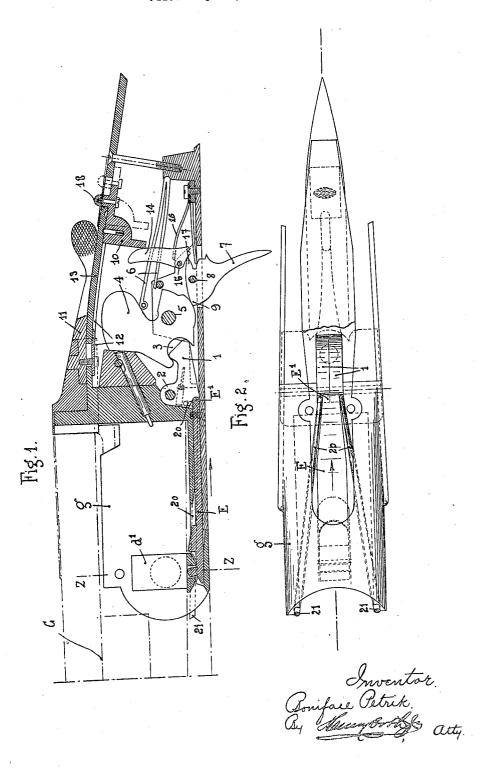
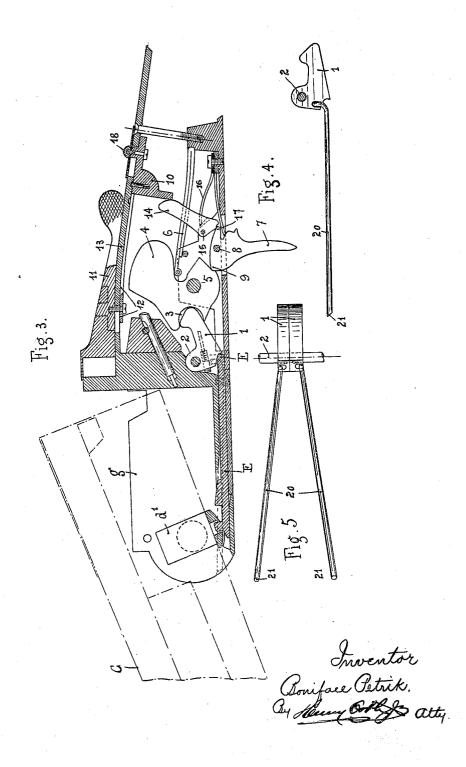
SPORTING GUN WITH SUPERPOSED BARRELS

Filed July 24, 1922



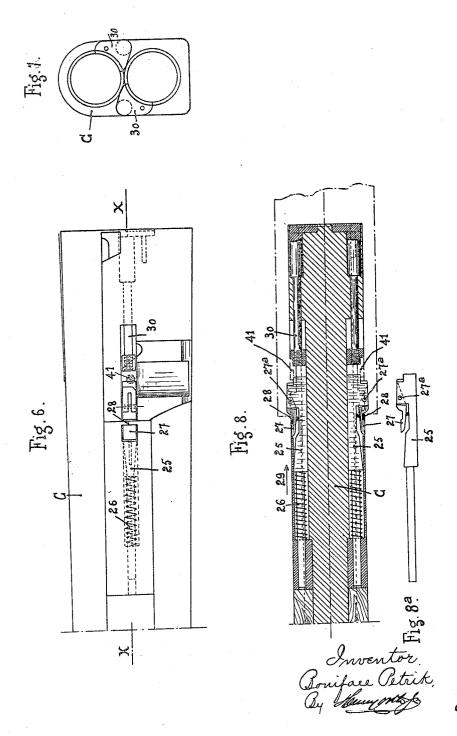
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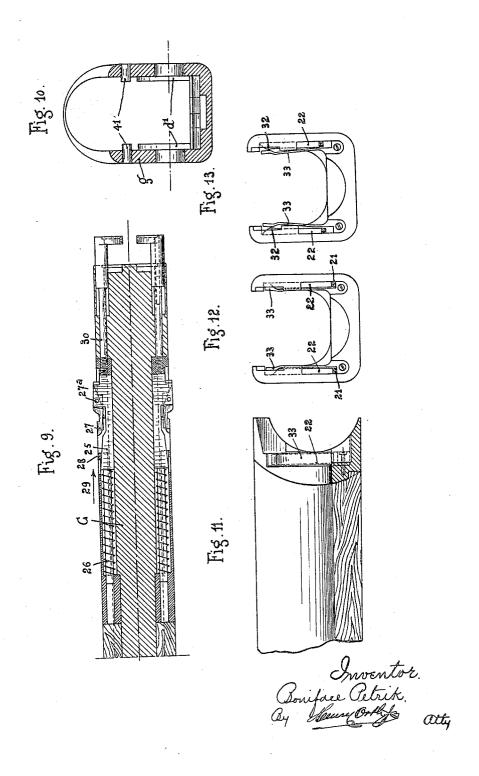
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# UNITED STATES PATENT OFFICE.

