

(No Model.)

J. E. PERL.
AUXILIARY GUN BARREL.

No. 555,582.

Patented Mar. 3, 1896.

Fig. 1.

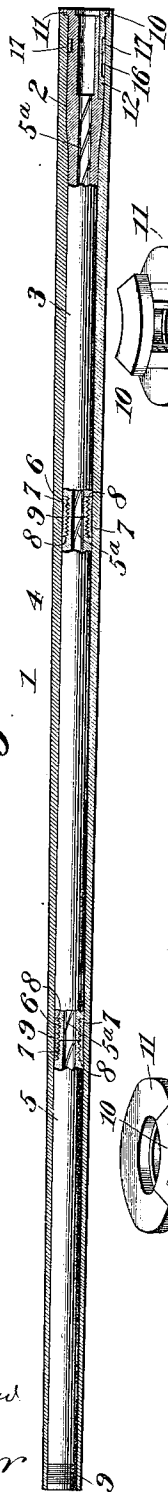


Fig. 4.

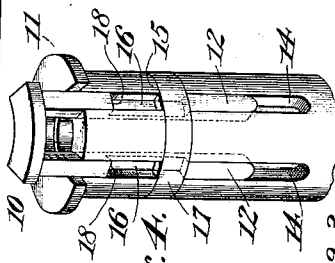


Fig. 2.

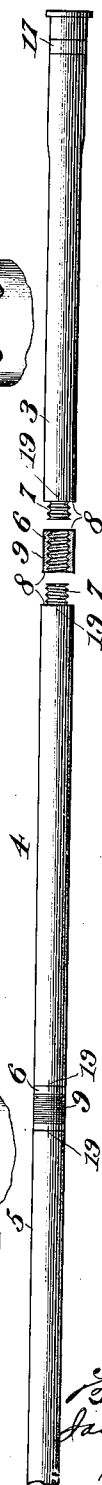
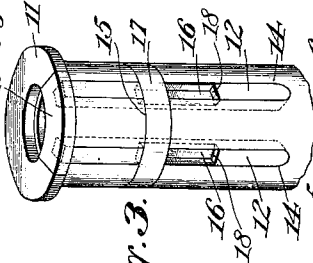


Fig. 3.



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UNITED STATES PATENT OFFICE.

JOHN EVARISTE PERL, OF OSAGE MISSION, KANSAS.

AUXILIARY GUN-BARREL.

SPECIFICATION forming part of Letters Patent No. 555,582, dated March 3, 1896.

Application filed October 15, 1894, Serial No. 525,948. (No model.)

To all whom it may concern:

Be it known that I, JOHN EVARISTE PERL, of Osage Mission, county of Neosho, State of Kansas, have invented certain new and useful Improvements in Firearms, of which the following is a specification, reference being had to the accompanying drawings.

The object of my invention is to produce improvements in firearms whereby a jointed rifle-barrel is readily separable into its component parts and may be used in conjunction with a shotgun-barrel, special provision being made for facilitating the fitting, adjustment, and operation of the parts.

In the accompanying drawings, Figure 1 is a longitudinal central vertical section of my shotgun-barrel with rifle-barrel in place, the rifle-barrel being shown partly in section. Fig. 2 is a view of the parts of the rifle-barrel detached. Fig. 3 is a bottom plan view of my rifle-barrel breech with the shell-extractor closed. Fig. 4 is a similar view showing the shell-ejector open.

Referring to the figures on the drawings, 1 indicates a shotgun-barrel which may be made of the usual shape, size, and dimensions. It is provided, as usual, with a chamber 2 at the breech, and may be otherwise of the usual and the ordinary construction. For converting the barrel into a rifle I employ a rifle-barrel of exterior diameter nearly equal to the inner bore of the shotgun-barrel 1. The peculiar features of this rifle-barrel are that it is composed of a plurality of joints or sections 3, 4, and 5, the number in the drawings being three, but I do not limit myself to any particular number, my object being to divide the barrel into sections small enough to be conveniently carried in a pocket. There are two essential conditions necessary to the construction of a barrel of this sort—namely, that the rifle-groove (shown at 5^a in the drawings) shall be in absolute and perfect alignment when the sections of the barrel are united, and that the longitudinal axis of the barrel shall be at such times in a perfectly-straight line. To provide, therefore, for the proper uniting of the sections of the barrel I employ an interior screw-threaded thimble 6 and an exterior screw-threaded nipple 7 on the end of each section. In addition thereto

