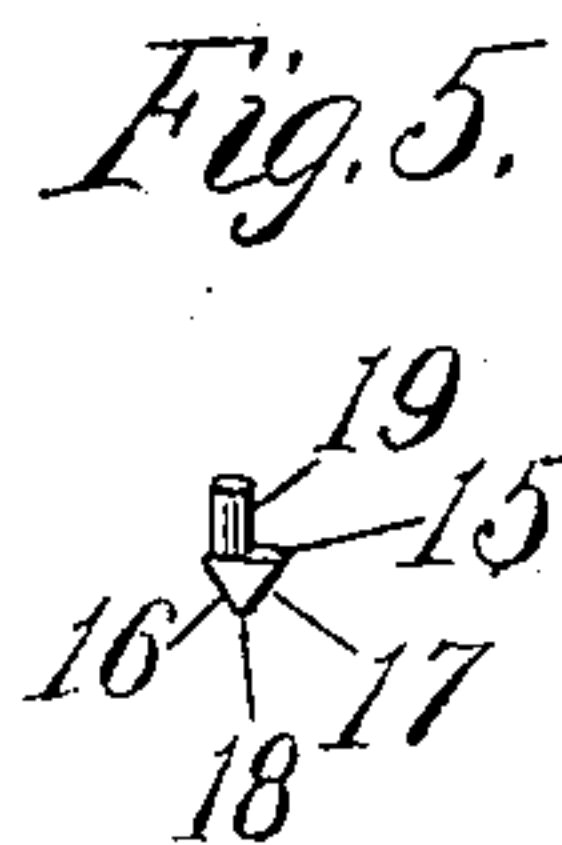
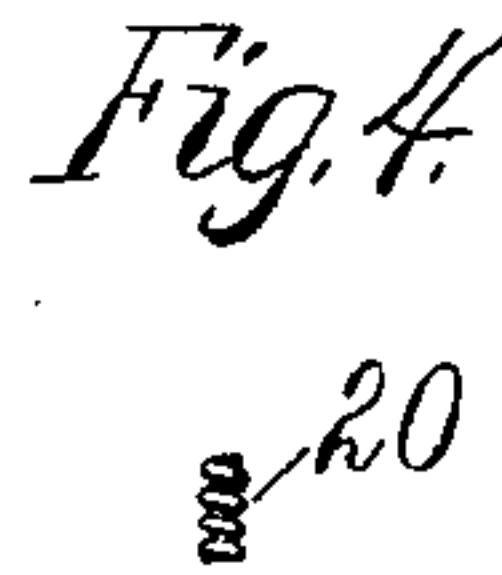
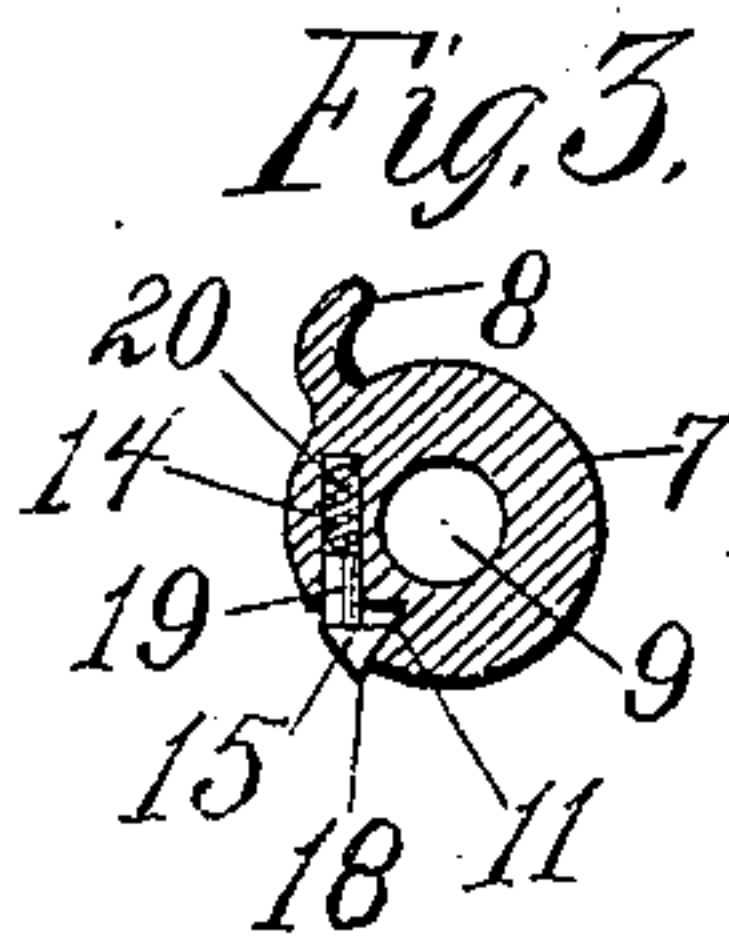
