(No Model.) 2 Sheets—Sheet 1.

J. M. & M. S. BROWNING.

MAGAZINE GUN.

No. 282,839. Patented Aug. 7, 1883.

Fig. 1.

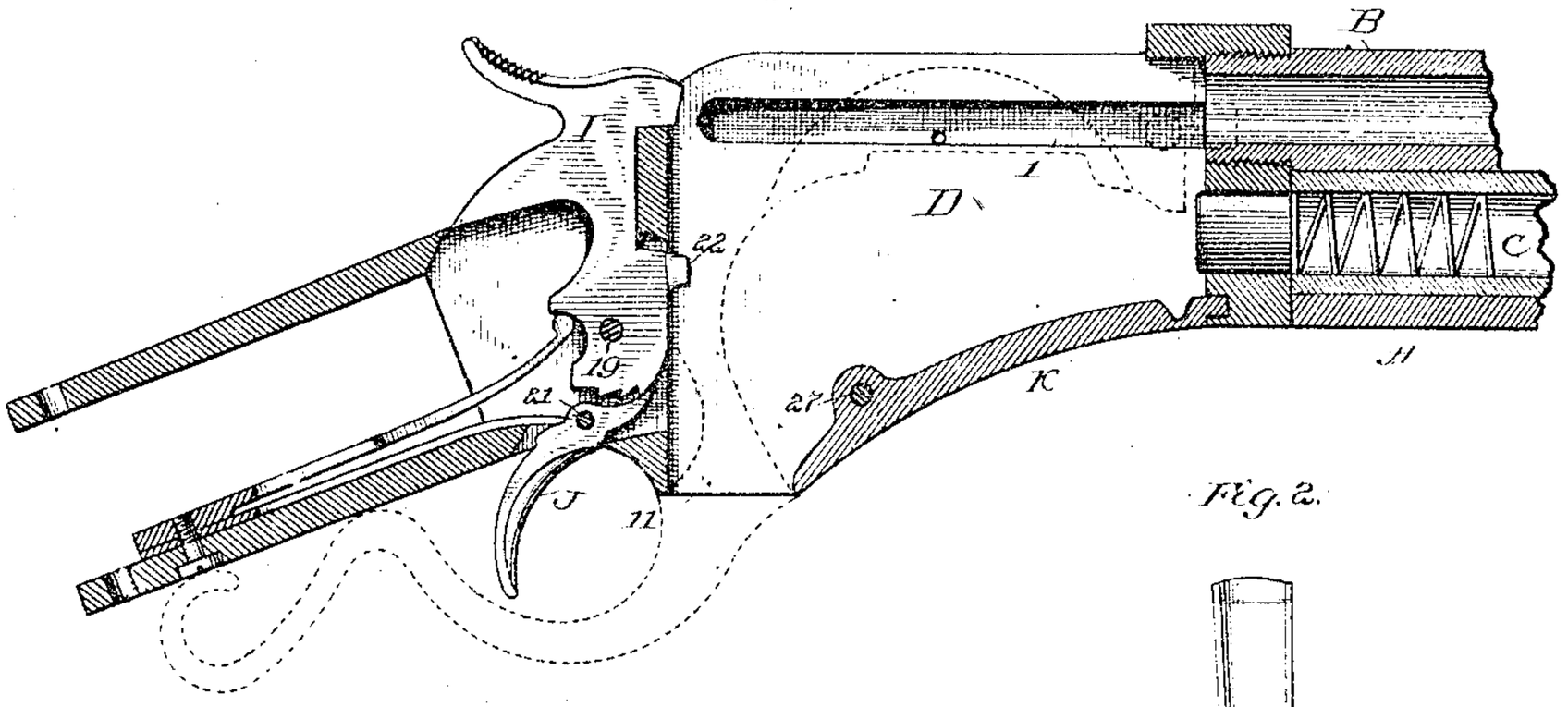


Fig. 2.

