Jan. 30, 1962 A. A. LEVY 3,018,499

PLASTERER'S TOOL

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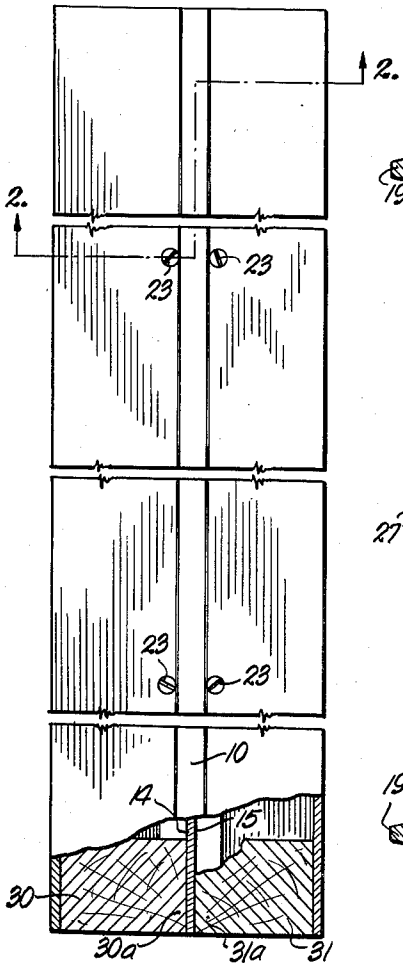


Fig. 1.

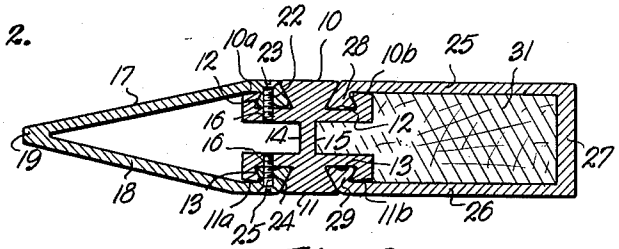


Fig. 2.

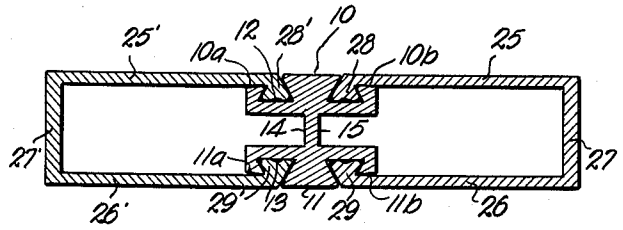


Fig. 3.

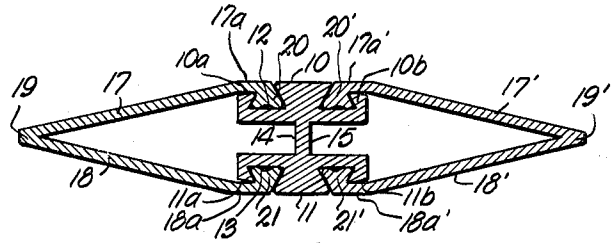


Fig. 4.

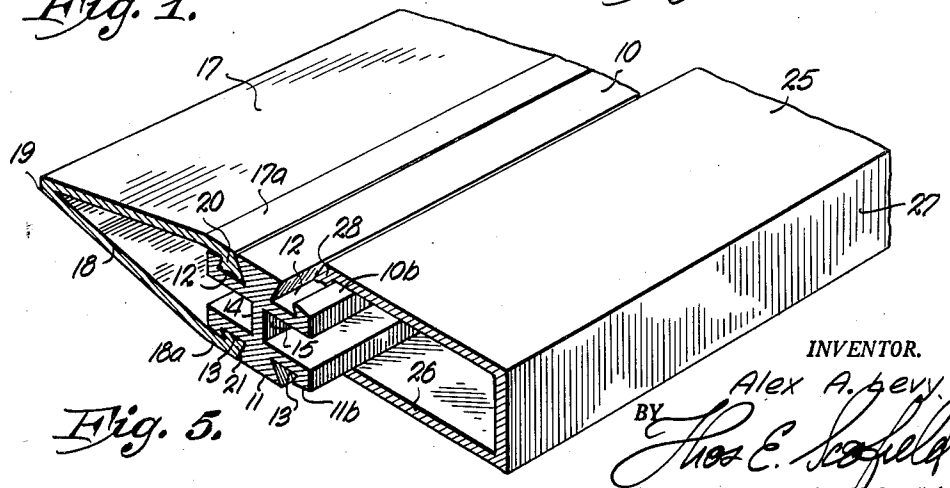


Fig. 5.

