

W. W. BOX.
CASTER.

No. 275,126.

Patented Apr. 3, 1883.

Fig. 1.

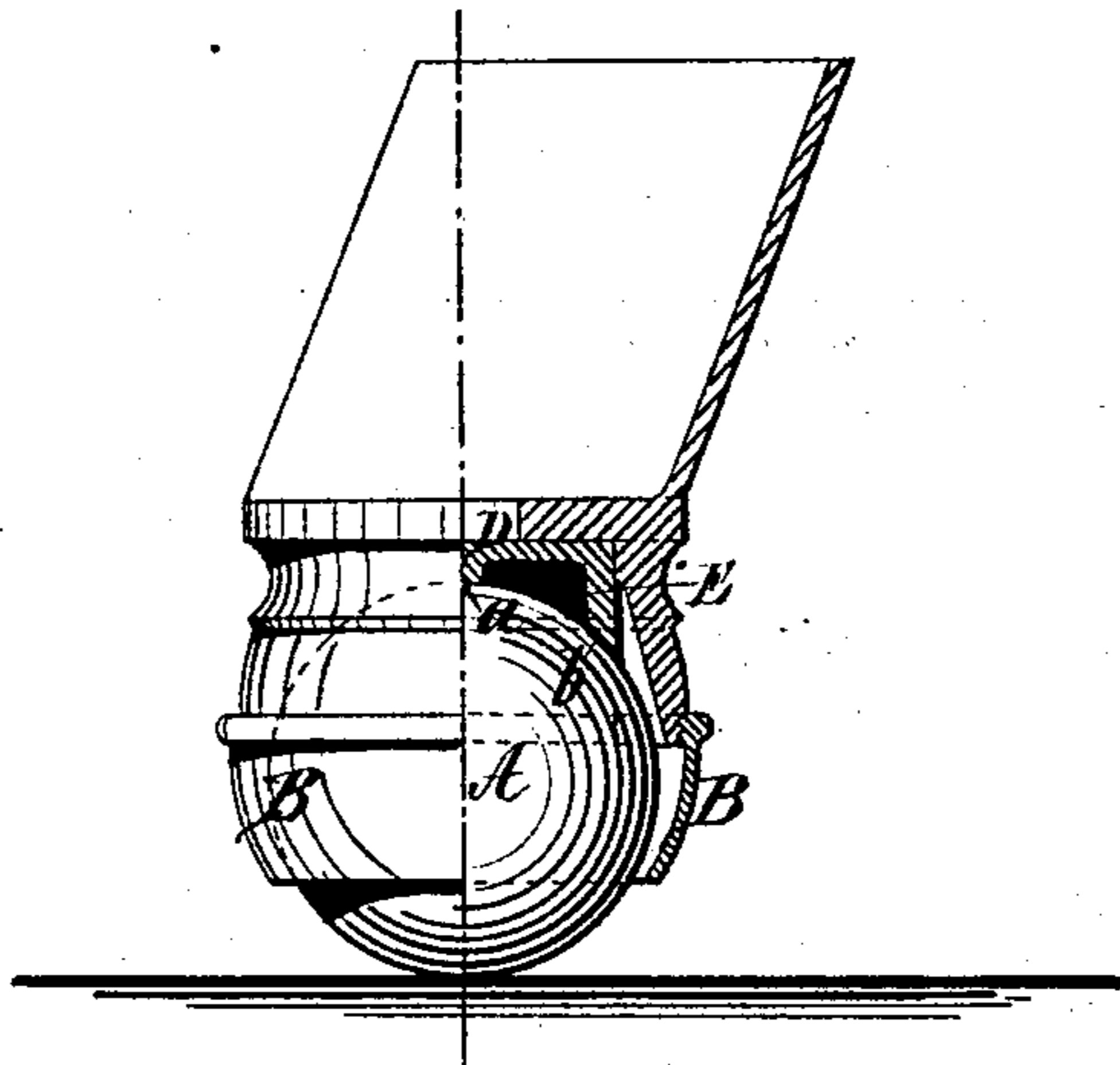


Fig. 2.

