

(Model.)

L. T. J. LUBIN.

SHOULDER BRACE.

No. 245,524.

Patented Aug. 9, 1881.

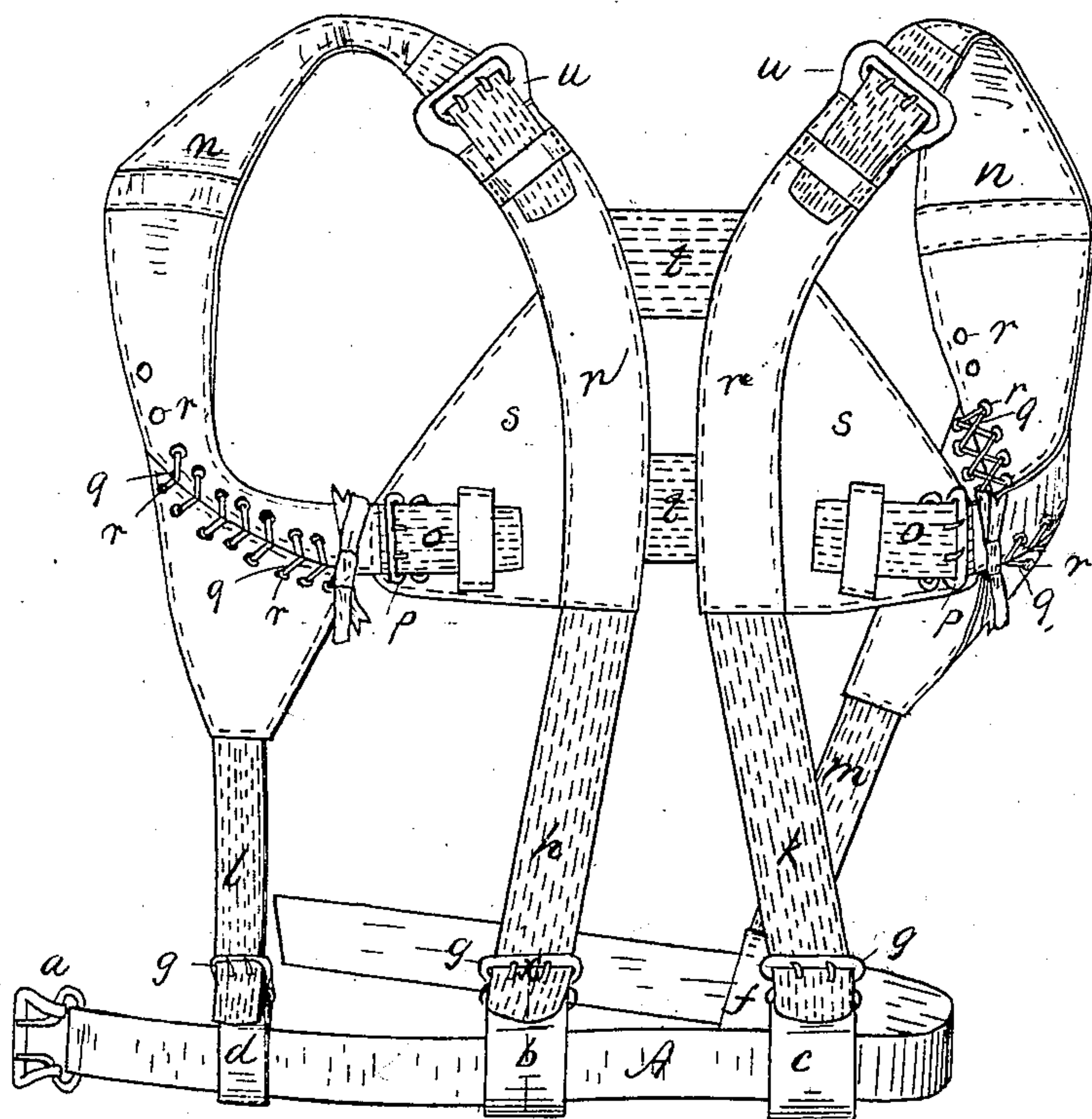


Fig. 1.

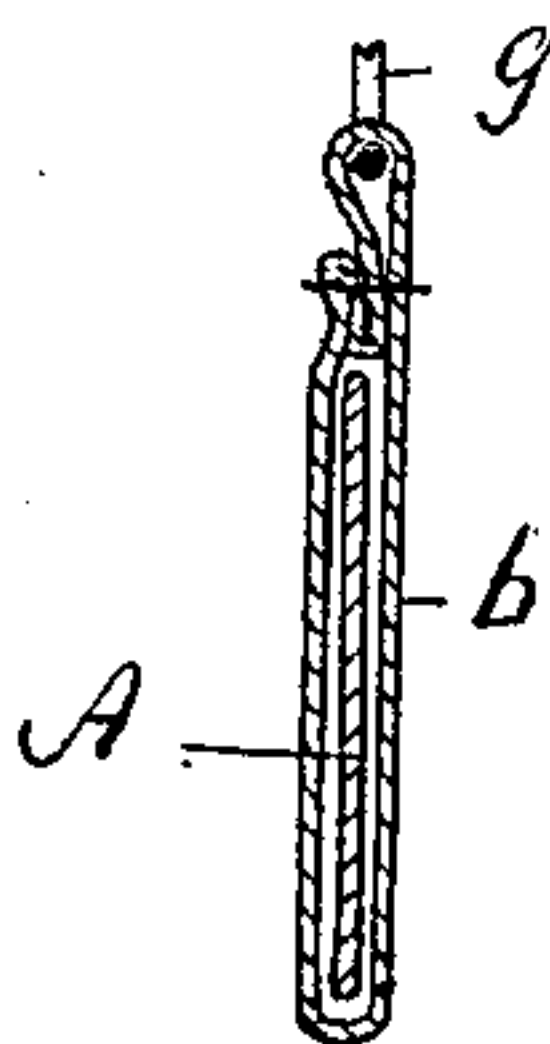


Fig. 2.