BONIFACE PETRIK, OF ST. ETIENNE, FRANCE, ASSIGNOR TO SOCIÉTÉ PETRIK & CIE., OF ST. ETIENNE, LOIRE, FRANCE.

# SPORTING GUN WITH SUPERPOSED BARRELS.

Application filed July 24, 1922. Serial No. 577,073.

To all whom it may concern:

Be it known that I, Boniface Petrik, a citizen of France, and a resident of St. Etienne, Loire, France, have invented certain new and useful Improvements in Sporting Guns with Superposed Barrels, which is fully set forth in the following specification.

This invention relates to an improved 10 shooting or sporting gun with superposed barrels of the same kind as the one which is described in United States patent applications Patents Nos. 1,434,627 and 1,434,628.

The essential features of the gun forming 15 the subject-matter of the invention consists more particularly in the simple and practical construction of the mechanism for cocking the hammers, of the safety locking device and of the shell ejector mechanism, 20 etc.

The following description will show by way of example with reference to the accompanying drawing the way of carrying out the invention.

Fig. 1 is a cross-section of the breech in the uncocked position, that is to say after shooting.

Fig. 2 is a bottom view of the breech, the

lower plate being partially broken away.
Fig. 3 is a similar view to Fig. 1 showing the cocking of the hammers, the mechanism being shown in the safety or locking position after the gun has been broken down by acting upon the key.

Figs. 4 and 5 are detail, side and bottom views of the stems for operating the ex-

Fig. 6 is a side view of the rear end of the barrel-block showing the ejector mechao nism.

Fig. 7 is a back view of Fig. 6.

Fig. 8 is a horizontal section on the line X—X of Fig. 6 showing the ejector mechanism ready to operate.

Fig. 8a is a separate view of the hammer which strikes upon the extractor.

Fig. 9 is a view corresponding to Fig. 8 after the operation of the ejector.

Fig. 10 is a cross-section on the line Z—Z of Fig. 1.

Fig. 11 is a longitudinal section of the

Fig. 12 is a rear view of Fig. 11 showing the operating means of the ejector provided upon the false breech.

Fig. 13 is a view corresponding to Fig. 12 after the opening of the barrel and showing the projecting position of the ejector operating means.

The gun with superposed barrels forming 60 the subject-matter of the present invention comprises a barrel-block C connected to the cheeks of the false breech g by means of a pivoted yoke  $d^1$  according to the way of mounting which has been described in the 65 application above named Patent No. 1,434,-

In the same it has been pointed out that the yoke  $d^1$  in the pivoting causes the recoil of a part E constituting the cocking-device. 70

This part engages through its end E1 a notch of the cocking lever 1 pivoted at 2; the latter in its turn engages a notch 3 of the hammer or cock 4 pivoted at 5. This hammer is under the influence of a spring 6 75 which tends to make it pivot about the axis 5 in a counter-clockwise direction, so as to The hammer is operated by causing firing. means of a trigger 7 pivoted at 8 the end of which enters a notch of the hammer, thereby 80 locking the latter as shown in Fig. 3.

Consequently, it will be understood that the hammer having been cocked, by means of the cocking device E and the cocking finger or lever 1, at the breaking down of the gun, 85 it will remain in this cocking position, when the gun is closed again. Such being the conditions, a pull upon the trigger 7 unlocks the hammer 4 which under the action of the spring 6 pivots suddenly about 5 and strikes 90 the firing pin, as shown in Fig. 1. It will therefore be seen that this mechanism is simple and practical.

