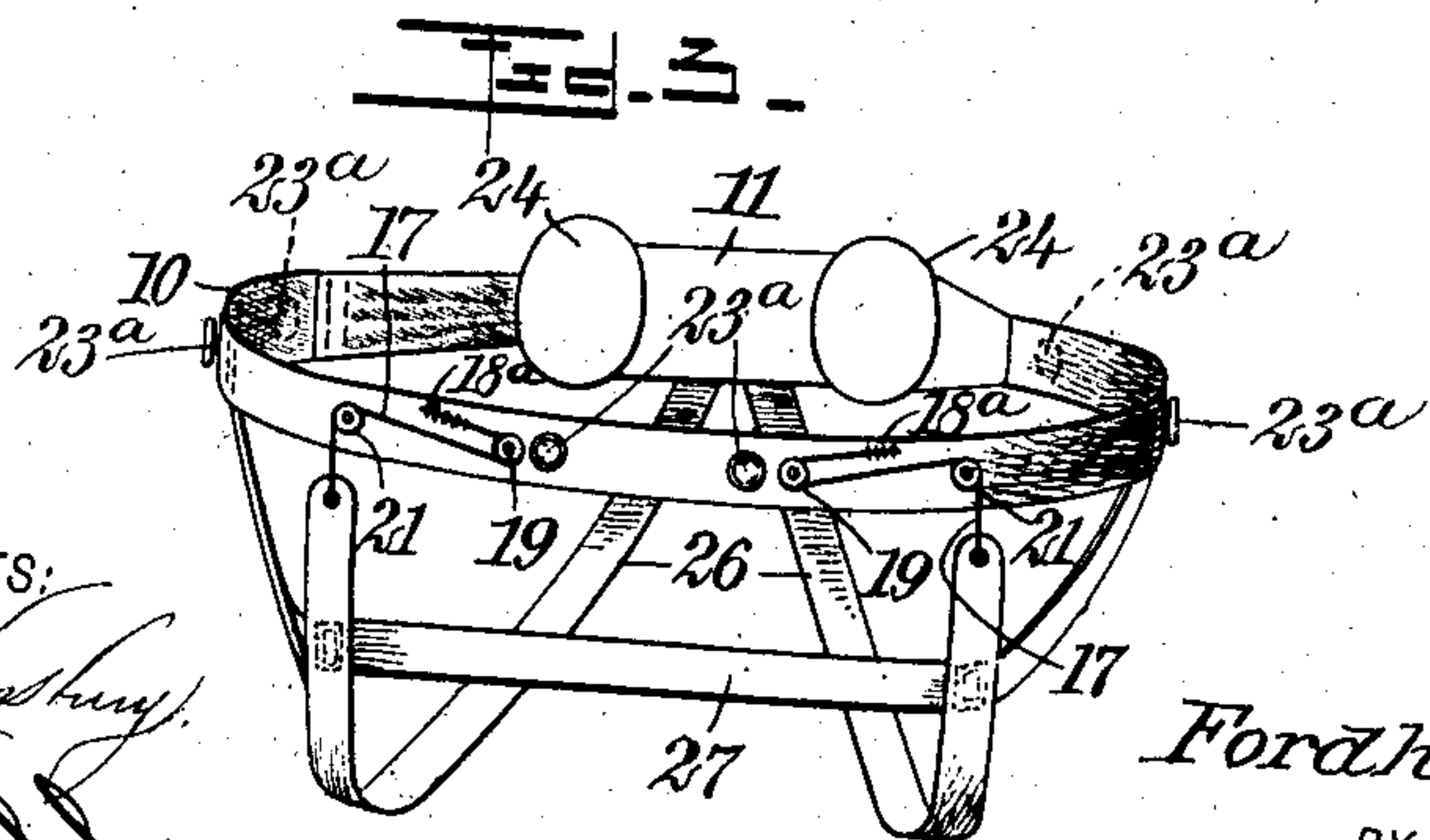
