violence of the accompanying fever. If the inflammation of the meatus be slight, no blood-letting is required, but if it present a violent character in all its phenomena, it should be reduced by local blood-letting,—by means of leeches placed around the ear. But if the inflammation has seized on the internal ear, and has attained considerable intensity, then, in case the patient is strong, plethoric, and not advanced in years, the practitioner may employ a proportionately copious venesection; he should, according to the violence of the local symptoms, place a greater or less number of leeches around the ear, and apply the cupping glasses to the nape of the neck, to the shoulders, and the spine. In weak and elderly individuals, and where the inflammation is not violent, or is chronic, leeches or cupping-glasses suffice. Internally we should prescribe mild antiphlogistic aperients in such cases, so as to produce copious evacuations by stool, and a derivation from the head and ear as quickly as possible. After the inflammation has been moderated, it is very easy to remove it entirely from the ear. Together with careful attention to the bowels, remedies which moderately promote the cutaneous transpiration are subservient to this end, accordingly I have found the continued administration of guaiacum, combined with alkalies and colchicum, or ammonia, the most efficient remedies; at the same time we should not neglect repeatedly to employ cutaneous irritants which derive powerfully, namely, acrid foot-baths, sinapisms, and blistering plasters to the nape of the neck, and to the shoulders. Should the inflammation of the ear be a consequence of a suddenly suppressed action in any joint whatever, we should apply here a cutaneous irritant, which may act rapidly. In less urgent cases we may employ frictions of croton oil, or tartar emetic ointment, over the region of the mastoid process, and on the nape of the neck, blisters to be kept open, issues on the upper part of the arm, and setons in the neck. If by the internal treatment the inflammation is crushed, and one has now to do only with the after-consequences of the same, then we should direct our efforts against the gouty disposition, and seek to ward off relapses; we should, accordingly in the first place, prescribe an appropriate dietetic line of conduct, recommend the use of food simple and easy of digestion, forbid strong beer, acid and heavy wines, liquors and other such drinks, as well as all heating, flatulent, fat, salted, and highly-seasoned food. The patient should take sufficient bodily exercise, not tarry too long in bed, clothe himself sufficiently warm, in order to protect himself from catching cold, cover the head with a warm cap, and use friction carefully over his body.

In order to remove the disturbance in digestion, the acid formation of mucus, obstruction, &c., those resolvent and bitter remedies so frequently celebrated in gout, will be found serviceable, as the infusions, decoctions, and extracts of taraxacum. Several aperient and diuretic mineral waters act very beneficially, more especially in the case of congestions in the head. To act on the lymphatic system and the excretions generally, sulphur will be found useful. With respect to the local treat-

ment of arthritic inflammation of the ear, whether the external or the internal parts of the ear be affected, nothing further is to be done at first except to cover the ear and the entire side of the head affected with warm dry cloths and the like. Every moist application is carefully to be avoided, as neither the lesser nor the greater degree of arthritic inflammation of the ear will admit of any such. In order to remove the morbid sensibility of the nerves of the ear, we may rub into the parts surrounding the ear the fluid ointment mixed with opium or extract of belladonna, or allow a solution of one grain of morphia in half an ounce of olive oil to be dropped in. In case of abscess forming in the meatus, and suppuration in the cavity of the tympanum, much relief will be afforded by a free liberation of the integuments covering the mastoid process, and kept discharging by a sponge tent in the wound for some time after; soothing and anodyne vapour and poultices are to be employed. Should a purulent discharge have established itself, the meatus must be carefully dried and covered with a compress or the like. Obstinate ulcers in the meatus should be treated with the tinctura opii camph., and even with the lapis infernalis. Should any affection of the mucous membrane set in, it is to be treated in the same way as in the case of the common catarrhal otitis. In order once more to awaken the sensibility of the ear, which has been changed by inflammation with respect to impressions coming from without, benefit will be derived from frictions with the volatile liniment, opodeldoc, oleum cajeput, &c.

2, Soho Square.

[To be continued.]

