

H. GRAY & J. A. KENYON.  
HOLLOW SHAFT PACKING.  
APPLICATION FILED DEC. 18, 1909.

955,867.

Patented Apr. 26, 1910.

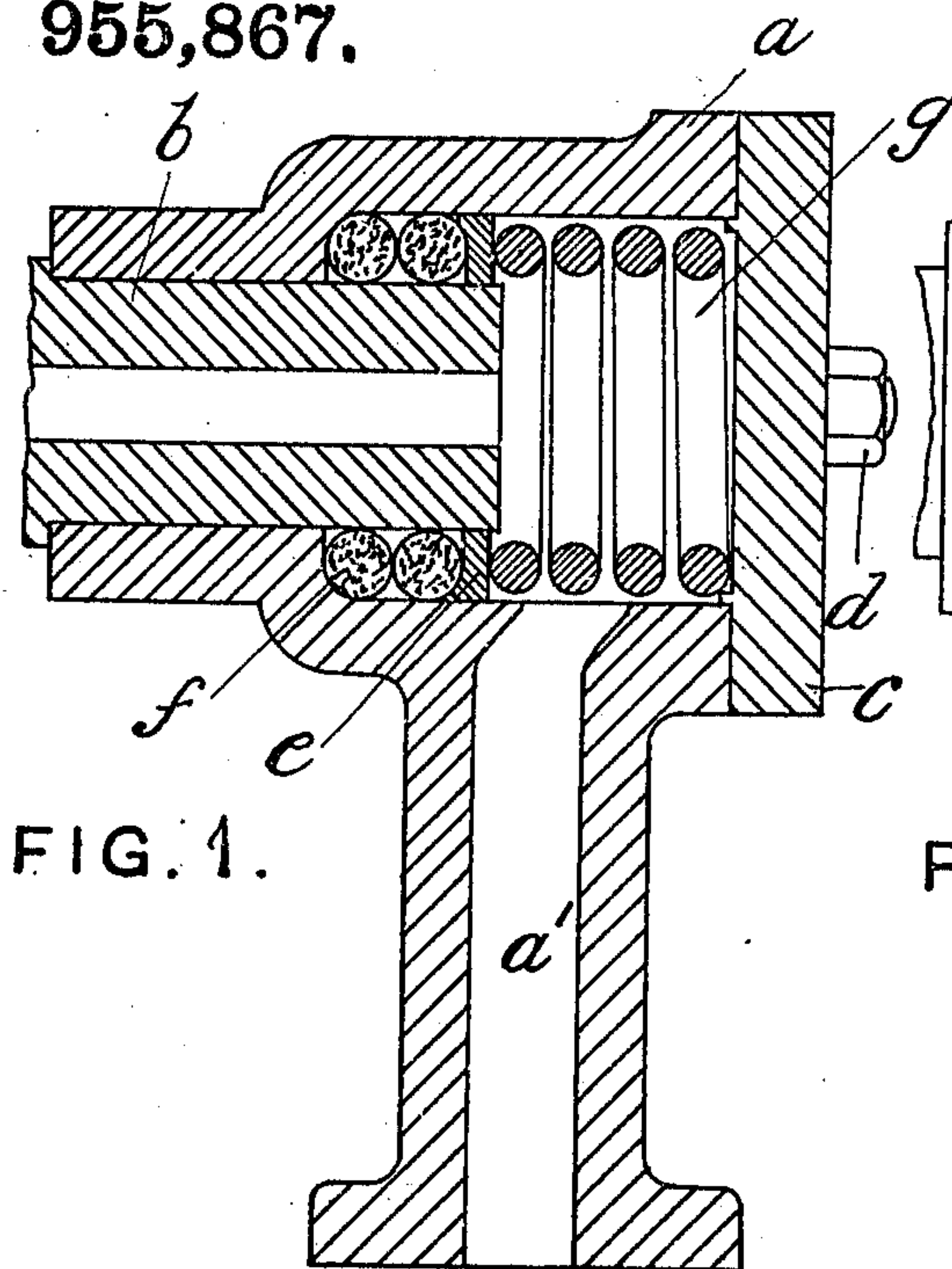


FIG. 1.

