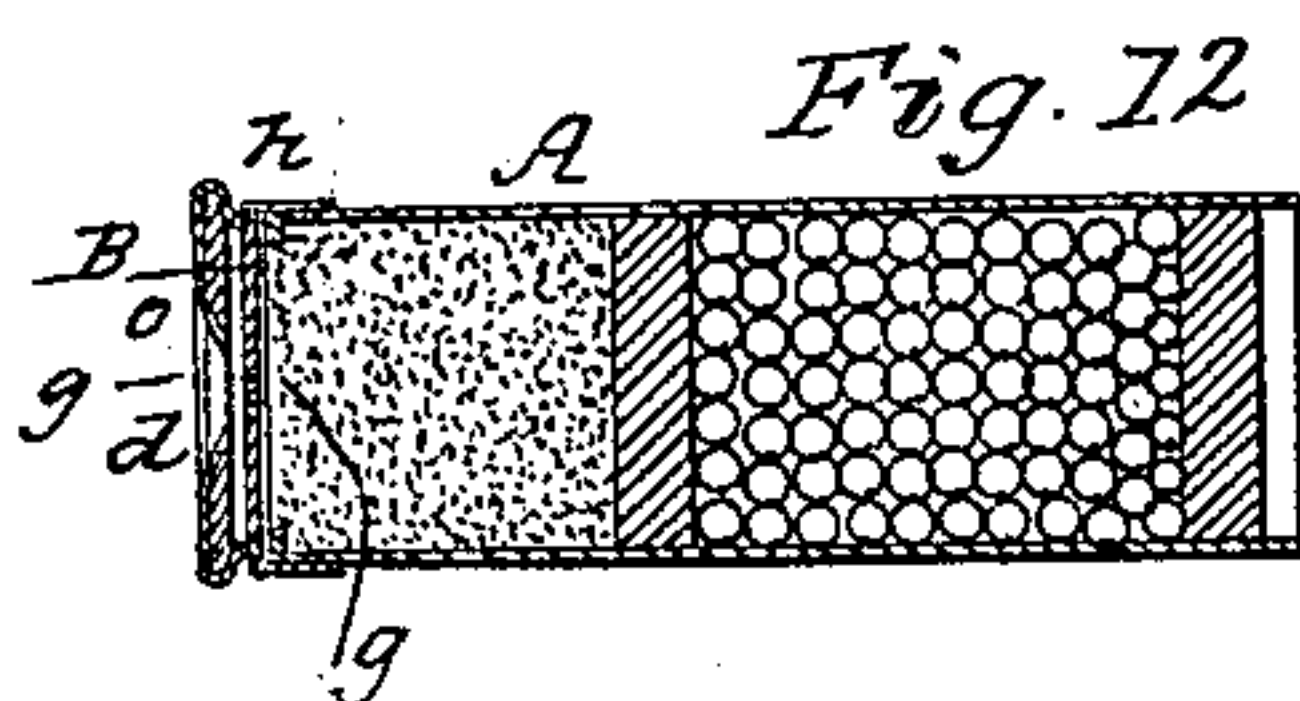
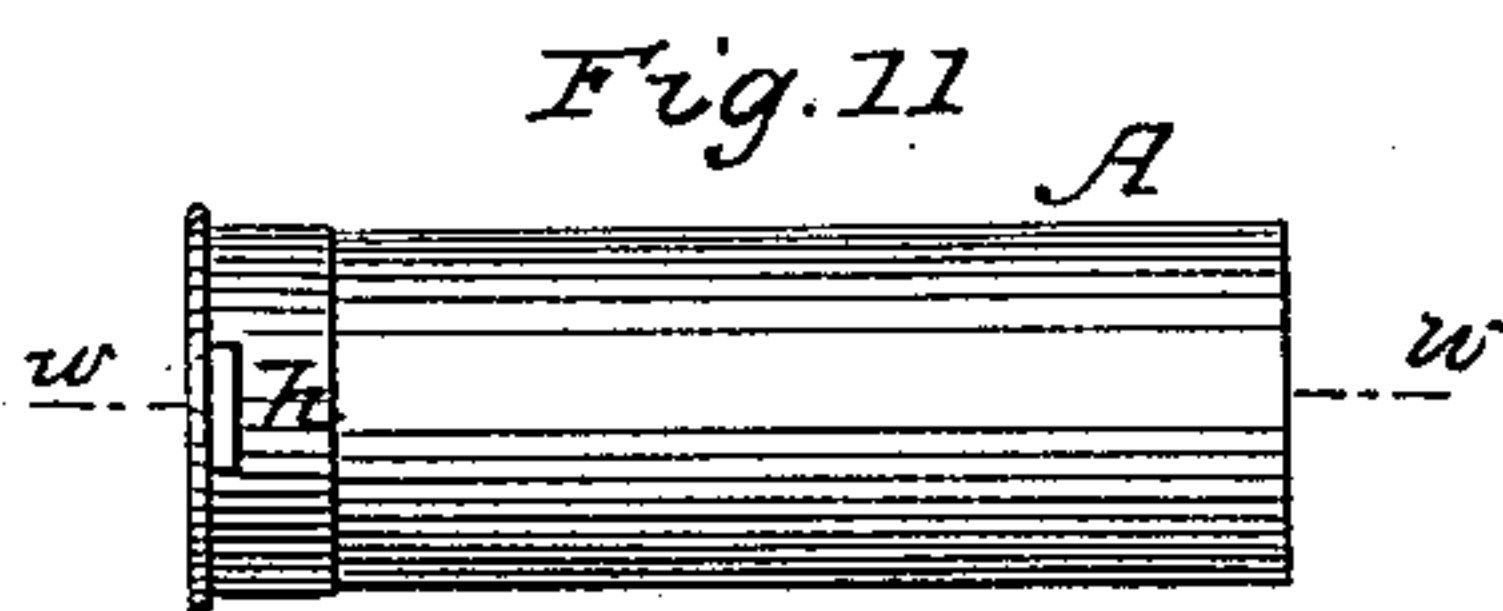
