FOUNTAIN-PEN GUN


This invention relates to a firearm, such as a gun or rifle of the non-magazine type, and has for its object to provide, in a manner as hereinafter set forth a firearm simulating the appearance of and capable of being carried on the person in the same manner as a fountain pen.

Further objects of the invention are to provide, in a manner as hereinafter set forth a firearm of the appearance aforesaid and which is simple in its construction and arrangement, strong, durable, thoroughly efficient as a fire-arm, conveniently set in firing position, including means to constitute a safety when loaded, readily assembled and disassembled to position a cartridge to be fired and to remove the shell after the firing of the cartridge, attractive in appearance, and comparatively inexpensive to manufacture.

With the foregoing and other objects in view the invention consists of the novel construction, combination and arrangement of parts as hereinafter more specifically described, and illustrated in the accompanying drawings, wherein is shown an embodiment of the invention, but it is to be understood that changes, variations and modifications can be resorted to which fall within the scope of the claims hereunto appended.

In the drawings wherein like reference characters denote corresponding parts throughout the several views:

Figure 1 is a side elevation of a firearm in accordance with this invention.

Figure 2 is a longitudinal sectional view thereof when loaded and further illustrating in dotted lines the hammer element in set position with respect to the trigger element for firing purposes.

Figure 3 is a section on line 3—3 Figure 2.
Figure 4 is a section on line 4—4 Figure 2.
Figure 5 is a section on line 5—5 Figure 2.
Figure 6 is a fragmentary view in elevation illustrating the inner end of the barrel.
Figure 7 is a fragmentary view, partly in section, of the body portion of the firearm and the enclosing casing for the body portion.

A firearm in accordance with this invention comprises a barrel 1 having its inner portion of a reduced outer diameter and said inner portion is indicated at 5 and formed with peripheral threads 3 and a notch 4 constituting means to permit of the extracting of the shell of a cartridge 5 after the latter has been fired. The threads 3 do not extend throughout the periphery of the portion 2 of the barrel, but terminate an appropriate distance from the free terminus of said portion 2 whereby the latter at its inner terminus is provided with what may be termed an annular flange 5' which is provided in its inner face with an annular shoulder 6 intersected by the notch 4. The flange 7 of the cartridge 5 is arranged within the flange 5' and is seated on the shoulder 6. The base of the notch 4 is arranged forwardly with respect to the shoulder 6 which enables the flange 7 of the cartridge 5 to be conveniently reached for the purpose of extracting a shell when desired. That part of the barrel 1, other than the reduced portion 2 thereof, is enclosed by a casing 8 of any suitable material of a desired color, and said casing 8 projects slightly beyond the outer end of the barrel 1. The thickness of the body of the casing 8 is materially less than the thickness of the body of the barrel 1. The bore of the barrel 1 is indicated at 9 and is of the desired diameter. The diameter of the barrel 1, that is the outer diameter thereof, can be as desired. The casing 8 snugly engages the outer periphery of the barrel 1 and is secured therewith in any suitable manner. The inner end of the casing 8 terminates at the outer end of the reduced portion 2 of the barrel 1.

Detachably connected with the reduced portion 2, of the barrel 1, as well as overlapping said reduced portion 2, is the body portion of the firearm and which is referred to generally at 10 and is of tubular form and of an outer diameter slightly greater than the outer diameter of the barrel 1. The body portion 10, at a point between the transverse median and the outer end thereof, is formed with an integral partition 11 of appropriate thickness provided with an opening 12 of appropriate diameter, disposed at an inclination with respect to the longitudinal median of the body portion 10 and having its inner
end arranged to one side of the axis of the partition 11 and its outer end positioned at the axis of said partition 11. The thickness of the partition 11 is greater than the thickness of the body portion 10. The partition 11 is formed with a diametrically disposed socket 13 and a diametrically extending opening 14, arranged in alignment with the socket 13 and having a threaded wall. The socket 13 opens into a slot 15 formed on the periphery of the body portion 10 and extending lengthwise of the latter. The width of the slot 15 is greater than the diameter of the socket 13. The outer end of the opening 14 is positioned at the periphery of the body portion 10 and its inner end communicates with the opening 12. The base of the socket 13 is spaced an appropriate distance from the opening 12. Slidably mounted in the opening 12 is a firing pin 16 of a length greater than the thickness of the partition 11, and said firing pin is grooved on one side, as indicated at 17, and extending in said groove is a stop member 18 which has threaded engagement with the wall of the opening 14. The stop member 18 slidesably connects the firing pin 16 to the partition 11 and limits the shifting movement thereof in either direction. That part of the inner face of the body portion 10, outwardly with respect to the partition 11, is provided with threads 19 which engage with the threaded reduced portion 20 of the barrel 1 whereby the body portion 10 is connected to the barrel 1. The body portion 10 at its inner end is formed with interior threads 20 for connecting therewith a peripherally threaded annulus 20 in the form of a disc and which constitutes a closure for the inner end of said body portion 10. The opening formed by the annulus 21 is indicated at 22.

