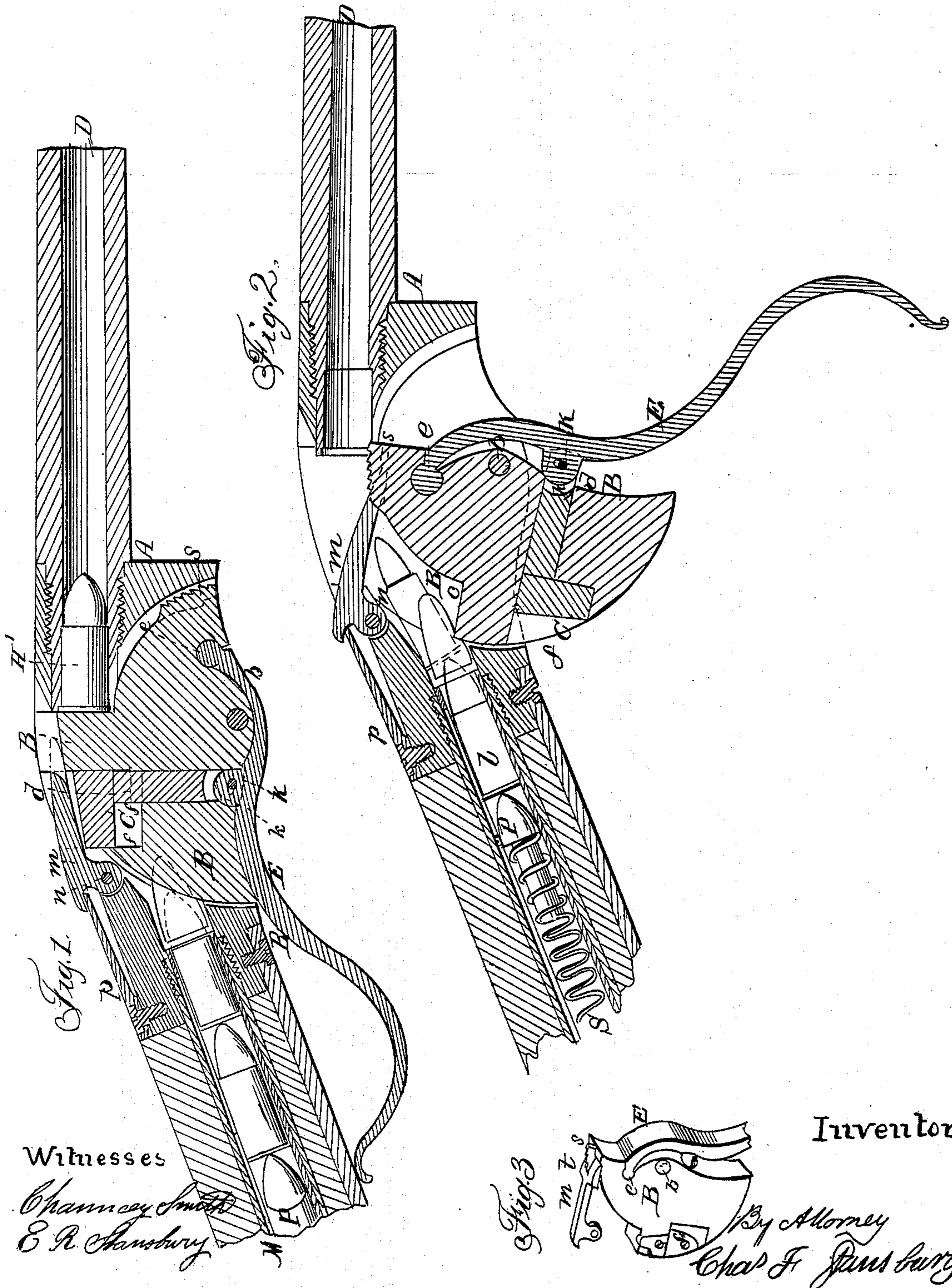


C. M. SPENCER.
Magazine Fire-Arm.

No. 58,737.

Patented Oct. 9, 1866.



UNITED STATES PATENT OFFICE.

CHRISTOPHER M. SPENCER, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO
SPENCER REPEATING RIFLE COMPANY, OF SAME PLACE.

IMPROVEMENT IN MAGAZINE FIRE-ARMS.

Specification forming part of Letters Patent No. **58,737**, dated October 9, 1866.

To all whom it may concern:

Be it known that I, CHRISTOPHER M. SPENCER, of the city of Boston and State of Massachusetts, have invented a new and useful Improvement in Breech-Loading Fire-Arms; and I do hereby declare the following to be a correct description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a longitudinal section of a portion of a breech-loading repeating-arm having my improvement, the breech being shown closed and the piece ready for firing. Fig. 2 is a similar section of the same arm with the breech open to the proper extent to receive a cartridge. Fig. 3 is a detail view, in perspective, of the carrier-block and cartridge-guide, showing the fork in the end of the guide and the notch-stop in the carrier-block in position for arresting the descent of the carrier-block.

