P. L. RAFFO.

DRAWING BOARD ATTACHMENT.

APPLICATION FILED APR. 16, 1919.

1,313,732. Patented Aug. 19, 1919.

Fig. 1.

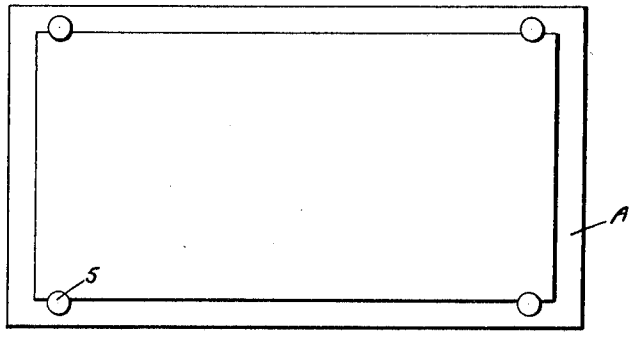


Fig. 2.

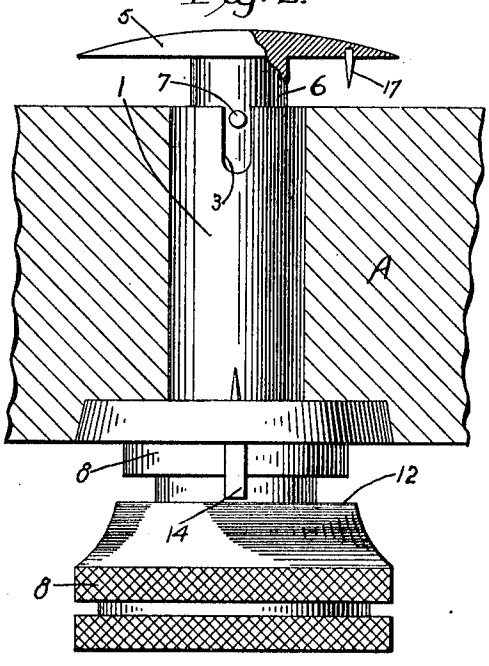


Fig. 3.

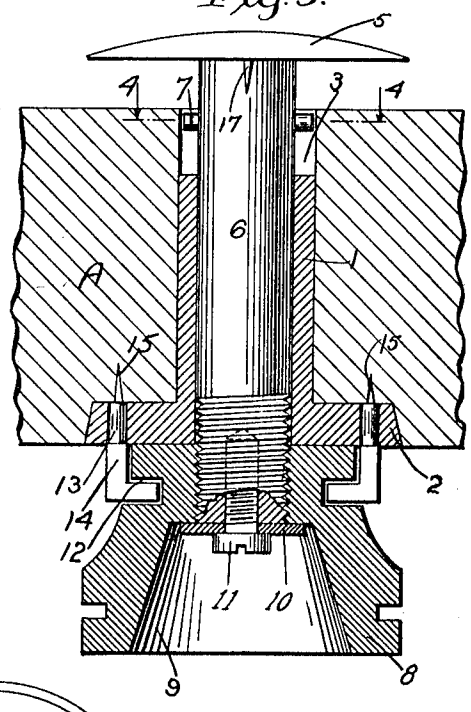
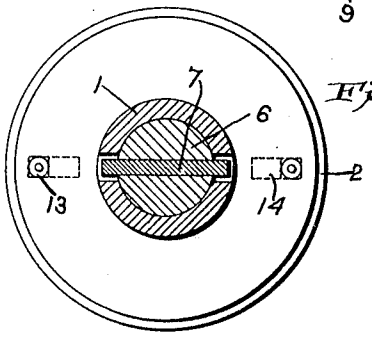


Fig. 4.



WITNESSES

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DRAWING-BOARD ATTACHMENT.

1,313,732. Specification of Letters Patent. Patented Aug. 19, 1919.

Application filed April 16, 1919. Serial No. 290,376.

To all whom it may concern:

Be it known that I, PAUL L. RAFFO, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, county of New York, and State of New York, have invented a new and Improved Drawing-Board Attachment, of which the following is a full, clear, and exact description.

This invention relates to drawing board attachments, and more particularly to an adjustable drawing board tack-pin used for holding a sheet of drawing paper in fixed position upon a drawing board.

A broad purpose of this invention is to provide a drawing board attachment comprising adjustable means fitted into the drawing board for clamping a sheet of drawing paper in position on the board, said attachment being provided with screw-threaded clamp means, the device being mounted in the board as a permanent part thereof.

