Improvements in trusses / [Alexander Strauss].

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PROVISIONAL SPECIFICATION.

Improvements in Trusses.

I, ALEXANDER STRAUSS of Töpfengasse No. 4 Francfort on the Main, in the German Empire, Merchant, do hereby declare the nature of my invention to be as follows :—

In trusses hitherto employed for exomphalus or umbilical hernia the pad is apt to shift from its proper position frequently causing great injury to, or even imperilling the life of the wearer. It is most desirable to provide a thoroughly good, well fitting truss and one which by exercising steady and uniform pressure upon the ruptured part, is capable of causing or allowing the edges of the hernial cavity or sack to close and heal, so that a radical cure of the rupture may be the result.

The object of the present invention is to provide such a truss and the said invention consists in making the pad, intended to be placed within the "gate" of the rupture, independent of the remaining portion of the truss, *i.e.* of the resilient belt or band by which it is secured to the body, so that, whilst such pad does not follow in all directions the movements of the said belt or band, caused by the movements of the body, it is, nevertheless subjected to its pressure to such an extent as firmly to compress the rupture.

To attain this end, the pad and the belt or band are made as separate parts, the belt or band being fitted with a comparatively wide plate or shield of which the side turned towards the body is so smooth that it easily and freely slides upon the pad situated underneath it, without causing, or permitting, such pad to leave the cavity or "gate" of the rupture.

The following is a convenient arrangement according to this invention but I do not limit myself to the precise details.

The pad consists of a disc of suitable material such for instance as india rubber, leather or the like lined at the back with woollen fabric or any other material capable of readily sliding upon the smooth plate which is placed next it while on its front side it carries the small hemispherical pad adapted to compress the rupture. Between the pad and disc there is preferably interposed a small stiffening washer of metal; but this washer may be dispensed with if desired. The aforesaid disc is surrounded by perforations or air-holes serving to promote perspiration. The pad itself may be made of celluloid or hard rubber and should consist of one solid piece.

The sliding plate or shield is curved so as to suit the shape of the body, and it preferably has an oval outline. It is best made of celluloid or hard rubber, though any other suitable material may be used in its manufacture, so long as its surface next the pad is sufficiently smooth or is capable of being planed or polished as it is an essential condition that the surface of the shield, which is turned towards the body, and which bears against the pad supporting plate, should be as smooth and even as possible, so that the said shield may move or slide upon the pad with ease. The said shield or plate is also provided with perforations to assist perspiration. It may be connected with, or attached to, the elastic belt or band of the truss in any convenient manner, for instance by means of two side slots in the shield, through which slots the elastic band or belt is passed, they meeting and being joined together in the centre of the shield.

[*Price* 8*d.*]

When it is desired to put on the improved truss the belt or band is secured to the shield and around the body, the buckle which serves to effect the attachment of the belt or band preferably taking up its position in the centre of the shield. The shield is next lifted slightly from the body and the pad is placed under it so that it exactly covers the rupture. The shield participates with ease in all the movements of the body, and in so doing, slides upon the pad; while the pad itself remains permanently embedded in the cavity of the rupture, being prevented from leaving it by the said shield.

The same arrangement is, of course, applicable also to trusses for other ruptures.

Dated this 21st day of June 1894.

JOHNSONS & WILLCOX,
47, Lincoln's Inn Fields, Agents.

COMPLETE SPECIFICATION.

Improvements in Trusses.

I, ALEXANDER STRAUSS, of Töpfengasse No. 4 Frankfort on the Main in the German Empire, Merchant, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

In trusses hitherto employed for exomphalus or umbilical hernia the pad is apt to shift from its proper position frequently causing great injury to or even imperilling the life of the wearer. It is most desirable to provide a thoroughly good, well fitting truss, and one which by exercising steady and uniform pressure upon the ruptured part, is capable of causing or allowing the edges of the hernial cavity or sack to close and heal so that a radical cure of the rupture may be the result.

The object of the present invention is to provide such a truss and the said invention consists in making the pad, intended to be placed within the "gate" of the rupture independent of the remaining portion of the truss, *i.e.* of the resilient belt or band by which it is secured to the body; so that, whilst such pad does not follow in all directions the movements of the said belt or band, caused by the movements of the body, it is, nevertheless, subjected to its pressure to such an extent as firmly to compress the rupture.

To attain this end, the pad and the belt or band are made as separate parts, the belt or band being fitted with a comparatively wide plate or shield of which the side turned towards the body is so smooth that it easily and freely slides upon the pad situated underneath it, without causing, or permitting, such pad to leave the cavity or "gate" of the rupture.

The invention will be best understood by reference to the accompanying drawings which illustrate a convenient arrangement according to this invention but I do not limit myself to the precise details.

Figure 1 is a plan of the pad.

Figure 2 is a plan of the plate or shield, fitted with the spring belt or band; and

Figure 3 is a longitudinal cross section of the combined shield plate, disc, and pad.

The pad consists of a disc *a* of suitable material such for instance as india rubber, leather, or the like, lined at the back with woollen fabric or any other material capable of readily sliding upon a smooth plate or shield *e* which is placed next it, while on its front side it carries the small hemispherical pad *b* adapted to compress the rupture. Between the pad *b* and disc *a* there is preferably interposed a small stiffening washer *c* of metal, but this washer may be dispensed

with, if desired. The aforesaid disc *a* is surrounded by perforations or air holes *d* serving to promote perspiration. The pad itself may be made of celluloid or hard rubber and should consist of one solid piece.

