No. 684,392. Patented Oct. 8, 1901.

G. W. BELL.

HERNIAL TRUSS.

(Application filed Feb. 28, 1901.)

(No Model.)

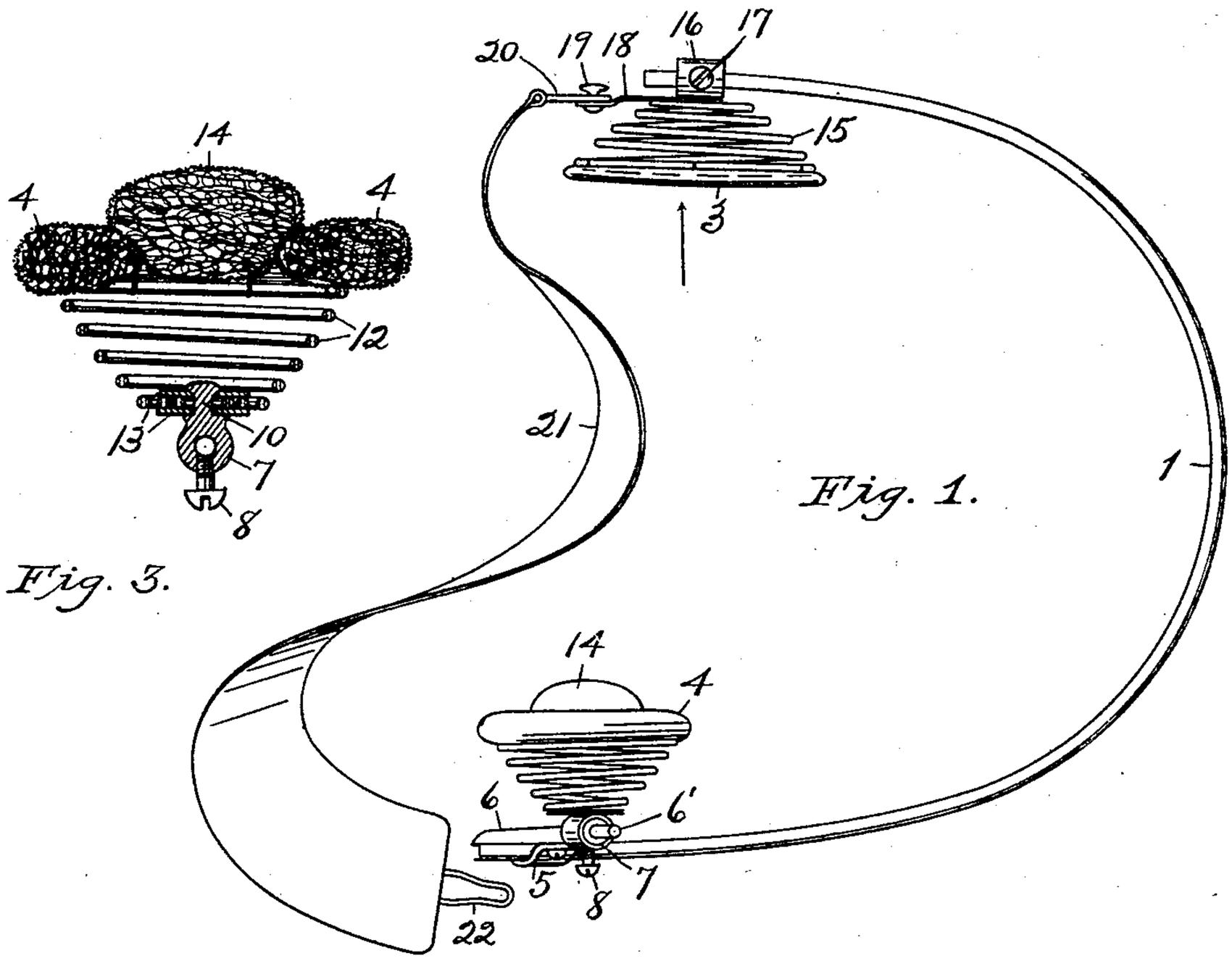

Fig. 1.

Fig. 3.

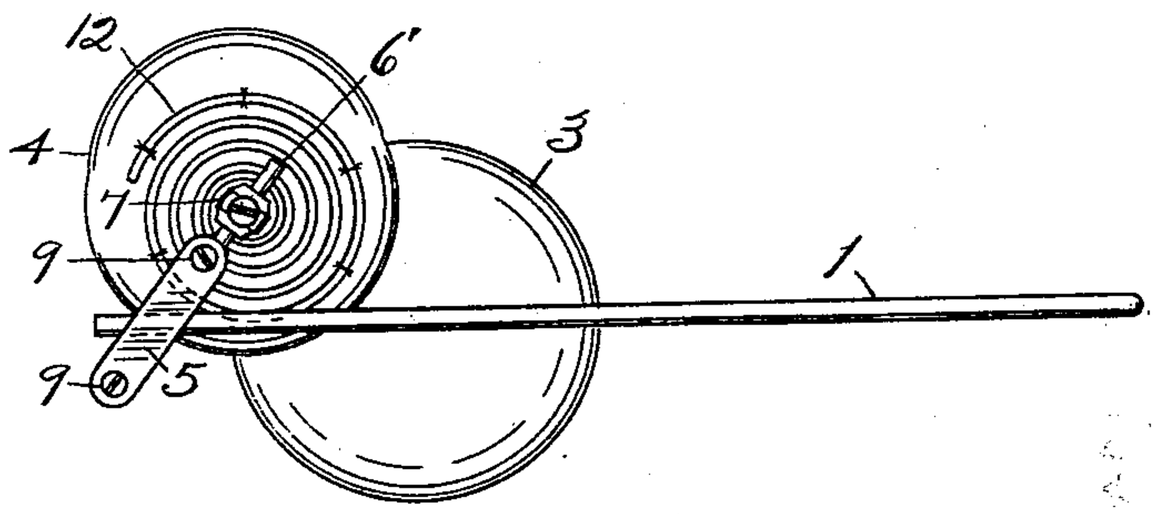

Fig. 2

WITNESSES:

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HERNIAL TRUSS.

