

(No Model.)

F. J. MOYER.  
FLYING TARGET.

No. 299,835.

Patented June 3, 1884.

Fig. 1.

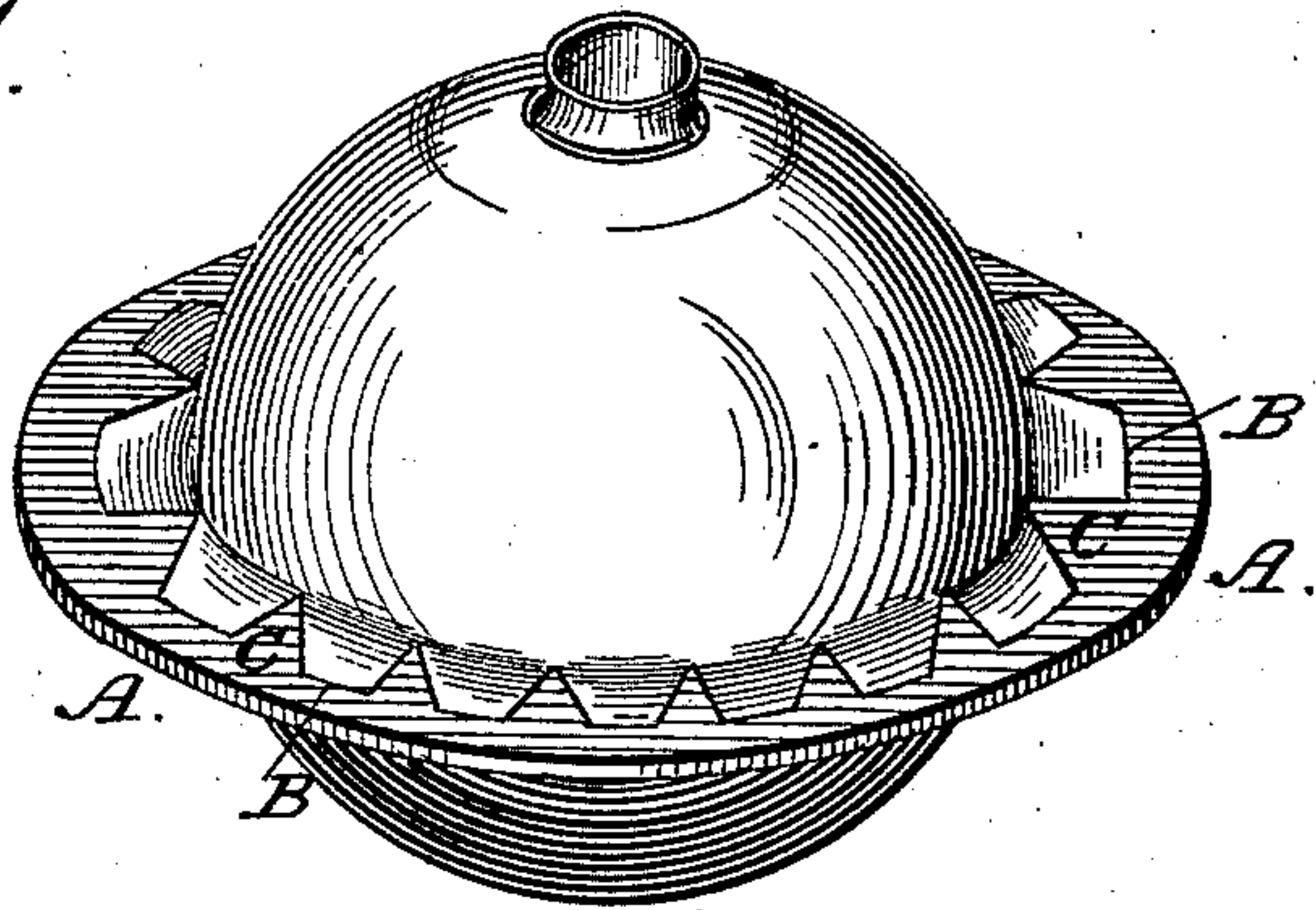


Fig. 2.

