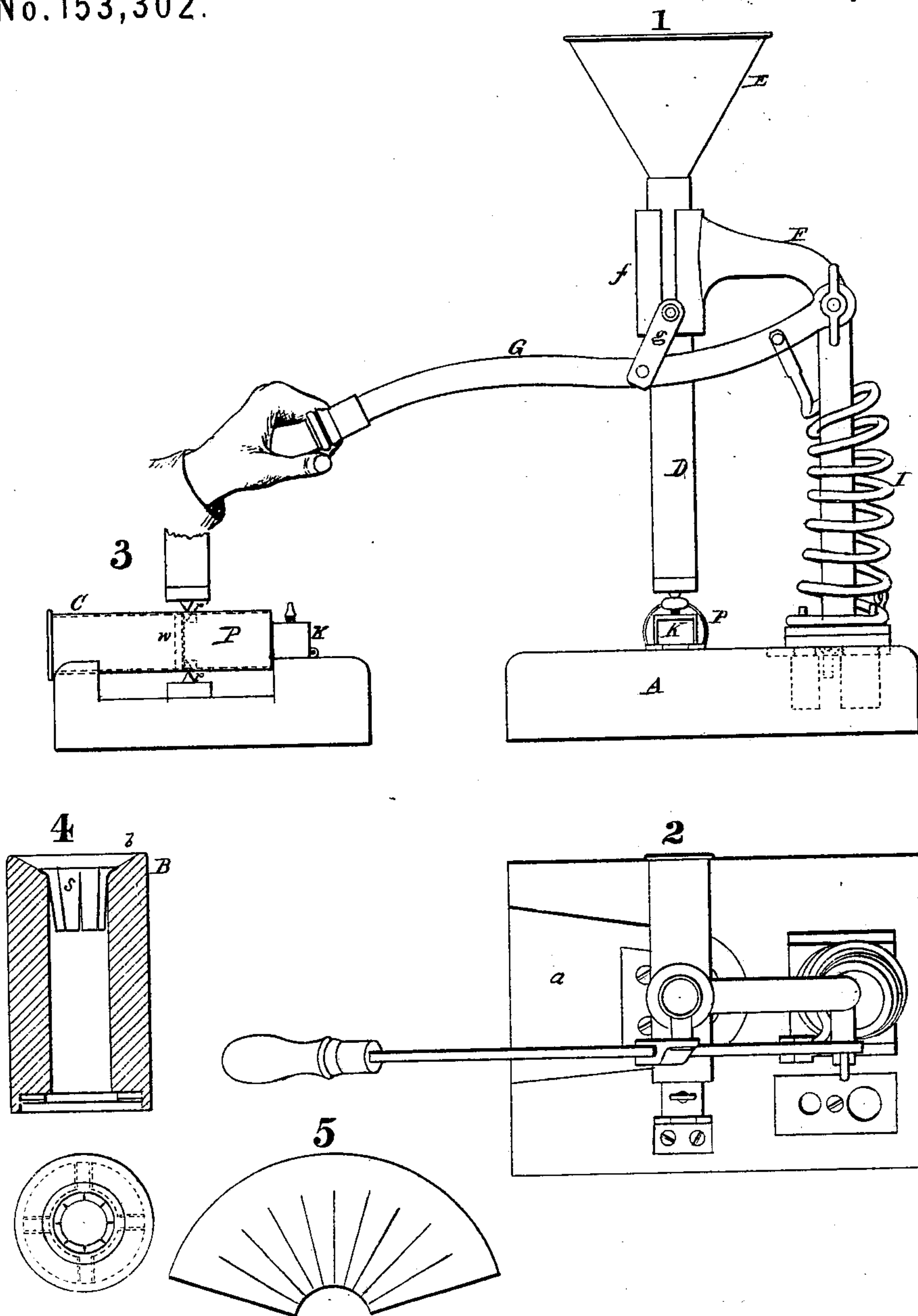


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Implements for Loading Cartridge-Shells.

No. 153,302.

Patented July 21, 1874.



WITNESSES.
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LESTER A. BEARDSLEE, OF LITTLE FALLS, NEW YORK.

IMPROVEMENT IN IMPLEMENTS FOR LOADING CARTRIDGE-SHELLS.

Specification forming part of Letters Patent No. **153,302**, dated July 21, 1874; application filed June 6, 1874.

