J. B. BLACKSHEAR.

TOY TORPEDO.

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1,288,813. Patented Dec. 24, 1918.

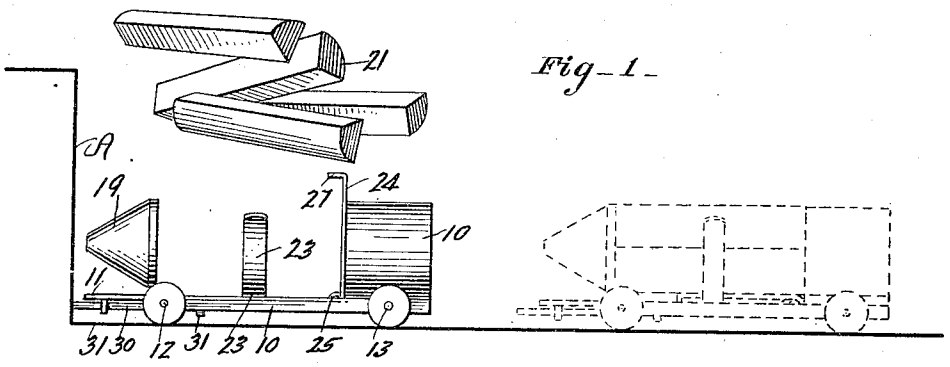


Fig. 1.

Fig. 2.

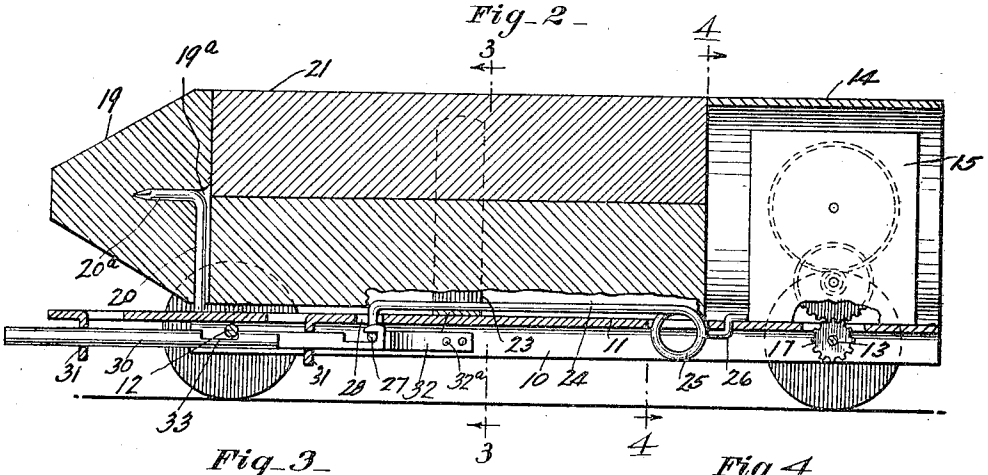
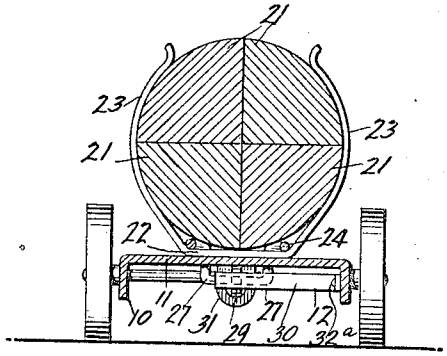


Fig. 3.

Fig. 4.



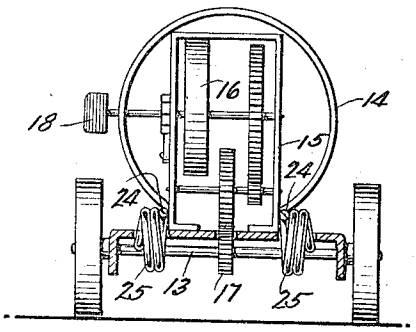
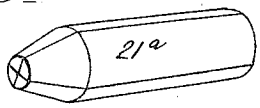


Fig. 5.



