

No. 877,236.

PATENTED JAN. 21, 1908.

M. M. RYAN.
BALL CASTER.

APPLICATION FILED AUG. 14, 1907.

Fig. 1.

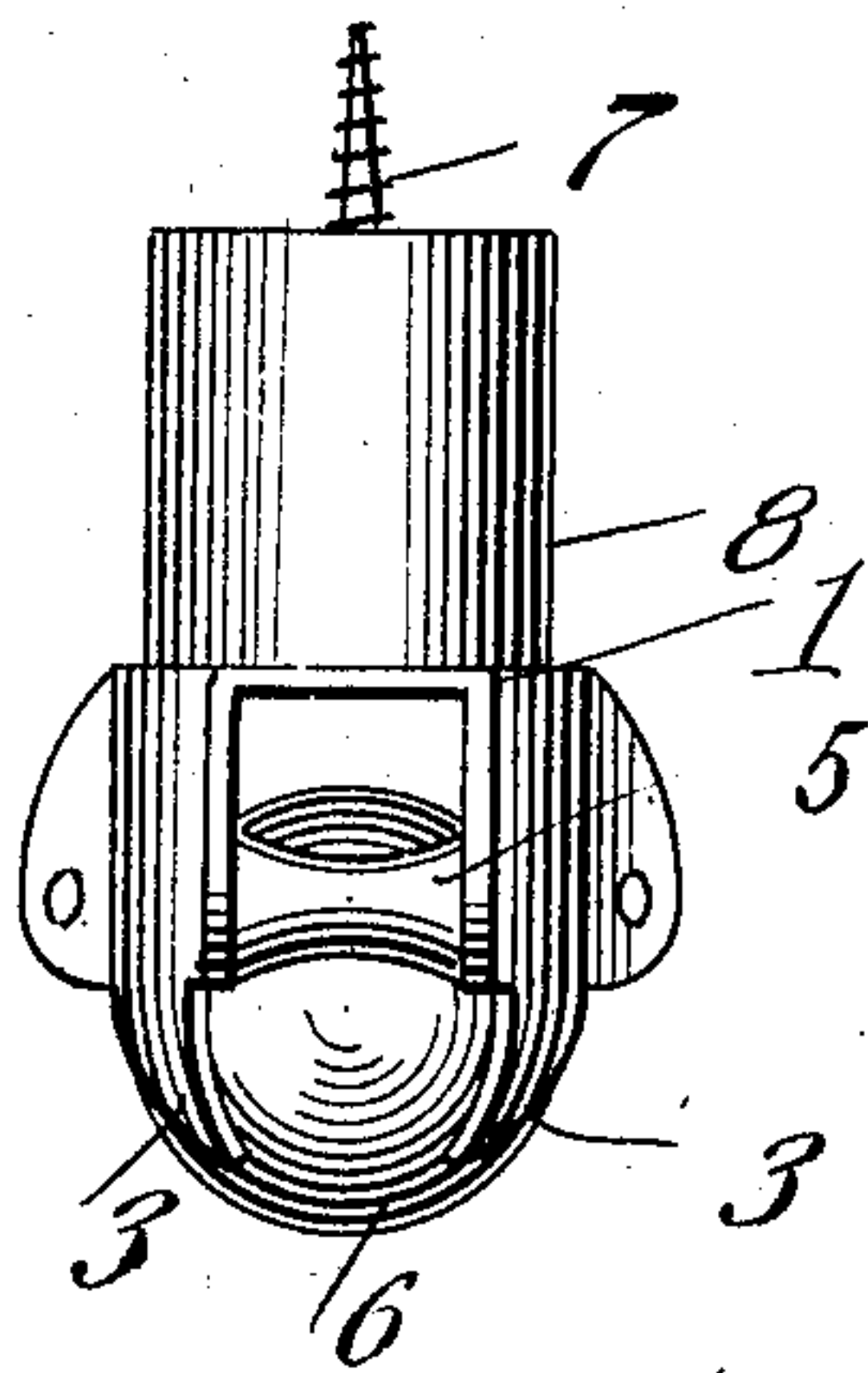


Fig. 3.

