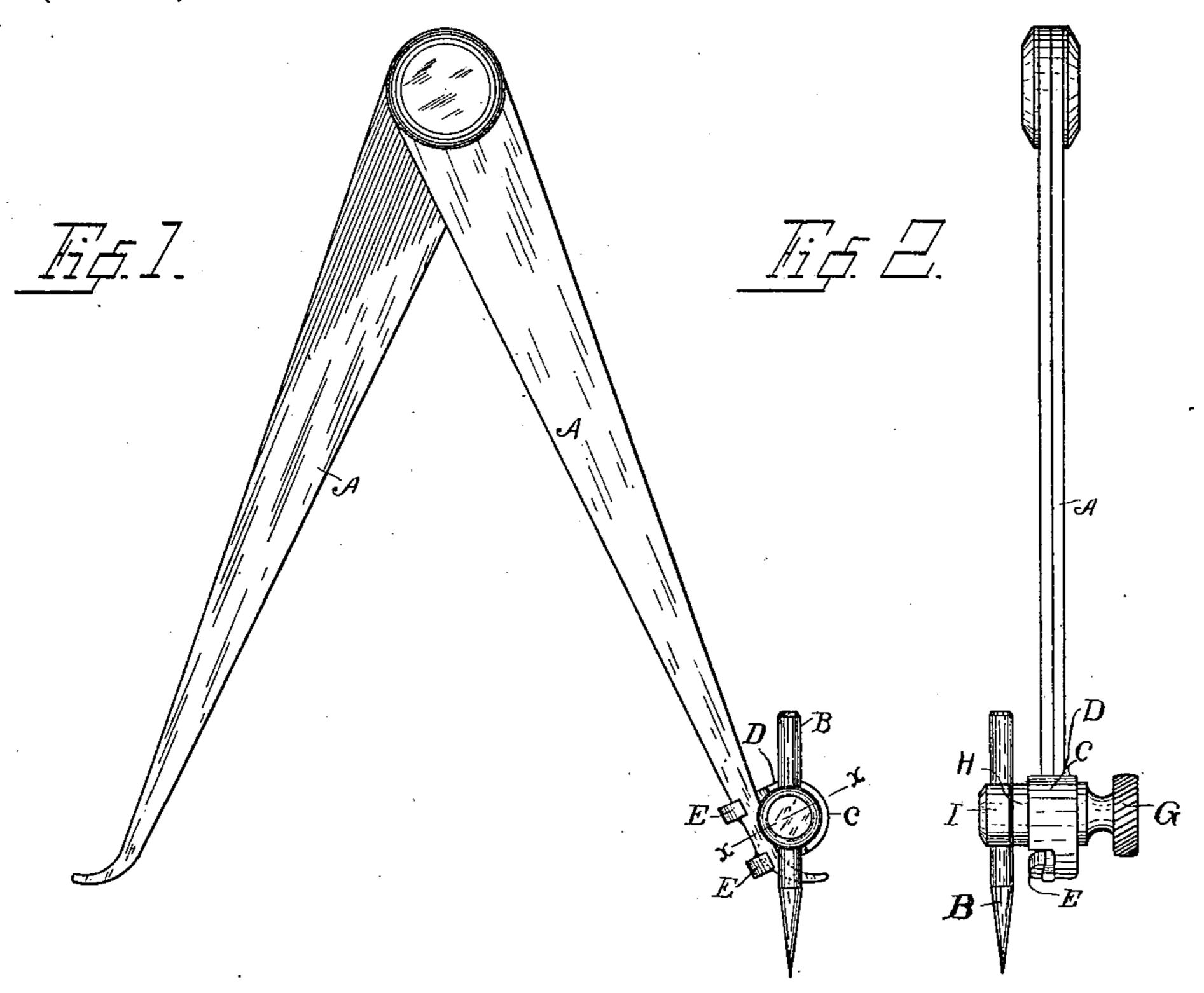
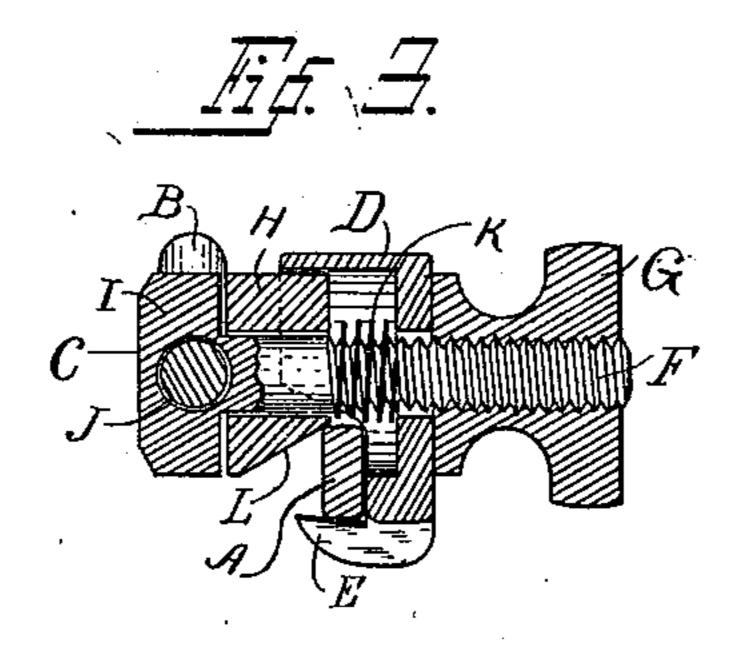
## T. A. PANYARD. CALIPER ATTACHMENT.

