

No. 658,709.

Patented Sept. 25, 1900.

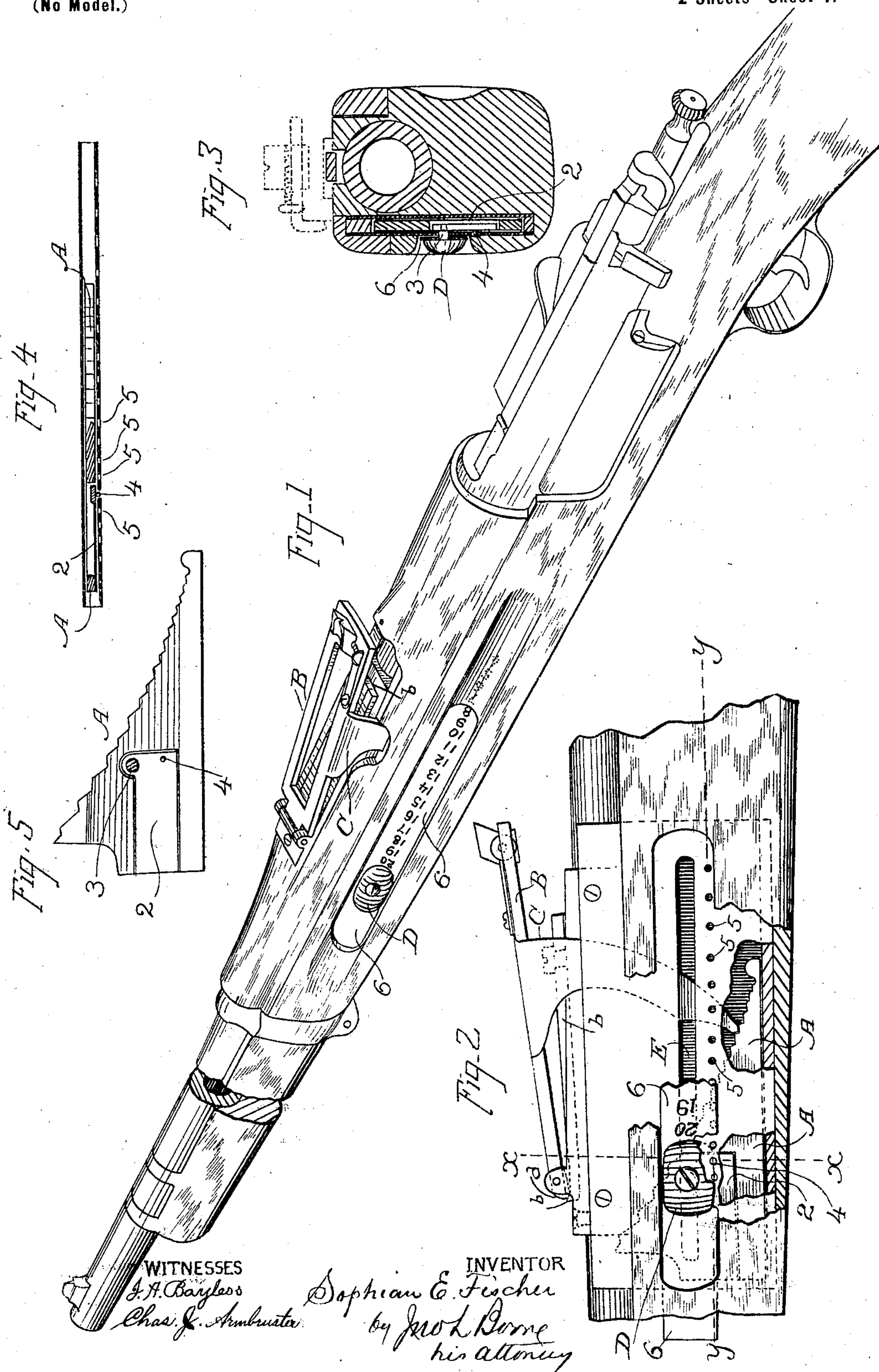
S. E. FISCHER.

QUICK ADJUSTING GUN SIGHT.

(Application filed Jan. 25, 1900.)

(No Model.)

