

F. E. M. NILLUS.

Improvement in Breech-Loading Fire-Arms.

Patented May 7, 1872.

No. 126,568.

FIG. 1.

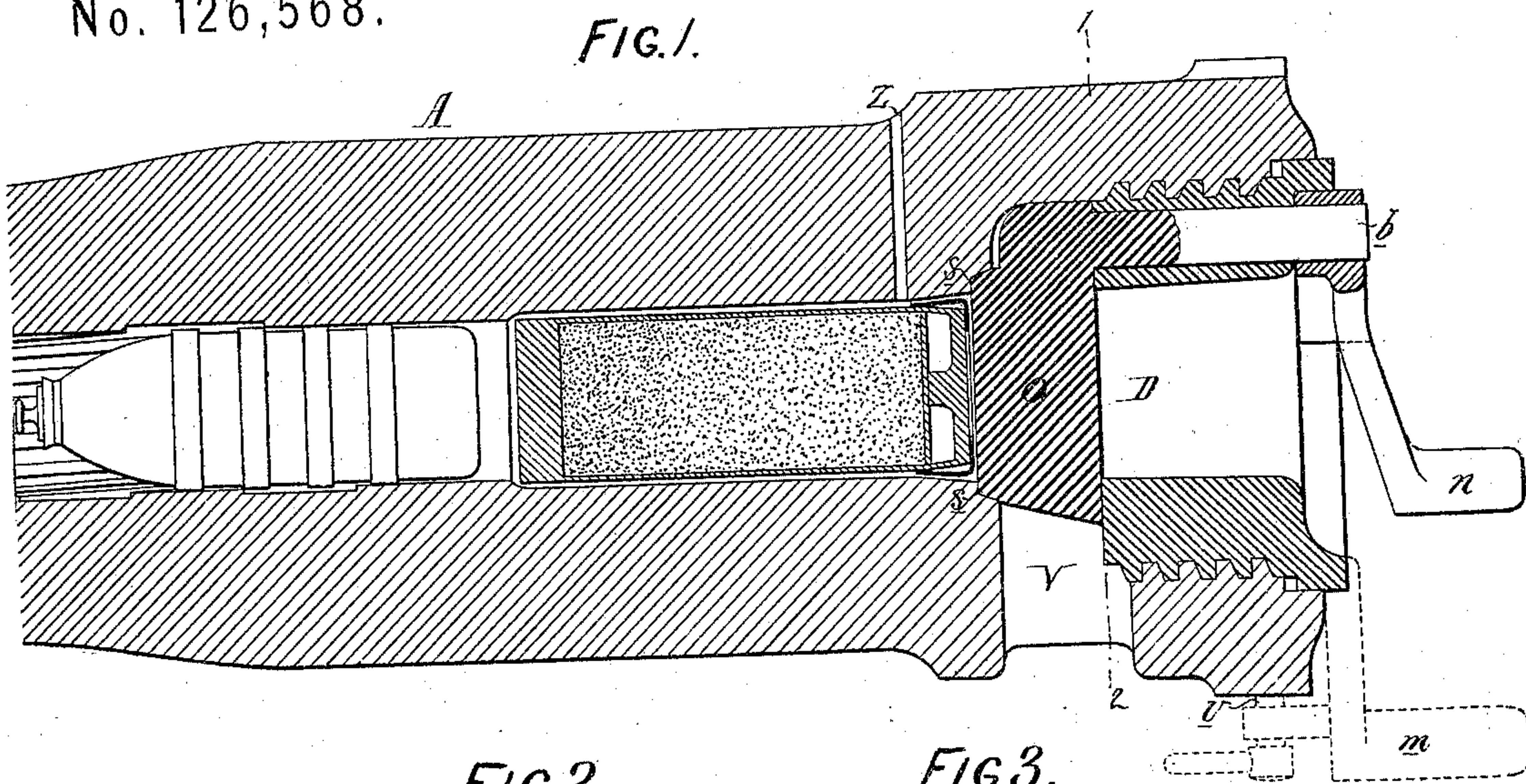


FIG. 2.

FIG. 3.

