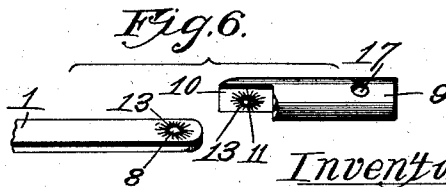
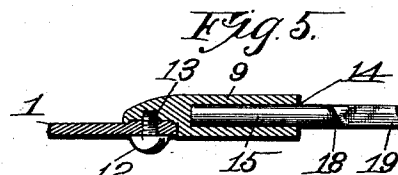
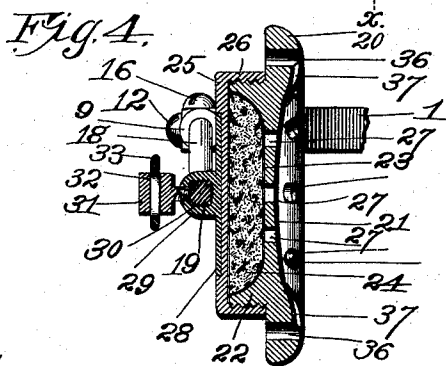
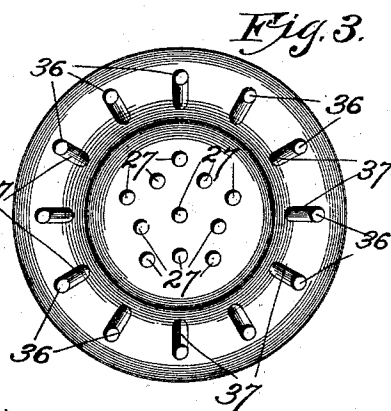
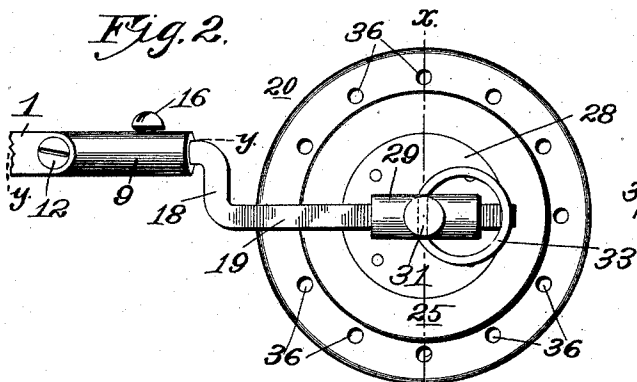
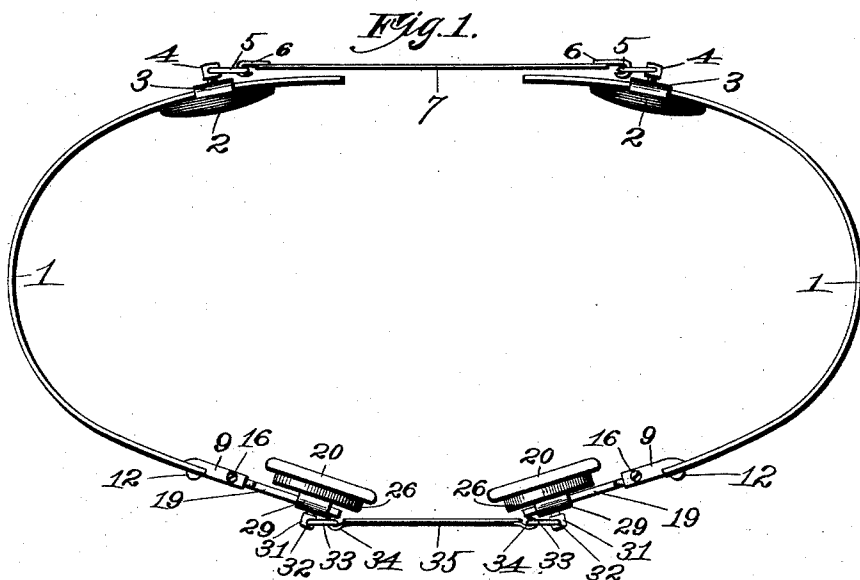


(No Model.)

C. H. CHAPMAN & W. S. GOODHUE.
TRUSS.

No. 522,967.

Patented July 17, 1894.



Witnesses:

Wm. H. Porter.
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UNITED STATES PATENT OFFICE.

CHARLES H. CHAPMAN AND WALTER S. GOODHUE, OF KANSAS CITY,
MISSOURI.

