No. 859,845. PATENTED JULY 9, 1907.

C. F. SAWTELL.

FIREARM.

APPLICATION FILED MAR. 16, 1906.

Fig. 1.

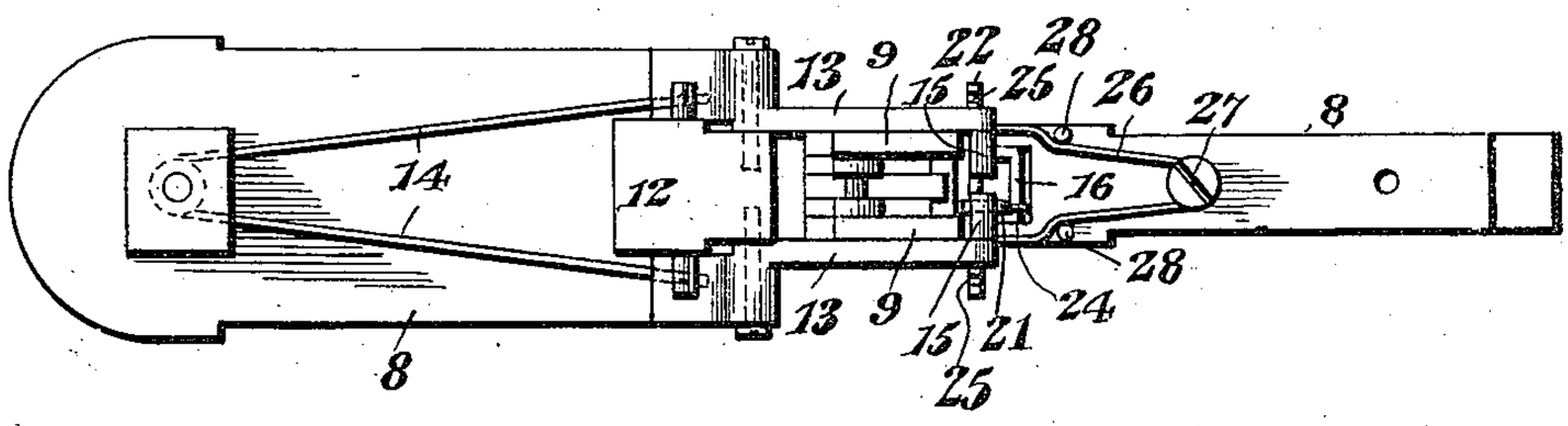

Fig. 2.

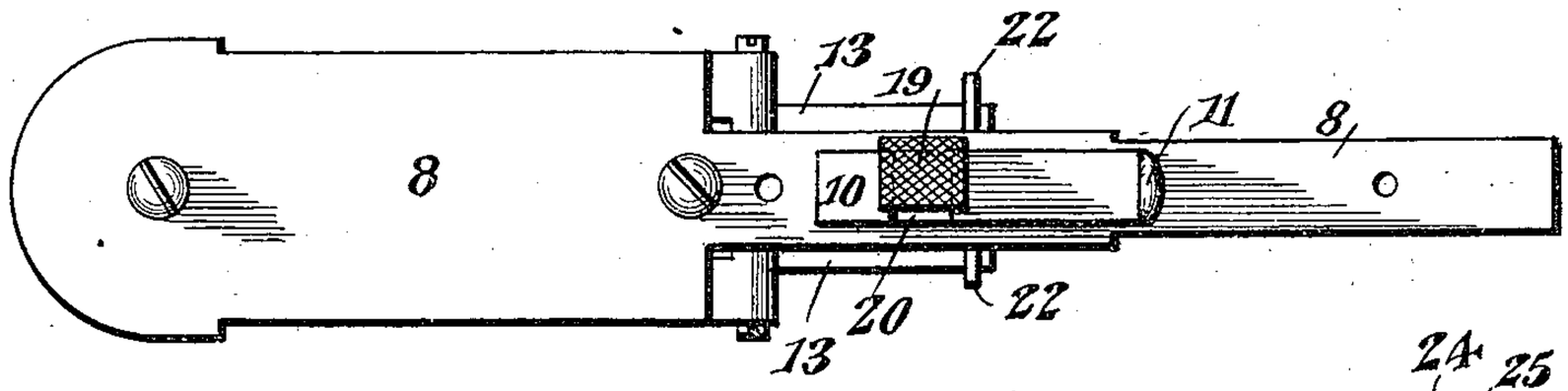

Fig. 7.