2 Sheets—Sheet 1.



WITNESSES

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INVENTOR

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by J. H. Boone
his attorney

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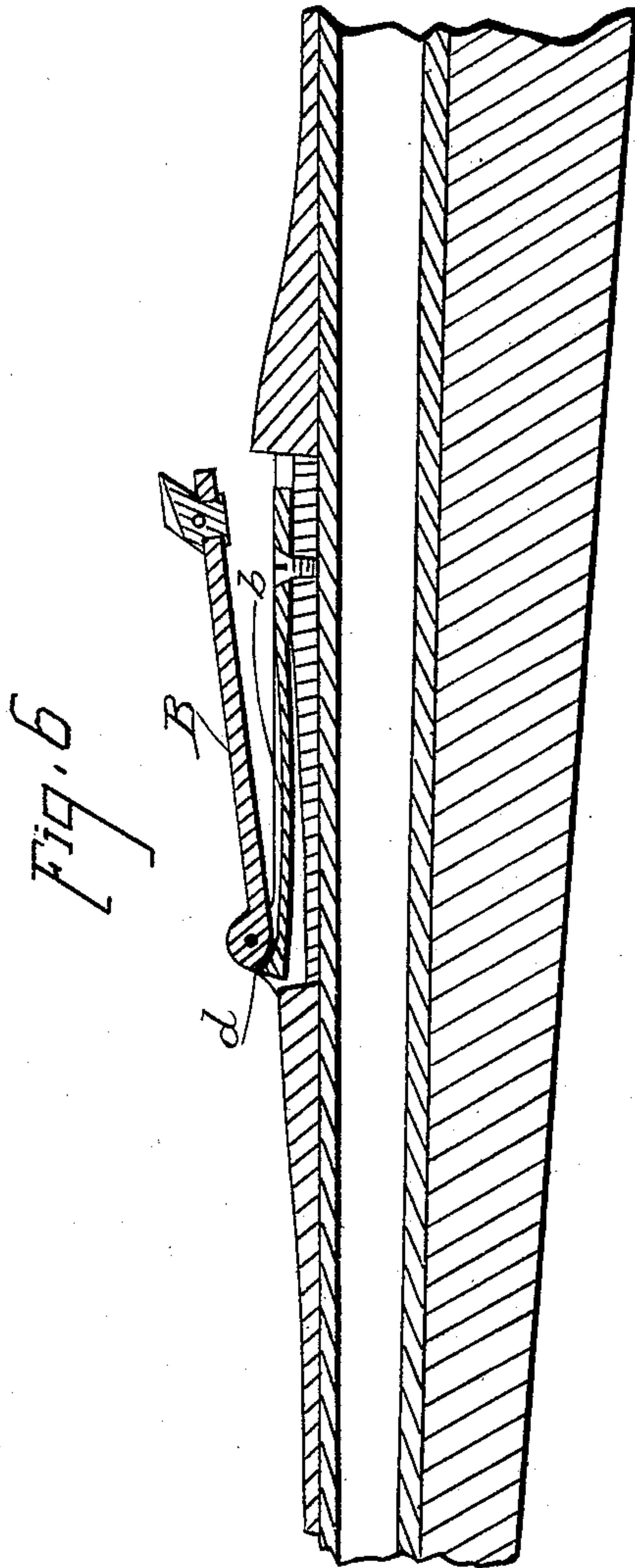
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J. A. Bayless.
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UNITED STATES PATENT OFFICE.

SOPHIAN E. FISCHER, OF HAYWARD, CALIFORNIA, ASSIGNOR TO FISCHER & BENNETT, OF SAN FRANCISCO, CALIFORNIA.

QUICK-ADJUSTING GUN-SIGHT.

SPECIFICATION forming part of Letters Patent No. 658,709, dated September 25, 1900.

Application filed January 25, 1900. Serial No. 2,796. (No model.)

To all whom it may concern:

Be it known that I, SOPHIAN E. FISCHER, a citizen of the United States, residing at Hayward, in the county of Alameda, State of California, have invented certain new and useful Improvements in Quick-Adjusting Gun-Sights; and I do hereby declare the following to be a full, clear, and exact description of said invention, such as will enable others skilled in the art to which it most nearly appertains to make, use, and practice the same.

The object of my invention is to provide a latching mechanism for locking the sliding elevator that operates the hinged sight-leaf of my improved quick-adjusting gun-sight in the various positions it is moved to and in connecting said latching mechanism with the push-button that moves the elevator, so that a pressure upon the button releases the latch and permits the elevator to be moved by pressure in either direction until the pressure is released, when it instantly locks again.

It also relates to a graduated sliding plate that moves with the button and elevator in order to close the slot in which the button moves, and thereby indicate the sight elevation, all as hereinafter described.

Referring to the accompanying drawings, Figure 1 is a perspective view of a firearm with my improved gun-sight. Fig. 2 is a side view of the gun-sight and casing with parts broken away to show its construction. Fig. 3 is a transverse section on the line $x x$, Fig. 2. Fig. 4 is a horizontal section of the elevator and casing on the line $y y$, Fig. 2. Fig. 5 is a side view of the elevator, showing the latch. Fig. 6, Sheet 2, is a vertical longitudinal section of the gun-barrel, showing the hinged sight-leaf and spring.

