

(Model.)

C. H. TROTT.
Surcingle.

No. 235,316.

Patented Dec. 7, 1880.

Fig. 1

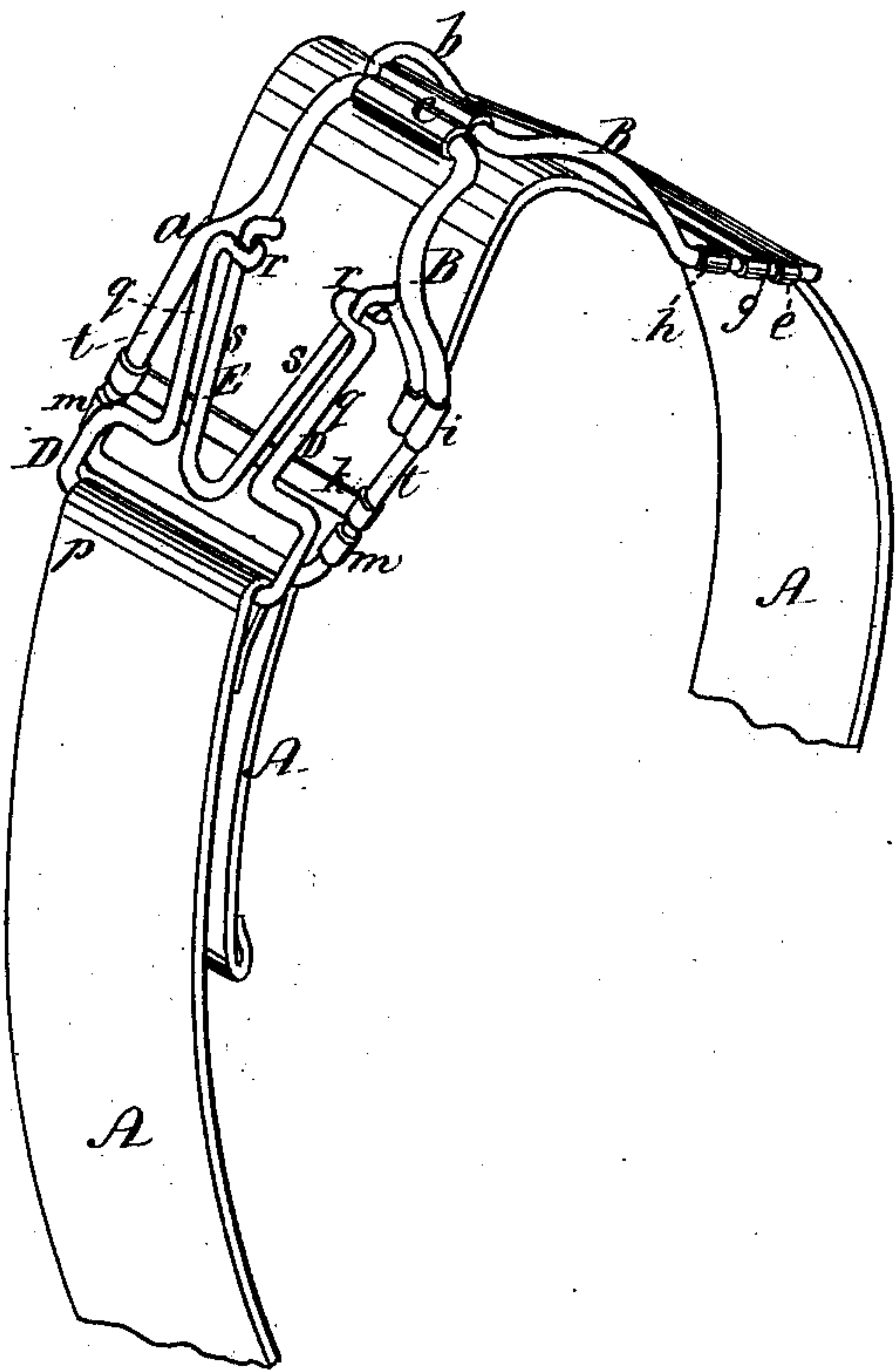


