July 5, 1960 G. W. DUNBAR 2,943,619

TOY BOOMERANG PROJECTING GUN

Filed May 27, 1959 2 Sheets-Sheet 1

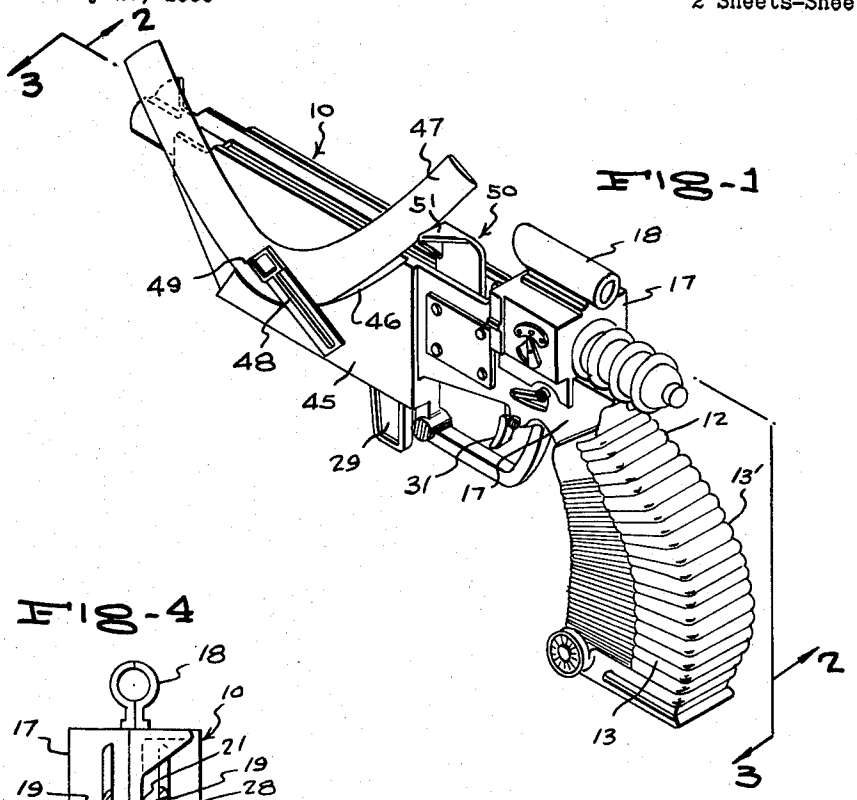
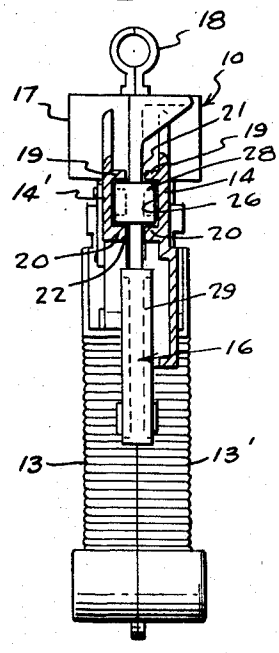


FIG-1

FIG-4



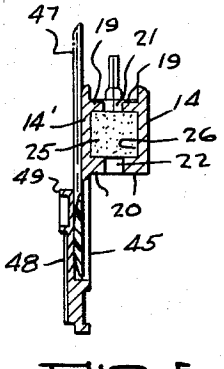


FIG-5

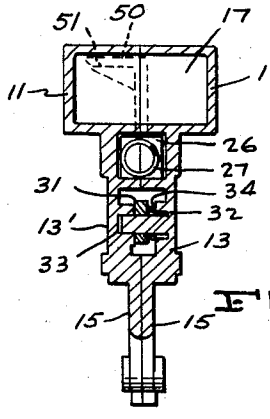


FIG-6

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TOY BOOMERANG PROJECTING GUN

