

S. W. TAYLOR.  
ADJUSTABLE ECCENTRIC.  
APPLICATION FILED JULY 20, 1905.

Fig. 1.

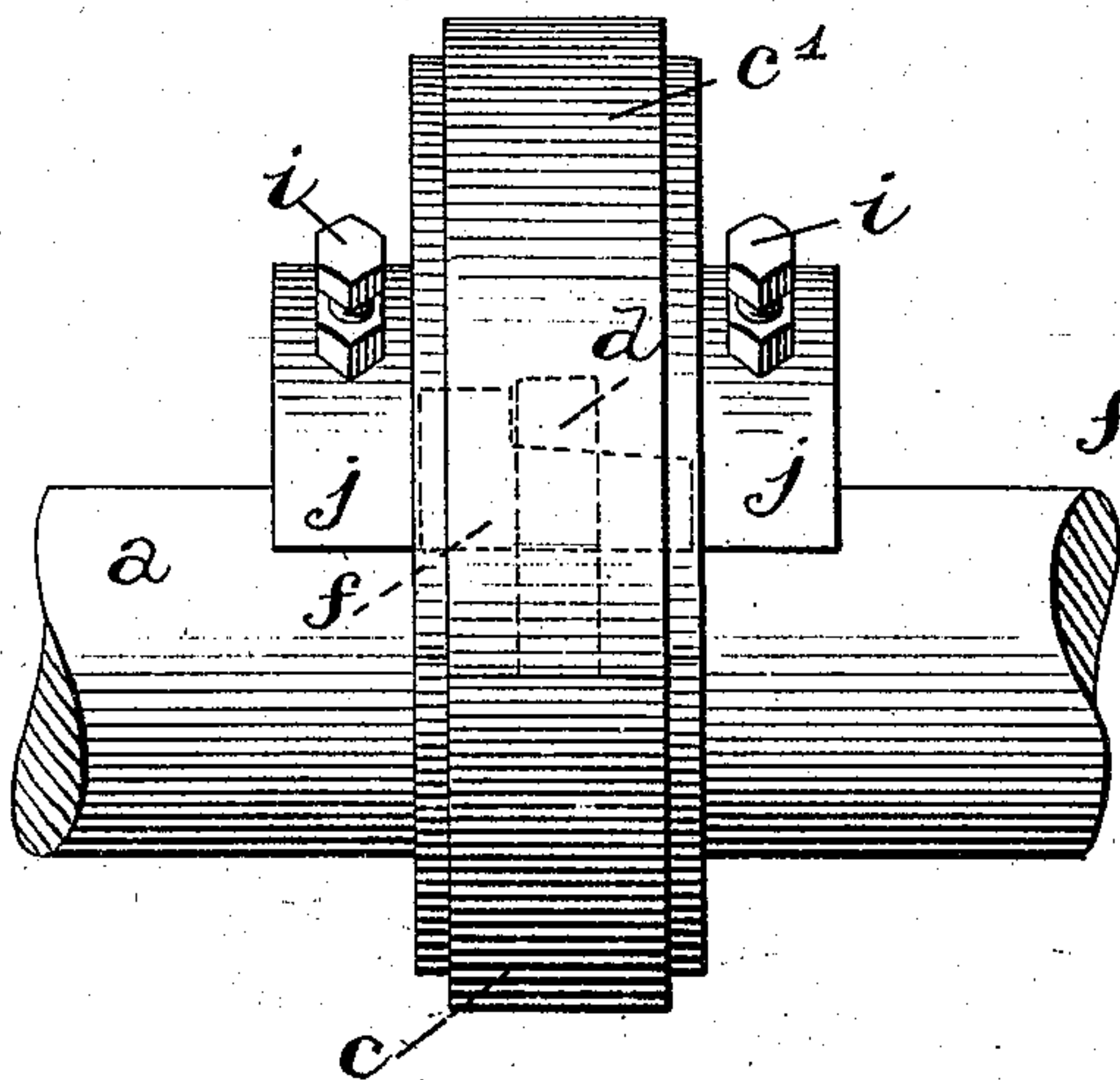


Fig. 2.

