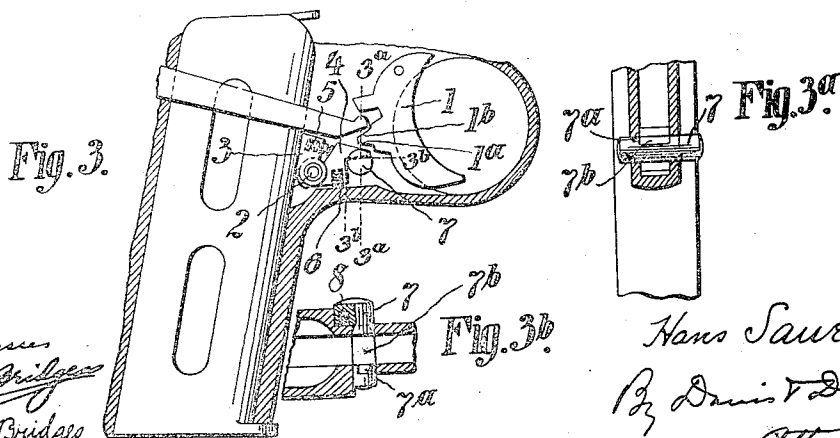
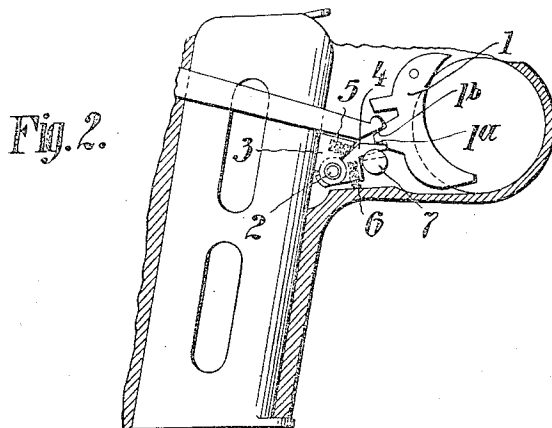
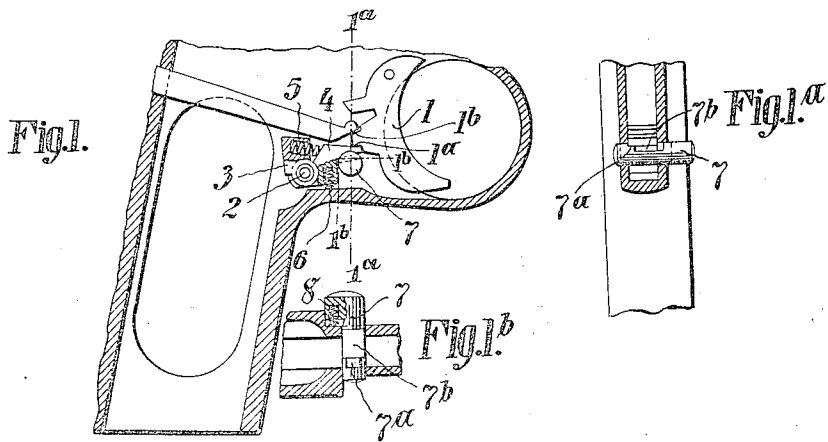


H. SAUER.
SEMI-AUTOMATIC LOCKING DEVICE FOR THE TRIGGERS OF SMALL ARMS.
APPLICATION FILED DEC. 30, 1912.

1,062,121.

Patented May 20, 1913.



Witnesses
B. 2. Bridges
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UNITED STATES PATENT OFFICE.

HANS SAUER, OF SUHL, GERMANY, ASSIGNOR TO THE FIRM OF J. P. SAUER & SOHN,
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SEMI-AUTOMATIC LOCKING DEVICE FOR THE TRIGGERS OF SMALL-ARMS.

1,062,121

Specification of Letters Patent.

Patented May 20, 1913.

Application filed December 30, 1912. Serial No. 739,261.

To all whom it may concern:

Be it known that I, HANS SAUER, a citizen of the German Empire, and residing at Suhl, Thuringia, Germany, have invented
5 certain new and useful Improvements in Semi-Automatic Locking Devices for the Triggers of Small-Arms, of which the following is a specification.

My invention relates to semi-automatic
10 locking devices for the triggers of small-arms and, particularly, of automatic pistols, and a primary object is to provide that the trigger is locked not only as long as the magazine is removed for discharging it, but
15 also subsequently in whatever position the magazine may be at the time, the locking device being released only when a lateral slide has been intentionally shifted by hand.

