

CHARLES B. CLARK.

Improvement in Sash-Pulley Cases.

No. 126,019.

Patented April 23, 1872.

FIG. I.

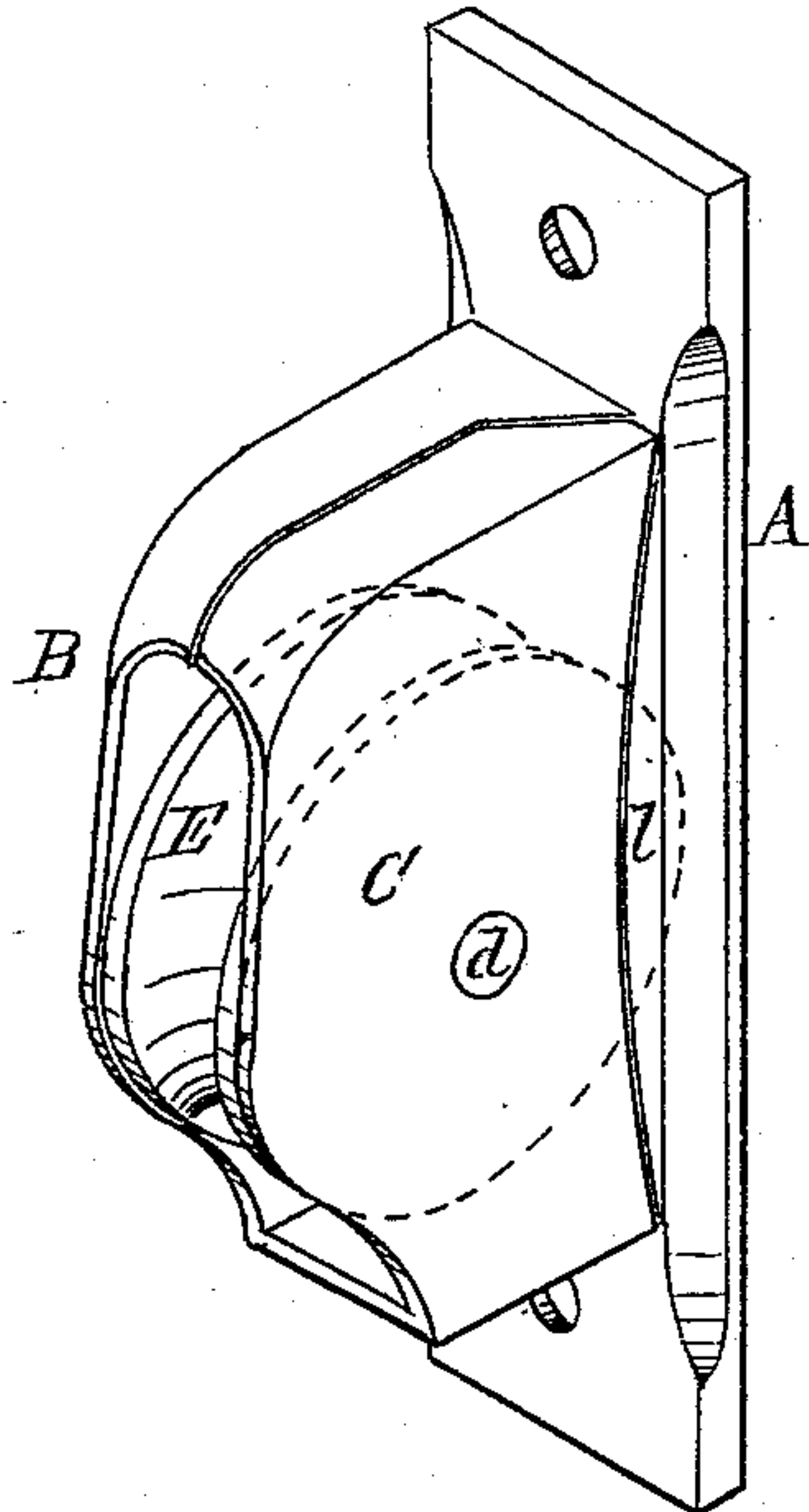


FIG. II.

