

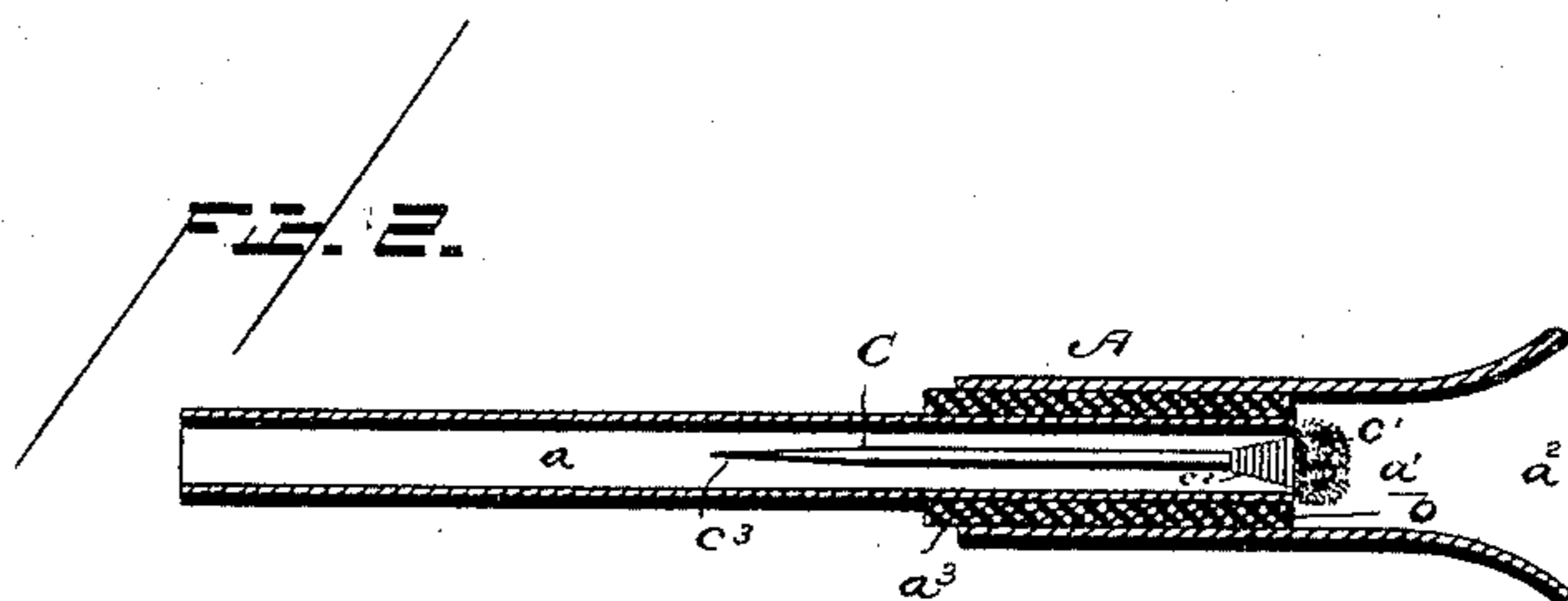
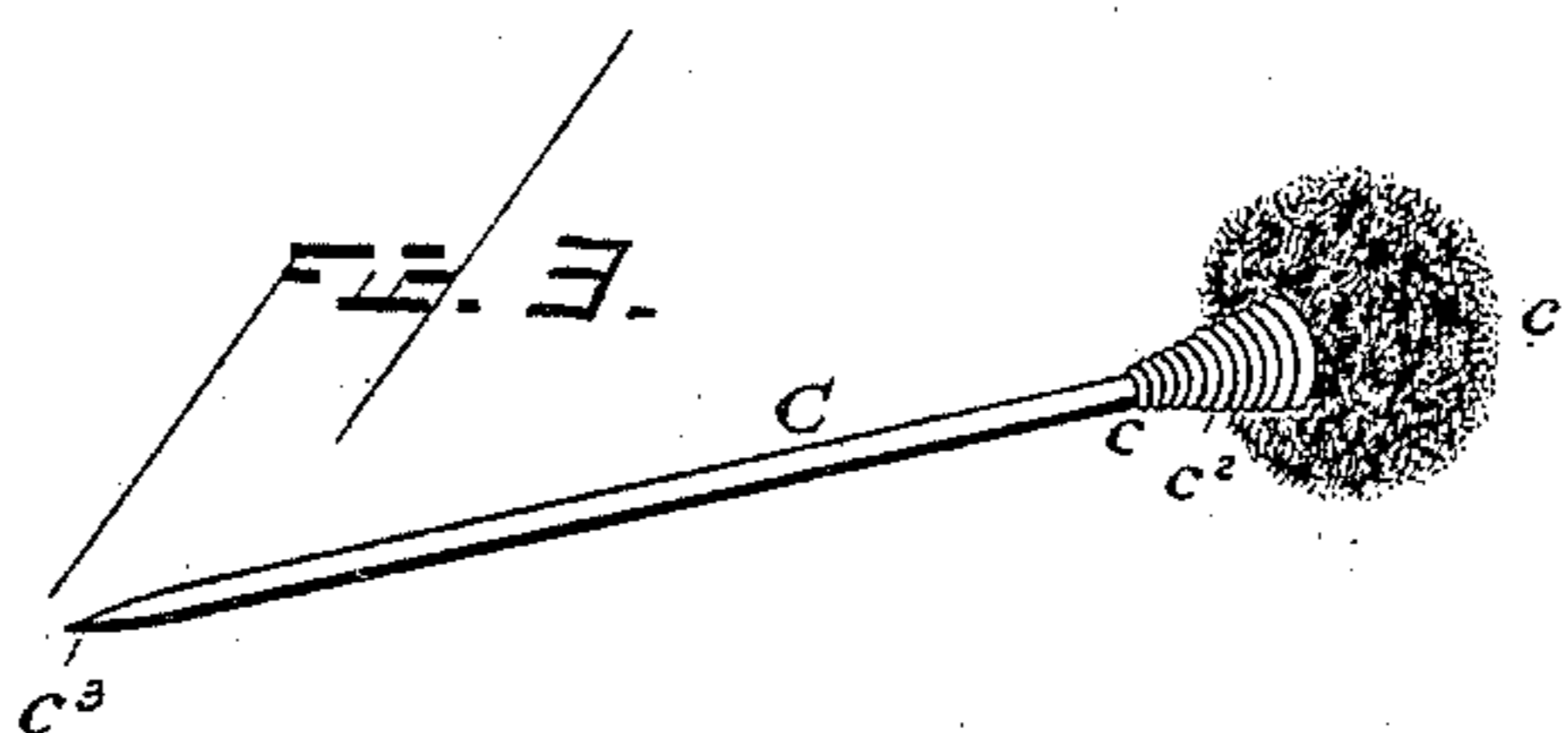
