(No Model.)

F. E. VANDERCOOK.

TOY DART.

No. 306,559. Patented Oct. 14, 1884.

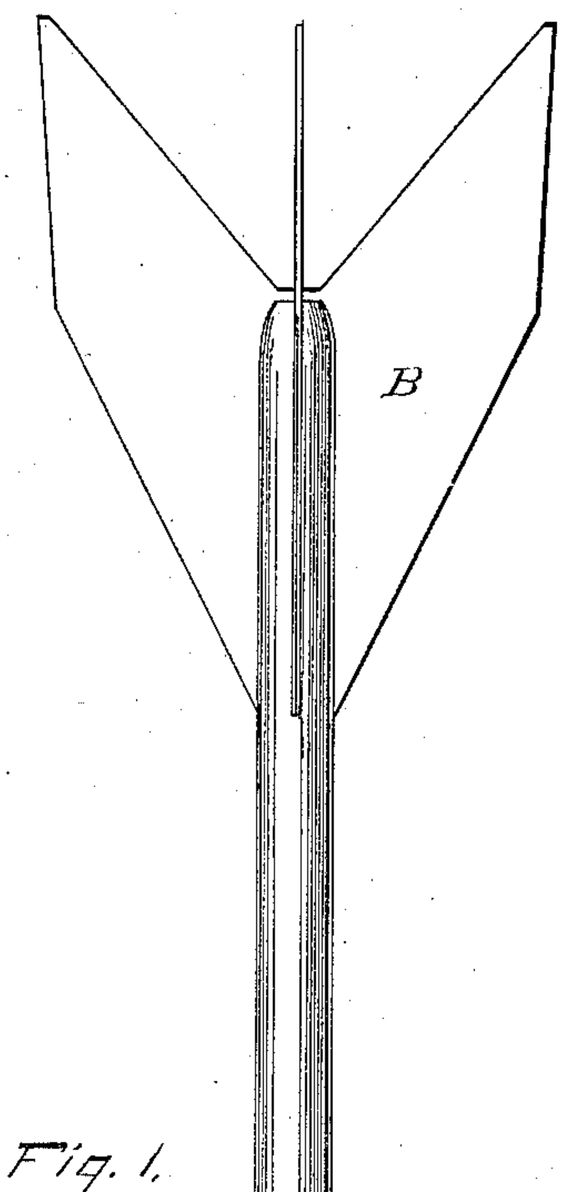

Fig. 1.

Fig. 3.

