E. P. MANLY.

CIRCLE RULE.

APPLICATION FILED MAR. 29, 1921.

1,402,629.

Patented Jan. 3, 1922.

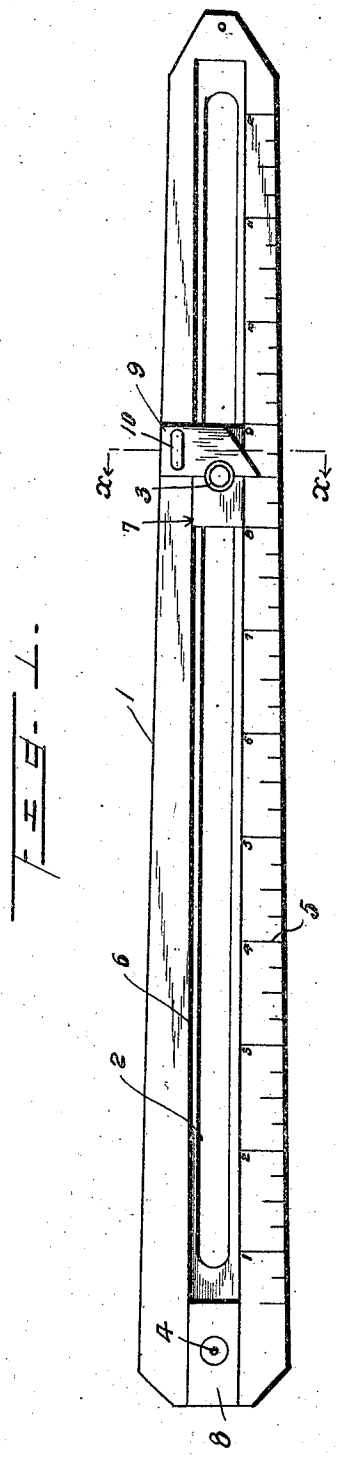


FIG. 1.

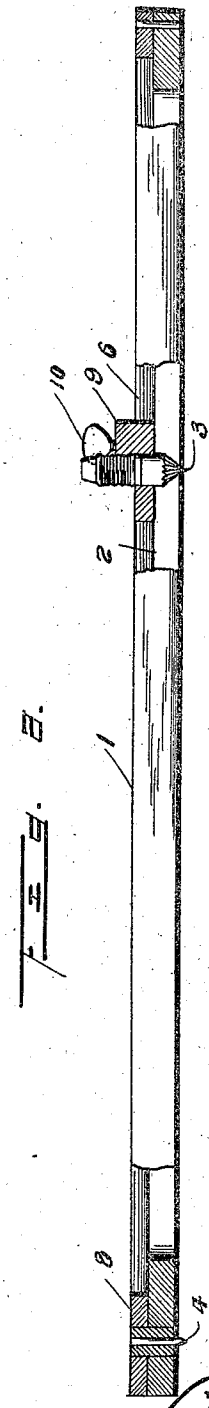


FIG. 2.

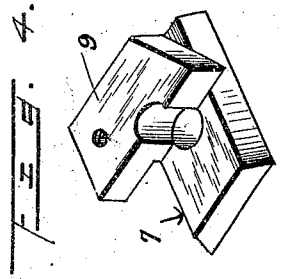


FIG. 4.

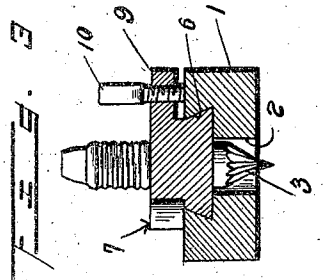


FIG. 3.

Inventor

E. P. Manly.

By [signature] Attorney

UNITED STATES PATENT OFFICE.

ERNEST P. MANLY, OF PORTSMOUTH, VIRGINIA.

CIRCLE RULE.

1,402,629. Specification of Letters Patent. Patented Jan. 3, 1922.

Application filed March 29, 1921. Serial No. 456,602.

To all whom it may concern:

Be it known that I, ERNEST P. MANLY, a citizen of the United States, residing at Portsmouth, in the county of Norfolk and State of Virginia, have invented certain new and useful Improvements in Circle Rules; and I do hereby 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.

The invention provides in a single article means for drawing straight lines any determinate length or outlining circles of any diameter within the range of adjustment of the device.

The invention furthermore provides an instrument capable of use as a gage since it includes relatively adjustable points.

The invention consists of a bar having one or both edges straight for directing a stylus when drawing straight lines, said bar having a longitudinal slot and being graduated for use as a rule in laying off work. The bar is provided at one end with a point to be used as a centering element. A slide is adjustable on the bar and is adapted to carry a pencil for outlining circles, means being provided for securing the slide in the required adjusted position.

