

(No Model.)

A BRUBAKER.
BUNG.

No. 504,060.

Patented Aug. 29, 1893.

Fig. 1.

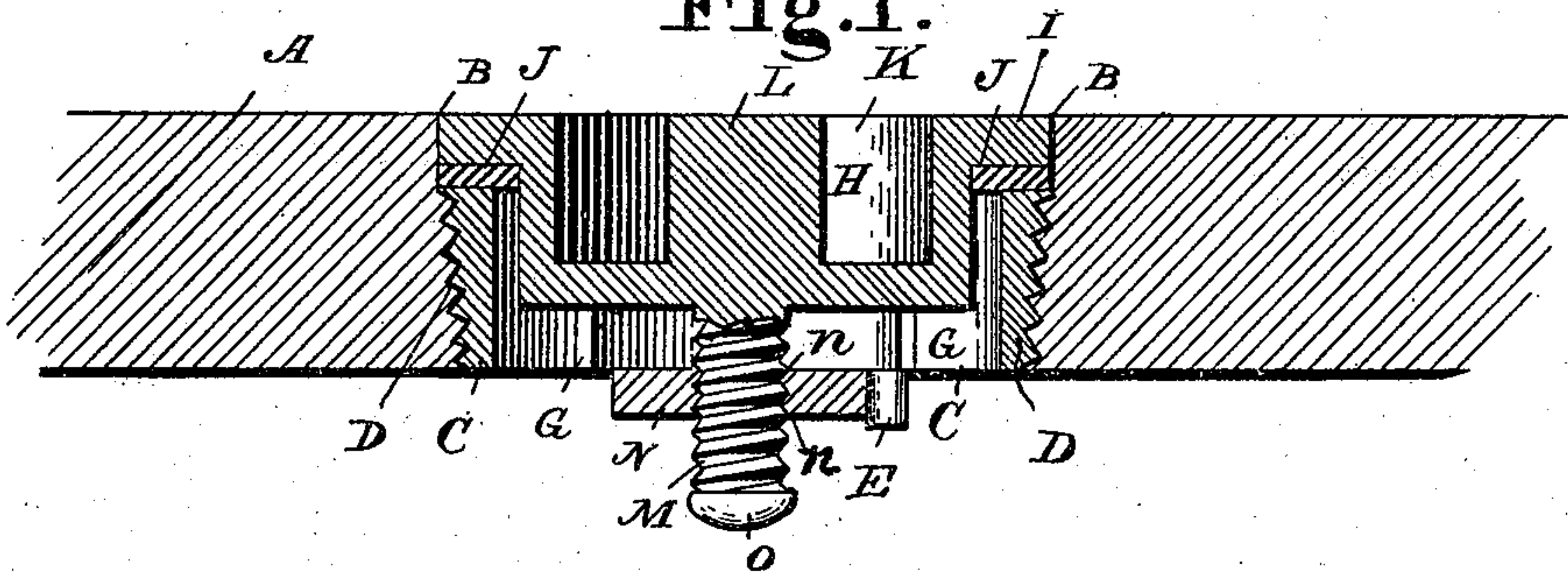


Fig. 2.

