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IN NEXT FIFTY YEARS**

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YOUR HOME HAPPIER**

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Hands Up!

to hold your books

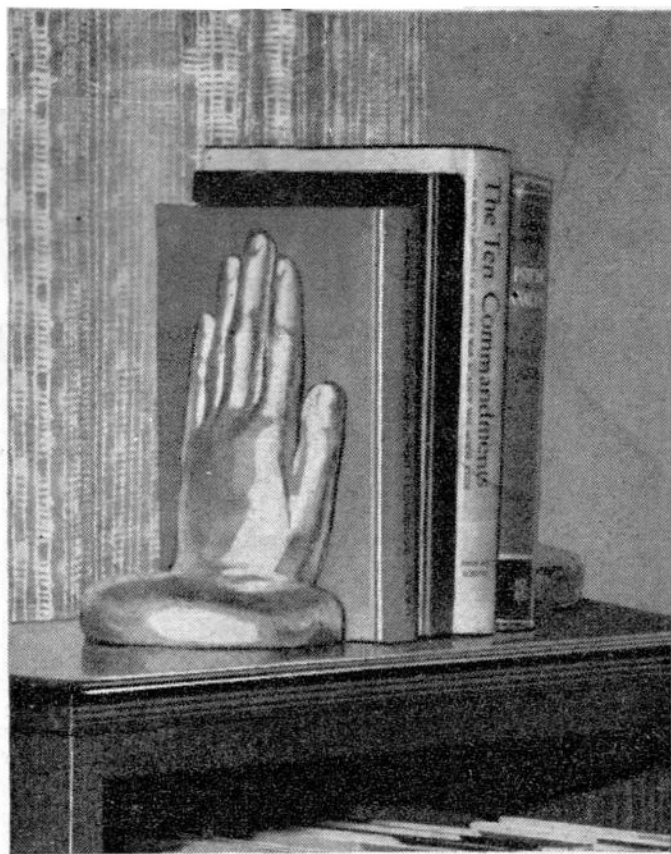
Cash in on personalized book ends. Cast in a flexible mold from a master pattern of a human hand and finished in bronze, they bring a handsome spare-time profit

By Thomas A. Dickinson

LIKE THE BRONZING of baby shoes, here's an idea that can be turned into a profitable spare-time business—casting book ends from human hands. But whether it's done for profit or just for fun, it costs little and your friends are sure to be intrigued by a life-size reproduction of their own hands, supporting their favorite books.

Producing a pair of these personalized book ends consists of making a "splash" plaster mold directly from the person's hand. To do this, the hand is first coated with Vaseline, Fig. 1, which prevents the plaster from sticking. Then the hand is rested palm down on wax paper on a flat surface and covered to the wrist with a mixture of casting plaster, Fig. 2. This splash coating should be at least $\frac{1}{2}$ in. thick all over. After allowing the plaster to harden for about 30 minutes, the hand is turned over and worked free by gently wiggling the fingers, Fig. 3. This usually can be done without damaging the mold, but any small chips or flaws that might occur can be easily corrected later in the master pattern.

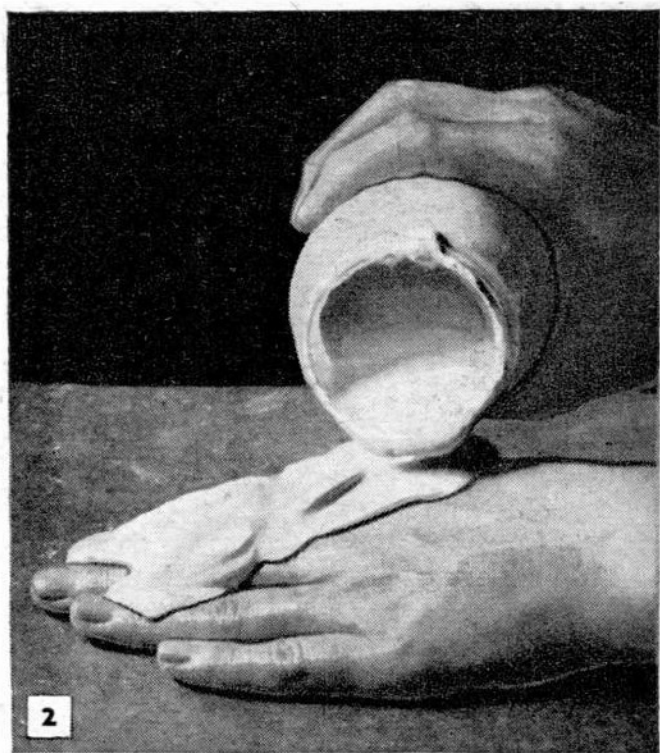
Next, the hand impression in the splash mold is coated with two or more applications of lacquer, Fig. 4, to seal the pores in the plaster and to produce a glossy finish. This is followed with a coat of paste wax to prevent the master pattern from sticking. The master pattern is made by merely filling the splash mold with plaster, the open end of the cavity being blocked off as in Fig. 5. As the splash mold is no longer needed, the



