(No Model.)

W. S. REED.

MECHANICAL TOY.

No. 294,076. Patented Feb. 26, 1884.

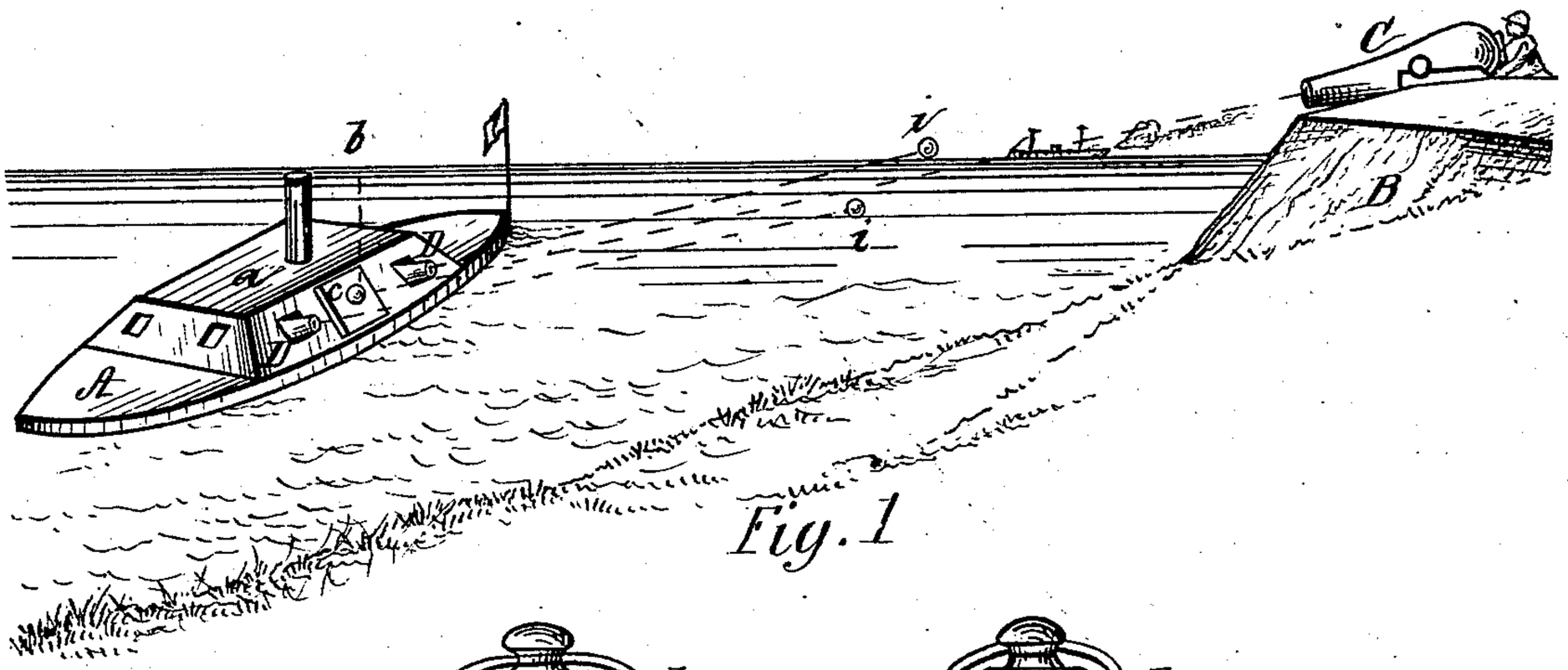


