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MALLET ATTACHMENT

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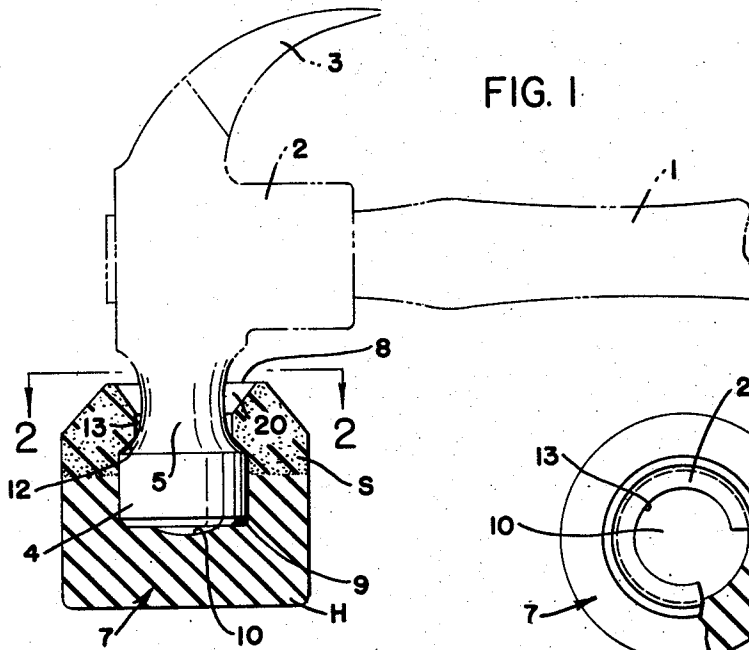


FIG. 1

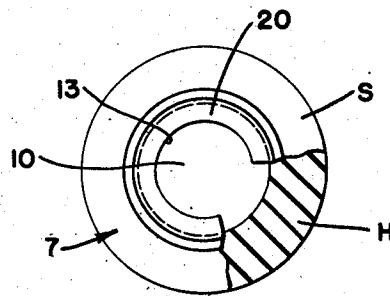


FIG. 2

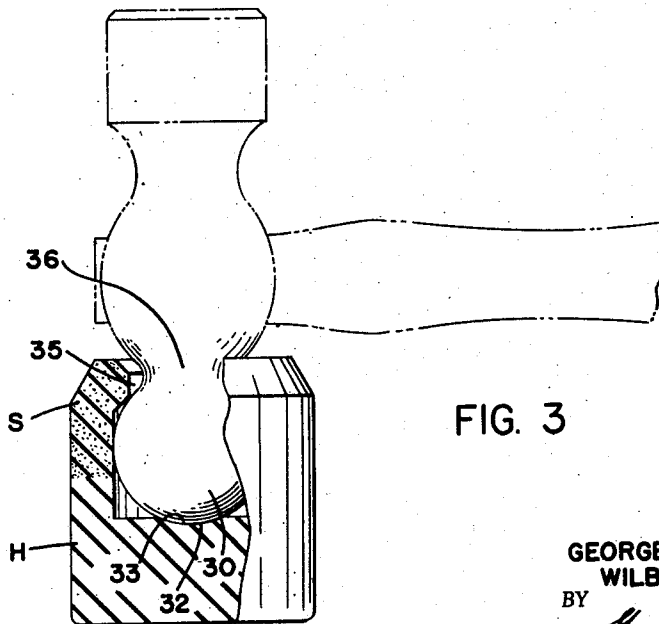


FIG. 3

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MALLET ATTACHMENT

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1 Claim. (Cl. 145—29)

This invention relates to a rubber mallet attachment for a hammer.

The attachment is molded of two different kinds of rubber. The striking portion of the attachment is made of a harder rubber; and the attachment portion is made of a softer rubber so that it can more easily be slipped on to and off of the head of a hammer.

The mallet attachment is designed for use with a hammer having a head which is larger in diameter than the neck to which it is attached. It can be applied to a claw hammer or a machinist's hammer. It will easily fit over the ball peen of a ball-peen hammer, and may be used over the flat head of a claw-peen hammer or a cross-peen hammer.

The invention will be further described in connection with the accompanying drawings, in which—

Fig. 1 shows the mallet attachment on the striking head of a claw hammer, the attachment being shown in section;

Fig. 2 is a section through the hammer head on the line 2—2 of Fig. 1, looking down on the mallet attachment which is partly broken away to more clearly show its construction; and

Fig. 3 is a side view of a mallet attachment, partly broken away, on the ball peen of a machinist's hammer.

