July 21, 1936. A. S. WILLIAMS 2,048,529

PLASTERER'S CENTER RIBBED ALUMINUM DARBY

Filed Oct. 17, 1935

FIG. 4.

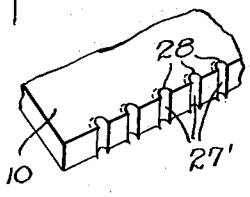
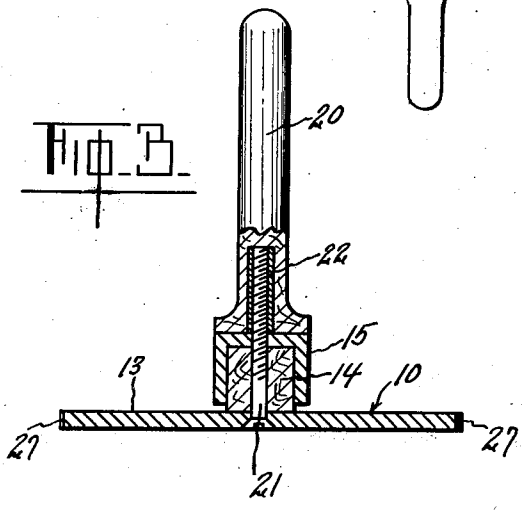


FIG. 1.

FIG. 5.

FIG. 3.



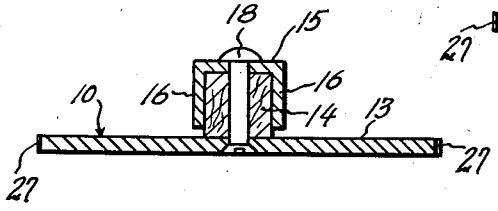


FIG. 2.

Inventor

Allen S. Williams

By Carl Miller

Attorney

Patented July 21, 1936 2,048,529

UNITED STATES PATENT OFFICE

2,048,529

PLASTERER'S CENTER RIBBED ALUMINUM DARBY

Allen Stewart Williams, Washington, D. C.

Application October 17, 1935, Serial No. 45,422

3 Claims. (Cl. 72—136)

This invention has general reference to improvements in plasterers' darbies; and it consists, essentially, in the novel and peculiar combination of parts and details of construction, as hereinafter first fully set forth and described, and then pointed out in the claims.

The principal object of this invention is to provide a darby wherein the blade of the darby consists of a flat strip of aluminum that is reinforced by a wood rib arranged on the aluminum strip along the longitudinal center line thereof.

Another object of the invention relates to a metallic reinforcement for the wood rib to extend the full length thereof.

A further object of the invention resides in the manner of mounting the handle and fin of the darby on the wood rib.

A still further object of the invention relates to the roughening or fluting of the longitudinal edges of the aluminum blade of the darby to provide a proper key for the finishing coat of plaster.

With the foregoing and other objects in view which will appear as the description proceeds, it is to be understood that changes in the precise embodiment of the invention herein disclosed may be made within the scope of what is claimed without departing from the spirit of the invention.

In the accompanying drawing the preferred form of the invention has been shown.

In said drawing:—

Figure 1 is a perspective view of the improved plasterer's darby,

Figure 2 is a cross-sectional view thereof taken on line 2—2, Figure 1,

Figure 3 is a cross-sectional view thereof taken on line 3—3, Figure 1,

Figure 4 is a perspective view of a portion of one edge of the darby blade showing the transverse serrations or grooves thereon, and

Figure 5 is an end elevational view showing the longitudinal grooves or flutings on the underface of the blade.

Referring again to the drawing, the darby shown in its entirety in Figure 1, comprises the usual blade 10 which in this case is preferably made of a strip of aluminum or other suitable preferably non-ferrous metal having a thickness of ⅛", a width of 3¾" and a length of 40". These dimensions have been found most satisfactory for general use of a darby though it is obvious that the blade thereof may assume other dimensions if so desired. The metallic blade 10 is flat throughout its entire extent and of rectangular formation with the longitudinal edges 11 and 12 parallel.

Disposed on one side 13 of the blade 10 along the longitudinal center thereof is a wood rib 14, the ends of which terminate short of the transverse edges of the blade 10 as clearly shown in Figure 1. Encasing the wood rib 14 which preferably is of square cross-section is a metallic channel reinforcement 15 that is adapted to snugly receive the wood rib 14. The legs or sides 16 of the channel 15 are of a length less than the height of the wood rib so that the same are spaced a slight distance from the surface 13 of the blade 10, for a purpose to be hereinafter described. The channel 15 is preferably made of aluminum or other non-ferrous metal, of rolled or cast stock and of not less than $\frac{1}{16}$" thickness throughout.

