

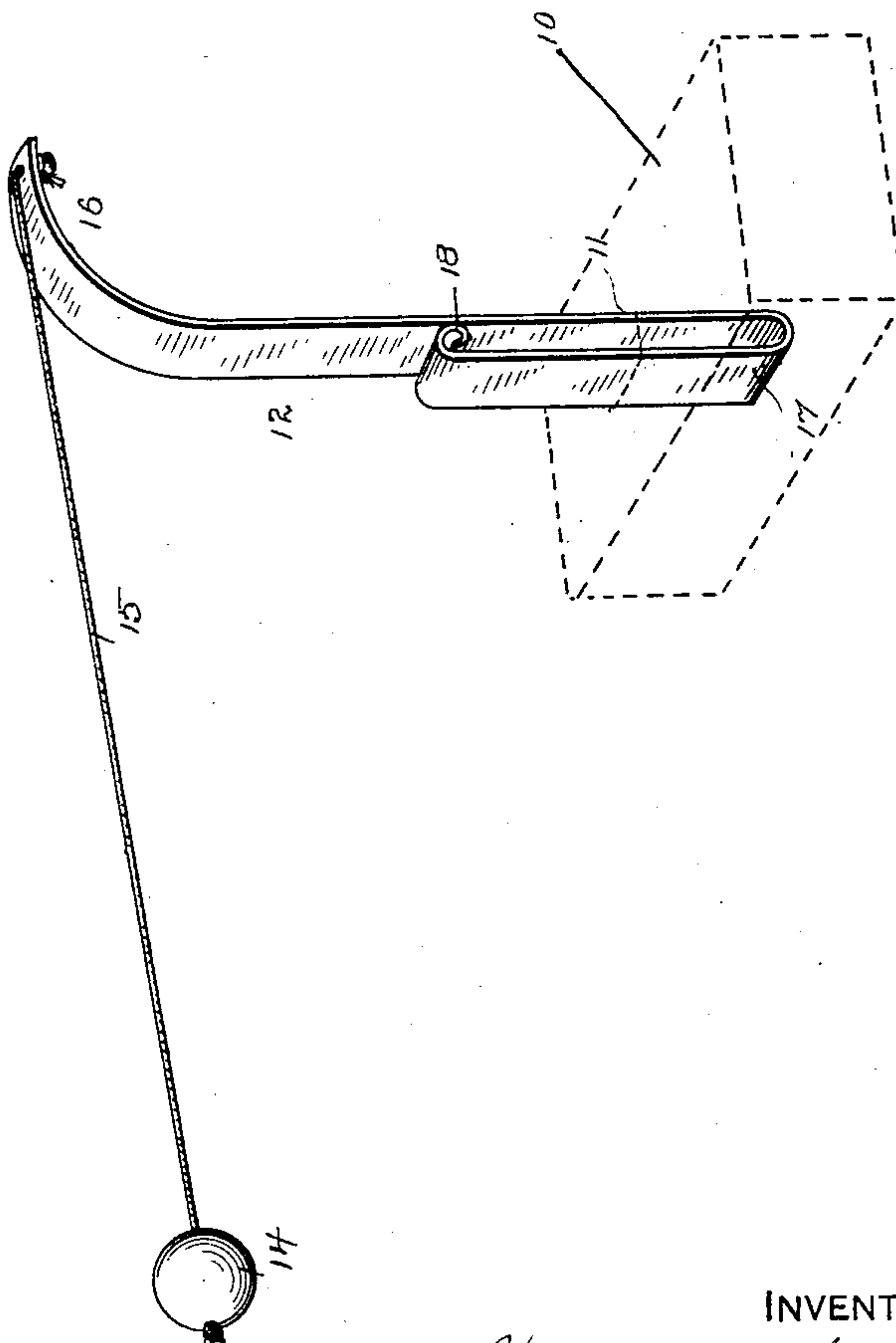
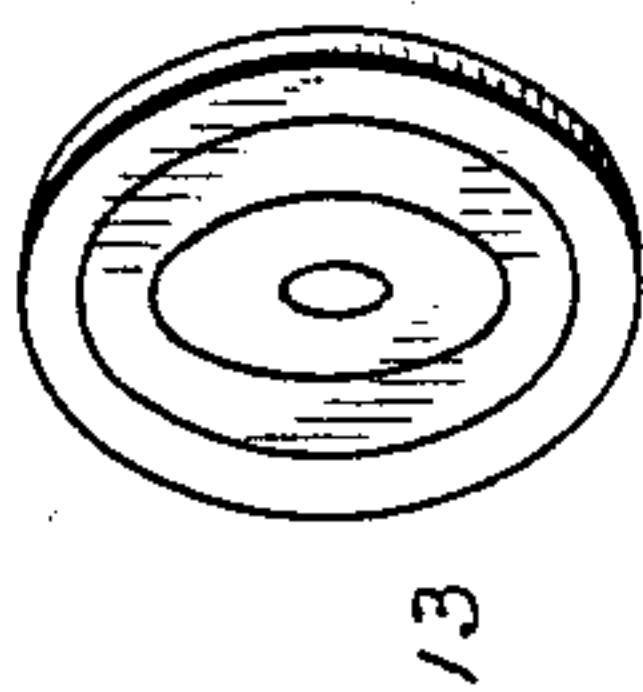
No. 702,910.

