May 25, 1926. 1,586,067

H. H. CHRISTIAN

DRAWING BOARD

Filed May 29, 1923 2 Sheets-Sheet 1

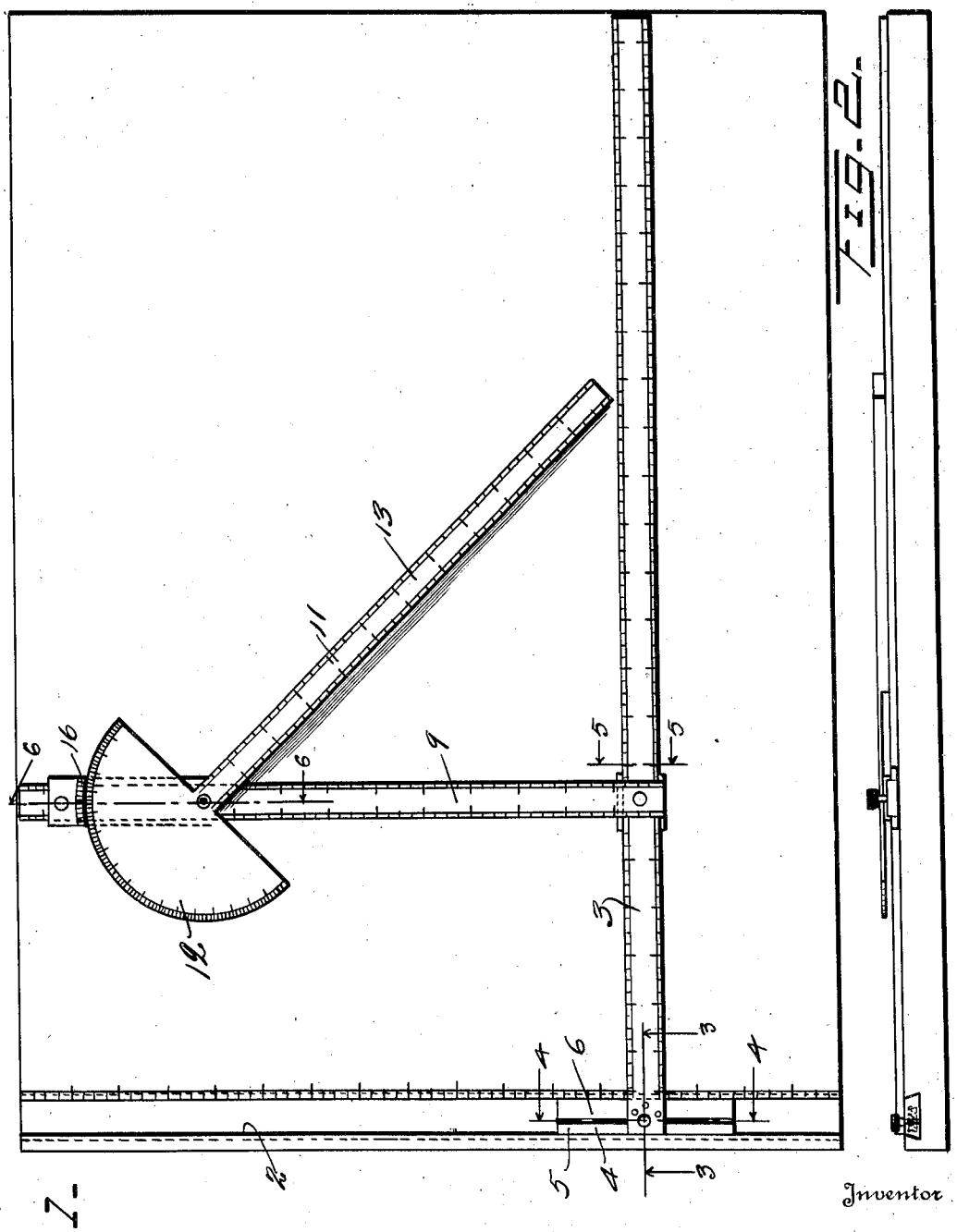


Fig. 1.

Fig. 2.

Inventor

Harry H. Christian

May 25, 1926. 1,586,067

H. H. CHRISTIAN

DRAWING BOARD

Filed May 29, 1923 2 Sheets-Sheet 2

Fig. 3.

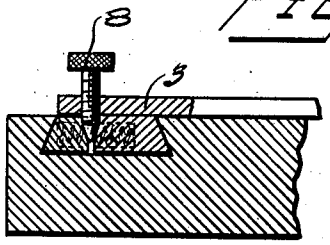


Fig. 4.

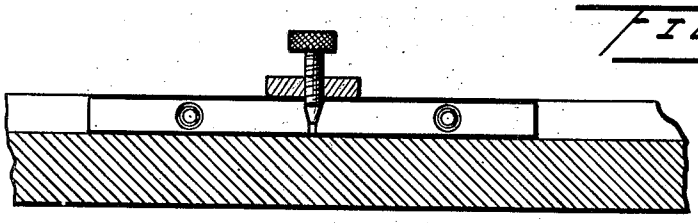


Fig. 5.

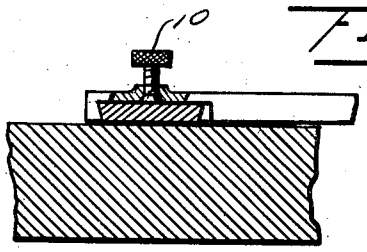


Fig. 6.

