(No Model.)

G. WILKINSON.

TRUSS.

No. 416,770. Patented Dec. 10, 1889.

Fig. 1.

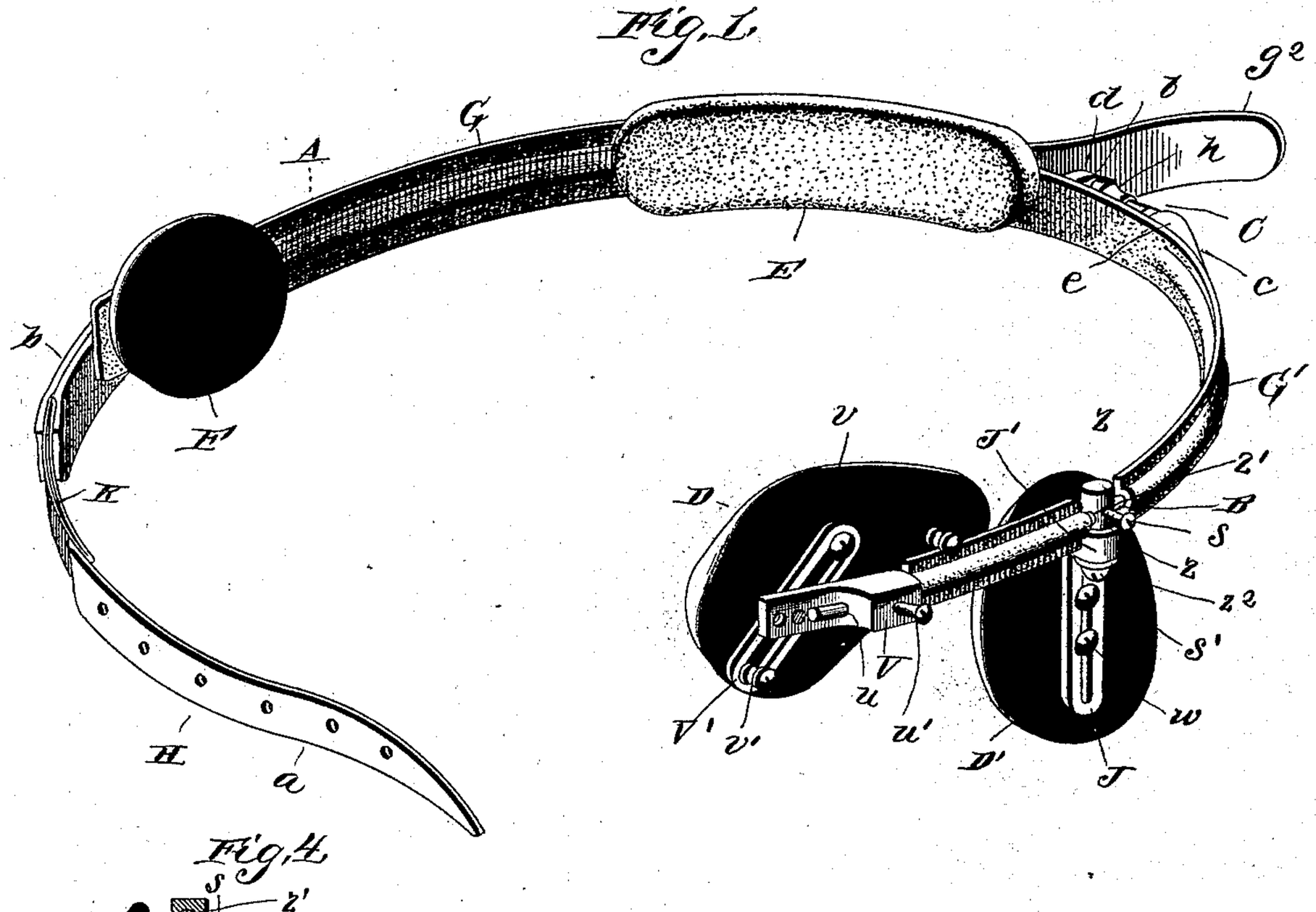


Fig. 4.

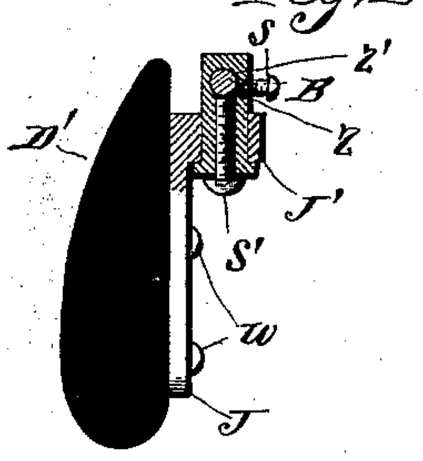


Fig. 2.

