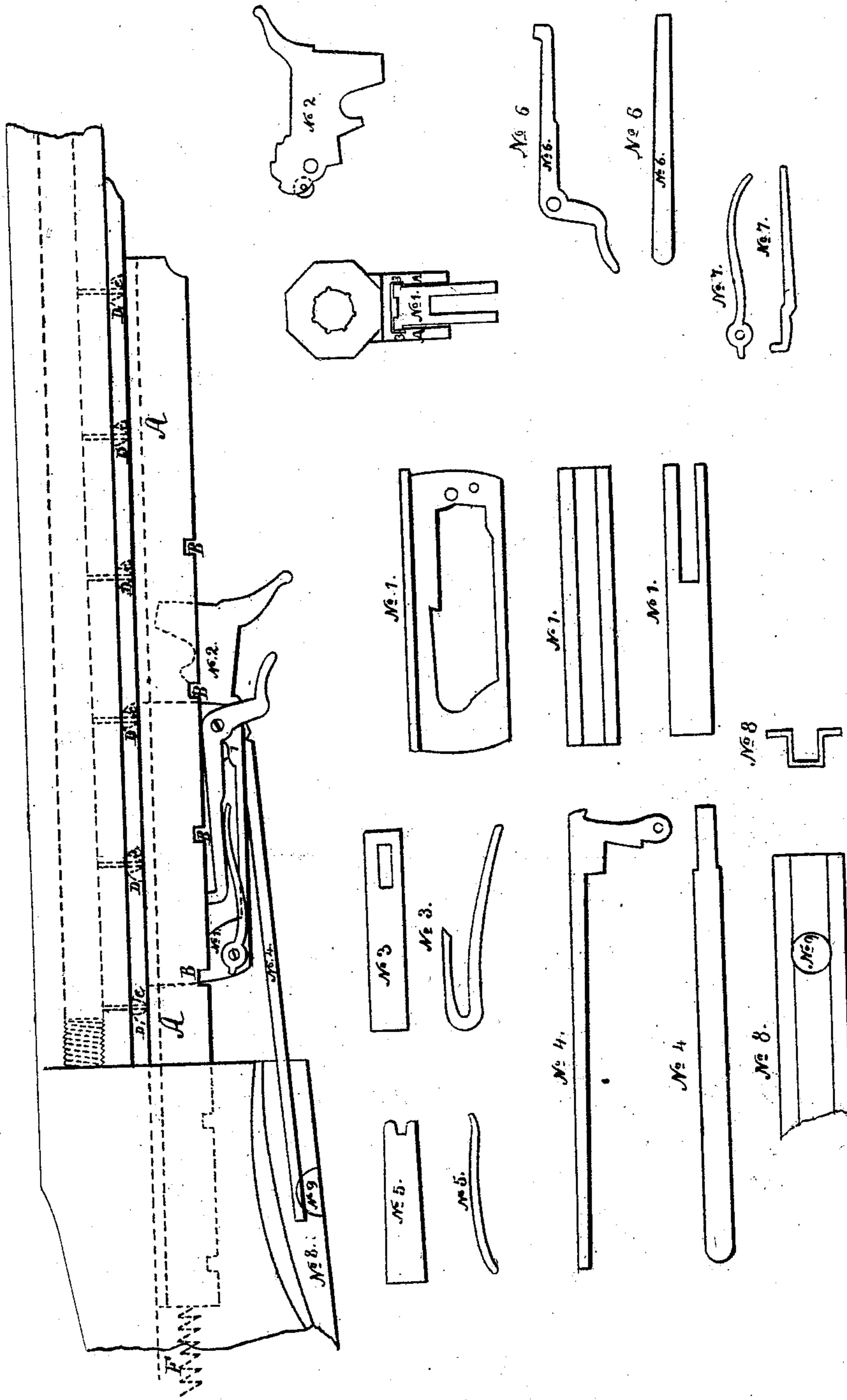


J. R. MOCK.

Muzzle-Loading Fire-Arm.

Patented May 31, 1859.

No. 24,228.



UNITED STATES PATENT OFFICE.

JAMES R. MOCK, OF ELIZABETHTOWN, KENTUCKY.

IMPROVEMENT IN LOCKS FOR REPEATING FIRE-ARMS.

Specification forming part of Letters Patent No. 24,228, dated May 31, 1859.

