

(No Model.)

D. SMITH.
REVOLVING FIRE ARM.

No. 318,315.

Patented May 19, 1885.

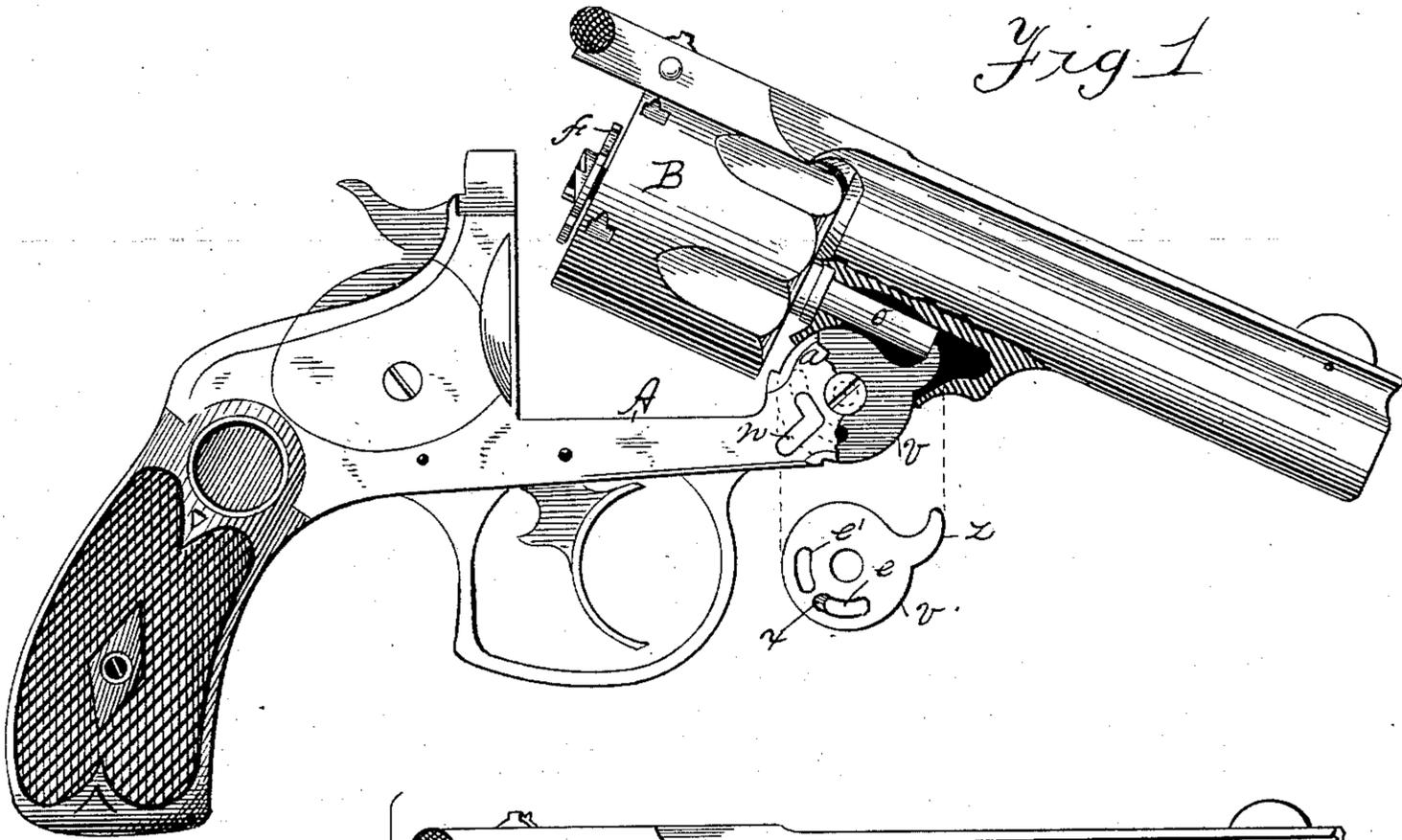


Fig 1

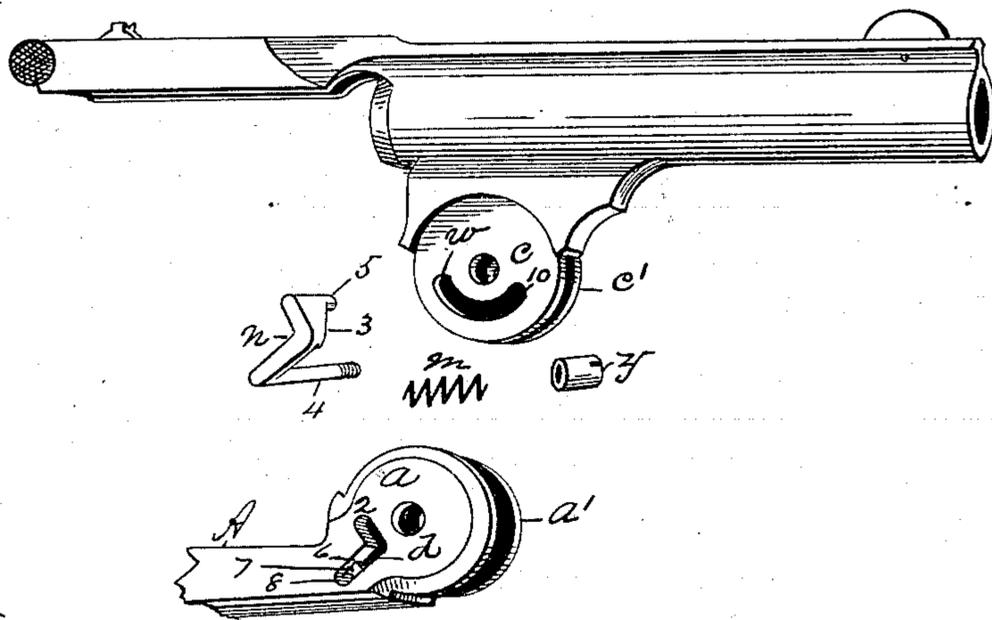
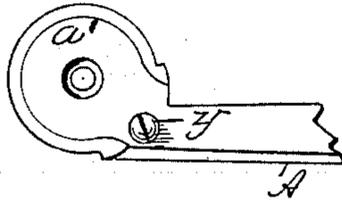


Fig 2

Fig 3



WITNESSES:

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REVOLVING FIRE-ARM.

SPECIFICATION forming part of Letters Patent No. 318,315, dated May 19, 1885.

Application filed March 23, 1885. (No model.)

To all whom it may concern:

Be it known that I, DEXTER SMITH, a citizen of the United States, residing at Springfield, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Revolving Fire-Arms, of which the following is a specification.

This invention relates to improvements in revolving fire-arms, and pertains to the ejector-operating mechanism of such arms, the object being to provide improved devices connected with and operating by the action of the frame and barrel joint for operating the shell-ejector, said improved devices embodying means for preventing the operation of the ejector at will.

In the drawings forming part of this specification, Figure 1 is a side elevation, partly in section, of a fire-arm embodying my improvements, and showing projected therefrom one of the extractor-operating parts. Fig. 2 is a side elevation of the barrel detached from the frame, the frame joint, and a view in perspective of the extractor-pawl and its nut and spring. Fig. 3 is a reverse side view of the frame-joint from that shown in Figs. 1 and 2.

