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A. P. JACOB

DRAWING BOARD ATTACHMENT

Filed March 4, 1927

Fig. 1.

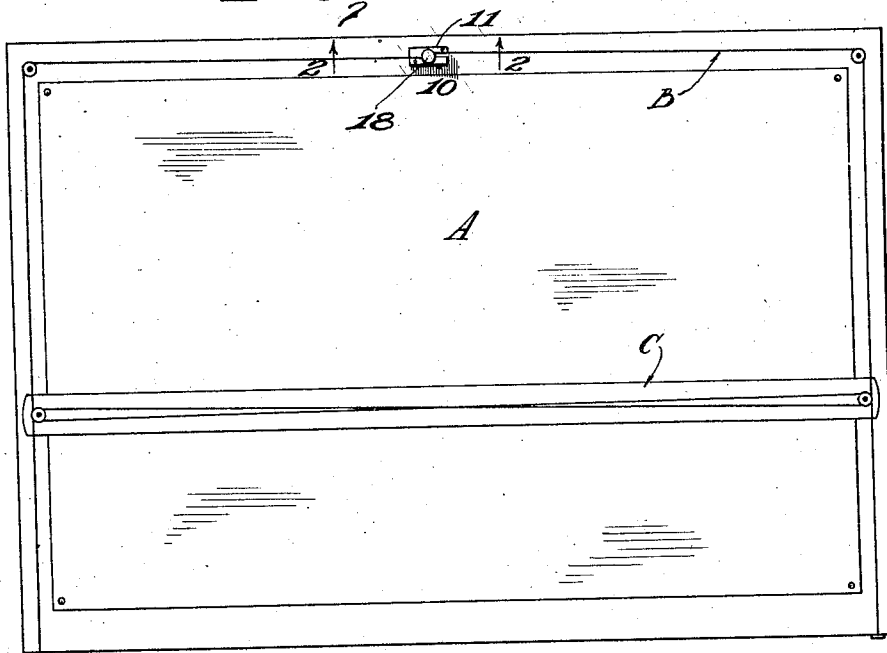


Fig. 2.

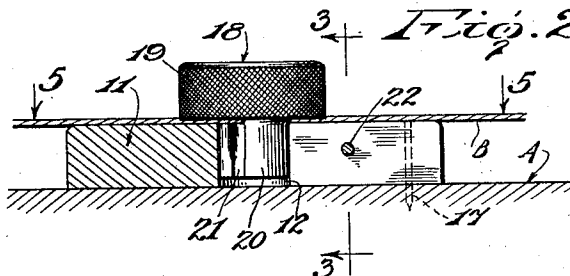


Fig. 5.

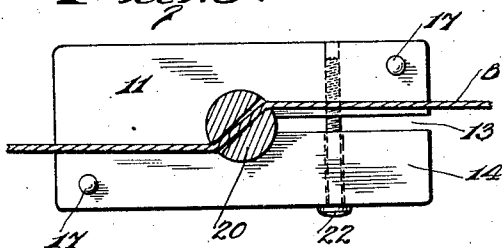


Fig. 3.

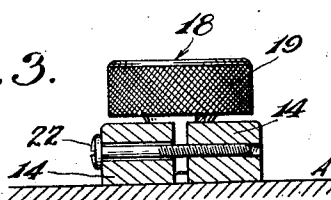
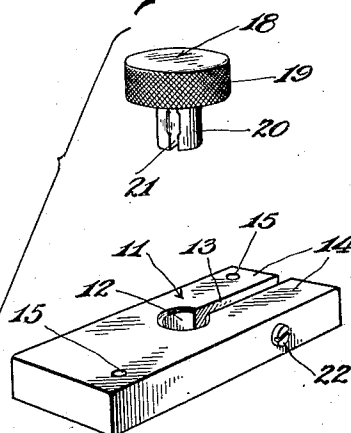


Fig. 4.



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DRAWING-BOARD ATTACHMENT.

Application filed March 4, 1927. Serial No. 172,899

This invention relates to a drawing board attachment and has particular reference to a winding device for regulating the tension on and firmly securing the cable usually provided on drawing boards for permitting the angular adjustment of parallel straight edges.

5 An object of the invention resides in the provision of a means for taking up any slack in the cable and at the same time to firmly secure the cable to the board, preventing lateral movement, so that the straight edge may be maintained in a true horizontal position upon the drawing board.

10 Another object of the invention is to provide a cable tensioning device for the above purpose which may be applied to drawing boards now in use without affecting the change of any construction therein.

15 A further object is to provide a cable tensioning device which is extremely simple in construction, inexpensive of manufacture, and efficient for the purpose intended.

