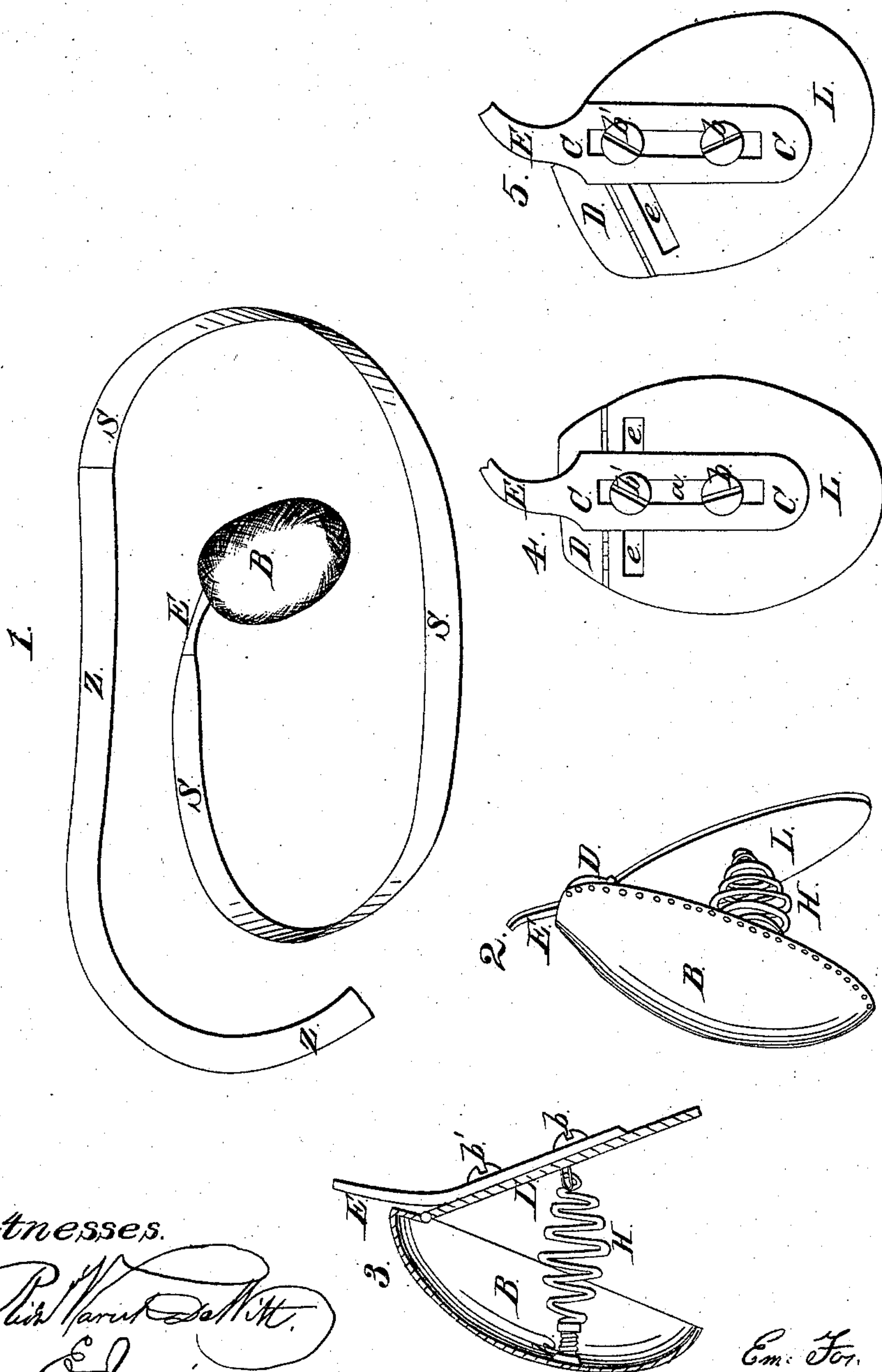


Gurdon & Damm,

Truss,

No 32,246.

Patented May 7, 1861.



Witnesses.

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UNITED STATES PATENT OFFICE.

EMERICK J. GERDOM AND JACOB DAMM, OF ALBANY, NEW YORK.

TRUSS.

Specification of Letters Patent No. 32,246, dated May 7, 1861.

