L. D. Cowles,

Harness Buckle,

No. 40,911, Patented Dec. 15, 1863.

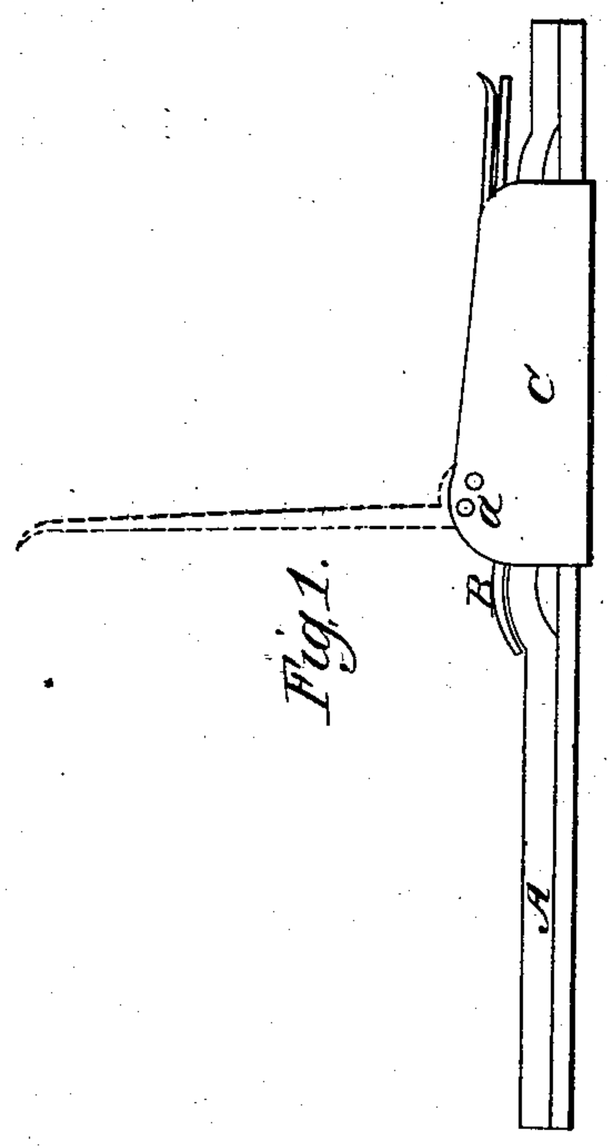

Fig. 1.

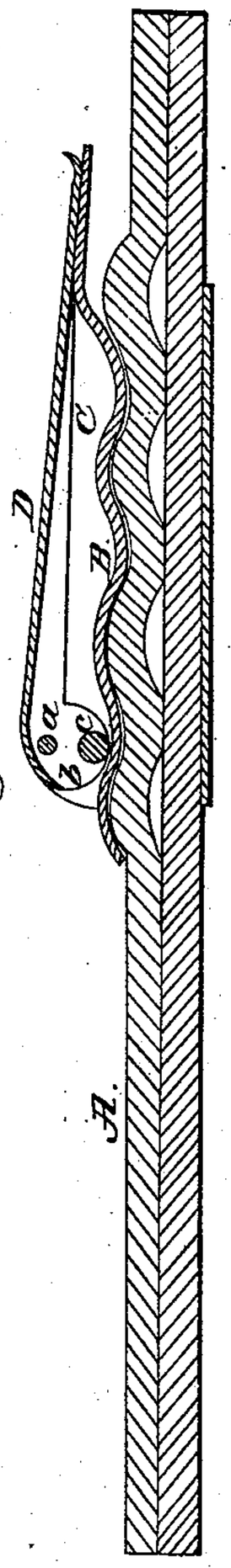

Fig. 2.

Witnesses.

J. W. Coombs.
G. W. Reed.

Inventor.

L. D. Cowles
per
Munn & Co.
attys

UNITED STATES PATENT OFFICE.

L. D. COWLES, OF ARMADA, MICHIGAN.

IMPROVED CLASP FOR HARNESS-TUGS.

Specification forming part of Letters Patent No. **40,911**, dated December 15, 1863.

To all whom it may concern:

Be it known that I, L. D. COWLES, of Armada, in the county of Macomb and State of Michigan, have invented a new and Improved Clasp for Harness Tugs; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side view of my invention; Fig. 2, an enlarged longitudinal section of the same, taken through the center.

Similar letters of reference indicate corresponding parts in the two figures.

The object of this invention is to obtain a simple and efficient device which will supersede the ordinary tug-buckle, and is an improvement on a clasp for the same purpose for which Letters Patent were granted to me bearing date February 17, 1863.

The invention consists in the employment or use of a box provided with a lever and clamp, in connection with a corrugated plate and strap, all arranged substantially as herein set forth.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents one of the straps, which is connected by the device to another one. This strap is crimped or corrugated transversely to form alternate elevations and depressions, as seen clearly in Fig. 2; and B is a metal plate which is crimped or corrugated to correspond with the strap A, and which will fit snugly in contact with its corrugated surface, as shown in Fig. 2.

C is a box, which may be constructed of sheet metal, and has the strap A fitted in it, the flat side of the strap resting or bearing against the back of the box. The outer side of the box is composed of a plate, D, which is fitted on a fulcrum pin or rod, *a*, the latter passing through the sides of the box near one end of the latter, and having a semicircular projection, *b*, at each side of it, between which a friction-roller, *c*, is fitted, said roller being near the edges of the projections *b b*, as shown in Fig. 2. These projections and friction-rollers form a clamp to press down and hold firmly the plate B on the strap A. When the plate B is thus pressed down, it is firmly connected to the strap A.

The plate B in practice is provided with loops and has the other strap attached to it. By this arrangement it will be seen that the strap A does not require to be perforated with holes to receive the tongue of a buckle, as is required in using the ordinary tug-buckle. The plate B also may be readily adjusted on the strap A, so that the latter may be "taken up" or "let out" at pleasure.

I would remark that one lever-plate D will probably be sufficient, although two may be employed if desired, one at each end of the box C, one lever or plate working over the other. I would further remark that different holes may be made in the sides of the box C to receive the pin or rod *a*, so as to compensate for straps A of different thicknesses. In Fig. 1 two of these holes are shown, and it will be seen that they are made in an oblique line, in order that the roller *c* may be brought nearer to or farther from the strap A, as may be required.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The box C, in combination with the crimped or corrugated plate B, and strap A, and the plate or lever D, one or more, provided with the clamps formed of the projections *b b*, and roller *c*, or their equivalents, all arranged to operate as herein set forth.

L. D. COWLES.

Witnesses:

DANIEL ROBERTSON,

M. S. PARTRIDGE.