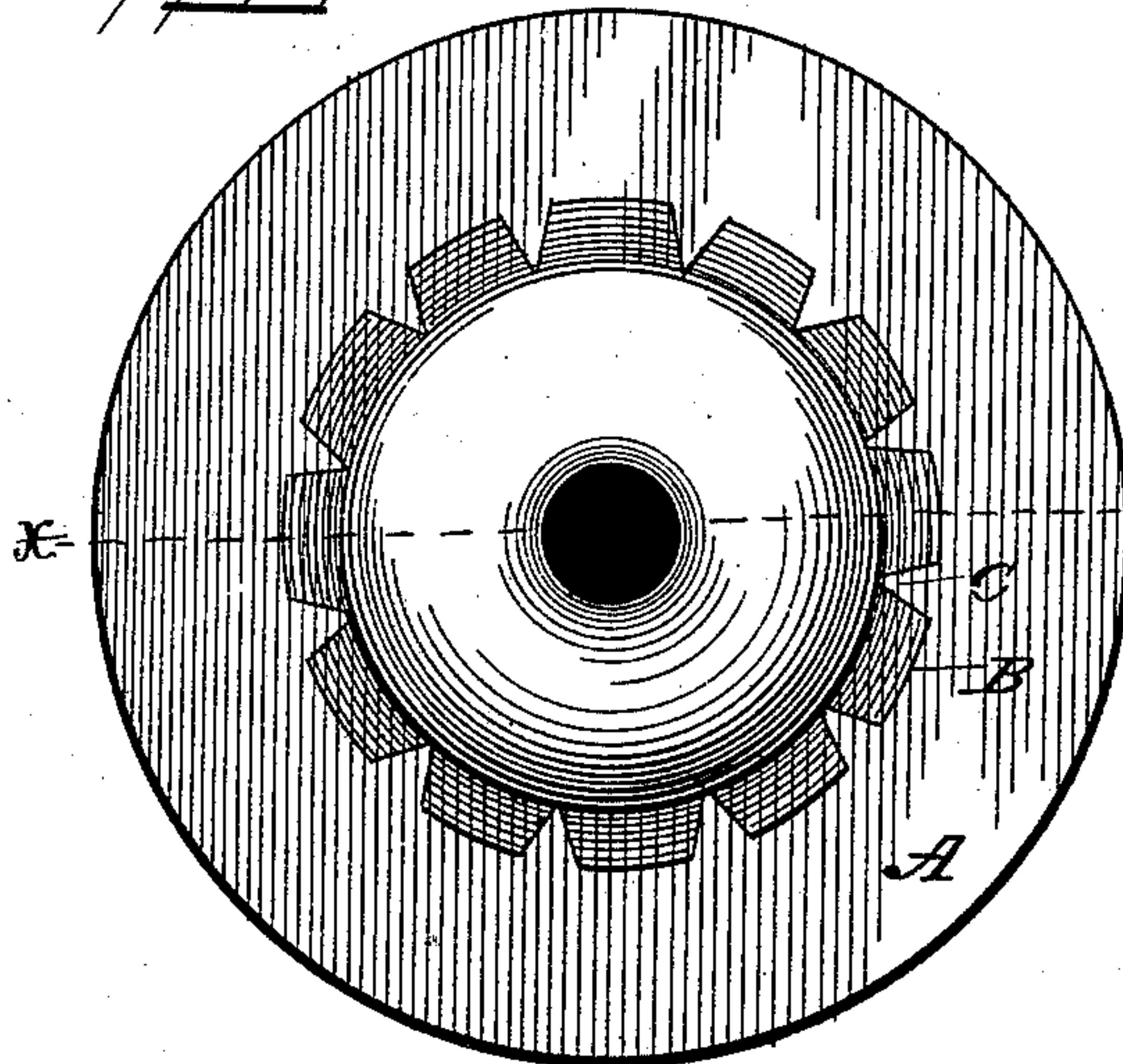


Fig. 4.