To all whom it may concern:

Be it known that I, JAMES R. MOCK, of Elizabethtown, in the county of Hardin and State of Kentucky, have invented a new and useful Improvement in Guns; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention relates to guns intended to be loaded with several cartridges at the same time, one rammed down upon another, these cartridges being afterward discharged in succession by means of a series of touch-holes or nipples and a sliding hammer or lock.

In the accompanying drawings, Figure 1 is a side view of a gun-breech with my improvement attached. Fig. 2 is a cross-section through the barrel, grooved box, and my improved lock-plate. The other figures show detached parts.

My invention consists of a coiled spring, in combination with a sliding lock provided with a catch and a catch-spring, and a grooved barrel and grooved breech-pin.

In Fig. 1 of the accompanying drawings, H represents part of my gun-barrel with the grooved box A cast in the same piece and extending along the side of the barrel H, Fig. 1. This grooved box, being cast, may be finished off with very little expense. The lock-plate No. 1 is fitted into the groove A and slides freely back and forth along the side of the barrel H, carrying the hammer No. 2. Along the lip of the grooved box A are several notches, B, into which the end of the catch No. 6 is pressed by catch-spring No. 7, to fix the lock in proper position for the hammer No. 2 to strike the nipples D in the bottom of the grooved box A.

Attached to the lock-plate No. 1 is a coiled spring, F, which connects the plate with the breech of the gun. Whenever the catch No. 6 is raised from one of the notches B this coiled spring draws the lock-plate back until the catch No. 6 enters the next notch B and again fixes the lock.

The breech of my gun is made removable for the purpose of cleaning. It also has a grooved box continuous with the box A in the barrel, so that the lock-plate slides into the breech without obstruction. In the construction of the gun the greatest care is required to arrange

the two sections of the grooved box so that when the breech and barrel are screwed together the two sections of the grooved box shall exactly correspond and allow the lock to slide freely from the barrel to the breech.

The coiled spring F is made detachable, so that the lock can be readily slipped out of the grooved box and carried in the pocket to protect it from dampness.

My lock-plate is very simple and of peculiar construction. A cross-section of this plate is seen in Fig. 2, letter E representing the lateral grooves at the bottom of the grooved box A. These lateral grooves and the corresponding ribs or shoulders on the sides of the lock-plate No. 1 hold the plate in position as it slides and give great accuracy of motion to the lock-plate, insuring the stroke of the hammer No. 2 exactly upon the nipple D. Three other views—of the side, bottom, and top—of No. 1 give a complete idea of its construction. This lock-plate No. 1 carries the other parts of the lock, which are very few and simple—namely, the hammer No. 2, mainspring No. 4, trigger-spring No. 5, catch No. 6, and catch-spring 7. The arrangement of the whole is new and especially adapted to a sliding lock. The lock-plate is a single piece, and the whole lock is very compact, convenient, and durable. The trigger, also, is in the same plate. The tubes extending from the nipple D to the hollow of the barrel are flared out or widened near the top of the tubes, and are gradually lessened as they approach the bore or hollow of the barrel. This shape renders the fire or discharge of the gun more certain upon the explosion of the cap, and yet prevents any loss of the force of the power from within the barrel.

Unlike guns where the lock slides in the wooden stock, my gun requires no wooden stock along the barrel. On this account my gun can be made cheaper. Moreover, my metallic grooved box may be kept always in perfect order; but with a groove in a wooden stock the lock has too much play in dry weather, and is liable to bind in wet weather on account of the swelling and warping of the wood. Moreover, the wooden groove soon wears, so that the lock will not be properly guided.

The barrel of the gun being loaded with several successive charges extending from to D, Fig. , the lock is pushed out, extending

spring F so as to bring the hammer opposite the cartridge nearest the muzzle of the gun. Now, upon the fall of the hammer the first cartridge is discharged. Then the lock recedes to the next nipple, when the next cartridge is discharged. Thus six or more balls may be discharged in rapid succession. When the lock recedes to the breech by cocking or half cocking, the lock offers no obstacle to the removal of the breech-pin for cleaning the gun. The gun can be unbreeched by hand without the aid of any tools whatever.

I am aware that a gun-lock has been made to slide in a wooden stock and to discharge a succession of cartridges; but I believe that a

grooved box made partly in the barrel itself and partly in the breech-pin is new and a great improvement in this class of guns.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

The use of the coiled spring F, in combination with the sliding lock, the catch No. 6, catch-spring No. 7, and grooved barrel and grooved breech-pin, substantially as described.

JAMES R. MOCK.

Attest:

W. V. VIRTUES,
CHAS. G. WINTERSMITH.