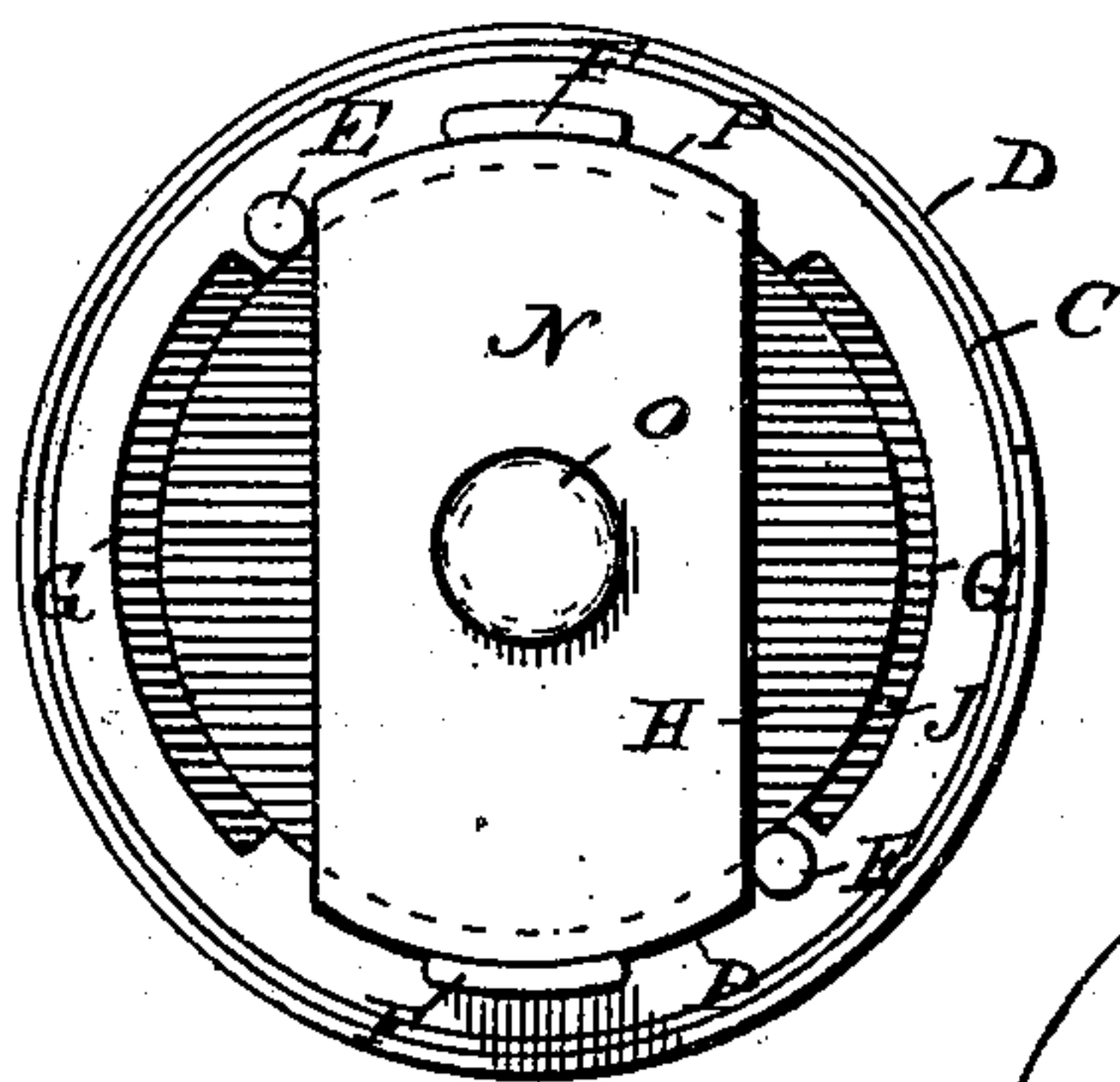


Fig. 3.

