

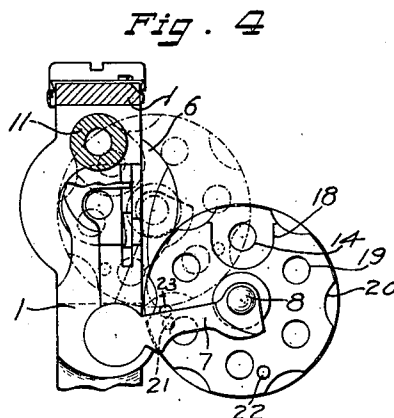
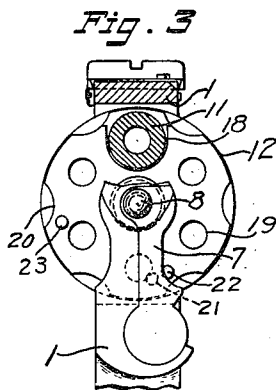
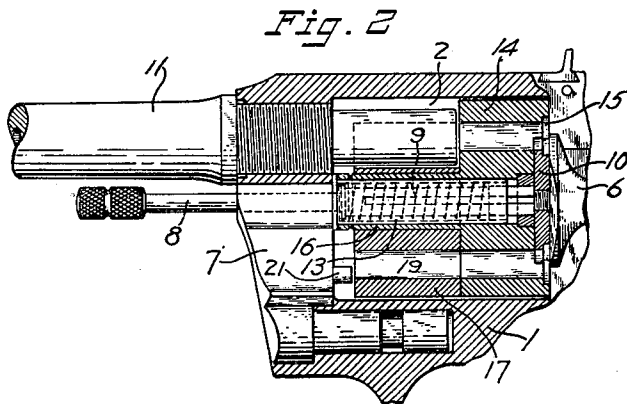
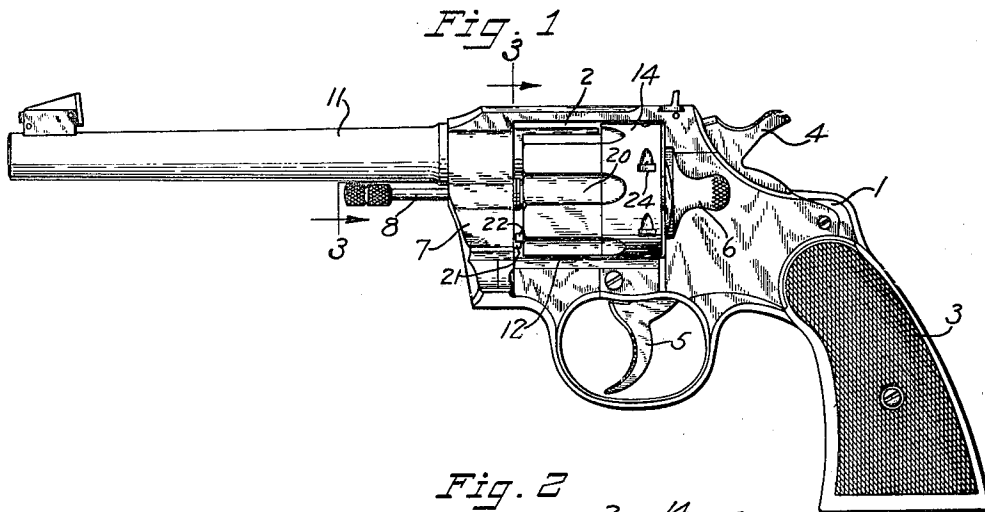
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E. H. KELLY

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REVOLVER

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Inventor
Edward H. Kelly
By S. Jay Teller
Attorney

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REVOLVER

Edward H. Kelly, Hartford, Conn., assignor to
Colt's Patent Fire Arms Manufacturing Com-
pany, Hartford, Conn., a corporation of Con-
necticut

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6 Claims. (Cl. 42-62)

The primary object of the invention is to provide a revolver construction such that a frame primarily adapted for shooting large caliber ammunition can be used in constructing a revolver adapted to shoot small caliber ammunition, and more particularly a construction in which a cylinder is provided having a chambered portion of a length substantially equal to that of the small caliber ammunition and from which the bullet passes directly into the barrel.

Another object of the invention is to provide a revolver construction of the above character in which the cylinder also includes an additional portion such that the small caliber revolver as an entirety simulates a large caliber revolver in general appearance and balance.

Further objects and advantages of the invention will be apparent to those skilled in the art.

In the accompanying drawing I have shown one embodiment of the invention, but it will be understood that the drawing is intended for illustrative purposes only and is not to be construed as defining or limiting the scope of the invention; the claims forming a part of this specification being relied upon for that purpose.

In the drawing:

Fig. 1 is a side elevational view of a revolver embodying the invention.

Fig. 2 is an enlarged vertical sectional view of a portion of the revolver shown in Fig. 1, the section being taken along the longitudinal axis of the barrel.

