(No Model.)

E. O. WARE & J. B. WILLAMAN.

TRUSS.

No. 545,640. Patented Sept. 3, 1895.

Fig. 1.

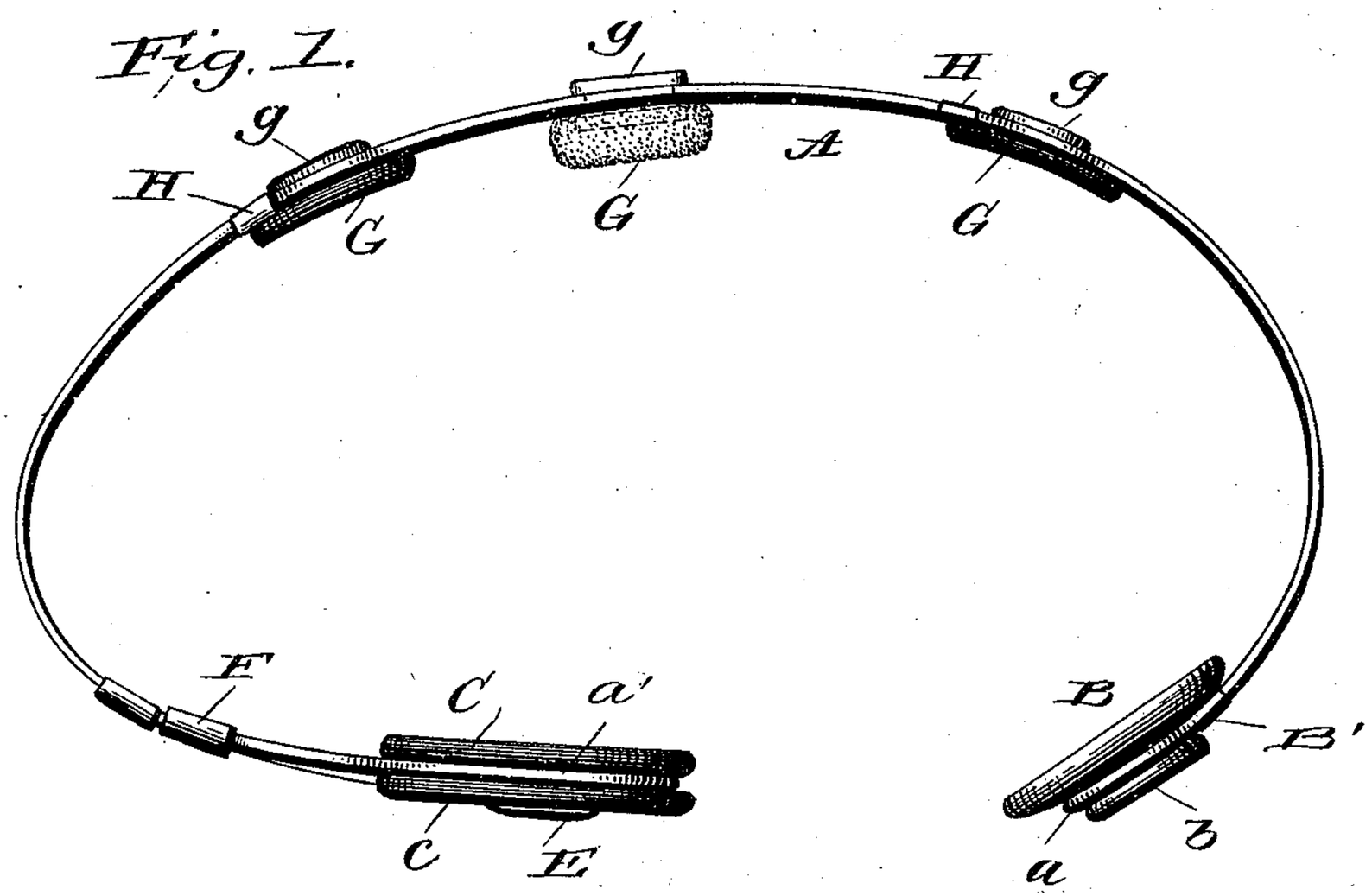


Fig. 2

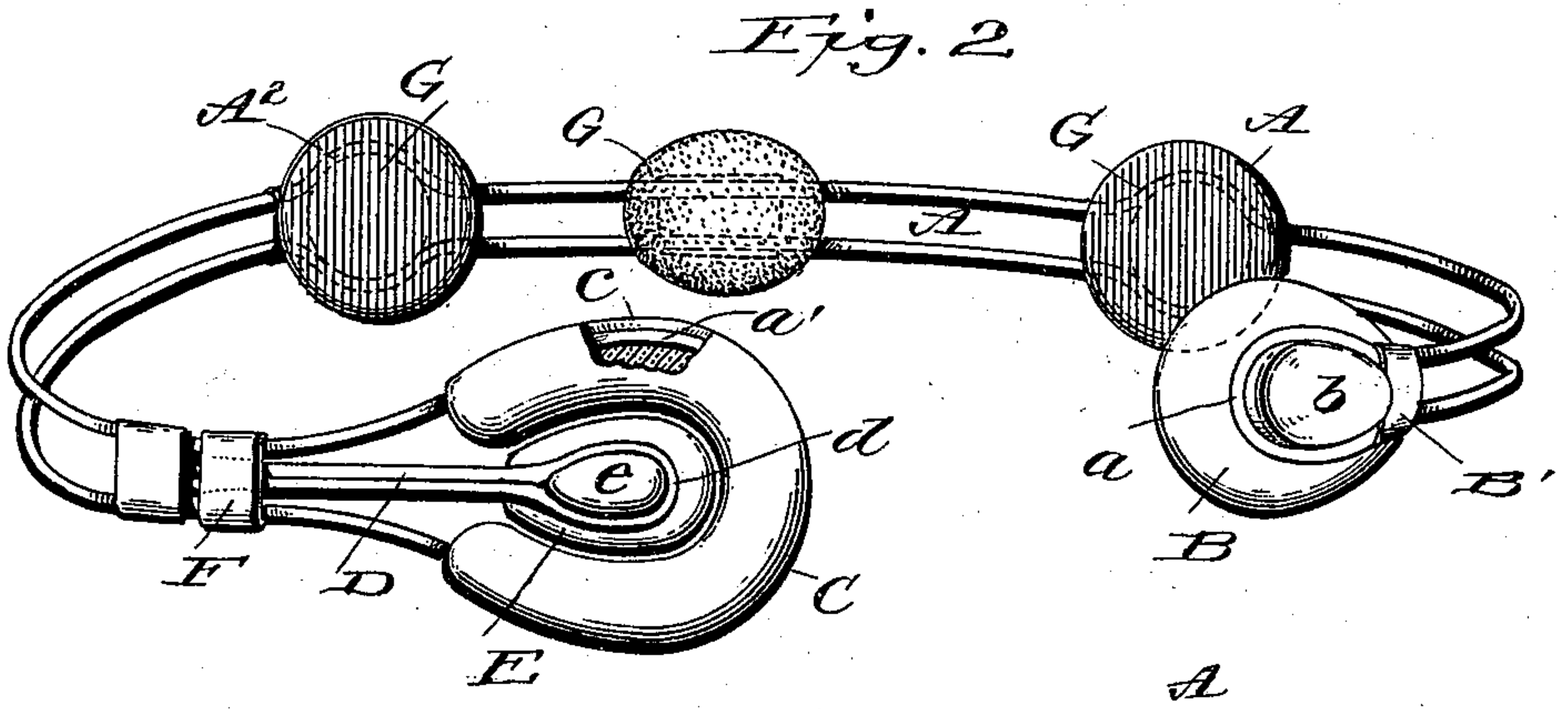


Fig. 3.