TRUSS.

SPECIFICATION forming part of Letters Patent No. 522,967, dated July 17, 1894.

Application filed September 11, 1893. Serial No. 485,292. (No specimens.)

To all whom it may concern:

Be it known that we, CHARLES H. CHAPMAN and WALTER S. GOODHUE, of Kansas City, Jackson county, Missouri, have invented certain new and useful Improvements in Trusses, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

Our invention relates to trusses, and has for its objects to provide a truss which is simple, durable and inexpensive of construction.

Other objects appear in the ensuing description, and are pointed out particularly in the appended claims.

Referring to the drawings, which accompany and illustrate this invention, Figure 1, represents a plan view of a truss constructed in accordance with our invention. Fig. 2, represents an enlarged view of one of the front truss-pads, and showing also the parts by which it is supported. Fig. 3, is an inner face view of one of the front truss-pads. Fig. 4, is a vertical sectional view taken on the line $x-x$ of Fig. 2. Fig. 5, is a horizontal sectional view taken on the line $y-y$ of Fig. 2, and Fig. 6, is a perspective view detached, of the front end of one of the body-pads, and the pivotal sleeve from which the front truss-pad is supported.

In the said drawings, 1—1 designates the similar and oppositely disposed body-bands which are constructed of spring metal and in the usual manner. A pair of back-truss-pads 2 are provided with sleeves 3 which fit upon the rear ends of the body-bands, and are secured at any desired point thereon by the set-screws 4 which pass through said sleeves and impinge upon the outer side of the body-band as will be readily understood. These set-screws 4 pivotally carry each a ring 5, and these rings are engaged by the hooks 6 carried at the opposite ends of the flexible connecting band 7. The front ends of the body-bands are provided with holes or apertures 8, and sleeves 9 preferably cylindrical as shown, are recessed in their outer ends to form the vertical or squared faces 10 and a shoulder which fits against and conforms to the curved end of the body bands, so as to present practically an unbroken surface.

The sleeves 9 are also provided each with a screw-threaded recess 11 which aligns with the holes or apertures 8 of the body-band when the squared surfaces 10 of said sleeves are fitted against the inner sides of the body-band, and screw-bolts 12 passing through the holes or apertures 8 engage the aligned or registering screw threaded recesses 11 of the sleeves 9.

In order to assist the bolt 12 in securing the sleeve 10 at any angle desired relative to the body-band, a series of radiating and alternating recesses and ribs or projections 13 surround the holes or apertures 8 at the inner side of the body-band, and also surround the recess 11 of the squared surface 10 of each sleeve; the ribs or projections of one part being adapted to engage the recesses of the other part. By this construction which is more clearly shown in Fig. 5, it will be seen that when the bolt 12 is screwed firmly home, and the ribs or projections of one part enter the recesses of the other it will be impossible to pivotally operate the sleeves 9. If desired the surface marginally surrounding the apertures 8 and recesses 11 may be milled or serrated instead of being radially roughened.

The sleeves 9 are provided with a longitudinally extending and cylindrical bore or channel 14 in which are engaged the cylindrical rods 15; these rods being secured from movement either laterally or longitudinally by the set-screws 16 which pass through holes or apertures 17 in the sleeves 9 and impinge firmly upon the cylindrical rods 15. The rods 15 a slight distance outward of the free end of the sleeves 9 are cranked at 18, and are then extended in an opposite direction from the disposition of the portions 15, and preferably parallel therewith as shown at 19, and these portions 19 are squared in cross section preferably.

A truss-pad is composed of the circular plate or portion 20 which is preferably rounded at its inner corners and concaved at its inner face as at 21. A circular hub-portion 22 projects from the opposite face of the circular plate 20, and is exteriorly screw threaded. This hub portion is recessed at 23 to receive a sponge or equivalent material 24 which is

saturated or pregated with a suitable medicine. A circular cover or cap 25 is adapted to fit against the hub-portion of the plate to hold the sponge or equivalent material in position, and this cover or cap is provided with an internally threaded annular flange 26 which engages the exteriorly threaded hub-portion. A series of holes or passages 27 are formed through the plate extending from the inner concaved face thereof and communicating with the recess containing the sponge or equivalent material. The outer side of the cover or cap 25 is recessed, and a plate 28 preferably of metal, is secured therein by rivets or other suitable means. This plate is provided with a sleeve or guide-tube 29 which is provided with a longitudinally extending squared passage 30.

