

No. 688,217.

Patented Dec. 3, 1901.

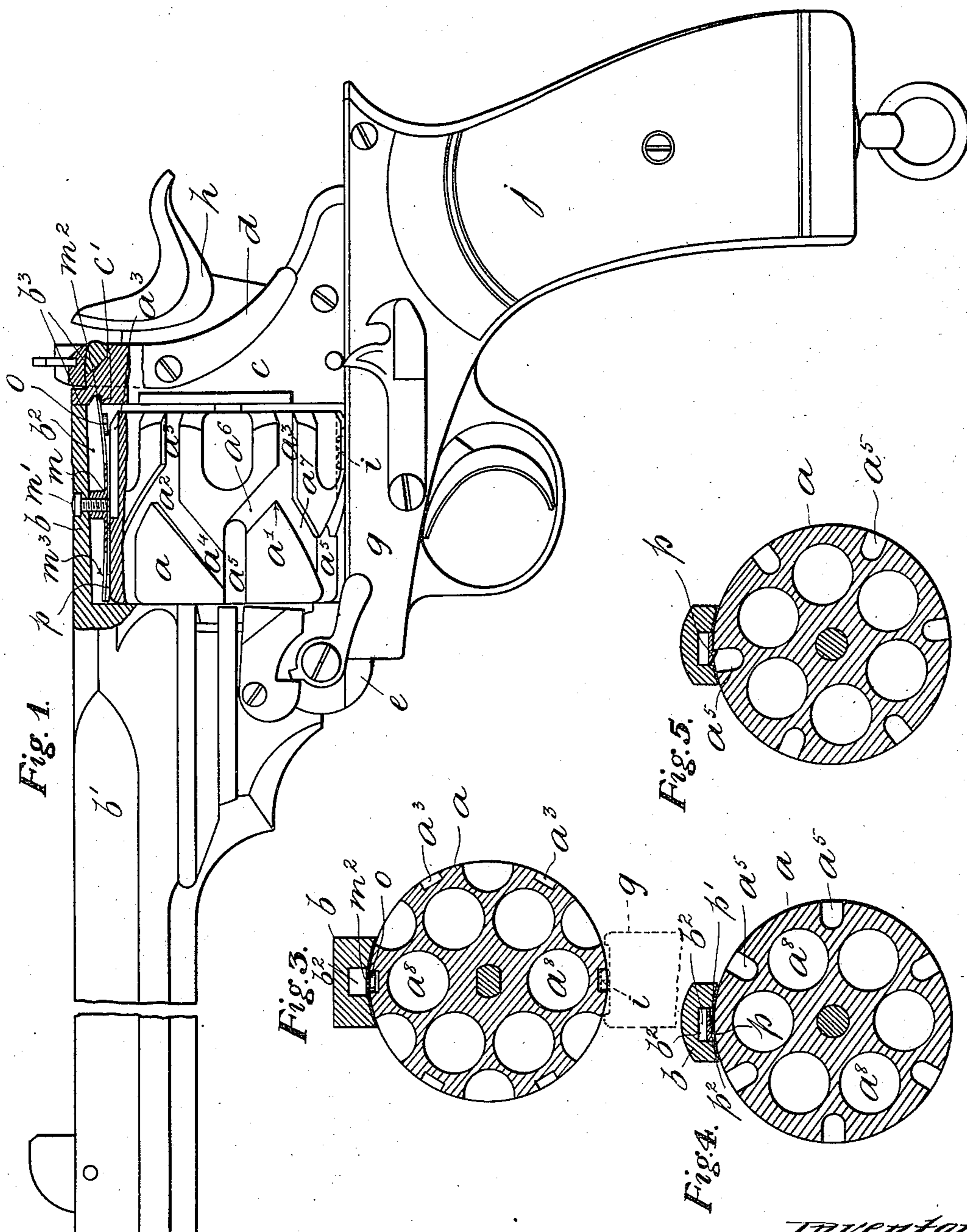
W. J. WHITING.

AUTOMATIC REVOLVER FIREARM.

(Application filed May 27, 1901.)

(No Model.)