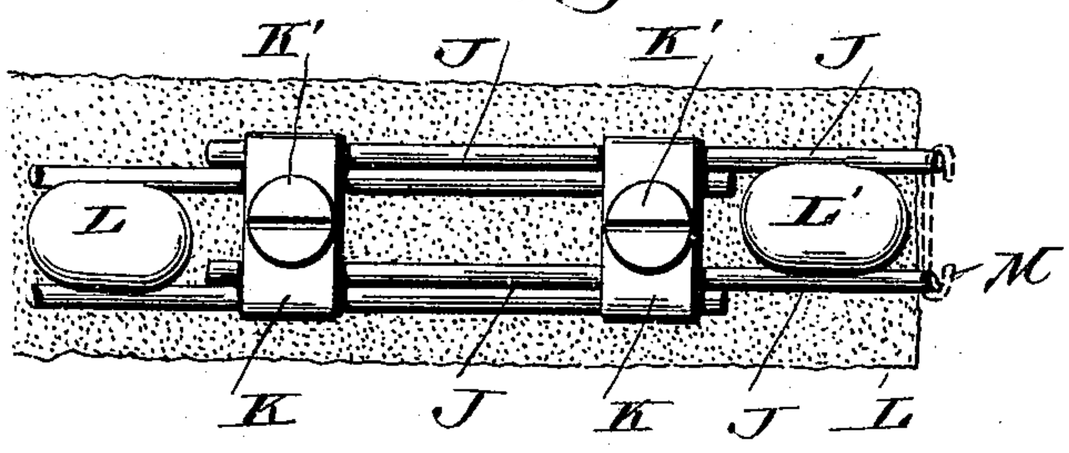
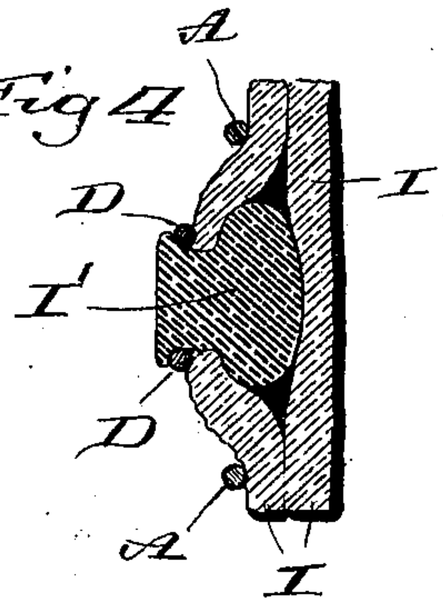


Fig 4



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UNITED STATES PATENT OFFICE.

EDWIN O. WARE AND JOSEPH B. WILLAMAN, OF SALEM, OHIO.

TRUSS.

SPECIFICATION forming part of Letters Patent No. 545,640, dated September 3, 1895.

Application filed February 28, 1895. Serial No. 540,091. (No model.)

To all whom it may concern:

Be it known that we, EDWIN O. WARE and JOSEPH B. WILLAMAN, citizens of the United States, residing at Salem, in the county of Columbiana, State of Ohio, have invented certain new and useful Improvements in Trusses, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in trusses; and it has for its objects, among others, to provide a simple and cheap truss in which the pads are adjustable and in which provision is made for regulating the pressure to be put upon the pad or wound.

The invention is applicable to a single or a double truss, and in the latter instance means are provided for making the truss larger or smaller, as circumstances may require. The frame is of spring material and the pads adjustably mounted thereon, with means for holding the pads firmly in any and all of their adjusted positions. The pads themselves are of novel construction, as is also their manner of mounting on the frame. The end pad is carried by a spring-support, which is mounted on one end of the frame, and means are provided for regulating the pressure with which said pad shall bear against the body of the wearer.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be specifically defined by the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a top plan view of a truss constructed in accordance with our invention. Fig. 2 is a front elevation thereof with some slight modifications. Fig. 3 is a detail in rear elevation showing the means of rendering the frame of a double truss adjustable. Fig. 4 is a substantially central section through one of the pads, the frame, and the pad-support.

Like letters of reference indicate like parts throughout the several views.

