

No. 855,282.

PATENTED MAY 28, 1907.

R. M. CLARK.
ECCENTRIC.

APPLICATION FILED DEC. 11, 1906.

Fig. 1

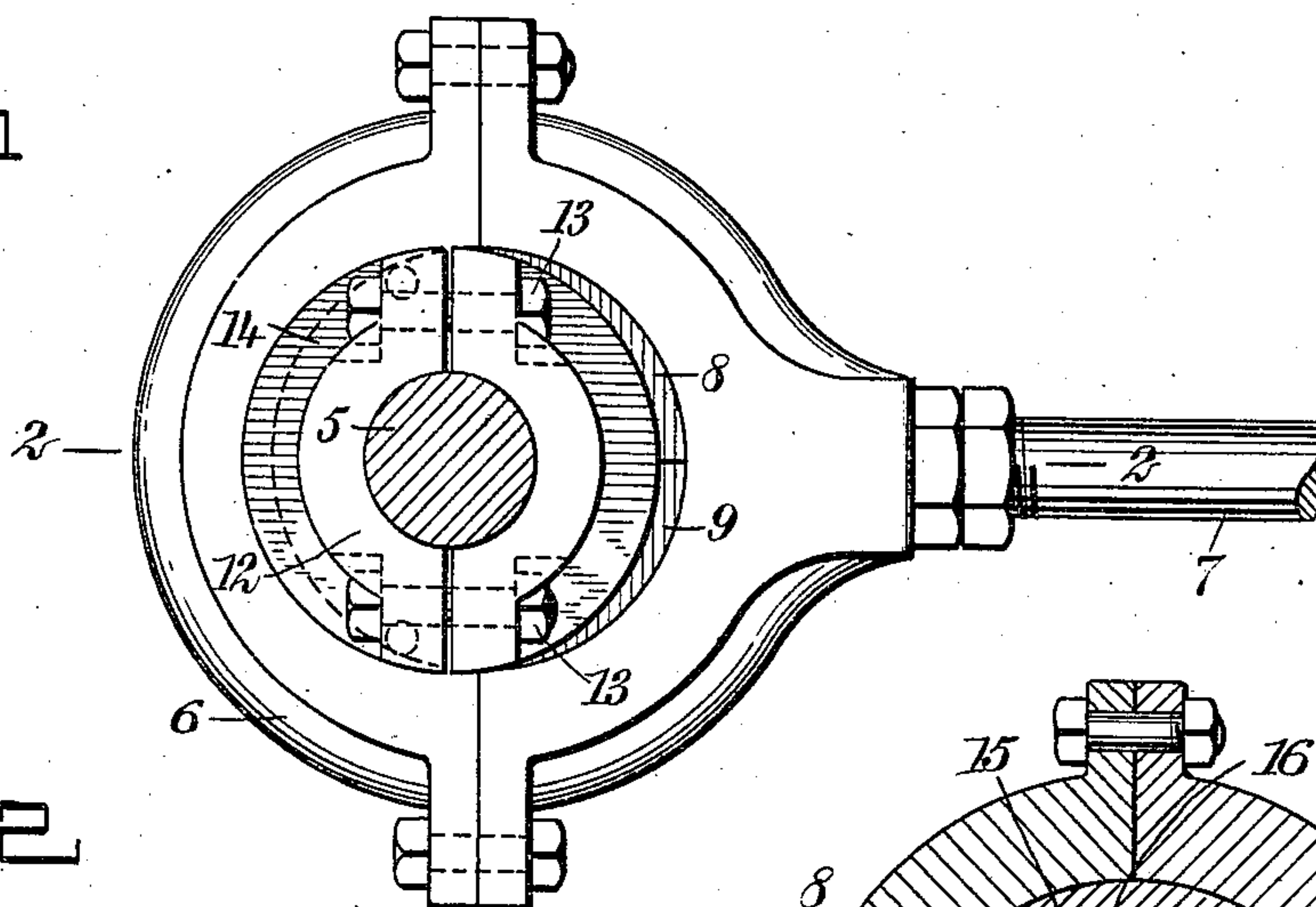