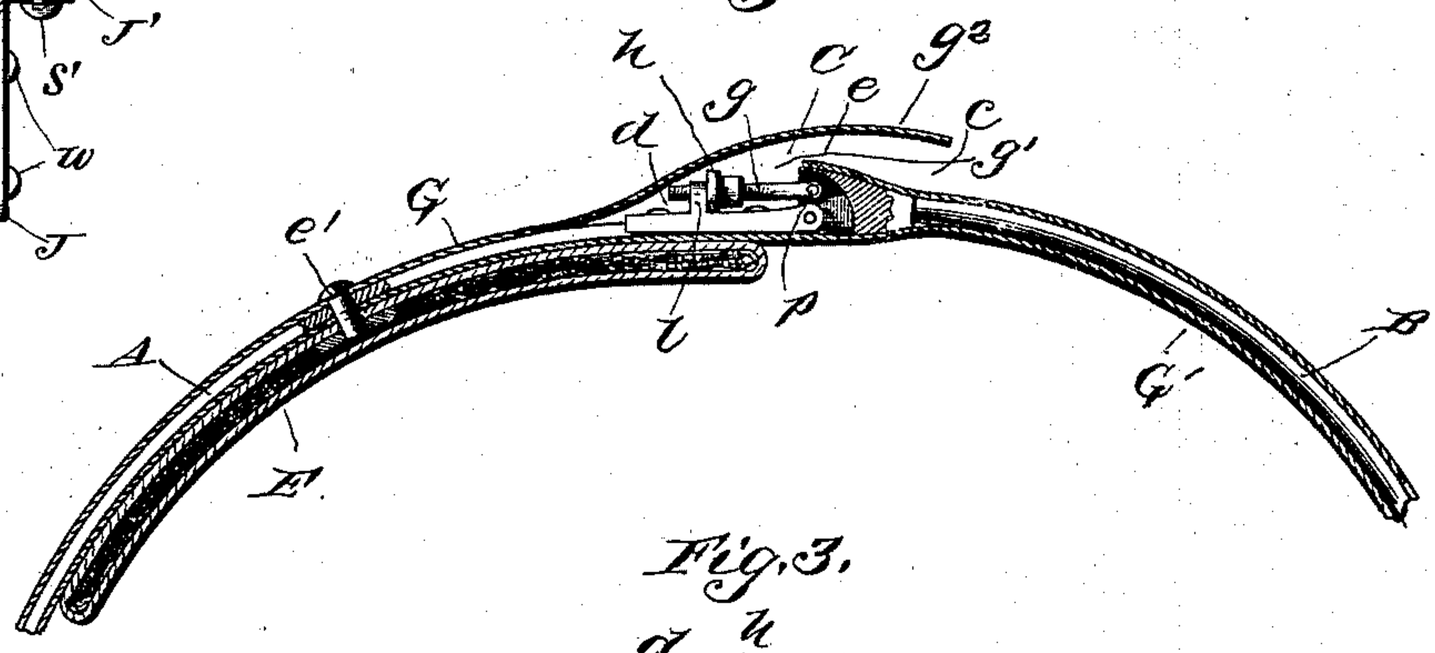


Fig. 3.

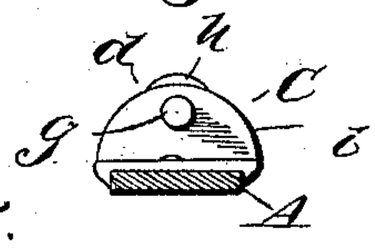
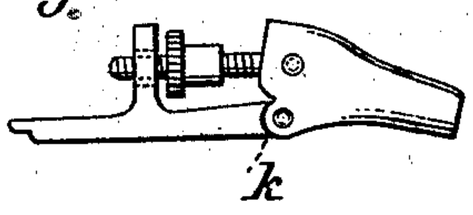


Fig. 5.



Witnesses,
Mary Boykin.
Villette Anderson.

Inventor.
Geo. Wilkinson
by E.W. Anderson
his Atty

UNITED STATES PATENT OFFICE.

GEORGE WILKINSON, OF WELLSBOROUGH, PENNSYLVANIA, ASSIGNOR OF THREE-FOURTHS TO JOHN W. BAILEY AND CHARLES W. RYAN, OF SAME PLACE, AND CHARLES M. MOORE, OF WILLIAMSPORT, PENNSYLVANIA.

