(No Model.)

J. W. SALZMAN.

THILL TUG FOR HARNESS.

No. 582,880. Patented May 18, 1897.

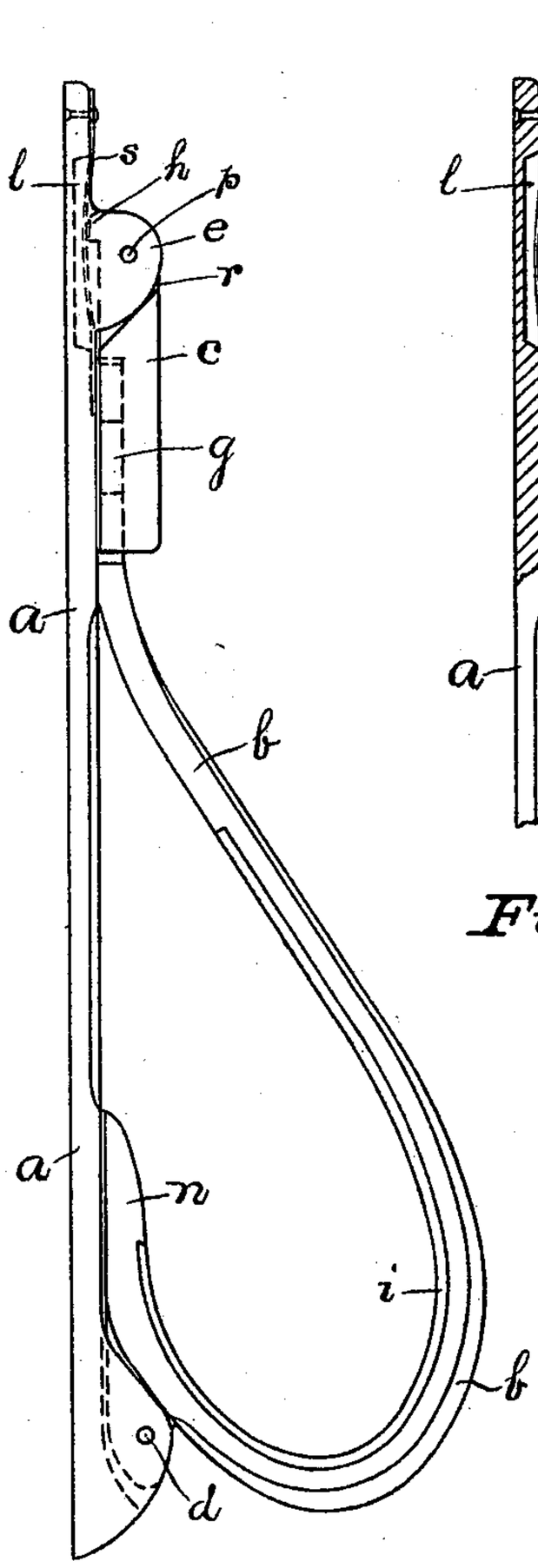

Fig. 1.

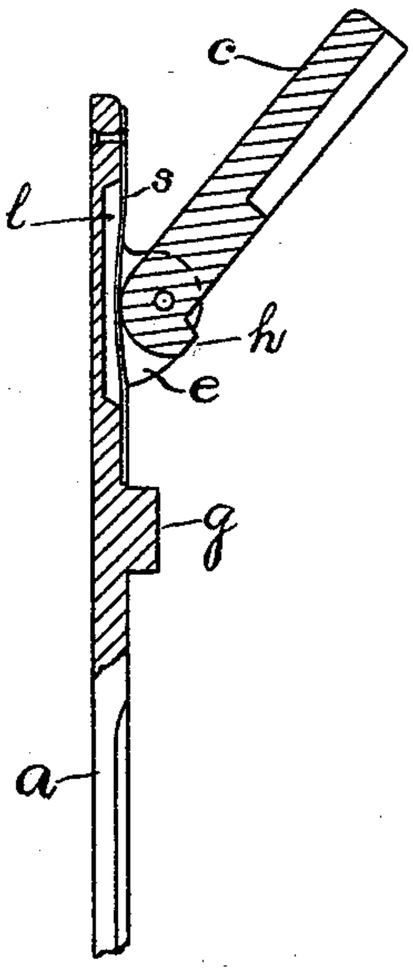

Fig. 3.

