(No Model.)

J. N. COLBY.

AIR GUN.

No. 341,884. Patented May 18, 1886.

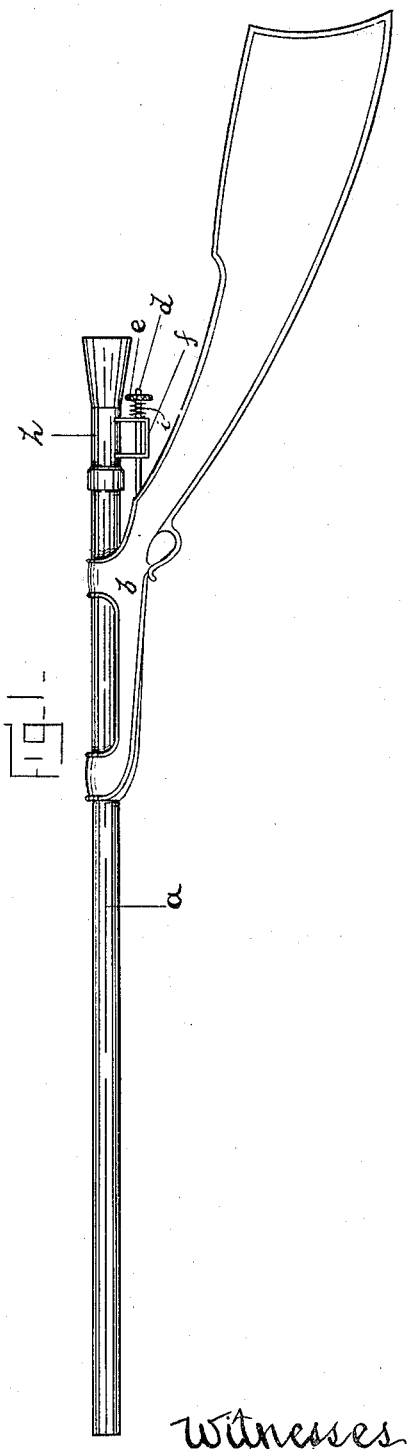

Fig. 1.

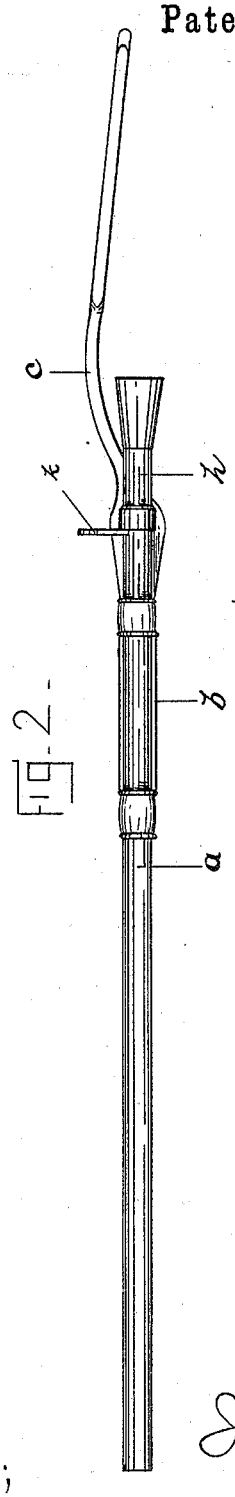

Fig. 2.

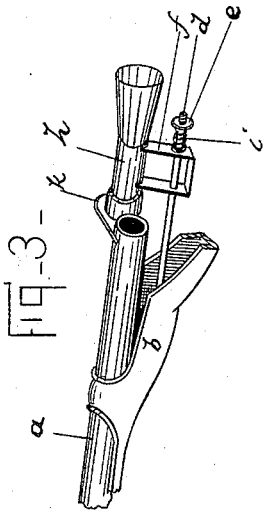

Fig. 3.

Witnesses;
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Inventor:
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UNITED STATES PATENT OFFICE.

JOHN N. COLBY, OF NEW LONDON, ASSIGNOR OF ONE-HALF TO I. D. CLIFT & CO., OF MYSTIC RIVER, CONNECTICUT.

AIR-GUN.

SPECIFICATION forming part of Letters Patent No. 341,884, dated May 18, 1886.

Application filed December 2, 1885. Serial No. 184,519. (No model.)