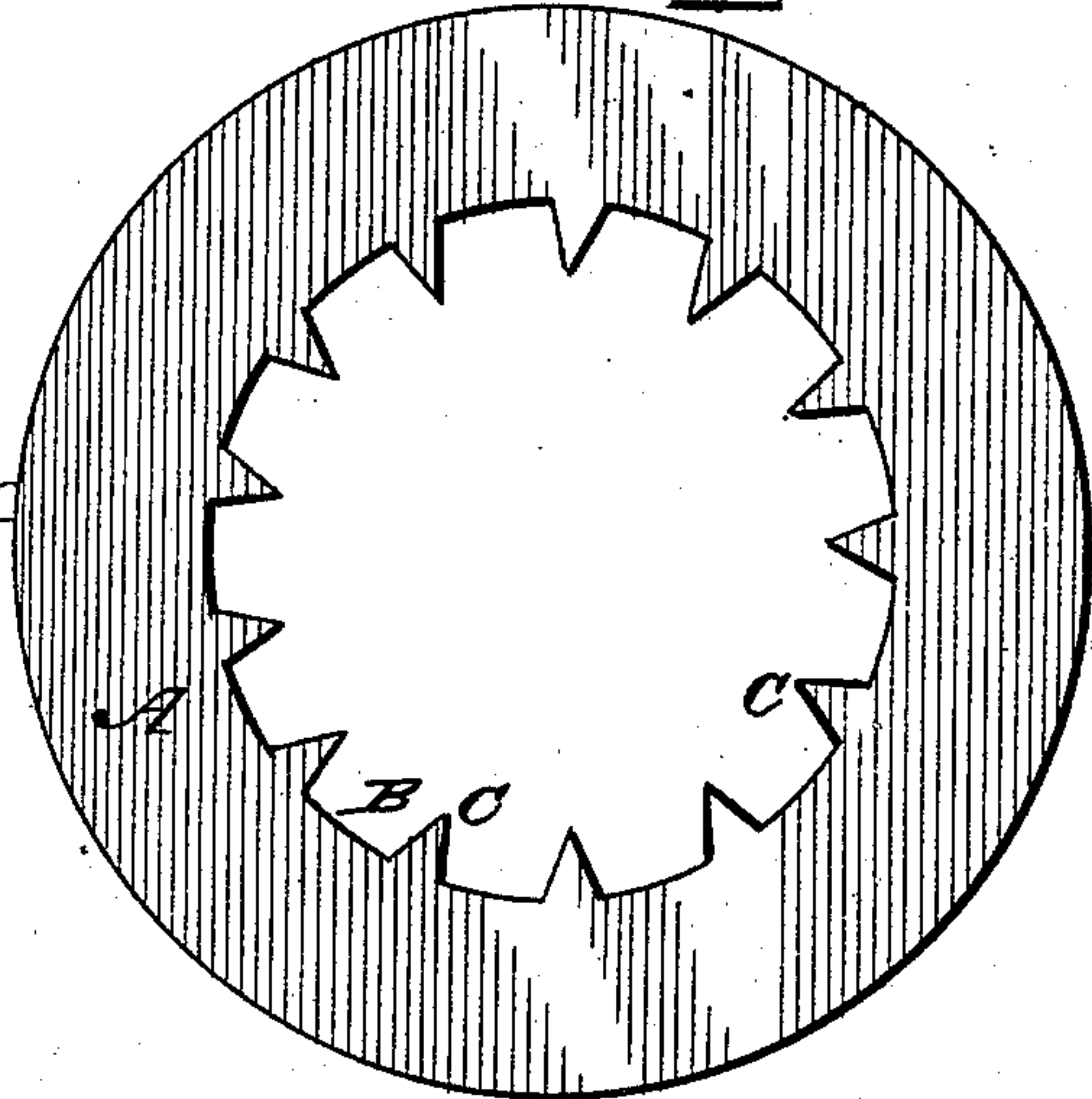