Fig. 1

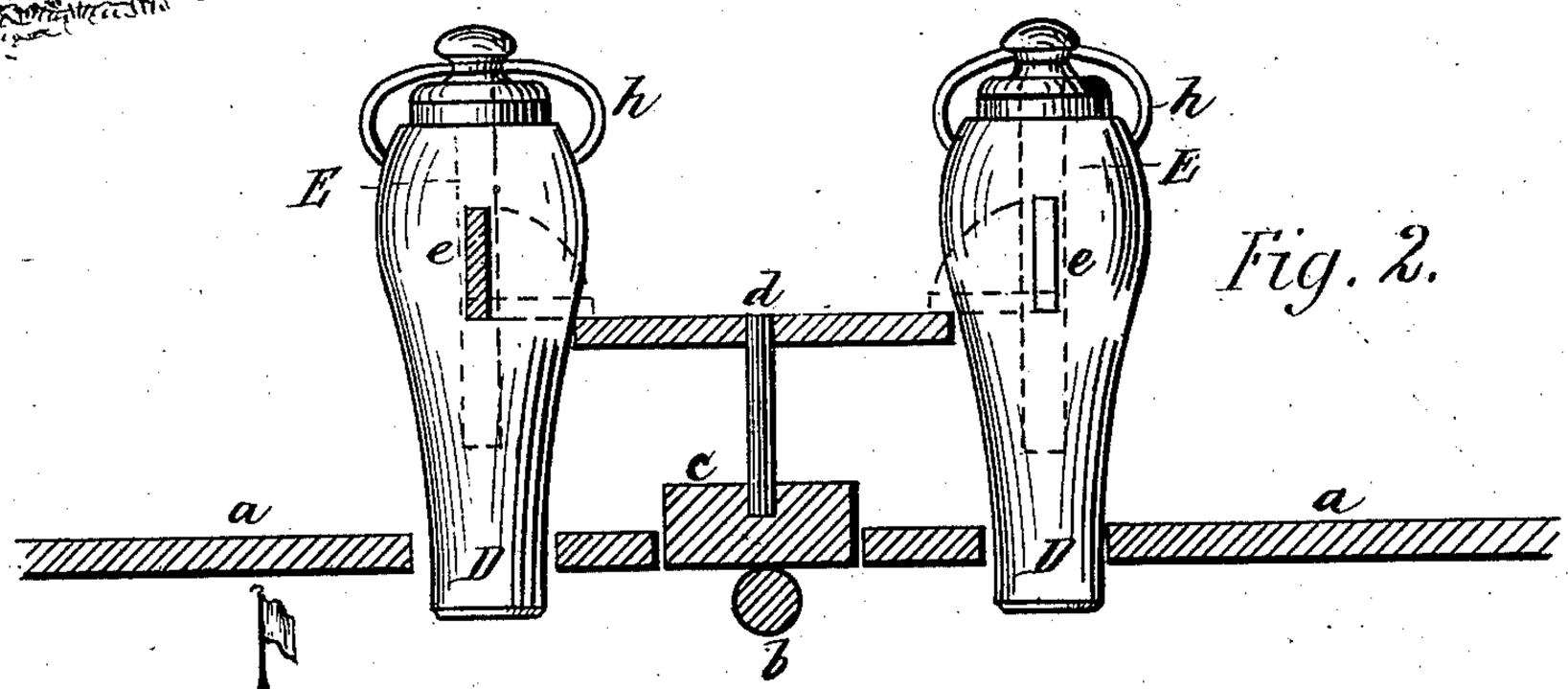
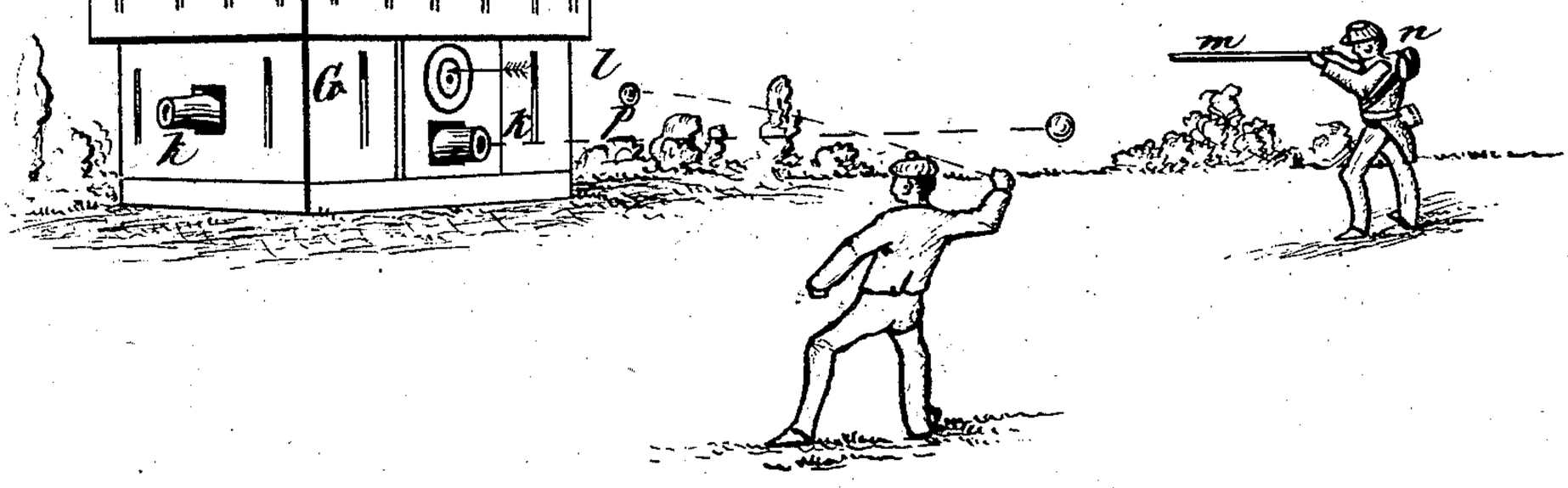


Fig. 2.

