

No. 630,773.

Patented Aug. 8, 1899.

P. BROTHERHOOD.  
CENTRIFUGAL GOVERNOR.

(Application filed Apr. 24, 1899.)

(No Model.)

Fig. 2.

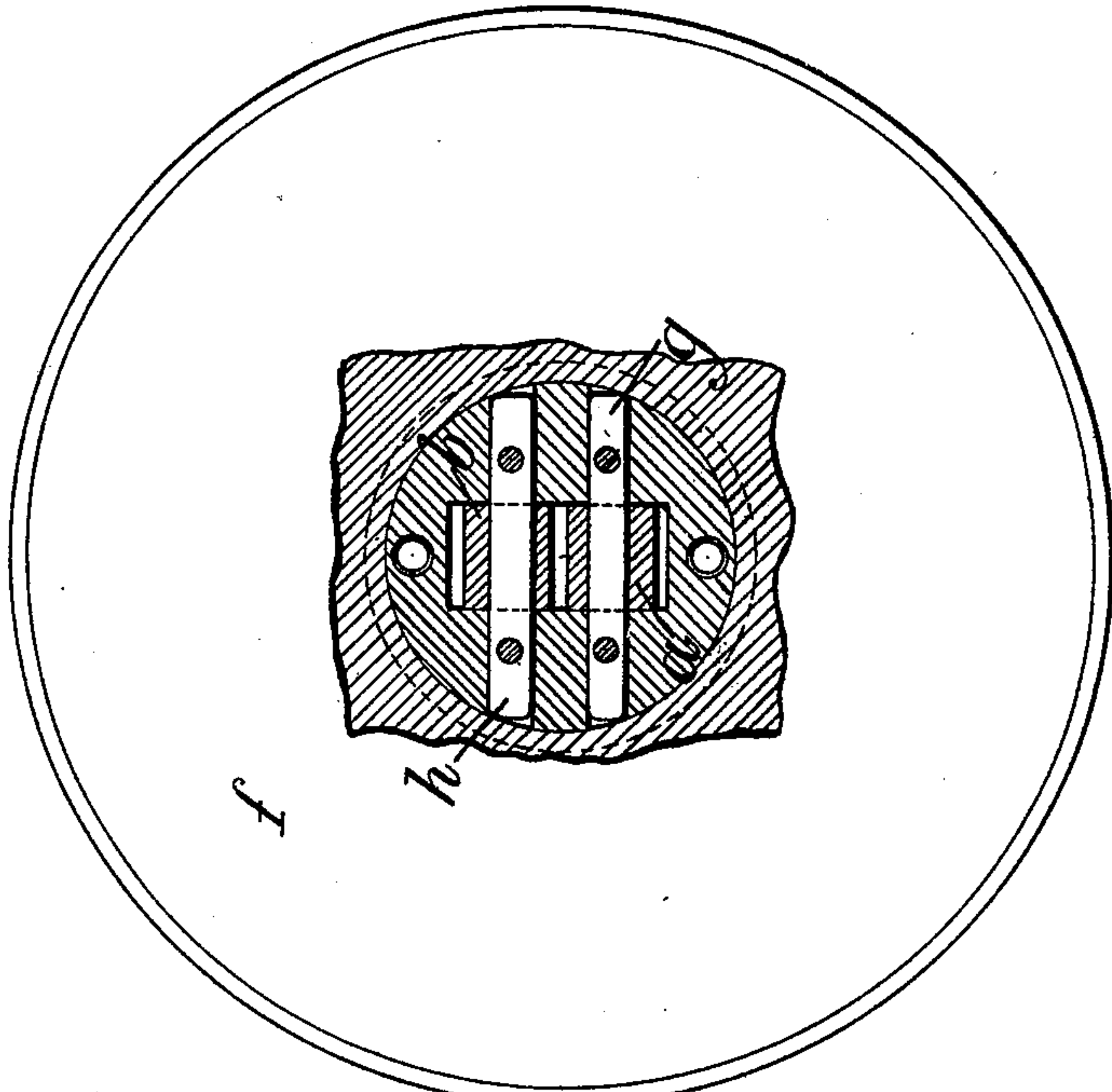
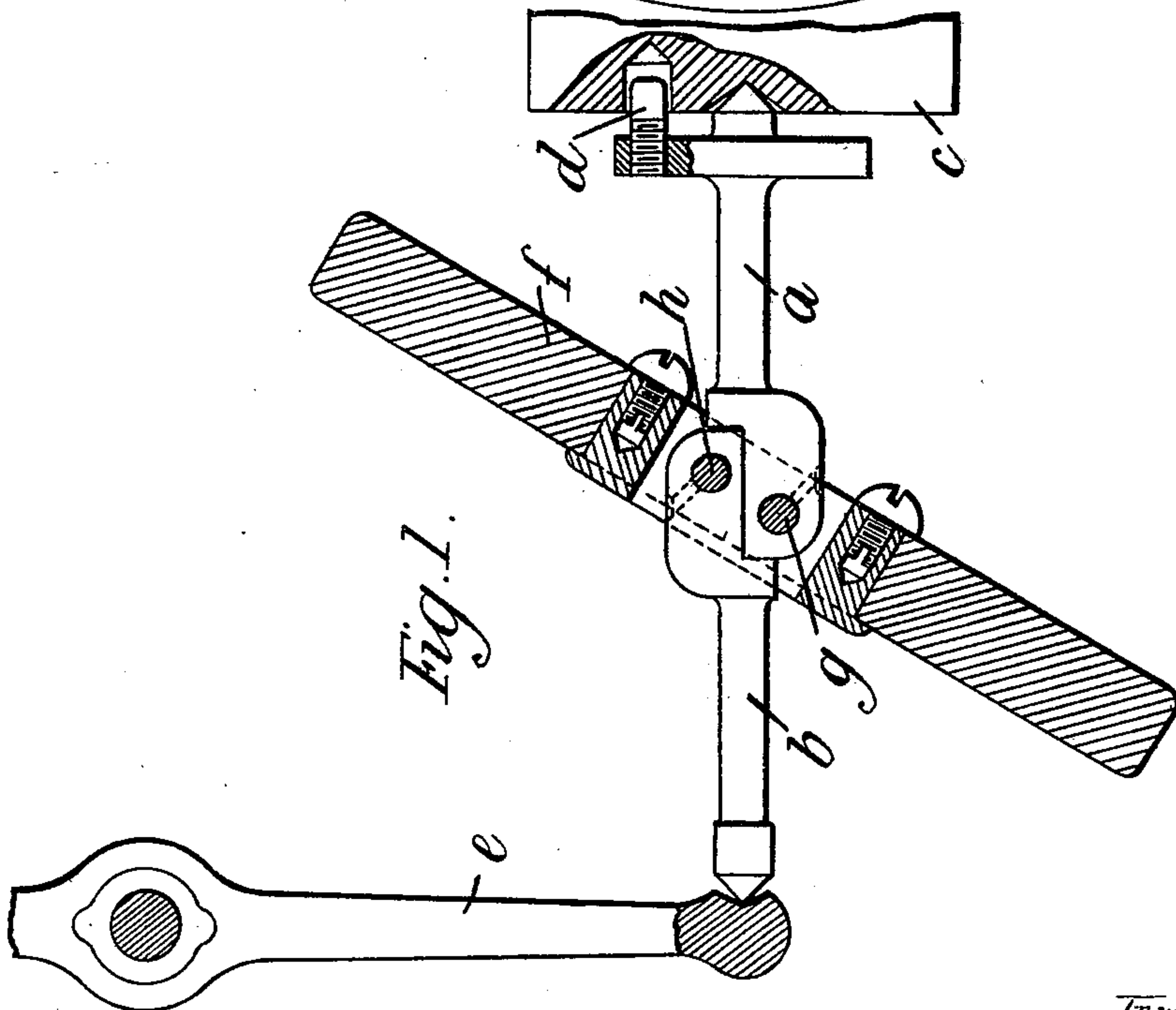


