May 23, 1950 C. R. RITTER 2,508,470

DRAWING BOARD ATTACHMENT

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Fig. 1.

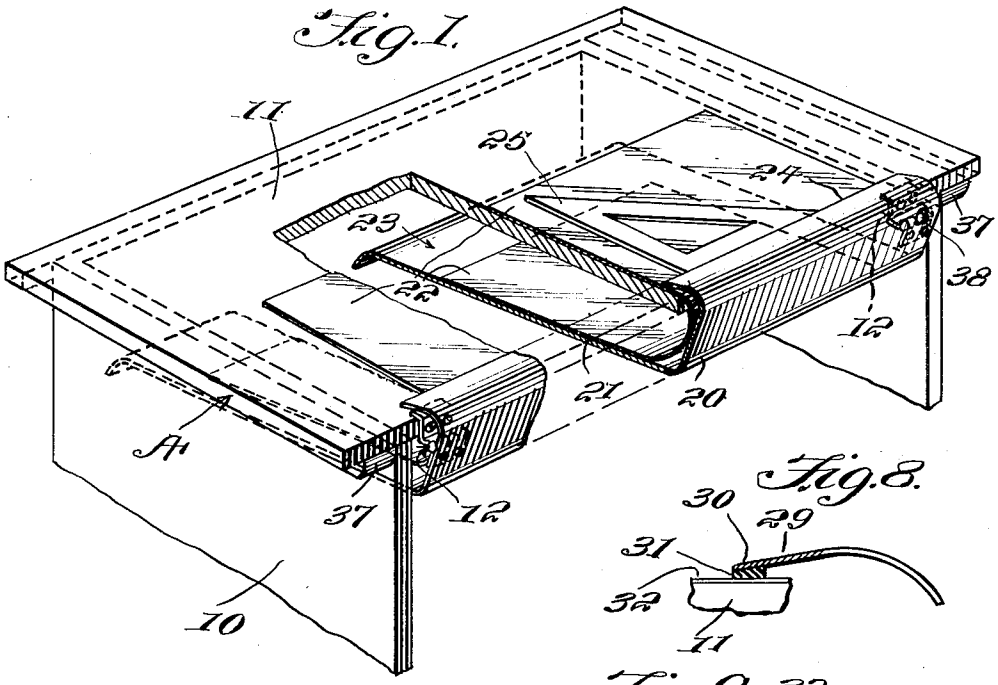


Fig. 8.

Fig. 9.

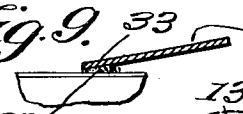
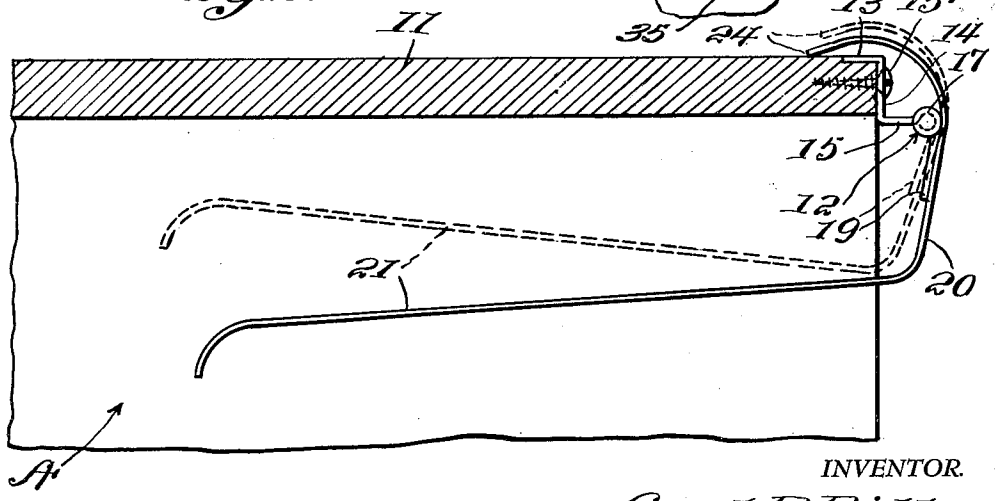


Fig. 2.



