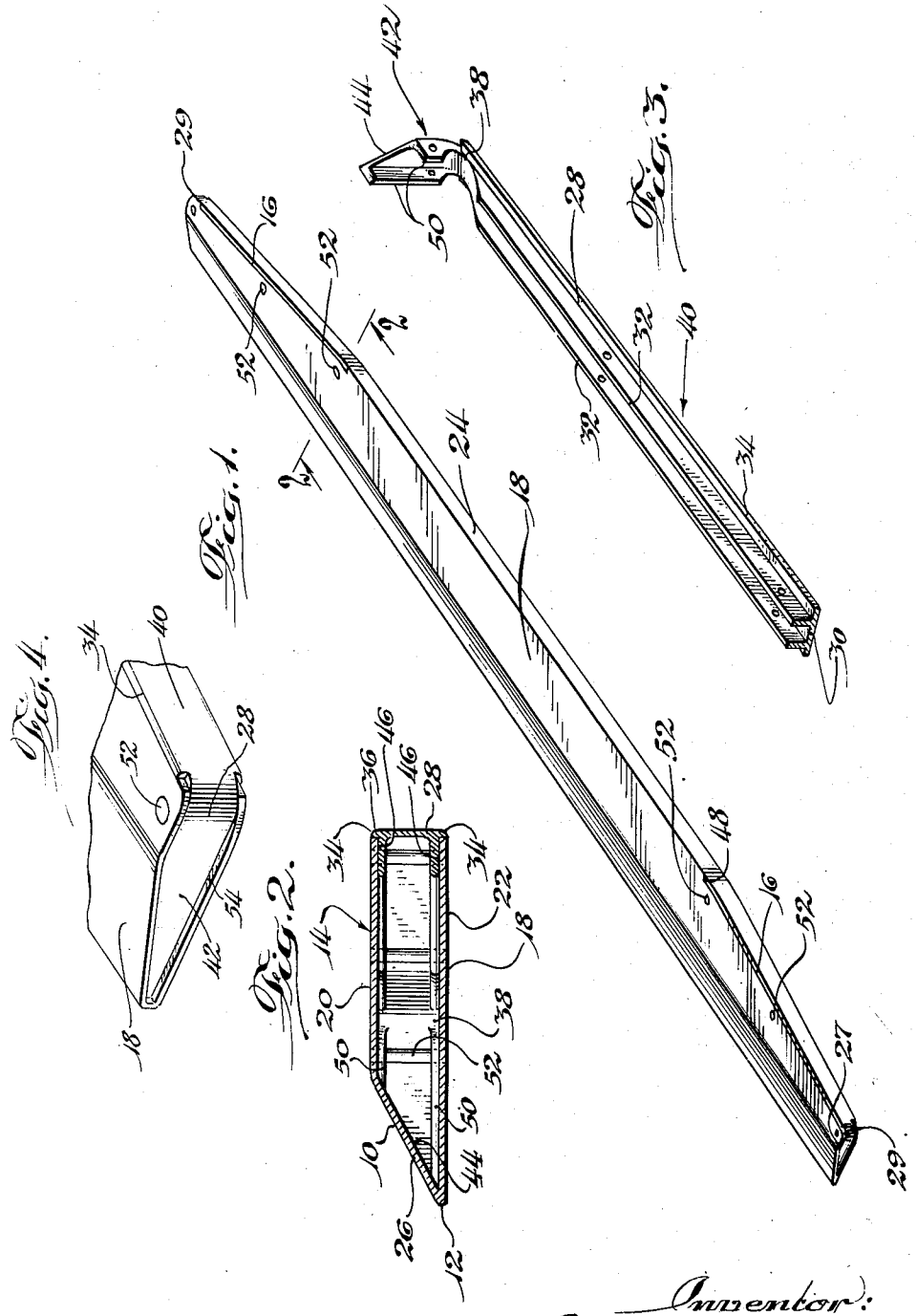
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FEATHEREDGE

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FEATHEREDGE

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My invention relates to a plasterer's tool and more specifically to a featheredge which may in its preferred dimensions or in greater length be employed also as a plasterer's rod.

One of the objects of the present invention is to provide a featheredge which is lighter and more convenient to manipulate than those previously known, which is rigid and incapable of warping so as to distort the true edge thereof, and which has a far greater life than those at present employed.