That part of the body portion 10, between the partition 11 and the annulus 21 provides a hammer head chamber 23. Coacting with the firing pin 16, for the purpose of shifting it to strike the cartridge 5 for the purpose of exploding the latter, is a spring controlled hammer of the plunger type and which includes a hammer head 24, a stem 25 connected at one end to the head 24 and extending through the annulus 21, and a stop member 26 connected to the outer end of the stem 25 and of greater diameter than the outer diameter of the body portion 10. The stop member 26 constitutes a finger piece for the purpose of setting the spring controlled hammer with respect to the trigger to be presently referred to. The stop 26 has a knurled periphery and when the hammer is in non-firing position, said stop member abuts against the inner end edge of the body portion 10 and the outer face of the annulus 21. Surrounding the stem 25 and interposed between the annulus 21 and head 24 is a coiled controlling spring 27 for the hammer and said spring has one end fixed, as at 28 to the head 24 and its other end fixed, as at 29 to the annulus 21. When the hammer is withdrawn, to dotted position as shown in Figure 2, the spring 27 is compressed and when the hammer is released, the spring 27 acts as a means for shifting it in a direction whereby the head 24 will strike the firing pin 16 and shift the latter against the cartridge 5 for the purpose of exploding the latter. In normal position the spring 27 acts to maintain the stop member 26 in abutting engagement with respect to the body portion 10 and annulus 21. The head 24 is formed on its forward face with a socket 30 constituting a safety when the firearm is loaded, as the rear or inner end of the firing pin 16 will extend in the socket 18 and under such conditions if the head is accidentally shifted rearwardly and forwardly, it will not strike the rear end of the firing pin 16 as the latter will enter the socket 30.

The slot 15 extends from the forward face of the partition 11 to an appropriate distance rearwardly with respect to the rear face of the partition 11, and pivotally connected to the partition 11 and extending lengthwise of the slot 15, is a trigger 31 formed with a pair of inwardly extending apertured ears 32, at a point between its transverse median and its forward end and said ears 32 are mounted upon a pivot 33, which is anchored in the partition 11, see Figure 3. Arranged in the socket 18 and bearing against the trigger 31, forwardly of the ears 32, is a controlling spring 34 for the trigger and which acts to normally shift the rear end of the trigger 31 into the chamber 23. That part of the trigger 31 rearwardly of the ears 32 is of triangular contour to provide the rear end of the trigger of substantial length and width and said rear end is indicated at 35. The rear end of the trigger 31 constitutes means for holding the head 24 when the hammer is in retracted position and the retaining of the head 24, in such position, is had against the action of the controlling spring 27. When the rear end 35 of the trigger 31 is shifted clear of the chamber 23, the hammer head 24 is released and projected forwardly through the action of the controlling spring 27.

The body portion 10 is surrounded by an enclosing casing 36 therefor formed of any suitable material and which is secured to the body portion 10 in any suitable manner, and said casing 36 is flush with the rear end of the body portion, but projects a substantial distance from the forward end thereof and overlaps the casing 36, see Figure 2, when the barrel 1 is connected to the body portion 10. The casing 36 is formed with an opening 37 which communicates with the forward end of the slot 15 and extending through said opening is a pin 38, which is secured to the forward end of the trigger 31. Carried on the outer end of the pin 38 is a shifting arm 39, and the pur-
pose of said arm is to shift the trigger 31 on its pivot, against the action of the controlling spring 34, whereby the rear end 35 of the trigger will be shifted clear of the chamber 28 and provide for the release of the hammer head 24, if the hammer is in retracted position and with the rear end 35 of the trigger bearing against the forward face of the head 24.

