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A. D. MIDDLETON.

TOY GUN.

APPLICATION FILED DEC. 28, 1906.

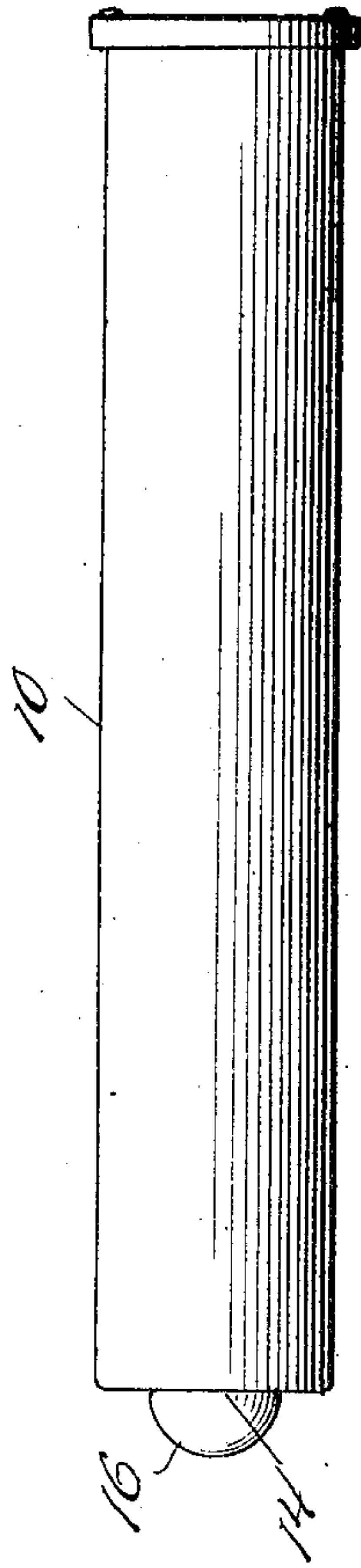


Fig. 1

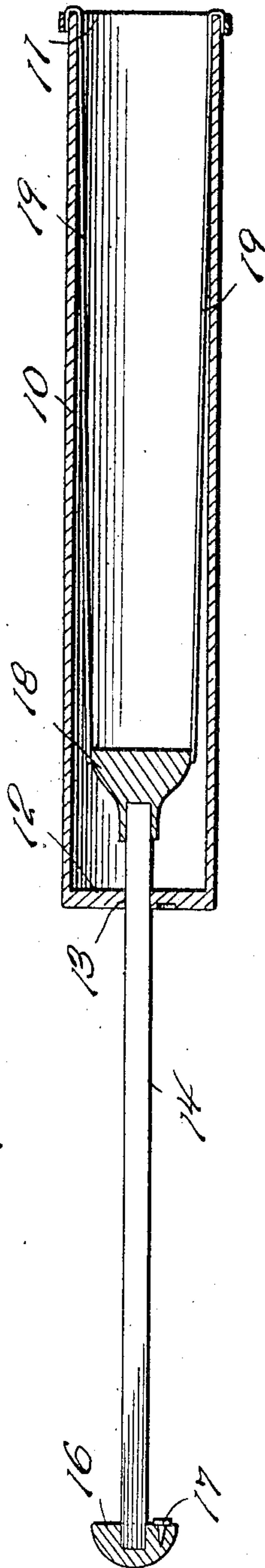


Fig. 2

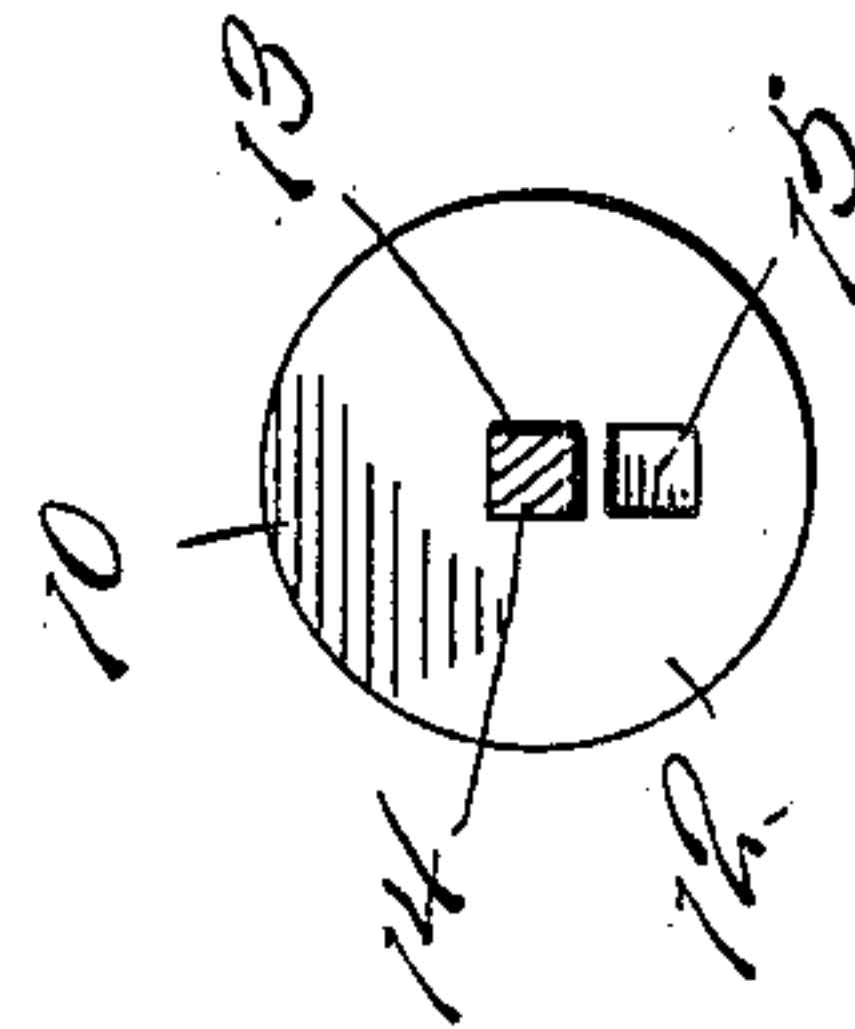


Fig. 3

Witnesses

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TOY GUN.

No. 849,554.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ALFRED D. MIDDLETON, a citizen of the United States, residing at Savannah, in the county of Chatham, State of Georgia, have invented certain new and useful Improvements in Toy Guns; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention has relation to that class of toy guns that are devised to propel an object placed in the barrel by the operation of springs on the propeller.

It is the purpose of the invention to provide a simply-constructed and inexpensive toy gun adapted to project any object—such as, for instance, a round ball, a “return-ball,” parachute, arrow, or small apple or potato that may be loaded into the barrel—and “fire” the same into the air or at a target, the gun being constructed at the same time to explode a fulminate cap at the instant of projecting the aforesaid object from the barrel.

The nature of the invention is fully shown in the device portrayed in the annexed drawings, forming a part of this specification, in view of which it will first be described with respect to its construction and mode of use, and then be pointed out in the subjoined claim.

Of the said drawings, Figure 1 is a side elevation of the invention, showing plunger-rod in the position it will take after firing. Fig. 2 is a longitudinal sectional view showing the plunger-rod and propeller as drawn back preparatory to firing a ball from the barrel. Fig. 3 is an end view of the outer end of the barrel, the plunger-rod being represented in section.

Similar numerals of reference designate similar parts or features, as the case may be, wherever they occur.

In the drawings, 10 designates a barrel composed of any suitable material, having an open end 11, constituting the muzzle, and a breech or closed end 12, having an angular hole 13 formed through the center as a bearing and guide for the plunger-rod 14.

