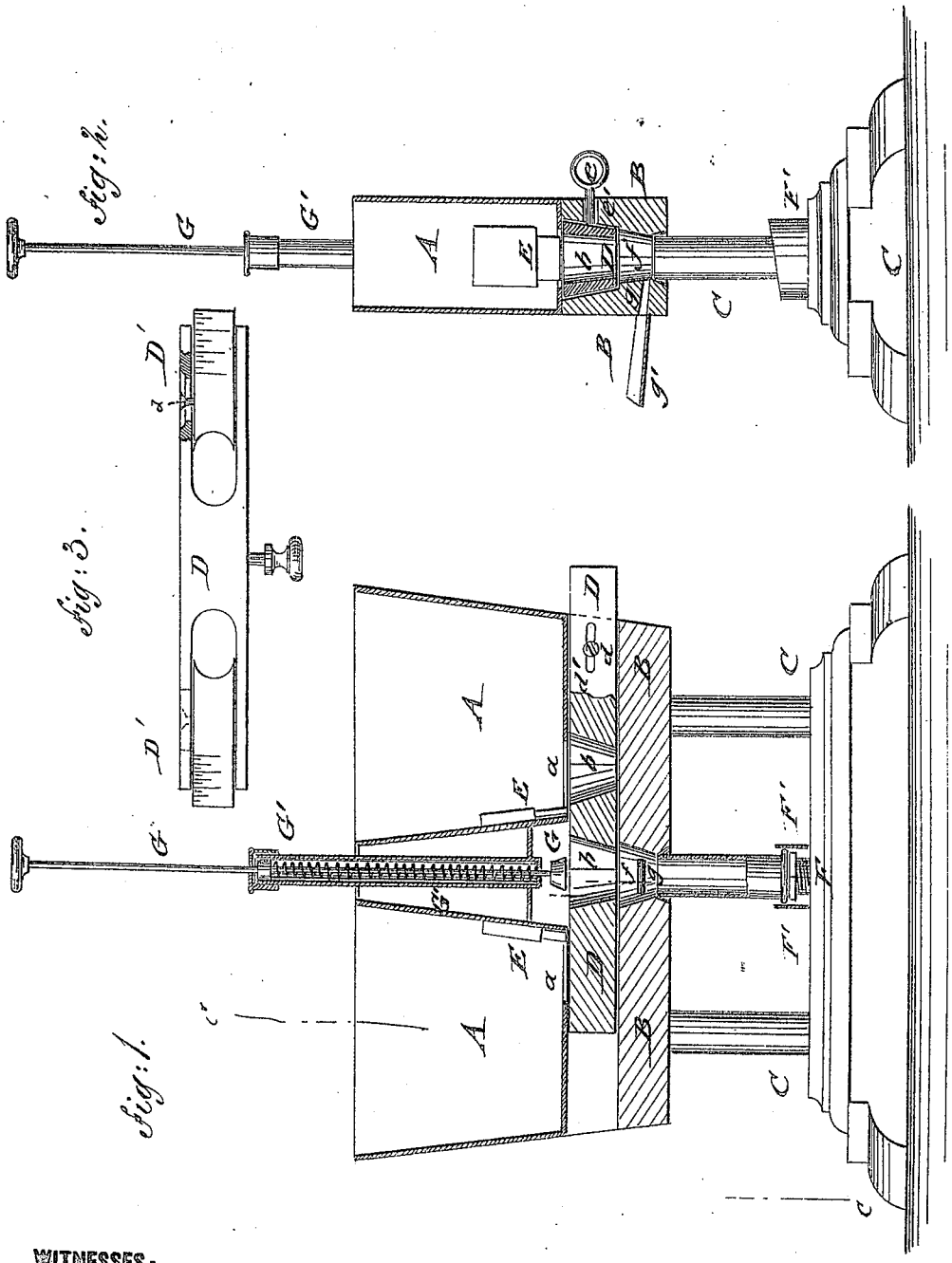
T. P. CAMP.

CARTRIDGE LOADING DEVICE.

No. 183,902. Patented Oct. 31, 1876.



WITNESSES:

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UNITED STATES PATENT OFFICE.

THOMAS P. CAMP, OF STOUGHTON, WISCONSIN, ASSIGNOR TO HIMSELF AND G. W. WISE, OF SAME PLACE.

IMPROVEMENT IN CARTRIDGE-LOADING DEVICES.

Specification forming part of Letters Patent No. **183,902**, dated October 31, 1876; application filed September 2, 1876.

