C. L. & E. M. DAWES.

BOOMERANG.

APPLICATION FILED JAN. 24, 1908.

906,206. Patented Dec. 8, 1908.

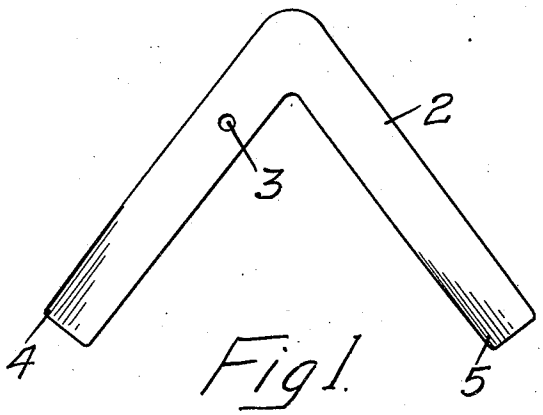


Fig 1.

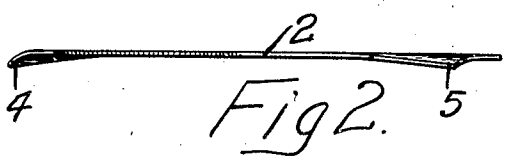


Fig 2.

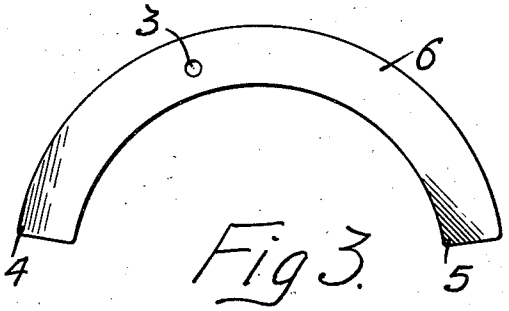


Fig 3.

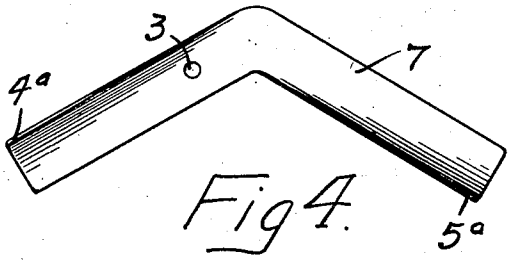


Fig 4.

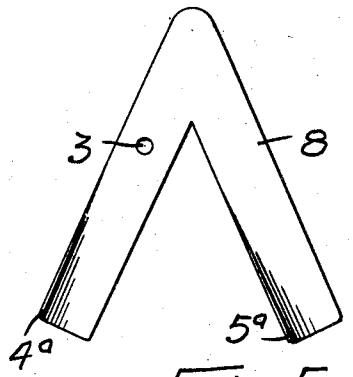


Fig 5.

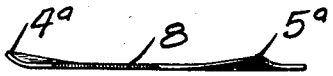


Fig 6.

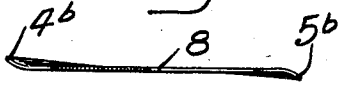


Fig 7.

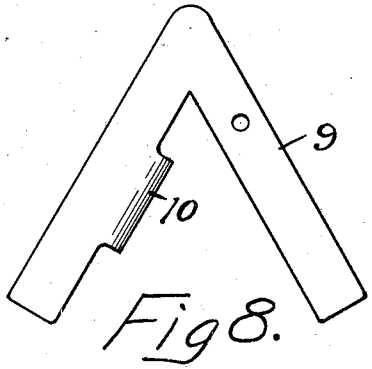


Fig 8.

WITNESSES

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UNITED STATES PATENT OFFICE.

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BOOMERANG.

No. 906,206. Specification of Letters Patent. Patented Dec. 8, 1908.

Application filed January 24, 1908. Serial No. 412,371.

To all whom it may concern:

Be it known that we, CLARENCE L. DAWES and EDWIN M. DAWES, of Minneapolis, Hennepin county, Minnesota, have invented certain new and useful Improvements in Boomerangs, of which the following is a specification.

Our invention relates to boomerangs designed for use as projectiles in a toy gun or pistol.

The object of our invention is to provide a projectile having the characteristics of a boomerang or being capable of describing a substantially circular course and returning to or near the starting point.

Our invention consists generally in providing means whereby the projectile is guided and caused to return to the starting point.

In the accompanying drawings, forming part of this specification, Figure 1 is a plan view of a boomerang projectile embodying our invention. Fig. 2 is an edge view of the same. Fig. 3 is a plan view of a modified form. Fig. 4 is a similar view of another form of boomerang. Fig. 5 illustrates an A-shaped form with a more acute angle than shown in Fig. 1 and provided with a modified form of guiding means. Fig. 6 is an edge view of the same. Fig. 7 is an edge view of a modified construction. Fig. 8 is a view of another modified construction.

In the drawing, 2 represents the boomerang projectile preferably made flat and angular in form and composed of fiber board of suitable gage. We prefer to use this material as it is light, tough and durable, can be bent without breaking and will not cause injury if a person is struck by the flying projectile.

The device is designed to be discharged from the gun shown and described in our companion application herewith, and is provided with a hole 3 to receive the propelling means that is mounted on the gun. For the purpose of guiding the device and causing it to describe a substantially circular course we provide rudders or fins which are preferably formed by bending the corners 4 and 5 of the projectile at the rear ends until they are out of the plane of the main portion of the projectile. These corners may be bent up or down, as preferred, and either the inside or the outside corners may be so operated, or as indicated in Fig. 1 one of the inside corners and one of the outside corners may be bent. We have found that the bending of these corners will cause the projectile to sail through the air, describe a curve to the right or the left, according to the location of the bends, and return to or near the starting point. This projectile may be made in various forms.

Fig. 3 illustrates one, indicated by reference numeral 6, substantially semi-circular in form.

Fig. 4 shows one, indicated by numeral 7, as angular corresponding to the one shown in Fig. 1, except that the angle is wider.

Fig. 5 illustrates a projectile indicated by reference numeral 8 that is A-shaped, the corners being bent up instead of down. Various other types may be used without altering materially the character of the invention.

The manner of bending the corners in Figs. 4, 5 and 6 is the same as in the other figures except that they are bent in the opposite direction. The same reference numerals may be used for each with the addition of the exponent *a*.

In Fig. 8 we have illustrated another modification which consists in providing a boomerang 9 having a wing 10 on one of its edges. This wing may be bent either up or down as preferred. We have illustrated the corners of the boomerangs bent, but do not wish to confine ourselves to this location as we may prefer to bend any other portion and produce the same result.

We claim as our invention:—

1. A boomerang projectile having a corner bent abruptly to form a web or fin that is out of the plane of the main portion of the projectile.

2. A boomerang projectile having its corners bent at an angle to the main portion of the boomerang, for the purpose specified.

3. A boomerang projectile angular in form having an edge bent out of the plane of the main portion of the boomerang.

4. A boomerang projectile angular in form and composed of flat fibrous material and having an edge bent at an angle to the main portion of the projectile.

5. A boomerang projectile composed of a flat fibrous material having its rear edge only bent out of the plane of the main portion of the projectile.

6. A boomerang projectile having a comparatively small portion of an edge bent out of the plane of the main portion of the projectile.

7. A boomerang projectile having a comparatively small portion bent out of the plane of the projectile.

In witness whereof, we have hereunto set our hands this 20th day of January 1908.

CLARENCE L. DAWES.
EDWIN M. DAWES.

Witnesses:
J. H. BALDWIN,
J. A. BYINGTON.