

J. A. Sherman,

Truss.

N^o 63,565.

Patented Apr. 2, 1867.

Fig. 1.

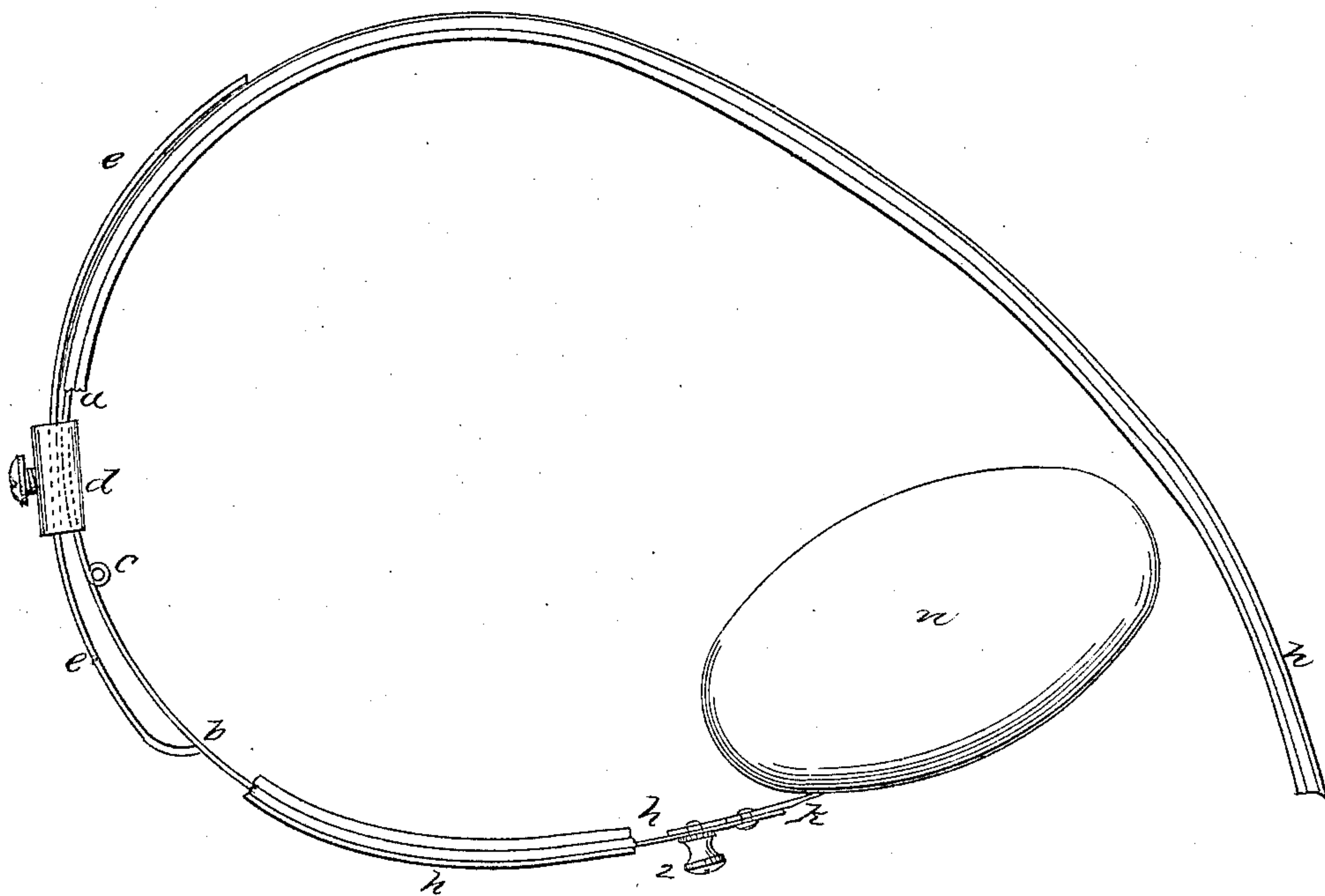


Fig. 2.

