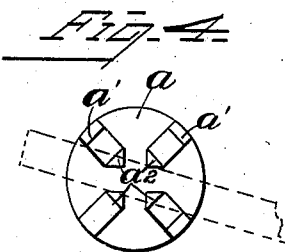
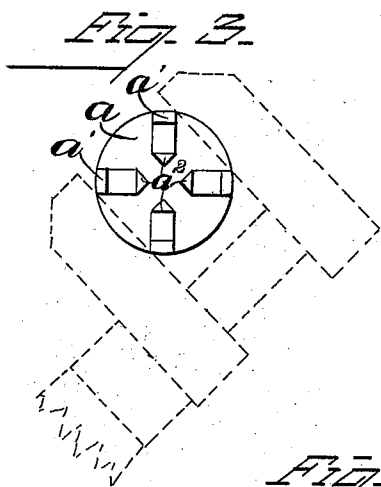
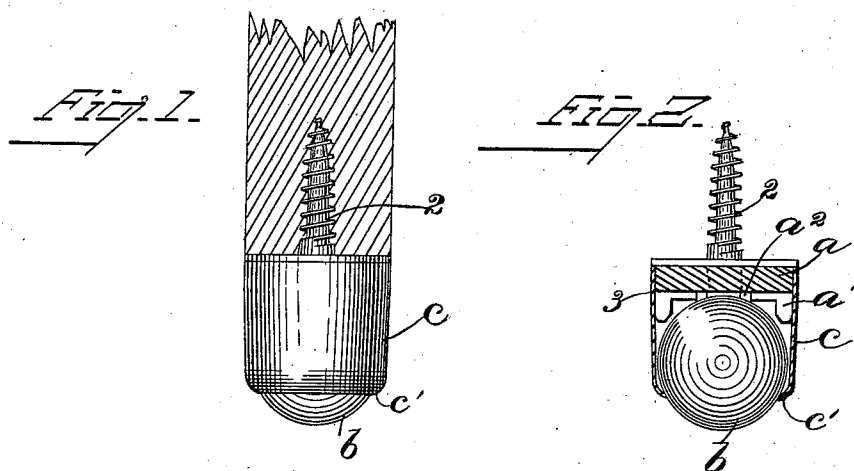


(No Model.)

W. S. BOWIE.
BALL CASTER.

No. 556,329.

Patented Mar. 17, 1896.



WITNESSES
Charles B. Blocker.
F. B. Warris

INVENTOR
William S. Bowie.
by R. J. May, esq.
att'y.

UNITED STATES PATENT OFFICE.

WILLIAM S. BOWIE, OF BOSTON, MASSACHUSETTS, ASSIGNOR OF ONE-HALF
TO DAVID HUNT, OF SAME PLACE.

BALL-CASTER.

SPECIFICATION forming part of Letters Patent No. 556,329, dated March 17, 1896.

Application filed May 21, 1895. Serial No. 550,047. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM S. BOWIE, of Boston, county of Suffolk, and State of Massachusetts, have invented an Improvement in Ball-Casters, of which the following description, in connection with the accompanying drawings, is a specification, like letters and numerals on the drawings representing like parts.

10 This invention has for its object to improve and simplify the construction of ball-casters; and it consists in certain details of construction, as will be hereinafter fully set forth and described.

15 Figure 1 shows in side elevation a ball-caster embodying this invention; Fig. 2, a vertical section of the same; Fig. 3, an under side view of the retaining-plate, showing the ball-seat and means for applying the retaining-plate; Fig. 4, a similar detail showing another method of applying said retaining-plate.

25 The retaining-plate *a*, made circular or of other desired shape, is cast around the head or end of a wood-screw 2, and said plate has formed on its under side several projections *a'*, there being four herein shown, arranged at equal distances apart, which may be engaged by an ordinary monkey-wrench, as represented in Fig. 3, and by means of such tool turned to screw the plate *a* to a leg or other thing to which the caster is to be applied. These projections *a'* may be made quite short. The plate *a* has also formed upon its under side slightly-projecting ball-seats *a*², made as projections, having more or less curved faces, and there may be three or more of these projecting seats, as desired, although I have herein shown four.

40 The ball *b* rests upon the ball-seats *a*².

To hold the ball *b* in place I have provided a metallic ferrule *c* of suitable diameter to snugly embrace the retaining-plate *a* and of suitable length to inclose said plate together with the ball *b*, the lower open end of said

ferrule being inturned, as at *c'*, to form a shoulder to retain the ball in place.

To prevent the ferrule *c* being driven on too far, so as to bind upon the ball, I have formed its upper end, for a short distance, 50 with straight parallel sides which embrace the plate *a*, and from such point—as at 3, for instance—said ferrule is made more or less tapering to the end.

At the point where the ferrule begins to 55 taper a shoulder or contraction is thereby formed, which bears against the bottom of the plate *a*, and forms a stop which limits further movement of the ferrule on the plate.

It will be observed that by providing four 60 projections, arranged around the plate *a* at equal distances apart, an ordinary monkey-wrench (see Fig. 3) may be employed to screw the plate to a leg, or, if desired, a pin or bar (see Fig. 4) may be placed between any two 65 opposite projections on the plate to thereby screw the plate into the leg.

The plate may be applied in this manner, if desired, although in certain instances the projections may be engaged by the fingers 70 and the plate thereby screwed on.

The plate having been secured in position, the ball will be held in place against the ball-seats and the ferrule driven on.

I claim—

75 The ball-caster herein described, consisting of the plate *a*, having several projections *a'*, said projections *a'* adapted to be engaged by a tool in applying the caster and also several ball-seats *a*², the screw 2, ball *b*, and ferrule 80 *c*, having a short portion with straight parallel sides and a tapering end portion, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of 85 two subscribing witnesses.

WILLIAM S. BOWIE.

Witnesses:

B. J. NOYES,
C. B. CROCKER.