

HAME TUG.

No. 294,243.

Patented Feb. 26, 1884.

Fig. 1.

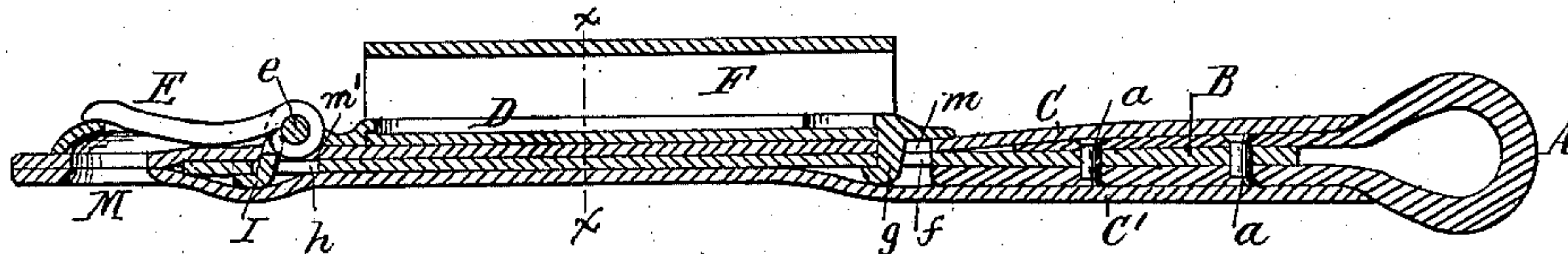


Fig. 2.