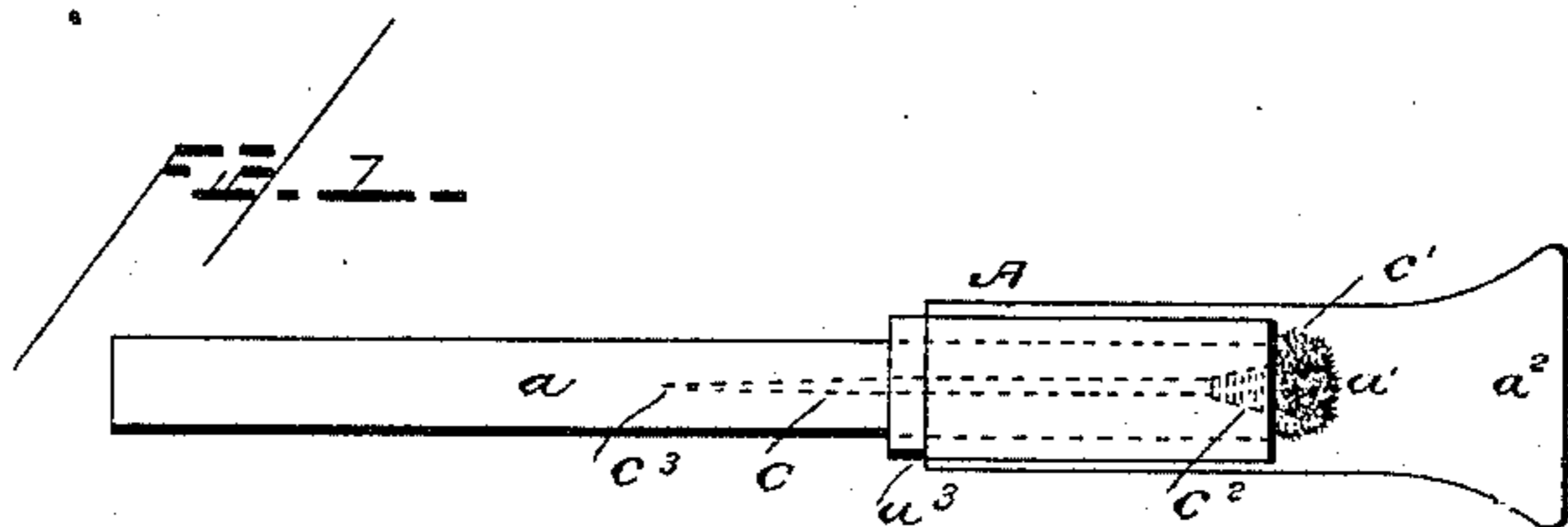
(No Model.)

