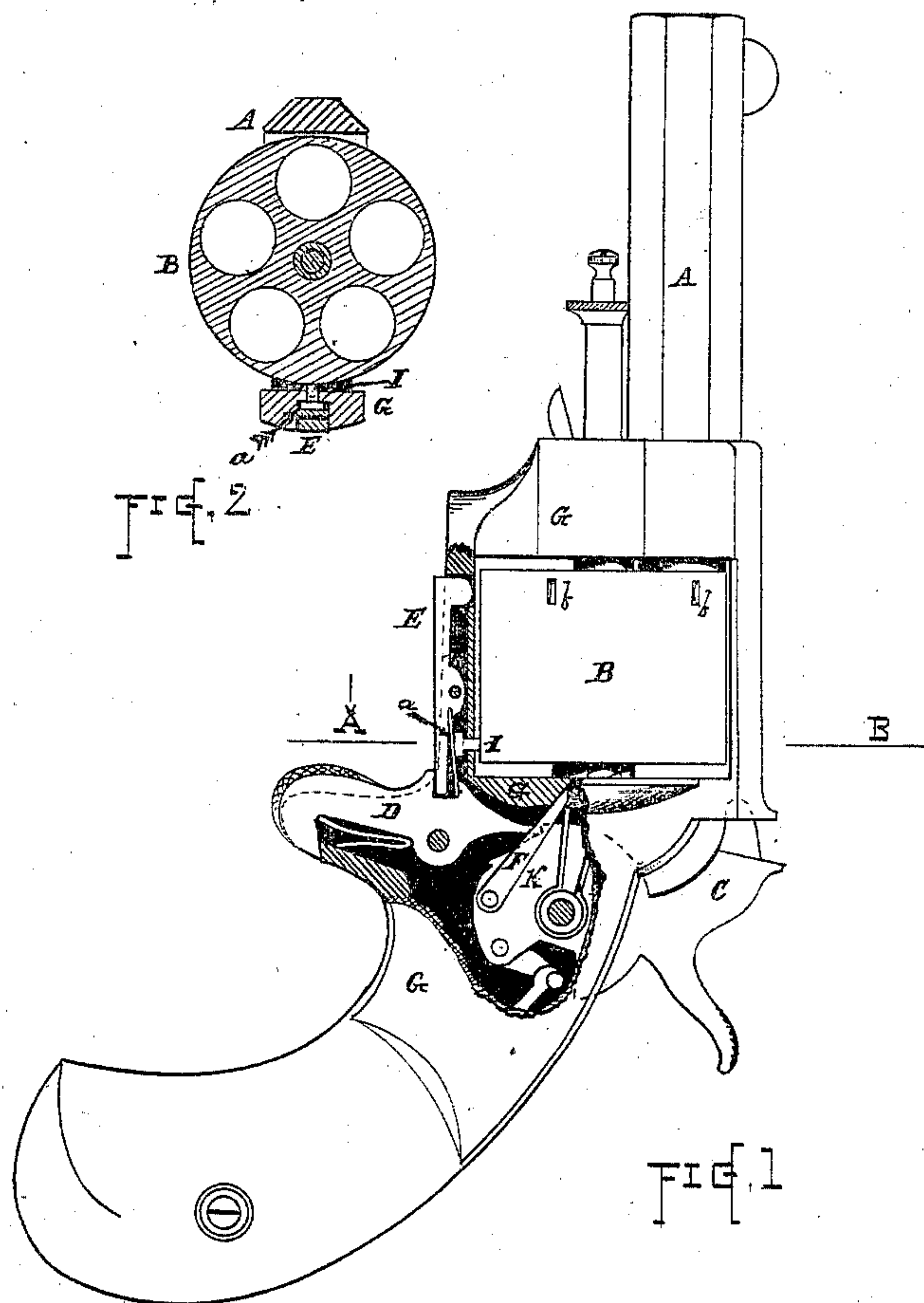


S. FOREHAND & H. C. WADSWORTH.
Revolving Fire-Arms.

No. 143,566.

Patented Oct. 14, 1873.



Witnesses

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IMPROVEMENT IN REVOLVING FIRE-ARMS.

Specification forming part of Letters Patent No. **143,566**, dated October 14, 1873; application filed April 5, 1873.