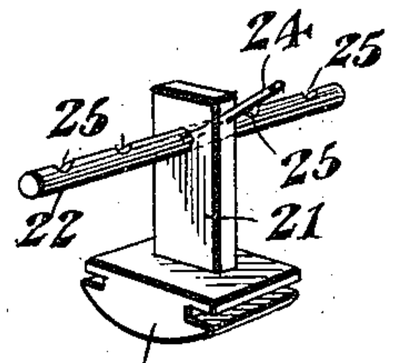

Fig. 3.

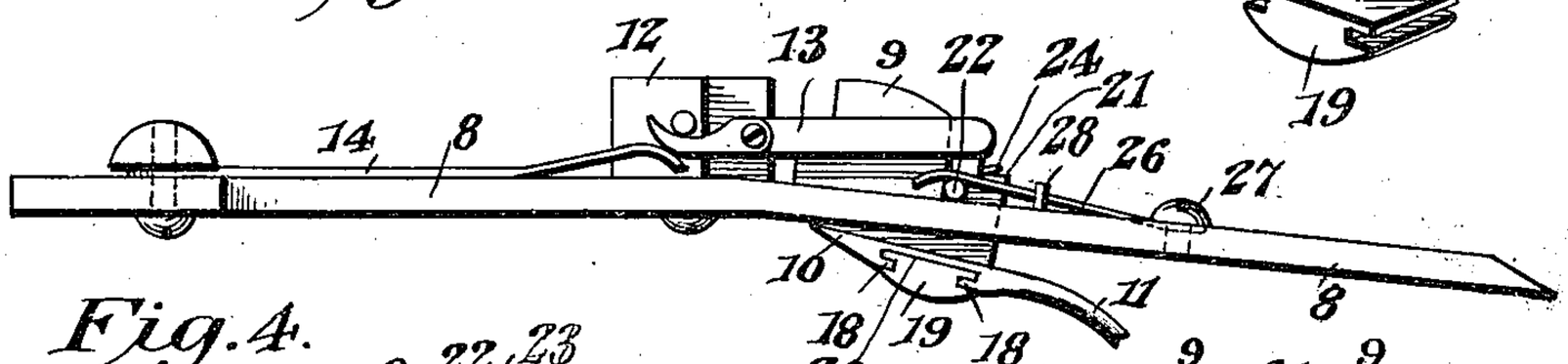

Fig. 4.

