

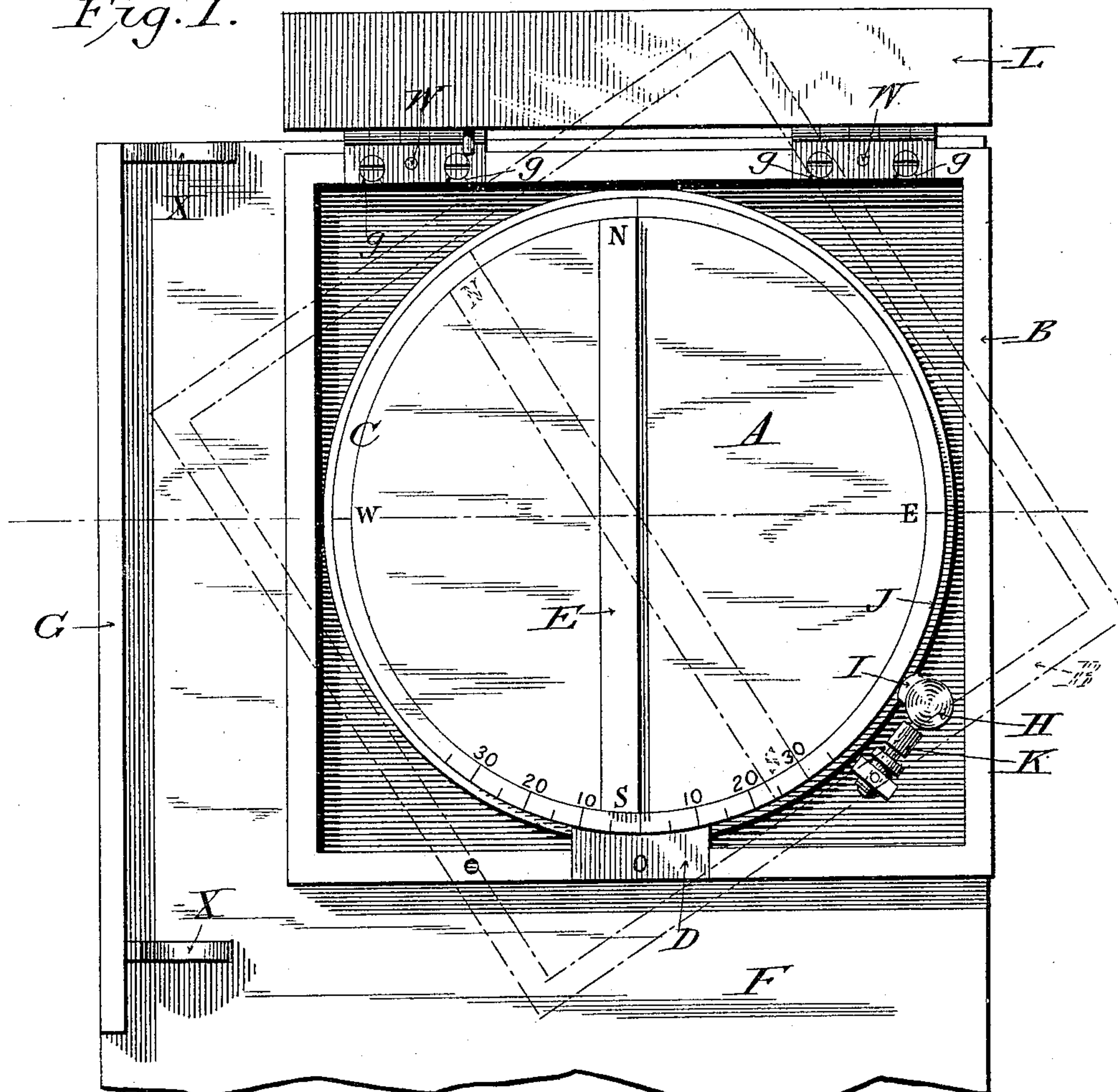
(No Model.)