This gun, like all sporting guns and other guns, is provided with a safety device con- 95 stituted as follows:

A pusher 10 can be brought, by simply acting upon the lock 11, into the safety or locking position shown in Figure 3, at the time this lock is acted upon. For this pur- 100 pose the latter carries a rod or lever 12 moving under the tail of the part 13 in sliding longitudinally when this lock 11 is acted upon, as shown in Figures 1 and 3; this lever 12 actuates the pusher 10 and this brings it 105 from position of "fire" (Fig. 1) to the position of "safety" (Fig. 3).

This rearward shifting of the part 10 allows the safety lever 14 to pivot about its axis 15 in a clockwise direction, when look- 110 ing at the figure, under the action of the The safety lever 14, being in the position shown in Fig. 3, locks the end 17 of the trigger 7 upon which it is now im-

5 possible to act.

In order to bring the gun to the "firing" position, it is only necessary to push by hand, in a forward direction, the knob 18 connected to the part 10 to bring it back to the position shown in Fig. 1. In this (Figs. 1, 3 and 10) which, as shown in dot to the position shown in Fig. 1. In this position, the safety lever 14 does not lock the trigger 7 which can then be acted upon by hand at every shot of the gun.

The ejector mechanism is as follows: In the cocking finger or lever-1, Figs. 4 and 5, are fixed two pins or needles 20, so that when the hammer 4 is depressed, when shooting, it causes the corresponding cocking lever or finger 1 to rotate (from the po-20 3ition shown in Figure 3 to the one shown in Figure 1) so that the end 21 of the pin 20

This end 21 engages the underside of a ver-25 tical slide 22, as shown in Figures 12 and 11, carried by the front part, and taking part in the rotary motion of the barrelblock, when the gun is being broken down. Furthermore, the catch of the barrel carries 30 on each side a pusher 25 acted upon by a strong spring 26 and kept locked by a nose 27 engaging a projection or vertical part 28 connected to or forming part of the barrelblock.

The said pusher 25 is so arranged as to act in the direction of the arrow 29 upon an extractor pin 30 when firing has taken place

and the barrel is opened.

In fact, as it has been explained above, 40 when the gun has been fired, the end 21 of the pin 20 engages underneath the part 22, so that when the gun is opened or broken down, that is to say when the barrel-block is caused to pivot, the said end 21 remaining stationary the part 22 is pressed upwardly, slides and assumes the position shown in Figure 13, in which the projection 32 forming the end of the rod or pin 22 will cause a small spring 33 to project 50 inwardly. The latter which occupied previously the position shewn in Fig. 12 (closed gun) comes into the position shewn in Fig. 13 (open gun), when the ejection of the cartridge takes place.

In this position of Fig. 13, the springs 33 press against the nose 27 pivoted upon the pushers 25 at 27a, which operate to shift the noses and unlock the pushers, which as they are no longer held up, are violently thrown by the spring 26 and strike the extraction pin 30 in the direction of the arrow

29 to eject the cartridge or shell.

What has been said contemplates that the two shots have been fired, but when only one 65 shot has been fired, only one of the springs

33 is shifted, the other spring not being acted upon from the fact that the end 21 of the pin 20 is not engaged under the part 22.

As in all other barrels, the extractors 30 are slightly projecting at the moment the 70 gun is opened before the pushers 25 come

(Figs. 1, 3 and 10) which, as shown in dot 75 and dash lines, Figs. 6 and 8, engages in front of the end of the extractor pins or

rods 30.

Accordingly, when the gun is broken down, the lugs 41 exert a pushing action 80 upon the ends of the extractor pins 30 and cause the said extractor pins to project slightly before the pusher 25 is unlocked to violently throw out the shells or fired cartridges

Of course, the above described arrangeprojects outside the false breech as shown in ments have been given by way of example only and it is well understood that they may be altered without in any way interfering with the principle of the invention.

