Nov. 19, 1929. G. GRAFF 1,736,495

METHOD OF FORMING HARDWARE

Filed May 10, 1926

Fig. 1.

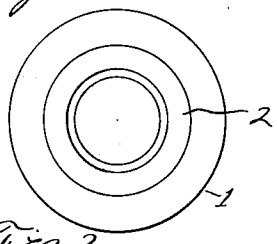


Fig. 2.

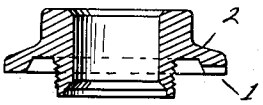
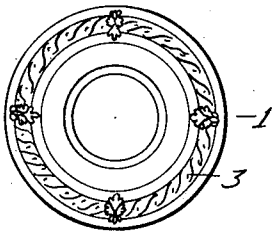


Fig. 3.



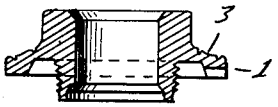


Fig. 4.

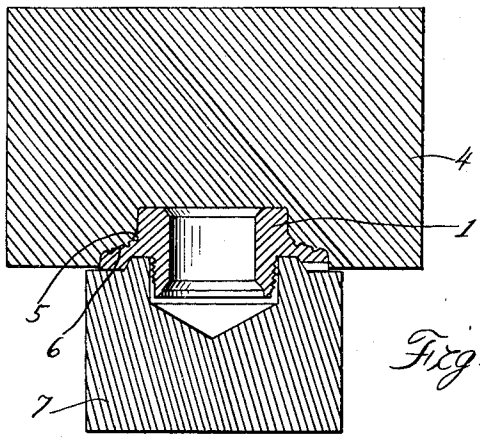
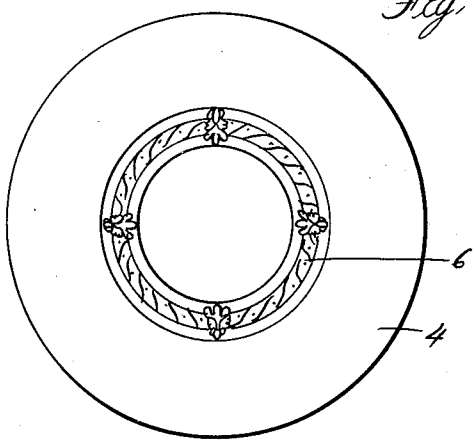


Fig. 5.

Fig. 6.



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UNITED STATES PATENT OFFICE

GEORGE GRAFF, OF TOLEDO, OHIO, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE DURA COMPANY, OF TOLEDO, OHIO, A CORPORATION OF OHIO

METHOD OF FORMING HARDWARE

Application filed May 10, 1926. Serial No. 108,179.

The invention relates to the manufacture of hardware and refers more particularly to the method of forming vehicle hardware, such as handles, escutcheons, etc.

Heretofore it has been usual in forming ornamental hardware articles designed particularly for use in vehicles to die cast the hardware blank, to engrave the blank, to polish the blank for the purpose of removing all blemishes such as indentations and the like, to plate the blank and finally to buff the blank. The article made with this method is not uniformly satisfactory inasmuch as the lines of ornamentation are often times made indistinct and even nearly completely removed when polished. With my method the finished article has clear cut and distinct lines of ornamentation. Other objects of the invention reside in the novel features as more fully hereinafter set forth.

In the drawings:—

Figures 1 and 2 are respectively a plan view and a central section through a piece of hardware illustrating one step of the method;

Figures 3 and 4 are respectively a plan view of a central section through the same piece of hardware when finished;

Figure 5 is a central section through a portion of the apparatus for carrying out one of the steps of the method;

Figure 6 is a bottom plan view of the die forming part of the apparatus shown in Figure 5.

In the present instance I have illustrated my method in the forming of a metal escutcheon 1, although it is apparent that other articles of hardware may be formed with the same method. This escutcheon is first formed by die casting the blank after which the blank is machined and its outer surface 2 is polished, Figures 1 and 2 showing the blank at the completion of these steps. This outer surface or a portion thereof is then formed with the desired ornamentation 3 after which the outer surface including the ornamentation is plated in a suitable manner to form upon this surface a coating of nickel or the like. The plated surface is then buffed to highly polish the same, Figures 3 and 4 showing the finished escutcheon.

In forming the ornamentation 3, I stamp the outer surface 2 of the blank as by means of the die steel 4, which has, as shown in Figures 5 and 6, the die face 5 formed with the projecting ornamenting portion 6 for engaging the outer polished surface of the blank. 7 is a seat die for supporting the blank and locating the same relative to the die steel during the ornamenting step. The die steel is moved downwardly relative to the seat die and blank to impress its ornamenting portion upon the blank, after which this blank is removed and may be finished as by plating and buffing.

With the above method, it will be seen that the die cast article of hardware is first polished to remove all blemishes therefrom, after which the ornamentation is produced upon its polished surface and the polished surface including the ornamentation is then plated and buffed. By reason of this method the lines of ornamentation are clear cut and distinct inasmuch as the buffing will not remove the same.

What I claim as my invention is:

1. The method of forming a hardware article which includes die casting a blank, machining and polishing the outer surface of the blank to remove all blemishes therefrom, forming lines of ornamentation upon a portion of the polished surface of the blank and finally buffing the blank.

2. The method of forming a hardware article which includes die casting a blank, machining and polishing the outer surface of the blank to remove all blemishes therefrom, stamping a portion of the outer surface of the blank to form ornamentation thereupon, plating the blank and finally buffing the blank.

In testimony whereof I affix my signature.

GEORGE GRAFF.