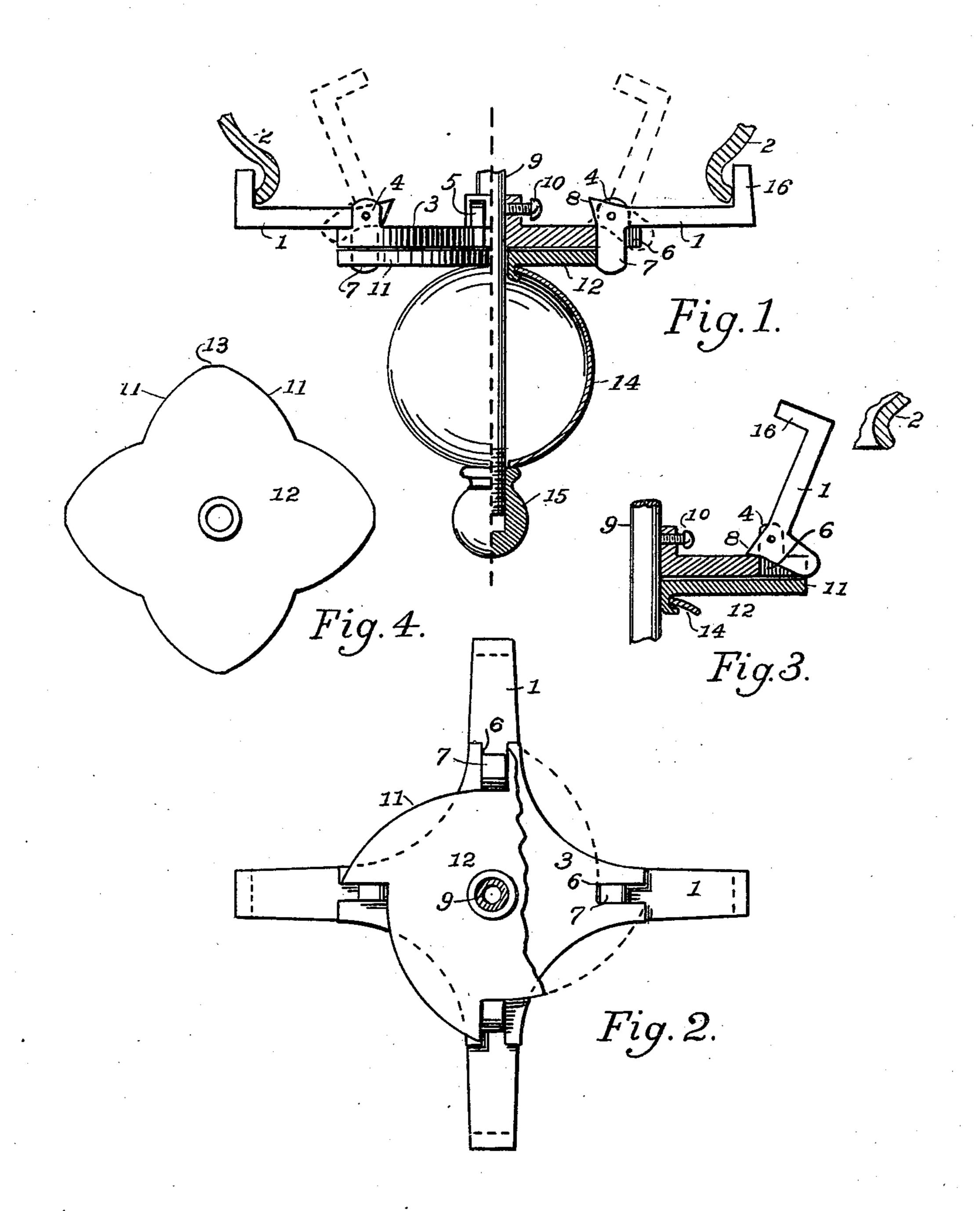
No. 690,419.

## G. GRAY. GLOBE HOLDER.

(Application filed June 10, 1901.)

(No Model.)



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## United States Patent Office.

## GEORGE GRAY, OF BROOKLYN, NEW YORK.

## GLOBE-HOLDER.

SPECIFICATION forming part of Letters Patent No. 690,419, dated January 7, 1902.

Application filed June 10, 1901. Serial No. 63,875. (No model.)