Fig. 2

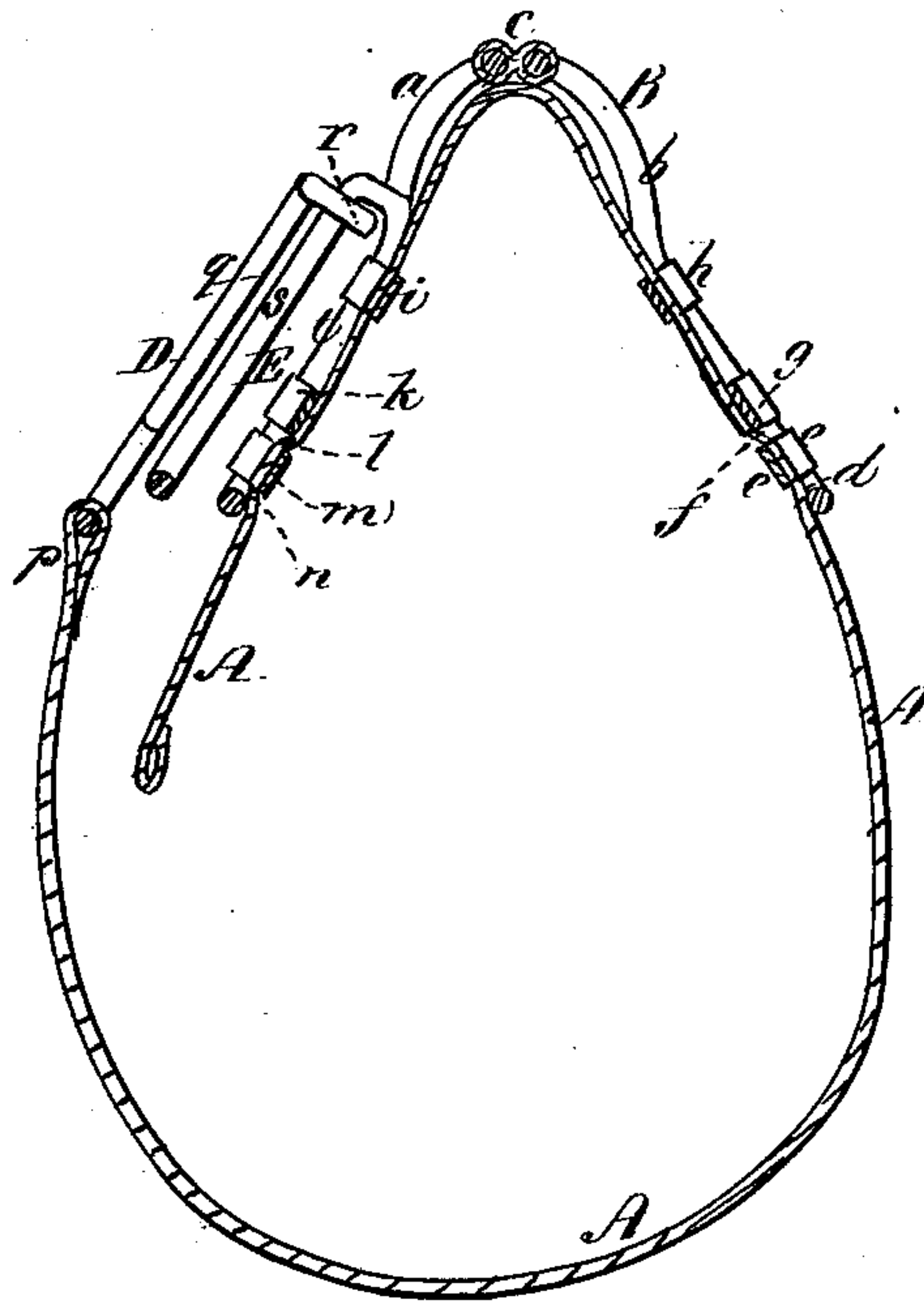
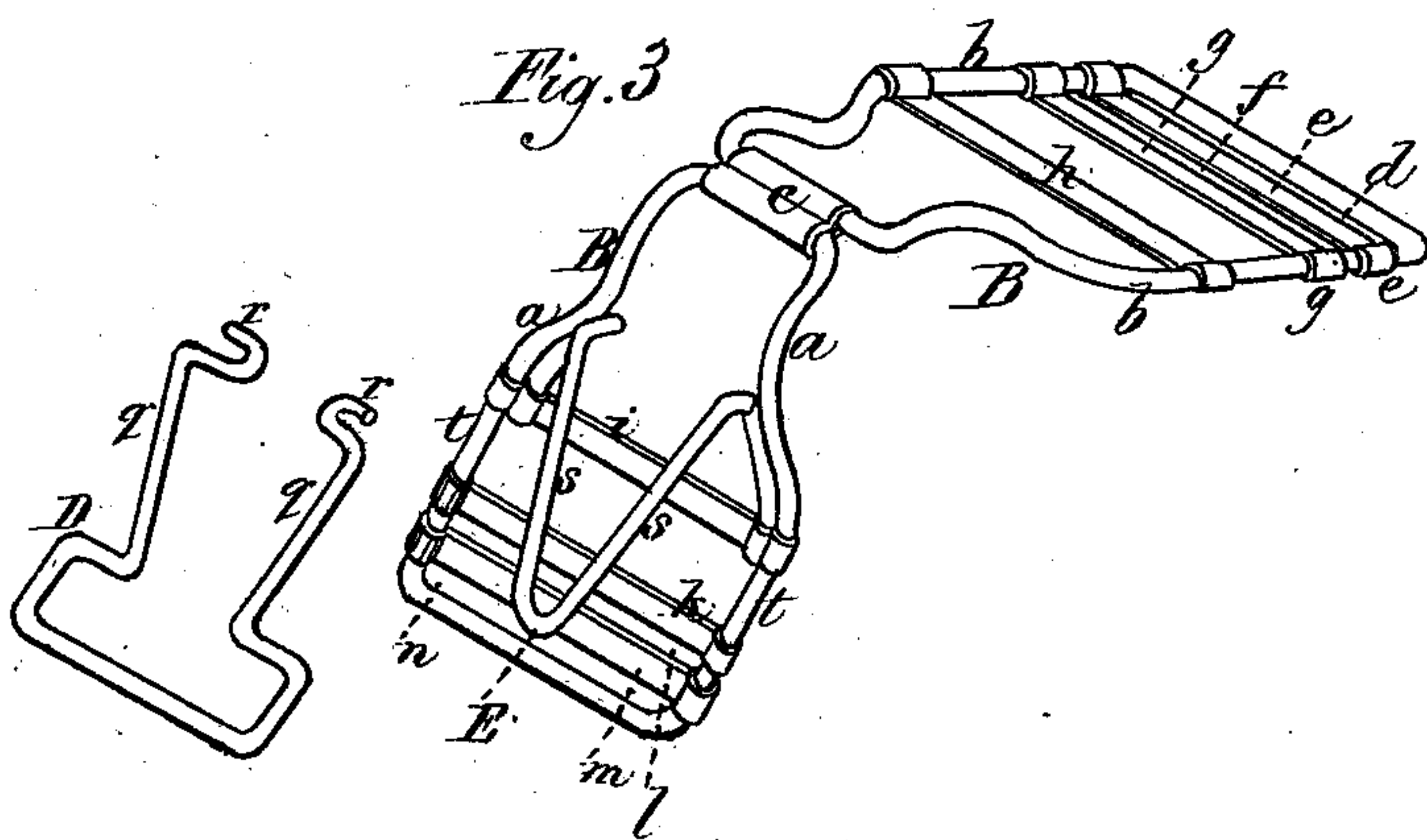