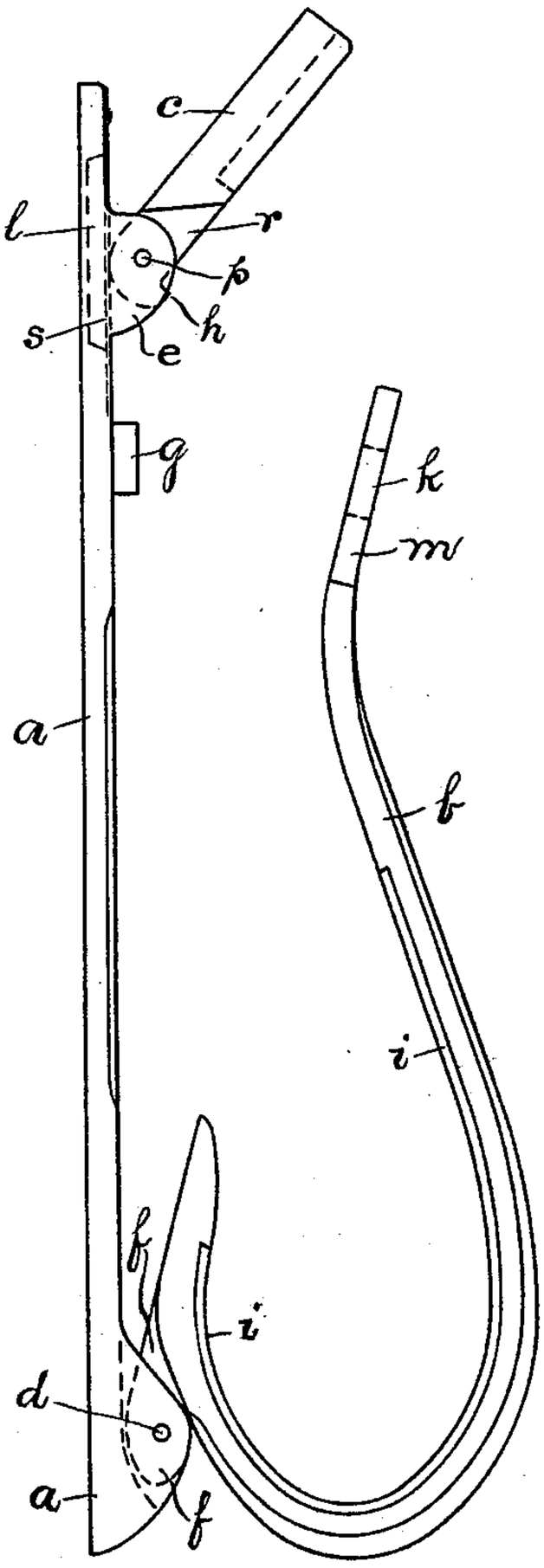

Fig. 2.

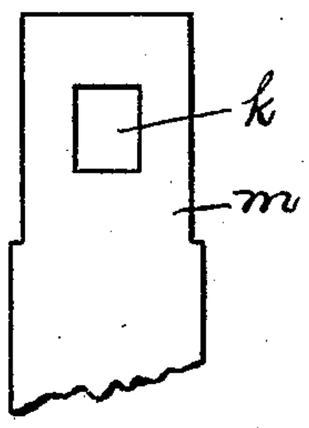

Fig. 4

Witnesses.
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UNITED STATES PATENT OFFICE.

JOHN W. SALZMAN, OF BLOOMINGTON, ILLINOIS.

THILL-TUG FOR HARNESS.

SPECIFICATION forming part of Letters Patent No. 582,880, dated May 18, 1897.

Application filed March 2, 1896. Serial No. 581,487. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. SALZMAN, of Bloomington, in the county of McLean and State of Illinois, have invented certain new and useful Improvements in Thill-Tugs for Harness; and I do hereby declare that the following is a full, clear, and exact description of the invention, which 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 the letters of reference marked thereon, which form part of this specification.