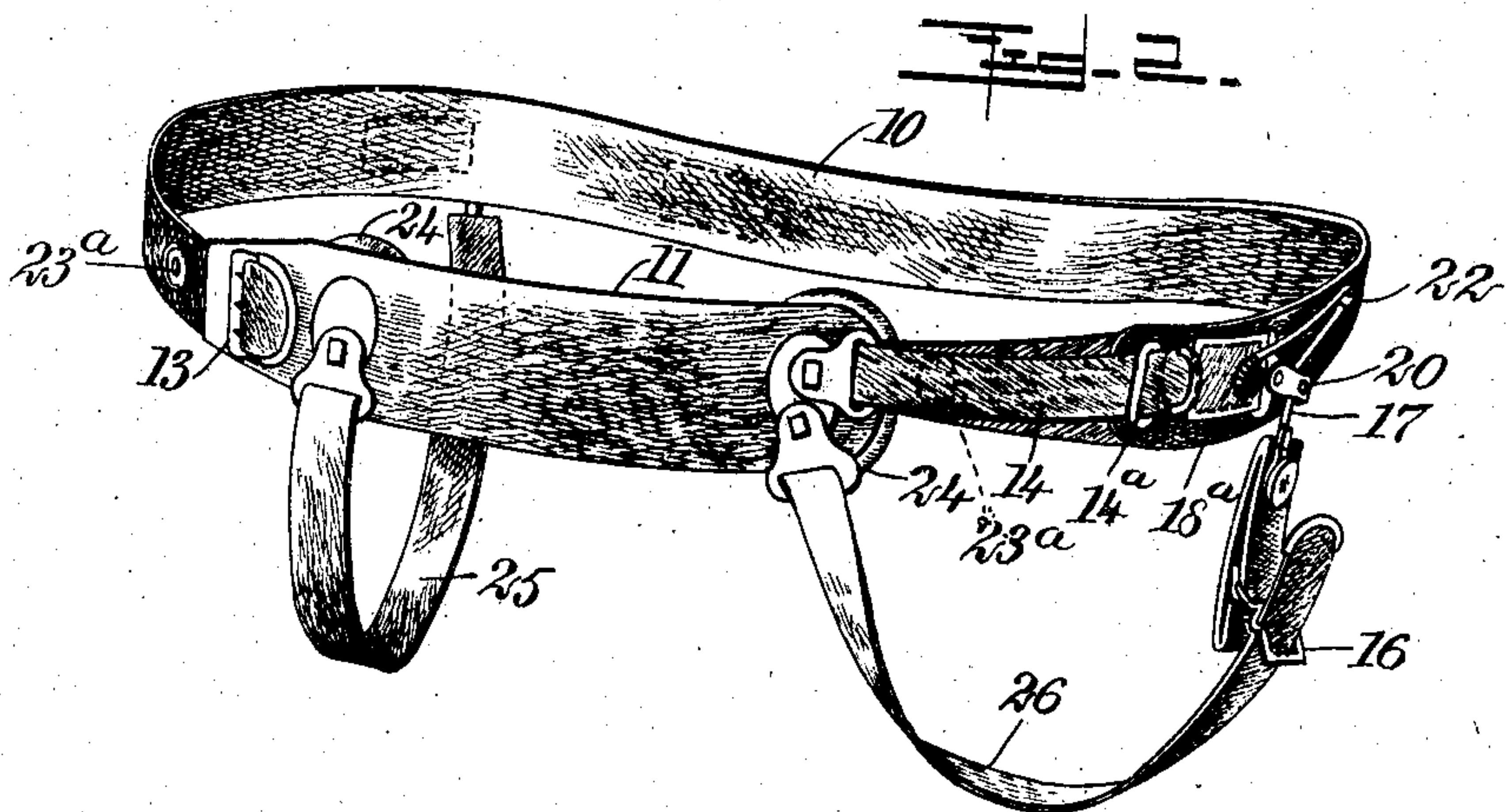