L. H. LANG & J. W. HART.

BLOW GUN.

No. 344,915.

Patented July 6, 1886.



Witnesses

*Wm. W. Moore*

*E. L. Suggs*

Inventor

*Lewis H. Lang*

*John W. Hart.*

By his Attorneys

*C. A. Howden*

# UNITED STATES PATENT OFFICE.

LEWIS H. LANG AND JOHN W. HART, OF STOCKTON, CALIFORNIA.

## BLOW-GUN.

SPECIFICATION forming part of Letters Patent No. 344,915, dated July 6, 1886.

Application filed February 24, 1886. Serial No. 193,057. (No model.)

*To all whom it may concern:*

Be it known that we, LEWIS H. LANG and JOHN W. HART, citizens of the United States, residing at Stockton, in the county of San Joaquin and State of California, have invented a new and useful Improvement in Blow-Guns, of which the following is a specification, reference being had to the accompanying drawings.

Our invention relates to improvements in toy-guns, and has for its object the provision of a gun wherefrom a suitable projectile is driven by the breath of the operator.

The invention consists in the construction, arrangement, and combination of the several parts for service, substantially as hereinafter described, and specifically pointed out in the claim.

In the drawings, Figure 1 is a side elevation of our improvements, showing the gun in position for use. Fig. 2 is a central vertical section taken through said gun as arranged in Fig. 1. Fig. 3 is a detail view of the projectile.

Referring to the drawings, in which similar letters of reference denote similar parts, A designates the gun, preferably consisting in a tube, *a*, of metal, tin, or brass, a tube, *a'*, of glass, having a flaring end, *a<sup>2</sup>*, that forms the mouth-piece, and a rubber washer, *a<sup>3</sup>*, interposed between the pipe or tube *a* and the mouth-piece *a'*, whereby a shoulder, *b*, is formed near the flaring end *a<sup>2</sup>*, that receives the head *c'* of a projectile, C, thereby forming a tight joint about said head, as hereinafter described.

C designates the projectile, consisting of a wire body, *c*, having a head, *c'*, of wool, secured thereto by a thread or twine, *c<sup>2</sup>*, that passes about the lower part of said head, upon the body *c*, and a pointed forward end, *c<sup>3</sup>*.

In practice a target is set up at the desired spot. The projectile is now placed in the tube *a*, its head *c'* resting upon the shoulder *b* therein, and is forced from said tube and against the target by a quick puff of breath from the mouth of the operator.

The essential feature of our invention consists in the construction of a blow-gun with an interior shoulder, in connection with a dart or projectile having a flexible or compressible head, the latter closing the space within the shoulder and fitting over the same, where-

by the head of the dart will receive the full force of the air, and, furthermore, the head will be compressed when entering the smaller diameter of the blow-gun. In the present construction the tube *a* is smaller than the outside tube, *a'*, so that when they are joined together by the washer *a<sup>3</sup>* a shoulder, *b*, is formed at the junction of the large and smaller tubes, *a' a*, and the washer *a<sup>3</sup>*. The head of the dart in its normal condition is larger in diameter than the tube *a*; but, being compressible when air is forced through the tubes, the head of the dart is allowed to pass out, sufficient resistance being offered to the free passage to allow the full force of wind to act against the dart, and thus enable the latter to be propelled farther than it otherwise would.

We are aware of the patent to Bush, No. 85,788, in which is illustrated a toy air-gun consisting of a metallic tube or barrel secured to an ordinary gun and passing back through the gun, and provided with a mouth-piece and a movable slide to cover and uncover an opening in the metallic tube. Our invention differs from this in the fact that the rubber tube or washer is employed to establish a firm connection between the large and small tubes *a a'*, and also provide a shoulder at the junction of the tubes, to hold the dart in place while the full force of the wind is acting upon its head. Unless the dart is held slightly within the gun, it will be ejected from the latter before the wind has spent its force upon the dart, and consequently will be blown but a very short distance. The shoulder *b* effects this purpose.

We are also aware of the patent to White, No. 186,651, which illustrates a plain tube employed as a blow-gun, and a dart or projectile having a head, of wool, secured thereto, and hence we do not claim such a construction.

We claim—

The projectile or dart C, having a head, of wool or the like, the outer portion of which is left free and loose, so as to be readily compressible, in combination with the blow-gun comprising the tubes *a a'*, the tube *a* being smaller in diameter than tube *a'*, and the latter tube being provided with a mouth-piece, *a<sup>3</sup>*, and a rubber tube, *a*, at the inner end interposed between said tube *a* and the tube *a'*, thereby establishing a firm air-tight connection between the said tubes *a a'*, and also pro-

viding, in conjunction with the inner end of tube  $a$ , a shoulder,  $b$ , within the large tube  $a'$ , so that when the dart is inserted through the mouth-piece opening its head extends partly  
5 over the shoulder, and thus presents the entire head to the action of the full force of wind injected into the tube  $a'$ , as set forth.

In testimony that we claim the foregoing as

our own we have hereto affixed our signatures in presence of two witnesses.

LEWIS H. LANG.  
JOHN W. HART.

Witnesses:

L. M. CUTTING,  
L. H. CUTTING.