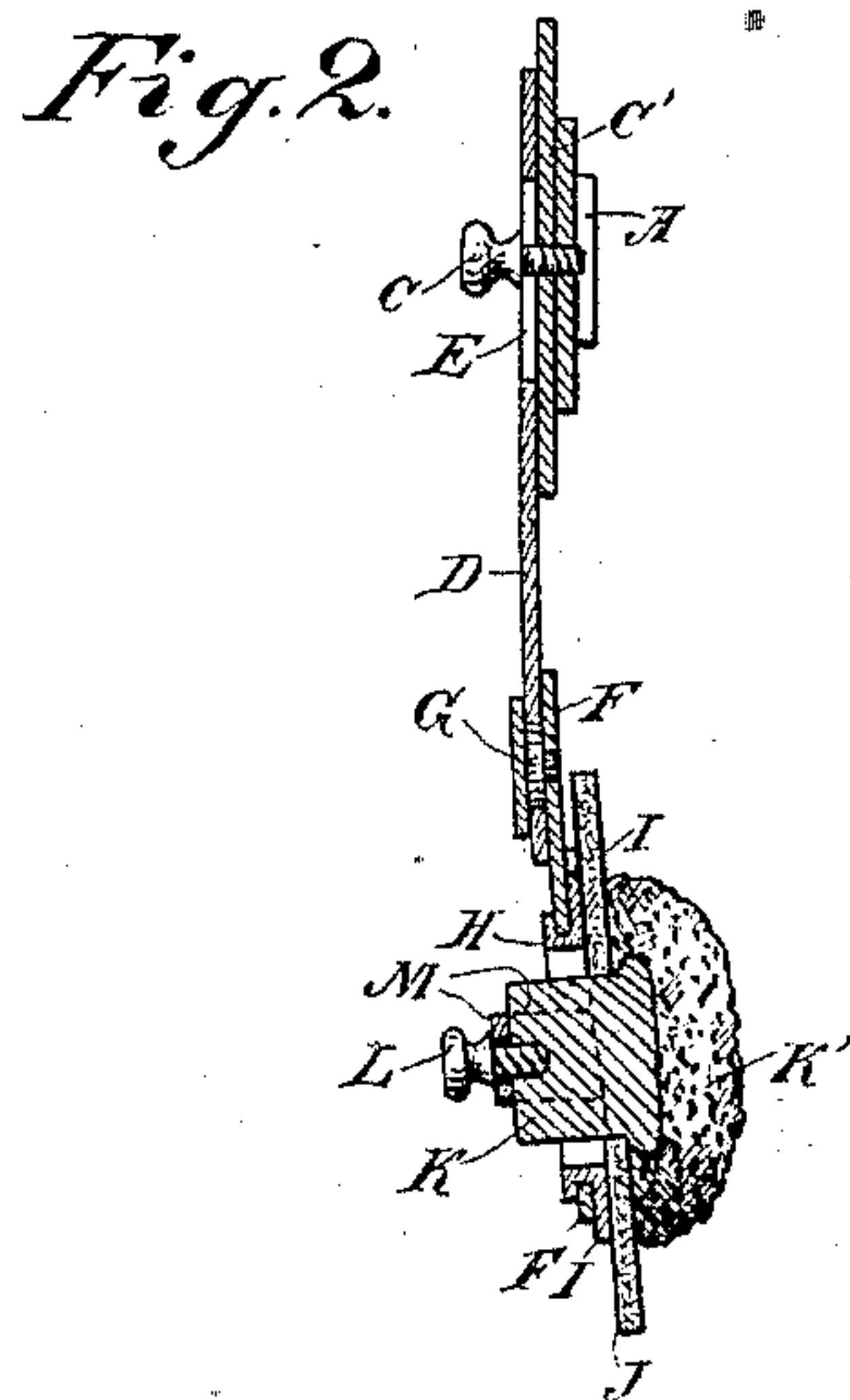