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PLASTERER'S TOOL

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This invention relates to a plasterer's tool or featheredge and/or browning rod and refers more particularly to such a tool wherein the featheredge and/or browning rod portions of the tool are removable for replacement or repair.

In the plastering trade, a featheredge is an elongate taper-edged construction for working the plaster so as to effect straight and true corners and edges. A browning rod is a square-edged device of the same general form employed for roughing in the preliminary plaster coats of heavier material prior ot the use of the featheredge. Conventionally two elongate tools have been employed, one as a featheredge, the other as a browning rod with one elongate edge of one device tapered for the featheredge and one elongate edge of the second device squared off for the browning rod. The original conventional featheredge or browning rod constructions comprised a piece of lumber from five to six feet long, approximately six inches wide and an inch thick, one longitudinal edge thereof being beveled to produce an acuate angle along the length thereof to provide the featheredge, the portion of the board rearward of the tapered edge providing both a gripping surface for the hands of the plasterer and a browning rod construction. Various metallic constructions have also been provided conventionally of the same overall form to perform the above described functions.

In the case of a wooden featheredge or browning rod construction, the tapered edge easily abrades away in continued use, thus destroying the accuracy desired. The wetting and drying to which the implement is exposed causes warping or distortion of the board. Coatings of paint and the like do not solve these problems as abrasion in the plastering operation rapidly wears off any such coating. Wood featheredges are also of relatively great weight and take on water which makes them even heavier.

While the metal conventional constructions of aluminum or magnesium alloys have provided lighter weight featheredges and have both greater long-time accuracy and less tendency to warp or distort, nevertheless, these conventional constructions still possess many disadvantages. For example, to achieve both the desired size and lightness, conventional featheredges are formed as hollow tubes of metal configured exteriorly to the desired form. If the featheredge or any portion of the construction becomes worn, warped or damaged, the entire construction must either be discarded or repaired as a unit. Sealing of the conventional featheredges of metal construction is not satisfactory and plaster and water, as well as other materials tend to get into the construction, require cleaning thereof, increase the weight thereof and tend to deteriorate the structures. No modifications are possible as to form in the conventional featheredges.

Therefore, an object of the present invention is to provide a metal featheredge and/or browning rod construction which is of extremely precise and accurate construction and which has a minimum tendency to warp or distort.

Another object of the invention is to provide a featheredge and/or browning rod construction which may be completely sealed at the ends thereof.

Another object of the invention is to provide a featheredge and/or browning rod construction wherein the portions of the construction making up the operating edges may be varied as desired to provide either a double featheredge, a double browning rod or a combined browning rod and featheredge construction.

Another object of the invention is to provide a featheredge and/or browning rod construction wherein all parts of the construction are readily accessible for repair or replacement in a minimum of time and with a maximum of convenience.

Another object of the invention is to provide a featheredge and/or browning rod construction, the parts of which may be produced by extrusion, wherein the extrusion dies will be of a minimum cost.

Still another object of the invention is to provide a featheredge and/or browning rod of great versatility, attractive appearance and greater accuracy than any previously known like construction.

Other and further objects of the invention will appear in the course of the following description thereof.

In the drawings, which form a part of the instant invention and are to be read in conjunction therewith, an embodiment of the invention is shown and, in the various views, like numerals are employed to indicate like parts.

FIG. 1 is a plan view of a preferred form of the inventive construction made up as a combined featheredge and browning rod with a portion cut away to better illustrate the structure.

