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(54) Pivoting semiautomatic rifle

(57) The present invention pertains to a semiautonlatic sports rifle and shotgun in which the barrel (14) is hinged (21) or [sic - Tr.Ed.] to the pivot (11) for its rotation between a position of closing and alignment with the breechblock unit in the pivot and a position of opening that is angled with respect to the pivot. The cartridges are fed from a side, and the cartridge cases are removed from the bottom of the pivot.

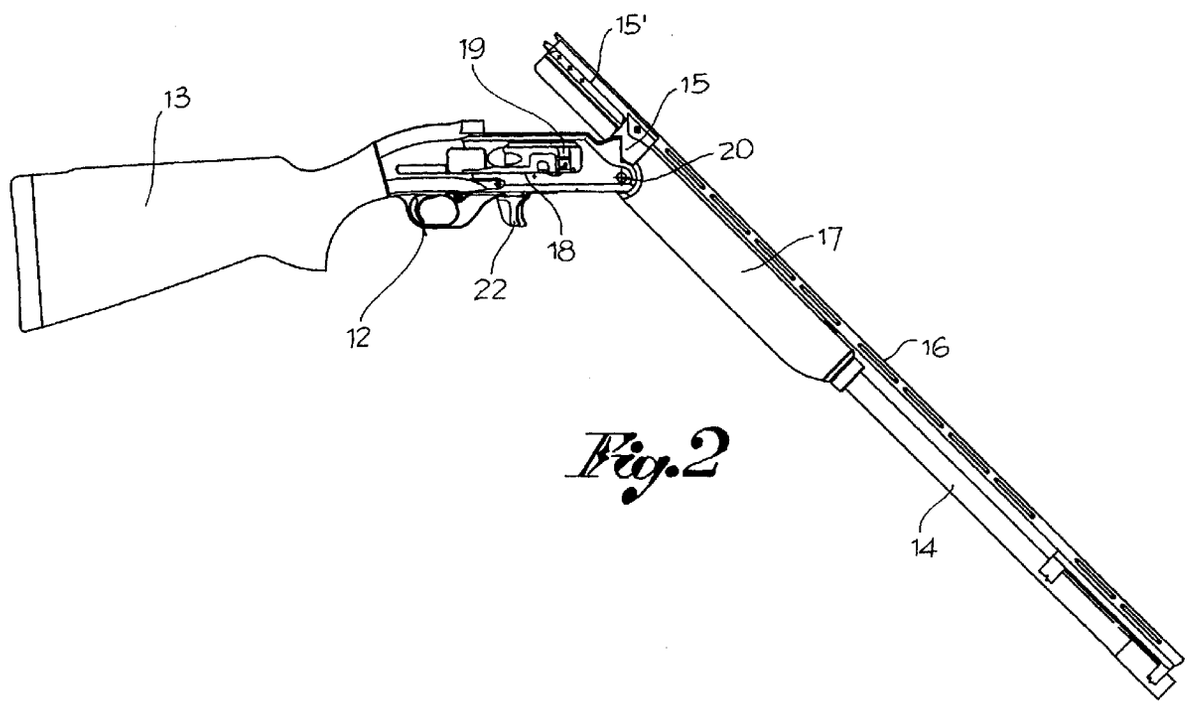

Fig.2

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Description

The present invention pertains to semiautomatic sports rifles and shotguns with smooth and/or rifled bore.

Currently and, on the one hand, only the traditional rifles with a single barrel, or two parallel or superimposed barrels, have a pivoting closing/opening mechanism which makes it possible for the barrel or the barrels to rotate on the pivot. These rifles are breech loaders, and have the limitation of having to be reloaded by inserting a cartridge in the barrel, or in each of the barrels each time, though they have the advantage of safety against accidental firings thanks to the opening of the rifle and to the possibility of being able to check the presence of ammunition in the barrel visually.

On the other hand, the semiautomatic sports rifles and shotguns have only one barrel, having the feature of coaxiality between the axes of the barrel and the breechblock, and they have the possibility of feeding two or more shots, one in the barrel and at least one other on a positioning-feeding means, to be fired in succession. However, these are not provided with a pivoting opening/closing mechanism, and thus, not being able to be opened, they do not have the degree of safety of traditional pivoting rifles and they do not make it possible to check whether the gun is loaded or unloaded.

The object of the present invention is to provide a semiautomatic rifle, which has a pivoting opening/closing barrel and which therefore can be opened, broken in two, to load the ammunition there manually and to be able to "see" whether the rifle is loaded or unloaded.

