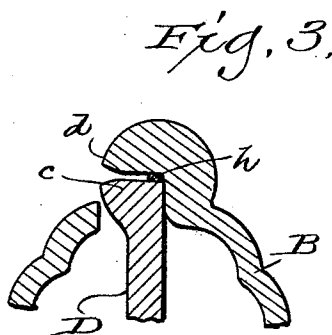
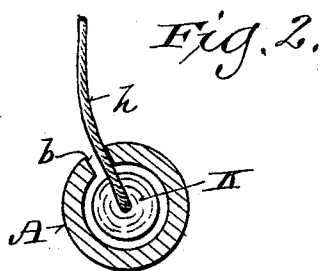
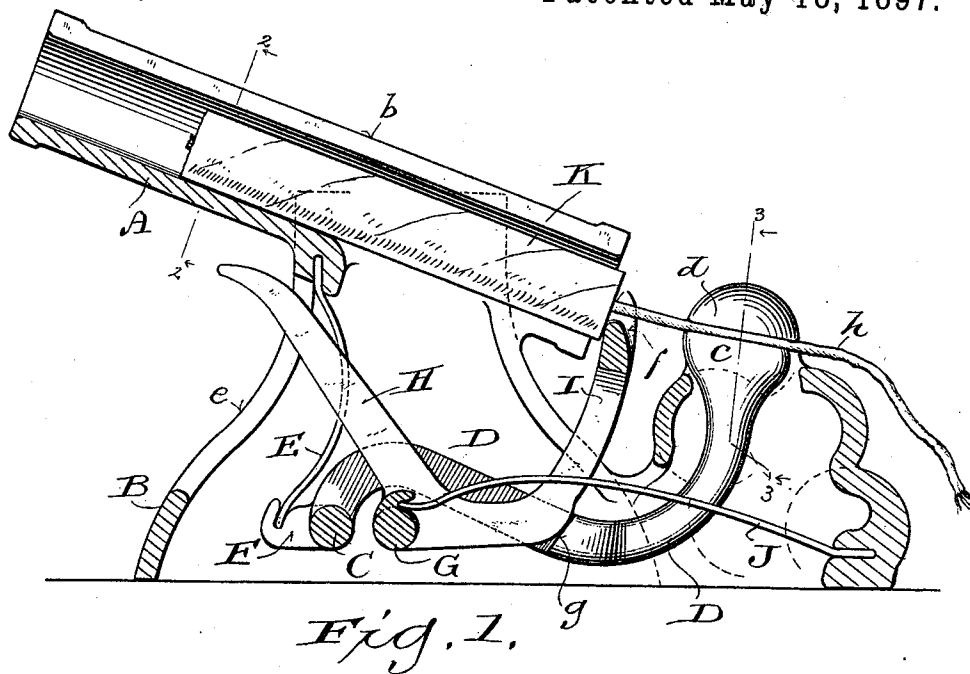


(No Model.)

E. H. ROONEY.
TOY FIRE CRACKER CANNON.

No. 582,693.

Patented May 18, 1897.



WITNESSES.

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TOY FIRE-CRACKER CANNON.

SPECIFICATION forming part of Letters Patent No. 582,693, dated May 18, 1897.

Application filed March 9, 1896. Serial No. 582,380. (No model.)

To all whom it may concern:

Be it known that I, EUGENE H. ROONEY, a citizen of the United States, and a resident of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Toys; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention has for its object to provide a simple economical toy organized for the purpose of holding a fire-cracker in position for safe ignition of its fuse and for automatic ejection of said fire-cracker, the latter becoming a projectile-explosive while in flight. Hence said invention consists in certain peculiarities of construction and combination of parts hereinafter set forth with reference to the accompanying drawings and subsequently claimed.

In the drawings, Figure 1 represents a vertical longitudinal section of a toy constructed according to my invention, and also illustrates a fire-cracker positioned in the toy for ignition and ejection. Figs. 2 and 3 represent transverse sections respectively taken on lines 2 2 and 3 3 of Fig. 1.

Referring by letter to the drawings, A represents a tube mounted on a hollow stand B and preferably inclined, so as to have its outer end at the greatest elevation. It is also preferable, as herein shown, to provide the tube A with a longitudinal slot *b*, that extends from end to end thereof. The tube and stand may be cast from metal in two sections for permanent union by solder or other suitable means.