In the drawings, A indicates that part of the pistol-frame extending under the cylinder B, and having the exterior cheek-pieces, *a a'*, of the frame and barrel joint. One of said cheek-pieces, *a*, has an angular slot, *d*, through it, opening quite to the side of the joint part *c* of the barrel. (See Fig. 2.) The exterior cut of said slot is from 2 to 8, a bridge, 7, being formed across it between 6 and 8, and at the latter point a hole is made quite through the part A, just below the opening, between the cheek-pieces *a a'*, said hole being counterbored from the opposite side to provide a shoulder, against which the end of the coil-spring *m* rests when the parts are assembled in working position. The joint part *c* of the barrel is provided with a curved slot, *w*, through it, and between the joint parts *c c'* is placed the armed disk *v*, having the curved slots *e e'* through it and the arm *z*. Said disk is hung on the joint-pin of the arm, and occupies operatively the position shown in Fig. 1, said arm *v* extending to and engaging with the end of the extractor-stem *o*, and said disk is caused to rotate between the parts *c c'* and drive the stem *o* rearwardly to operate the shell-extractor *f* by the hereinafter-

described devices, connected with and operated by swinging the part A and cheek-pieces *a a'* in connection with the joint parts *c c'*, and by the same action to become disconnected from said devices, leaving it free to rotate on the joint-pin, and let the usual spring on the extractor-stem return the extractor *f* against the end of the cylinder B, and swing-arm *z* of the disk *v* back to its starting-point, or substantially that shown in Fig. 1.

