

No. 675,412.

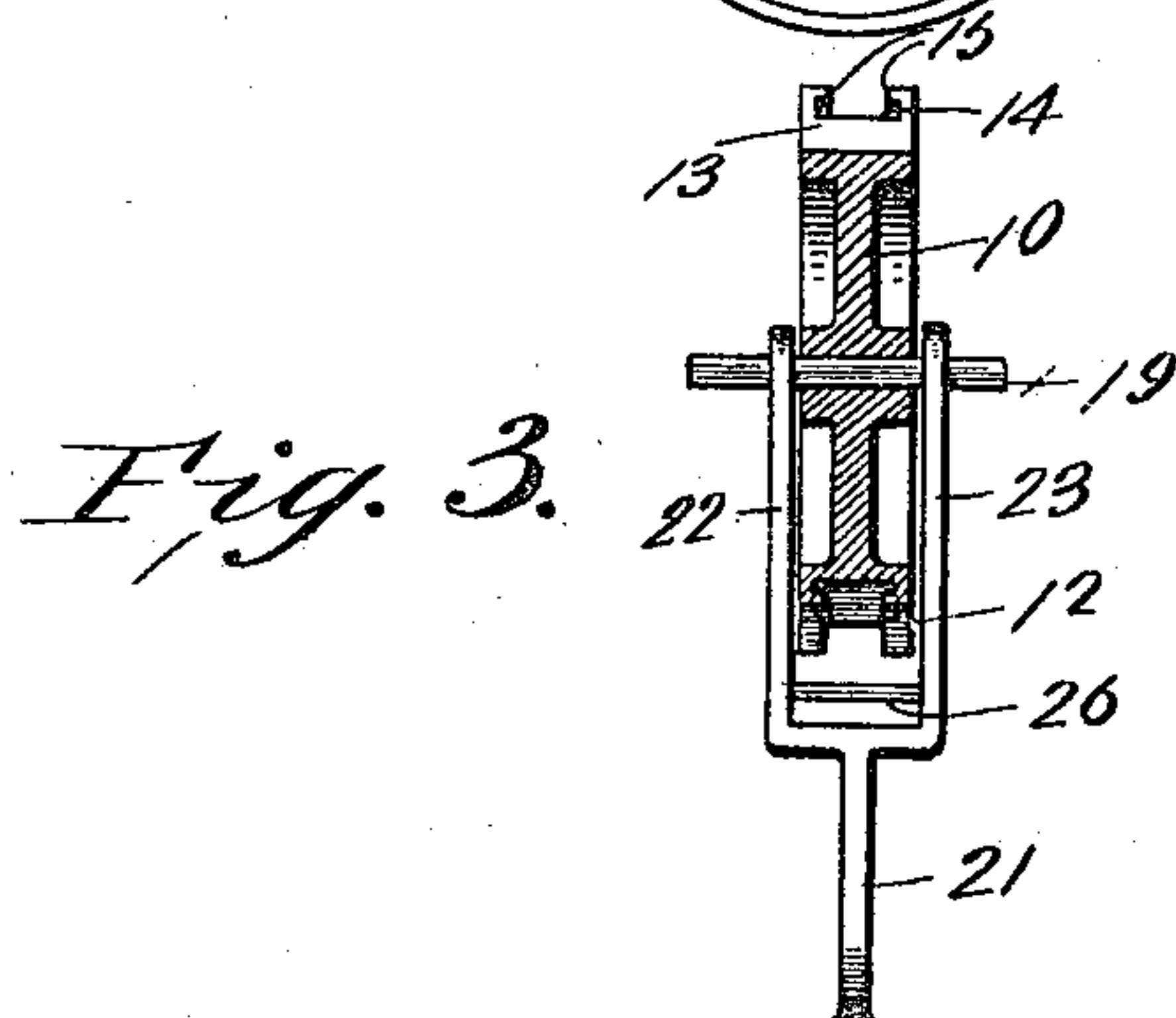
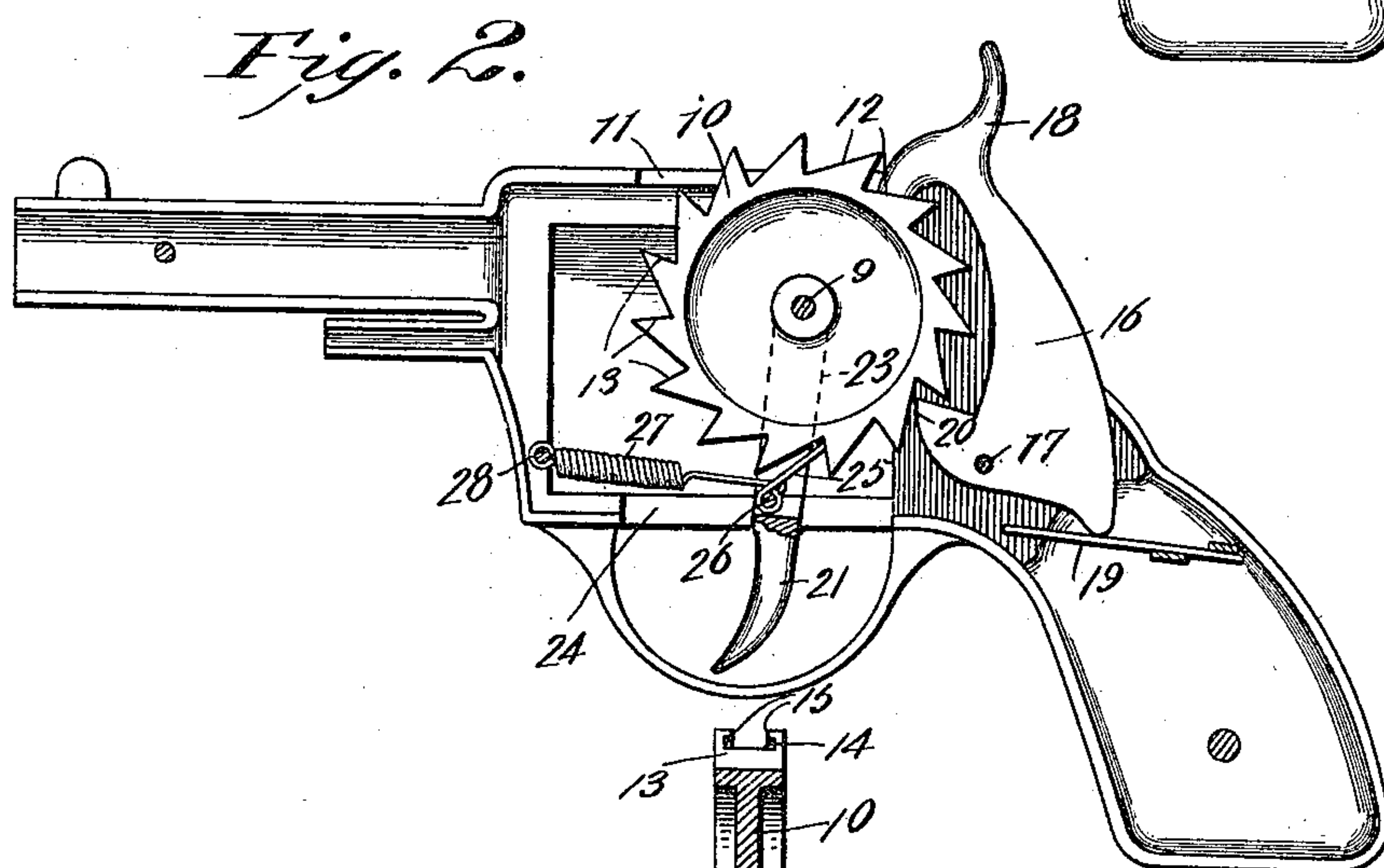
