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AUTOMATIC PISTOL
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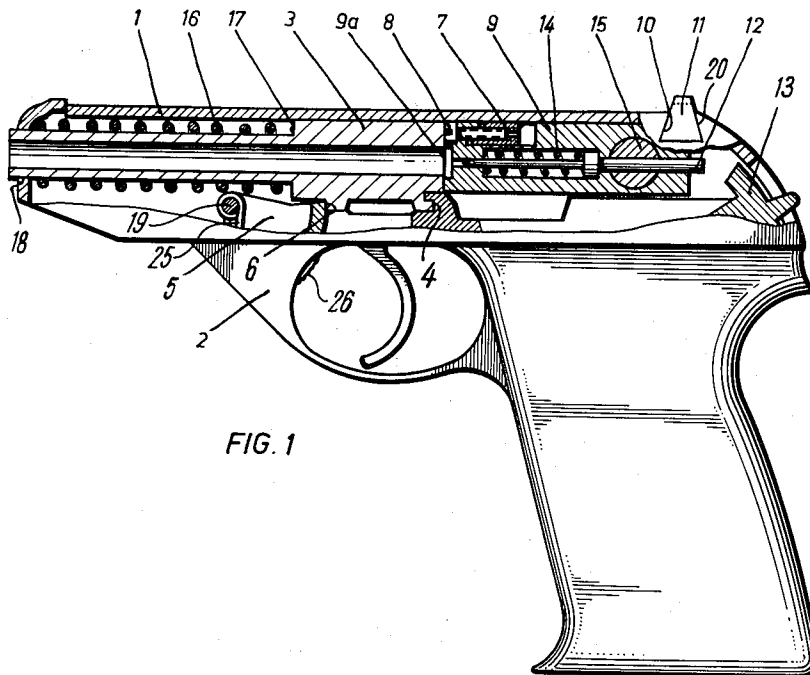


FIG. 1

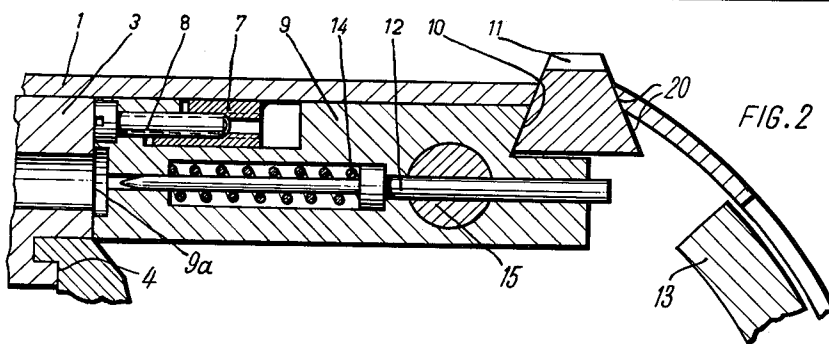


FIG. 2

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AUTOMATIC PISTOL

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The invention relates to an automatic pistol with a displaceably guided breech carrier which can be gripped externally for the purpose of cocking the pistol, and which has a breech head attached thereto which guides a striker pin.

In known pistols the breech head and the breech carrier are in one piece. As a rule the breech carrier forms a longitudinally displaceable housing member which closes the weapon at the top and which together with the breech head is machined from the solid. In this case the breech face fits the bottom of the cartridge and the construction of this part is thus dependent on the respective diameter of the bullet or cartridge bottom.

In a further known pistol, the breech carrier and breech head are constructed as separate parts, but also in this pistol the breech carrier is a part which has been machined from the solid, the front end of which is constituted by a block with a bore for the barrel of the weapon and with a further bore for guide rod disposed below the barrel and provided with a recoil spring.

These known pistols have the disadvantage that the manufacture of the breech carrier is extremely expensive because machining from the solid of such a complicated part as represented by the breech carrier with breech head requires considerable time and such work can be carried out only by skilled workers by means of expensive machine tools.

These disadvantages of the known pistols are avoided by the invention. The invention consists in that the breech carrier is formed as a pressing having a substantially U-shaped cross-section over the whole length of the breech carrier which is open downwardly and that further members associated with the breech carrier and/or the breech head and having faces which extend transversely to the longitudinal direction of the breech carrier are subsequently inserted into this pressing, in particular the breech head itself.