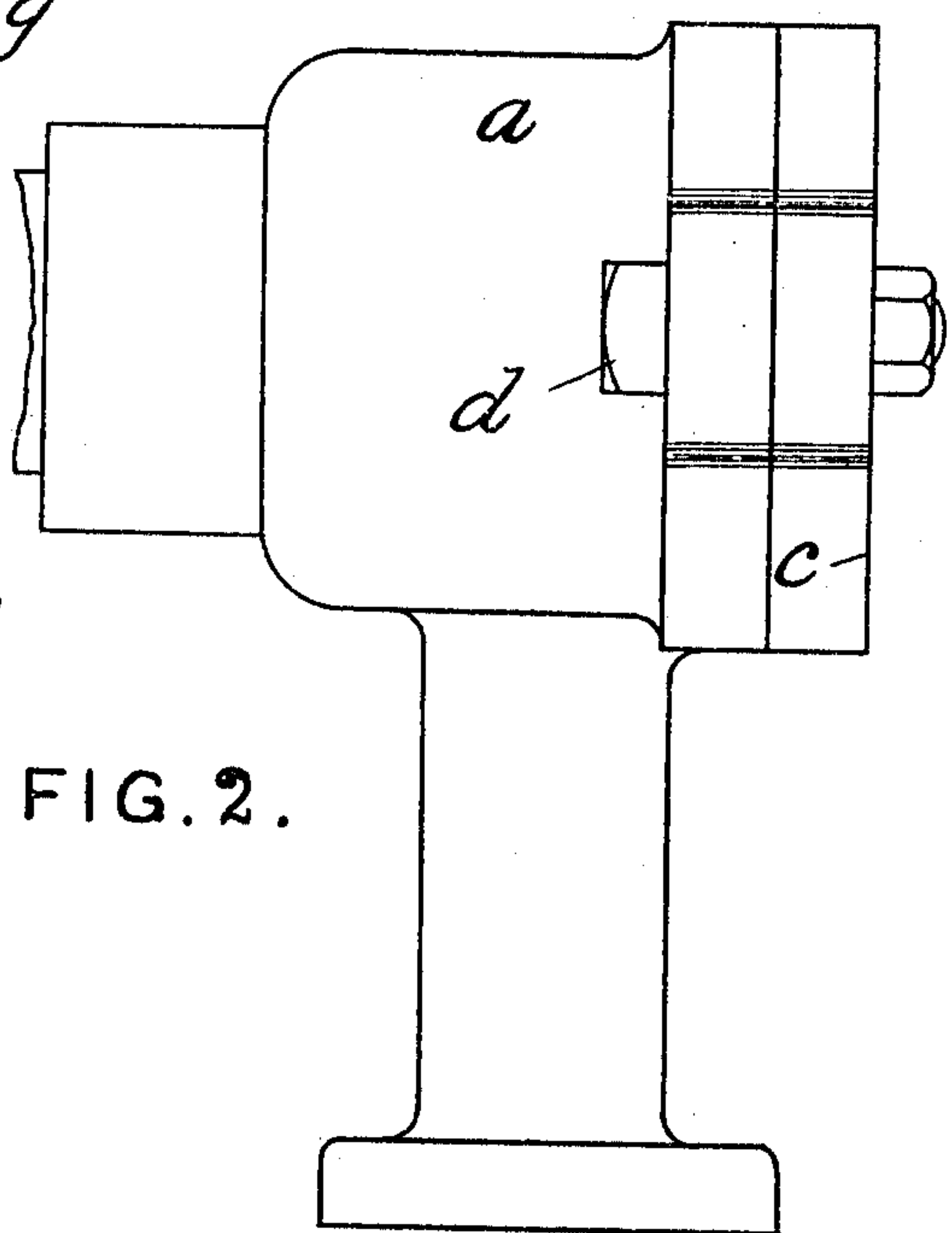


FIG. 2.

