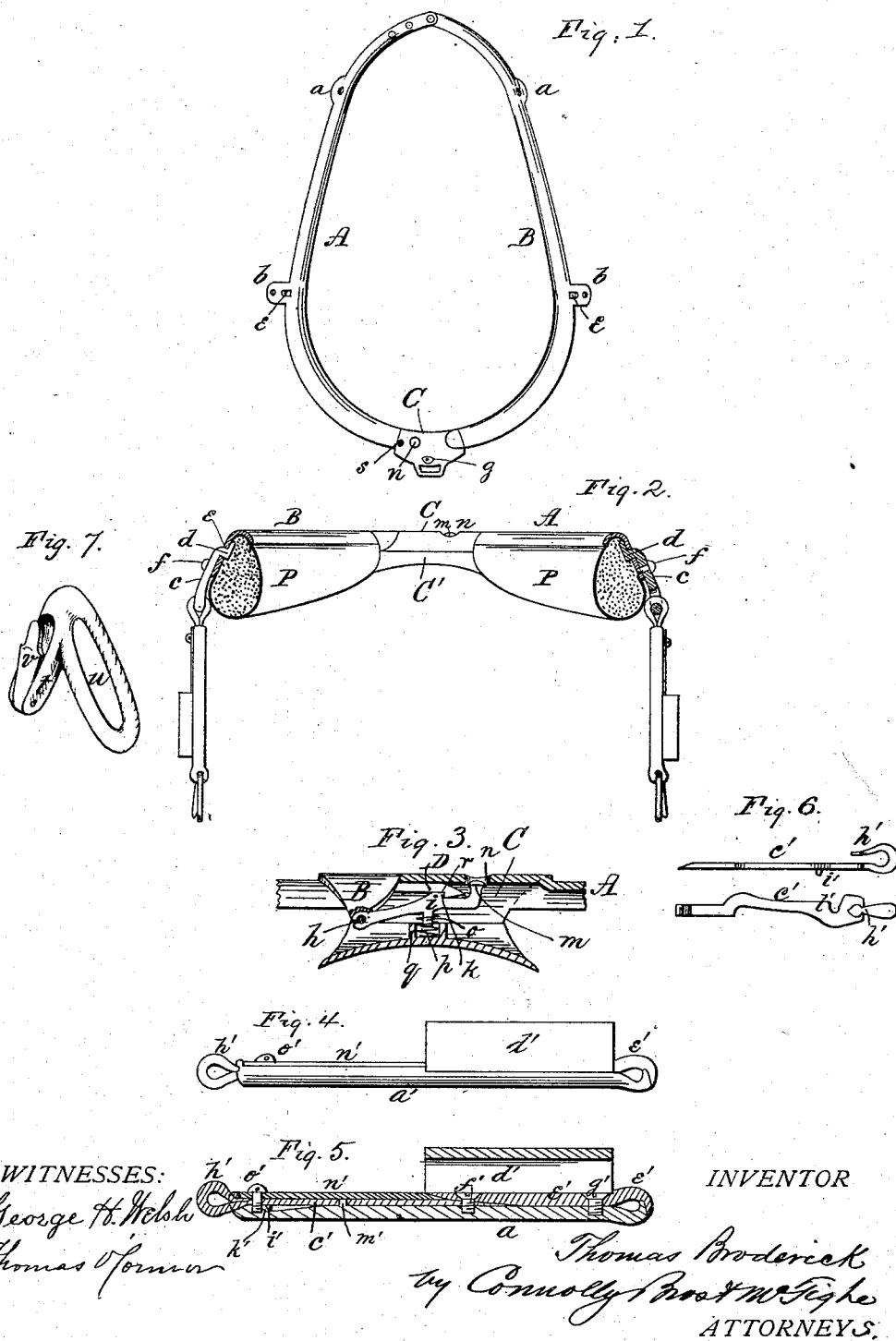


(No Model.)

T. BRODERICK.
COMBINED COLLAR AND HAMES.

No. 264,922.

Patented Sept. 26, 1882.



WITNESSES:
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UNITED STATES PATENT OFFICE.

THOMAS BRODERICK, OF PITTSBURG, PENNSYLVANIA.

COMBINED COLLAR AND HAMES.

SPECIFICATION forming part of Letters Patent No. 264,922, dated September 26, 1882.

Application filed April 17, 1882. (No model.)

To all whom it may concern:

Be it known that I, THOMAS BRODERICK, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Combined Collar and Hames; 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, which form a part of this specification, and in which—

Figure 1 is a front view of the metal frame constituting the hames. Fig. 2 is a transverse section enlarged, showing collar-pads and tug attachments. Fig. 3 is a horizontal section, detached, of the locking device at junction of hames, drawn to a larger scale. Fig. 4 is a side view of the trace-tug. Fig. 5 is a longitudinal section of same. Fig. 6 is a side and top view, respectively, of the tug-hook preparatory to its insertion. Fig. 7 is a perspective view of the pole-strap ring.