Fig. 2

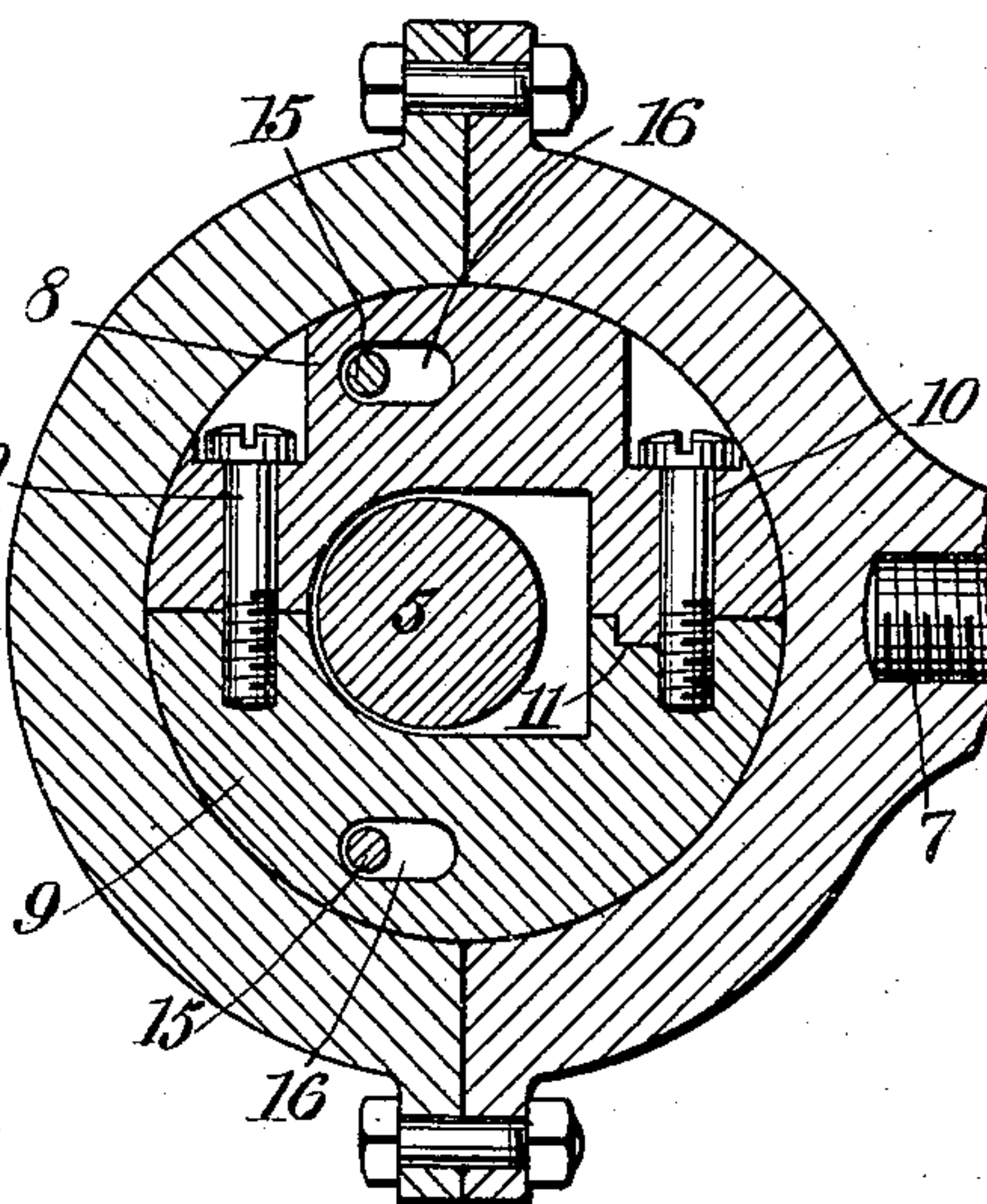
