

No. 737,757.

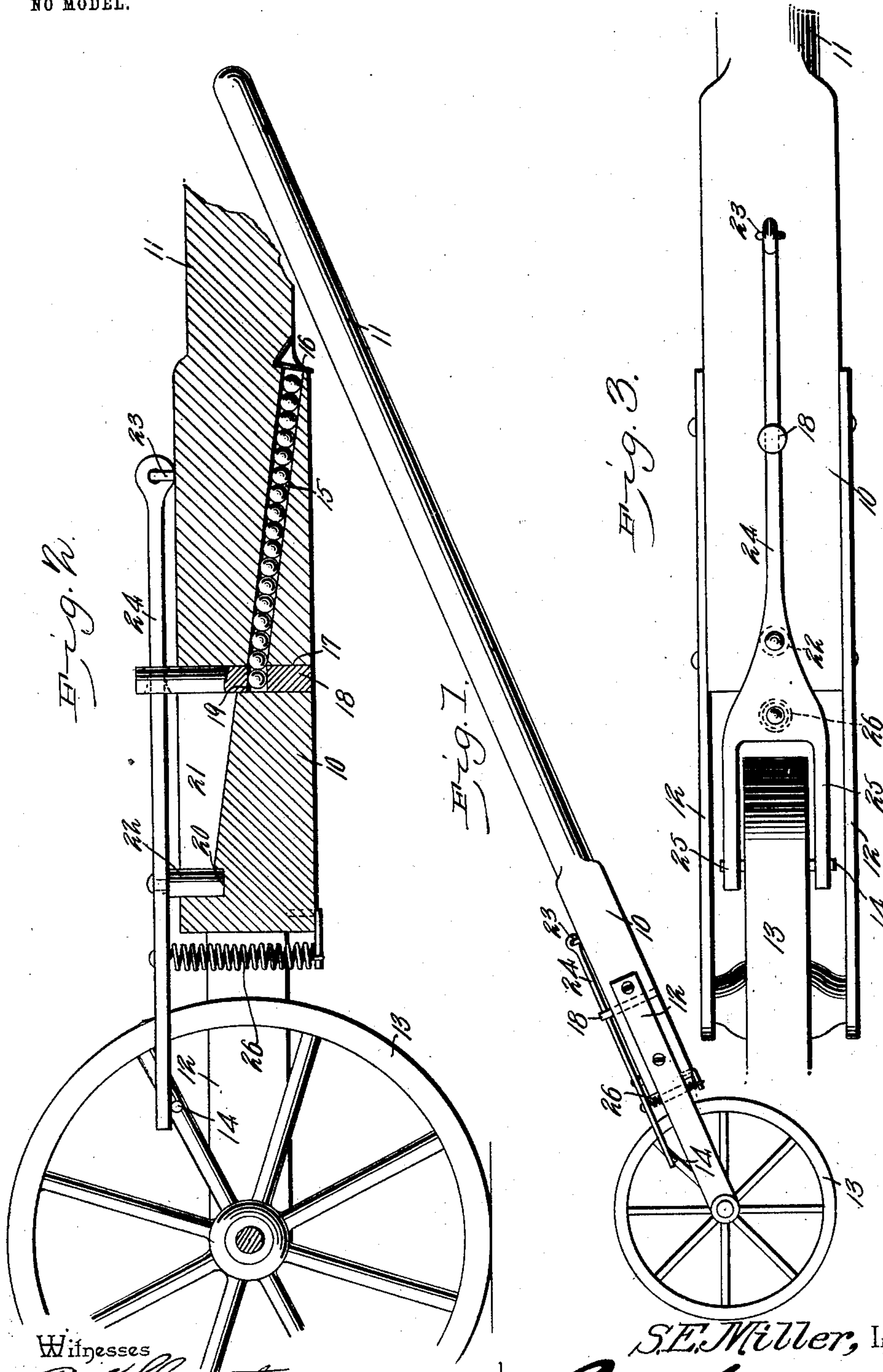
PATENTED SEPT. 1, 1903.

S. E. MILLER.

TOY.

APPLICATION FILED MAR. 24, 1903.

NO MODEL.



Witnesses
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UNITED STATES PATENT OFFICE.

SILAS EDWIN MILLER, OF CROCKETT, CALIFORNIA.

TOY.

SPECIFICATION forming part of Letters Patent No. 737,757, dated September 1, 1903.

Application filed March 24, 1903. Serial No. 149,384. (No model.)

To all whom it may concern:

Be it known that I, SILAS EDWIN MILLER, a citizen of the United States, residing at Crockett, in the county of Contra Costa and State of California, have invented a new and useful Toy, of which the following is a specification.

This invention relates to toys for children, more particularly to the class wherein detonating caps or pellets are exploded, and has for its object to produce a simply-constructed and easily-operated device wherein the caps or pellets are exploded intermittently by the action of the toy while moving over the ground; and the invention consists in a stock or frame having a magazine for the detonating members, an anvil upon which they are fed at regular intervals, a hammer for producing the requisite percussion to explode them, and means operated by the movements of the toy to operate the feeding and hammer mechanism.