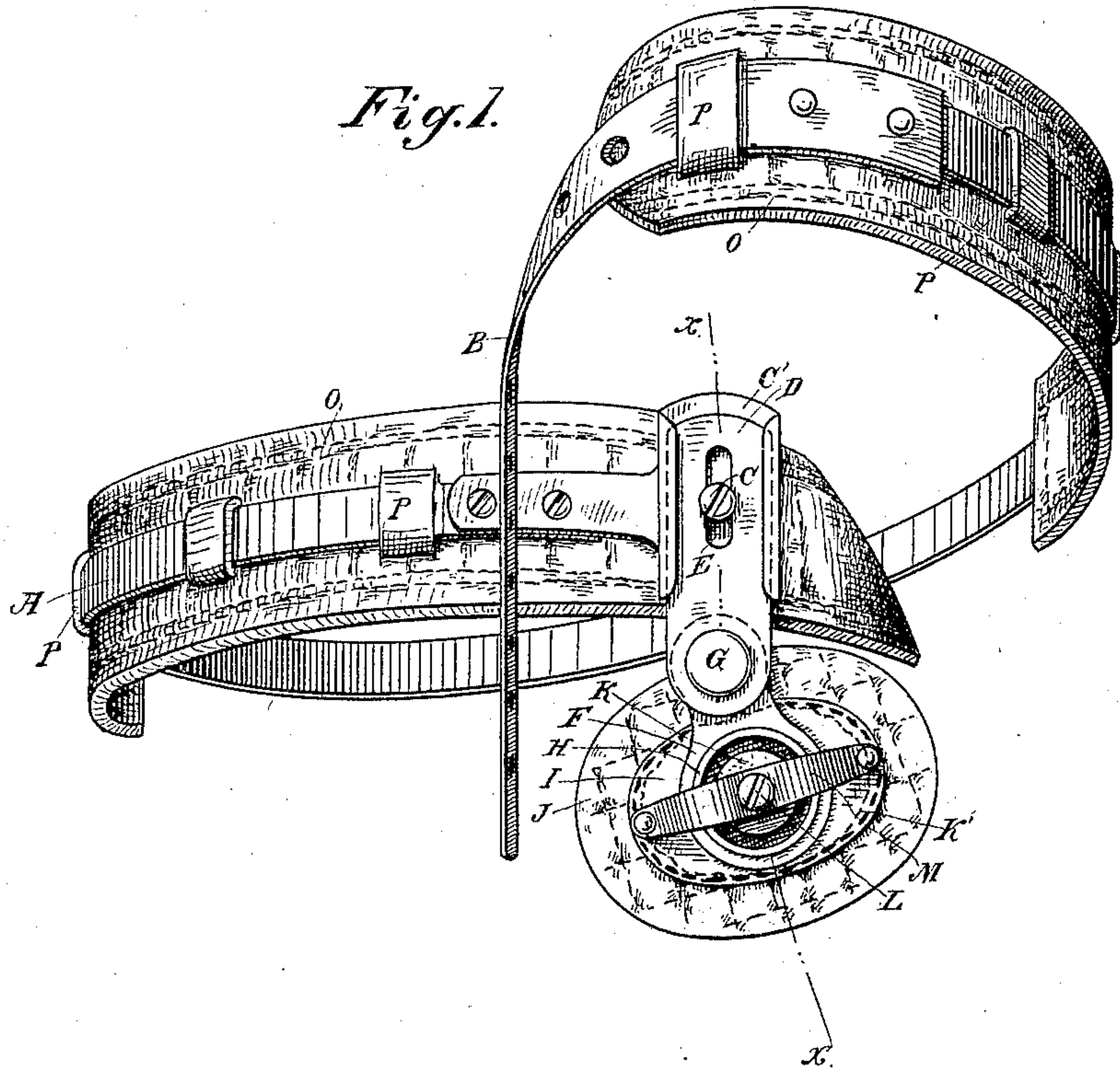