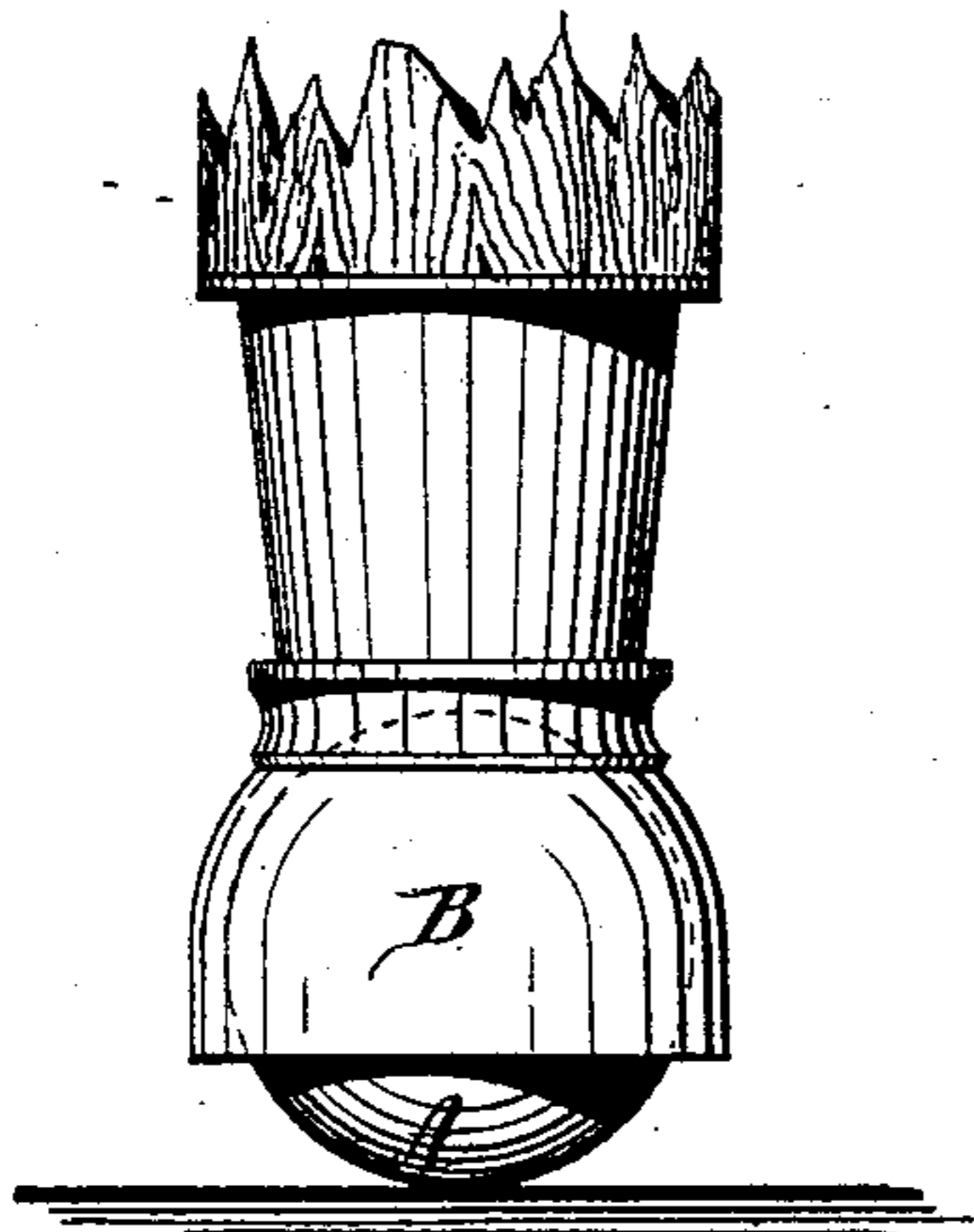
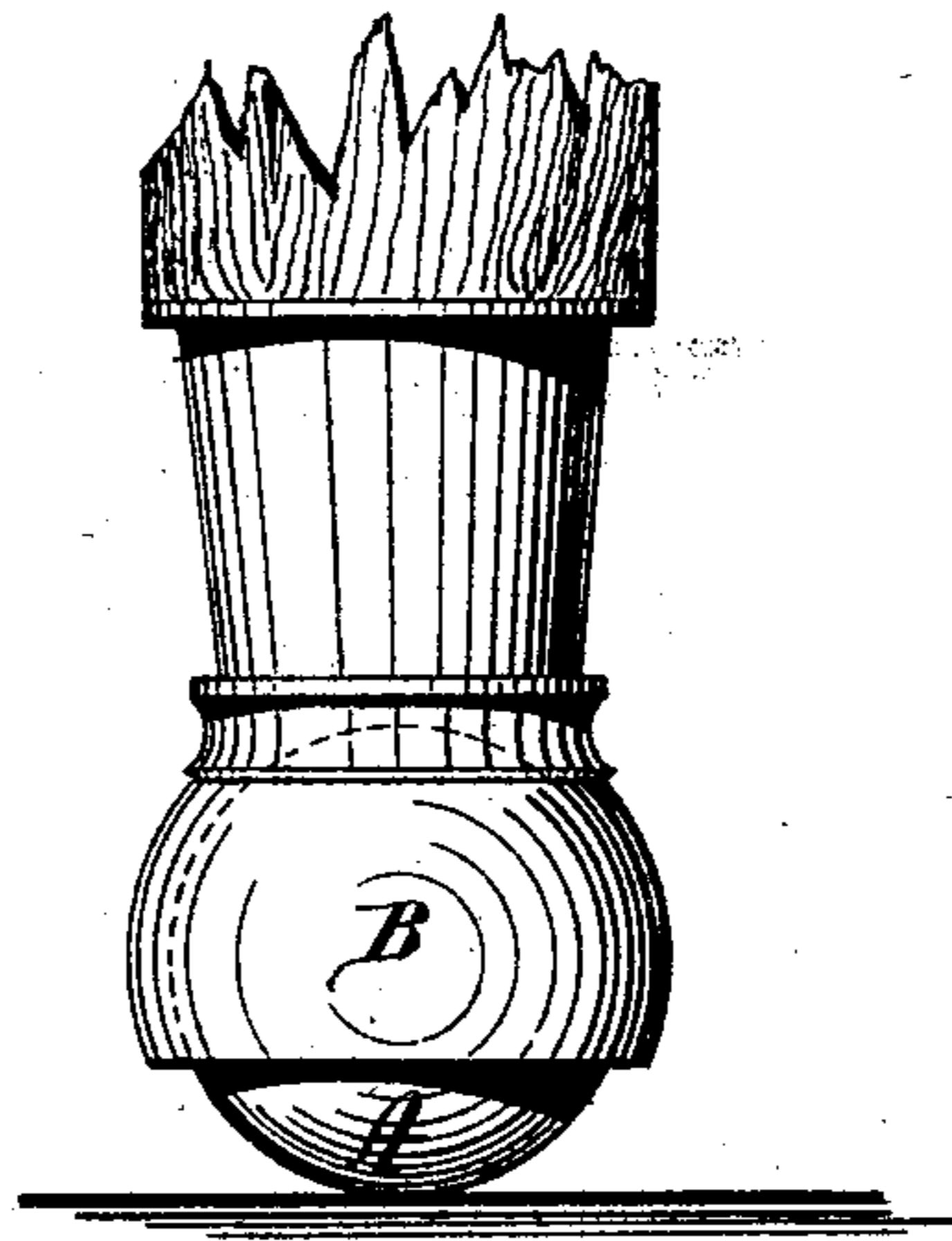


