No. 648,050. Patented Apr. 24, 1900.

P. H. OWENS.

RELEASING ATTACHMENT FOR HALTER STRAPS.

(Application filed Mar. 30, 1898.)

(No Model.)

Fig. I.

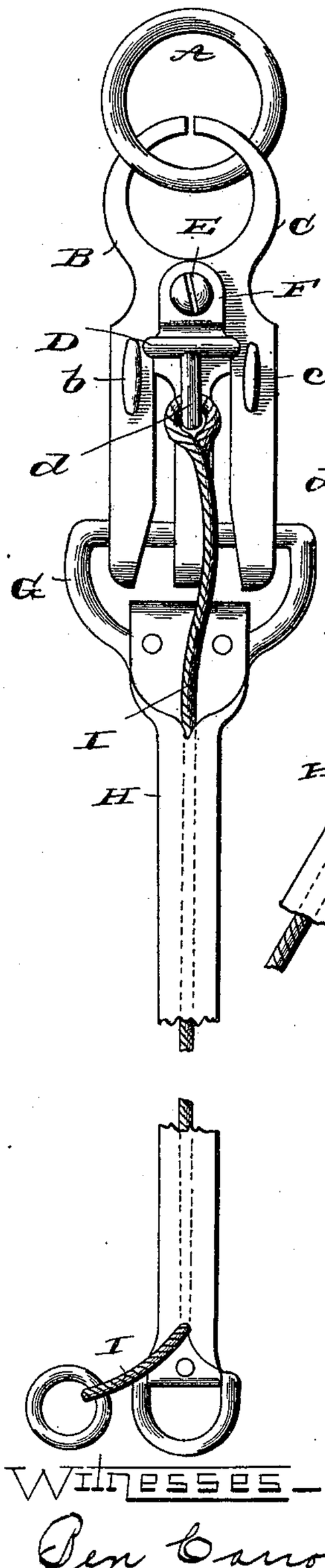
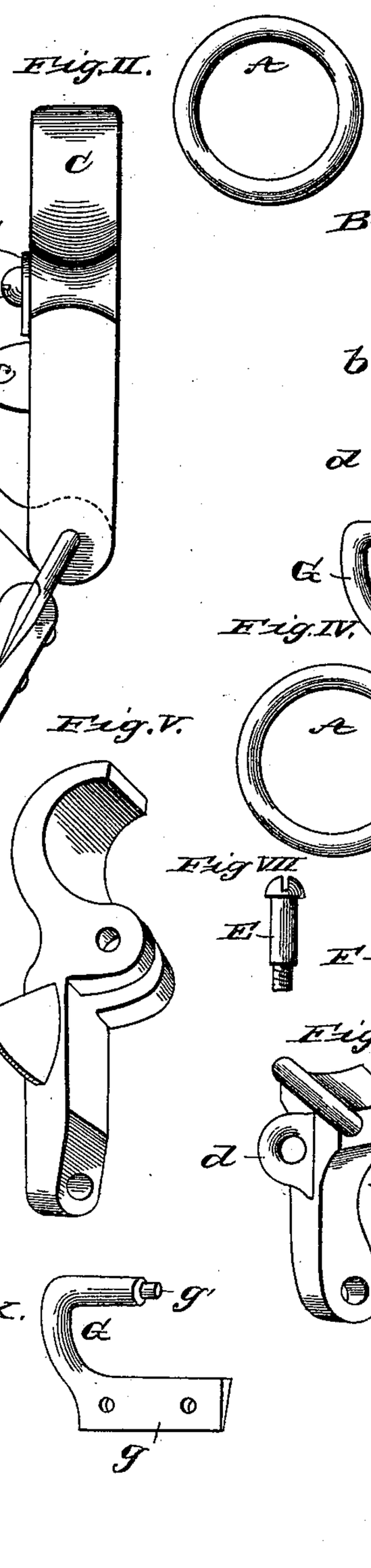


Fig. II.



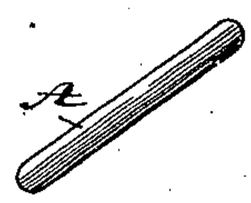


Fig. III.

