

No. 614,533.

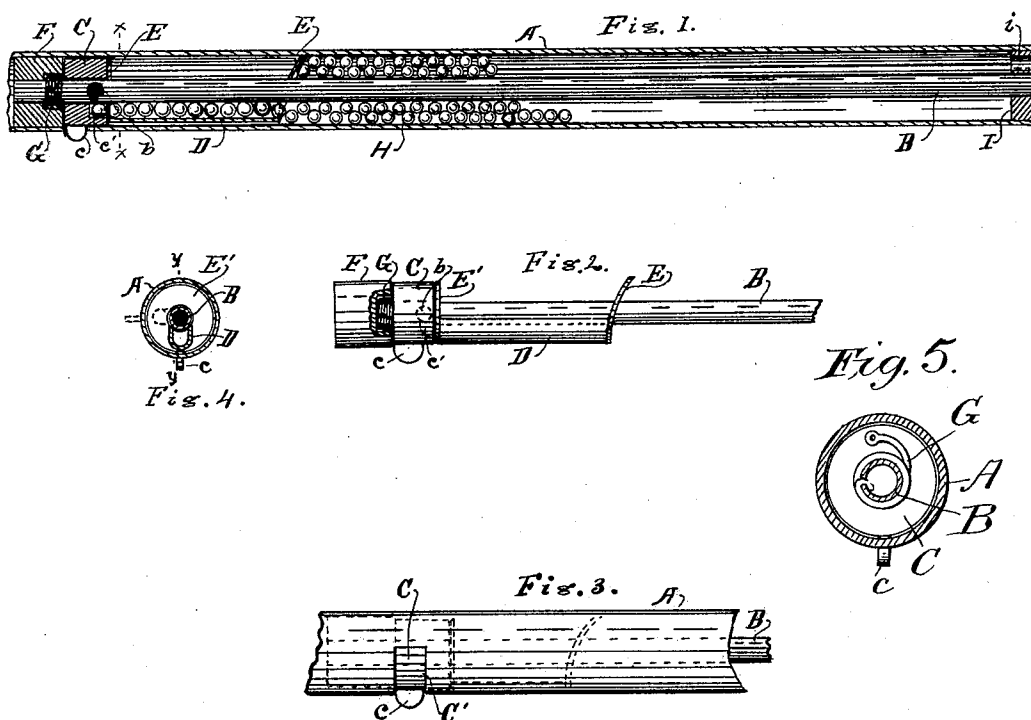
Patented Nov. 22, 1898.

W. H. CALKINS & C. A. LINDBERG.

TOY GUN.

(Application filed June 29, 1898.)

(No Model.)



Witnesses:

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UNITED STATES PATENT OFFICE.

WILLIAM H. CALKINS AND CHARLES A. LINDBERG, OF GRAND RAPIDS,
MICHIGAN.

TOY GUN.

SPECIFICATION forming part of Letters Patent No. 614,533, dated November 22, 1898.

Application filed June 29, 1898. Serial No. 684,763. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM H. CALKINS and CHARLES A. LINDBERG, of the city of Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Toy Guns, of which the following is a specification.

Our invention relates to improvements in spring air-guns; and its objects are, first, to provide for storing shot in magazine spring-guns in the outer tube of the barrel, and, second, to provide for transferring the shot from said magazine or storage-chamber to the inner tube of the barrel. We accomplish these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a longitudinal section of the barrel on the line *yy* of Fig. 4. Fig. 2 shows a portion of the inner tube and its several parts removed from the outer tube and the breech-block cut away to show the application of the spring that actuates the transfer-block to return it to normal position. Fig. 3 is an elevation of a portion of the barrel, showing the manner of actuating the transfer-block. Fig. 4 is a transverse section of the barrel on the line *xx* of Fig. 1, showing the relative position of the several parts that make up the transfer mechanism; and Fig. 5 is a cross-section of the tubes just back of the actuating-spring shown in Fig. 1, showing the manner of applying said spring to actuate the transfer-block.

Similar letters refer to similar parts throughout the several views.

In constructing this gun we support the inner tube B of the barrel within the outer tube A by means of the blocks I and F in the usual manner. We then form a small aperture *i* through the block I for the introduction of the shot between the two tubes. This aperture may be plugged in any convenient way to prevent the shot from falling out, or it may be left open, as desired or convenient.

At the back end of the inner tube we form a dam or guideway E, and from this a port or guideway D, that conducts the shot to the transfer-block C.

The transfer-block C is fitted to turn freely on the inner tube B and is provided with a

port or transfer-chamber *e'*, which receives the shot from the guideway D. This block is provided with a thumb-piece *c*, that projects out through the slot C' in the side of the outer tube of the barrel, so that it may be carried around, as indicated by the dotted lines in Fig. 4, for the purpose of turning the transfer-block around to position to convey the shot to the port *b* in the inner tube of the barrel, through which it may pass into this tube. The transfer-block is carried to and held in normal position by the spring G, so that as soon as the thumb-piece is released it will carry around to close the port *b*. The front or open end of the port *e'* is covered by a wall E' after it leaves the end of the port D, so that there is no danger of the shot escaping from the port *e'* between the port D and the port *b*.

By the construction herein described we are enabled to store a large amount of shot in the outer tube of the barrel and to readily transfer it to the inner tube without the usual unsightly outside magazine and to operate the transfer mechanism with perfect ease and efficiency.

We have not shown the stock or plunger of this gun, as they are not necessary to show the construction and action of our invention, and as their office in guns of this kind is so well known we deem it unnecessary to include them for the purpose of setting up an operative combination of elements.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent of the United States, is—

1. In combination with the outer and inner tubes of a toy gun, a plug in the outer end having an aperture for the introduction of shot, a guiding-wall to conduct the shot to a conductor-tube, a conductor-tube, a revolvable transfer-block around the inner tube at the back end of the conductor-tube, a spring for actuating said transfer-block, and the inner tube provided with a port for the reception of the shot from the transfer-block, substantially as and for the purpose set forth.

2. In combination with the outer and inner tubes of a toy gun provided with an aperture for the reception of shot into the outer tube; a conducting-wall at the back end of

the inner tube, a transfer-block having a port
opening into the space between the tubes,
said block revoluble around the inner tube,
a thumb-piece on said transfer-block arranged
5 to work in a slot in the outer tube to carry
the block around until the port therein regis-
ters with a corresponding port leading to the
inner tube, and a spring to carry said block

back to normal position, substantially as and
for the purpose set forth.

WILLIAM H. CALKINS.
CHARLES A. LINDBERG.

In presence of—

AUSTIN K. WHEELER,
ITHIEL J. CILLEY.