

(No Model.)

J. BRICKNER & A. S. HERR.
TRUSS.

No. 566,738.

Patented Sept. 1, 1896.

Fig. 1.

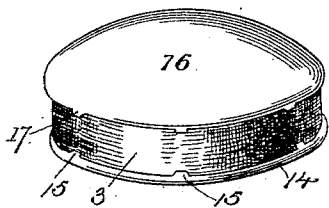


Fig. 2.

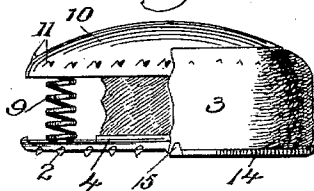


Fig. 3.

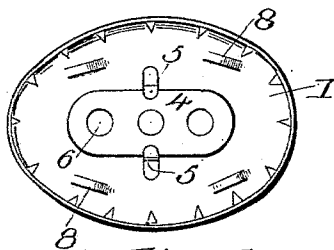


Fig. 4.

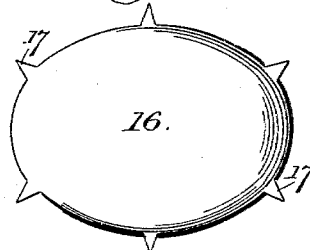


Fig. 5

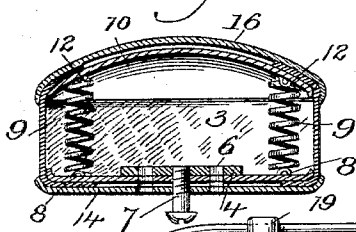


Fig. 7

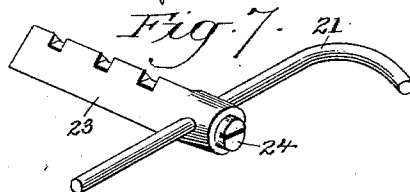
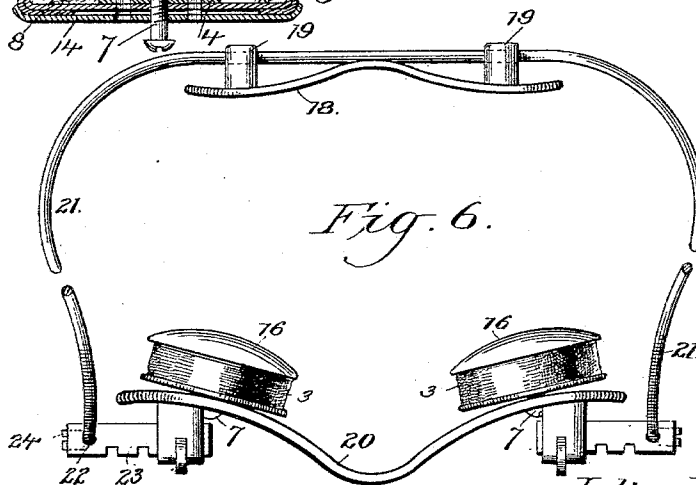


Fig. 6.



Inventors

Julius Brickner

und Abraham S. Herr.

By their Attorneys.

C. Snow & Co.

Witnesses

V. B. Hillyard.

G. C. Shoemaker

UNITED STATES PATENT OFFICE.

JULIUS BRICKNER AND ABRAHAM S. HERR, OF TIFFIN, OHIO.

TRUSS.

SPECIFICATION forming part of Letters Patent No. 566,738, dated September 1, 1896.

Application filed April 29, 1895. Serial No. 547,541. (No model.)

To all whom it may concern:

Be it known that we, JULIUS BRICKNER and ABRAHAM S. HERR, citizens of the United States, residing at Tiffin, in the county of Seneca and State of Ohio, have invented a new and useful Truss-Pad, of which the following is a specification.

This invention relates to improvements in truss-pads, and aims to attain greater ease and comfort to the wearer and at the same time provide a yielding pad which will admit of the soldering of the springs to the base and bearing plates without detracting from or injuring the temper of the springs, and which will provide ready means of attachment to the edges of the said plates of a strip of textile fabric, binding, or like material, the whole being protected by covers or caps of aluminium or other metal or suitable material, whereby a neat, light, and efficient structure is attained.

Other objects and advantages will appear from the following description and subjoined claims, when taken in connection with the drawings hereto attached, in which—

Figure 1 is a perspective view of an improved truss-pad embodying the essence of the invention. Fig. 2 is a detail view of the pad having the covering removed and a portion of the edge or side fabric broken away. Fig. 3 is a detail view of the base-plate. Fig. 4 is a plan view of a metal cap or cover. Fig. 5 is a central longitudinal section of the completed pad. Fig. 6 is a top plan view of a truss embodying all the novel features of the present invention. Fig. 7 is a detail view of the movable plug, showing the manner of adjustably attaching the wire frame thereto.

The numeral 1 represents a base-plate having any of the usual forms, according to the nature of the treatment for which the pad is specially designed. This plate has its edge portion turned up slightly and provided with a series of retaining-points 2, punched or struck from the body of the plate and located at proper intervals apart to form positive means of connection with the edge portion of the textile fabric or braid 3, which closes the space between the base and bearing plates comprising the pad. A reinforcing-plate 4 is disposed on the inner side of the base-plate

1 and is secured to the latter by lips 5, stamped from the body of the plate 1 and bent to embrace the edge portions of the said reinforcing-plate 4. A series of threaded openings 6 are formed in the plates 1 and 4 and are adapted to receive the fastening-screw 7, by means of which the pad is attached to the supporting straps or harness. These openings 6 admit of a varied adjustment of the pad with reference to its supporting-harness, whereby ease and comfort to the wearer may be attained. Loops 8 are pressed inward from the plate 1 and are adapted to receive the ends of the coil-springs 9, which are passed thereunder and held in place thereby. To prevent the accidental displacement of the springs, solder is applied to the outer face of the plate opposite the depression formed by providing the lips 8. By this means the plate forms a shield and prevents the heat of the soldering-iron from annealing or otherwise injuring the springs, which frequently happens when said springs are subjected to a too high temperature.