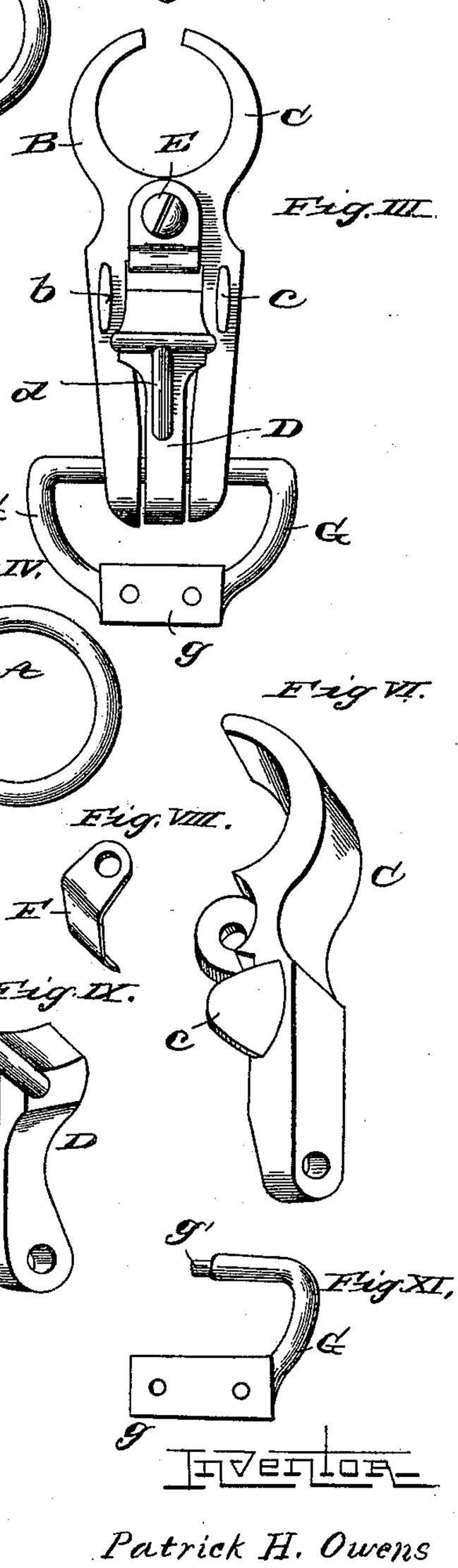


Fig. IV.

Fig. V.

Fig. VI.

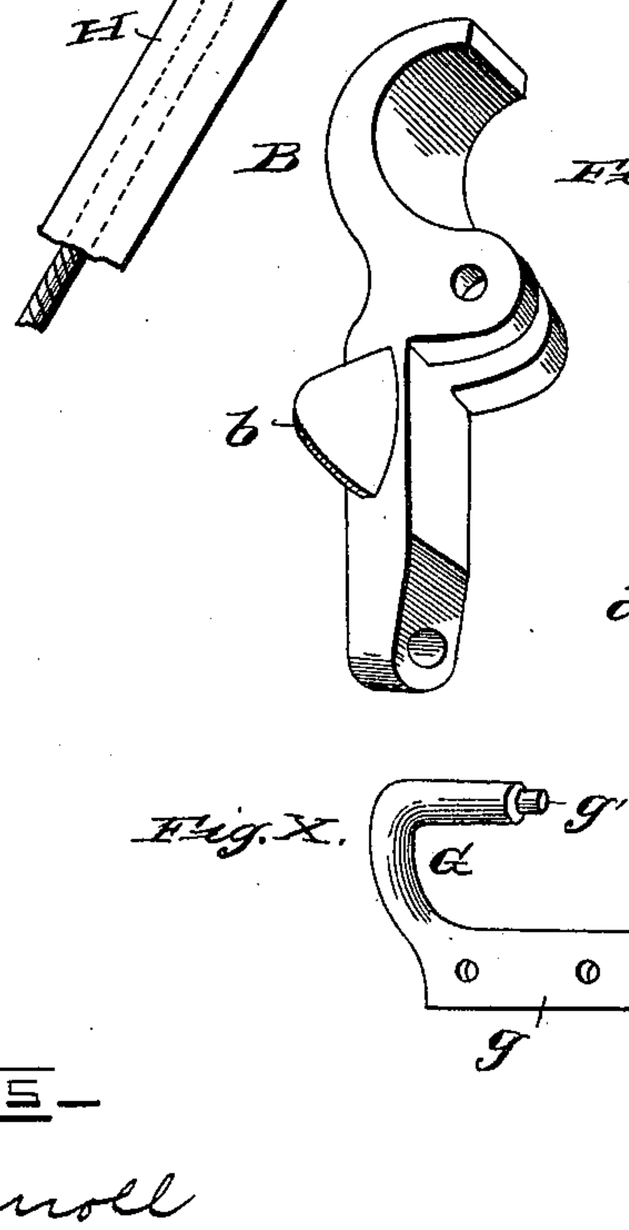


Fig. VII

Fig. VIII.

Fig. IX.

Fig. X.

Fig. XI.