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Fig. 3.

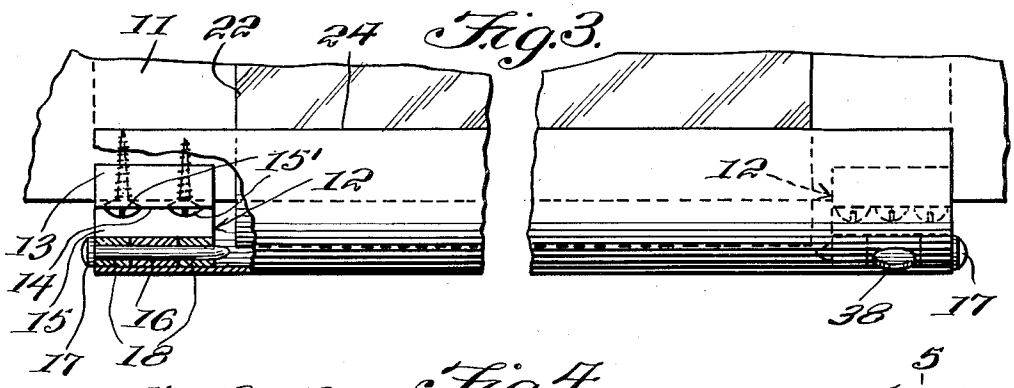


Fig. 4.

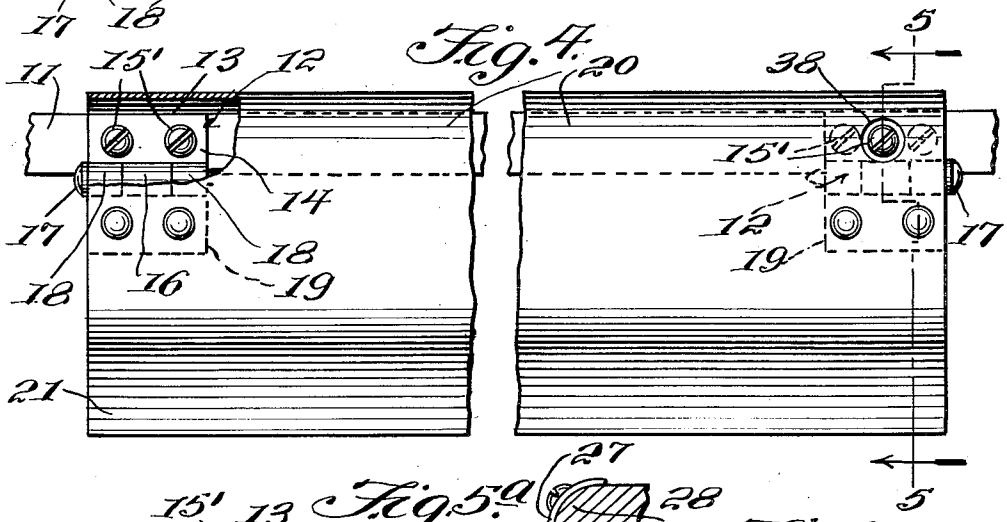


Fig. 5a.

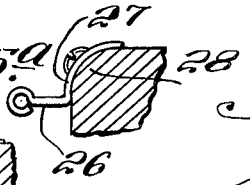


Fig. 6.

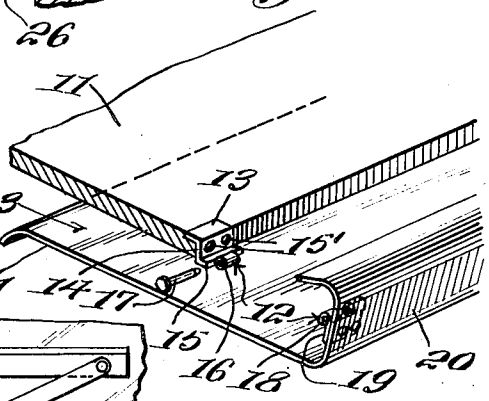


Fig. 5.

