

W. FOEHL.
Ice-Creepers.

No. 150,410.

Patented May 5, 1874.

Fig. 1.

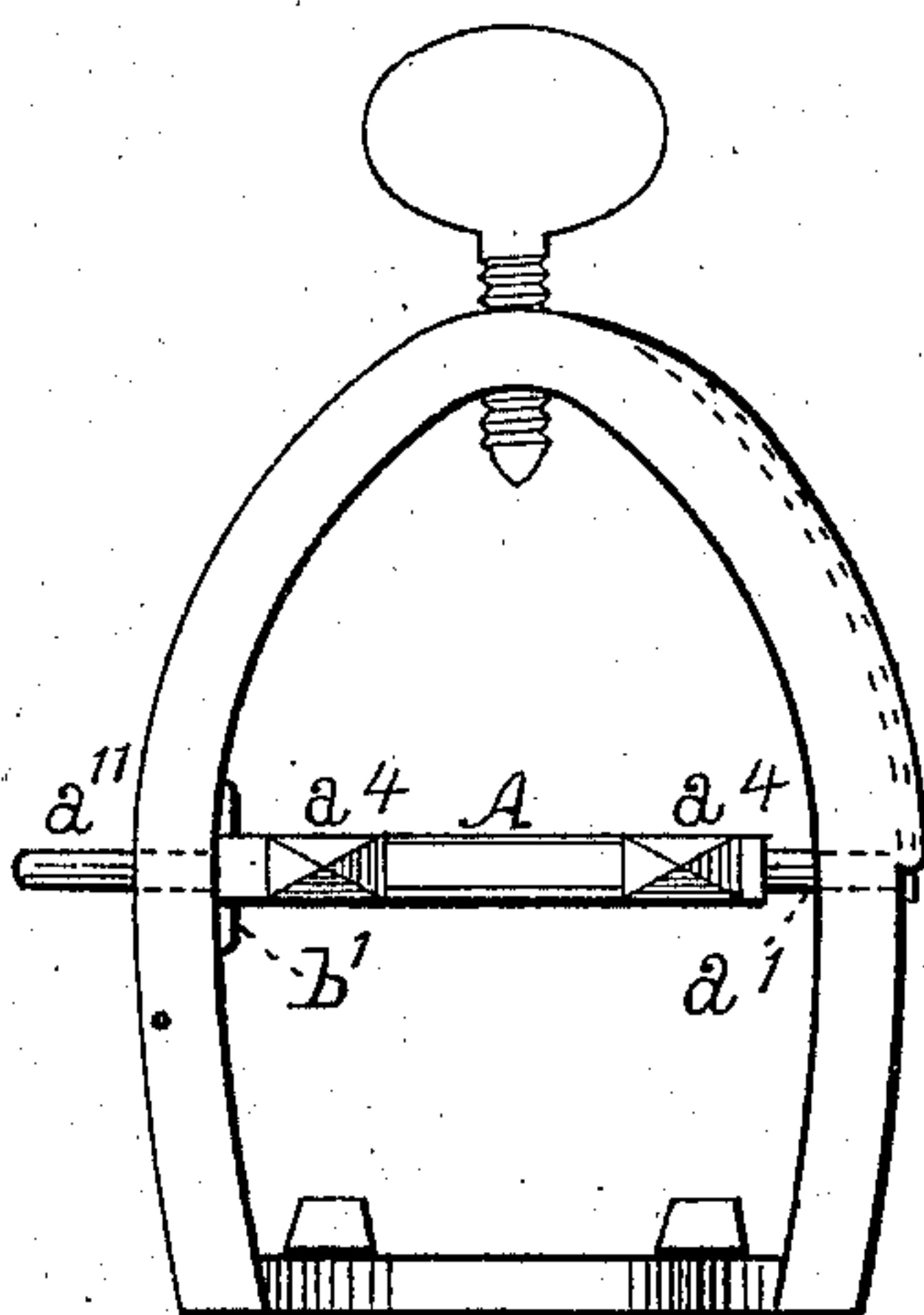


Fig. 2.

