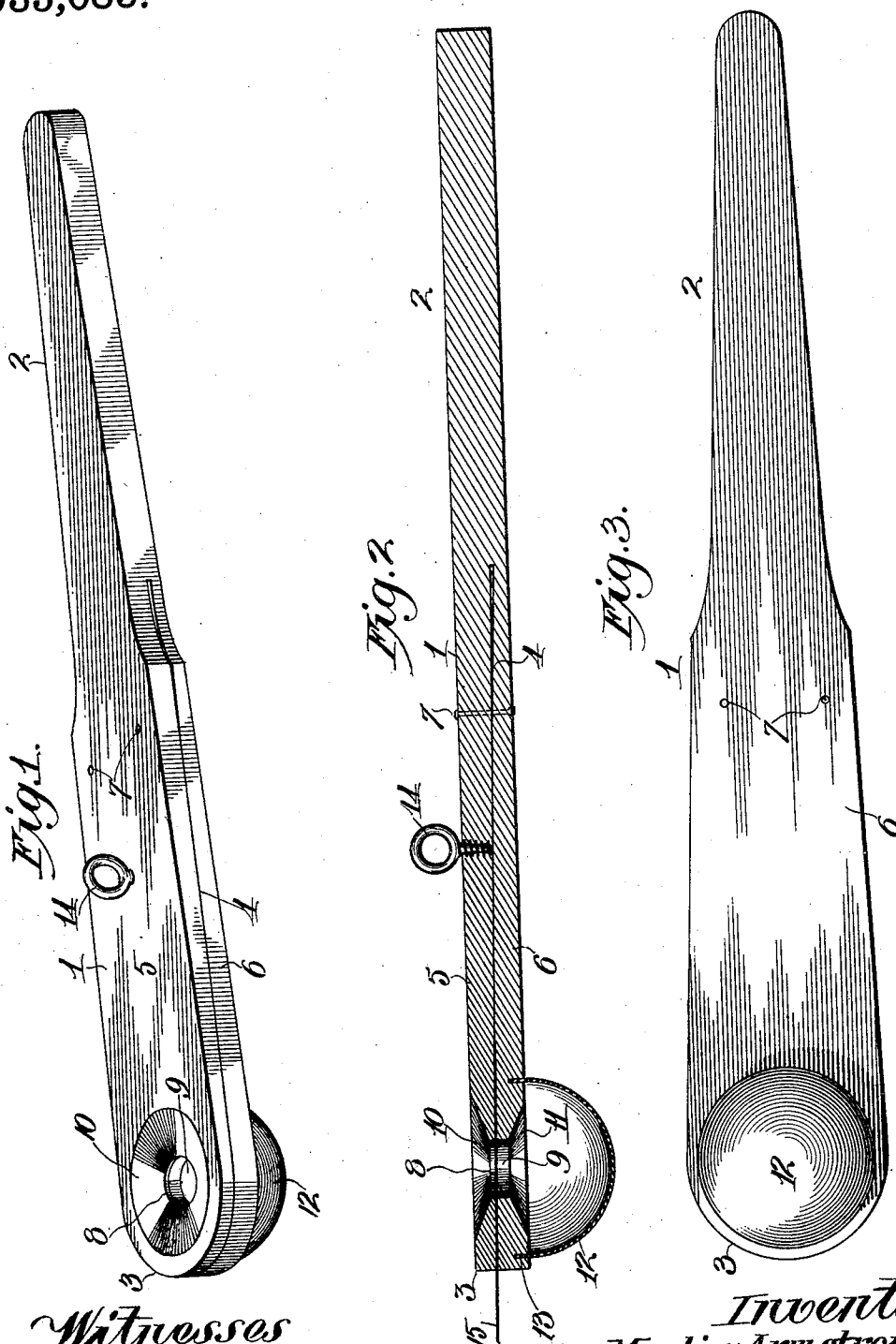


M. ARMSTRONG.
EXPLOSIVE TOY.
APPLICATION FILED JUNE 16, 1909.

Patented Sept. 28, 1909.

935,083.



Witnesses
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UNITED STATES PATENT OFFICE.

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EXPLOSIVE TOY.

935,083.

Specification of Letters Patent. Patented Sept. 28, 1909.

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To all whom it may concern:

Be it known that I, MARTIN ARMSTRONG, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Explosive Toys, of which the following is a specification.

This invention relates to explosive toys and is designed more especially as an improvement in the similar device patented June 18, 1907, by myself and A. A. Coup, the number of said patent being 857,008.

My primary object is to produce a noise-producing toy of the same general type as that shown in Figure 1 of the aforesaid patent but of simpler and cheaper construction.

With this object in view the invention consists in certain novel and peculiar features of construction and organization as hereinafter described and claimed; and in order that it may be fully understood reference is to be had to the accompanying drawing, in which:

Fig. 1, is a perspective view of a toy embodying my invention. Fig. 2, is a central vertical longitudinal section of the toy with a piece of paper therein to be ruptured for the purpose of producing the desired noise. Fig. 3, is an inverted plan view of the toy.