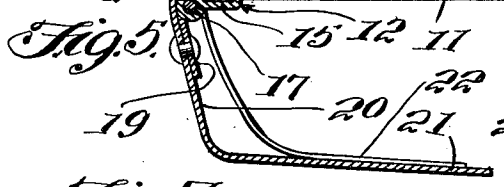
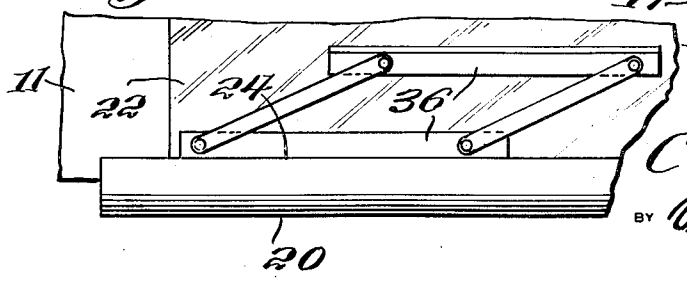


Fig. 7.



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DRAWING BOARD ATTACHMENT

Curt R. Ritter, New York, N. Y.

Application July 2, 1946, Serial No. 680,941

2 Claims. (Cl. 45—131)

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The invention relates to a drawing board attachment, and more especially to a draftsman's appliance.

The primary object of the invention is the provision of an appliance of this character, wherein material of sheet form to be used by draftsmen in mapping out drawings or the drafting of plans or other matter, can be conveniently held in place without the use of thumb fasteners, tackings or the like, onto a drawing base, bed or board, the appliance being of novel construction and is unique in the assembly of its parts, which are few in number.

Another object of the invention is the provision of an appliance of this character, wherein the material to be drawn upon is readily adjustable, so that it can be delivered into working position on the support constituting the drawing bed, base or board, and the drafting instruments are susceptible of wide range arrangement, while the appliance can function as a straight edge abutment for such instruments during the use thereof.

A further object of the invention is the provision of an appliance of this character, wherein its construction enables the association thereof with a drawing support, which latter functions as a board for draftsman's service, the said appliance being a clamp for the material worked upon, and is conveniently releasable for the rearrangement of the material at will.

A still further object of the invention is the provision of an appliance of this character, which is simple in construction, thoroughly reliable and efficient in operation, strong, durable, readily and easily handled with dispatch, and inexpensive to manufacture and install.

With these and other objects in view the invention consists in the features of construction, combination and arrangement of parts as will be hereinafter more fully described, illustrated in the accompanying drawings, which disclose the preferred embodiment of the invention, and pointed out in the claims hereunto appended.

In the accompanying drawings:

Figure 1 is a fragmentary perspective view, partly broken away, of the appliance, constructed in accordance with the invention.

Figure 2 is a fragmentary vertical transverse sectional view thereof, showing by full lines one position and by dotted lines another position of the appliance.

Figure 3 is a fragmentary top plan view, partly broken away, of the appliance.

Figure 4 is a front view, partly broken away.

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Figure 5 is a sectional view taken on the line 5—5 of Figure 4 looking in the direction of the arrows.

Figure 5a is a fragmentary detail view similar to Figure 5 showing a slight modification.

Figure 6 is a fragmentary perspective view showing the elements of the appliance before complete assembly.

Figure 7 is a fragmentary plan view showing the use of a straight edge drawing instrument in place with respect to the appliance.

Figure 8 is a fragmentary vertical transverse sectional view showing a slight modification to the gripping edge of the appliance.

Figure 9 is a view similar to the Figure 7 showing a further modification thereto.

Similar reference characters indicate corresponding parts throughout the several views in the drawings.

Referring to the drawings in detail, A designates generally a portion of a vertical stand, which in its entirety may constitute a work counter, bench or other support, and can be of any selected construction, having the side leg panels 10, and a flat top section 11, which serves as a drawing board for drafting purposes, in structural designing and detailing by artificers, such as draftsmen, and in reality may be in the nature of a desk or the like. In this instance the top section 11 is of elongated formation, yet it may be of any other shape, as may be desired under practical construction.

The appliance constituting the present invention comprises a releasable clamping device, involving a pair of spaced stationary hinge leaves 12, each in the form of a substantially Z-shaped plate having a flange 13 at right angles to the intermediate portion 14, and a reversely disposed flange 15 at right angles to the said intermediate portion, the latter being of size to match the thickness of the top section 11, for abutment with the edge thereof at the longer side thereof. The intermediate portion 14 of each leaf 12 is made secure to this top section 11 by fasteners 15'.