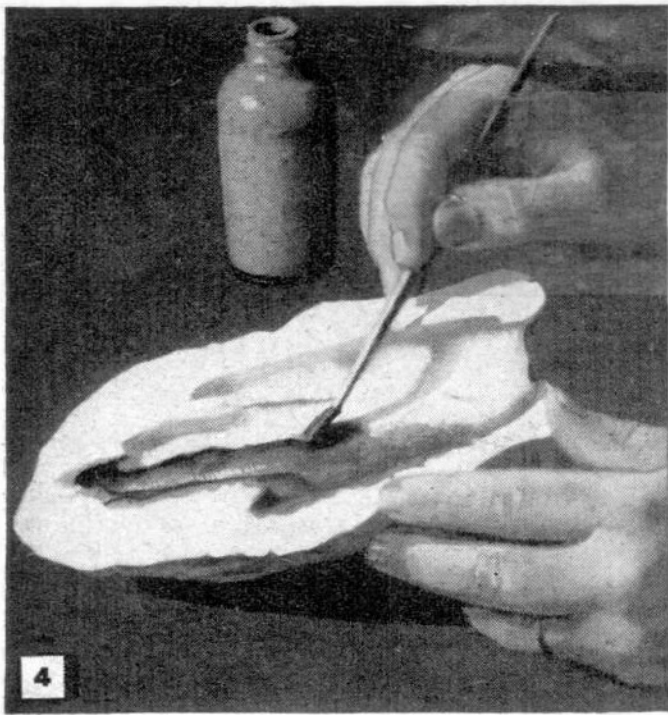
First step, coat both sides of hand with Vaseline



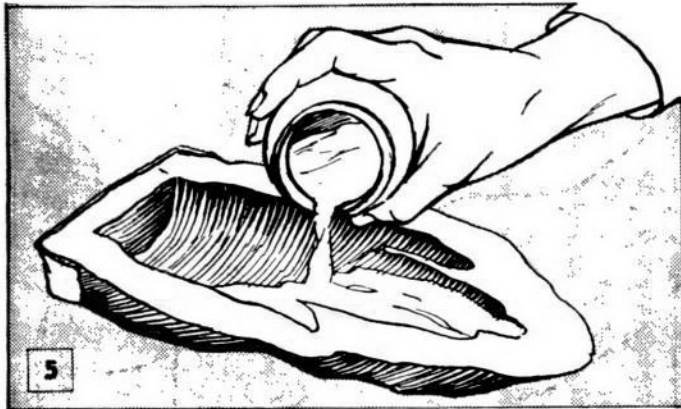
Hand is freed from plaster mold by wiggling fingers



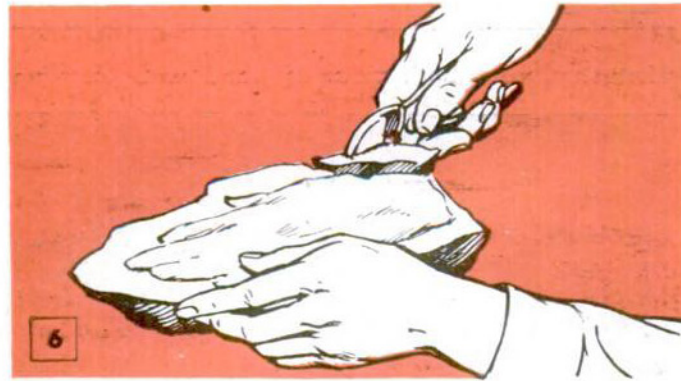
Next, rest hand on wax paper and cover with plaster