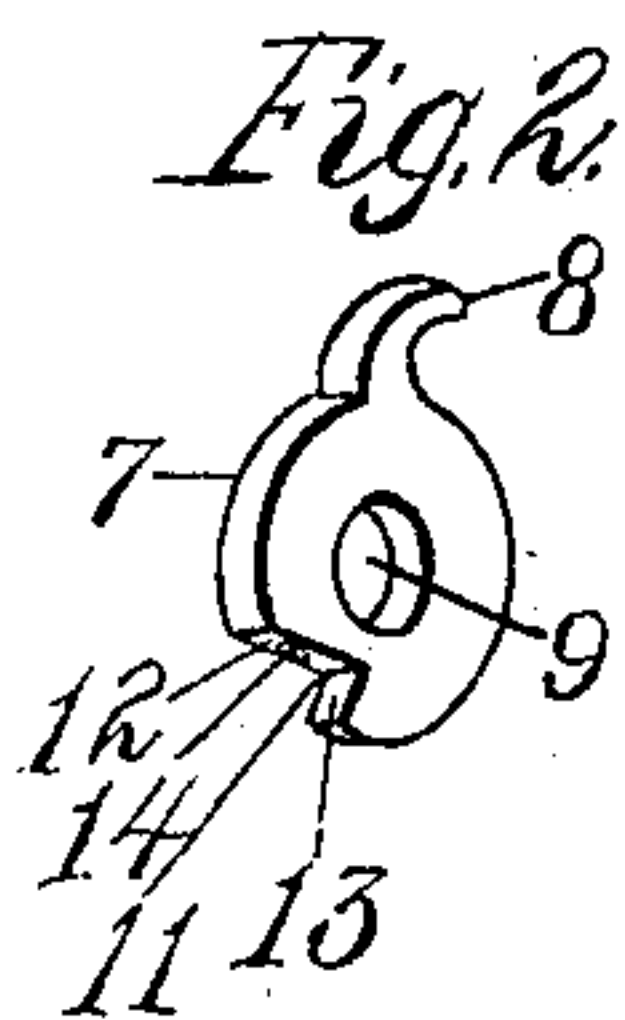
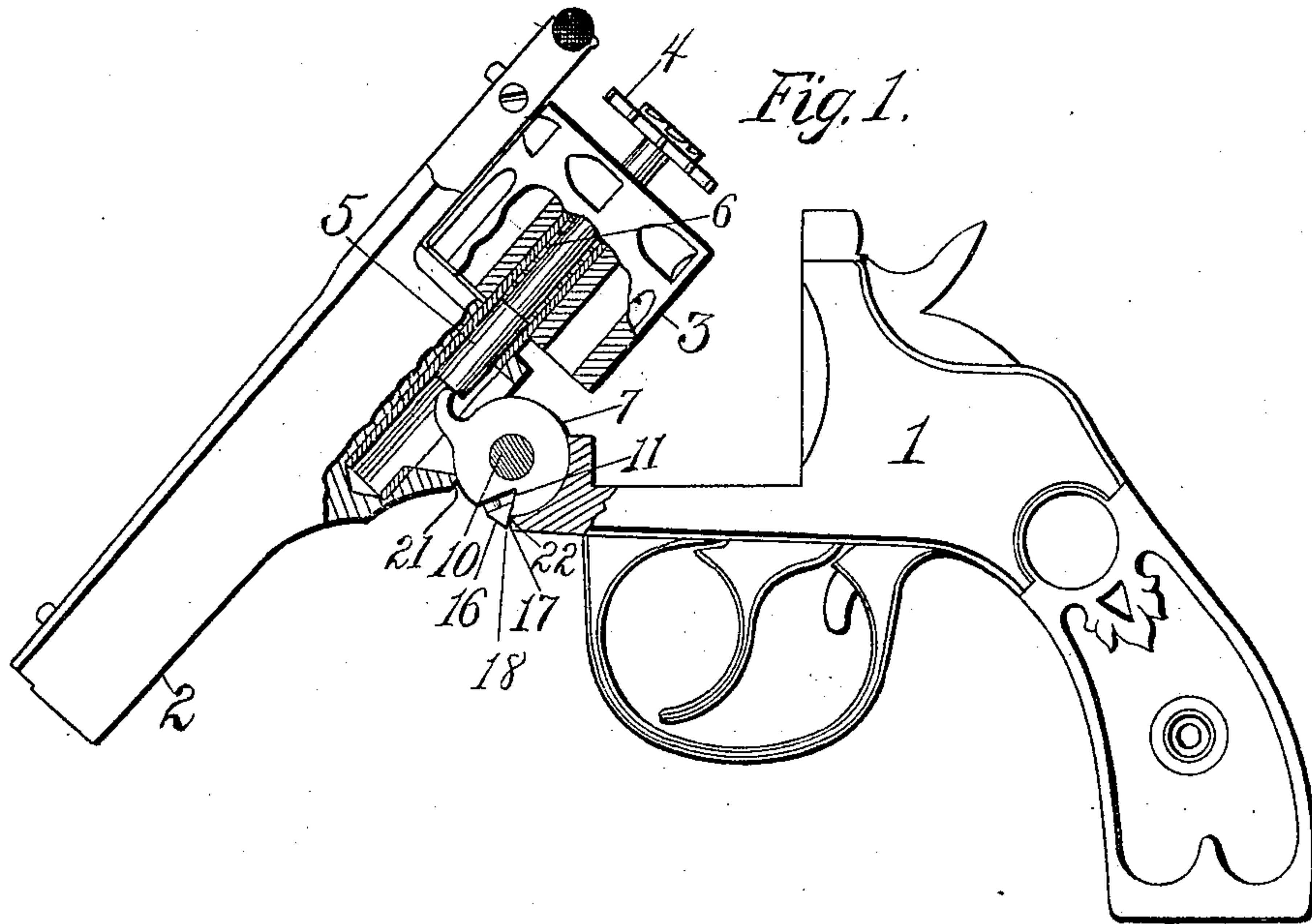


