

(No Model.)

D. W. LEWIS.
TRUSS.

No. 513,585.

Patented Jan. 30, 1894.

Fig. 1.

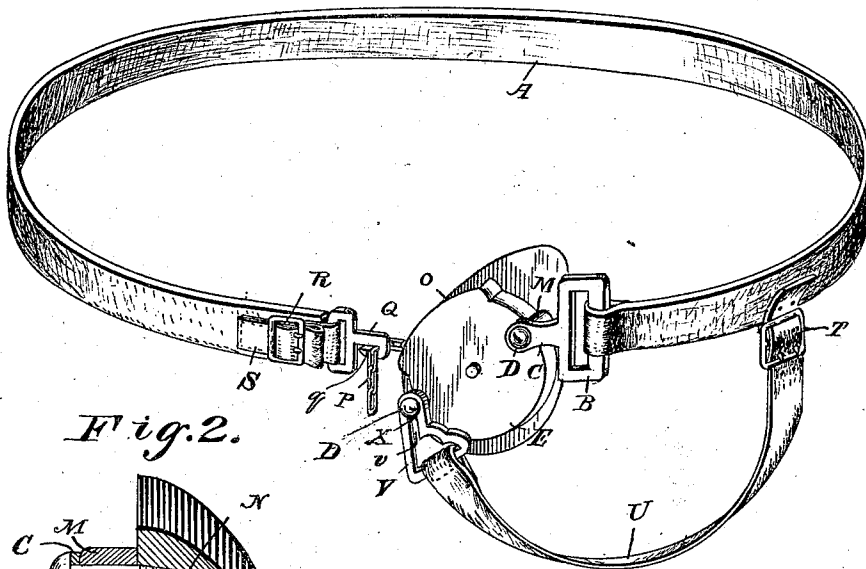


Fig. 2.

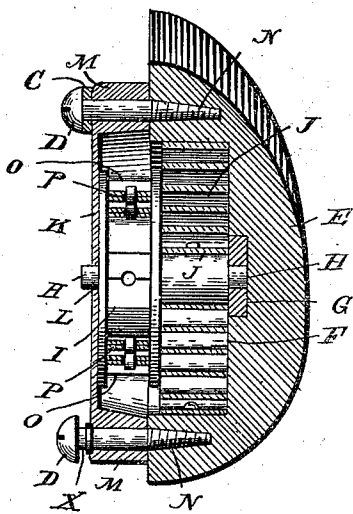


Fig. 3.

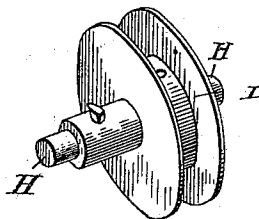


Fig. 5.

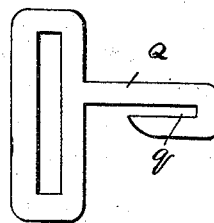
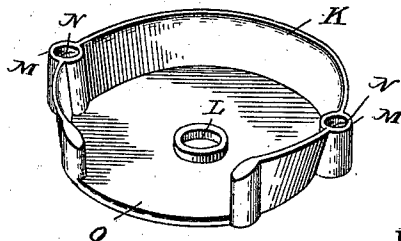


Fig. 4.



Inventor

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DANIEL W. LEWIS, OF NORTH PLATTE, NEBRASKA, ASSIGNOR OF ONE-THIRD TO FANNIE McCHESNEY, OF SAME PLACE.

TRUSS.

SPECIFICATION forming part of Letters Patent No. 513,585, dated January 30, 1894.

Application filed August 19, 1893. Serial No. 483,557. (No model.)

To all whom it may concern:

Be it known that I, DANIEL W. LEWIS, a citizen of the United States, residing at North Platte, in the county of Lincoln and State of Nebraska, 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 improved device of this character which may be worn with perfect comfort by the patient, while at the same time providing for the firm retention of the hernia.

To this end the main and primary object of the present invention is to construct an improved hernial truss which can be readily adjusted in position to fit any sized person and to be accommodated to the location of the rupture, and one which is self-adjusting to the various movements of the body without strain on any part of the truss.

With these and other objects in view which will readily appear as the nature of the invention is better understood, the same consists in the novel construction, combination and arrangement of parts hereinafter more fully described, illustrated and claimed.

In the accompanying drawings:—Figure 1 is a perspective view of a truss constructed in accordance with this invention. Fig. 2 is an enlarged detail sectional view of the truss pad, the line of section being through the attaching screws. Fig. 3 is a detail in perspective of the chain wheel or drum removed from the pad. Fig. 4 is a similar view of the wheel casing, removed from the pad. Fig. 5 is a detail plan view of the connecting hook.

Referring to the accompanying drawings, A represents a body band made of any suitable material and of a size sufficient to encircle the body of various sized persons, and said body band has attached to one end thereof the pad attaching loop B, provided with an off-standing perforated ear C, adapted to receive the upper one of the attaching screws D, which pass into the body of the pad E, and means are thus provided for attaching the pad to one end of the body band A, and holding the same at any adjusted angle by tightening the upper one of the screws D.