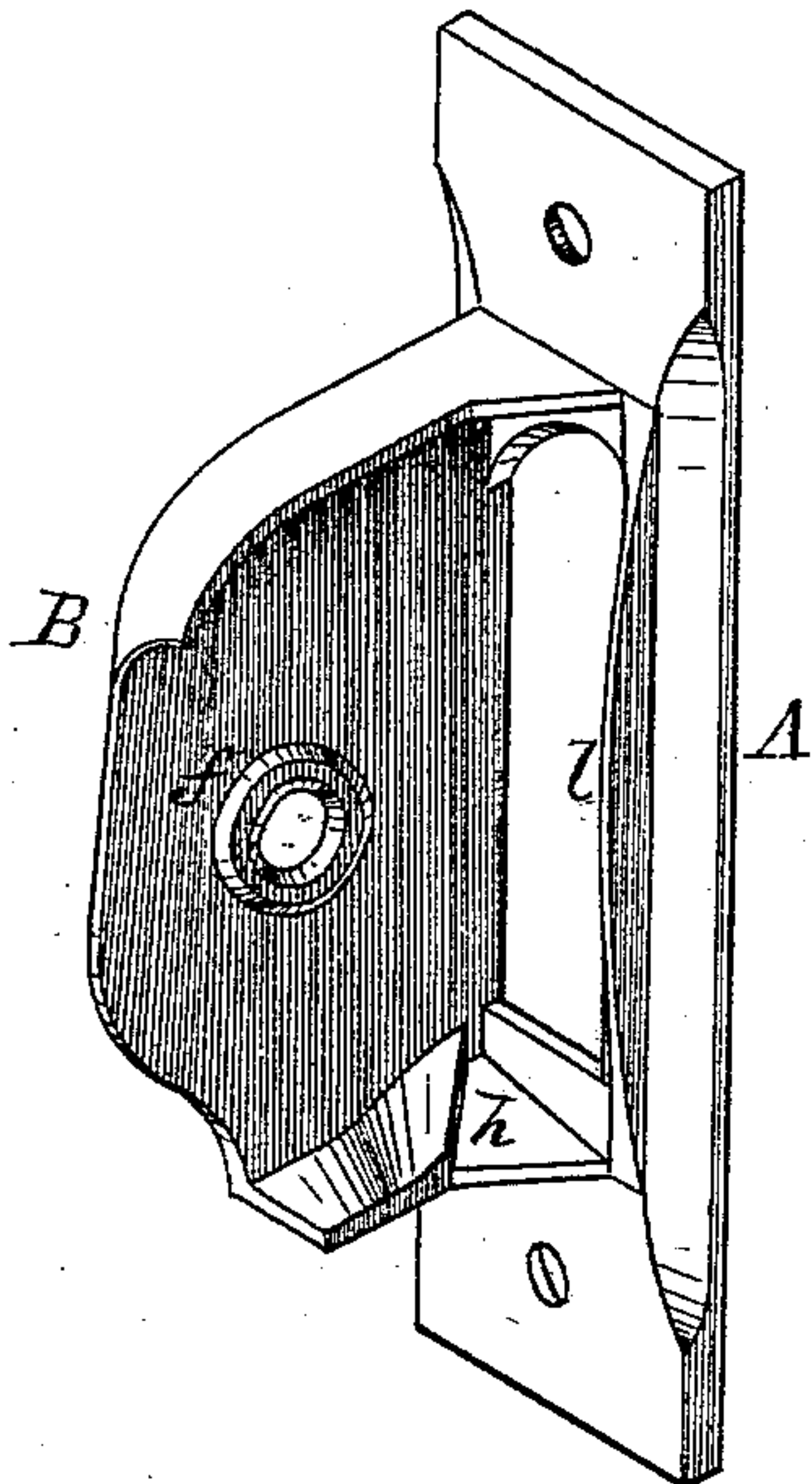


FIG. III.

