

No. 883,197.

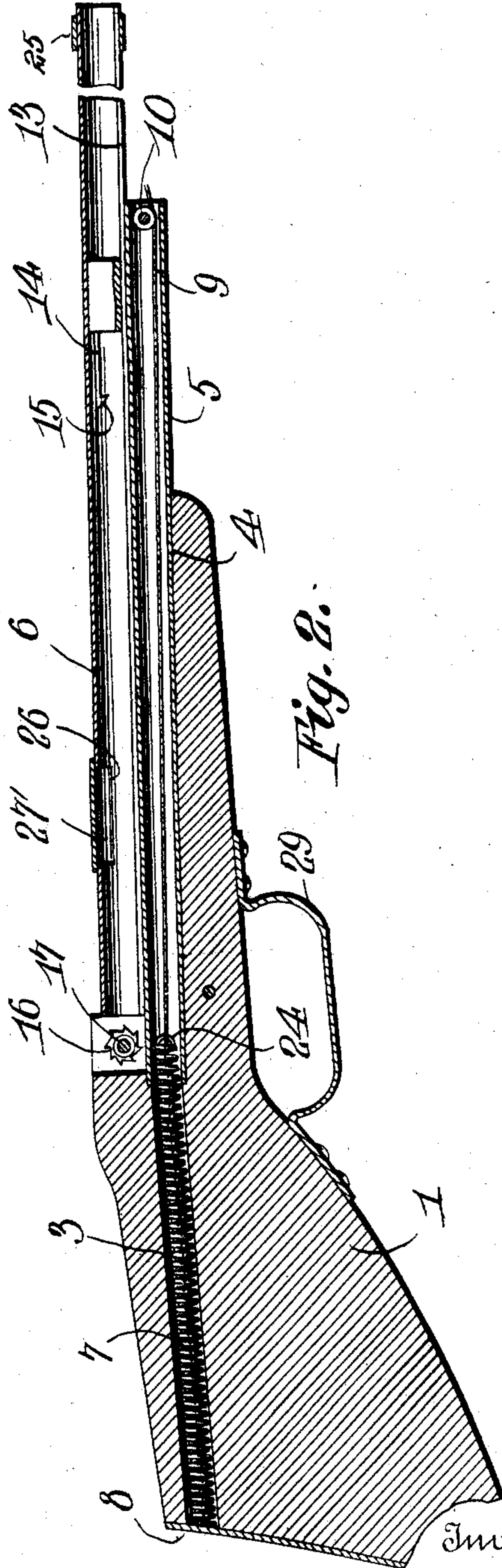
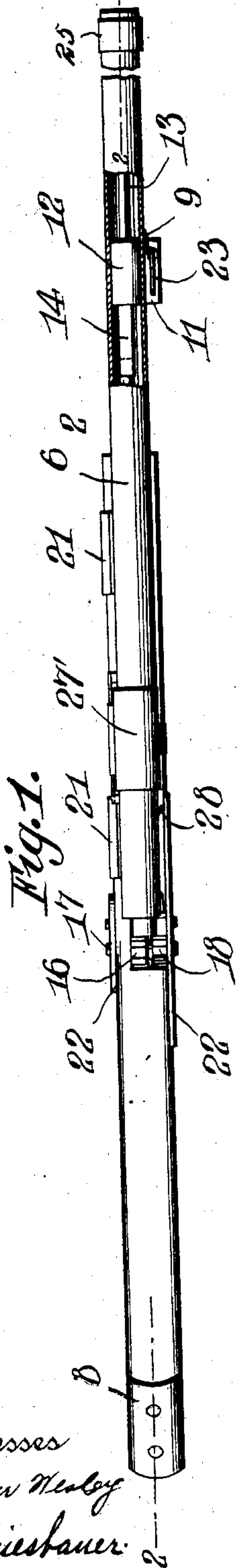
PATENTED MAR. 31, 1908.

B. HESTNESS.

TOY GUN.

APPLICATION FILED AUG. 5, 1907.