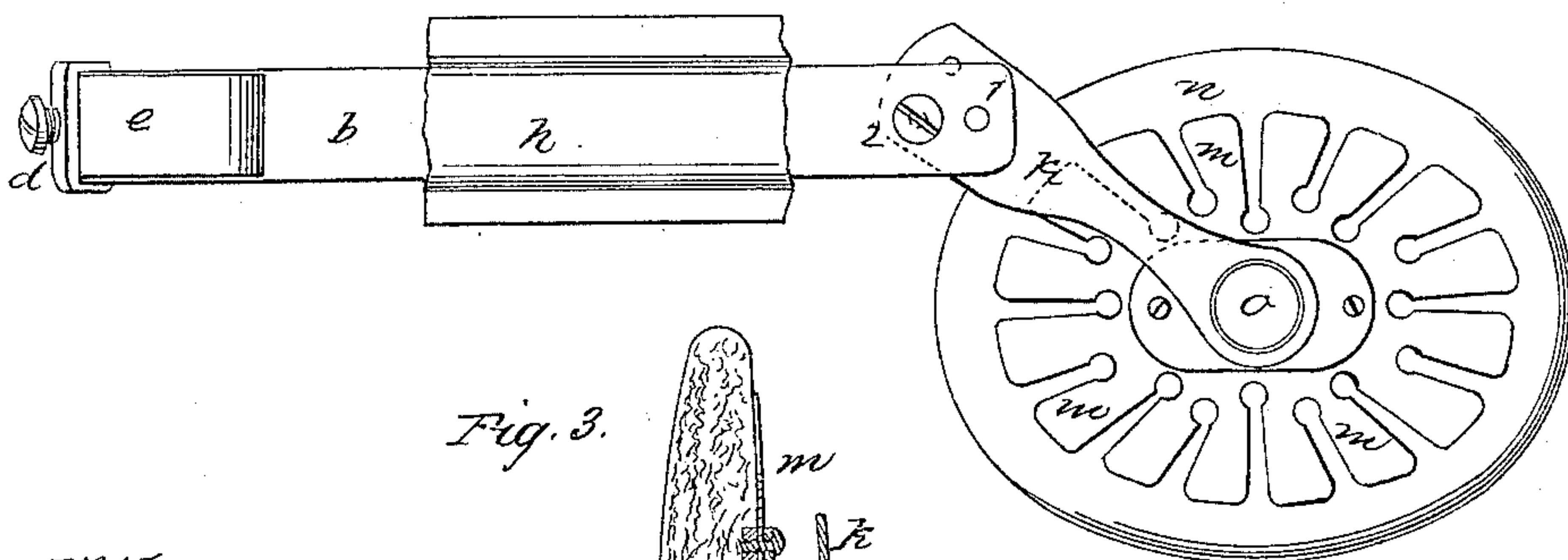
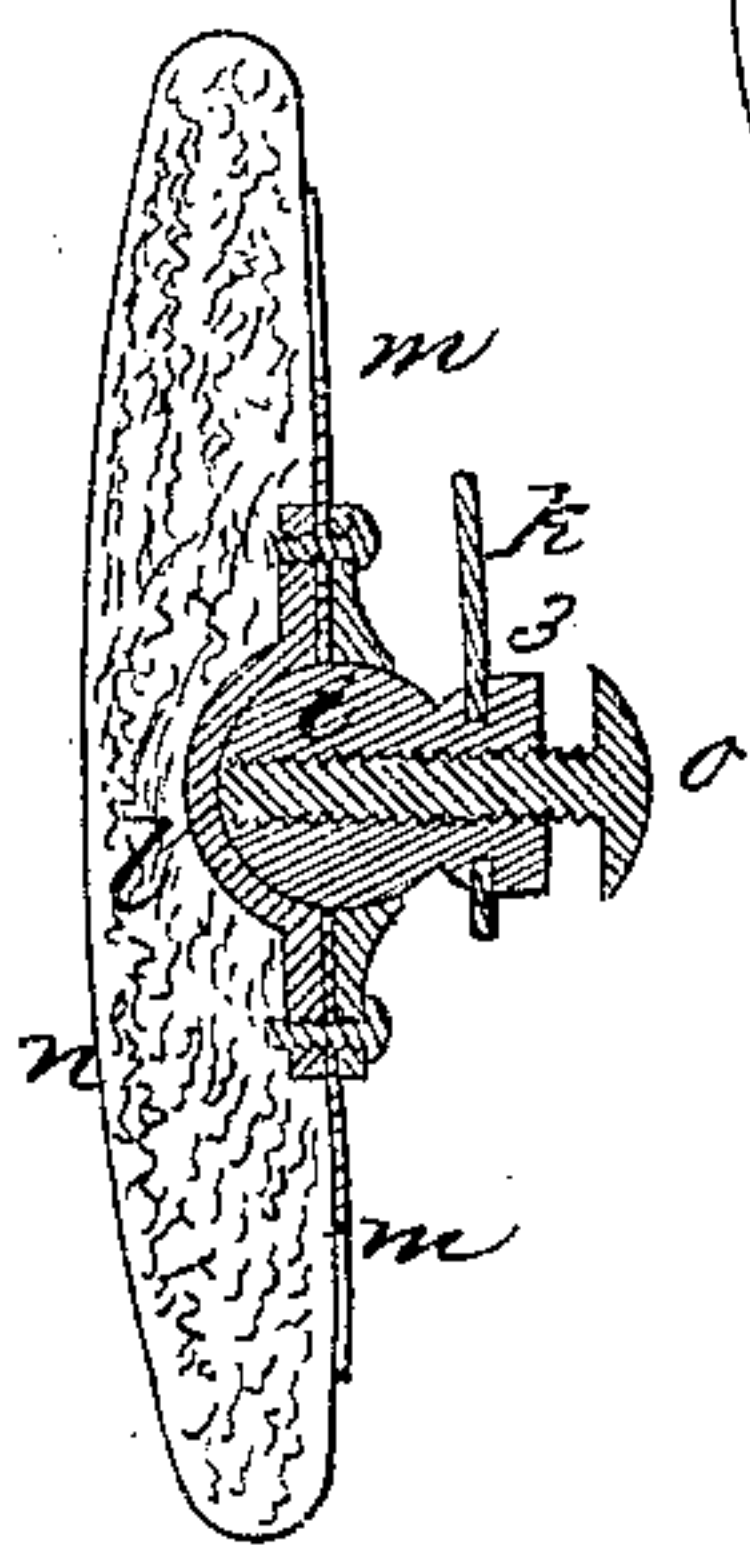


Fig. 3.