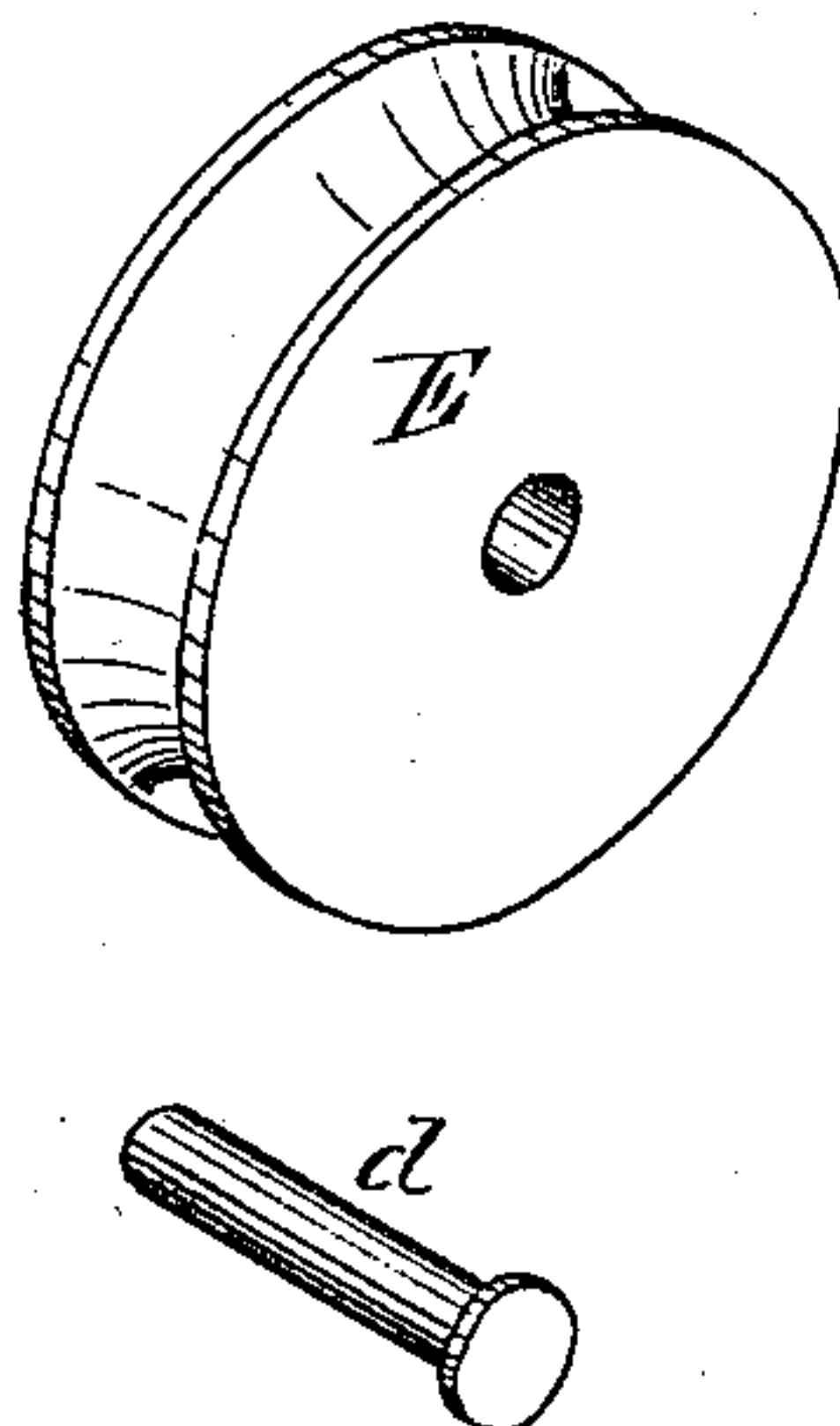


FIG. IV.

