H. T. ZEINER-HENRIKSEN.

ADJUSTABLE COMPASS DIAL.

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1,349,455. Patented Aug. 10, 1920.

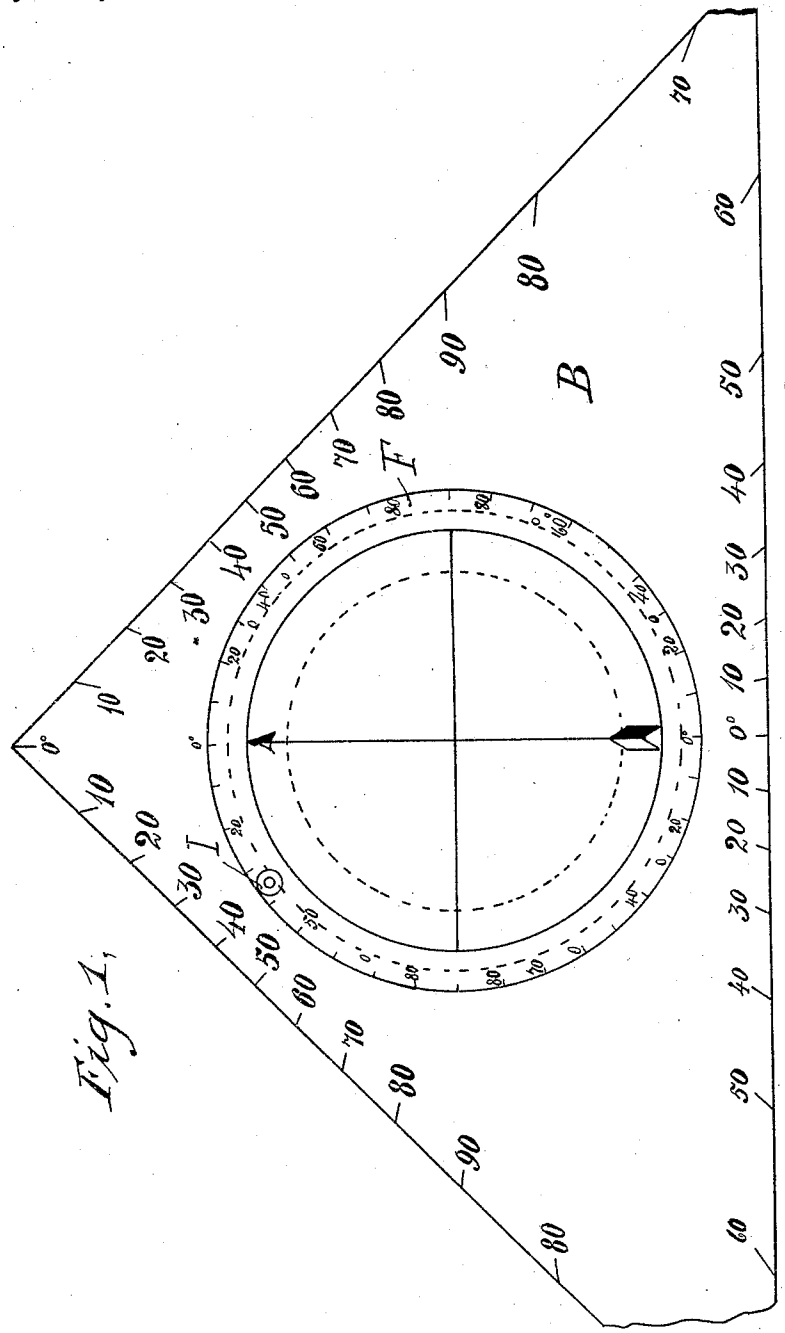


Fig. 1.



Fig. 2.

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ADJUSTABLE COMPASS-DIAL.

1,349,455. Specification of Letters Patent. Patented Aug. 10, 1920.

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To all whom it may concern:

Be it known that I, HANS THORVALD ZEINER-HENRIKSEN, of Framnæsveien 12, Christiania, Norway, have invented certain new and useful Improvements in Adjustable Compass-Dials; 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

The present invention has for its object an adjustable compass dial comprising two transparent disks rotatably connected with each other, one of said disks being provided with a complete set of points, while the other disk is provided with a rectangular cross adapted to indicate the four main directions of the compass.

Further according to the present invention one of the transparent disks is provided with a circular opening, while the other disk has a circular shape, its diameter being somewhat larger than the opening in the other disk. The circular disk is mounted on the other disk by means of an annular member fastened to the latter and provided with an inwardly projecting flange gripping over the edge of the circular disk.

Preferably the exterior disk member may be given the form of a rectangular triangle having the compass points marked off along its edge as well as along the edge of its circular opening.

On the drawing is illustrated a form of the invention.

Figure 1 is a plan and Fig. 2 a cross section of the compass dial as specified.

The inner disk member A is provided with an arrow for indicating the north south line, and another line perpendicular on the arrow east west. Disk A is fastened to the exterior disk B, which is in a form of a rectangular triangle by means of an annular member F of metal or the like, which is provided with an inwardly projecting flange G gripping over the edge of the inner disk A. The disk B is provided with a circular opening having a somewhat smaller diameter than disk A, so that disk A may be gripped with the hand on both sides for rotating the same. A screw I is provided for fastening disk A in a determined position with regard to ring F. A complete set of compass points is provided on annular member F or along the inner edge of opening H as well as along the exterior edge of disk B.

The apparatus above specified is used in the following manner:

The two dials are adjusted relatively to each other at an angle corresponding to the magnetic deviation at the place where the apparatus is used.

When it is desired to determine the direction of a line on a map, said line is continued until it crosses one of the longitude or latitude lines on the map. The apparatus is placed with its center at the cross points, and the arrow of the inner disk pointing due north. The direction of the line according to the compass may then be read off on the graduation of the exterior disk.

Claims.

1. An adjustable compass dial for determining the direction of a line on a map as indicated by a compass comprising two transparent disks adjustable relatively to each other one of said disks being in the form of a rectangular triangle and having a circular opening while the other disk has a circular shape and is rotatably mounted on the first named disk so as to cover the said opening said circular disk being provided with an arrow or a cross indicating the the north-south line or north-south and east-west, while the other disk is provided with a complete set of compass points.

2. An adjustable compass dial for determining the direction of a line on a map as indicated by a compass comprising two transparent disks adjustable relatively to each other one of said disks being in the form of a rectangular triangle with a central circular opening and provided along its edge and along the edge of said circular opening with a complete set of compass points while the other disk is circular and mounted rotatably on the first named disk so as to cover the said circular opening said last named disk being provided with lines forming a rectangular cross thereon.

3. An adjustable compass dial for determining the direction of a line on a map as indicated by a compass, comprising a rectangular triangular transparent plate having a central opening and provided along its edge with a set of compass points, a

transparent disk on the plate over the opening thereof, said plate being of considerably greater diameter than the opening, and an annular member secured to the plate and having a flange extending a short distance over the edge of the disk, said member being provided with a set of compass points.

In testimony that I claim the foregoing as my invention, I have signed my name in presence of two subscribing witnesses.

HANS THORVALD ZEINER-HENRIKSEN.

Witnesses:

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