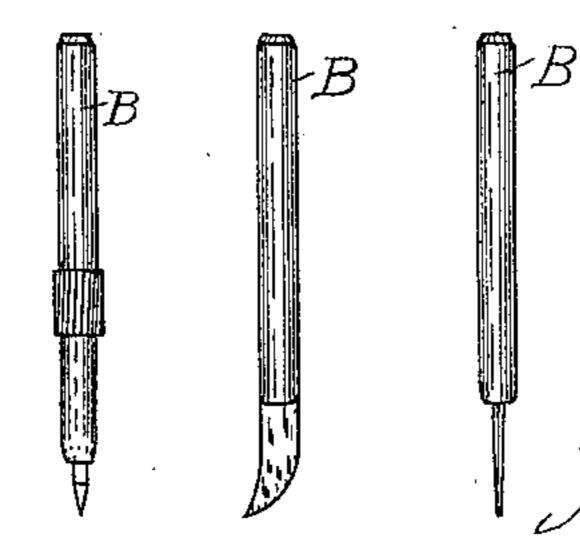
(Application filed July 7, 1899.)

(No Model.)





Tip. 4. Tip. 5. Tip. 5.



Witnesses.

La Minder Ch.

Thomas A Taugard By Enwin, Muler Muler

Attorneys

## United States Patent Office.

THOMAS A. PANYARD, OF MILWAUKEE, WISCONSIN.

## CALIPER ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 656,260, dated August 21, 1900.

Application filed July 7, 1899. Serial No. 723,041. (No model.)

To all whom it may concern:

Be it known that I, THOMAS A. PANYARD, a citizen of the United States, residing at Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented new and useful Improvements in Caliper Attachments, of which the following is a specification.

My invention relates to improvements in

caliper attachments.

The object of my invention is to provide a device for attaching a pivotal compass-point, a scribing-point, a pencil, a cutting instrument, or other similar instrument to the legs of calipers or dividers, whereby the range of work performed by such instrument is broadened.

My invention is further explained by reference to the accompanying drawings, in which—

Figure 1 represents a front view of calipers with a pivotal compass-point or scribing-point attached to one of the legs. Fig. 2 represents a side view of the device illustrated in Fig. 1. Fig. 3 represents a longitudinal section of the clamping device by which the scribing-point or other instrument is attached to the calipers. Fig. 4 represents a side view of the pencil-holder removed from the clamping device. Fig. 5 represents a side view, and Fig. 6 an edge view, of the cutting instrument, also removed from the clamping device.

Like parts are identified by the same reference-letters throughout the several views.

A represents calipers of the ordinary construction, to one of the legs of which is attached a pivotal compass-point or scribing-point B by the clamping device C. A like clamping device is also adapted to be attached to the other leg. The clamping device consists of the bracket D, provided with fastening-lugs E E, binding-screw F, handnut G, and collar H. The head I of the binding-screw is provided with an aperture J for the reception of the pivotal compass-point or other instrument B.

