

(No Model.)

J. T. WATSON.
TRUSS.

No. 492,504.

Patented Feb. 28, 1893.

Fig. 1.

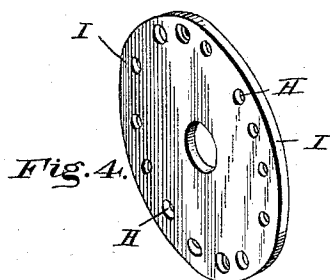
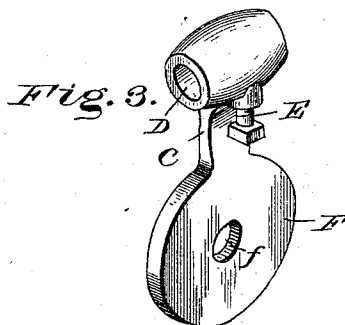
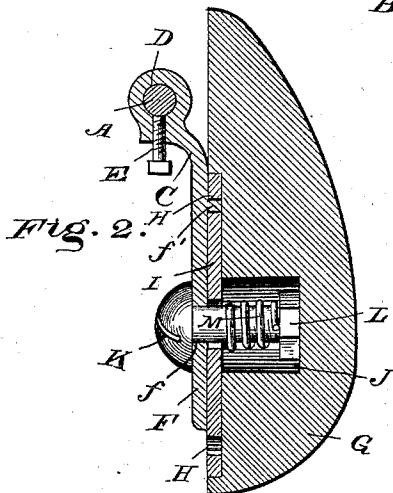
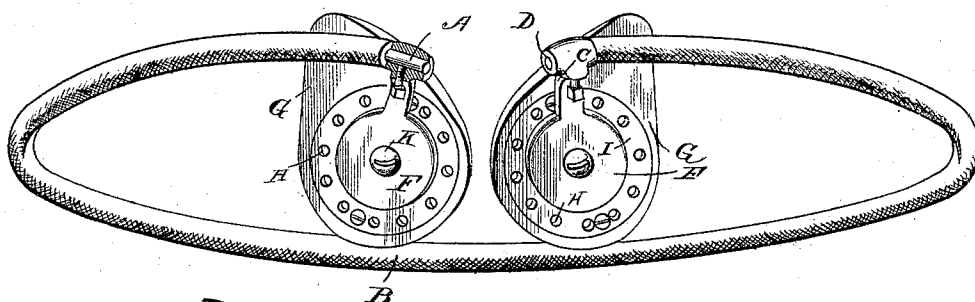
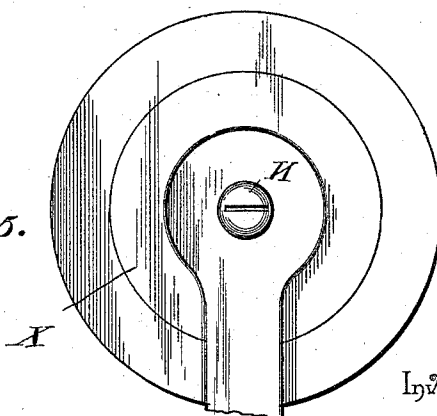


Fig. 5.



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN T. WATSON, OF POLO, ILLINOIS.

TRUSS.

SPECIFICATION forming part of Letters Patent No. 492,501, dated February 28, 1893.

Application filed October 19, 1892. Serial No. 449,370. (No model.)

To all whom it may concern:

Be it known that I, JOHN T. WATSON, a citizen of the United States, residing at Polo, in the county of Ogle and State of Illinois, have invented a new and useful Truss, of which the following is a specification.

This invention relates to trusses; and it has for its object to provide an improvement in the construction and combination of the various parts of a truss, whereby the same can be readily adapted to various sized persons, adjusted to the position or location of the rupture, and the requisite degree of pressure suitably applied.

To this end the invention contemplates a simple, durable and inexpensive truss, adapted to secure the results noted.

With these and other objects in view, which fall within the scope of this invention, the same consists in the novel construction, combination and arrangement of parts hereinafter more fully described, illustrated and claimed.

In the drawings:—Figure 1 is a perspective view of a truss constructed in accordance with this invention, showing the same adapted for application to a double hernia. Fig. 2 is an enlarged detail sectional view of one end of the body spring taken through one of the adjustable pads and the adjustable supporting arms therefor. Fig. 3 is a detail in perspective of one of the adjustable pad supporting arms. Fig. 4 is a similar view of one of the perforated pad plates. Fig. 5 is a detail view of the retention pad.

