Dec. 29, 1964 I. C. POSKIN 3,163,293

DEVICE FOR HOLDING STACKED SHEET MATERIAL

Filed April 19, 1963

Fig. 1.

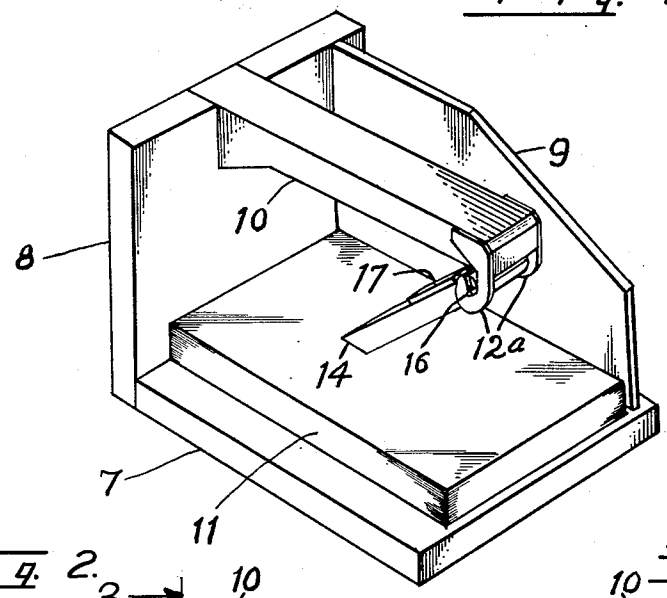


Fig. 2.

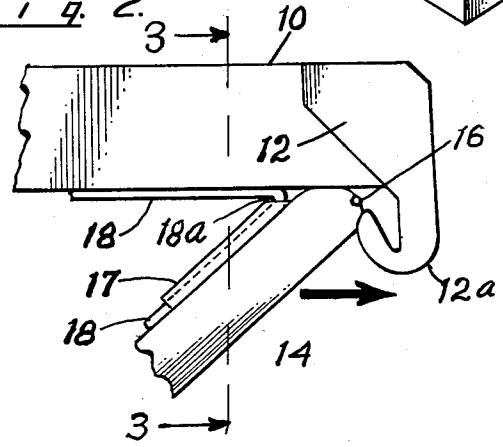


Fig. 3.

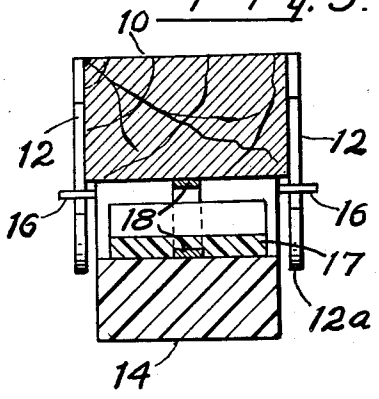
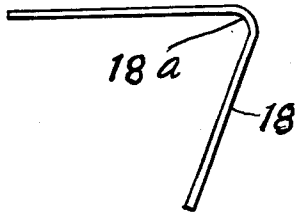


Fig. 4.



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DEVICE FOR HOLDING STACKED SHEET MATERIAL

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This invention relates to a device for holding stacked sheet material, and more particularly to an improvement upon a device of that character patented to me March 7, 1961, Patent No. 2,973,868.

In addition to the objects and advantages mentioned in the above referred to patent, the following are objects in view and advantages obtained by the present invention:

An important object of the present invention is to reduce the cost of manufacturing the article, this being done without impairing its usefulness, and being accomplished in part by lessening the time required to assemble the parts thereof.

Another object is to provide a combination of parts which can be secured to each other by means of an adhesive, thus making it unnecessary to use fastening devices of any kind.

In manufacturing articles of the kind to which this invention pertains commercial success is dependent largely upon keeping cost of production down. There are two particulars which must be attended to in order to secure this end. First, the device must be so constructed that low cost of material is maintained and this may in a measure be secured by the use of stock materials now on the market. Also parts must be provided which can be assembled at a low cost, preferably by unskilled labor. Both these particulars are attended to in the production of the device hereinafter described and claimed.

Additional objects, advantages and features of invention will hereinafter appear.

Referring to the accompanying drawing, illustrative of a preferred, reduced to practice embodiment of the invention,

FIG. 1 is a perspective view of the complete device.

FIG. 2 is a fragmentary side elevation illustrating on an enlarged scale the upper right hand portion of the structure shown in FIG. 1, and showing how the clamping arm is put into operative position.

FIG. 3 is a vertical section on line 3—3 of FIG. 2.

FIG. 4 is an edge view showing separately the leaf spring which actuates the clamping arm.