Figs. 3 and 4 are enlarged sectional views taken on the line 3-3 of Fig. 1, the two views showing the parts in different relative positions.

Revolvers of relatively large caliber, such as .38, are commonly used by policemen and armed guards when on duty, the large caliber being necessary for effectiveness. It is necessary that these men do considerable practice shooting in order to become good marksmen and that they also continue to practice to maintain their proficiency. Large caliber ammunition is expensive as compared with that of small caliber, such as .22, and it is therefore advantageous if the necessary practicing can be done with the latter ammunition. However, small caliber revolvers ordinarily have smaller and lighter frames having different grip and handling characteristics. This invention relates to the construction of a small caliber revolver built about a frame primarily adapted for use in a revolver of large caliber.

The basic principles of the invention may be incorporated in most any design of revolver, but for the purpose of this specification the inven-

tion is illustrated in connection with a revolver of the type known as the Colt "Official Police," caliber .38, which embodies the inventions shown in U. S. Patents Nos. 303,172 and 793,692. The revolver shown comprises a Colt "Official Police" frame 1 primarily adapted for shooting .38 caliber ammunition, the frame having a cylinder receiving recess 2 therein of a size to receive a cylinder chambered for .38 caliber ammunition. The frame includes a grip portion 3 and is provided with a hammer 4, trigger 5, cylinder latch 6, pivoted crane 7, ejector rod 8, ejector spring 9 and ejector 10, all of known construction and consequently not described or shown in detail. A small caliber barrel 11 is secured in the frame and projects rearward a substantial distance into the cylinder receiving recess 2.

A cylinder 12 having a length and diameter substantially equal to that of a large caliber cylinder is mounted in the cylinder receiving recess 2. When the principles of the invention are incorporated in a revolver of the type shown the cylinder is carried on a sleeve-like bearing portion 13 of the crane so as to be movable out of the recess 2 for loading and ejection of the empty cartridge cases. The cylinder includes a rearward portion 14 chambered as at 15 for small caliber ammunition and having an axial length substantially equal to that of the small caliber ammunition for which it is chambered. It will be noted that the rearward portion of the barrel extends to a point closely adjacent the front face of the portion 14 so that the bullets pass directly from the chambers 15 into the barrel. The rearward portion 14 is preferably provided with a forwardly extending sleeve portion 16 to provide a greater bearing surface between the cylinder and crane.

The cylinder 12 also includes a forward portion 17 which is preferably made as a single member as shown. The portion 17 is carried by the bearing sleeve 16 on the rearward portion 14 of the cylinder and about which it is rotatable. A recess 18, which in the illustrated construction is in the form of a groove, is provided in the portion 17 for closely receiving the rearward extending portion of the barrel. Holes 19 which are alignable with the chambers 15 are preferably formed in portion 17. The holes 19 are preferably of such size that is, the amount of metal removed in forming them is such, that the total weight of the cylinder 12 when loaded with small caliber cartridges is equal to the total weight of a large caliber cylinder when loaded with large caliber cartridges so that the balance of the

small caliber gun when loaded will be about the same as that of the large caliber gun when loaded. For reasons which will be apparent hereinafter, means, such as pins 21, 22, and 23, are preferably provided for limiting the rotation of the forward portion 17 of the cylinder. Limiting pin 23 is so located that when it is held against pin 21 the crane and cylinder portion 17 are properly related for the groove 18 to receive the barrel as the cylinder is moved into recess 2, while pin 22 serves to prevent undue rotation of portion 17 with respect to the crane.

The cylinder portions 14 and 17 may be provided with flutes 20 such as are usually found in large caliber cylinders. The rearward cylinder portion 14 is also provided with indexing recesses 24 for cooperating with indexing means of usual construction to properly align the chambers 15 with the bore of barrel 11.

It is apparent from Fig. 1 that, by following the principles of the invention, a revolver of small caliber can be built upon a large caliber frame so that the bullets pass directly into the barrel and so that it closely simulates a revolver of large caliber in appearance, balance and grip. The manner of loading and ejecting will now be described, particular reference being had to Figs. 3 and 4. Upon release of the latch 6 the crane can be swung in a clockwise direction (as viewed in Fig. 3), the cylinder portions 14 and 17 being carried along therewith and the portion 17 also rotating on sleeve 16 in a counter-clockwise direction to free the rearward projecting portion of the barrel from groove 18 as indicated in dotted lines in Fig. 4. Further clockwise movement of the crane carries the cylinder completely out of the frame recess 2 to a position where the empty cartridge cases can be ejected from the chambers 15 and the chambers can be reloaded. Counter-clockwise movement of the crane, while holding pin 23 against pin 21 again places the parts in approximately the dotted line position of Fig. 4 with groove 18 properly positioned to receive the rearward projecting portion of the barrel. Further counter-clockwise rotation of the crane moves the cylinder into proper position in the frame recess, the forward cylinder portion 17 being rotated in a clockwise direction to closely receive the barrel. As the cylinder portions 14 and 17 and the crane sleeve 13 are all relatively rotatable, the portion 14 can be rotated and indexed to successively bring the chambers 15 into alignment with the bore of the barrel.