To all whom it may concern:

Be it known that I, THOMAS P. CAMP, of Stoughton, county of Dane, and State of Wisconsin, have invented a new and Improved Cartridge-Loader, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a vertical longitudinal section, and Fig. 2 a vertical transverse section, of my improved cartridge-loader, on line *c c*, Fig. 1; and Fig. 3 a detailed top view of the charging-slide detached.

Similar letters of reference indicate corresponding parts.

My invention relates to an improved device for loading the cartridge-shells of breech-loading shot-guns in a rapid and convenient manner.

The invention consists, mainly, in the particular construction and arrangement of a single continuous slide, having two charging-holes, which, by being moved back and forth in a race, receive the charge of powder and shot from respective powder-and-shot hoppers above, and deliver it to the cartridge-shell below, the same operating in connection with a central plunger and inserting-spout for the wads, and cut-off brushes in the hoppers, for brushing off and leveling the charge in the slide, as hereinafter more fully described.

In the drawing, A represents hoppers—one for powder, the other for shot—which are placed on a recessed trough or race, B, arranged at the top of supporting pillars and stand C. The hoppers A A have bottom openings *a*, through which the powder and shot are charged to corresponding holes *b* of a reciprocating slide, D, that is guided in the recessed race B. The amount of the charge is regulated by an adjustable graduated slide-piece, D′, at each end of the main slide, the slides D′ being set by means of clamp-screws *d*, moving in slots *d′* of the main slide, so as to enlarge or diminish the holes of the slide and take up a larger or smaller charge. Each hopper is provided with a brush or rubber, E, that forms contact with the charging slide-piece, so as to cut off the charge and prevent any powder or shot from wedging or clogging between hoppers and slide, and obstructing the free working of the same.

The slide D is reciprocated in the race by means of a button, *e*, and guide-slot *e′*. That brings each hole of the slide vertically above a central funnel-shaped perforation, *f*, of the trough or race B, to conduct the charge to the cartridge-shell placed below the funnel-opening. The lower part of the perforation *f* is made to flare outwardly, to admit the shell and form a support for the same. This outward flare or lower conical shape of the perforation serves, in combination with the lower bearing or support for the shell, to admit cartridge-shells of different sizes and hold the upper ends of the same concentrically with the opening through the race, thus adapting it to use with shells of different diameters or bore.

An adjustable screw-bearing, F, at the center of the supporting-stand C, and vertically below the perforation *f*, serves to support shells of different lengths, the shell being retained thereon by a guard-spring, C′. Intermediately between the hoppers A A is arranged a spring-acted plunger, G, that is guided by a tube, G′, for the purpose of inserting the wad, that is introduced through an inclined side recess, *g*, and a spout, *g′*, of the trough.

The operation of the loader is as follows: The hoppers are filled with powder and shot respectively, and the charging-slide is drawn to receive a charge of powder. The shell is then placed in position and the slide pushed back, so that the powder is discharged through the central opening in the race into the shell beneath. A wad is then slipped into the side recess of the race, and forced into the shell by a stroke of the plunger. The slide is then moved forward again, and thereby the shot deposited in the shell, and then wadded, as before. The shell is thus charged and wadded by the machine, without being moved or touched, and the charging accomplished in a rapid and reliable manner.

In defining more clearly the limits of my invention, I would state that I am aware that it is not new in cartridge-loaders to employ a

powder-and-shot magazine with two subjacent slides—one for the powder and the other for the shot—which are adapted to receive successively a charge of powder or shot and transfer it to the shell placed centrally below them. But these slides not only require separate and independent manipulation, but powder, shot, or dirt is liable to become packed in between their ends, and so obstruct their movement as to prevent the proper registration of the holes. I therefore disclaim the independent slides, and confine this feature of my invention to a single slide, made with two holes, either of which is adapted to register with the central opening, and which is not liable to the objection referred to attending the use of two separate slides.

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

1. The single continuous slide D, having the two openings *b b*, in combination with the powder-and-shot receptacles A A, having holes *a* and brushes E, and the supporting-race B, having a hole, *f*, substantially as and for the purpose described.

2. The combination of the recessed main slide D with adjustable graduated slide-pieces D′, regulated by set-screws and slots, substantially as herein shown and described.

3. The single continuous slide D, having the two openings *b b*, in combination with the plunger G, the receptacles A, having openings *a*, and the race B, having openings *f*, substantially as and for the purpose described.

4. The race B, having openings *f* with outwardly-flared lower portion, to receive and hold concentrically the different-sized shells, in combination with a supporting-bearing for the shell, substantially as and for the purpose described.

5. The supporting-stand of a cartridge-loader having a central adjustable screw-bearing and retaining guard-spring for shell, substantially as herein specified.

THOMAS P. CAMP.

Witnesses:
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