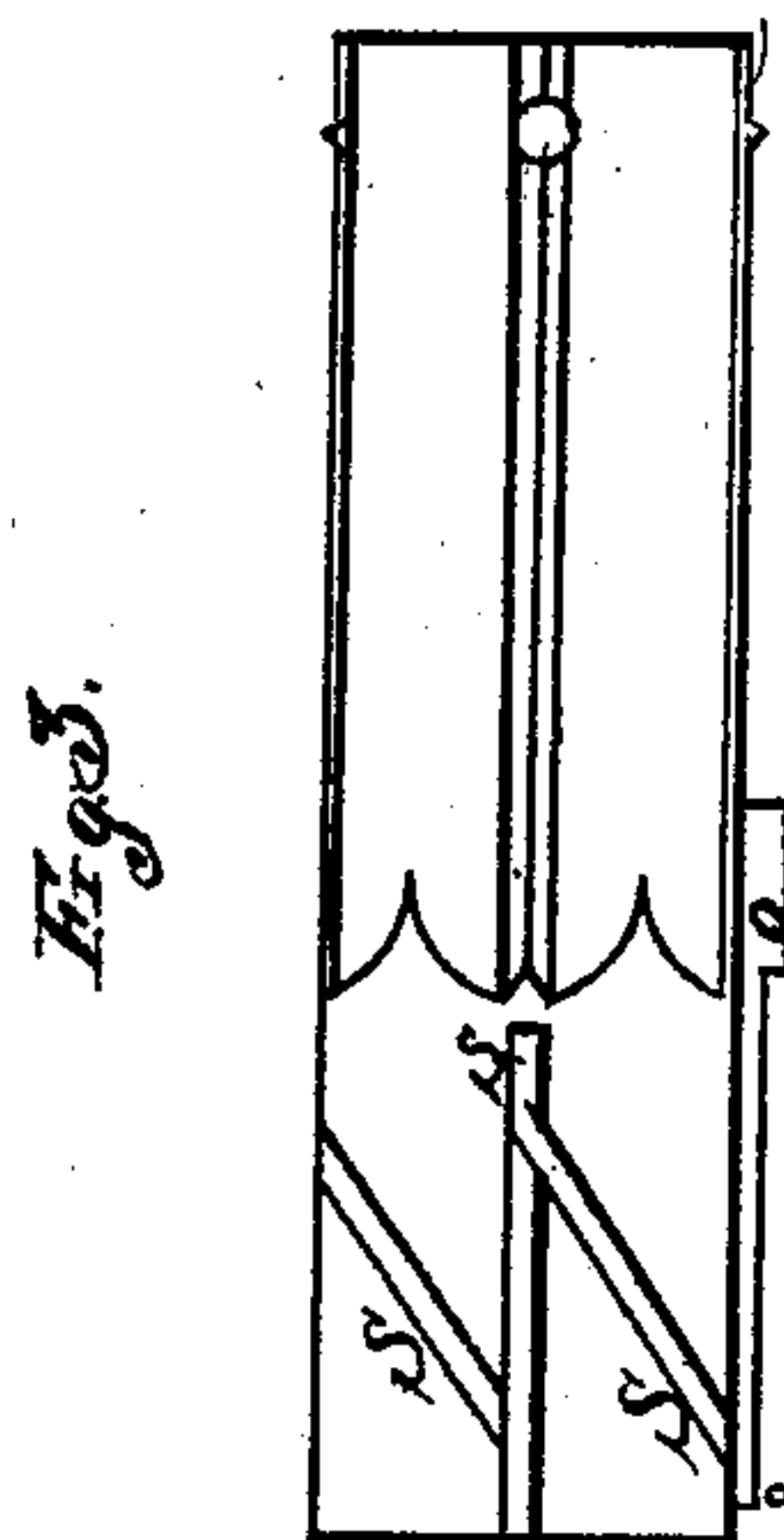