In the said drawing, 1 indicates a strip of wood preferably narrowed at one end to form a handle 2 which may be conveniently gripped by a child. The opposite end of the strip is preferably rounded as at 3 and the strip from the rounded end 3 to the handle is provided with a saw-kerf 4 which preferably extends obliquely so as to produce a stationary or front jaw 5 and a movable or rear jaw 6, the jaw 6 being movable because at the point where it connects with the handle it is sufficiently thin to be capable of being swung toward or from the jaw 5, and in order to establish and normally maintain an air-tight joint or relation between said jaws at their free ends. They are fastened together near their hinge or handle ends preferably by means of a pair of rivets 7 concentric with respect to their curved or handle ends 3 the jaws 5 and 6 are provided with registering holes 8 and 9 respectively, said holes having flaring enlargements 10 and 11, the latter to concentrate the compressed air on the sheet of paper to be ruptured, as hereinafter explained, and the

enlargement 10 to expedite the escape of the air in the atmosphere after the paper has been ruptured the hole 9 and its enlargement 11 communicating with a hollow and preferably hemispherical cap 12, the edge of the same being secured with an air-tight relation to jaw 6 and around enlargement 11. The preferred method of securing the edge of the hemispherical cap to the jaw, is to provide the latter with a groove 13 receiving such edge of the cap and to glue or otherwise fasten such edge in the groove to guard against dislocation of the cap.

When it is desired to load the device, jaw 6 is sprung slightly away from jaw 5, and to accomplish this I employ a jaw-opening device movable through the stationary jaw and adapted to press against the movable jaw, my preferred jaw-opening device being a headed-screw 14 mounted in jaw 5 and having a flattened front end to bear against jaw 6, as a screw provides sufficient leverage to enable a small child to turn it and thus separate the jaws sufficiently to permit a thin diaphragm 15—preferably of paper, to be slipped between the jaws and close communication between holes 8 and 9, the screw being then turned backward to permit the movable jaw to return to its original position and clamp such diaphragm with an air-tight relation between the jaws. To operate the device it is grasped by the handle and struck sharply against the base of the hand or any other firm portion of the body or upon any substantially solid object, the impact being sustained by the cap which, yielding under such impact, compresses the air confined within it sufficiently to burst or rupture the diaphragm and produce a loud noise or explosion. The jaws are then slightly separated to permit the ruptured diaphragm to be withdrawn and replaced by a new one, the screw being again turned backward to permit the new diaphragm to be clamped tightly between the jaws.

From the above description it will be apparent that I have produced an explosive or noise producing toy which can be operated without danger of injury resulting from the explosion and which is of simple, strong, durable and cheap construction and is susceptible of modification in minor particulars without departing from the spirit and scope of the appended claims.

Having thus described the invention what I claim as new and desire to secure by Letters-Patent, is;

1. An explosive toy, comprising a handle
5 provided at one end with a pair of relatively-movable and integrally-formed jaws, provided at their free ends with communicating holes, and a hollow compressible cap secured to one of the jaws with an air-tight
10 relation and surrounding the opening of such jaw.
2. An explosive toy, comprising a handle provided at one end with a pair of relatively-movable and integrally-formed jaws
15 held yieldingly together and provided at their free ends with communicating holes, and a hollow compressible cap secured to one of the jaws with an air-tight relation and surrounding the opening of such jaw.
- 20 3. An explosive toy, comprising a handle provided at one end with a pair of relatively-movable and integrally-formed jaws, provided at their free ends with communicating holes, a hollow compressible cap secured to one of the jaws with an air-tight relation and surrounding the opening of such
25 jaw, and means movable through one of the jaws whereby pressure may be applied on the companion jaw to separate them slightly.
- 30 4. An explosive toy, comprising a handle provided at one end with a pair of relatively-movable and integrally-formed jaws held yieldingly together and provided at their free ends with communicating holes, a
35 hollow compressible cap secured to one of the jaws with an air-tight relation and surrounding the opening of such jaw, and means carried by one of the jaws to exert pressure against the other jaw and thereby
40 move the jaws apart.
5. An explosive toy, comprising a handle provided with a kerf in one end producing a pair of jaws and provided in said jaws near their free ends with communicating
45 holes, means tending to hold the jaws pressed flatly together at their free ends, and a hollow compressible cap secured to one of

the jaws with an air-tight relation around the hole therein and at the opposite side of said jaw from the companion jaw.

6. An explosive toy, comprising a handle provided with a kerf in one end producing a pair of jaws and provided in said jaws near their free ends with communicating holes, means tending to hold the jaws
55 pressed flatly together at their free ends, a hollow compressible cap secured to one of the jaws with an air-tight relation around the hole therein and at the opposite side of said jaw from the companion jaw, and
60 means carried by one of the jaws for exerting pressure against the other whereby they may be spaced apart at their free ends.

7. An explosive toy, comprising a handle provided with a kerf in one end producing a
65 pair of jaws and provided in said jaws near their free ends with communicating holes, means tending to hold the jaws pressed flatly together at their free ends, a hollow compressible cap secured to one of the jaws with
70 an air-tight relation around the hole therein and at the opposite side of said jaw from the companion jaw, and means extending movably through one of the jaws and engaging the other for spacing said jaws apart.

8. An explosive toy, comprising a handle provided with a kerf in one end producing a pair of jaws and provided in said jaws near their free ends with communicating holes, means tending to hold the jaws pressed flatly
80 together at their free ends, a hollow compressible cap secured to one of the jaws with an air-tight relation around the hole therein and at the opposite side of said jaw from the companion jaw, and a screw mounted in one
85 of the jaws and adapted to be advanced therethrough and engage the companion jaw for the purpose of spacing said jaws apart.

In testimony whereof I affix my signature, in the presence of two witnesses.

MARTIN ARMSTRONG.

Witnesses:

HELEN C. RODGERS,
G. Y. THORPE.