I employ limiting devices—for example, as shoulders 8—at the base of the thimble and nipple, respectively, which are so accurately constructed as to keep the rifle-grooves of the barrel in perfect alignment when the nipple is screwed into the thimble. Guide-lines 19 (see Fig. 2) are employed to indicate the proper union of the parts. In addition, however, to the limiting mechanism or shoulders for compelling the perfect alignment of the rifle-groove it is necessary, as above suggested, to employ special means for keeping the longitudinal axis of the barrel in a perfectly-straight line, inasmuch as it is impracticable to fit the exterior of the rifle-barrel with sufficient nicety into the interior of the shotgun-barrel to preserve this feature in perfection. I provide, therefore, preferably on each thimble and on the last section, near its end, a packing-ring 9. These packing-rings may be made of silk thread or any suitable material wrapped around a shallow groove or roughened place in the thimble or the barrel to hold it in position, and being located at the places where the barrel is likely to be deflected affords a support for it and holds it in the required position.

In Figs. 3 and 4 a preferable form of shell-ejector is shown. It consists of a segmental flange 10, that is complementary to the end flange 11 of the barrel, which is adapted to fit into the chamber of the shotgun-barrel precisely after the manner of a shot-cartridge. The segmental flange is designed to be operated by engagement with the ordinary and well-known shell-removing mechanism, which forms a part of all breech-loading shotguns, and which does not, therefore, require to be illustrated or described. The segmental flange is carried upon a plurality of guide-legs 12, which project at right angles thereto and move within longitudinal grooves 14 in the end of the breech of the rifle-barrel. For limiting the movement of the shell-ejector I prefer to employ a peripheral groove 15 in the rifle-barrel near its breech and recesses 16 in the guide-legs. Within the peripheral groove I provide a band 17, which is desirable, since it may also perform the office of a packing-ring and take the place, where it is used, of one of the rings 9. The band serves to hold the guide-

legs within the grooves and engages the shoulders 18 of the recesses to prevent separation of the shell-ejector from the barrel.

What I claim is—

5 1. The combination with a smooth-bored barrel, of a sectional rifle-barrel, separate detachable thimbles uniting the sections of the rifle-barrel and flush therewith, and a packing-ring intermediate of the sections of the
10 rifle and around the thimble whereby said thimbles constitute means for uniting the sections, and detachable packing-joints, substantially as specified.

15 2. The combination with a smooth-bored barrel, of a sectional rifle-barrel provided with reduced nipples, a separate independent thimble engaging the nipples and flush with the exterior of the rifle-barrel sections, an annular recess around the thimble, and a thread
20 wrapped around the thimble within the recess to form a packing-ring intermediate of the rifle-barrel sections, substantially as specified.

25 3. The combination with a smooth-bored barrel, of a sectional rifle-barrel having its sections united by detachable thimbles flush with the barrel-sections and provided with packing-rings, and said rifle-barrel being pro-

vided with a flange breech and groove therein, a segmental flange, a plurality of guide- 20 legs movable within the grooves, a peripheral groove in the barrel, and recesses in the legs, and a band immovably secured within the peripheral groove and situated within the recesses in the legs to constitute retaining and
35 limiting mechanism for said legs, and a packing-ring for the rifle-barrel, substantially as specified.

4. The combination with a rifle-barrel adapted to be inserted into the shotgun-barrel, of a flanged breech and grooves therein, a segmental flange, a plurality of guide-legs 40 movable within the grooves, a peripheral groove in the barrel, and recesses in the legs, and a band movably secured within the peripheral groove and situated within the recesses in the legs to constitute retaining and
45 limiting mechanism for the legs, and a packing-ring for the rifle-barrel, substantially as specified.

50 In testimony of all which I have hereunto subscribed my name.

JOHN EVARISTE PERL.

Witnesses:

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