(No Model.)

J. P. LANDER.

TRUSS.

No. 554,825. Patented Feb. 18, 1896.

Fig. 1.

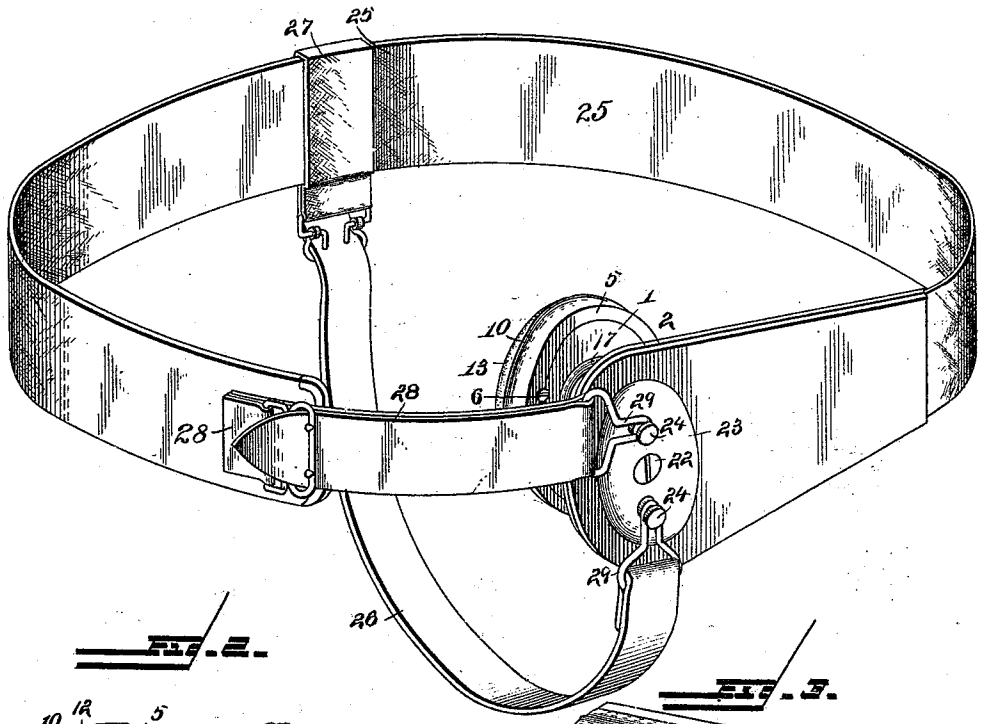


Fig. 2.

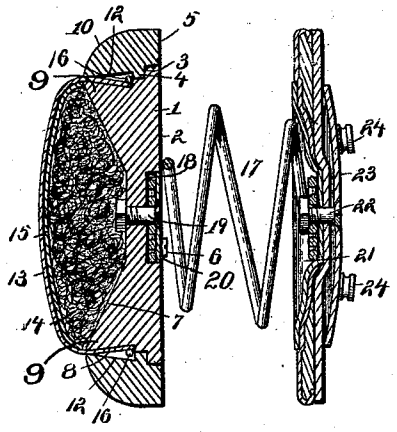
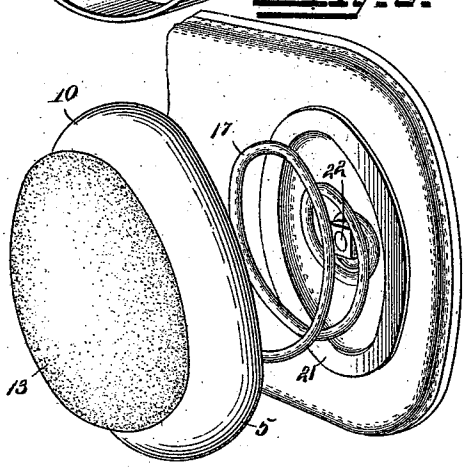


Fig. 3.



Inventor

John P. Lander

Witnesses

T. W. Riley,

G. H. Maxwell.

By his Attorneys,

C. A. Snow & Co.

ANDREW B. GRAHAM, PHOTO-LITHO. WASHINGTON, D.C.

UNITED STATES PATENT OFFICE.

JOHN PET. LANDER, OF OSKALOOSA, IOWA.

TRUSS.

SPECIFICATION forming part of Letters Patent No. 554,825, dated February 18, 1896.

Application filed September 7, 1895. Serial No. 561,831. (No model.)

To all whom it may concern:

Be it known that I, JOHN PET. LANDER, a citizen of the United States, residing at Oskaloosa, in the county of Mahaska and State of Iowa, have invented a new and useful Truss, of which the following is a specification.

My invention relates to trusses for hernia, the object thereof being to provide a truss that will be easy for the wearer and will conform to any position of the body without upsetting or losing its proper position in the least.

Further objects are to provide a pad that is gentle in its pressure, soft and flexible, and contains a chamber for medicine to be applied to the ruptured parts, and to provide elastic supporting-braces for the pad that have no metallic parts exposed to chafe the body and that are adjustable to any position of body and size of person.

With these and other objects my invention consists of the novel features, details of parts and combinations thereof, as hereinafter set forth by the description and claims.