Other objects and advantages of my invention will be apparent from the following description and drawings, of which:

Fig. 1 is a perspective view of the featheredge;

Fig. 2 is a sectional view thereof which may be considered as being taken on the line 2—2 of Fig. 1, looking in the direction of the arrows;

Fig. 3 is a perspective view of one of the end closure members employed in the practice of my invention; and

Fig. 4 is an enlarged perspective view of one end of the featheredge.

As is well known in the plastering trade, a featheredge is an implement for working the plaster so as to effect straight and true corners and edges. Traditionally, a featheredge is constructed of a piece of lumber about five or six feet long, six inches wide and one inch thick, where one longitudinal edge is beveled so as to produce an acute angle along the length thereof, which acute angled edge constitutes the working edge of the implement, and the portion of the board rearward of the working edge provides a gripping surface for the hands of the plasterer. In the interest of lightness the rear edges of the implement are tapered adjacent its ends.

It will be evident from this construction that many disadvantages inhere therein which are attributable to the wooden composition of the featheredge. The working edge being thin, it is easily abraded away to destroy its accuracy. The constant wetting and drying to which the implement is exposed leads rapidly to warping or distortion of the board. Because of the abrasion inherent in the plastering operation any coating such as paint and the like placed on the featheredge to protect it against these warping conditions will be rapidly worn off so as to expose the wood again to moisture. Furthermore, wood is heavy, and in the course of use the wood will accumulate more and more water so as to become continually heavier.

My invention is directed to the solution of these many disadvantages of the traditional

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wooden featheredge by fabricating the implement of light metal of the nature of aluminum or magnesium alloys and, as a necessary concomitant, fabricating such a metallic featheredge of inexpensive components in a novel fashion so as to produce a smooth surfaced, attractively appearing and easy to handle implement.

My featheredge follows externally the same pattern as the traditional tool since plasterers are thoroughly acquainted with the use of so formed an implement. It possesses the bevel 10, the acute angled working edge 12, the flat sided rearward portion 14 and the tapers 16. It is formed of two types of stock both of which may be and preferably are extruded elements, and a major advantage of my featheredge lies in this construction in that the component members may be formed from the two types of extrusions by a simple cutting to length in addition to a small amount of subsequent fashioning. The first of these members, which hereafter will be referred to as the body member 18, may be considered as a tubular extrusion having three rectangular sides, 20, 22, and 24 which furnish the rearward grasping surface of the featheredge, and a fourth inclined side 26 providing the acute angled working edge 12. The dimensions of an example might be a thickness of about one inch, a width of about six inches, and a bevel to create about a thirty degree relatively sharp angle at the working edge 12. This extrusion may be cut into lengths of five or six feet for use as a featheredge or longer for a rod. After cutting the tubular extrusion to proper length the tapered ends are formed by cutting a piece through the sides 20 and 22 from the back 24 to the ends 27 at an angle so as to remove the end portions of the side 24 with long narrow triangular pieces of the top and bottom portions 20 and 22 attached thereto, the cut being made normal to the plane of the bottom face 22, the end-taper corners 29 being rounded to smooth the contour of the implement. In this form the body member will furnish an implement having generally the same configuration as a traditional featheredge excepting that the tapered portion 16 and the ends 27 will be open.

To effect the closure of the open ends and the covering of the cut edges of the tapers 16 so as to avoid smoothing and polishing operations thereon and furnish a surface smooth to handle, two closure members 28 are employed. As one closure member is the inverse counterpart of the other, only one will be described. This closure member is an extrusion having a generally chan-

nel shaped cross section consisting of a web 30 and two flanges 32 wherein the web extends outwardly beyond the adjoining portions of the flanges 32 to define lips 34. The dimensions of this member are such that the flanges 32 fit snugly between the sides 20 and 22 of the body member 18 and the lips 34 project outward from the flanges 32 a distance about equal to or slightly greater than the thickness of the sides 20 and 22. The lips are rounded on their outer edges as at 36. These elements are formed by cutting the extrusion to length, two pieces being required for the completion of each featheredge to close the two ends and tapers thereof.

