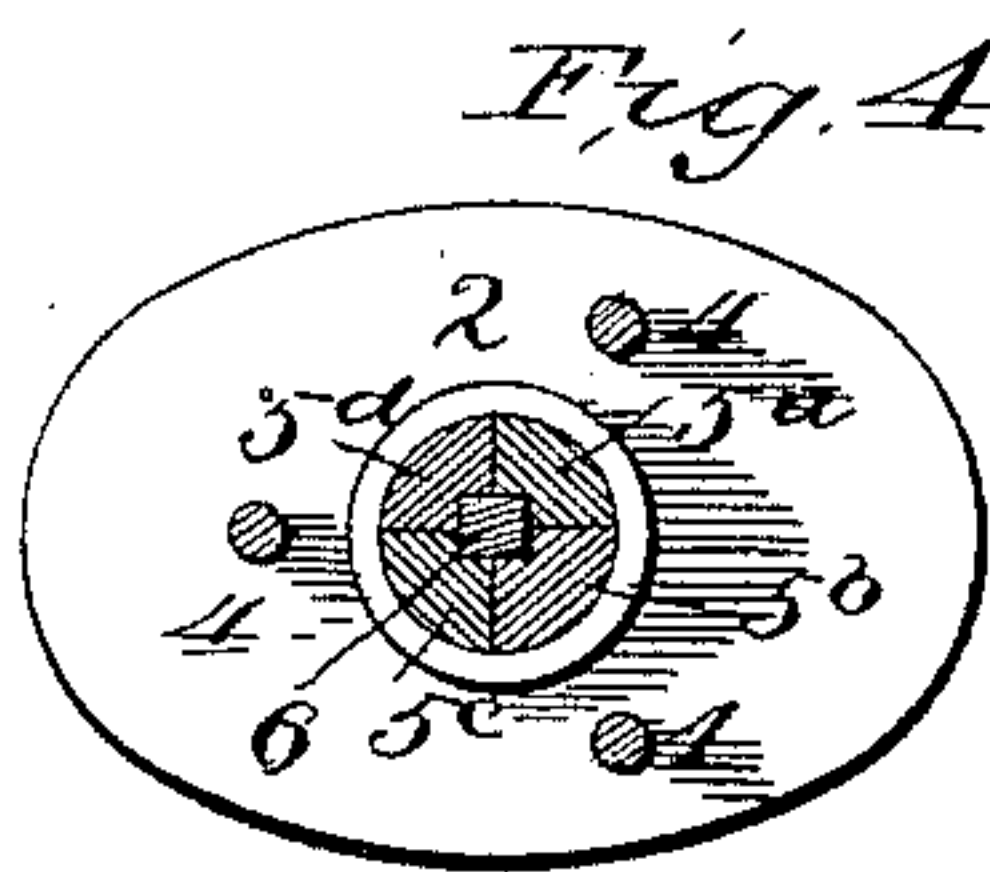