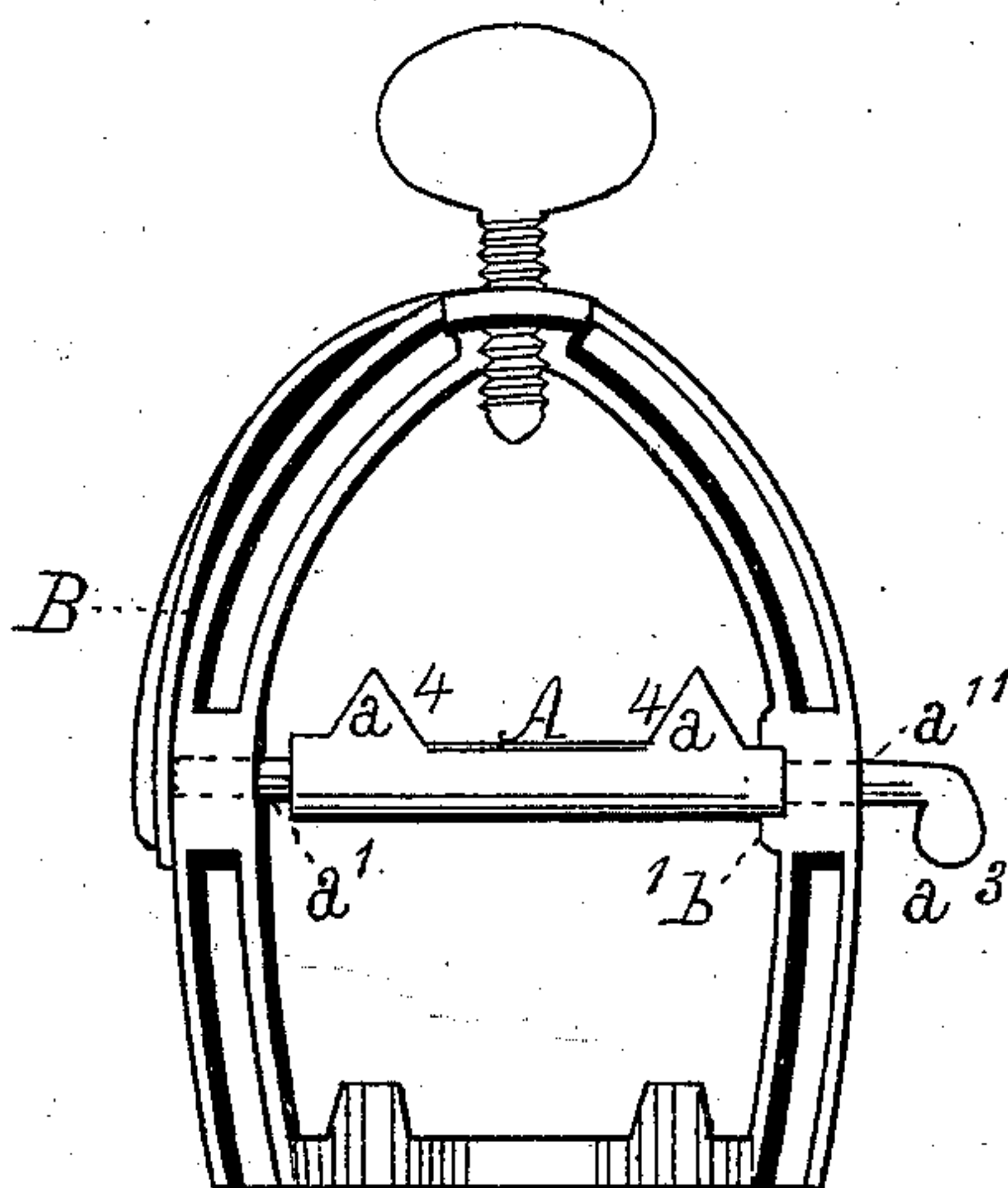