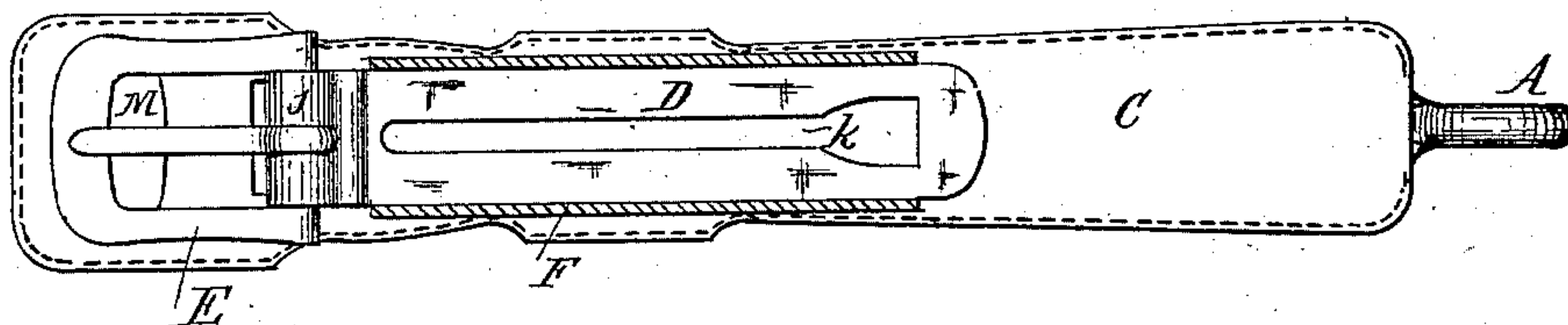


Fig. 3

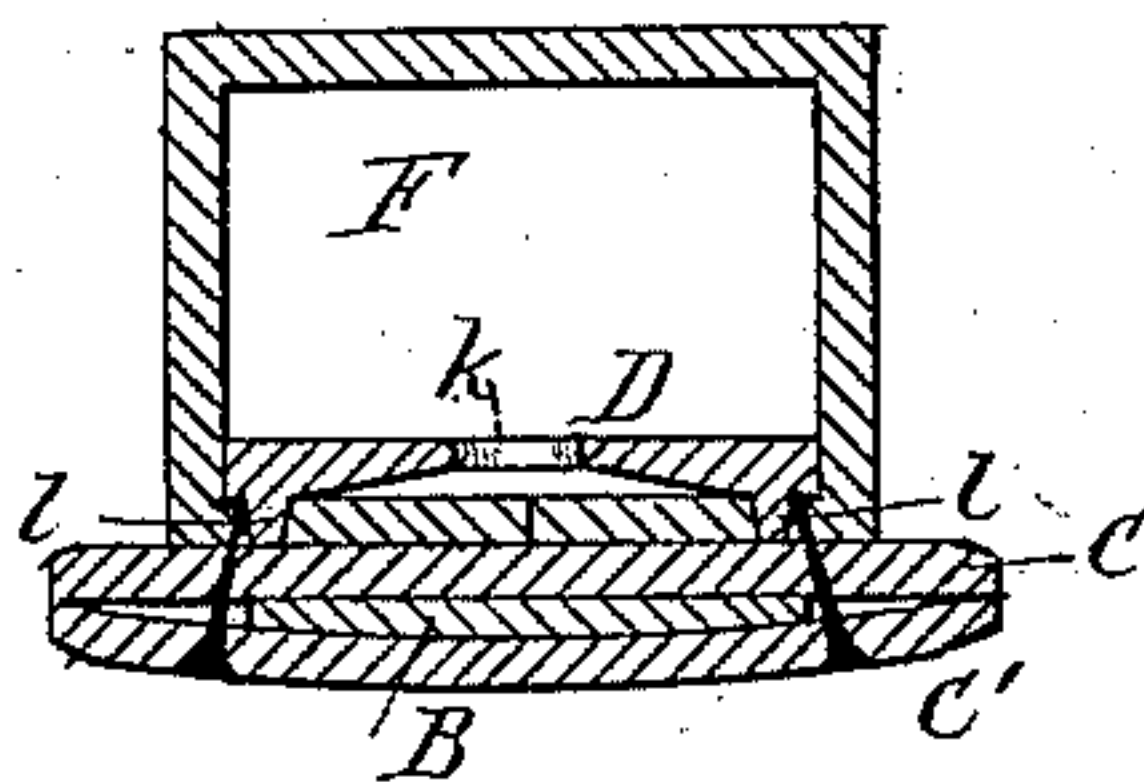


Fig. 4.

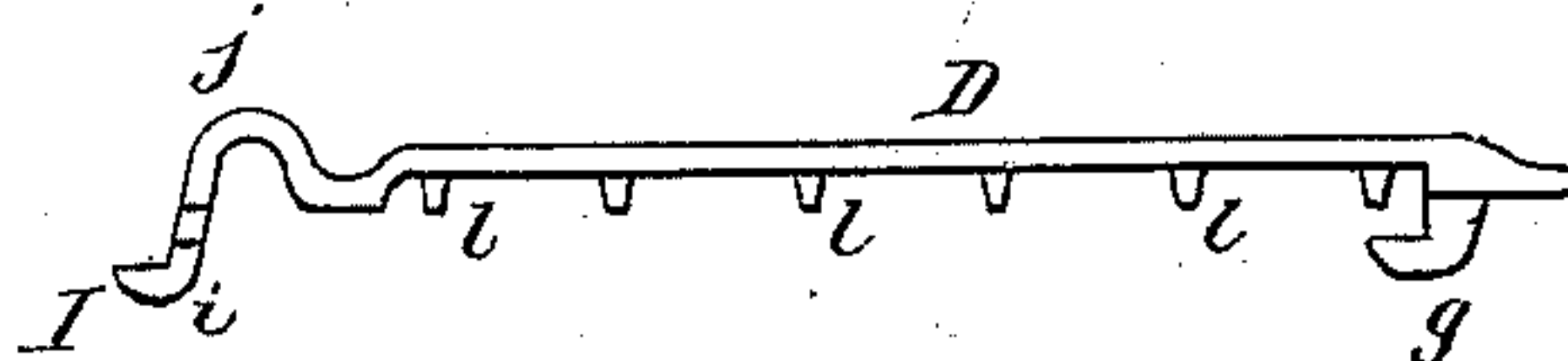


Fig. 6.

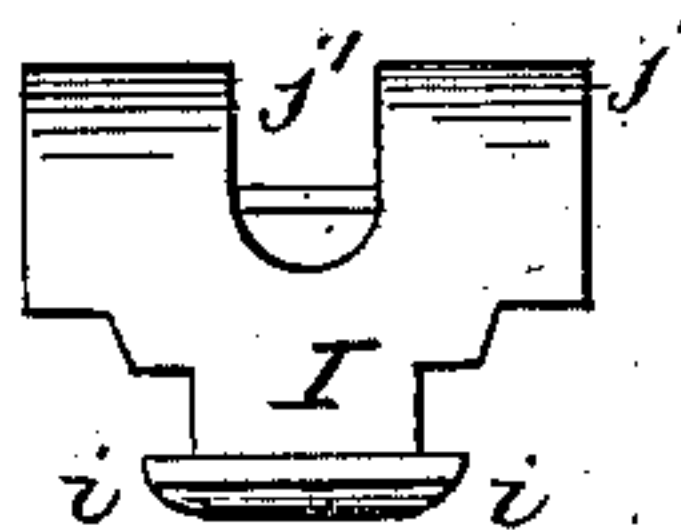


Fig. 5.