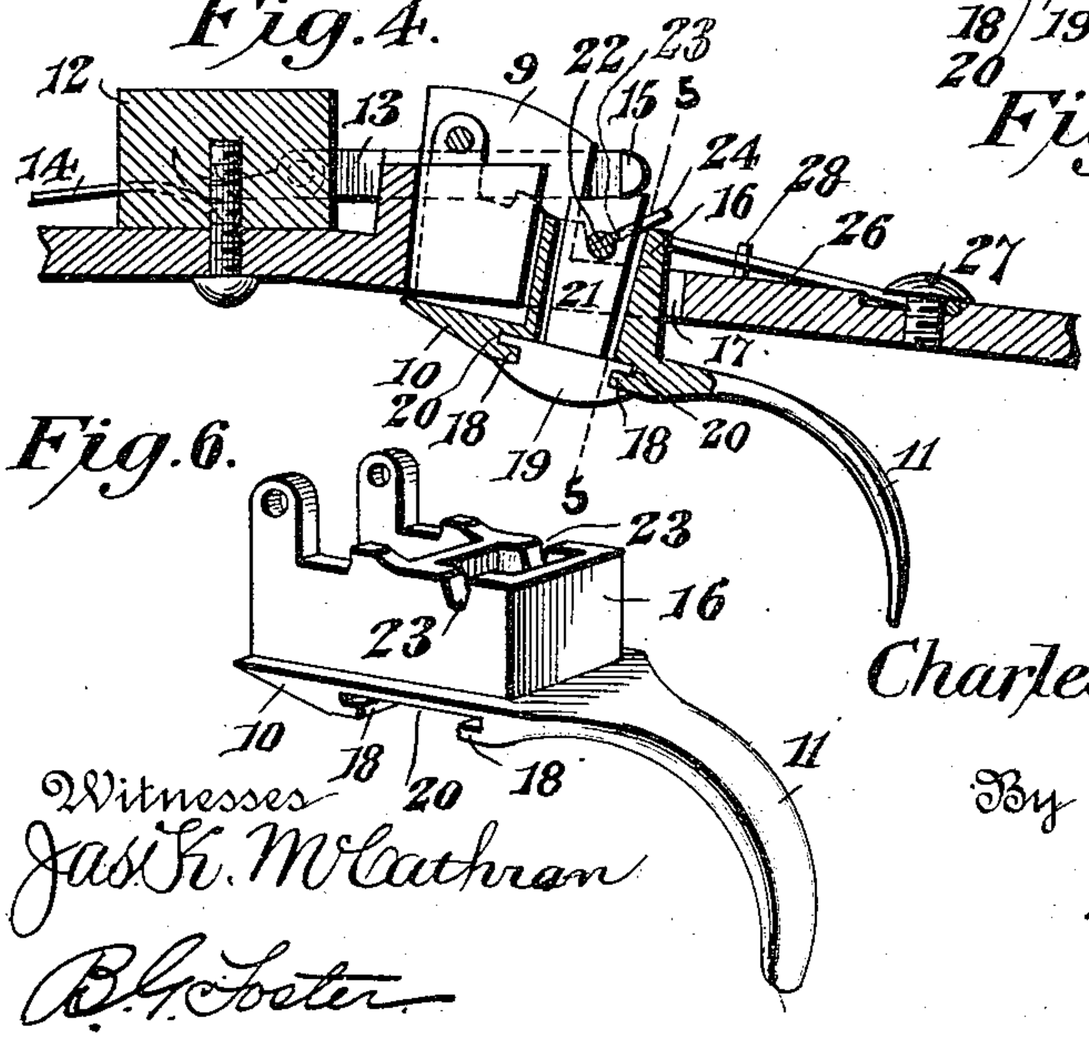

Fig. 5.

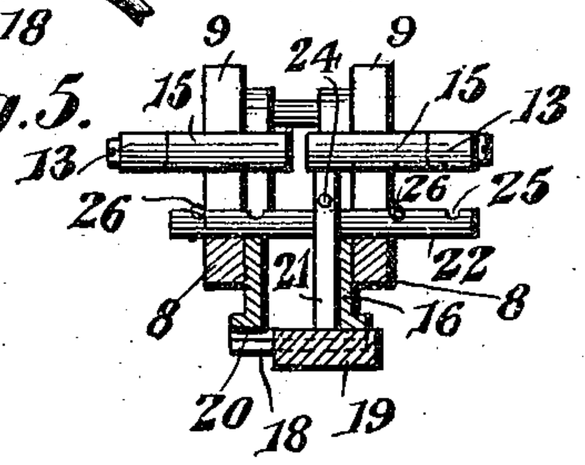

Fig. 6.

Witnesses
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UNITED STATES PATENT OFFICE.

CHARLES FRANK SAWTELL, OF MANCHESTER, NEW HAMPSHIRE.

FIREARM.

No. 859,845. Specification of Letters Patent. Patented July 9, 1907.

Application filed March 16, 1906. Serial No. 306,377.

