

No. 644,550.

Patented Feb. 27, 1900.

H. B. GILLETTE.
BEARING.

(Application filed June 30, 1899. Renewed Feb. 2, 1900.)

(No Model.)

Fig. 1.

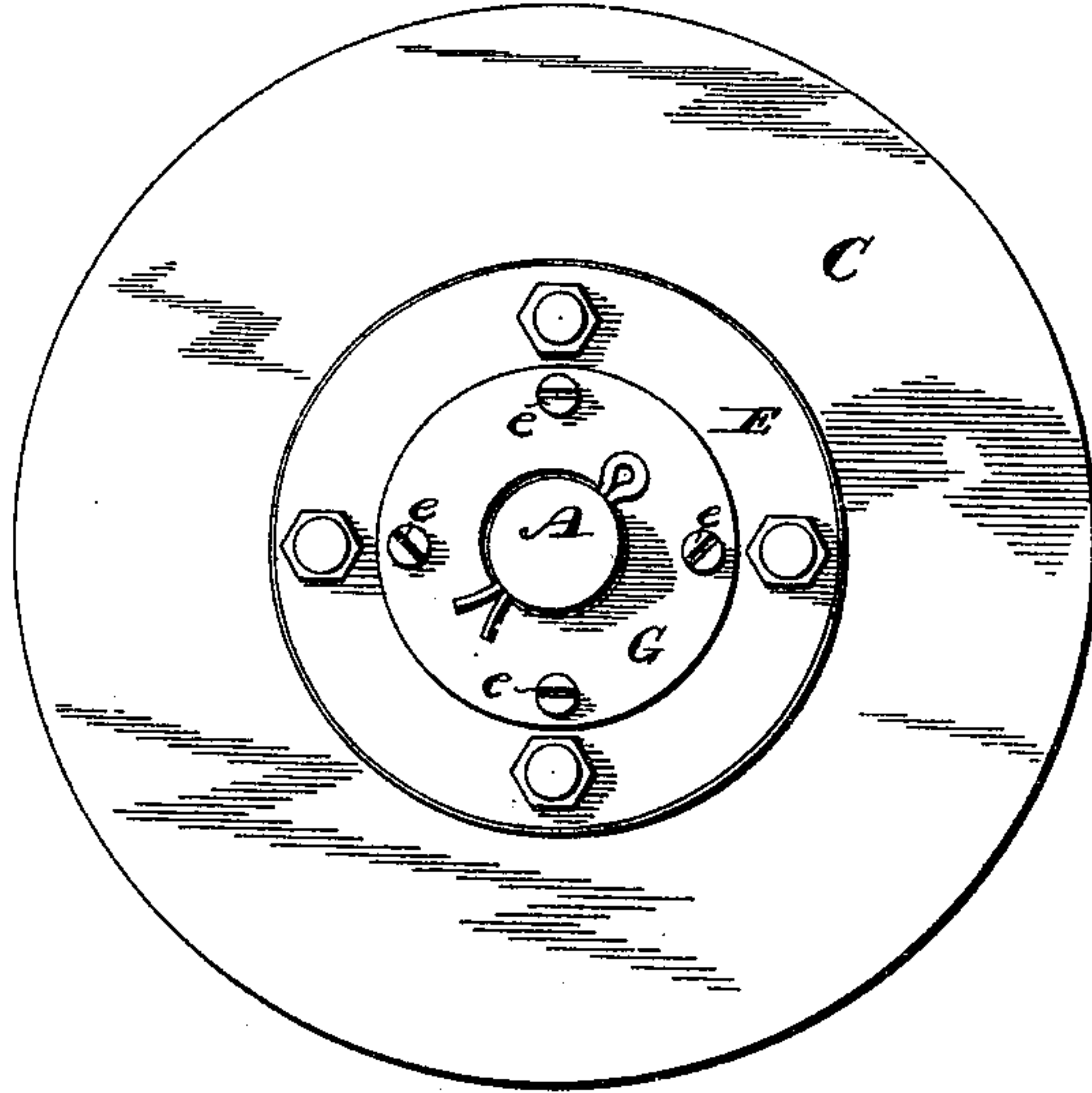


Fig. 2.

