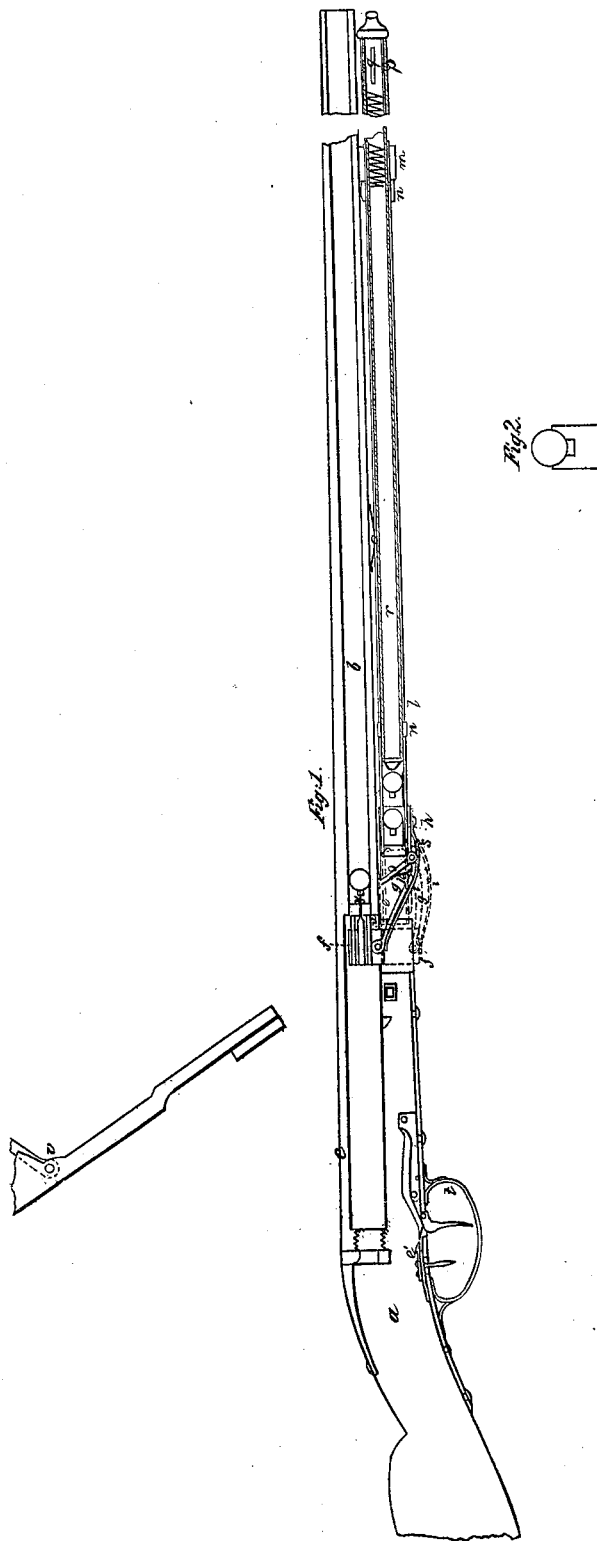


C. W. BUCHEL.  
Magazine Fire-arm.

No. 6,136.

Patented Feb. 20, 1849.



# UNITED STATES PATENT OFFICE.

CHRISTIAN W. BÜCHEL, OF NEW YORK, N. Y.

IMPROVED CARTRIDGE-TUBE-FORMING AND CONVEYER REPEATING FIRE-ARM.

Specification forming part of Letters Patent No. 6,136, dated February 20, 1849.

*To all whom it may concern:*

Be it known that I, CHRISTIAN W. BÜCHEL, of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Fire-Arms; and that the following is a full, clear, and exact description of the principle or character which distinguishes them from all other things before known, and of the usual manner of making, modifying, and using the same, reference being had to the accompanying drawings, which form a part of this specification, in which—

Figure 1 is a vertical section through the gun. Fig. 2 is a detached part.

The same letters refer to like parts in all the drawings.

The nature of my invention consists in constructing fire-arms with a chamber for containing the ammunition in such a form as to be readily transferred to the barrel of the gun by apparatus prepared for that purpose, by means of which the gun can be discharged many times in rapid succession, the whole being combined in a neat and portable form.

The construction and operation are as follows:

The stock *a* and barrel *b* are formed like other small-arms. Near the front end of the breech there is an opening, *e*, cut through the barrel into the hollow breech, for the purpose of introducing a short thin metal tube, *f*, said tube being connected by an arm, *g*, with a stout thimble, *h*, as is clearly shown in Fig. 1. Over this arm there is a strong spring, *i*, which rests upon the tube *f* and holds it into its place in the recess of the barrel, as shown in Fig. 1.

Directly under the arm, at the end of thimble *h*, there is a valve, *j*, that closes the end of the thimble *h*, and is kept closed by a light spring, *k*, that bears against the under side of the arm *g*. Within this thimble *h* there is placed the lower end of a metal cartridge tube or charger, *l*, that is fixed in its position under the barrel by means of the thimble *h* and a corresponding one, *m*, near the muzzle of and fixed to the gun-barrel. The cartridge-

tube has a sliding motion within these thimbles, governed in extent by the bosses or rings *n* on it coming in contact with said thimbles; and about the middle, between the rings, and between the barrel and cartridge-tube, there is a spring, *o*, that bears against the last to hold it in place.

Within the cartridge-tube there is a follower, composed of two tubes, one sliding within the other. The outer one, *p*, slides into the cartridge-tube, and is fastened by a catch, *q*. The inner one, *r*, is forced out with a spiral spring. Thus both, when extended, fill the cartridge-tube; but when the inner one is shoved clear into the outer one there is a space for cartridges, which are introduced by first removing the tubes *p* and *r*, the space being enough to hold fifteen, (more or less,) sufficient for as many discharges.

The cartridges are formed by depositing a sufficient quantity of powder in a paper tube, and then placing a percussion-cap on top, and over all attaching the ball. Thus made they are placed in the cartridge-tube, each with the ball up, as clearly represented in the section Fig. 1, there being a small catch, *s*, at the bottom of the tube to hold them. This catch is on a spring, the use of which I will presently describe.

The follower is replaced after the cartridges are inserted. One end of the inner tube bears on the upper cartridge and presses downward, tending to drive the lower ones out. When a charge is to be inserted in the barrel of the gun the cartridge-tube *l* is drawn downward toward the guard *t*. This forces open the valve *j* against the arm *g* and bears that off, by which the tube *f* is drawn out of its recess in the barrel under the cartridge-tube, and as they meet, as shown by the red lines in Fig. 1, the catch *s* recedes, by means of its spring, into a recess, *u*, made for it in the barrel, and permits a cartridge to be forced by the follower *r* into the tube *f*. The cartridge-tube is then drawn up to its place, the catch *s* projects to hold the next cartridge, the tube *f* assumes its position within the barrel, and the valve *j* closes.

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