15 designates a recess or other suitably-constructed support on the outside of the end 12 for the reception of a fulminate cap. The outer end of the plunger-rod 14 is pro-

vided with a knot or other suitably-formed handle 16; that has a tack 17 driven into it from the inner side in place, so that the projecting head of the tack when the gun is fired, as will be presently explained, will strike the cap in the support 15 and explode it.

The plunger-rod 14 is provided on its forward inner end with a head 18 of suitable form, to the outer margin of which one end of a plurality of rubber springs 19 are secured, the other end of each spring being attached to the margin of the muzzle 11 of the barrel. The plunger-rod, furthermore, is of angular form in cross-section, corresponding in form to the hole in the center of the breech 12, through which it passes, in order that the plunger-rod may not turn in its bearing.

Under this construction it will be seen that a ball, parachute, or other object loaded into the barrel through the muzzle may be projected therefrom with considerable force by drawing back the plunger-rod and then letting “go” of the same, so that the head will strike the said object and impel it from the gun by the action of the springs 19. At the same time the head of the tack 17 will strike the cap on the support 15 on the end of the gun and explode said cap instantaneously with the firing of the object from the barrel of the gun.

The paramount object of the improvements is to furnish a toy gun that may be readily constructed at low cost and at the same time be efficient in projecting any object from the barrel that may be loaded therein, the said object not being dependent upon particular form or other character.

What is claimed is—

A toy gun comprising a barrel provided with an angular opening through the breech, a plunger-rod of form in cross-section corresponding to the form of the opening through the breech and provided on its forward end with a head and on its rearward end with a handle, a support on the breech for a cap, means on the handle for striking the cap, and rubber springs connected at one end with the margin of the muzzle and at the other with the plunger.

In testimony whereof I affix my signature in presence of two witnesses.

ALFRED D. MIDDLETON.

Witnesses:

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