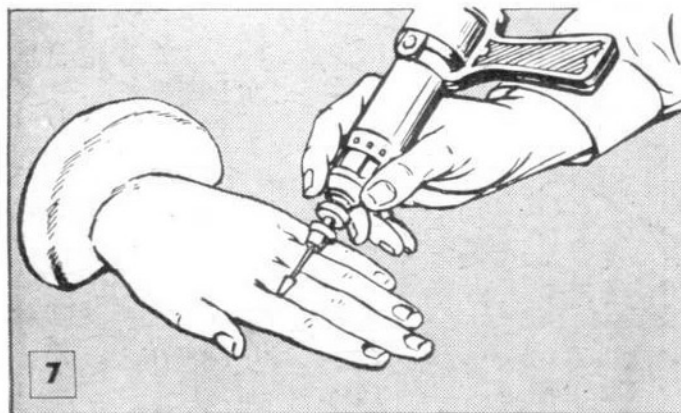
4 Cavity of mold is painted with two coats of lacquer



5 Master pattern is made by filling mold with plaster



6 Mold is carefully chipped from master with pliers

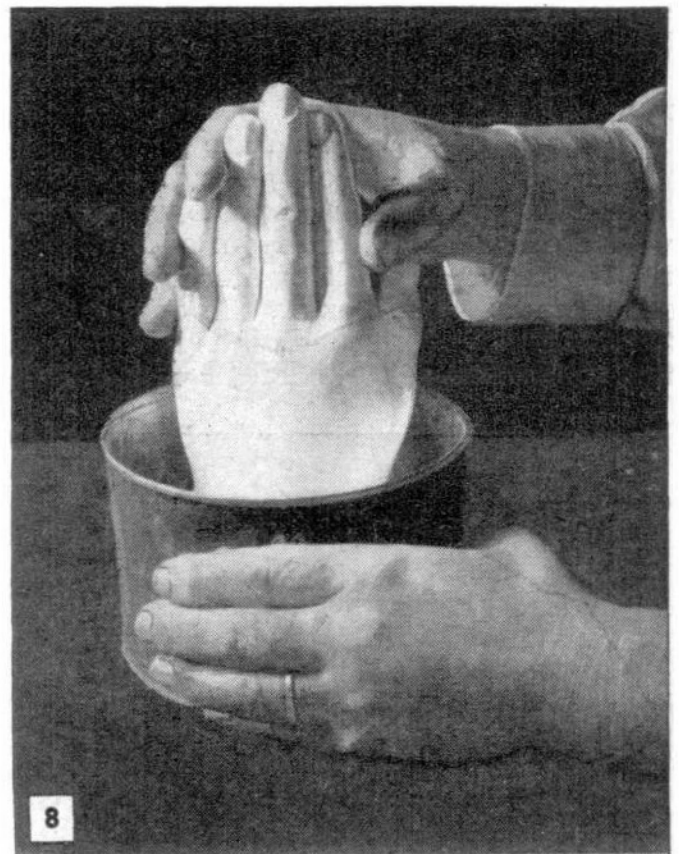


7 Completed master is cleaned up by sanding the flaws

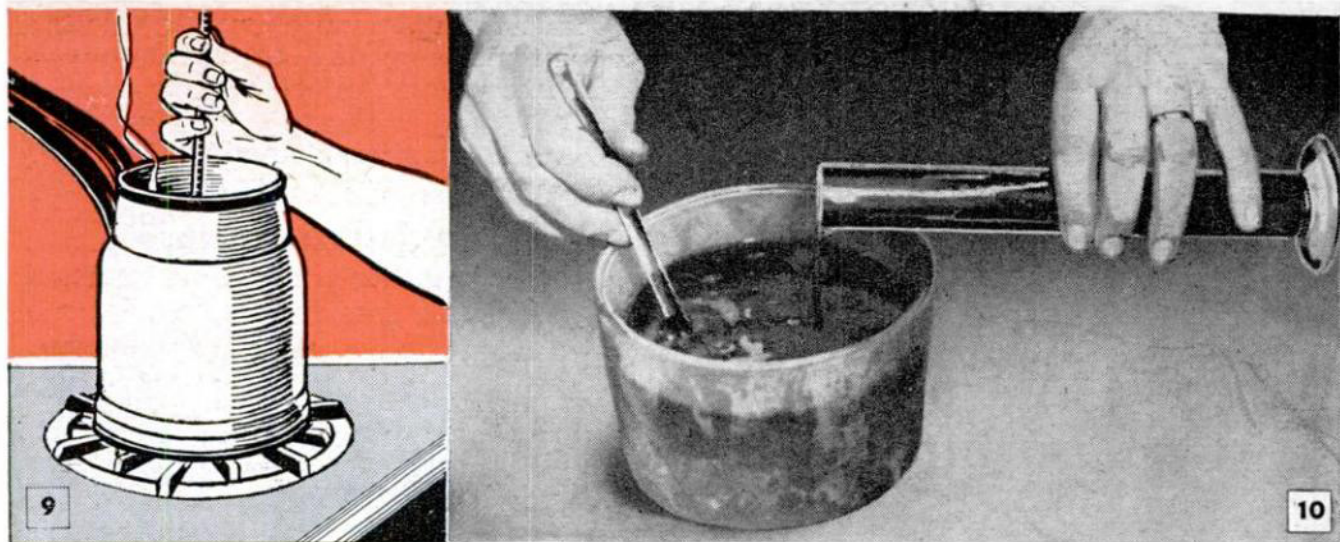
master casting is removed by simply breaking away small pieces of the mold with a pair of pliers, Fig. 6.