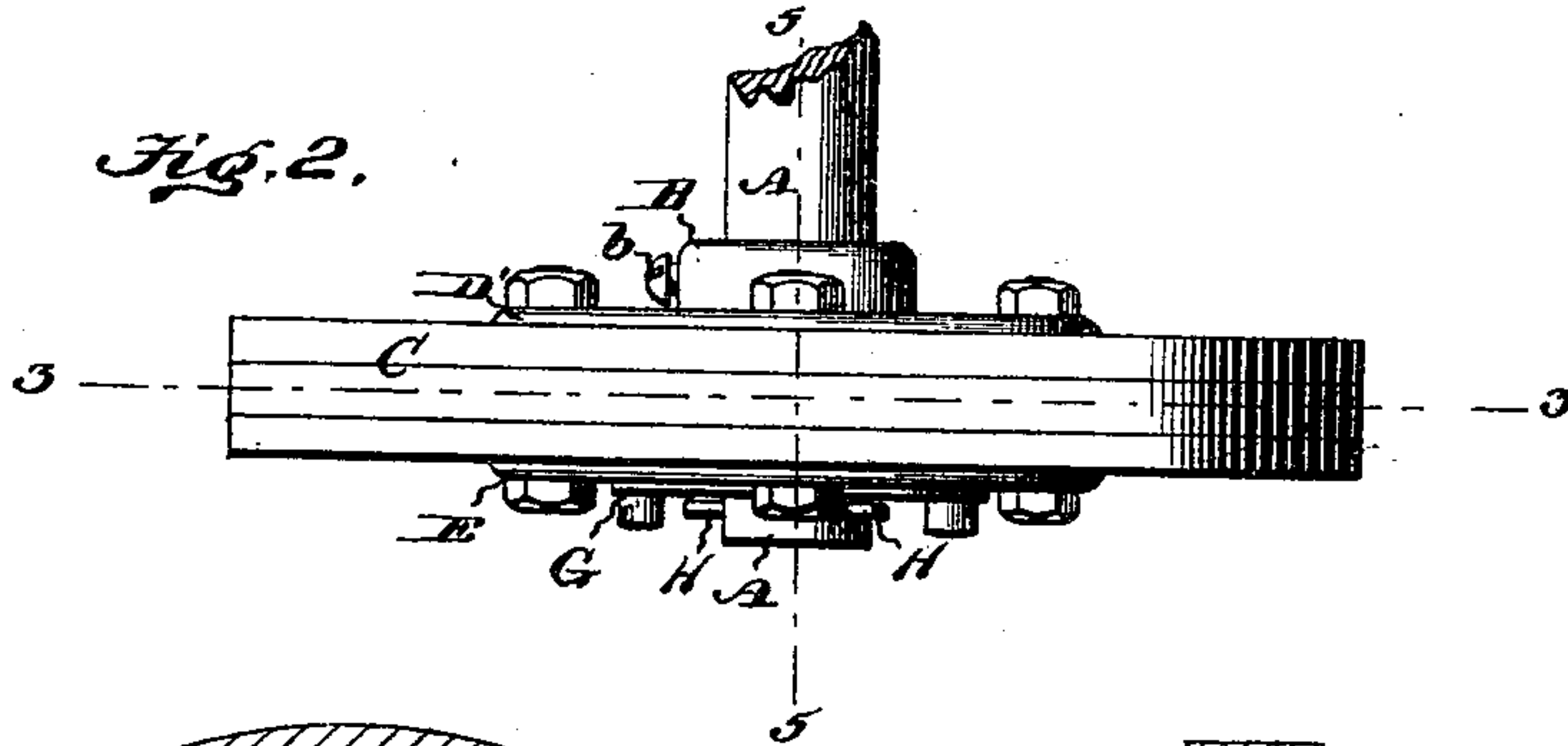


Fig. 3.