ON THE TREATMENT OF THE VARIOUS FORMS OF HERNIA

BY NEWSON'S PATENT WIRE TRUSS.

By FREDERICK H. HEWITT, M.R.C.S.

OF all the diseases and infirmities that flesh is heir to, there is probably not one as widely prevalent as hernia. Upon the most moderate calculation there must be at least 100,000 ruptured persons in the metropolis; and in some parts of the country the proportion is said to be much greater. When we reflect that all, or nearly all, such persons come sooner or later under the notice of a surgeon, it does certainly seem strange that there should be so little unanimity among the profession as to the best way of relieving and, when practicable, of curing the complaint by mechanical means. Perhaps the explanation of this apparent anomaly is to be found partly in the great and perplexing variety in trusses, and partly in the limited number of cases which come annually under the observation of most practitioners, who are glad enough to

simplify the matter by recommending one particular kind of truss (as Egg's, Coles', or Salmon's,) in every case; or by leaving it to the truss-maker to construct the truss in any way he may think best. My object in the following remarks is to introduce to the notice of the profession an instrument already very favourably known to several leading physicians and surgeons in London under the name of "Newson's Patent Wire Truss." My own experience of it comprises at least one hundred cases, including every variety of hernia to which a truss is applicable; and without claiming for it anything like infallibility, or even universal applicability, I believe it will be found to combine comfort and efficiency, together with the minor qualities of lightness and simplicity, in a higher degree than any other instrument of the kind, especially in difficult cases.

A glance at the drawings will at once explain its construction. It consists of two pads, one resting

upon the hernia, the other upon the opposite point at the back of the pelvis, connected by a round or wire spring, which passes round the hip *opposite* to the hernia. That part of the spring which crosses the spinous processes is always curved just enough to leave an interval of one-eighth to one-fourth of an inch between it and them, and is on a plane higher than that which crosses the middle line in front. Even the double truss passes round one hip only; in fact, it differs from the single one only in the addition of the little supplemental spring F F, which is generally so adjusted that the pressure upon the pad at its extremity shall be rather less than that exercised by the one at the end of the longer, or mainspring. In *fig. 2* the left hernia is supposed to require the greater pressure. The pads are made of various shapes—round, oval, pear-shaped, &c.; but for ordinary purposes the round ones are found to answer perfectly well.

The apparent resemblance to Salmon's truss is so obvious, (except as regards the double truss,) that I cannot better describe the principle of its action than by noticing very briefly the particulars in which they differ. They have in reality only one feature in common, viz., the opposite sided mode of application:—

1. The pads are fixed, instead of being connected to the spring by ball and socket joints. It has always appeared to me that the substitution of a moveable for a fixed pad was rather a *disimprovement* than otherwise. It increases the self-adjusting power of the instrument, but it renders the pressure shifting and uncertain, by enabling any part of the circumference of the pad to yield to any sudden impulse from within, instead of resisting it. Hence a much stronger spring

is required, especially for a bad hernia, than if the pads were fixed. The most powerful truss I have ever seen was one constructed on Salmon's principle for a large entero-epiplocele. It had caused severe ulceration from the groin to the hip, but had never retained the rupture for many hours together. In the "wire truss" the ends of the spring are left soft enough to admit of their being bent or twisted by a moderate force in any direction. In this way the plane of the pad's surface may be adjusted with the greatest nicety, so that either the pressure may be equally distributed, or, if required, may be concentrated upon any particular point; as over the internal ring if the hernia is recent, over the external ring and inguinal canal if it is direct, whether originally or from neglect or mismanagement.

2. The spring is a round or wire spring instead of a flat one. The advantage of this is, that its diameter being the same in every direction it can be moved with almost equal facility in every direction. Thus the pads can be moved, not only towards or from each other, (like a pair of sugar tongs,) but if one be fixed the other can be moved up or down, or even in a circle. And, accordingly, when the truss is carefully applied, the back pad may be moved up or down to the extent of two inches, or even more, without disturbing at all the front pad in the groin; and it is found that it is always the back pad which is affected by any sudden movement of the body. This substitution, therefore, of a round, for a flat spring, confers an amount of self-adjusting power, sufficient to render any joint between the spring and the pads unnecessary.

