

(No Model.)

H. SMITH.
HARNESS TUG.

No. 259,777.

Patented June 20, 1882.

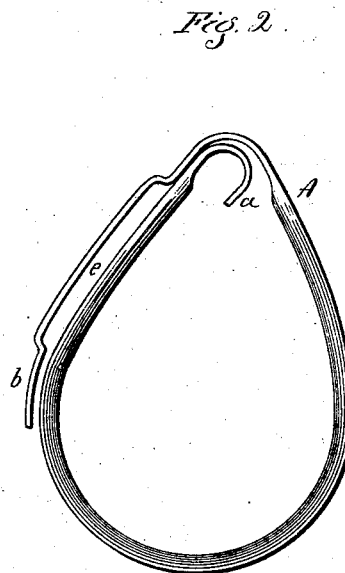
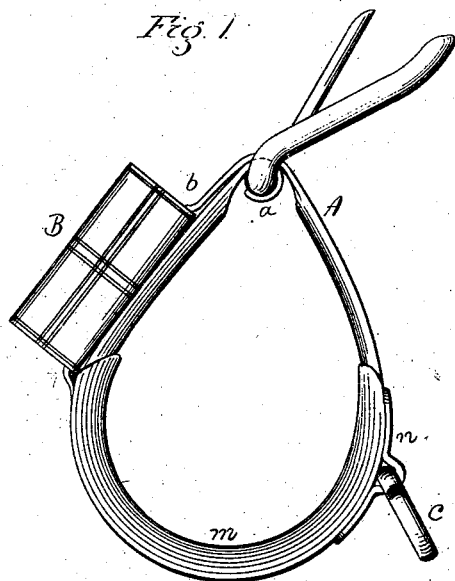


Fig. 3



Fig. 4



Fig. 5



Fig. 6

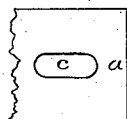


Fig. 7

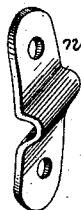


Fig. 8

Witnesses:
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Inventor:
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UNITED STATES PATENT OFFICE.

HENRY SMITH, OF NEW HAVEN, CONNECTICUT.

HARNESS-TUG.

SPECIFICATION forming part of Letters Patent No. 259,777, dated June 20, 1882.

Application filed April 27, 1882. (No model.)

To all whom it may concern:

Be it known that I, HENRY SMITH, a citizen of the United States, residing at New Haven, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Harness-Tugs, of which the following is a specification, reference being had therein to the accompanying drawings, in which—

10 Figure 1 is a view of the metal tug, back-strap buckle, leather loop, and metal loop to which the belly-girt is fastened. Fig. 2 is a view of the metal tug. Fig. 3 is a top view of the tug, showing a slot through which the tongue of the buckle passes. Fig. 4 is a cross-section of the tug and leather lining. Fig. 5 is a view of the plate for holding the metal loop to the tug. Fig. 6 is a view of the metal loop. Fig. 7 is a view of one end of the tug, 20 and Fig. 8 is a cross-section of the tug.

My invention relates to new and useful improvements in harness-tugs; and it consists in a novel construction of the same, as shown in the drawings, and hereinafter described and 25 explained.

To enable others to make my improved tug in the way contemplated, I will give a detailed description of the same.

The tug A, Figs. 1 and 2, is made of an iron 30 bar having a flat and a rounded side, as shown in cross-section in Fig. 8. Its ends *a* and *b* are rolled downward and made flat on both sides. In the end *a* the slot *c*, Fig. 7, is formed. In the end *b* the slot *d*, Fig. 3, is formed, and the end 35 is bent to form the space *e*, in which the leather loop B is clamped between the overlapping ends of the tug. The bar or tug is bent into proper form and so that the slot *d* is over the slot *c*, the end *a* being bent round the bar of 40 the buckle and the end *b* overlapping, as shown in Fig. 2. The tongue of the buckle passes

through the slots *c* and *d*. A rivet passes through the end *b*, tug, and lining *m*, and fastens the parts together, clamping the leather loop B in the space *e*.

The leather loop B has its ends stitched together, is dampened, and pressed in a mold to give it the proper form. The leather lining *m* is formed in a similar way, and is fastened to the tug by the rivets which fasten the end *b* 50 and the plate *n* to the tug. A good tug may be made without the lining; but it is better with it.

The plate *n* is formed to hold the metal loop C and to fit the tug, and is riveted to the tug. 55

The tug may be covered with leather, japanned, or nickel-plated, as desired.

I am well aware that harness-tugs have been made with a leather and metal lining and a strap surrounding both, and that metal tugs 60 of various forms of construction have been made; but

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

The metal tug A, having its end *a* bent round 65 the bar of the buckle, and provided with the slot *c*, through which the tongue of the buckle passes, also having its overlapping end *b*, provided with the slot *d*, through which the tongue of the buckle also passes, formed to make the 70 space *e*, in which the leather loop B is clamped and riveted to the side of the tug, and also having the metal loop C fastened to the tug by the plate *n*, riveted to the tug, substantially as shown and set forth. 75

In testimony whereof I affix my signature in presence of two witnesses.

HENRY SMITH.

Witnesses:

GEORGE TERRY,
DANIEL S. GLENNY, Jr.