

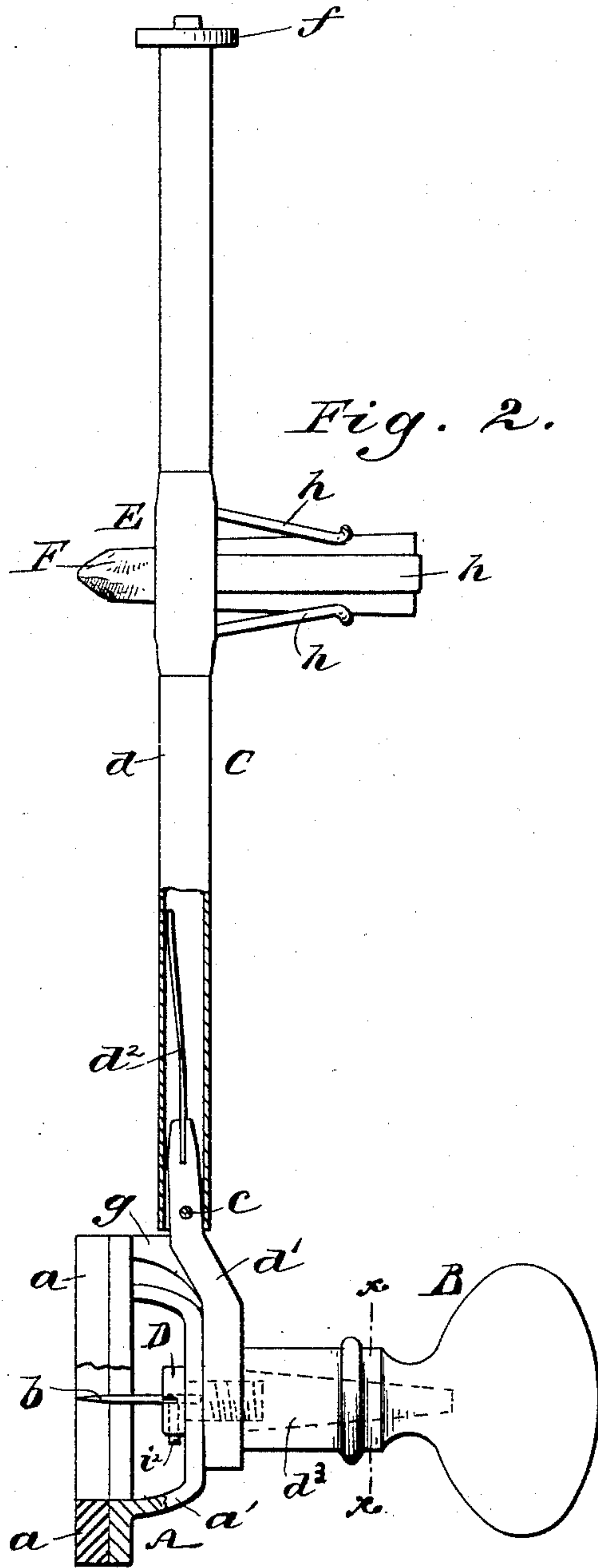
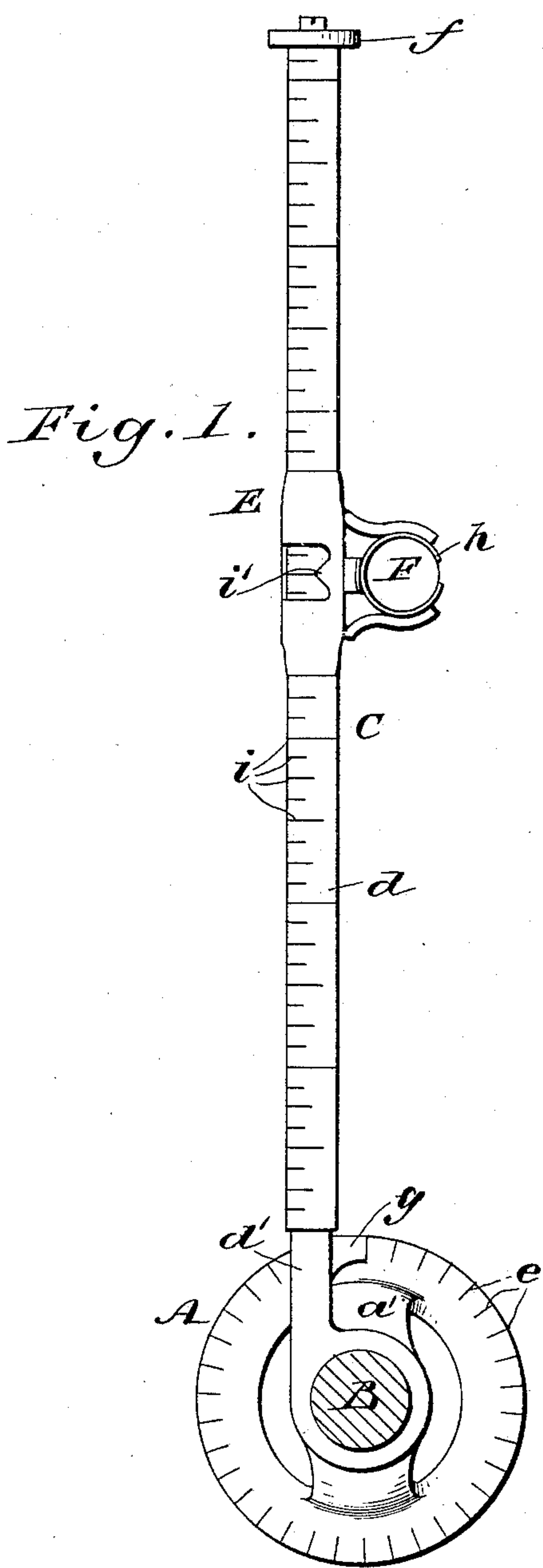
(No Model.)

