Dec. 1, 1936. J. H. FOX 2,062,646

METHOD OF FRAMING DOUBLE FACE POCKETBOOK MIRRORS

Filed Feb. 7, 1936

Fig. 1.

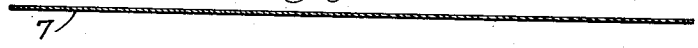


Fig. 2.



Fig. 3.

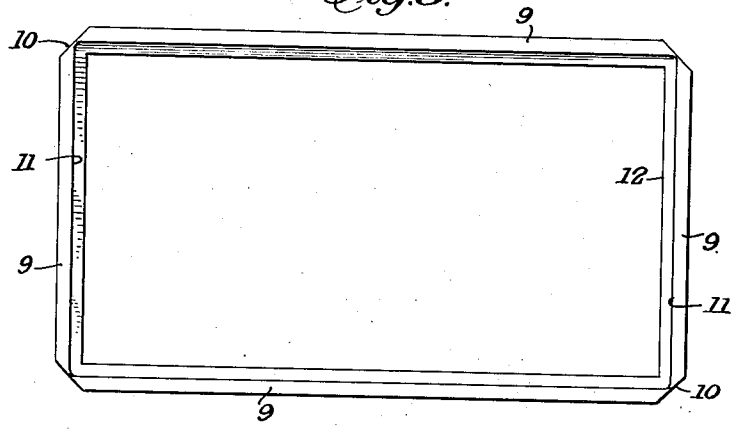


Fig. 4.

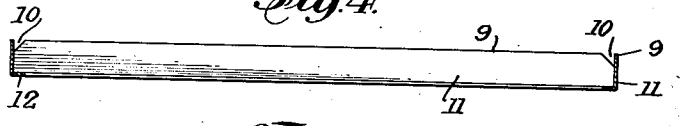


Fig. 5.

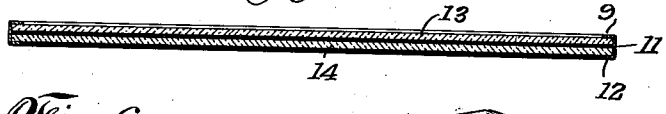
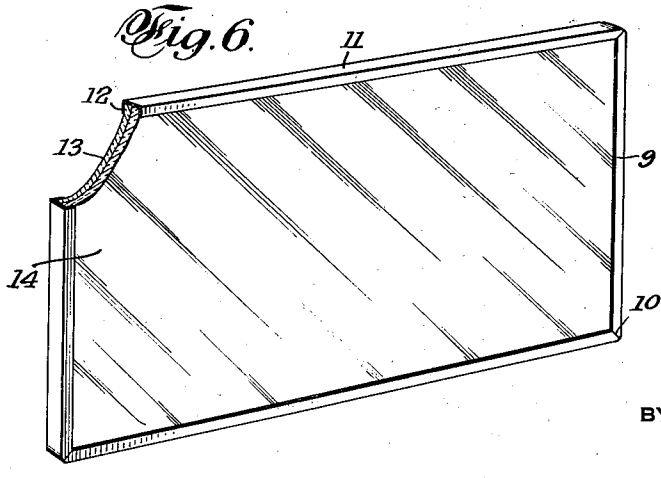


Fig. 6.



JOSEPH H. FOX
INVENTOR

BY Philip S. McLain

ATTORNEY

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METHOD OF FRAMING DOUBLE FACE POCKETBOOK MIRRORS

Joseph H. Fox, Long Island City, N. Y.

Application February 7, 1936, Serial No. 62,842

1 Claim. (Cl. 113—116)

This invention relates to the manufacture of the small mirrors used in pocketbooks, handbags, vanity cases and the like, and particularly to the so-called "double face" type of mirror.

The double face mirrors now in use consist of two glass mirrors cemented in back-to-back relation. The exposed edges and corners of these two layers of glass are objectionable, particularly if the two layers are not in exact register or the glasses are not of the same exact size. These glasses must be relatively thick to stand the handling to which they are subjected. The shellac which is usually employed to cement the mirrors together has a tendency to attack the silver backings of the two mirrors.

The objects of the present invention are to overcome and eliminate the above and other faults common to the present form of mirrors and to provide a small double face mirror in which the edges and corners will be smoothly covered and reinforced, enabling use of desirably thin glass and in which the mirrors will be held together without the need for any intervening adhesive.

Other objects and the novel features of construction, combinations and relations of parts will appear as the specification proceeds.

The drawing accompanying and forming part of the specification illustrates steps in the manufacture and a complete embodiment of the invention, but it should be understood that the method and structure may be modified and changed within the true intent and broad scope of the claim.

Fig. 1 is a longitudinal sectional view of a thin sheet metal blank from which the frame of the mirror is made.

Fig. 2 is a similar view showing the blank drawn to provide a seat for the mirror elements.