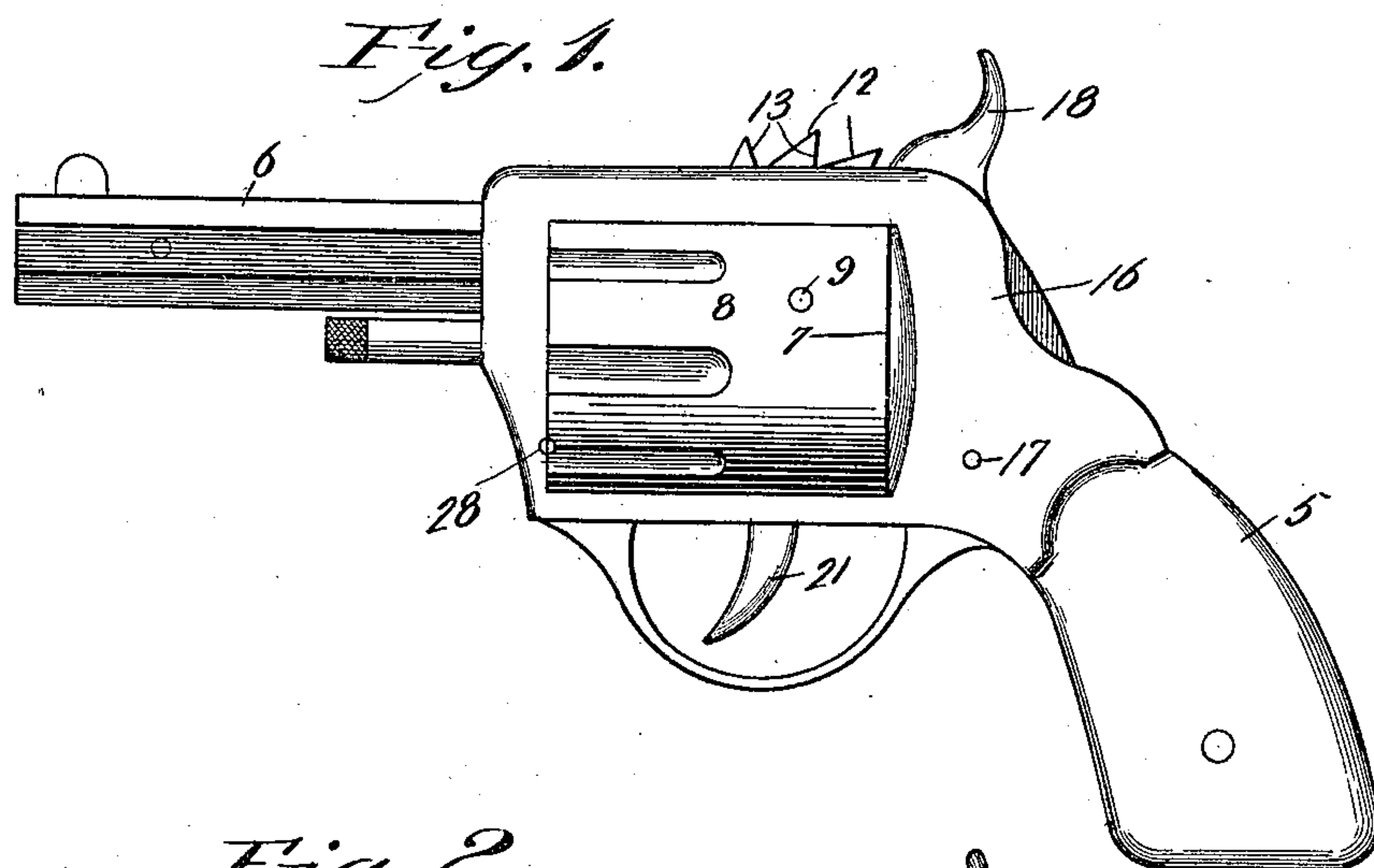
Patented June 4, 1961.

