(No Model.)

W. H. DAVENPORT.

SET TRIGGER FOR FIRE ARMS

No. 390,286. Patented Oct. 2, 1888.

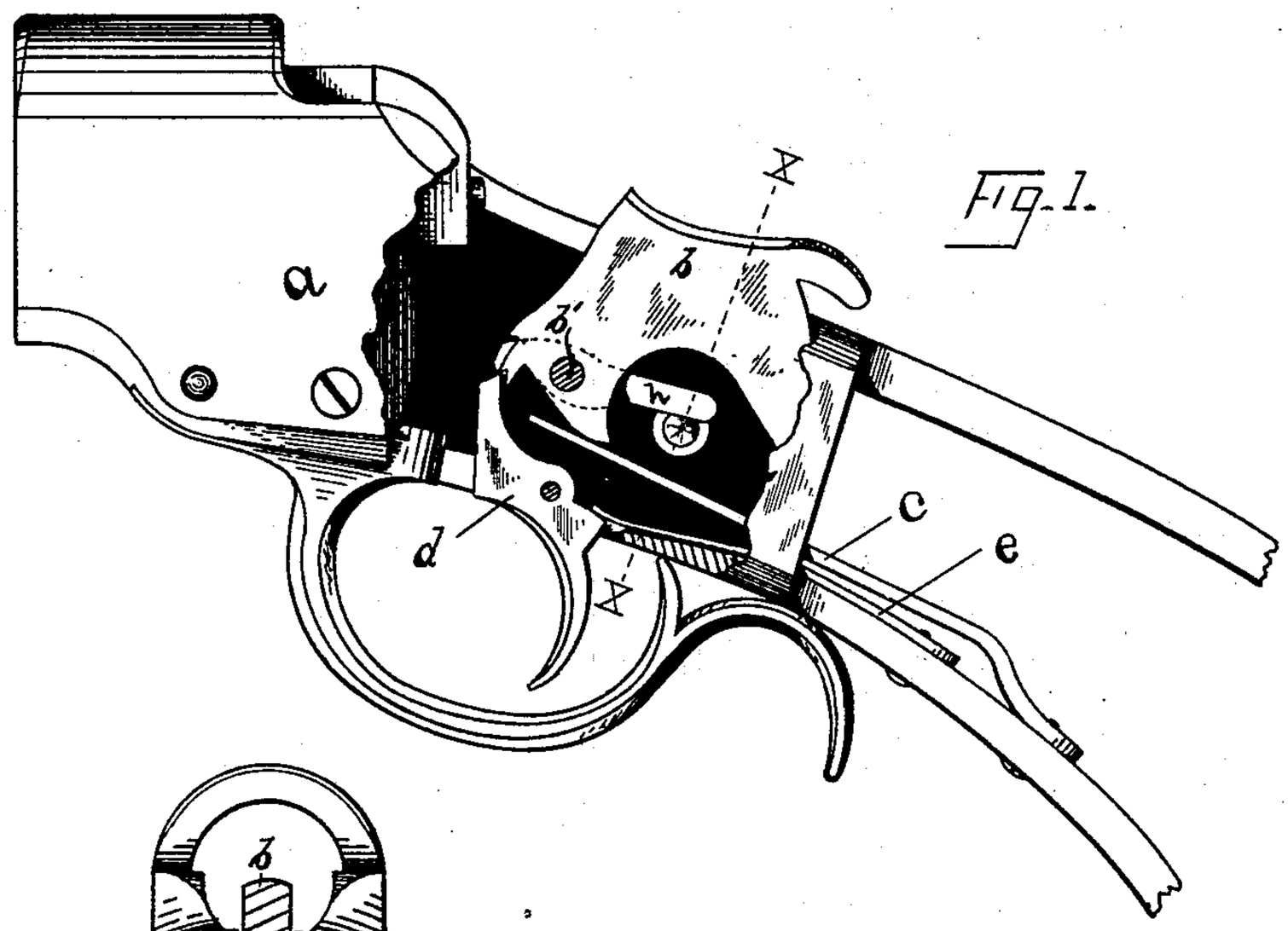

Fig. 1.