To all whom it may concern:

Be it known that CHARLES FRANK SAWTELL, a citizen of the United States, residing at Manchester, in the county of Hillsboro and State of New Hampshire, has invented a new and useful Firearm, of which the following is a specification.

This invention relates more particularly to that class of fire arms in which a single trigger is employed for operating a plurality of hammers.

One of the principal objects is to provide novel, efficient and exceedingly simple means for operatively connecting or associating the trigger with either hammer controlling mechanism, said means being located in convenient relation to permit its ready operation or change.

Another object is to provide a structure that is composed of a comparatively small number of parts and elements, which are not liable to become deranged or injured, certain of said parts or elements moreover performing double functions.

The preferred but not the only embodiment of the invention is illustrated in the accompanying drawing, wherein:—

Figure 1 is a top plan view of a portion of a fire arm lock, showing the improved structure forming a part thereof. Fig. 2 is a bottom plan view of the same. Fig. 3 is a side elevation of the same. Fig. 4 is a longitudinal sectional view through the structure. Fig. 5 is a cross sectional view on the line 5—5 of Fig. 4. Fig. 6 is a detail perspective view of the trigger. Fig. 7 is a similar view of the actuating device.

Similar reference numerals designate corresponding parts in all the figures of the drawing.

A complete lock is not shown, as the structure is clearly applicable to substantially any well known type, as will be apparent to those skilled in the art. A trigger plate is employed, and is designated 8. Said plate is provided with suitable upstanding ears 9, to and between which is pivoted a trigger 10, having the usual depending finger piece 11 located below the plate 8. Said plate 8 is furthermore provided in advance of the ears 9 with an upstanding boss or projection 12, on the opposite sides of which are pivoted separate sears 13, constituting parts of the usual hammer-controlling mechanisms. The sears are urged in one direction by spring arms 14, secured to the front portion of the trigger plate, and their tails are provided with inwardly extending lugs 15.

The trigger 10 is provided between its ends with an upstanding boxing portion 16 extending through an opening 17 in the trigger plate, said trigger also having a transversely disposed guide-way in its under portion, which guide-way includes inwardly extending oppositely disposed and spaced flanges 18. A reciprocatory actuating or connecting device is mounted on the trigger, and is slidable transversely thereof. Said actuating device includes a reciprocatory finger piece 19, slidable in the guide-way of the trigger and having channels 20 that receive the flanges 18. The lower surface of the finger piece is preferably rounded and roughened, and is located in advance of the finger piece 11 of the trigger. A stem 21 is carried by the finger piece and projects upwardly through the boxing 16. The upper end of said stem is movable to positions beneath the lug 15 of either sear 13 or to a position between said lugs.

A cross bar 22 passes through the upper portion of the stem 21, and is slidable in recesses 23, formed in the opposite side walls of the boxing 16 of the trigger. This cross bar is held in place in the stem by a pin 24 projecting from the stem and operating between the side walls of the boxing. Notches 25 are formed in the upper side of the cross bar on opposite sides of the stem, and spring arms 26, formed by a double wire bear upon the upper side of the cross bar on opposite sides of the boxing, and are arranged to engage in the notches 25. The spring extends longitudinally along the rear portion of the trigger plate and is held in position by a suitable screw or other fastener 27, the arms being also preferably located between stop pins 28 mounted on the plate.

It is believed that the operation of the structure can now be made clear. If for instance it is desired to discharge the right hand barrel of the fire arm, it is only necessary for the gunner to push the finger piece 19 to the right, whereupon the stem 21 will be brought beneath the lug 15 of the right hand sear 13, which sear controls the right hand barrel as is well understood. Consequently if the trigger 11 is pulled, the stem being raised thereby, will cause the elevation of the rear end of the sear, and the release of the hammer controlled by it. This movement of the trigger, however, has no effect on the left hand sear. The actuating or controlling device is moreover locked in this position by the spring arms 26 engaging in certain of the notches 25 of the cross bar. To discharge the other barrel, it is only necessary to push the finger piece in an opposite direction, whereupon the actuating device or stem will be moved out of coaction with the right hand sear, and into coaction with the left hand sear, said actuating device being also locked in this position by the spring arms 26 engaging in the other notches. By placing the actuating device in a central position, the stem will be located in a plane between the lugs 15 of the sears, and therefore an actuation of the trigger will not effect the operation of either sear. Consequently a safety device is also provided. It will be apparent that this structure is exceedingly simple, and at the same time is entirely effective for the desired purposes. The parts or elements moreover are of a nature not liable to derangement or to become inoperative. Furthermore certain of the parts perform double functions.