This invention relates to certain improvements on my Letters Patent, No. 246,066, of August 23, 1881, whereby the construction of the combined collar and hames is simplified and the whole strengthened.

The malleable cast-iron frames A B are reduced to a smaller width of semicircular section and occupy the front of the collar, and are hinged together at the top, as shown. The frames A B have the ears *a*, which are perforated for the attachment of the hame-rings. They also have the backwardly-extending lugs *b* for the attachment of the hame-lugs *c*. The latter have the L-shaped toe-pieces *d*, which are inserted first into the corresponding openings, *e*, in the lugs *b*, and, after being brought down against the lugs *b*, the hooks *c* are secured by the bolts *f*. In this construction the strain in pulling all comes against the rear shoulder of the L-shaped toe-piece *d*, thus relieving the bolt *f*.

Instead of the single "socket-casting C" of my former patent, I now form one half of the socket integral with the frame A, as shown at C, and the other half, C', I bolt thereto by the screw *g*. Across the end of the part C is a bar, *h*, Fig. 3, and outside this an opening to permit the end D of frame B to enter the socket

C. Upon the bar *h*, I clinch or bend the ends of the keeper *i*, which thus swings on said bar. The keeper *i* then passes backwardly into socket C and is formed with the shoulder *k*, Fig. 3, and thumb-piece *m*, which is made accessible through an opening, *n*, in the socket C, and is also provided with the rear pin or projection, *o*, upon which is guided a spiral spring, *p*, which at the other end rests in the socket *q* formed in the part C' of the socket. The keeper *i* is thus always pressed outwardly. The end D of frame B is formed to match the casting C, and is provided at the part which enters the latter with a hook or recess, *r*, which, when thrust into casting C, passes over and is caught by the keeper *i*, the strain coming on the latter in a more efficient manner than in my former patent. By depressing the thumb-piece *m* the hook *r* is released and the parts A B may be separated. A hole, *s*, in the socket C or frame A receives the shank *t* of the pole-strap ring *u*, Fig. 7, which is held by the spring-tongue *v* striking against the inner face of casting C, and prevents its withdrawal, except when the projecting end of the spring-tongue *v* is adjusted. This adapts the collar and hames to "double harness."

The pads P are secured, as before, by appropriate stitching. The frame A B may be enameled or covered with leather, as desired. Their curved form affords a shoulder, against which the pads P rest and are secured against being forced out of place.

The tug ends, which form a part of the hames, are peculiar. They are made in three parts, so as to be placed on the tug-hooks and secured permanently. The bottom *a'* is formed at one end to curve upwardly, Figs. 4 and 5, so as to afford a seat for the buckle, and at the other end is slotted to allow the insertion of the clip *c'*, which connects with the hame-lug *c*. The buckle is laid in its seat, then the ends or sides of the box-loop *d'* are set in, and a metal strap, *e'*, having at its outer end the remainder of the buckle-seat and at its inner end a slot, is pushed in under a screw, *f'*, which has been screwed into the bottom *a'*, and is then secured by the screw *g'* just inside the outer end of the box-loop *d'*. Previous to this final fastening the clip *c'* is attached to the hame-lug *c*, after which its nose *h'* is bent down to

touch its body. Then it is inserted through the slot in the end of the part *a'* till its end comes under the metal strap *e'* and its nose *h'* gets under the edge of the slot in part *a'*. A lug, *i'*, on the under side of clip *e'* at this point falls behind the projection or screw-socket *k'* on part *a'*, and the shoulder *l'* is behind a lug, *m'*, on part *a'*. Then the leather finish *n'* is set on, with its scarfed end passing under the scarfed end of the strap *e'*, after which the whole is secured together by the two screws *g'* and *o'*, as shown. By this construction that part of the tug is greatly cheapened and a permanent connection secured.

15 I claim as my invention—

1. The combination of frame A, having lug *b* and opening *e*, with hame-lug *c*, having toe-piece *d* and bolt *f*, substantially as described.
2. The combination of frame B, having

hooked or recessed end D, with frame A, having the two-part socket C *C'*, bar *h*, keeper *i*, having shoulder *k*, pin *o*, thumb-piece *m*, and spring *p*, substantially as described. 20

3. The combination, with frame A, having perforated socket C, of the pole-strap hook *u*, having shank *t* and spring-catch *v*, substantially as described. 25

4. The combination of hame-section A, hame-lug *c*, clip *e' h'*, back *a'*, part *e'*, box-loop *d'*, leather or other finish *n'*, projections *k' i' m'*, and screws *f' g' o'*, substantially as described. 30

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

THOMAS BRODERICK.

Witnesses:

T. J. McTIGHE,

THOMAS J. PATTERSON.