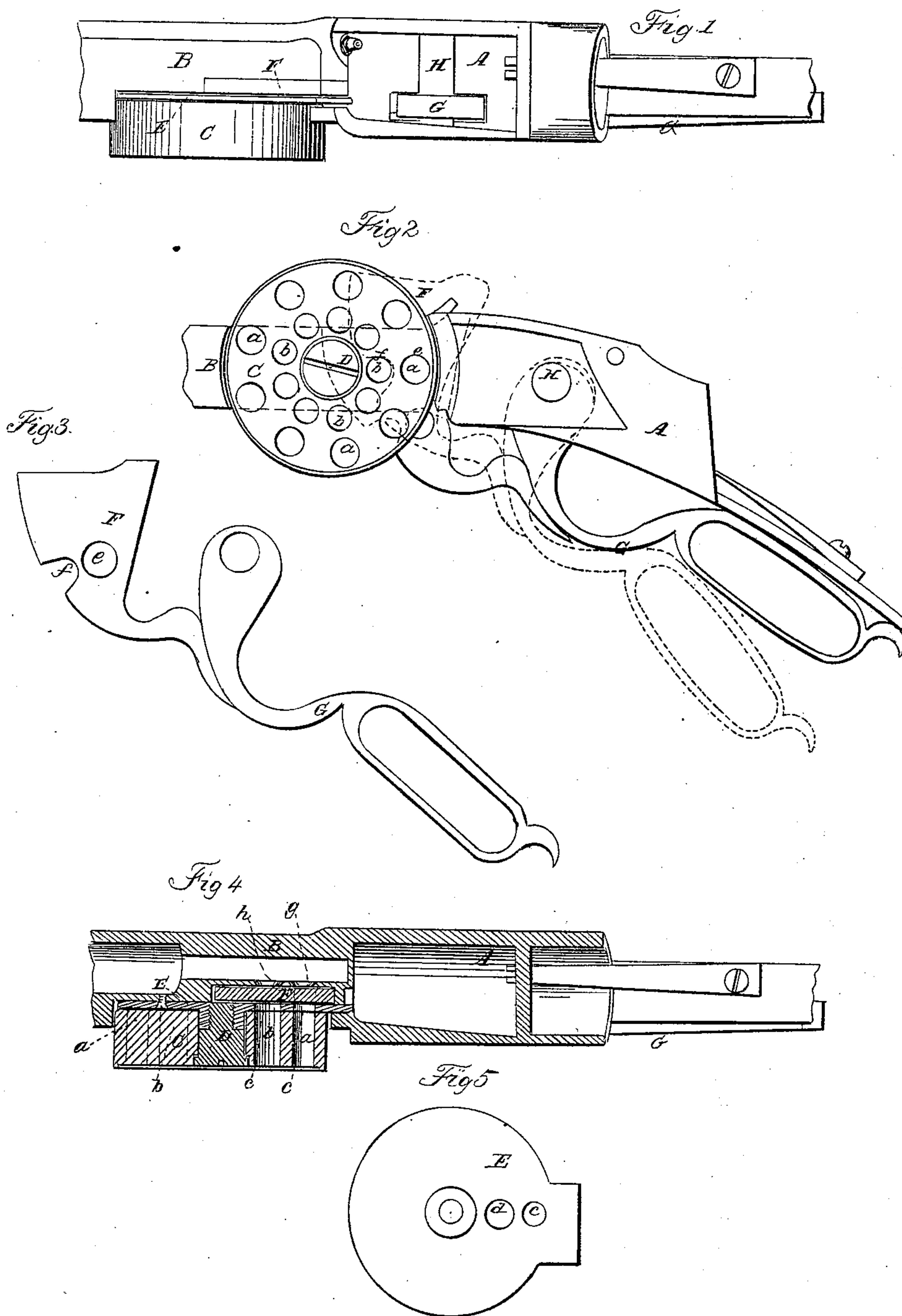


E. H. GRAHAM.

Revolver.

No. 10,944.

Patented May 16, 1854.



UNITED STATES PATENT OFFICE.

EDMUND H. GRAHAM, OF BIDDEFORD, MAINE, ASSIGNOR TO EDMD. H. GRAHAM AND ARTEMAS WHEELER, OF LOWELL, MASSACHUSETTS.

IMPROVEMENT IN MAGAZINE-GUNS.

Specification forming part of Letters Patent No. **10,944**, dated May 16, 1854.

