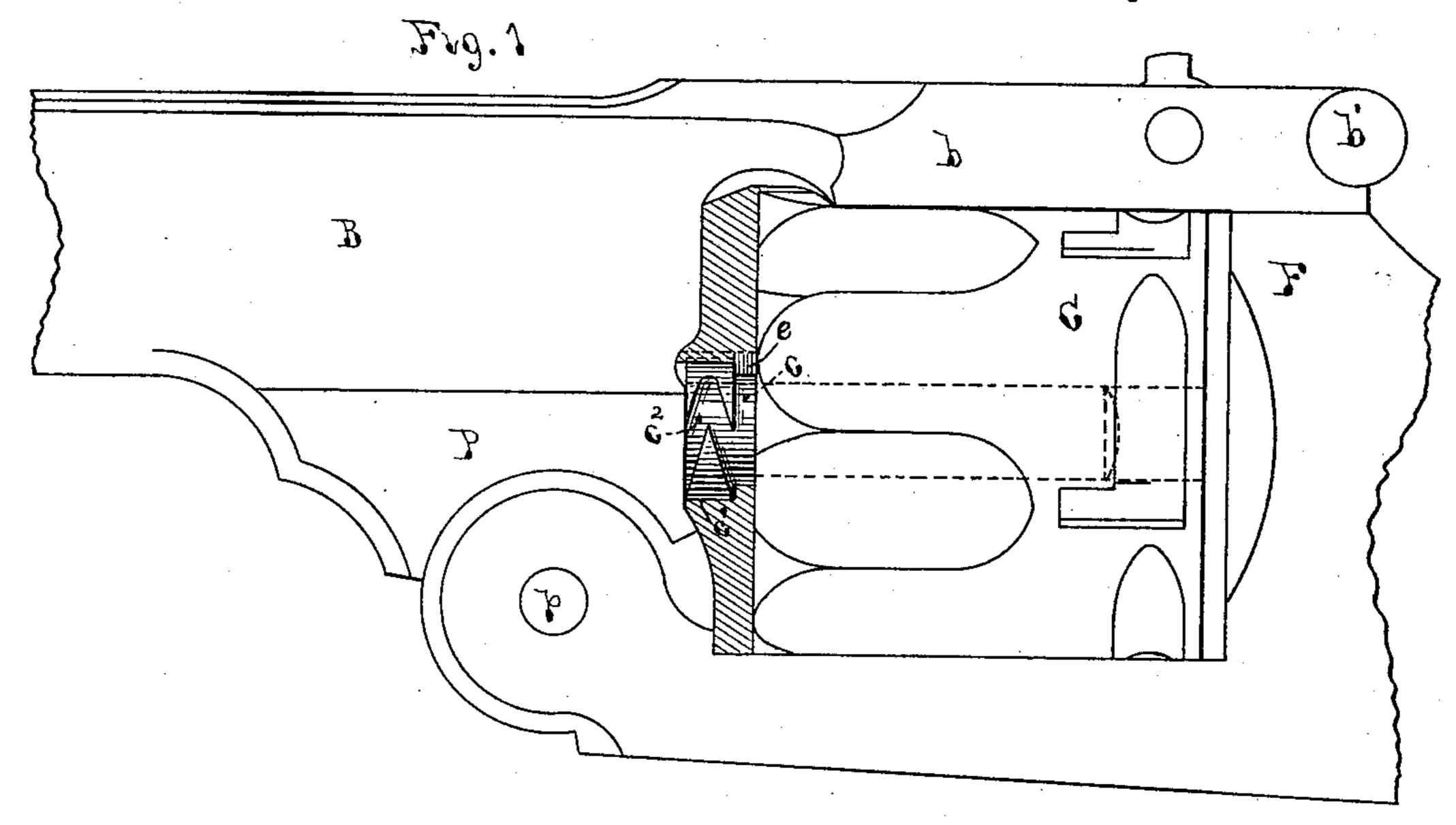
(No Model.)