To all whom it may concern:

Be it known that I, GEORGE GRAY, a citizen of the United States, residing at New York city, borough of Brooklyn, county of Kings, and State of New York, have invented a new and useful Improvement in Globe-Holders, of which the following is a specification.

My invention relates to an improvement in that class of holders which support a globe to that surrounds a central suspending-stem—such, for instance, as is shown in design Patent No. 33,392, issued to me on October 16, 1900—the object being to produce a holder having folding arms to decrease the spread and means for operating said arms, so that the globe may be more easily removed and replaced on a pendent fixture than heretofore and that one or both hands may be used to grasp the globe for this purpose.

My improvement is fully shown in the ac-

companying drawings, in which-

Figure 1 is a side view, one-half being in section, the front arm not being shown. Fig. 2 is an inverted plan view of Fig. 1, the ball not being shown. Fig. 3 is a side view on a center line, partly in section, showing the position of the arms when raised; and Fig. 4 is a modified cam-body for operating the arms.

Similar reference characters refer to simi-

lar parts in the several views.

Fig. 1 shows the arms 1 in a normal position supporting a globe 2. Three or more arms are used in each holder. The arms are 35 pivotally supported upon a body 3 between two flanges 45, which are placed parallel to each other on either side of a slot or opening 6, through which a projection 7 of the arm extends, the rear of the slot limiting the 40 downward movement of the arm. The lateral upward extension 8 limits the movement of the arm when raised, as shown in Fig. 3. The flanges 4 5 are cast integral with the body 3, which is fastened to the stem 9 by means of a screw 10 or in any well-known or preferred manner. The arms are actuated by a series of cams 11 upon the periphery of the cam-body 12, which is revolubly placed under the holder-body 3 in such a position 50 that a cam 11 will engage the projection of the nearest arm, the arms being freely mounted between the flanges, so that the projec-

tion 7 is in the path of the cam. The jump-cams shown in Fig. 2 are operative only one way—viz., the arms being raised or folded 55 when the cam-body is turned to the right. The cams shown in Fig. 4 are operative either way, by turning to the right or left, a small flat section 13 on the outer edge permitting the arms to be held in a raised position. To 60 more easily operate the cam-body, I make use of a ball 14, which is securely fastened to it and which revolves upon the stem. An ornamental knob 15 keeps the ball and body in position. 16 are fingers integral with the 65 arms for retaining the globe centrally.

A knob or handle may be used or the cambody may be operated without any other attached part; but I prefer to use a ball, as it affords a good means whereby to revolve the 70 cam-body and to operate the arms from underneath or below a pendent fixture. A holder constructed as described is not adapted for use on arms of fixtures such as are in common use, nor do the arms advance radially so as to fit globes of different diameters at the lower opening, the flange of the globe being centered by the retaining-fingers on the

outer ends of the arms.

Such being the construction of my improved 80 holder, the operation is as follows: The body is fastened on the stem at the proper point. The cam-body is next slipped up into its place, so that the projections on the arms come within the path or radius of the cams and the knob 85 is screwed on the stem to hold all the parts operating together. To place a globe upon the holder, pass it upward with the holder central of the opening of the globe. The globe engages the outer ends of arms and raises 90 them. When the lower flange of the globe is above the radius of the folded arms, they will drop back into their normal position, as shown in Fig. 1, when the globe may be lowered and set inside of the retaining-fingers. To remove 95 the globe, raise it until the lower edge of the flange is above the radius of the arms, turn the cam-body by means of the ball, and all the arms will simultaneously rise up and decrease the diameter or spread, so that the ico globe can be lowered with one or both hands and be removed from the fixture. The preponderance of weight being on the outer side of the arms they will fall back into their normal position by gravity when the cam is turned to permit of their doing so.

Such being a description of my invention,

what I claim as new is—

1. In a pendent globe-holder the combination of the stem, a body provided with a series of flanges upon its face near the edges, a series of right-angled arms pivotally connected to said flanges, projections upon the pivotal end upon opposite sides of the arms, and a cam-body rotatably mounted upon the stem so as to contact the lower projections of the arms and cause the upper projections to engage a globe.

2. In a pendent globe-holder, the combina-

tion of the stem, a flanged body, right-angled arms pivotally connected to said body, and a cam-body rotatably mounted upon the stem so as to contact the lower portion of the pivoted end of the arms and cause the right-angled ends of the arms to engage a globe.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 29th day of

May, 1900.

GEORGE GRAY.

Witnesses:
Gaston E. Cordeaux,
John L. Nolan.