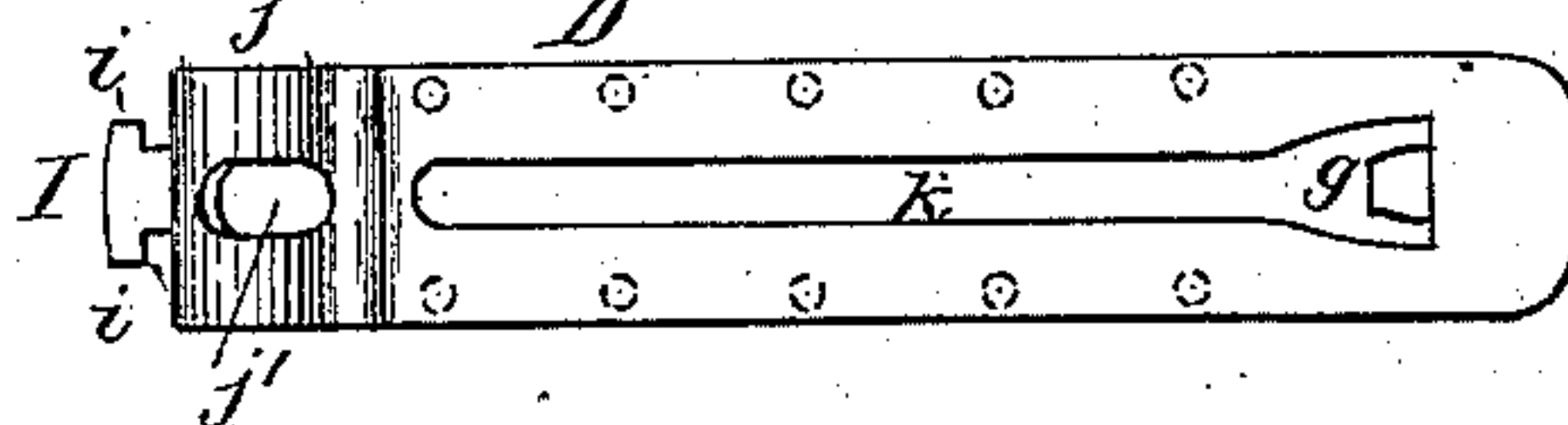


Fig. 7.



Fig. 8.

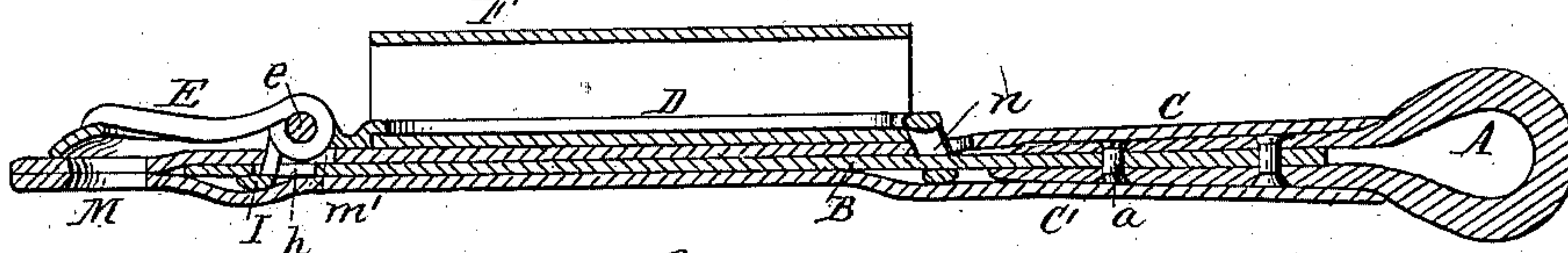
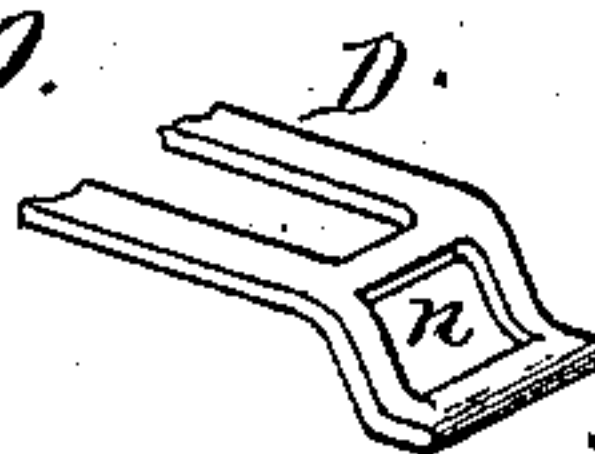


Fig. 9.