To all whom it may concern:

Be it known that we, SULLIVAN FOREHAND and HENRY C. WADSWORTH, both of the city and county of Worcester and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Revolving Fire-Arms; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings which form a part of this specification, and in which—

Figure 1 represents a side view of a revolving fire-arm embracing our improvement, (the frame being shown broken away to exhibit the internal construction,) and Fig. 2 represents a transverse section of the same at line A B, Fig. 1.

The nature of our invention consists, first, in the employment of a stop or friction device actuated by the lock mechanism, in combination with the cartridge-cylinder in revolving fire-arms, for the purpose of preventing the accidental rotation of said cylinder when the piece is at "half-cock," or during operation of raising the hammer while slowly cocking the piece, as hereinafter explained; second, in the combination, with the cylinder and cylinder-bolt, of a friction-pin or spring-stud for retaining the cylinder in position, as herein shown and described.

In certain classes of revolving fire-arms the construction and arrangement of the parts are such that during the action of the piece, either while the hammer stands at half-cock or while the hammer is being raised, there occurs an interval after the stop or cylinder bolt has been raised, and before the advancing mechanism engages the cylinder-ratchet, during which the cylinder is released and is free to revolve in either direction, and it has been ascertained in practice, especially with the large-calibered arms, that when a portion of the chambers of the cylinder is charged and the remainder empty or discharged the preponderance of the ball-cartridges over the empty shells or vacant chambers sometimes causes the cylinder to partially revolve or change its position while the piece is at half-cock, or in case the hammer is raised somewhat slowly, thus occasionally interfering with the perfect action of the cylinder, so that the mechanism fails to advance the proper chamber into position when the piece is

full-cocked, thus frequently requiring a repetition of the movement, or a recocking of the piece, in order to bring the charged chamber into discharging position. To obviate this liability of failure, and to insure at all times the proper action or movement of the cylinder, we combine with the cylinder a stop or friction device attached to or retained in the frame, and actuated by the mechanism of the lock in such a manner as to operate upon the cylinder while the latter is freed by the cylinder-bolt, and to retain said cylinder in position until the advancing hand or lever is brought into action, at which time the friction or stop is relieved or ceases to act upon the cylinder.

In the drawings, A denotes the barrel; B, the cartridge-cylinder; C, the hammer; D, the trigger; E, the cylinder-bolt; F, the advancing hand or lever; G, the frame; and I, the friction-pin or stop device.

The friction-pin or stop device in this instance consists of a small stud or pin, I, arranged in and projecting through the frame G near the trigger D, as shown. Said pin I is actuated by the cylinder-bolt E and its spring *a*, it being pressed against the exterior surface of the cylinder B by the spring *a* as the cylinder-bolt E is actuated by the movement of the trigger dropping into the half-cock notch of the tumbler K when the hammer C is drawn back, the forward end of said cylinder-bolt E being by this action thrown outward to release it from the notch *b* on the cylinder, and the rear end thereof moved inward, causing the spring *a* to press on the head of the pin I and force its point against the cylinder B with pressure sufficient to hold or retain the cylinder in position and prevent its revolving from the preponderance of the cartridge-balls, or from other slight causes, but not with sufficient pressure and friction to cause undue strain upon any of the parts. When the hammer C is entirely down, or when it is at full-cock, the end of the cylinder-bolt enters one of the notches *b* at the front end of the cylinder; and at such time the pin I is relieved from its pressure against the surface of the cylinder. The pin or stop I is also moved from the cylinder to relieve the friction while the advancing hand or lever F is acting to revolve the cylinder forward, the outward movement of the pin I com-

mening as soon as the hand E engages with the ratchet of the cylinder and the latter starts forward, thus relieving the mechanism and permitting the easy movement of the cylinder by the hand or lever F.

Having described our improvement in revolving fire-arms, what we claim therein as new and of our invention, and desire to secure by Letters Patent, is—

1. The combination, with the cartridge-cylinder in a revolving fire-arm, of a stop or friction device actuated by the lock mechanism for retaining the cylinder in proper position when

the piece is at half-cock, or when the cylinder is released by the cylinder-bolt, and before the advancing-hand engages the cylinder-ratchet, substantially as set forth.

2. The combination, with the cylinder B, cylinder-bolt E, and its spring *a*, of the friction pin or stud I, substantially as and for the purpose set forth.

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