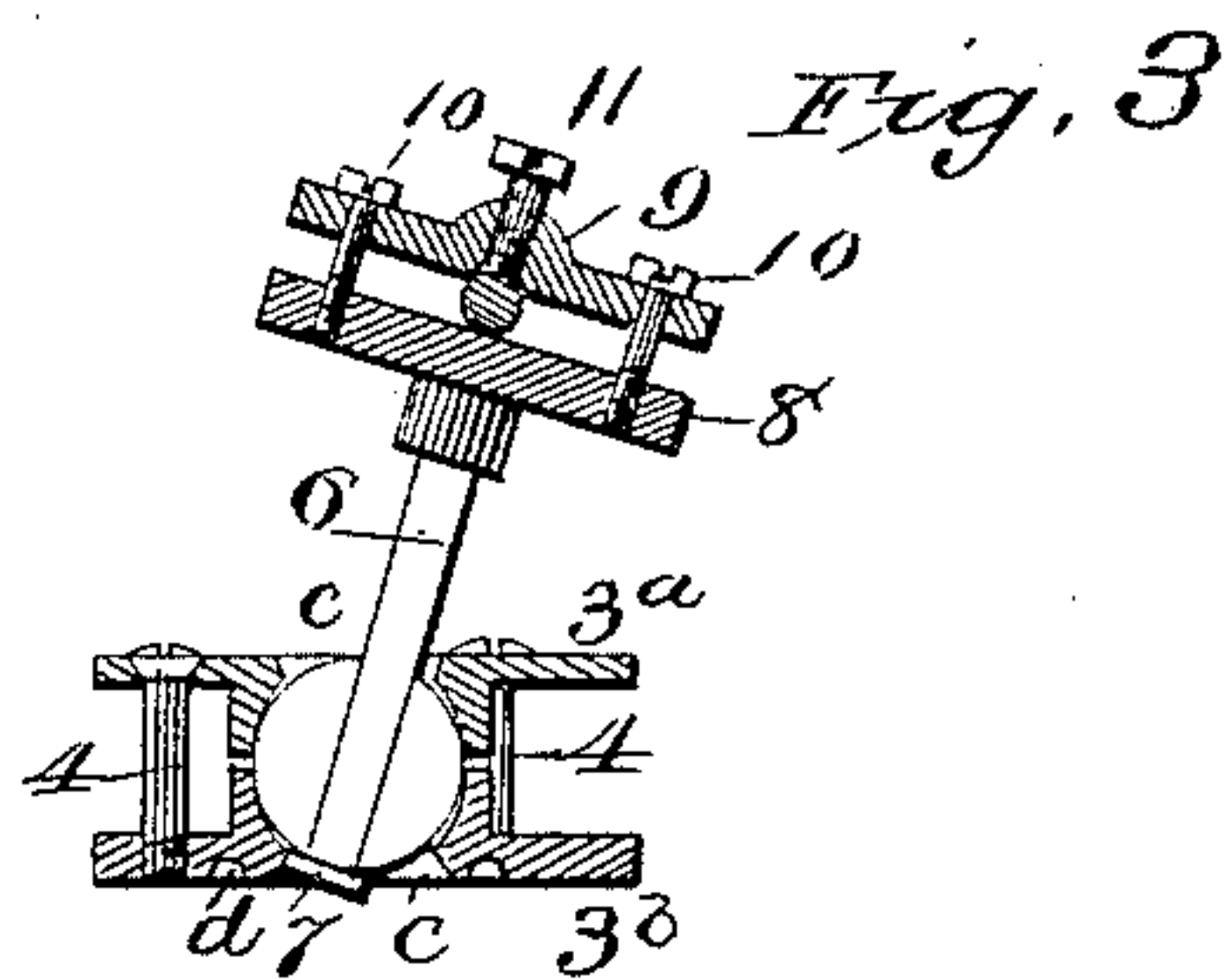