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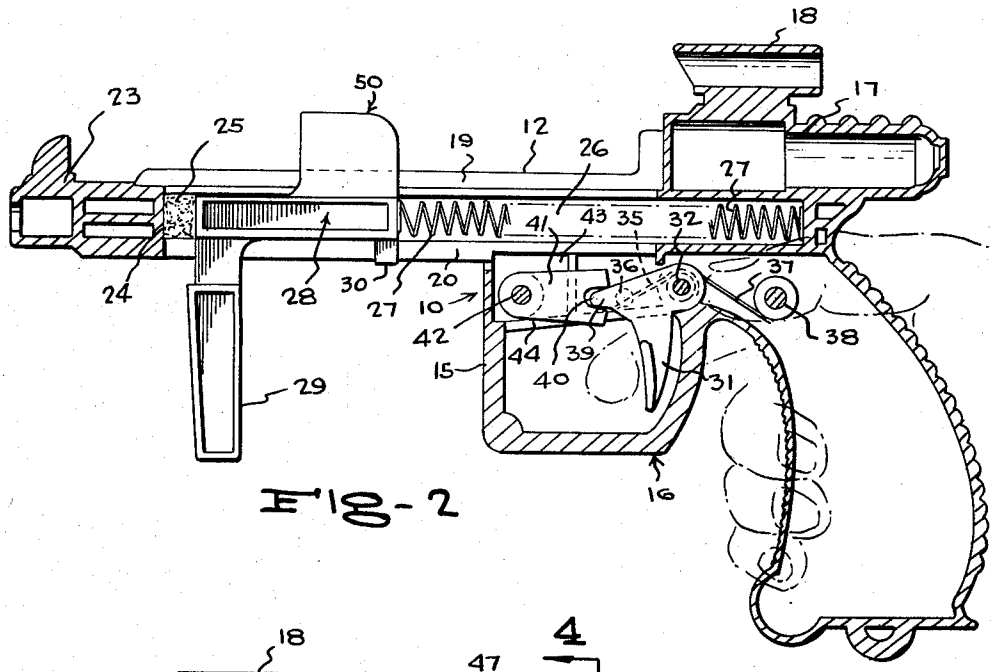


FIG-2

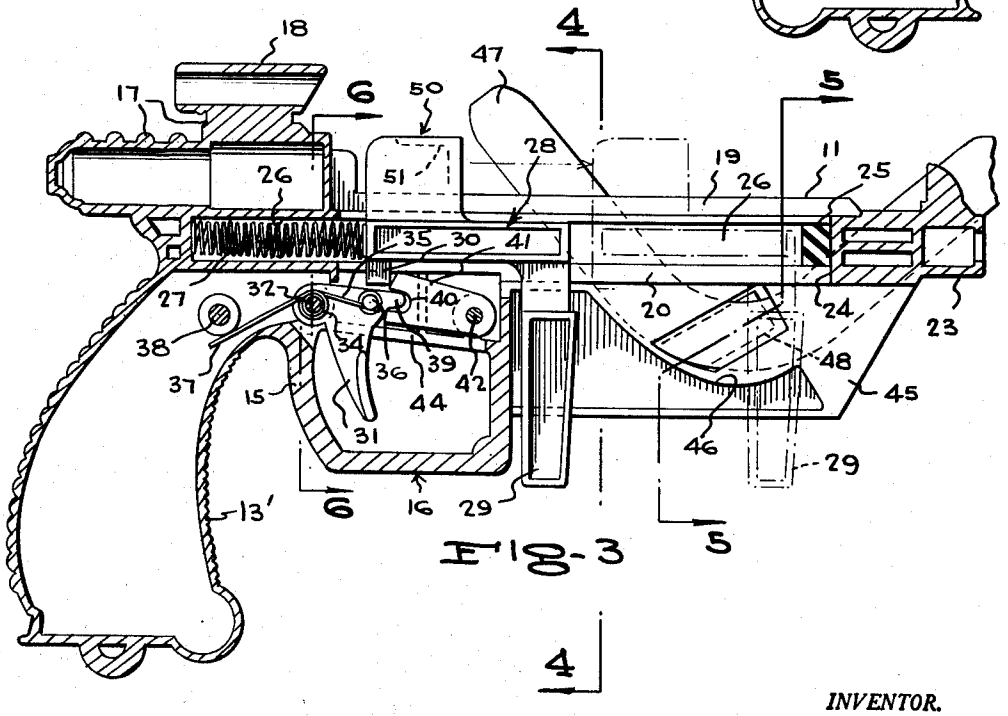


FIG-3

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TOY BOOMERANG PROJECTING GUN

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4 Claims. (Cl. 124—16)

This invention relates to toy guns and more particularly to a gun wherein a miniature boomerang may be supported and projected therefrom and it consists in the constructions, arrangements and combinations herein described and claimed.