What I claim is:

1. A gun or rifle with superposed barrels comprising hammers and lever means for cocking the hammers, a trigger, safety means for locking the trigger when the gun is open, 95 pins connected with the cocking lever, vertical sliding parts movable upon and with said barrels, and under which the ends of the pins pass, a pusher provided on each side of the barrel-block, a spring pressing upon 100 each pusher, a catch pivoted on each pusher, projection of the barrel-block engaging each catch, an extractor rod operated by each pusher, shoulders provided at the ends of the sliding vertical parts, and springs 10: pushed inwardly by the shoulders and unlocking the catch so as to release the extractor pushers.

2. A sporting gun with superposed barrels comprising a barrel block, a breech, a 11 cocking lever, a horizontally sliding part acting upon the lever, a yoke forming part of the barrels and acting upon the sliding parts so as to cause the cocking lever to pivot when the gun is opened, a pivoted 11 hammer into which enters the cocking lever, a spring pushing the hammer, a trigger stopping the hammer in the cocking position and permitting release of the same for firing, a key for opening the gun, a safety 15 device, means for connecting the key with the safety device so that the latter will be shifted when the key is turned, a safety trigger, a spring tending to press the end of the safety trigger against the firing trigger to lock the latter when the gun is open so that it is impossible to act upon the firing trigger pins connected with the cocking lever, vertical sliding parts taking part to the rotary motion of the barrel block when 1

the gun is to be opened and under which and unlocking the catch so as to release 45 the ends of the pins pass, a pusher provided on each side of the barrel-block, a spring pressing upon each pusher, a catch connected with each pusher, a projection of the barrel-block engaging each catch, an extractor rod operated by each pusher, shoulders provided at the ends of the sliding vertical parts, and springs pushed in-10 wardly by the shoulders and unlocking the catch so as to release the extractor pushers.

3. A sporting-gun with superposed barrels comprising a barrel-block, a breech, a cocking lever, a horizontally sliding part 15 acting upon the lever, a yoke on the barrelblock acting upon the sliding parts so as to cause the cocking lever to pivot when the gun is opened, a pivoted hammer into which enters the cocking lever, a spring pushing 20 the hammer, a trigger stopping the hammer in the cocked position and allowing the release of the same for firing, a key for opening the gun, a safety device, means for connecting the key with the safety device so that the latter will be shifted when the key is turned, a safety trigger, a spring tending to press the end of the safety trigger against the firing trigger to lock the latter when the gun is open so that it is impossible to act upon the firing trigger, means causing the extractors to project at the moment the gun is opened, pins connected with the cocking lever, vertical sliding parts taking part to the rotary motion 35 of the barrel block when the gun is to be opened and under which the ends of the pins pass, a pusher provided on each side of the barrel-block, a spring pressing upon each pusher, a catch connected with each 40 pusher, a projection of the barrel-block engaging each catch, an extractor rod operated by each pusher, shoulders provided at the ends of the sliding vertical parts, and springs pushed inwardly by the shoulders

the extraction pushers.

4. A sporting-gun with superposed barrels comprising a barrel-block, a breech, a cocking lever, a horizontally sliding part acting upon the lever, a yoke formed on the 50 barrel-block and acting upon the sliding parts so as to cause the cocking lever to pivot when the gun is opened, a pivoted hammer into which enters the cocking lever, a spring pushing the hammer, a trigger ar- 55 resting the hammer in the cocked position and allowing the release of the same for firing, a key for opening the gun, a safety device, means for connecting the key with the safety device so that the latter will be 60 shifted when the key is turned, a safety trigger, a spring tending to press the end of the safety trigger against the firing trigger to lock the latter when the gun is open so that it is impossible to act upon the firing 65 trigger, extractors, extractor pins, lugs connected with the breech and coming in front of the extractor pins so as to slightly push the latter when the gun is opened in order to release them, pins connected with the cock- 70 ing lever, vertical sliding parts taking part to the rotary motion of the barrel block when the gun is to be opened and under which the ends of the pins pass, a pusher provided on each side of the barrel-block, a 75 spring pressing upon each pusher, a catch connected with each pusher, a projection of the barrel-block engaging each catch, an extractor rod operated by each pusher, shoulders provided at the ends of the sliding 80 vertical parts, and springs pushed inwardly by the shoulders and unlocking the catch so

as to release the extractor pushers.

In testimony whereof I have signed this

specification.

BONIFACE PETRIK. [L. S.] Witnessed by—

François Borbergere.