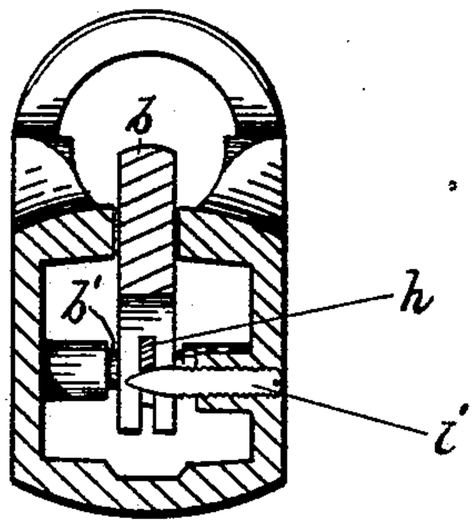

Fig. 2.

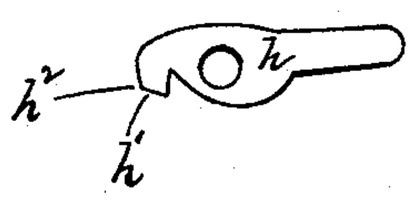

Fig. 4.

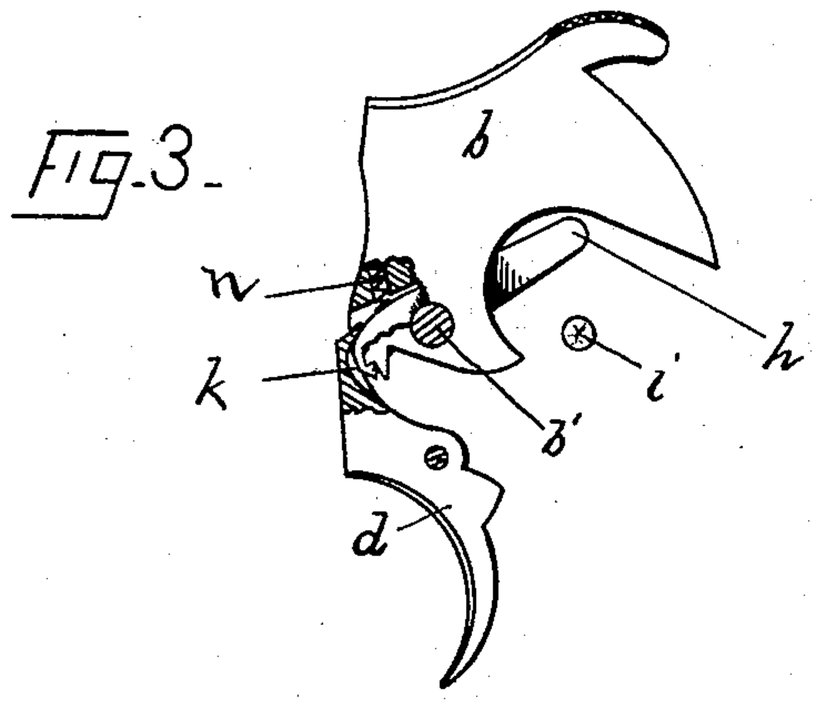

Fig. 3.

Witnesses

Allen Tenny

Henry A. Burnham.

Inventor

William H. Davenport,

By his Attorney

Frank H. Allen

UNITED STATES PATENT OFFICE.

WILLIAM H. DAVENPORT, OF NORWICH, CONNECTICUT.

SET-TRIGGER FOR FIRE-ARMS.

SPECIFICATION forming part of Letters Patent No. 390,286, dated October 2, 1888.

Application filed April 2, 1888. Serial No. 269,263. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. DAVENPORT, a citizen of the United States, residing at Norwich, in the county of New London and State of Connecticut, have invented certain new and useful Improvements in Set-Triggers for Fire-Arms, which improvements are fully set forth and described in the following specification, reference being had to the accompanying sheet of drawings.

This invention is in small-arms, and has for its immediate object the improvement of the lock-work so that the "pull" of the trigger to release the hammer may be finely adjusted by regulating a single screw. The mechanism by which I accomplish this desirable result is extremely simple in construction, is strong and cheaply produced, and may be readily applied to that class of arms in which the hammer is provided with so-called "notches," into which the trigger-nose drops as the hammer is raised to a full-cock position.

