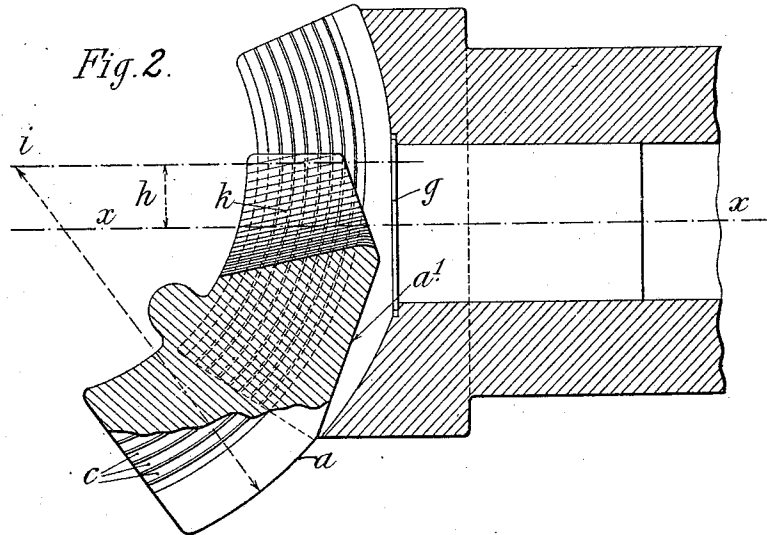
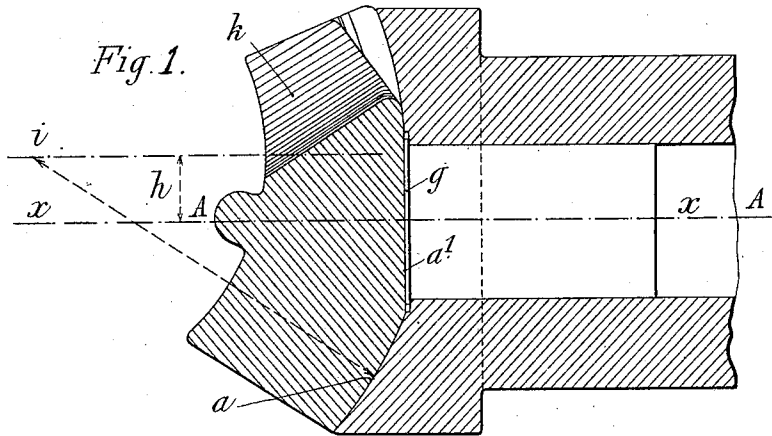


1,016,179.

2 SHEETS—SHEET 1.



Witnesses:
E. E. Warfield
R. C. Fitzhugh.

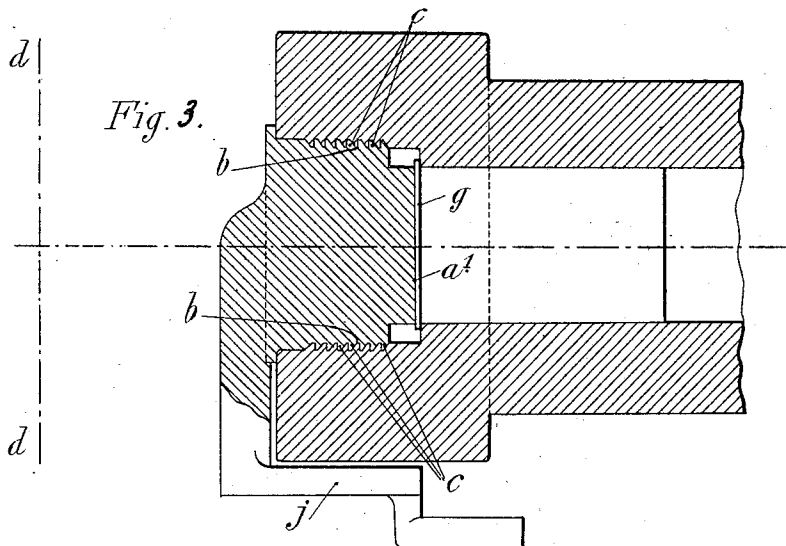
Inventor:
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E. SCHNEIDER.
BREECH MECHANISM OF FIREARMS.
APPLICATION FILED MAY 4, 1911.

1,016,179.

Patented Jan. 30, 1912.

2 SHEETS—SHEET 2.



Witnesses:

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Inventor:

Ernest Schneider
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UNITED STATES PATENT OFFICE.

EUGENE SCHNEIDER, OF LE CREUZOT, FRANCE.

BREECH MECHANISM OF FIREARMS.

1,016,179.

Specification of Letters Patent.

Patented Jan. 30, 1912.

Application filed May 4, 1911. Serial No. 625,054.