3rd. There is no pressure upon or within two inches of the spinous processes. And not only is this avoided by slightly curving the posterior half of the instrument, but by thus crossing the median line both before and behind it, it obtains so firm a hold upon the pelvis as to render any strap or fastening between the two ends of the spring unnecessary, except in cases of extreme emaciation.

4. Even the double truss, as already stated, leaves one hip free.

It should have been stated that pressure upon the abdomen is as scrupulously avoided as upon the spine, the curve of the anterior half of the instrument being carefully adapted to the shape of the wearer, and the more powerful the pressure required, the more loosely is the truss made to fit round the pelvis; in this respect it is just the reverse of the majority of trusses, in which the pressure is increased by tightening the straps and compressing all the parts surrounded by the instrument.

The following cases will I think suffice in the way of illustration:—

Case 1.—H. Langford, aged 73, became the subject of a left inguinal hernia, thirty-five years ago, neglected it, and it soon descended into the scrotum. Has had trusses from every society in London, some of them very powerful, and with every variety of straps and fastenings, but for the last thirty years it has been constantly in the scrotum, except at night. When he first applied to me, it was of great size, completely filling half the scrotum, and had become to all intents and purposes direct; the points of two fingers could be passed through the ring apparently straight into the abdomen. There was also a small right inguinal hernia. He has now worn one of Newson's double trusses for nearly two years, and it has been only upon some very unusual exertion, in unloading vans, &c., that his hernia has escaped. The most violent coughing seldom or never produces any effect. The parts, too, have so contracted, that the hernia cannot now be made to descend to anything like the same extent as at first, even when the truss is removed.

Case 2.—Anne Sallaway, aged 45, has had a femoral hernia for the last eight years; it was small at first, but

soon increased in size. She had two trusses from the society in Hatton Garden; neither, however, were of the slightest use. Four years ago it became strangulated, and she was operated upon in Guy's Hospital by Mr. Bransby Cooper. After the operation it became larger than ever, and after repeated attempts to obtain an efficient truss from the two well-known instrument makers at the west end, she gave it up in despair. When I first saw her the hernia was of the size of a small apple, and the crural aperture admitted the point of my thumb for nearly an inch. The only difficulty met with was in avoiding pressure upon the hip, owing to a peculiarity in the shape of her pelvis. The hernia was completely retained from the first, and is now so much reduced in size as to require but very slight pressure.

Case 3.—J. G., aged 46, admitted into University College Hospital under Mr. Quain for hydrocele. The following was the report on his admission:—"Scrotum as large as a full-sized hat, twenty-one inches in circumference, and at its upper part the hydrocele is covered largely with bowel in a hernial sac." He was tapped three times. At the first operation seven, at the second four pints, and at the third one pint, were drawn off. The following was the report when he was discharged:—"There is no deformity; the scrotum on the whole is larger than natural," &c., &c.; "the bowel, which had been almost constantly during several years in the scrotum, is now retained in the abdomen with one of Newson's wire spring-trusses." When this man was first sent to Mr. Newson by Mr. Quain, his case was unusually embarrassing, owing, not only to the great size of the ring, but the distortion of the parts, which had not yet subsided.

Clapham, Surrey, May 3, 1851.

ON THE AFRICAN FEVER.

By HENRY LANDOR, Esq.,

LATE COLONIAL SURGEON TO THE GOLD COAST.

THE opinions of nearly all medical men who have practised in hot countries seem to be against the contagion of fever, whether it be called plague, or cholera, or yellow fever, or the African variety of the disease. These opinions, and the practical results to which they lead, are admirably condensed in the "Report on Quarantine," issued by the Board of Health, and printed by the authority of Parliament.

It seems, also, to be the general opinion that there is only one fever poison, and that local or atmospheric circumstances determine the type the disease will assume in each epidemic. In the present state of our knowledge it is impossible to determine what these local circumstances are with sufficient exactitude to guide the sanitary practitioner; but it is somewhat easier to find out what they are not; and the considera-