## J. H. WESSON. CARTRIDGE. APPLICATION FILED MAR. 27, 1913.

1,079,083.

Patented Nov. 18, 1913.

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Fig. 2.

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## UNITED STATES PATENT OFFICE.

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## CARTRIDGE.

1,079,083.

Specification of Letters Patent.

Patented Nov. 18, 1913.

Application filed March 27, 1913. Serial No. 757,075.

To all whom it may concern:

Be it known that I, Joseph H. Wesson, a citizen of the United States, residing in Springfield, in the county of Hampden and 5 State of Massachusetts, have invented an Improvement in Cartridges, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings represent-

10 ing like parts.

The present invention relates to a cartridge, and is embodied in a cartridge of the kind which is adapted to seat against the shoulder at the front end of the chamber, 15 instead of being held in position against the impact of the hammer by means of a projecting flange of larger diameter than the body of the shell which engages the part around the chamber at the back. Cartridges 20 having the characteristics described are especially adapted for use in magazine fire arms where the projecting flange is an objectionable feature. It is essential, however, in cartridges of this kind that the shells 25 should be absolutely uniform in length, and in manufacturing shells crimped in the ordinary way to hold the bullet, or made to fit a chamber of special shape, it is a difficult matter to secure the necessary uniformity.

In accordance with the present invention, a portion of the front end of the shell is left in its original shape, the bullet being held by crimping or pressing inward another portion of the front end of the shell, 35 this being sufficient to hold the bullet firmly in place. By this construction it is possible to trim the shells to a uniform length, the crimping being done by a tool which is adapted to press portions of the shell down 40 against the bullet. The uncrimped part of the shell is left in its original shape, the front edge of the shell thus constituting a bearing which positions the shell against the annular shoulder at the front of the 45 chamber. A further advantage secured by this construction is that the shoulder can be made rectangular in cross-section, instead of having some special shape, as in the case of some fire arms which are adapted to 50 receive specially shaped cartridges.

Figure 1 is a side elevation of a cartridge embodying the invention; and Fig. 2 is a front view of the same.

Referring to Fig. 1, the shell a is cylindri-

cal in shape, being provided at the rear 55 with the usual annular channel a2 to afford the annular shoulder  $a^3$  to be engaged by the extractor hook. The bullet b, which is somewhat smaller in diameter than the shell a, is inserted in the front of the shell 60 in the usual way, so as to project forward from the chamber of the pistol into the barrel when the cartridge is in firing position. In order to provide a bearing surface at the front of the shell to cooperate with 65 the shoulder at the front of the chamber, the front edge of the shell, or a portion thereof, is left in its original shape, the bullet being held in position by crimping or pressing inward another portion of the 70 shell against the surface of the bullet. In the construction shown, the shell is crimped along the front edge, and alternating portions are left in the original shape, with the crimped portions between them, thus form- 75 ing a series of adjacent tongues, the tongues a<sup>5</sup> being forced inward against the bullet, and the other tongues as being left in their original shape. By this construction, the bullet is firmly held in position, while a 80 sufficient portion of the shell remains in the cylindrical shape to bear firmly against the shoulder at the front end of the chamber and hold the cartridge against the impact of the firing pin. In order to secure uni- 85 formity in the length of the shells, therefore, it is only necessary to trim the ends of said shells before loading, this being an operation which can easily be accomplished with great accuracy.

It is not essential that the front of the shell should be slit, as shown in the drawing, as it is obvious that the crimping of a pertion of the shell, as distinguished from the crimping of the entire outer edge, will 95 result in the formation of the article embodying the invention.

What I claim is:

1. A cartridge comprising a metallic shell, the open end of which is cylindrical in 100 form; a bullet of smaller diameter inserted in said open end; and parts of the front end of the wall of the shell pressed inward to engage and hold the bullet, the remainder of the shell being left in its original shape. 105

2. A cartridge comprising a cylindrical shell slit at its open end; and a bullet contained in the open end of the shell and se-

cured in position by the material between the slits at the end, which material is bent in against the side of the bullet, the other portions of the material between the slits

5 being of the original shape.
3. A cartridge comprising a metallic shell, the open end of which is cylindrical in form; a bullet of smaller diameter inserted in said open end; and parts of the wall of 10 the shell separated from other parts and

crimped, the remainder of the shell being

left in its original shape.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses.

JOSEPH H. WESSON.

Witnesses:
D. B. Wesson, H. L. Pomeroy.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents. Washington, D. C."