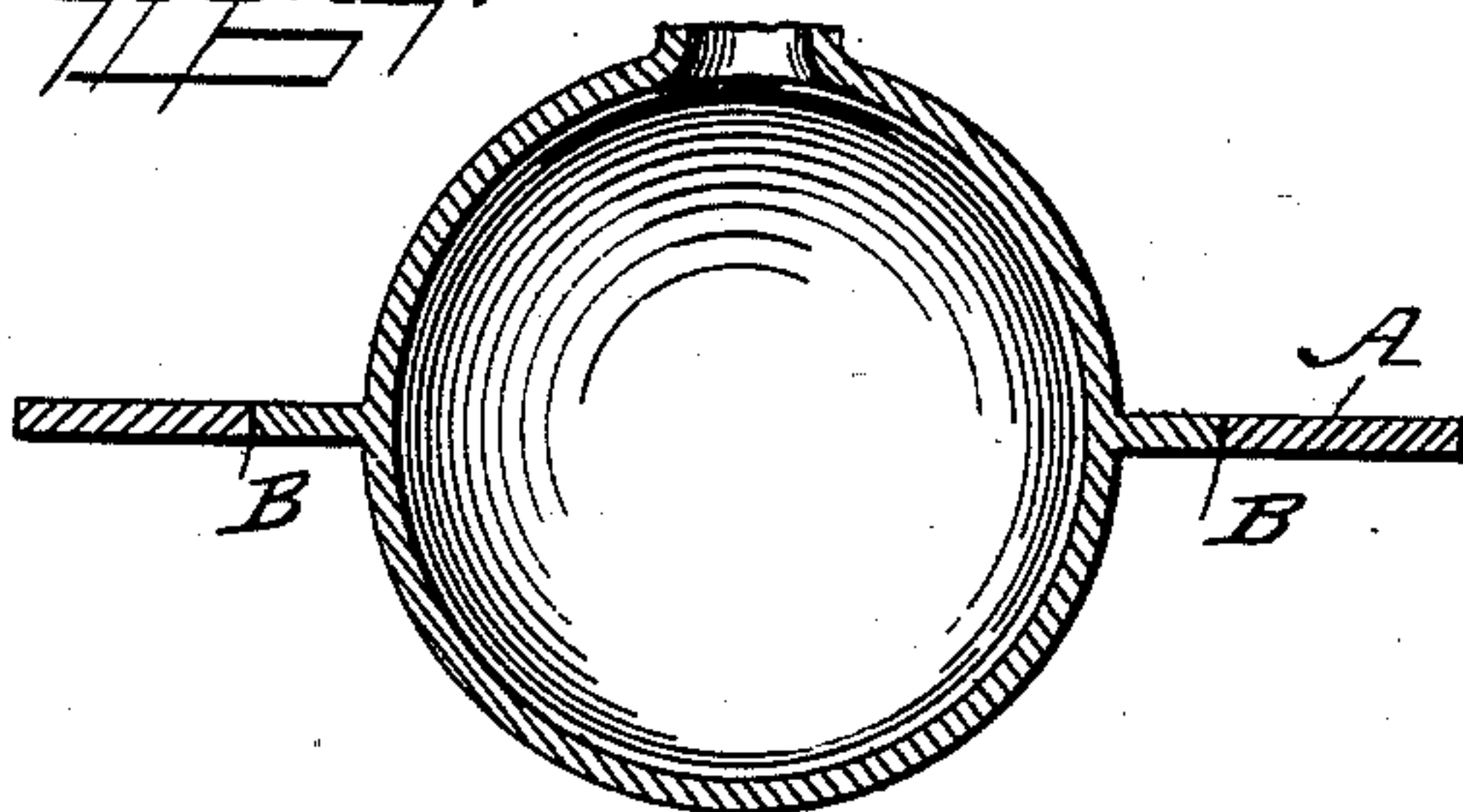


