

No. 793,850.

PATENTED JULY 4, 1905.

R. J. SIMPSON & L. S. STARRETT.

SPLIT NUT.

APPLICATION FILED DEC. 3, 1904.

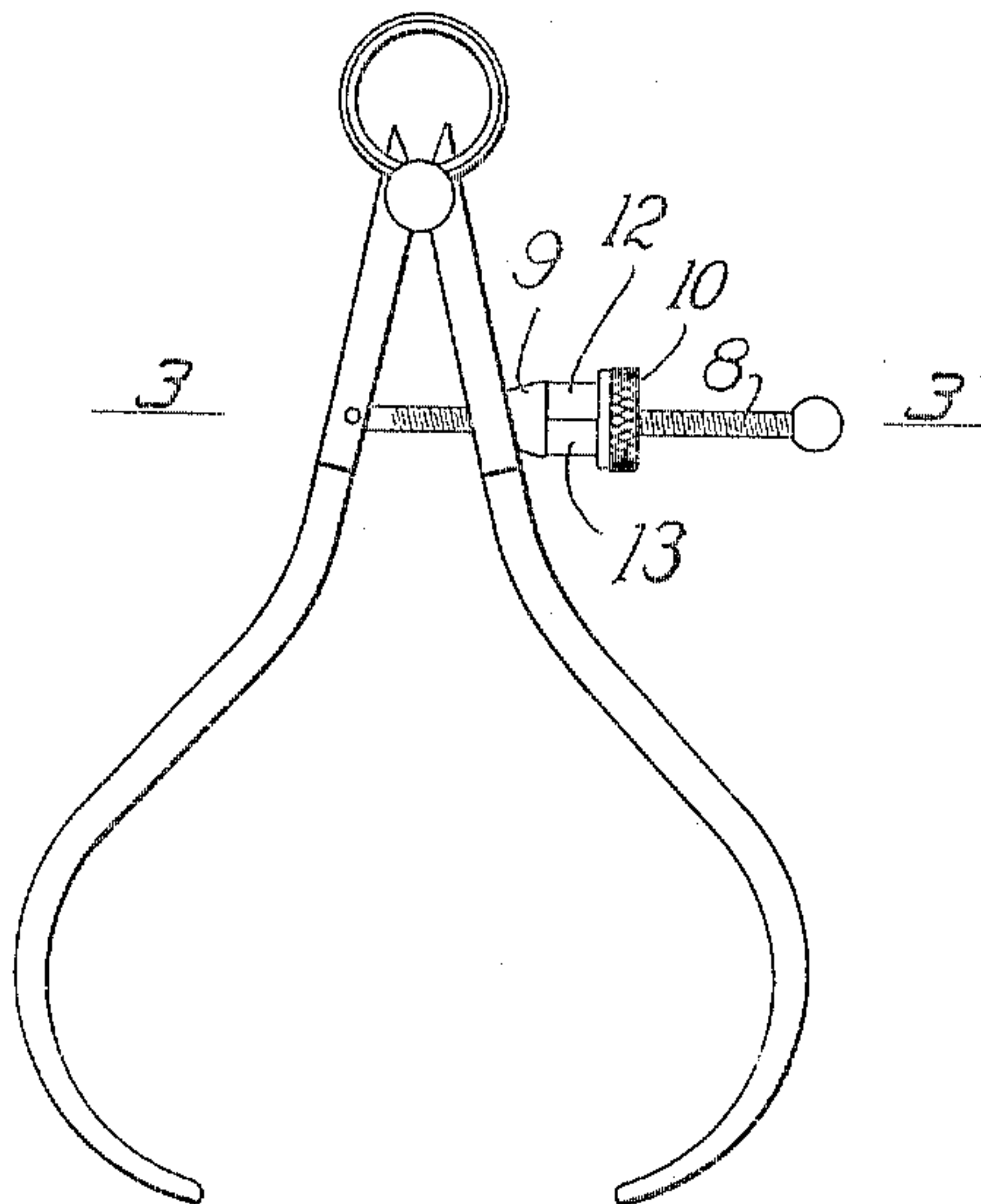


FIG. 1.

