C. WALTHER.

PISTOL.

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1,059,581.

Patented Apr. 22, 1913.

Fig.1.

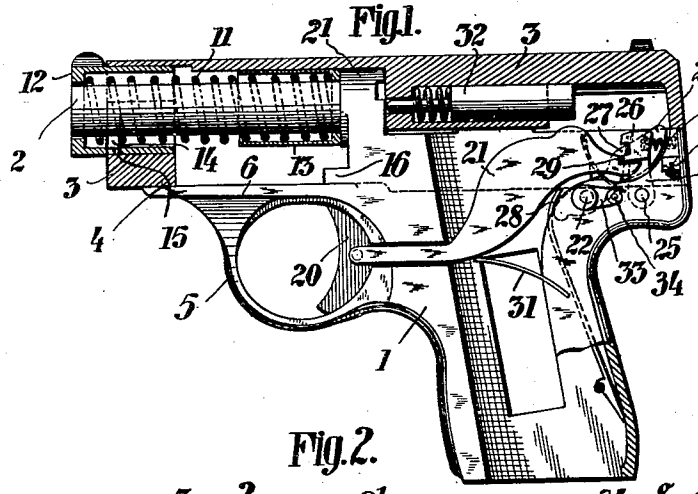


Fig.3.

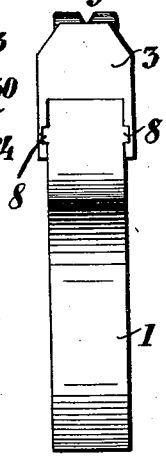


Fig.2.

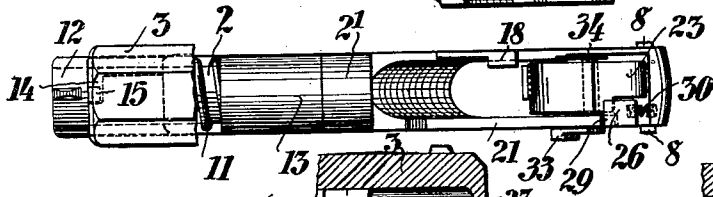


Fig.6.

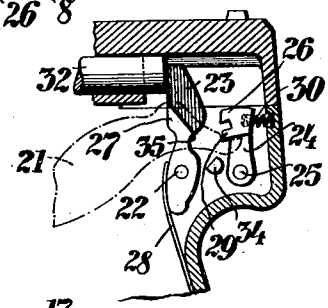


Fig.7.

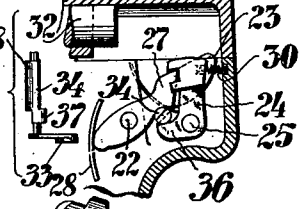
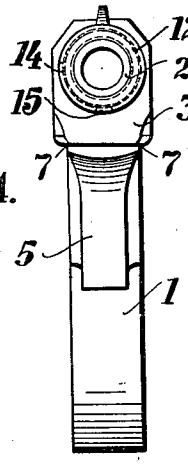


Fig.4.



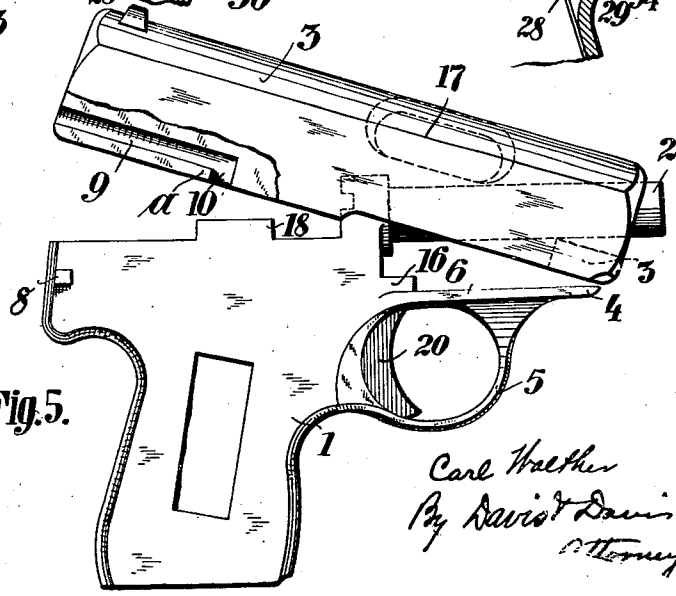


Fig.5.

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UNITED STATES PATENT OFFICE.

CARL WALTHER, OF ZELLA ST. BL., THURINGIA, GERMANY.

PISTOL.

1,059,581. Specification of Letters Patent. Patented Apr. 22, 1913.

Application filed December 15, 1911. Serial No. 665,977.

To all whom it may concern:

Be it known that I, CARL WALTHER, a subject of the German Emperor, and residing at Zella St. Bl., Thuringia, Germany, have invented certain new and useful Improvements in Pistols, of which the following is a specification.

My invention relates to a self-loading pistol, a so-called recoil loader, comprising a stationary barrel and a breech guided on the stock, and a primary object is to provide an improved pistol of the type described comprising a breech guided in an improved manner, and improved trigger mechanism.

