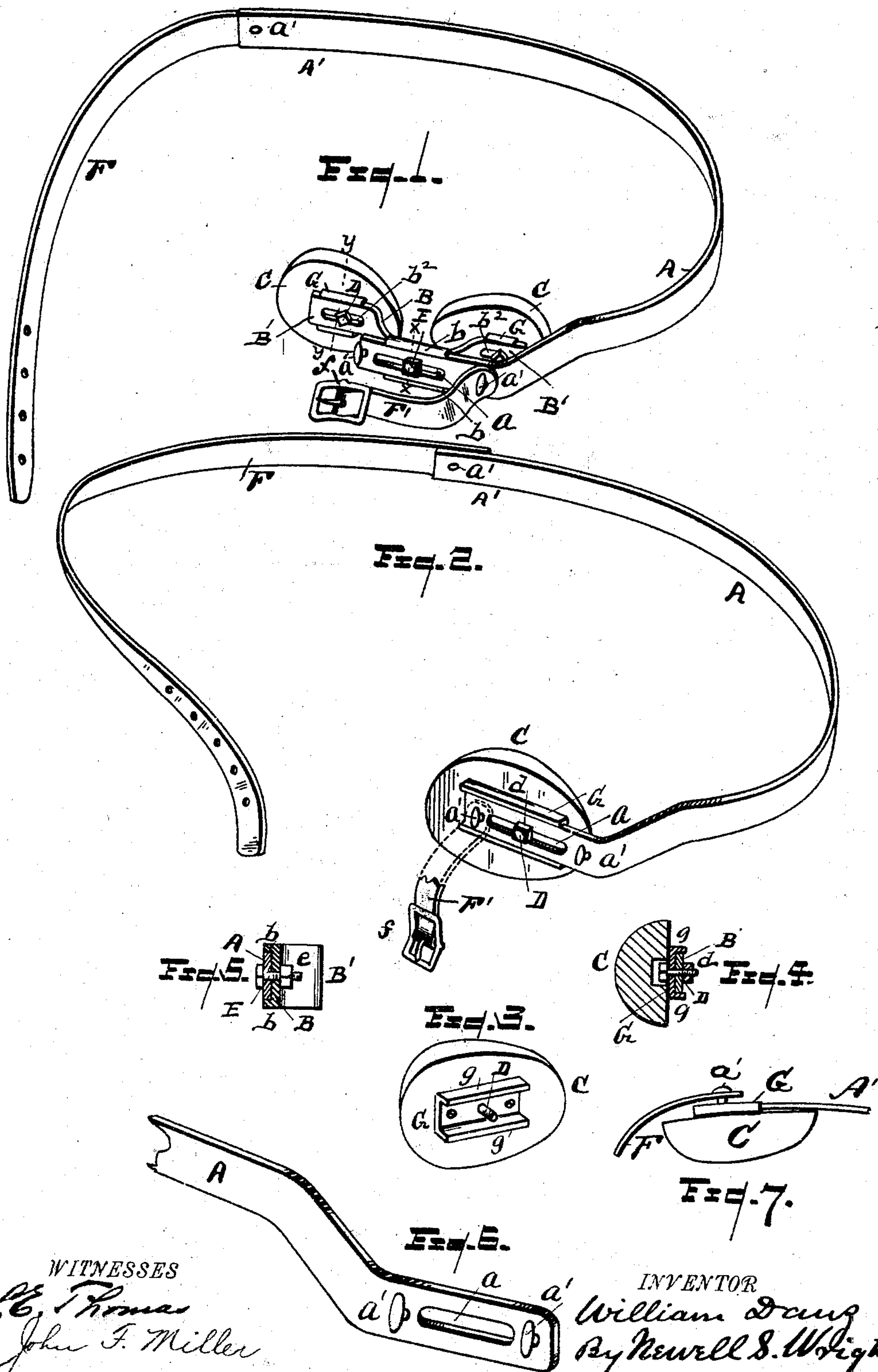


(No Model.)

W. DANZ.
TRUSS.

No. 500,739.

Patented July 4, 1893.



WITNESSES

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UNITED STATES PATENT OFFICE.

WILLIAM DANZ, OF DETROIT, MICHIGAN.

TRUSS.

SPECIFICATION forming part of Letters Patent No. 500,739, dated July 4, 1893.

Application filed October 13, 1892. Serial No. 448,750. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM DANZ, a citizen of the United States, residing at Detroit, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Trusses; and I declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

The object of my invention is to provide a novel truss of superior utility and adaptation, and it consists of the combination of devices and appliances hereinafter specified and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a view in perspective, showing features of my invention. Fig. 2 is a similar view, showing a modification. Fig. 3 is a detail view in perspective. Fig. 4 is a cross section on the line $y-y$ Fig. 1. Fig. 5 is a cross section on the line $x-x$ Fig. 1. Fig. 6 is a perspective view of a portion of the band A. Fig. 7 is a partial plan view, showing a pad attached to the rear end of the band.

