R. E. Dornie,

Truss.

No. 51,108. Patented Nov. 21, 1865.

Fig. 1.

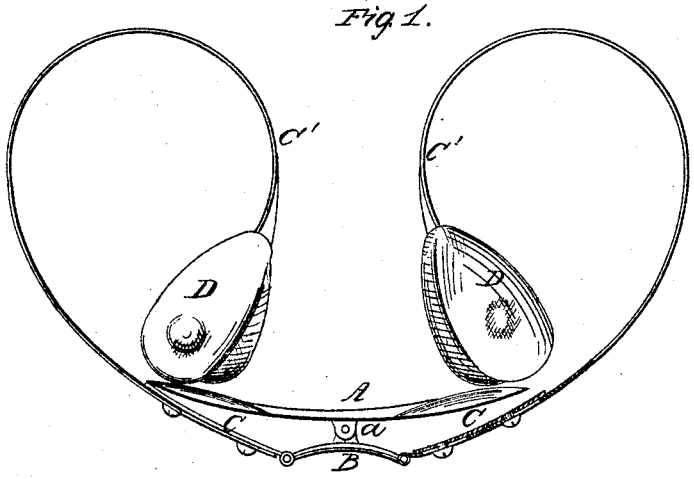
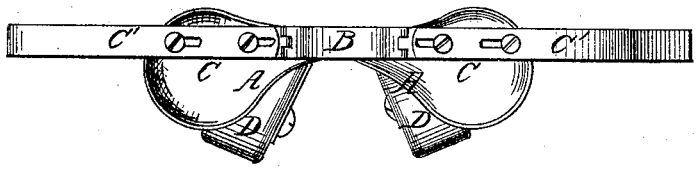


Fig. 2.



Witnesses,
Wm Drewry
Theo Tuech

Inventor.
R E Dornie
By Munn & Co
Attys

UNITED STATES PATENT OFFICE.

ROBERT E. DOWNIE, OF DELAVAN, WISCONSIN, ASSIGNOR TO HIMSELF AND LEONARD E. DOWNIE, OF SAME PLACE.

IMPROVEMENT IN TRUSSES.

Specification forming part of Letters Patent No. **51,108**, dated November 21, 1865.

To all whom it may concern:

Be it known that I, ROBERT E. DOWNIE, of Delavan, in the county of Walworth and State of Wisconsin, have invented a new and Improved Truss and Supporter; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a plan or top view of this invention, partly in section. Fig. 2 is a rear elevation of the same.

Similar letters of reference indicate like parts.

This invention relates to a truss or supporter provided with a back pad which is hinged to a rocking bar, in combination with spring-arms hinged at their rear ends to said rocking bar, and provided with pads of a peculiar shape, in such a manner that by the combination of said rocking bar, back pad, and spring-arms a uniform pressure is exerted on the rupture, and at the same time the body of the patient has a free and unrestricted motion in all directions or forms and in any position without irritation from any part of the truss and without danger of causing a displacement of the truss. The front pads are so formed as to avoid all downward pressure, and to give a more direct and upward pressure and from a lower point than other pads in use, and also prevent the rupture from pressing out below the pad.

A represents the back pad, which may be made of steel, malleable or wrought iron, or of any other suitable material, and covered with buckskin, rubber, or other material, or it might be made of hard rubber; but I use, by preference, steel covered with rubber. This pad is connected to the adjusting or rocking bar B by a hinge-joint, *a*, which may be made of malleable or wrought iron, or of any suitable material, and which connects by suitable joints, *b*, with the arms C. To these arms are connected the springs C′, which should be made of steel sufficiently light and elastic, and covered with buckskin, rubber, or other suitable material, although the covering is not essential to the working of the instrument and may be dispensed with. Said springs are connected to the arms by screws *f* passing through slots *g*, so that they can be extended or shortened, and that they can be readily adjusted for patients of different stature. They bear on their outer ends the pads D, which are so formed that all downward pressure is avoided, and that they act from a lower point and in a more direct manner than other pads heretofore used in trusses or supporters.

It will be readily understood that the same arrangement is applicable to an abdominal supporter as well as to a truss; and I do not wish to confine myself, therefore, in the application of the back pad and adjusting-bar, merely to a truss, but reserve the right to apply the same to supporters or other similar devices.

I claim as new and desire to secure by Letters Patent—

1. The back pad, A, and rocking bar B, applied in combination with the springs C′ and pads D, substantially as and for the purpose set forth.

2. The hinged arms C, in combination with the rocking bar B, back pad, A, and springs C′, constructed and operated substantially as and for the purpose described.

ROBT. E. DOWNIE.

Witnesses:
MARY C. HIGBEE,
L. HUNTINGTON.