The blade 10, wood rib 14 and metallic channel 15 are secured rigidly together by the spaced screws or rivets 18.

Adjacent one end of the blade 10 is arranged an upright wood handle 20 that is preferably seated on the channel 15 and rigidly secured in place by the screw 21, that passes upwardly through the blade 10, wood rib 14, channel 15 into threaded engagement with a threaded metallic bushing 22 provided axially within the handle 20 all as clearly shown in Figure 3. If desired the wood handle 20 may be replaced with a metallic handle in which case the bushing 22 may be replaced with a threaded bore within the handle.

Also adjacent the other end of the blade 10 is arranged a fin 25 of wood or metal seated on the channel 15 and rigidly secured in place in the same manner as the handle 20 is secured in place.

The rivets or screws 18 and the screws 21 are provided with counter-sunk heads that are flush with the under surface of the blade 10, and are also made of a non-ferrous metal to obviate any corrosion taking place.

The longitudinal edges 11 and 12 of the blade 10 are roughened, vertically serrated or grooved as indicated by the reference character 27 so as to provide when the darby is used on the first brown coat of mortar a proper key thereon for the application of the second or white coat of plaster. In Figure 4, the vertical grooves 27' along the edges of the darby blade are formed by pressing the same in with a suitable tool with a consequent deformation of the metal at the ends of the grooves and edges of the darby as at

28. As these raised portions 28 wear off in use there will still be left the grooves 27' to provide the proper key. If desired the roughened edge or vertical serrations may be dispensed with entirely and small grooves or flutes 29, see Figure 5 provided on the under face of the blade 10 a short distance from each of the edges 11 and 12. This is another method for accomplishing the same purpose for the provision of the proper key on the first plaster coat.

I desire it understood however that each of the above indicated keying means are not strictly necessary to the operation of the darby as the same may in the hands of a skillful plasterer be used successfully. In some cases the edges of the blade 10 may be supplied true and smooth in the manufacture thereof and the same roughened by the plasterer, if so desired, by merely hacking the edges with the plasterer's pointing trowel which he has at hand at all times. This will in no way affect the durability of the darby.

The invention as above set forth has the advantage over a wood darby or a wood darby provided with metallic edges in that by virtue of the aluminum blade employed the same will not hang to the mortar with the consequent pulling off of the mortar; the aluminum blade sliding over the mortar with greater ease as well as acting to fill in all uneven portions. Another advantage of the invention relates to the fact that the darby may be manipulated without a sprinkling of water on the plaster or mortar as is done before using a wood darby, the use of water acting to destroy the hardness of the surface of the plaster or mortar to some extent. The darby of this invention retains at all times a permanent straightness when applied against the plaster in the natural position by being held by the handle and fin. At the same time it can be flexed by the application of the proper pressure to the handle and fin. It is evident that because the walls 16 of the channel 15 are clear of the upper surface 13 of the blade 10, the reinforced rib construction will permit of this flexing of the darby. Inasmuch as the handle and fin are secured to the wood rib and channel there is no danger of the same pulling away or turning on the comparatively thin blade.

Having thus set forth and disclosed the nature of this invention, what is claimed is:

1. A darby comprising a single elongated flat blade of non-ferrous metal, a rib extending substantially the full length of said blade terminating short of the ends thereof and positioned thereon along the longitudinal axis thereof, spaced handling means arranged on the rib adjacent the ends thereof, and common fastening means for rigidly securing said blade, rib and handling means together.

2. A darby comprising an elongated flat blade of non-ferrous metal, a wood rib extending substantially the full length of said blade and arranged on the longitudinal axis thereof, reinforcing means for said wood rib, spaced handling means arranged on the rib adjacent the ends thereof, and common fastening means for rigidly securing said blade, wood rib, reinforcing and handling means together.

3. In the darby as set forth in claim 2, said reinforcing means comprising a non-ferrous metallic channel snugly embracing said wood rib over its entire length, the legs of said channel being of a length less than the height of said rib and spaced from the upper face of said blade and separate spaced fastening means for rigidly securing together said blade, wood rib and channel reinforcement.

4. In the darby as set forth in claim 2, said spaced handling means comprising a handle at one end of said darby and an elongated fin at the other end thereof.

5. In the darby as set forth in claim 1, the longitudinal edges of said blade being roughened or serrated.

6. In the darby as set forth in claim 2, the longitudinal edges of said blade being roughened or serrated.

7. In the darby as set forth in claim 1, and a plurality of longitudinal grooves or flutes provided on the under face of said blade adjacent the longitudinal edges thereof.

8. In the darby as set forth in claim 2, and grooves or flutes provided on the under face of said blade adjacent the longitudinal edges thereof.

ALLEN STEWART WILLIAMS.