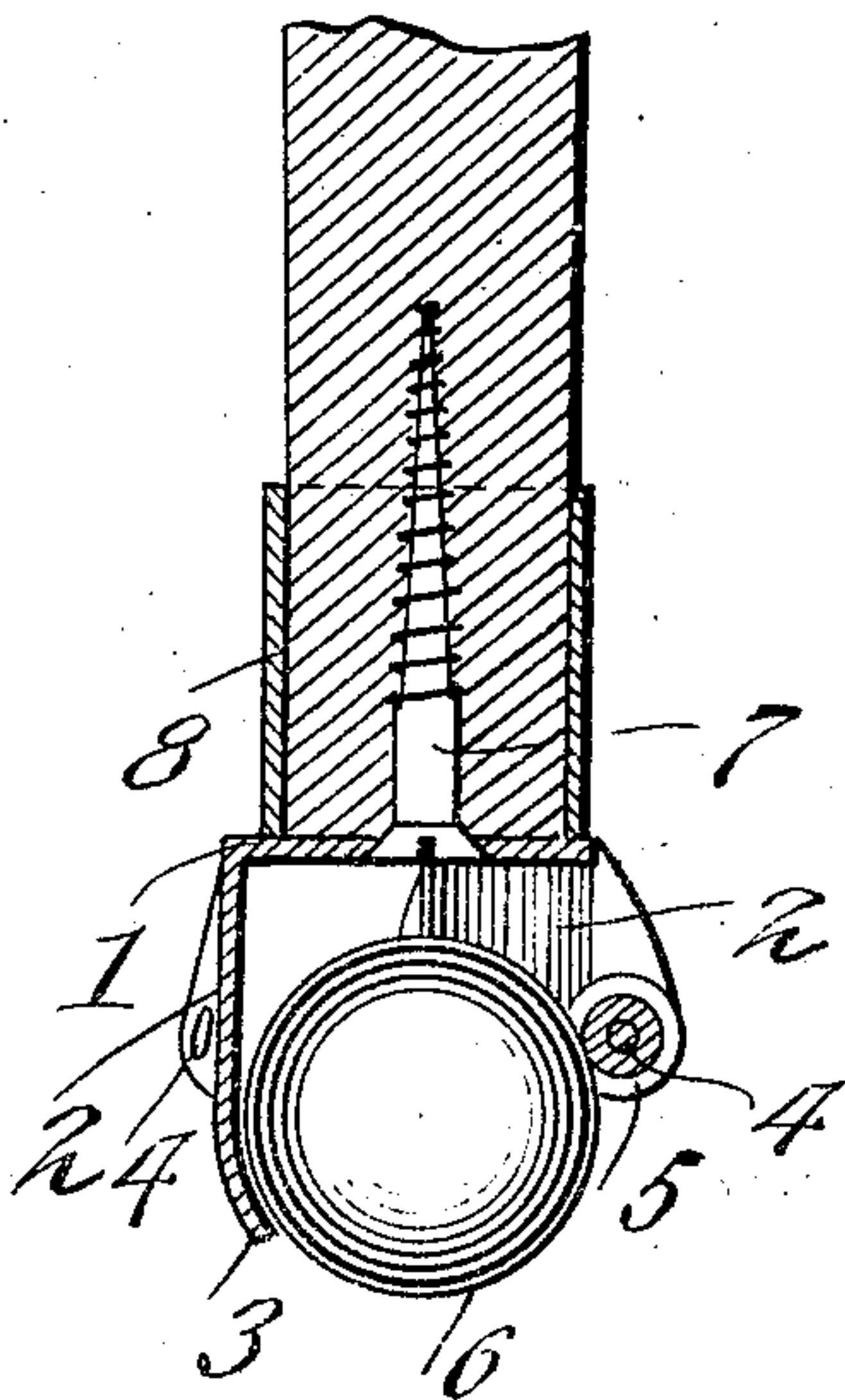


Fig. 4.