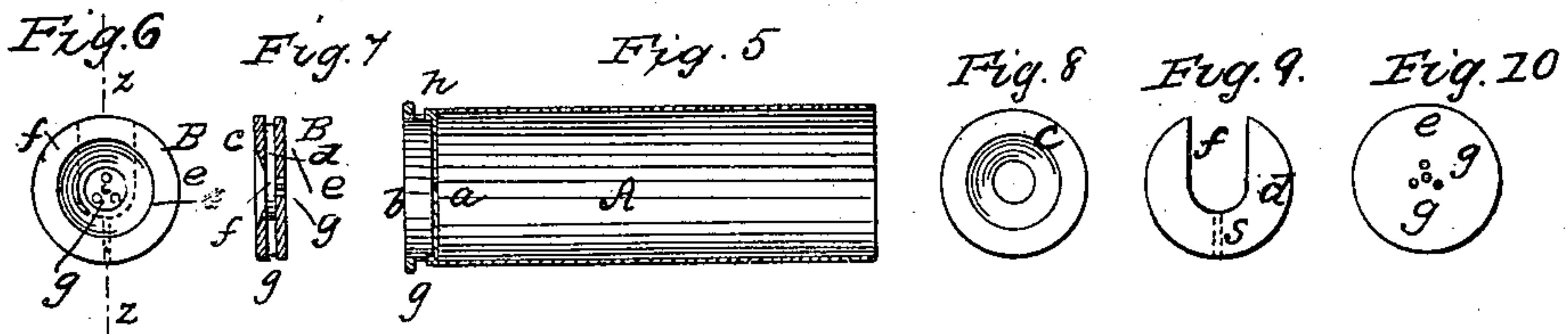