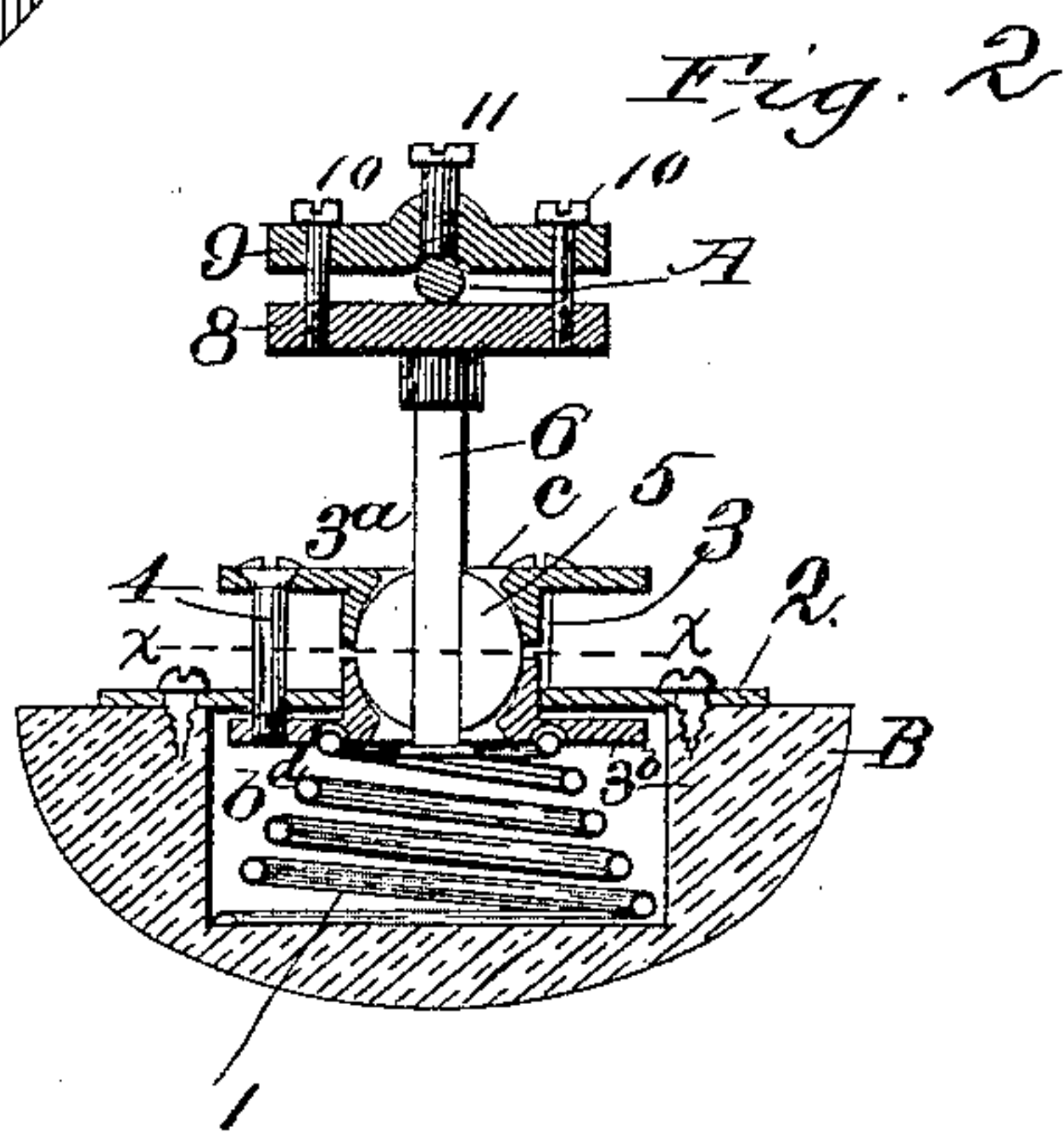