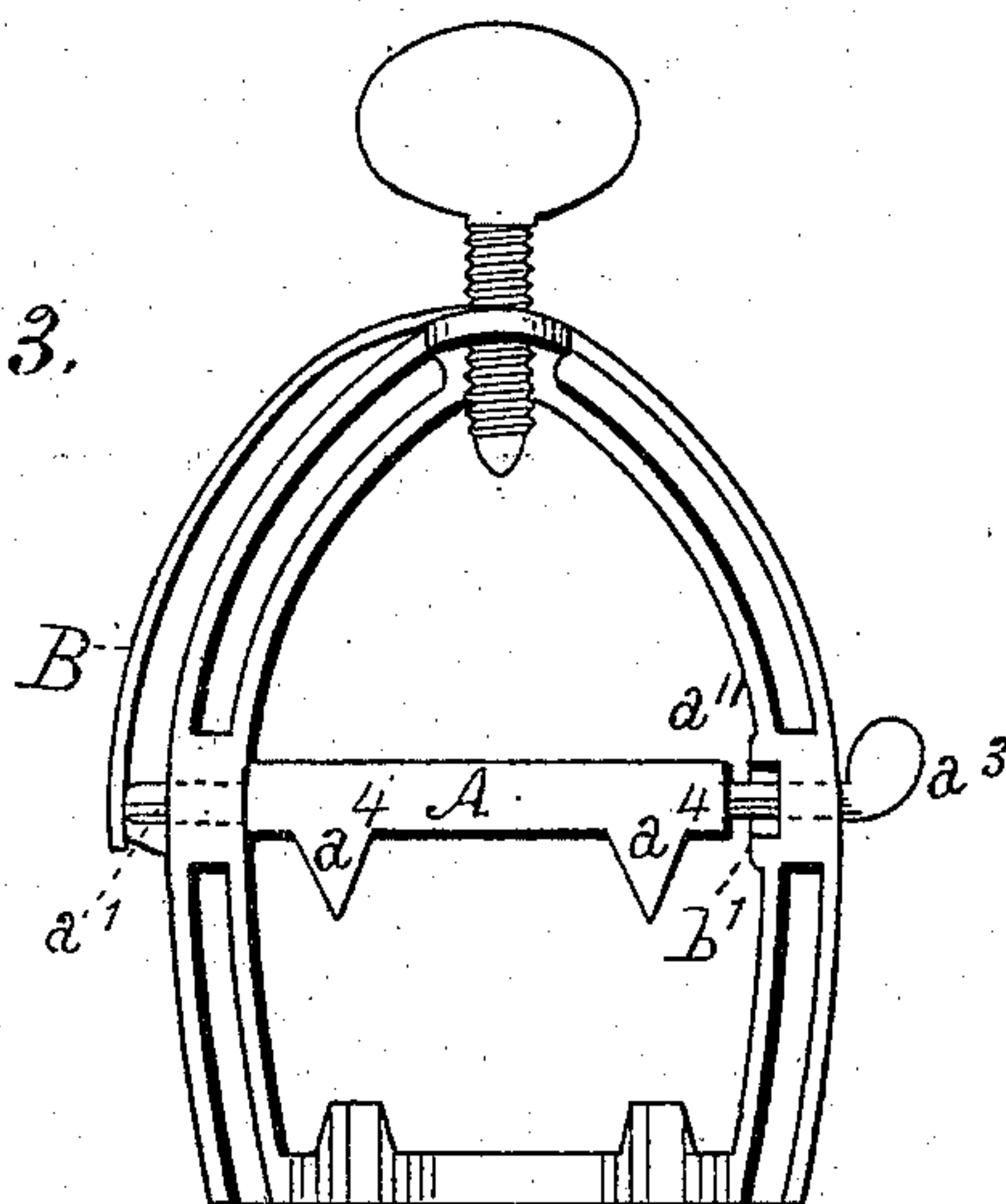


