C. F. ODIN.

CURVE SCRIBER.

APPLICATION FILED JULY 3, 1914.

1,168,546. Patented Jan. 18, 1916.

Fig. 1

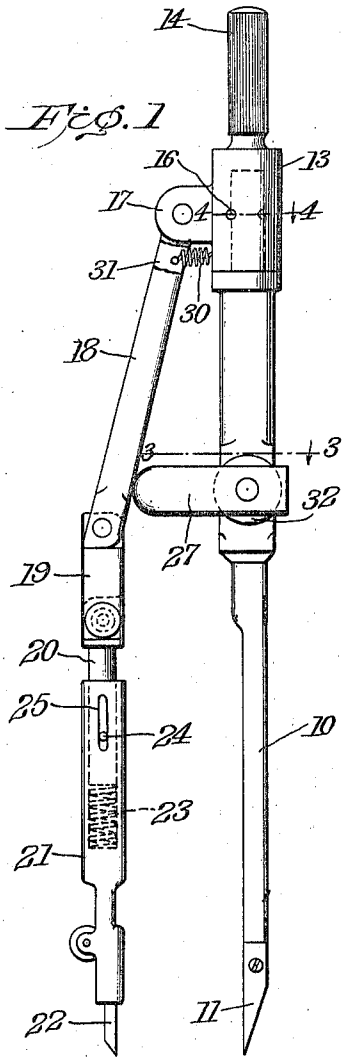


Fig. 3.

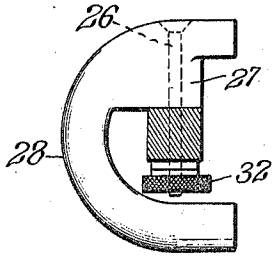


Fig. 4.

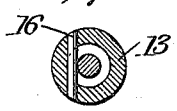


Fig. 2.

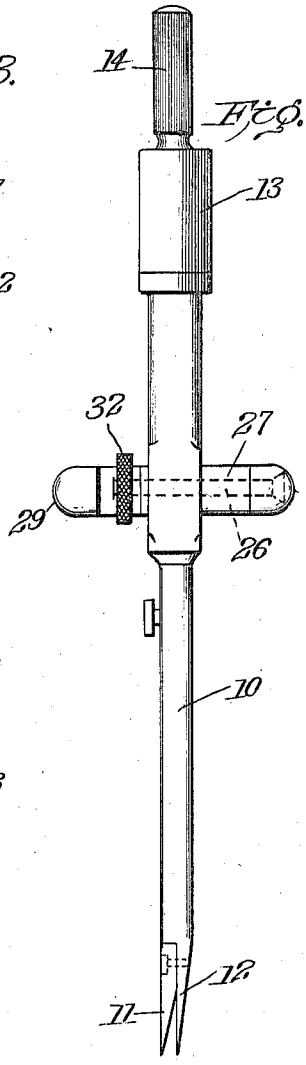
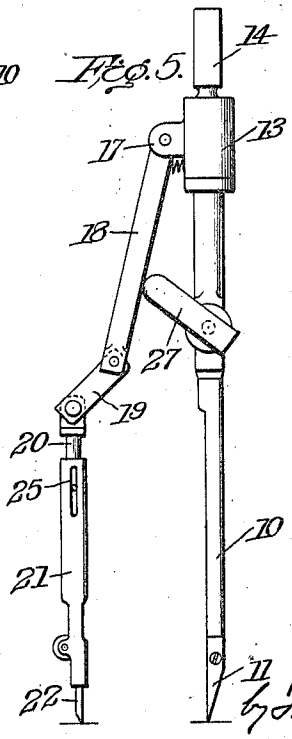


Fig. 5.



Witnesses

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UNITED STATES PATENT OFFICE.

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CURVE-SCRIBER.

1,168,546. Specification of Letters Patent. Patented Jan. 18, 1916.

