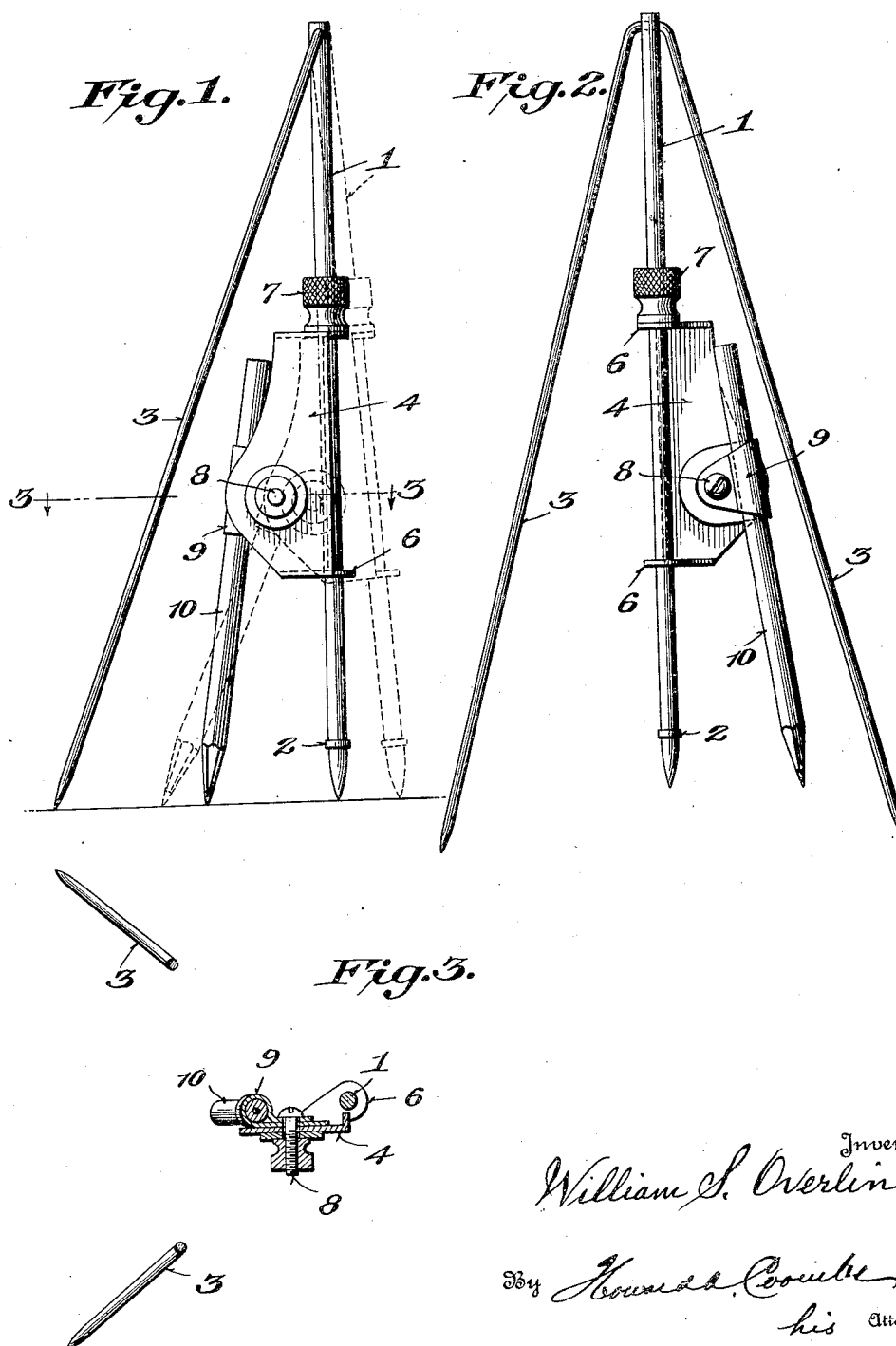


Sept. 2, 1924.