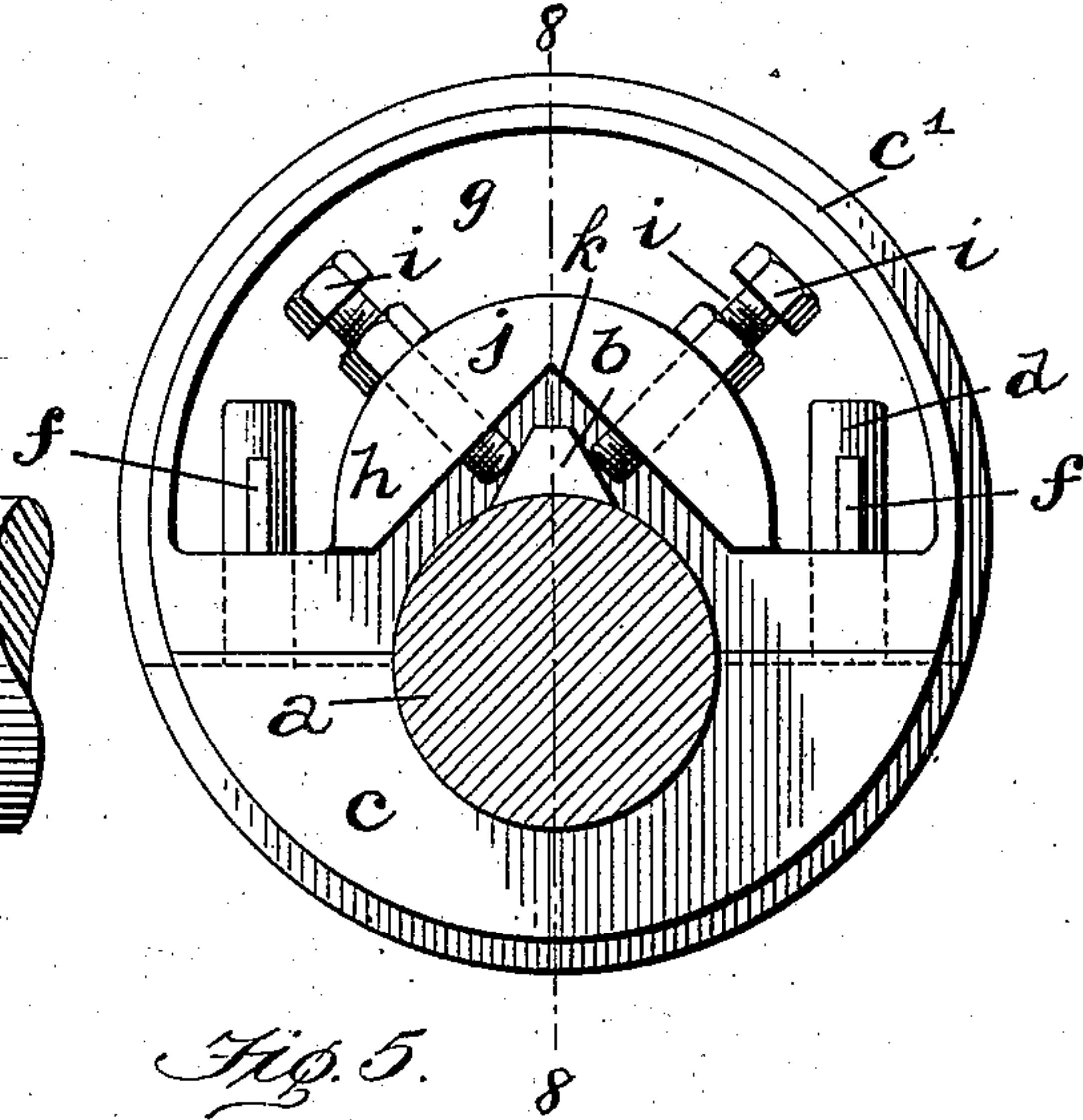


Fig. 3.