T. A. & S. B. WYLIE.

INSTRUMENT FOR DESCRIBING CIRCLES.

No. 371,160.

Patented Oct. 4, 1887.



WITNESSES:

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UNITED STATES PATENT OFFICE.

THEOPHILUS A. WYLIE AND SAMUEL BROWN WYLIE, OF BLOOMINGTON,
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INSTRUMENT FOR DESCRIBING CIRCLES.

SPECIFICATION forming part of Letters Patent No. 371,160, dated October 4, 1887.

Application filed November 5, 1886. Serial No. 218,099. (No model.)

To all whom it may concern:

Be it known that we, THEOPHILUS A. WYLIE and SAMUEL BROWN WYLIE, of Bloomington, in the county of Monroe and State of Indiana, have invented a new and Improved Cyclograph, of which the following is a full, clear, and exact description.

Our invention relates to a device, in the nature of a compass, designed for school use for drawing circles and geometrical figures on a blackboard, and also for draftsmen's use as a substitute for the beam-compass.

The invention consists of the construction, arrangement, and combination of parts, all as hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both figures.

Figure 1 is a sectional plan view of our invention, taken on the line xx of Fig. 2; and Fig. 2 is a broken side elevation of the instrument.

A represents the base, B the handle, and C the arm, of the instrument, pivoted to turn upon the base as a center. The base A is by preference made annular in form and provided with a cushion, a , of soft rubber or other suitable material, and spanning the base is the bridge a' , made narrower than the central opening in the base, and slightly elevated therefrom, so that the centering-point b may be readily seen for centering the instrument at a given point. The centering-point b is held in a stud, D, fitted in the bridge-piece a' , and screwing into the end of the arm C, which is thus pivoted on the bridge a' , and to this arm, above the stud, is also secured the handle B, as shown clearly in Fig. 2. The arm C might be made of a single piece of wood, metal, rubber, or other suitable material; but I prefer to make it in two parts or sections, d d' , jointed together by a pin, c , which may be removed for detaching the section d , so that the instrument may be stored or packed in small space. The section d' is solid and pivoted to the stud D, and is provided at its outer end with the spring d^2 , which serves to press the outer section, d , toward the base A, so that it

will keep the crayon or other marker in contact with the surface on which the instrument may be used, and the section d is by preference made hollow to inclose and hide the spring d^2 and outer end of the section d' . Upon the section d is placed the sliding clip or frame E, to hold or serve as a guide to the pen, pencil, or crayon or other device used in marking. In this instance the clip or frame E is formed with the side spring-clasps, h , to receive and hold the crayon F. The upper surface of the section d is graduated, as shown as i , and a point, i' , is formed upon the clip or frame E to assist in readily locating the clip or frame to form a circle or arc of a given radius. The surface of the base A is also graduated, as shown at e , to assist in setting the arm C at any desired angle from the base, and to assist in moving the arm for protracting angles or for arcs of any given degree. We attach to the arm the pointer g , which indicates the graduations upon the base, as will be understood from Fig. 1. The handle B is by preference rigidly connected to the section d' of the arm C by the stud d^3 , formed with the said section, so that the arm C may be turned by the handle in the use of the instrument. The point b is made adjustable in the stud D, and is held by a small set-screw, i^2 , for that purpose.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination, with the base A, having the cushion a on its lower edge, and the centrally-apertured bridge a' , of the two-part arm C, comprising the inner section, having the handle secured thereto for turning it, the outer section detachably connected to the inner section and extending at right angles to the base, the stud D, passed up through the bridge into the inner section to form the pivot thereof, the centering-point on the lower end of the stud within the base, and the sliding holder on the outer section of the arm, substantially as set forth.

2. The combination, with the base, of the two-part arm pivoted to turn thereon and consisting of an inner section provided with a

spring at its forward end and an outer section pivoted to the outer end of the inner section and extending in the plane thereof, and the sliding holder on said outer section, the end
5 of the spring bearing on outer section to hold the crayon in contact with the surface upon which it is moved, substantially as set forth.

3. The combination, with the base, of the two part arm C, comprising the inner section,
10 d' , pivoted to the base at right angles thereto, and provided with the handle B for turning it, and the forward-projecting spring d^2 , the outer hollow section, d , receiving the spring and end of section d' , and the sliding holder
15 upon the section d , substantially as set forth.

4. The combination, with the circular base

A, having the graduations e upon its upper surface, the centrally-apertured bridge a' , the arm C, having the handle B rigidly secured to its inner end, and the pointer g for the grad- 20 uations e , the stud D, extending up through the bridge and forming the pivot of the arm C, the centering-point b , secured to the stud within the base, and the slide E, having the spring clamp h at right angles to the arm and 25 parallel with the axis thereof, substantially as set forth.

THEOPHILUS A. WYLIE.
SAMUEL BROWN WYLIE.

Witnesses:

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