Fig. 3.



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UNITED STATES PATENT OFFICE.

WILLIAM S. REED, OF LEOMINSTER, MASSACHUSETTS.

MECHANICAL TOY.

SPECIFICATION forming part of Letters Patent No. 294,076, dated February 26, 1884.

Application filed May 12, 1883. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM S. REED, of Leominster, in the county of Worcester and State of Massachusetts, have invented a Mechanical Toy, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a perspective view of a monitor approaching a harbor defense, the guns of both being represented as in the act of firing. Fig. 2 represents the arrangement of the guns within the turret of the monitor. Fig. 3 represents a block-house with its guns, and with figures of soldiers in front discharging balls thereat.

My present invention consists in a toy, object, or person, either stationary or movable, provided with a device—such as a cannon, gun, or other weapon or instrument—which shall be discharged or projected when any portion of said toy is struck or acted on by a ball or other object from the outside or inside of the same.

To enable others skilled in the art to understand and use my invention, I will proceed to describe the manner in which I have carried it out.

In Fig. 1 of the said drawings, A represents a toy monitor approaching a fort or harbor defense, B, having a cannon, C, located in a firing position. D D are mortars within the turret *a*, aimed at the cannon C.

To illustrate one form of this invention, the ball *b* of the cannon C is supposed to strike the central bulk-head, *c*, Figs. 1 and 2, of the wall of the turret, which is thereby knocked inward, carrying with it a T-shaped discharger, *d*, and bringing its opposite ends into contact with devices *e*, which communicate with the bores of the mortars D D, through vertical openings extending down from their tops, the devices *e*, when pressed by the discharger, being swung around from the position seen in dotted lines, Fig. 2, to that represented in full lines in a direction longitudinal with the axes of the mortars, when they are immediately discharged, thus returning the fire of the cannon C at the fort. When the upper portion of the device *e* of a mortar is arranged at right angles to the axis thereof, as seen in dotted lines, its vertical portion or shank (having its bottom provided with inclined faces, not shown) extending down into the bore forms a stop or bearing for the forward end of a long plunger, E, (seen dotted, Fig. 2,) which passes through the rear of the mortar, and is held in this position against the resistance of a spring (in the form of an elastic band, *h*,) until the device *e* is struck by the T-shaped discharger, when the device is rotated, so that its lower end liberates the spring-plunger, simultaneous with which the balls *i i* of the mortars are forcibly projected thereby, thus replying to or returning the fire of the cannon at the fort.

The discharge of the gun or guns *k k* of a fort, block-house G, or castle may be effected by projecting against its sides a ball or dart, *l*, from a gun, *m*, aimed by a marksman, *n*, (see right hand of Fig. 3,) or by a ball, *p*, (center of Fig. 3,) thrown by hand.

As the device *e* and its office as a target when applied to a cannon form the subject of an application for patent made simultaneous herewith, I have not herein entered into the minute details of its construction.

The principal feature which I have originated and carried into practice, is a toy in which one object is discharged or projected when said toy is struck or acted on by another object, either separated from or connected therewith—such as a ball from a cannon being discharged when the latter is struck by the ball of another cannon, thus illustrating the reply or return of the fire of the first.

My present invention may be applied to numerous toys—such as horsemen, vehicles, steamboats, railway-cars, locomotive-engines, castles, forts, and machines of various kinds—in which the manipulation of or action upon one object or portion thereof will cause the movement, action, or response of another.

I claim—

As an improvement in mechanical toys, an object, person, or thing provided with a means for projecting a ball or other weapon or thing, in combination with another object, person, or thing, also provided with a means for projecting a ball or other weapon or thing, the action of one toy upon the other producing the response or reply of the action of the former, substantially as described.

Witness my hand this 26th day of April, 1883.

WILLIAM S. REED.

In presence of—
N. W. STEARNS,
E. J. STEARNS.