F. J. REPP.

TOY PISTOL.

(Application filed Jan. 3, 1901.)

(No Model.)



Witnesses

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UNITED STATES PATENT OFFICE.

FREDERICK JOHN REPP, OF PHILADELPHIA, PENNSYLVANIA.

TOY PISTOL.

SPECIFICATION forming part of Letters Patent No. 675,412, dated June 4, 1901.

Application filed January 3, 1901. Serial No. 42,009. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK JOHN REPP, a citizen of the United States, residing at Philadelphia, (Olney,) in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Revolver, of which the following is a specification.

This invention relates to toy pistols designed for shooting paper caps, and more particularly to the revolver type; and it has for one object to provide a simple and efficient construction, including a ratchet-wheel, on the teeth of which are carried the caps and in connection with which there is employed a hammer, which is both raised and released by rotation of the wheel and which when it descends strikes a cap to explode it.

A further object of the invention is to provide a simple and effective form of trigger mechanism for rotating the wheel with a step-by-step movement.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a side elevation showing the revolver. Fig. 2 is a longitudinal vertical section through the revolver, the wheel, hammer, and springs being shown in elevation. Fig. 3 is a sectional view taken diametrically of the ratchet-wheel and showing the trigger in elevation.

Referring now to the drawings, the present revolver comprises a handle 5, a barrel 6, and the intermediate breech portion 7, which latter is usually occupied by a rotatable cylinder; but in the present instance this cylinder is represented by a portion 8, formed integral with the frame and cast to represent the cylinder of an ordinary revolver.

Mounted transversely of the revolver and with its ends in the portion 8 thereof is a pin 9, and upon this pin is rotatably mounted a ratchet-wheel 10, the upper teeth of which are adapted to project through a slot 11 in the frame. One face of each tooth lies diametrically of the wheel, while the remaining faces of all of the teeth lie tangent to a common circle concentric with the wheel, and as the wheel is rotated these last-named faces (shown at 12) are brought to lie successively horizontal under the nose of the hammer when down. The diametrically-projecting faces are shown at 13.

