

J. TAMBOUR.

SMALL ARM.

APPLICATION FILED JUNE 23, 1909.

939,112.

Patented Nov. 2, 1909.

Fig. 1

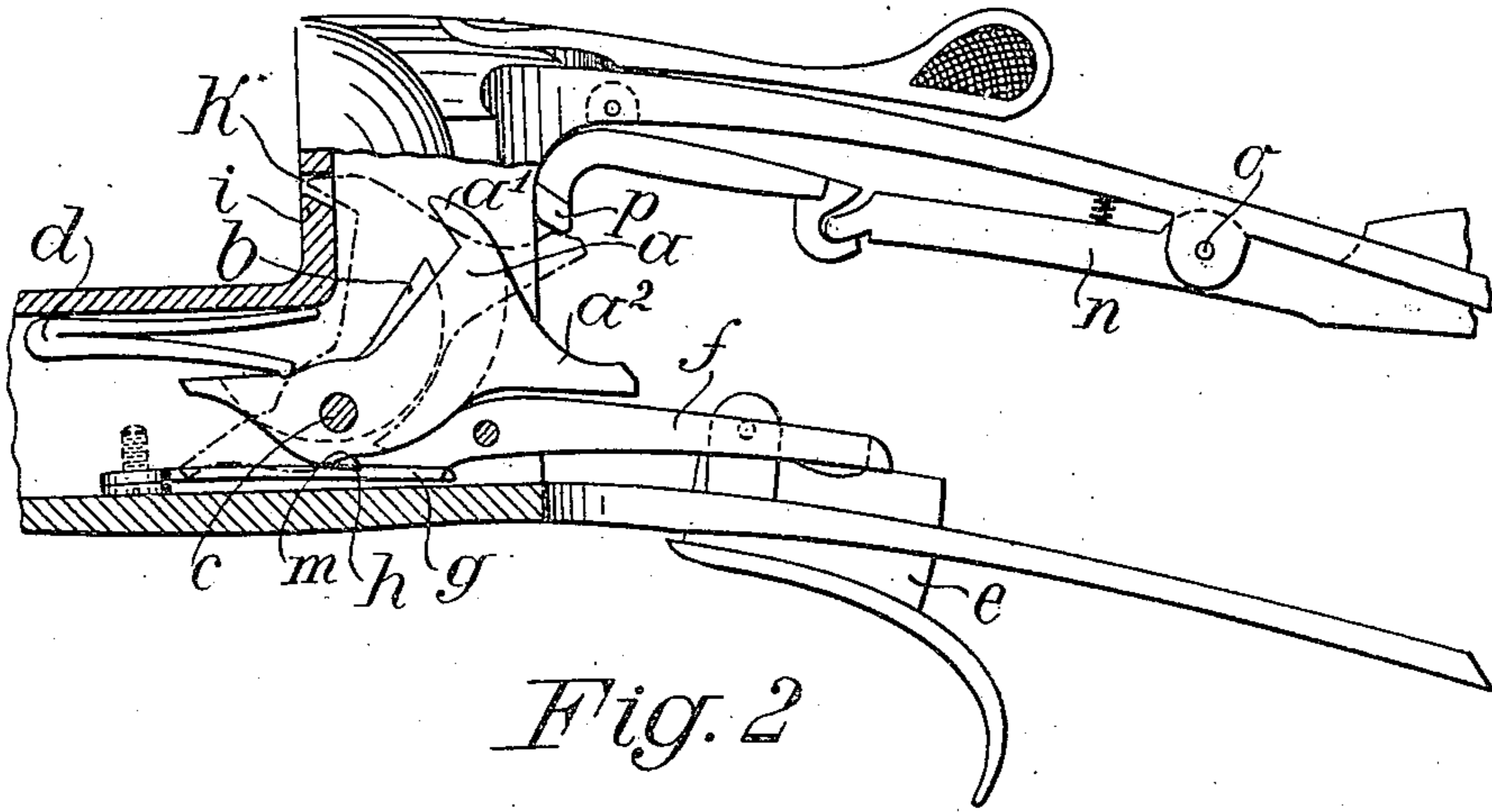


Fig. 2