To all whom it may concern:

Be it known that I, EDMUND H. GRAHAM, now, or late, of Biddeford, in the county of York, of the State of Maine, have invented a new and useful Improvement in Magazine-Guns or Repeating Fire-Arms; and I do hereby declare that the same is fully described and represented in the following specification and the accompanying drawings, letters, figures, and references thereof.

Of the said drawings, Figure 1 denotes a top view, and Fig. 2 a side elevation, of a portion of the stock and barrel of a repeating-gun with my improvement applied thereto. Fig. 3 is a separate side view of the slide or cut-off and the trigger-guard, to be hereafter described.

On the 4th day of October, 1853, Letters Patent of the United States of America were granted to me for a new or improved magazine-gun or fire-arm, in which invention a series of powder-chambers and a series of ball-chambers were disposed in concentric circles, and on the side of a gun-barrel and out of the sight range, and so as to operate in connection with a rotary charge-receiver placed and made to rotate within the barrel of the gun. Experience has demonstrated that this rotary charge-receiver will become fouled by repeated explosions of charges, so as to often require to be cleaned in order to enable it to operate well. By my present improvement I entirely dispense with the rotary charge-receiver, and make use of a self-cleaning slide or cut-off, which I shall now proceed to describe.

In the drawings, the part of the stock of the gun to which the barrel is directly attached is shown at A, the breech or rear portion of the barrel being formed thereon, as shown at B. C denotes the rotary magazine of two series of ball and powder chambers, *a a a*, &c., *b b b*, &c., arranged about one another in the block *c*, in concentric circles, and so that each fellow ball-chamber *b* and powder-chamber *a* shall be in a radial line with the screw-pin D, on which the magazine is supported and made to revolve. The said magazine revolves against a face-plate, E, that is screwed firmly to the side of the barrel and out of the sight-range. A horizontal section of this plate, the barrel, magazine, and slide cut-off is given in Fig. 4,

while a separate front view of the plate is exhibited in Fig. 5. There are two passages or perforations, *c d*, made through the face-plate.

Between the face-plate and the barrel is a cut-off slide, F, which is attached to the trigger-guard G, and formed as seen in side view in Fig. 3. It is provided with two holes or passages, *e f*, and in rear of it, and into the barrel and through the side of the barrel, two holes or passages, *g h*, are made. The passages of each set of holes or passages *c d*, or *e f*, or *g h*, are arranged at the same distance apart as, and made to correspond in diameter with, two fellow powder and ball receptacles of the magazine. Besides this, the passages are so disposed that when the trigger-guard G is turned down as far as it can be from the stock, or into the position as indicated by dotted lines in Fig. 2, there will be a free communication from one to another and between the barrel and two fellow powder and ball receptacles of the magazine, so that the powder and ball or shot of such receptacles may be made to pass into the barrel when it is turned over so as to bring the axes of the powder or ball chambers in vertical lines.

The extent of movement of the slide cut-off should be such that when the guard G, which turns on the percussion-hammer pin H, is moved up against the stock such slide cut-off shall have been depressed far enough to carry its passages *e f* entirely below the sets of passages *c d* and *g h*, and so as to cut off or completely interrupt the communications between the magazine and the barrel.

The method of operating or rotating the magazine it is not necessary to describe, it being understood that it, as well as the elevation of the cock, may be effected by mechanism connected with and operated by the aforesaid movable trigger-guard or lever G, which performs the office of protecting the trigger.

I would herein repeat that I do not claim as my invention a rotary magazine connected with the barrel of a fire-arm, such being in common use in repeating-guns; nor do I claim to combine a magazine for powder, balls, and priming with a hollow cylinder or tube made to encompass and revolve on a gun-barrel, while the said barrel is provided with holes or

passages to receive the load from the magazine when the latter is turned around on it into a suitable position; nor do I claim the combination of a rotary charge-receiver (placed within the barrel or breech of a gun) and a stationary loading-magazine affixed on the said barrel or breech; but

What I do claim is—

To combine with the gun-barrel and the magazine, when the latter is arranged and made to operate on the former as specified, a slide cut-off and a perforated plate, as made, applied, and operated substantially as described, the same enabling me not only to dispense with a rotary charge-receiver and

its attendant evils, but to retain the advantages of the arrangement of the two series of powder and ball chambers in concentric circles on the side of the gun and out of the sight-range, and to apply to the magazine and gun-barrel a contrivance which, by its peculiar operation, is rendered less or very little liable to be fouled by the smoke or any gases of the explosions of the charges.

In testimony whereof I have hereto set my signature this 22d day of October, A. D. 1853.

EDMUND H. GRAHAM.

Witnesses:

R. H. EDDY,

F. P. HALE, Jr.