To all whom it may concern:

Be it known that we, EMERICK J. GERDOM and JACOB DAMM, of the city of Albany, State of New York, have invented a new and useful Improvement in the Construction of the Surgical Instrument Known as the Truss for the Reduction of Hernia, &c.; and we declare the following specification, with the drawings hereto attached as part of the same, to be a full and perfect description thereof.

Figure 1 represents the entire truss, viz. the pad B which is the subject of our invention, with its metallic spring covered with leather, S, and the strap Z, for securing it to the person. Fig. 2 represents the pad in perspective showing its interior mechanism. Fig. 3 is a sectional profile through the center of the pad. Fig. 4 is a direct front view of the pad with the terminal, arm of the spring, showing their method of attachment to each other. Fig. 5 is a diagram showing the manner, by which the relative positions of the pad, and arm of the spring are changed.

Similar letters in the different drawings denote the same parts of the apparatus.

The ordinary method of constructing trusses is to attach to the end of a metal spring, similar to S Fig. 1, a solid circular or oval block of wood or metal. The block is fixed immovably to the end of the spring, and the parts are adjusted, to suit that part of the body to which the block is applied, but when once fitted the position of the block in reference to the direction of the spring cannot be changed without a permanent bending of the end of the spring, at its connection with the block. The block is sometimes finished smoothly and so used, but generally it is cushioned or padded, hence it is called the pad.

The spring S is the only method by which the pad is made to press properly against the diseased part, and it is manifest that it must be a very difficult, almost impossible affair to adjust from time to time the desirable pressure, by varying the curve of the spring.

It is to accomplish the desirable object of furnishing a truss whose pad, without any intermeddling with the spring S, can be varied, within reasonable limits, in its position upon the diseased parts, and whose pressure can also, when in any position be varied to suit each case or the varying con-

ditions of any case, that we propose our invention which is as follows:

The terminal part of the spring at E is to be prolonged and enlarged into a limb C which is a flat oblong plate with a slot *a* lengthwise down its center. To this limb is affixed what may be called the lid L, of the pad, which is shaped as shown in the drawing, and is hinged at its upper straight edge, to the piece D which forms the upper front piece of the bowl of the pad, by which it is attached to the lid. The remaining part of the pad is formed of a bowl-shaped body B attached at its top to the flat piece D, so that it can open and shut upon its lid L. This lid is fixed to the limb C by the set screws *b*, *b'*, which pass through the slot *a*, the screws being fitted so as to allow themselves to play within the slot. These screws *b*, *b'*, are also fitted to hold the arm C down against the face of D, screw *b* being tapped into L; screw *b'* passing not only through slot *a*, but also through another slot *e* cut through L just below and parallel with its hinge, and being tapped into a nut which slides within the slot *e*. It will be seen by inspection of Figs. 4 and 5, that by this arrangement the position of the pad can be shifted either vertically or horizontally or obliquely for a distance sufficient to admit of its application over a reasonable space of the diseased parts.

The parts of the pad L and B are held apart by the spring H. This is a spiral spring whose coils form a double cone having a common base, that is, the coils taper from the center each way; the one end being attached to inner face of L, and the other to that of B. At one of the ends, (in the drawing at *h*) there is placed on the plate a projecting screw *r* upon the threads of which, the terminal of the spring formed to act as a nut can be screwed inward or outwardly, by which the pressure between the parts of the pad can be increased or diminished considerably. The end of the spring opposite to the nut, is slipped over a stud or pin on the plate, so that by unscrewing the spring, it can be promptly detached and another one of different elasticity substituted. This it will be noted gives a large scope for the adjustment of pressure upon the subject of the truss' operations. Around the border of the bowl B, a row of small holes permit the attachment of cushioning if desired.

In regard to the spring between B and L we do not limit ourselves to any form, but prefer the use of the spring described above.

What we claim, and desire to secure by
5 Letters Patent are the following devices, substantially, as set forth:

1. The combination of the arm C, with the lid L, adjustable by the screws *b* and *b'* operating together with slot *e e* to regulate
10 the relative positions of the arm and the pad to each other.

2. The combination of the spring H formed as described, with the adjusting screw, the whole attached to a truss, substantially in the manner and for the pur- 15 poses set forth in the specification.

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J. DAMM.

Witnesses:

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E. J. MILLER.