It is an important object of the invention to provide a toy gun which may be readily formed from plastic materials and preferably the complete gun is defined by a pair of substantially identically formed half sections, the interior surfaces of which are provided with complemental configurations which when mated and assembled as a unit, provide respective housings for operating means for projecting a boomerang.

More specifically, it is an object of the invention to provide a toy gun wherein the gun proper is formed in two parts, which are suitably connected together to form a composite unit; the gun including a grip portion and trigger mechanism for actuating a spring tensioned means, the barrel portion of the gun having a trackway extending longitudinally thereof for a portion of its length, the trackway forming a sliding support for a carriage which will be forcibly urged forwardly along the trackway upon release of the spring tensioned means, one side of the barrel having a depending plate which includes a cradle for support of the boomerang, a portion of which extends upwardly in the path of a projector head carried by the carriage.

Additional objects, advantages and features of invention will be apparent from the following description, considered in conjunction with the accompanying drawings, where,

Figure 1 is a perspective view of the gun constructed in accordance with the invention.

Figure 2 is a longitudinal section taken on the line 2—2 of Figure 1.

Figure 3 is a longitudinal section taken on the line 3—3 of Figure 1.

Figure 4 is a cross section taken on the line 4—4 of Figure 3.

Figure 5 is a similar view taken on the line 5—5 of Figure 3, and

Figure 6 is a cross section taken on the line 6—6 of Figure 3.

Referring more particularly to the drawings, the gun is designated generally by the reference character **10** and comprises a pair of longitudinally halved gun sections **11** and **12** suitably secured together as by cementing, welding or otherwise. The sections include respective grip portions **13** and **13'** and barrel sections **14** and **14'** having mating portions **15** to define a trigger guard **16**. The barrel sections may include any suitable configurations **17** as best seen in Figure 1, which may represent appurtenances usually found in firearms and as here shown also includes a sight **18**.

The barrel sections **14** and **14'** of the gun halves, are each provided with longitudinally extended upper and lower flanges **19** and **20** which, as clearly shown in Figures 4 and 5, are inwardly directed toward each other, but terminate short of the longitudinal axis of the barrel sections, forming upper and lower longitudinal slots **21** and **22** when the sections are assembled. The flanges **19** and **20** terminate inwardly of the end **23** of the barrel forming a face **24** to which a cushion block **25** is secured which forms a bumper for a carriage presently to be described. The flanges **19** and **20** in addition to providing the slots **21** and **22** also form an elongated chamber **26** which terminates at a point within and above the grip portions **13** and **13'** and forms a seat for one end of a helical spring **27**, the other end of the spring being in contacting engagement with the rear portion of a carriage **28**. The carriage comprises a body of corresponding shape to the chamber **26** and is slidable throughout the length of the slots **20** and **21**, for a purpose as will presently appear. The lower side of the carriage **28** has a depending arm **29** which passes freely between the lower flanges **20** (see Figures 2, 3 and 4) and rearwardly thereof a short detent lug **30** is provided which will retain the spring **26** under compression as will be presently explained.

A trigger **31** is pivotally mounted upon a pin **32** which is integrally formed with the grip section **13**, the free end of the pin being seated in an opening **33** of the grip section **13'** (see Figure 6). The pin **32** also mounts a coiled spring **34** one end **35** of which is engaged by a pin **36** on the trigger, the opposite end **37** of the spring being engaged by a pin **38**. The trigger **31** has a forwardly extended bill **39** for seating engagement with a slot **40** formed in the adjacent end of a carriage engaging plate **41** which is pivotally mounted upon a pin **42** extended transversely of a compartment **43** formed between the gun sections **11** and **12**, the compartment **43** having a slot **44** permitting free swinging movement of the plate **41**, as shown in Figure 2.

The section **11** of the gun has integrally formed therewith a vertically disposed planiform plate **45** which extends from the trigger guard **16** to a suitable point forwardly of the barrel section **11**, the outer face of the plate being provided with an arcuate shaped laterally offset ridge **46** forming a cradle for support of a boomerang indicated at **47**; and in order that the boomerang will be releasably supported in the cradle, a resilient retainer strip **48** is employed. As best seen in Figure 1, the free end **49** of the strip extends at an angle in a forwardly direction, and will engage a boomerang at approximately the medial or bight portion thereof for retention. It will be noted that the offset ridge **46** forming the cradle is so shaped as to curvature as to support various sizes and shapes of boomerang and yet properly present an edge of the boomerang in the path of the extension **51** of the carriage.