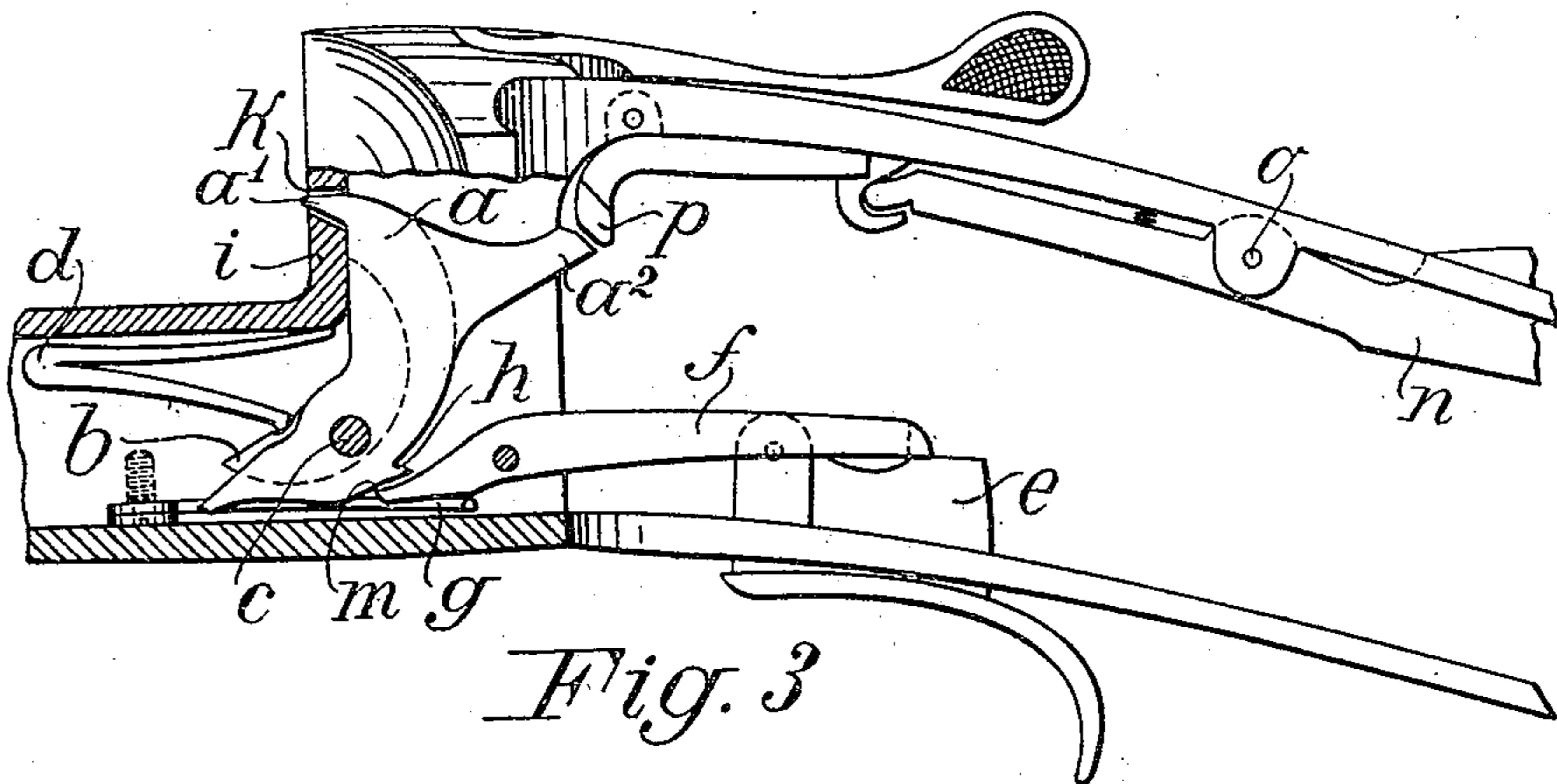
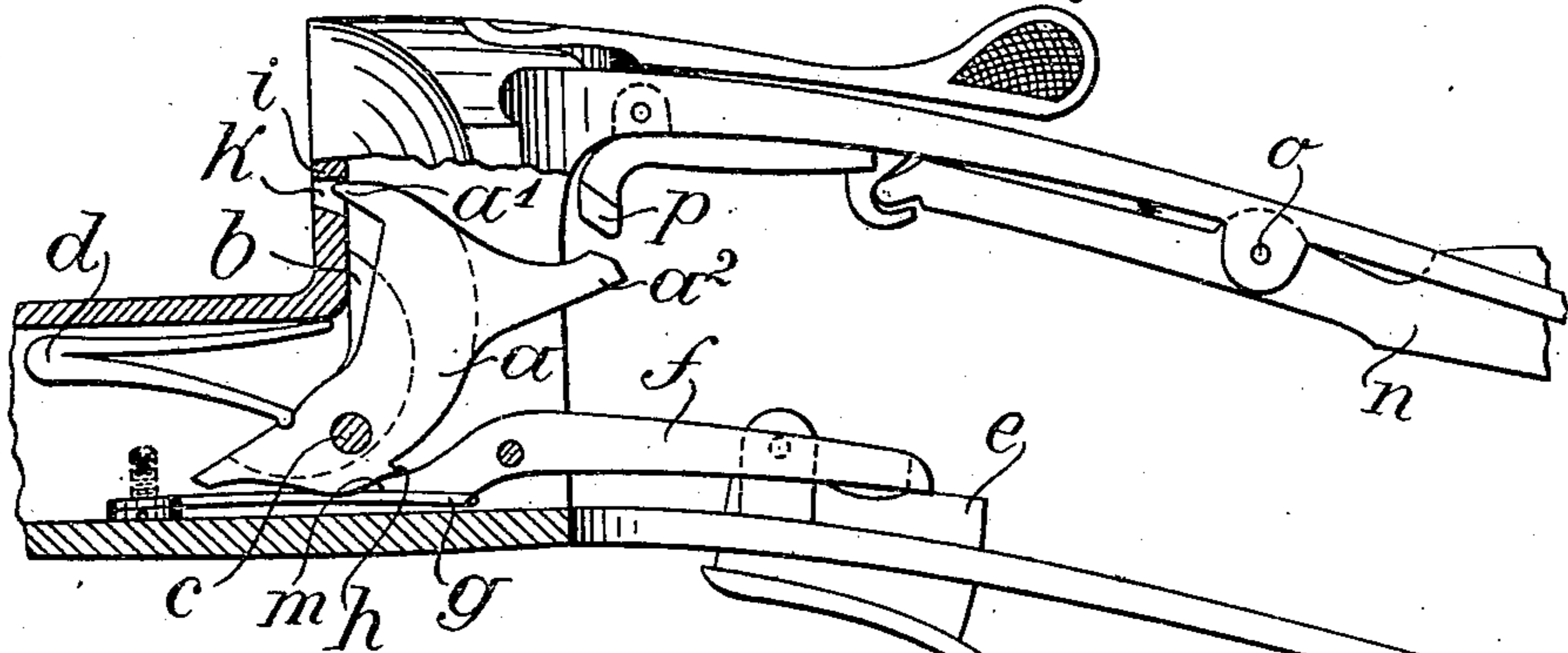