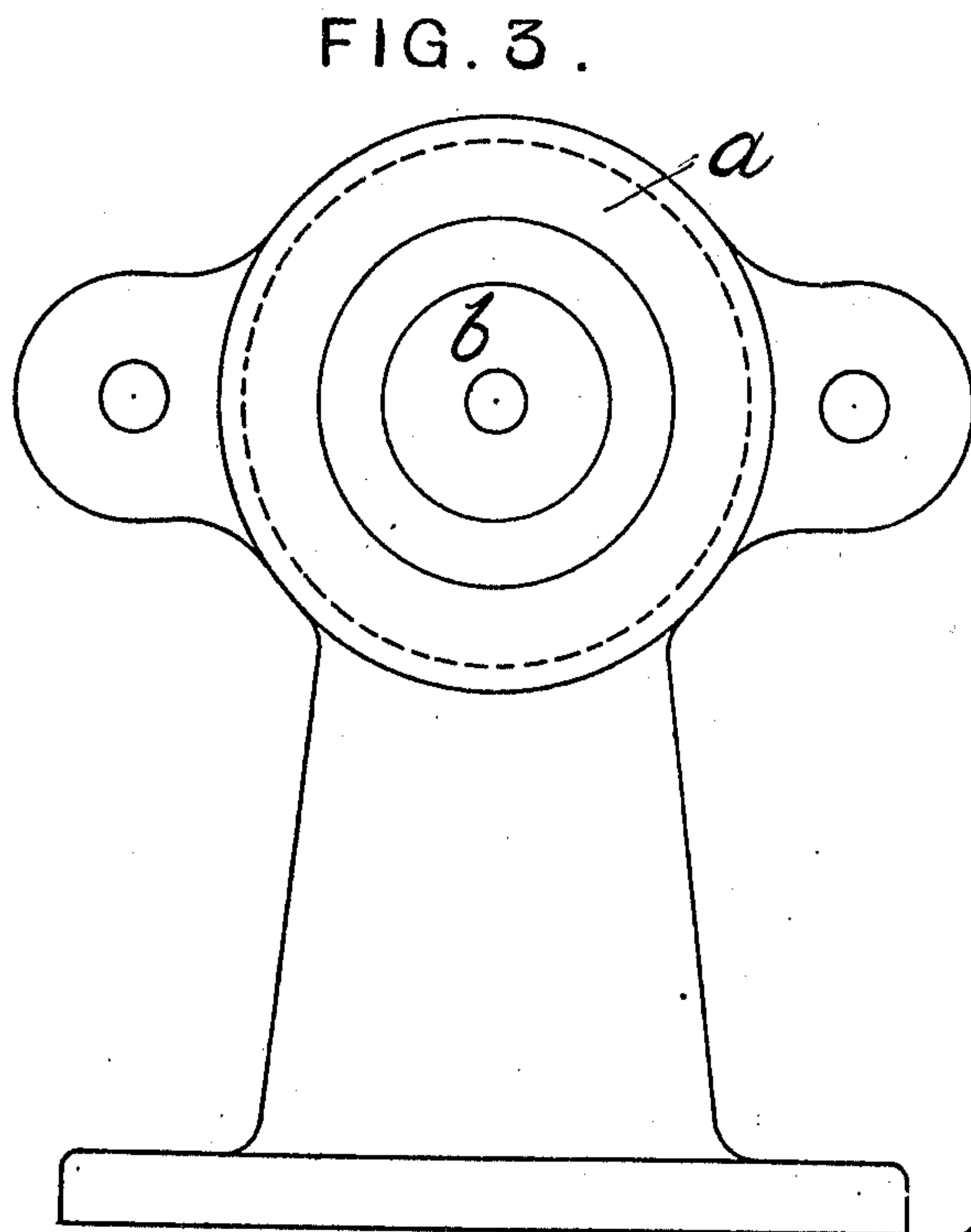


FIG. 3.

WITNESSES

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# UNITED STATES PATENT OFFICE.

HARRY GRAY AND JAMES ARTHUR KENYON, OF RAWTENSTALL, ENGLAND.

## HOLLOW SHAFT-PACKING.

955,867.

Specification of Letters Patent.

Patented Apr. 26, 1910.

Application filed December 18, 1909. Serial No. 533,763.

*To all whom it may concern:*

Be it known that we, HARRY GRAY and JAMES ARTHUR KENYON, both subjects of the King of Great Britain, the former residing at 1 Railway Terrace, Rawtenstall, in the county of Lancaster, England, and the latter residing at Townendfold House, Rawtenstall, aforesaid, have invented new and useful Improvements in Hollow Shaft-Packing, of which the following is a specification.

Our invention relates to improvements in bearings or glands for the hollow trunnions or shafts of steam heated drying cylinders, and our improvements consist in the particular arrangement hereinafter described and shown, whereby the wear of the trunnion packing is automatically taken up and compensated for by means of a spring.

In the accompanying sheet of drawings,—  
Figure 1 is a longitudinal sectional elevation, Fig. 2 a side elevation, and Fig. 3 an end elevation, with the cover removed, of our improved bearing or gland for the trunnion or hollow shaft of a steam heated drying cylinder or the like.

In these views, *a* designates the ordinary doll head or like pedestal bearing, which is hollow and provided with the usual passage *a'* leading from the frame of the drying machine or the like, and supplying steam through the trunnion *b* of the drying cylinder or the like, not shown, and *c* is the cover secured to the doll head or pedestal by bolts *d* in the usual way.

According to our invention we employ a brass or other suitable washer *e* placed on the end of the trunnion *b* beyond the ordinary packing *f* against which it is pressed by a coiled spring *g* confined between the washer *e* and the cover *c*. In this manner and by these means any wear taking place in the packing *f* is compensated for and taken up automatically by the spring *g* continually compressing the packing and consequently no attention is required until the packing is practically worn out.

We declare that what we claim and desire to secure by Letters Patent of the United States is:—

In a doll head or pedestal bearing the combination with the hollow trunnion or shaft *b*, of the washer *e*, asbestos or like packing rings *f*, and the coiled spring *g*, compressed between the washer *e* and the cover *c* of the doll head bearing, said doll head bearing having a steam passage *a'* leading through the bearing to the hollow trunnion *b* of the steam heated drying cylinder, substantially as and for the purposes herein set forth.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

HARRY GRAY.

JAMES ARTHUR KENYON.

Witnesses:

S. W. GILLET,

HERBERT ROWLAND ABBEY.