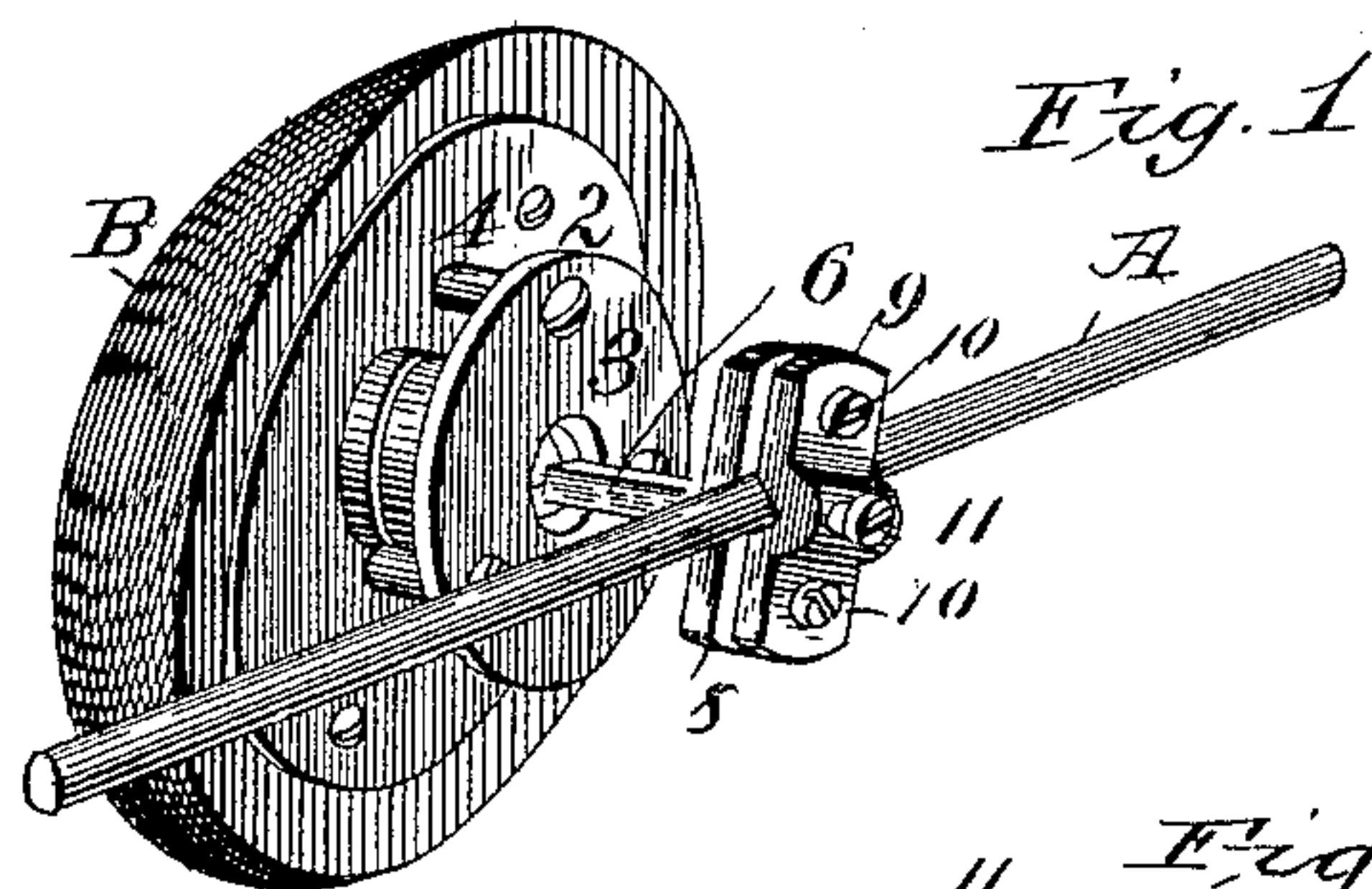


