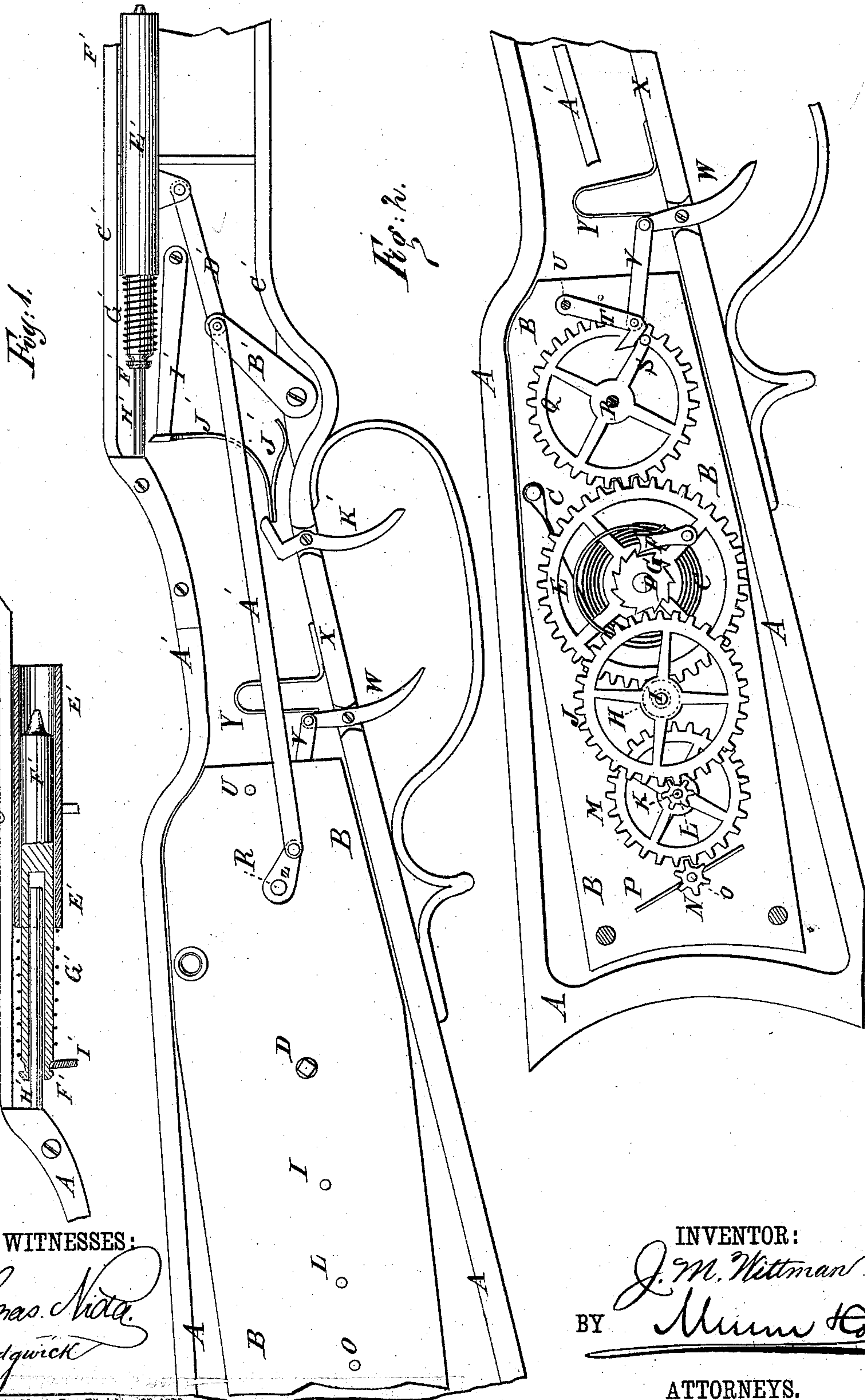


J. M. WITTMAN.  
Lock for Fire-Arms.

No. 206,991.

Patented Aug. 13, 1878.



WITNESSES:

*Chas. Nida.*  
*C. Sedgwick*

INVENTOR:

BY

*J. M. Wittman*  
*Mum Ho*

ATTORNEYS.

LOCK FOR FIRE-ARMS, John M. Wittman, St. Mary's, Pa. Filed June 27, 1878.  
The device is to be applied to magazine-guns. A pull upon the  
sets the clock-work in motion and the gun is then automatically loaded  
the magazine. A  
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# UNITED STATES PATENT OFFICE.

JOHN M. WITTMAN, OF ST. MARY'S, PENNSYLVANIA.

## IMPROVEMENT IN LOCKS FOR FIRE-ARMS.

Specification forming part of Letters Patent No. **206,991**, dated August 13, 1878; application filed June 27, 1878.

*To all whom it may concern:*

Be it known that I, JOHN M. WITTMAN, of St. Mary's, in the county of Elk and State of Pennsylvania, have invented a new and useful Improvement in Repeating Fire-Arms, of which the following is a specification:

Figure 1 is a side view of my improved device shown as applied to a gun-stock. Fig. 2 is a detail side view of the operating-gearing. Fig. 3 is a detail section of the breech-pin and spring-hammer.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved attachment for the Winchester repeating-rifle, which shall be so constructed that the rifle may be reloaded by simply pulling a trigger, so that several shots may be fired when required without taking the gun out of aim, and which shall be simple in construction and not liable to get out of order.

