This invention relates to metallic trims, especially for wooden handles.

This invention has utility when incorporated as a ferrule at the wood handle termini adapted for carrying or mounting tools, such as shovels, forks, etc.

Referring to the drawing:

Fig. 1 is a plan view of the blank of general strap form adopted hereunder;

Fig. 2 shows the step of forming, succeeding that of the blank, and involves the initial cupping;

Fig. 3 is a view of the step following the cupping which gives the structure the tapered tubular form for the convex termini;

Fig. 4 is a view similar to Fig. 3 with the weld bonding for the tubular portion remote from the terminus and showing the terminus as transversely channeled;

Fig. 5 is a view looking into the terminus of Fig. 4 showing the perforation or keying seat in the channel seat of less extent than the channel or concave seat;

Fig. 6 is a fragmentary view of the assembled device with a wood handle;

Fig. 7 is a detail view of the ferrule as of stub form in its terminal structure as that used with a sleeve or sleeve and terminal device; and

Fig. 8 is a detail view in an enlarged section, showing the crowding reinforcement from the cupping as to the integral tubular portion.

Strap blank is shown having widened medial portion 1 with tongue termini 2, 3, therefrom having rivet openings 4 adjacent the free ends. This widened medial portion is initially offset to form cup 5. A following drawing operation may convert the cup 5 into convex terminus 6 with tapering side walls 7 therefrom, having crowd reinforcement region 8. From this portion there extend tapering, semi-cylindrical portions 9 to offsets 10, outwardly to the tongues 2, 3, now in opposing relation from this tapered cylindrical portion 1, 9. The curved portions 9 as away from the crowded drawing portions, have abutting edges 10' bonded by weld portion 11 remote from the terminus 6. This convex terminus 6 has transverse concave keying seat 12 as between the tongues 2, 3, and approximating alignment with the pair of abutting edges 10'. This concave portion 12 as a seat has bottom 13 in which and of less extent than this seat, there is keying opening 14, herein shown as of rectangular form. The ferrule is in completed form for assembly with wood handle 15 to have opposing tongues 2, 3, rolled or configured to such handle and assembled therewith by rivet 16. This wood handle may have terminal opening 17 in which tang 18 of tool 19 may be forced, with such tang rectangular and with rib 20 at the terminus of the tang 18, such rib 20 may cooperate with the seat 12 as the tang 18 passes through the perforation 14. There is thus a dual effective keying at the reinforced portion 8, thereby providing a substantial trim or ferrule for the tool.

In some instances the blank may be of less than strap-like form producing this drawn keying portion for the device, and in such instances this portion as a cap may slip over tapered tubular portion 21 in assembly with wood handle 22.

What is claimed and it is desired to secure by Letters Patent is:

1. A ferrule unit from a single piece of sheet metal having a socket terminus portion of reinforcement wall and tapered tubular portion therefrom of relatively lighter gage than the socket terminus portion, said tapered portion having circumferential metallic bonding means assembling together opposing sides of the unit remote from the terminus, and opposing tongues from between the bonding means and extending away from the terminus.

2. A sheet metal ferrule unit having a socket terminus portion of reinforcement wall and lighter gage tapered tubular portion therefrom having circumferential bonding means remote from the terminus, and opposing tongues from between the bonding means and extending away from the terminus, said terminus having a transverse concave seat, and a keying opening there-through of less extent than the concave seat.

3. A ferrule unit from a single piece of sheet metal having a socket terminus portion of heavier gage wall than the sheet metal of the unit remote therefrom, said terminus having a transverse concave seat, and a keying opening through the seat of less extent than the concave seat whereby the seat provides an abutment laterally of the opening and transversely therefrom.

4. A ferrule from a sheet-metal strip having a transversely wider medial portion than remote therefrom, said ferrule comprising a cup portion provided with tapering side walls extending therefrom and there being a lighter gage tubular portion in one piece therewith and extending therefrom with similar strip sides also therefrom and in one piece with the cup and tubular portions forming a pair of opposing tongues, metallic bonding means bridging between opposing similar strip sides for the tubular portion remote from the cup portion, and a keying seat in said cup portion.

5. A ferrule from a flat sheet metal blank, said ferrule comprising a tapered tubular portion having a convex terminus at its lesser diameter, a transverse concave keying seat at said terminus, and a supplemental keying opening of less extent than the concave keying seat.

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