Theo. L. Popp.
Geo. E. Pitman ^{Witnesses.}

E. G. Latta Inventor.
By Wilhelm & Bonner.
Attorneys.

UNITED STATES PATENT OFFICE.

EMMIT G. LATTA, OF FRIENDSHIP, NEW YORK, ASSIGNOR OF TWO-THIRDS
TO ADRIAN C. LATTA, OF SAME PLACE, AND HARVEY D. BLAKESLEE,
OF BUFFALO, NEW YORK.

HAME-TUG.

SPECIFICATION forming part of Letters Patent No. 294,243, dated February 26, 1884.

Application filed July 27, 1883. (No model.)

To all whom it may concern:

Be it known that I, EMMIT G. LATTA, of Friendship, in the county of Allegany and State of New York, have invented a new and useful Improvement in Hame-Tugs, of which the following is a specification.

The object of this invention is to produce a strong, durable hame-tug of elegant appearance, which can be produced at less expense than heretofore, and in which the leather is relieved from the strain; and in which the trace-buckle and the loop are removably attached, so that they can be readily replaced when necessary.

My invention consists of the improvements in the construction of the hame-tug which will be hereinafter fully set forth, and pointed out in the claims.

In the accompanying drawings, Figure 1 represents a longitudinal section of my improved hame-tug. Fig. 2 is a side elevation thereof with the loop in section. Fig. 3 is a cross-section on an enlarged scale in line *x x*, Fig. 1. Fig. 4 is a side elevation of the coupling-plate. Fig. 5 is a plan view of the same. Fig. 6 is an elevation of the rear end of the coupling-plate on an enlarged scale. Fig. 7 is an elevation of the hame-clip and draft-bar. Fig. 8 is a longitudinal section of the hame-tug, showing a modified construction of the coupling-plate. Fig. 9 is a perspective view of the front end of this coupling-plate.

Like letters of reference refer to like parts in the several figures.

A represents the hame-clip, and B the draft-bar, secured with its front end between the legs of the clip by rivets *a*.

C C' represent the leather covers applied, respectively, to the outer and inner sides of the draft-bar and hame-clip, and secured together along their outer edges by sewing or stitching.

D represents the coupling-plate, and E the trace-buckle; and F, the loop which is secured to the draft-bar by the coupling-plate.

f represents an elongated opening formed in the draft-bar B, near the rear end of the hame-clip, for the reception of a hook, *g*, formed

at the front end of the coupling-bar D, and having its lower projecting end turned backwardly, so that upon passing the hook *g* through the opening *f* and moving the coupling-plate backwardly the projection of the hook *g* will engage under the draft-bar, and thereby secure the front end of the coupling-plate to the draft-bar, as represented in Fig. 1.

h represents an elongated opening formed in the draft-bar near its rear end, for the reception of a lug, I, formed on the rear end of the coupling-plate D, and provided with lateral projections *i*, which are adapted to engage under the draft-bar when the lug or head I is passed through the opening *h*.

j represents an upward bend formed in the coupling-plate D near the head I, to form a bearing or socket for the front bar, *e*, of the trace-buckle E. The bend *j* extends over the front bar of the trace-buckle, and is provided with a slot, *j'*, through which the tongue of the trace-buckle projects. The opening *h* is made so long that the head I can be passed through the opening in a position at right angles to that which it occupies when the coupling-plate is secured to the draft-bar, and so narrow that the lateral projections *i* of the head I will engage under the coupling-plate on both sides of the opening *h* when the coupling-plate has been turned so as to stand parallel with the draft-bar.

k represents a longitudinal slot formed in the coupling-plate for the purpose of rendering the same light.

l represents spurs formed on the under or rear side of the coupling-plate, along both edges of the same, and adapted to penetrate the inner parts of the loop F.

