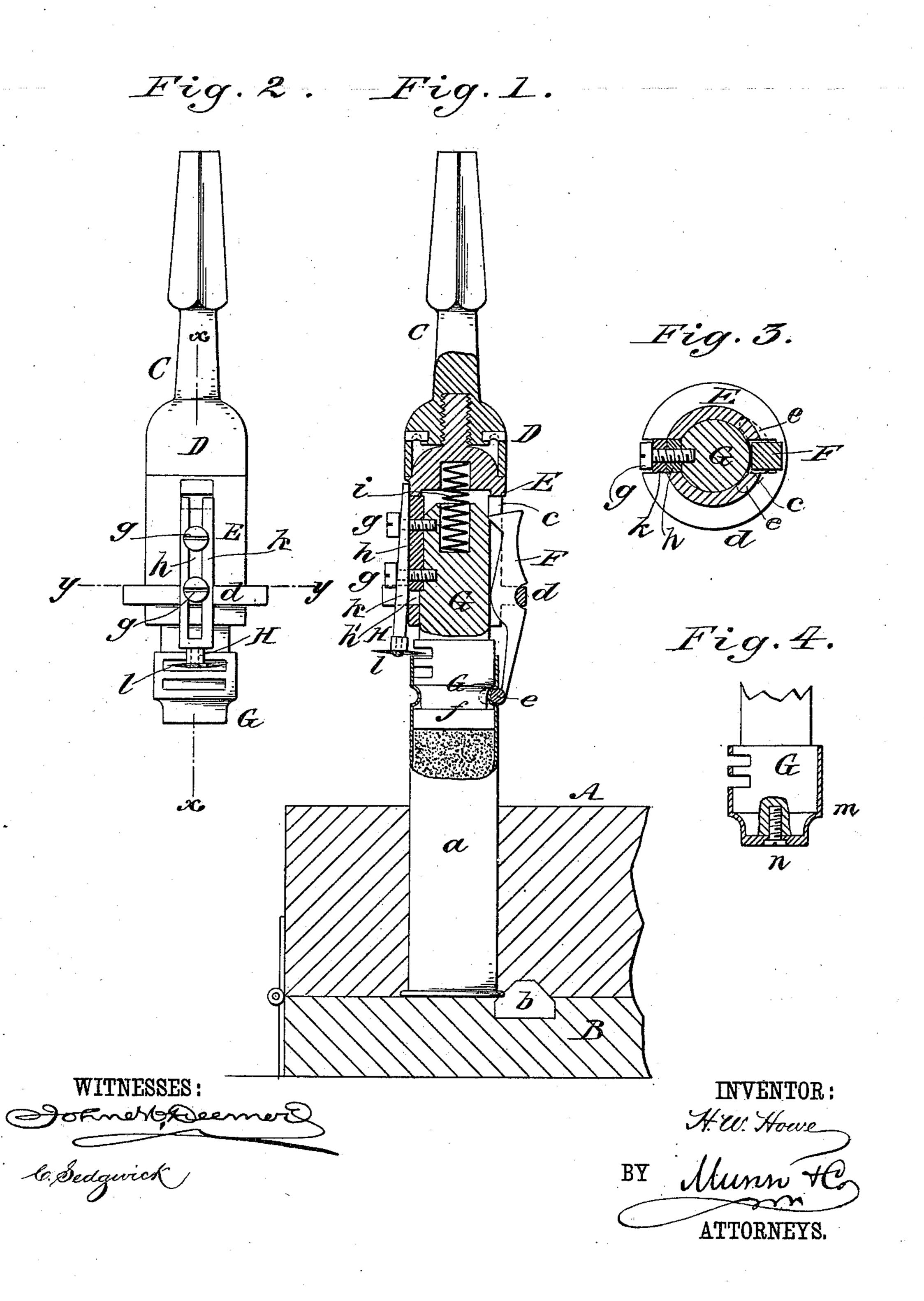
## H. W. HOWE.

## CARTRIDGE SHELL CREASER.

No. 319,256.

Patented June 2, 1885.



## United States Patent Office.

HENRY W. HOWE, OF LAWRENCE, KANSAS.

## CARTRIDGE-SHELL CREASER.

SPECIFICATION forming part of Letters Patent No. 319,256, dated June 2, 1885.

Application filed February 25, 1885. (No model.)

To all whom it may concern:

Be it known that I, Henry W. Howe, of Lawrence, in the county of Douglas and State of Kansas, have invented a new and Improved 5 Cartridge-Shell Creaser, &c., of which the following is a full, clear, and exact description.

This invention has reference to creasers, or combined creasers, crimpers, and trimmers for shells for shotguns, including both paper and 10 metal shells, or combined paper and metal shells, and is more particularly intended to be used in connection with that class of cartridge-loading apparatus in which a block of wood is provided with a series of holes to re-15 ceive the cartridges, and a hinged bottom to retain them in place; also, means for keeping the shells from turning when being creased or trimmed, as they have before been kept from turning when being crimped. The creaser, 20 either with or without an attached trimmer, may either be used separately in connection with a hand-brace or other suitable means for turning it, or may be an attachment to the brace, &c., and may be combined with a crimp-25 er, so that not only may the shells be creased and trimmed, if necessary, but also crimped, without removing them from the loadingboard, which is the arrangement shown in the accompanying drawings.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 represents a vertical section upon the line x x in Fig. 2 of a cartridge-loading board in part with a loaded shell therein, together with means for creasing and trimming the shell, all in accordance with my invention; Fig. 2, a side elevation, mainly showing the creaser and trimmer; Fig. 3, a transverse section on the line y y in Fig. 2, looking downward; and Fig. 4a partially-sectional side elevation of an adjustable plug used in the creaser for operating upon different-sized shells.

