March 21, 1939. C. ARNOLD 2,151,546

MECHANICAL TOY IN THE FORM OF A SOLDIER THROWING A HAND GRENADE

Filed July 6, 1937

Fig. 1

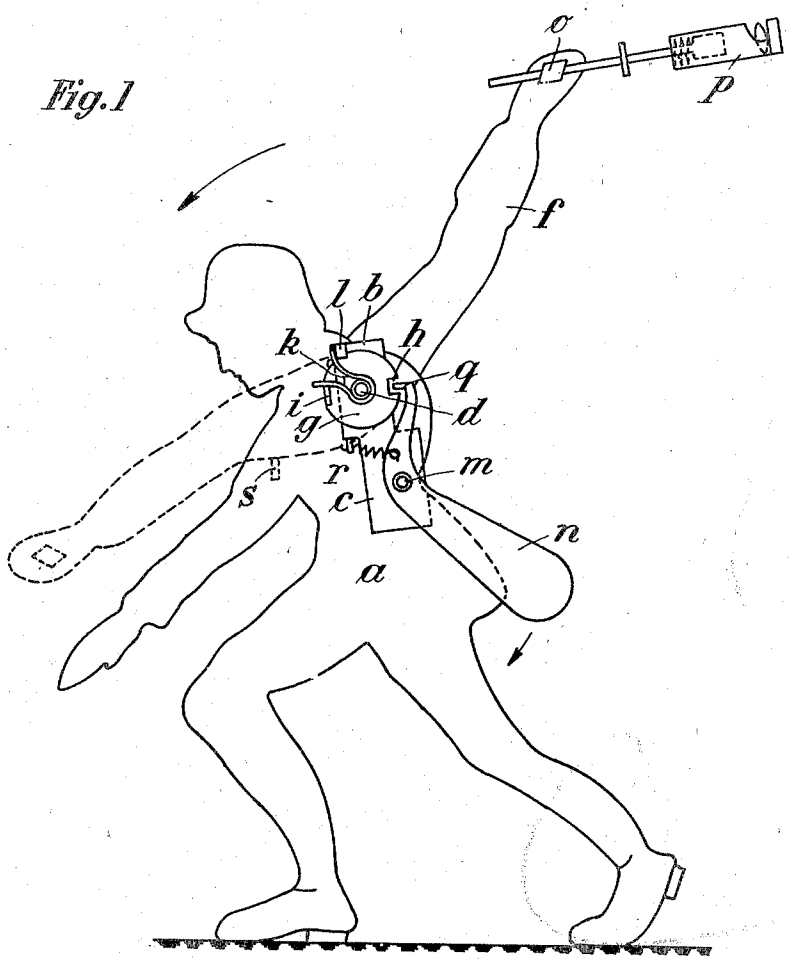
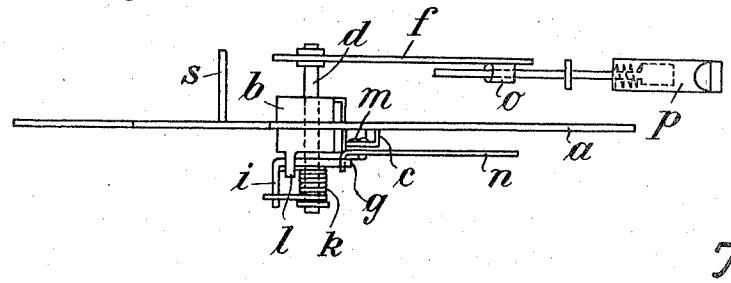


Fig. 2



Inventor:
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by
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Patented Mar. 21, 1939

2,151,546

UNITED STATES PATENT OFFICE

2,151,546

MECHANICAL TOY IN THE FORM OF A SOLDIER THROWING A HAND GRENADE

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Application July 6, 1937, Serial No. 152,252
In Germany May 7, 1937

1 Claim. (Cl. 46—145)

This invention relates to a mechanical toy for instance in the form of a soldier throwing a hand-grenade, the figure having a movable arm and a hand-grenade in the hand, said grenade to be thrown by the arm and to explode when striking against any article, for instance the ground.

The object of the invention is, to animate the known rigid hand-grenade throwing toys so that they carry out an approximately natural movement.

An embodiment of the invention is illustrated, by way of example, in the accompanying drawing, in which

Fig. 1 shows the mechanical toy in side elevation, the figure being in the position ready for the throw.

Fig. 2 is a top plan view of the mechanism in the toy figure.

On the back of a plastic figure *a* imitating a soldier and in the typical position of a hand-grenade thrower, a bracket *b* is fixed which has a downwardly directed extension *c*. A transverse axle *d* mounted in the bracket *b* carries on one of its ends the right arm *f* of the toy-figure. On the other end of the transverse axle *d* a disc *g* is keyed, which has a notch *h* and a projection *i* bent at the end to form a hook which is opposite the notch *h*. A spiral spring *k* is bent around the axle *b*, and the ends of the spring are spread asunder and bear the one against the hook *i* of the disc and the other against an angular extension *l* of bracket *b*. On the downwardly directed extension *c* of bracket *b* a short pin *m* is fixed, on which a lever *n* is pivotally mounted, which is shaped and painted to imitate a haversack. The upper hook-shaped end *q* of the lever *n* engages in the notch *h* of disc *g* and secures the arm *f* in the lifted position. On the inner face of the hand of arm *f* a tubular holder *o* is fixed, into which the rod of the hand-grenade *p* is inserted and loosely held.

The operation of the toy is as follows:

In the inoperative position arm *f* is in the position indicated in Fig. 1 in dash lines. If a hand-grenade has to be thrown by the toy-figure the arm *f* is lifted, whereby disc *g* is rotated and spring *k* put under tension. The nose *q* at the upper end of lever *n* engages into the notch *h* of disc *g* and secures the arm *f* in the lifted position. A spiral spring *r* is attached at the one end to lever *n* and at the other end to the extension *c* of bracket *b* and designed to securely hold disc *g* in its actual position. The charged hand-grenade *p* is then inserted into the tubular holder *o*. As soon as the lower end of lever *n* is depressed nose *q* moves out of notch *h* of disc *g* so that the spring *k* rotates with sufficient force the axle *d* with disc *g* and arm *f* so that the hand-grenade is thrown out of the hand and the tubular holder *o* against the article to be struck. To increase the throwing effect a stop *s* is fixed on the toy figure designed to suddenly stop the arm *f* in its forward movement.

Instead of a figure imitating a soldier with hand-grenade the toy-figure can imitate a spear-thrower or the like.

I claim:

A mechanical toy in the form of a soldier throwing a hand grenade, comprising in combination a body, an axle extending transversely in said body, a spiral spring wound on said axle and secured at one end to said body, a notched disc keyed on said axle and engaging the other end of said spring, an arm fixed at one end on said axle and adapted to be raised by hand to rotate said axle and tension said spring between said body and said disc, a catch oscillatable in said body and adapted to lock said disc to maintain said spring under tension, holding means on the other end of said arm, a stick shaped percussion hand grenade loosely insertable in said holding means, and a lever rigidly connected to said catch and adapted to disengage said catch from said disc to swing forward said arm precipitately into its initial position under the action of said spring, and to sling said hand grenade out of said holding means.

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