One illustrative embodiment of the invention is represented by way of example in the accompanying drawing, wherein:—

Figure 1 shows my improved pistol partly in side elevation and partly in longitudinal section; Fig. 2 is a top plan view thereof, only the fore end of the breech being shown, Fig. 3 a rear elevation and Fig. 4 a front elevation; Fig. 5 is a side elevation showing the breech lifted, Fig. 6 is a longitudinal section through the rear portion of the pistol, and Fig. 7 a like view showing a safety device for the hammer and its catch.

The butt or stock 1 of the pistol, to which the barrel 2 is immovably attached, is formed as a guide for the breech 3. To this end, the fore end 4, to which the trigger-guard 5 is attached, has a rectilinear guiding face 6 on which the breech 3, preferably provided with somewhat overlapping edges 7 (Fig. 4), can slide. For guiding the member 3 on the stock 1 I provide on the rear end of the latter lugs or projections 8 which enter into corresponding grooves 9 (Fig. 5) in the breech 3. Each of the grooves 9 runs out at its inner end into a transverse groove 10, the purpose of these grooves 10 being to enable the lugs 8 to be removed from the grooves 9 when the weapon is being dismembered.

The breech 3 surrounds the barrel on all sides but without contacting with it, and between the breech and the barrel is disposed the closing spring 11. This spring is tensioned between a sleeve 12, which closely surrounds the front end of the barrel and serves as a short casing therefor, and a rear sleeve 13. In the illustrative embodiment the former sleeve is attached to the breech 3 by means of a bayonet-joint constituted by a rectangular incision 14 cut in the sleeve 12 and a lug or projection 15 on the breech 3. The casing 12 of the barrel may, if preferred, be screwed into the breech 3.

A shoulder 16, which is preferably at least as long as the lugs 18, is formed on the stock 1 below the projection 2′ of the barrel. As long as the sleeve 12 is seated firmly in the breech it is impossible to lift the latter; for even when the breech is pushed back into its rearmost position, owing to the shoulder 16 the lugs 8 still remain in the longitudinal grooves 9 and are located immediately in front of the transverse grooves 10 at the place designated *a* in Fig. 5.

When it is wished to dismember the weapon, the sleeve 12 locking the breech at the front end must first be rotated until its bayonet-joint is detached, whereupon the sleeve 12 jumps out under the action of the spring 11 and this spring and the sleeve 13 can be removed. The breech is then pulled back so far while simultaneously lifting it from the face 6 and the shoulder 16 that the lugs 8 pass into the transverse grooves 10, whereupon the rear end of the breech can be lifted and removed from the barrel toward the front (Fig. 5). When assembling the weapon the operations are carried out reversely. With regard to the arrangement of the lugs 8 and the grooves 9 and 10 on or in the stock and breech it may of course be vice versa.

The breech 3 has a lateral aperture 17 through which are ejected the empty cartridge cases pushed to one side by the projection 18 (Fig. 2) on the stock.

The trigger mechanism comprises the finger or trigger 20, the rod 21 able to be shifted longitudinally by the same, the hammer or cock 23 fulcrumed at 22, and the safety-catch 24 inserted behind both the hammer and the rod 21. This catch, pivotally mounted at 25, is located laterally of the hammer but so, however, that when the hammer is tensioned the recessed shoulder 26 of the catch clasps a projection 27 on the hammer and thereby holds the hammer tensioned by the spring 28, while its lug 26 coacts with the rod 21. The catch is held pressed by a spring 30 against the hammer and the rod 21, while the latter is pressed by a spring 31 against the catch.

As will be readily understood, my improved trigger mechanism principally differs from known constructions in that the catch 24 is arranged laterally of the hammer and in the same plane with the rod 21.

Another feature of importance is the pivoting of the catch 24 at its lower end at a point behind the hammer, thereby obtaining a greater length and a greater stroke than if the latch were arranged in front of the hammer. In consequence of this arrangement a relatively light pressure on the trigger 20 suffices to move backward the shoulder 26 from the projection 27 of the hammer by means of the rod 21 coacting with the lug 29 of the catch 24, whereupon the hammer flies forward under the action of its spring 28 and impacts against the firing-pin 32 for discharging the weapon. Apart from the saving in power, the improved form and arrangement of the safety-catch 24 has the advantage that neither does the weapon require to be lengthened rearwardly nor need the stock be provided below with projections which inconvenience the handling of the weapon.

The hammer can be locked in the usual manner by a rotary lock which comprises a shaft 34 of non-circular cross-section rotatable by a crank-handle 33 and engaging in a recess 35 in the hammer. In the form according to Fig. 7 this shaft 34 simultaneously serves for locking the catch 24. The latter has an arm 36 which when locked bears against the part 37 of the shaft 34, while the hammer is secured by the part 38 of the shaft 34 engaging in its recess 35.

I claim:—

In a pistol of the character described comprising a stock, a fixedly mounted barrel, and a breech guided between the barrel and the stock, the combination of the trigger, a rod having one end pivotally attached to the latter, a spring-pressed hammer pivotally mounted on the stock in the breech, and a catch normally engaging the hammer and coacting with the other end of the said rod, said catch being located in the rear of said rod and also being pivoted at its lower end in the rear of said hammer, said catch being adapted to be disengaged from the hammer by the rod.

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

CARL WALTHER.

Witnesses:
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M. C. DILLINGHAM.