After cutting to length the flanges 34 are cut away as at 38 at a distance from one end of the piece approximately equal to the length of the taper of the body portion 18. This permits the member 28 to be bent at this point at an angle about equal to the angle between the taper 16 and the end 27 to divide the member into a taper closing portion 40 and an end closing portion 42. The radius of curvature is about equal to the radius of the rounded end-taper corner. Likewise the lips 34 are cut away to the flanges 32 from the bend at 38 over the length of the end closing portion 42. The end closing portion terminates in a beveled cut 44, the angle of which is equal to the angle of the bevel of the body portion.

The body member 18 and the closure members 28 are assembled in the following fashion. The flanges 32 of the taper closing portion 40 of the closure member 28 are inserted into the opening 46 created by cutting the taper 16 on the body member 18. These fit snugly within the opening 46 and the lips 34 project over the cut edges of sides 20 and 22 of the body member so as to cover them and provide a rounded surface for this section of the featheredge. It should be noted that the taper cut is initiated on side 24 by a short perpendicular cut through side 24 to provide a shoulder 48 about equal to the thickness of the web 30. The flanges 32 and web 30 abut against this shoulder 48. Any variance in alignment between the webs 30 and the side 24 may be corrected by grinding. The bend 38 is formed such that upon this insertion of the flanges 32 within the taper 16 and against shoulder 48 the end closure portions 42 will lie wholly within the open ends 27 of the body portion, the flanges 50 of the end closure portion 42 and the beveled cut 44 in the end thereof fitting snugly within the open ends 27 of the body portion 18. The body portion and flanges are then pierced to receive rivets 52 and the two closure members 28 are riveted to the body portion 18. As the implement is usually used, the plasterer will clean the featheredge of adhering plaster by hitting its end against the floor. In order that the shock may be wholly taken by the body member 18 and not by the rivets 52, the end closure portions 42 may be recessed slightly inward of the ends 27 of the body member, the spacing being on the order of one sixteenth of an inch, as at 54.

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

1. A lightweight metallic featheredge comprising a body member formed of a length of tubular light metal extrusion having three sides rectangular to each other and an oblique fourth side between the parallel sides to create and acute angled edge, said member being tapered on a plane substantially normal to the planes of the parallel sides and on a line oblique to the ends so as to remove a substantial portion of the ends of the side which is normal to the parallel sides as well as long thin triangular pieces from the end portions of the parallel sides producing continuous openings in the tapers and ends of the body member, closure members for said openings in the body member formed of light metal channel stock of a length to close the openings and having flanges spaced to fit closely between the parallel sides of the body member, each member being obliquely terminated at one end on the same angle as the body member bevel to fit therein and being bent intermediate its ends through the same angle as the angle between the taper and the end to define a taper closing portion and an end closing portion, and means for securing the free edges of the channel flanges inside the tubular cavity of the body member.

2. A lightweight metallic featheredge as claimed in claim 1 wherein the flanges of the closure members are removed at the point of bending to facilitate the bending thereof.

3. A lightweight metallic featheredge as claimed in claim 2 wherein the closure members have lips formed thereon over the length of the taper closing portion extending outward from the flanges to cover the cut edges of the taper.

4. A lightweight metallic featheredge as claimed in claim 3 wherein the tool edge defining edges of the lips are rounded.

5. A lightweight metallic featheredge comprising a body member formed of a length of tubular light metal extrusion having three sides rectangular to each other and an oblique fourth side between the parallel sides to create an acute angled edge, said member being tapered on a plane substantially normal to the planes of the parallel sides and on a line oblique to the ends so as to remove a substantial portion of the ends of the side which is normal to the parallel sides as well as long thin triangular pieces from the ends of the parallel sides to result in a continuous opening in the taper and end of each end portion thereof, closure members for said openings in the body member formed of light metal channel stock of a length to close the openings in said members and having flanges spaced to fit closely between the parallel sides of the body member and a web extending outwardly on each side beyond said flanges to define lateral lips on said stock, each member being obliquely terminated at one end on the same angle as the body member bevel to fit therein, and having a portion of the flanges removed and being bent at a point intermediate its ends to define a taper closing portion and an end closing portion, the lips being removed from said end closing portions, and means for securing the free edges of the channel flanges inside the tubular cavity of the body member such that the web and lips cover the taper opening to close it, and the web lies within the end opening to close it.

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