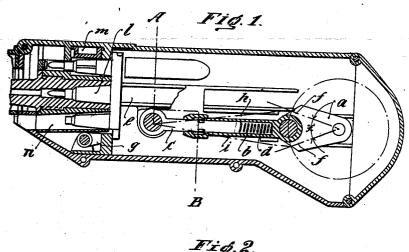
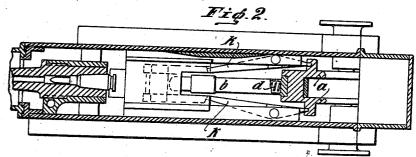
A. H. G. FOKKER.

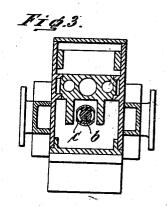
CRANK OPERATING GEAR FOR MOVING THE BREECH IN MACHINE GUNS. APPLICATION FILED SEPT. 1, 1920.

1,427,079.

Patented Aug. 22, 1922.







Inventor: Anthony Herman Gerard Folker Ry D. Singer, Arty

UNITED STATES PATENT OFFICE.

ANTHONY HERMAN GERARD FOKKER, OF AMSTERDAM, NETHERLANDS.

CRANK-OPERATING GEAR FOR MOVING THE BREECH IN MACHINE GUNS.

1,427,079.

Specification of Letters Patent. Patented Aug. 22, 1922.

Application filed September 1, 1920. Serial No. 407,539.

To all whom it may concern:

Be it known that I, Anthony Herman GERARD FORKER, a subject of the Queen of the Netherlands, residing at Amsterdam, 5 Netherlands, have invented certain new and useful Improvements in Crank-Operating Gear for Moving the Breech in Machine Guns (for which I have filed application in Germany, No. 310,067, filed Feb. 12, 1918), 10 of which the following is a specification.

The type of machine gun in which the breech block, the movement of which places a cartridge in position and operates the firing pin, is given a reciprocating movement by mechanical means, such as a rotating crank, instead of being returned to the cocked position by the recoil of the explosion in the gun, is well known. In the usual form of construction in such a gun, the ex-20 treme forward position of the crank brings the breech block to the point where it holds the cartridge in position and the shot is fired.

The object of the present invention is to provide a means of bringing the breech block 25 into its forward position before the operating crank has reached the end of its throw in order to utilize the remainder of that throw for operating a device for locking the breech block in position before the shot is fired. This means of locking forms the subject of my copending application for Letters Patent of the United States, Serial No. 407,540, filed September 1, 1920.

The accompanying drawing illustrates the 35 construction of the gun mechanism which forms the subject of this invention.

In said drawing: Figs. 1 and 2 respectively show vertical and horizontal sections through the gun 40 mechanism.

Fig. 3 is a cross section through A—B

The operating crank A is connected to the breech block E by means of a connecting rod, 45 which, however, consists of two telescoping parts B and C, one of which slides axially inside the other, the two parts being extended as far as allowed by the crank A and the breech block E by means of a spring D. 50 When the crank A has completed part of its forward throw as indicated by the center line F, the breech block is forced against the abutment G and holds the cartridge carrier. L in place. In continuing its rotation from

the position shown from the center line F 55 to its furthest forward point (the position in which it is shown in the diagram), the crank A forces the two parts of the connecting rod together, thus compressing the spring D. During this time the breech block 60 È remains stationary while the movement of the crank is utilized to move the locking levers K into the position in which they lock the breech block in the manner described in my copending application hereinbefore iden- 65 tified, Serial No. 407,540. When this has been effected the shot is fired. The continued rotation of the crank A first unlocks the breech block by moving the locking levers K, during which time the breech block re- 70 mains stationary while the two parts of the connecting rod slide outwards, decompressing the spring D. When the connecting rod is fully extended the further rotation of the crank draws the breech block away from the 75 abutment and the cycle of operations is repeated by the means described. The rotation of the operating crank remains continuous and uniform throughout the cycle of operations.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be per-

formed, I declare that what I claim is:—
1. In a breech block mechanism for ma- 85 chine guns, a rotating crank, a connecting rod between the crank and the breech block, divided into two parts in a manner allowing the said connecting rod to change in length during the transmission of the movement of 90 the crank to the breech block, whereby the movement of the breech block is less than the total throw of the crank.

2. In a breech block mechanism for machine guns, a rotating crank, a connecting 95 rod connecting the operating crank with the breech block, divided into two parts, one sliding axially within the other, and a spring holding the two parts extended as far as allowed by the relative positions of the 100 crank and the breech block.

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

ANTHONY HERMAN GERARD FOKKER.

Witnesses:

C. Porter, H. Y. KUIJPERS.