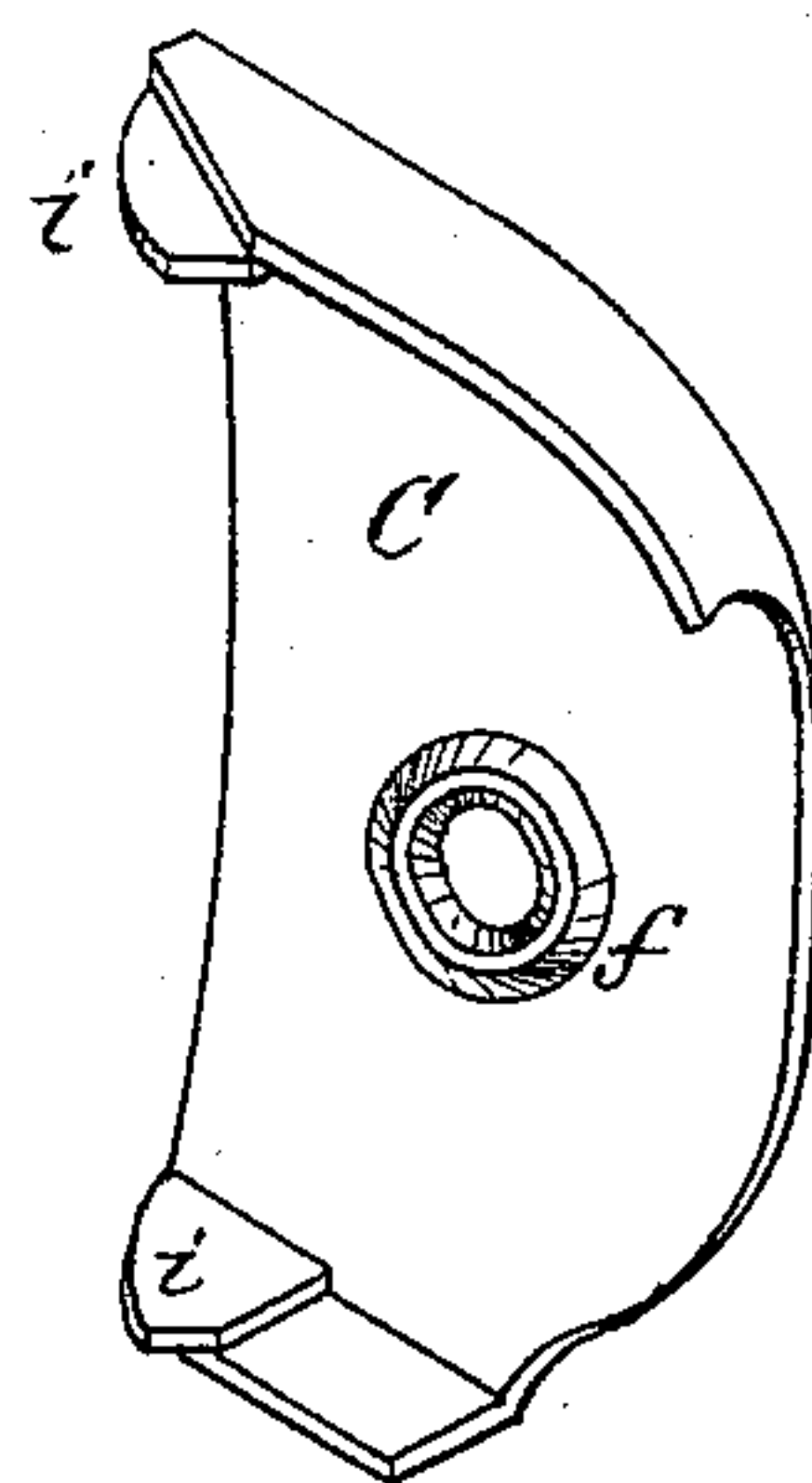
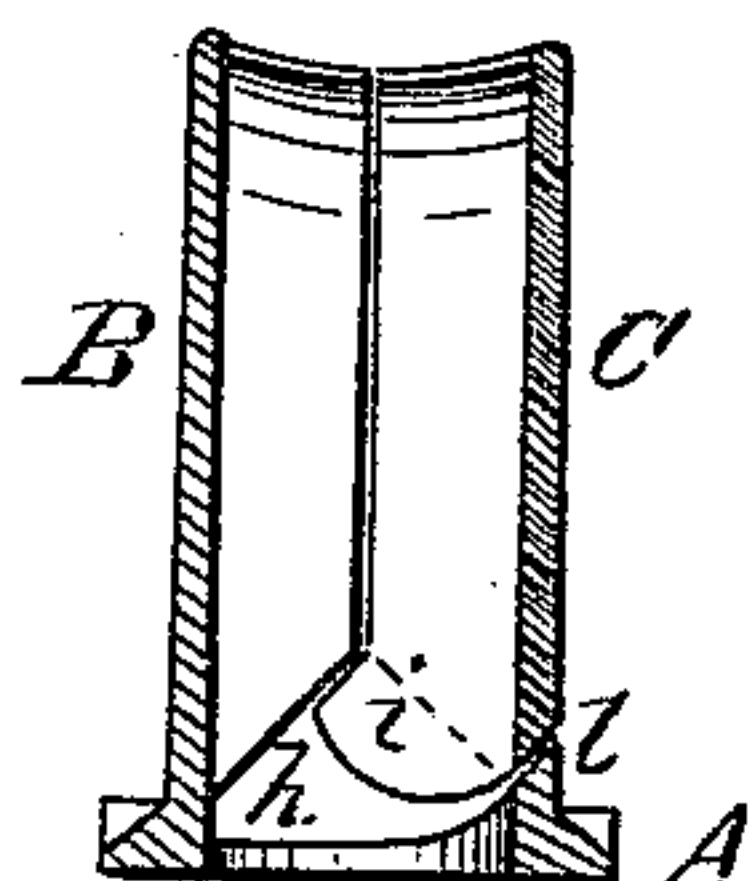


FIG. V.