Fig. 3



Witnesses;
W. J. Cambridge
Chas. E. Griffin

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Atty.

UNITED STATES PATENT OFFICE.

CHARLES H. TROTT, OF BOSTON, MASSACHUSETTS.

SURCINGLE.

SPECIFICATION forming part of Letters Patent No. 235,316, dated December 7, 1880.

Application filed October 1, 1880. (Model.)

To all whom it may concern:

Be it known that I, CHARLES H. TROTT, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain Improvements in Surcingles, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a perspective view of a surcingle constructed in accordance with my invention. Fig. 2 is a vertical section through the center of the same. Fig. 3 is a view of the frame and clasp, the girth or webbing being detached therefrom.

My invention relates to certain improvements in surcingles, and has for its object to cheapen their construction without impairing their efficiency, and also to dispense with the padded portion heretofore applied to the back of the horse, while at the same time a convenient means is afforded of readily changing the length of the girth to suit horses of different sizes; and my invention consists in a frame adapted to fit the back of the horse, and having slots or bars, through or over which the girth or band is made to slide in such a manner as to enable its length to be readily adjusted, as required, the friction between the girth and the frame being sufficient to effectually prevent the former from slipping within the latter and allowing the blanket to become loose after being secured upon the horse.

My invention also consists in a fastening device of peculiar construction for securing the surcingle in place upon the horse, as will be hereinafter more particularly described.

In the said drawings, A represents the girth or main portion of the surcingle, to one end of which is attached a metallic frame, B, formed of stout wire and composed of two portions, *a* *b*, bent into the form seen in Fig. 3, and hinged together at the apex *c*, which construction enables the frame to fit and adapt itself to a sharp, round, or flat backed horse, and when not in use to be folded compactly together, thus rendering it less liable to become accidentally bent out of shape.

In attaching the girth A to the frame B it is first passed through the slot *d*, then over the bar *e*, through the slot *f*, and under the

bar *g*, then over the bar *h*, and along the under side of the frame immediately beneath the apex *c*, then over the bar *i* and under the bar *k*, through the slot *l*, over the bar *m*, and through the slot *n*, as seen in Fig. 2, this disposition of the band or girth A through the slots and over the bars of the frame B producing sufficient friction to hold the girth in place and effectually prevent it from slipping or sliding through the frame when fastened in place upon the horse, while it also admits of the end of the girth being readily drawn through the frame in either direction when the surcingle is unfastened, to shorten or lengthen it, as may be required to suit horses of different sizes.