FIG. 2 is a view taken along the lines 2—2 of FIG. 1 in the direction of the arrows.

FIG. 3 is a cross-sectional view of a first modification of the inventive construction made up as a double browning rod.

FIG. 4 is a cross-sectional view of a second modification of the inventive construction made up as a double featheredge.

FIG. 5 is a cut-away perspective view of the first form of the inventive construction.

Referring to the drawings, at **10** is shown one side face of a rigid elongate rib of substantially rectangular form in overall cross section and having the sides **10** and **11** of greater width extending substantially parallel one with the other. Pairs of elongate channels or grooves **12** and **13** are formed in the faces **10** and **11** of each side and extend parallel to one another longitudinally of the rib. Channels **12** and **13** widen in cross section as they extend into the rib. The peripheral portions of the sides **10** and **11** are cut away as at **10***a*, **10***b* and **11***a* and **11***b*. Secondary slots or channels **14** and **15** are formed in the faces of the rib normal to the double channeled faces **10** and **11**. Grooves **14** and **15** preferably extend the length of the rib as do the primary channels **12** and **13**. A plurality of holes **16** threaded internally may be formed into or through the bottom walls of channels **12** and **13**.

The tapered featheredge construction will be first described. The featheredge comprises an elongate hollow tube member having a pair of elongate opposed rectangular sides **17** and **18**. Sides **17** and **18** are joined together at one edge **19** thereof, while the other ends of the sides **17** and **18** are tapered away therefrom. A pair of flanges **20** and **21** are fixed to each side of the featheredge tube member adjacent the free edges thereof and extending inwardly thereof. Flanges **20** and **21** are each engageable in longitudinal sliding fit with one of the channels **12** and **13**. Flanges **20** and **21** widen in cross section toward their free edges so as to be congruent with the channels **12** and **13**. The inner edges of the flanges **20** and **21** are preferably rounded to avoid hazard to the user when the featheredge member is disengaged from the elongate rib. The thickness of the sides **17** and **18** is substantially equal to the distance which the end edges **10***a* and **11***a* of the faces **10** and **11** are inwardly reduced so that the outer surfaces **17** and **18** of the sides may be in line with the faces **10** and **11** while the rib faces **10***a* and **11***a* bear against the undersides of the sides **17** and **18**.

In FIG. 4, two featheredges are shown engaging the elongate rib and thus the parts of the second featheredge are numbered the same as that of FIGS. 1, 2 and 5 but primed. The primed featheredge cooperates with the faces **11***a* and **11***b* in the same manner as the unprimed featheredge cooperates with the faces **10***a* and **11***a*. The free edges **17***a* and **18***a* of the sides **17** and **18** are flattened to be in line with faces **10** and **11**. Openings **22** and **23** (FIG. 2) are formed through the wall portions **17***a* and **18***a* to receive screws **24** and **25** which are recessed to be flush with the faces **17***a* and **18***a*.

The browning rod section comprises a pair of elongate opposed rectangular sides **25** and **26** positioned substantially parallel to one another and having an end edge **27** at right angles thereto to join the sides **25** and **26** at one end. Inwardly extending flanges **28** and **29** enlarge as they extend inwardly to fit the channels **12** and **13**. FIG. 3 shows a tool formed of two browning rod sections engaging the intermediate rib, the extra browning rod section being primed in the numbering. The thickness of the browning rod walls **25** and **26**, **25'** and **26'** is equal to the distance the faces **10***a*, **10***b*, **11***a* and **11***b* are depressed or cut away so the outer faces of walls **25**, **26**, **25'** and **26'** are in line with faces **10** and **11**.

The means for sealing the open ends of the hollow tubular metal featheredge and browning rod portions comprise wood, plastic or metal plugs **30** and **31** (FIG. 1) which are configured in cross section to tightly fit either the cross section of the featheredge or the browning rod and also have flange portions **30***a* and **31***a* to tightly fit into the slots **14** and **15**. FIG. 2 shows, in cross section, one of the plugs **31** inserted in the browning rod section and slot **15**. Plugs **30** and **31** may be formed to extend any desired distance into the hollow tubes but are preferably only a few inches long. Each end of each tube is sealed by a plug **30** or **31**.