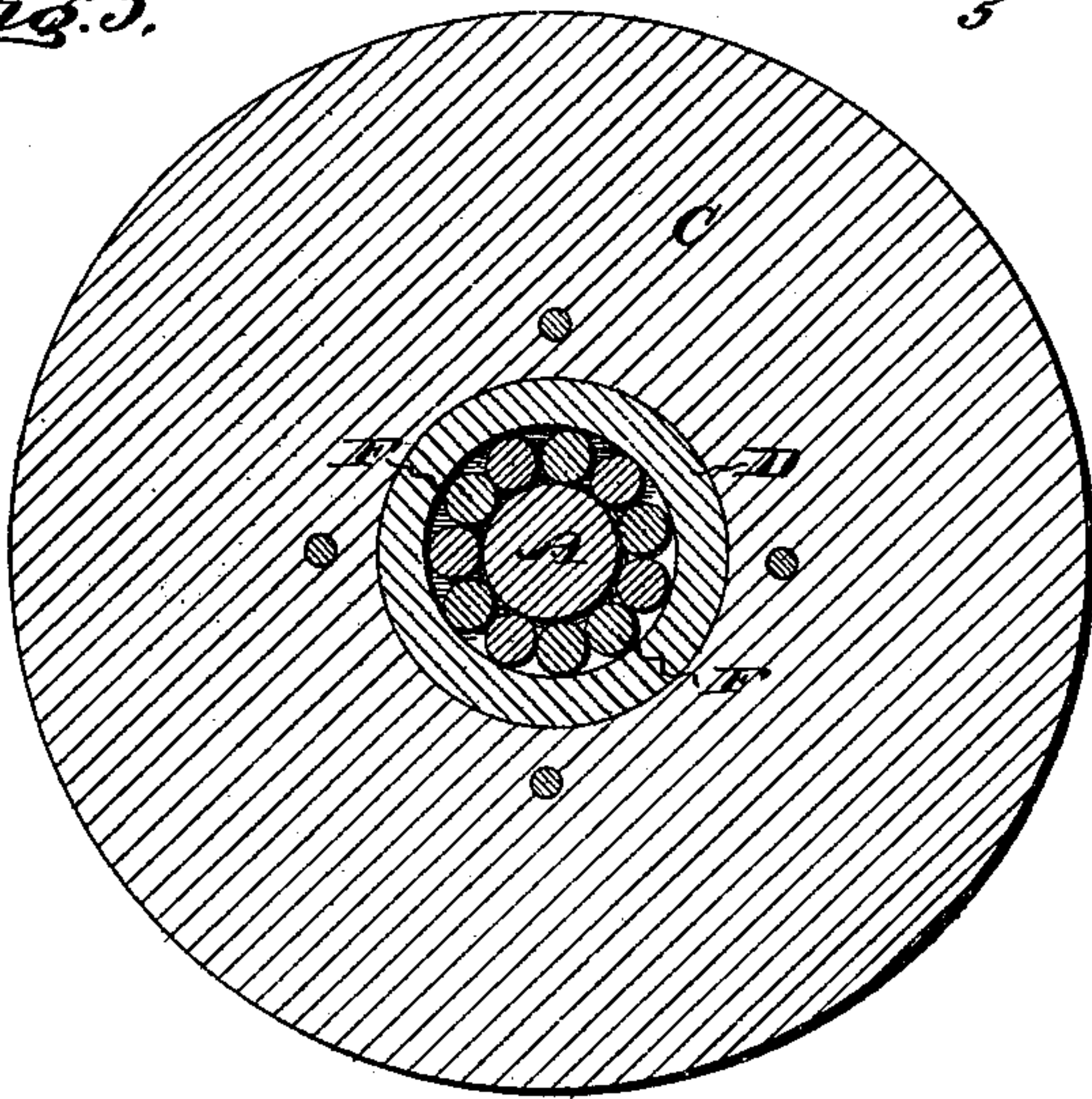
