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J. R. EHRBAR

METHOD OF MAKING DOOR HANDLES

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Fig. 1.

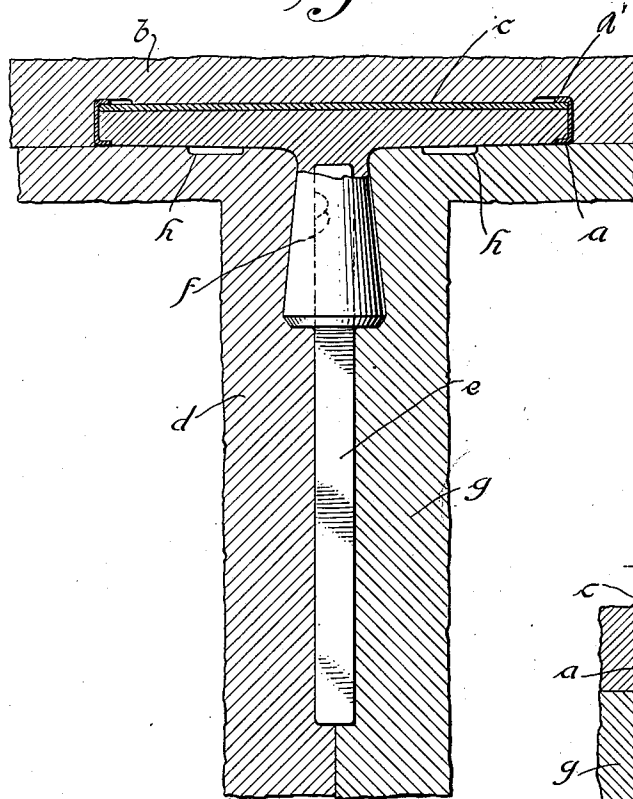


Fig. 3.

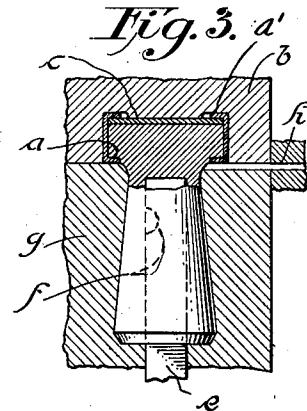
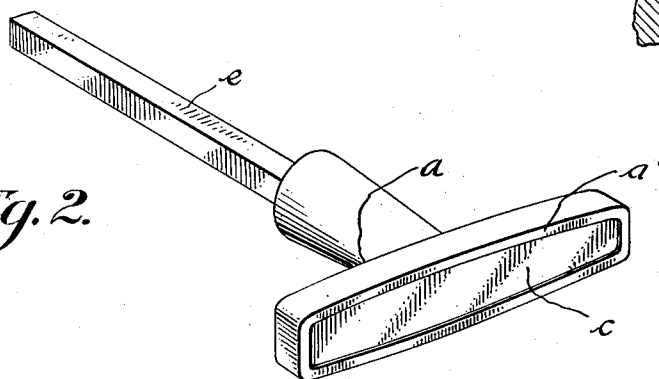


Fig. 2.



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METHOD OF MAKING DOOR HANDLES.

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This invention relates to a process for the manufacture of automobile door handles. It is the object of the invention to provide a process for the manufacture of ornamental handles which will reach almost the limit of economy in manufacturing cost.

It has been the practice heretofore to manufacture ornamental door handles for automobile bodies by treating the same to a coating of pyroxylin enamel. A portion of this enamel has then been stripped by hand to expose the underlying nickel-plated portions to give the handle the necessary ornamentation.

This process has been satisfactory, but it is a relatively expensive one, as the stripping operation is a slow hand operation.

In the drawings:

Fig. 1 is a section through the dies.

Fig. 2 is a perspective of the finished handle.

Fig. 3 is a cross section through the dies.

A stamping in the form of a shell or frame, preferably of brass, is made by suitable dies, and punched. This frame has an under-turned edge *a*, and overlying flange *a'*, and an enameled plate or insert *c* is made of strip metal stock and suitably enameled, as by dipping. The frame, together with the insert, is laid in a set of dies in a die-casting machine. These dies open in two ways and are tri-partite. The back die *b* is provided with a socket arranged to have fitted thereinto the shell or frame, and the enameled insert.

One forward die *d* is arranged to have fitted thereinto the shank *e* which is rolled bar stock put through a screw machine to recess it, as at *f*.

It will be obvious that when the dies are opened up one first inserts the brass shell and the enamel plate in the back die. He next fits the shank *e* and the forward die *d*. This then closes upon the back die and the other forward die *g* closes in on the other two dies. The molten die-casting alloy is then shot through the gates *h*.

This serves to make the whole one integral casting, in which the body of the handle, the outer shell, the enameled plate, and the roll bar shank lock together. It will be seen that the recess *f* serves to securely key and lock the shank into the body and the casting, while the underlying and overlying flanges

a and *a'* of the shell serve to lock the shell into the casting.

The brass shell is preferably nickel-plated.

What I claim is:

1. The method of constructing a door handle which comprises the insertion of an enameled plate in a shell having an overlying and underlying flange, then the placing of these elements in a set of die-casting dies together with a shank, closing the dies and shooting thereinto a fluid metal which upon setting cast-unites the shell and plate and the shank with the body of the handle.

2. The method of constructing an ornamental door handle which comprises the inserting of a frame having an ornamental plate and an underlying part, in molding dies having cavities conforming with the handle, and passing a fluid metal into the same whereby the frame is cast united to the body of the handle.

3. The method of constructing an ornamental door handle which comprises the inserting an ornamental plate in a shell with an overlying and underlying flange, placing the shell with its plate in a set of die-casting dies together with a shank, closing the dies and passing thereinto a fluid metal part of which flows between the plate and the shell, and which upon setting cast-unites the shell and plate and the shank with the body of the handle.

4. The method of constructing a door handle with an ornamental grip portion, which comprises laying a frame member in the grip portion of a mold, placing an ornamental plate in said frame, and then introducing molten metal into the mold behind said plate to form the grip portion of the handle and uniting the frame and ornamental plate to such grip portion.

5. The method of constructing an ornamental door handle which comprises laying a frame member in a mold, placing an ornamental plate within the frame member, closing the mold, and introducing a fluid metal into the mold and between the ornamental plate and part of the frame to form the handle and to lock the ornamental plate to the handle as an integral part thereof.

In testimony whereof I have affixed my signature.

JOHN R. EHRBAR.