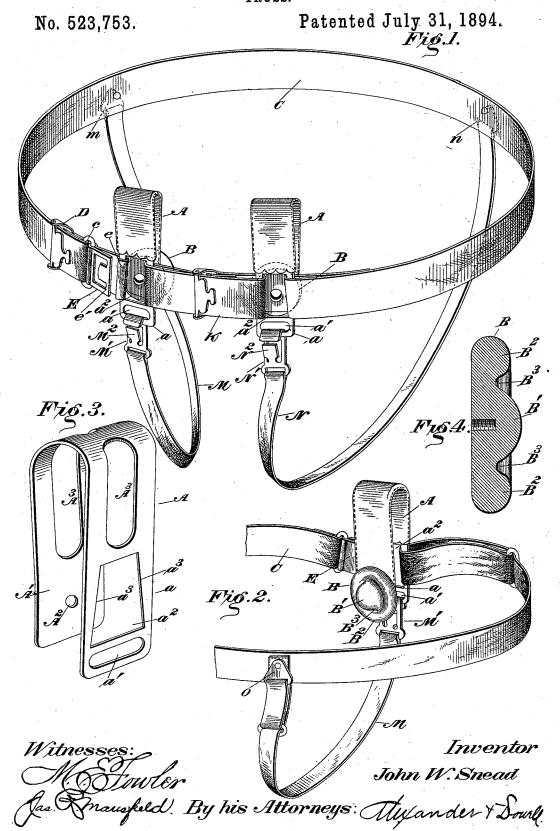
J. W. SNEAD. TRUSS.



UNITED STATES PATENT OFFICE.

JOHN W. SNEAD, OF GAINESVILLE, GEORGIA.

TRUSS.

SPECIFICATION forming part of Letters Patent No. 523,753, dated July 31, 1894.

Original application filed August 1, 1893, Serial No. 482,115. Divided and this application filed September 26, 1893. Serial No. 486,526. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. SNEAD, of Gainesville, in the county of Hall and State of Georgia, have invented certain new and useful Improvements in Trusses; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, 10 which form part of this specification.

My invention relates to trusses, and is a division of my application for patent on electrical trusses, filed August 1, 1893, Serial No.

It consists in the novel construction and combination of parts hereinafter described

My truss can be used as a double truss, for both right and left hand ruptures, or by detaching one of the truss-pad supports, it can be used as a single truss for either right or

left hand ruptures.

The truss-pad is of peculiar shape and designed to facilitate the healing of the rupture, 25 and the truss-pad support is also of peculiar form so that when the wearer stoops over it will tend to rise and hold the pad tighter to the rupture instead of slipping down, thus greatly increasing the comfort of the wearer 3° as the pad is kept uniformly in position and cannot chafe. The truss also has various other minor novel details of construction which together with those above referred to will be clearly understood from the follow-35 ing detailed description.

In the drawings:—Figure 1 is a perspective view of a double truss, embodying my invention. Fig. 2 is a similar view indicating the parts arranged as a single truss. Fig. 40 3 is a view of the pad support detached. Fig. 4 is a sectional view through a pad.

Referring to the accompanying drawings:—
The pad supporter A is formed of a flat steel spring bent upon itself in U-shape and its legs A', a, converge toward each other, so that at its bend the legs are preferably slightly more separated than at their lower extremities. The inner leg A', has an angular aperture A2 in its extremity to receive the shank

immediately above slot a', a large opening a^2 , the sides a^3 of which slightly converge upwardly. The supporter may have openings A³ formed in it intermediate aperture A² and 55

opening a^2 to lighten it.

One end of the belt C which is of any suitable construction is looped through opening a² and secured at one side of the supporter. The outer end of the belt is formed into a bo loop c, which is adjustable by means of a catch buckle D, so as to lengthen or shorten the belt, and in this loop is secured the eye of a catch E, which is adapted to engage the supporter at one side of opening a^2 as shown. 65 This eatch has one end e bent into a short hook, and opposite it is a spring tongue e' by which causal disengagement of the hook from the supporter is prevented. The converging edges a^3 of the slots a^2 are inclined at about 70 seventeen degrees from a vertical perpendicular and the broad end of the belt and buckle E engaged therewith causes the front ends of the belt to assume a position about seventeen degrees from a horizontal, result- 75 ing in holding the supporter and pad more firmly in position because of the superior and closer fit of the belt, and preventing puckering of the belt.

The slots A³ marked on pad supporter are 80 cut out, or filed out until the resiliency of the spring supporter is just sufficient to overcome and support the weight or outward push

of the ruptured portion or hernia.

The points of fastening of my supporter be- 85 ing directly opposite the truss pad and pad over rupture gives full access to spring and brings the point of fastening the pad to the supporter centrally of the fastenings of supporter to belt, so that if the spring is cut to 90 hold up the exact weight of bowels it will all the time be on a balance and will not lose its lateral equilibrium.