Fig. 3.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

FRANK J. MOYER, OF LOCKPORT, NEW YORK.

## FLYING TARGET.

SPECIFICATION forming part of Letters Patent No. 299,835, dated June 3, 1884.

Application filed February 1, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK J. MOYER, a citizen of the United States, residing at Lockport, in the county of Niagara and State of New York, have invented certain new and useful Improvements in Flying Targets, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to that class of devices which are known as "flying targets," and which consist, essentially, of a spherical or other suitably-shaped body, to which, by my present invention, I attach an annular rim or flange; and my invention consists in an improved construction of the said rim or flange and the method of attaching it to the body of the target, as will hereinafter be fully described, and particularly pointed out in the claims.

20 In the drawings hereto annexed, Figure 1 is a perspective view of my improved flying target. Fig. 2 is a plan view of the same. Fig. 3 is a vertical sectional view on the line  $x x$  in Fig. 2. Fig. 4 is a detail view of the rim or flange detached.

25 The same letters refer to the same parts in all the figures.

30 The targets which are the subject of this invention are to be constructed of fusible and frangible material in substantially the manner set forth in the patent granted to Woodward on the 9th day of September, 1879, and which consists in pouring the fused material into a mold, allowing it to harden until a shell is formed, and pouring the surplus material out through an orifice in the mold. By this method of construction a target has been made the shell of which has been of uniform thickness throughout—an object which has not been attained by other processes so far as I am aware.

40 As stated, my present invention has for its object to provide a shell or target with an annular rim or flange. The purpose of this flange is to aid the flight of the target through the air and to make it resemble more closely the flight of a bird. To do this successfully the flange must be thin, light, and impervious to the action of moisture or other atmospheric influences. It must, moreover, be firmly attached to the body of the target, so as not to

become loose or detached in the act of throwing the latter.

To accomplish the several objects of my invention I first construct an annular disk or band, A, preferably of straw-board or some similar light and inexpensive material. Said band may thus, for instance, be formed of wood pulp, wood, leather, or other material which may be found suitable for the purpose. The inner edge of this band is provided with a series of notches, B B, between which lips or tongues project, as denoted by C. In the process of casting or molding the target this disk or band is placed between the sections of the mold, which are suitably constructed for the purpose, and the fused material, when poured into the mold, is allowed to enter the notches B of the disk, the points C of which will enter the body of the casting, to which the said disk is thus firmly attached.

70 If it were attempted to attach a disk or flange to a casting of the nature described by means of a simple circular orifice in the said disk, the result would be that the fused material, by coming in contact with the flange or disk, would not readily harden at the point of contact, thus leaving the shell or target thin and weak at such point, and rendering the device, if not useless, at all events less efficient and valuable. By my present invention this disadvantage is entirely obviated, inasmuch as the fused material is allowed to flow out into the notches of the flange, which is thus more securely attached, while the difficulty above alluded to is obviated.

85 The target, having been formed as above described, is submitted to an additional process, which consists in coating the rim or flange and its adjacent parts with some water-proof substance, which may be ordinary varnish or any other suitable composition. By this means I not only render the flange water-proof and capable of resisting all atmospheric influences, but I also cause additional tenacity between the shell or body of the target and the rim or flange.

95 The operation and advantages of this invention will be easily understood from the foregoing description, taken in connection with the drawings hereto annexed.

The construction is simple and inexpensive, and I have succeeded by the method herein set forth in making a flying target which possesses all the requisite qualities of cheapness, 5 lightness, ease of manipulation, and certainty of action.

I claim and desire to secure by Letters Patent of the United States—

1. The combination, with a flying target, 10 consisting of a shell molded of frangible material, of a rim or flange connected annularly to the said shell, and having a coating of water-proofing material, as set forth.

2. The combination, with a target-shell 15 molded of frangible material, of a rim or flange having notches, which are filled by a portion of the material constituting the body of the shell, and tongues which enter the body of the

said shell, thus forming a rigid connection between the said shell and flange, substantially 20 as set forth.

3. As an improvement in flying targets, the combination, with a shell or body of fusible and frangible material, of an annular rim or flange composed of light infrangible material 25 connected to said shell by means of tongues or points entering the body of the latter, and water-proof material covering the joints, substantially as set forth.

In testimony whereof I affix my signature in 30 presence of two witnesses.

FRANK J. MOYER.

Witnesses:

WM. BAGGER,

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