2 SHEETS—SHEET 1.



Witnesses
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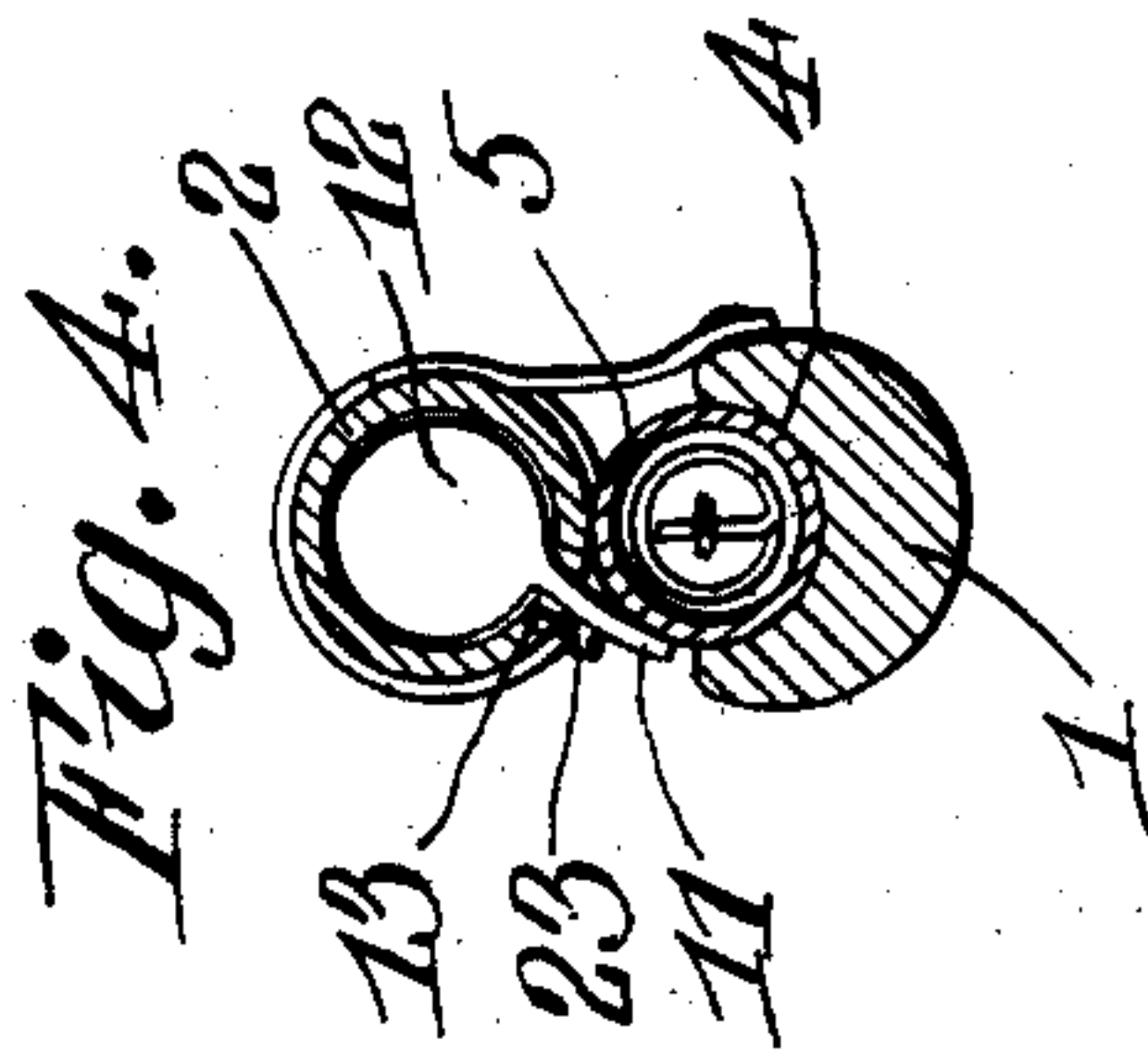