No. 816,125.

PATENTED MAR. 27, 1906.

J. D. ROBERTSON.
EJECTOR MECHANISM FOR REVOLVERS.

APPLICATION FILED SEPT. 21, 1905.



Witnesses:
F. H. Elliott
L. G. Ridley

Inventor:
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UNITED STATES PATENT OFFICE.

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EJECTOR MECHANISM FOR REVOLVERS.

No. 816,125.

Specification of Letters Patent.

Patented March 27, 1906.

Application filed September 21, 1905. Serial No. 279,415.

To all whom it may concern:

Be it known that I, JAMES D. ROBERTSON, of the city of Norwich, county of New London, and State of Connecticut, have invented certain new and useful Improvements in Ejector Mechanism for Revolvers, which improvements are described in the following specification and are illustrated by the accompanying drawings.

My invention relates to the ejector mechanism of so-called "hinge-revolvers," and in particular to that part of such mechanism which is known as the "disk" or "cam" and is provided with a horn or finger engaging the extractor-stem and with a disappearing shoulder engaging the revolver-frame.

It is the object of the invention to impart both a positive motion and a superior form and mounting to such disappearing shoulder, and thereby to render such extractor mechanism simple in structure and easy of operation. To accomplish this object, I use a closely-pivoted cam, which is provided with the usual projecting horn and has a peripheral V-notch, in combination with a wedge-shaped shoulder-piece, which is provided with a spring-seated stem and works toward and from said horn transversely in said notch.

