

E. R. CAHOONE & N. TEAS.  
Hame-Tugs.

No. 211,650.

Patented Jan. 28, 1879.

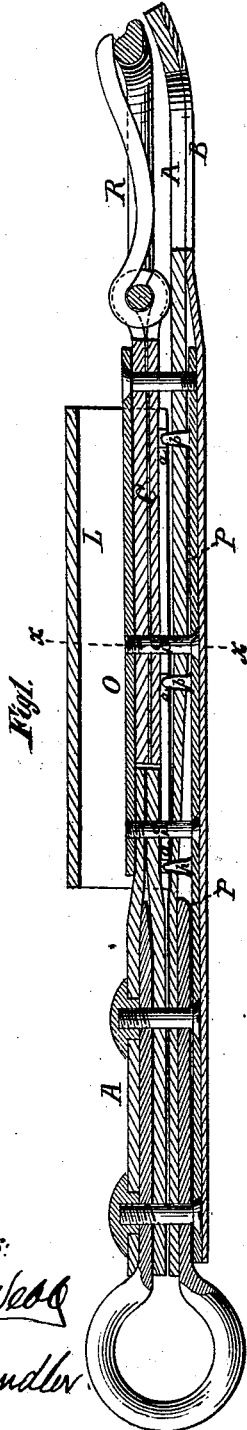


Fig. 2.

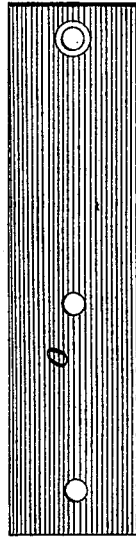


Fig. 3.

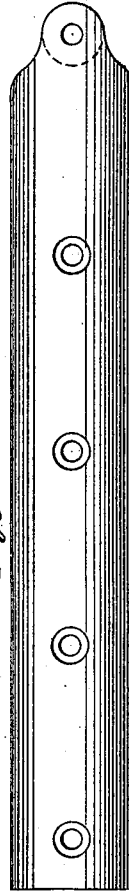


Fig. 5.

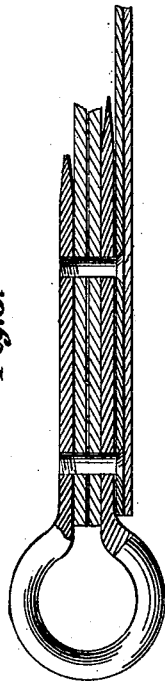
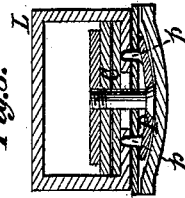


Fig. 8.



Witnesses:  
*Ernest Wood*  
*W. D. Chandler*

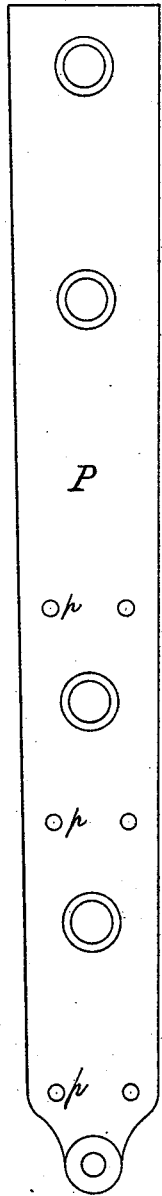
Inventors,  
*Edwin R. Cahoon,*  
*and*  
*Noble Teas,*  
 by atty. *J. Clayton.*

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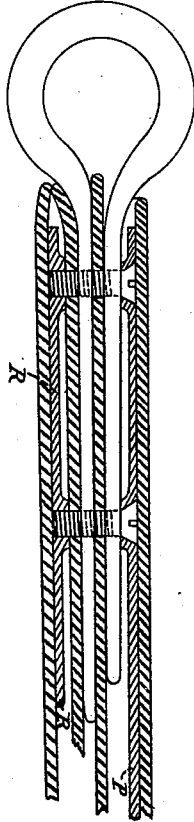
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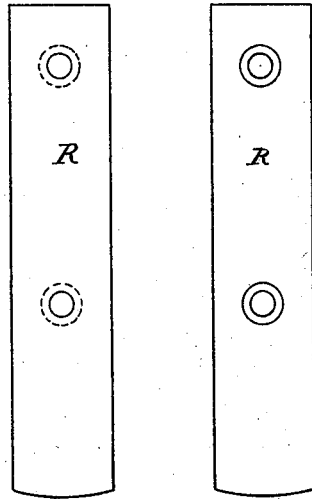
*Fig. 4.*



*Fig. 6.*



*Fig. 7.*



WITNESSES:-

*Ernest C. Wood*  
*W. D. Chandler*

INVENTORS,

*Edwin R. Cahoon,*  
*and*  
*Noble Teas,*  
*by atty. J. Clayton*

# UNITED STATES PATENT OFFICE

EDWIN R. CAHOONE AND NOBLE TEAS, OF NEWARK, NEW JERSEY; SAID  
TEAS ASSIGNOR TO SAID CAHOONE.