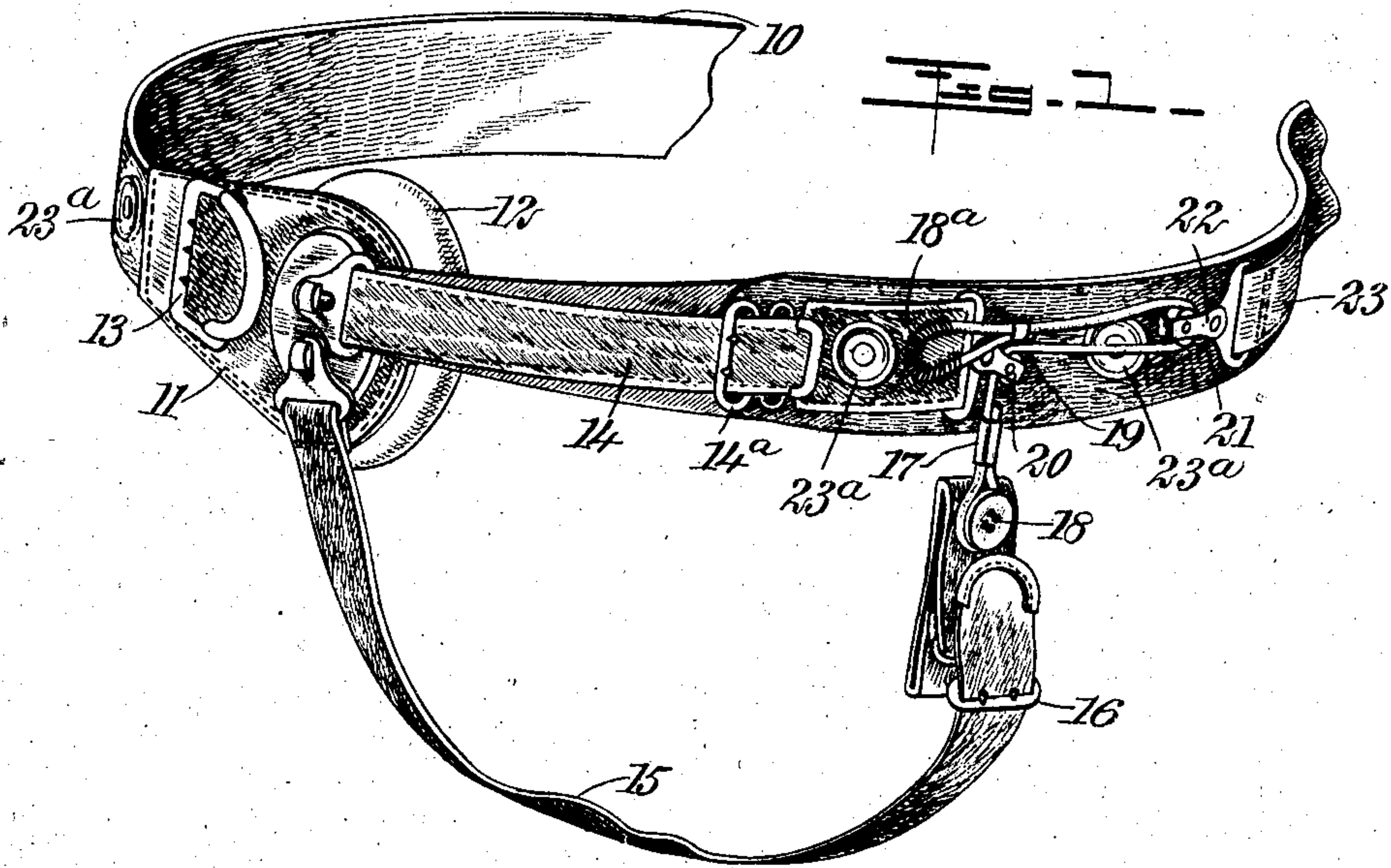