Another object of the present invention is to create a semiautomatic rifle which can be opened and can be held open when it is not being used for maximum safety of the gun against accidental firings, a condition which is required and is appreciated especially on fields for sports practice of trap shooting or the like.

Another object of the present invention is to create a semiautomatic rifle with a smooth or rifled barrel which has the degree of safety of the traditional pivoting rifles and in which are found the good qualities of two different types of guns, i.e., the opening and safety of a pivoting gun and the properties of a semiautomatic rifle as concerns the precision, the symmetrical structure and the possibility of ambidextrous use, thanks to a lateral loading and to an unloading from the lower part as well.

The said objects and advantages are basically accomplished with a pivoting semiautomatic rifle according to claim 1. At any rate, greater details of the present invention shall become more evident from the description provided below with reference to the attached drawings, in which:

Figure 1 shows schematically the semiautomatic rifle closed and ready for use;

Figure 2 shows the rifle of Figure 1 opened, with the barrel pivoted; and

Figure 3 shows the rifle disassembled in its two principal components.

The rifle comprises two principal units: a pivot 11, which has a trigger mechanism 12 and is fixed to a butt 13, and a barrel 14 with related breechblock or sleeve 15 and provided with a metal strip 16 and a stem 17.

In the pivot 11 is housed the trigger mechanism 12 with a breechblock unit 18, to which is associated a means for feeding ammunition 19, which is arranged on one side of the gun, and a means for unloading the cartridge cases from the bottom part.

For its part, the pivot 11 has, in front, two drilled lugs 20, to which is connected the breechblock or sleeve 15 of the barrel 14 by means of a cross pin 21.

Thus, the pin 21 forms an axis of rotation for the barrel 14 so that this [barrel] may be rotated between a closed position, in which it is aligned with the breechblock unit 18, and an opened position that is pivoted and angled with respect to the pivot 11.

Figures 1 and 2 show these two closed and opened positions, respectively.

A mechanism (not shown), which interacts with a rear appendix 15' of the breechblock and of which only a control drawing means 22 is shown, is provided for the locking/unlocking of the barrel in its closed position.

Therefore, the barrel of the automatic rifle is pivoting and can be opened by simple rotation on the pin 21 in order to achieve the predicted objectives.

Moreover, the pin 21 can be extracted, making it possible to separate the two principal units of the gun, as shown in Figure 3, also for the purposes of reducing the hindrances of the semiautomatic rifle when it is not used, put away separated into two parts in a case and transported in a short case.

Claims

1. Semiautomatic sports rifle and shotgun with a said pivot (11) fixed to a butt, and having a said trigger mechanism and a said ammunition feeding means, and with a said barrel (14) having a said breechblock (15), a said metal strip (16) and a said gripping stem, characterized in that said barrel (14) is hinged (21) to the said pivot (11) for a rotation of the said barrel between a position of closing and alignment with the said breechblock unit in the said pivot and a position of opening that is angled with respect to the said pivot.

2. Semiautomatic rifle in accordance with claim 1, in which the said breechblock of the said barrel is connected to the said pivot by means of a said transverse pin (21), which forms the axis of rotation of the said barrel between the closed and opened positions, and the said pin is able to be removed in order to disconnect the said barrel from the said piv-

ot.

3. Semiautomatic rifle in accordance with the claims 1 and 2, in which the said breechblock of the said barrel has a rear appendix, which is locked at the pivot when the said barrel is in the closed position, and locking is controlled by a drawing means under the said pivot.

4. Semiautomatic rifle in accordance with the above claims, characterized additionally by a said lateral ammunition feeding means and by a said means for unloading the fired cartridge cases from the bottom.