1,507,250

W. S. OVERLIN
COMPASS

Filed Jan. 10, 1923



UNITED STATES PATENT OFFICE.

WILLIAM S. OVERLIN, OF PORTLAND, OREGON.

COMPASS.

Application filed January 10, 1923. Serial No. 611,739.

To all whom it may concern:

Be it known that I, WILLIAM S. OVERLIN, a citizen of the United States, residing at Portland, in the county of Multnomah and State of Oregon, have invented new and useful Improvements in Compasses, of which the following is a specification.

This invention relates to drafting instruments of the compass type, and consists in a simplified, and otherwise improved compass, by means of which ovals may be described as well as circles. I use the term oval in a general way to include all kinds of cylindrical and conic sections,—ellipses, parabolas and hyperbolas.

An instrument for the same purpose is disclosed in the patent to Rashkovsky, No. 1,286,770, issued December 3, 1918, in which the relation of the angles of the center point and the scribing point, which result in the generation by the latter of the various curves, is fully set forth. It will therefore be sufficient for me to herein refer to the curves, other than circles, which can be described by my instrument, as ovals, since it is obvious that by changing the said angles, lines of varying contour can be drawn.

Broadly stated, the improved instrument, which for trade purposes I call the "oval-graph," consists of a center pin or axis rod, to the upper end of which are pivoted two divergent legs forming, with said rod, a tripod, whereby the center pin or axis rod can be held at any desired angle to the plane of the paper or other surface to be inscribed. The marking point, pencil or pen, is adjustably clamped to a sleeve or member, which is free to slide and rotate on the axis rod. the adjustability of the said marker being both longitudinal in the clamp and angular about the pivot of the clamp on said sleeve.

An embodiment of the invention is illustrated in the accompanying drawing, in which,

Figure 1 is an elevation of the instrument, the adjustability of the axis rod and marker being indicated by dotted lines.

Figure 2 is an elevation at right angles to Figure 1, and

Figure 3 is a cross section on line 3—3, of Figure 1.

In these views, 1 is the center or axis rod, which has a hole drilled through its upper end and a collar 2 near its lower, pointed end. A wire, bent into approximately V-

shape to form divergent legs 3, is passed through the hole in the axis rod, so as to form with it an adjustable tripod, whereby said rod can be maintained at the desired angle to the surface. A bracket 4 is mounted on the axis rod by means of apertured ears 6, to the upper one of which is secured a knurled head 7. The body of the bracket is apertured for the reception of a screw 8, which serves as the pivot, as well as the actuating member, of a clamp 9, in which the marker, shown as a pencil 10, is adjustably held.

In using the instrument, the tripod is stood on the paper, or other surface, with the legs 3 swung at an angle to the rod 1 which will hold the latter at the desired angle to the surface. The pencil, pen or other marking implement is adjusted in the clamp 9 at the required length and angle, and then the bracket 4 is rotated about the rod 1 by means of the head 7. In this way a circle or oval is described on the paper.

Having thus described my invention, what I claim is:

1. A compass comprising a center rod, divergent supporting legs pivoted to the upper end of said rod, a sleeve freely slidable and rotatable on said rod below the point of connection of said legs, and a clamp pivoted on said sleeve and adapted to adjustably hold a marking implement.

2. An instrument for describing circles and ovals, comprising a center rod, means to support the same at any desired angle to the surface to be inscribed, a sleeve bracket freely slidable and rotatable on said rod, a clamp for a marking implement, and means for actuating said clamp and at the same time securing it at any desired angle to said bracket, whereby the angular positions of both said rod and implement can be varied to cause the latter to describe different curves.

3. A compass comprising a center rod having a transverse hole near its top, a V-shaped wire passed through said hole so as to constitute divergent supporting legs for said rod, and a clamp slidable on said rod and provided with means for adjustably carrying a marking point.

In testimony whereof I have hereunto set my hand.

WILLIAM S. OVERLIN.