(No Model.)

M. COLONEY.

MAGAZINE GUN.

No. 282,499. Patented Aug. 7, 1883.

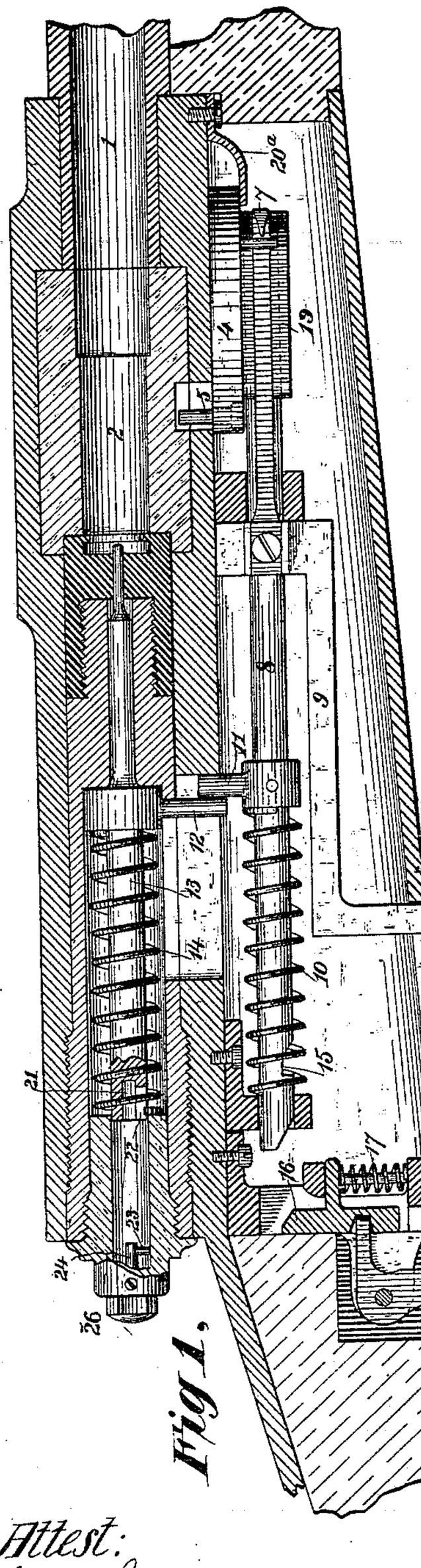

Fig 1.

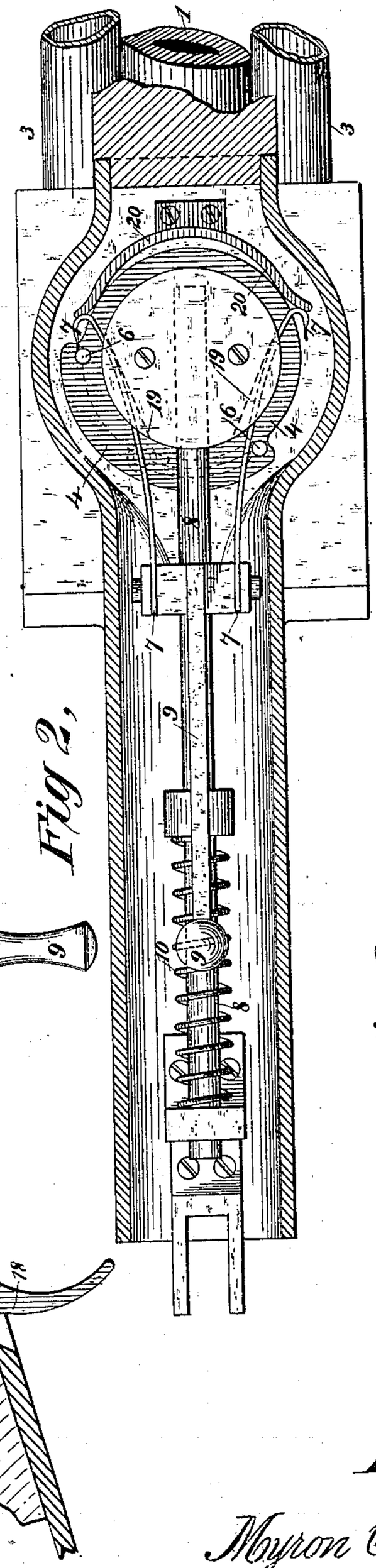

Fig 2.