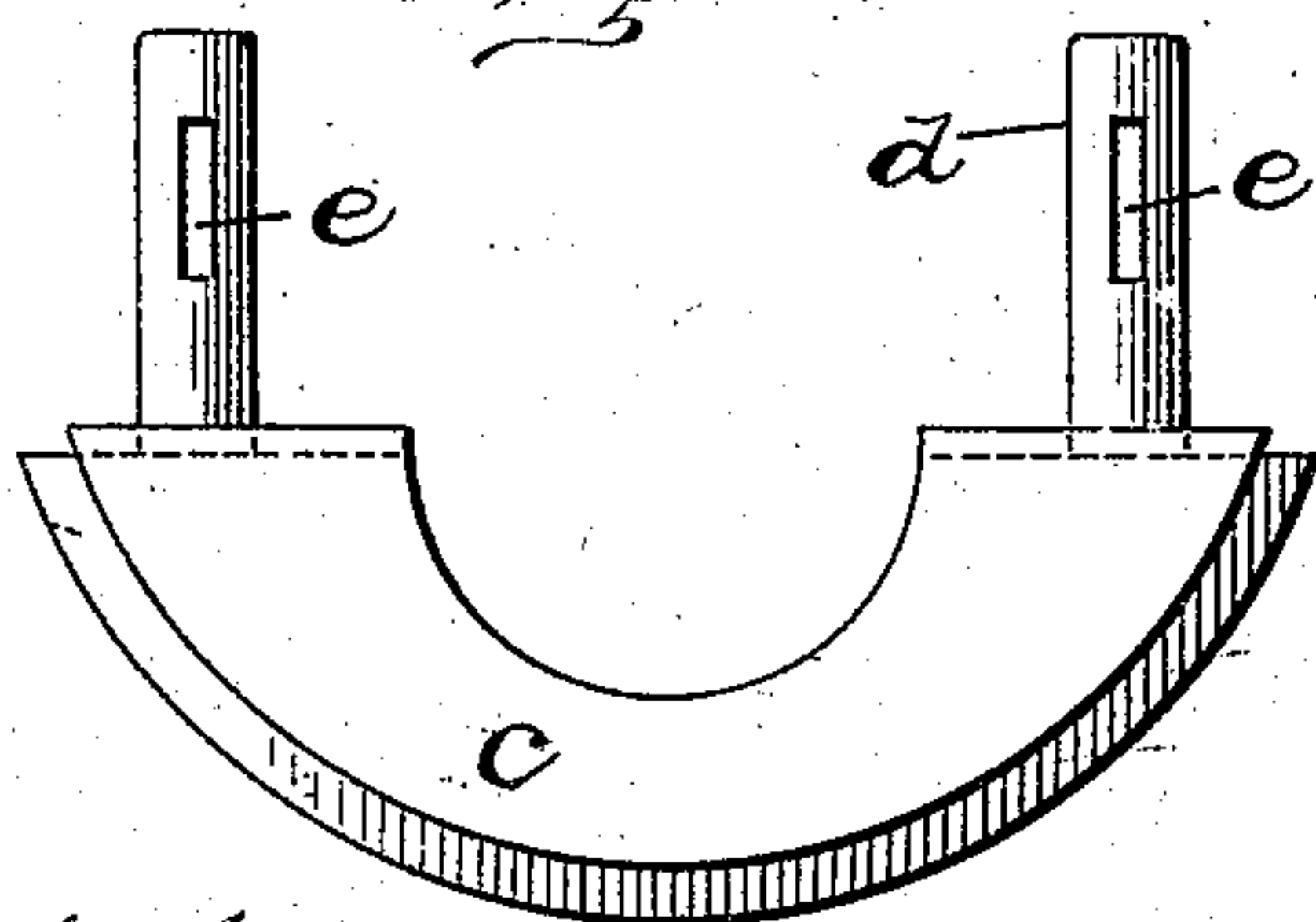


Fig. 5.