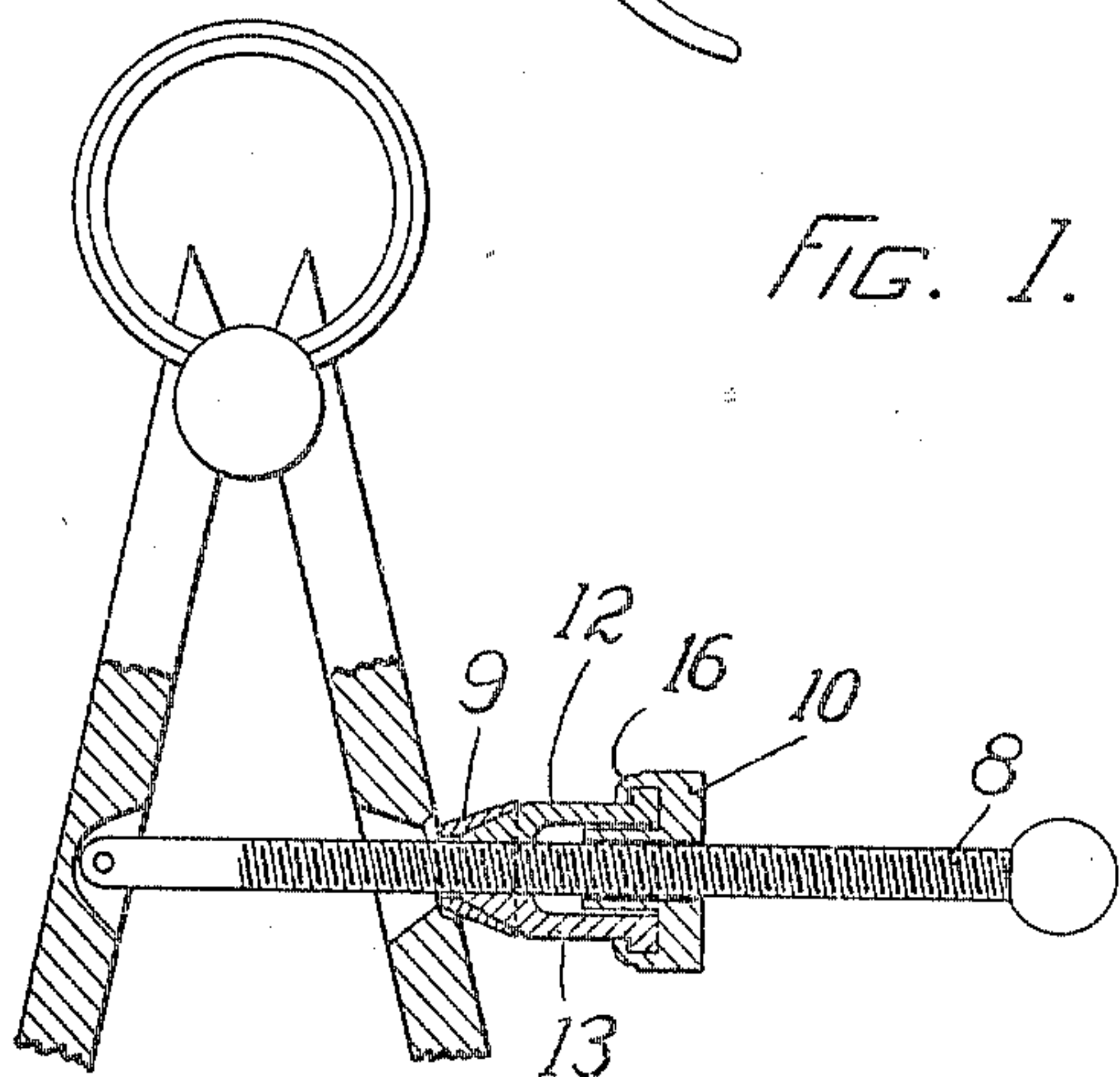


FIG. 2.