Witnesses.

Chas H Smith

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JACOB A. SHERMAN, OF NEW YORK, N. Y.

Letters Patent No. 63,565, dated April 2, 1867.

IMPROVEMENT IN TRUSSES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JACOB A. SHERMAN, of the city and State of New York, have invented, made, and applied to use a certain new and useful Improvement in Trusses; and I do hereby declare the following to be a full, clear, and exact description of the said invention, reference being had to the annexed drawing, making part of this specification, wherein—

Figure 1 is a plan of my improved truss, a portion of the covering for the spring being removed.

Figure 2 is an elevation of the truss spring and pad; and

Figure 3 is a section through the universal joint of the pad.

Similar marks of reference denote the same parts.

Difficulty has heretofore been experienced in regulating the pressure of the main spring of trusses, and in many instances the springs are sufficiently soft to allow of their being bent, so as to bring the end of the spring carrying the pad nearer to or farther from that portion of the truss spring that extends across the back, and thereby regulate the pressure of the spring.

The nature of my said invention consists in a hinge applied at the bend or side portion of the truss spring, in combination with an adjustable slide or other mechanism for holding the two portions of the spring at the hinge at any desired angle to each other, so that the pressure of the spring may be adjusted with great facility. And I also make use of a metallic plate, with radiating leaves or fingers for receiving the padding of the hernial pad. And I also make use of a peculiarly-constructed universal joint to attach the pad to the spring and allow of its adjustment.

In the drawing, *a* and *b* are the parts of the spring of the truss. *c* is the hinge by which they are connected together. *d* is a loop or clip, through which slides the bar *e*. The said clip *d* is provided with a clamping-screw, and is attached or applied to one portion of the spring near the hinge *c*, and the end of the bar *e* is curved inwards. When the bar *e* is drawn along through the clip *d*, the curved end will be brought nearer to or farther from the joint *c*, and hence that joint will be stiffened, so that the spring will operate to press the pad to the rupture, and according to the position to which the bar may be slid so the parts of the spring will make a greater or less angle with each other, and the pressure of the spring be thereby regulated or adjusted. The slide bar shown is a convenient device for holding the parts of the spring at the hinge, but other means, such as a set-screw or a cam, may be employed at the hinge to hold the parts of the spring at the proper angle to each other and adjust the pressure of the pad; and to facilitate the application of such parts one end of one spring may extend past the hinge and lap upon the other. The spring is to be enclosed by any suitable covering, from the end of which is a strap to button over the stud 2, as usual. The strap *h* is shown as partially removed. *k* is a link attached by the rivet 1 and screw 2, as usual, so as to be adapted to right or left trusses. At the end of the link *k* is a universal or ball joint, *i*, the neck of which ball passes through the link *k*, and is secured by a screw-nut, 3, so as to allow a slight movement and play to accommodate the motion of the body. *l* is the socket for the ball *i*, and *m* is a metal spring plate attached to *l*, and carrying the padding *n*, and *o* is a screw that passes through the ball *i*. It will now be understood that when the screw *o* is loosened, the pad *n* can be placed in any desired position to the spring *a b*, and by simply screwing in the screw *o*, the ball is tightened by being pressed outwardly in its socket, at the same time the point of the screw against the interior of the socket *l* aids the friction. The plate *m* is slotted radially, so as to form leaves or fingers, to which the padding and covering are attached, and these yield and cause the pad to accommodate the surface of the hernia. The spring *a b* might be formed with more than one hinge, so as to increase its facilities for adjustment.

What I claim, and desire to secure by Letters Patent, is—

1. A truss spring, formed of two or more parts hinged together and retained at the desired angle to each other, substantially as specified, so as to regulate the pressure of the spring, as set forth.

2. I claim the ball joint *i*, for attaching and adjusting the pad, in combination with the screw *o*, passing through said ball and taking the inner surface of the cavity, as set forth.

3. I claim the plate *m*, formed with radiating leaves or fingers, to which the padding is connected, so that they yield and adapt the pad to the surface of the hernia, as set forth.

In witness whereof I have hereunto set my signature this eighteenth day of May, A. D. 1866.

J. A. SHERMAN.

Witnesses:

GEO. D. WALKER,
CHAS. H. SMITH.