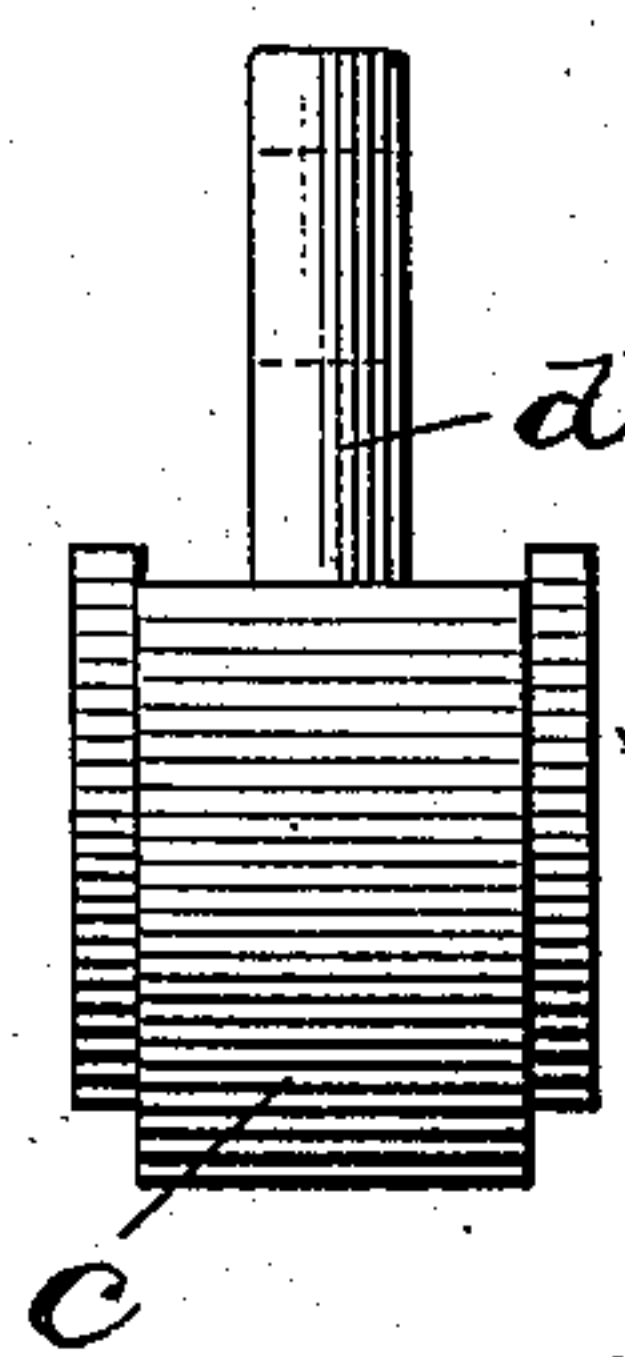


Fig. 6.

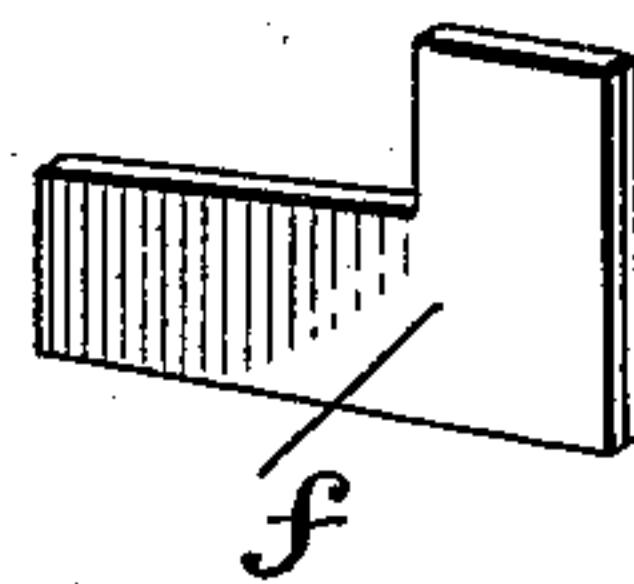


Fig. 4.