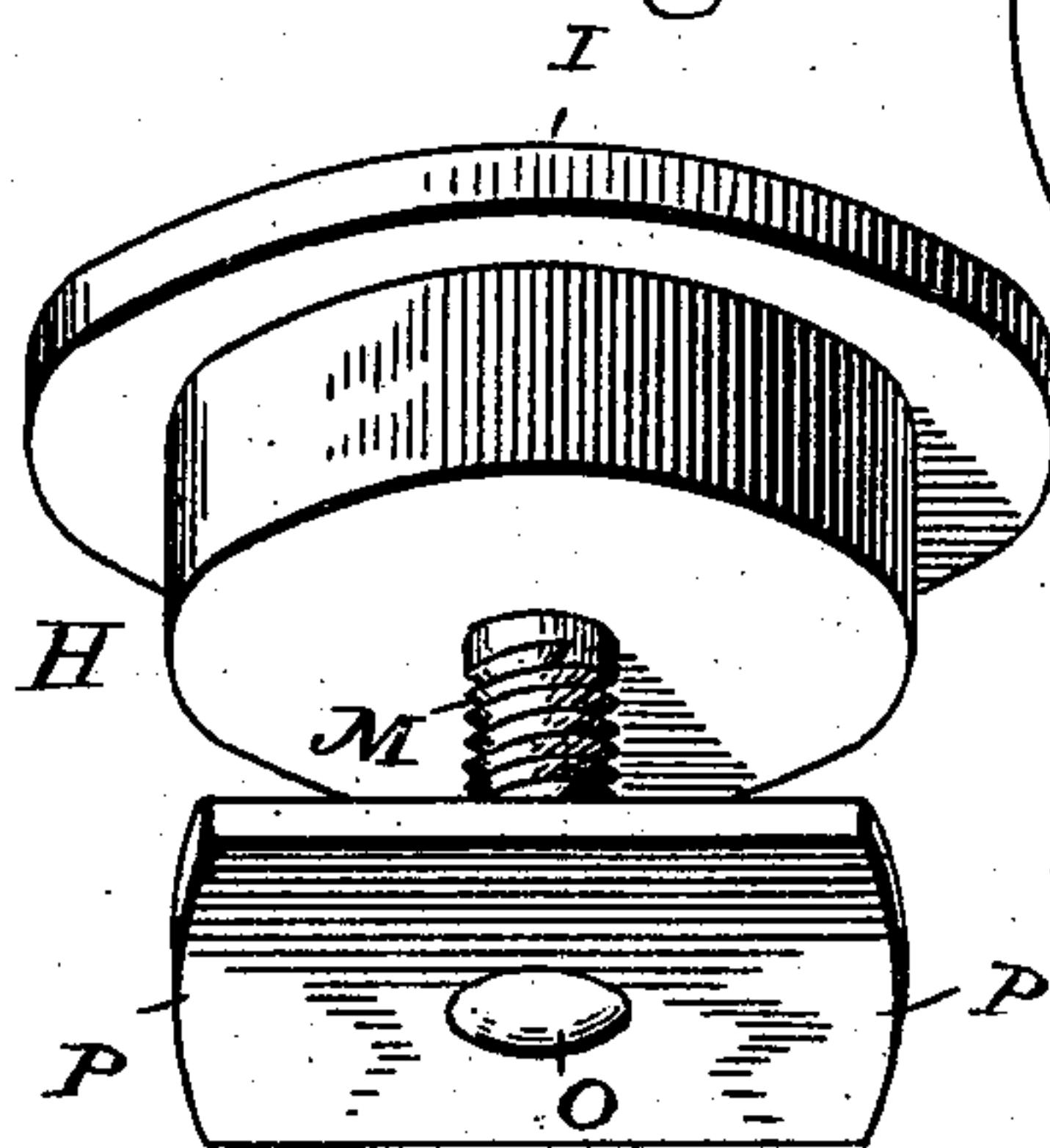
