May 24, 1955 T. SCHNEIDER 2,708,803

EJECTOR DEVICE FOR AUTOMATIC FIREARMS WITH REVOLVER DRUMS

Filed March 22, 1951

Fig. 1

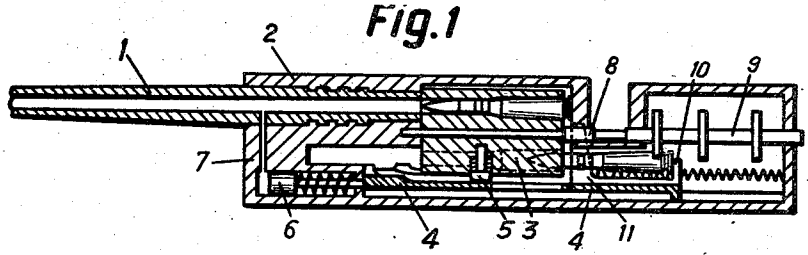


Fig. 2

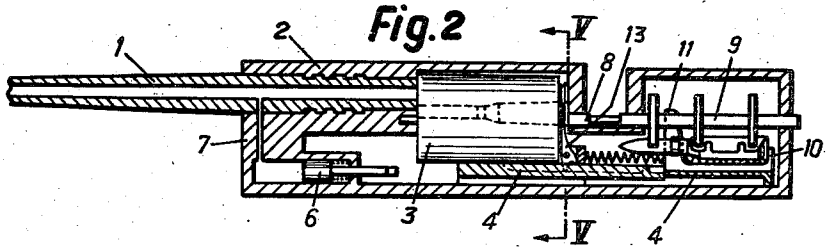


Fig. 3

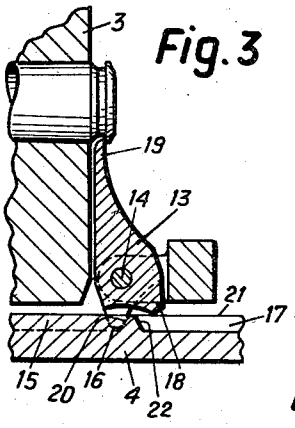


Fig. 4

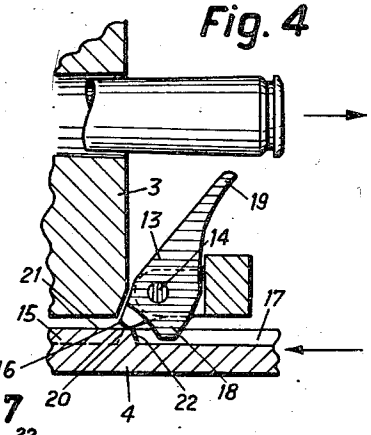


Fig. 7

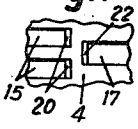


Fig. 5

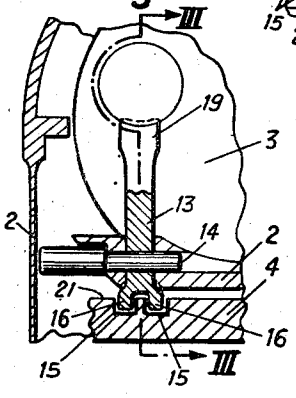
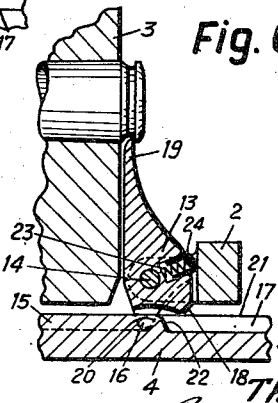


Fig. 6



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EJECTOR DEVICE FOR AUTOMATIC FIREARMS WITH REVOLVER DRUMS

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Application March 22, 1951, Serial No. 216,863

2 Claims. (Cl. 42—68)

The present invention relates to an ejector device for automatic firearms with a revolver drum rotated by a longitudinally movable gas-operated slide.

The device according to the present invention is characterized in that on the gun casing an ejector lever is pivotally disposed, one arm of which engages the extractor groove of the cartridge case to be ejected and which has two lugs engaging with recesses and stops on the longitudinally movable slide whereby the pivoting of the ejector lever and locking of the same in its end positions is effected.