The particular advantage of the invention lies in that the breech carrier can now be produced extremely cheaply by shaping rather than cutting methods, since no intermediate walls or other transverse surfaces are involved. This manufacturing possibility by itself reduces the production costs of breech carrier and breech head quite considerably. If a terminal wall is required at one end of the U-shaped breech carrier, this can be formed during the pressing operation by which the breech carrier is produced. Although the breech head itself may need some machine cutting, it is nevertheless possible to produce the breech head in such manner that a suitably drawn profiled rod is cut into pieces corresponding to the length of the breech head, and these pieces are then machined further. Thereby also expensive operations are avoided again.

A further advantage of the invention lies in that it enables the weapon to be changed to a different calibre in a simple manner. If the breech head is not fixed in the breech carrier in a non-removable manner, such as by soldering or welding, but is releasably connected thereto, for instance by screwing, the breech carrier need not even be changed when the calibre is changed, but it is sufficient to interchange the barrel and the breech

head. Thus in the pistol according to the invention considerably lower costs arise for a change of calibre than in the known pistols constructed for change of calibre.

In particular if the breech carrier extends as upper housing member over the whole length of the barrel the sighting device will also be disposed on the breech carrier and this need not be interchanged either when the calibre is altered. If machine cutting of the breech carrier should be necessary for certain reasons, for instance for the purpose of providing rifling or for the sighting device, this cutting operation is in any case only of a minor character and requires only a short working time.

In one embodiment of the invention the rear end of the striker pin is always disposed in the same position in the breech heads associated with the various calibres. Dependently upon whether the ammunition is fired centrally or from the rim, the striker pin runs at a corresponding angle. If the rear end of the striker pin is always disposed at the same point also the same safety roll can always be used.

The breech head can be fixed in the breech carrier in various ways, for instance a holding member may be attached to the breech carrier for example by screwing, welding or the like, to which member the breech head is fixed by means of screws.

In known pistols the back sight is fixed in a transverse groove which is provided either in the breech carrier or at the rear end of the barrel. After the back sight has been adjusted the edges of the transverse groove are deformed and the back sight fixed thereby. In contrast thereto in the pistol according to the invention the back sight is held in a transversely extending recess of the breech carrier by means of the breech head which is fixed in the breech carrier. If therefore the back sight is to be readjusted it is sufficient to loosen the breech head.

For fixing the back sight one face of the breech head preferably presses the back sight in a wedging manner against the edges of the recess in which the back sight is disposed in a transversely displaceable manner.

Further features of the invention are apparent from the following description of one embodiment of the invention in conjunction with the claims and the accompanying drawing. The individual features may be carried into effect either individually or several of them in combination in one embodiment of the invention.

In the embodiment of the invention illustrated:

FIG. 1 shows a section through the parts of the pistol according to the invention which are necessary for understanding the invention, and

FIG. 2 illustrates a portion of FIG. 1 on a larger scale.

In the embodiment of the invention illustrated in the drawing a breech carrier 1 which forms a housing member closing the weapon from above is displaceably guided on a grip member 2 by means of grooves disposed on the grip member 2 and ribs formed in the breech carrier 1. A barrel 3 is interchangeably inserted in the weapon. A lip of the barrel engages a recess 4 of the grip member and is pressed into the recess 4 by means of a segmental barrel holder 5 which is rotatable about a pin 19 and includes a roughened surface part 26 accessible in the trigger slot for convenient finger manipulation when required.

A holder member 7 is welded into the breech carrier 1 and has a screw-threaded bore which is engaged by a screw 8 holding a breech head 9 made separately.

The breech carrier 1 consists of a U-shaped sheet steel pressing which is open on the underside over its whole length. So far as parts are required which more or less occupy this profile, such as in particular the breech head, they are inserted afterwards in this profile and may be

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fixed in a releasable or permanent manner. The lower edges of the U-shaped pressing are guided in the above-mentioned guides or grooves of the grip member. The U-shaped pressing member surrounds like a housing all individual parts in the upper section of the weapon. A transverse recess 20 is located in the breech carrier 1, which intersects the inner space, and a back sight 11 is disposed in this transverse recess 20. The breech head 9 has an oblique face 10 which presses against the back sight 11 when the screw 8 is tightened and wedges the sight against the edges of the recess 20.

If the back sight 11 is to be displaced in the recess 20 it is sufficient to loosen the screw 8 so that the wedging effect by the face 10 is released and the back sight is then easily displaced in the recess 20.