Fig. 1.



Witnesses

W. B. Keefe  
Bruce S. Elliott.

Inventor

Peter Brotherhood

by

James L. Norris

Att'y

# UNITED STATES PATENT OFFICE.

PETER BROTHERHOOD, OF LONDON, ENGLAND.

## CENTRIFUGAL GOVERNOR.

SPECIFICATION forming part of Letters Patent No. 630,773, dated August 8, 1899.

Application filed April 24, 1899. Serial No. 714,310. (No model.)

*To all whom it may concern:*

Be it known that I, PETER BROTHERHOOD, engineer, a citizen of England, residing at 15 Belvedere road, Lambeth, London, England, have invented a certain new and useful Improvement in Centrifugal Governors, (for which I have applied for a patent in Great Britain, dated March 23, 1899, No. 6,354,) of which the following is a specification.

My invention relates to the construction of a centrifugal governor of a simple character which is very sensitive, as I shall describe with reference to the accompanying drawings.

Figures 1 and 2 are sections, partly in elevation.

The governor-spindle is made in two parts *a* and *b*. The one *a* is centered in a hole in the end of the engine or other shaft *c*, which drives the governor by means of a crank-pin *d*, attached to *a* and engaged in a hole in the end of the shaft *c*. The other part *b* of the spindle is centered in a hole in the side of a lever *e*, which works the throttle or other regulating-valve. The meeting parts of *a* and *b* are inclosed in a rectangular hole in a heavy disk *f* and jointed to the disk by pins *g* and *h*, passed through holes of the disk in such positions that when the ends of *a* and *b* are in their extreme position, the spindle being then in its shortest condition, the disk *f* lies at an angle to the axis of the spindle. When the shaft and governor revolve, the disk *f*

tends to take a position at right angles to the axis of the spindle, and thus to lengthen the spindle moving the lever *e*, so as to more or less close the regulating-valve.

The holes for centering *a* and *b* and also that for the crank-pin of *a* are somewhat larger than the parts which enter them, so that there is freedom of movement for all the parts of the lever *e*.

Having thus described the nature of this invention and the best means I know of carrying the same into practical effect, I claim—

A centrifugal governor for engines, consisting of a spindle formed in two parts which are overlapped upon each other one of said parts being connected to a shaft of the engine, a disk mounted on the overlapped portions at an angle less than ninety degrees with the axis of the spindle, said disk having a central opening in which the overlapped portions lie, a pivotal connection between said disk and each of the two parts of the spindle, and a valve-controlling lever having a fulcrum at one of its ends and connected to the longitudinally-movable member of the two-part spindle, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

PETER BROTHERHOOD.

Witnesses:

GERALD L. SMITH,  
C. S. HOPKINS.