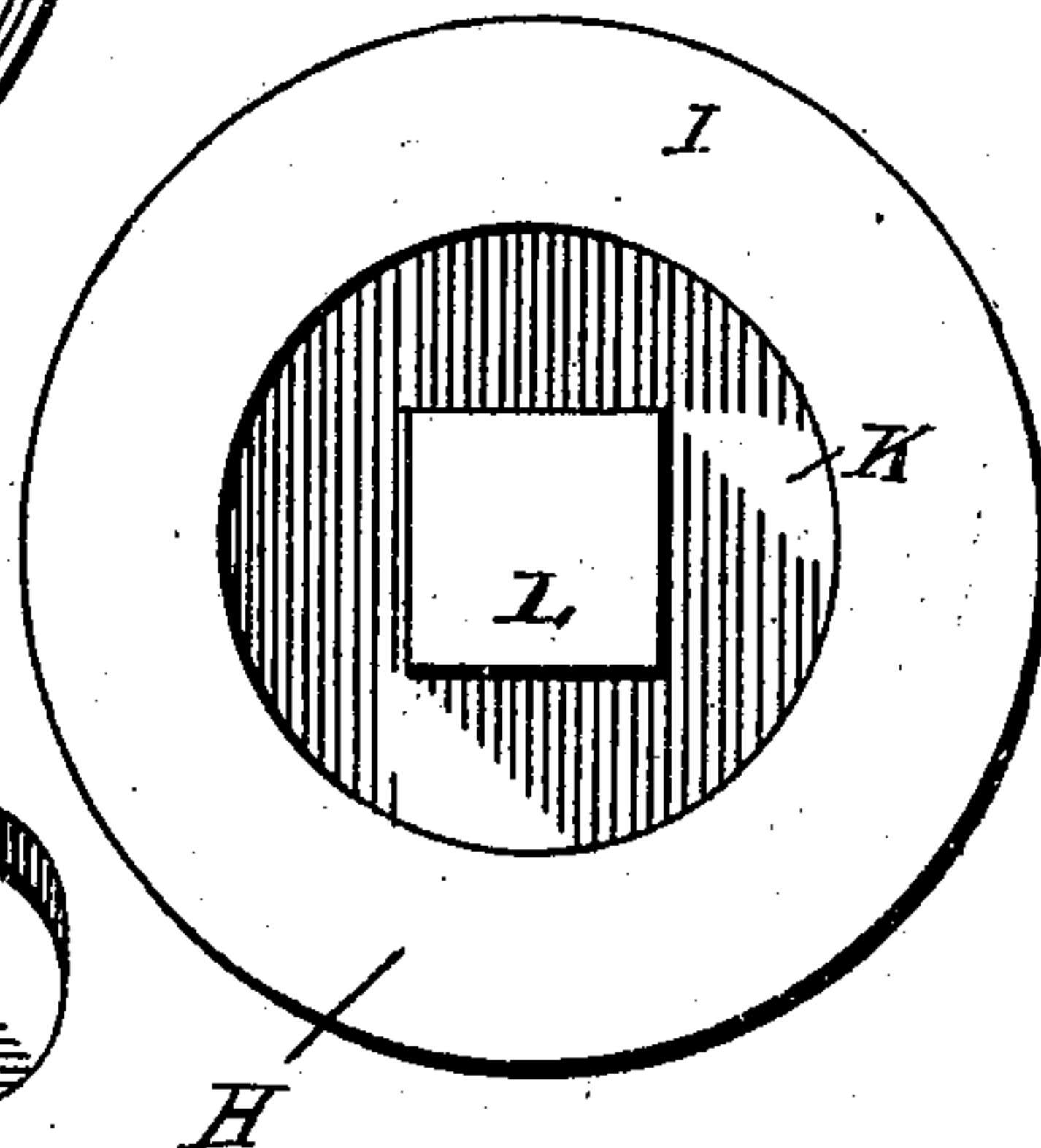