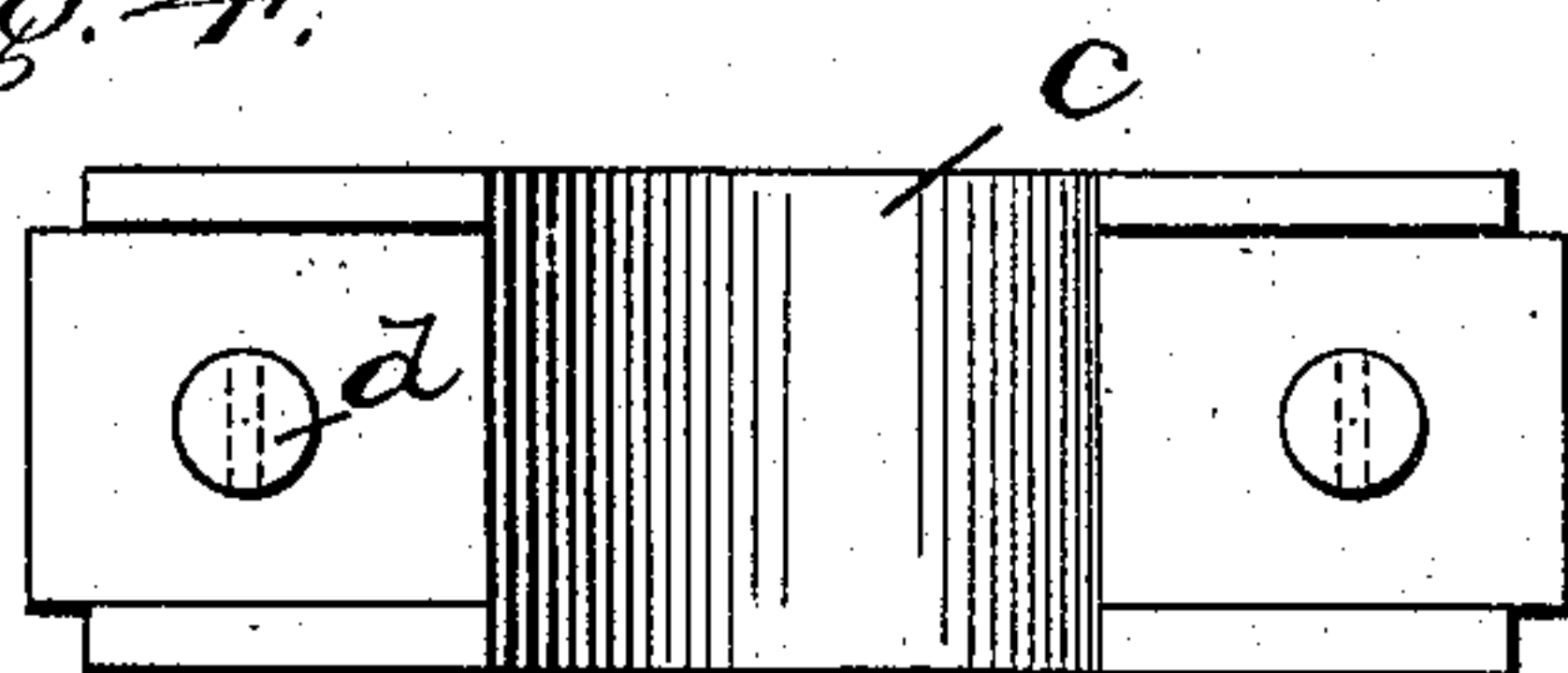


Fig. 7.