A pawl, *n*, a somewhat enlarged view of which is shown in Fig. 2, is adapted to fit into the slot *d* in the cheek-piece *a*, as seen in Fig. 1, the post 4 of the pawl entering the above-named hole at 8, Fig. 2, and passing nearly through the part A. The spring *m* is then placed in the aforesaid counterbored portion of said hole and on the post 4, and the hollow screw *y* is placed on the end of said post, and enters said hole against the end of the spring, compressing the latter between the screw and the before-mentioned shoulder in the hole, and thereby the pawl *n* is held in the slot *d* by the force of said spring. Fig. 3 shows the end of the screw *y* on the opposite side of the part A, Fig. 2, projecting a little beyond the surface of said part. By pressing on the end of the screw the pawl *w* is moved outwardly in slot *d*. The pawl *n* has a short arm or pin, 5, thereon, and an inclined under face, 3, just back of said arm, and when the parts are assembled, as in Fig. 1, the said inclined part of the pawl reaches into the curved slot *w* of the joint part *c*, and the arm 5 extends beyond the latter and engages alternately with the slots *e e'* of the disk *v*, as follows:

The cylinder may be swung to about the position away from the recoil-plate shown in Fig. 1 before the arm *z* of the disk *v* will strike the end of the extractor-stem *o*, the arm 5 of the pawl moving from the left to the right hand end of the slot *e'* during said swinging movement, and then engaging with the end of said groove it causes the said disk to swing with the cheek-pieces *a a'* until the extractor *f* has been carried far enough from the end of the cylinder, and at this point in its movement the inclined face 3 of the pawl is brought against the end 10 of the slot *w* in the part *c*, and is thereby lifted so that the arm 5 is disengaged from the said end of slot *e'*, and the

spring-actuated ejector-stem drives against arm *z*, rotating disk *v* and bringing the groove *e* therein under the arm 5.

When the frame is swung back toward a closed position with the cylinder, the end of groove *w* passes from under the inclined part 3 of the pawl, or vice versa, letting arm 5 thereon drop into groove *e* in the disk, and following the latter the end of the arm encounters the inclined end *x* of said slot, and the pawl is thereby lifted and arm 5 rides over the bridge between slots *e e'*, and drops again into the latter, moving to the place of starting when the arm is closed.

15 What I claim as my invention, is—

1. In a revolving fire-arm, the combination, with the barrel and frame joint thereof, of an extractor-disk located in said joint having an arm thereon extending to the extractor-stem 20 and two curved slots therein, a transversely-moving spring-actuated pawl located in the joint part of the frame, having a post thereon extending through the latter, and an arm thereon engaging with slots in said disk, and an inclined part engaging with the end of a curved slot in one of the joint parts of the barrel, substantially as set forth.

2. In a revolving fire-arm, the combination, with the extractor-stem and the joint parts *c c'* 30 of the barrel, said part *c* having a curved slot therein, of the disk *e*, having the slots *e e'* and the arm *z* thereon, the spring-actuated pawl *n*, having the arm 5 and the incline 3, and the part A of the frame, having the cheek-piece *a* thereon perforated and grooved to receive said 35 pawl, substantially as set forth.

3. In combination, the frame part A, having the cheek-pieces *a a'*, the pawl *n*, located in said cheek-piece *a*, spring *m*, the disk *v*, located 40 between the joint parts *c c'*, and provided with the arm *z*, and having the slots *e e'* therein, in which said pawl engages, and the joint parts *c c'* of the barrel, said part *c* having a curved slot therein, substantially as set forth.

4. The combination, with the frame and 45 barrel joint parts of a revolving fire-arm and with the extractor-stem thereof, of a disk, substantially as described, hung to reciprocally rotate on the joint-pin, and having an arm thereon engaging with said extractor-stem, 50 and a pawl, substantially as described, having a movement bodily in the frame of the arm in a line with the joint-pin and capable, by means substantially as described, of automatic engagement with and disengagement from 55 said disk, substantially as set forth.

5. In combination with the frame and barrel joint parts of a revolving fire-arm, the extractor-stem *o*, the disk *v*, having the slots *e e'* 60 therein, and the arm *z*, and the pawl *n*, engaging with the slots in said disk, said pawl having the post 4 thereon, passing transversely through the frame part A near said joint parts, and capable of being acted upon from the outside of said frame part independent of the 65 movement of the joint parts, substantially as set forth.

DEXTER SMITH.

Witnesses:

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