Fig. 4.



Inventor,

Andrew Brubaker,

By His Attorneys.

Witnesses

Julius Ulke, Jr.
David P. Holmström.

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

ANDREW BRUBAKER, OF ASHLAND, OHIO.

BUNG.

SPECIFICATION forming part of Letters Patent No. 504,060, dated August 29, 1893.

Application filed May 17, 1893. Serial No. 474,536. (No model.)

To all whom it may concern:

Be it known that I, ANDREW BRUBAKER, a citizen of the United States, residing at Ashland, in the county of Ashland and State of Ohio, have invented a new and useful Bung, of which the following is a specification.

This invention relates to bungs; and it has for its object to provide a strong and durable bung and bung bushing for barrels, casks, &c., so as to provide a perfectly air-tight closure for the bung hole.

To this end the main and primary object of the present invention is to provide certain improvements in adjustable and removable bungs, whereby a strong and durable joint will be effected, while at the same time the locking of the bung is effectually secured without danger of being displaced.

With these and other objects in view which will readily appear as the nature of the invention is better understood, the same consists in the novel construction, combination and arrangement of parts hereinafter more fully described, illustrated and claimed.

In the accompanying drawings:—Figure 1 is an enlarged sectional view of my improved bung and bung bushing applied to the barrel stave. Fig. 2 is a bottom view of the bushing and the bung locked in position therein. Fig. 3 is a detail in perspective of the removable bung. Fig. 4 is a detail plan view of the bung.

Referring to the accompanying drawings, A represents a stave having the ordinary bung hole B, into which is adapted to be removably inserted the bushing ring C. The said bushing ring is exteriorly tapered and threaded as at D, so that the same can be easily screwed into the bung hole B, while at the same time securing a wedging fit therein. The said bushing ring C, is adapted to be screwed into the hole B, so that its flat outer end will be disposed below the outer edge of the bung hole or opening B, and its inner end projected beyond the inner edge of said hole or opening. The said inner end of the exteriorly threaded and tapered bushing ring is provided with the diametrically opposite stop pins E, adjacent to which are arranged the diametrically opposite curved guide lugs F, the function of which will presently appear. The bushing ring C, is further provided in its inner sides with the directly opposite grooved

ways G, and is adapted to receive the closing bung H. The closing bung H, is provided with an outer shouldered flange I, adapted to work directly on top on the outer flat end of the bushing ring, and to fit flush within the bung hole beyond said outer end of the ring, and the shouldered flange I, clamps in position between the same and the flat outer end of the bushing ring, the packing gasket J, which insures a perfectly tight bung hole joint. The bung H, fits inside of the bushing ring, and is provided in its outer face with the wrench groove K, which surrounds a square wrench stem L, which stem is adapted to receive a suitable wrench whereby the bung may be placed in position. The said bung H, is further provided with the screw stem M, projecting from its inner end and carrying the locking bar N, provided with a central threaded opening *n*, in which the screw M, works, and said locking bar is prevented from being turned off of the screw stem, or vice versa, by the head O, at the outer extremity of said screw stem.

The locking bar N, which is mounted on the screw stem of the bung is provided with opposite rounded ends P, which correspond in curvature to the curved guide lugs F, at one end of the bushing ring, and such rounded ends of the locking bar are adapted to be passed through the grooved ways G, of the bushing ring and be turned into engagement with its inner end. It will be readily seen that, after inserting the ends of the locking bar through the bushing ring, by continuing to turn the bung, the rounded ends of the locking bar are turned over the inner end of the bushing ring and are guided by the curved guide lugs F, onto the stop pins E, which hold the locking bar stationary, while by continuing to turn the bung, its screw stem works through the threaded opening of the locking bar, and draws the shouldered flange of the bung tightly onto the outer end of the bushing ring. By reversing the movement, and unscrewing the bung, the ends of the locking bar will be brought into alignment with the grooved ways, so that the bung can be easily detached from the bushing.

Having thus described the invention, what is claimed, and desired to be secured by Letters Patent, is—

The combination of an exteriorly tapered and threaded bushing ring having in its inner sides opposite grooved ways and at its inner end diametrically opposite stop pins and adjacent curved guide lugs, said ring being adapted to have its outer end disposed below the outer edge of the bung hole in which it is fitted a flanged bung adapted to be detachably locking in position within said bushing ring and provided with an outer shouldered end adapted to work flat onto the outer end of said ring, and inside of the bung hole and a screw stem projected from its inner end, and provided at its extremity with a head O a locking bar having a central threaded open-

ing receiving the screw stem of the bung and opposite rounded ends corresponding in curvature to the bushing ring guide lugs, and adapted to be passed through said opposite grooved ways and turned over the inner end of the bushing ring so as to engage inside of said curved guide lugs and at one side of said stop pins, substantially as set forth. 20

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses. 25

ANDREW BRUBAKER.

Witnesses:

J. A. BLACK,
L. K. HINKLE.