Each face 12 has a slot 14 formed longitudinally thereof and with overhanging edges 15, the outer ends of the slots being open to permit of introduction of a cap, while the inner end of each slot is closed by the adjacent face 13 of the next tooth. Referring to the upper side of the ratchet-wheel, it will be noted that the teeth thereof project rearwardly and the operative movement of these teeth is in a forward direction with a step-by-step motion to present the caps successively in position to be struck by the hammer.

The hammer is shown at 16 and is pivoted upon a pin 17 and projects with its upper portion through the slot 11, which is continued into the upper portion of the handle, said hammer having a finger-piece 18, although this is not necessary, as the pistol is what is termed a "self-cocker." When the hammer is in lowered position, it enters the slot 14 of the tooth of a wheel to strike a cap in said slot, and when in raised position it is free from the teeth and permits the wheel to rotate. The butt-end of the hammer beyond the pivot thereof rests against the leaf-spring 19, fixed in the handle, and which spring is adapted to hold the hammer yieldably in lowered position, said hammer-butt having slidable contact with the spring to permit of operation of the hammer pivotally, as will be understood. When the cylinder is to be loaded, the hammer is grasped and pulled back to an extent further than it is moved by the rotation of the cylinder, so that both the hammer and its lug are out of the path of movement of the teeth of the cylinder, when the latter may be rotated freely without operation of the hammer, the friction between the hammer and its spring 19 being sufficient to hold the hammer in such raised position. After the caps have been applied the hammer may be again lowered to its position for operation by the teeth of the cylinder.

The hammer is raised and released by the teeth of the ratchet-wheel successively, and for this purpose said hammer has a lug 20 formed thereon and projecting forwardly therefrom to engage between two teeth of the ratchet-wheel. The under side of this lug is rounded, as shown, and said hammer, with its lugs, forms an escapement-rocker for the ratchet-wheel, so that as the wheel is rotated

a tooth will engage the rounded under face of the lug and by pressing thereagainst will rock the upper end of the hammer rearwardly and out of engagement with the ratchet-wheel against the tendency of the leaf-spring of the hammer. The engaged tooth of the wheel gradually moves past the lug 20, and the point thereof finally leaves the point of the lug, and the lug being then released the hammer is violently returned to its normal position by the action of its spring. The teeth of the sprocket successively perform this operation, so that for each complete rotation of the ratchet-wheel the hammer is raised and released as many times as the wheel has teeth, which in the present instance is fifteen.

To rotate the ratchet-wheel with a step-by-step motion, a trigger 21 is provided of yoke shape, the ends of the arms 22 and 23 of the trigger being passed upwardly at opposite sides of the wheel and pivoted upon the pin which carries the wheel. The lower portion or stem of the yoke projects through a slot 24 in the lower side of the frame and forms the finger-piece of the trigger.

Between the arms 22 and 23 is pivoted a pawl 25 upon a transverse pin 26, this pawl projecting rearwardly and upwardly and lying in engagement with the ratchet-wheel. A helical spring 27 is attached at one end to the pawl at a point above its pivot and is connected at its forward end to a transverse pin 28, this spring having the double function of holding the pawl yieldably in operative engagement with the ratchet-wheel and of holding the trigger yieldably in forward position. When the trigger is drawn rearwardly, the pawl rotates the wheel one step, causing the hammer to rise and fall, and when the trigger is released it moves forwardly into engagement with the next tooth in advance, ready to again rotate the wheel one step.

It will be understood that in practice modifications in the specific construction shown may be made and that any suitable materials and proportions may be used for the various parts without departing from the spirit of the invention.

What is claimed is—

1. A device of the class described comprising a rotatable ratchet-wheel having its teeth adapted to receive caps, a hammer pivoted for movement to engage the caps successively, a spring disposed to move the hammer into engaging position, a pivoted trigger, a pawl carried by the trigger in operative relation to the ratchet-wheel to rotate the wheel to present the caps successively to the hammer, a spring connected to the pawl and disposed to hold the pawl yieldably in operative position and the trigger yieldably in forward position, and means operable by rotation of the ratchet for raising the hammer from the wheel.

2. A device of the class described comprising a rotatable ratchet-wheel having its teeth adapted to receive caps, a hammer pivoted for engagement with the caps successively, said hammer having a projection in the path of the teeth for operation thereby to raise the hammer, a spring disposed to return the hammer, a pivoted trigger, a pawl carried by the trigger in operative relation to the ratchet-wheel to rotate it, and a spring connected with the pawl and disposed to hold the pawl yieldably in operative position and the trigger yieldably in forward position.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

FREDERICK JOHN REPP.

Witnesses:

JAMES B. O'NEILL,
MAME E. O'NEILL.