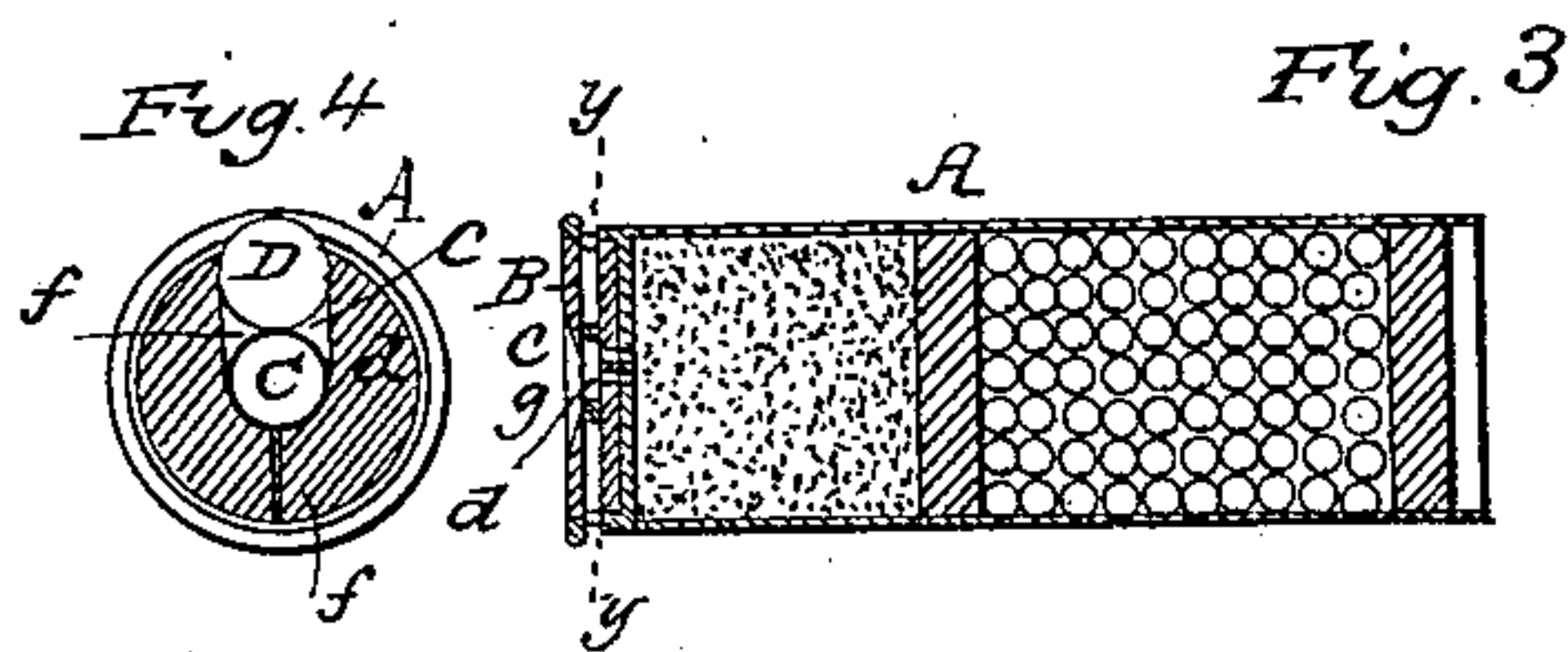
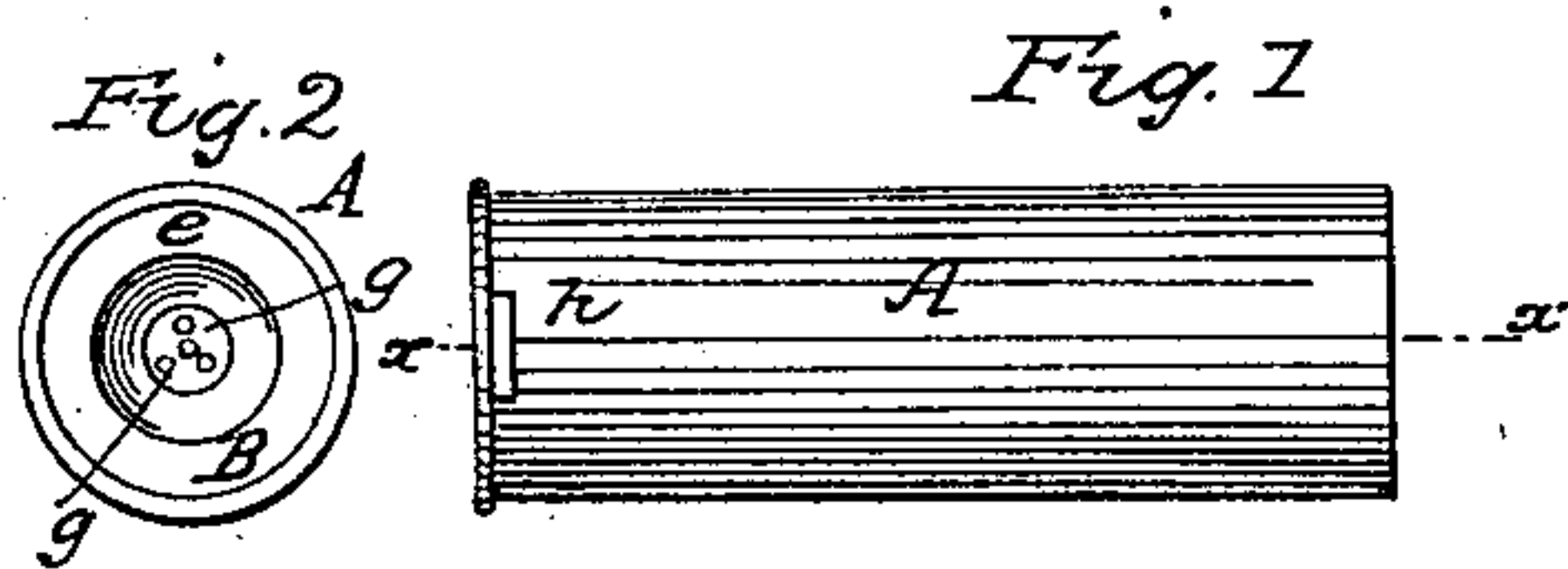