J. B. McELROY.  
MERIDIAN DRAWING BOARD.

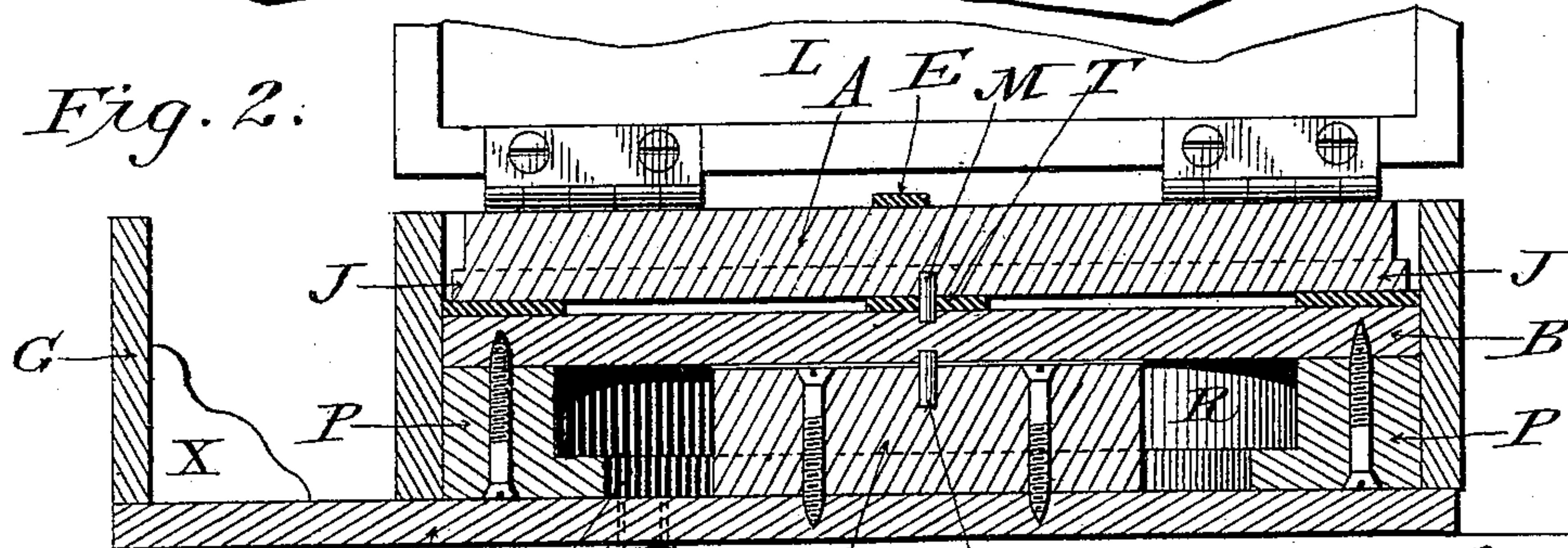
No. 449,049.

Patented Mar. 24, 1891.