For instance, the spring arms 26 not only lock the actuating device in its different positions, but bearing down on said actuating device, consequently bear down on the trigger, and thereby constitute yielding means to resist the movement of said trigger, doing away with the necessity of an additional spring.

From the foregoing, it is thought that the construction, operation, and many advantages of the herein described invention will be apparent to those skilled in the art, without further description, and it will be understood that various changes in the size, shape, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

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

1. In a fire arm, the combination with a plurality of hammer controlling mechanisms, of a trigger, and a reciprocatory actuating device slidably mounted on the underside of the trigger and having a portion movable transversely thereof into and out of coaction with either hammer controlling mechanism.

2. In a fire arm, the combination with a plurality of hammer controlling mechanisms, of a trigger, and a reciprocatory actuating device comprising a finger piece having a slidable interlocking engagement with the under side of the trigger, and a stem carried by the finger piece, said stem projecting upwardly through the trigger and being movable into and out of coaction with either hammer controlling mechanism.

3. In a fire arm, the combination with a plurality of hammer controlling mechanisms, of a trigger plate, a trigger pivotally associated with the plate and having a boxing portion passing through said plate, and an actuating device movably mounted in the trigger and including a stem slidably mounted in the boxing portion, said actuating device being movably into and out of coaction with either hammer controlling mechanism.

4. In a fire arm, the combination with a plurality of hammer controlling mechanisms including separate sears, of a trigger plate, a trigger pivotally mounted on the plate, said trigger including a boxing extending through the plate and a transversely disposed guide way arranged at the lower end of the boxing, a reciprocatory finger piece slidably mounted in the guideway, and a stem carried by the finger piece and projecting upwardly through the boxing, said stem having its upper portion movable into and out of coaction with either sear.

5. In a fire arm, the combination with a plurality of hammer controlling mechanisms, of a trigger, a reciprocatory actuating device slidable transversely of the trigger and into coaction with either mechanism, said device including a cross bar disposed transversely of the trigger, and a spring bearing against the cross bar, said cross bar having a slidable movement with respect to the spring and trigger.

6. In a fire arm, the combination with a plurality of hammer controlling mechanisms, of a trigger, an actuating device movably associated with the trigger and movable into coaction with either mechanism, said device including a cross bar disposed transversely of the trigger and having notches, and a spring disposed transversely of the cross bar and having a free portion that engages in the notches to hold said cross bar and the actuating device in different relations.

7. In a fire arm, the combination with a plurality of separate sears, of a pivotally mounted trigger including a boxing portion, an actuating device comprising a finger piece slidably mounted on the lower portion of the trigger, a stem carried by the finger piece, said stem extending through the boxing and being movable into coaction with either sear, a cross bar carried by the upper portion of the stem and disposed transversely of the trigger, said bar having notches, and a spring having spaced arms that bear against the cross bar on opposite sides of the stem and are arranged to engage in the notches thereon.

8. In a fire arm, the combination with hammer controlling mechanisms, of a trigger, an actuating device movably associated with the trigger and movable into coaction with the different controlling mechanisms, and a spring having spaced arms that have slidable bearings with the opposite sides of the actuating device to hold the same against movement with respect to the trigger and in different positions on said trigger.

In testimony, that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

CHARLES FRANK SAWTELL.

Witnesses:
LEWIS H. FELLOWS,
SHERMAN L. GREER.