

No. 746,070.

PATENTED DEC. 8, 1903.

J. C. GILLNER & J. L. WHITE.
CENTER SQUARE.

APPLICATION FILED APR. 11, 1903.

NO MODEL.

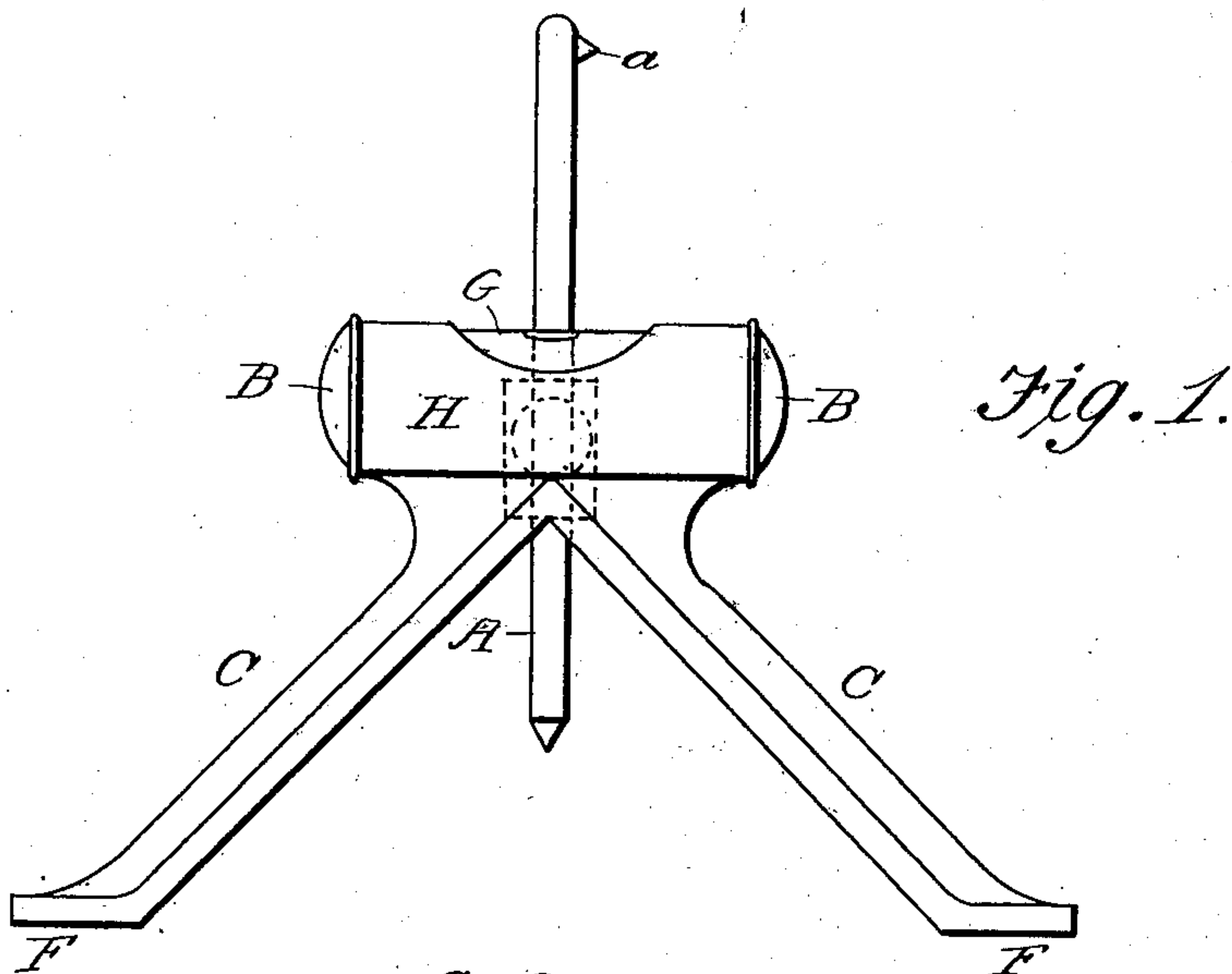


Fig. 1.