The diameter of the stop member 26 is the same as the outer diameter of the casing 36 and is flush therewith and said casing 36 and stop member 26, can be provided with any suitable means to indicate for the positioning of the socket 30 in a manner to provide a safety, with respect to the firing pin 16 and head 24, when the firearm is loaded. A half turn of the hammer will position the socket 30 to the point shown in Figure 2 so as to receive the rear end of the firing pin 16. The socket 30 is eccentrically disposed in the forward face of the head 24. The casing 36 has secured thereto an ordinary clasp or clamp 40 employed in fountain pens for detachably connecting the pen to the garment of a person. When the barrel 1 and body portion 10 are connected together, the firearm simulates the appearance of a fountain pen. Although the firing pin 16 is shown as disposed at an inclination with respect to the longitudinal axis of the body portion 10, yet it is to be understood that it can be set up in any suitable position desired.

It is thought the many advantages of a firearm, in accordance with this invention, can be readily understood, and although the preferred embodiment of the invention is as illustrated and described, yet it is to be understood that changes in the details of construction can be had which fall within the scope of the invention as claimed.

What I claim is:

1. A firearm comprising a cylindrical barrel provided therein slightly in advance of its inner end a seat for a cartridge flange, said barrel further formed with a cartridge extractor notch extending from said seat to its inner end edge, a hollow cylindrical body portion provided in proximity to its forward end with a partition for closing the inner end of the barrel and further formed adjacent its forward end with a longitudinal slot, said body portion and barrel having interengaging means for detachably connecting them together forwardly of the partition, a shiftable firing pin carried by said partition, a spring controlled hammer slidably connected with said body portion rearwardly of said partition and including a head for shifting said pin, a spring controlled, hammer setting trigger disposed in the slot of said body portion, and having its rear end normally positioned in the path of said head, said trigger at a point between its transverse median and its forward end provided with apertured means extending into the partition, means for pivotally connecting the apertured means to the partition, and the controlling spring for the trigger bearing thereon forwardly of said apertured means.

2. A firearm comprising a cylindrical barrel provided therein slightly in advance of its inner end a seat for a cartridge flange, said barrel further formed with a cartridge extractor notch extending from said seat to its inner end edge, a hollow cylindrical body portion provided in proximity to its forward end with a partition for closing the inner end of the barrel and further formed adjacent its forward end with a longitudinal slot, said body portion and barrel having interengaging means for detachably connecting them together forwardly of the partition, a shiftable firing pin carried by said partition, a spring controlled hammer slidably connected with said body portion rearwardly of said partition and including a head for shifting said pin, a spring controlled, hammer setting trigger disposed in the slot of said body portion, and having its rear end normally positioned in the path of said head, said trigger at a point between its transverse median and its forward end provided with apertured means extending into the partition, means for pivotally connecting the apertured means to the partition, and the controlling spring for the trigger bearing thereon for-
wardly of said apertured means, said head provided in its forward face with a firing pin receiving socket to constitute a safety for the firing pin when the barrel is loaded.

4. A firearm comprising a cylindrical barrel provided therein slightly in advance of its inner end a seat for a cartridge flange, said barrel further formed with a cartridge extractor notch extending from said seat to its forward end with a longitudinal slot, said body portion and barrel having interengaging means for detachably connecting them together forwardly of the partition, a shiftable firing pin carried by said partition, a rotatable hammer controlled by a pivot forwardly of said apertured means, means secured in the partition and extending in the firing pin for limiting the shifting movement thereof in either direction, and said lever pivotally connected to said partition and with the pivot the lever positioned between the transverse median of the latter and its forward end.

5. A firearm comprising a cylindrical barrel provided therein slightly in advance of its inner end a seat for a cartridge flange, said barrel further formed with a cartridge extractor notch extending from said seat to its inner end edge, a hollow cylindrical body portion provided in proximity to its forward end with a partition for closing the inner end of the barrel and further formed adjacent its forward end with a longitudinal slot, said body portion and barrel having interengaging means for detachably connecting them together forwardly of the partition, a shiftable firing pin carried by said partition, a rotatable hammer controlled by a pivot forwardly of said apertured means, means secured in the partition and extending in the firing pin for limiting the shifting movement thereof in either direction, and said lever pivotally connected to said partition and with the pivot the lever positioned between the transverse median of the latter and its forward end.