In operation, given a rib construction as shown in the drawings, one of three modifications of the tool may be assembled by sliding the hollow tube sections onto the rib engaging channels **12** and **13**. FIGS. 1, 2 and 5 show a tool having a single featheredge and a single browning rod assembled. FIG. 3 shows a double browning rod and FIG. 4 a double featheredge. As one or more of the component tube portions wears, is distorted, damaged or is desired to be replaced, the screws **23** and **24** may be backed off, the tube component slid out of the channels **12** and **13** and a new tube component slid on. The screw lock is optional, as the sliding fit of the various members, especially with the friction fit of the sealing end plugs, is normally sufficient to hold the pieces relative one another against any but a relatively large pressure applied to one end of one of the tube portions. As the faces of the intermediate rib portions are in line with the faces of the tube portions, the wear to the rib is negligible and, thus, one rib will serve to rigidify, strengthen and support many tube sections as they are used up in the process of work.

From the foregoing it will be seen that this invention is one well adapted to attain all of the ends and objects hereinabove set forth together with other advantages which are obvious and which are inherent to the structure.

It will be understood that certain features and subcombinations are of utility and may be employed without reference to other features and subcombinations. This is contemplated by and is within the scope of the claims.

As many possible embodiments may be made of the invention without departing from the scope thereof, it is to be understood that all matter hereinabove set forth or shown in the accompanying drawings is to be interpreted as illustrative and not in a limiting sense.

Having thus described my invention, I claim:

1. A plasterer's tool comprising, in combination, a relatively rigid elongated rib substantially rectangular in transverse cross-sectional form, a pair of channels formed

in each of two opposed sides thereof spaced from one another in said sides and extending longitudinally of the rib, the channels of greater width adjacent their bases than adjacent their outward portions in transverse cross section, a pair of hollow, elongate tube members each having a pair of elongate, opposed, substantially rectangular sides, the sides of each said member connected with one another at one edge and free at the other, a flange connected adjacent each free edge of each said side extending inwardly of said member, each said flange in transverse cross section formed to slidably fit in and positively engage one of said channels, the sides of at least one of the tube members being parallel with an edge member extending substantially normal to said tube sides joining the edges of said sides not engaged with said rib, and the portion of the rib between the channels in each opposed side thereof raised so as to be flush with the tube member side faces when the latter are engaged with the rib.

2. A plasterer's tool comprising, in combination, a relatively rigid elongate rib substantially rectangular in transverse cross-sectional form, a pair of channels formed in each of two opposed sides thereof spaced from one another in said sides and extending longitudinally of the rib, the channels of greater width adjacent their bases than adjacent their outward portions in transverse cross section, a pair of hollow, elongate tube members each having a pair of elongate, opposed, substantially rectangular sides, the sides of each said member connected with one another at one edge and free at the others, a flange connected adjacent each free edge of each said side extending inwardly of said member, each said flange in transverse cross section formed to slidably fit in and positively engage one of said channels, and secondary channels formed in the faces of the rib normal to the channel faces.

3. A tool as in claim 2 including means for sealing the ends of the tubes, said sealing means comprising removable plugs in the ends thereof, said plugs sealingly received in the ends of the hollow tube members and the secondary channels in said rib.

4. A plasterer's tool comprising, in combination, a relatively rigid elongate rib substantially rectangular in transverse cross-sectional form, a pair of channels formed in each of two opposed sides thereof spaced from one another in said sides and extending longitudinally of the rib, the channels of greater width adjacent their bases than adjacent their outward portions in transverse cross section, a pair of hollow, elongate tube members each having a pair of elongate, opposed, substantially rectangular sides, the sides of each said member connected with one another at one edge and free at the other, a flange connected adjacent each free edge of each said side extending inwardly of said member, each said flange in transverse cross section formed to slidably fit in and positively engage one of said channels, and the portion of the rib between the channels in each opposed side thereof raised so as to be flush with the tube member side faces when the latter are engaged with the rib.

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