The sliding plate or shield *e* (Figs. 2 and 3) is curved so as to suit the shape of the body, and it preferably has an oval outline. It is best made of celluloid or hard rubber, though any other suitable material may be used in its manufacture, so long as its surface next the pad is sufficiently smooth or is capable of being planed or polished as it is an essential condition, that the surface of the shield, which is turned towards the body, and which bears against the pad supporting disc, should be as smooth and even as possible, so that the said shield may move or slide upon the pad with ease. The said shield or plate *e* is also provided with perforations *f*, to assist perspiration. It may be connected with, or attached to, the elastic belt or band of the truss in any convenient manner. In the drawings the connection is shewn as made by means of two side slots g^1 g^2 formed in the shield, through which slots the elastic band or belt *h* is passed, they meeting and being joined together in the centre of the shield.

When it is desired to put on the improved truss, the belt or band is secured to the shield and around the body, the buckle, which serves to effect the attachment of the belt or band preferably taking up its position in the centre of the shield as shewn in the drawings. The shield is next lifted slightly from the body, and the pad *b* is placed under it, so that it exactly covers the rupture. The shield *e* participates with ease in all the movements of the body, and, in so doing, slides upon the pad, while the pad itself remains permanently embedded in the cavity of the rupture, being prevented from leaving it by the said shield *e*.

The same arrangement is, of course, applicable also to trusses for other ruptures.

Having now particularly described and ascertained the nature of this invention and in what manner the same is to be performed, I declare that what I claim is :

1. Improvements in trusses, in which the truss is formed with its pad independent or separate from the belt or band, the said belt or band being provided with a plate or shield substantially as and for the purposes hereinbefore described.

2. The improved truss substantially as hereinbefore described and illustrated in the accompanying drawings.

Dated this 27th day of February 1895.

JOHNSONS & WILLCOX,
47, Lincoln's Inn Fields, London, W.C., Agents.

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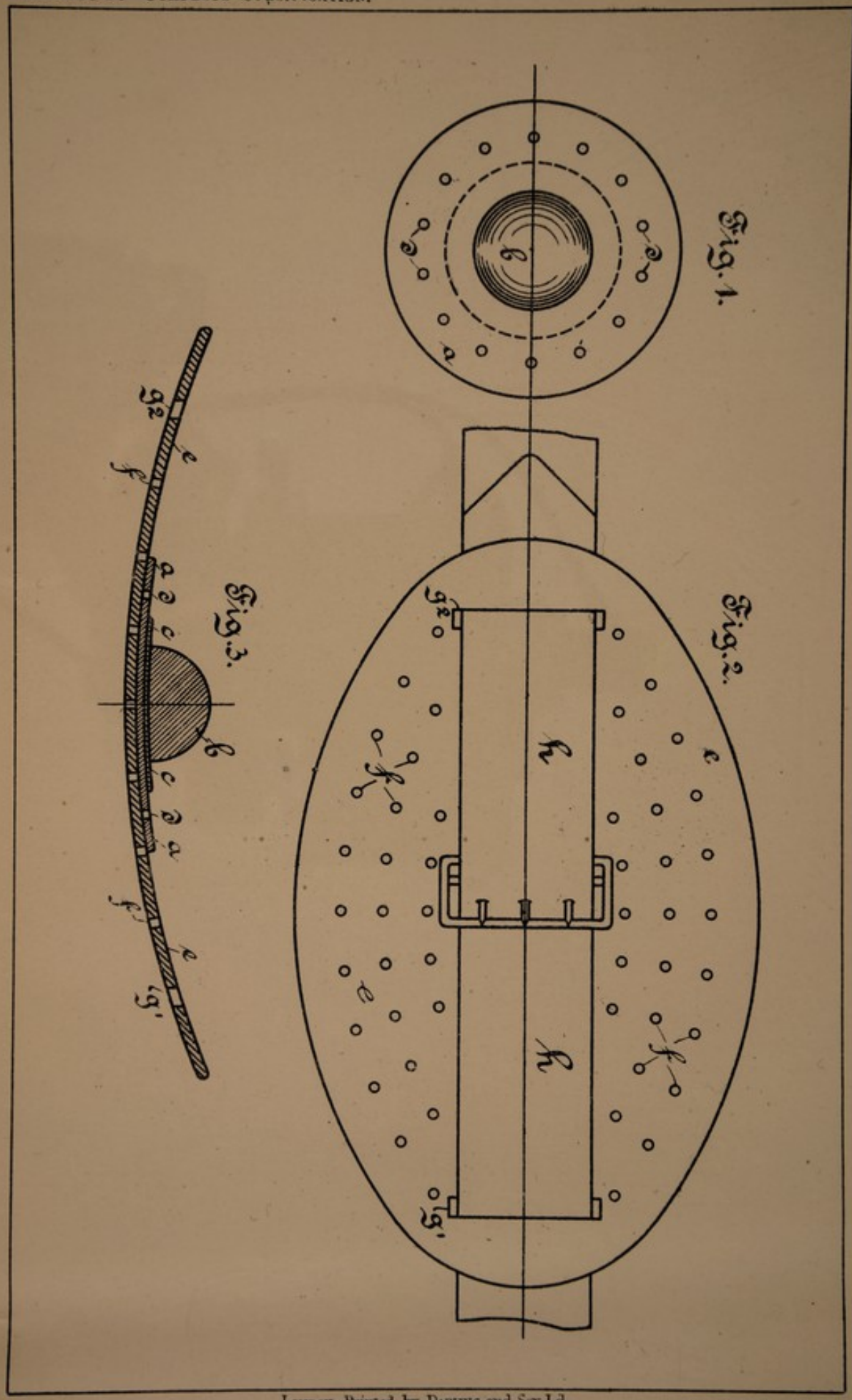

[This Drawing is a reproduction of the Original on a reduced scale]

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