A is the sliding triangular-shaped elevator that moves within a chamber alongside the barrel of the gun, as shown in this class of quick-adjusting gun-sights described in former applications for patents made by me, and B is the hinged leaf-sight on top of the barrel, which is mounted above a flat spring b , so that the pressure of the spring tends to depress the hinged sight-leaf to its closed position. The manner of mounting this leaf and spring are plainly shown at Fig. 6, Sheet 2. The hinged leaf has a nose or extension

d in front of its hinge, against which the free end of the spring presses in an upward direction, so that the free end of the spring is depressed by the nose or extension d as the hinged leaf rises. This pressure on the nose and extension d tends to close the hinged leaf to a plane with the gun-barrel. This hinged leaf has a leg C extending from it on one side and passing down into the elevator-chamber alongside of the gun-barrel, where its lower end rides upon the inclined notched edge of the elevator, and b (shown plainly in dotted lines, Fig. 2) is the spring which exerts a pressure upon the leaf to press it to its closed position. The elevator is moved lengthwise in its chamber by pressure applied upon or against a button D on the outside of the elevator-chamber. The shank of the button D passes through a slot E in the outer wall of the chamber and is attached to the elevator-plate inside the chamber, so that pressure applied to the button outside of the chamber will move the elevator-plate in its chamber in either direction, and thereby cause the hinged leaf B to be raised or lowered as its leg C rides upon the inclined notched edge of the elevator.

In order to lock the elevator in any position it may be moved to, I have devised a spring latching mechanism which is unlatched by pressure upon the button D, so that the same pressure that slides the elevator serves to unlatch it. This latch consists of a spring-plate 2, which is attached at one end of the elevator-plate A, while its opposite end is free. Usually I shall make an opening in the plate A within which the free end of this spring-plate will fit and work, as shown at Fig. 4. The button D is connected with the free end of this spring-plate by its shank 3, and it also has a latch-pin or projection 4 on its free end, which will snap into and enter holes 5 in the rim of the slot-casing, or ratchet-teeth might be provided instead of holes for it to snap into.

In order to cover the slot E and prevent the entrance of dust or other objects into the chamber through the slot, I interpose a thin plate 6 in the outer wall of the chamber between the elevator and button, and the shank 3 of the button also passes through this plate.

The plate fits snug up against the wall of the chamber, so as to cover the slot-opening, and it is long enough to slide with the button and elevator and yet cover the slot at whatever position the button is moved to. This plate is graduated, as shown at Fig. 1, to correspond with the elevation of the hinged-leaf sight, so that the sight elevation or range is indicated by the last-exposed figure on the slide. For instance, the holes or notches are so spaced that the distance between each two holes or notches represents an elevation or depression of the sight equal to one hundred yards. The figures on the sliding plate correspond with these holes or notches and are numbered from the maximum range, which is represented in the drawings as two thousand yards by the figures 20 next to the button, down to the minimum range at the rear end of the slide. The firing elevation of the sight can then be determined either by counting the clicks of the elevator as they successively drop into or pass the holes or notches or by reading the last-exposed figure on the slide, because the figures are in a reverse order from the notches or holes indicating the same elevation. The notches on the inclined edge of the triangular-shaped elevator-plate might be dispensed with when this latching and locking mechanism is used, in which case the inclined edge will be perfectly smooth. An important feature of this sight-elevator mechanism has been developed during my experiments, and that is that the enlargement at the lower end of the elevator interlocks with the slight concavity on the rear lower end of the leg C when the hinged leaf-sight is fully depressed, so that it locks the sight against accidental displacement until the elevator is moved to release it. I have shown this enlargement in my former applications; but its special value in this respect has not been heretofore mentioned.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A hinged-leaf gun-sight having a leg arranged to ride upon a sliding inclined surface; a spring adapted to close said hinged-leaf sight as the inclined slide recedes and the leg rides down the incline; a spring-latch

connected with the sliding elevator and adapted to engage with holes or notches in the gun-casing, and a button connected with said spring-latch by a shank which moves in a guiding-slot in the gun-casing, substantially as described.

2. A hinged-leaf gun-sight having a leg arranged to ride upon a sliding inclined surface; a spring adapted to close said hinged-leaf sight as the inclined slide recedes and the leg rides down the incline; a triangular slide adapted to move in a chamber alongside the gun-barrel below the lower end of the leg; a longitudinal slot in the side of the chamber; a button on the outside of the casing connected with the triangular sliding plate by a shank that passes through the longitudinal slot, and a slot-closing plate secured to the shank between the button and sliding elevator so as to move with the button and slide, substantially as described.

3. In a quick-adjusting gun-sight operated by a sliding elevator adapted to move in a chamber alongside the gun-barrel, a longitudinal slot in the outer wall of the chamber; a shank extending from the elevator-plate through the slot; a button on the outer end of the shank, and a slot-closing plate attached to the shank and free to move with the button and shank, said plate being marked to indicate the sight elevation of the hinged-leaf sight, substantially as described.

4. A quick-adjusting gun-sight consisting of a hinged-leaf sight; a spring adapted to press the hinged leaf downward; an elevator adapted to force the sight upward by pressure applied upon or against a longitudinally-sliding button; a latching device connected with said elevating mechanism and adapted to be operated by pressure upon said button, and a sliding plate connected with and operated by the button and graduated to indicate the elevation of the sight, substantially as described.

In testimony whereof I have hereunto signed my name, in the presence of two witnesses, this 16th day of January, A. D. 1900.
SOPHIAN E. FISCHER.

Witnesses:

J. A. BAYLESS,
CHAS. J. ARMBRUSTER.