This invention relates to certain improvements in adjustable thill-tugs for use on harness. As now made, thill-tugs for harness are merely small rings or loops of leather attached to the bearing-straps of the harness. In hitching a harnessed horse to a vehicle the ends of the thills must be passed through these rings as now made, and to do this it is necessary to draw the vehicle up from behind, passing a thill on either side of the horse, thereby incurring the danger of frightening the horse and causing injury to the attendant and the vehicle, or if the thills are raised and lowered from above, one on either side of the horse, the vehicle may have to be drawn either forward or pushed back to bring the ends of the thills to the tugs as now made.

The object of the present invention is to overcome these disadvantages by providing a thill-tug the loop of which may be opened at the top to receive the thills as they descend and then closed, confining the thill.

Referring to the accompanying drawings, Figure 1 is a view of the complete thill-tug when in use. Fig. 2 is a view of the thill-tug with the clasp thrown up and the oblong tug-loop opened. Fig. 3 is a vertical sectional view of the upper portion of the invention. Fig. 4 is the upper end of the tug-loop.

In the drawings, *a* is the stock of the thill-tug, which is fastened to the bearing-strap of the harness by buckle or other suitable means. The other parts of the invention are supported on this stock. The oblong tug-loop *b* directly supports the thill. When the thill-tug is in use, the upper end *m* is reduced in thickness and in width and rests against the stock *a*, widening downward to form the oblong tug-loop and curving back to the stock, the end *n* being rounded to an edge at the stock. On its interior surface is a lining *i* of suitable material, as felt or leather, to prevent the other parts from damaging the thills. The clasp *c*, the office of which is to hold the upper end of the tug-loop, is hinged to the stock *a* by the lugs *e* and axle *p*, being shouldered in at *r* to fit the lug. This hinged end is rounded, and terminates on the lower side in the square flat surfaced lug *h*. This rounded end is so adjusted on the axle that its periphery is at all times in contact with the flat spring *s*, depressing it slightly into its bed *l*, so that when the farther or free end of the clasp is raised to an angle of forty-five degrees or more to the stock at the axle *p* the tension of the spring, acting on the end at the axle, throws the clasp up and holds it substantially parallel with the stock. This clasp is thrown up or inverted, as just described, for the purpose of freeing the tug-loop at the end *m*. The oblong tug-loop *b* is secured to the stock at *d* by the ear *f*, and the upper end *m*, being free, may be thrown out from the stock. The lower part, being secured to the stock at *f* turns on the axle *d*, the end *n* following the circumference, opening the tug-loop at the upper part for receiving the thill, reverse the movement last described, and close the loop over the thill. In closing the loop the square lug *g* fits neatly into the opening *k*. After the tug-loop is closed, as described, the clasp *c* should be drawn down toward *m*, turning on the axle *p*. The lug *h*, projecting beyond the surface of the clasp, comes in contact with the spring *s*, depressing it as the clasp is turned down until, as the clasp is closed down against the lug *g* and over the end *m*, the flat end of the lug *h* rests evenly on the spring, and the tension of the spring, acting against the axle *p* through the lug *h*, tends to hold the lower or free end of the clasp *a* firmly against the tug-loop end *m*, preventing it being pulled off the lug *g* by the weight or movement of the thills.

In practice, to operate the invention, the operator raises the clasp *c*, then disengages the tug-loop from the lug *g*, and draws the end *m* away from the stock *a*. Let the thill in, draw the tug-loop back in former position, and turn the clasp down over it.

It is evident that various changes might be

made in the forms, arrangements, and construction of the parts described without departing from the spirit and scope of this invention. Hence I do not wish to limit myself specifically.

What I claim is--

A thill-tug for harness comprising a stock *a* with the clasp *c* attached to the stock by the lugs *e* and turning on the axle *p* and the flat spring *s* fastened to the stock *a* directly under the hinged clasp *c*, and so as to press against the lug *h*, with the tug-loop *b* hinged to the stock *a* at *d* and the ear *f*, the flat end *m* fitting against the stock at the lug *g*.

In testimony that I claim the foregoing as my own I affix my signature in the presence of two witnesses.

JOHN W. SALZMAN.

Witnesses:
A. L. VINEY,
GUSTAV SCHWEIZER.