Other objects and advantages will be apparent and suggest themselves as the nature of the invention is understood.

While the drawings illustrate an embodiment of the invention, it is to be understood that in adapting the same to meet different conditions and requirements, various changes in the form, proportion and minor details of construction may be resorted to without departing from the nature of the invention.

Referring to the accompanying drawings forming a part of the specification,

Figure 1 is a top plan view of a circle rule illustrative of the invention,

Figure 2 is an edge view thereof, parts being broken away,

Figure 3 is a cross section on the line *x*—*x* of Figure 1, and

Figure 4 is a detail perspective view of the slide.

Corresponding and like parts are referred to in the following description and designated in the several views of the drawings by like reference characters.

The article comprises a bar 1 which may be of any length and cross sectional outline. Opposite longitudinal edges of the bar 1 are straight to enable the article to be used as a rule when drawing straight lines. A slot 2 extends longitudinally of the bar 1 to within a short distance of the ends thereof. The longitudinal slot 2 provides clearance for a pencil or stylus 3. A point 4 is provided at one end of the bar 1 and constitutes a centering element. The bar is provided in its length with graduations 5 preferably in inches and fractional parts thereof to facilitate the laying off of work and determining measurements. The bar 1 preferably tapers throughout its length, being widest at the end provided with the point 4. A recess 6 is formed in the upper side of the bar 1 in line with the longitudinal slot 2 and its opposite longitudinal walls are undercut to prevent displacement of the slide or pencil carrier 7 disposed in the recess 6. The recess 6 extends longitudinally of the bar 1 and is adapted to be closed at one end by means of a plate 8, whereby provision is had for placing the slide or pencil carrier 7 in position. The plate 8 is prevented from displacement by means of the point 4 which extends therethrough. The slide or pencil carrier 7 preferably consists of a block which snugly fits within the recess 6 and is adjustable therein to any required point. The part 7 is apertured to receive a pencil or stylus 3 which may be retained in place by friction or in any desired way. The part 7 is provided with a cross piece 9 which may constitute a part thereof, the projecting ends of the cross piece overlapping the upper side of the bar 1 at the sides of the longitudinal recess 6. One end of the cross piece 9 is pointed and cooperates with the scale graduations 5 and the opposite end receives a set screw 10 which is threaded therein and adapted to bindingly engage the bar 1 so as to retain the slide 7 in the adjusted position.

A device constructed in accordance with the present invention is adapted for use as a rule, a gage or compass for scribing circles. The longitudinal edges of the bar 1 are adapted to give direction to a pencil, pen or other stylus when drawing straight lines. For scribing a circle, the bar 1 is held at one end by means of the point, the slide 7 being adjusted to bring the pencil or stylus 3 a distance from the point 4 corresponding to the radius of the circle to be scribed. The scribing of the circle is effected by swinging the bar 1 about the point 4 as a center with the

point of the pencil 3 or like device in contact with the surface upon which the circle is to be scribed. For use as a gage, the slide 7 may be adjusted to vary the distance between the point 4 and the point of the pencil according to the distance to be measured between relatively adjustable points of a gage.

What is claimed is:

1. An instrument of the class described consisting of a bar having a longitudinally disposed recess closed at one end, a marker carriage movable in said recess, a closure member for disposition in said recess at the other end to prevent longitudinal displacement of said carriage therefrom, and a point serving as a compass center for the bar securing said closure member to the bar.

2. An instrument of the class described consisting of a bar having a longitudinally disposed recess, a marker carriage movable in said recess, said bar having a slot below said recess to facilitate movement of the marker, a closure member for disposition in said recess to prevent displacement of said carriage therefrom, said carriage having a dovetailed plate, said recess conforming in shape to said carriage, a cross piece on said plate overlapping the bar on opposite sides of said recess, one end of said cross piece serving as a pointer, a binding member mounted in the other end of the cross piece and engageable against the bar, said plate having a marker-insert opening therethrough, said cross piece being cutaway over said opening, and a point member serving as a compass center for the bar securing said closure member to the bar.

3. An instrument of the class described consisting of a bar having a longitudinally disposed recess, a marker carrier movable in said recess, said bar having a slot below said recess to facilitate movement of the marker, a closure member for disposition in said recess to prevent displacement of said carriage therethrough, said carriage having a dovetailed plate, said recess conforming in shape to said carriage, a cross-piece on said plate overlapping the bar on opposite sides of said recess, one end of said cross-piece serving as a pointer, a binding member mounted in the other end of the cross-piece and engageable against the bar, and said plate having a marker insert opening therethrough.

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

ERNEST P. MANLY.

Witnesses:

JNO. T. HOOBER,

C. H. DAVIS.