As a matter of design, the structure thus far described may represent a mounted cannon, and in rear of the same the stand or base may be configured upon the exterior to represent a series of cannon-balls in pyramidal arrangement.

Journaled in the hollow stand B is an arbor C, and an arm D, extending from the arbor, has its upper outer end *c* in opposition to a jaw *d*, constituting part of said stand, in rear of the tube A above specified. A flat spring E has one end thereof set in a recess formed in the stand, and the other end of this spring engages a seat in a lug F, extending from the arbor C in a direction opposite the

arm D, this spring being under contraction to hold the upper outer end of said arm normally in contact with the jaw *d* of said stand. Another arbor G, journaled in the hollow stand B, carries a bell-crank that has one arm H thereof extended through a vertically-disposed slot *e* in the front of said stand, the other arm I of said bell-crank being arranged to play in a clear space at the rear of the tube A, communicating with the aforesaid stand. The latter arm of the bell-crank has its outer upper end in the form of a fork *f*, that normally comes within the rear portion of the tube or barrel A, and a flat spring J, engaged at one end with a recess in the stand B, has its other end seated under tension against the arbor G aforesaid.

The arm D above specified has a shoulder *g* in the path of the bell-crank arm I, and thus when the bell-crank is tilted against the resistance of the spring J the former arm D is depressed against the resistance of spring E to bring its end *c* out of contact with the opposing portion *d* of the stand B, while at the same time the fork *f* is brought in rear of the tube A, this being the position of the parts, as illustrated in Fig. 1.

In practice a fire-cracker K is placed in the tube A to have its fuse *h* come in rear of said tube, and this operation is facilitated by having the longitudinal slot *b* in the aforesaid tube. At the same time the bell-crank is operated to bring the fork *f* astraddle of the fire-cracker fuse and to open the jaws formed by the end *c* of the arm D and the part *d* of the stand B, after which said bell-crank is released to permit a grasp of said fuse by said jaws and forcible impingement of said fork against the butt of the fire-cracker. The fuse of the fire-cracker being lighted intermediate of the holding-jaws and the fork *f* its severance will permit of said fork returning to normal position, whereby this fork operates as an automatic ejector for said fire-cracker, and the latter has its explosion while in flight as a projectile from the aforesaid tube.

It is possible and practical to grip the fuse of a fire-cracker between a side of the ejector and bore of the tube, notwithstanding the fact that an especially-constructed fuse-grip is herein set forth.

Having now fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A toy comprising a suitably-mounted
5 tube for the support of a fire-cracker, a spring-controlled fuse-grip in rear of the tube, and a spring-controlled ejector for the fire-cracker.

2. A toy comprising a suitably-mounted
10 tube for the support of a fire-cracker, a spring-controlled pivotal arm terminating at one end in a jaw opposing a stationary jaw in rear of the tube, and a spring-controlled pivotal fire-cracker ejector operative in one direction
15 against said arm to open the fuse-grip embodying said jaws.

3. A toy comprising a suitably-mounted longitudinally-slotted tube for the support of a fire-cracker, a spring-controlled fuse-grip in rear of the tube, and a spring-controlled ejector
20 for the fire-cracker.

4. A toy comprising a hollow stand, a tube mounted thereon in communication therewith at the rear, a spring-controlled arbor journaled in the stand, a shouldered arm that be-
25 ing extended from the arbor has its free end

in the form of a jaw opposing another jaw on the stand in rear of the tube, another spring-controlled arbor journaled in said stand, and a bell-crank on the latter arbor having one arm extending through a vertically-disposed slot at the front of the aforesaid stand and its other arm terminated in a fork that normally comes within the rear portion of said tube, this forked arm of said crank being operative against the shoulder of the aforesaid jaw-arm.

5. A toy comprising a suitably-mounted tube for the support of a fire-cracker, and a spring-controlled ejector for the fire-cracker, the latter being held, by grip upon its fuse, against the ejector so as to be expelled from the tube subsequent to ignition of said fuse.

In testimony that I claim the foregoing I have hereunto set my hand, at Milwaukee, in the county of Milwaukee and State of Wis-
consin, in the presence of two witnesses.

EUGENE H. ROONEY.

Witnesses:

N. E. OLIPHANT,
B. C. ROLOFF.