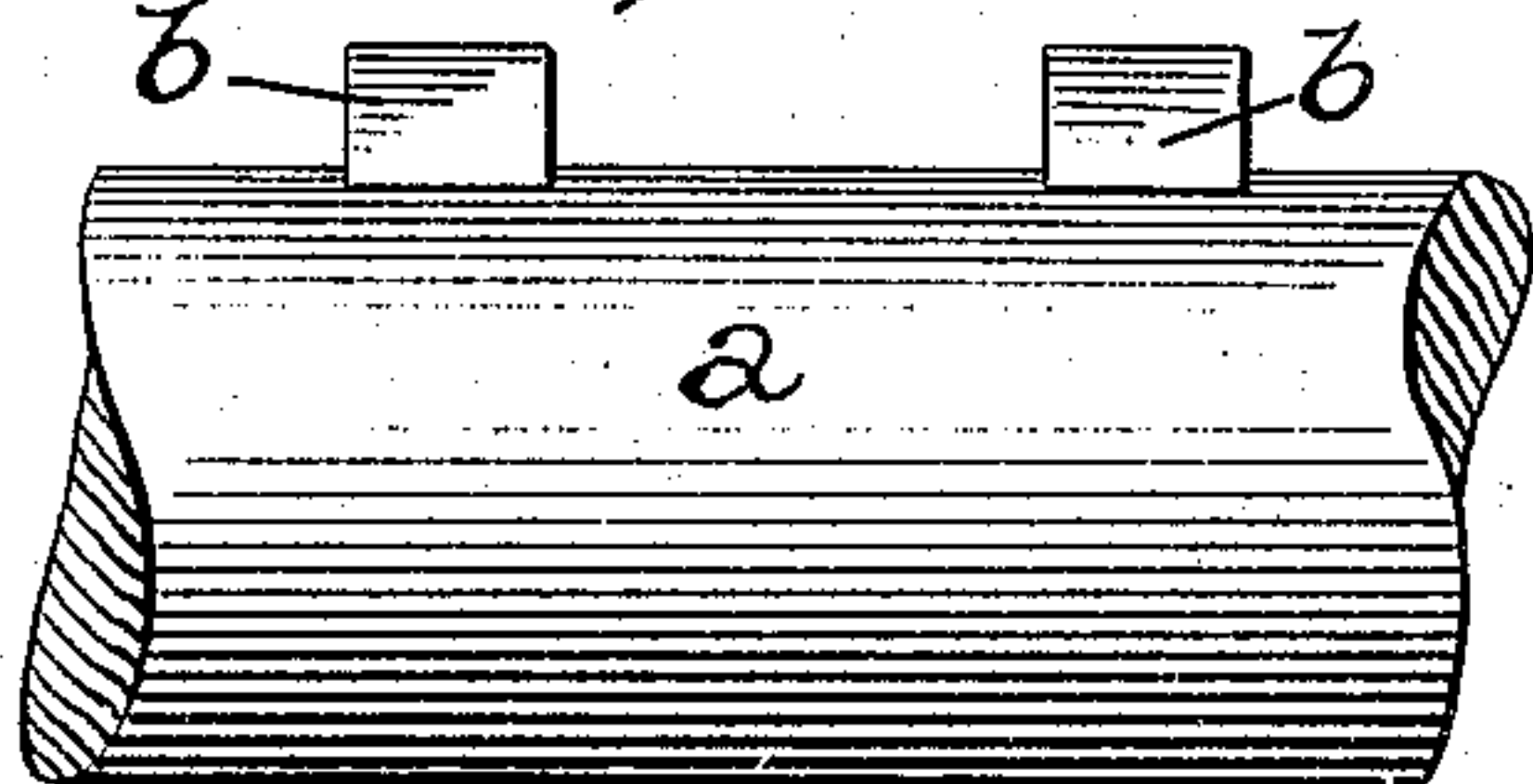