Witnesses.

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LEON T. J. LUBIN, OF BOSTON, MASSACHUSETTS.

SHOULDER-BRACE.

SPECIFICATION forming part of Letters Patent No. 245,524, dated August 9, 1881.

Application filed May 11, 1881. (Model.)

To all whom it may concern:

Be it known that I, LEON T. J. LUBIN, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Shoulder-Braces, of which the following is a full, clear, and exact description.

This improved shoulder-brace is composed, in substance, of a waist-belt, back, and front straps, all severally constructed and arranged together, and for the purposes substantially as hereinafter described.

In the accompanying plate of drawings, Figure 1 is a view, in elevation, of my improved shoulder-brace at the back, showing the parts of the brace at one side as in their position of use, and at the other side as spread or opened out somewhat from each other; Fig. 2, a detail cross-section on line *x x*, Fig. 1.

In the drawings, A represents a waistband or belt, provided at one end with a buckle, *a*, for securing its ends together and adjusting its length, as desired. This belt, preferably, is made of non-elastic webbing, but it may be made of elastic webbing and other material which is suitable, if so desired.

b, *c*, *d*, and *f* are four flat loops, preferably made of non-elastic webbing, but which may be made of other suitable material. Each loop is placed upon the waist-belt, and is free to move along its length. These loops each carry a buckle, *g*, and each buckle has an elastic webbing-strap, *h k l m*, respectively buckled to it, and these several straps, with their connecting parts, hereinafter described, constitute the shoulder-brace. The straps *h k* constitute the back-straps, and the straps *l m* the front or side straps, of the brace as the brace is worn. These front and back straps, *l m* and *h k*, are respectively connected at their upper ends by a woven piece of fabric, *n*, which pass over the shoulders and around and under the armpits. The ends of the parts *n* are respectively connected with extension-pieces *s s* on the straps *h* and *k*, through the medium of the elastic webbings *o o* and buckles *p p*, while the straps *l* and *m* are connected with said part *n* by means of lacing-cords *q* which pass through eyelet-holes *r*.

The parts of the brace which pass over the shoulders are widened and are stiffened by a transverse band-spring, to give a better bear-

ing-surface upon the front and upper side of the shoulder, and each back-strap is provided with an extension-piece, *s*, at one side, and such pieces are in position to bear against and cover the shoulder-blades of the wearer, and thus act as a support thereto and give increased leverage and strength to the brace.

The back portions of the parts *n* are connected together by cross-straps *t* of elastic webbing, as shown, and the end of the front straps, which are laced to the shoulder parts *n* of the brace, are widened, as shown, so as to give a longer edge for lacing it to the shoulder parts, a better and more even bearing of the brace under the armpit and at the side of the wearer, and obviate any unpleasant cutting feeling under the arm.

The front straps and shoulder parts, obviously, can be changed as to their relative positions by simply unlacing the cords and moving the front strap, so as to bring it when laced either more to the front or the back of the wearer, and as the front straps are connected by the slide-loops to the waist-belt, obviously such adjustment of the front straps is susceptible of being made at pleasure.

The slide-connection of the several straps to the waist-belt obviously gives a freedom of movement to them, when worn, to accommodate the brace to the movements of that part of the body of the wearer about which it is worn, and also to waists of different sizes.

The shoulder-blade supports *s* may be secured to the back-straps by eyelet-holes and lacing-cords, the same as the front straps are secured to the shoulder-straps *n*, thus enabling them to be adjusted to their support and bearing upon the shoulder-blade.

The parts *n n* which extend over the shoulders can be adjusted in length by means of the buckle-connection *u*.

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

1. A shoulder-brace composed of a waist-belt, A, front and back straps, *l m h k*, connected to the waist-belt by slides *d f b c*, and also connected to each other, and provided with armpit parts *n*, constructed and arranged substantially as described, for the purposes specified.

2. A shoulder-brace composed of a waist-belt, A, front and back straps, *l m h k*, severally connected to the waist-belt by slides *d f b c*, and also connected to each other, and provided with armpit parts *n*, constructed as described, and connected with front straps, *l m*, for the adjustment of the latter relative thereto, all substantially as described, for the purpose specified.
3. A shoulder-brace composed of a waist-belt, A, front and back straps, *l m h k*, severally connected to the waist-belt by slides *d f b c*, and also connected to each other, and provided with armpit parts *n*, connected with the supporting-pieces *s* for the shoulder-blades of the wearer, all substantially as described, and for the purposes specified.
4. A shoulder-brace composed of a waist-belt, A, front and back straps, *l m h k*, severally connected by slides *d f b c* to the waist-belt, and also connected to each other, and provided with armpit parts *n*, constructed and arranged as described, and provided with supporting-pieces *s* for the shoulder-blades of the wearer, all substantially as described, for the purpose specified.
5. A shoulder-brace composed of a waist-belt, A, front and back straps, *l m h k*, and shoulder-straps *n*, provided with the buckle-connection *u*, substantially as described, for the purposes specified.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

LEON T. J. LUBIN.

Witnesses:

EDWIN W. BROWN,
WM. S. BELLOWS.