SPECIFICATION forming part of Letters Patent No. 684,392, dated October 8, 1901.

Application filed February 28, 1901. Serial No. 49,229. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. BELL, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented new and useful Improvements in Trusses, of which the following is a specification.

My invention relates to trusses for use in retaining rupture or hernia; and the objects of my invention are to provide a very yielding and adjustable pressure to the parts affected or to the pads which bear on the parts affected and to provide a medicated pad which may be instantly detached from the truss for the purpose of applying fresh medicine thereto or for substituting a freshly-medicated pad for the one removed. To these ends I employ coiled springs as a yielding medium between the pads and the more or less rigid frame of the truss, and I construct the retaining-pad in ring form and provide a small central pad adapted to be retained by the annular pad and pressed against the rupture, the central pad being unattached to the annular pad, whereby it may be easily and quickly removed.

I will proceed fully to describe my invention with reference to the accompanying drawings, in which—

Figure 1 is a top or plan view of a truss embodying the preferred form of my invention. Fig. 2 is a front elevation of the same looking in the direction of the arrow, as shown in Fig. 1. Fig. 3 is an enlarged central section through the annular pad detached from the body-spring, showing the center pad in position.

1 designates the body-spring of the truss, it being a suitably-bent rod of any preferred metal adapted to pass around one side of the body of the wearer and supporting the back pad 3 and the front or retaining pad 4 in the manner hereinafter described. Mounted at or near the front end of the frame 1 is a clamp 5 6, which comprises an outer plate 5, curved to fit around the frame-rod 1, and a companion plate 6, made straight, as shown in Fig. 1, and having a cylindrical extension 6′, on which is mounted the spring-supporting sleeve 7, adjustably secured to said extension by a set-screw 8. The clamping-plates 5 and 6 are drawn together by two screws 9, which pass freely through holes in the former plate and enter threaded holes in the latter. The bend in plate 5 where said plate passes around body-spring 1 is formed obliquely in relation to the length of said plate, so that the entire clamp is held obliquely with respect to the body-spring 1, as shown. The object of setting the clamp obliquely is that the clamp may be reversed from the position in which it is shown, and by this means the truss is adapted for hernia on either the right or left hand side of the body. The clamp 5 6 is of course adjustable to any angular position upon the body-spring 1 and to any position along said frame. Still further adjustments for the pad 4 are provided by the sleeve 7, mounted on the extension 6′, as aforesaid. This sleeve 7 is formed with a flat base or shoulder on one side thereof, and extending from said base or shoulder is a stud 10. (See Fig. 3.) A coiled spring 12, to the large base of which the pad 4 is secured, has its inner end clamped between two washers 13, one of which in assembling is placed over stud 10. Then the small end of the spring 12 is placed upon said washer, the other washer 13 is laid on top of the spring, and the top of the stud 10 is swaged or hammered down upon the upper washer, forming a head which secures the spring tightly between the washers, as shown.

The pad 4 is annular in form, as shown, and is sewed or otherwise secured to the largest turn of the spring 12. The covering of said pad is preferably of some kind of cloth, and the interior of the pad is composed of wool or a similar elastic substance. By referring to Fig. 2 it will be observed that the pad 4 is not circular and is not concentric with the spring 12. It has been found that the operation of the pad is more effective when the pad is thus formed and arranged on its support. The purpose of the opening in pad 4 is to receive a small pad 14, which is shaped like a much-flattened spheroid, may be covered with cloth or any suitable material, and is stuffed preferably with wool. I saturate this pad with certain medicinal liquids for reducing the hernia, and the renewal of this pad is much facilitated by its being detachable from the annular pad 4.

The back pad 3 (shown in Figs. 1 and 2) is

an ordinary flat and circular pad secured to a coiled spring 15, the inner end of which is secured to a sleeve 16 by being riveted thereto between washers in the same way in which the spring 12 is secured to sleeve 7. The sleeve 16 has an opening therethrough for the body-spring 1 and is adjustably secured to the frame by a set-screw 17. Between the sleeve 16 and its adjacent washer is secured one end of a sheet-metal ear 18, to the outer end of which is riveted a button 19 for engaging a loop 20, secured to one end of the belt 21, which belt passes around the opposite side of the body from the body-spring 1 and has a loop 22 secured to its opposite end, which loop may be hooked over the screw 8, thereby holding the entire truss firmly against the body. The belt 21 may be provided with any preferred device for changing or adjusting its length; but I do not confine myself to any one device for this purpose.

Having now fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

In a truss, a body-spring, a clamp mounted thereon, said clamp comprising a straight member having a cylindrical extension and a bent member on the opposite side of the body-spring from said straight member, screws securing said clamp members together, a sleeve mounted on said cylindrical extension, a coiled spring secured to said sleeve, and an annular pad attached to said spring; the bend in said bent clamp member lying obliquely of the length of said member, whereby both of said clamp members are held obliquely with respect to said body-spring, substantially as described.

In testimony whereof I affix my signature in the presence of two witnesses.

GEORGE W. BELL.

Witnesses:
M. L. LANGE,
K. M. IMBODEN.