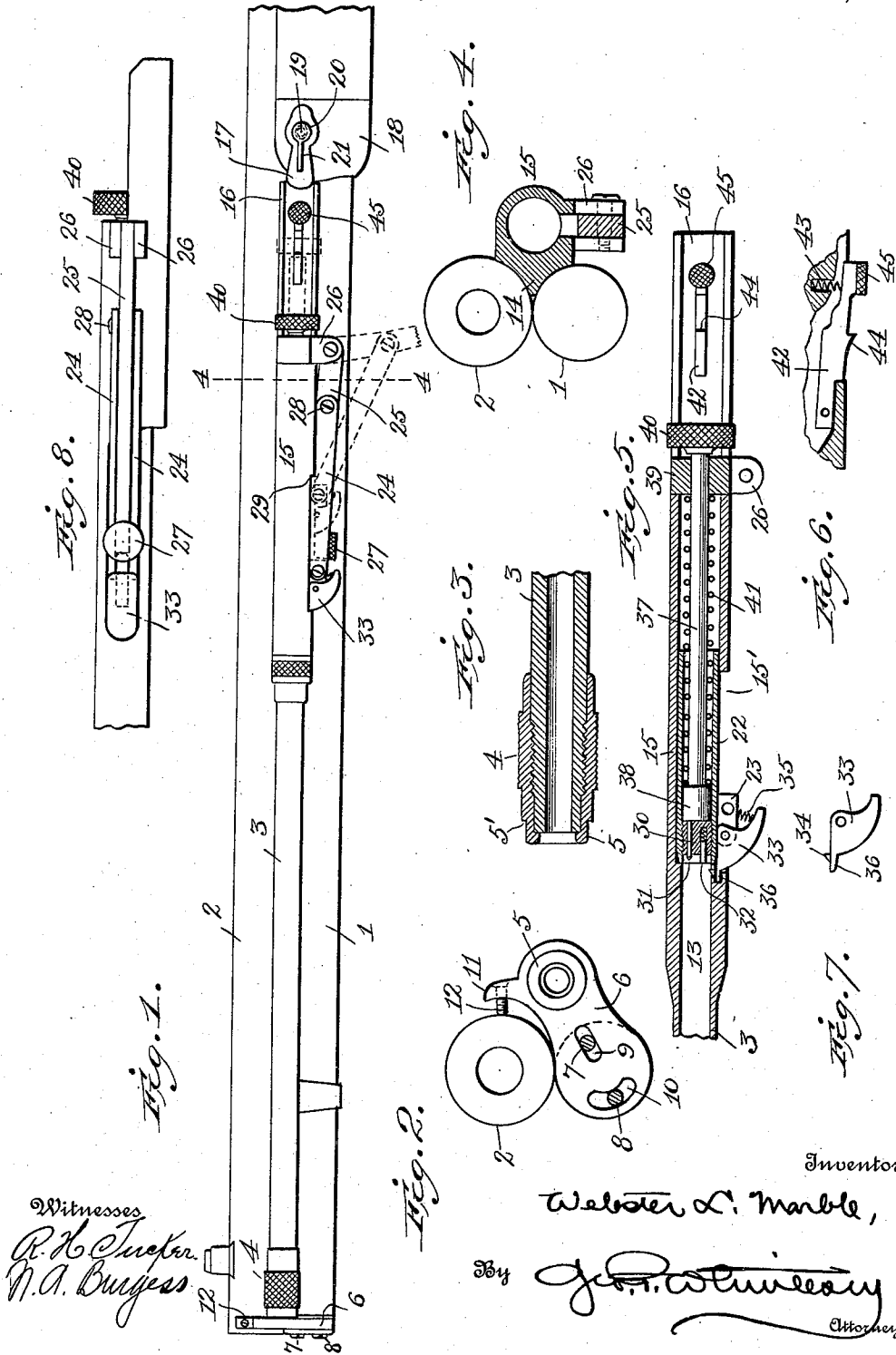


W. L. MARBLE.
 SUPPLEMENTAL BARREL FOR MAGAZINE FIREARMS.
 APPLICATION FILED APR. 13, 1910.

1,009,161.

Patented Nov. 21, 1911.



UNITED STATES PATENT OFFICE.

WEBSTER L. MARBLE, OF GLADSTONE, MICHIGAN.

SUPPLEMENTAL BARREL FOR MAGAZINE-FIREARMS.

1,009,161.

Specification of Letters Patent.

Patented Nov. 21, 1911.

Application filed April 13, 1910. Serial No. 555,216.

