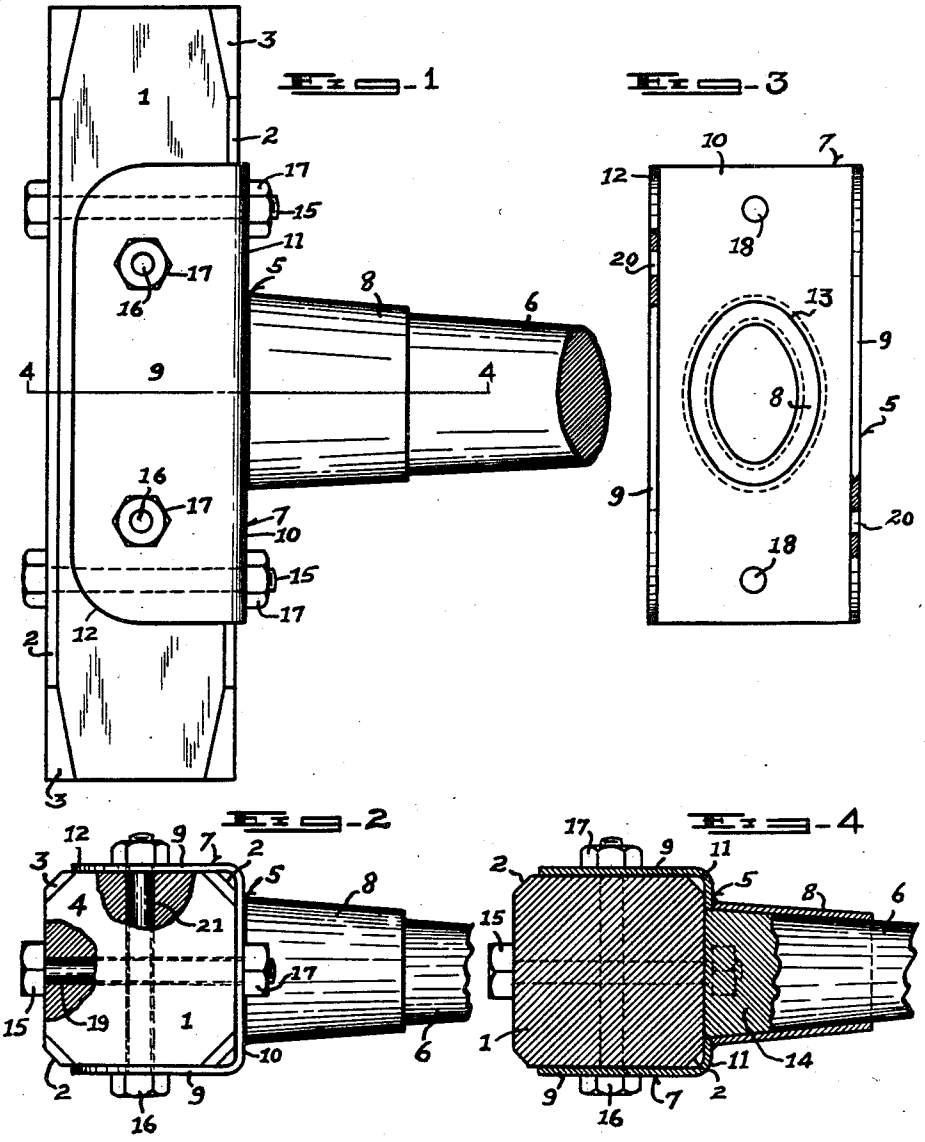
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MAUL

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## MAUL

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2 Claims. (Cl. 306—24)

My invention relates to a maul of the mallet type extensively employed in many classes of industries for driving wedges and posts, for jarring railroad dump cars to loosen and accelerate the flow of the contents therefrom, or for any other purposes or uses requiring a maul type of hammering instrument and wherein reasonable care must be exercised so as not to batter or otherwise damage the objects or surfaces receiving repeated blows.

Important objects and advantages of the invention are to provide a maul of the character described, which embodies novel means for securing the handle to the maul head whereby the latter cannot accidentally disengage the handle and in consequence the attendant hazards not infrequently resulting from such accidental disengagement are entirely eliminated, which allows and facilitates the removal and replacement of either the head or handle, which employs a construction that reenforces the maul head, which is simple in its construction and arrangement, strong, durable and efficient in its use, compact, attractive in appearance, and comparatively economical in its manufacture, use and maintenance.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the novel construction, combination and arrangement of parts herein specifically described and illustrated in the accompanying drawing, but it is to be understood that the latter is merely illustrative of what is now considered to be the best embodiment of the invention, and that changes in the form, proportions and detail of construction may be resorted to that come within the scope of the claims hereunto appended.

In the drawing wherein like numerals of reference designate corresponding parts throughout the several views:—

Figure 1 is a side view of a maul, with a portion of the handle being broken away, constructed in accordance with the invention.

Figure 2 is a face end view thereof partly in section.

Figure 3 is a plan view of the connecting element embodied in the present invention.

Figure 4 is a sectional view on line 4—4, Figure 1.

Referring in detail to the drawing 1 denotes an oblong, rectangularly-shaped head, which is preferably square in transverse cross section, and constructed of elm, black gum, beech or any other suitable hard wood. The edges 2, of the head are beveled, and the end portions thereof have relatively enlarged bevels 3, which taper toward the respective striking end faces 4 of the head, to eliminate acute corners from said faces and thereby minimize the possibility of damage to the latter due to the repeated battering to which the striking faces are necessarily subjected in the use of the maul.