No. 834,712.

PATENTED OCT. 30, 1906.

F. CRATER.
TRUSS.

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WITNESSES:
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FORDHAM CRATER, OF PARSONS, KANSAS, ASSIGNOR TO HIMSELF AND
THOMAS B. ALLISON, OF PARSONS, KANSAS.

TRUSS.

No. 834,712.

Specification of Letters Patent.

Patented Oct. 30, 1906.

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To all whom it may concern:

Be it known that I, FORDHAM CRATER, a citizen of the United States, and a resident of Parsons, in the county of Labette and State of Kansas, have invented a new and Improved Truss, of which the following is a full, clear, and exact description.

My invention relates to trusses, and has for its principal object the provision of means for equalizing strains in such appliances.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of one embodiment of my invention, it being illustrated in connection with a single-pad truss. Fig. 2 is a similar feature of a double-pad truss, one of the under straps having my invention associated with it; and Fig. 3 shows in perspective another arrangement of double-pad truss.

Referring now to Fig. 1, at one end of a belt 10 is attached a support 11, having a pad 12, conveniently by means of a buckle 13. The opposite extremity of the belt may be connected with the pad-support by a strap 14 and buckle 14^a, this arrangement permitting the belt to be adjusted to the waist of the wearer.

Secured to the pad-support is an under strap 15, which is shown as formed in sections, including a buckle 16, by means of which its length may be adjusted. The under strap is continued by a cord 17, having a loop engaging a button 18, fastened upon the end of the strap. The opposite or outer end of the cord is fixed to the belt near the end removed from the pad, it being shown as sewed thereto at 18^a. The cord 17 passes over a guide, preferably provided by a roll 19, rotatable in a frame 20, attached to the belt adjacent to the point 18^a. From this roll it extends over a similar guide furnished by a roll 21, mounted in a frame 22, which, as illustrated, is carried by the end of a strap 23, secured to the belt. These two guides are separated from one another by an appreciable space, and the cord in its passage from the strap to the point at which it is fixed to the belt has substantially parallel portions or extends back upon itself.

If desired, buttons 23^a or the like may be attached to the belt to admit of its being supported by braces from the shoulders of the wearer.

It will be apparent that when the tension upon the under strap varies a similar change in tension will occur in the belt—that is, if the under strap is tightened, as would result if the wearer stooped, the cord, which may be considered as essentially a portion of the under strap, will be drawn over the guide 19 and then over the guide 21, thus shortening both of its parallel runs and drawing the last-named guide and fixed point 18^a toward one another. This is of peculiar advantage, in that when the person wearing the truss occupies a stooping position the rupture which the truss retains is liable to become displaced; but with this invention the assuming of such an attitude automatically increases the pad-pressure by the shortening of the belt, thus guarding against displacement. The self-adjustment of the elements also greatly adds to the comfort of the user. The maintenance of a uniform tension throughout the appliance will also tend to hold it more firmly about the waist, thus obviating the necessity of employing an elastic belt, which is subject to comparatively rapid deterioration.

In Fig. 2 of the drawings a double-pad truss is illustrated. Here the belt is similar to that previously described; but the support has two separated pads 24 24. Under straps 25 and 26 are secured at one extremity to the support, the first of these being fixed to the belt at its opposite end in the usual manner. The strap 26, on the other hand, is connected through the hereinbefore-described equalizing arrangement, securing to the wearer substantially the same advantages.

In Fig. 3 a double-pad truss is also shown; but here both under straps are connected to the belt by the equalizing means, so that a change in the stress upon either one or both of them will vary the tightness of the belt. In this form the under straps are shown as connected by a stay 27 to prevent lateral displacement.

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

1. A truss comprising a belt having a pad

in connection therewith, an under strap connected by one end to the belt adjacent to the pad, means for contracting the belt, comprising a cord having one end fixed to the belt, spaced guides on the belt, one adjacent to the connection of the cord, the cord passing from its point of attachment to the belt through the remote guide and being returned through the proximate guide, and the free end of the strap being secured to the free end of the cord, whereby tension upon the strap will contract the belt.

2. A truss comprising a belt having a pad in connection therewith, an under strap connected by one end to the belt, and means whereby tension upon the strap will contract the belt comprising a cord having its ends connected respectively with the free end of the strap and the belt, and a guide on the belt spaced apart from the attachment of the cord said cord passing from its attachment to the belt over the guide to its attachment to the strap.

3. A truss comprising a belt, having a pad in connection therewith, an under strap connected by one end to the belt, means for contracting the belt, and a connection between the opposite end of the strap and said contracting means, whereby tension upon the

strap will operate said means to contract the belt.

4. A truss comprising a belt having a pad connected thereto an under strap connected by one end to the belt adjacent to the pad, means for contracting the belt, and a connection between the free end of the strap and said contracting means, whereby tension upon the strap will contract the belt.

5. A truss comprising a belt having separated guides and an under strap secured to the belt at one end and having a cord connected with the other end, said cord passing through the guides and being fixed to the belt adjacent to the guide through which it first passes.

6. A truss comprising a belt having spaced guides, and an under strap secured by one end to the belt, the free end of the strap having a cord connected thereto, said cord passing through the guides and being fixed to the belt adjacent to one of said guides.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FORDHAM CRATER.

Witnesses:

JOHN CRATER,
P. S. WHITE.