The pad E, is constructed of any suitable

material ordinarily employed in the manufacture of truss pads, and is formed in the usual pear-shape, but in the present invention the said pad is provided in the rear side thereof with the circular spring recess F, in the base of which is fitted the perforated bearing plate G, which loosely receives the inner extremity of the wheel or drum spindle H, on which is arranged the chain wheel or drum I. The portion of the spindle H, located at one side of the wheel or drum within the rear recess of the pad has attached thereto one end of the spiral spring J, the other end of which is attached at one side of the said recess, and by reason of this spring located within the pad recess, the chain wheel or drum will turn under pressure in one direction against the tension of the spring, while such spring will serve to automatically return the wheel or drum in the opposite direction, whereby a self-adjusting and yielding connection may be had with the truss pad.

The chain wheel or drum I, is suitably increased and held in its proper position at one side of the truss pad by means of the removable wheel casing K. The removable wheel casing K, is provided with a central bearing opening L, to receive the outer extremity of the spindle H, at one side of the wheel or drum, and thereby complete the journal support for the same. The said wheel casing is further provided at diametrically opposite sides with the perforated lugs M, adapted to receive the attaching screws N, which engage screw openings N, formed in the rear side of the pad and arranged in pairs so that the said wheel casing can be properly shifted so as to dispose the slot O, in one side thereof, toward either edge of the pad, according to the end of the body band on which it is placed. The slot O, formed in the flange or one side of the wheel casing accommodates the self-adjusting pad chain P. The self-adjusting pad chain P, is connected at its inner end to the chain wheel or drum I, and winds and unwinds thereon and is adapted to have the links forming the outer portion thereof removably slipped into engagement with the connecting hook Q. The connecting hook Q, is provided with a contracted slot q, of a width equaling the width of the chain links, so that the same can be

readily inserted into the hook, while at the same time being secured from slipping out of the same, and said connecting hook Q, is connected to the adjustable buckle R, which is adjustable on the buckle strap S, attached to the free end of the body band.

Now it will be readily seen that the body band can in the first place be adjusted to fit the body of any sized person, by reason of the adjustability of the hook Q, and the adjustable connection of the chain P, therewith, while at the same time any movement of the body is readily yielded to owing to the spring connection of the pad chain with the pad as already described.

The body band A, is provided at one side thereof near its rear portion with the strap buckle T, which adjustably receives one end of the thigh or crotch strap U; to the other end of which is attached the connecting loop V. The connecting hook V, is enlarged near the base thereof to readily fit over the head of the lower one of the screws D, and is provided with an off-standing angularly disposed slotted end v, which is adapted to be slid into engagement with the neck X, formed at one side of the head of the lower one of the screws D, to prevent the separation of the loop V, therefrom.

Changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described the invention, what is claimed, and desired to be secured by Letters Patent, is—

1. In a truss, the body band, the truss pad removably attached to one end of the body band, and having a spring wheel or drum, and a connection from said spring wheel or drum with the other end of the body band, substantially as set forth.

2. In a truss, the body band, having a hook at one end, a pad removably secured to the other end of the body band and having a spring winding device therein, and a self-adjusting pad chain winding and unwinding at one end on said winding device and adjustably connected at its other end to said hook, substantially as set forth.

3. In a truss, the body band having an at-

taching loop at one end provided with a perforated ear, the truss pad having a spring actuated wheel or drum, an attaching screw adapted to pass through said perforated ear and engage the pad body, and a connection from the said spring wheel or drum with the free end of the body band, substantially as set forth.

4. In a truss, the body band, the truss pad adjustably and removably secured to one end of the body band, a spring-actuated winding wheel or drum mounted at the rear side of said pad, a wheel casing removably secured to the back of the truss pad and inclosing said wheel or drum, and a self-adjusting chain attached at one end to said winding wheel or drum and at its other end to the free end of the body band, substantially as set forth.

5. In a truss, the body band, the truss pad secured to one end of the body band and having a spring recess in its rear side, a chain wheel or drum having projecting spindle portions the inner of which is journaled in the base of said recess, a wheel casing removably secured to the rear side of the truss pad and having a central bearing opening to receive the outer extremity of said spindle, and a side slot, a spiral spring arranged within said spring recess and attached at its ends to the inner spindle portion of the wheel or drum and to the pad, respectively, and the self-adjusting chain connected at its inner end to the chain wheel, and at its outer end adjustably to the free end of the body band, substantially as set forth.

6. In a truss, the body band, a truss removably attached at one end to the body band and having a spring-actuated wheel or drum, a connecting hook adjustably connected to the free end of the body band and having a contracted slot, and a self-adjusting chain winding and unwinding on said wheel or drum and adapted to have the links thereof engage the contracted slot of said hook, 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.

DANIEL W. LEWIS.

Witnesses:

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G. C. STODDARD.