*Fig. 1.*

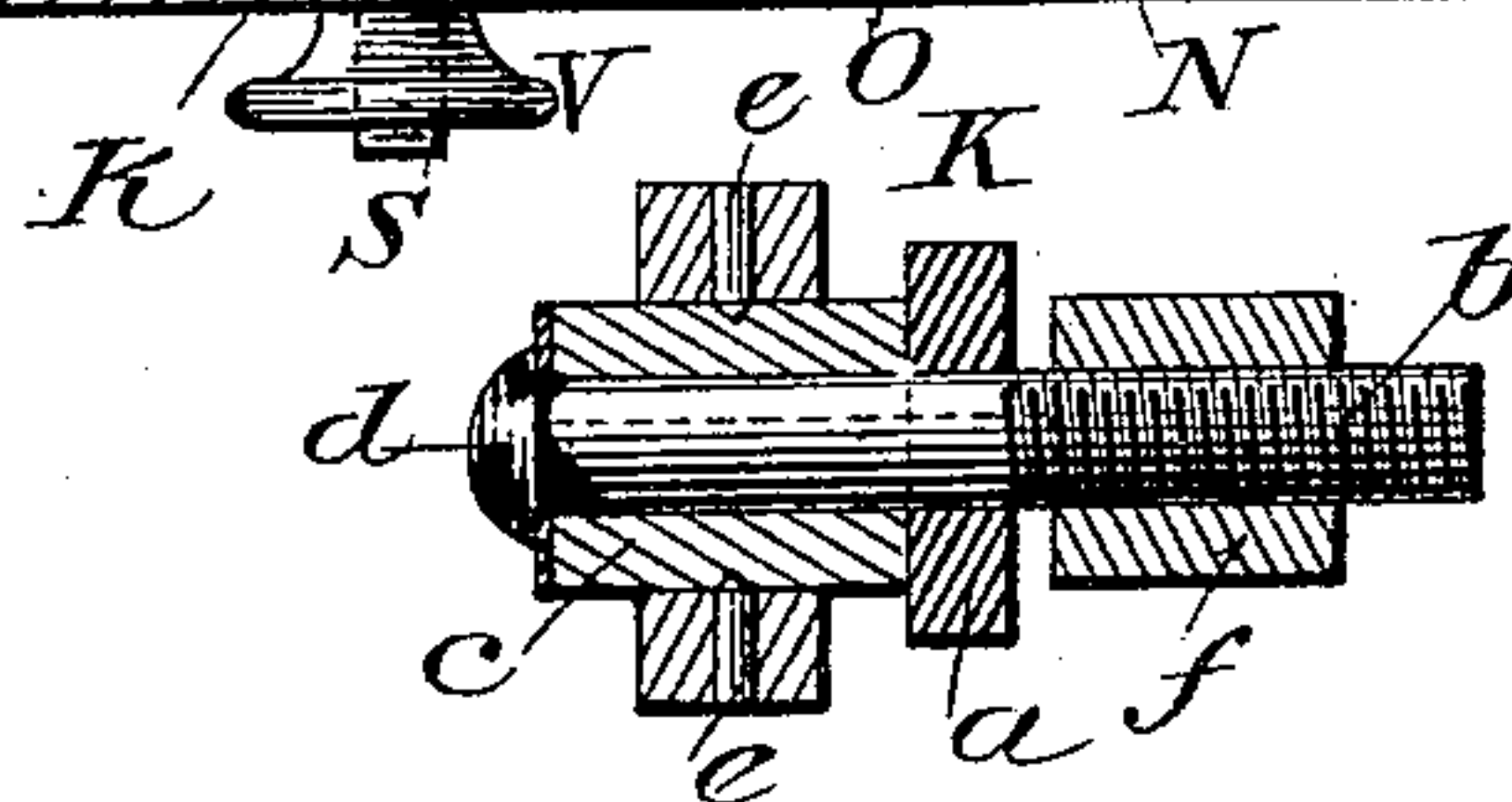


*Fig. 2.*



*Witnesses:*

T. M. Latimer  
Grand Duke



*Inventor.*

J. B. McElroy



# UNITED STATES PATENT OFFICE.

JOSIAH B. McELROY, OF CHARLESTOWN, WEST VIRGINIA.

## MERIDIAN DRAWING-BOARD.

SPECIFICATION forming part of Letters Patent No. 449,049, dated March 24, 1891.

Application filed January 20, 1890. Serial No. 337,565. (No model.)

*To all whom it may concern:*

Be it known that I, JOSIAH B. McELROY, a citizen of the United States, residing at Charlestown, in the county of Jefferson and State of West Virginia, have invented a new and useful Meridian Drawing-Board, of which the following is a specification.

My invention relates to improvements in drawing-boards, in which a large protractor is used in conjunction with a T-square and a quadrant; and the objects of my invention are, first, to provide an instrument admitting of an inscribed drawing in boundary work of medium size, and in work of larger size and of alignment to transfer the lines to paper on a draftsman's table, and to have an instrument so adjustable to the mean bearing in work of alignment as to keep the drawing within the limits of the paper; second, to have a board on one side of which the metallic protractor is embedded and to which the drawing-paper, of medium size, is fastened; third, to facilitate the adjustments and use of the several parts with reference to accurately and rapidly doing the work of plotting, drawing, and taking and describing angles. I attain these objects by the construction illustrated in the accompanying drawings, in which—

Figure 1 is a top view of the drawing-board A, as set in the case B. The circular protractor C is inserted in the board A and the vernier D in the case B. E is a meridian attached to the board A. F is a draftsman's table. G is a strip fastened to the top of and parallel with the edge of the draftsman's table F and of a height equal to that of the board A in the case B. K is a tangent-screw having a right-hand screw-thread cut on one end and a left-hand one on the other. H is a clamp-screw, and I is a clamp-plate pressing on the edge of the board A at J J in Fig. 2. The screw-sockets *c f*, one with a right-hand thread and the other with a left-hand, are adjustable by being suspended on the pivots *e e*, held by standards, one of these standards being attached to the case B and the other to the strip T. (Shown in Fig. 2.) *a* is the milled head, and *b* the stem of tangent-screw *k*, one end only being shown screw-cut at *f*. *d* is an adjustable stop. L is the lid of the case B, and hung with hinges having slots for removal, as shown by lines *g g g g*.

Fig. 2 is a sectional view showing the cen-

ter pin M, upon which the board A revolves in the case B, and the center pin N, fixed in the circular piece O, screwed to the draftsman's table, and by which the case B, holding the board A, is made to revolve on the draftsman's table F. P is a plate screwed to the under side of the case B, having its inner edge turned in the form of a groove, and of a diameter to give space between it and the circular piece O to receive the head R of the clamp-screw S, extending through a hole in the top of the table F. T is an end view of a strip having a hole through it at one end to receive the center pin M, and on the other end is fastened the clamp-screw H and one of the tangent-screw standards.

Similar letters refer to similar parts in both figures.

I am aware that prior to my invention drawing-boards have been made with revolving protractors and T-squares. I therefore do not claim such a combination, broadly; but

What I do claim as my invention, and desire to secure by Letters Patent, is—

1. The combination, in a meridian drawing-board, of a large protractor C, embedded in the face of and virtually being a part of the revolving board A, a case B, to which the vernier D is fixed and the tangent screw-standard at *c* is fastened a reversely-cut tangent-screw K, and clamp-screw H, with a T-square, all substantially as set forth.

2. In a meridian drawing-board, the combination of a meridian-strip E, attached to the board A, set in the case B, which case, by means of the center-pin N, fixed to circular piece O, the head-plate R, and the clamp-screw S; is adjustable and clamped to any angle of the line of the strip E and the line of the strip G, attached to the table F, substantially as described.

3. The combination, in a meridian drawing-board, of an adjustably-revolving board A and protractor C, having a meridian-strip E thereon, a clamp-screw H, a reversely-cut tangent-screw K, a vernier D, an adjustable case B, and clamp-screw S, with a T-square, a quadrant, a draftsman's table F, and an attachment G thereto, for the purposes specified, substantially as set forth.

J. B. McELROY.

Witnesses:

J. E. EASTERDAY,

H. K. AMBLER.