No. 692,693. Patented Feb. 4, 1902.

W. L. MORGAN.

TOY PADDLE.

(Application filed Mar. 30, 1901.)

(No Model.)

Fig. 1.

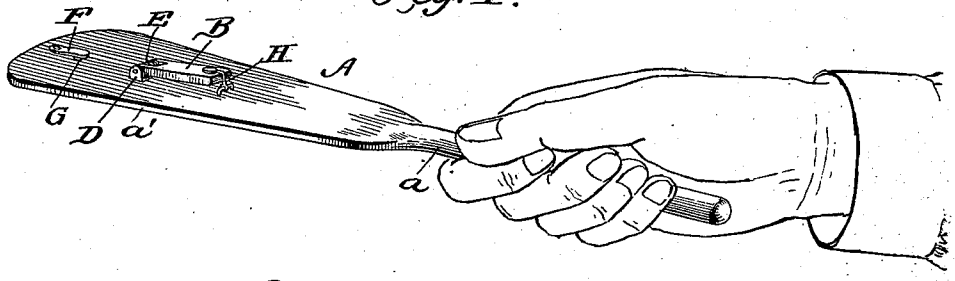


Fig. 2.

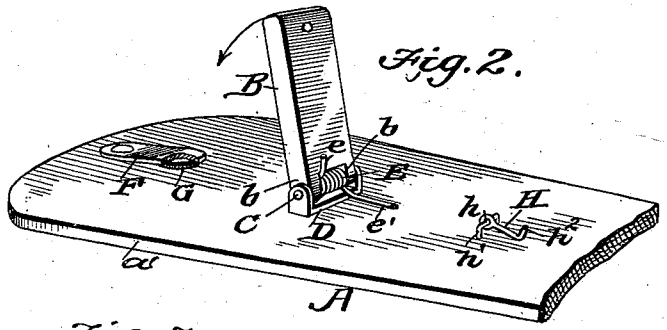


Fig. 5.

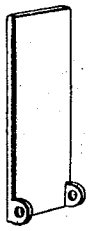


Fig. 7.

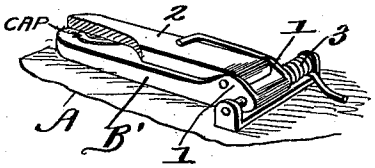


Fig. 6.

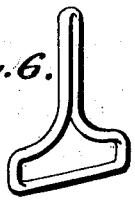


Fig. 3.

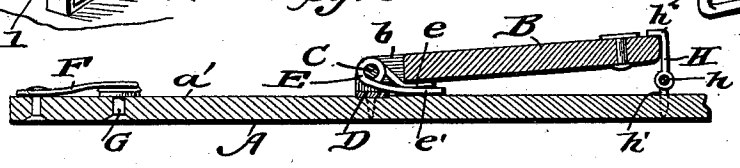
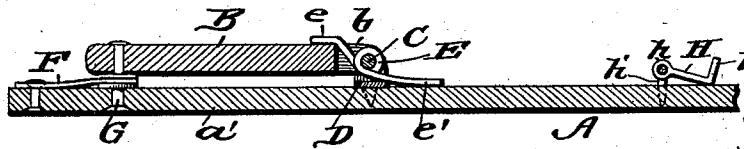


Fig. 4.



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UNITED STATES PATENT OFFICE.

WILLIAM L. MORGAN, OF BURLINGTON, IOWA.

TOY PADDLE.

SPECIFICATION forming part of Letters Patent No. 692,693, dated February 4, 1902.

Application filed March 30, 1901. Serial No. 53,672. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM L. MORGAN, a citizen of the United States, residing at Burlington, in the county of Des Moines and State of Iowa, have invented a new and useful Toy Paddle, of which the following is a specification.

My invention is an improvement in toy paddles, and has for its object to provide a paddle with an arrangement for holding and exploding a paper-cap when the paddle is given a jar by being brought into contact with a person or object.

The object of my invention is to provide a paddle with an arrangement for holding a paper percussion-cap that is designed to be exploded by a spring-actuated hammer which is held in place by a trigger so arranged and adjusted that it will release its hold upon the hammer when a slight jar is given the paddle, which forces the hammer through the medium of a spring to strike against the holder with force enough to explode the cap.