The invention further consists in certain features of construction, as hereinafter shown and described, and specified in the claims.

In the drawings illustrative of the invention, in which corresponding parts are denoted by like designating characters, Figure 1 is a side elevation of the device complete. Fig. 2 is a longitudinal sectional elevation, and Fig. 3 is a plan view of the operative portions of the device enlarged.

The improved toy consists of a stock or frame 10, extended at one end into a handle 11 and forked at the other end at 12 and provided between the forks with a trundle-wheel 13, the wheel having a transversely-extended pin 14, as shown.

Within the stock 10 is a magazine for the caps or pellets in the form of a longitudinal cavity 15, having a detachable cap 16 at its upper or inlet end and with its lower end terminating in a transverse valve-seat 17, in which a valve 18 operates, the valve being in the form of a cylindrical plug provided with a transverse aperture 19, conforming to and adapted to register with the magazine 15 when the valve is in its depressed position, as shown in Fig. 2.

Between the valve and the wheel 13 an anvil 20 is located, being, preferably, in the form of a cavity in the stock, and between the anvil and the valve-aperture a runway 21 is lo-

cated, through which the pellets or caps will run into the anvil-cavity.

Operating in the anvil-cavity is a hammer 22, adapted to produce the requisite concussion to explode the pellet.

Movably connected by one end to the stock 10, as at 23, is an arm 24, the arm connected to the valve 18 and hammer 22, as shown, and preferably forked, as at 25, and passing upon opposite sides of the wheel 13 across the path of the pin 14. The arm 24, with the valve 18 and hammer 22 connected thereto, will be held yieldably in their withdrawn or depressed positions by a holding-spring 26, connected at one end to the stock and at the other end to the arm 24.

The valve 18 will be connected to the arm 24 sufficiently flexible to permit the requisite "play" to prevent the valve binding in the valve-cavity 17.

By this arrangement it will be obvious that if pellets of uniform diameter be placed in the magazine 15 and the toy trundled over the ground the pin 14, acting on the forked end 12 of the stock, will elevate the arm 24 and valve 18 and hammer 22, the valve-aperture 19 by this action carrying one of the pellets upward and delivering it into the runway, down which it will run into the anvil-cavity 20, the solid lower portion of the valve closing the outlet or discharge of the magazine and preventing the escape of the pellets therefrom.

When the pin 14 passes the end of the arm 24, the spring 26 will cause the hammer 22 to strike the pellet with sufficient force to explode it, this return movement of the arm 24 also returning the valve 18 to its former position, with the cavity 19 again opposite the magazine ready to receive another pellet, and when the pin 14 again acts upon the arm 24 the action is repeated and another pellet conducted to the anvil-cavity and exploded, and so on as long as the device is moved forward or so long as the pellets last.

By this simple means a succession of detonations will occur as the toy is trundled along the ground.

It will be noted that the explosions take place at a relatively remote point from the hands or face of the operator, so that no danger exists of injury from that source.

The parts may be constructed of any suitable material or of any suitable size and may be of any desired shape and ornamented in any desired manner and will present a pleasing appearance and will be an interesting and amusing device for the entertainment of children.

The wheel 13 may be of any desired size, but will generally be about six inches in diameter, with the other portions of the device of proportionate sizes; but it will be understood that these proportions may be modified and changed without departing from the principle of the invention or sacrificing any of its advantages. The wheel 13 might also be made solid or with spokes, as preferred, and utilized when solid to contain advertising matter, pictures, or ornamental designs or otherwise utilized, as preferred.

Having thus described the invention, what I claim is—

1. A toy consisting of a stock having an anvil and a cap-holding magazine and with a runway for the caps between the magazine and anvil, a valve between the runway and magazine, a hammer adapted for operation upon said anvil, a trundle-wheel mounted for rotation in said stock, and means whereby the motion of said trundle-wheel will intermittently operate said valve and hammer, substantially as described.

2. A toy consisting of a stock having an anvil and a cap-holding magazine and with a runway for the caps between the magazine and anvil, a trundle-wheel mounted for rota-

tion in said stock, a rod movably connected by one end to said stock and extending to a position opposite said trundle-wheel, a valve connected to said rod and adapted to control the discharge from said magazine, a hammer connected to said rod and operating upon said anvil, and means whereby the rotation of said wheel will cause said rod to intermittently operate said valve and hammer, substantially as described.

3. A toy consisting of a stock having an anvil and a cap-holding magazine and with a runway for the caps between the magazine and anvil, a trundle-wheel mounted for rotation in said stock, a rod movably connected by one end to said stock and extending to a position opposite said trundle-wheel, a valve connected to said rod and adapted to control the discharge from said magazine, a hammer connected to said rod and operating upon said anvil, a spring operating to yieldably support said rod in its withdrawn position, and a pin upon said wheel extending into the path of and adapted to operatively engage said rod when said wheel is rotated, and thereby intermittently operate said valve and hammer, substantially as described.

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

SILAS EDWIN MILLER.

Witnesses:

HORACE BURTON GARDINER,
ORREN LEWIS ROSS.