The bearing-plate 10 is similarly formed to the base-plate 1 and is convexed on its outer surface in the usual manner to effect the desired result. Retaining-points 11 are provided around the edge portion of this plate for the same purpose as the points 2 of the plate 1 and are similarly formed. Loops 12 are formed in the plate 10 and correspond in position and number with the loops 8 of the plate 1, and are designed to have the opposite ends of the springs 9 secured thereto in precisely the same manner as the connection formed between the said springs and the loops 8.

The space occurring between the plates 1 and 10 is closed by a textile fabric or braid 3, which has its edge portions secured to the respective plates by means of the retaining-points 2 and 11, the latter being passed through the edge portions of the said fabric or braid and clenched to retain the latter in place. By this means simple and efficient provision is had for attaching the fabric to the plates without necessitating stitching, which latter is soon cut through, or the employment of extra fastenings, which involves unnecessary and considerable expense. This

fabric, while closing the space between the edge portions of the plates, also gives a neat finish to the completed article and results in cleanliness and the exclusion of foreign matter from the coil-springs 9.

The base-plate 1 is protected by a covering-plate 14, which conforms in outline to the shape of the said plate 1 and has its edge portions slightly curved or bent to embrace the edge portions of the plate 1 and prevent rubbing or wearing of the fabric by engagement of the latter with the clothing at points opposite the edges of the said plate 1. Points 15 are integrally formed with the covering-plate 14 and are adapted to be bent inward over the plate 1 and retain the said plate 14 in proper position. The bearing-plate 10 is protected by a covering-plate 16, similar in construction to the covering-plate 14, but conforming in shape and size to the said bearing-plate 10. The covering-plate 16 has points 17 integral therewith to be bent over the edge of the bearing-plate 10 and retain the covering-plate 16 in proper relation. These covering-plates 14 and 16 may be of any desired material, sheet metal being preferable, and of the latter aluminium is the best adapted for the purpose because of its non-corrosive qualities and comparative light specific gravity. Pads constructed as herein set forth may be used in connection with any desired supporting frame or harness, and the adjustability of the fastening-screw 7 admits of various changes in the position of the pad to adapt the latter to the particular location and nature of the hernia to attain the best possible results.

In Fig. 6 is shown a supporting-frame comprising a back plate 18, having lugs 19 on its rear side, which are longitudinally apertured, a front plate 20, and a wire body-band 21, the latter passing loosely through the apertured lugs 19 and having the free end portions working through openings 22 in the movable plugs 23, attached to the outer face or side of the front plate 20. A binding-screw 24 passes through the end of each plug 23 and serves to hold the end portions of the wire body-band in the adjusted position, thereby adapting the truss for different-sized persons, as will be readily understood.

From the foregoing description it will be seen that the back plate 18 is loosely mounted upon the body-band and is free to adapt itself to the various movements of the body and obviate undue and unequal pressure, which frequently results in inconvenience and annoyance to patients by reason of the rigidity of the back plate with reference to the body-band.

The pad and harness herein shown and described may be variously constructed and of any material best adapted for the purpose; and to this end it must be understood that 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 as new is—

1. In a truss, the combination of a continuous body-band having its end portions separated and bent in the same direction approximately at right angles, a plate bearing the truss-pads, plugs adjustably connected at their inner ends to the said plate and having transverse openings at their outer ends for the passage of the bent end portions of the body-band, and binding-screws for securing the bent ends of the body-band in the openings of the said plugs, the parts being disposed to admit of the ends of the body-band being separated or brought together, or moved up and down relative to the pad-bearing plate, substantially as set forth.

2. In a truss-pad, the combination of a base and a bearing-plate, each having integral retaining-points adjacent to and extending around its peripheral edge formed by punching or striking them from the body of the plate, springs interposed between the plates to hold them separated, and a strip of textile fabric closing the space between the two plates and secured to the latter by being engaged with the said retaining-points, which latter are clenched, substantially in the manner set forth.

3. A truss-pad comprising a base and a bearing-plate, each plate having integral retaining-points ranging around and adjacent to its edge and formed by being struck or punched from the body of the plate, springs for holding the plates normally separated, a strip of textile fabric for closing the space between the plates and engaged with the retaining-points, the latter being passed through the fabric and clenched, and covering-plates applied to the pad-plates and extending over the joint between the clenched retaining-points and the textile fabric, and having a portion bent to embrace the edge of the pad-plates, whereby a neat and finished appearance is secured, substantially as set forth.

4. In a truss-pad, the combination of a plate having retaining-points contiguous to its edge, a textile fabric having engagement with the said plate by means of the said retaining-points, and a covering-plate having its edge portion bent, or curved, to embrace the edge portion of the first-mentioned plate, and having retaining-points to be clenched upon the first-mentioned plate and secure the covering-plate in position, substantially as set forth.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

JULIUS BRICKNER.
ABRAHAM S. HERR.

Witnesses:
CHARLES DEPPEN,
W. F. NOBLE.