WITNESSES

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TOY TORPEDO.

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To all whom it may concern:

Be it known that I, JAMES B. BLACKSHEAR, a citizen of the United States, and a resident of the city and county of Honolulu, Territory of Hawaii, have invented a new and Improved Toy Torpedo, of which the following is a full, clear, and exact description.

My invention relates to a toy and is adapted to be embodied in a land torpedo or the like mounted to travel and comprising spring-controlled means arranged to suddenly cause disruption of the torpedo or body part thereof upon release of the spring by contact of the torpedo with a wall or other fixed object affording the necessary resistance.

An object of the invention is to provide a toy of the indicated type in which the displaceable elements, the holding means therefor, as well as the disrupting spring and its controlling means, are formed and arranged in a novel manner, not only with a view to simplify the construction but to cause the disrupting of the torpedo to be carried out in a striking manner.

Reference is to be had to the accompanying drawings forming a part of this specification in which similar reference characters indicate corresponding parts in all the views, it being understood that the drawings are merely illustrative of one example of the invention.

Figure 1 is a side view of a toy torpedo embodying my invention showing the same in full lines after disruption and indicating in dotted lines the initial assembled form of the toy;

Fig. 2 is an enlarged longitudinal vertical section, parts being broken away;

Fig. 3 is a transverse vertical section on the line 3—3, Fig. 2, and looking forwardly;

Fig. 4 is a transverse vertical section on the line 4—4, Fig. 2, and looking rearwardly.

Fig. 5 is a perspective view of a modified form of the destructive body or toy shell forming part of the invention.

Ordinarily, the invention will be embodied in a wheeled structure embodying any suitable frame or body 10 presenting at the top a platform 11 and having a front axle 12 and a rear axle 13. In practice the rear axle is motor driven, for which purpose any ordinary spring motor as used in toys of this general character may be employed. In the illustrated form there is conventionally shown a housing 14 in which is a motor frame 15, the motor spring 16 serving to actuate a clock train, the final pinion 17 of which is on the driven axle 13. The numeral 18 indicates the winding key or handle on the main spindle of the motor.

The torpedo includes a head 19 in fixed position on the body 10 and here shown as held in position by a fastening device 20 rising from the platform 11 and having a forwardly extending terminal 20^a, the body of the spindle being accommodated in a vertical recess 19^a in the back of the head 19, the construction serving to facilitate the assembling of the parts. Between the head 19 of the torpedo and the motor housing 14, a sectional and disruptable body 21 is accommodated, the body being advantageously formed of elongated sectors 21, four of which are employed in the illustrated form to present a cylindrical body when assembled. The sections of the body 21 are supported on the platform 11 lengthwise thereof in a holder 22 presenting upwardly extending resilient arms 23 conforming generally to the cylindric exterior of the disruptable body.

To cause the ejection and disruption of the body 21 to roughly simulate the effect of an explosion, I employ a spring 24 generally of U-shape presenting two side arms, the rear ends of which are formed with spring coils 25, the rear terminals 26 of the spring being made fast to the body 10 or its platform 11, said terminals being here shown as bent twice to pass through the platform 11 and be securely engaged therewith. The free end or bend 27 of the spring 24 is disposed at approximately right angles to the side arms of said spring. The said spring may be pressed downwardly from the upright position indicated in Fig. 1 to the horizontal position shown in Figs. 2 and 3 with the spring disposed along the top of the platform 11 and extending through the retainer 22 at the base thereof, so that the bent end at 27 will extend downwardly through a vertical opening 28 in the platform 11 for engagement by a trigger. The trigger 30 is a pilot trigger and is slidable longitudinally of the torpedo at the under side of the platform 11 and has a hooked rear end 29 adapted to engage the bend 27 of the spring 24 to hold the latter restrained against reaction and lying beneath the assembled body 21. The trigger 30 is

