be a fragment, it is almost sure to fall between the blades of the scoop; whereas, if only searched for with the sound, the fragment may not be reached, by its probable detention by a fold of mucous membrane, or its lying behind the prostate gland.

With regard to the exhibition of opium after the operation, Mr. Holt considers that it tends in a very great measure to prevent the rigors which so frequently supervene in lithotripsy. In some instances a severe shivering fit will be experienced after the first, but not after any subsequent operation, unless a larger instrument be used than the urethra will conveniently bear.

We should not conclude without stating that the Lithotriptic ward, alluded to above, has been set apart for operations of this nature, in consequence of the funds of the Lithotriptic charity having been given to this hospital.

## New Inventions

IN AID OF THE

### PRACTICE OF MEDICINE AND SURGERY.

*The Mesopodium or Saddle-Stick.* By T. TWINING, Esq., jun.,  
Perryn House, Twickenham.

MR. TWINING has forwarded to us the following particulars respecting his invention; and we have no doubt that it will prove of great value for the purposes for which it is intended:—

The invalid emerging from a long confinement to his couch may truly be said to appreciate more the blessing of being able to get about with the assistance of crutches, than a person in good health does the full enjoyment of his limbs. The object of the mesopodium is to place this within the reach of many who have not yet attained the degree of convalescence usually required, and of many indeed who could perhaps never expect to attain it.

In order to use crutches with comfort, it is requisite that the invalid should have strength enough, either in one leg or in the two together, to bear the whole weight of his body whilst he brings forward his two crutches *simultaneously*, otherwise he is obliged to bring them forward *alternately*, whilst he hangs with nearly his whole weight, first on one shoulder, and then on the other, in a manner at once fatiguing and injurious. This is entirely obviated by means of the simple apparatus proposed, on which the invalid rests comfortably seated, although perfectly erect in posture, whilst he brings both his crutches forward.

It was towards the beginning of 1842, that I was induced, by that necessity which is truly said to be the mother of invention, to make my first attempt in this mode of progression; but it was not till 1844 that I hit on the idea of obtaining a comfortable approximation to the shape of a saddle, by the very light and simple means of a small oblique board, as exhibited in the accompanying drawing, (Fig. 1.)

It will be noticed that the supporting stem does not consist of a single straight stick, but of two thin slips of wood curved to suit the form of the legs, (Fig. 2.) Besides the advantage of rendering the apparatus less unsightly, it is astonishing what light and slender slips are found to be, in this way, perfectly adequate to support the weight of the human frame.

If the wooden saddle is accurately shaped, it may be used even without stuffing, as figured by the dotted lines, Fig 1; but I consider it preferable to add a little stuffing covered with velvet, as represented, which can be done without materially adding to the weight of the apparatus, which, when complete, does not weigh more than fifteen to twenty ounces. In consequence of this lightness, which is one of its most essential advantages, it is scarcely felt by the person using it; and the legs being slightly pressed against it, it follows their motions without any effort being required to keep it in its place, especially if a strip of velvet be fastened on the outside of each of the slips, with the nap downwards, so as to present a rough and somewhat adhesive surface to the cloth of the trousers.

I shall not for the present enter into the practical details of the use of the mesopodium, or enumerate the

very great advantages which I have personally derived from it for the last five or six years; the former will be best understood, and the latter better appreciated, by seeing the apparatus used by some person who has acquired practice in the use of it; for in this, as in everything else of the kind, it is only practice that makes perfect.

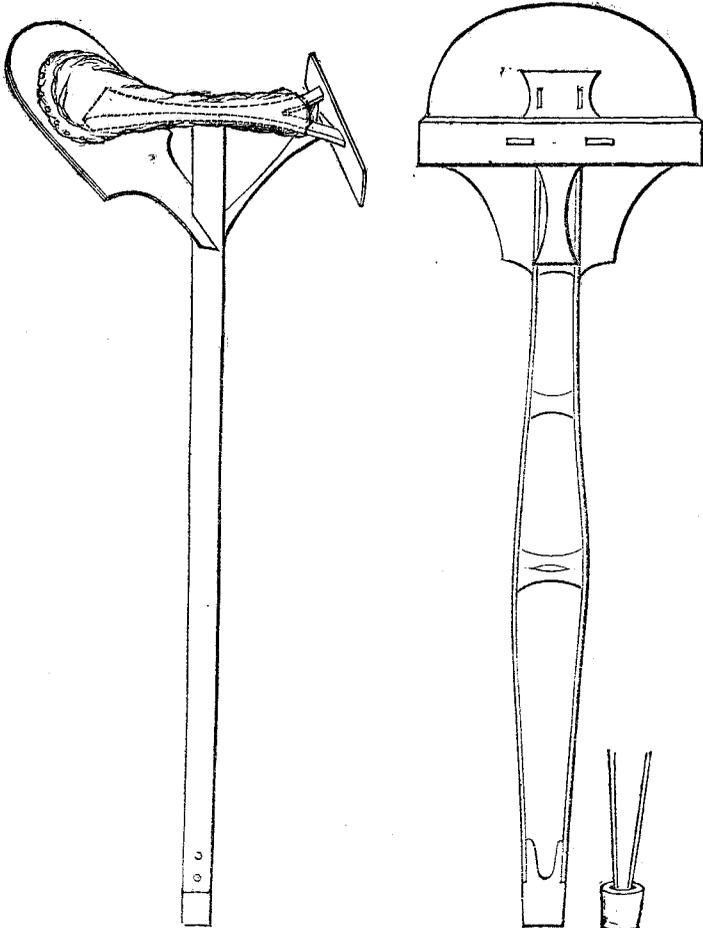


FIG. 1.