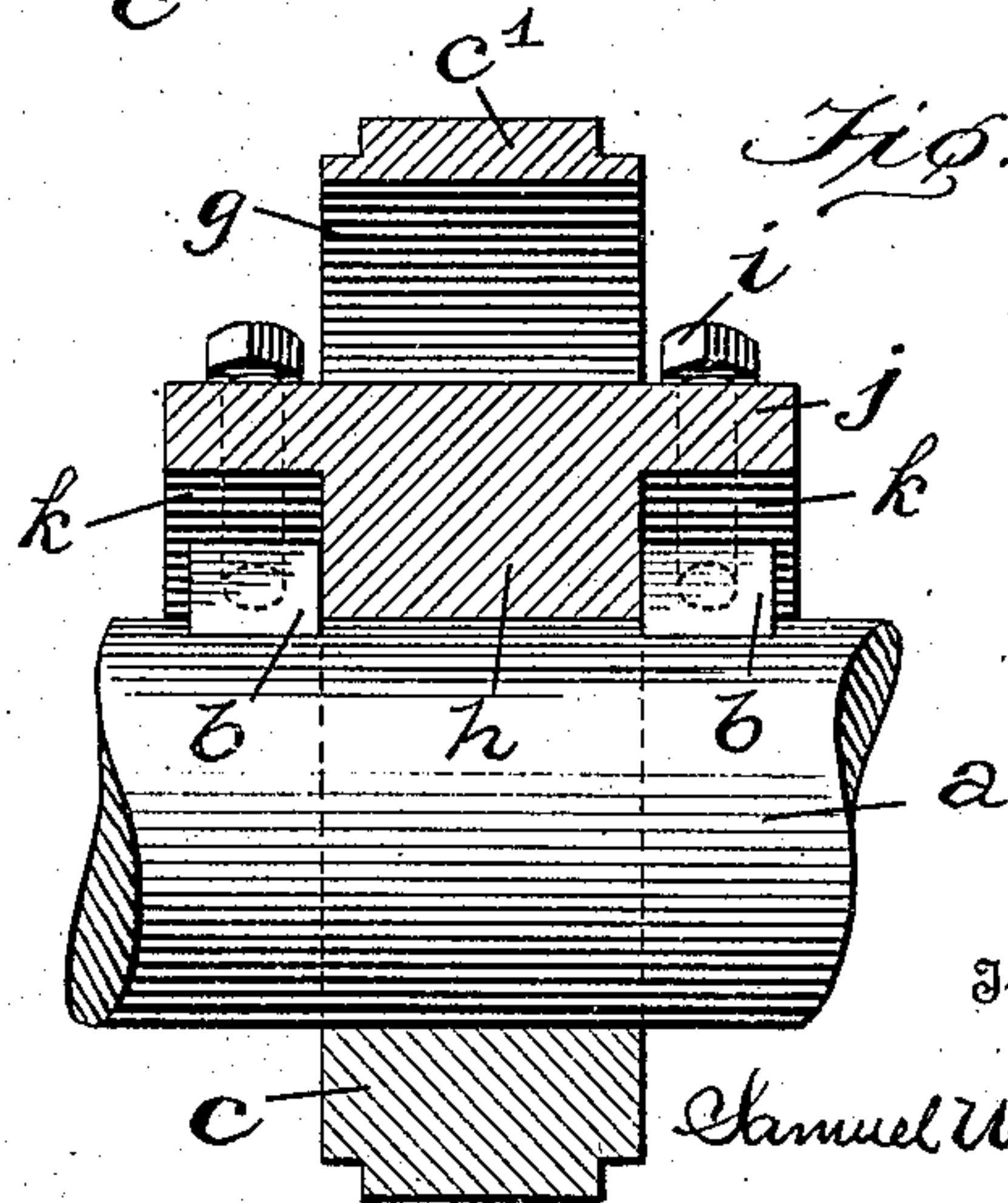