Finally, it is an object to provide the design of drawing board clamp means for securing paper thereto, which will be simple and positive in operation and unlikely to get out of working order, and a device which will always be intact ready to function as above described.

With the above and other objects in view the invention has relation to certain combination and arrangements of parts, an example of which is described in the following specification, pointed out in the appended claims, and illustrated in the accompanying drawings, wherein:

Figure 1 shows a plan view of a drawing board provided with the paper clamp means, with a sheet of drawing paper secured to the board by said means.

Fig. 2 illustrates an elevational view of the drawing board clamp fixed in the board.

Fig. 3 shows a vertical sectional view of the device mounted in a drawing board.

Fig. 4 is a sectional view taken upon the line 4—4 of Fig. 3.

Referring more in particular to the drawings, wherein the several parts thereof are designated by the several reference characters, the numeral 1 points out a bushing provided with an integral flange 2, said bushing provided with diametrically opposite slots 3 cut in the upper end thereof extending parallel to the axis of said bushing. This bushing is pressed into an appropriate sized hole formed in the drawing board A with the flange 2 flush with the underneath side of said board.

A paper clamp head 5 is integrally formed upon a screw-threaded shank or bolt 6. This bolt 6 is slidably confined within the bushing, and the pin 7 is fixed in the bolt with the ends thereof projecting into the slots 3. The pin heads 7 register with the slots and prevent rotation of the bolt in the bushing. The bolt is screw-threaded as described and receives a knurled thumb screw head 8 which is counterbored at 9 thus providing a cavity therein. The bolt end is fitted with a plate or washer 10 fixed upon the end thereof by a screw 11 or other appropriate means. The screw-threaded end of the bolt terminates within the counterbore of the knurled thumb nut and the plate 10 prevents the bolt 6 being screwed off of the thumb nut, thus retaining the thumb nut in position as illustrated.

The thumb nut is provided with an external groove 12. A member comprising a screw-threaded stud 13 integrally formed with a square bodied hook 14 is secured in the flange 2 with the hook portion registering with the external groove of the knurled thumb nut. A point 15 is integrally formed with the stud and sticks into the wooden board. This construction rotatably confines the knurled nut to the flange and bolt, and the points 15 prevent the rotation of the flange should it ever become loosened within the board. A pin 17 is fixed on the underneath surface of the clamp head 5.

When the knurled thumb nut is rotated the bolt is moved upwardly in the bushing and restrained from rotation thus moving the paper clamp head 5 away from the surface of the board. A sheet of drawing paper will then be slipped under the clamp head and the knurled thumb nut rotated to draw the clamp head downwardly against the paper. The pin 17 will embed itself in the paper preventing any possible slip or movement of the paper under the clamp head.

This form of drawing board attachment will materially increase the value and utility of a board so equipped and provides the draftsman with a permanent means of securing the drawing paper to his board obviating all inconvenience occasioned by using the present day methods such as tacks, springs, clamps and the like.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent is:

1. A drawing board attachment of the character described, comprising in combination; a screw threaded bolt, a clamping head formed thereon, a knurled thumb nut inwardly threaded and screwed on the threaded bolt, means for confining the knurled thumb nut upon the bolt, and a pin secured to the bolt and registering in a slot to prevent rotation of the bolt.

2. A drawing board attachment for securing the paper to the drawing board, comprising in combination; a bushing adapted to be fixed within a hole in the drawing board, a flange integral with the bushing, a pair of screw-threaded hooks provided with a squared body portion fixed in the flange, a knurled thumb nut provided with an external groove, said groove engaged by the hooks, and a clamp coöperating with the knurled thumb nut for the purpose of clamping the paper to the board.

3. A drawing board attachment, comprising in combination; a bushing, a flange formed on one end of the bushing, a screw-threaded bolt slidably retained in the bushing, a clamp head formed on the bolt, a knurled thumb-screw provided with an external groove, and hooks fixed to the flange and engaging the external groove for retaining the knurled thumb-screw in position.

4. A drawing board attachment, comprising in combination; a bushing, a flange formed on one end of the bushing, a screw-threaded bolt slidably retained in the bushing, a clamp head formed on the bolt, a knurled thumb-screw provided with an external groove, and hooks fixed to the flange and engaging the external groove for retaining the knurled thumb-screw in position, and a washer fixed to the end of the screw-threaded bolt to limit the sliding motion of the bolt in the washer.

PAUL LOUIS RAFFO.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."