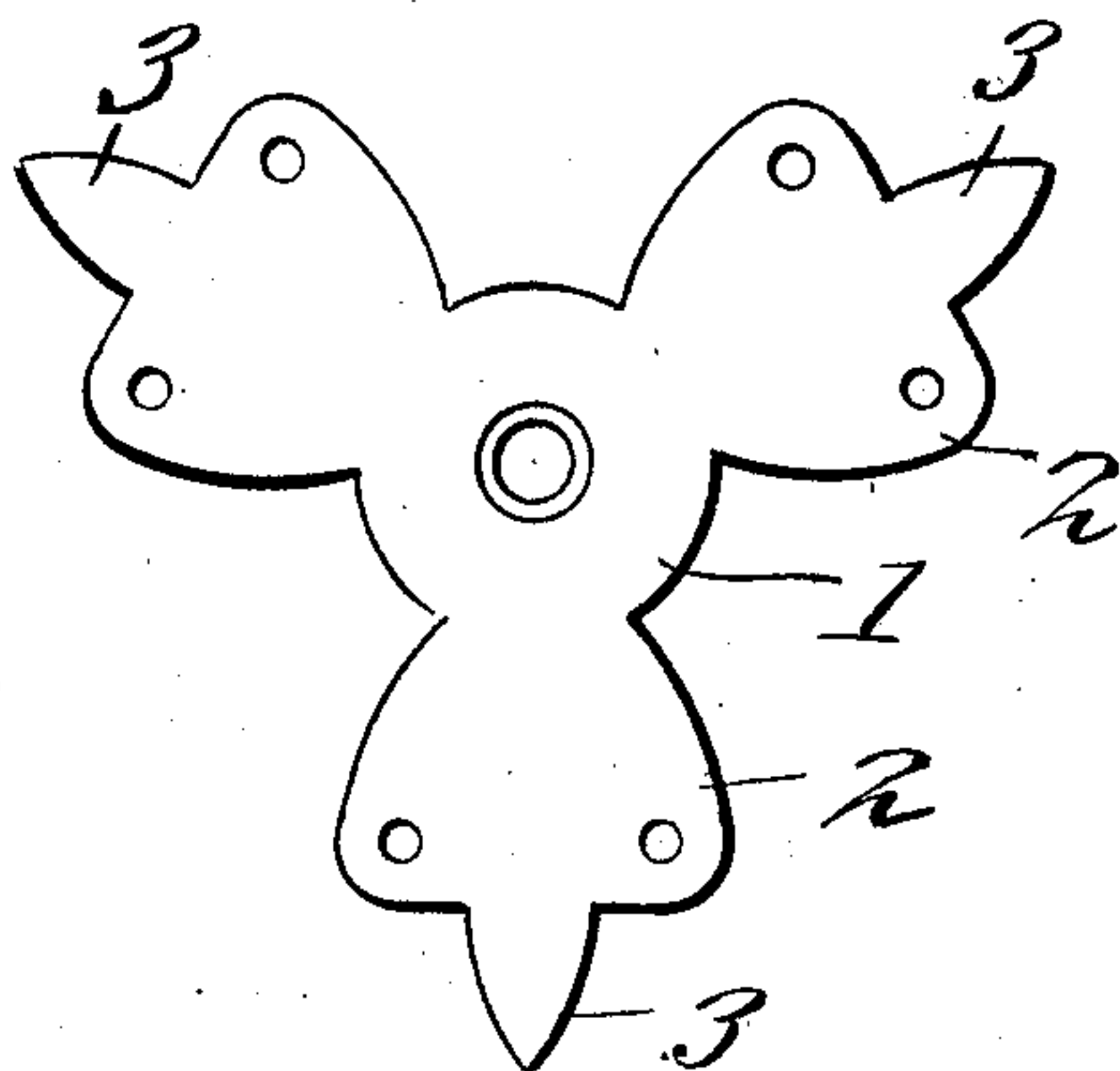
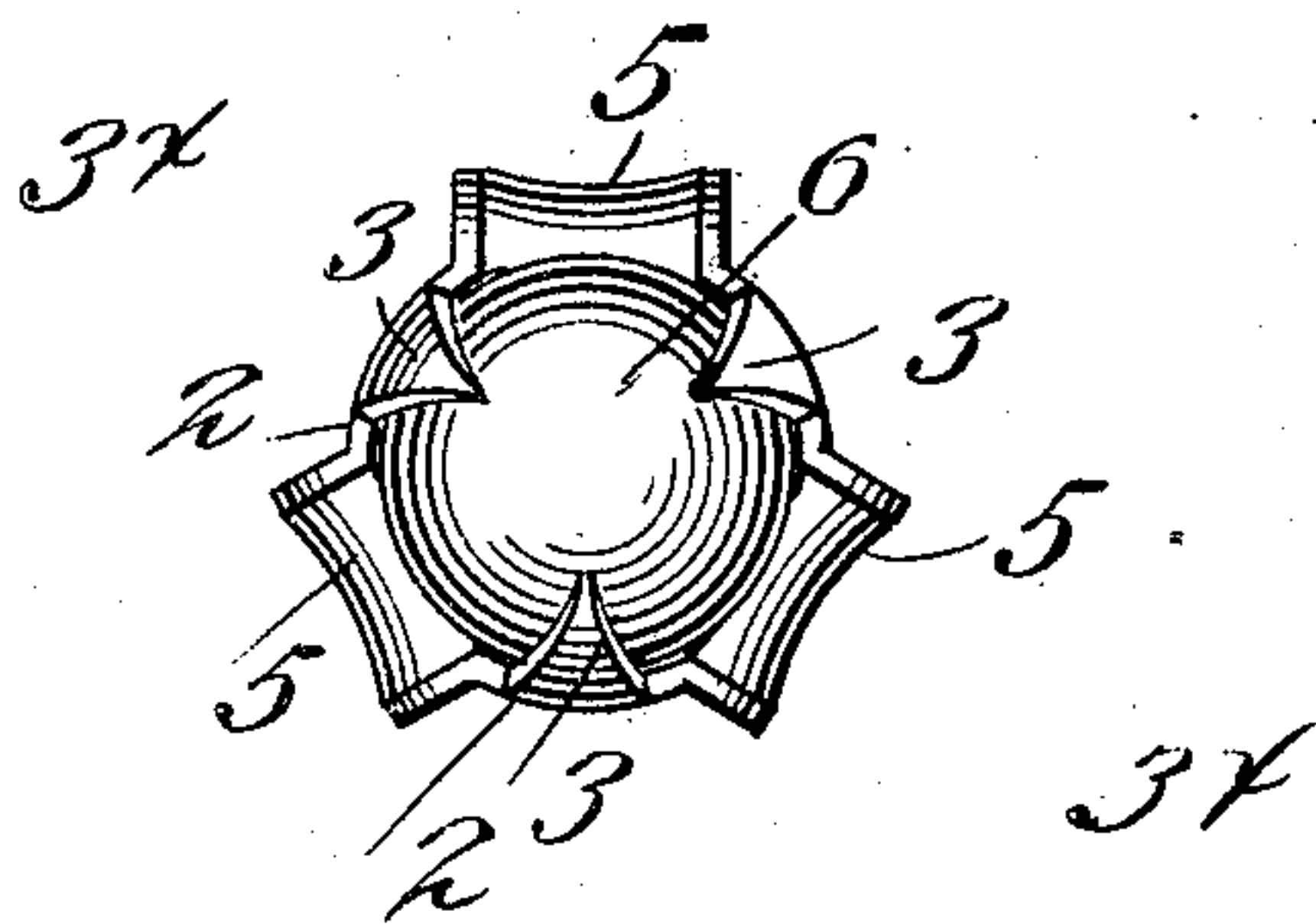