On the flange 15 is formed a pintle sleeve 16, for a hinge pintle 17, which is offset relative to the side edge of the top section 11 outwardly thereof, while the flange 13 is in overlapping relation to the upper surface of this section 11, which is counterseated therein to be flush therewith.

In the pintle sleeve 16 is the pintle 17 for the pintle sleeve 18 of a hinge leaf 19, which is secured to the inner side of a material clamping jaw 20 which is upwardly and inwardly curved for a distance over the top section 11 at the hing-

ing edge for the device. The clamping jaw 20 has a continuation lever 21 which is carried beneath the top section 11 at the knee space below the latter and formed within the work counter, bench or other support A, as best seen in Figures 1 and 2 of the drawings, so that a person working on the top section 11 can hand or leg operate the jaw for the opening thereof on upward pressure upon this lever 21 to release it from clamping engagement with sheet material 22 trained over the top section 11 from within the vacancy 23 therebeneath, as is apparent from said Figure 1.

The jaw 20 has a straight gripping portion 24 accessible at the upper surface of the top section 11, so that a drafting instrument, as exampled at 25, in Figure 1 of the drawings, can make contact with this edge 24, in the execution of drawings onto the material 22, as carried forth by a draftsman working at the counter, bench or other support A, as should be obvious.

In Figure 5a there is shown a slight modification of the invention, wherein the leaf 26 has a curved flange area 27 coinciding with the rounded corner edge 28 of the bench, counter or other support hereinbefore described, while otherwise the appliance is identical in construction, as before described with respect to Figures 1 and 2 of the drawings.

In Figure 8 of the drawings there is shown a further modification of the invention wherein the clamping jaw 29 at its under free edge 30 is provided with a resilient rubber strip 31 so as to permit a firm grip on the sheetlike material 32 to be held thereby when drawing upon the same by a draftsman or other artificer to prevent slipping of the material when worked upon.

In Figure 9 of the drawings there is shown a further modification of the invention, wherein the free edge 33 of the clamping jaw 34 is provided at its under portion with a coating of adhesive 35, which may be a substitute for the strip 31.

In Figure 7 of the drawings the device constituting the invention has abutting the same a straight edge drawing instrument 36 as commonly used by draftsmen in shading or cross-hatching work or other work execution when using the appliance on a drawing board, bench, counter or support, as should be obvious.

If desired the appliance can be secured to drawing board section per se, having end cleats 37, for fitting with suitable uprights, for instance those alike to the side leg panels hereinbefore described. There is a clearance 38 provided in the appliance for giving access to the fasteners 15 from without the same, so that the latter can be applied or removed with ease and dispatch.

What is claimed is:

1. In a drafting appliance for a drawing board, a pair of spaced hinge leaves, each of said leaves comprising a first flange arranged in superimposed relation with respect to the top of said drawing board, an intermediate portion dependingly carried by said flange and secured to the edge of said drawing board, a second flange arranged at right angles with respect to said intermediate portion and having one end secured to the latter, a pintle sleeve carried by the other end of said second flange, a clamping jaw pivotally connected to said pintle sleeve, a straight gripping portion secured to said clamping jaw adapted to coact with the top of said drawing board for releasably holding sheet material, manually-operable means secured to said clamping jaw for causing pivotal movement of the latter, and means carried by said gripping portion for maintaining said sheet material immobile.

2. In a drafting appliance for a drawing board, a pair of spaced hinge leaves, each of said leaves comprising a first flange arranged in superimposed relation with respect to the top of said drawing board, an intermediate portion dependingly carried by said flange and secured to the edge of said drawing board, a second flange arranged at right angles with respect to said intermediate portion and having one end secured to the latter, a pintle sleeve carried by the other end of said second flange, a clamping jaw pivotally connected to said pintle sleeve, a straight gripping portion secured to said clamping jaw adapted to coact with the top of said drawing board for releasably holding sheet material, manually-operable means embodying a continuation lever secured to said clamping jaw for causing pivotal movement of the latter, and means embodying a resilient strip carried by said gripping portion for maintaining said sheet material immobile.

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