Patented June 24, 1902.

W. R. AUSTIN & W. N. CRAW.
PROPELLING SPRING FOR TARGET GAMES.

(Application filed Jan. 2, 1902.)

(No Model.)



WITNESSES.

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UNITED STATES PATENT OFFICE.

WILLIS R. AUSTIN AND WILLIAM N. CRAW, OF SOUTH NORWALK,
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PROPELLING-SPRING FOR TARGET GAMES.

SPECIFICATION forming part of Letters Patent No. 702,910, dated June 24, 1902.

Application filed January 2, 1902. Serial No. 88,179. (No model.)

To all whom it may concern:

Be it known that we, WILLIS R. AUSTIN and WILLIAM N. CRAW, citizens of the United States, residing at South Norwalk, county of Fairfield, State of Connecticut, have invented a new and useful Propelling-Spring for Target Games, of which the following is a specification.

Our invention relates to the class of games generally known to the trade as "target games"—that is, games in which a "return-ball," so called, is propelled toward the target by means of an elastic cord, as, for example, in our former patent, No. 536,176, dated March 26, 1895—in which a ball is attached to one end of an elastic cord, the other end of the cord being attached to a yoke, and an effigy, row of heads, or other suitable target or targets being provided at which to propel the ball. Our present invention is applicable to the game described in our said former patent and to all of the various games of this general class, the object of our present invention being to do away with the yoke and the elastic cord and to substitute therefor a strong non-elastic cord and a durable spring. It has been the most serious objection to this class of games as heretofore placed upon the market that after a short time the elastic cord lost much of its resiliency, and consequently its power to propel the ball with the speed and force necessary to make a game of this class attractive. On account of the difficulty of attaching the ball to an elastic cord and to the fact that suitable elastic cord is usually difficult to find little attempt has been made to renew spent elastic cords, and the games have been thrown away when the cords gave out, which was frequently after very little use. As a result games of this class have not met with the success upon the market that they obviously would have met with but for this serious objection. Our present invention obviates this objection wholly and without increase in cost provides a means for propelling a return-ball in a target game that will be as durable as the game itself and is free from any of the objections which have interfered with the success of these games when dependent upon an elastic cord and a yoke.

The accompanying drawing, which forms a portion of this specification, is a perspective view illustrating the use of our novel propel-

ling-spring in a target game in connection with a non-elastic cord.

10 denotes a block having a suitably-shaped hole or recess 11 to receive the spring 12.

13 denotes a target, 14 a ball, ordinarily of rubber, and 15 a strong durable non-elastic cord, one end of which is attached to the ball, the other to the spring. In practice the ball may be provided with a central hole, through which the string is passed and a knot tied in the end of the string.

It should be understood that it is wholly unimportant, so far as the principle of our invention is concerned, what style of target is used. We have illustrated an ordinary ring-target merely to show the operation of the invention.

In practice we preferably make the spring from a flat strip of spring-steel or brass. The upper end of the spring may be curved forward more or less, as at 16, this form of spring in practice giving a quick sharp motion to the ball. In order to brace and strengthen the spring at the point where the greatest strain comes in use, we preferably bend the spring backward upon itself, as at 17, and turn the end inward against the back of the spring itself, as at 18, ordinarily coiling it slightly, as shown in the drawing. This end of the spring braces and supports the operative portion thereof, thereby insuring the greatest efficiency in use and durability that is practically without limit.

Having thus described our invention, we claim—

1. In a target game the combination with a ball and a non-elastic cord attached thereto, of a spring to which the cord is attached and which consists of a piece of spring metal bent backward upon itself and the ends turned inward to form a support for the operative portion thereof.

2. The spring 12 having a forward bend 16, a backward bend 17 and an end 18 supporting the operative portion of the spring.

In testimony whereof we affix our signatures in presence of two witnesses.

WILLIS R. AUSTIN.
WILLIAM N. CRAW.

Witnesses:

JACOB M. LAYTON,
WAYTE RAYMOND.