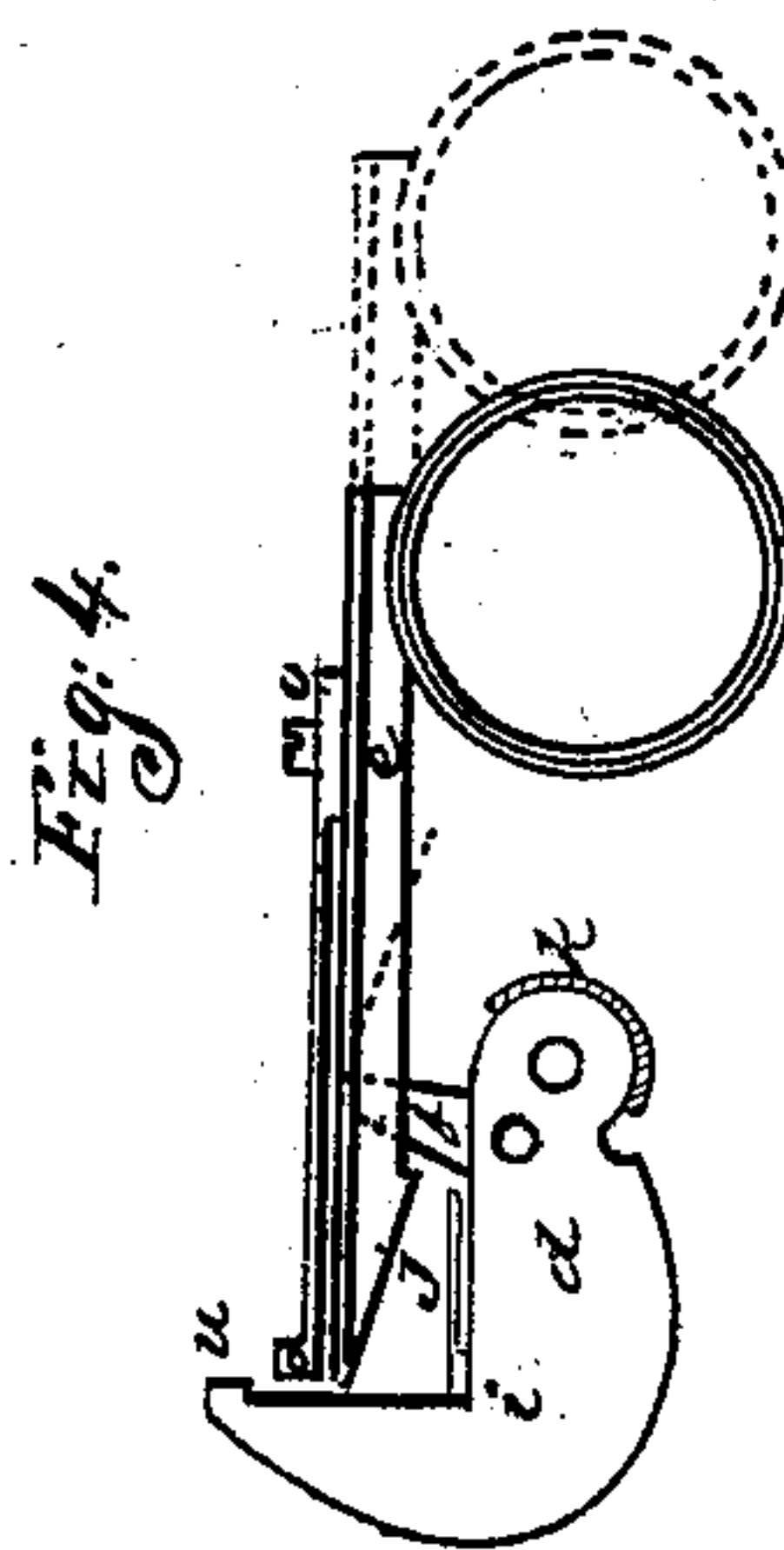
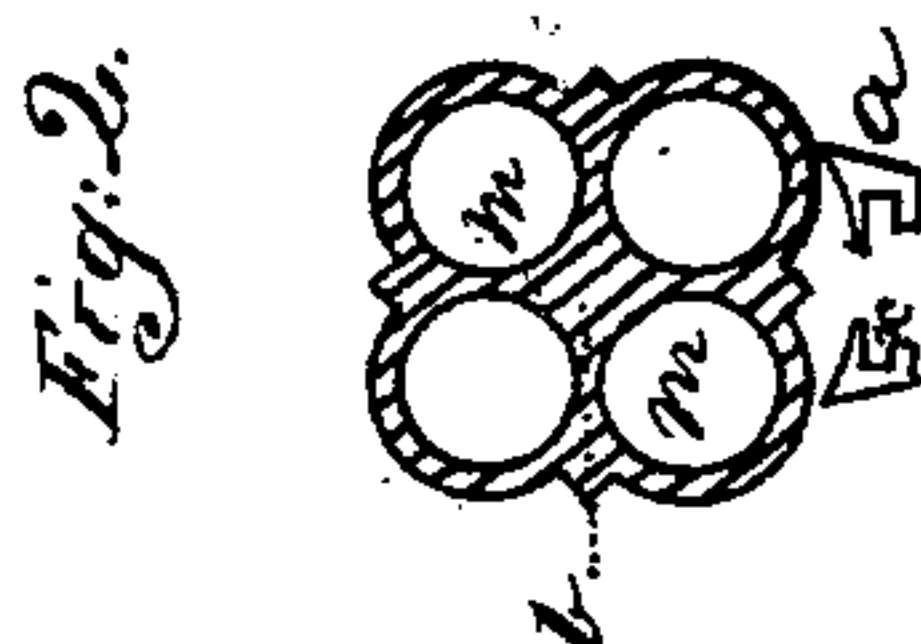