Referring now to the details of the drawings by letter, A designates the frame, which is composed, preferably, of spring-wire bent upon itself to give the required shape, the ends being united in any suitable manner, the wire forming two substantially parallel bars between and upon which the pads are held and are adjustable.

As shown in Figs. 1 and 2, there is a pad B, held in the bend or loop *a*, formed at one end of the frame, the pad having a head *b*, which is embraced by the said loop, as seen in both views, and the pad held firmly by means of a slide B′, adjustably mounted upon the parallel portions of the frame. In this instance the pad is formed of rubber and the head is integral therewith. The loop *a′* at the other end of the frame is made somewhat larger, as seen best in Fig. 2, and has a rubber rim C, which has a surrounding groove *c*, into which the loop is sprung and held by frictional contact or engagement of the parts. At this end of the frame there is attached thereto in any suitable manner the spring holder or support D, the outer end of which is formed into a loop *d*, as seen best in Fig. 2, and which engages over the head *e* of a pad E, which fits within the rubber rim C, and this pad is designed to be held against the body or the wound with more or less pressure, which is regulated by means of a slide F, mounted upon the bars of the frame and adapted to press upon the support D to press the pad with greater pressure as the slide is moved toward the end of the frame. One, two, or more pads G may be provided, and these pads may be relatively fixed or adjustably mounted on the frame. In Fig. 1 the pads are provided with heads *g*, that are fitted between the parallel portions of the frame and are held in their adjusted positions by the slides H, which are moved away from the pads to allow of their being moved to the desired position, and then the slides are moved up to the pads to compress the bars of the frame to hold the pads in their adjusted positions. The pads may be of any other suitable material other than rubber. They may be of felt or of a base covered with chamois or other soft covering. Such a pad is illustrated in the center of Figs. 1 and 2. In Fig. 4 we have shown a sectional view of a pad consisting of the body portion I, of felt or other soft material—such, for instance, as

is usually employed for corn and bunion shields—and the head I′, of rubber, having an enlarged inner portion held within the body portion I, as shown. The bars of the frame A bear upon the body portion and the loop of the support D fits under the flange of the head, as is clearly shown in said Fig. 4.

In Fig. 3 is shown an adjustable frame for a double truss. In this form the frame is made in two parts, the adjacent ends of the wires J of which overlap each other, as shown, and these overlapped ends pass through the loops or clamps K, which are adjusted by means of the screws K′ to clamp and bind the ends of the frame-section together. In this instance a long pad L may be employed. It is adjustably mounted on the frame by means of the heads L′, which are held between the parallel bars of the frame, and sliding clamps M may also be provided for more securely holding the pad in position on the frame.

In Fig. 2 the two end pads G are shown as having substantially circular heads which are fitted in circular enlargements A^2 in the frame. When this construction is employed the pads are not designed to be adjusted. The pads can be quickly and easily removed and replaced by new ones when they become soiled or for any other cause.

Modifications in detail may be resorted to without departing from the spirit of the invention or sacrificing any of its advantages.

We may sometimes employ hard rubber or other suitable material for the pads with or without a covering of felt or other material, the pads being mounted upon the frame in the manner specified. The connecting-strap, when employed, may be connected to the frame in any suitable manner.

What is claimed as new is—

1. The combination of a spring frame having a loop at one end, and a yielding pad around said loop of a spring support mounted on the frame near said end, and a pad carried by said spring support arranged within the pad on the loop, substantially as specified.

2. The combination of a spring frame having a loop at one end, a yielding rim around said loop, a spring support mounted on the frame and extended within said loop and carrying a pad, and a slide mounted on the frame to engage said spring support to regulate the pressure of said pad, as set forth.

3. A truss pad composed of a body portion of soft material and a yielding button having an enlarged head held within the body portion and having a portion protruding from the body portion and grooved circumferentially exteriorly of the body portion to receive a spring wire support, substantially as shown and described.

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

EDWIN O. WARE.
JOSEPH B. WILLAMAN.

Witnesses:
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