The truss pad B is circular, on its inner face is a central round protuberance B' which 95 projects above the main surface of the pad, and surrounding this protuberence concentric therewith, is an annular ring B², rounded on its outer and inner edges and forming the outer portion and main body of the pad, and 100 50 of the truss pad B; and the outer leg a has a transverse slot a' along its lower edge and, nular groove B³. The protuberance is adapted

to force back the protruding matter, while the flesh can expand into the groove, between the protuberance and ring, and the ring can press closely on the flesh exterior to and around the rupture, thus preventing chafing and irritation of the ruptured flesh and facilitating the healing thereof.

The pad may be made of wood or other material or combination of materials and metals.

In practice the supporter A, or at least the leg thereof next the body will be covered with some suitable non-sorbent material.

When a double truss is to be used, as indicated in Fig. 1, two supporters are connected by an intermediate adjustable strap K, and respectively attached to the opposite ends of the belt.

The crotch straps M, N, are attached at their rear ends to hooks m, n, attached to the belt as shown, and are provided with spring catches M', N', on their front ends, adapted to engage slots a' of the supporters as indicated in the drawings. The catches M' N' are formed of a bent metal strip provided with internal spring tongues M2 N2 to prevent casual disengagement thereof from the supporters, and said tongues being formed by cutting a U-shaped slot in the strip, which slot is so wide and rounded at its ends that it will not eatch hairs.

When used as a single truss the belt C but one crotch strap need be used. This crotch strap is connected at one end to a piece O, pivoted to the belt, as indicated in Fig. 2.

In Fig. 2 the truss is indicated as a right-hand truss; now if it is desired to convert it into a left-hand truss the crotch strap and hook end of belt are detached from the supporter, then the loop end of the belt is slipped around in opening a until it is at the other side of the opening formerly occupied by hook D, which is now fastened to the supporter at the side formerly occupied by the loop end of

belt, and the crotch strap is simply swung around, so as to hang beneath the belt (as this reversal of the belt turned it upside down). Thus it will be seen how readily the truss can, without alteration or disengagement of parts be fitted either to a left-hand or right-hand 50 rupture.

It will be noticed that the belt is fastened to the supporter in such manner that when the belt is taut the supporter is held closely against the body and cannot turn right or 55 left, and the body and crotch strap will keep it from turning forward or back, consequently the truss pad is held securely and firmly in position without discomfort to the wearer. It is also secured in position with the bend

position without discomfort to the wearer. It is also secured in position with the bend 60 uppermost, consequently as the belt is tightened the supporter tends to rise, and thus presses the pad more firmly in place and lifts up on the rupture instead of dragging down thereon as do the ordinary inverted V-shaped

supporters. And if the wearer stoops over 55 the pressure of the stomach against the supporter tends to cause the latter to rise thereby keeping the pad in place. This peculiar form of the supporter, with the actually tested advantages above described, I consider of great 70 importance.

I am aware that inverted roughly U-shaped pad supporters having diverging legs; also inverted V-shaped pad supporters, have been used; such I disclaim, as they are diametri- 75 cally opposite in function to my supporter, in that when the belt is tensioned, as by the wearer bending over, the diverging legs of the old supporters cause them to slip downward and thereby shift the position of the pad and 80 relax the compression on the ruptured portion; whereas the converging legs of my supporter, as above stated, cause it at such times to ride, or tend to ride, upward, and therefore to even more firmly and securely bind the pad 85 in position, thus avoiding the danger of slipping of the pad, or relaxation of pressure on the rupture, and consequent discomfort or injury to the wearer.

Having thus described my invention, what 90 Iclaim as new, and desire to secure by Letters

Patent thereon, is—

1. An inverted **U**-shaped pad supporter having its legs converging from the bend to their lower extremities, and in its outer leg 95 an opening with upwardly inclined side edges a^3 , and a belt connected to said supporter by engaging the portions thereof on opposite sides of said opening whereby said supporter is held in an upright position when the belt 100 is fastened, substantially as specified.

2. The combination of an inverted U-shaped supporter having converging legs, the outer one of which is slotted near its lower end for the attachment of the belt and crotch straps: with a belt attached to the outer leg of the supporter at one end, and adjustable to either side of said slot without detaching it, and detachably connected thereto at its other end; the crotch strap also detachably reconnected to the outer leg of the supporter; and the pad secured to the inner leg of the supporter, substantially as described.

3. The combination with the supporter A, having slots A^3 , A^3 , in its outer and inner legs, 115 near its bend; a slot a' in the lower end of its outer leg, and a slot a^2 in its outer leg having inclined side edges: with the pad attached to the inner leg, and the belt and crotch strap attached to the outer leg, substantially as described.

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

JOHN W. SNEAD.

Witnesses:

C. A. STOVALL, THOS. W. BEARDEN.