To all whom it may concern:

Be it known that I, JOHN N. COLBY, a citizen of the United States, residing in New London, New London county, Connecticut, have invented certain new and useful Improvements in Air-Guns, which improvements are fully set forth and described in the following specification, reference being had to the accompanying sheet of drawings, in which—

Figure 1 is a side elevation of my newly-improved air-gun ready for use. Fig. 2 is a top view of said gun, and Fig. 3 is a perspective view of the rear portion of the barrel, showing the breech-tube thrown to one side, as in the act of introducing a dart.

My improvements are shown as applied to a toy blow-gun; but one of the principal features (the bent stock) may be successfully applied to other forms of air-guns, and to rifles and shot-guns.

In this present case my object is to provide at a comparatively low cost a toy which shall furnish an endless amount of amusement, and at the same time to provide a means by which the lungs are unconsciously brought into repeated use, and thereby developed and strengthened.

Referring to the drawings, the letter *a* represents a barrel, which I make preferably of a section of tubing, and *b* represents the stock or frame, that portion which extends forward of the place usually occupied by the lock-work being so formed that it encircles and supports the barrel. This stock I prefer to make of cast metal. Inasmuch as the mouth of the operator must be brought into close engagement with the rear end of the barrel, I have formed stock *b* with a considerable lateral curve, which conforms to the shape of the operator's face. (See *c*, Fig. 2.) This principle of curving the stock laterally could, as before stated, be advantageously applied to other forms of guns, and I wish it understood that I do not wish to confine this feature of my invention to toy blow-guns alone.

Secured in frame *b*, beneath the rear end of the barrel, is a rod, *d*, whose outer end is threaded, and carries a nut, *e*. Located on this rod and adapted to be moved longitudinally is a frame, *f*, which supports the breech-tube *h*. The body portion of tube *h* is of about the same diameter as the barrel *a*, but has its rear end shaped as a funnel to form a mouth-piece, and its forward end swelled to slip over the rear end of the barrel *a*. In order to hold the movable breech-tube thus provided firmly against the barrel, to form an air-tight joint, I have placed on rod *d*, between frame *f* and nut *e*, a stiff spiral spring, *i*, which acts with a constant tendency to force the breech-tube forward.

When it is desired to load the blow-gun by introducing a dart, the breech-tube is drawn rearward until its swelled portion leaves the barrel, when it may be swung to one side, as in Fig. 3. With the rear of the barrel thus exposed a dart may be easily inserted, and the breech-tube is then swung back into line with the barrel, to close the joint.

I prefer to attach to the rear end of the barrel proper a laterally-extending plate, *k*, against which the breech-tube abuts when in its open position.

Having described my invention, I claim—

1. The combination, in an air-gun, with a barrel, of a pivotally-supported breech capable of longitudinal and lateral movement, and having a swelled inner end to inclose the rear end of the barrel, as set forth.

2. The combination, with a barrel, of a pivoted spring-actuated breech capable of longitudinal and lateral movement, and having a swelled inner end inclosing the rear end of the barrel and formed with a funnel-shaped outer end, as set forth.

3. The combination, with the barrel and stock and a rod projecting rearwardly from the latter, of a breech having a depending frame mounted to slide on said rod, said breech being adapted to close the rear end of the barrel, as set forth.

4. The combination, with a barrel and stock, of a breech having a pivotal connection with the latter and adapted to longitudinal and lateral movement, and a spring for holding the breech in engagement with the barrel, as set forth.

5. The combination, with the barrel and stock, of a longitudinally-sliding breech capable of lateral movement, a spring for holding

the breech in engagement with the barrel, and a stop for limiting its forward movement when out of engagement with the barrel, as set forth.

6. The combination, with a barrel and stock, of a rod extending rearwardly from the stock, a breech having a depending frame mounted to slide on said rod, and a spring on the rod, bearing against the rear end of the frame, as set forth.

7. The combination, with a barrel and stock, of a rod extending rearwardly from the latter, a breech having a depending frame mounted and adapted to slide on said rod, a spring on the rod bearing against the rear end of the frame, and a stop-plate, *k*, projecting laterally and adapted to limit the forward movement of the breech when out of engagement with the barrel, as set forth.

8. The frame *b*, the barrel *a*, secured fixedly in said frame, rod *d*, secured in the rear of said frame, as described, breech-tube *h*, swelled and flared, as described, and having the perforated frame *f*, movably located on rod *d*, spring *i*, and nut *e*, all of said elements being combined substantially as described, and for the several objects specified.

JOHN N. COLBY.

Witnesses:
FRANK H. ALLEN,
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