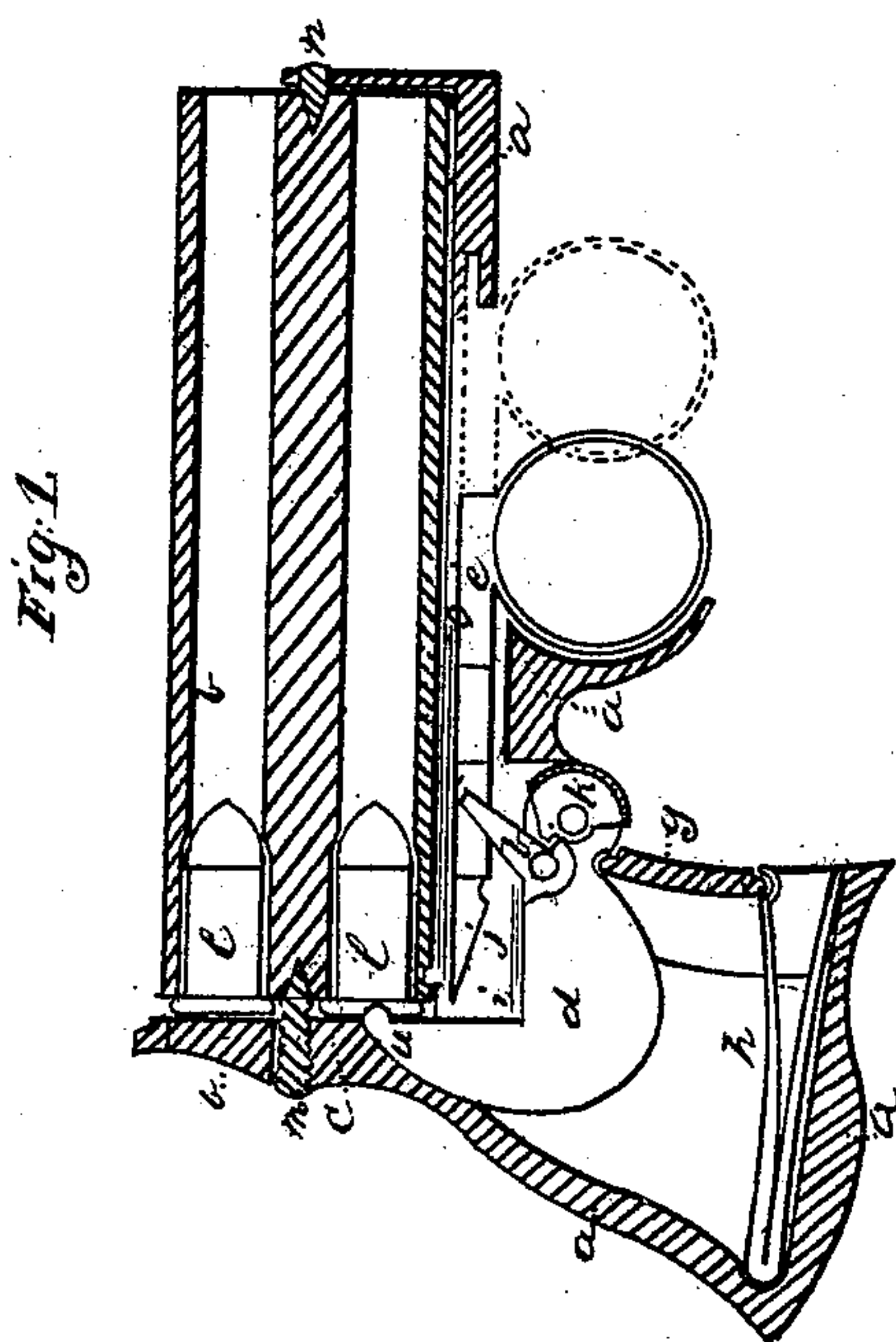