The carriage **28** is also provided with an upright projection or head **50** positioned at the rear of the carriage, the head including a lateral extension **51** adapted to contact an edge of the boomerang under operation as will be described.

In use, it being assumed that the carriage **28** is at the forward end of the barrel sections **14** and **14'** as indicated in Figure 2, and it is desired to place the gun in operative position, the carriage **28** may be moved rearwardly against the tension of the spring **27** by exerting pressure upon the arm **29** or head **50**. Such movement of the carriage is continued until the lug **30** has passed over and beyond the spring tensioned detent **41** at which time a clicking sound will be heard due to passage of the lug **30** beyond the detent **41**, to indicate that the gun is cocked. The boomerang is next positioned in the cradle defined by the ridge **46**, as best seen in Figure 1, the free end of the retainer strip releasably engaging the arm of the

boomerang. Upon exerting pressure on the trigger **31**, the carriage will be released, the extension **51** forcibly contacting the upwardly projecting arm of the boomerang causing projection thereof from the cradle.

The support of the boomerang within the cradle may be varied so that varying projections of the boomerang may be attained. For instance, a very short portion of the arm of the boomerang may project in the path of the carriage which would provide a different motion to the boomerang than if a greater portion of the arm was exposed to the striker head of the carriage; and it will be understood that the gun can be used in an upright position as in Figure 1 or the gun may be turned upon its side and in each position there will be given a different motion and passage of the boomerang when in flight.

While I have shown and described a preferred form of the gun, this is by way of illustration only and I consider as my own, all such modifications in construction as fairly fall within the scope of the appended claims.

I claim:

1. A toy for projecting a boomerang comprising an elongated body member simulating a gun and having a barrel and hand grip, said barrel having opposed upper and lower spaced flanges interiorly thereof, a carriage slidably supported upon and between said flanges, a helical spring seated at the rear end of said flanges and in contacting engagement with the rear end of said carriage to urge said carriage forwardly along said flanges, detent means operatively associated with said carriage to retain said spring under tension, said grip having release means for the detent, a cradle for support of a boomerang positioned upon one side of the barrel forwardly of said grip, said cradle having an arcuate seat for reception of the bight portion of the boomerang, said seat including an upward extension terminating adjacent the upper edge of the barrel for support of an arm of the boomerang when placed in said seat, a spring retainer strip on said cradle extended diagonally forward of the barrel, for releasable retention of a boomerang and said carriage having an upright head for contacting engagement with the arm supported by the extension of said cradle.

2. A toy gun for projecting a boomerang comprising an elongated body having opposed upper and lower spaced flanges extending longitudinally thereof, a carriage slidably supported upon and between said flanges, said body having a seat at the rear terminal ends of said flanges, a helical spring interposed between said seat and the rear portion of said carriage, said carriage being slidable rearwardly to compress said spring, a spring tensioned trigger member pivotally mounted within and projecting exteriorly of the body member, a detent member on said carriage, a carriage engaging plate operatively associated with said trigger and positioned in the path of the detent member to engage the same to maintain the carriage at the rearmost position with the spring under compression, a cradle upon one side of said body member for support of a boomerang thereagainst and said carriage having a lateral extension for contacting an edge of a boomerang arm supported in said cradle upon actuation of said trigger and release of said spring.

3. The structure of claim 2, in which the elongated body is formed in two half sections and secured together, the sections having configurations which when assembled define respective housings for the operating means of the gun.

4. A toy for projecting a boomerang comprising an elongated body member simulating a gun and having a barrel, a depending plate on one side of said barrel, said plate having an arcuate seat at a low level of said plate and an upward extension terminating adjacent the upper edge of said barrel, said arcuate seat forming support of the bight portion of the boomerang and said extension affording support of an arm of the boomerang when positioned in said arcuate seat, a spring retainer strip on said plate having a forward free end for contacting the boomerang for releasable retention thereof and a releasable spring tension means including a striker head for contacting engagement with the arm of the boomerang supported in said extension.

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