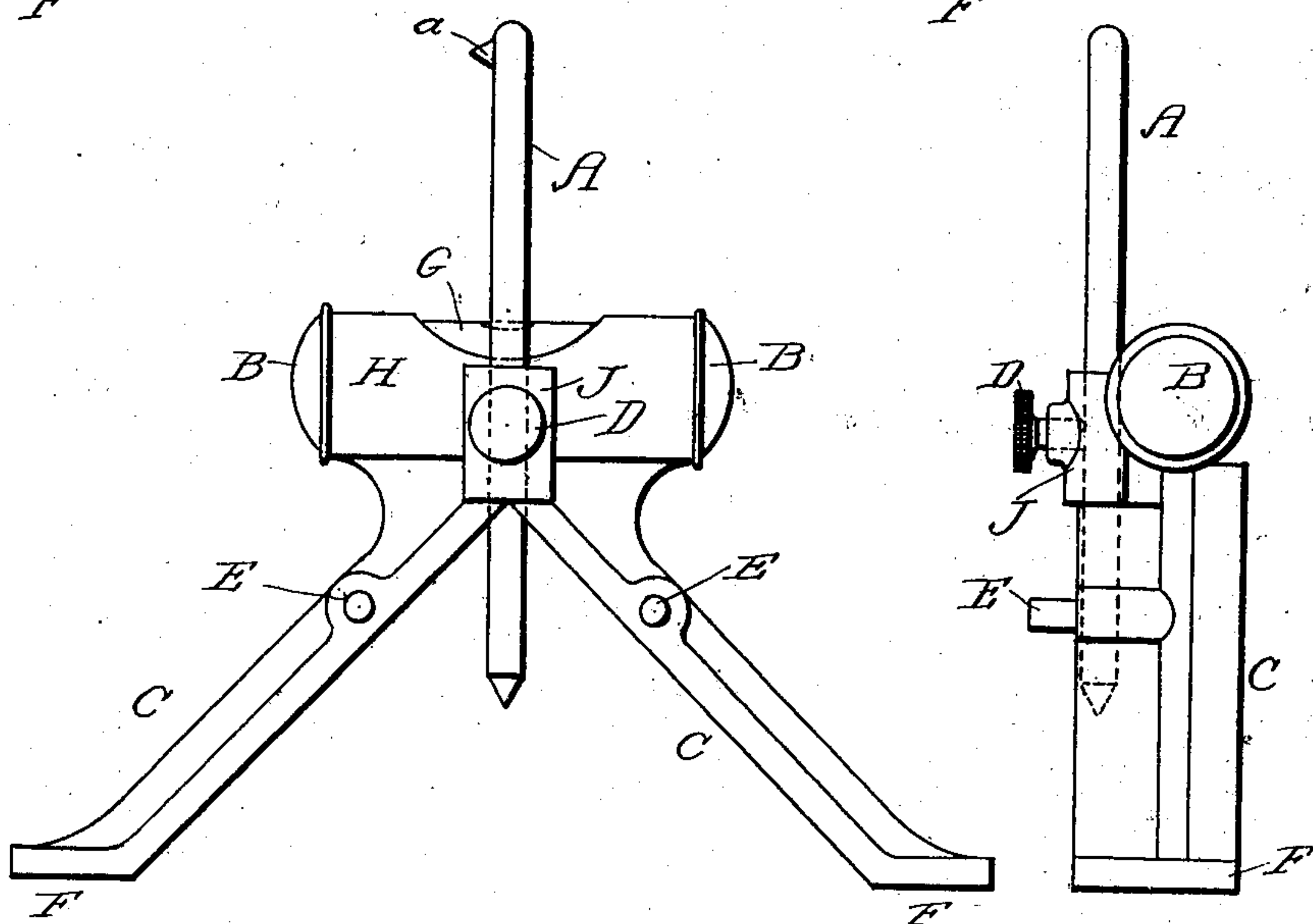


Fig. 2.