Fig. 3.



Witnesses
Harold Serrell
Chas H. Smith

Inventor
William Williams Box
per Lemuel W. Serrell

UNITED STATES PATENT OFFICE.

WILLIAM W. BOX, OF CRAYFORD, COUNTY OF KENT, ASSIGNOR TO HENRY GREENE, OF LONDON, ENGLAND.

CASTER.

SPECIFICATION forming part of Letters Patent No. 275,126, dated April 3, 1883.

Application filed December 11, 1879. Patented in England September 5, 1877, No. 3,367; in France March 1, 1878, No. 122,933, and in Belgium March 2, 1878, No. 44,445.

To all whom it may concern:

Be it known that I, WILLIAM WILLIAMS BOX, of Crayford, Kent, England, have invented new and useful Improvements in Cast-
5 ers, (for which I have obtained a patent in Great Britain, bearing date the 5th day of September, 1877, No. 3,367,) of which the following is a specification.

The object of this invention is to construct
10 casters in such a manner and of such materials as will insure their durability, and at the same time afford ease of working, even after long and hard use, and also economy in their manufacture, but little fitting being required for
15 their finish. The upper or fastening part of the body of the caster is adapted in form to suit the varied requirements of the parts or pieces of furniture to which the caster is to be applied, as is well known. Thus, for instance,
20 it may be formed with a flange, or with a central screw, or with a straight or slanting socket. The lower part of the caster, intended to receive the ball, is hollowed out in the form of part of a sphere, and the ball is retained there-
25 in by a ring-cap screwed onto the said socket, or secured by well-known means. The ball is made of iron and cast in a very true chill-mold, so that it requires but little grinding or smoothing to fit it for use, and without pene-
30 trating the hard crust. I find that a chilled ball made in such manner retains its smooth surface, and hence does not take or collect the "fluff" or dirt from carpets so readily as a soft-iron or brass or glass ball, and is of course
35 many times cheaper than a cast-steel ball, both as regards material and fitting.

Figure 1 represents a caster in which the chilled cast-iron ball A has one bearing-sur-
40 face at the top of the ball, and another bearing-surface, about midway between the top and the center of the ball, against a chilled cast-iron or other hard bearing-piece, D, and

there is an annular lubricating-pad, E, preferably made of hair felt, and secured in the bearing-piece D, as shown, and held there in any
45 desired manner. The bearing-piece D and pad E are secured in and held by the body of the caster B, and the chilled cast-iron ball A, after being put in place, is held either by the collar shown in Fig. 1, screwed onto the body
50 B by spinning in the lower part of the body B, as shown in Figs. 2 and 3, or by forming the lower part of the body B of points or fingers which are bent inward to retain the ball after it has been inserted in place. 55

I am aware that a caster-ball has been made with its bearings at the top, and also against a point of the circumference at or below the center of the ball; also with bearings at the top and against a great portion of the inner
60 side of a spherical bearing-socket.

I am also aware that a lubricating-pad is not new in connection with a lubricating-hole leading down through a bearing part or socket, which hole is intended to convey lubricating
65 material from the pad down to the ball, but is liable to be stopped.

I claim as my invention—

In a ball-caster, the combination, with a chilled cast-iron ball, of a removable bearing-
70 piece of chilled cast-iron, having a central bearing directly over the ball, and a circular bearing-surface resting upon the ball about midway between the top and center of the ball, and a separate outer socket surrounding and
75 retaining the ball and bearing-piece, substantially as described and shown.

WILLIAM WILLIAMS BOX.

Witnesses:

PETER JENSEN,
33 Chancery Lane.
HENRY GREENE,
3 Gracechurch St.