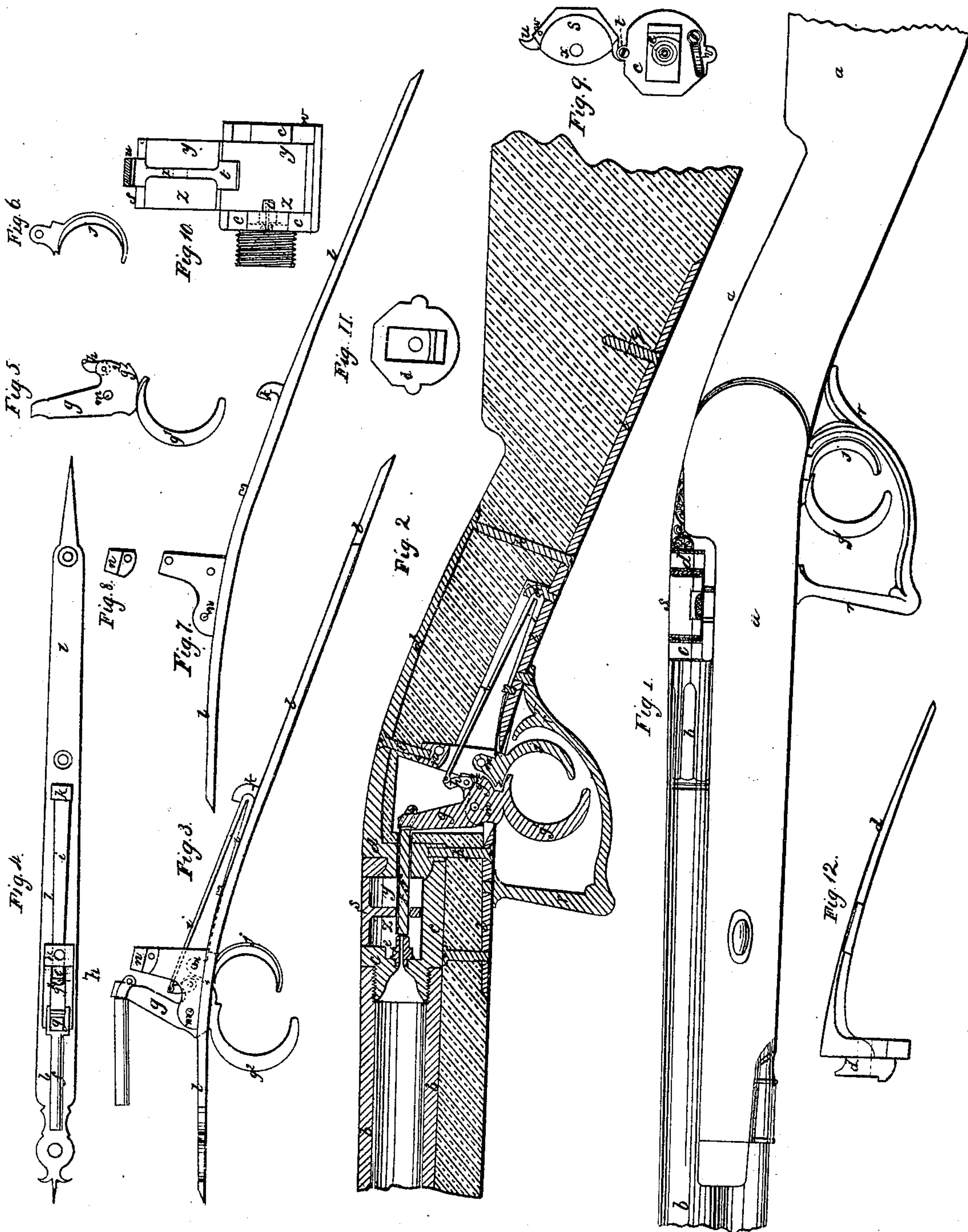


BENTLEY & SLOCKER. Muzzle-loading Fire-arm.

No. 1,544.

Patented April 8, 1840.



UNITED STATES PATENT OFFICE.

GEO. STOCKER AND JOSEPH BENTLEY, OF BIRMINGHAM, ENGLAND.

IMPROVEMENT IN GUNS, PISTOLS, AND OTHER FIRE-ARMS.

Specification forming part of Letters Patent No. 1,544, dated April 8, 1840.

To all whom it may concern:

Be it known that we, GEORGE STOCKER and JOSEPH BENTLEY, both of Birmingham, in the Kingdom of Great Britain, gun-makers, have invented certain Improvements in Guns, Pistols, and other Denominations of Fire-Arms; and we do hereby declare that the following is a full and exact description thereof.

The nature of our improvements consists in forming an explosion-chamber within the "breech" or solid "break-off" of fire-arms having an external jointed cover thereto; likewise, in a new combination of mechanism for the locks of fire-arms, applicable to guns, pistols, rifles, &c.