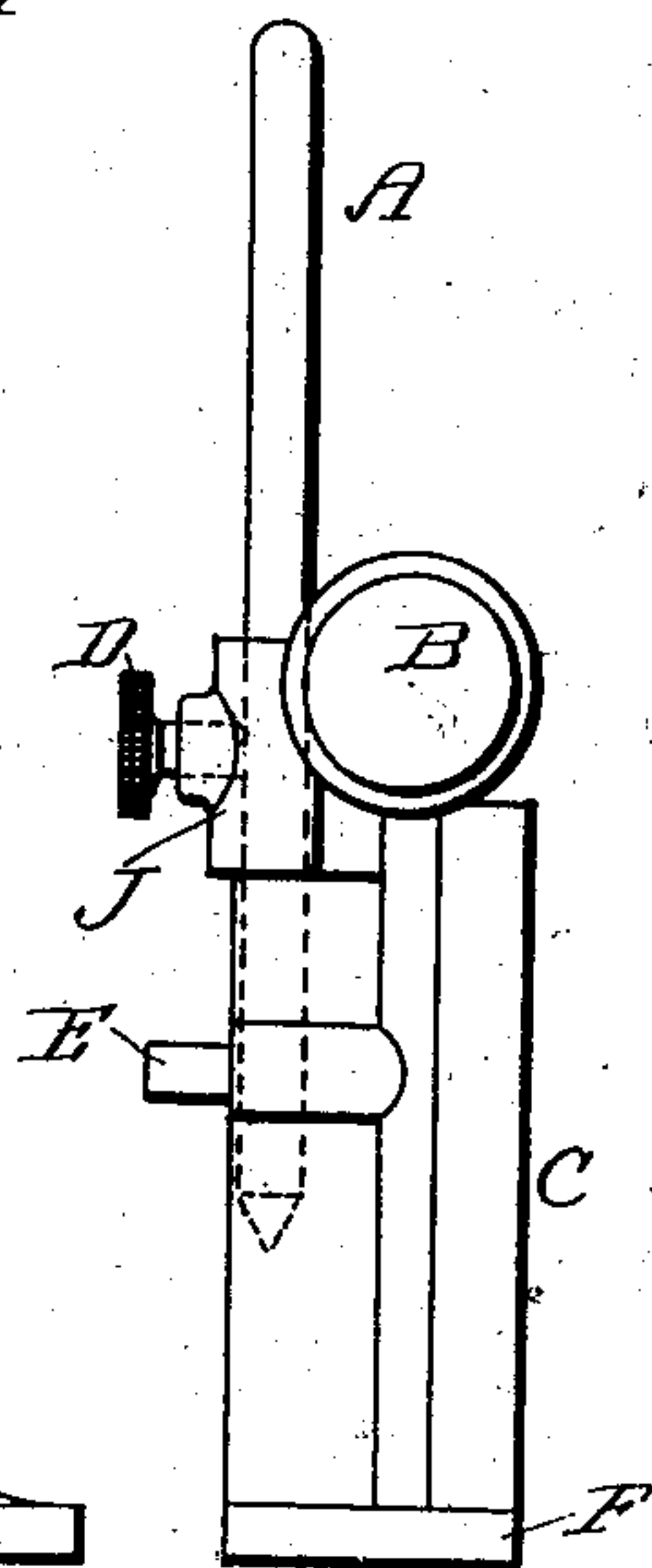


Fig. 3.

Witnesses
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UNITED STATES PATENT OFFICE.

JOHN C. GILLNER AND JOSEPH L. WHITE, OF WILLOUGHBY, OHIO.

CENTER SQUARE.

SPECIFICATION forming part of Letters Patent No. 746,070, dated December 8, 1903.

Application filed April 11, 1903. Serial No. 152,184. (No model.)

To all whom it may concern:

Be it known that we, JOHN C. GILLNER and JOSEPH L. WHITE, citizens of the United States, residing at Willoughby, in the county of Lake and State of Ohio, have invented certain new and useful Improvements in Center-Squares; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention comprises particularly a center-square having in combination therewith a scratch-pin and level and guide-pins to permit parallel scribing, either straight or circular.

In the accompanying drawings, Figures 1 and 2 are respectively front and back views of the tool and Fig. 3 is an edge view.

Referring specifically to the drawings, the center-square comprises two legs C, which are at right angles to each other and which terminate in level feet F. At the junction of the legs is a casing H for the spirit-level G. The ends B of the casing are removable, so that the glass of the spirit-level may be readily replaced. The level extends parallel to the feet F, so that it may be used as level on a plane surface by standing the tool on the feet F. At the junction of the legs is a boss J, through which extends the center and scratch-pin A, the bore through the boss being directed to a center found by the branches or legs C. The pin is movable lengthwise and also rotatable in the boss and fixed at adjustment by thumb-screw D. It is also reversible, to change ends. At one end of the pin A is a scratch-point *a*, which is serviceable in scribing. The other end of the pin is pointed for centerwork. From each of the legs a pin E projects side-
wise, these pins being equidistant from the point of the square. They are useful in paral-

lel scribing. Thus to draw a line parallel to the edge of a piece of work the pin A is fixed with the scratch-point projecting parallel to the pins E, and if the tool be then laid upon the work with the pins E against the edge thereof and drawn along the scratch-point will scribe a line parallel to the edge along which the pins E are moved.

The device is used to advantage in laying out work, making key-seats, drilling, finding centers, in parallel scribing, and generally in machinists' work. To draw a circular parallel line around a cylinder-head from the outside or inside, the pin A is reversed and adjusted to the radius desired and with the pins E as guides around the edge of the circle may be scratched parallel to the edge. In drilling radial holes in a shaft—for instance, from any desired point on the surface of the shaft—the tool is placed on the shaft with the point of the pin at the desired place. The shaft is then turned until the level shows that its center is directly under the point. Then the hole can be drilled with the assurance that it will cut the center. Other advantages and uses will be apparent to a machinist or other person skilled in the art.

What we claim as new, and desire to secure by Letters Patent, is—

The combination with two legs forming a centering angle, of a guide-pin projecting side-
wise from each leg equidistant from the point of the angle, and a reversible longitudinally-adjustable rotatable pin extending through the point of the angle perpendicular to a line drawn connecting the guide-pins and having a laterally-extending scratch-point at one end and center-point at the other.

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

JOHN C. GILLNER.
JOSEPH L. WHITE.

Witnesses:

M. A. HOAGE,
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