To all whom it may concern:

Be it known that I, EUGENE SCHNEIDER, citizen of the Republic of France, residing at Le Creuzot, Saône-et-Loire, France, have invented certain new and useful Improvements in and Relating to the Breech Mechanism of Firearms, of which the following is a specification.

This invention relates to breech mechanism for fire-arms. It has heretofore been proposed to provide a breech block with a curved front face and with a series of concentric threads or locking shoulders on its side faces. These threads or locking shoulders and the curved front face of the breech block were struck from a common center which intersected the longitudinal axis of the gun. A housing of corresponding form was provided for the block at the rear of the gun, and the breech was opened by rotating the block around a horizontal axis. In this opening operation the curved front face of the breech block moved in engagement with the curved wall of the breech and with the end of the cartridge case. Consequently, in this construction, it was necessary to give to the end of the cartridge case a concavity corresponding to that of the wall of the breech which was engaged by the curved face of the breech block. This necessity for imparting a concavity of a determined curvature to the bottom of cartridge cases complicates the construction of these parts and increases their cost. In addition the adoption of this form of breech closure with concentric threads is rendered difficult for armaments into the composition of which other firearms utilizing ordinary flat bottomed cartridge cases enter.

The present invention has for its object a form of breech closure with concentric threads in which these defects are obviated, that is to say in which cartridges with flat bottomed cases can be employed.

According to this invention the breech block is so constructed and arranged that when it is in the closed position it presents a plane surface opposite the bore of the gun; for this purpose the geometrical axis of the concentric threads of the breech block is eccentric relatively to the axis of the gun, the front part of the block being bounded by a cylindrical surface concentric with the

threads and having its forward portion truncated.

In order that the said invention may be clearly understood and readily carried into effect, I will describe the same more fully with reference to the accompanying drawing in which:—

Figure 1 is a sectional elevation along the axis of the gun the breech being represented closed. Fig. 2 is a similar sectional elevation, the breech being represented during the opening movement. Fig. 3 is a sectional plan on the line A A in Fig. 1.

The novel construction comprises a block provided with concentric threads and bounded laterally by two planes b parallel with the vertical plane through the axis of the gun and provided with threads c in the form of arcs of circles having a common geometrical axis $d d$ perpendicular to the said planes $b b$. The axis $d d$ instead of intersecting the axis $x x$ of the gun is eccentric relatively to the latter, that is to say it projects vertically at a point i separated by a certain distance h from the axis of the gun.

In front the breech block is bounded by a cylindrical surface a having the same axis $d d$ as the threads c but for a portion of its extent this surface is flattened in such a manner as to present opposite the bore of the gun in the breech closed position (Figs. 2 and 3) a plane portion a' . As shown in the drawing this permits of employing flat bottomed cartridge cases g . It will of course be understood that a housing, the form of which corresponds to that of the block described is reserved for the latter at the rear of the gun.

The eccentricity h of the axis $d d$ is selected in such a manner that when the breech is opened by rotation in its housing around this axis the flat portion a' of the block immediately separates from the flat bottom g of the cartridge case.

It will of course be understood that in the breech block and in its housing suitable cavities are provided for the fitting and operation of the usual firing and cartridge extracting parts and the like.

The block may be operated by a lever j either fitted to or integral with it. As shown in Figs. 1 and 2 it may present at its

upper part a cylindrical cavity $\frac{1}{2}$ forming a loading plate when the breech is open.

What I claim and desire to secure by Letters Patent of the United States is:—

5 1. In breech mechanism for fire-arms, the combination of a breech, a curved locking shoulder provided therein struck from a center to the rear of the breech and eccentric to the longitudinal axis of the fire-arm, a
10 breech block the front face of which has a flat portion for engagement with the projectile and a curved portion for engagement with a correspondingly curved portion of the breech, and a shoulder on said breech
15 block for engagement with the shoulder in the breech.

2. In breech mechanism for fire-arms, the combination of a breech, a plurality of concentric curved locking shoulders provided
20 therein struck from a center to the rear of the breech and eccentric to the longitudinal axis of the fire-arm, a breech block and corresponding shoulders thereon for engagement with the shoulders in the breech, the

front face of said breech block having a flat 25 portion for engagement with the projectile and a curved portion engaging a correspondingly curved portion of the breech.

3. In breech mechanism for fire-arms, the combination of a breech, a plurality of concentric curved locking shoulders provided
30 therein struck from a center to the rear of the breech and eccentric to the longitudinal axis of the fire-arm, a breech block and corresponding shoulders thereon for engagement
35 with the shoulders in the breech, the front face of said breech block having a flat portion for engagement with the projectile and a curved portion engaging a correspondingly curved portion of the breech,
40 said curved portion being concentric with said locking shoulders.

In testimony whereof I have affixed my signature in presence of two witnesses.

EUGENE SCHNEIDER.

Witnesses:

R. DE SERELINGES,
JACK H. BAKER.

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