W. H. ELLIOT.
Revolver.

No. 28,461.

Patented May 29, 1860.



Witnesses:
Thos. J. Williams
Saml. A. Pomeroy

Inventor:
W. H. Elliot

UNITED STATES PATENT OFFICE.

WILLIAM H. ELLIOT, OF PLATTSBURG, NEW YORK.

IMPROVEMENT IN REVOLVING FIRE-ARMS.

Specification forming part of Letters Patent No. 28,461, dated May 29, 1860.

To all whom it may concern:

Be it known that I, WM. H. ELLIOT, of Plattsburg, in the county of Clinton, in the State of New York, have invented a new and Improved Pocket-Pistol; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Similar letters of reference indicate the same devices in all the figures.

To enable others skilled in the arts to comprehend, make, and use my invention, I will proceed to describe its nature, construction, and operation.

The nature of my invention consists in a peculiar method of employing, combining, and arranging certain devices by which a powerful and compact pocket-pistol is obtained.

Figure 1 is a perpendicular section of my pistol, showing the lock and revolving devices. Fig. 2 is a section of the barrels and frame. Fig. 3 is an elevation of the barrels and revolving spring. Fig. 4 is an elevation of the lock and revolving spring.

a is the frame; *b*, barrels bored through and left open at their rear end for the purpose of being charged at the breech; *c*, breech-plate, which, when employed with cartridges such as are shown in the drawings, serves the purpose of breech-pin; *d*, hammer pivoted underneath and forward of the rear end of the chambers or barrels, while its exploding point strikes up in the rear of said chambers or barrels; *e*, sliding-trigger, (this trigger slides in grooves cut in the frame which extends along the lower side of the barrels;) *f*, fly upon which the trigger acts to raise the hammer; *g*, stirrup between the hammer and mainspring; *h*, mainspring; *i*, fly-spring; *j*, cam or wedge upon the trigger for raising the hammer; *k*, fly-lever for depressing the fly so that the trigger may be passed back without raising the hammer; *l*, cartridges shown within the chambers *m*; *n*, rear support of the barrels; *n'*, front support of the barrels; *o*, revolving spring fastened to the sliding trigger; *o'*, projection upon the rear end of spring *o*, which works in the revolving grooves *s* upon the barrels; *r*, grooves in the frame, in which the trigger slides; *s*, revolving grooves in the outer surface of the barrels.

The operation of my pistol is as follows: It is intended, when the pistol is carried in the pocket, that the trigger should occupy the position in which it is represented at *e*, Fig. 1; but when it becomes necessary to fire it the finger is placed in the ring and the trigger pushed forward to the position represented by the dotted lines. As it passes forward the heel of the wedge strikes the back of the fly, depressing it toward the front and passing completely under it, when the fly, by the power of the spring *i*, assumes its original position. In drawing the trigger back to fire the pistol the toe of the wedge strikes the fly, carrying it back, and as the trigger continues its motion backward the end of the fly passes up the inclined plane of the wedge, and when the fly arrives at the heel of the wedge the hammer stands at full-cock, when it may be fired by continuing the motion of the trigger backward; or it may be let down without firing by allowing the trigger to pass forward, which it will do by the power of the mainspring. As the revolving spring *o* is carried back and forth by the trigger the projection *o'* passes in one direction in the parallel grooves and in the other direction in the diagonal grooves *s*, causing the barrels to revolve so as to bring another cartridge under the hammer with each backward and forward motion of the trigger. To replace the trigger without firing, after it has been pushed out the fly must be depressed so as to allow the trigger to pass backward without raising the hammer. To do this the lower side of the fly-lever *k* must be pushed forward by the finger, when the fly will be depressed sufficiently to effect the object.