Referring in detail to the drawing, and first mentioning briefly parts to which the present invention is applied, the device comprises a somewhat elongated baseboard 7 with an upstanding rear wall 8, side board 9 and horizontal mounting arm 10 spaced considerably above said baseboard and supported by and extending forwardly from the top portion of said wall 8. In FIG. 1 a pack 11 of sheet material is shown overlying the baseboard 7.

The present invention pertains to the twin hook-forming plates 12 and the clamping arm 14 and its adjuncts. The flat plates 12 are desirably made of plastic sheet material about one-eighth of an inch thick, and are secured flatwise to the outer end portion of the mounting arm 10 preferably by means of an adhesive. Said plates extend down below the mounting arm 10 and have their downwardly extending portions 12*a* shaped as hooks which are directed upwardly and rearwardly in relation to the mounting arm, with their points spaced slightly below it.

The clamping arm 14, viewed in its operative position, has a rounded upper end portion provided with a transverse groove which is semi-circular in cross-section, in which is seated and secured by an adhesive a pin 16 the end portions of which project so as to be fittable within

the hooks 12*a*, thus to swingably mount the arm 14, which is cross-sectionally dimensioned to fit loosely between said hooks.

A plastic strip 17 extending lengthwise along and adhered to the upper surface of the arm 14 serves as a mounting means for an angular leaf spring 18, said strip having along its under side a groove in which is contained one limb or end portion of said spring. When the clamping arm 14 is in its operative position the other arm of said spring engages the under side of the mounting arm 10 thus keeping the lower end of said clamping arm in engagement with the pack 11 of sheet material. The two limbs of the spring 18 are shown united by an arcuate bend 18*a*.

The attached grooved strip 17 forms an elongated pocket the mouth of which is spaced slightly away from the pivot-carrying end of the clamping arm 14.

In FIGURE 2 is illustrated the operation of putting the clamping arm and its adjuncts into the operative position. Said clamping arm is shown in an inclined position with its upper end directed forwardly and abutted against the lower side of the mounting arm 10 adjacent to the hook 12*a*, this being done in opposition to the leaf spring 18, one limb of which has previously been inserted into the aforesaid pocket. When the mounting arm is in this position the pin 16 is at a slightly higher level than the upwardly directed points of the hooks 12*a*, so that, to place the mounting arm in its operative position it is only necessary to move it far enough to the right (as indicated by the large arrow in FIG. 2) to cause the pin 16 to pass the points of the hooks and then allow the spring to force the pin down into a seated relation to the hooks.

When the device has been completely assembled all portions of the spring are in a downwardly or rearwardly spaced relation to the axis about which the clamping arm swings. This construction can be more quickly and easily assembled than one in which the spring is coiled around the pivot.

The illustrated embodiment of the invention is so constructed that all parts thereof, except the spring may be made of plastic stock material, without the use of molds, with its parts adhered or bonded together by the use of an adhesive only.

It is to be understood that, although a preferred embodiment of the invention has been shown and described, yet changes may be made therein, within the purview of the claims, without exceeding the scope of the invention.

I claim:

1. A device of the kind described comprising, prior to complete assembling of its parts, a baseboard having a front and a rear end portion, a mounting arm, means upstanding from said baseboard and supporting said mounting arm considerably thereabove in rear to front extending position, hook means carried by the front end portion of said mounting arm and pointing upwardly and rearwardly in a slightly spaced relation to the under side of said mounting arm, a clamping arm having an end portion engageable with said hook means, said clamping arm having, extending along one of its sides, an elongated pocket the mouth of which is slightly spaced away from the aforesaid end portion of the clamping arm, and an elongated spring consisting of two limbs angularly related to each other, one limb of said spring being insertable into said pocket so that, when said clamping arm is put into its operative position the other limb thereof engages the under side of said mounting arm, so that the spring both maintains the clamping arm in engagement with said hook means and causes it to press upon said baseboard or material overlying it, all portions of the spring being in a downwardly or rearwardly spaced relation to the axis about which the clamping arm swings.

2. A device of the kind described comprising a baseboard having a front end portion and a rear end portion, a mounting arm, means upstanding from said baseboard and supporting said mounting arm considerably thereabove in rear to front extending position, hook means carried by the front end portion of said mounting arm and pointing upwardly and rearwardly in a slightly spaced relation to the under side of said mounting arm, a clamping arm having an upper end portion swingably engaging said hook means, said clamping arm extending at a downward and rearward inclination from said hook means, and spring means acting between said mounting arm and said clamping arm, thus maintaining the latter in its engagement with said hook means and at the same time causing it to exert its clamping action, when said clamping arm is in its operative position all parts of said spring means being in a downwardly or rearwardly spaced relation to the axis about which the clamping arm swings.

3. The subject matter of claim 2, and said spring means consisting of a strip of resilient material having two angularly related limbs, one of said limbs being carried by said clamping arm and the other engaging the under side of said mounting arm.

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