April 8, 1952 J. W. SCHLAF 2,592,472

SHEET METAL ARTICLE AND MOLDING STRIP ASSEMBLY

Filed Aug. 3, 1948

Fig. 1

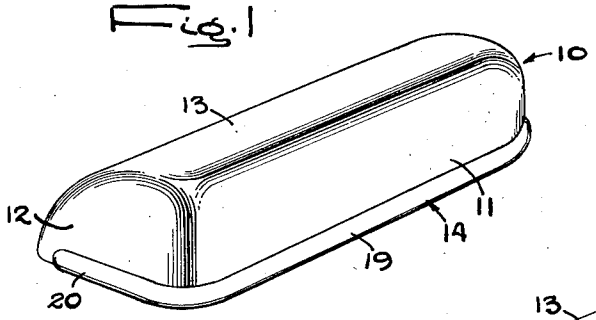


Fig. 2

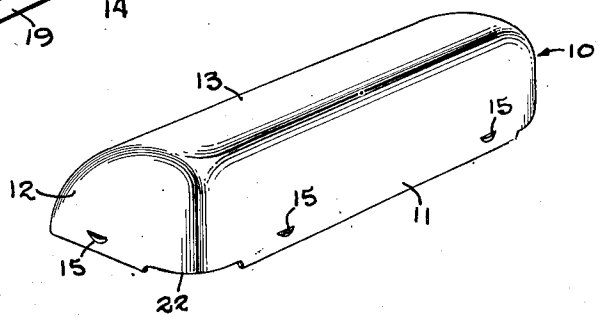


Fig. 3

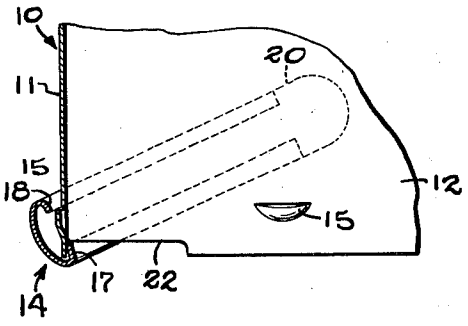


Fig. 6

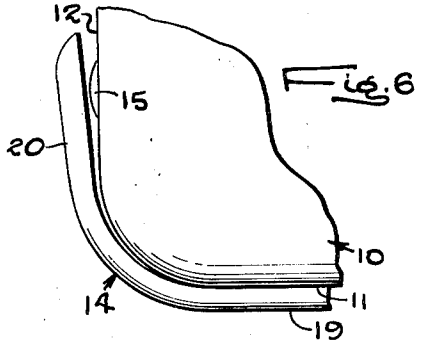


Fig. 4

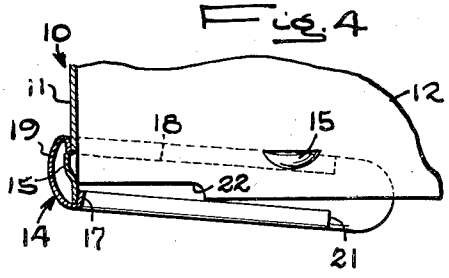


Fig. 5

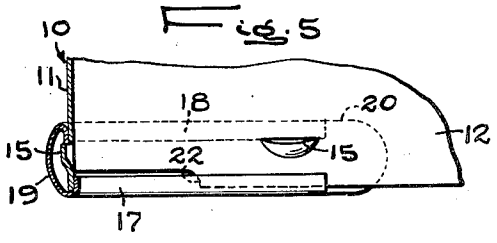
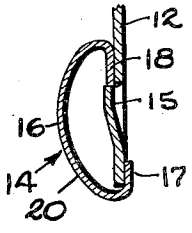


Fig. 7



INVENTOR

Joseph W. Schlaf

By Carlson, Pitzner, Hubbard & Wolfe

ATTORNEY

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SHEET METAL ARTICLE AND MOLDING STRIP ASSEMBLY

Joseph W. Schlaf, Kankakee, Ill., assignor to Florence Stove Company, Gardner, Mass., a corporation of Massachusetts

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3 Claims. (Cl. 189—34)

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The invention relates to articles such as lamp housings constructed of sheet material and relates more particularly to an improved construction and arrangement for applying moulding strips to such articles to mask the free edges thereof.