To all whom it may concern:

Be it known that I, LESTER A. BEARDSLEE, of Little Falls, in the county of Herkimer and State of New York, have invented certain Improvements to the Machine for Loading Cartridges for which Letters Patent Nos. 149,183, dated March 31, 1874, were granted to me; and I do hereby declare that the following is a full, clear, and accurate description of the same, together with the modified form of the machine, which adapts it to use in combination with the improvements, reference being had to the accompanying drawing, forming a part of the specification, in which—

Figure 1 is a sectional side view of complete machine; Fig. 2, plan of same; Figs 3, 4, and 5, views more in detail of the improvements.

A represents a bed provided with the inwardly-converging groove *a*, its smaller end being curved on the arc of a circle slightly larger, but corresponding to the perimeter of a loading cylinder or tube, B, concaved on top at *b*, and provided with an elastic funnel, S, which acts as a guide and steadier to the shell, and also as guide to the wads, powder, and shot. The elastic funnel S is stamped, from sheet-brass, in the shape as per views, and wound upon a mandrel, and a flange turned upon its upper end. It is then placed in mouth of loading-tube B, and secured.

Heretofore a device approximating to my elastic funnel has been used so as to be operated by the descending rammer; but in such cases it only operates to spread the mouth of the cartridge, and is wholly unprotected from injury during transportation. In using my elastic funnel permanently fixed to the loading-socket, I overcome all of the disadvantages of any of the funnels heretofore used.

The diameter of its lower section is such that it will enter a small cartridge-shell and steady it, while a large shell, being longer, will go farther up, and encounter a larger section of the funnel, and be equally steadied. This funnel prevents any grains of powder or pellets of shot from going outside the shell, and between it and loading-tube.

Also, opposes sufficient resistance to a wad going in at an angle to force it to go horizontally into the shell under the push of the rammer. Secondly, the novel mode and means by which, by use of gage-plug P and points *p* and *p'*, the charge is firmly secured in the shell.

C is the cartridge-case, fitting into the correspondingly-central cavity *b'*, but not shown in such position. D is the rammer, as well as the hollow conductor, through which the ammunition falls from the funnel or cup E. This rammer is cylindrical, and slides in the guide *f*, placed at the end of curved upright F, which upright F is cast with a dovetailed base, which slides into a metallic socket secured to the bed A, and can be taken out when not in use, thus reducing the machine to convenient size for stowing in a gun-case. G is a lever, connected with the reciprocating plunger by a link, *g*, that is pivoted to each, and has its fulcrum near the elbow of the curved standard F. The retracting-spring I has one end attached to the lever G, and the other secured to the dovetailed base. P is the gage-plug, a cylindrical piece of wood or metal, with a square end, which fits into the hinged socket K. The plug is of such length that when a loaded cartridge-shell is placed over it the end will press against the wad W, and the reduced portion will come directly under the center of the rammer D, the screw-points *p* and *p''* being secured, the one in the rammer D, the other in the bed A, in holes provided.

The application is as follows: A cartridge-case, C, being inserted within the holder B, and the latter pushed to the bottom or small end of converging groove *a*, the bed-groove centers the cartridge-case under the rammer D. A charge of powder is poured into the funnel E. It falls through the hollow rammer D, and is finally received on the bottom of cartridge-case. A wad is now dropped down the top concavity *b* of tube B, and directly under the rammer D, which is then brought down by use of lever G, and the wad driven home.

The spring-funnel S prevents the wad from becoming canted, and failing to go squarely home. The shot is now poured, and a second wad driven home in a similar manner. The charges having been placed into the required

quantity of shells, it becomes necessary, to complete the process of loading, to secure them from slipping out. To this end, the gage-plug P, attached by hinged socket to bed-plate, is turned into plane of bed A, and the iron points p and p' screwed, the one into end of rammer D and the other into bed A, immediately under, in holes provided. The shell C is then pushed into the plug P until the wad W comes in close contact with the end of plug, when, by a downward push of the rammer, two burrs are made in the shell close to the wad, which secures the wad, and completes the process.

The operation may be performed with great rapidity, economy of time, and by a servant

or unskilled person, and one machine is adapted to the various gages of shells.

Having thus described my invention, what I claim is—

1. An elastic funnel, S, in combination with, and fixed to, the loading-socket B, substantially as set forth.

2. The combination of the gage-plug P and the metallic points p and p' with the hollow rammer D and bed-plate A, as described, and for purpose as described.

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Witnesses:

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