Fig. 2.



Witnesses

E. Ackman
R. Allen

Inventor

Martin M. Ryan

By

Victor J. Evans

Attorney

UNITED STATES PATENT OFFICE.

MARTIN M. RYAN, OF OBERLIN, OHIO

BALL-CASTER.

No. 877,236.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, MARTIN M. RYAN, a citizen of the United States, residing at Oberlin, in the county of Lorain and State of Ohio, have invented new and useful Improvements in Ball-Casters, of which the following is a specification.

This invention relates to casters for supporting furniture and other heavy articles in such a manner as to enable the same to be readily moved about; and the object of the invention is to provide a caster of simple and improved construction in which the supporting member consists of a ball which is readily revoluble in any direction, so that swiveling motion of the caster will not be needed in order to move the articles supported thereon in any direction.

The invention further consists in the improved construction and novel arrangement and combination of parts which will be hereinafter fully described and particularly pointed out in the claims.

In the accompanying drawing has been illustrated a simple and preferred form of the invention; it being, however, understood that no limitation is necessarily made to the precise structural details therein exhibited, but that changes, alterations and modifications within the scope of the invention may be resorted to when desired.

In the drawing, Figure 1 is a side elevation of a caster constructed in accordance with the invention. Fig. 2 is a bottom plan view of the same. Fig. 3 is a vertical sectional view. Fig. 4 is a detail plan view of the blank used in the formation of the ball supporting cage.

Corresponding parts in the several figures are denoted by like characters of reference.

The ball supporting cage of the improved caster is preferably stamped or formed of a piece of sheet metal from which is cut a blank A which includes a central portion 1 having three equidistant outwardly extending lobes 2—2 each provided with a radially extending spur 3. The ball supporting cage is formed by bending the lobes 2—2 downward from the central portion 1; the edges of said lobes being bent slightly outward to fa-

cilitate the insertion of connecting pins 4—4 upon which rollers 5—5 are mounted for rotation; said rollers being preferably concaved as shown in the drawings, and made of suitable length to space the edges of the lugs properly apart. The ball 6 which may be made of glass, stone ware, metal such as steel, or other suitable material, is made of suitable dimensions to bear against the under sides of the rollers 5 and said ball is retained in position by bending the spurs 3—3 in the direction of the vertical axis of the ball. It will be seen that there will be practically no strain upon the spurs 3 which are utilized only, or mainly, to prevent the ball from dropping out of the cage when the caster is raised from the floor. The pins through said spurs may be made quite light, so as to be easily bent and adjusted in the manufacture of the caster.

The ball containing cage is provided with a shank 7 which is preferably threaded so as to be readily applied to the leg of a table or other piece of furniture; and said shank may be surrounded by a ferrule 8.

From the foregoing description taken in connection with the drawings hereto annexed, the operation and advantages of this invention will be readily understood. It is simple, inexpensive, and thoroughly efficient for the purposes for which it is provided.

Having thus fully described the invention, what is claimed as new is:—

A caster comprising a cage consisting of a central body portion having lobes bent downwardly therefrom and provided with radially extending bendable spurs, pins extending through and connecting the edges of the lobes, rollers supported for rotation upon the pins, said rollers having enlarged ends and a reduced central portion, and a ball engaging the rollers and retained between the bendable spurs.

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

MARTIN M. RYAN.

Witnesses:

LOUIS E. BURGNER,

HARRIETT E. D. BURGNER.