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W. F. LENT

1,974,618

METHOD OF MOLDING INSULATING HANDLES

Filed March 2, 1931

Fig. 1

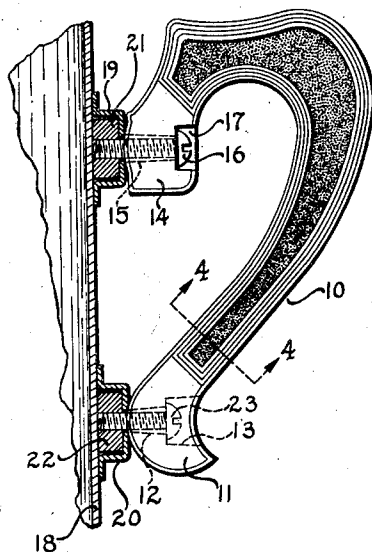


Fig. 2

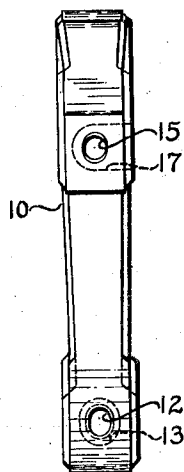


Fig. 3

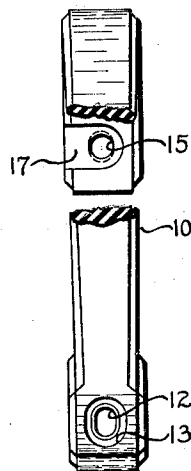


Fig. 4

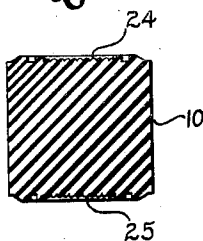
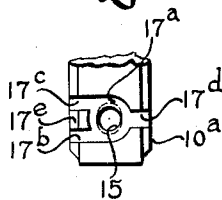


Fig. 5



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UNITED STATES PATENT OFFICE

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METHOD OF MOLDING INSULATING HANDLES

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6 Claims. (Cl. 18—55)

This invention relates to improvements in methods of molding insulating handles.

An object of the invention is to provide a reflexed molded insulating handle with a novel form of countersink or recess in the reflexed end thereof.

Another object is to provide a novel method of molding a reflexed handle having such a countersink or recess.

Another and more specific object is to provide means for properly insulating the head of a screw or other element which may be employed to secure the reflexed molded insulating handle to a cooking utensil of the desired form.

The accompanying drawing illustrates an embodiment of the invention which will now be described, it being understood that the invention is susceptible of embodiment in other forms without departing from the scope of the appended claims.

In the drawing, Figure 1 is a side elevational view of a molded insulating handle embodying my invention, and showing in section the usual means for attaching the handle to a hollow-ware utensil.

Fig. 2 is an end elevation of the handle looking toward the right in Fig. 1.

Fig. 3 is a similar elevation looking toward the left in Fig. 1,—a portion of the handle being broken away to illustrate the countersink or recess at the reflexed end of said handle.

Fig. 4 is an enlarged sectional view, on the line 4—4 of Fig. 1, illustrating the manner in which the opposite sides of the handle are paneled or decorated, and

Fig. 5 is a fragmentary elevational view of a molded handle having a modified form of countersink or recess.

Referring to the drawing, the numeral 10 designates a molded insulating handle which may in general be of a form well known in the art. Thus, the handle is provided with a lower end 11 having a slightly tapered through-passage 12 and a countersink or recess 13,—said passage and said recess being preferably somewhat elliptical, as shown, to compensate for possible shrinkage or warpage of the molded piece or to allow for slight inaccuracies in the spacing of the fastening elements upon the hollow-ware article. As will be understood, the passage 12 and recess 13 are formed by a retractable die element or bushing (not shown) which is withdrawn toward the right (Fig. 1) in a plane at right angles to the direction of the applied molding pressure.

The body of handle 10 curves upwardly and outwardly from the lower end 11 thereof, and

then inwardly and downwardly to provide the reflexed end 14. The reflexed end 14 is likewise provided with a through-passage 15 which is formed by a retractable die element or bushing (not shown) to be withdrawn toward the left (Fig. 1) in said plane at right angles to the direction of the applied molding pressure. As best illustrated in Fig. 1 the passage 15 is slightly flared toward the left to compensate for possible inaccuracies in the size of the molded piece or in the positioning of the fastening elements. The flared or tapered form of passage 12, recess 13, and passage 15 likewise facilitates retraction or withdrawal of the die elements.