The invention consists in the combination of the coiled spring, the two gear-wheels, the catch, connecting-rod, and spring, and the crank and connecting-rod with each other, and with the reloading-trigger and the link that operates the reloading mechanism; in the combination of the train of gear-wheels and the fan, the coiled spring, the two gear-wheels, the catch, connecting-rod, and spring, and the crank and connecting-rod with each other, and with the reloading-trigger and the link that operates the reloading mechanism, as hereinafter fully described.

A represents the gun-stock, which is made hollow, and in its cavity is secured a frame, B, having a set of gear-wheels driven by a spring pivoted to it.

C is a coiled spring, one end of which is attached to the frame B, and its other end is attached to the shaft D. The shaft D revolves in bearings in the frame B, and one of its ends projects and is squared to receive a key for winding up the spring C. Upon the shaft D is placed a gear-wheel, E, which is connected with the said shaft by a pawl, F, and ratchet-wheel G, so that the shaft D may be turned to wind up the spring C without turning the wheel E, and so that the shaft D, when turned by the uncoiling of the said spring C, must carry the gear-wheel E with it. The teeth of

the gear-wheel E mesh into the teeth of a small gear-wheel, H, attached to the shaft I, which revolves in bearings in the frame B, and to which is attached a large gear-wheel, J. The teeth of the gear-wheel J mesh into the teeth of the small gear-wheel K, attached to the shaft L, which revolves in bearings in the frame B, and to which is attached a large gear-wheel, M. The teeth of the gear-wheel M mesh into the teeth of the small gear-wheel N, attached to the shaft O, which revolves in bearings in the frame B, and to which is attached the fan P.

The gear-wheels H J K M N and the fan P retard and give steadiness and uniformity of motion to the gear-wheel E when turned by the spring C.

The teeth of the gear-wheel E also mesh into the teeth of a large gear-wheel, Q, attached to the shaft R, which revolves in bearings in the frame B. To the gear-wheel Q is attached a crank-pin, S, to strike against the foot of the catch T at each revolution of the said gear-wheel Q, and thus stop the movement of the gearing.

The catch T is pivoted at its upper end to a pin, U, attached to the frame B, and to its lower or free end is pivoted the end of a short connecting-rod, V, the other end of which is pivoted to the inner end of the trigger W. The trigger W is pivoted to the trigger-plate X, and its upper end is held back, holding the catch T in position to be struck by the stop-pin S of the wheel Q by a spring, Y, attached to the trigger-plate X.

One end of the shaft R of the wheel Q projects, and to it is attached a short-crank, Z, to which is pivoted the end of the long connecting-rod A'. The other end of the connecting-rod A' is pivoted to the upper end of the link B', the lower end of which is pivoted to the breech-frame C'. The link B' operates the mechanism that raises the cartridge in the same manner as in the Winchester rifle, which mechanism is not shown in the drawings, as there is nothing new in its construction.

To the forward end of the connecting-rod A' and the upper end of the link B' is pivoted the rear end of the connecting-rod D', the forward end of which is pivoted to the breech-pin E', for drawing back the said breech-pin



in reloading. Within the breech-pin E' is placed the piston-hammer F', the rear end of which projects, and around it is coiled the spiral spring G'. The rear end of the spiral spring G' is attached to the rear end of the piston-hammer F', and its forward end is attached to the rear end of the breech-pin E', so that the said piston-hammer may be thrown forward to discharge the rifle by the action of the said spiral spring G'.

The rear part of the piston-hammer F' is perforated longitudinally to receive the guide-pin H', attached to the gun-frame, to keep the said piston-hammer in line as it moves back and forth. Around the rear end of the piston-hammer F' is formed a groove to receive the rear end of the catch I' when the breech-pin E' and the piston-hammer F' are drawn back to detain the said piston-hammer or hold it cocked.

The forward end of the catch I' is pivoted to the breech-frame C', and to its rear end is attached the upper end of the spring J'. The spring J' is curved forward, and is then bent back upon itself, and is curved downward and upward, so that its curved rear end may rest upon the bottom of the breech-frame to hold the catch I' up in position to catch upon and hold the piston-hammer F'.

To the trigger-plate X is pivoted the forward or discharge trigger K', the upper end of which is bent forward to rest upon the rearwardly-projecting part of the spring J', so that the catch I' may be withdrawn from the piston-hammer F' to discharge the rifle by operating the trigger K'.

With this construction the rifle is reloaded and cocked by simply pulling the rear or reloading trigger W, and is discharged by pulling the forward or discharge trigger K', so that the rifle can be discharged, reloaded, and again discharged without taking it out of aim.

I am aware of the existence of a revolving fire-arm adapted to discharge the chambers of the cylinder successively through one barrel by a single pull of the trigger. This is accomplished by a system of gear or toothed wheels driven by a coiled spring inclosed within a hollow stock.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination of the coiled spring C, the two gear-wheels E Q, the catch, connecting-rod, and spring T V Y, and the crank and connecting-rod Z A' with each other, and with the trigger W and the link B' that operates the reloading mechanism, substantially as herein shown and described.

2. The combination of the gear-wheels H J K M N, and the fan P, the coiled spring C, the gear-wheels E Q, the catch, connecting-rod, and spring T V Y, and the crank and connecting-rod Z A' with each other, and with the trigger W and the link B' that operates the reloading mechanism, substantially as herein shown and described.

JOHN M. WITTMAN.

Witnesses:

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*Received*  
57,690  
*Record*  
J.