Fig. 8.



Witnesses

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# UNITED STATES PATENT OFFICE.

SAMUEL W. TAYLOR, OF BALTIMORE, MARYLAND.

## ADJUSTABLE ECCENTRIC.

No. 815,232.

Specification of Letters Patent.

Patented March 13, 1906.

Application filed July 20, 1905. Serial No. 270,494.

*To all whom it may concern:*

Be it known that I, SAMUEL W. TAYLOR, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Adjustable Eccentrics, of which the following is a specification.

This invention relates to an eccentric for the driving-axles of locomotives. These eccentrics serve to operate the steam-valves.

The object of this invention is to provide for the accurate adjustment of the eccentric on the driving-axle.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a view of the axle and eccentric. Fig. 2 is a side view of the eccentric, the axle being in cross-section. Figs. 3, 4, and 5 are views of the small section or clamp part of the eccentric. Fig. 6 is a view separately of one of the two keys that are used to hold together the two parts or two sections of the eccentric. Fig. 7 is a view separately of the axle. Fig. 8 is a sectional view of the eccentric mounted on the axle, taken on the line 8 8 of Fig. 2.

The letter *a* designates the driving-axle of a locomotive, which is provided with two stout lugs *b* in line with each other, but spaced apart to admit clamping the eccentric between them. The eccentric, as usual, is made of two sections *c c'*. The smaller section *c* has two pins *d*, each having a slot *e*, and when the two sections are together keys *f*, entered in the said slots *e*, will hold the two sections in clamped position on the axle *a*. The small section *c* has a width exactly equal to the space on the axle between the two lugs.

The large section *c'* has a segment-shape space or opening *g*, into which the pins *d* project. (See Fig. 2.) It also has a half-hub *h*, which snugly takes between the two lugs *b* on the axle. These two axle-lugs serve two purposes—first, to prevent the eccentric from shifting longitudinally on the axle *a*; second, the ends of the adjusting-screws *i* impinge against the lugs. The said half-hub *h* has a lateral flange *j* at each side. The outer side of this flange is curved convex, and the inner side next to the axle has a V-notch *k*, which takes over one of the lugs *b* on the axle. Both flanges *j* are alike. Each flange *j* has two set-screws *i* pitched in opposite directions, and the ends of the screws impinge against opposite sides of the lugs *b*, as shown.

It will be seen that by loosening one set-screw *i* on each flange and tightening the other set-screws the eccentric may be slightly turned on the axle to adjust it to effect the desired cut-off of the valve. A jam-nut is on each set-screw.

To admit of the eccentric slightly turning on the axle, the V-notch *k* of each flange must be larger than the lug *b* on the axle.

From this description and the drawings the operation of adjusting the eccentric will be readily understood.

While the eccentric has been described with special reference to a locomotive-axle, it is obvious it is applicable to other uses where shafts are used.

The lugs rigid on the axle constitute one form of means which may be used for the ends of the set-screws to impinge against.

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

1. The combination of an axle provided with two lugs separated by a space; an eccentric on the axle and snugly fitted in the space between the two lugs, there being a lateral flange at the side of the eccentric—said flange projecting over one of the said lugs, and two set-screws in said flange and pitched in opposite directions, the ends of the screws impinging against opposite sides of the lug, as and for the purpose set forth.

2. The combination of an axle; an eccentric on the axle and provided at each side with a laterally-projecting flange; two set-screws in each of said flanges and pitched or inclined in opposite directions, and means rigid on the axle and covered by said projecting flanges and against which the ends of said set-screws impinge.

3. The combination of an axle; an eccentric on the axle, two set-screws on the eccentric and pitched or inclined in opposite directions; and means rigid on the axle against opposite sides of which the ends of said oppositely-pitched set-screws impinge.

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

SAMUEL W. TAYLOR.

Witnesses:

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