In order that other persons skilled in the art of gun-making may be able to make and use our said invention, we proceed to describe its construction and operation in detail, with reference to the sheet of drawings hereunto annexed.

Figure 1 of the drawings represents an external view of a fowling-piece possessing our improvements, part of the barrel and the stock being omitted for want of space. Fig. 2 is a longitudinal section of a portion of the same, bringing into view all the novel parts, the essential details of which are separately illustrated in Figs. 3 to 12. Thus Fig. 3 represents a side view, and Fig. 4 a plan, of the lock. Fig. 5 is the cocking-lever; Fig. 6, a trigger; Fig. 7, a side view of the lock and trigger-plate. Fig. 8 is a connecting-piece, hereinafter explained. Fig. 9 is an end view, and Fig. 10 a plan, of the breech. Fig. 11 is an end view of the break-off, and Fig. 12 an elevation of the same.

The same letters of reference, wherever they occur, indicate the same parts.

At *a* is the stock, *b* the barrel, and *c* the breech screwed thereto. *d* is the break-off, which fits into the breech; *e*, the nipple screwed into the breech; *f*, a piston or striker acting horizontally against the percussion-cap in the explosion-chamber *z*; *g*, the cocking-lever, the upper extremity of which is shaped to receive the looped end of the striker. This cocking-lever is shown as uncocked, or as if the gun had just been discharged. In order to cock it, the piece *g'* is to be pushed forward or toward the muzzle by the thumb when it takes the position (at full cock) shown in Fig. 3. It should

be observed that this cocking-lever acts also as a tumbler at *g*².

At *h* is a swivel-lever jointed to the cocking-lever and hooked to the mainspring *i*, which thus becomes compressed by cocking, as shown in Fig. 3, and causes, it when liberated by the trigger *j*, to exert its elastic force (through the medium of the cocking-lever) on the striker *f*. The lower limb of the mainspring *i* also acts as an ordinary sear-spring upon the trigger, as indicated in the drawings.

At *k* is a small hooked piece provided with a short projecting pin, which enters a hole in the doubled end of the mainspring, which is thus prevented from moving either upward or sidewise. *l* is the lock and trigger plate, (shown separately in Fig. 7,) through which there is an opening, as shown in Fig. 2 and 4, to let in the trigger, the cocking-lever, and tumbler, which work on pins *m m*, that go through them.

At *n* is a connecting-piece, (separately shown in Fig. 8,) which is screwed between the fork of the trigger-plate, and has a tapped hole on its upper side for receiving the breech-pin *o*.

This breech-pin binds the parts of the gun together by screwing the trigger-plate *l* (which is also the lock-plate) to the break-off *d*, thus making the stock as strong as though two plates were screwed to it. *p* is the "guard-pin," which screws the trigger-plate to the break-off. *q* is the "back-end pin," also connecting the last-mentioned parts together. *r* is the guard, which incloses the cocking-lever and the trigger.

It has already been noticed that a peculiar feature in this improved fire-arm consists in making within the breech an explosion-chamber. For the more exact illustration of this part we have given separate figures of the same, Fig. 9 representing an end view, and Fig. 10 a plan, of the breech, having the lid or cover *S* open, as when the percussion-caps are being put on. This lid has a hinge-joint at *t* and a thumb-piece at *u* for opening it. When shut down, it is held sufficiently fast in its place by a small spring and stud at *v*, the latter entering a suitably-formed catch-hole, *w*, made in the lid. To the lid is also formed a division-plate, *x*, (having a hole through it for the horizontal striker to pass,) which plate, when the lid is closed, separates the explosion-chamber *z* from the other part, *y*, of the same cavity.

From the foregoing description it will be obvious that our explosion-chamber may be formed in the break-off piece (instead of the breech) by sufficiently extending the length of its solid part. Such a modification, therefore, we consider to come within the limits of our invention.

It is our intention to apply to double guns our explosion-chambers, which should be made straight across both the breeches (or break-offs, as the case may be) and a nipple screwed into each breech. One cover only is used to cover both breeches, (or break-offs,) and by placing the ordinary back-work gun-locks on the sides, with pieces left projecting on that part of the tumbler which bears against the top leg of the bridle when out of the gun. These projecting pieces are made to move the striker, with them, which are made the same as in the fowling-piece before described. Single guns and rifles may also be made in this manner.

We desire it to be understood that we do

not claim all the parts which we have described in the foregoing; but

What we do claim as our invention, and desire to secure by Letters Patent, is the following, namely:

1. The manner in which we construct the explosion-chamber within the breech of fire-arms, or within the break-off, as set forth.

2. The manner of constructing and arranging the cocking-lever with its lower end within the guard, said lever being combined with the other parts of the lock, as described.

3. The manner of connecting the break-off and the cock and trigger plates by means of the screw, the connecting-piece *n*, and its appendages, substantially as set forth.

GEO. STOCKER.
JOSEPH BENTLEY.

Witnesses:

LUKE HEBERT,
CHARLES STONE.