Application filed July 3, 1914. Serial No. 848,820.

To all whom it may concern:

Be it known that I, CHARLES F. ODIN, a citizen of the United States, and resident of Elmira, county of Chemung, and State of New York, have invented certain new and useful Improvements in Curve-Scribers, of which the following is a specification.

This invention relates to compasses and more particularly to compasses for drawing ovals.

The invention has for its object the provision of a simple device for drawing ovals which is of strong and simple construction, accurate of operation and which is comparatively inexpensive to manufacture.

The novel features of the invention will be apparent from the following description taken in connection with the accompanying drawings, in which,

Figure 1 is a side elevation of a compass embodying my invention; Fig. 2 is an elevation of the right hand side of Fig. 1; Fig. 3 is a transverse section on the line 3—3 of Fig. 1; Fig. 4 is a transverse section on the line 4—4 of Fig. 1; and Fig. 5 is a side elevation on a reduced scale and showing the parts in different position from that in Fig. 1.

Referring to the drawings, 10 indicates a non-revoluble leg having the two points 11 and 12 at its lower end, these points being adapted to engage the paper to hold the leg. At the upper end of the leg 10 is a cap 13 having a handle 14 and a swivel connection with the leg, the latter being provided by means of a groove in the leg and a pin 16 carried by the cap 13 and engaging the groove, as shown in Fig. 4. On the side of the cap 13 is a pair of spaced lugs 17 to which the upper member 18 of the other leg is pivoted. A link 19 is pivoted to the lower end of the member 18 and has pivoted at its lower end a member 20 on which is slidably arranged the tubular member 21 carrying the pencil point 22. A spring 23 is arranged in the member 21 and bears against the end of the member 20, pressing the pencil 22 against the paper. The members 20 and 21 are held together by means of a pin 24 carried by the member 20 and slidably arranged in a slot 25 in the member 21.

The leg 10 has pivoted thereto by means of the screw 26 a guiding member 27 having a circular outline 28 and a semi-circular cross section, as indicated at 29 in Fig. 2. A spring 30 secured in a recess 31 in the member 18 and connected with the cap 13 holds the member 18 in engagement with the member 27 so that as the leg formed by the members 18, 19, 20 and 21 revolves about the leg 10, it is guided by the member 27. The member 27 is held in any desired position on its axis by means of a clamping nut 32, which engages the screw 26 and clamps the member 27 to the leg 10. By loosening the nut 32 the member 27 may be swung about its pivotal connection with the leg 10 above or below the position shown in Fig. 1 and it will be evident that when the member 27 is either above or below the position shown in Fig. 1 the point 22 will describe an oval when revolved about the leg 10. If it is desired to describe a complete oval this may be done by first describing one half and then turning the leg 10 around 180° and describing the other half. Similar ovals of different sizes may be described by adjusting the members 19 and 20 with respect to the member 18 and referring to Fig. 5 it will be seen that the parts are in position to describe a much larger oval than when in the position shown in Fig. 1. By having the outer surface of the member 27 rounded or semi-circular in vertical cross-section, the member 18 will have a smooth and uniform surface to slide on and the oval described will be regular and accurate. It will be seen that by interposing the pivotal link 19 between the members 18, 20, of the pencil leg of the compass, the pencil holder is enabled to occupy a perpendicular position, parallel with the non-revoluble leg 10.

Having described my invention what I claim and desire to secure by Letters Patent is,

In a device of the class described, the combination of a non-revolving leg of normally

fixed length, a telescopic two-jointed leg pivoted thereto and adapted to be revolved therearound, a semi-circular guiding member pivoted to said non-revolving leg on an axis extending transversely thereof and having a circular guiding surface engaged by said revoluble leg, a screw for clamping said member on said non-revolving leg in different positions, and spring means for holding said revoluble leg against said member.

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

CHARLES F. ODIN.

Witnesses:
JOHN A. MATHEWS,
JULIA B. GENN.