The compass-point or other instrument is secured in the aperture J, between the head I of the binding-screw and the collar H, by the hand-nut G. The aperture J is so formed as to cut through the inner face of the head I, so that when the scribing-point or other

instrument is inserted in said aperture the periphery of said instrument will protrude slightly past the inner face of said head, 55 whereby said collar H is caused to impinge against its periphery when the pressure of the hand-nut G is turned down and brought to bear against it. When desirous to attach a scribing or other instrument to the leg of 60 the calipers the hand-nut G is turned back slightly, so as to permit the end of the calipers to be inserted between the bracket D and the collar H, as shown in Figs. 1 and 2, when the hand-nut G is turned down against 65 said bracket, whereby the leg of the calipers is firmly and securely clamped between said bracket and said collar. It will now be understood that by the same movement of the hand-nut G the collar H is caused to im- 70 pinge, as before stated, against the scribing instrument, whereby said instrument is simultaneously locked in position. When desirous so to do, the pivotal compass-point or other instrument thus locked to the leg of 75 the calipers may by loosening the hand-nut be adjusted at any desirable angle to the leg of the calipers. Thus when desirous to describe a large circle the legs A of the calipers may be brought in line with each other and 80 upon the same plane, when the pivotal compass-point and scribing instrument may both be adjusted at right angles to said legs, when a circle may be described without liability of the points becoming disengaged from the sur- 85 face, as is otherwise the case when describing a circle with an ordinary compass when the legs are adjusted on or near the same plane.

To prevent the scribing-point or other in- 90 strument from accidentally dropping from the aperture J when the hand-nut G is loosened, I preferably interpose a spring K between the bracket D and the collar H, whereby said collar H is retained in contact with 95 said scribing-point or other instrument by the recoil of said spring.

To more firmly secure the clamping device to the legs of calipers of different sizes, one side of the collar H is preferably beveled off, 100 as indicated at L, whereby as said bracket is turned forward against the leg of the calipers said collar engages beneath the edge of the calipers' leg, when, acting as a wedge, it forces the same outwardly in contact with the retaining-lug E of the clamping instrument until the same is securely locked in place.

While I have shown the scribing instrument attached to the calipers, it is obvious that a pencil-point or cutting instrument, as shown in Figs. 4, 5, and 6, may be substituted therefor and that a cutting instrument thus attached may be used for cutting gaskets or for other similar purposes. It will also be obvious that while the attachments are shown in connection with the calipers they are equally adapted to be used in connection with dividers or an ordinary compass.

Having thus described my invention, what I claim as new, and desire to secure by Letters

Patent, is—

1. An attachment for calipers, consisting of the combination of a binding-screw, the head of which is provided with a tool-retaining aperture; a collar loosely fitted to said screw and adapted to impinge, at one side, against the tool or other instrument in said aperture, and at its opposite side, against the leg of the calipers or other instrument; a clamping-bracket also loosely fitted to said screw and adapted to bear against the other side of said leg; a spring interposed between said bracket and said collar; and a clamping-nut adapted,

as it is turned down, on said screw, to clamp 30 said parts together upon the leg of the calipers or other instrument, substantially as and for

the purpose specified.

2. An attachment for calipers, consisting of the combination of a binding-screw, the head 35 of which is provided with a tool-retaining aperture; a collar beveled at one side so as to engage beneath the edge of the calipers' leg or other instrument, loosely fitted to said screw and adapted to impinge, at one side, against 40 the tool or other instrument in said aperture, and at its opposite side, against the leg of the calipers or other instrument; a clampingbracket also loosely fitted to said screw and adapted to bear against the other side of said 45 leg; a spring interposed between said bracket and said collar; and a clamping-nut adapted, as it is turned down on said screw, to clamp said parts together upon the leg of the calipers or other instrument, substantially as and for 50 the purpose specified.

In testimony whereof I have hereunto affixed my signature in the presence of two wit-

nesses.

THOMAS A. PANYARD.

Witnesses:

JAS. B. ERWIN, LEVERETT C. WHEELER.