(No Model.)

A. NAIDL.  
TRUSS.

No. 461,039.

Patented Oct. 13, 1891.



Witnesses,  
J. P. Cornwall  
Edwin S. Clarkson

Inventor,  
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# UNITED STATES PATENT OFFICE.

ANTON NAIDL, OF OMAHA, NEBRASKA.

## TRUSS.

SPECIFICATION forming part of Letters Patent No. 461,039, dated October 13, 1891.

Application filed April 25, 1891. Serial No. 390,460. (No model.)

*To all whom it may concern:*

Be it known that I, ANTON NAIDL, a citizen of the United States, residing at Omaha, in the county of Douglas and State of Nebraska, have invented certain new and useful Improvements in Trusses for the Treatment of Hernia; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of a truss embodying my invention. Fig. 2 is a central section of the same. Fig. 3 is a detail sectional view of the rocking post and its socket, and Fig. 4 is a transverse section of the sectional ball-joint on the line  $x x$ , Fig. 2.

Like symbols refer to like parts wherever they occur.

My invention relates to the construction of adjustable spring-ball or spring-pad trusses for the treatment of hernia; and has for its object to simplify the adjustment of the post and ball and render effective and secure the relative position of said parts after the adjustment thereof.

To this end the main feature of my invention, generally stated, embraces the combination, with the post, of a sectional clamp-bearing and clamp-socket, whereby the post may be pushed in or drawn out to increase or diminish the pressure and may be set and secured at any desired inclination to the pad.

There are other minor features of invention, all as will hereinafter more fully appear.

I will now proceed to describe my invention more fully, so that others skilled in the art to which it appertains may apply the same.

In the drawings, A indicates a portion of the belt or body-band which supports the truss-pad, and in the present instance is shown as of wire, preferably annealed, so as to render it capable of being bent to vary the position of the truss pad or ball. The portions of the truss-band A which are not shown may be flattened and leather-covered in the well-known manner of forming body-bands for trusses. As this belt embodies no feature of the present invention, any well-known form of belt may be substituted therefor.

B indicates the ball or pad provided with a central well  $b$  for the reception of the spring

1, which spring supports the post-socket and permits a yielding endwise movement of the post to relieve the wearer of the truss from the rigid pressure of the truss liable to produce bad results. This well  $b$  also provides for the endwise adjustment of the post through its socket.

2 indicates the truss-plate, which is secured to the ball in any suitable manner and is provided with a central opening for the reception of the post-socket, said opening preferably being of sufficient size to permit the free movement of the post-socket in the plate.

3 indicates the post-socket, which is preferably composed of two horizontal flanged sleeve-sections  $3^a$   $3^b$ , held together by threaded bolts 4 4, which pass through the truss-plate 2, though another form of sectional post-socket and connections may be employed, if desired. I, however, prefer the construction shown, as the screw-bolts 4 4 not only serve as guides to prevent the side motion or cramping of the socket in the plate, but also as means for drawing the section of the socket together to clamp the post-joint and secure the post. The upper and under edges of the socket-sections may be beveled or countersunk, as at  $c$ , to permit the post to be inclined in any desired direction, and the under face of the socket 3 may be grooved, as at  $d$ , to form a seat for the end of spring 1.

5 indicates the clamp-bearing of the post. This bearing is composed of sections  $5^a$   $5^b$ , &c., (see Fig. 4,) corresponding in shape, as a whole, to the interior of post-socket 3, and provided with a central cavity or hole for the passage of the post 6. By turning the screw-bolts 4 4 to loosen the sections of post-socket 3 the post 6 may be moved through this clamp-bearing to increase or diminish the distance between the pad and belt, after which the bolts 4 4 may be tightened up to cause the clamp-bearing to bind on and hold the post.

In addition to the before-specified adjustment of the post as to its length, it is desirable to adjust its inclination to the pad, and to accomplish this I prefer to form this clamp-bearing 5 in the form of a sectional ball and the interior of the post-socket 3 in the form of a cup, as shown in the drawings, to obtain a ball-and-socket or universal joint, so that



the post can be set at any desired inclination to the pad by the same operation, and at the same time its length is adjusted.

5 The inner end of the post 6 may be provided with a button 7, and its outer end can be secured to a suitable clamp-plate 8, which clamp-plate 8, in conjunction with clamp-yoke 9 and screws 10 and 11 or equivalent means, may be employed for adjustably se-  
10 curing the post 6 to the belt or body-band A.

Among the advantages of my invention are simplicity of construction, combined with facility in adjustment and security of the parts when adjusted.

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

1. In a truss, the combination, with a truss ball or pad, of a sectional clamp-post socket,  
20 sectional clamp-post bearing, and a post ad-

justable through the sectional clamp-bearing, substantially as and for the purposes specified.

2. In a truss, the combination, with the ball or pad, of a ball-and-socket bearing for the  
25 post, and a post adjustable through the said ball-bearing, substantially as and for the purposes specified.

3. In a truss, the combination, with the ball or pad, of a spring-supported post-socket, a  
30 clamp-ball arranged in the socket, and a post adjustable through the ball, substantially as and for the purposes specified.

In testimony whereof I affix my signature, in presence of two witnesses, this 18th day of  
35 April, 1891.

ANTON NAIDL.

Witnesses:

I. C. BACHELOR.

JOHN T. WILLIAMS.