m m' represent openings formed in the front leather cover, C, for the passage of the hook *g* and head I; and M represents an opening formed in both leather covers C C', underneath the trace-buckle, for the passage of the front end of the trace. The leather covers may be cut out with a die and the openings stamped in the covers at the same time. The front portion of the draft-bar is contracted, so that the draft-bar can be pushed forward between the

leather covers, to expose its front portion for securing the same to the hame-clip. The outer leather cover, C', is preferably skived out thin in the center where the loop F rests in order to prevent it from bulging out when the draft-bar is inserted, whereby the loop is enabled to be drawn closely with its edges to the body of the tug. The draft-bar B is placed between the leather covers C C', and the latter are then sewed together along their outer edges, leaving a small opening at the front end to admit the clip, as represented in Fig. 2, whereby the draft-bar is confined in the sheath formed by the leather covers. The draft-bar is then pushed forward and the clip riveted to its front end. The coupling-plate D is then passed through the loop F and the trace-buckle E placed with its rear bar in the socket *j*. The head I of the coupling-plate is inserted in the opening *h*, with the coupling-plate standing at right angles to the draft-bar. The coupling-plate is then turned parallel to the draft-bar and the hook *g* inserted through the opening *f*. The coupling-plate is then pushed back on the draft-bar until the head I and hook *g* strike the rear edges of their respective openings in the draft-bar, whereby the buckle E and loop F are secured to the draft-bar. The parts are retained in this position when in use by the draft on the trace.

In order to prevent accidental detachment of the parts, the back of the cover C' may be channeled, and a few tacks driven through the loop F and clinched on the inside of the coupling-plate, as represented in Fig. 3.

When it is desired to replace a worn clip or loop, or to change the buckle, it is only necessary to disengage the coupling-plate from the draft-bar by a reverse operation from that described for securing these parts together.

For a cheap grade of tugs the draft-bar B may be made straight, when the edges of the leather covers can be sewed together before inserting the draft-bar.

The draft-bar, having a contracted front end, is preferably formed by drop-forging; but it may also be constructed of malleable cast-iron. In either case the contracted front end is made thicker than the wide body of the draft-bar, in order to give it sufficient strength.

The coupling-plate may be made of malleable cast-iron or sheet metal.

If desired, the trace-buckle may be cast in one piece with the coupling-plate D, or the loop may be formed of cast-iron and cast in one piece with the coupling-plate, to reduce the cost of the tug.

The opening *f* in the draft-bar B may be omitted, and a loop, *n*, may be substituted for the

hook *g*, the draft-bar passing through the loop *n*, as represented in Figs. 8 and 9. In this case the head I is not constructed with lateral projections *i*, but only with a rearward projection engaging under the draft-bar, as the coupling-plate cannot be turned on the draft-bar when the latter is passed through the loop *n*. This construction avoids the weakening of the draft-bar by the opening *f*.

My improved device for attaching the buckle and loop to the draft-bar may be used in breast-collar harness as well as in connection with hame-tugs, and produces a strong durable tug of neat appearance, in which less leather is used than in ordinary tugs, and which can be constructed at less expense, because it does not require skilled labor for its production, and which can be attached to the hame-tug without rivets or screws, and in which all the parts can be easily replaced when necessary, and in which the strain falls upon the metallic parts only, thereby relieving the leather, and permitting the use of thinner leather than heretofore.

I claim as my invention—

1. In a hame-tug, the combination, with the clip A, of a draft-bar, B, a trace-buckle, E, and a coupling-plate, D, provided with fastening devices I, whereby it is attached to the draft-bar, substantially as described.

2. In a hame-tug, the combination of a leather cover or sheath, closed at its edges except at the front end, and a draft-bar and clip seated in said cover, and adapted to be drawn out through the opening at its front end, whereby the clip can be removed without defacing the leather cover, substantially as set forth.

3. The combination, with the clip, of a draft-bar having openings *f* and *h*, and a coupling-plate having a hook, *g*, and head I, substantially as set forth.

4. The combination, with the clip and draft-bar, of a loop and a coupling-plate having spurs adapted to penetrate the loop, and means whereby the coupling-plate is attached to the draft-bar, substantially as set forth.

5. In a hame-tug, the combination, with a draft-bar, B, having an elongated opening, *h*, of a coupling-plate, D, having a head, I, constructed with lateral projections *i*, substantially as set forth.

6. In a hame-tug, the combination, with a draft-bar, B, having openings *f* and *h*, of a coupling-plate, D, having a hook, *g*, a head, I, and a socket, *j*, substantially as set forth.

Witness my hand this 16th day of July, 1883.

EMMIT G. LATTA.

Witnesses:

S. M. NORTON,
F. B. CHURCH.