20 With these and other objects in view, the invention resides in certain novel construction and combination and arrangement of parts, the essential features of which are hereinafter fully described, are particularly pointed out in the appended claims, and are illustrated in the accompanying drawing, in which:—

25 Figure 1 is a plan view of a drawing board with my attachment mounted thereon.

30 Figure 2 is an enlarged vertical sectional view on the line 2—2 of Figure 1.

35 Figure 3 is a sectional view on the line 3—3 of Figure 2.

40 Figure 4 is a perspective view of my device per se and showing the parts in a separated position.

45 Figure 5 is a horizontal sectional view on the line 5—5 of Figure 2.

Referring to the drawing, the reference numeral A designates a drawing board of the ordinary construction and which has a cable B extending therearound adjacent the outer edges thereof and on which a straight edge C is mounted for angular adjustment.

50 My attachment is shown in its entirety as at 10 and includes an attaching member or base 11 which is constructed of wood or other light material. The base is provided with a central opening 12 from which a slot 13 extends to one of its edges to provide spaced furcations 14. Openings 15 are provided on opposite sides of the central open-

ing to receive screws or like fastening elements 17 which enter the drawing board A to rigidly support the device thereon. The device is mounted on the board A adjacent its top edge and in the path of the top lead of the cable B. Turnably mounted in the opening 12 and removable therefrom is a winding stem 18 which includes a knurled head 19 and a reduced shank 20 having a kerf or slot 21 extending inwardly from the outer end thereof. The slot is of a thickness to receive the cable B and of a length equal to the length of the stem or shank 20. The shank is adapted to frictionally engage the walls of the opening 13, and for regulating the degree of friction, I provide a set screw 22 which is threaded into one of the furcations 14 to bring the same into closer engagement with each other to contract the walls of the opening 12 to increase the friction, or to spread the furcations further apart to reduce the friction between the shank and the walls of said opening as desired. The furcations are yieldable to permit of this adjustment.

In practice, the winding stem is supported from the base 11 and is brought down over the top lead of the cable B so that the cable is received in the slot or kerf 21 thereby keying the cable to the shank of the winding stem. The shank is then inserted into the opening 13 where the same frictionally engages the walls thereof and causes the cable to move to the closed end of the kerf and against the head 19. The head is then given a slight turning movement to cause any slack in the cable to be wound about shank thus pulling the cable taut. The head is then pressed down on the cable to prevent lateral slipping so as to maintain the straight edge in a perfectly aligned position upon the drawing board. Should the tension of the cable when drawn taut overcome the friction between the winding stem and the walls of the opening 13, the set screw 21 is actuated to increase the friction to a point sufficient to prevent loosening of the cable. When slack is desired in the cable in order to angularly adjust the straight edge, the winding stem may be turned in an opposite direction to pay out sufficient cable to permit of the adjustment.

From the foregoing description, it will be seen that I have provided a device which may be easily attached to a drawing board now in use and which will fill a long felt

want as draftsmen have found it most difficult to maintain the cable in different tensional conditions. The device is quick and positive in its actions and will not interfere with the adjustment of the straight edge nor with the work of a draftsman.

What is claimed as new is:—

1. A cable tensioning device for drawing boards comprising a base having an opening therein, and a winding stem having a cable receiving kerf therein and frictionally engageable with the walls of said opening, and means for varying the degree of friction between the winding stem and the walls of said opening.

2. A cable tensioning device for drawing boards comprising a base having an opening therein, said base being bifurcated from said opening to one of its edges, a winding element including a head and a reduced shank insertible in said opening for frictional engagement with the walls of said opening, and a cable receiving kerf provided in the free end of said shank.

3. A cable tensioning device for drawing boards comprising a base having an opening therein, said base being bifurcated from said opening to one of its edges, a winding

element including a head and a reduced shank insertible in said opening for frictional engagement with the walls of said opening, a cable receiving kerf provided in the free end of said shank, and an adjusting screw passing through the furcations formed by said bifurcation for varying the degree of friction between said stem and the walls of said opening.

4. A cable tensioning device for drawing boards comprising a base adapted to be fixedly mounted on a drawing board and having an opening therein, a winding stem provided with a manipulating head at one end thereof and having a cable receiving kerf extending inwardly from the opposite end and terminating at the inner side of said manipulating head, said winding stem being turnably mounted in said opening for frictional engagement with the walls thereof, the manipulating head of said winding stem adapted to overlie and engage the cable when the same is disposed in the closed end of said kerf.

In testimony whereof I have affixed my signature.

ALFRED P. JACOB.