Fig. 3 is a top plan view showing the drawn blank trimmed and punched.

Fig. 4 is a longitudinal sectional view showing the edge flanges of the trimmed blank turned up in line with the drawn portion.

Fig. 5 is a longitudinal sectional view of the completed article with the flanges turned inward over the edge of the upper mirror element.

Fig. 6 is a perspective and broken sectional view of one of the completed mirrors.

The blank shown at 7, Fig. 1 may be considered as part of a continuous sheet or strip or as a separate detached element and preferably it is of a thin, ductile sheet metal, which will draw readily to the form shown in Fig. 2, where the center of the blank is depressed to the outline of the mirror, with an outstanding marginal flange left at 8.

After the drawing operation, the blank goes through trimming and punching operations, in which the outstanding flange 8 is trimmed to a narrow edge flange 9, Fig. 3, discontinuous or separated by notches 10, cut in at the corners to substantially the beginning of the drawn wall 11. As a part of or as a separate operation, the center of the blank is punched out, leaving only a narrow continuous marginal edge flange 12.

The next operation usually is to turn the discontinuous trimmed and notched flange made up of the elements 9, upward or into line with the drawn wall 11, as in Fig. 4. This may readily be effected by forcing the blank, which at this stage has become an open frame, through a so-called "push through" die.

This frame is then ready to receive the mirror elements 13, 14, which are located in back-to-back relation in the frame resting against a continuous retaining flange 12.

The final step consists in folding the notched discontinuous flange in over the edges of the exposed mirror 13, as shown in both Figs. 5 and 6. The removal of material at the corners enables the flange sections 9, to meet smoothly, as shown in Fig. 6.

The shape of the notches 10, may vary with different shapes of frames, designed as they are to remove excess material which would result from the folding in of the retaining flange.

The drawing produces a frame which is tough and strong, even though of light metal and this so reinforces the mirrors that comparatively thin glass may be used. These mirrors on the other hand, have the effect of reinforcing the light metal frame so that by the cooperative action, a double face mirror is produced, which though quite thin is stronger and better adapted to resist breakage than the thicker mirrors now in use.

To insure a firm holding of the mirrors, the blank is drawn to a depth approximately equal to the combined thickness of the two mirror elements and the discontinuous retaining flange is cut in to the drawn wall, so that when closed over the mirror edge, it will clamp and hold the mirrors against any slippage or movement in the frame. This firm holding effect enables a certain latitude in the size of the mirrors, that is, they need not be cut with such care and exactitude as heretofore required.

In addition to having the continuous, smooth edges and corners and being thinner, lighter and yet stronger than mirrors now in use, the mirror of this invention actually is more attractive and presents a better, neater and more finished

appearance. The frame structure may be so narrow as not to take away any appreciable mirror surface and it may be enamelled, plated, colored or otherwise treated to add to the attractiveness of the article. The various steps of manufacture may be performed as described, or they may be modified in accordance with special requirements or machine practice. Thus several or all of the operations described may be combined in one press or forming and punching machine and the mirrors and frames may be assembled as soon as the centers are punched out or only just before the discontinuous retaining flange is folded in. The claim therefore should be considered in this light. While small mirrors of parallelogram shape are the usual form desired, it will be understood that the invention is adapted to and contemplates mirrors of any shape. The drawn portion of the frame between the continuous and the discontinuous retaining flanges at opposite sides of the same provides a particularly strong and tough reinforcement about the edges of the mirrors, resisting breakage from dropping or careless handling of the mirror. This intermediate drawn portion between the flanges is rounded at the corners as particularly appears in Figs. 3 and 6, and the flanges are preferably bent with rounded edges, so that no sharp corners or edges are present at any part of the mirror. The frame is so light and flexible that close fitting sharp cornered mirror elements may be forced therein, the tight fit thus obtained between the sharp cornered mirror elements and the round cornered frame being advantageous in securing the parts together against any possible relative shifting of mirror elements and frame.

What is claimed is:

The method of framing double face pocketbook mirrors, comprising the following steps; drawing a circumscribed area of sheet material in a shape corresponding to the shape of the article to be framed and to a depth approximating the total thickness of such article, trimming the surrounding material about the drawn wall to a width corresponding to the desired width of a flange for confining the article in the frame and notching said flange inwardly to substantially the beginning of said drawn wall in shape to enable the notched edges to meet smoothly when said flange is subsequently folded down over the inserted article, punching out the center of the drawn area at a distance inward from the drawn wall corresponding to the desired width of a flange for supporting the article in the frame, folding the surrounding trimmed and notched confining flange portion into substantial continuation of said drawn wall, seating the article in said drawn portion resting on said supporting flange and continuing the folding of said notched rim flange inwardly over into substantially confining engagement with the article resting on said supporting flange.

JOSEPH H. FOX.