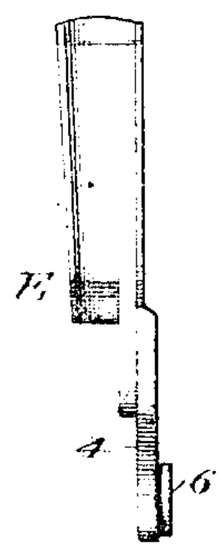
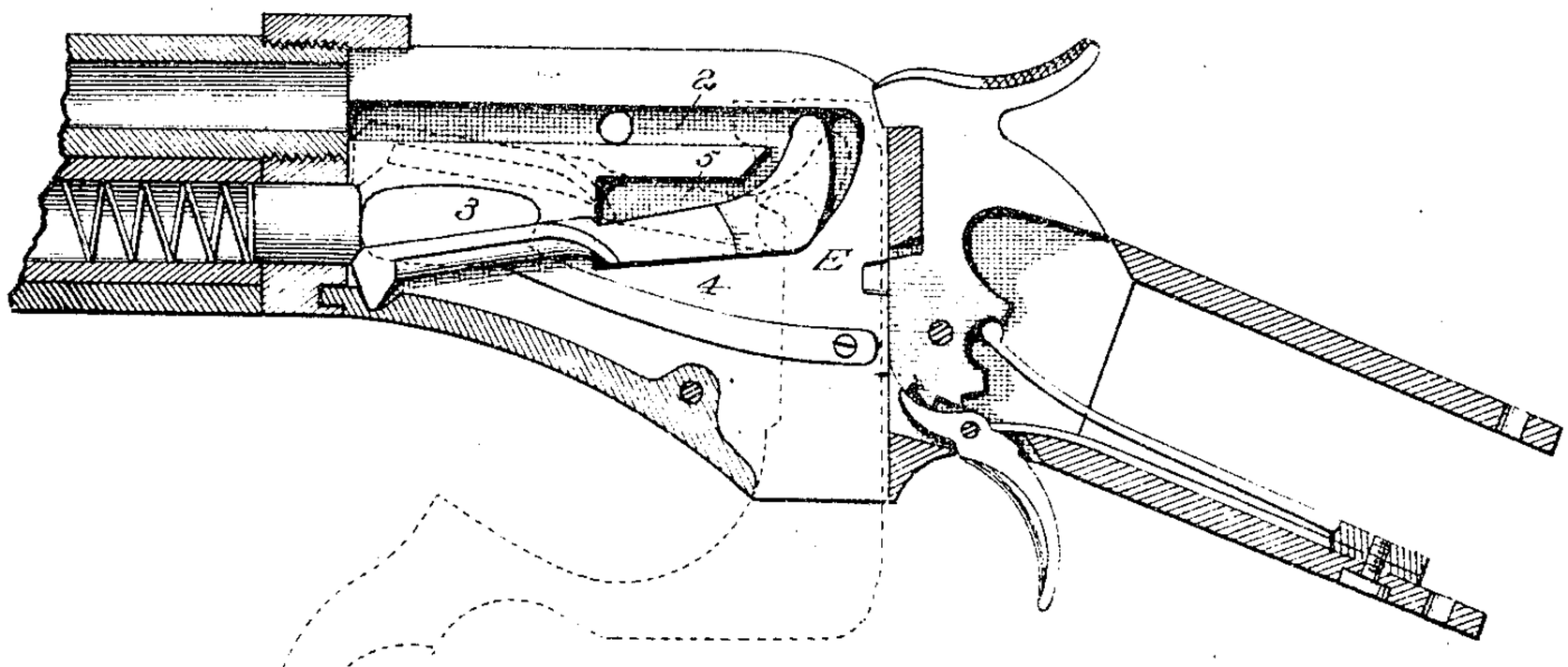


Fig. 3.



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(No Model.) 2 Sheets—Sheet 2.

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Fig. 4.