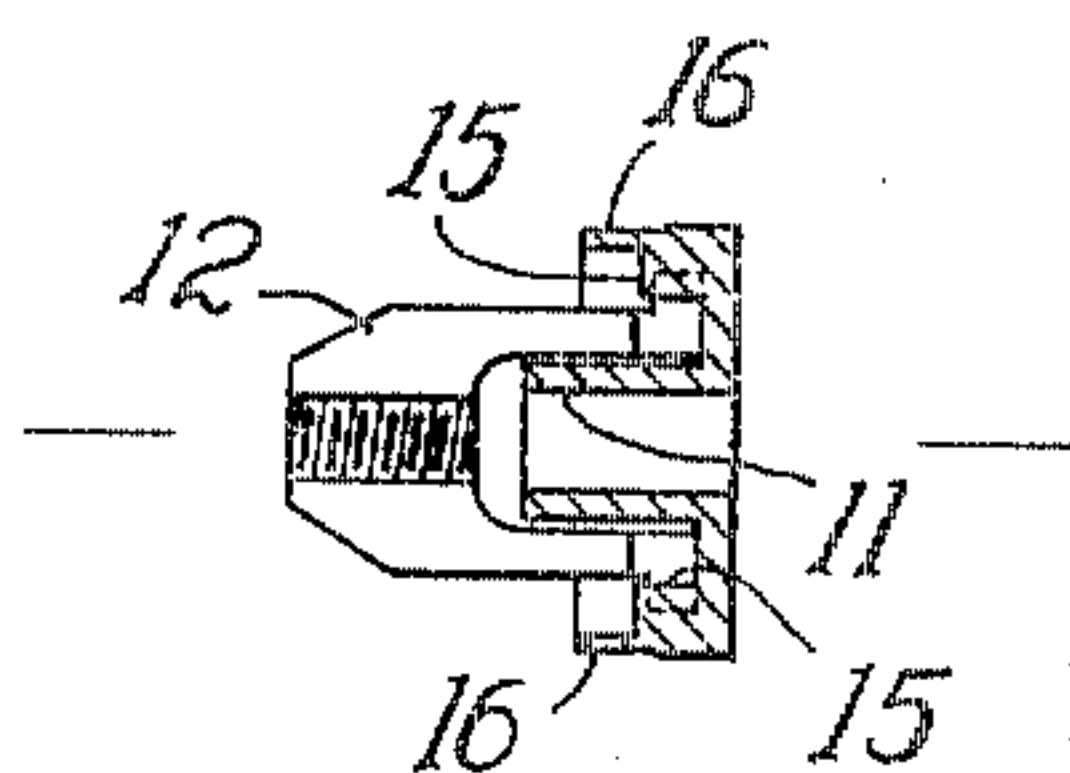


FIG. 3.