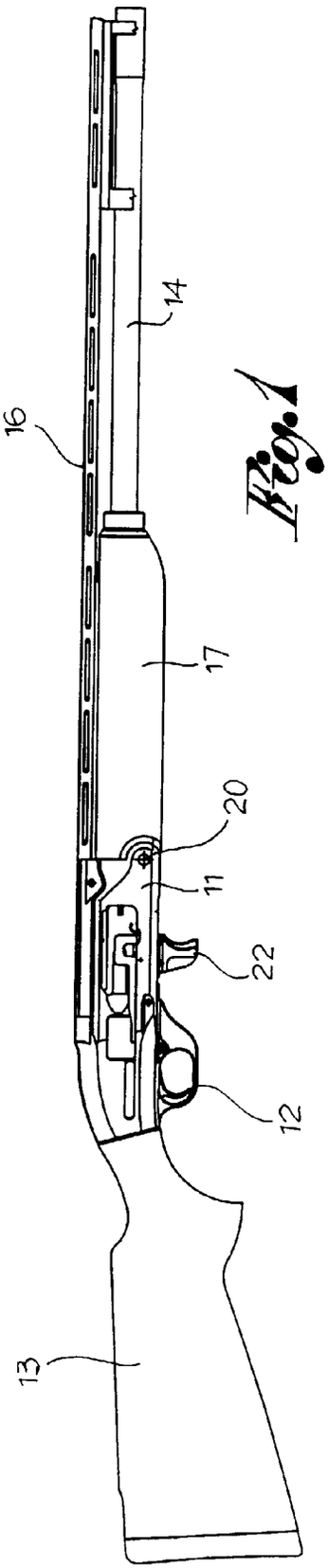

Fig. 1

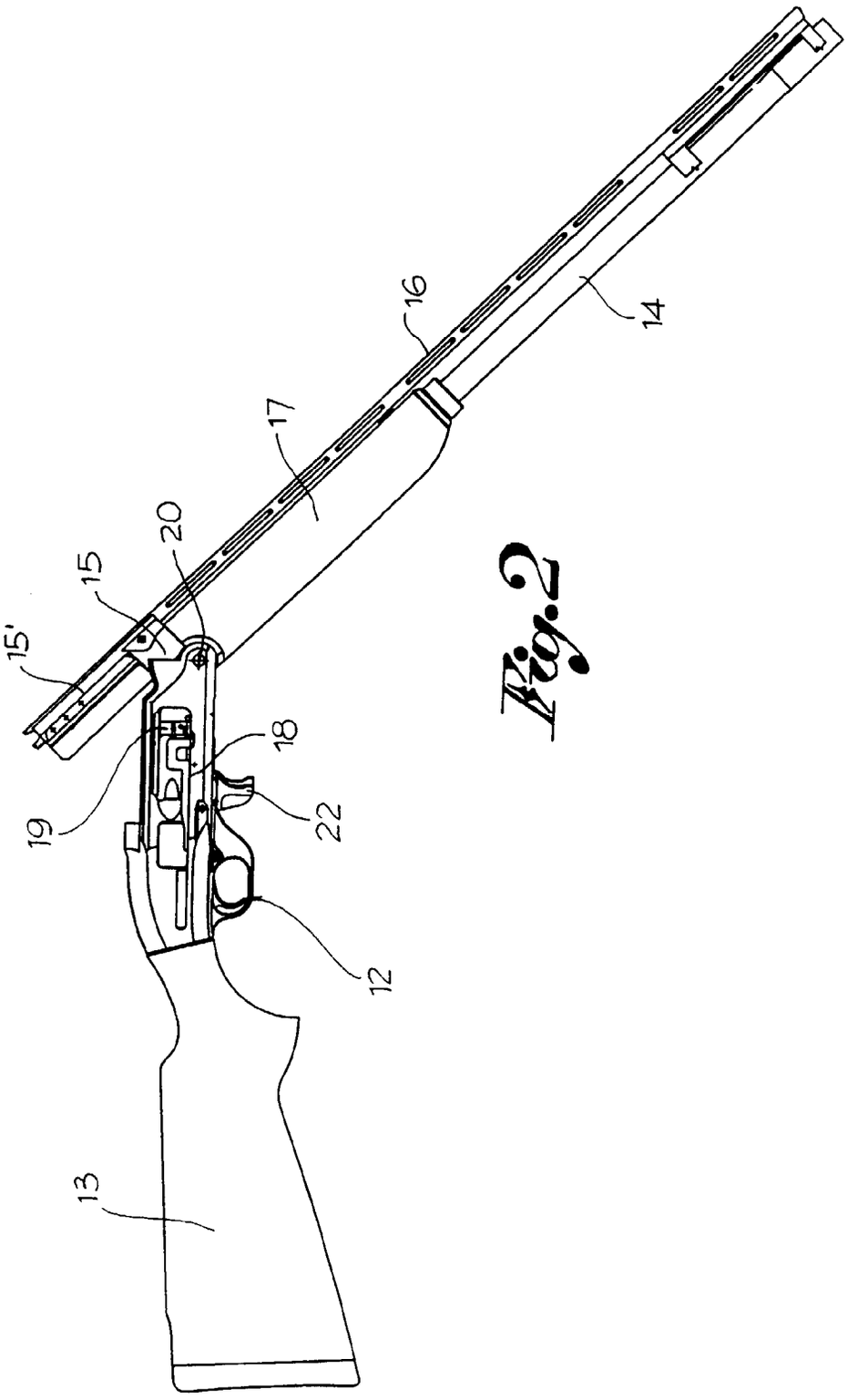