A hammer arranged as before stated—viz., with its pivoted end attached to the pistol at some point forward of the rear end of the chambers or barrels, while its point or face strikes up in the rear of said chambers—operates in a peculiar manner, as by this arrangement of these devices the point of the hammer penetrates a little into the cartridge and at the moment of the discharge holds onto it like a hook, and thus prevents it from being thrown back against the breech-plate with so much force as to interfere with the revolution of the barrels; and this arrangement is essential not only to revolving pistols, but to any pistol in

which the cartridge and breech-plate change their position in relation to each other between the discharges, as in any case the full recoil and consequent strain of several cartridges against a breech plate would interfere with their motions.

When a hammer is thus employed and arranged in combination with a breech-plate its operation is as follows—viz., at the moment the discharge takes place the exploding point or face of the hammer resting upon the rim of the cartridge resists so much of the recoil that the center of the head of the cartridge is swelled out till it touches the breech-plate. When the strain upon it is passed the slight elasticity there is in the shell of the cartridge causes it to a certain extent to assume its original form, drawing away from the breech-plate that portion of the head of the cartridge which at the moment of the discharge rested against it. By employing this means of preventing the cartridge from pressing against the breech-plate the chambers may be made small enough to fit snugly around the shell, and so prevent a discharge of gas in the rear. When no such means of preventing the shell from resting against the breech is employed it is necessary that the chambers be made large enough, so that the shell will move forward loosely away from the breech-plate. Such chambers allow a large escape of gas in the rear.

The employment of a hammer arranged as shown in the drawings, and as hereinbefore specified in relation to the barrels, with chambers bored through the rear end, and with a breech-plate, is an important improvement, as a degree of compactness is obtained by this combination that could not possibly be had without it. A hammer arranged with its joint or pivot forward and its exploding point or face swinging down into the frame of the pistol, as shown in the drawings, when employed with chambers having breech-pins and nipples, makes a very compact pistol; but when a hammer so arranged is employed, as specified, and the breech-pin and nipples dispensed with, all the room they occupied is added to the length of the barrel without increasing the length of the pistol. Either this arrangement of the hammer or the employment of chambers bored through with a breech-plate, when used separately, tend greatly to compact a pistol; but when these two conditions are employed together a still greater degree of compactness is effected than would result from the use of either of them alone.

When a series of barrels are bored through at their rear end for the purpose of being loaded at the breech they are very much weaker in every respect than those that are not bored through or than those that are filled with a

breech-pin, particularly if in addition to being bored through they are chambered out for the reception of a cartridge. When a base-pin is employed for such barrels to revolve upon it is essential that the center hole should be much larger in the rear than in the front end, so that the base-pin may be largest at its point of support; and to give sufficient strength to the chambers it is necessary to put a greater weight of metal in the barrels than would otherwise be required; but by employing support *n* and *n'*, in combination with barrels bored through at their rear end, they may be made as light and compact as they could be if they were not bored through and a base-pin were employed.

The employment of wedge or cam *j* for raising the hammer has peculiar advantages, inasmuch as it allows the required length of motion of the trigger, and at the same time lifts upon the cock through the fly with great force, thus making a powerful and closely compact arrangement of devices for raising the hammer.

I make no claim to the arrangement of a hammer which is pivoted below and forward of the rear end of the chamber while its exploding-point or face strikes up in the rear of said chamber, as this was patented by V. M. Wallace August 17, 1835; nor do I in this application make the broad claim of resisting the recoil of a cartridge by a hammer so arranged; but

What I do claim, and wish to have secured to me by Letters Patent, is—

1. The employment of a hammer, arranged as specified in relation to the barrels, when used independent of a breech-pin or nipple, and in combination with chambers bored through at their rear end and with a breech-plate, as specified.

2. The arrangement of support *n* in the rear of all the barrels and support *n'* in front of all the barrels, in combination with a series of revolving barrels, when said barrels are bored through at their rear end for the purpose of being charged at the breech, as set forth.

3. The employment of a hammer, arranged and operating as herein set forth, in combination with a breech-plate for resisting the recoil of the cartridge so as to relieve the breech-plate from the pressure of the cartridge-shell, as and for the purpose specified.

4. The combination of wedge or cam *j* with fly *f* for raising the hammer, as specified.

5. The employment of lever *k*, in combination with fly *f*, as and for the purpose specified.

Washington, D. C., May 11, 1860.

W. H. ELLIOT.

Witnesses:

THOS. J. WILLIAMS,
SAML. A. POWER.