H. C. WIGHT.

Caliper.

No. 205,225. Patented June 25, 1878.

FIG. 1.

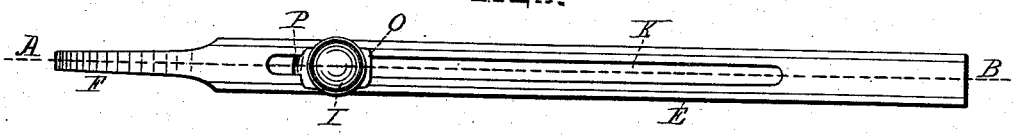


FIG. 2.

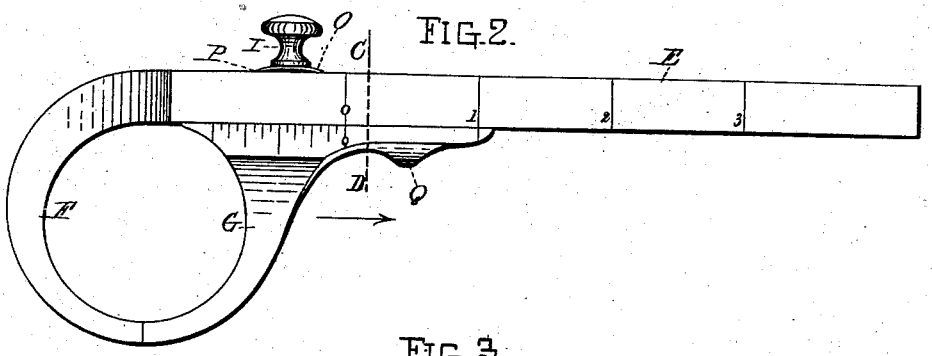


FIG. 3.

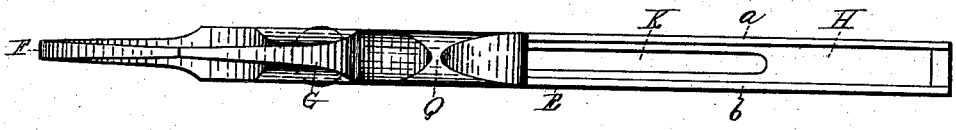


FIG. 4.

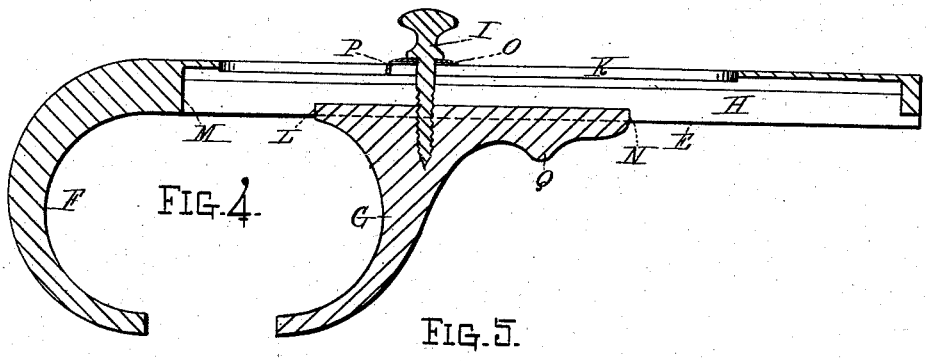
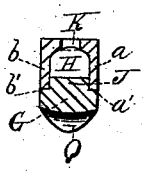


FIG. 5.



Witnesses=

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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN CALIPERS.

Specification forming part of Letters Patent No. **205,225**, dated June 25, 1878; application filed May 16, 1878.

To all whom it may concern:

Be it known that I, HIRAM C. WIGHT, of the city and county of Worcester, and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Calipers; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and in which—

Figure 1 represents a top or back view of my improved calipers. Fig. 2 represents a side view of the same. Fig. 3 represents a front edge view of the device. Fig. 4 represents a vertical central longitudinal section through the calipers, taken on line A B, Fig. 1; and Fig. 5 represents a vertical transverse section through the same, taken on line C D, Fig. 2, looking in the direction indicated by arrow in the same figure.

The nature of my invention consists in sliding the movable jaw of the calipers back and forth in a slot formed or cut out in the bar upon which is formed the other jaw; also, in the construction of said movable jaw, as will be hereinafter more fully described.

To enable those skilled in the art to which my invention belongs to make and use the same, I will proceed to describe it more in detail.

In the drawings, the part marked E represents a rectangular bar, one end, F, of which is curved, and constitutes the stationary jaw of the calipers. The movable jaw G, which is also curved to correspond to jaw F, slides back and forth in a slot, H, formed in said bar E, being held in place by means of an adjusting and set screw, I.

The edge of movable jaw G is cut away to form a flange, J, (see Fig. 5 of the drawings,) which fits into slot H, and the sides *a* and *b*, forming the sides of said slot, bear upon shoulders *a'* and *b'* of jaw G, thus preventing said jaw from getting out of slot H after having been drawn up into position by screw I.

Another slot, K, is also formed or cut out in bar E, in which screw I slides back and forth. Said slot is made just long enough to allow the forward end L of jaw G to strike bar E at M, and the end N of said jaw G to slide to the end of bar E, being stopped at that point by screw I striking in the end of said slot.

Adjusting-screw I is provided with a flat spring, O, by means of which, by turning down said screw I, just sufficient pressure may be produced upon the top of bar E as to allow of the movement of sliding jaw G back and forth, and at the same time hold it in any position into which it is slid. By turning said screw down still farther, sufficient pressure may be obtained to securely hold it in position.

The forward end P of spring O is bent down into slot R (see Fig. 4) for the purpose of keeping it in its proper position.

A hub or projection, Q, is formed upon sliding jaw G, by means of which the operative, by grasping bar E with the hand and fingers, and placing the thumb over said hub or projection, and moving the thumb back and forth, may conveniently operate jaw G in measuring the diameter of a body.

Bar E is marked off into inches, and sliding jaw G is marked with two lines an inch apart and subdivided into fractions of an inch, as desired, said marks on bar E and jaw G being arranged, relative to each other, as represented in Fig. 2 of the drawings, so that when the jaws are opened or thrown apart by sliding back jaw G, the distance between them is indicated by said lines and figures, thus obviating the necessity of using a rule.

It will be seen from the accompanying drawings and foregoing description that calipers thus constructed and arranged are strong and durable, and very convenient to operate; and by making the jaws circular in form, as represented, any diameter embraced within their limits may be measured, whether square, irregular in form, or oval-shaped, with equal facility.

Having described my improvements in calipers, what I claim therein as new and of my invention, and desire to secure by Letters Patent, is—

The combination, with the fixed slotted bar or arm E and its circular jaw F, of the sliding part, upon which circular jaw G and hub or projection Q are formed, adjusting thumb-screw I, and adjustable spring-plate O, substantially as and for the purposes set forth.

HIRAM C. WIGHT.

Witnesses:

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