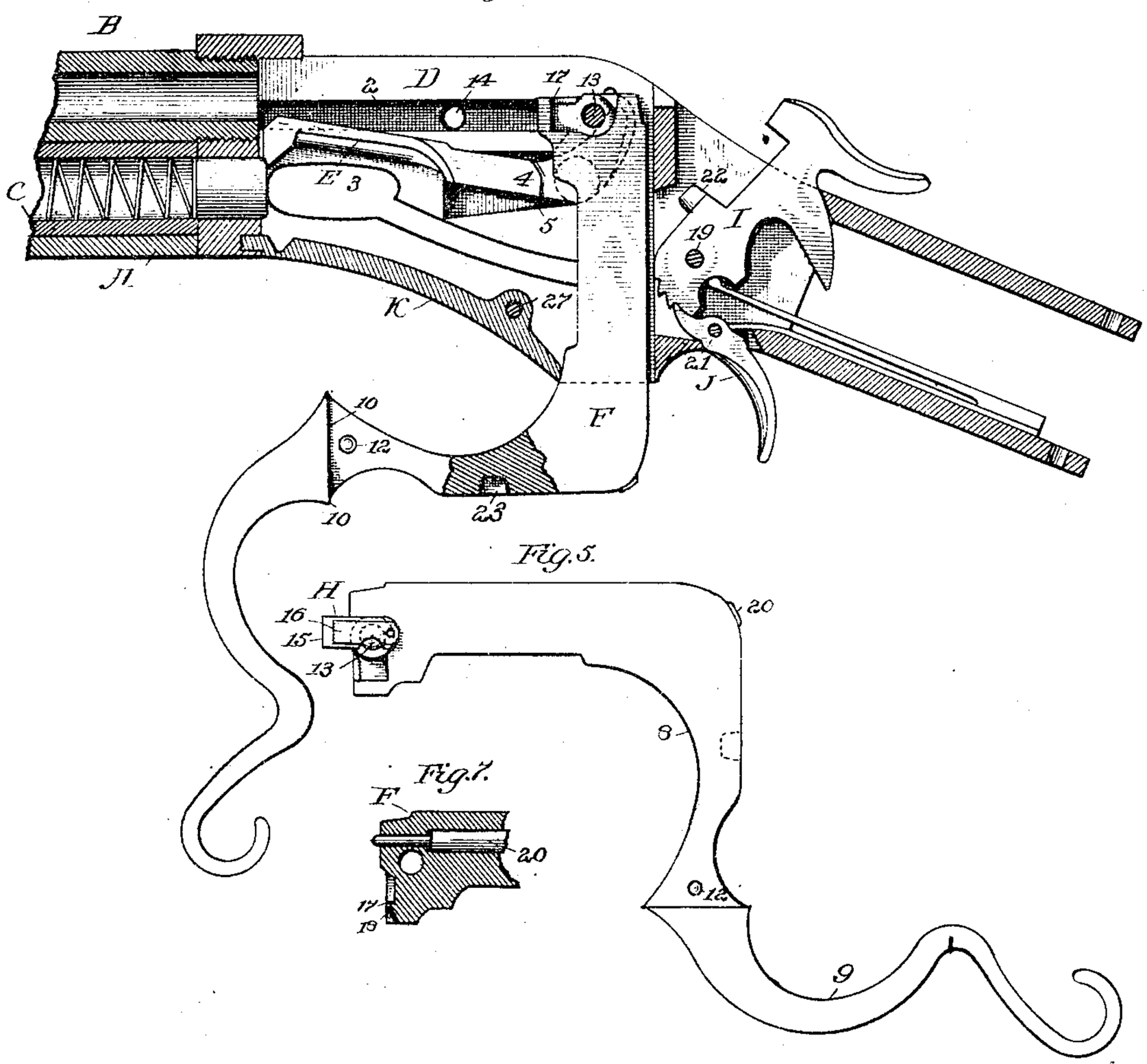

Fig. 5.

Fig. 7.

Fig. 6.

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UNITED STATES PATENT OFFICE.

JOHN M. BROWNING AND MATTHEW S. BROWNING, OF OGDEN, UTAH TERRITORY.

MAGAZINE-GUN.

SPECIFICATION forming part of Letters Patent No. 282,839, dated August 7, 1883.

Application filed September 13, 1882. (No model.)

To all whom it may concern:

Be it known that we, JNO. M. BROWNING and M. S. BROWNING, of Ogden, in the county of Weber and Territory of Utah, have invented a new and useful Improvement in Magazine-Guns; and we do hereby that the following is a full, clear, and exact description of the same.