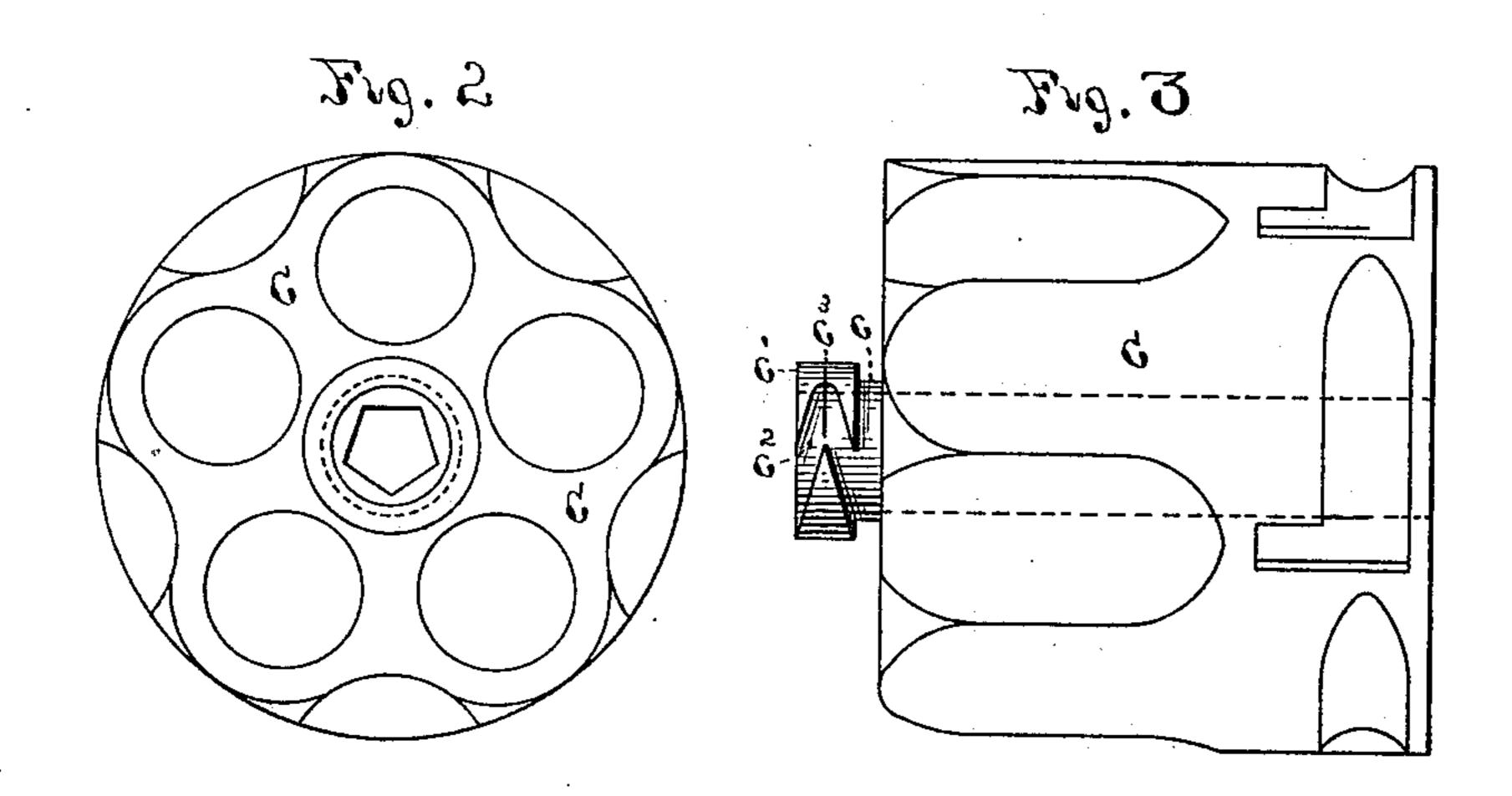
## D. H. RICE.

## REVOLVING FIRE ARM.

No. 366,794.

Patented July 19, 1887.





Witnesses A. P. Ochnigton.

David Hall hee

## United States Patent Office.

DAVID HALL RICE, OF BROOKLINE, MASSACHUSETTS, ASSIGNOR TO THE MARLIN FIRE-ARMS COMPANY, OF NEW HAVEN, CONNECTICUT.

## REVOLVING FIRE-ARM.

SPECIFICATION forming part of Letters Patent No. 366,794, dated July 19, 1887.

Application filed March 28, 1887. Scrial No. 232,693. (No model.)

To all whom it may concern:

Be it known that I, DAVID HALL RICE, of Brookline, in the county of Norfolk and State of Massachusetts, have invented a new and useful Improvement in Revolving Fire-Arms, of which the following is a specification.

My invention relates to revolving fire-arms; and it consists in certain new and useful constructions and combinations of the several parts thereof, substantially as hereinafter described and claimed.

In the drawings, Figure 1 is a side elevation of a portion of a revolving fire-arm constructed according to my invention. Fig. 2 is a rear end view of the revolving cylinder. Fig. 3 is a side view of the same.