A further object of my invention is to provide a toy that shall be so constructed that when operated the cap will be covered, so that there will be no possibility of the powder escaping to cause one injury.

With the above objects in view my invention consists in the novel construction and arrangement of parts, that will be fully described in the following specification and pointed out in the claim, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of my improvement, showing the hammer held back or cocked ready for releasing. Fig. 2 is an enlarged perspective view of the end of the paddle containing the devices for exploding a cap. Fig. 3 is an enlarged longitudinal section on the line 3 3, Fig. 1. Fig. 4 is a similar view showing the hammer released and resting against the cap-holder. Fig. 5 is a detail view of a modified form of hammer. Fig. 6 is a detail view showing a further modified form of hammer hereinafter referred to, and Fig. 7 is a detail view hereinafter referred to.

In the drawings forming a part of this specification, A designates a wooden paddle made of any shape or design, but preferably having at one end a round handle portion *a* and at its opposite end a broad thin portion, as at *a'*. Upon the broad end of the paddle I position a hammer B, made of any suitable material and having at one end two perforated ears *b*, through which passes a shaft C, that is held in a U-shaped clip D, as shown.

E indicates a torsional spring which is held upon a shaft C, having one end *e* resting against the hammer and its opposite end *e'* against the paddle, the function of which will appear later on.

Upon the extreme outer end of the paddle I arrange a cap-holder F, which consists of a flat spring-plate riveted at one end to the paddle and having its opposite or free end normally resting upon the head of a metal rivet G, and between this spring-plate and the rivet is held the cap to be exploded.

At a point in rear of the pivotal point of the hammer, at a distance equal to the length of the same, I position a trigger or holder H, having in one end an eye *h*, through which passes a staple *h'*, that is held upon the paddle and loosely holds the trigger in place. The free end of the trigger terminates in a finger portion h^2, that is designed to hook over the end of the hammer and hold the same down against the tension of the spring.

The manner of operating my improved toy is as follows: A paper-cap is placed upon the rivet-head G and is held in place by the free end of the spring-plate or cap-holder F, this being done by either turning the plate to one side or raising the free end, as may be desired. The hammer is then turned back against the tension of the spring and held in such position by the trigger H, which is so arranged that by a slight jar of the paddle it releases its hold upon the hammer, which, through the spring, flies up and over, striking at its free end the cap-holder with force enough to explode the cap.

In practice I prefer to make the hammer of wood, as shown in the drawings, and in that case I provide its free end with a metal contact-piece at a point where the hammer engages the spring holder-plate, which not only prevents wear, but also provides a weight at the outer end that increases the effectiveness of the hammer.

I do not wish to be limited to the above form of hammer, as I may find it desirable to

make it of sheet metal of any suitable thickness and having its pivotal end provided with ears formed integral with the body portion, as shown in Fig. 5 of the drawings. In either case, however, I make the hammer of such width that the powder from the exploded cap will not easily escape, thereby greatly reducing the possibility of any harm being done the operator or person struck by the paddle.

The hammer may be made of a single piece of spring-wire bent to the form shown in Fig. 6; but in the latter case I would make the cap-holding spring-plate of such a width as to prevent the escapement of the powder, as the hammers shown in Figs. 2 and 5 are designed to do.

In some instances I may provide the hammer with a cap-retaining member that is held by and designed to move with the said hammer, and in that case the hammer B' would be provided with ears 1, between which is pivoted a retaining member 2, which is normally held into engagement with the hammer by a spring 3. This hammer is held open and operated precisely as the hammer B, only the spring 3 operates to hold the retaining member 2 in engagement with the hammer and also operates to throw the hammer over to explode the cap, as will be readily understood.

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

In a toy of the kind described, the combination of a paddle, a clip held upon said paddle, a shaft held by said clip, a hammer having one end provided with perforated ears through which the shaft projects, a spring held on the said shaft and having one end thereof engaging the hammer and its opposite end engaging the paddle, a contact-piece held upon the paddle and adapted to be engaged by a spring-plate pivoted to the said paddle, a staple held upon the said paddle and a trigger connected at one end to the staple and its free end provided with a finger portion for engagement with the hammer, substantially as shown and described.

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Witnesses:
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