here shown as slidable in depending brackets 31 on the under side of the platform 11, and the arrangement is such that in the engaged position of the trigger it will project forwardly as a pilot beyond the front of the platform 11 and head 19 for contact with a wall or other resistance surface A. Any suitable spring may be arranged in connection with the trigger 30 to normally tend to maintain the same in the forward position, for which purpose there is here shown, merely as one example, a plate spring 32 secured at one end as at 32ª to frame 10 and bearing at its free end against the rear end of the trigger 30. In the trigger 30 is a notch 33 through which the front axle 12 extends so that said axle constitutes a stop to limit the movement of the trigger, without the provision of any special device for the purpose.

With the described arrangement the motor spring having been wound and the parts assembled as in Figs. 2 and 3, upon the contact of the trigger 30 with a resisting object, said trigger will be moved rearwardly relatively to the platform 11 and release the ejecting spring 24 permitting the reaction of the latter to cause the spring to swing through an arc of approximately 90° to a vertical position, thereby ejecting the sectional body 21 against the restraining action of the resilient arms 23 and the yielding resistance of said arms will result in the sudden ejection of the body with considerable force, the sections of the body separating and scattering in various directions as will readily be understood.

In Fig. 5 a destructible body or toy shell 21ª is shown, the sections of which are tapered at their front end in simulation of the head 19, it being designed to employ this form of destructible body without the head 19 or its sustaining element 20.

I would state in conclusion that while the illustrated example constitutes a practical embodiment of my invention, I do not limit myself strictly to the mechanical details herein illustrated, since manifestly the same can be considerably varied without departure from the spirit of the invention as defined in the appended claims.

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

1. A toy torpedo including a structure adapted to travel, a platform on said structure, a holder on said platform presenting resilient side arms, a sectional body adapted when assembled to be accommodated in said holder, between the arms thereof, a spring adapted to eject the said sectional body from the holder, and trigger-controlled means to hold the spring under restraint on the said platform and beneath the sectional body.

2. A toy torpedo including a structure adapted to travel, a platform on said structure, a holder on said platform presenting resilient side arms, a spring adapted when under compression, to lie longitudinally above the platform and extend through the said holder, said platform having a vertical opening and the said spring terminating at its free end in a bend at approximately right angles to project through said opening to the under side of the platform, a sectional body adapted to be accommodated in said holder between the arms thereof, over the said spring, and a spring-pressed pilot trigger extending longitudinally of said structure and projecting beyond the front end thereof, the rear end of the trigger being adapted to engage the bent end of the spring beneath the platform and adapted to release said spring upon a rearward movement of the trigger, said spring being adapted, when released, to swing upwardly through an arc to dislodge the sectional body from the position thereof in the holder.

3. A toy torpedo including a structure adapted to travel, separable members adapted to be displaced, spring means to displace said members, a longitudinally reciprocating spring-pressed trigger projecting beyond the front end of the structure to contact with an object, said trigger being adapted to restrain or release the spring means, and a wheeled axle on said structure, said trigger having a notch through which the axle extends to constitute a stop for the trigger.

4. A toy torpedo including a wheeled structure adapted to travel, axles on which the wheels of said structure are mounted, a motor on the structure at the rear end having driving connection with one of said axles, a head on the torpedo at the front end and distant from the motor, a sectional body disposed lengthwise of the torpedo and accommodated thereon between said motor and said head, spring means adapted to be placed under compression on the structure between the motor and head and beneath the said body, and means to restrain or release said spring means.

5. A toy of the class described including a structure adapted to travel, a head thereon formed in its rear face with a vertical groove and with a recess extending forwardly from said groove, and a fastener rising from said structure and accommodated in said groove, the upper end of said fastener being bent forwardly and extending into said recess.

JAMES BAYARD BLACKSHEAR.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."