Witnesses:

J. Fraser
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UNITED STATES PATENT OFFICE.

CHARLES B. CLARK, OF BUFFALO, NEW YORK.

IMPROVEMENT IN SASH-PULLEY CASES.

Specification forming part of Letters Patent No. 126,019, dated April 23, 1872.

SPECIFICATION.

To all whom it may concern:

Be it known that I, CHARLES B. CLARK, of Buffalo, in the county of Erie and State of New York, have invented an Improvement in Axle-Pulley Cases for Sash-Pulleys and the like, of which the following is a description:

The object of my invention is to enable the pulley-case to be so constructed that its several parts are held together by the pin which forms the axis of the wheel, and without other riveting, and to enable it to be cast with holes for the axial-pin and bosses on the interior to prevent friction of the wheel against the sides, and to be molded and cast without using a core; and it consists in a case so constructed that the face-plate and one-half of the cap are united in one piece, and the other half forms a removable part, which is held in position by lugs at the base, as hereinafter described, and secured to the former by riveting the pin which constitutes the axis of the wheel.

In the drawing, Figure 1 is a perspective view of my improved axle-pulley case; Fig. 2, a like view, with the wheel, axial-pin, and removable part of the cap removed. Figs. 3 and 4 are like views of the wheel, axial-pin, and removable part of the cap separated. Fig. 5 is a transverse vertical section of the cap.

Hitherto, in axle-pulleys, the form of the case has been such as did not admit of securing those advantages which are the special object of my invention without employing the more expensive processes of the workshop, such as drilling, molding with a core, &c.; as, for instance, in order to cast a cap formed in one piece, with bosses to prevent friction of the wheel against the sides, the bosses have been necessarily made so elongated as to extend to the outer edge of the cap in order that the pattern might be drawn from the sand in molding, and when so formed the holes for the axial-pin, of necessity, require to be drilled, as they cannot be molded, and the boss, when so formed, subjects the wheel to friction on its periphery, where it is most objectionable. It is, moreover, an object to secure the advantage of a wrought-iron pin for an axis instead of cast journals for its greater strength, its adaptation to a wooden wheel, and for obviating friction, which my invention does by making the same pin serve both as the axis

and the rivet by which all the parts are held together.

As shown in the drawing, the case consists of two parts, the face-plate A and one side of the cap B, these being cast as one piece, there being a central longitudinal division of the cap, by which the part C is separated. Both B and C are provided, in casting, with holes for the axial pin *d*, on which the grooved wheel E revolves, said holes being surrounded each with an annular boss, *f*, as guards to prevent friction of the wheel against the sides of the cap. The part C of the cap is provided at its base, at either end, with laterally-projecting lugs or spurs *i i*, and the part B with corresponding recesses, *h h*, in which the lugs are received when the parts are placed together, and by which they are held from moving longitudinally. A web, *l*, projects perpendicularly from the face-plate on the plane of the movable part of the cap, which is beveled inwardly; and the base of the part C being correspondingly beveled, as seen in Fig. 5, it, in conjunction with the recess for the lugs *i i*, forms a seat which effectually prevents the two parts of the cap from separating laterally after the axial pin *d* has been inserted. The wheel E being introduced, the pin *d* is riveted, by which single manual operation all the parts are permanently united. The wheel is preferably of wood, but a metal one may be employed.

This construction secures the advantages of an axial pulley, which may be cast cheaply, requiring no drilling or fitting; obviates noise and friction; in which the parts are all permanently connected by the simple act of riveting one end of the axle; and whereby excellence and economy of manufacture are combined.

What I claim as my invention is—

An axle-pulley case, formed of the face A and part B, cast in one piece, and the removable part C when seated at its base and connected therewith by means of the riveted axial pin *d*, substantially as and for the purpose set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

CHARLES B. CLARK.

Witnesses:

J. FRASER,
GEO. W. MIATT.