A is the loading-board in part, having any desired number of shell-holding apertures, one

Cartridge, a, here only being shown.

B is the hinged bottom of said board, closing the bottoms of the shell-holding apertures, and being provided, as in another invention made by me for a loading-board and crimping attachment for cartridges, with any number of

stationary blades or spurs b, arranged so as to impinge on the flanges of the shells and keep the shells from turning.

C is the bit of an ordinary brace for rotating the creaser and trimmer around the mouth end of the shell projecting above the loading-board A. A crimper, D, is here shown as attached to the bit for crimping the shell by removing 60 the creaser, which is represented as screwing

into the bit or its attached crimper. The creaser is composed in part of a cylindrical chamber or tube, E, having one or more longitudinal slots, c, in its side inside of a col- 65 lar or flange, d, to receive within it one or more rocking creasing-levers, F, which have their fulcrum on the flange, and which are suitably shaped at their lower ends, as at e, to crease the shell immediately above the wad f on giving 70 the bit carrying the creaser one or more turns of the brace. Only one creasing-lever F here is shown; but, if desired, there may be two arranged opposite each other, or any number of them. Fitted freely but snugly within this 75 chamber or tube E is a plug, G, extending below said chamber and shaped at its lower end so as to enter down within the mouth of the loaded shell, and to clear the crease made in the shell. Screws g, passing through a slide, 80 h, fitting a longitudinal slot, h', in the side of the chamber E, may be used to hold the plug in place, as also to attach a trimmer, H, where a trimmer is used. This plug G is pressed outward by a spring, i, and is beveled on its up- 85 per end to receive over it a hooked upper end of the creasing-lever F, so that when the bit C is pressed down after the lower end of the plug G is brought to bear on the wad in the loaded shell, and the bit or brace carrying it is turned, 90 the hook end of the creasing-lever will be forced laterally outward by the beveled upper end of the plug, and the lower end of the creasing-lever be correspondingly forced inward to crease the shell above the wad, as required, so 95 as to firmly hold the load in the shell. The trimmer H, which may be in the form of a slotted carrier, k, carrying a rotary or other knife, l, at its lower end, arranged to work in grooves in the lower end of the plug G, and which may roo be adjusted up or down by the screws g, passing through the slotted carrier k into the slide h, serves, as the creaser is turned on or around the loaded and firmly-held shell, to trim off

any surplus material, if necessary, from the top of the shell—as, for instance, when the shell is loaded lightly and the wad is too far down to be reached by the plug G. When not need-5 ed, said trimmer may be detached from the creaser. After the shell is creased and downward pressure is taken from the bit, the spring i, pressing down on the plunger, tends to lift the bit and chamber E, and with them the creas-10 ing-lever F, which, by its being of greater weight above than below its fulcrum, falls at its upper end inward over the beveled upper end of the plug G, thus releasing the creasinglever from the crease in the shell. The whole 15 tool may then be applied to another shell in the loading-board, and so on indefinitely, thereby rapidly creasing a series of shells in succession.

Different-sized plugs G may be used in the 20 chamber or tube E for operating on differentsized shells, or the plug may have a series of different-sized sleeves or caps, m, fastened by a screw, n, or otherwise, on a reduced lower end of it, as shown in Fig. 4, to suit the different-25 sized shells, thus making the one creaser serve to crease different-sized shells.

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

1. The within-described rotatable creaser for cartridge-shells, which consists in a rotatable chamber or tube, E, a plug, G, arranged to fit freely within said chamber and to project be-

yond its lower end for entry within the mouth end of the shell, and of beveled construction on 35 its upper end, a spring, i, arranged to press. the plug outward, and one or more levers, F, arranged to engage at their upper end with the beveled end of the plug, and having a shellcreasing projection at their lower end for op- 40 eration together, substantially as specified.

2. In a cartridge-shell creaser, the combination, with a rotatable tube carrying the creaser, of a trimmer attached to said tube and rotating therewith, substantially as herein shown 45 and described, whereby provision is made for trimming the shell while being creased, as set forth.

3. In a cartridge-shell creaser, the combination, with a rotatable tube and plug held there- 50 in, of the slotted carrier k, secured to the said tube, the knife l at the lower end of the said carrier, and the screws g, substantially as herein shown and described.

4. The combination, with the bit C and load- 55 ing-board A, of the creaser consisting of a chamber or tube, E, the plug G, arranged to freely fit said chamber and to project below it, the spring i, arranged to press said plug and bit away from each other, and one or more 60 shell-creasing levers F, actuated by the plug to crease the shell, essentially as described.

HENRY W. HOWE.

Witnesses:

J. H. WOODY, LOYD R. HOWE.