In the accompanying drawings, Figure 1 is a perspective view of my invention. Fig. 2 is a central vertical section through the pad end of the truss. Fig. 3 is a detail view of the parts shown in Fig. 2.

Reference-numeral 1 designates the body-plate of the oval truss-pad, which is made of hard rubber or other suitable material and comprises a straight back 2, rabbeted away on its inner side to provide a seating-recess 3 to receive the flange 4 of the clamping-ring 5. This clamping-ring 5 is made of the same material as plate 1 and fits closely over the said body-plate flush with its outer face, to which it is secured by two locking-screws 6, one on either edge of said ring.

Concentric with recess 3 a sponge-dish 7 is formed integral with the body-plate, projecting inwardly therefrom and having its sides 8 flared slightly toward the rim 9. Rim 9 of the sponge-dish 7 is flush with the outer edge of ring 5. Ring 5 has oval extension-walls 10 and conical interior walls 12, the latter being parallel at their outer edges with the rim 9 of the sponge-dish and diverging slightly at their opposite edges adjacent to flange 4. Thus a small annular space is provided around the dish 7 to clamp the edges of the porous pad-covering 13.

A sponge, lint, or other soft absorbent material 14 is placed in the dish 7, and a piece of felt 15 is placed over it. The covering 13, of chamois, suede, or other tough porous material, is then neatly stretched thereover and secured to walls 8 by a spring-clip, rubber, or thread 16. The ring 5 is then clamped tightly over the assembled parts and secured thereto by a half-turn of the locking-screws 6 against the body-plate 1.

The truss-pad is secured to the belt and held in projected position by a conoidal spring 17. This spring tapers at either end and is fastened at one end in a recess 18 formed in the body-plate 1 by a screw-bolt 19 and washer 20. At its opposite end spring 17 is fastened within a concave disk 21 by a similar screw-bolt 22. The screw-head of bolt 22 is on the outside of the belt and secures at that point the oval plate 23, which is provided at either end with headed studs 24.

The belt is made of elastic webbing 25 strengthened and stiffened adjacent to the stud-plate 23 by a piece of slightly-flexible leather. An elastic thigh or crotch strap 26 is buckled at one end to a loop 27, which fits snugly around the belt, but is capable of being slid thereover; also, slightly back from the free end of the belt a buckle and strap 28 are secured to the outer side thereof. Straps 28 and 26 carry links or loops 29 at their outer ends to hook over the studs 24 for securing the truss about the body of the wearer.

The manner of using my improved truss is as follows: The locking-screws 6 are given a half-turn to release the clamping-ring 5, covering 13 and sponge. The sponge is then saturated in the liquid medicine and replaced in the sponge-dish 7. The felt 15 is then placed over the sponge in order to prevent the medicine from evaporating too rapidly, the porous covering 13 is adjusted in place and secured by lip 16, and the clamping-ring is finally crowded down and fastened by the locking-screws. The belt is then adjusted to the waist by means of the buckle and strap 28. The pad is turned to the most advantageous angle by slightly loosening screw-bolt 22, the

stud-plate 23 being also properly turned at the same time, and the link-eyes 29 are caught over studs 24. This secures the truss. The crotch-strap is adjusted, if necessary, along the belt by loop 27 and tightened or loosened by its buckle. The wearer can now bend into any position whatever, and the spring 17, by reason of its special shape, will retain the face of the pad in true proper position against the ruptured parts and with the required pressure. At the same time the clamping-ring serves as a rigid limit for the rupture not to slip by. The elastic belt gives longitudinally to any sudden strain on it, and does this without giving the pad any tendency whatever to slip around or to tip over.

When the belt is once adjusted by means of its buckles it can be quickly put on and taken off by means of the link-eyes and studs without any further adjustment.

Various changes in 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.

What I claim is—

1. In a truss, a pad comprising a body-plate provided in one side with a dished portion, an absorbent cushion filling said dished portion of the body-plate, an inelastic ring detachably secured on the periphery of the body-plate, and a porous cushion-covering secured at its edges between the body-plate and said ring, substantially as set forth.

2. In a truss, a pad comprising a body-plate provided in one side with a dished portion, an inelastic ring detachably secured on the body-plate, the adjacent peripheral walls of said body-plate and said ring diverging toward the back of the body-plate to leave an annular space, an absorbent cushion filling the dished portion of the body-plate, and a porous covering surrounding the outer side of the absorbent cushion and secured at its edges in the annular space between the body-plate and the ring thereon, substantially as set forth.

3. In a truss, a pad comprising a body-plate provided in one side with a dished portion and with a rabbeted periphery forming a seating-recess, an inelastic ring having an inwardly-disposed flange registering in the seating-recess of the body-plate, the adjacent peripheral walls of said body-plate and said ring diverging toward the back of the body-plate to leave an annular space, an absorbent cushion filling the dished portion of the body-plate, a porous covering surrounding the outer side of the cushion, and a fastening device securing the edges of said covering within said annular recess between the body-plate and the ring thereon, 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 PET. LANDER.

Witnesses:

L. T. SHANGLE,

WARREN C. JOHNSON.