It is desired that a countersink or recess be provided in the inner surface of the reflexed end 14 of the handle, in order that the head of the fastening screw 16 will be properly insulated to protect the hand or fingers of a person who grasps the handle 10 to lift or move the utensil. As will be apparent to those skilled in the art, there is insufficient space between the inner surface of end 14 and the main body of handle 10 to permit the use of a retractable die element such as may be employed to form the passage 12 and recess 13.

Accordingly I provide a countersink or recess of the form shown at 17 in the inner face of the reflexed end 14, said recess 17 opening laterally to one side of the handle, to permit forming of said recess by the straight-line molding of the piece. That is to say, one of the straight-line molding die members (not shown) has fixed thereto or formed integrally therewith a projecting element having a contour such as to provide the recess 17 by the molding operation.

Obviously, if desired, the recess 17 might be extended entirely across the width of the handle either by providing a projection of greater length upon the aforementioned die member, or by providing half-length projections on each of the two die members. However, the arrangement illustrated is preferred, since the appearance of the handle is improved by having the recess 17 closed on at least one side of the handle, and better protection is provided from burning the fingers by the screw-head. In this connection, I have illustrated a modified form of countersink or recess 17^a which opens at two spaced points 17^b, 17^c to one side of the handle 10^a and likewise opens, as indicated at 17^d, to the other side of the handle. By this means the recess 17^a is made of substantially circular contour, by closing a portion of one side thereof, as indicated at 17^e, while dividing the open area of said recess between opposite sides of the handle. As will be

apparent the recess 17^a is formed by providing interleaving projections on the respective members of the straight-line molding die.

The coffee percolator or other cooking utensil 18 has attached thereto in any suitable manner the perforated metal stampings 19 and 20, which serve to retain the nuts 21 and 22, respectively, which are preferably of polygonal contour. The screw 16 is adapted to cooperate with nut 21 to clamp the reflexed end 14 of handle 10 to the utensil 18, and screw 23 cooperates with nut 22 to clamp the lower end 11 of said handle in fixed position.

The opposite sides of the molded handle may be stippled and paneled or otherwise decorated, as best illustrated at 24 and 25 in Fig. 4.

What I claim as new and desire to secure by Letters Patent is:

1. In the method of molding an insulating handle having a reflexed end portion, the inner surface of said reflexed end portion being in relatively close juxtaposition to the inner surface of the main body portion of the handle and having a countersunk recess formed therein, the step which consists in forming said handle and the walls of said recess by a single straight-line molding operation.

2. The method of molding an insulating handle having substantially parallel flat sides and an end portion curved to oppose the main body thereof, which consists in forming the piece by a straight-line molding operation, and utilizing said straight-line molding operation to provide a countersink or recess in the surface of said end portion adjacent to the main body of said handle.

3. The method of molding an insulating handle

having substantially parallel flat sides and an end portion curved to oppose the main body thereof, which comprises forming the piece by a straight-line molding operation, utilizing said straight-line molding operation to provide a countersink or recess in the surface of said end portion adjacent to the main body of said handle, and simultaneously forming in said end portion a through passage communicating with said recess.

4. The method of molding an insulating handle having an end portion reflexed to oppose the main body thereof and a countersink or recess opening to the surface of said end portion adjacent to said main body, which consists in forming said handle and said recess by a single straight-line molding operation.

5. The method of molding an insulating handle having an end portion reflexed to oppose the main body thereof and a countersink or recess opening to the surface of said end portion adjacent to said main body, which consists in forming said handle by a single straight-line molding operation, and utilizing an integral portion of at least one of the straight-line molding die members to shape the walls of said recess.

6. The method of molding an insulating handle having an end portion reflexed to oppose the main body thereof and a countersink or recess opening to the surface of said end portion adjacent to said main body, which consists in forming said handle and said recess by a single straight-line molding operation, and simultaneously forming in said reflexed end portion a passage extending in a plane at substantially right angles to said surface.

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