B is the barrel of the arm, provided with a rearward extension, b, over the cylinder C, which is locked by the latch b' to the frame 20 F. The barrel B also has a projection, P, on its lower side, by means of which it is pivoted to the frame by the pivot p forward of the cylinder. The cylinder C revolves upon a pin fixed in the projection P and extending rear-25 wardly therefrom parallel with the lower face of extension b, and at the proper distance therefrom, as shown in dotted lines in Fig. 1. All of these parts are of the usual and well-known construction and are well understood, and furso ther description of them in unnecessary.

My improvement relates to the method of securing the cylinder C upon the axial pin, on which it rotates in such manner that it is less readily detached accidentally than heretofore, 35 and so that dirt and gases cannot foul up the connecting mechanism. To the front end of the cylinder C is attached a tubular extension, c, concentric with the cylinder. On the outward end of this extension is formed an annu-40 lar collar, c', projecting radially outward beyond the extension all around. Through this collar, and to the depth to which it projects beyond the extension, I form a groove,  $c^2$ , of V contour having its ends opening outward 45 through the edges of collar c' and its point in the central portion of the collar and projecting in the direction in which the cylinder C revolves around its axial pin when the arm is being discharged. On the lower side of the barrel B of the arm

a pin, e, is attached to the barrel, which projects downward toward the axial pin of the cylinder C for a short distance. This pin e is made of the proper length and breadth to fit and pass through the V-groove  $c^2$  of the cylin- 55 der-extension. When it is desired to seat the cylinder in place in the arm, it is slipped upon its axial pin and its extension-collar c' brought against the pin e. By then turning the cylinder backward the pin enters the V groove and 60 traverses the same to the point of the groove, when by reversing the motion of the cylinder and still pressing it upon its axial pin the pin e traverses the other branch of the V-groove and passes behind the collar c', thus securing 65 the cylinder upon its axial pin when the barrel is unlocked from the frame. When thus secured, any revolution of the cylinder in a forward direction will cause the pin e to pass by the V-groove without entering it, while any 70 revolution of the cylinder backward will only cause it to enter one branch of the groove, and cannot detach it from its axial pin, thus providing greater security against the accidental escape of the cylinder from the arm, since it 75 is manifest that it can only be removed by revolving it alternately in one direction and the other, and at the same time so pressing upon it as to cause the pin e to enter the second branch of the V-groove after it has passed 80 through the first branch to the point of the same. When the pin e and V-groove  $c^2$  are nicely proportioned and fitted to each other, it will be found a difficult matter to cause the pin to pass through the groove and allow the 85 escape of the cylinder unless by design.

To further guard against the accidental escape of the cylinder, I have shown in Fig. 3, as an addition to the invention, a spring,  $c^3$ , set firmly into the collar c', so that its free end 90 projects into the V-groove at that point thereof in the plane of rotation of the cylinder. The free end of the spring  $c^3$  is capable of being sprung sidewise in either direction, so as to allow the pin e to pass by it from one branch 95 of the V-groove into the other, and vice versa; but should the pin enter either branch of the V-groove the spring will always keep it from entering the other branch until the requisite pressure transversely of it has been brought 100

to bear upon it to press the point of the spring to one side and allow the pin to pass by it. This pressure must be brought to bear while the cylinder is firmly held from rotation, because if the cylinder be allowed to rotate it will crowd the pin e toward the heel of the spring c'and prevent the spring being pushed aside by any reasonable force exerted upon it.

What I claim as new and of my invention is—

1. The combination of the barrel B, the axial cylinder-pin extending rearwardly therefrom, the pin e, projecting from said barrel at right angles to the axial pin, the cylinder C, revolving upon said axial pin, and the tubular forward extension, c, concentric with the cylinder and provided upon its end with the collar c', and the groove c², of V contour, through said collar, adapted to receive pin e and allow the same to pass through it by the rotation of the

cylinder in two directions, substantially as de-20 scribed.

2. The combination of the barrel B, the axial cylinder-pin extending rearwardly therefrom, the pin e, projecting from said barrel at right angles to the axial pin, the cylinder C, revolving upon said axial pin, and the tubular forward extension, e, concentric with the cylinder and provided upon its end with the collar e', and the groove  $e^2$ , of e contour, through said collar, adapted to receive the pin e and allow 30 the same to pass through it, and the spring  $e^3$ , projecting into said groove, substantially as described.

DAVID HALL RICE.

Witnesses:

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