Fig.2

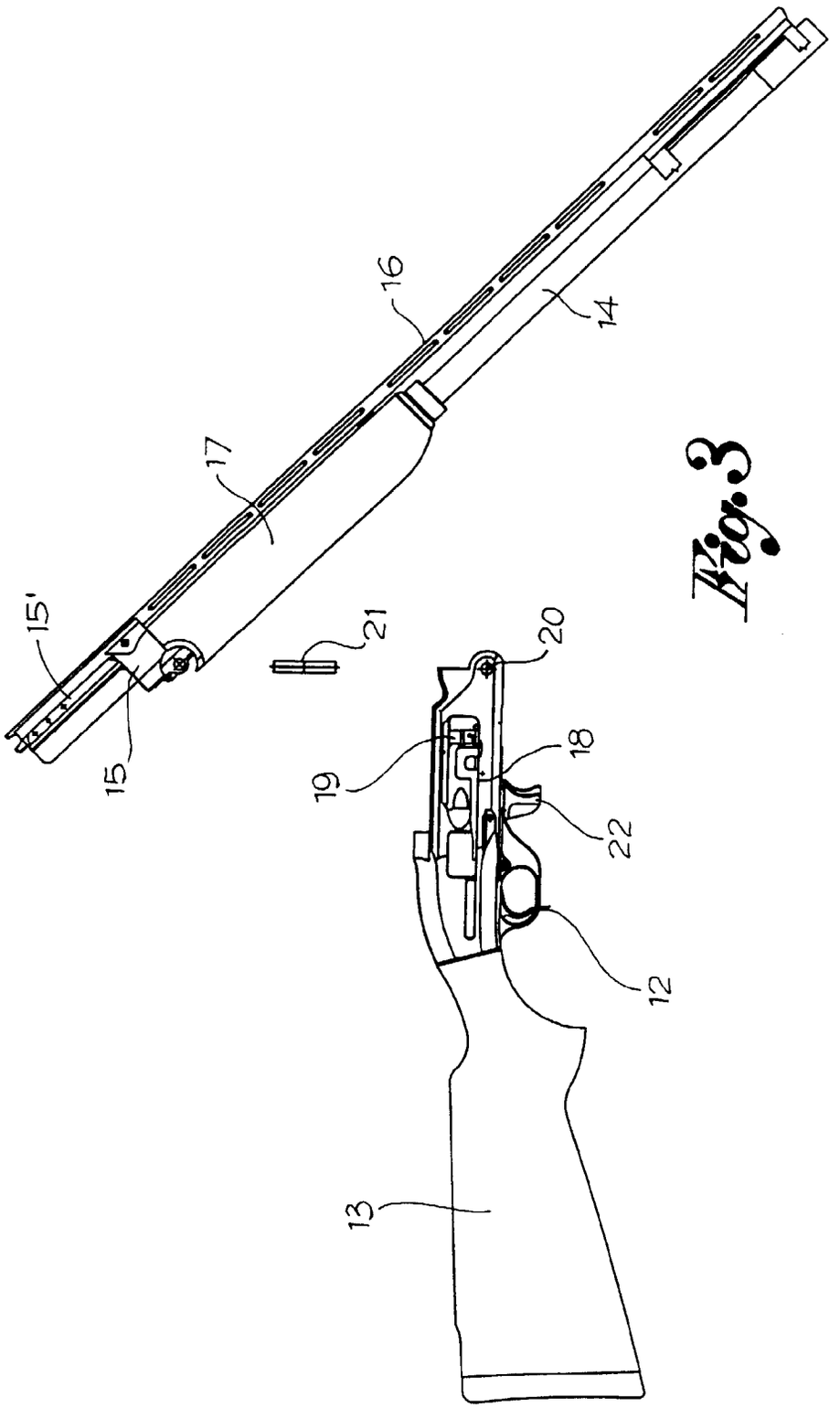

Fig. 3