In the enclosed drawing two constructional examples of the present invention are shown. In the drawing:

Fig. 1 is a diagrammatic longitudinal section through the gun;

Fig. 2 is a diagrammatic longitudinal section through the gun immediately after the firing of a shot, showing the revolver drum and the ejector lever in elevation;

Fig. 3 is a section through the ejector device in normal position along the line III—III of Fig. 5;

Fig. 4 is a section through the ejector device in ejection position;

Fig. 5 is a section along the line V—V in Fig. 2;

Fig. 6 is a section through the ejector device of a second example;

Fig. 7 is a plan view of the slide at the position of engagement of the ejector lever as shown in Figs. 3, 4 and 6.

As shown in Figs. 1 and 2 the barrel **1** is fastened by means of a bayonet connection to the casing **2** which contains the drum **3**. The drum **3** is fitted with a number of cartridge chambers which on rotation of the drum **3** are successively moved in front of the barrel **1**. Rotation of the drum **3** is effected in known manner by means of a slide **4** fitted with curved grooves which engage the rollers **5** disposed on the drum. The slide **4** is actuated by the gas piston **6** arranged in the gas cylinder **7**. The cartridge feed star wheel **9** is arranged coaxial to the drum **3** and connected with the latter by the coupling **8**. The cartridges are moved in known manner in two steps from the star wheel into the cartridge chambers of the drum **3** by means of the lugs **10**, **11** of the slide **4**.

The ejector lever **13** shown in Figs. 3 to 6 is pivotally arranged on the pin **14** in the casing and is controlled by the slide **4**. The latter is fitted with two grooves **15** which are engaged by the fork-shaped lugs **16** of the ejector lever **13** and a further groove **17** engaged by the lug **18**. The arm **19** of the ejector lever **13** is provided for engaging the extractor groove of the cartridge cases.

Operation of the device is as follows: During rotation of the drum **3** the ejector lever is in the normal position shown in Fig. 3. Just before the advancing slide **4** has reached its forward end position the two end faces **20** of the grooves **15** impact upon the lugs **16** of the ejector lever and initiate pivoting of the latter. Since the drum **3** has already reached its end position at this moment the arm **19** of the ejector lever is already engaging the extractor groove of the empty cartridge case and starts pulling the case out of the chamber. Due to the further movement of the slide the ejector lever **13** is pivoted until its lugs **16** rest against the top face **21** of the slide **4**. The lug **18** thus engages the groove **17** (cf. Fig. 4). The ejector lever now remains in this position until the slide starts moving backward after firing of the next round. The lug **18** is then hit by the end face **22** of the groove **17** whereupon the ejector lever is positively returned to its normal position (Fig. 3) and held in this position by the lug **18** resting against the top face **21** of the slide **4**. This sequence of operation is repeated on firing of the next round.

It should be noted that the ejector lever **13** is located in the position shown in Fig. 3 before the cartridge in the drum has reached the ejection position. Thus the empty cartridge casing in the drum is directly turned upon the ejector.

In the example shown in Fig. 6 a spring **23** with plunger **24** is provided which tends to move the ejector lever **13** into either one of its end positions. It is thus unnecessary to provide a positive guidance of the ejector lever **13**. The examples described are, of course, only two out of many possibilities for practical realization of the inventive thought.

I claim:

1. An ejector device for an automatic firearm having a casing, a gas-operated slide longitudinally-reciprocating in said casing, a revolver drum adapted to carry cartridges and rotated by said slide, the cartridges being of the type having extractor grooves formed at the ends thereof and located beyond said drum when the cartridges are mounted in the drum, said ejector device comprising an ejector lever pivoted upon the casing and swingable in the direction of movement of said slide and having an arm fitting in the extractor groove of the cartridge being ejected, and two lugs, each of said lugs fitting into a recess formed in said slide, said slide having stops engaging said lugs to swing said lever in opposite directions during a reciprocating movement of said slide, whereby said arm of the lever pulls the cartridge out of the drum and ejects it during one of the swinging movements.

2. A device in accordance with claim 1, comprising a spring pressing said lever toward one of its end positions.

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