(No Model.)

R. NAGLER.
TRUSS.

No. 462,015.

Patented Oct. 27, 1891.



Witnesses,
G. H. Morse
H. F. Aschbeck

Inventor,
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attys

UNITED STATES PATENT OFFICE.

ROBERT NAGLER, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR OF TWO-FIFTHS TO FREDERICK WEEGMANN, OF SAME PLACE.

TRUSS.

SPECIFICATION forming part of Letters Patent No. 462,015, dated October 27, 1891.

Application filed February 24, 1891. Serial No. 382,669. (No model.)

To all whom it may concern:

Be it known that I, ROBERT NAGLER, a citizen of the United States, residing in the city and county of San Francisco, State of California, have invented an Improvement in Trusses; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to certain improvements in trusses which are applicable to persons afflicted with rupture.

It consists in certain details of construction, which will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 is a front view showing the relative arrangement of parts. Fig. 2 is a vertical sectional view through the line xx of Fig. 1.

A is an elastic curved spring of the form usually applied to such devices, having a strap B, which passes around the body and is attached to a button or other fixture at C, so as to hold the parts in place. The button C passes through a guide-plate C', which is fixed transversely across the front end of the spring. This guide-plate may be made in any suitable form to receive the sliding plate D. In the present case I have shown it with the sides turned over to form holding-flanges, within which the plate D slides. The plate D is slotted, as shown at E, and by loosening the screw or button C, which screws into the back of the guide-plate, this sliding plate may be moved up or down to any required position, where it may be secured by tightening the screw. To the lower end of this plate is attached a plate F by means of a rivet G, which allows it to swivel easily from side to side upon the lower end of the guide-plate. The outer end of this swivel-plate is enlarged and has a hole made through it of considerable diameter, and within this hole is fitted the circular collar H, which projects outward from the plate F. The collar has a flange turned over so as to hold it in the opening in the plate F, and at the same time to allow it to turn freely in the openings. The plate I, of which this flange-collar forms a part, is shown in the present case made oval in form and having a pad of soft material J and of suitable thickness stitched to it through the holes formed around

the periphery of the plate. A hole is made through this pad of a size approximating that of the interior of the collar, and through this hole passes the cylindrical stem K. This stem is enlarged at the inner end and has fixed to it a pad K' of any suitable description to press upon the part to be treated. This pad is shown in the present case as oval in outline and convex or ovoid in form, so as to produce a pressure upon the part in the proper manner. I prefer to make this pad of some porous and elastic material, and I have found that ordinary sponge is very suitable for this purpose. The stem or shank K to which the pad K' is fixed extends outwardly through the hole in the plate and collar H, before described, and is secured by a screw L, passing through the spring M into the center of the stem. The spring M is arched in form, curving over the center of the opening through which the stem projects, as shown, and has its ends secured to the outer ends of the plate I, preferably in the direction of its longest diameter, so as to give the spring as much freedom and elasticity as possible. The screw or pin by which the stem is secured to this spring turns loosely where it passes through the spring, and this allows the pressure-pad K' to be turned to any desired point, so as to occupy any position with relation to the pad and the part to which it is applied. In addition to this, the plate I turns freely by reason of the flanged collar H in the end of the plate F, and this latter plate being pivoted or swiveled to the sliding plate D, which is vertically adjustable upon the guide-plate C', it will be manifest that the utmost freedom of motion is allowed to these parts to move from side to side and adapt themselves to the movements of the pad and the various positions which may be taken by the wearer.

Upon the body-spring A, I fit the soft broad padded belts or sections O by means of loops P, which allow them to slide backward and forward upon the spring, and thus allow movements of the body without any friction of the spring. The ends of these sections project beyond the ends of the spring, and if it be found that the pressure of the spring ends upon any part of the body is inclined to make it sore or to make the patient uneasy these

sections can be shifted or the ends folded under, so as to make a thicker pad, and thus relieve the wearer from disagreeable pressure.

It will be manifest that by the adjustments here described the pad can be moved into various positions, the belt may be reversed, and by taking the slide out and introducing it into the other end of the guide-plate C' the same belt may be worn upon either side. The guide-plate may also be shifted or turned upon the end of the spring, so as to apply the pad to a navel rupture or to any part where it may be needed.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a truss, the combination of the elastic spring having a guide-plate upon its end and at right angles thereto, a slide adjustably mounted on said guide, a plate swiveled to the slide, and a pad rotatably secured to the swiveled plate, substantially as herein described.

2. In a truss, the body-spring having the guide-plate fixed to its inner end, a slide adjustable upon said guide, a plate swiveled to the lower end of the slide, having a hole made in its outer end, an oval plate having a flanged collar adapted to turn in the hole of said plate, a spring having its ends secured to the ends of the plate and arching above the hole, in combination with the pressure-pad having the outwardly-projecting stem extending through

the hole in the swivel-plate, and a means for loosely attaching said stem to the arched spring, substantially as herein described.

3. In a truss, the body-spring having a guide-plate fixed to the inner end, an adjustable slide movable upon said guide-plate, having a second plate swiveled to its lower end, an oval pad-plate having a central perforation and a flanged collar, by which it is attached to the swivel-plate, a pressure-pad the stem of which extends through this opening, an arched spring having its ends secured to the ends of the pad-plate, a screw or pin by which the stem of the pad is loosely connected with said spring, and an intermediate disk or pad of soft material stitched to the pad-plate, lying between it and the pressure-pad, substantially as herein described.

4. In a truss, the combination of a body-spring having a plate upon its end provided with vertical guides, a plate adjustably fitted to the guide-plate, a plate swiveled to the slide, a pad-plate having a collar engaged by the swiveled plate, so that the pad may turn, and a porous substance fixed to the pad-plate, substantially as herein described.

In witness whereof I have hereunto set my hand.

ROBERT NAGLER.

Witnesses:

S. H. NOURSE,
J. A. BAYLESS.