Referring to the accompanying drawings, A represents a round metallic spring or hard tempered body-wire, having its ends terminating short of each other, and adapted to be made of suitable metal so that the same can be readily bent into a shape conforming to the curvature of the human body, to which it is applied, the ends of the wire being adapted to reach to a point just above the rupture. The said wire which encircles the body, is covered by a rubber or other impervious flexible tube B, which not only provides a soft flexible covering for the wire, but at the same time on account of being impervious to perspiration, prevents any corrosion or rusting of the

spring, which spring readily yields to every movement of the body, so that the pads of the truss are always held firmly to their place.

The tube covering B, terminates short of the pad ends of the body-wire A, so as to leave the said ends of the wire free to receive the adjustable pad supporting arms C. The said adjustable pad supporting arms C, are provided at one end thereof with the tubular sockets D, receiving the free ends of the body-wire, and sliding thereon, said tubular sockets being adapted to be slid longitudinally on the wire according to the size of the person to which the truss is applied, and also adjusted radially with respect to said wire, to and from the body, to secure the desired degree of pressure on the retaining pads. The said supporting arms C, are held in any adjusted position by means of the set screws E, passing through the under sides of the tubular open sockets D, and impinging against the ends of the body-wire in the socket. The arms C terminate at their other ends in a circular plate F, which owing to the bend in the arm proper, are arranged in a different plane or set off from the tubular socket, so as to support the pads G, away and in from the body-wire. The circular plates F, are provided with central perforations *f*, while the inner face of the arm portion C, adjacent to the circular plate is further provided with the inwardly projecting locking stud *f'*, which is adapted to be normally held in engagement with any one of a circular series of perforations H, formed near the edge of the pad plate or disk I, seated in the outer flat face of the pads and held therein by screws *i*, or other suitable securing devices.

The pads G, are constructed in a shape suited to the individual case and are made of hard wood, rubber, or other suitable material, and the same are provided in the outer face thereof with the circular recesses J, inclosed by the pad plates I, and adapted to receive the inner ends of the clamping screws K. The said clamping screws K, pass through the central perforations of the arm plates F, and corresponding perforations in the pad plates, so as to pivotally clamp the two plates together,

and therefore pivotally connect the pad to the arm. The inner threaded ends of the screws K, receive the spring retaining and adjusting nuts L, between which and the underside of the pad plates I, upon said screws, are mounted the spiral springs M, which normally hold the pads closely to the supporting arms to which they are pivotally connected. The springs M, therefore hold the pad plates into locking engagement with the locking studs of the supporting arms and provide means whereby the pads can be held in any of their axially adjusted positions, the said screws being regulated in tension by said nuts.

After the body-wire has been adjusted in position upon the wearer, and the proper pressure given to the pads by radially adjusting the supporting arms as herein described, the pads are then adjusted axially, to give the proper angle thereto, by raising one end thereof so that the engaged perforation in the pad plate on the body on the pad, is disengaged from the locking stud projecting from the arm, and then turning the pad to such angle desired, and then releasing the same so that the spring will draw the same back into locking engagement with the locking stud of the supporting arm.

From the foregoing description, it is thought that the several adjustments of the truss herein described, will be readily apparent and the advantages thereof obvious to those skilled in the art. In cases of double hernia or rupture, both sides are fitted with suitable pads as illustrated in the drawings, while in a case of single hernia, the usual pad is properly adjusted over the hernia, while over a corresponding location on the opposite side is suit-

ably fitted a small round flat retention pad X, or counterpoise as illustrated in the drawings.

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

1. In a truss, a spring body-wire, pad supporting arms mounted for radial adjustment on the ends of said wire and having a locking stud, axially adjustable pads pivoted to said arms and having a circular series of locking perforations adapted to engage said locking studs, and springs arranged inside of said pads to normally hold the same flat against said pad arms, substantially as set forth.

2. In a truss, a flexible body-wire having opposite free ends, pad supporting arms having tubular sockets loosely engaging the free ends of the wire, circular plates at their other ends, perforations in said plates, and locking studs upon their inner faces, set screws holding the arms in any adjusted position on the free ends of the wire, the pads having circular recesses in their rear faces, pad plates seated in the pads over the recesses therein and provided with a circular series of adjustment perforations, clamping screws passing through the circular plates of the supporting arms into the recess of the pads, nuts on the inner ends of said screws, and springs mounted on the screws between said nuts and the inner faces of the pad plates, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOHN T. WATSON.

Witnesses:

MORTON D. WOLFF,
WILLIAM ROSSITER.