

UNITED STATES PATENT OFFICE.

JOHN R. ALEXANDER, OF MONTREAL, QUEBEC, CANADA.

IMPROVEMENT IN TRUSSES.

Specification forming part of Letters Patent No. **212,344**, dated February 18, 1879; application filed July 26, 1878.

To all whom it may concern:

Be it known that I, JOHN R. ALEXANDER, of the city of Montreal, Province of Quebec, Dominion of Canada, have invented a new and useful Improvement in Trusses; and I hereby declare that the following is a full, clear, and exact description of my invention, reference being had to the accompanying drawings, forming a part of this specification.

The object of my invention is, first, to attach to the pads of a truss a portable and adjustable pressure-plate, which is so constructed as to support and constantly press the pads inward and upward without the use of supporting-straps, so inconvenient and annoying to the wearer of trusses; secondly, to provide for a hollow hinge, whereby the ends of the truss-band are prevented from bending up and striking into and getting entangled in the wearer's clothes.

Referring to the drawings, Figure 1 is a front view of my improved truss. Fig. 2 is a plan view. Fig. 3 is a sectional view taken on line *xx* of Fig. 2. Fig. 4 is a detached view of the plate. Fig. 5 is a sectional view taken on line *yy*, Fig. 2. Fig. 6 is a detached plan sectional view of the hinge. Fig. 7 is an end view of the hinge.

A is the supporting-band, constructed of two pieces, *a* and *a*¹. The rear ends, *a*² *a*³, of this band are inserted into the hollow ends, *b* *b*¹, of the hinge B, and held therein by the set-screws *b*² *b*³.

The object in fastening the end in this manner is to allow the band to be shortened and lengthened, according to the size of the wearer.

The object of making the ends of the hinge hollow is, first, to allow the ends *a*² *a*³ of the band A to be adjusted, as hereinbefore stated; secondly, to prevent the ends of the hinge from bending up and striking into the wearer's clothes.

The front ends, *a*⁴ *a*⁵, of the band A are held together by the clasp E, which consists of the two hollow ends or guide-pieces *c* *c*¹, which are held together by the side pieces, *c*² *c*³. In the center, between the inner ends, *c*⁵ *c*⁶, of the hollow guide *c* *c*¹, is placed the movable spring-catch *c*⁷, which is habitually forced upward by the spring *c*⁸. This catch is provided with two projections or prongs, *c*⁹ *c*¹⁰, at its outer ends, which enter corresponding slots or notches *a*⁶ *a*⁷ in the ends *a*⁴ *a*⁵ of the

band A. By this arrangement either ends of the band can be detached.

D is the pad, made of metal and semicircular in shape. It is made hollow, and provided with a hole, *d*, through which enters the stem or axle *d*¹, on the end of which the pad is held by the pin *d*², which allows the pad to move in any direction. This axle *d*¹ is fastened to the band *a*¹ at *a*⁸. To the under side of the pad is fastened by a screw, *d*³, the plate E, shaped as shown in Figs. 1 and 4. Around the inner edge of this plate is a number of holes, *e* *e*, by which the said plate can be adjusted.

The pad D and plate E are habitually forced inward by aid of the spring F. The object of this plate is to hold the pad D in place. When the pad is placed on any ruptured spot, the upper part of the plate E is forced outward by coming in contact with the abdomen, thus causing the pad to be pressed inward and upward and firmly held in place without the aid of straps or any other supports.

The band A is covered with any suitable covering to prevent it from doing injury to the wearer.

I am aware of the patent granted to Edward A. Campbell, No. 175,029, March 21, 1876, and therefore do not wish to be understood as broadly claiming the pressure-plate E.

I am also aware of the patent granted to me June 19, 1877, No. 192,141, and therefore do not wish to be understood as here broadly claiming the insertion of the free ends of a truss-band into a hollow connecting-piece.

Having thus described my invention, I desire to claim—

1. The portable adjustable pressure-plate E, constructed as shown, and provided with holes *e* *e*, in combination with the pad D and spring F, substantially as and for the purpose set forth.

2. The hollow ends *b* *b* of the hinge B, with set-screws *b*² *b*³, in combination with the ends *a*² *a*³ of the bands A, substantially as and for the purpose set forth.

This specification signed this the 9th day of July, 1878.

J. R. ALEXANDER.

Witnesses:

GEORGE R. W. KITSON,
HECTOR MUNRO.