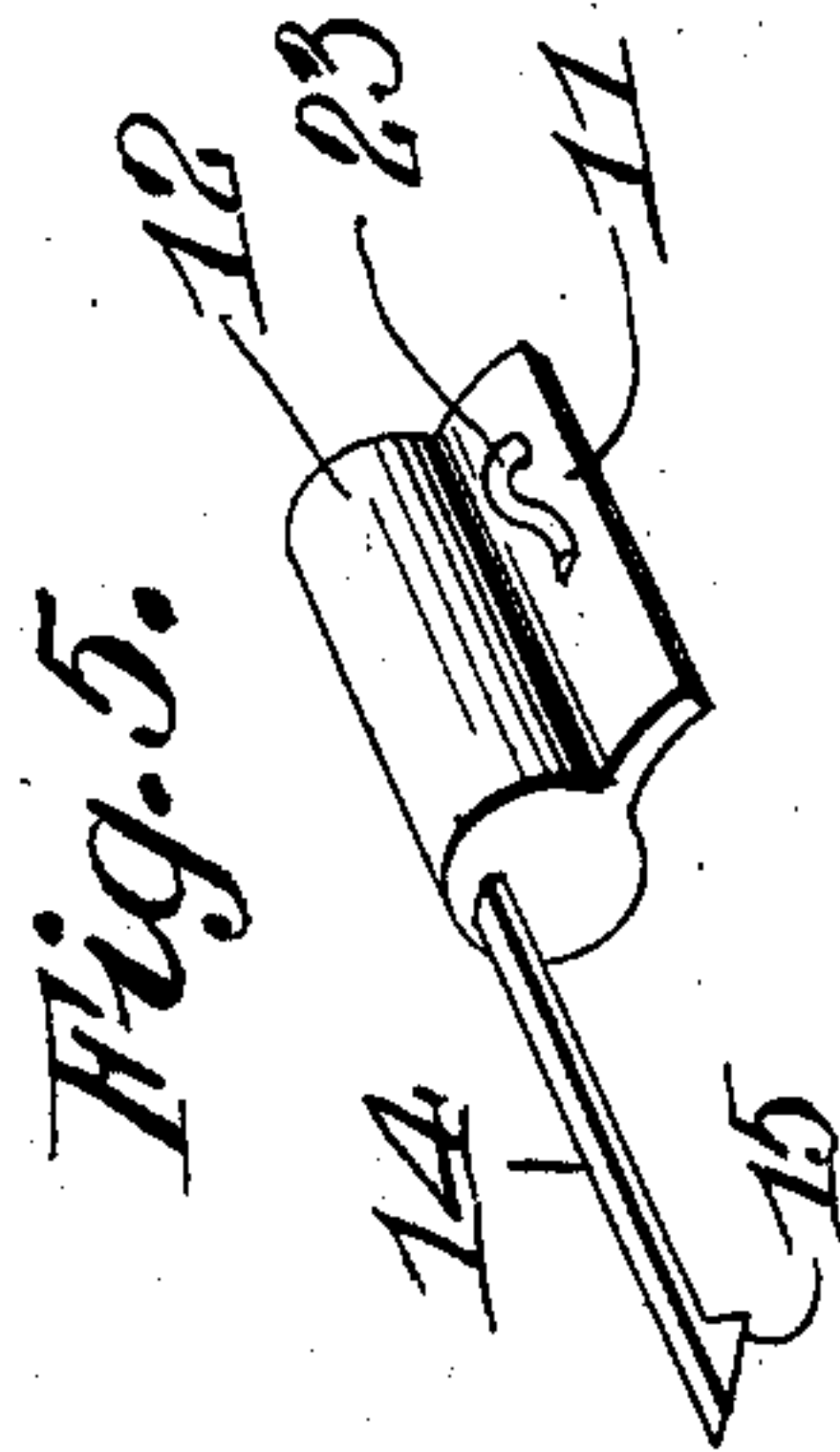
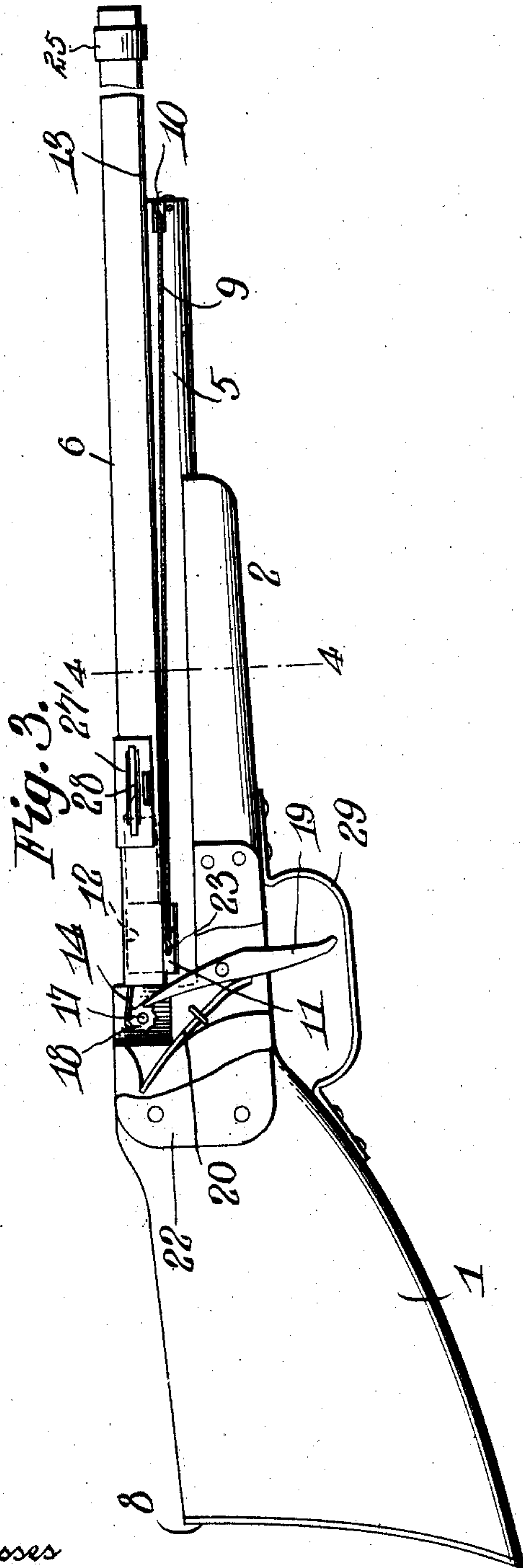
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2 SHEETS—SHEET 2.