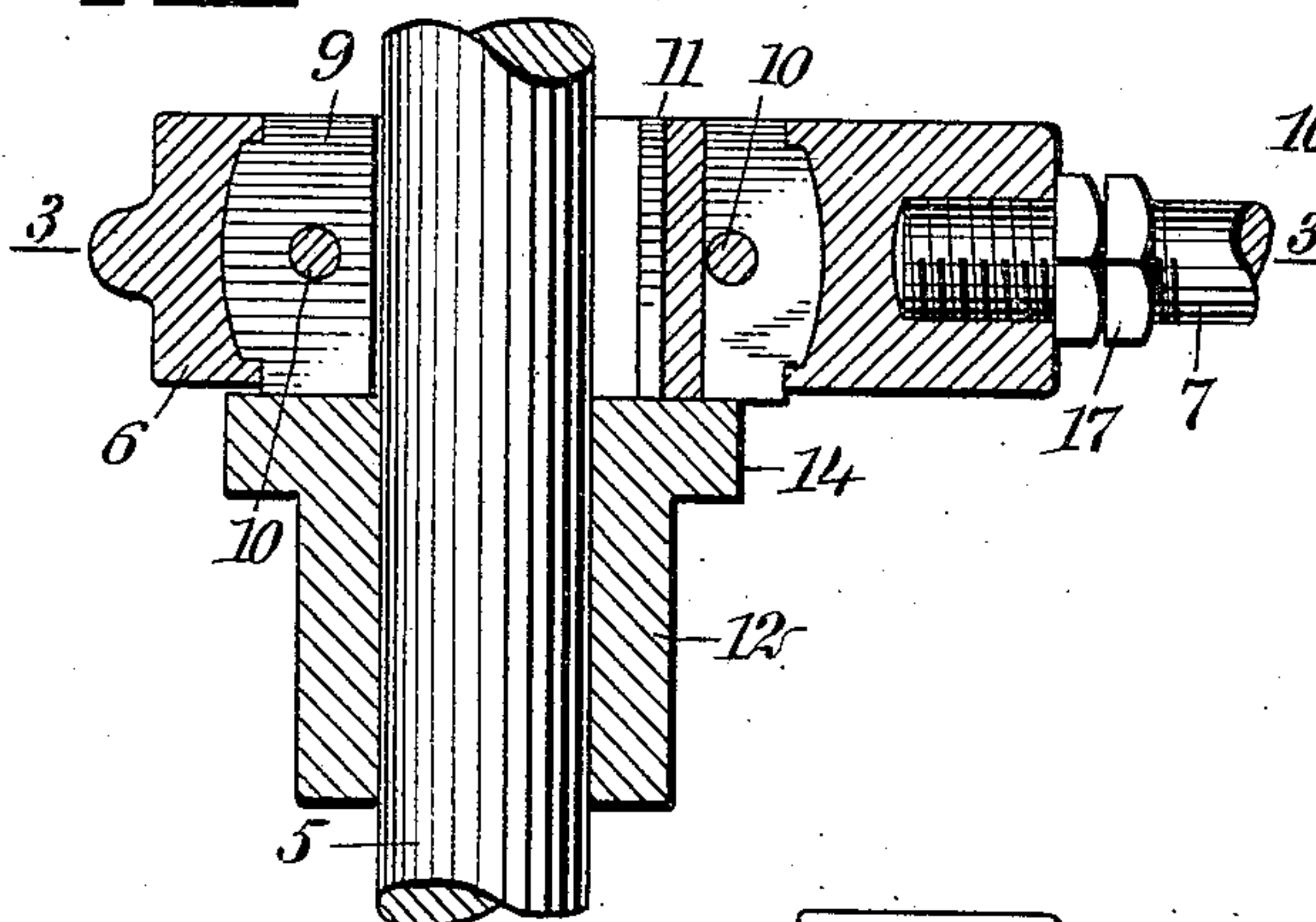
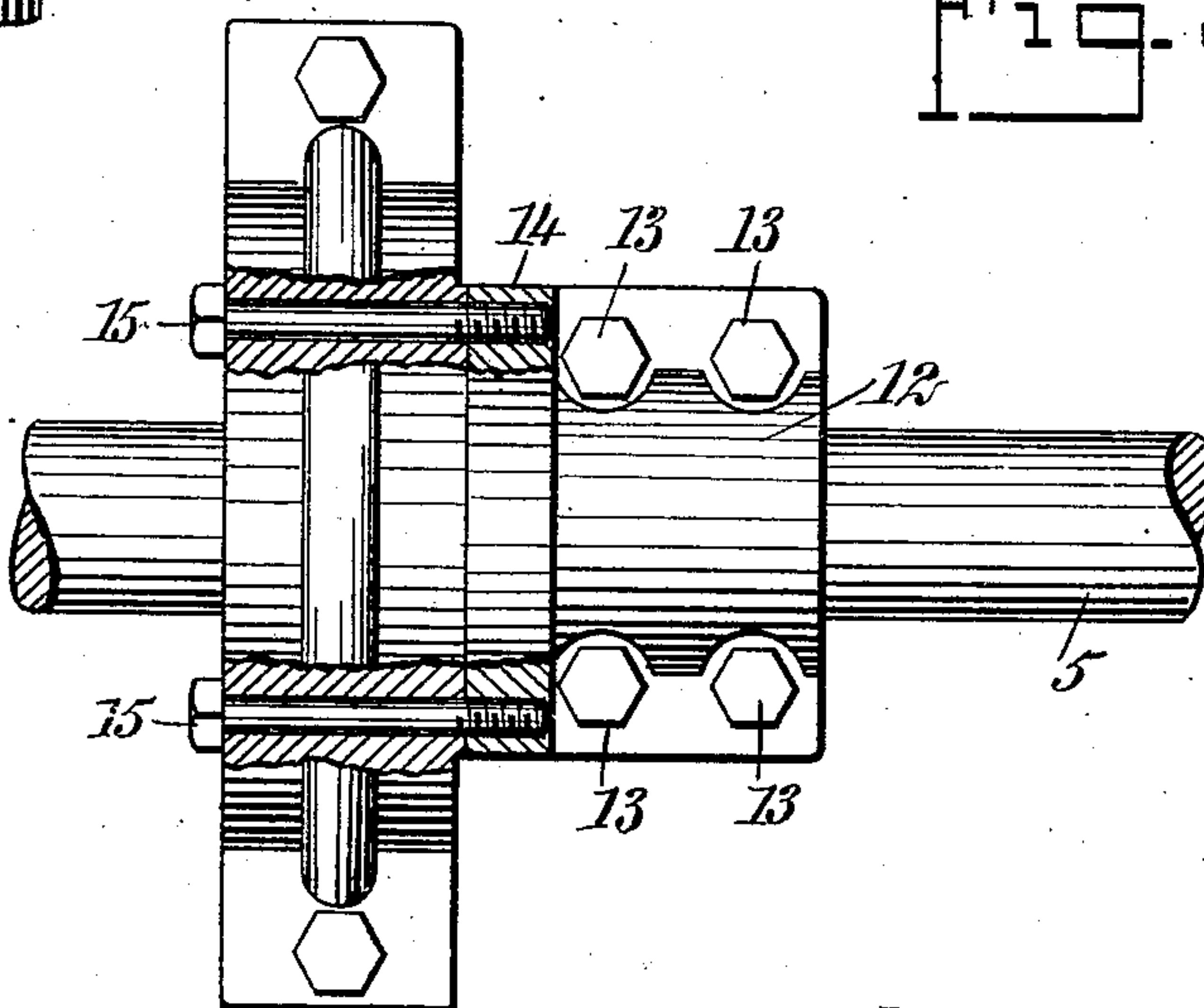