In order to explain said invention more clearly, I have annexed hereto a sheet of drawings, in which—

Figure 1 is a side view of the frame of a rifle in which are embodied my improvements, a portion of said frame being cut away to expose the lock-work. Fig. 2 is a cross section of the frame, hammer, fly, and adjusting screw *i*, taken on line *x x* of Fig. 1. Fig. 3 shows the hammer, trigger, and fly as they appear when the hammer is down. Fig. 4 is a detached view of the fly *h*.

Referring to said drawings, the letter *a* indicates the frame of the arm, and *b* the hammer pivoted therein in the usual manner.

c denotes the mainspring, *d* the trigger, and *e* the trigger-spring. The hammer is split or slotted from its bottom side upward to a point somewhat beyond where its pivotal stud *b'* passes through it, and in the slot thus provided is located a fly or lever, *h*, also hung on stud *b'*. The rear end or arm of fly *h* projects a considerable distance beyond the edge of the hammer, as shown in the drawings, and, under certain conditions hereinafter specified, engages a screw, *i*, tapped into the frame *a* and formed with a tapered or cone-shaped inner end that projects into the path of said fly as the arm is cocked. The opposite end of fly *h* reaches forward slightly beyond the edge of the hammer, and when held downward engages the trigger-nose to prevent said nose from entering the full-cock notch, or rather to limit such entrance.

Referring particularly to Fig. 4, it will be seen that the front end of the fly is shaped with a straight portion, *h'*, at the point which engages the trigger-nose when the arm is cocked. When the hammer is down, as in Fig. 3, the front end of the fly rests in a slot or channel, *k*, provided for its reception in the trigger. During the act of cocking the arm the fly travels with the hammer and drags along the trigger-nose until the angle h^2 passes the end of the trigger, when the power of the trigger-spring forces the nose of the trigger toward the full cock notch and throws the engaging end of the fly upward. This action depresses the rear end of the fly until it is checked by the tapered end of screw *i*. When in this position the edge *h'* of the fly projects slightly beyond the bottom of the full-cock notch and limits the depth to which the trigger-nose may enter. By unscrewing the screw *i* the point of contact with the fly is changed and the rear end of said fly is slightly depressed. This correspondingly raises the front end of the fly and allows the trigger-nose to enter farther into the full-cock notch. On the other hand, if screw *i* is screwed inward, the front end of the fly is depressed and prevents the trigger from entering the full-cock notch, or allows it to enter so slightly that the least pressure on the exposed end of the trigger releases the hammer and discharges the arm.

By varying the adjustment of the screw *i* any desired pull of the trigger may be attained, from a few ounces to several pounds weight.

In Fig. 4 of the drawings I have cut away a portion of the hammer to expose a spiral spring, *n*, that bears on the fly *h* with a tendency to hold its front end down—*i. e.*, in the position shown in said Fig. 4. This spring is not absolutely necessary to the satisfactory working of my invention; but, as it insures a uniform action of the fly, and costs practically nothing, I prefer to use it.

The operation of adjusting or regulating the pull of the trigger, as above described, is so

simple that no special instructions to the user are required. Any one of ordinary intelligence may, in a few seconds, with a screw-driver, adjust the arm to suit his particular judgment or fancy.

Having thus described my invention, I claim as new and wish to secure by Letters Patent—

1. In a fire-arm, in combination with the hammer and trigger, a fly or lever, (hung on the hammer-stud,) one of whose arms projects forward to a point adjacent to the sear-notch, to limit the entrance of the trigger-nose in said notch, as set forth, and an adjustable screw located in the path of the opposite arm of said fly, substantially as and for the object specified.

2. In combination, a frame, a hammer split as set forth and pivoted in said frame, a fly pivoted in said split hammer, having one end projecting forward to a point adjacent to the sear-notch, to limit the entrance of the trigger-nose in said notch, a trigger, and a screw with tapered end in the path of the rear end of said fly, substantially as and for the object specified.

WILLIAM H. DAVENPORT.

Witnesses:
FRANK H. ALLEN,
ALLEN TENNY.