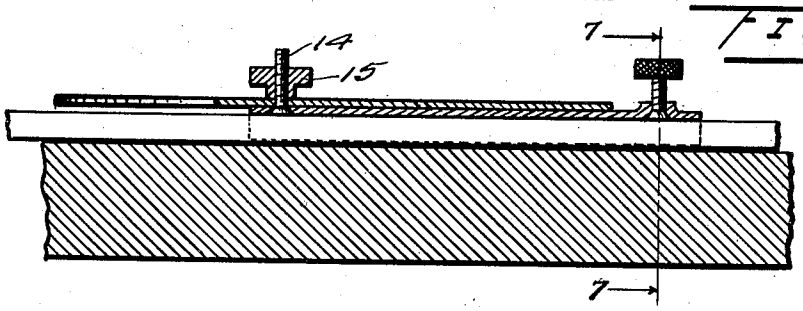
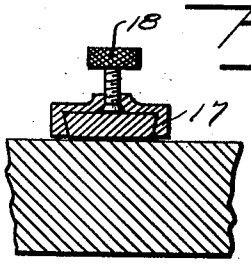


Fig. 7.



Inventor

Harry H. Christian

Patented May 25, 1926. 1,586,067

UNITED STATES PATENT OFFICE.

HARRY H. CHRISTIAN, OF SEBASTOPOL, CALIFORNIA.

DRAWING BOARD.

Application filed May 29, 1923. Serial No. 642,233.

This invention relates to improvements in draughting instruments, and more particularly to a combination draughting board, T-square, triangle and protractor.

The primary object of the invention is to provide a device which will have the combined features to take the place of traingles, protractors, and parallel rulers on a drawing board.

Other objects of the invention will appear upon consideration of the following detailed description and accompanying drawings, wherein:

Figure 1 is a plan view of the device,

Figure 2 is an edge elevation,

Figure 3 is a cross section on the line 3—3 of Figure 1,

Figure 4 is a cross section on the line 4—4 of Figure 1,

Figure 5 is a cross section taken on the line 5—5 of Figure 1,

Figure 6 is a cross section on the line 6—6 of Figure 1, and

Figure 7 is a cross section on the line 7—7 of Figure 6.

Referring to the drawings by numerals, the drawing board 1 is provided at one of its side edges with a transverse groove 2 which extends entirely across the board and is dovetailed as shown. The T-square 3 is provided with a head 4 which is fitted in the dovetailed groove 2, and this head is divided in two sections 5 and 6. Sockets are provided in the sections 5 and 6 of the head 4 to receive spring element which acts to spread the sections 5 and 6 apart so that they will be firmly held in the dovetailed groove 2. A thumbscrew 8 passes through the shank 3 of the T-square and into the head 4 for clamping the T-square to the board in any desired adjusted position. The edges of the T-square are graduated and the edge of the groove 2 is also graduated to permit the user to make any desired adjustment without the use of scales or rulers.

The movable scale 9 is attached to the shank 3 of the T-square and is disposed at right angles thereto, and is secured in position by a thumbscrew 10 which will be screwed downwardly to press against the T-square for holding the scale 9 in any desired adjusted position.

Near the opposite end of the scale 9, a protractor 11 is pivotally mounted, and this consists of the semi-circular plate 12 and the protractor arm 13, which has its edges graduated as shown. The pivot member 14 connects the protractor to the scale 9 and a thumbscrew 15 is employed to clamp the protractor in any desired adjusted position. The marginal edge of the protractor plate 12 is graduated in the usual manner and registers with graduations 16 on the end of the scale 9, so that the angular position of the arm 11 may be determined by swinging the protractor on its pivot. Instead of connecting the protractor directly to the scale 9, a sleeve 17 is provided on the scale which, as shown in cross section in Figure 7, fits over the edges of the scale and is provided with a screw 18 adapted to clamp the sleeve in any desired adjusted position. The screw 14 is connected to the sleeve as shown in Figure 6 and the thumbnut 15 may be employed to tighten or loosen the protractor on the sleeve. The sleeve, of course, may be longitudinally adjusted on the scale 9 to move the protractor to any desired position with respect to the marginal edges of the board, and by adjusting the clamping nut 15 the protractor may be fixed at any angle so that the T-square, scale and protractor may be used without the use of triangles or separate implements such as are now generally employed.

Minor changes may be made in the details of construction without departing from the spirit of the invention or the scope of the claim hereunto appended.

What I claim is:

Drawing apparatus comprising a board having a groove, a T shaped square having a head composed of sections which are normally sildable in the groove, the sections being provided at their inner edges with aligned sockets, coil springs having their end portions housed within the sockets and the said springs having their axes disposed transversely with relation to the longitudinal dimension of the sections, said

springs being under tension and with a tendency to hold the outer edges of the sections in frictional contact with the sides of the groove, a blade fixed to one of the sections at a point midway between the axes of the coil springs and disposed transversely of both of the sections and a screw threaded through the blade and having a conical end portion entering between the sections and adapted to spread the sections to fix the T square with relation to the board, the axis of the screw being disposed in a plane at an angle to the plane in which the axes of the coil springs lie.

In testimony whereof, I have affixed my signature.

HARRY H. CHRISTIAN.