## IMPROVEMENT IN HAME-TUGS.

Specification forming part of Letters Patent No. **211,650**, dated January 28, 1879; application filed  
December 9, 1878.

*To all whom it may concern:*

Be it known that we, EDWIN R. CAHOONE and NOBLE TEAS, of the city of Newark and State of New Jersey, have invented a new and useful Improvement in Hame-Tugs, of which the following is a correct specification.

Our invention consists in a hame-tug, intended chiefly as a manufactured article, which is cheaper and stronger than one made in the usual way, and is, in addition, provided with facilities for changing the trimmings, substantially as hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a longitudinal section through the metal, showing the screws and rivet-heads and the arrangement of the different parts when put together. Fig. 2 is a view of the metal plate used inside of the loops, showing the screw-holes for the screw-threads and the counter-sink-hole for the head of the screw that fastens in the buckle. Fig. 3 is a view of the covered side of the concave metal plate, which extends the whole length of the tug, from the bar of the buckle to the end which is fastened to the hame. Fig. 4 is a view of the other side of the plate shown in Fig. 3, showing the pins. Fig. 5 is a longitudinal section of a portion of a tug, showing the screws screwed directly into the clip. Fig. 6 is a similar view, showing the screws screwed into the convexed plate. Fig. 7 shows the convexed plate, which is incased, when finished, between the ornamental end of patent-leather and leather linings, being sewed in and finished before putting the tug together; and Fig. 8 is a view of the cross-section of the tug, cut at *x x*, Fig. 1, showing the different parts of the finished article.

A piece of patent-leather forms the body. The body-piece or top layer, A, including the upper part of a safe under the buckle and under layer, B, is cut of harness-leather about the same size. When the two pieces A and B are sewed together, they constitute the body-leather, and also tug and safe for the buckle R.

The loop L is the same as other hame-tug loops. We prefer to use pressed loops. Holes *a* are punched in the under parts of the loops to receive the pins *p*, which are cast on the

under metal plate, P. Six holes (more or less) may be used. Holes are also made in the loop to receive the screws S, which hold the whole together. A leather strap, C, is cut sufficiently long to go the whole length of the loop, forming a loop under the top layer, which is of patent-leather, and forms the ornamental part of that portion of the tug which contains the clip to which the hames are attached. Said leather or strap C doubles over the bar of the buckle, and has an aperture cut into it, through which the tongue of the buckles passes. It is kept firm in place by a screw, as hereinafter described.

The top piece, A, is a piece of patent-leather cut in any ornamental form, with ornamental stitching covering up the iron clip which is used for attaching the tug to the hames. This top piece A is lined with a somewhat thinner piece of leather of the same shape. Besides the leather parts described, three metal plates are used. Two can be used instead of three, if desired, by having the plate under the loop extend to the end of the tug next to the hame; but we prefer to use them in three parts.

In Fig. 3 is shown the long plate extending from the bar of the buckle to the end or nearly to the end of the tug, where it is fastened to the hames. Said plates are made concave sufficiently to receive the upper parts of the iron clips, also the leather portion under the loops, and to form a better clamp to keep all the parts together when the tugs are finished. Fig. 3 shows the elevated portions of the inner side and sunken portions of the outer sides to make room for the screws, which hold all together. The end of the plate next the buckle is cast sufficiently thick to admit of tapping for the screw which holds in the buckle. This concave plate has cast to it on the inner sides pins *p*, about six, more or less. These pins pass through holes in the top piece, A, and through the loop L, and serve to hold the loop in place without sewing, as in other tugs.

The metal plate O, as seen in Fig. 2, is a flat one, which is used inside of the loop L. This plate is bossed sufficiently thick to be tapped with a thread to receive the screws which hold the front and loop parts together. Any de-

sired number of screws can be used, though two will suffice. On the end of said plate O toward the buckle end is a countersink-hole, on the upper side, to receive the head of the screw which holds in the buckle.

The third plate, R, as shown in Fig. 7, gives form to the ornamental piece of leather which covers the clip. This plate R is thickened sufficiently to receive the threads of the screw which holds the clips. Said plate extends from the loop, or nearly so, to the end of the tug, where it is fastened to the hame.

When these several parts of leather and metal are put in their proper place and screwed firmly together, the top piece, A, and bottom piece, B, are sewed together and fastened up, and the tug is complete, making a manufactured hame-tug which can be taken apart and put together to change the trimmings at the option of the harness-maker.

In this invention, by the use of the long plate, P, the tug is made stiff throughout its whole length, so that no break can take place at the back end of the loop, which frequently occurs in tugs of the usual construction.

What we claim as our invention, and desire to secure by Letters Patent, is—

A hame-tug composed of the leather portions A B, metal plates O R, concave metal plate P, having pins *p*, the leather loop L, provided with holes to receive the pins *p*, the clip, and buckle, all combined and arranged to operate substantially as described.

EDWIN R. CAHOONE.  
NOBLE TEAS.

Witnesses:

ABRAHAM MANNERS,  
EDWARD G. ROBERTSON.