N. G. WHITMORE.

Cartridge.

No. 104,912.

Patented June 28, 1870.



Witnesses
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UNITED STATES PATENT OFFICE.

NATHANIEL GILBERT WHITMORE, OF MANSFIELD, MASS., ASSIGNOR TO
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IMPROVEMENT IN CARTRIDGES.

Specification forming part of Letters Patent No. 104,912, dated June 28, 1870.

To all whom it may concern:

Be it known that I, NATHANIEL GILBERT WHITMORE, of Mansfield, in the county of Bristol and State of Massachusetts, have invented a new and useful Improvement in Cartridge-Cases for Breech-Loading Fire-Arms, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, forming part of this specification.

The object of the invention is to construct a cartridge-case for breech-loading fire-arms, mainly designed for the use of shot, which shall provide, in a simple and convenient manner, for the repriming of the cartridge-case for repeated use, by facilitating the removal of an exploded cap, and allowing of the ready insertion of a fresh cap or pellet; also whereby a substantial construction of the case is effected.

The invention comprises a cartridge-case the tube or body of which is made either of metal or paper, or both combined, or other suitable materials, with a chamber or cavity formed in the base end thereof, into which is fitted and secured, in any suitable manner, an independent base-piece, preferably formed in sections, riveted or soldered together, to make of the whole a disk or base that is not only provided with firing-apertures through it, in communication with an aperture or apertures in the sunken base end of the case, or in a head fitted thereon, but has also opposite transverse cavities or passages in it, extending partially through it from its periphery, and accessible from the exterior of and in communication with the case, on opposite sides thereof, the one of said passages being of an enlarged size, to allow of the entry and removal of the cap, while the other is of smaller size, and serves to admit of the insertion of a needle or wire, to facilitate the extraction of an exploded cap.

The independent base or base-piece, thus formed and fitted within an extension of the body of the case in rear of the end thereof, constitutes a cap-holder accessible from the exterior of the peripheral portion of the case or its extension, for insertion and removal of the caps.

After a cap has been inserted within the

holder or base-piece, through the larger of the side openings in the case, into the larger cavity or passage in said base-piece, a pasteboard or other wad is introduced through the same opening, and pressed down into said cavity or passage, to hold the cap in its required position.

Having thus specified the object and nature of the invention, its description will be proceeded with in reference to the accompanying drawing.

