

No. 702,735.

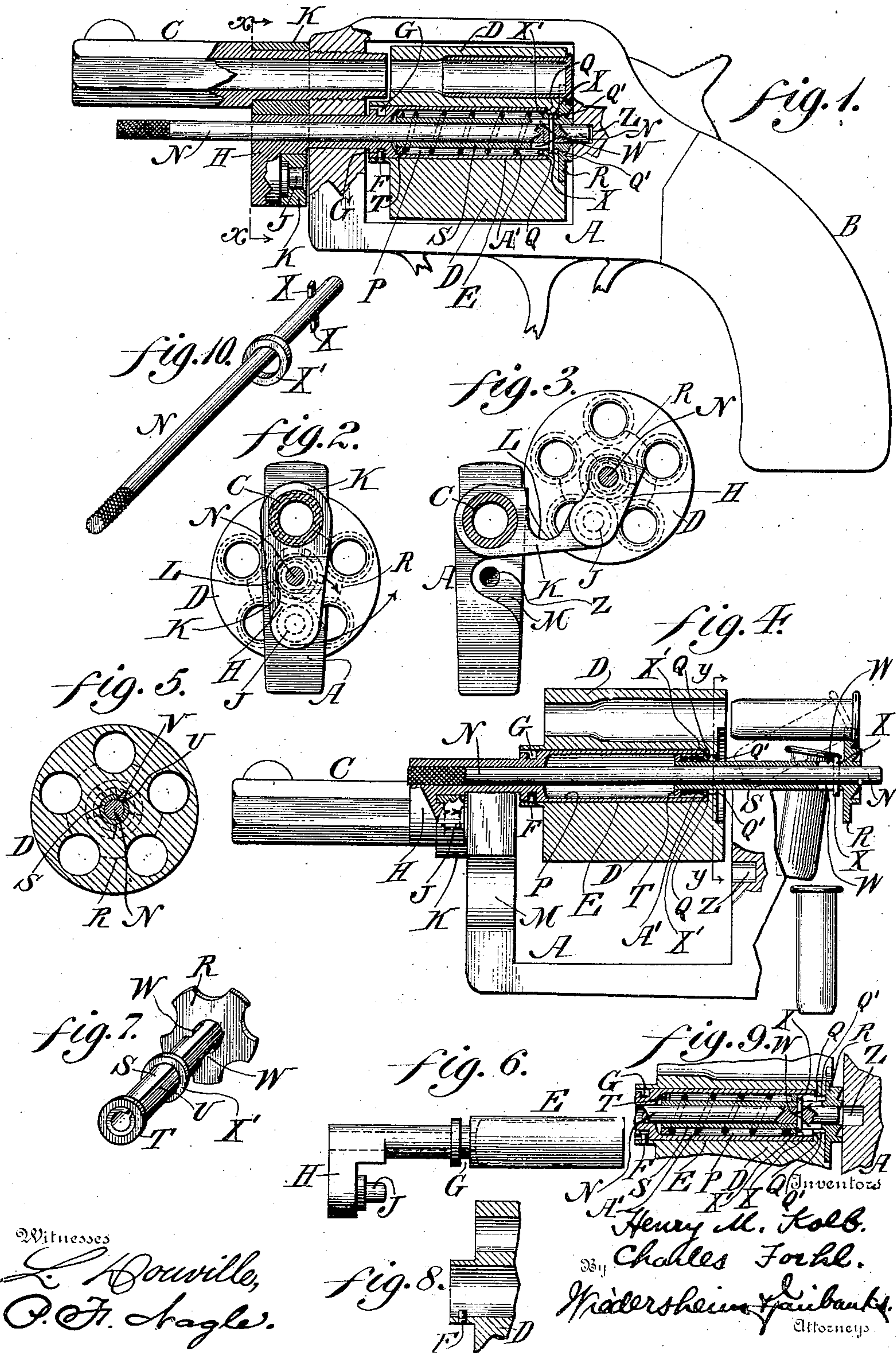
Patented June 17, 1902.

H. M. KOLB & C. FOEHL.

REVOLVER.

(Application filed Sept. 28, 1901.)

(No Model.)



UNITED STATES PATENT OFFICE.

HENRY M. KOLB AND CHARLES FOEHL, OF PHILADELPHIA, PENNSYLVANIA.

REVOLVER.

SPECIFICATION forming part of Letters Patent No. 702,735, dated June 17, 1902.

Application filed September 28, 1901. Serial No. 76,934. (No model.)

To all whom it may concern:

Be it known that we, HENRY M. KOLB and CHARLES FOEHL, citizens of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Revolvers, of which the following is a specification.

Our invention consists of an improvement in revolvers, as will be hereinafter described and claimed.

Figure 1 represents a view, partially in side elevation and in longitudinal section, of a revolver embodying our invention. Fig. 2 represents a transverse section thereof, taken on line *xx*, Fig. 1. Fig. 3 represents a similar section with the cylinder thrown to one side. Fig. 4 represents a fragmentary view, partially in elevation and in section, with the cylinder moved to one side and the parts in the position they assume in ejecting the empty shells. Fig. 5 represents a transverse section of a cylinder, taken on the line *yy*, Fig. 4. Fig. 6 represents a detail side elevation of the arm upon which the cylinder is mounted. Fig. 7 represents a perspective view of the ejector. Fig. 8 represents a section of the forward end portion of the cylinder. Fig. 9 represents a central longitudinal section of the cylinder with the locking-pin moved forward. Fig. 10 represents a perspective view of the locking-pin.

Similar letters of reference indicate corresponding parts in the figures.