My invention is especially designed to provide a truss which may be readily adjusted to the person, and which may be worn with ease.

I carry out my invention as follows:

A represents a metallic band, preferably made of steel, fitted to partially surround the person. The rear end A' of said band is preferably extended to reach past the spine. The opposite end of the band A is carried forward so as to extend into proximity to the hernia to be treated by the truss. The forward end of said band may be bent downward, as shown, to secure a more perfect fit of the truss upon the wearer, and to allow of his stooping over more readily. The downward bend allows the band to fit over the hip and downward in front thereof.

My improved truss may be made either double or single, as may be desired, both forms being illustrated in the accompanying drawings. Where a double truss is desired, I employ an adjustable arm B, also preferably made of steel, having an adjustable engagement with the forward end of the band A.

To this end the band A is provided with an elongated slot "a" toward its forward end. The arm B is also provided with lateral flanges "b," "b," intermediate its ends, forming therebetween a seat for the forward end of the band A. The arm B is bent between its extremities so as to form inwardly projecting ends B', B'. Upon said inwardly projecting ends B', B', I adjustably engage pads C C of desired size, said ends being each constructed with an elongated slot "b²." The pads C are preferably provided with a metal plate G flanged at its sides, as shown at "g," "g," the flanges embracing the edges of the arm B. Said pads are also provided with bolts D, which pass through said plate and through the corresponding slot "b²," and are held in place by nuts "d." The arm B is connected with the forward end of the band A, by means of a bolt E intermediate its ends, said bolt passing through the elongated slot "a," and is held in place by a nut "e." It will thus be seen that the arm B is adjustably engaged with the forward end of the band, and may be adjusted thereupon the length of the elongated slot "a." The pads C are likewise adjustable in the two ends of the arm B the length of the two elongated slots "b²." Provision is thus made for a very considerable adjustment of the parts in order to bring the pads in required position to suit the needs of the wearer. The forward and rear ends of the band A are connected by straps F, F', buckled about the person when in use, a buckle "f" being engaged with the strap F'. The straps may be engaged with the two ends of the band A in any suitable manner, as by studs at "a'," over which the ends of the strap are secured. I prefer to provide two of said studs on the forward end of the band, one to the front and the other to the rear of the slot "a," so that the strap F' may be engaged with either stud, as may be desired.

It is found necessary in a good truss, to prevent the buckling or turning over of the pads. Accordingly the construction which I have described is especially adapted to prevent such a difficulty and objection.

By making the band A of suitable dimensions, any desired degree of firmness may be secured thereby, while the manner of con-

necting the arm B with the forward end of the band A and the pads with the ends of said arm, give all the firmness requisite to prevent the buckling of the truss in use. By making the band A of steel fitted to the person of the wearer, its extremities may yield as may be necessary. Yet they will always have a tendency to resume a normal position without having any spring tension upon the body, such a spring tension being undesirable. Where a single truss is desired, one of the pads C with its metal plate G flanged at the sides may be directly engaged with the forward end of the band, the pad having an adjustable engagement upon the band, and held in place thereon by the bolt D passed through the slot "a." In this case the arm B is entirely dispensed with. It will be observed that the band A is adapted for use in either a single or in a double truss, as the pad C may be directly engaged with the band, or pads C C may be engaged therewith by means of the intervening arm B.

The fit the right or left side the band A must be formed accordingly. As the forward end must bend downward, it will be necessary to make the bands as rights and lefts, to fit the corresponding sides of the person. This will be seen by reference to Figs. 2 and 6 of the drawings, the band in Fig. 2 being fitted for the left side, and that in Fig. 6 being fitted for the right side.

The feature of providing for the lateral ad-

justment of the pads as hereinbefore specified is obviously of much importance.

In some cases, I desire to provide the band A with a pad C at the rear end thereof, as shown in Fig. 7, the pad attaching to the rear end in a manner similar to its attachment to the front end.

What I claim as my invention is—

1. In a truss, the combination, with a metal band, one end of which is slotted, an arm adjustably secured thereto, said arm having its ends formed into inwardly projecting ends and having its intermediate portion provided with lateral flanges, and a pad adjustably secured to each arm, and means for securing the band to the wearer, substantially as set forth.

2. In a truss, the combination, with a metal band, one end of which is slotted and provided with a retaining device at each end of the slot a pad or pads for supporting the hernia adjustably secured to one end of the band, a strap adapted to be detachably secured to either one of the retaining devices, and a second strap secured to the opposite end of the band, substantially as set forth.

In testimony whereof I sign this specification in the presence of two witnesses.

WILLIAM DANZ.

Witnesses:

N. S. WRIGHT,
JOHN F. MILLER.