

(No Model.)

A. HESSELS.
TRUSS.

No. 567,568.

Patented Sept. 8, 1896.

Fig: 1.

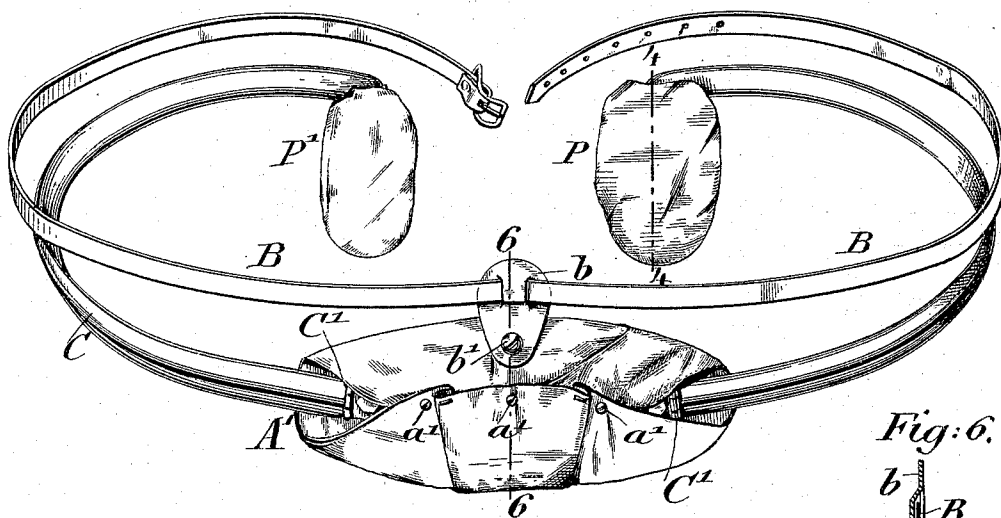


Fig: 2.

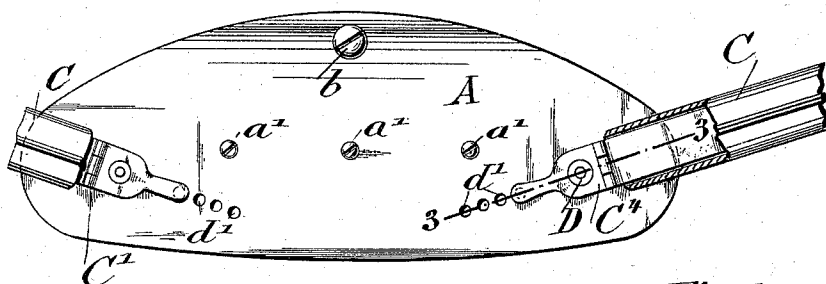


Fig: 6.

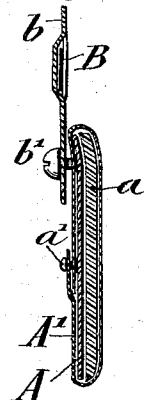


Fig: 5.

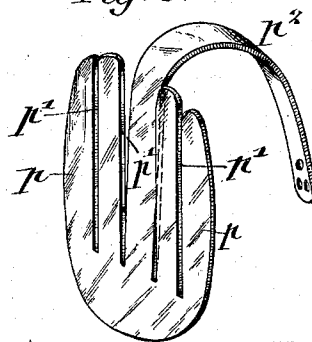


Fig: 4.

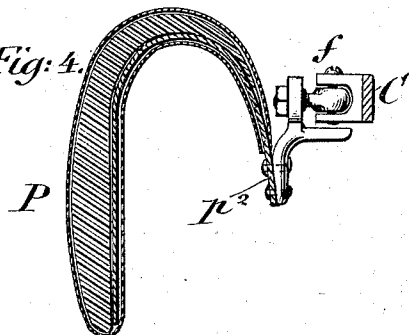
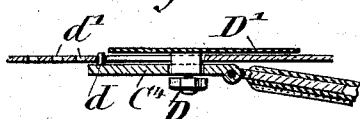


Fig: 3.



WITNESSES:

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ANTHONY HESSELS, OF NEW YORK, N. Y., ASSIGNOR TO AMALIE HESSELS,
OF SAME PLACE.

TRUSS.

SPECIFICATION forming part of Letters Patent No. 567,568, dated September 8, 1896.

Application filed December 26, 1895. Serial No. 573,375. (No model.)

To all whom it may concern:

Be it known that I, ANTHONY HESSELS, a citizen of the United States, residing in the city, county, and State of New York, have invented certain new and useful Improvements in Trusses, of which the following is a specification.

This invention has reference to an improved truss, in which the truss-pad can be readily adjusted to the proper location of the rupture and fitted snugly to the same, so that the truss adjusts itself to the various positions of the body without exerting an injurious pressure on the ruptured parts; and the invention consists of a truss which comprises a slightly-curved back-plate, springs hinged to said back-plate, and means for adjusting the rear ends of the springs on said back-plate.

