(No Model.)

J. GRAY.

TRUSS.

No. 490,558. Patented Jan. 24, 1893.

Fig. 1

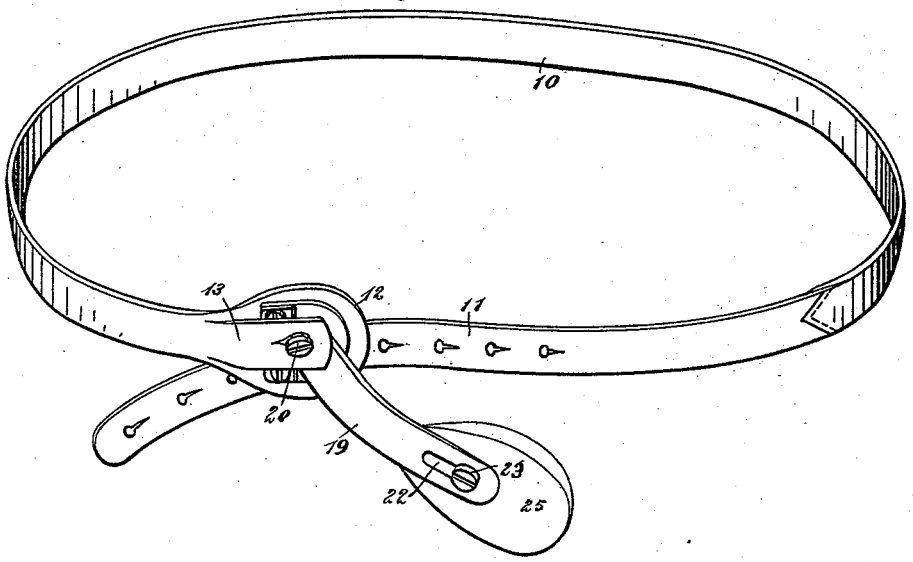


Fig. 2

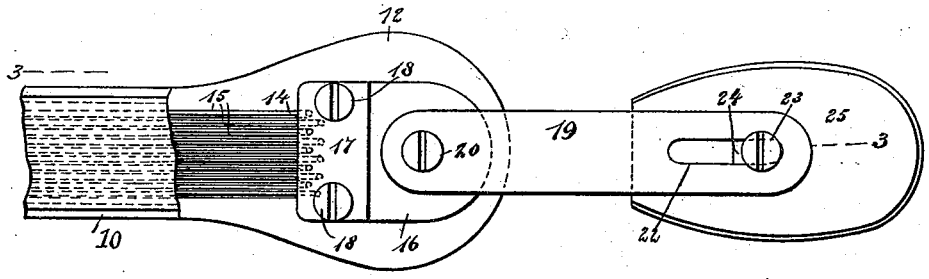
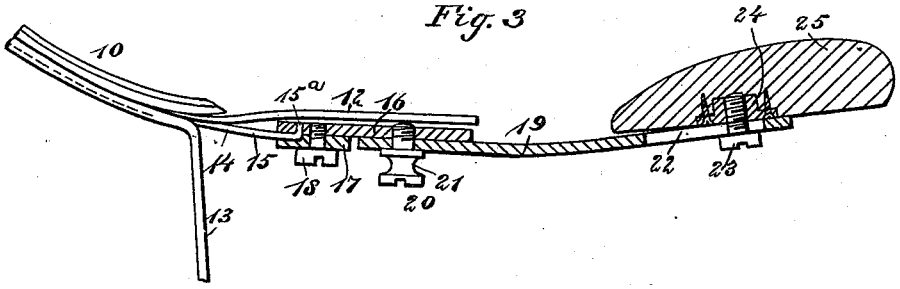


Fig. 3



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JOHN GRAY, OF BUFFALO, NEW YORK.

TRUSS.

SPECIFICATION forming part of Letters Patent No. 490,558, dated January 24, 1893.

Application filed December 26, 1891. Serial No. 416,185. (No model.)

To all whom it may concern:

Be it known that I, JOHN GRAY, of Buffalo, in the county of Erie and State of New York, have invented a new and Improved Truss, of which the following is a full, clear, and exact description.

My invention relates to improvements in trusses of the kind that are worn around the body for the treatment of hernia, and the object of my invention is to produce a light but strong truss which will be very easy to the body owing to its ready conformation to the movements of the body, and which is adapted to carry the pad so that it may be held at an angle to the truss belt and may be held at a convenient distance from the belt, and thus be made to bear effectively upon the desired part of the body.

To this end my invention consists in certain features of construction, and combinations of parts, which will be hereinafter described and claimed.

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

Figure 1 is a perspective view of the truss embodying my invention; Fig. 2 is a broken enlarged detail view showing particularly the construction of the belt spring; and Fig. 3 is a longitudinal section on the line 3—3 in Fig. 2.

The truss is provided with the usual hollow belt 10, which is adapted to be buckled around the body, and which terminates at one end in a perforated strap 11, and at the opposite end in flaps 12 and 13, which are adapted to embrace the end plate carried by the belt spring, and the inner of which is adapted to protect the body from the metal plate and spring. The belt 10 is provided with a bent spring 14, which is held within the belt and is adapted to press the belt closely against the body, and this spring 14 is made up of a series of parallel spring wires 15, piano wires being preferably employed, and the wires have their outer ends bent at nearly a right angle as shown at 15^a, so as to enter the perforations in the end plate 16. The wires are held to the plate 16 by a clamping plate 17, and by screws 18, which fasten the clamping plate to the plate 16 and the wires fit in grooves formed in the two plates 16 and 17. The inner ends of the wires may be fastened together in any convenient way as the belt will prevent them in a measure, from being displaced. It will be seen that the combined effect of the different wires will make the complete spring 14 have the force of the usual flat spring, and the wires will also have a movement independent of each other, so that the spring may easily conform to the movements of the body and it will therefore be very easy. The plate 16 has pivoted to it, a curved flat bar 19, which is held to the plate by a screw 20, and this screw has its head recessed annularly as shown at 21, in Fig. 3, so that the flap 13 and the strap 11 may be hooked upon the screw and held in place.

It will be seen that the bar 19 may be turned to any angle to the belt and may be held in place by tightening the screw 20. The free end of the bar 19 is slotted longitudinally, as shown at 22, and this slot receives a screw 23, which enters a socketed nut 24, which is inlaid in the pad 25, and it will be seen that by loosening the screw, the pad may be moved into a desired position in relation to the bar 19 and may be held in place by tightening the screw 23. The pad 25 may be of any approved construction, but owing to the improved means of applying it to exactly the right spot, and also to the pressure of the spring 14, the pad may be made lighter than usual.

When the truss is used, the pad 25 is adjusted by means of the swinging bar 19 and the screw 23, and the belt 10 is fastened around the body in the usual way by hooking the strap 11 upon the screw 20 and also by fastening the flap 13 upon the same screw. The strap 13 has nothing to do, however with fastening the belt in place as its office is to prevent the slipping out of the spring 14.

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

1. A truss, comprising the belt, the wires held therein and having bent ends 15^a, the plate 16 having apertures receiving said ends,

a securing plate 17 bolted over said ends, and a pad carrying bar or arm adjustably secured to plate 16, substantially as set forth.

2. A truss, comprising the belt provided with flaps 12, 13, the wires 15, a plate to which said wires are secured between the flaps, a pad carrying arm secured to the said plate by a screw 20; the outer flap 13 having an aperture to receive the head of the said screw, substantially as set forth.

JOHN GRAY.

Witnesses:
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