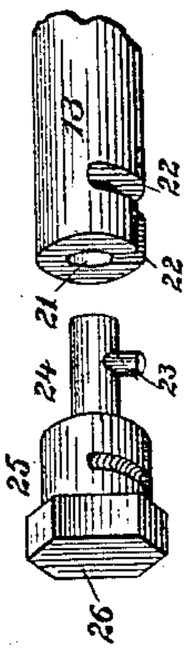

Fig 3.

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UNITED STATES PATENT OFFICE.

MYRON COLONEY, OF NEW HAVEN, CONNECTICUT, ASSIGNOR TO JAMES HENRY McLEAN, OF ST. LOUIS, MISSOURI.

MAGAZINE-GUN.

SPECIFICATION forming part of Letters Patent No. 282,499, dated August 7, 1883.

Application filed January 20, 1881. (No model.)

To all whom it may concern:

Be it known that I, MYRON COLONEY, a citizen of the United States, residing at New Haven, in the county of New Haven and State of Connecticut, have invented new and useful Improvements in Magazine Fire-Arms, of which the following is a specification.

My invention relates to that class of fire-arms in which a transversely-moving breech-slide is actuated by the movement of a longitudinally-moving rod through the medium of an oscillating disk, such arrangement being embodied in a magazine fire-arm, forming the subject-matter of an application for Letters Patent filed by me and in my name on or about the 6th day of January, 1880, bearing the serial number 638.

The present invention, as distinguished from my said former invention, consists in an arrangement whereby the rotation of the disk and the consequent transverse movement of the breech-slide are produced by a positive backward movement of the sliding rod.

My improved arm is constructed with a chambered breech-slide moving transversely and operating to take cartridges alternately from magazines on the opposite sides of the barrel and carry them to firing position. The slide is moved by a disk oscillated on a vertical axis by the alternate engagement of spring-hooks with studs on the disk, said hooks being carried by a longitudinally-sliding rod, which is drawn back by a finger stud or handle to move the disk, is held in its retracted position by a trigger, and when released is pressed forward by a spring, in which movement the hooks are spread apart by a V-shaped guide, so that one of them will engage with whichever of the disk-studs is at the time in advanced position.

My improvements further consist in constructing the arm with a longitudinally-moving rod for engaging with and oscillating the disk distinct from the firing-pin, as hereinafter described; also, in the combination of a firing-pin thrown forward by a spring and a slide-operating rod retracting the firing-pin when drawn back and thrown forward by an independent spring; also, in a device for holding the firing-pin in retracted position when it is desired to avoid discharging the piece on the forward stroke of the slide-operating rod; also, in the combination, with the slide-operating disk, of a brake to prevent recoil or false motion of the said disk or slide.

In the accompanying drawings, Figure 1 is a vertical longitudinal section of a gun illustrating the invention, with some parts in elevation. Fig. 2 is an under side view, with the stock and casing removed to expose the interior. Fig. 3 is a detached perspective view of the hammer-lock hereinafter described.

1 represents the barrel; 2, a breech-slide with two chambers moving transversely in rear of said barrel; and 3 3, magazines which are provided with springs and followers, so that the cartridges with which said magazines are supplied will be delivered to the slide-chambers successively, and will by them be carried to firing position in rear of the barrel, the respective chambers of the slide being by its reciprocating movement brought in register with one of the magazines and the barrel alternately, one of the slide-chambers being in loading position while the other is in firing position, and vice versa. The reciprocating motion of the slide is imparted by an oscillating disk, 4, having an upwardly-projecting stud, 5, engaging in a longitudinal slot in the slide, and two downwardly-projecting studs, 6 6, which are caught alternately by hooks 7 7, carried by a rod, 8, drawn back by a handle, 9, and thrown forward by a spring, 10. The sliding rod 8 also carries an upwardly-projecting stud, 11, engaging in front of a stud, 12, projecting down from the firing-pin or sliding hammer 13. This hammer or firing-pin is impelled forward by a spring, 14. The rod 8 is provided with a notch, 15, so as to be caught and held by a sear, 16, when drawn back. The said sear is pressed up by a spring, 17, and drawn down by a trigger, 18. A V-shaped guide, 19, spreads the hooks 7 apart at the termination of their forward stroke, so that the proper one may engage with whichever of the studs 6 is advanced by the previous motion of the oscillating disk 4, but in the backward movement permits the hook which is not in action to pass the disengaged stud without contact. A fric-