Witnesses

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UNITED STATES PATENT OFFICE.

BERNT HESTNESS, OF ROCKFORD, WASHINGTON, ASSIGNOR OF ONE-HALF TO I. J. BLÄKKAN,
OF ROCKFORD, WASHINGTON.

TOY GUN.

No. 883,197.

Specification of Letters Patent.

Patented March 31, 1908.

Application filed August 5, 1907. Serial No. 387,166.

To all whom it may concern:

Be it known that I, BERNT HESTNESS, a citizen of the United States, residing at Rockford, in the county of Spokane and State of Washington, have invented certain new and useful Improvements in Toy Guns, and 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 new and useful improvements in toy guns and has for its object the production of a simple and inexpensive toy of this class of such construction as to enable it to be readily and easily operated by a child without danger to the operator.

With the foregoing and other objects in view which will appear as the nature of the invention is better understood, the invention consists in certain novel features of construction, combination and arrangement of parts as will be hereinafter fully described and claimed.

In the accompanying drawings: Figure 1 is a top plan view of a gun constructed in accordance with the invention; showing the relative position of the parts just after it has been fired, with parts broken away to more advantageously illustrate the invention; Fig. 2 is a longitudinal sectional view on the line 2—2 of Fig. 1; Fig. 3 is a side elevation, the gun set and the projectile or missile in position; and Fig. 4 is a cross sectional view on the line 4—4 of Fig. 3. Fig. 5 is a detail perspective view of the plunger.

Referring to the drawings for a more particular description of the invention, the numeral 1 indicates the stock and 2 the forearm of the gun. Said stock is provided near its top or upper edge with a longitudinal opening 3 which extends entirely through the stock and communicates with a recess 4 of substantially semi-circular form in the upper edge of the forearm. A tube 5 has its inner end inserted in the inner end of the opening 3 in the stock, is arranged in the recess in the forearm and projects a suitable distance forwardly of the same, the purpose of which will be disclosed. A barrel 6 is arranged above the tube and extends from the inner end of the stock to a suitable distance beyond the outer or front end of the tube. A longitudinally disposed coiled spring 7 is arranged in the opening in the stock and is secured at

its outer end to the inner face and near the upper end of a fastening plate 8 fastened to the outer end of the stock by screws or other equivalent means.

A string or other flexible member 9 is connected at its inner end to the free end of the spring, works through said tube 5 over a pulley 10 journaled in the outer end thereof and is fastened in any suitable manner to the outwardly-extending flange 11 of a plunger 12 working in the barrel, said flange 11 working through a corresponding longitudinal slot 13 formed in one side of the barrel and extending throughout its entire length. A longitudinally disposed member or extension 14 extends from the inner end of the plunger and terminates at its outer or free end in a suitable catch 15 adapted to catch over or engage one of a series of teeth of a ratchet wheel 16 formed at one end of a hub or axle 17 in rear of the inner end of the barrel. Ratchet teeth 18 inclined in an opposite direction to the teeth 16 are formed on the opposite end of the hub or axle 17 and are adapted to be engaged by the upper end of a trigger 19 pivoted to one side or face of the gun stock.