2 Sheets—Sheet 1.



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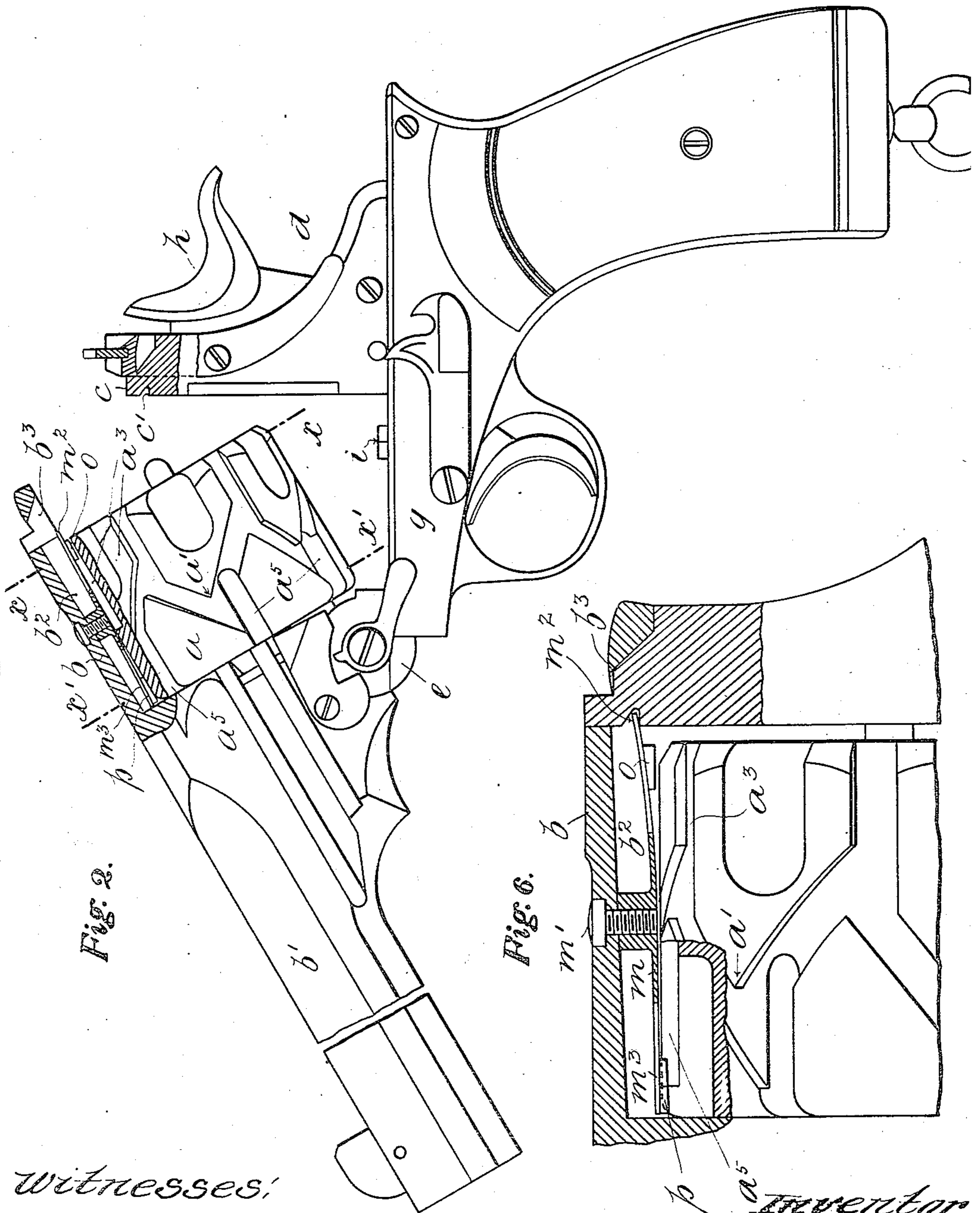


Fig. 2.

Fig. 6.

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UNITED STATES PATENT OFFICE.

WILLIAM JOHN WHITING, OF HANDSWORTH, ENGLAND.

AUTOMATIC REVOLVER-FIREARM.

SPECIFICATION forming part of Letters Patent No. 688,217, dated December 3, 1901.

Application filed May 27, 1901. Serial No. 62,105. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM JOHN WHITING, works manager, a subject of the King of Great Britain, residing at Douglas road, Handsworth, near Birmingham, England, have invented certain new and useful Improvements in Revolver-Firearms, of which the following is a specification.

This invention relates to small-arms of the breakdown-revolver type, and has reference to automatic revolvers primarily of the Webley-Fosbery class.

The said invention has for its objects, first, to simplify the construction and arrangement of the cylinder-rotating mechanism, thereby dispensing with the stepping of the zigzag channel and the employment of the usual spring-peg over which the said channel slides and works, and, secondly, to provide improved means for obtaining the direct alinement of the chambers of the cylinder in succession with the barrel and hammer and for releasing the cylinder when the weapon is closed, in conjunction with means for insuring the rotation of the cylinder in the proper direction.

Figure 1 is a side elevation, partly in longitudinal vertical section, of the revolver. Fig. 2 is a similar view to that of Fig. 1. Fig. 3 is a cross-section taken upon lines xx , Fig. 2. Figs. 4 and 5 are similar views upon the dotted lines x' of Fig. 2; and Fig. 6 is an enlarged view, partly in elevation and in longitudinal vertical section, of a portion of the revolver.

The same letters of reference indicate corresponding parts in the said figures.

