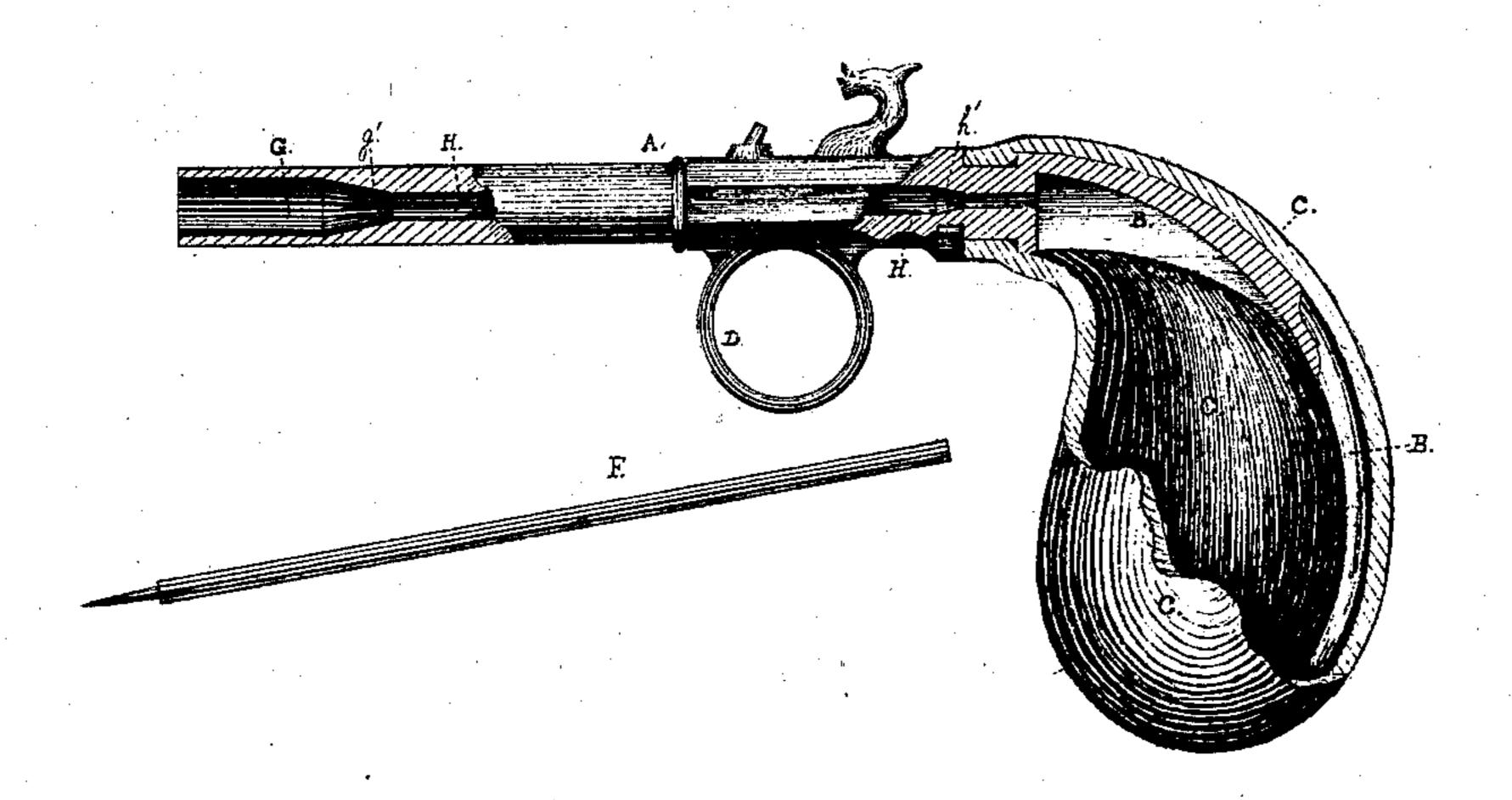
T. Bints. S.

I Pistol.

Patented Feb. 15, 1870



Reuten Brooksp. INVENTOR.

## Anited States Patent Office.

## REUBEN BROOKS, JR., OF ROCKPORT, MASSACHUSETTS.

Letters Patent No. 99,754, dated February 15, 1870.

## AIR-PISTOL.

Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, Reuben Brooks, Jr., of Rockport, in the county of Essex, and State of Massachusetts, have invented a new and improved Air-Pistol, designed as a toy for children; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon, making a part of this specification.

My invention consists in combining an elastic bulb with a pistol-barrel in such a manner that the pistol may be held firmly in the hand, while the elastic bulb is compressed.

And my invention further consists in forming the "bore" of the pistol-barrel in the peculiar manner hereinafter described, for the purpose set forth.

A is the "barrel" of the pistel, and is provided with a rib, B, and ring D, all of which may be east in one piece, or otherwise attached.

The rib B may be of any suitable form to fit the palm of the hand, and may be upon the outside or inside of the elastic bulb C.

The bulb C is of rubber or other elastic substance, and is attached to the barrel A in any suitable manner.

The projection D is intended for the forefinger, and may be of any suitable form.

In practice, the pistol is held firmly in the hand by the forefinger passing through the ring D and pressing the rib B against the palm of the hand, while the remaining three fingers are at liberty to compress the elastic bulb C.

I do not claim the combination of an elastic bulb with a tube or carrel, (as this has before been done, as in the case of Snow & Cc., patent No. 85,704,) but I do claim the combination of the rib B, elastic bulb C, and barrel A, substantially as described.

The barrel A is provided with a small bore, H, about one-eighth of an inch in diameter, and a large bore, G, about one-fourth of an inch in diameter, the former

for the purpose of receiving the dart F, and the latter for peas or other suitable projectiles; but it is found, if the bore is of equal diameter throughout, that the projectile will start from the pistol on the first puff of air caused by compressing the bulb C, unless it is retarded by some means, and will consequently be thrown but a short distance, and with feeble force; but if the projectile can be retained in the pistol until the pressure of air in the bulb has reached its maximum, and then be suddenly released, it will be thrown with much greater force to a considerable distance.

To accomplish this I contract the rear portion of the bore in a conical form, as shown at h' and g', so that the projectile may be pressed into the contracted portion of the bore, and be retained by friction until the pressure of air caused by compressing the bulb C is sufficient to overcome the resistance caused by the friction described, when the projectile will be suddenly and forcibly expelled, as before stated.

The cylindrical portion of the bore gives direction to the projectile, and allows the force of the expanding air to act for a longer time upon the dart.

I do not claim the use of "bores" of different diameters, as G and H; but I do claim forming the rear portion of the bore of air-pistols in the form of the frustum of a cone, with its base joining the cylindrical portion of the bore, substantially as described.

Having thus described my invention,

What I claim, and desire to secure by Letters Patent, is—

- 1. The combination of the barrel A, rib B, and bulb C, substantially as described and for the purpose set forth.
- 2. In combination with the cylindrical bore of the barrel of air-pistols, the conical chamber h' g', substantially as described and for the purpose set forth. REUBEN BROOKS, Jr.

Witnesses:

Jos. Manning, Eben. Blatchford.