(No Model.)

A. C. WINN.

GAGE.

No. 301,945. Patented July 15, 1884.

Fig. 1.

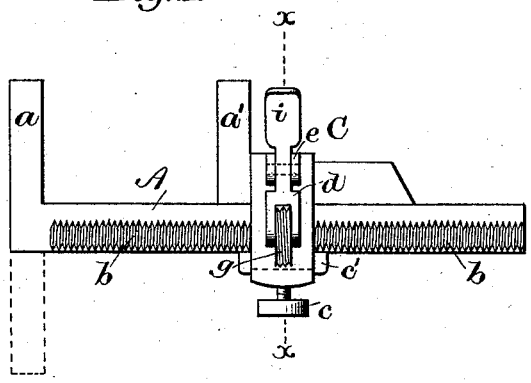
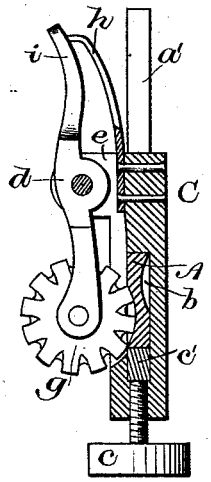


Fig. 2.



Witnesses
Henry Marsh.
John F. C. Brinkerhoff

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UNITED STATES PATENT OFFICE.

ALBY C. WINN, OF BOSTON, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO WM. E. PAYNE, OF SAME PLACE.

GAGE.

SPECIFICATION forming part of Letters Patent No. 301,945, dated July 15, 1884.

Application filed April 28, 1884. (No model.)

To all whom it may concern:

Be it known that I, ALBY C. WINN, of Boston, county of Suffolk, State of Massachusetts, have invented an Improvement in Measuring-Instruments, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention relates to improvements in measuring-instruments, and is shown embodied in a caliper-square, wherein the bar is provided with a fixed jaw, and has a slide carrying a second or movable jaw, adapted to be held at various points on the bar.

The object of my invention is to attain a quick and easy adjustment of the movable jaw by means of comparatively inexpensive and simple mechanism.

To these ends my invention consists, primarily, of a bar or shank having threads cut in the face thereof, and provided with a slide adapted to be readily moved on said bar, and provided with a wheel having a threaded periphery, adapted to engage the threads in the bar, so as to enable the slide to be adjusted or moved on said bar.

My invention further consists of a bar having threads cut in the face thereof, and provided with a fixed jaw, combined with a slide having free movement on the bar, and provided with a spring-actuated lever, carrying a wheel having a threaded periphery, adapted to engage the threads on the bar and lock the slide on said bar, substantially as hereinafter described, and particularly pointed out in the claims.

Figure 1 is a plan of a caliper-square containing my invention; and Fig. 2, a transverse section on line *x x*, Fig. 1.

The bar A, having the fixed jaw *a*, is provided with threads *b* on both sides, and has a slide, C, carrying the second or movable jaw, *a'*, a set or thumb screw, *c*, and press-block *c'*, the said screw and block enabling the slide to be clamped to the bar at suitable points. The slide is provided with a lever, *d*, journaled in the studs *e*, and having a wheel, *g*, with a threaded periphery, to engage the threads in the face of the bar, a slot being provided in the slide to permit such engagement. The wheel is kept in engagement with the threaded bar by means of a spring, *h*, secured to the slide *c*, and having one end pressing against the under side of the thumb-piece *i* of the lever *d*, the wheel being journaled in the opposite bifurcated portion of said lever. Upon pressing on the thumb-piece *i* of the lever as against the action of the spring the wheel will be removed from contact with the threaded bar, so as to permit the slide to be freely moved along said bar, when, upon releasing the thumb-piece, the spring will so act on the lever as to force the threaded wheel down through the slotted portion of the slide and cause it to engage the threaded bar. At this stage the wheel may be rotated by hand to move the slide slightly in either direction to attain the exact adjustment, when the thumb-nut *c* may be operated to lock the slide in the desired position and prevent further movement thereof on the bar. The threads *b* are cut near the outer edge of the bar, so as to provide ample space near the inner edge thereof to cut a scale thereon, and said threads are cut on both sides of the said bar, so that it may be placed in the slide in such manner that the jaw may project from either side thereof, as shown in dotted lines, Fig. 1, whereby by resting the fixed jaw upon a plane surface height measurements of various devices or things may be made with the other or movable jaw, as will be readily understood by those skilled in the art. In this case I term the edge of the bar next the fixed jaw as the "inner" edge, and the threads are so cut (see Fig. 2) that whichever side of the bar may be uppermost or be for the time the face of the bar the threads thereon will be farthest removed from the inner edge, as stated.

I claim—

1. In a measuring-instrument, a bar or shank having threads cut in the face thereof, combined with a slide capable of free movement on the bar, and provided with a wheel having a threaded periphery, and adapted to engage the threads in the bar, substantially as set forth.

2. In a measuring-instrument, a bar or shank having a jaw integral therewith, and provided with threads cut in the face thereof, combined with a slide capable of movement on the bar, and provided with a jaw, *a'*, and spring-actuated lever, having a wheel journaled thereto, said wheel being provided with threads

about its periphery, adapted to engage the threads on the bar, substantially as set forth.

3. In a measuring-instrument, a shank or bar having a jaw integral therewith, and provided with threads cut in both its sides, combined with a slide capable of free movement on the bar, and adapted to be withdrawn therefrom, said slide carrying a jaw, and provided with a spring-actuated lever having a wheel with screw-threads, substantially as described, and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ALBY C. WINN.

Witnesses:
JAS. H. LANGE,
JOHN F. C. PREINKERT.