The feature of the present invention resides in the novel construction and arrangement of the connecting element 5 employed for securing the maul handle 6 to the head 1. The connecting element is constructed of any suitable metal in any suitable manner, preferably by forming same from comparatively heavy sheet steel, and comprises an elongated saddle 7 and a tapered socket eye 8.

The saddle 7 is substantially U-shaped in transverse cross section and consists of a pair of outwardly projecting side walls 9 and a bottom 10. The junctures 11 of the side walls with the bottom are rounded, and the ends of the free outer edges of said walls are provided with curved corners 12.

The saddle bottom 10 is provided with a large elliptical shaped opening 13 which is disposed longitudinally on the longitudinal center of said bottom at the transverse center of the latter. The tapered socket eye 8 is likewise elliptical-shaped in transverse cross section, and has its enlarged end permanently fixed, preferably by welding, to the exposed face of the edge margin of the wall of the bottom opening 13, whereby the latter is positioned in registration with the passage through the socket eye 8. The socket eye extends at right angles with respect to the longitudinal disposition of the saddle 7, and its welded connection with the latter, in the manner stated, provides a substantially integral connecting element structure.

The socket eye 8 is shaped to conform to and receive the tapered butt end 14 of the handle 6. The handle employed is preferably an ordinary standard handle of the type commonly used for clay picks and the like, as the same is of a substantial construction and universally available.

The head 1 is mounted and extends longitudinally in the saddle 7, and being considerably longer than the latter, the end portions of said head project considerably beyond the respective ends of the saddle, as clearly illustrated in Figure 1.

The side walls 9 and bottom 10, of the saddle 7 closely and flatly engage and embrace the respective side walls and inner face of the head 1. The inwardly disposed bevelled edges 2 of the head wall provide clearances preventing the interfer-

ence by the rounded saddle junctures 11 with the adjacent edges of the head 1.

The head 1 is secured in the saddle 7 by two pairs of bolts, respectively indicated at 15 and 16, each of which is threadedly engaged by a suitable nut 17. The pair of bolts 15 are disposed parallel to the handle 6 and extend through apertures 18 provided therefor in the saddle bottom 10 on respective sides of the interposed socket eye 8, and through the apertures 19 in the head 1. The pair of bolts 16 are disposed at right angles relatively to the disposition of the pair of bolts 15 and extend through the apertures 20 provided therefor adjacent to respective ends of the pair of saddle side walls 9, and through the apertures 21 in the head 1.

In the assembly of my improved maul, the handle 6 is first engaged in the socket eye 8 by extending said handle through the latter to position the butt 14 of the handle in the socket eye. The head 1 is then placed into the saddle 7 whereby the end of the handle butt 14 will abut against the inner face of the head 1 through to the bottom opening 13. By positioning and tightening the pair of bolts 15, the head will be securely bolted to the saddle bottom 10, and the handle butt 14 will be forcibly and rigidly seated and maintained in the socket eye 8. The assembly of the maul is completed by positioning and tightening the other pair of bolts 16 to clamp the saddle side walls 9 flatly against the respective sides of the head 1. The nuts 17 are preferably locked in the securing positions on the bolts 15 and 16 by prick-punching or peening inter-engagements, even if necessitating the destruction of these elements to effect their removal for allowing replacements.

The apertures 21 in the head 1 are preferably aligned on the longitudinal center of the head, and as the latter is square in transverse cross section, the positions of the outer and inner faces of said head may be readily reversed in the saddle 7 if found to be necessary or advantageous in practice.

It will be obvious that, the relative positions of the two pairs of bolts 15 and 16, at right angles to each other through the head 1, will reenforce the latter in two directions and thereby eliminate the possibility of splitting said head even under the most adverse and untoward conditions.

While the present disclosure of the invention embodies a head that is preferably rectangularly-shaped, as stock of such contour is commonly and universally available, it will here be noted that the configuration of the head may be cylindrical or otherwise varied without departing from the principle of the invention. It is only essential that the conformation of the associated saddle structure be shaped to accommodate the contour of the head employed in connection therewith.

The present invention provides a most efficient device of its kind, which is economical in its use by allowing the convenient replacement of any of its parts, and which may be employed with comparative safety for all purposes requiring a maul type of hammering instrument, as under no conditions can the head or any part thereof be dislodged accidentally from its connecting element and handle, except by the complete fracture of the latter.

What I claim is:

1. A maul comprising the combination of an elongated saddle member substantially U-shaped in transverse cross section, an elliptical shaped tapering socket eye fixed to said member and disposed at right angles to the latter, an oblong rectangularly-shaped head mounted in said member, the end portions of said head projecting beyond the respective ends of said member, two pairs of securing elements extending through said member and through said head for reenforcing and securing the latter in said member, one of said pair of elements being disposed at right angles relatively to the other of said pair of elements, and a handle having one end thereof fixed in said socket eye.

2. A maul comprising the combination of an elongated saddle member substantially U-shaped in transverse cross section, an elliptical shaped tapering socket eye fixed to said member and disposed at right angles to the latter, an oblong rectangularly-shaped head mounted in said member, the edges of said head being bevelled and having tapered end portions, the end portions of said head projecting beyond the respective end of said member, two pairs of securing elements extending through said member and through said head for reenforcing and securing the latter in said member, one of said pair of elements being disposed at right angles relatively to the other of said pair of elements, and a handle having one end thereof fixed in said socket eye by the engagement of said head against said fixed handle end.

ALEXANDER IRWIN.