Various changes and modifications within the scope of the appended claims will be apparent to those skilled in the art.

I claim:

1. In a revolver adapted to shoot small caliber ammunition, the combination of a frame primarily adapted for shooting large caliber ammunition and having a cylinder receiving recess therein of a size to receive a cylinder for large caliber ammunition, a small caliber barrel carried by said frame having its rearward end projecting a substantial distance into said recess, and a cylinder having a length and diameter substantially equal to that of a large caliber cylinder mounted in said recess so as to be immovable longitudinally thereof; said cylinder having two separate and relatively rotatable portions respectively comprising a rearward portion chambered for small caliber ammunition and having an axial length substantially equal to that of the small caliber ammunition, and a forward portion having a recess therein receiving said pro-

jecting rearward end of the barrel whereby said revolver simulates a large caliber revolver in general appearance.

2. In a revolver adapted to shoot small caliber ammunition, the combination of a frame primarily adapted for shooting large caliber ammunition and having a cylinder receiving recess therein of a size to receive a cylinder for large caliber ammunition, a small caliber barrel carried by said frame having its rearward end projecting a substantial distance into said recess, and a cylinder having a length and diameter substantially equal to that of a large caliber cylinder mounted in said recess and the cylinder also being of such weight when loaded with small caliber ammunition that it approximates the weight of a large caliber loaded cylinder; said cylinder comprising at least two separate and relatively rotatable parts including a rearward part chambered for small caliber ammunition and having an axial length substantially equal to that of the small caliber ammunition, and a forward part having a recess therein receiving said projecting rearward end of the barrel whereby said revolver simulates a large caliber revolver in general appearance.

3. In a revolver adapted to shoot small caliber ammunition, the combination of a frame primarily adapted for shooting large caliber ammunition and having a cylinder receiving recess therein of a size to receive a cylinder for large caliber ammunition, a small caliber barrel carried by said frame having its rearward end projecting a substantial distance into said recess, and a cylinder having a length and diameter substantially equal to that of a large caliber cylinder mounted in said recess so as to be immovable longitudinally thereof, said cylinder having two separate and relatively rotatable portions respectively comprising a rearward portion chambered for small caliber ammunition and having an axial length substantially equal to that of the small caliber ammunition, and a forward portion having a groove therein closely receiving at least the bottom and sides of said projecting rearward end of the barrel whereby said revolver simulates a large caliber revolver in general appearance.

4. In a revolver adapted to shoot small caliber ammunition, the combination of a frame primarily adapted for shooting large caliber ammunition and including a crane, said frame having a cylinder receiving recess therein of a size to receive a cylinder for large caliber ammunition, a small caliber barrel carried by said frame having its rearward end projecting a substantial distance into said recess, and a cylinder having a length and diameter substantially equal to that of a large caliber cylinder rotatably mounted on said crane so as to be immovable longitudinally of said frame and being movable therewith into and out of said recess; said cylinder having two separate and relatively rotatable portions respectively comprising a rearward portion chambered for small caliber ammunition and having an axial length substantially equal to that of the small caliber ammunition, and a forward portion having a groove receiving said projecting rearward end of the barrel and having means thereon engageable with the frame to position the said forward portion relatively to the frame when not received in said recess whereby upon movement of the cylinder into the recess the groove in said forward portion is properly positioned to receive the projecting rearward end of the barrel.

5. A small caliber revolver cylinder of substan-

tially the same diameter and over-all length as a large caliber revolver cylinder and adapted to be substituted for such large caliber revolver cylinder in a revolver frame primarily adapted for use with the latter, said small caliber revolver cylinder comprising a forward part and a separately rotatable rearward part, the said rearward part having a plurality of small caliber chambers therein and also having a length substantially equal to that of small caliber ammunition to be used in said cylinder, and the said forward part having therein a recess of greater width transversely to the axis of the cylinder than the diameter of the small caliber chambers of the rearward part for receiving a rearward extending portion of the revolver barrel.

6. A small caliber revolver cylinder of substantially the same diameter and over-all length as a

large caliber revolver cylinder and adapted to be substituted for such large caliber revolver cylinder in a revolver frame primarily adapted for use with the latter, said small caliber revolver cylinder comprising a forward part and a separately rotatable rearward part, one of which has a longitudinally projecting sleeve fitting a bearing aperture in the other, the said rearward part having a plurality of small caliber chambers therein and also having a length substantially equal to that of small caliber ammunition to be used in said cylinder, and the said forward part having therein a recess of greater width transversely to the axis of the cylinder than the diameter of the small caliber chambers of the rearward part for receiving a rearward extending portion of the revolver barrel.

EDWARD H. KELLY.