When this is done, a base is added to the hand. Using a tin can as a form, plaster is poured into the can to a depth of 1 in., and while the plaster is still wet the master pattern is placed upright in the can and embedded in the soft plaster, Fig. 8. Small holes due to air bubbles and other irregularities in the master casting can be corrected by sanding and patching where necessary. A handy tool for cleaning up the pattern is a small hand grinder, Fig. 7. The portion of the base projecting on the flat side of the hand is carefully sawed off flush with the surface. Next, the master pattern is coated with lacquer, followed, when dry, with linseed-oil soap, consisting of equal parts of linseed oil, water and laundry soap. This is applied to keep the pattern from sticking to the flexible mold.

Material for the flexible mold is compounded by mixing together 4½ lbs. of flake gelatin, 4½ pts. of water, 9 lbs. of glycerin, 1 lb. of glucose and 1 oz. of denatured alcohol in the following order: Add the water to the gelatin and cover the container with a damp cloth to prevent evaporation. Stir the water-and-gelatin mixture every 10 min., replacing the cloth each time until the gelatin is thoroughly softened. Drain off any surplus water in the mixture and then place the gelatin in a double boiler, Fig. 9. Next, warm the glycerin and add it to the melted gelatin,



8 Base is added to master by standing in wet plaster



Ingredients for the flexible mold are cooked in a double boiler and then alcohol is added to the mixture



Master and subsequent castings are extracted from mold by stretching it. Open-end can provides mold form

and then warm and add the glucose. When thoroughly "cooked," remove the mixture from the double boiler and stir in the alcohol, Fig. 10. The mixture is now ready to be poured over the master pattern. A mold for the pattern can be made by removing both ends from a large can or by wrapping cardboard into a tube, Fig. 12. The form should clear the pattern at least 1 in. all around. After pouring, the flexible mold is allowed to stand for about 12 hrs. before separating it from the pattern.

Preparatory to making the finished casting, the flexible mold is dusted on the inside with talcum powder and left for an hour to allow any moisture in the mold to evaporate. If the casting material used requires a melting point of more than 100 deg. F., the mold cavity should be treated with a strong solution of alum, which is made by heating 1 lb. of alum in 1 qt. of water. This is applied cold to the mold and allowed to dry. If any alum residue remains in the mold, remove it by tapping.

Low-melting materials that may be used

to make finished castings include a metal called Cerrolow, thermo-setting plastics, regular casting plaster and other compounds which do not require heating the mold beyond 150 deg. F. Before each casting is made, the mold cavity should be brushed with a mixture of 7 parts of kerosene and 5 parts of stearic acid. In addition to cleaning the mold surface, this mixture serves as a parting agent. In filling the mold, care should be used to pour the liquid down the side of the mold so that the lowest parts of the mold will be filled first, forcing any air bubbles to the top. Pouring should be done steadily without splashing. When the flexible mold has served its purpose, it can be melted and the material used again.

Finishing the book ends can be done with pastel enamels or bronzing powders. A glaze-like finish in shiny black makes an attractive pottery-type job. If plain plaster is used to cast the hand, it should be sized with shellac before painting to seal the porous surfaces. Apply several coats of paint to build up a smooth heavy finish.