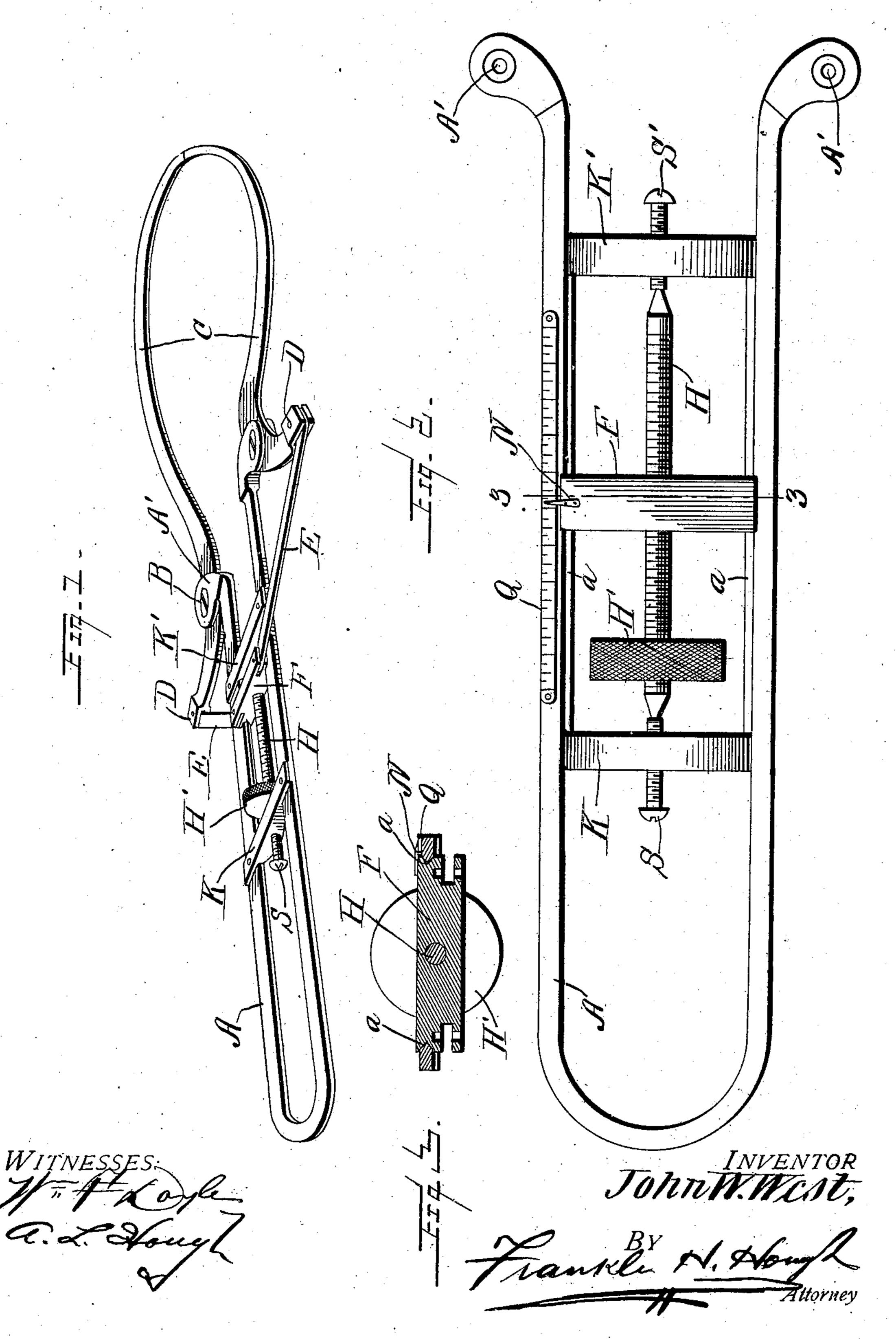
J. W. WEST.

CALIPERS.

APPLICATION FILED APR. 27, 1904.

NO MODEL.



## United States Patent Office.

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## CALIPERS.

SPECIFICATION forming part of Letters Patent No. 762,786, dated June 14, 1904.

Application filed April 27, 1904. Serial No. 205,259. (No model.)

To all whom it may concern:

Be it known that I, John W. West, a citizen of the United States, residing at Toledo, in the county of Lucas and State of Ohio, have invented certain new and useful Improvements in Calipers; and I do 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 relates to new and useful improvements in calipers, designed especially for machinists' and forgers' use; and it consists of a device of this character which will admit of free easy manipulation by the fingers of the hand of the operator holding the calipers, thus giving free use of the other hand of the operator.