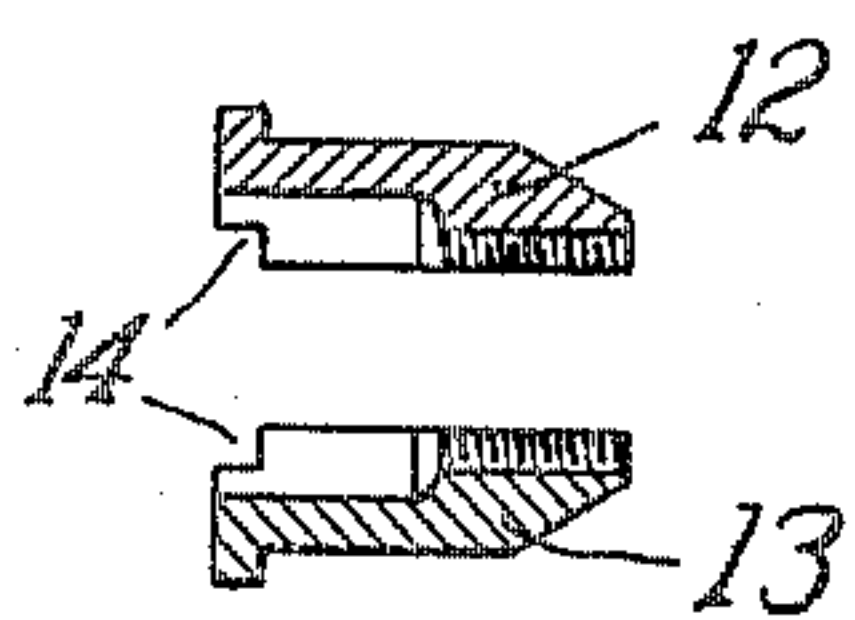


FIG. 4.

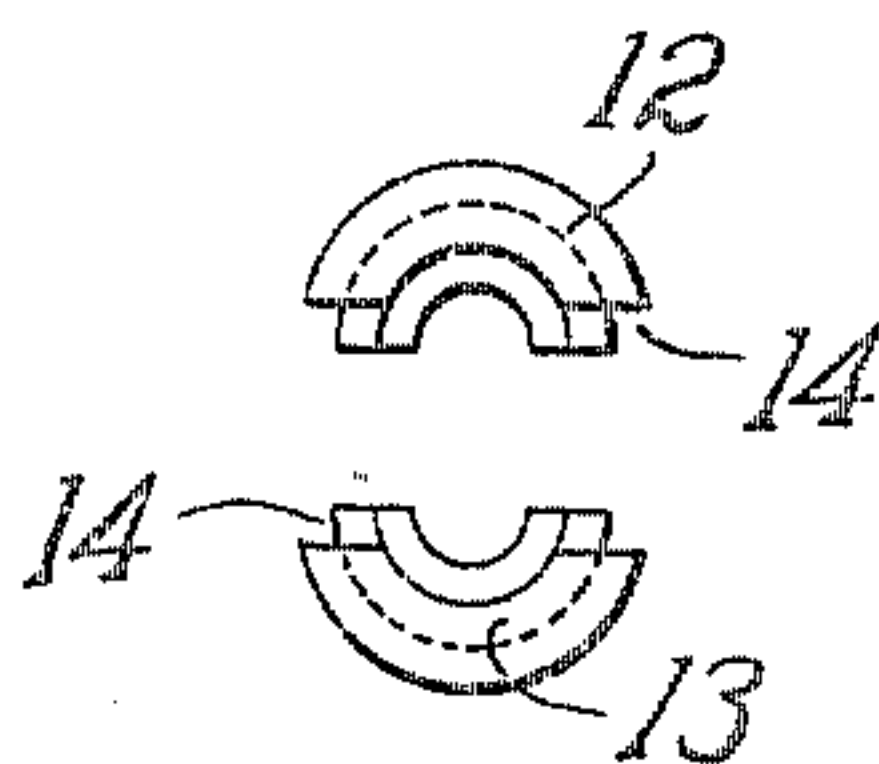


FIG. 5.