To all whom it may concern:

Be it known that I, WEBSTER L. MARBLE, a citizen of the United States, residing at Gladstone, in the county of Delta and State of Michigan, have invented new and useful Improvements in Supplemental Barrels for Magazine-Firearms, of which the following is a specification.

This invention relates to firearms, and its object is to provide an ordinary rifle or shot gun with an additional or supplemental barrel adapted to use ammunition of much smaller caliber than the regular barrel or barrels, so that the hunter can kill small game without consuming the large and more expensive cartridges necessary for said regular barrels. If one has a gun loaded for large game, one hesitates to use it on small animals, on account of the expense involved in firing a good deal of large ammunition and also because of the danger of tearing to pieces a small bird or animal if a large caliber ball is used. But by means of my small caliber supplemental barrel one can readily pick up small game at small expense.

My supplemental barrel is arranged parallel with the main barrel, and is attached thereto by simple fastening devices which permit it to be easily and quickly taken off when it is not wanted. It is light and inconspicuous, and in some cases it helps the balance of the piece. The catch or trigger for releasing the firing pin is located in such a position that it can be readily operated by the thumb of the left hand, without altering the grip of said hand on the forearm of the gun.

Other features of novelty and the advantages accruing therefrom will appear in the following description.

In the accompanying drawing, which represents the application of my invention to such a firearm as a Winchester rifle, Figure 1 is a side elevation of the front portion of the barrel of said rifle with my supplemental barrel secured thereto. Fig. 2 is an elevation of the muzzle end of both barrels. Fig. 3 is a sectional view of the muzzle end of the supplemental barrel and its securing sleeve. Fig. 4 shows a cross section of the supplemental barrel taken on the line 4-4, Fig. 1. Fig. 5 is a sectional view of the firing mechanism for the supplemental barrel. Fig. 6 is a detail sectional view of the trigger or

catch. Fig. 7 shows the extractor and Fig. 8 is a bottom plan view.

In the Winchester repeating rifle, the magazine 1 is located directly below the barrel 2, and runs the full length thereof. The supplemental barrel 3, which is of smaller caliber than the main barrel 2, is located alongside thereof, about in the plane of the lower side of said barrel. The muzzle end of the small barrel is provided with a longitudinally movable sleeve 4, being preferably externally screw-threaded, to receive internal screw-threads in said sleeve. This sleeve has a cylindrical front end 5 which enters a circular hole in a plate 6 fastened to the front end of the magazine 1. The magazine is usually provided at this point with a plug to receive the thrust of the spring coiled in said magazine. Into said plug I tap two screws 7, 8, which pass through slots 9, 10, in the plate 6; the latter of said slots being at right angles to the other and preferably slightly curved, as shown. This permits the plate to be angularly adjusted, turning on the screw 7 as a pivot, and thereby swinging its outer end toward or away from the barrel 2. The plate is provided with a beak 11 through which is tapped a small set screw 12, abutting against the side of the barrel 2, so that fine adjustments can be made after the barrel 3 has been brought nearly into its proper alignment. It is usually so set as to concentrate the fire of both barrels upon a bull's-eye placed some fifteen or twenty yards away.

The rear end of the small barrel is provided with a chamber 13 for the cartridge, and has a laterally projecting rib portion 14 which fits between the main barrel and the magazine, as shown in Fig. 4. This rib runs back along a casing 15 for the firing mechanism, to be described later; said casing terminating in a flat portion 16 whose end is held firmly in place by a small clamp 17, secured to the forearm 18 by a screw stud 19 and a nut 20 provided with a handle 21 for turning it. The small barrel is laid against the side of the gun, with its end under the loosened clamp, which is then tightened by turning the nut. The sleeve 4, which has been previously run back on the barrel, is then rotated to cause its cylindrical portion 5 to enter the hole in the plate 6, and is turned until a shoulder 5' abuts against the plate

and the parts are firmly fastened. The operation of removing the barrel is the reverse of this, and can be quickly performed. It is thus a matter of only a moment to attach or
 5 detach the supplemental barrel.

In the under side of the casing 15 is an opening 15' for the introduction of the cartridge, said opening being closed by the tubular breech block 22 when in the position
 10 shown in the drawings. This block is provided with a lug 23, to which is pivoted one end of the link or links 24, pivotally connected at their rear ends with the lever 25, which is fulcrumed to the forked lug 26 at
 15 the rear end of the casing 15. The lever shuts down between the links, and when it is lifted by means of its handle 27 and turned out to the position shown in dotted lines in Fig. 1, it pulls back the block 22
 20 and exposes the opening for the insertion of the cartridge. When shut, the joint 28 between the links and the lever passes the dead center, so as to lock the parts, after the fashion of a toggle. In order to relieve the
 25 pivots of some of the strain when the cartridge is fired, the links are provided with shoulders 29 which engage with the edge of the opening in the casing.