Witnesses—

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UNITED STATES PATENT OFFICE.

PATRICK H. OWENS, OF TOLEDO, OHIO.

RELEASING ATTACHMENT FOR HALTER-STRAPS.

SPECIFICATION forming part of Letters Patent No. 648,050, dated April 24, 1900.

Application filed March 30, 1898. Serial No. 675,779. (No model.)

To all whom it may concern:

Be it known that I, PATRICK H. OWENS, a citizen of the United States of America, and a resident of Toledo, in the county of Lucas and State of Ohio, have invented certain new and useful Improvements in Trip-Release Attachments for Halter-Straps, of which the following is a specification.

My invention relates to improvements in devices for attaching and detaching the halter-straps to and from the halters of horses used in the fire-department, underwriters', and police-stable service; and the object of my improvements is to provide a cheap and simple automatic device for the purpose that will release the strap from the horse's halter at the sound of the gong either by a drop-weight attachment or the electrical opening of the stall-doors, arranged so as to draw a trip in the attaching device of the strap to the ring of the halter. I attain this object by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a face view of the device entire closed. Fig. 2 is a side or edge view of the device open, with a section of the strap and the ring separate. Fig. 3 is a face view of the device open, with the ring out and without the strap. Fig. 4 is a view of the ring separate. Fig. 5 is a perspective view of the left jaw. Fig. 6 is a perspective view of the right jaw. Fig. 7 is the pivot-screw. Fig. 8 is a perspective view of the trip-spring. Fig. 9 is a perspective view of the trip-arm. Fig. 10 is a perspective view of the left section of the strap-bail. Fig. 11 is a perspective view of the right section of the strap-bail.

In all the views like letters refer to like parts.

As seen in the several views, A is the halter-ring, which is held loosely inside of the upper closed curved arms of the jaw-pieces B and C of the device, which jaw-pieces are pivoted together by the screw E, so as to open and release the ring A. The lower straight arm portions of the jaw-pieces B and C are provided with holes in their lower ends, in which are pivoted the two sections G G of the strap-bail. Also the ends *g g* of the pivots on the strap-bail sections G G are shouldered and pivoted, so as to form a hanger for the end of the trip-arm D, so that it hangs and turns between the lower straight arms of the jaw-pieces B and C and at its upper end locks closely between them in such a manner as to prevent them from closing below the pivot-screw E and opening above it, so as to release the ring A. Under the head of the pivot-screw E is secured a spring F, which presses and holds lightly against the upper concave end of the trip-arm D, so as to prevent it from turning out except when it is pulled out by the cable I, which is attached to its upper end in the eyelet *d*. Opposite the eyelet *d*, on each lower straight arm of the jaw-pieces B and C, are projecting guards *b* and *c*, which prevent the trip-arm D from being rubbed or knocked out of its position except when drawn out by the cable I. To the strap-bail sections is riveted a tubular halter-strap H, which also holds the strap-bail sections together by the rivets passing through the holes in the two sections and through the two thicknesses of the strap. The other end of the strap is provided with a ring or other means of attachment, and the cable I passes through the hollow or tubular strap and terminates in a ring or loop, by which to operate it when desired. It is therefore plain to be seen that the jaw-pieces B and C are designed to rock on the pivot-screw E, so that when the upper curved ends are open to release the ring the trip-arm D is pulled out and the lower straight arms are closed against the sides of the trip-arm D at its pivot, and, the reverse, when the lower straight arms are extended and the trip-arm D is in position between them then the upper curved ends are closed and the ring A is retained between them until such a time as it may be desired to release it, when the pulling of the cable I draws out the upper end of the trip-arm D and allows the ring to pull out by the upper curved ends opening. The strap-bail sections G G perform the triple office of a pivoted attachment for the strap, a pivot on which the jaw-pieces can slide and turn, and an independent pivot for the trip-arm D.

Having thus described and illustrated my invention, so that any one skilled in the art could make and operate the same, what I claim as new, and desire to secure by Letters Patent, is—

In a release attachment for halter-straps the combination of the jaws B, and C, piv-

oted together by the screw E, and having upper inward-curved ends for holding the ring of the halter, and lower straight arms, bail-sections G, G, in holes in said straight arms, the trip-arm D, the spring F, bearing against the trip-arm, the hollow strap H, the cable I, passing through said hollow strap being secured to the bail-sections G, G, and the cable I, being secured to the said trip-arm to operate the same, substantially as shown and described.

Signed by me at Toledo, in the county of Luca sand State of Ohio, this 28th day of March, 1898.

PATRICK H. OWENS.

Witnesses:
EDNA DAYAN,
H. R. WADE.