The numeral 20 represents a suitable spring arranged at one side of the stock for normally holding the upper end of the trigger in engagement with one of the ratchet teeth 18. Fastening plates 21 are formed on one side of the barrel and are fastened to the forearm of the gun to fasten the barrel in position and plates 22 are arranged on opposite faces of the gun stock principally for protecting the mechanism of the gun adjacent thereto. A wire 23 bent to form eyes may be fastened to the outer end of the outwardly-extending flange of the plunger so that the same may be easily drawn back in setting the gun by employing a handle or other auxiliary means. If found desirable, a loop 24 may be formed at the end of the string or other flexible member fastened to the flange of the plunger for drawing back the same in setting the gun. A stop 25 is provided near the outer end of the gun barrel to engage the flange of the plunger to prevent it from entirely leaving the barrel when the gun is fired.

A suitable opening 26 is formed in the top of the gun barrel near its inner end to enable the projectile to be inserted in the barrel when the gun is not set. A cover 27' is

hinged to the barrel in position to cover said opening 26 therein and is provided with a longitudinally-disposed spring 28 to hold the projectile in position when the gun is being
5 carried.

The numeral 29 indicates a suitable guard for the trigger, said guard being fastened to the under edge of the gun stock and forearm in any suitable manner.

10 In practice, the plunger is drawn back in the barrel until the catch thereof engages one of the ratchet teeth at the inner end of the hub or axle journaled slightly in the rear of the barrel. The missile or projectile to be
15 fired is then inserted in the barrel when the gun is ready to be fired. The upper end of the trigger is normally held in engagement with one of the ratchet teeth formed on the outer end of the hub or axle by said spring 20
20 and prevents rotation of said axle or hub. To fire the gun, the operator pulls on the lower end of the trigger which releases it from engagement with the hub or axle when the contraction of the coiled spring arranged in
25 the gun stock through the medium of the string or flexible member 9 causes the plunger to move forwardly in the barrel.

From the foregoing description taken in connection with the accompanying drawings, the construction and operation of the
30 invention will be readily understood without requiring a more extended explanation.

I claim as my invention:

1. In a device of the character described,
35 the combination with the stock and forearm, of a barrel arranged above the forearm and projecting in advance of the same, a hub member having oppositely inclined ratchet teeth journaled in rear of the rifle barrel, a
40 plunger having an inwardly projecting member with a catch at its free end adapted to engage one of the ratchet teeth of said hub, means carried by the stock and forearm for exerting a forward pull on the plunger when
45 set, and a trigger normally holding the hub against rotation.

2. In a toy gun of the character described,

the combination with a barrel, forearm and stock, the latter having a bore or opening throughout its length, of a longitudinally ex- 50
tending tube arranged under the barrel, one end of the tube projecting into the opening of the stock, a detachable plate arranged at the outer end of the stock, a coiled spring arranged in the opening in the stock, one end 55
of the spring being attached to said plate and the other end projecting into the inner end of the tube, a plunger movable in the barrel, and a flexible connecting element arranged between the inner or free end of the spring 60
and the plunger.

3. In a toy gun, the combination with the stock and forearm, of a barrel arranged above the forearm, a hub member having two series of oppositely inclined teeth on its pe- 65
riphery journaled rearwardly of the barrel, a plunger arranged in the barrel and having an inwardly extending catch member adapted to engage one of the teeth of one series of the hub member, a trigger pivoted to the stock 70
and adapted to normally engage one of the teeth of the other series and means carried by the stock and forearm for exerting a forward pull on the plunger when set.

4. In a toy gun, the combination with a 75
stock and forearm, of a barrel arranged above the forearm, a hub member having two series of oppositely inclined teeth journaled in the rear of the barrel, a plunger arranged in the barrel and having an inwardly extend- 80
ing catch adapted to engage either of the teeth of one series of the hub member, a trigger pivoted to the stock and adapted to normally engage either of the teeth of the other series, a pull spring arranged in the stock, 85
and a flexible connecting member arranged between the spring and plunger.

In testimony whereof, I have hereunto set my hand in the presence of two subscribing witnesses.

BERNT HESTNESS.

Witnesses:

S. C. GRABLE,

RICH. BARTHELMESS.