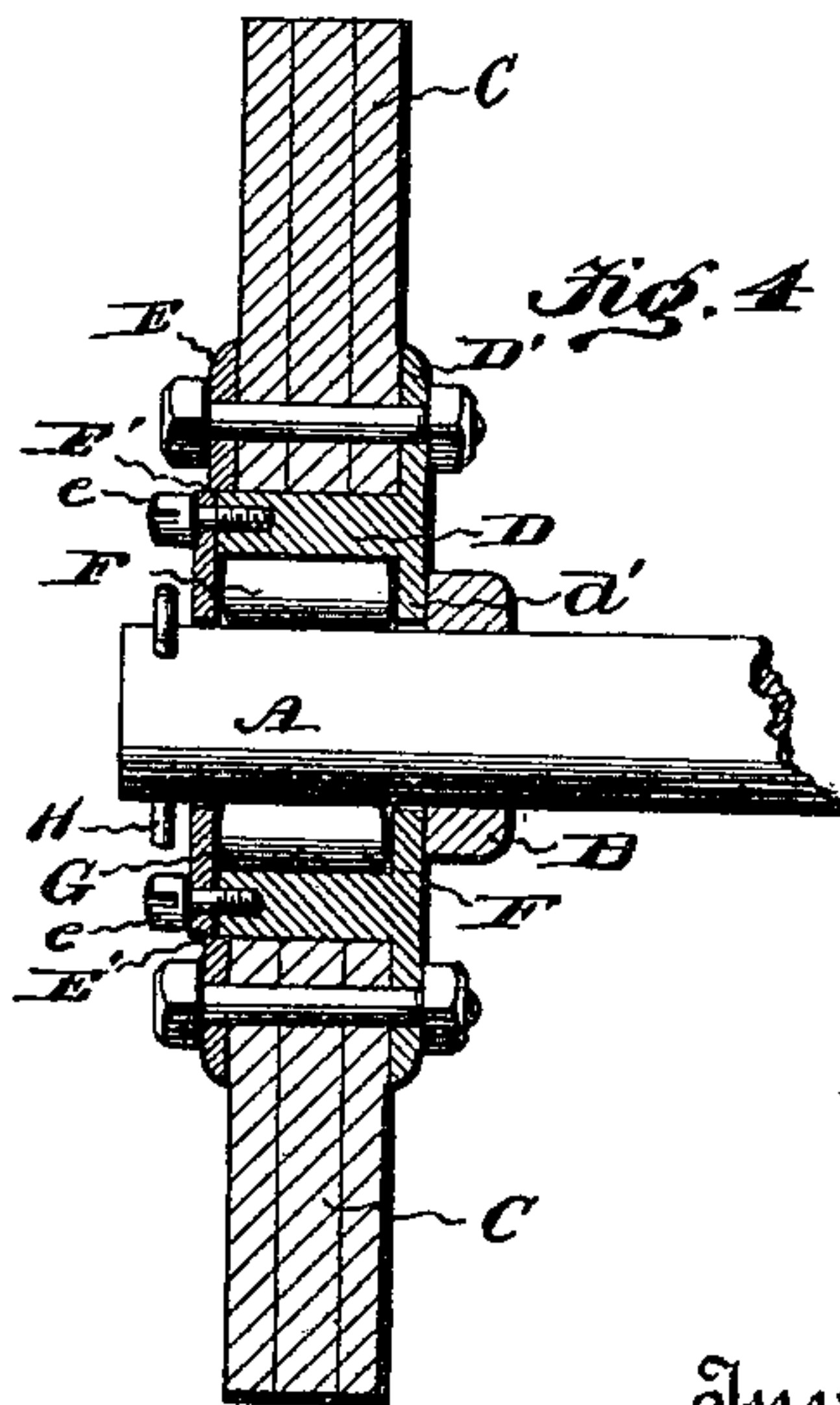