tion-brake, 20, bears against the periphery of the oscillating disk 4, as illustrated in Fig. 2, or against its face, as shown at 20^a in Fig. 1, to steady the motion of the same and prevent any rebound of the slide 2 at the termination of its stroke. This construction of friction-brake is an improvement upon those structures for analogous purposes in which the brake is attached directly to the slide and acts against the wall of the slide-socket. The advantages of my arrangement are that the spring is better protected, and, furthermore, any binding of my spring is less liable to seriously affect the working of the parts, owing to the more powerful leverage system operating in my device upon the slide. In the rear end of the firing-pin 13 is a cavity, 21, and in the wall of this an L-shaped slot, 22, to receive a lip, 23, which projects radially from an axial stud, 24, on a short shaft, 25, fitted in the rear end of the firing-pin cylinder, and provided with an external milled head, 26, for rotating it.

Operation: In the ordinary manipulation of the piece the retraction of the rod 8 by means of handle 9 draws back the firing-pin 13, and the rod 8, being caught by sear 16, holds the firing-pin back in cocked position by the contact of the studs 11 12. If, now, the sear 16 be withdrawn by means of the trigger 18, so as to release the rod 8, this rod and the firing-pin 13 will both be thrown forward instantaneously by their respective springs 10 and 14, the pin 13 delivering the firing-stroke on the rear of the cartridge. When the rod 8 is again drawn back, one of its hooks, 7, engages with whichever of the studs 6 is in advanced position, and by the partial rotation of the disk 4 throws the slide 2 laterally to the other extremity of its stroke, bringing a new cartridge into firing position, and the discharged chamber with its empty shell opposite a magazine, from whence a new cartridge enters it, expelling the empty shell from the rear. The load-chambers extend completely through the breech-slide, and are formed with internal shoulders for the seating of shouldered balls, thus limiting the entrance of the successive cartridges within the slide-chambers, so as to limit their backward motion; but after the ball is fired the empty shell, being without a shoulder, passes out freely backward. When a load-chamber is not in position, the base of the first cartridge in the magazine rests against the face of the slide.

When it is desired to avoid discharging the piece on the forward stroke of the rod 8, the shaft 25 is turned while the firing-pin 13 is in its retracted position, so that the lip 23 will engage in the transverse part of the L-shaped slot 22, and thus hold the firing-pin in its retracted position independently of the rod 8.

Having thus described my invention, the following is what I claim as new therein and desire to secure by Letters Patent:

1. In a magazine fire-arm, a transversely-reciprocating breech-slide and a horizontally-oscillating disk, arranged to actuate said slide through the medium of a device placed upon the disk and in engagement with the slide, in combination with a longitudinally-moving rod provided with attachments for engaging alternately with opposite points of the disk at each successive backward movement of said rods, whereby such backward movements of the rod oscillate the disk, and through the medium of the latter reciprocates the slide.

2. In a magazine fire-arm, a transversely-reciprocating breech-slide and a horizontally-oscillating disk, arranged to actuate said slide through the medium of a device placed upon the disk and in engagement with the slide, in combination with a longitudinally-moving rod provided with attachments for engaging alternately with opposite sides of the disk at each successive backward movement of said rod, and a horizontally-moving firing-pin arranged to be thrown into cocked position by engagement with the said sliding rod in the backward movement of the latter.

3. The combination, with a reciprocating breech-slide and an oscillating disk provided with an attachment engaging with said slide, and with connections for operating it, of a friction-brake acting directly upon the said disk for the purpose of preventing false movement of the slide by said disk.

4. The combination of the sliding rod 8, hooks 7, oscillating disk 4, studs 6, and V-shaped guide 19, for effecting the alternate engagement of the hooks, in the manner explained.

5. The combination of the firing-pin or sliding hammer 13, driven forward by a spring, and the locking device 22 23 24, for holding the said hammer in retracted position, as explained.

MYRON COLONEY.

Witnesses:
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