The mallet attachments of this invention are formed of two kinds of rubber, the harder rubber being indicated in the drawings by the letter H, and the softer rubber by the letter S. The harder rubber is located at the striking head, and the softer rubber forms the attaching portion of the attachment. The location of the dividing line between the harder and softer rubbers may be varied but, in general, all of the attachment below the head of the hammer to which it is applied will be made of harder rubber, and all of the attaching portion above the cavity into which the head of the hammer fits will be of softer rubber. The harder rubber will be of the hardness of the rubber in an ordinary mallet, so that it will strike a blow comparable to that of a mallet. It may, for example, have a durometer reading of 85 to 95. The softer rubber will have a lower modulus so that it can more easily be stretched to the extent necessary to put it on, and take it off, the head of the hammer. It may have a durometer reading of, for example, 50 to 60.

The claw hammer of Fig. 1 is formed of the handle 1 and the head 2. The head is provided with a claw portion 3 and striking head 4 which is larger in diameter than the neck 5 to which it is attached.

The mallet attachment 7 is formed of both harder and softer rubber, as indicated by the letters H and S. This attachment is molded by first placing a portion of harder rubber in the bottom of the mold and a portion of softer rubber on top of this in the upper portion of the mold. The mold is provided with a core which forms the cavity. After molding, the core is easily removed by flexing the softer rubber which tends to hold it in place. The parting line is generally in the upper portion of the resulting unitary vulcanizate, and in Fig. 1 would usually be at about the level of the top of the perpendicular cylindrical wall of the striking head 4 of the hammer. The

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location of the parting line is immaterial to the invention.

Standard claw hammers weigh 16 ounces. Framing hammers (a type of claw hammer) weigh about 20 ounces. A single mallet attachment of this invention may be made to fit both these types of hammers and also the ball peen of a 16-ounce to 24-ounce machinist's hammer. The cavity for an attachment which will fit these various types of hammers measures about 1 inch to 1 1/4 inches from the top surface 8 to the bottom 9 of the cavity. The central portion of the bottom of the cavity is preferably cupped somewhat at 10 to receive the end of a ball peen of a hammer. The diameter of the larger portion of the cavity will be about 1 1/8 inches. The opening at the top of the cavity narrows at 12 to a vertical wall 13 which firmly grips the tapering portion of the neck 5 above the striking head.

To apply the mallet attachment to the head of a hammer, the surface of the hammer head, or preferably the surface of the neck of the attachment is moistened, as with a few drops of water. The attachment is then easily pressed over the head. After use, a few drops of water inside of the tapering mouth 20 of the attachment will lubricate the rubber surface and facilitate its removal.

Figure 3 illustrates a mallet attachment of the same general design but of somewhat larger construction, to fit the ball peen of a 32- to 48-ounce machinist's hammer. The attachment fits over the ball peen 30 and the rounded bottom 32 of the peen fits into the rounded depression 33 in the bottom of the cavity. The neck 35 of the attachment closes in against the neck 36 of the ball peen.

The design of the mallet attachment may be varied. It is generally cup shaped and has a flat striking surface. The vertical walls may be corrugated or of any desired configuration, and the top may be rounded instead of being provided with flat slanting walls. The rounded depression in the bottom of the cavity may be omitted, although it assists in centering the attachment onto a ball peen. The cavity, generally speaking, is formed of a bottom portion with vertical walls, and the inner surface of the neck or attaching portion may have a vertical wall as shown or this wall may be convexly curved. An inwardly tapering wall connects this portion of the neck with the wider portion of the cavity. The wall leading down to the narrow portion of the neck preferably slants inwardly to facilitate applying the mallet attachment to a hammer. Thus modification of the construction shown and described is possible within the scope of the invention.

What we claim is:

A mallet attachment for a hammer head with a neck of smaller diameter than the largest diameter of the hammer head, which attachment is a unitary vulcanizate and includes a generally cylindrical cavity with an opening at one end of relatively smaller diameter, said open end being of relatively softer rubber than the closed end which is of relatively harder rubber, there being a rounded depression in the center of the bottom of the inside of the closed end, the edge of which depression is spaced a substantial distance from the edge of the bottom with the area between the edge of the depression and the edge of the bottom being substantially flat.

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