Figure 1 represents an exterior longitudinal view of a cartridge constructed according to the invention, with its case made wholly of metal; Fig. 2, a base end view of the same; Fig. 3, a central longitudinal section, taken as indicated by the line *x x* in Fig. 1, and showing the cartridge as charged and loaded with small shot; Fig. 4, a transverse section, taken as indicated by the line *y y* in Fig. 3. Fig. 5 is a central longitudinal section of the case, with its base-piece or cap-holder and charge removed; Fig. 6, an outer face view of said base-piece or cap-holder detached, and Fig. 7 a section of the same through the line *z z* in Fig. 6. Figs. 8, 9, and 10 are face views of separate plates or pieces of which the cap-holder is composed. Fig. 11 is an exterior longitudinal view of the cartridge, with the case made mainly of paper; and Fig. 12, a central longitudinal section of the same, taken as indicated by the line *w w* in Fig. 11.

Similar letters of reference indicate corresponding parts.

Referring, in the first instance, to the several figures, from 1 to 10, inclusive, A represents the case of the cartridge, formed of metal, and spun or otherwise made to comprise a base end, *a*, with a chamber, *b*, in the rear of it, formed, as it were, by an extension of the cylindrical body. Into this chamber or cavity *b* is fitted and secured in a permanent manner, by creasing the case or otherwise, an independent base-piece, B, constituting a priming-holder or cap-holder. This base-piece is made in plate-like sections or pieces, *c*, *d*, and *e*, riveted or soldered together, the first or outer piece, *c*, being in the form of a ring.

The second or intermediate piece, *d*, has an open space or passage, *f*, in it, extending from

or around its center to the periphery of said piece, and of a size sufficient to receive within it the priming in the shape of a cap or pellet, and the third or inner piece *e*, which, when the base-piece is in position within the case, lying against the base end *a*, is in the shape of a disk. An aperture or apertures, *g*, are drilled through this disk *e* and end *a* of the case, to communicate the fire from the cap or priming in the passage *f* of the cap-holder to the charge in the body of the case.

The cap *C*, which may be in the form of a thin metal case, is exposed to the action of the hammer or exploding device, through the ring *c* and central portion of the passage *f* in the intermediate piece *d*. When the three pieces *c*, *d*, and *e* are riveted or otherwise secured together to form an entirety, the ring *c* and disk *e* form sides to the passage or cavity *f*. An opening, *h*, is made through the case, corresponding with the outer end of the cavity *f*, to provide for the insertion and removal of the cap, and an oppositely-arranged smaller aperture, *s*, drilled through the case and piece *d*, establishing communication with the cavity *f* at its inner end, to provide for the insertion of a needle or wire, for the purpose of pushing out the exploded cap from the cavity *f*, and through the opening *h*, in case of any sticking.

After a cap has been inserted within the cavity *f* through the opening *h*, a pasteboard or other wad, *D*, is introduced through the latter opening, and pressed down within the cavity *f* to hold the cap in its proper position within the holder *B*.

A cartridge-case thus constructed affords every convenience for repriming for repeated use, and the construction is a substantial one.

In Figs. 11 and 12 of the drawing essentially the same construction is shown; but the body

or main portion of the case *A* is there represented as made of paper, with a metal end cap at its base, to receive the cap-holder *B* within it, a base end piece for the cap-holder to abut against here being dispensed with, and said cap-holder and paper case being united by creasing the metal end cap or otherwise.

What is here claimed, and desired to be secured by Letters Patent, is—

1. A cartridge-case having an end or base provided with a priming or cap-holding cavity, extending partially through it from its periphery, and accessible from the peripheral exterior of the case, in combination with firing-apertures through the faces of said base, and in communication with the charge in the shell, substantially as specified.

2. The combination of the radially-disposed cap-clearing aperture *s* with the priming or cap-holding cavity *f* in the base *B*, both accessible from the peripheral exterior of the case, and in communication with each other, and with the firing-apertures through the faces of said base, essentially as shown and described.

3. The base *B*, formed of a ring, *c*, an intermediate piece, *d*, having a cavity or space, *f*, in it, and a perforated disk, *e*, substantially as specified.

4. The case *A*, extended to form a rear chamber, *b*, and provided with a lateral opening, *h*, also, if desired, with an oppositely-arranged aperture, *s*, for communication with the interior of a base, *B*, arranged to fit within the rear chamber *b*, essentially as described.

NATHANIEL GILBERT WHITMORE.

Witnesses:

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