The same part is marked by the same letter wherever it occurs.

This invention relates to the repeating breech-loading arms invented and patented by me, in which a rolling breech is employed and the cartridges are deposited in a magazine in the stock of the piece. In these arms it is necessary that the carrier-block should be depressed to a certain point and there arrested, in order that a cartridge may be introduced and carried forward into the chamber by the upward and forward movement of the block in the act of locking. The arrest of the downward movement of the block at the proper point has heretofore been effected by me by bringing a projecting portion of the slide, which forms a part of the carrier-block, into contact with the receiver. This mode will be found described and shown in the reissue of my patent of July 29, 1862, dated April 12, 1864, and numbered 1,652.

The nature of the present invention consists in a method of stopping the downward movement of the carrier-block by a slight modification of that block and of the cartridge-guide, without interfering with any of the functions performed by either. A portion of the upper face of the forward segment of the carrier-block is cut away to form a stop, which, when the block is depressed to the proper point, engages with a fork in the free end of the cartridge-guide, and checks the further descent of the block.

It is desirable to place the subject of the present application in its true relation to the arm now so well known as the "Spencer Repeating-Rifle." The first patent obtained by me for that invention was granted March 6, 1860, and reissued May 1, 1866. In the specification of that patent no method of arresting the descent of the breech was described or shown. Experiences soon demonstrated the importance of some device for effecting this object, and that described in the present application is the one which first suggested itself to my mind. At the same time that I carried that idea into practice I modified the locking device of the carrier-block in the manner shown in the accompanying drawing and hereinafter described; but soon afterward the invention assumed the more perfected form described in my patent of 1862, reissued April 12, 1864, in which the locking-slide not only performed the triple function ascribed to it in that reissue, but served to arrest the downward movement of the carrier-block when it had reached the proper point for the reception of a cartridge. In view of the satisfactory operation of that invention, the method of locking and arresting the carrier-block herein set forth were temporarily laid aside; but subsequent reflection and experiment have satisfied me of the value of this method of stopping the descent of the breech, and I now desire to secure it as valuable in itself, as an important step in the development of my invention, and as the basis of other improvements for which I am about to apply for Letters Patent.

To enable others skilled in the art to make and use this improvement, I will proceed to describe the construction and operation of the arm so far as may be necessary to illustrate the nature and application of the improvement, referring to the drawings, whereon—

A marks the receiver, which receives the carrier-block B C and connects the barrel D to the stock. The carrier-block works in a parallel-sided slot of irregular form in the receiver A.

The carrier-block consists, mainly, of two parts, B and C, of which the part B has a rotary motion on its center-pin *b*, which passes transversely through the receiver, and the part C has a sliding movement in a recess, *ff*, in the piece B, and also partakes of the rolling

movement of B. The piece C is moved up and down by means of the rod *d*, which, after passing through a hole in piece B, is pivoted loosely to the guard-lever E at *k*. This sliding piece C, when at its highest point, locks the breech, as shown in Fig. 1.

The guard-lever E is connected to the piece B by a knuckle-joint, *e*, and is pivoted to the rod *d* at *k*. On depressing the guard-lever the first effect is to draw down the slide C out of the position shown in Fig. 1 until it descends far enough into the recess *f* to unlock the breech, when a continuation of the same downward movement rotates the carrier-block on its center *b* until the parts assume the position shown in Fig. 2, when further downward movement is arrested by the stop *s* engaging the fork in the free end of the cartridge-guide *m*. When in this position the carrier-block receives a cartridge from the magazine M in the stock, in the manner described and shown in my patents of 1860 and 1862 and their reissues. The guard-lever is then raised, when the carrier-block rotates into the position shown in Fig. 1, and the piece C is forced upward to lock the breech.

The cartridge-guide *m* is pivoted at *n* to the receiver A, and its free end is depressed by the operation of the spring *p*. There is a fork at its free end. (Most clearly shown in Fig. 3.) A small portion of the face of the piece B is cut away to form a stop, *s*, at the forward angle of that piece, which stop engages the fork on the end of guide *m*, and arrests the descent of the carrier-block when the parts reach the position shown in Fig. 2.

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

The combination of the forked cartridge-guide *m* with the stop *s* in the face of the carrier-block, for the purpose of arresting the movement of the latter at the proper point for the introduction of a cartridge, substantially as set forth.

The above specification of my said invention signed and witnessed, at Boston, this 15th day of February, A. D. 1865.

CHRISTOPHER M. SPENCER.

Witnesses:

W. H. RICHARDSON,
CHAS. F. STANSBURY.