Figure 1 of said drawings is a side elevation of a revolver containing ejector mechanism which is constructed and arranged in accordance with the principles of my invention. This view shows the barrel unlocked from the breech and in process of being broken down and parts of the barrel, frame, and cylinder removed to expose the interior construction and the arrangement of the several operative parts. Fig. 2 is a perspective view of the ejector-cam alone. Fig. 3 is a central section of said cam in a plane parallel to its sides, including the shoulder-piece and the spring-seated shoulder-stem. Figs. 4 and 5 are details.

In the drawings, which as filed are of a full working size, the numerals 1, 2, and 3 denote, respectively, the frame, the barrel, and the rotary cartridge-cylinder, while the numerals 4, 5, and 6 denote, respectively, the extractor-spider, the stem of that spider, and the stem-actuating spring, all of which are of a structure and operation which are common in revolvers of the class above specified. The extractor-cam is indicated by the numeral 7.

This is a plate of uniform thickness and general circular form and is provided in the usual manner with a horn 8 for engagement with said extractor-stem 5. By means of a central perforation 9, which is occupied by the hinge-pin 10, this cam is pivoted so as to rock in a fixed position relative to the axis of the hinge by which the barrel and the frame of the revolver are joined together. Said cam is also provided with a marginal V-notch 11, which extends through the entire thickness of the cam and has two plane sides or converging faces 12 and 13 of unequal length and of unequal inclination to the contiguous circumference of the cam, as shown in Figs. 1, 2, and 3. Through said face 12 and at right angles thereto a cylindrical socket 14 is drilled into the body of the cam midway of its thickness to a point near the base of said horn 8.

The triangular shoulder-piece or wedge 15, which is preliminarily mentioned above, has two converging faces 16 and 17, which are approximately equal in length and form by their conjunction the wedge-point 18. This wedge is mounted in a one-sided or unbalanced position on a round stem 19, which works in said socket 14 and is seated therein upon a spiral spring 20. On account of this eccentricity it is necessary in assembling to hold the wedge in a turned position while inserting the stem into socket 14 and then while pressing the wedge down on notch-face 12 to turn the same on the stem-axis through an angle of ninety degrees, more or less, to the angular position shown. In that position the wedge is normally pushed forward by the action of spring 20 until stopped by contact with notch-face 13. In that advanced position this wedge-shaped shoulder-piece is exposed to engagement with the base 21 of the barrel 2 and with the holding-shoulder 22 of the revolver-frame.

Such being the construction of my invention, its general mode of operation is obvious from that construction and from the familiar mode of operation of other extractor mechanism of the same general type. It must be noticed, however, that face 13 of the V-notch 11 serves as a stop to prevent the shoulder-piece 15 from coming out of that notch too far, that said shoulder-piece when coöperatively pinched between frame-shoulder 22

and barrel-base 21 is forced toward its seat upon face 12 of said notch by squeezing, and at the same time is additionally impelled to the same destination by the push of said
5 shoulder 22, which impulse is always in a direction approximately parallel to the longitudinal axis of stem 19. As this additional impulsion varies with the degree of the parallelism referred to and as that parallelism can
10 be increased by structurally varying the inclination of the stem-socket 14, it is obvious that the retiring movement of the disappearing shoulder 15 may upon the same principle be further facilitated to any desired or nec-
15 essary extent.

Such being the construction and operation of my improved ejector mechanism for revolvers, I claim as my invention—

1. In a revolver, an ejector-stem, a frame-
20 shoulder, and a cam which is provided with a

peripheral V-notch, and with a horn to engage said stem, in combination with a wedge-shaped shoulder-piece, which is provided with a spring-seated stem, and is movable in said peripheral notch, and toward said horn. 25

2. In the ejector mechanism of a hinged firearm, a rocking cam, which has a stem-engaging horn and a peripheral V-notch, in combination with a wedge-shaped shoulder-piece, which is eccentrically mounted in said
30 notch upon a spring-seated stem, and thereby is normally impelled against one of the faces of said notch.

In testimony whereof I hereunto set my name in the presence of two witnesses.

JAMES D. ROBERTSON.

Witnesses:

WILLARD EDDY,
CHARLES A. LAFFORD.