J. RUPERTUS.

Primer for Fire-Arms.

No. 25,142 Patented Aug. 16, 1859.

Fig: 1.

Fig: 5.



Fig: 2.



Fig: 3.

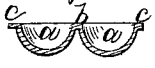


Fig: 7.



Fig: 4.



Fig: 6.

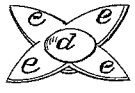


Fig: 8.



Fig: 9.



Witnesses

William H. Dingler

Charles D. Sherman

Inventor:

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UNITED STATES PATENT OFFICE.

JACOB RUPERTUS, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN PERCUSSION-PELLETS FOR FIRE-ARMS.

Specification forming part of Letters Patent No. **25,142**, dated August 16, 1859.

To all whom it may concern:

Be it known that I, JACOB RUPERTUS, of the city of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Percussion-Pellets for Fire-Arms; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, forming a part of this specification, in which—

Figure 1 is an outside view, natural size, of my improved pellet. Fig. 2 is a similar view larger than the natural size. Fig. 3 is a section of the capsule before it is charged, exhibiting one mode of making it. Fig. 4 is a section of the same partially closed and charged. Fig 5 is a section of the same closed. Fig. 6 is a perspective view of an open capsule of another construction. Fig. 7 is a section of the same in the same condition. Fig. 8 is a section of the same partly filled and closed. Fig. 9 is a section of the same closed.

Similar letters of reference indicate corresponding parts in the several figures.

My improvement consists in the employment to inclose the detonating compound of a spherical metal capsule. This kind of capsule affords the same protection to the detonating compound as the closed cylindrical shell, and possesses the advantage of never failing to be presented to the vent in a proper manner, as is so often the case with the cylindrical pellet, owing to its liability to be turned sidewise within the priming-magazine.

To enable others to make my percussion-pellets I will proceed to describe them, with reference to the drawings.

In the construction represented in Figs. 3, 4, and 5 the capsule is made by first cutting and stamping from a piece of sheet-copper or other ductile metal or alloy a blank with two hemispherical depressions, *a a*, as shown in Fig. 3, having a very narrow connection at *b*, and two narrow lips *c c* at the most distant points in their margin. This blank is afterward bent at the connection *b* of the hemispheres to about the condition shown in Fig. 4, and while in that condition the detonating compound is put in. The margins of the two hemispheres are then brought together by a suitable pair of pliers or other instrument, and the two lips *c c* lapped over the opposite hemispheres. The capsule, after being thus closed, is subjected to a rolling operation between two semicircularly-grooved surfaces, and by that means the margins of the hemispheres are perfectly closed and the capsule made of a perfect, or nearly perfect, spherical form externally.

In the construction represented in Figs. 6, 7, and 8 the capsule is made by first cutting and stamping a star-shaped blank with a central hemispherical depression, *d*, as shown in Figs. 6 and 7. This blank, after having its rays *e e* bent up to the condition shown in Fig. 8, has the detonating compound put in, and the rays, which are of such form as to combine to form a hemisphere, are then closed together and the capsule then subjected to the same rolling process as that first described to make perfect joints between the rays.

I do not confine myself to these modes of forming the capsules, for such other modes may be adopted as might suggest themselves to skillful workers in metal.

The detonating compound employed in these pellets may be compounded by any of the formulæ commonly adopted for percussion primings.

I do not claim the invention of spherical pellets for the priming of fire-arms when not incased in a metallic capsule. Neither do I claim the detonating compound in a metallic shell when such shell is not of spherical form; but—

What I claim as my invention, and desire to secure by Letters Patent, is—

The employment, for inclosing the detonating compound, of a metal saupsle of spherical form, substantially as herein described.

JACOB RUPERTUS.

Witnesses:

CHARLES D. FREEMAN,
WILLIAM H. DINGLER.