J. H. K. MILLER.

DIVIDERS, CALIPERS, AND LIKE INSTRUMENT.

APPLICATION FILED NOV. 6, 1919.

1,350,511. Patented Aug. 24, 1920.

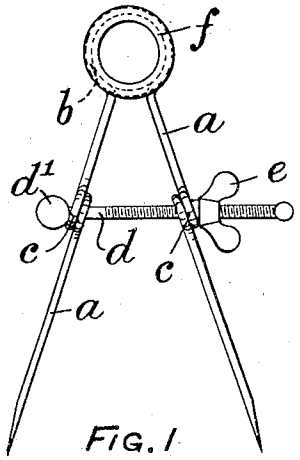

FIG. 1

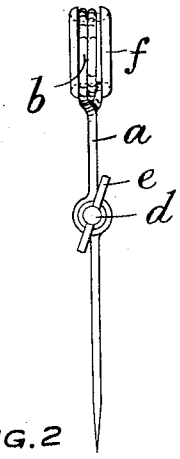

FIG. 2

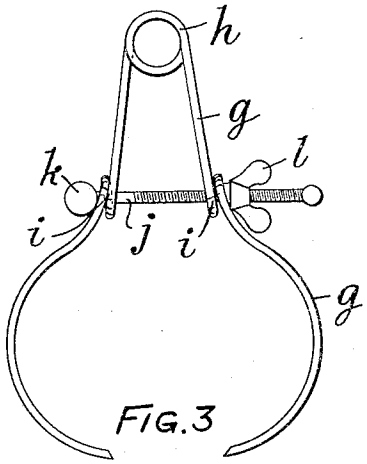

FIG. 3

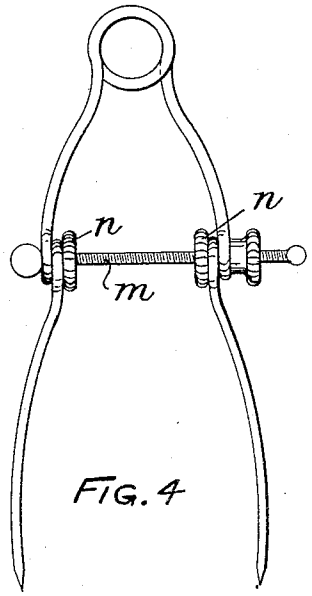

FIG. 4

Inventor.
John Henry Hadley Miller.
By B. Singer, Atty.

UNITED STATES PATENT OFFICE.

JOHN HENRY KEELEY MILLER, OF CLAPHAM, LONDON, ENGLAND.

DIVIDERS, CALIPERS, AND LIKE INSTRUMENT.

1,350,511. Specification of Letters Patent. Patented Aug. 24, 1920.

Application filed November 6, 1919. Serial No. 336,041.

To all whom it may concern:

Be it known that I, JOHN HENRY KEELEY MILLER, a citizen of the United Kingdom of Great Britain and Ireland, and residing at 434 Wandsworth road, Clapham, London, S. W. 8, England, have invented certain new and useful Improvements in Dividers, Calipers, and like Instruments, of which the following is a specification, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to dividers and calipers of the kind made from one piece of material, say wire, centrally bent into a form to provide a spring and with which a screwing device is employed for the purpose of adjusting the width between the legs of the calipers or dividers.

The object of the invention is to provide better means for the attachment of the screwing device, and for this purpose I form loops in the legs to receive the said device which can be placed therein without riveting or other such attachment, and I may also provide means for locking the screwing device at any desired position thus permitting the calipers or dividers to be freely handled without fear of alteration of the adjustment.

For the purpose of adding to the efficiency or appearance of the dividers or calipers, the bow may be more or less inclosed in any suitable material, such as by the eyelet hereinafter described.

I will describe my invention with reference to the accompanying drawings whereon:—

Figure 1 shows in elevation a pair of dividers fitted with a bolt and nut passed through the legs which are formed into loops, and

Fig. 2 is a side view of the dividers shown in Fig. 1. The dividers there shown have an eyelet fitted to the bow.

Fig. 3 shows in elevation a pair of calipers constructed on much the same lines as the dividers.

Fig. 4 shows in elevation a modified form of bolt and nut device for holding the legs at any required position.

Referring to Figs. 1 and 2, the legs *a* are in one piece with the looped bow or top *b*, which as will be seen from Fig. 2, is in two loops whereby the requisite spring is obtained.

Each of the legs *a* is formed into an eye *c* by simply turning the wire around, and through these eyes the bolt *d* is fitted, one end of the bolt having on it a knob *d'* and the other end of the bolt having fitted to it a fly nut *e*. An india-rubber or other suitable eyelet *f* is fitted to the bow *b* and serves to afford a better grip and to enhance the appearance of the instrument.

In Fig. 3 the calipers have the legs *g g* in one piece with the spring top *h* and are formed with eyes *i* through which the bolt *j* with knob *k* and nut *l* is fitted in much the same manner as that shown in Figs. 1 and 2.

In Fig. 4 the bolt or screw *m* is furnished with lock nuts *n n* inside the legs and by which they can be rigidly held at any position at which they may be set.

It must be understood that the form of top or bow may be as required and also that the eyes or loops for the bolt can be at one side of the legs and not centrally disposed as shown and that both these parts may be formed in any convenient manner by bending or coiling the wire.

What I claim and desire to secure by Letters Patent is:—

1. An instrument of the class described, comprising a single length of wire bent to form a spring looped at the top and bent also to form bolt-receiving loops in the legs, a threaded adjusting bolt passing through the loops in the legs and having nuts adapted to engage said loops.

2. An instrument of the class described, comprising a single length of wire bent to form a spring looped at the top and bent also to form bolt-receiving loops in the legs, a threaded adjusting bolt passing through the loops in the legs and having nuts adapted to engage said loops, the said adjusting bolt also having a lock-nut.

3. An instrument of the class described, comprising a piece of wire centrally looped to form the spring and having its legs also looped to provide openings, a threaded bolt passing through said openings and nuts on said bolts and adapted to engage said loops and close the legs against the pressure of the spring.

In witness whereof I have hereunto set my hand in presence of two witnesses.

JOHN HENRY KEELEY MILLER.

Witnesses:

ELIZABETH PARRY,

HENRY FAIRBROTHER.