The frame B is easy and comfortable for the horse, and will not in any way chafe or hurt him, while it will, when secured in place, hold the blanket so tightly as to effectually prevent it from working back and getting out of its proper position.

The clasp or fastening which I employ for securing the surcingle upon the horse will now be described. To the end *p* of the girth A is secured a wire clasp, D, which is provided with two diverging spring-arms, *q* *q*, having at their outer ends hooks *r* *r*, which are adapted to fit over the side bars, *s* *s*, of a V-shaped piece, E, secured to or forming a part of the portion *a* of the frame B, the two arms *q* being first grasped in the hand and compressed together sufficiently to enable the hooks *r* to engage with the bars *s*, as seen in Fig. 1, and thus, should the size of the horse increase from change of position or other cause, as frequently occurs, the girth will yield, as the hooks *r* of the spring-arms *q* will slide down the bars *s*, which serve as guides therefor, thus temporarily lengthening the surcingle, while the convergency of the bars *s* will cause the spring-arms to be compressed together, so that when the strain on the girth is relieved the tendency of the arms to spring apart will cause them to automatically slide up the bars *s*, and thus keep the girth at all times tight enough to hold the blanket securely in place upon the horse.

When the clasp is to be unfastened it is simply necessary to grasp the two arms *q* and compress them together, when the hooks *r* can

be readily detached from the bars *s*, and the end of the surcingle thus set free, a fastening device thus constructed being simple and more easily and quickly manipulated than an ordinary buckle.

If desired, the V-shaped frame *E* may be dispensed with and the clasp *D* made to hook directly over the side bars, *t*, of the portion *a* of the frame, and rest against stops thereon; but with the latter construction the clasp will not yield or allow the surcingle to automatically adapt itself to the varying size of the horse, and therefore I prefer to employ the V-shaped piece *E*, as shown.

In lieu of making the frame *B* of wire, it may be made of cast or malleable iron, or other suitable material or composition which will retain its form when bent into shape. Instead of an open frame, *B*, one composed of a plate or plates of metal or other suitable rigid substance, provided with slots or openings for the passage of the girth, may be employed; and although I prefer to make the frame *B* of two portions hinged together, as shown, so that it may more readily adapt itself to the form of the back of any horse, and be folded compactly together when not in use, yet it may be made of a single piece, if desired, without departing from the spirit of my invention.

A surcingle constructed in accordance with my invention presents many advantages over those heretofore in use, among which may be enumerated the following: There being no thick pads, it will be cooler for a horse in warm weather. Being adjustable, it can be readily made to fit the smallest or largest horse without cutting or defacing the girth, while the metallic frame holds the blanket firmly and immovably in place upon the horse with about one-half the pressure on the girth that is required to perform the same work with the old style of pad, strap, and buckle.

When the girth or band becomes worn out, instead of having to discard the entire surcingle, as heretofore, and purchase a new one, it is only necessary to remove the girth or band *A* from the frame *B* and replace it with a new band or piece of webbing, which can be done by any one at a trifling expense, and the surcingle thus rendered as good as new.

If the size of the horse increases on account

of lying down, or in his efforts to rise, or from any other cause, the spring-clasp will readily allow the girth to yield to conform thereto, thus preventing the breakage of the girth or discomfort to the animal; while any subsequent decrease in size will be compensated for by the action of the spring-clasp, which will instantly take up any slack in the girth and keep it at all times tight and secure, thus rendering it entirely unnecessary to make the frequent changes in the size of the surcingle by tightening or loosening it several times a day, as is now customary with persons who look carefully to the comfort and health of their animals.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a surcingle, the frame *B*, formed to fit the back of a horse and provided with slots or bars, through or over which the girth or band *A* is adapted to slide, for the purpose of adjusting its effective length to enable the surcingle to fit horses of different sizes, substantially in the manner and for the purpose set forth.

2. In a surcingle, the frame *B*, composed of two portions, *a b*, hinged together at the apex *c*, to adapt it to fit backs of horses of different shapes, and provided with slots or bars, through or over which the girth or band *A* is adapted to slide, for the purpose of adjusting the effective length of the surcingle, substantially as and for the purpose described.

3. The combination, with the frame *B*, adapted to fit the back of a horse, and the girth or band *A*, applied to said frame and made adjustable therein, of the spring-clasp *D*, with its hooked arms *q*, adapted to engage with the sides of the frame *B*, or a piece attached thereto, substantially as set forth.

4. The combination, with the frame *B* and the girth or band *A*, of the V-shaped piece *E* and the spring-clasp *D*, adapted to catch over the side bars, *s*, thereof, and slide up and down thereon as the horse's body varies in size, substantially as and for the purpose described.

Witness my hand this 28th day of September, A. D. 1880.

CHARLES H. TROTT.

In presence of—

P. E. TESCHEMACHER,
W. J. CAMBRIDGE.