Our invention relates to improvements in magazine fire-arms; and the object of the invention is to render the arm more certain in operation and effective in use by decreasing he number of working parts, and thereby greatly simplifying the action of the gun.

The invention pertains to that class of repeating-rifles in which the magazine is located beneath the barrel, from which the cartridges are expelled by a spring-follower into the receiver and upon a carrier, by which they are elevated to a position opposite the chamber of the gun, into which they are driven by a breech-block and lever operating from the under side of the gun, and which serves also as a trigger-guard.

The invention consists, first, in the peculiar manner of connecting the breech-block to the receiver, by which it is given a combined sliding and pivotal motion; further, in the combination of such a breech-block and the peculiar extractor; further, in the manner of attaching the carrier to the receiver; and, generally, in the peculiar construction and arrangement of the various parts and in the various operative combinations of such parts, all fully hereinafter explained.

In the drawings, Figure 1 represents in part a central longitudinal section, with some of the parts in side elevation. Fig. 2 represents the carrier in plan. Fig. 3 represents, in section and side elevation, the opposite side from that shown in Fig. 1. Fig. 4 is a similar view, with the breech-block in full lines; Figs. 5, 6, and 7, separate views of the breech-block.

A represents the stock, and B the barrel, both of ordinary form and construction.

C is a magazine-tube, rigidly secured below the barrel of the gun, the rear part being inclosed by the stock, as usual in arms of this class. The magazine is provided with the ordinary spring-follower, and preferably extends to the muzzle of the gun, thus being adapted to hold a large number of cartridges.

D represents the receiver, which is slotted vertically from top to bottom, and communicates with the magazine at its lower forward end, and above with the chamber of the gun. The receiver is provided on one side with a slot, 1, extending for almost its entire length, which slot is on a line with the chamber of the gun. A similar slot, 2, is formed in the opposite side of the receiver.

The magazine is loaded by means of a spring-trap, 3, in the side wall thereof, the cartridges being forced through such trap and into the magazine, each cartridge being impelled forward by the succeeding cartridge until the magazine is full.

E represents the carrier, which is shown separately in Fig. 2. This carrier is of angular shape, and is provided at its forward end with a concave rest or support, the forward end of which is in close proximity when the carrier is depressed to the mouth of the magazine, and on which the cartridge rests when expelled therefrom. The rear arm of the carrier 4 fits snugly in a slot, 5, in the side wall of the receiver, and such arm is provided with a round stud, 6, which enters a perforation in the side wall, by which the carrier is held in operative position. The upper end of the slot 5, in which the carrier is placed, communicates with the slot 2, before mentioned, and the rear arm of the carrier extends up to a point opposite the termination of such slot 2, the slot 5 being extended back a short distance, in order to give play to the carrier when moved, as hereinafter described.

F represents as a whole the combined breech-block and lever, which is shown separately in Fig. 5. This lever is of a peculiar shape, as shown, the upper end, which is nearly straight, being adapted to close the receiver when the arm is ready to be fired. The lever is bent as indicated at 8, and extends downward through the receiver and behind the rear end of the carrier, terminating in an ordinary trigger-guard and handle, 9, and having shoulders 10 10, which bear against the plane face 11 on the receiver, a spring friction-stud, 12, having

a rounded end, being provided, which holds the breech-block in a closed position by bearing against the inner wall of the receiver. The breech-block is guided in its movement by a pin, 13, which is inserted through a hole, 14, in the side of the receiver, and passes through a corresponding hole in the forward end of the block. The end of the pin 13, after passing through the hole and breech-block, slides in the slot 2, while its other end, passing through the block, enters an opening in the extractor H.

The extractor is represented in Fig. 6. It consists of a plate, 15, of such diameter that it will fit snugly in the slot 1 of the receiver, having at its forward end a hook adapted to engage with the flange of the cartridge in the chamber. A spring, 16, is secured to the extractor, and bears against the wall of the slot, and tends to throw the hook outward to engage with the cartridge. It is evident that the extractor and breech-block are connected together by the pin 13, and as the lever is moved the extractor will have a direct reciprocating movement in the slot 1, while the lever has both a sliding movement and a pivotal movement on the pin. In the forward end of the block is a notch, 17, and in front of such notch the block is beveled, as shown at 18, for the purpose hereinafter described. The breech-block is bored out longitudinally to receive the firing-pin 20, which is provided with a strong spring, and is adapted to slide longitudinally in such bore.