Fig. 4.



Witnesses
Edwin B. St. Tower, Jr.
Herbert B. Gillette.

Inventor
Herbert B. Gillette.

By - Edwin B. St. Tower, Jr.
Attorneys

UNITED STATES PATENT OFFICE.

HERBERT B. GILLETTE, OF BENTON HARBOR, MICHIGAN, ASSIGNOR TO THE
GILLETTE ROLLER BEARING COMPANY, OF SAME PLACE.

BEARING.

SPECIFICATION forming part of Letters Patent No. 644,550, dated February 27, 1900.

Application filed June 30, 1899. Renewed February 2, 1900. Serial No. 3,748. (No model.)

To all whom it may concern:

Be it known that I, HERBERT B. GILLETTE, a citizen of the United States, residing at Benton Harbor, in the county of Berrien and State of Michigan, have invented certain new and useful Improvements in Bearings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to a new and useful improvement in journal-bearings, and is especially adapted for use in the wheel-hubs of mill and freight-house trucks. Its object is to provide a device of this character which will be simple and inexpensive of construction and durable in use.

To these ends the invention consists in providing the hub with a box of peculiar construction adapted to receive the axle and a series of rollers thereabout and means for retaining the rollers in proper position. An adjustable collar is provided upon the shaft, whereby the swing or sway of the wheel may be taken up or prevented.

The invention also consists in the further novel constructions and combinations of parts hereinafter more fully described and claimed, and illustrated in the accompanying drawings, showing the preferred form of my invention, and in which—

Figure 1 is a side elevation of a wheel mounted upon an axle and embodying my improvements. Fig. 2 is a plan view thereof; and Fig. 3 is a section on line 3 3, Fig. 2. Fig. 4 is a section on line 5 5, Fig. 2.

Referring to said figures by letters of reference, A is the axle, upon which is loosely mounted a collar B, provided with a set-screw *b*, whereby it may be secured to the axle at any desired position thereon. The hub of the wheel, which may be of any preferred construction, is provided with a box D, having a radial flange D' upon one end. Between the flange D' and a hub-plate E, which surrounds the end of the outer wall of box D, are bolted the inner edges of the plates C, of which the body of the wheel is preferably made, as shown. The box D has an inwardly-extending flange *d'*, which is to provide space between the axle A and the wall of the box D

to receive the friction-rollers F, the diameter of which is such that when placed within said space their opposite sides will bear against the box D and the axle A. The rollers are preferably provided with rounded ends, as shown. A ring G is fitted in a circular recess E', formed by the hub-plate E, and serves to retain the rollers upon the axle A, between it and the flange *d'*. This ring is secured to the box D, preferably by means of screws *e*, as shown. The wheel may be secured to the axle in any desired manner, as by means of a pin H. It will be obvious that by this construction I obtain a device which is extremely simple and inexpensive of construction, but which is, nevertheless, strong and durable and which will overcome all end thrust of the rollers. Moreover, by providing the adjustable collar the wheel may be readily tightened in position and all swaying or swinging thereof prevented.

In the foregoing description I have shown the preferred form of my invention; but I do not limit myself thereto, as I am aware that modifications may be made therein without departing from the spirit or sacrificing the advantages thereof, and I therefore reserve the right to make such changes as fairly fall within the scope of my invention.

Having thus fully described my invention, what I therefore claim as new, and desire to secure by Letters Patent thereon, is—

1. The combination, in a wheel, of a box, outwardly and inwardly extending flanges at one end thereof, a hub-plate surrounding the opposite end of the box, a ring secured to the said box, and rollers confined between the box and said inwardly-extending flange, substantially as described.

2. The combination, with a shaft, of a wheel having a box, outwardly and inwardly extending flanges at one end thereof, a hub-plate surrounding the opposite end of the box, a ring secured to said box, and friction-rollers intermediate the box and the axle therein and confined in position by said inwardly-projecting flange and the ring, substantially as described.

3. The combination, with a shaft and an adjustable collar thereon, of a wheel having a box, outwardly and inwardly extending

flanges at one end thereof, a hub-plate surrounding the opposite end of the box, a ring secured to said box, and friction-rollers intermediate the box and the axle therein and
5 confined in position by said inwardly-projecting flange and the ring, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

HERBERT B. GILLETTE.

Witnesses:

W. H. HOLLIS,

ETTA BORRENDAME.