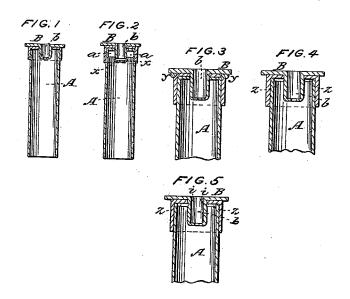
## S. CRISPIN. Cartridge.

No. 113,634.

Patented April 11, 1871.



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## UNITED STATES PATENT OFFICE.

SILAS CRISPIN, OF NEW YORK, N. Y.

## IMPROVEMENT IN METALLIC CARTRIDGES.

Specification forming part of Letters Patent No. 113,634, dated April 11, 1871.

To all whom it may concern:

Be it known that I, SILAS CRISPIN, of New York, in the county of New York, and in the State of New York, have invented certain new and useful Improvements in Cartridges; and do declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, and to the letters of reference thereon, making

a part of this specification.

The nature of my invention consists in a solid metallic disk for cartridges for breechloading fire-arms and a cap and anvil chamber or receiver made in one piece, and constructed so as to admit of the body of the cartridge being secured to it by means of a wad; and also in a solid metallic disk and cap chamber made of one piece of metal, in combination with a tubular cartridge-case, when secured thereto by means of solder, either on the outside or inside, all of which will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which-

Figure 1 is a longitudinal vertical section of the cartridge shell, showing the disk and capchamber in position before the wad is put in. Fig. 2 is a similar view, showing the wad in position. Fig. 3 is a similar view, showing the disk attached to the cartridge-shell by means of solder on the outside. Figs. 4 and 5 are similar views, showing two ways of applying solder on the inside.

A represents the body, case, or shell of a cartridge, made of paper, metal, linen, or any other suitable material, or of two or more ma-

terials combined.

B represents the base of the cartridge, formed of a solid metal disk, from which is set up, and without breaking the continuity of the metal, a seamless tube, chamber, or pocket, b, for the reception of the cap and its anvil or other means of ignition, said tube having a vent at its end, as shown in the various figures.

This disk, with its cap, pocket, or chamber, is secured to the shell or case A in various

ways.

After the tube or pocket has been inserted in the end of the shell, a wad, a, of paper, metal, or other suitable material, is inserted within the shell and surrounding said tube. This wad is then, by means of punches and dies adapted to the purpose, forced home, and at the same time the end of the tube b is pressed so as to form a bulge or shoulder above or on top of the wad, as shown at x, Fig. 2, whereby the base, shell, and wad are firmly and solidly united together; or, in place of the wad a, solder may be poured on the outside, all around between the disk or base B and the end of the shell, as shown at y, Fig. 3; or solder may be poured into the shell, as shown at z, Figs. 4 and 5, thereby uniting the shell with the tube b.

It is obvious that in this case one or more grooves, i, may be formed in or around the outside of the tube b, as shown in Fig. 5, into which groove or grooves the solder, when poured into the shell, will pass, and thus

form an additional security.

Having thus fully described my invention, what I claim as new, and desire to secure by

Letters Patent, is-

1. A solid metallic disk and a centrally inward-projecting cap and anvil chamber or receiver, made in one piece, in combination with an internally-flanged tube or cartridge-body, when secured thereto by means of a wad, as described.

2. The metallic disk B and cap-chamber  $b_1$ made in one piece, in combination with the rear end of the cartridge-body A or its reenforce, when secured thereto by means of solder, substantially as herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand.

SILAS CRISPIN.

Witnesses:

CHAS. J. McGOWAN, D. W. C. HALL.