Fig. 3

Fig. 4



WITNESSES

J. A. Brophy
C. W. Fairbank

INVENTOR

Reuben M. Clark

BY

Mumford

ATTORNEYS

UNITED STATES PATENT OFFICE.

REUBEN MARSHALL CLARK, OF WEBB CITY, MISSOURI.

ECCENTRIC.

No. 855,282.

Specification of Letters Patent.

Patented May 28, 1907.

Application filed December 11, 1906. Serial No. 347,245.

To all whom it may concern:

Be it known that I, REUBEN MARSHALL CLARK, a citizen of the United States, and a resident of Webb City, in the county of Jasper and State of Missouri, have invented a new and Improved Eccentric, of which the following is a full, clear, and exact description.

This invention relates to certain improvements in eccentrics, and more particularly to means whereby the eccentric may be placed upon a shaft without removing the latter from its bearings, or removing any pulley or wheel already secured to the shaft.

The object of the invention is to provide means whereby the eccentric may be separated into a plurality of parts and these parts rigidly secured together after having been separately applied to the shaft.

A further object of the invention is to provide means whereby the angular position of the eccentric on the shaft may be readily adjusted, as also the degree of eccentricity.

The invention consists in certain features of construction and combination of parts, all of which will be fully set forth hereinafter and particularly pointed out in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures, in which

Figure 1 is a side elevation of my improved device; Fig. 2 is a transverse section taken on the line 2—2 of Fig. 1; Fig. 3 is a transverse section taken on the line 3—3 of Fig. 2; and Fig. 4 is an end elevation having portions thereof broken away.

I have illustrated one form of my improved eccentric as applied to a shaft 5 and in connection with a two-part eccentric strap 6 rigidly secured to the eccentric rod 7. The eccentric proper, that is, the disk, is formed of two parts 8 and 9, which when secured together form a perfect circle having an axial opening therethrough. Each of the two parts of the disk is substantially semi-circular in cross section, as illustrated in Fig. 3, and the two are rigidly secured in any suitable manner, as, for instance, by means of screw bolts 10 having the heads thereof countersunk beneath the circumferential surface of the disk. For insuring the proper alinement of the parts, I may, if desired, provide a tongue and groove 11 upon the meeting edges of the two parts 8 and 9.

Adjacent the disk and adapted to be secured thereto, I provide a split collar 12 of any suitable character and provided with bolts 13, whereby the parts may be rigidly secured together and the collar held in any desired position upon the shaft. This split collar is provided with a flange 14 in contact with the surface of the disk, and means are provided for securing this flange to said disk; said means preferably comprises two screw bolts 15 carried by the flange 14 and extending through elongated slots 16 in the disk. The heads of these bolts contact with the outer surface of the eccentric and bind said eccentric to the flange 14 of the collar. The slots 16 are arranged substantially parallel to each other and to the line of division between the parts 8 and 9 of the eccentric, and extend in the same direction from diametrically opposite points. The axial opening through the eccentric is somewhat larger than the shaft 5 in connection with which said eccentric is employed, and thus the position of the disk may be adjusted to bring the center thereof nearer to or farther from the center of the shaft.

In the employment of my improved device the parts 8 and 9 of the disk are brought together from opposite sides of the shaft 5, and are secured together by means of the bolts 10. The collar 12 is then secured to the shaft, its angularity in respect to the shaft and its longitudinal position upon the shaft being readily adjusted. The bolts 15 are then inserted through the slots 16 of the disk and into the threaded openings in the collar 12. The eccentricity of the disk is then adjusted by movement of said disk in respect to the flange 14 of the collar, and the bolts 15 are then employed to clamp the disk in the adjusted position. The two-part eccentric strap 6 is then inclosed about the eccentric disk and the length of the eccentric rod 7 adjusted by means of lock nuts 17.

It will be noted that each element of the entire device is composed of two separable parts adapted when secured together to inclose the shaft, and thus the entire device may be readily secured to the shaft intermediate its ends without removing said shaft from its bearings or adjusting any of the machinery upon said shaft. In case an eccentric becomes broken, it may be readily replaced by a new one in the same manner in which the old one was originally applied.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. In combination, a shaft, a collar secured thereto, and formed of two separable parts an eccentric disk formed of two separable parts, means for adjustably securing said disk to said collar, and an eccentric strap inclosing said disk.
2. In combination, a split collar, a split annular disk, means for securing said disk to said collar, whereby the disk may be moved laterally in respect to the collar to vary the eccentricity of said disk and an eccentric strap surrounding the disk.
3. In combination, a shaft, a split collar rigidly secured thereto, said collar being provided with a flange, an eccentric disk formed of two parts secured together and inclosing said shaft, said disk being provided with elongated slots, bolts extending through said slots and entering said flange, whereby the disk may be rigidly secured to the flange

of the collar and the position of said disk readily adjusted and an eccentric strap inclosing said disk.

4. In combination, a shaft, a split collar inclosing said shaft and rigidly secured thereto, there being an annular flange carried by said collar, a disk composed of two parts inclosing said shaft and rigidly secured thereto, said disk having elongated slots and an axial opening, bolts extending through the elongated slots and carried by said flange for rigidly securing the disk to the flange of the collar and adjusting the position thereof in respect to the shaft, and a split eccentric strap surrounding said disk.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

REUBEN MARSHALL CLARK.

Witnesses:

A. D. HATTEN,
T. F. COYNE.