Referring to the drawings, A designates the frame of the revolver, B the handle, and C the barrel. The cylinder D is rotatably mounted upon an arm E, being held against longitudinal movement thereon by means of a pin F upon the cylinder entering a groove G in said arm. The front end of the arm is provided with offset H, carrying a pivot-pin J, by means of which the arm is pivotally connected with a link K, that is pivoted on the barrel C just in front of the frame, said link K being recessed, as shown at L, to allow the offset H and the arm E to close to the position shown in Fig. 2, the frame being also recessed, as shown at M, to accommodate these parts. This pivotal connection between the cylinder-carrying arm and the pivot-link enables the cylinder to be moved from its operative position to one side, as seen in Fig. 3, and then

brought into position, so that the empty shells may be ejected by the locking-pin now to be described.

The arm E is tubular, the diameter of the same at the front end thereof being such that the locking-pin N fits snugly therein, while the rear end portion of the arm or such portion as is situated within the cylinder is enlarged, as at P. (See Figs. 1, 4, and 9.) The opening in the cylinder within which the arm E is situated is reduced at its rear end to form a shoulder Q, against which the end of the arm abuts, and notches or passages Q' are made in the walls of the reduced portion forming said shoulder. The ejector consists of a plate R, of familiar construction, that is carried by a tube S, said tube sliding in the reduced opening at the rear end of the cylinder and being provided at its forward end with a flange T, fitting within the enlarged opening at the rear portion of the arm E and forming a shoulder. The said tube S is provided with a longitudinal slot or guide U, within which is situated a key V, rigid with the cylinder, which prevents the relative rotation of these parts, while allowing relative longitudinal movement. The locking-pin N slides through the forward portion of the arm and through the tube S, while near the rear end of the tube are the slots W, that are engaged by the lugs X, projecting from the pin N. The slots W are in alinement with the notches or passages Q', and said lugs X project beyond the tube S and engage the rear side of a washer or ring X', between which and the flange T on the forward end of the tube S the spring A' is situated. The rear end of the pin N, as shown in Fig. 9, does not project beyond the ejector-plate when the lugs X stand at the front end of the slots W, but when moved to the other limit of their movement the rear end of the pin passes into the socket Z in the frame to hold the cylinder in place.

The operation is as follows: The parts normally stand in the position shown in Fig. 1. When it is desired to load the chambers, the pin N is drawn forward against the action of a spring A' to the position shown in Fig. 9, which allows the cylinder to be moved to one side, as shown in Fig. 3. This exposes the ends of the chambers, that the cartridges

may be inserted. The cylinder can then be restored to its normal position, while the pin is moved into the socket Z by said spring A'. When it is desired to eject the empty shells, the locking-pin F is moved forwardly and the cylinder moved to one side to the position shown in Fig. 3, and then the locking-pin is moved to the rear to the position shown in Fig. 4, the lugs X thereon engaging the rear ends of the slots W and carrying the ejector-plate and tube to the rear against the action of the spring A', the key V sliding in the guide-groove U of the tube S. This brings the parts to the position shown in Fig. 4 and ejects the empty shells entirely from the cylinder. When the pin N is released, the spring A' will restore the parts to their normal positions, and the cylinder can then be restored to its firing position and locked.

20 Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a revolver, a cylinder rotatably mounted upon an arm, a link pivotally connected with the barrel of the revolver, and a pivot connecting said link and arm, the same being eccentric to said arm.
2. In a revolver, an arm upon which the cylinder is rotatably mounted, said arm being provided with an offset, and a link pivotally connected with the barrel of the revolver and pivoted to said offset.
3. In a revolver, an arm upon which the cylinder is pivotally mounted, an offset at the forward end of said arm, a link pivoted upon the barrel and pivotally connected with said offset, said link being recessed to receive the end of said arm, and the forward portion of the frame of the revolver being recessed to receive said arm.
4. In a revolver, a tubular arm upon which the cylinder is rotatably mounted and a pivotally-mounted member pivotally connected with said arm, an ejector-plate at the rear end of said cylinder carried by a tube situated within said tubular arm, and a longitudinally-movable locking-pin passing through said arm and tube, said cylinder, tube and locking-pin being held against relative rotation, and a socket in the frame of the revolver to receive said pin.
5. In a revolver, a tubular arm upon which the cylinder is rotatably mounted and a pivotally-mounted member pivotally connected with said arm, an ejector-plate at the rear end of said cylinder carried by a tube situated within the tubular arm, said tube being longitudinally movable within said arm, a spring situated between said cylinder and tube for moving the tube in one direction, a locking-pin passing through said tube and arm, said locking-pin and tube being capable of a limited relative longitudinal movement, said cylinder, tube and pin being held against relative rotation, and a socket in the frame of the revolver to receive said pin.
6. In a revolver, a tubular arm upon which the cylinder is rotatably mounted and a pivotally-mounted member pivotally connected with said arm, an ejector-plate at the rear end of said cylinder carried by a longitudinally-movable tube situated within said arm, a spring situated between said tube and cylinder for moving the former in one direction, a locking-pin passing through said arm and tube, lugs upon said locking-pin situated within slots in said tube, said cylinder, tube and pin being held against relative rotation, and a socket in the frame of the revolver to receive said pin.
7. In a revolver, a frame, a cylinder, an ejector, a pin extending through said ejector and adapted to lock said cylinder to said frame, a slotted tube through which said arm passes and lugs on said pin engaging in said slots and a spring adapted to return said ejector to its normal position after the shells have been removed and by engagement with the lugs on said pin causing the same to lock the cylinder to said frame when the parts are in proper position.
8. In a revolver, a frame, a cylinder, a tube having slots near its rear end, a pin movable in said cylinder and having lugs moving in said slots, an ejector carried by said tube at its rear end, the cylinder having notches at its end, a flange on the forward end of the said tube, a spring around the tube and a ring, between which and said flange, said spring is disposed.

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Witnesses:

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