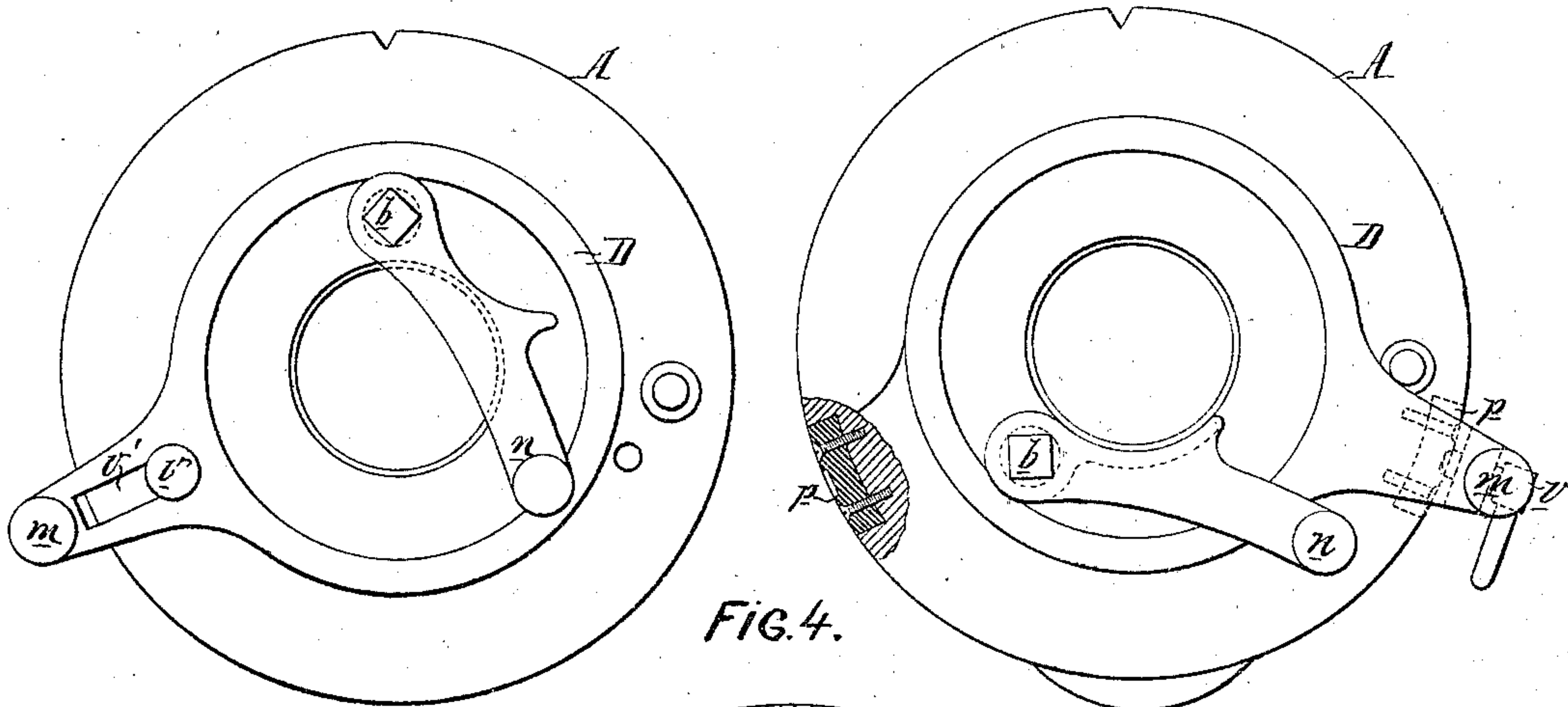
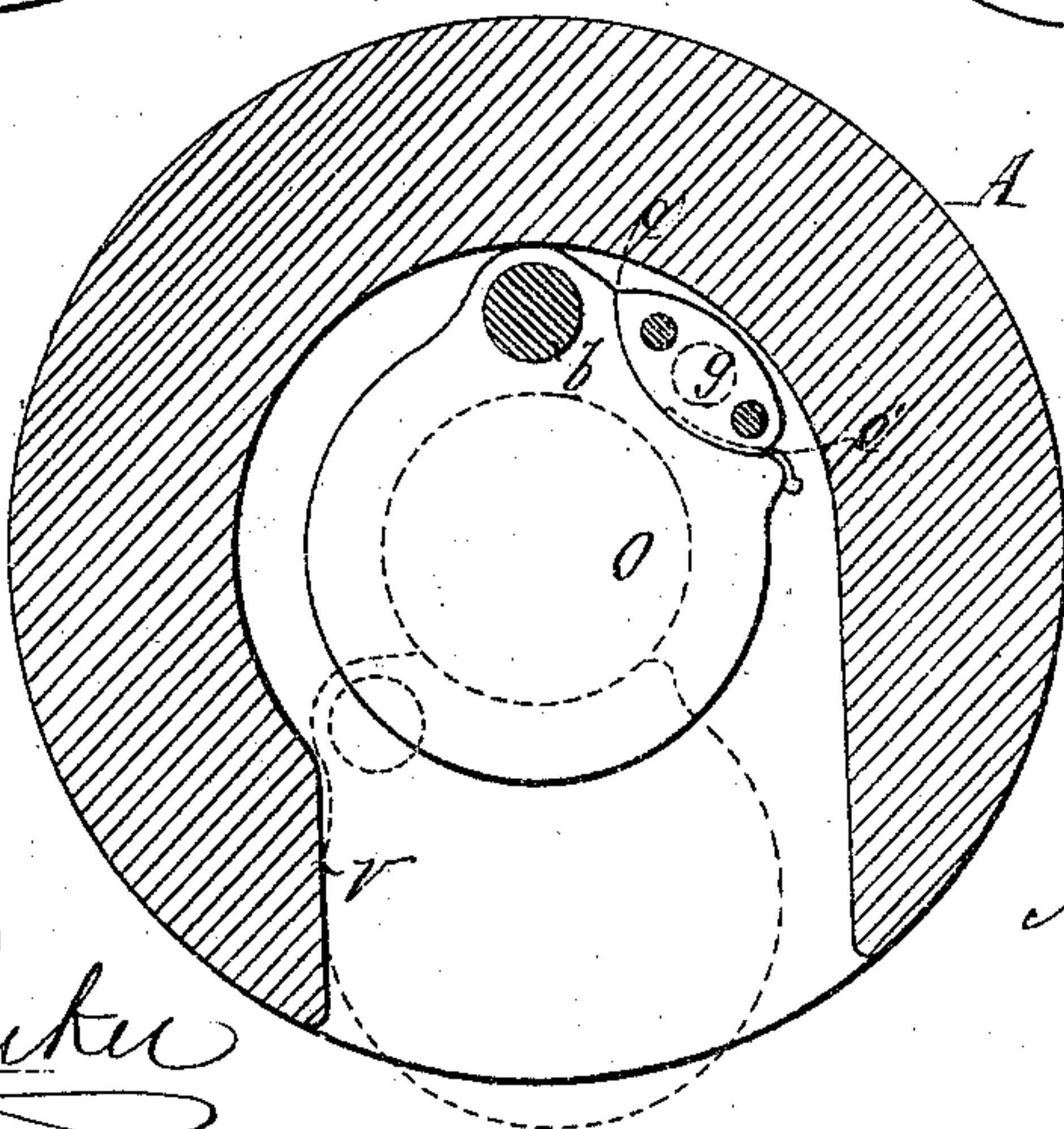