TRUSS.

SPECIFICATION forming part of Letters Patent No. 416,770, dated December 10, 1889.

Application filed March 18, 1889. Serial No. 303,735. (No model.)

To all whom it may concern:

Be it known that I, GEORGE WILKINSON, a citizen of the United States, and a resident of Wellsborough, in the county of Tioga and State of Pennsylvania, have invented certain new and useful Improvements in Trusses; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification, and which improvements have especial reference to Letters Patent granted to me June 28, 1887, the same being numbered 365,660.

Figure 1 of the drawings is a perspective view of my truss. Fig. 2 is a horizontal section, partly broken away. Figs. 3 and 4 are sectional details, and Fig. 5 is a detail.

The letter A designates a flat curved spring, and B is a round spring of brass wire. These springs are connected by a hinge device C.

D D′ are the hernia-pads, connected to the round spring.

E is the inside lumbar cushion, secured to the flat spring and extending longitudinally along its inner wall to protect the body from any inequality of surface which may exist at the joint on account of the adjustment.

F is the rubber cushion at the end of the flat spring.

G G′ are the cover-sections, and H is the strap having a section of elastic rubber K between its outer portion *a* and its inner part *b*, which is pivoted to the flat or band spring.

The hinge device C consists of the parts *c* and *d*. The part *c* is made in tapering form arched at its broader portion *e*, which is made in hooded or cup-like form to receive and cover the pivot end of the threaded stop-guide *g*, which is provided with an adjustable stop-nut *h*. The lateral walls of the part *e* are made convex when they engage the end of the part *d*, as indicated at *k*, so that there will be a close joint at all times whatever be the adjustment and no projecting angles to irritate the body. The part *d* of the hinge is channeled in its under or inner side to receive the end of the flat spring A, so that it will be flush with the edges of the plate or part *d*. This part is provided with the perforated stop projection or lug *l*, through which the guide *g* projects and against which the stop-nut *h* bears. The round brass spring is easily bent to any form desired to suit the shape of the body, and it is rigidly secured in the socket of the hinge-section *c* by a rivet.

The elongated cushion E is provided with a small nut-plate within its middle portion to engage the end of the fastening-screw *e′*, which passes through the flat spring A near the hinge and extends from said hinge around the lumbar muscle, protecting the same and rendering the truss easy to wear. The springs are covered by the leather cover-sections G and G′, the former being a long slip cover provided with an opening in its middle portion at *g′* for the hinge and with a flap *g″* to cover said opening. When the hinge-pin *p* is removed, the cover-section G can be readily removed from the springs by slipping it from their ends. The short section G′ can be slipped off over the end of the round spring when the outer holder V of the outer hernia-pad D is removed. This outer or end holder V is pivoted to the middle portion of the double-slotted adjustable plate V′, which is connected to the hernia-pad D by the guide-screws *v* and *v′*. The holder V is a socket-plate having a perforation *u* extending longitudinally through its inner end to receive the end of the round spring B, and said holder can be adjusted on said round spring toward or from its end, being secured in position after adjustment by the set-screw *u′*. The inner holder Z for the inner hernia-pad D′ consists of a journal-piece *z*, having a transverse perforation *z′*, through which the round spring B passes. At the end of the journal *z* is the flange *z″*, and J is the slotted holder-arm, which is provided with the perforated bearing-lug J′, which engages the journal-piece between the flange and the round spring. A set-screw *s* passes through a threaded perforation in the lug J′ to hold the slotted holder-arm to its adjustment on the journal-piece, and a set-screw *s′*

passes through an axial perforation in the journal-piece *z* to the round spring and serves to hold said journal-piece to its adjustment on said spring. The hernia-pad carries the clamp-screws *w*, which pass through the slot of the holder-arm and enable the latter to adjust the pad higher or lower, as may be necessary.

The hernia-pads are reversible and may be adjusted one below and the other above the spring and at any desired angle. The pressure upon the pads is direct, the spring being arranged directly over the pads, and the tendency of the spring to move upward is therefore in a great measure avoided.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

In a truss having a flat spring and a round spring hinged together, the cup-formed socket-piece forming one section of the hinge, provided with the convex lateral joint walls K and having the end of the threaded guide pivoted within its enlarged hooded end *e*, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE WILKINSON.

Witnesses:

JNO. I. MITCHELL,

DAVID CAMERON.