Fig. 3



Witnesses:
W. B. Keeler
C. E. Keeler

Inventor
Joseph Tambour
By *James L. Norris*
Att'y.

UNITED STATES PATENT OFFICE.

JOSEPH TAMBOUR, OF NANTERRE, NEAR PARIS, FRANCE.

SMALL-ARM.

939,112.

Specification of Letters Patent.

Patented Nov. 2, 1909.

Application filed June 23, 1909. Serial No. 503,884.

To all whom it may concern:

Be it known that I, JOSEPH TAMBOUR, subject of the Emperor of Austria-Hungary, residing at Nanterre, near Paris, France, have
5 invented certain new and useful Improvements in Small-Arms, of which the following is a specification.

The usual return spring mechanism of small arms comprises a bent main spring the
10 shorter arm of which is raised by the tumbler when the hammer falls, more quickly than the longer arm which extends nearer to the pivot of the tumbler, so that the spring is slightly compressed and the hammer re-
15 turns through a short distance after it has struck the firing pin. This spring return cannot be used in a number of weapons, for example in hammerless guns wherein the firing appliances are arranged within the
20 casing (as in the Anson and Deely system). The absence of the spring return in such weapons is a danger in that the point of the hammer (the firing bolt within the casing), after the weapon has been discharged, pro-
25 trudes through the basquill-wall so that in the event of missing fire on opening the barrel the cartridge in the cartridge chamber may be fired unintentionally. The present invention avoids this danger by supplying
30 such weapons with a return spring mechanism whereby the firing bolt (hammer) is caused to spring back under pressure of the sear-spring. For this purpose there is
35 mounted to turn on the pivot of the hammer a safety piece which is accommodated in a cavity in the hammer; the front edge of this piece is of the same general angular profile as that of the hammer but the angle is smaller so that when both are subject to
40 the pressure of the main spring, the said piece projects beyond the edge of the hammer, with the result that during the latter part of the forward movement of the hammer, the latter is free of the main spring and
45 can be caused to spring back by the sear or its spring.

The accompanying drawings illustrate the invention applied to an Anson and Deely hammerless gun, and in the drawings:—
50 Figure 1 is a sectional elevation of the lock portion of the gun illustrating the mechanism as being cocked and embodying the features of the invention. Fig. 2 is a similar view showing the mechanism released and in
55 firing or discharging position. Fig. 3 is a

similar view illustrating the mechanism as it appears after discharge or firing.

The safety piece *b* accommodated in a cavity in the hammer *a* turns on the pivot *c* of the latter; the angle of its profile being
60 smaller than that of the hammer and its lower part being flush with the hammer; both the piece and the hammer are subject to the action of the main spring *d* when the weapon is cocked as in Fig. 1 and the upper
65 part of the piece is in advance of the hammer by an amount equal to the difference between the two angles.

When the trigger *e* is raised, the end of the sear *f* is disengaged from the notch *h* of
70 the hammer against the action of spring *g* and the spring *d* brings both the hammer and the piece *b* against the basquill wall *i* (Fig. 2). Since, however, the piece *b*
75 strikes the wall first, the latter part of the movement of the hammer is due to its momentum and not to the spring, the final position being that shown in Fig. 2 in which
80 the pin *a'* has passed through the aperture *k* and has fired the cartridge. In this position of the parts the end of the sear is engaged in an indentation *m* in the hammer
85 below the notch *h* so that on releasing the trigger, which is under the action of spring *g* the hammer is pressed back against the main spring (Fig. 3).

In the example shown, there is a safety lever *n* of the known kind, pivoted at *o* and operating a safety stop *p*; if the sear *f* is by
90 any chance jolted out of the notch *h* the striking hammer can only advance as far as it can under direct action of the main spring, the rest of its movement being prevented by the stop *p*. Thus unintentional discharge
95 is prevented. For this purpose the hammer *a* has an arm *a'* in the path of which the safety stop *p* lies, when the safety lever is not depressed.

Claims.

1. A firearm of the class specified having
100 a basquill wall with an opening there-through, a hammer pivotally mounted adjacent to the said wall and provided with a cavity, a safety piece mounted in the cavity
105 and on the pivot of the hammer to engage the said wall, a main spring disposed to operatively engage both the hammer and the safety piece, a spring-actuated sear arranged to coöperate with the hammer, and a
110 trigger, the angular profile of the safety

piece being like that of the hammer but of
smaller angle so that under pressure of the
main spring the said piece projects beyond
the hammer and relieves the latter during
5 the last part of its stroke from the action
of the main spring, the trigger when re-
leased after firing resulting in the sear
spring bringing the hammer back until it is
stopped by the main spring.

10 2. A firearm of the class specified having
a basquill wall, a hammer pivotally mount-
ed adjacent to said wall and provided with
a cavity and a projection, a safety piece dis-
posed in the cavity and mounted on the

pivot of the hammer, the safety piece being 15
adapted to engage the said wall, a main
spring disposed to engage both the hammer
and safety piece, a sear and sear spring
coöperating with the hammer, a trigger, and
a safety lever having a projection to engage 20
the projection of the hammer.

In testimony whereof I have hereunto set
my hand in presence of two subscribing
witnesses.

JOSEPH TAMBOUR.

Witnesses:

JOSEF RUBURCHY,

ROBERT W. HEINGARTNER.