6. A firearm comprising a cylindrical barrel provided therein slightly in advance of its inner end a seat for a cartridge flange, said barrel further formed with a cartridge extractor notch extending from said seat to its inner end edge, a hollow cylindrical body portion provided in proximity to its forward end with a partition for closing the inner end of the barrel and further formed adjacent its forward end with a longitudinal slot, said body portion and barrel having interengaging means for detachably connecting them together forwardly of the partition, a shiftable firing pin carried by said partition, a rotatable hammer controlled by a pivot forwardly of said apertured means, means secured in the partition and extending in the firing pin for limiting the shifting movement thereof in either direction, and said lever pivotally connected to said partition and with the pivot the lever positioned between the transverse median of the latter and its forward end.
said partition and including a head for shifting said pin, a spring controlled, hammer setting trigger disposed in the slot of said body portion and having its rear end normally positioned in the path of said head, said trigger at a point between its transverse median and its forward end provided with apertured means extending into the partition, means for pivotally connecting the apertured means to the partition, and the controlling spring for the trigger bearing thereon forwardly of said apertured means, said head provided with means to constitute a safety for the firing pin when the barrel is loaded, means secured in the partition and extending in the firing pin for limiting the shifting movement thereof in either direction, and said lever pivotally connected to said partition and with the pivot for the lever positioned between the transverse median of the latter and its forward end.

8. A firearm comprising a cylindrical barrel provided therein slightly in advance of its inner end a seat for a cartridge flange, said barrel further formed with a cartridge extractor notch extending from said seat to its inner end edge, a hollow cylindrical body portion provided in proximity to its forward end with a partition for closing the inner end of the barrel and further formed adjacent its forward end with a longitudinal slot, said body portion and barrel having interengaging means for detachably connecting them together forwardly of the partition, a shiftable firing pin carried by said partition, a spring controlled hammer slidably connected with said body portion rearwardly of said partition and including a head for shifting said pin, a spring controlled, hammer setting trigger disposed in the slot of said body portion and having its rear end normally positioned in the path of said head, said trigger at a point between its transverse median and its forward end provided with apertured means extending into the partition, means for pivotally connecting the apertured means to the partition, and the controlling spring for the trigger bearing thereon forwardly of said apertured means, said body portion of greater diameter than said barrel, a casing enclosing said barrel, and a casing enclosing said body portion and overlapping the casing for the barrel when the latter and body portion are connected together, and means connected to the forward end of the trigger and extending through the casing for the body portion and further arranged exteriorly of the latter to provide means for shifting the trigger to release the hammer to retracted position.

10. A firearm comprising a cylindrical barrel provided therein slightly in advance of its inner end a seat for a cartridge flange, said barrel further formed with a cartridge extractor notch extending from said seat to its inner end edge, a hollow cylindrical body portion provided in proximity to its forward end with a partition for closing the inner end of the barrel and further formed adjacent its forward end with a longitudinal slot, said body portion and barrel having interengaging means for detachably connecting them together forwardly of the partition, a shiftable firing pin carried by said partition, a spring controlled hammer slidably connected with said body portion rearwardly of said partition and including a head for shifting said pin, a spring controlled, hammer setting trigger disposed in the slot of said body portion and having its rear end normally positioned in the path of said head, said trigger at a point between its transverse median and its forward end provided with apertured means extending into the partition, means for pivotally connecting the apertured means to the partition, and the controlling spring for the trigger bearing thereon forwardly of said apertured means, said body portion of
greater diameter than said barrel, a casing enclosing said barrel, and a casing enclosing said body portion and overlapping the casing for the barrel when the latter and body portion are connected together, and said head provided with means to constitute a safety for the firing pin when the barrel is loaded, means secured in the partition and extending in the firing pin for limiting the shifting movement thereof in either direction, and said lever pivotally connected to said partition and with the pivot for the lever positioned between the transverse median of the latter and its forward end, and means connected to the forward end of the trigger and extending through the casing for the body portion and further arranged exteriorly of the latter to provide means for shifting the trigger to release the hammer to retracted position.

In testimony whereof, I affix my signature hereto.

FERNAND L. HUGUENIN.