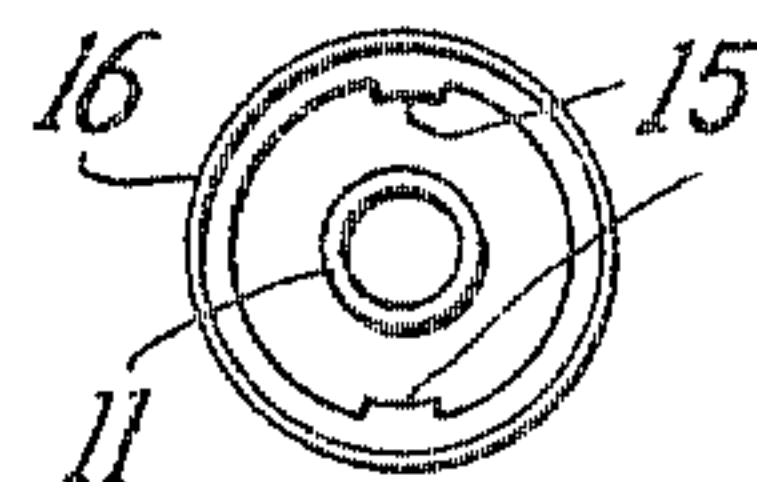


FIG. 6.

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# UNITED STATES PATENT OFFICE.

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## SPLIT NUT.

SPECIFICATION forming part of Letters Patent No. 793,850, dated July 4, 1905.

Application filed December 3, 1904. Serial No. 235,303.

*To all whom it may concern:*

Be it known that we, ROBERT J. SIMPSON and LARROY S. STARRETT, of Athol, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Split Nuts, of which the following is a specification.

This invention simplifies split nuts, such as are used in calipers and like tools to quickly traverse a considerable length of screw-rod and to have a threaded engagement therewith at any desired point.

Our improvement comprises a nut having two laterally-separable halves, each internally threaded and externally tapered at one end and internally recessed and externally flanged at the other end, as hereinafter described, combined with a recessed head having a flange loosely inclosing the radial flanges of the nut-sections, and a tubular hub and two actuating-lugs extending into the space between said sections which spread automatically at their tips when properly held, so as to freely traverse the screw by their own weight acting on the tubular hub. A tapering cap incloses the tips of the nut-sections when in use.

In the drawings, Figure 1 shows a caliper provided with our improved nut. Fig. 2 is an enlarged view, partly in section. Figs. 3 to 6 are detail views of the parts of the nut.

The caliper shown is of the form in which the spring at top tends to spread the legs or arms, a movement which is resisted or regulated by the nut on the screw-rod 8. A tapering cap or washer 9 is interposed between the caliper-leg and the tapered tip of the nut, as heretofore.

Our improved nut has a recessed head 10, formed integral with a central tubular hub 11, which slides freely along the screw-rod 8. The nut-body is composed of two half-sections 12 13, each about semicylindrical, with radial flanges at one end and a tapering frusto-con-

ical tip at the other end. Within the tapered end these sections are threaded to engage the screw-rod, while the opposite ends are axially recessed to receive the hub 11, and each flange is cut away or notched, as at 14, Figs. 4 and 5, to admit between the sections the projecting lugs 15, Fig. 6, when the nut-sections are introduced into the recessed head 10. These lugs are integral with said head and force the nut-sections to rotate with it in use. The head has a thin peripheral flange 16, Fig. 3, which is folded down loosely over the nut-section flanges to hold them in position, as in Fig. 2.

It is essential that the nut-sections 12 13 fit loosely within the recessed head 10, so that they may separate slightly at tip by gravity when their plane of separation is vertical. The weight of said sections then bears on opposite sides of the tubular core 11, located between them, and serves to spread their tips. They will also separate centrifugally to an extent sufficient to disengage their threads by a quick partial rotation given by the operator.

We claim as our joint invention—

The improved split nut described, consisting of the recessed head 10 formed with the hollow axial hub 11, inwardly-extending lugs 15 and overlapping marginal flange 16, in combination with semicircular nut-sections 12, 13 tapered and internally threaded at one end, recessed and radially flanged at the other end, notched in said flanges to receive said lugs and loosely held within the recessed head, substantially as set forth.

In testimony whereof we have affixed our signatures in presence of two witnesses.

ROBERT J. SIMPSON.  
LARROY S. STARRETT.

Witnesses:

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