In the Webley-Fosbery automatic revolver represented in the said figures the cylinder a , with its extractor, (not shown,) is rotatably mounted upon a pivot-sleeve, as usual, and the barrel-strap b of the barrel b' is locked to the standing breech c by an ordinary pivoted bridle-fastener d , while the barrel b' with the body e , standing breech c , and cylinder a and hammer mechanism are arranged to slide bodily rearward upon a stationary bed g under the influence of the recoil after each discharge for recocking the hammer h and partially rotating the cylinder a through the medium of a zigzag race a' , formed around the periphery of the latter, traveling over a fixed stud i , mounted on the said bed g , which

surmounts the handle or grip j and has the trigger k and its mechanism located within it. The zigzag cylinder-race a' , comprising forwardly-sloping channels a^6 and backwardly-sloping channels a^7 , which work successively over a fixed diamond or other shaped stud i , mounted on the bed and extending through a slot in the body, is of a special and novel character, as the whole of its angularly-disposed channels a^6 a^7 are made of uniform depth throughout, and extending from the back angles a^2 of the said race are a series of straight channels a^3 , opening rearwardly and disposed in the same axial line as the chambers a^8 , while from its forward angles a^4 there extend other channels a^5 , opening to the front of the cylinder and disposed alternately between the said chambers, which admits of these channels being made deeper, both to lighten the cylinder and to provide ample clearance for the direction-stud, hereinafter described.

Located within a longitudinal sinking b^2 in the under side of the barrel-strap b is an arrangement for insuring the alinement of the chambers with the barrel and hammer and a device to act in conjunction with the cylinder-rotating mechanism for compelling the said cylinder to turn or move around in the proper direction after each discharge and recoil. These means consist of a long blade-spring m , fixed at its middle by a screw m' to the rib and with the opposite free ends fitted, respectively, with depending studs o and p . The tip of the rearward free end m^2 extends into the eye or opening b^3 at the end of the extension-rib and is arranged to overhang a shoulder c' , formed in the top part of the face of the standing breech, while the stud o , carried by this rearward end, is adapted to engage (when the weapon is opened) with one or other of the straight channels a^3 , extending from the rearward angles a^2 of the zigzag race a' , and thus retain the cylinder with one of its chambers in alinement with the barrel; but on the revolver being closed the said tip m^2 of the spring-limb m is made to impinge against the shoulder c' in the face of the standing breech, so as to lift the stud o from out of the channel wherein it previously engaged, and thereby liberates the cylinder, which is free to be rotated on recoil

by the action of a portion a^6 of the race a' being constrained to travel over the fixed stud i . The direction-stud p on the forward free end m^3 of the blade-spring m has a straight shoulder p' on the one side and an inclined face on the other side p^2 , so as to admit of the cylinder wiping freely past this stud, which is the proper direction in which the cylinder is required to rotate (on the flat-bottomed race a' being made to work over the fixed peg i) in order to bring the chambers successively around to the barrel; but when the said stud p drops or snaps into one of the channels a^5 the straight shoulder p' of the stud engages with the side of the said channel, and thereby both locks the cylinder against rotation in the contrary direction and also sets or secures it in such a position relative to the fixed peg i as to insure that on the next discharge and backward recoil of the cylinder with the other movable parts of the pistol one of the forwardly-directed angular portions or channels a^6 of the zigzag race will pass over the stud for converting the rectilinear movement of the cylinder into a partial rotary movement in the proper direction for bringing a loaded chamber up to the barrel and hammer, it being understood that unless some such locking device as above described is used in conjunction with the special form of race and fixed peg constituting this part of my invention one of the backwardly-directed channels a^7 might inadvertently pass over the peg, which would cause the cylinder to turn in the wrong direction and present an empty or discharged chamber to the hammer.

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

1. In a revolver, a cylinder provided with a zigzag race, a fixed peg on the arm of the frame and operating in said race, in combination with a catch device for determining and setting the position of the cylinder relative to the said peg, substantially as herein shown and described.

2. In automatic revolver-firearms of the type set forth; the combination with the zigzag cylinder-race on the cylinder and the fixed

peg on the frame, of a cylinder direction catch or device, consisting of a spring-limb carrying a stud with an inclined or wiping face and a flat shoulder for engaging suitable peripheral channels or sinkings on the cylinder, which is permitted to rotate or wipe under the catch in one direction but is blocked against rotation in the contrary direction, whereby the said cylinder is set or affixed in such a position relative to the fixed peg as to insure its rotation in the proper direction substantially as herein described and also as set forth.

3. In an automatic revolver-firearm of the type set forth, the combination with the zigzag cylinder-race on the cylinder and the fixed peg on the frame, of a catch device for determining and setting the cylinder relative to the peg, and a cylinder-aligning device adapted to be brought into and out of engagement with the cylinder when the revolver is opened and closed, respectively.

4. In automatic revolver-firearms of the type set forth; the combination with the rotating cylinder arranged to make a backward-sliding movement under recoil, a zigzag race thereon having channels of uniform depth, a fixed peg on the body over which the said race travels, a spring-limb carrying a cylinder direction-catch, and peripheral channels or sinkings on the said cylinder adapted to be engaged by such catch; of a cylinder-alignment device comprising a spring-limb carrying a stud adapted to engage with peripheral channels on the cylinder arranged parallel with the axis of the chambers, with the carrier-limb of the said alignment-stud being extended into engagement with an abutment on the standing breech, whereby the stud is lifted clear of the cylinder when the weapon is closed, substantially as herein described and also as set forth in the accompanying drawings.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

WILLIAM JOHN WHITING.

Witnesses:

HY. SKERRETT,

ARTHUR T. SADLER.