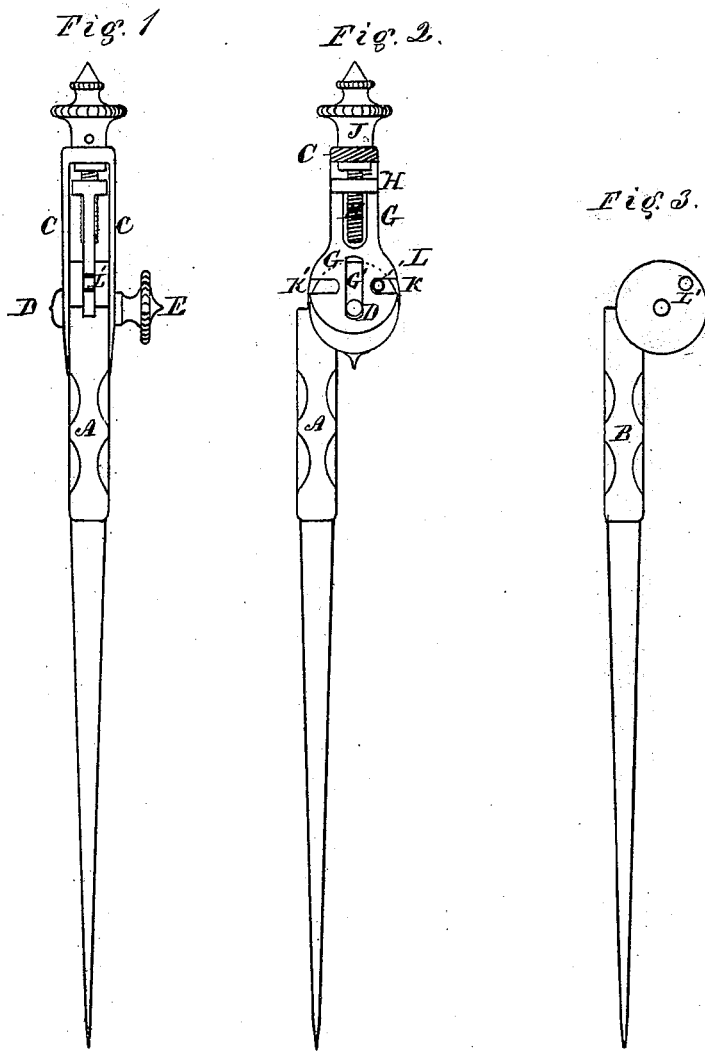


T. H. GRIGG.  
Compass.

No. 205,543.

Patented July 2, 1878.



Witnesses.

Inventor.

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# UNITED STATES PATENT OFFICE.

THOMAS H. GRIGG, OF WEST MERIDEN, CONNECTICUT, ASSIGNOR TO  
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## IMPROVEMENT IN COMPASSES.

Specification forming part of Letters Patent No. **205,543**, dated July 2, 1878; application filed  
May 22, 1878.

*To all whom it may concern:*

Be it known that I, THOMAS H. GRIGG, of West Meriden, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Compasses; and I do hereby declare that the following is a full, clear, and exact description thereof, whereby a person skilled in the art can make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Like letters in the figures indicate the same parts.

My improvement relates to such compasses, dividers, or calipers as are opened, closed, and adjusted by means of a screw, so that a fine motion is given to the points in order to set them to any desired opening with accuracy.

My invention has for its object the arrangement of the parts forming the screw-adjustment in a more convenient and compact form than has heretofore been in use.

My invention consists in the construction and arrangement of the several parts, as will be hereinafter described.

In the accompanying drawings, Figure 1 shows a side or edge view of a pair of compasses or dividers having my improvement. Fig. 2 shows a front or flat view of the same, with the exterior cheek and one of the legs removed, so as to show the interior construction. Fig. 3 shows the under side of the leg removed from Fig. 2.

A and B are the two legs of the compasses. C is the head, forming two cheeks, which extend downward, so as to embrace the tops of the legs, as shown in Fig. 1. D is a pin passing through the two cheeks and the tops of the two legs, to form the joint in the usual manner.

The pin D is furnished with the screw-nut E, by which the cheeks can be clamped and the legs firmly held in place when desired.

The tops of the legs are halved together, so

as to form a sector-joint, as is common in dividers, except that a space is left between the leaves for a central piece, G, which is moved up and down by means of the screw H. This screw turns in a nut in the top of the piece G, and also in a bearing in the top of the head C. The head J and a collar upon the under side of this last-named bearing prevent the shank of the screw from moving longitudinally in the part C.

The lower part of G, which lies between the tops of the legs, is provided with a slot, G', through which passes the pin D, and which permits G to move up and down by the turning of the screw H. The part G is also furnished with the two slots K and K' upon opposite sides, in which move the pins L and L', which are attached to the inner sides of the legs A and B, respectively. These pins are intended to fit the slots, so that they can have a radial motion in and out as the legs are closed or opened.

The operation of my invention is as follows: When the screw H is turned, by means of its head J, so as to press down the slide G, the slots K and K' force down the pins L and L' and turn the tops of the legs around the central pin D, so as to separate the points or open the compasses. When the screw is turned in the opposite direction the compasses are closed.

If at any time it is desired to clamp the legs so that they will not easily be moved, it is done by turning the nut E so as to compress the cheeks against the sides of the tops of the legs.

What I claim as my invention is—

The combination of the head C, the slide G, the screw H, and the pins L L' upon the legs of the compasses, substantially as and for the purpose herein described.

THOMAS H. GRIGG.

Witnesses:

THEO. G. ELLIS,  
GEO. G. STILLMAN.