The invention consists, further, of a pad applied to a supporting spring-plate provided with parallel longitudinal slits, said spring-plate being provided with a curved shank that is connected by a double swivel-joint with the end of the truss-spring, so that the pad is applied with uniform pressure to the ruptured part while adapting itself to the various positions of the body.

The invention consists, further, of certain details of construction and combinations of parts, which will be fully described hereinafter, and finally pointed out in the claims.

In the accompanying drawings, Figure 1 represents a perspective rear view of my improved truss. Fig. 2 is a detail rear view of the back-plate to which the springs are applied. Fig. 3 is a horizontal section on line 3 3, Fig. 2, showing the adjustable connection of the truss-spring with the back-plate. Fig. 4 is a vertical transverse section on line 4 4, Fig. 1, showing the connection of the pad with the truss-spring. Fig. 5 is a detail perspective view of the spring-plate to which the pad is applied; and Fig. 6 is a vertical transverse section on line 6 6, Fig. 1, through the back-plate.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A represents the supporting-plate of my improved truss, which, when the truss is in position, is located at the

small of the back and preferably made of aluminium for the sake of lightness. The plate A is rounded off at the ends and slightly curved, so as to snugly fit the small of the back, it being covered by a layer of felt *a* and by a suitable interchangeable covering *A'*, which is applied by headed screws *a'*, that are attached to the back-plate A, as shown in Fig. 2, the covering preventing direct contact of the metal with the skin. A waist-strap B is connected by a slotted plate *b* and screw *b'* with the upper part of the back-plate A, so that said strap serves to hold the back-plate A in its proper position at the small of the back. To each end of the back-plate A is applied a covered steel spring C, which is connected at its rear end by a hinge *C'* with the back-plate A, one leaf of the hinge being attached to a socket of the spring, while the other leaf of the hinge is attached by a clamping-screw D to the plate A, said leaf being provided with an extension having a pin *d*, which engages one of a group of holes *d'*, arranged in the back-plate A, as shown in Figs. 2 and 3. By the clamping-screw D and the pin and holes the truss-spring C can be adjusted in different positions on the back-plate, so as to bring the pad P in the proper relative position to the rupture. After the adjustment of the spring is made the clamping-screw D is firmly applied, so that the pin *d* cannot escape from the hole *d'*, into which it is inserted. The inner end of the shank of the screw D is provided with a suitable steadying-plate *D'*, that bears against the plate A, so as to impart steadiness to the connection of the hinge with the plate A.

The pad P is applied to the end of one of the springs C, and a smaller pad or stay *P'* to the end of the opposite truss-spring, as shown in Fig. 1, the said stay-pad *P'* serving to exert pressure on the opposite side of the abdomen and balance thereby the truss-pad P. The pad P is connected by a double swivel-joint *f* with the end of the truss-spring C, so that the pad has a yielding action in a horizontal as well as in a vertical plane. The joint used may be preferably of the construction shown in the patent granted to me heretofore, No. 513,681, dated January 30,

1894, though any other approved construction of double swivel-joint may be used. To provide for the yielding motion of the pad in a vertical and backward direction, the same is applied to a supporting-plate p , which is provided with parallel slits p' and with a spring-shank p^2 , of inverted-U-shaped form that is attached to one member of the joint f , as shown in Fig. 4. The slits p' impart independently-yielding action to the different portions of the plate p , so that either side of the lower and upper end of the pad can "give" sufficiently for adapting itself to the rupture during the various positions and motions of the body, while the joint imparts a yielding motion to the pad in lateral as well as up-and-down directions. The slitted spring-plate enables the pad to yield at either side of its shank in backward direction, so that it presses uniformly on the ruptured part without giving pain by exerting an undue or injurious pressure on the same. The pad fits thereby in an easy and comfortable manner to the rupture so as to prevent irritation of the same.

25 The pad is formed of a body of felt and a covering of suitable fabric, which covering can be changed from time to time as required.

My improved truss is readily adjusted to the proper location of the rupture, so as to bring the pad in proper relative position thereto, while the construction of the pad-plate provides a yielding motion for the pad in every direction and secures the uniform

pressure on the ruptured parts, so as to hold the same firmly and snugly in position. 35

Having thus described my invention, what I claim is—

1. The combination in a truss, of a back-plate provided with a group of holes, a truss-spring connected by a hinge with the back-plate, and a clamping-nut for adjusting the hinge on the back-plate, one leaf of the hinge being provided with a pin, adapted to enter one of the holes of the back-plate, substantially as set forth. 40 45

2. The combination, with a truss-spring, of a pad, a spring-plate having a spring-shank of inverted-U-shaped form to which the pad is applied, and a double swivel-joint by which the curved shank is connected with the end of the truss-spring, substantially as set forth. 50

3. The combination, with a truss-spring, of a pad, a spring-plate provided with a spring-shank such as described, and with parallel longitudinal slits at each side of said shank, and a double swivel-joint between the shank and the truss-spring, substantially as set forth. 55

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses. 60

ANTHONY HESSELS.

Witnesses:

PAUL GOEPEL,
GEO. W. JAEKEL.