FIG. 2.

It will then be at once perceived that the use of the saddle-stick, either in its present form or with such modifications as will readily suggest themselves, is applicable to many cases in which the limbs are incapacitated for bearing their natural burden, either by the effects of accident or by disease.\* It will further be perceived that the patient may rest just as much or as little of his weight as he pleases on the artificial support thus afforded him; and this is a consideration of no little importance, for provided there be healthful tendencies, and if nothing unfavourable should intervene, the chances are that a judicious apportionment of the amount of effort to the amount of strength, and a very gradual and cautious increase of exercise, will most essentially conduce to the progress of his recovery. Day by day he will rest more on his limbs and less on their artificial coadjutor, till the time comes, not for kicking away the mesopodium, but for laying it aside to be gratefully preserved as a memento of some of the most soothing of human enjoyments—those of convalescence.

### Hospital Reports.

#### DORSET COUNTY HOSPITAL.

Reported by F. E. GOLDSMITH, Esq., M.R.C.S.

*Case of Dislocation of the Femur on the os pubis, reduced after a period of nearly eight weeks.*

G. T.—, aged thirty-nine, a strong, muscular man, whilst at work in his garden, March 20th, was suddenly seized with an epileptic fit, and fell down, his body swinging round on its left side; he had afterwards considerable pain and swelling of the left thigh, for which he kept his bed, and was attended by a surgeon, but unfortunately the nature of the accident

was not detected until shortly before his removal to the Dorset County Hospital, seven weeks and five days subsequent to the accident.

It appears from his statement, that, when a young man, he fractured the left femur, which caused that limb to be an inch shorter than the other, and slightly everted; and as he had not worn a high-heeled shoe to compensate for that shortening, considerable obliquity of the pelvis on that side took place; these circumstances combined rendered the diagnosis somewhat obscure, and account for the dislocation being overlooked in the first instance.

May 13th.—He was admitted this day under Mr. Tapp; on examination, the leg was found to be two inches shorter than the other, and everted, the heel of the left foot being on a line, and at a right angle with the malleolus of the right; the head of the bone was distinctly felt resting on the pubes; the limb is free from pain when at rest; pain is however produced on attempting to invert the foot or flex the thigh on the pelvis: he could only progress with the aid of crutches. A consultation was held, and it was agreed that an attempt should be made to reduce the limb; the patient (having previously been bled, and chloroform administered) was laid on the sound side, and the pulleys applied, extension being made in a direction backwards and downwards; this was kept up for more than an hour, frequent attempts being made in the meantime to lift the bone over the pubes and edge of the acetabulum by means of a towel placed round the upper part of the thigh, but without success. Palletta's plan of abducting the thigh, and then suddenly violently bending it towards the belly, was tried; also, that of bringing the patient to the edge of the table, and pushing the knee suddenly and forcibly backwards, at the same time adducting the limb as strongly as possible, but without apparent effect. Mr. Tapp then requested an assistant to endeavour to lift the head of the bone with a towel placed round the upper part of the thigh, whilst he grasped the heel of the affected limb firmly with his left hand, and with the right hand placed on the outside of the knee, endeavoured to rotate the limb inwards. Under each attempt to rotate the leg, some of the adhesions were heard to give way. In a short time the limb rotated inwards more freely; the pulleys were then slackened, and the thighs approximated, when it was found that the limb lay nearly straight, the foot could be inverted, and the leg more easily moved in any direction; it appeared about an inch and a half shorter than the other. He was then put to bed, the legs being fastened together with a bandage, and fomentations applied to the hip.

May 14th.—Complains of pain in the groin, for which leeches were applied. He fancies he felt the bone go into its place.

16th.—All pain in the hip and groin has ceased.

30th.—The leg is gaining strength; he thinks it is about the same length as before the accident, and still continues somewhat everted; he can turn it either in or out. He left the hospital at his own request, promising to return in a month.

June 26th.—He returned to-day much improved; has good motion of the hip-joint, and his leg is getting stronger every day.

July 24th.—Still improving; is able to take short walks.

### NON-RESTRAINT IN LUNACY.

*To the Editor of THE LANCET.*

SIR,—Enough, I trust, has appeared in your journal to satisfy all impartial persons that Mr. Hill's pretensions are unfounded; and I have not wished to trouble your readers with the more detailed and fully conclusive examination issued in this county, in reply to some of his circulars, a copy of which I took the liberty of sending you, though not for publication.

I will now merely observe, on his last communication in THE LANCET, that I utterly deny the position and the signature which he has there so complacently assumed.

I am, Sir, yours, very faithfully,

West Ashby, Horncastle, July 28, 1851.

W. M. PIERCE.

\* \* In publishing this note we think it right to state, that the controversy on this subject cannot be re-opened in our columns.—ED. L.

COLLEGE STUDENTSHIP. — Mr. John Falconer, formerly of the University of Edinburgh, has just been elected Student in Human and Comparative Anatomy, in the Royal College of Surgeons of England.

\* In cases of spinal debility, which would preclude the use of crutches in the common way, two straps passing over the shoulders may be fastened to the saddle part of the mesopodium before and behind, with buckles in front, to allow of lengthening or tightening at will.