A striker pin 12, a striker pin spring 14 and a safety roll 15 are disposed in the breech head 9. A hammer 13 is also located in the grip member which strikes the rear end of the striker pin 12 when a shot is fired. A recoil spring 16 is disposed about the front portion of the barrel 3 one end of the spring bearing on the forward internal face of a recess 18 in the breech carrier 1, while the rear end bears against a shoulder 17 of the barrel 3. The pistol according to the invention is cocked by pulling back the breech carrier whereupon the recoil spring 16 forces the breech carrier forwardly again and closes the weapon. When a shot is fired the breech carrier with the breech head 9 is also forced back by the recoil, the empty cartridge is extracted from the barrel and ejected and the weapon is cocked again; the recoil spring 16 pushes the breech carrier 1 forward again and a new cartridge is fed from the magazine in known manner.

The cartridges are fed from a suitable magazine located in the downwardly projecting section of the grip member 2 and are fed automatically into the breech after each operation of the weapon. Since the arrangement of this part of the weapon may follow normal practice in the art, it has not been thought necessary to show details of the cartridge feed means. It will be understood however that on firing the cartridge the breech carrier 1, together with the breech head 9 moves rearwardly extracting the spent cartridge from the barrel and allowing a fresh cartridge to move to a point opposite the barrel from the magazine. The recoil spring 16 then inserts the fresh cartridge into the barrel as the recoil spring comes into operation to force the breech carrier forwardly again thus ensuring that the breech head closes the rear end of the barrel head for the next firing. The trigger mechanism also follows normal practice in the art and has not been shown in detail; the trigger indicated is associated with sear mechanism which on operation of the trigger releases the hammer 13 which moves forward under the action of a mainspring, not shown, to strike the striker pin 12 to fire the cartridge.

If a change of calibre is to be effected the breech carrier 1 is removed from the grip member 2. This can be effected by rotating the barrel holder 5 away from the region of the front face 6 so that then the breech carrier can be pushed forward out of the guides of the grip member 2. Then the barrel 3 is pushed forward against the action of the recoil spring 16 through the recess 18 until the barrel is free of the front face of the breech head 9 and can then be removed from the breech carrier 1 downwardly and rearwardly. Thereby the screw

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8 becomes accessible by means of which the breech head is fixed to the holding member 7 of the breech carrier 1. If this screw is loosened the breech head 9 can be removed after the safety roll 15 has been taken out. Thereby the back sight 11 is also freed so that the back sight 11 can be displaced in the recess 20 or even removed completely. Thereupon, another barrel and another breech head can be inserted which are associated with a different calibre. The striker pin 12 and the striker pin spring 14 and also the safety roll 15 of the interchanged breech head 9 can be used again in this case. In the case of calibre changes in the described manner the recoil spring 16 will generally be replaced by a different spring.

What I claim is:

1. An automatic pistol, comprising a grip member, a slidably movable breech carrier on said grip member, a separately produced breech head on said carrier, a striker pin guided in said breech head, a barrel assembly fixedly associated with said grip member, means to feed cartridges in succession into said barrel, the cartridges so inserted being engaged by the breech head, and a trigger-released hammer operable upon said striker pin, said breech carrier being of U-shape and said breech head being fixed therein, said breech head having a face extending transversely to a longitudinal direction of said breech carrier, said breech carrier being a steel pressing, a holder member permanently attached to said breech carrier and receiving therein fastening means securing said breech head in fixed position relative to said breech carrier, said breech carrier surrounding said barrel assembly, said barrel assembly including a forwardly directed portion of reduced diameter, and a recoil spring surrounding said forwardly directed portion.

2. An automatic pistol according to claim 1, in which a displaceable back sight is mounted in said breech carrier and is held in position by said breech head in said fixed position of the latter.

3. An automatic pistol according to claim 1, wherein said fastening means comprises a fastening screw traversing said breech head, a displaceable back sight having an oblique face and being mounted in said breech carrier, said face of said breech head being seated in wedging relationship against said oblique face of said back sight upon the assumption of said fixed position by said breech head.

4. An automatic pistol according to claim 3, wherein said back sight is of dovetail form in cross-section and a correspondingly shaped recess in the breech head receiving said back sight.

5. An automatic pistol according to claim 1 wherein said barrel assembly is detachably fixed to said grip member by means of a releasable barrel holder.

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