The front end of the tubular block 22 is closed by a plug 30 in which is a firing pin 31 and a spring actuated ejector 32. Pivoted to the lug 23 is a short lever or dog 33, carrying a horn 34 and urged upwardly by a spring 35, so that when the block 22 is
 30 pushed forward by the straightening of the toggle and the cartridge is thereby shoved into the chamber, this horn will snap over the rim of the cartridge and be ready to extract the shell when the lever is thrown down and the block drawn back. To prevent the
 40 dog from being accidentally disengaged, it is provided with a nose 36 which enters a recess in the casing when the parts are in the position shown in Figs. 1 and 5.

The hammer is a rod or bolt 37 having a head 38 at its front end sliding in the tubular block 22. This bolt runs back through the abutment 39 at the rear end of the casing 15; said abutment forming a
 50 convenient support for the lug 26. The rear end of the bolt has a knurled knob 40 by means of which it can be drawn back against the tension of a spring 41 coiled around the bolt and abutting at one end against the head 38 and at the other end against the abutment 39. A trigger is arranged to engage with said knob, being preferably located in the flat portion 16 of the casing. This trigger consists of a lever 42
 60 biased outwardly by a spring 43 and provided with a shoulder 44 to engage and retain the knob 40 when the hammer is retracted. The trigger has a small button 45 easily reached by the left thumb of the
 65 hunter when the gun is held for firing.

The mode of attaching and detaching the supplemental barrel has been described. To load, the knob 27 is grasped and the lever 25 is pulled down to the dotted line position in Fig. 1, which retracts the block 22 and un-
 70 covers the opening 15' into the casing immediately in the rear of the chamber 13. The cartridge is then inserted into said chamber through said opening, and the lever is then shut up, straightening the toggle and forcing the horn 34 on the dog 33 into engagement with the rim of the cartridge. When the joint 28 of the toggle passes the dead center, the parts are securely locked and this effect is assisted by the engagement of the
 75 shoulders 29 on the links 24 with the edge of the opening 15' in the casing. To cock the piece, the knob 40 is drawn back until it engages with the shoulder 44 of the trigger 42, thereby putting the spring 41 under strong tension. To fire, the hunter simply presses the button 45 with the thumb of his left hand, without changing the hold of said hand upon the forearm of the gun.

This device affords a simple means whereby a hunter can possess the advantage of a small caliber gun without being unduly encumbered. The supplemental barrel weighs but a few ounces, and can be easily carried in the pocket if one does not wish to keep
 90 it on the gun. It is easily and quickly attached and detached; it can be accurately adjusted to shoot in line with the main barrel, so that the usual sights can be used in firing it; it does not disfigure the gun, and saves a lot of expensive ammunition, while enabling the hunter to bag small game which he would otherwise let go.

Having thus described my invention, what I claim is:—

1. The combination with a repeating fire-arm having a magazine extending along its barrel, of a plate adjustably secured to the front end of said magazine and provided with a hole, and a supplemental barrel of smaller caliber having its muzzle end detachably secured in said hole.

2. The combination with a repeating fire-arm, of a magazine extending along its barrel and having a plug at its front end, a plate provided with slots, screws passing through said slots into the plug at the front end of said magazine, and a supplemental barrel of smaller caliber detachably secured to said plate.

3. The combination with a repeating fire-arm, of a magazine extending along its barrel and provided with a plug at its front end, a plate movably secured to said plug and provided with a hole, an adjusting device for giving said plate a fine adjustment, and a supplemental barrel having its muzzle end detachably secured in said hole.

4. The combination with a repeating fire-arm, of a magazine extending along the

barrel and provided with a plug at its front end, a plate movably secured to said plug and provided with a hole, a beak on said plate, a set screw tapped through said beak and bearing against the barrel, and a supplemental barrel of smaller caliber having its muzzle end detachably secured in said hole.

5. The combination with a repeating fire-arm, of a magazine extending along its barrel and provided with a plug at its front end, a plate adjustably secured to said plug and provided with a hole, a supplemental barrel of smaller caliber, and a longitudinally movable sleeve on the muzzle end of said supplemental barrel adapted to enter said hole.

6. The combination with a repeating fire-arm, of a magazine extending along its barrel, a plate adjustably secured to the front end of said magazine and provided with a hole, a supplemental barrel of smaller caliber having screw threads near its muzzle end, and a sleeve internally screw-threaded to engage with said barrel and adapted to enter said hole.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WEBSTER L. MARBLE.

Witnesses:

W. L. MARBLE, Jr.,
E. L. BAKER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."