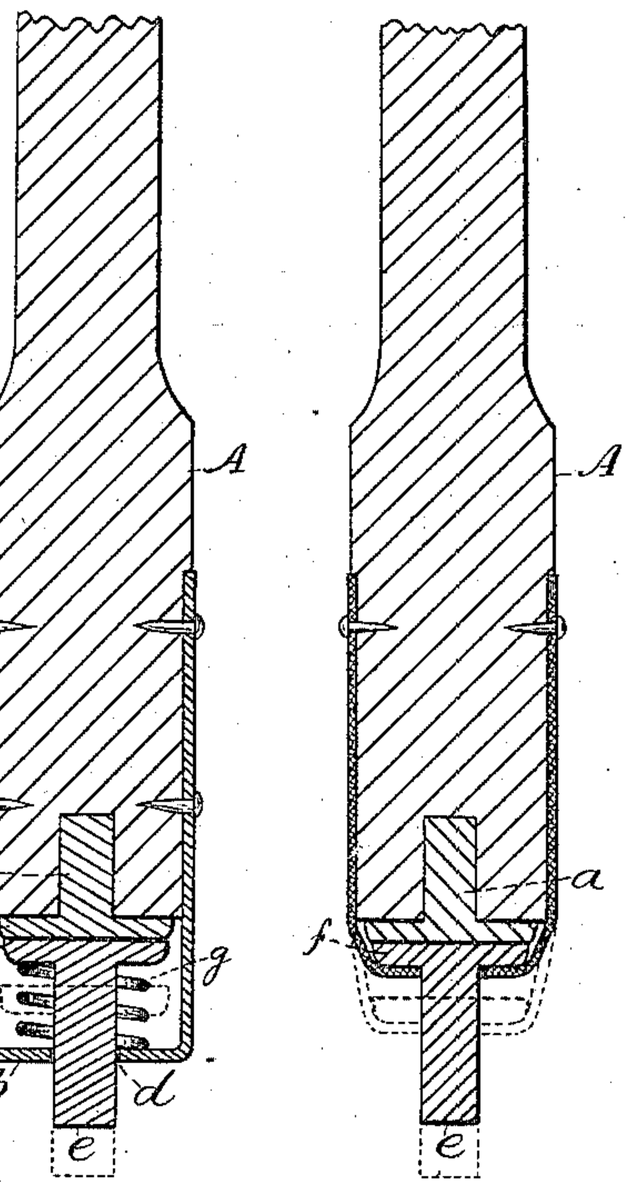

Fig. 2.

Witnesses.

L. C. Earle

L. B. Crocker

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UNITED STATES PATENT OFFICE.

FRANK E. VANDERCOOK, OF ANSONIA, CONN., ASSIGNOR OF TWO-THIRDS TO FREDERICK L. GAYLORD AND DON C. PECK, OF SAME PLACE.

TOY DART.

SPECIFICATION forming part of Letters Patent No. 306,559, dated October 14, 1884.

Application filed July 18, 1884. (No model.)

To all whom it may concern:

Be it known that I, FRANK E. VANDERCOOK, of Ansonia, in the county of New Haven and State of Connecticut, have invented a new Improvement in Toy Darts; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a side view; Fig. 2, a vertical section of the head end enlarged; Fig. 3, a modification.

This invention relates to an improvement in the toy commonly called a "dart"—that is to say, a shaft having its head somewhat heavier than its tail, and the tail provided with wings, which serve to balance and carry the dart when thrown by the hand—the object of the invention being to adapt to the dart a device for exploding a percussion-pellet when the dart strikes; and it consists in providing the head of the dart with an anvil and a hammer, so that the percussion-pellet may be introduced between the hammer and dart, the tail of the hammer projecting forward, so that as the dart is propelled the tail of the hammer will first strike and receive the force of the blow and transmit that blow to the percussion-pellet, so as to cause an explosion, as more fully hereinafter described.

A represents the shaft of the dart. At its tail it is provided with the usual wings, B. On its head end an anvil, *a*, is applied. This is best done by introducing a common metal rivet, as seen in Fig. 2, and so that the head of the rivet will set close upon the end of the head.

C is a yoke made from a strip of sheet metal, its two legs attached upon opposite sides of the head, its body *b* extending across parallel with the head, but some distance from it. Through the body is a central hole, *d*. Into this the tail *e* of the hammer is set, the head *f* standing against the anvil, and between the head and the body of the yoke a spring, *g*, is introduced, of sufficient strength to hold the hammer against the anvil, as seen in Fig. 2, but yet so as to permit its easy withdrawal from the anvil. The tail *e* of the hammer projects beyond the yoke, so as to form a striking-point for the dart.

To introduce the percussion-pellet, the hammer is drawn away from its anvil, (see broken lines, Fig. 2,) the pellet introduced between them, the hammer permitted to return, so as to grasp the pellet between the two. In this condition the dart is thrown in the usual manner, and when it strikes the force of the blow is communicated through the hammer and is sufficient to produce an explosion.

Instead of making the yoke of metal and employing the spring *g*, the yoke itself may be elastic—say made from a strip of india-rubber, as seen in Fig. 3, the tail of the hammer projecting through a hole in the rubber strip, the rubber yielding for the introduction of the pellet, as seen in broken lines, Fig. 3, its own elasticity serving to hold the hammer upon the pellet or anvil, as the case may be.

I claim—

1. The combination of the shaft A, provided at its tail end with wings B, the head end provided with a fixed anvil, *a*, the hammer *f*, its tail projecting forward to form a striking-point, and a spring whereby said hammer is held upon the anvil, yet permitted to be removed for the introduction of the pellet, substantially as described.

2. The shaft A, provided at its tail end with wings B and at its forward end with an anvil, *a*, a yoke, C, attached to the head end and extending beyond the anvil, the hammer *f*, arranged in said yoke, and with a spring, *g*, between the yoke and the hammer, the tail of the hammer projecting through the yoke to form a striking-point, substantially as described.

FRANK E. VANDERCOOK.

Witnesses:
FRANKLIN BURTON,
CHAS. H. BENZIGER.