A truss-pad constructed as described and provided with the tube having the squared opening 30 is carried by each crank rod 15; the squared portion of said rods being passed through the squared passages 30, and to secure the truss-pad at any desired point of adjustment upon said rods, the set-screws 31 are provided. These set-screws pass through apertures in the sleeves or guide tubes and impinge upon the portions 19 of the crank-rods. The heads of the set-screws are provided with passages 32 in which are pivotally secured rings 33, and these rings 33 are engaged by hooks 34 carried at opposite ends of a flexible band or strap 35.

From this construction it is apparent that the truss is applicable to persons of various sizes by reason of the adjustment of the rear or back-pads, and the adjustment of the front-pads upon the squared portion 19 of the rods 15 carried by the sleeves 9. It will further be seen that the tendency of the concaved surface of the front pads when pressed firmly against the body in operative position is to draw or pull inwardly upon that portion marginally surrounding the concaved face of the circular plate 20 and by thus drawing and holding the broken tissues or displaced parts to their normal position tend to effect a rapid cure.

In order that air may be admitted to the afflicted portion of the body against which the concaved face of the pads are held, a series of air passages or holes 36 are formed through the plate 20 outward of the hub-portion 22, and communicating with these holes or passages are a series of radial and inwardly extending grooves or channels 37; these grooves or channels being formed in the inner face of the truss-pad and extending inward a sufficient distance to admit air no matter how great the pressure of the pad upon the body, to the afflicted part of the body, so as to have a cooling and soothing influence at the point where the medicine passing through the holes or passages 27 comes in contact with the body. If desired, a single truss may be provided by removing one section of the body-band carrying the front and

rear truss-pads, and the front and rear flexible pads 7 and 35 and replacing them with a single half web-belt, the opposite ends of which are to be secured to the rings 5 and 33 of the rear and front truss-pads respectively of the remaining section of the body-band.

If it is desired to change the inclination of either of the front truss-pads, by loosening the set-screw 16 the rod 15 may be rotated therein until the position desired for the truss-pad is attained. If it is desired to raise or lower the truss-pad without moving the body-band by loosening the set-screw 12 the sleeve 9 may be pivotally operated in either direction desired, and by again screwing the bolt 12 home the truss-pad is secured rigidly in this position.

From the above description, it will be seen that we have produced a truss-pad which is easily adjusted to any position required, and which is simple, durable, and inexpensive of construction.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a truss, the combination with a body-band, and a back-pad mounted upon said body-band, of a sleeve pivotally carried at the front end of the body-band, a crank-rod rotatably carried by said sleeve, and a front truss-pad carried by said rod, substantially as set forth.

2. In a truss, the combination with a pair of oppositely disposed body-bands and back-pads adjustably carried thereon, of sleeves pivotally carried to operate in a vertical plane between the front ends of said body-bands, crank rods rotatably carried by said sleeves, and front-pads adjustably mounted upon said rods, and flexible bands connecting the rear truss-pads, and the front truss-pads, substantially as set forth.

3. In a truss, the combination with a body-band, and a sleeve pivotally carried thereby, said body-band and sleeve having their contact faces serrated or roughened for the purpose described, a crank rod having a cylindrical portion fitting in said sleeve, and a set screw to hold it in any position, and having a squared portion, and a truss-pad having a tube or sleeve provided with a squared opening in which the squared portion of said rod engages, and a set-screw carried by said tube or sleeve and impinging upon the squared portion of the rod, substantially as set forth.

4. A truss-pad, consisting of a plate provided with a concaved inner face, and a recess in its outer face to receive a suitable medicine, and a cap or cover to close said recess, and a series of air-passages formed through the plate, and radial and inwardly extending grooves or channels communicating with the inner end of said passages, and with the inner concaved face of the said plate, substantially as and for the purpose set forth.

5. A truss-pad, comprising a circular plate having a concaved face, and having a recess

upon its rear side, and having an exteriorly threaded web portion surrounding said recess, and a screw-cap to engage said hub-portion and close the recess, in combination with a
5 medicated sponge carried in said recess, and a series of openings or air passages formed through the plate, and radial and inwardly extending grooves or channels communicating with said openings and with the inner

concaved face of the truss-pad, substantially as set forth.

In testimony whereof we affix our signatures in the presence of two witnesses.

CHARLES H. CHAPMAN.

WALTER S. GOODHUE.

Witnesses:

MAUD FITZPATRICK,

M. P. SMITH.