FIG. 4.



WITNESSES,

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FERDINAND E. M. NILLUS, OF HAVRE, FRANCE.

IMPROVEMENT IN BREECH-LOADING FIRE-ARMS.

Specification forming part of Letters Patent No. 126,568, dated May 7, 1872.

SPECIFICATION.

I, FERDINAND ERNEST MICHAEL NILLUS, of Havre, France, have invented certain Improvements in Breech-Loading Fire-Arms, of which the following is a specification:

Improvement in Breech-Loading Fire-Arms.

My invention relates to improvements in breech-loading fire-arms, too fully described hereafter to need preliminary explanation, the said improvements insuring the ready closing and opening of the breech without liability of the parts to become inoperative from fouling or heating.

In the accompanying drawing, Figure 1 is a longitudinal section of a gun with my improvements; Figs. 2 and 3, rear views, showing the parts in different positions; and Fig. 4, a section on the line 1 2, Fig. 1.

The gun A may be of any suitable form, and in the breech, communicating with the bore, is an enlarged opening for the reception of a hollow cylindrical plug, D, the opening in which coincides with the bore of the gun, and is of such a diameter as to permit the ready passage of the charge into the bore. On the plug D is an external screw-thread, adapted to a similar thread in the breech, and through a longitudinal opening in the plug extends a spindle, *b*, to the front end of which is secured a breech-piece, O, a conical projection, *s*, on the face of the latter fitting an enlargement of the bore. At the rearend of the hollow screw D is a handle, *m*, by which the screw may be turned to an extent limited by shoulders *p p*. The motion thus imparted to the screw-plug will be sufficient to force the projection *s'* into or withdraw it entirely from the enlargement of the bore. To the spindle *b* is secured a handle, *n*, by which, (when the screw D is drawn back,) the breech-piece O may be turned down to a position to expose the bore of the gun, the breech of the gun being cut away so as to form a slot, V, for the reception of the breech-piece when thus depressed, as shown by dotted lines in Fig. 4. As the slot V is not of sufficient width to permit the breech-piece to be entirely withdrawn from the bore, the

projecting part of the said breech-piece is cut away on the line *o o*, Fig. 4, forming a curved recess, which (when the breech is open) coincides with the bore, and when the gun is closed receives a projection or stop, *g*, on the inner face of the screw D.

It will be seen that when the breech is closed the screw D prevents the breech-piece from being driven back, and that the projection *g* prevents any lateral movement, and that, owing to the peculiar construction and arrangement of the parts, they are not liable to become inoperative from fouling, and can expand freely, should they become heated, without danger of being wedged in their places.

It will be observed that, instead of the usual oblique vent formed partly in the breech of the gun and partly in the breech-piece, I form a vertical vent, *z*, in the solid metal in front of the breech-piece. This enables the latter to be screwed into its place until perfectly tight, as there are no two openings to be brought into line with each other, and it is also safer than the oblique vent, and enables cartridges of ordinary construction to be employed.

It will be observed that the breech-piece, when withdrawn, is still almost entirely within the body of the gun, and is most effectually protected from any liability to be injured by missiles which can strike the gun at any point.

I claim as my invention—

1. The combination, in a fire-arm, of a recessed and slotted breech-piece, a hollow screw, D, and a breech-piece, O, hung to and operated by a shaft extending through the said screw, substantially as described.

2. The combination of the breech-piece O pivoted to the hollow screw as described, its projection *s*, and the enlargement of the bore, as and for the purpose set forth.

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

F. E. M. NILLUS.

Witnesses:

JOHN S. HUNT,
GIRD P^{re}.