Fig. 3.



Witnesses.

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UNITED STATES PATENT OFFICE.

WILLIAM FOEHL, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN ICE-CREEPERS.

Specification forming part of Letters Patent No. 150,410, dated May 5, 1874; application filed December 22, 1873.

To all whom it may concern:

Be it known that I, WILLIAM FOEHL, of the city of Philadelphia, in the State of Pennsylvania, have invented an Improved Ice-Creeper, of which the following is a specification:

The object of my invention is to enable the wearer of the ice-creeper to readily change the position of the safety-points of the creeper without removing the creeper from his foot, as occasion may require—on entering upon the ice from his dwelling or place of business, and on entering his dwelling or place of business from an iced pavement—and thus to adjust the said safety-points for protection against slipping on the ice, and against injury to floors, oil or floor-cloths, or carpets, in dwellings, offices, or stores. These advantages I produce by constructing the safety-points on a rotary shaft attached to the frame of the creeper, so that the same can be adjusted with ready facility without removing the creeper from one's foot, by simply pressing the rotary shaft longitudinally against a spring, and turning the former around, say, a quarter-circle, and then releasing it, as will hereinafter be more fully described with reference to the accompanying drawings.

Figure 1 is a plan view of the under side of an ice-creeper (to be applied and secured to the bottom of one's boot or shoe by means of wedge-shaped catches in front and a thumb-screw in rear, in the usual well-known manner) having my invention applied thereto. Fig. 2 is a plan view of the opposite side of Fig. 1, except that the ice-picks or safety-points are turned a quarter-circle around from the perpendicular position to a horizontal position, or into the same plane with that of the creeper, and so secured by the reacting force of a spring in keeping the rotary-shaft of the safety-points fixed in a recess in the side of the frame. Fig. 3 is a plan view of the under side of the creeper shown in Fig. 2, with the difference that (in Fig. 3) the rotary shaft is in the position by which the spring is pushed and held outward by the rotary shaft just before it is released from the thumb and finger of the operator, and allowed to be forced backward by the spring into the recess, whereby the said

horizontal position of the safety-pick is secured.

About the midlengths of the two sides of the frame of the creeper there are respective holes, made transversely in the same plane with the frame, in which the journals a' a'' of the shaft A rotate. The transverse section of the shaft A is nearly square; but the projecting journals thereof are cylindrical, the one, a' , about an eighth of an inch, more or less, longer than the width of its side of the frame A, and the opposite one, a'' , somewhat longer, and with a flat thumb and finger end, a^3 , whereby the required rotary motions can be given to shaft A. The length of the shaft A between journals a' and a'' is about an eighth of an inch, more or less, shorter than the space between the two opposite sides of the frame, and, consequently, the shaft can be moved longitudinally that distance by one's thumb and finger applied to the projecting handle a^3 to operate the shaft, by pressing it against the spring B to release it from the slot b' , and turning it a quarter round, and then letting the said spring B force it back again into the holding-slot b' . The handle a^3 is flat in the same plane with the safety-points a^1 a^4 , and, consequently, the operator can always know thereby the position of said points, as to whether they are in the horizontal position, or in the position for taking hold of the ice and preventing any danger of the person's slipping thereon. It will be understood without any further explanations that the safety-points a^4 a^4 will be firmly held in either the downward or the horizontal position by the slot b' , and the square portion of the shaft which fits it; and that the utility of such changeableness in an ice-creeper is important, in view of the penetrating character of the creeper-points.

I claim as my invention—

The rotary shaft A, having the points a^4 a^4 and handle a^3 , in combination with the slot b' and spring B of the frame of the creeper, substantially as and for the purposes hereinbefore set forth and specified.

Witnesses:

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