As compared with all arrangements
20 known heretofore my improved construction has the following advantages, viz: firstly, the cartridge which remains in the barrel when the magazine is discharged remains safeguarded under all circumstances
25 until, owing to the position of the slide and the fixed trigger, it is remembered that the weapon has not yet been actually discharged, and, secondly, the locking device remains in its operative position after the
30 discharged magazine has been returned to its place.

According to my invention the locking device comprises a spring-influenced double
35 lever in combination with a spring-influenced pin.

One illustrative embodiment of my invention as applied to an automatic pistol is represented by way of example in the accompanying drawing, wherein:—

40 Figure 1 is a sectional elevation showing the locking device in its operative position, the magazine having been removed, and Figs. 1^a and 1^b are sections taken on the lines *a—b* and *c—d*, respectively; Fig. 2 is
45 a sectional elevation showing the locking device in its operative position when the magazine is inserted; Fig. 3 is a like view showing the locking device in its inoperative position, and Figs. 3^a and 3^b are sections taken
50 on the line *e—f* and *g—h* in Fig. 3.

Referring to the drawing, a pair of levers 3, 4 able to rock about a common pivot 2 is located behind the trigger 1. The two levers are acted on by the compressed coil
55 spring 5 located between them, and the lever

4 is also influenced by the coil spring 6. The relative strength of the two springs is such that the spring 5 is able to overcome the spring 6. Now when the magazine is removed from the handle portion of the
80 weapon, the spring 6 which was held compressed by the magazine is released and pushes the levers 3 and 4 upward, so that the lever 3 moves into the path of the magazine, and the lever 4 bears against a stop
65 1^a of the trigger 1. At the moment when the lever 4 moves in this manner the pin 7, which is also located below the lever 4 and is under the influence of a spiral spring 8, is liberated and bears directly with its
70 face 7^a under the lever 4 and locks the latter in the position locking the trigger 1. When the magazine is removed the trigger 1 is doubly locked, namely, on the one hand by the double lever 3, 4 and, on the other
75 hand, by the face 7^a coacting with the part 4 of the double lever 3, 4. The trigger is still propped in this manner when the magazine is returned into its position because although the lever 3 is rocked and the spring
80 5 compressed the lever 4 experiences no change of position. The locking device is unlocked only by the pin 7 being pushed by the pressure of a finger into the casing of the weapon. The lever 4 then slides under
85 the influence of the spring 5 away from the face 7^a into the recess 7^b of the pin 7, *i. e.* the lever 4 moves downward and releases the stop 1^a of the trigger 1.

I claim:—

1. In an automatic small-arm, the combination with the casing and the trigger, having a stop, mounted therein, of a spring-influenced pair of levers mounted to rock in the casing, one of the levers being adapted to rock into and out of the path of the
95 magazine and the second lever being adapted to bear against said stop, and a spring-influenced pin slidable in the casing and normally locking the second lever against
100 said stop.

2. In an automatic small-arm, the combination with the casing and the trigger, having a stop, mounted therein, of a spring-influenced pair of levers mounted to rock
105 in the casing, one of the levers being adapted to rock into and out of the path of the magazine and the second lever being adapted to bear against said stop, a spring tending to press the second lever against said stop and
110

simultaneously tending to drive the former lever into the path of the magazine, and a spring-influenced pin slidable in the casing and normally locking the second lever
5 against said stop.

3. In an automatic small-arm, the combination with the casing and the trigger, having a stop, mounted therein, of two levers mounted to rock about a common fulcrum in
10 the casing, a spring compressed between the two levers, one of the levers being adapted to rock into and out of the path of the magazine and the second lever being adapted to bear against said stop, a spring tending to
15 press the second lever against said stop and simultaneously tending to drive the former lever into the path of the magazine, the latter spring being weaker than the former spring, and a spring-influenced pin slidable
20 in the casing and normally locking the second lever against said stop.

4. In an automatic small-arm, the combi-

nation with the casing and the trigger, having a stop, mounted therein, of a spring-influenced pair of levers mounted to rock
25 in the casing, one of the levers being adapted to rock into and out of the path of the magazine and the second lever being adapted to bear against said stop, a recessed pin slidable in and projecting out of the casing, and
30 a spring tending to drive the pin out of the casing, the top face of the pin normally locking the second lever against said stop, and the recess in the pin being adapted to receive
35 the second lever when the pin is pushed inward against the action of the spring, for the purpose specified.

In testimony whereof, I affix my signature in the presence of two witnesses.

HANS SAUER.

Witnesses:

WM. H. MURPHY,
S. HINZE.