The hammer I is pivoted upon a pin, 19, and operates in connection with the trigger J, pivoted upon a pin, 21, both provided with the usual springs. In addition to the usual half-cock notch, I employ a safety-catch, which holds the hammer locked a slight distance from the firing-pin. Upon the hammer is a projection, 22, which, when such hammer is at the safety-catch just described, engages with a notch, 23, in the rear end of the breech-block and locks such block rigidly in a closed position.

The lower opening of the receiver is closed by means of a bottom plate, K, provided at its forward end with a projection, which enters a notch in the adjacent wall of the receiver, and at its rear end with projecting lugs, through which is passed a pin, 27. The arm of the lever works in contact with the rear end of this bottom plate, it being curved for that purpose, as shown. In the operation of this arm the breech-block is thrust down, the pin 13 striking the rear arm of the carrier and throwing the forward end up. The magazine is then loaded through the spring-trap, and at the same time a cartridge may be placed in the chamber of the gun from above. The breech-block is now closed and the piece cocked, and at the same time the carrier is forced down to its lowest position in line with the magazine. After firing, the gun is placed either at half or full cock and the lever forced down. The extractor has grasped the flange of the exploded shell, and as the lever is pressed down such extractor moves directly back in the groove, carrying the shell with it. At the same time another cartridge has been gradually forced by the magazine-spring upon the carrier. After the cartridge is drawn from the chamber, the flange is released by the extractor, and the notch 17 in the forward end of the block seizes the flange and draws the cartridge back. At this point the pin 13 strikes the rear arm of the carrier, throwing its forward end up, not only placing the cartridge last taken from the magazine in position to be forced into the chamber, but also throwing the exploded cartridge completely out of the receiver. The loaded cartridge is prevented from following it by its bullet striking against the upper wall of the receiver, in the rear of the chamber, while its head comes in contact with the forward end of the breech-block. The carrier is held in its elevated position either by the succeeding cartridge being forced against it or, if the magazine is empty, by the spring-follower. The breech-block is then closed and a fresh cartridge driven into the chamber, when the gun is ready to be fired.

It will be seen that the gun can be used with great rapidity as a single-loader, since when the carrier is in its elevated position the cartridges could be simply dropped upon the carrier from above and then forced into the chamber by closing the breech-block.

It will be noticed that the working parts of this gun, setting aside the magazine, hammer, and trigger, are only three in number—namely, the breech-block, carrier, and extractor. All springs are dispensed with.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a magazine-gun, the combination of a receiver or chamber communicating both with the magazine and the barrel, cartridge carrying and extracting devices, and a solid breech-block and lever, formed in one piece, and having a combined sliding and pivotal movement in the receiver, such breech-block having a plane smooth upper surface, adapted, when the breech is closed, to be flush with the upper edge of the walls of the receiver and form the top and closing plate thereof.

2. The receiver D, having the slots 1, 2, and 5, in combination with the breech-block, the extractor, the pin 13, connecting such breech-block and extractor and projecting into the said slot 2, and the vibrating carrier E, mounted in the said slot 5, and having its rear end projecting up opposite the said slot 2, in position to be struck by the pin 7 when the breech-block is drawn down.

3. The receiver having the communicating slots 2 5, in combination with the carrier having the turned rear edge adapted to be secured within such slot 5, to operate in connection with the described breech-block.

4. In combination with the slotted receiver,

the breech-block, the vibrating carrier, and the extractor, arranged substantially as described, the pin 13, passing through the said breech-block and pivoting it upon the extractor, and projecting into the slot 2, to operate in connection with the vibrating carrier.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

JOHN M. BROWNING.
MATTHEW S. BROWNING.

Witnesses:
D. W. FELSHAW,
ALPHA BALLINGER.