The invention consists in various details of construction and in combinations and arrangements of parts, which will be hereinafter fully described and then specifically defined in the appended claims.

My invention is illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this application, and in which drawings—

Figure 1 is a perspective view of my improved calipers. Fig. 2 is an enlarged side elevation of the scale and the handle carrying the same, and Fig. 3 is a cross-sectional view on line 2.2 of Fig. 2

Reference now being had to the details of the drawings by letter, A designates the handle of the calipers, which is of substantially U shape and provided with apertures A' at the ends thereof for the reception of the screws B, upon which the caliper-arms C are pivotally mounted. Said arms may be of any desired shape and size, and the outer pivotal ends of said arms are bifurcated and carry each a pin D. Pivotally mounted upon said pins D are the links E, and mounted to have a longitudinal movement between the opposite sides of the handle is a slide-block F, the

opposite edges of which are grooved and adapted to move in contact with the tapering 50 edges a of the handle, as shown clearly in the sectional view of the drawings. Cross-pieces K and K' are fastened to the opposite sides of the handle, and spaced apart and swiveled in the adjacent faces of said cross-pieces are 55 the ends of a screw H, having a milled head H', whereby the screw may be turned. Said screw passes through a threaded aperture formed in the block F and is adapted to cause the block to move backward and forward as 60 said screw is turned in one direction or another, and thereby cause the jaws of the calipers to open or close. A pointer N is provided which is carried by the block F, and a scale Q is formed upon or secured to the han- 65 dle and over which said pointer is adapted to move and by which the calipers may be set. Set-screws S and S' are mounted in said crosspieces K and K', respectively, whereby wear upon the adjusting-screw may be taken up, 70 although said set-screws may be dispensed with, if desired.

By the provision of calipers made in accordance with my invention it will be observed that a simple and efficient apparatus is pro-75 duced which may be easily adjusted by the thumb-screw by the fingers of the hand of the operator holding the calipers, thus leaving the other hand free and unencumbered, and by reason of the scale which is upon the han-80 dle the instrument may be quickly and accurately adjusted.

While I have shown a particular construction of apparatus illustrating my improved calipers, it will be understood that I may alter 85 the detailed construction of the same, if desired, to adapt the instrument for various uses without in any way departing from the spirit of the invention.

Having thus fully described my invention, 90 what I claim as new, and desire to secure by Letters Patent, is—

1. A pair of calipers comprising a handle, a block adjustably mounted upon said handle, a scale upon the latter, a pointer carried by 95 said block and moving over said scale, and

caliper-arms pivoted to the handle and having pivotal link connections with said block, as set forth.

2. A pair of calipers comprising a handle, 5 a block movably mounted upon said handle, an adjusting-screw swiveled to the handle and passing through a threaded aperture in said block, an indicator carried by the block, a scale upon the handle over which said indi-10 cator moves, caliper-arms pivoted to the handle, and pivotal link connections between said arms and block, as set forth.

3. A pair of calipers comprising a handle, a block movably mounted between and against 15 the adjacent edges of the handle, a scale upon the handle, an indicating-pointer upon said block adapted to move over said scale, an adjusting-screw carried by the handle and passing through a threaded aperture in said block, 20 caliper-arms pivoted to the handle, and pivotal link connections between said arms and

block, as set forth.

4. A pair of calipers comprising a U-shaped handle, caliper-arms pivoted to the ends of 25 said handle, a block mounted between and in contact with the inner edges of said handle, an indicating-pointer carried by said block, a scale upon one side of the handle, over which said pointer moves, an adjusting-screw swiv-3° eled upon the handle and passing through a threaded aperture in said block, and pivotal

link connections between said caliper-arms and block, as set forth.

5. A pair of calipers comprising a U-shaped handle, caliper-arms pivoted to the ends of 35 said handle, a block having its opposite edges grooved and movably held in contact with the adjacent edges of the handle, a set-screw swiveled between the sides of the handle and passing through a threaded aperture in the block, 40 pivotal links connecting said arms with said block, a scale upon the handle, and an indicator carried by the block and moving over said scale, as set forth.

6. A pair of calipers comprising a U-shaped 45 handle, caliper-arms pivoted to the ends of said handle, a movable block mounted upon the handle, cross-pieces upon the latter, an adjusting-screw swiveled upon said crosspieces and passing through a threaded aper- 5° ture in said block, pivotal links connecting the latter with said arms, a scale upon the handle, and an indicating-pointer upon said block and adapted to move adjacent to said scale, as set forth.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

JOHN W. WEST.

Witnesses:

Howard Lewis, Frank P. Kennison.