One object of the invention is to provide an article and moulding strip assembly of the above general character embodying novel features of construction which materially reduce the labor involved and therefore the cost of applying the moulding strip, which improve the appearance of the finished article by eliminating screws and similar fastener means for securing the moulding strip in place, and which effectually retain the parts in assembled relation.

Another object is to provide an improved method of applying a conventional moulding strip to an article made of sheet material to mask the free edges of the article.

Other objects and advantages of the invention will become apparent from the following detailed description of the preferred embodiment illustrated in the accompanying drawing, in which:

Figure 1 is a perspective view of a sheet metal article and moulding strip assembly embodying the features of the invention.

Fig. 2 is a perspective view of the article without the moulding strip.

Figs. 3, 4 and 5 are fragmentary sectional views showing the manner in which the moulding strip is manipulated in applying it to an article of the type shown in Fig. 2.

Fig. 6 is a fragmentary top view of the article with the moulding strip in process of being applied thereto.

Fig. 7 is a sectional view taken in a vertical plane substantially on the line 7—7 of Fig. 1.

While the invention is susceptible of various modifications and alternative constructions, I have shown in the drawing and will herein describe in detail the preferred embodiment, but it is to be understood that I do not thereby intend to limit the invention to the specific form disclosed, but intend to cover all modifications and alternative constructions falling within the spirit and scope of the invention as expressed in the appended claims.

For purposes of illustration the invention has been shown as applied to a lamp housing or reflector 10, although it will be appreciated that it is applicable as well to other articles constructed of sheet material which have exposed free edges that present a better appearance when finished off or masked with moulding strips. The housing

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10 as shown is in the form of an open bottom shell of generally rectangular cross section having an upright front or side wall 11 and end walls 12. The other side and the top of the shell are closed by a convexly curved wall member 13 formed integrally with the side and end walls. Shells of this character may be stamped or drawn from sheet metal, or other suitable material. As will be seen by reference to Figs. 1 and 2, the several walls are arranged to meet in generally rounded corners which enhance the appearance of the housing and facilitate the stamping or drawing operation by which it is produced.

To give the housing an attractive and finished appearance, the exposed free lower edges of the side wall 11 and the end walls 12 are masked by a moulding strip 14. In accordance with the invention, the housing and the moulding strip are constructed so that the latter may be made from conventional flanged or channel-section stock and may be assembled in a simple and expeditious manner without the use of screws or similar fasteners. More particularly, the construction and relationship of the parts is such that the moulding strip is applied and held in place on the housing simply by hooking one flange over the edges of the housing walls and engaging the other flange over suitable retaining elements 15 on the housing walls. The elements 15 are preferably in the form of nibs struck out or lanced in the walls 11 and 12 of the housing to present outwardly projecting ledges for coaction with the flange of the strip. In the exemplary embodiment, two retaining elements are provided on the side wall 11 and one on each of the end walls 12, all of such elements being uniformly spaced from the lower free edges of the walls.

Referring more particularly to Figs. 1, 4 and 7 of the drawing, the moulding strip 14 as herein shown is shaped to present a convex outer face portion 16 with inwardly turned flanges 17 and 18 extending along opposite side edges. In preparing the moulding strip for application to the housing 10, a section of stock cut to suitable length to extend around at least three sides of the housing is bent into substantial conformity with the cross-sectional shape of the housing, in this instance into generally U-shaped configuration. The preformed strip thus presents an intermediate portion 19 adapted to extend the full length of the side wall 11 and end portions 20 adapted to extend along the end walls 12. In the present instance these end walls are terminated forwardly of the rear edge of the housing and the end portions of the strip are preferably rounded off to

fit snugly against the end walls. For convenience in shaping of the ends of the strip, the flanges 17 and 18 may be cut off inwardly from the ends of the strip, as indicated at 21 (Fig. 4).

To facilitate the assembly of the moulding strip 14 with the housing 10, the edge portions of the latter adjacent the corners defined by the side and end walls are cut away or notched, as indicated at 22, to provide clearance for the lower flange 17 of the strip. In applying the strip the flange 17 of the intermediate portion 19 of the strip is initially hooked over the free edge of the side wall 11, the strip being tilted to the position shown in Fig. 3 to allow the wall to enter between the flanges. The end portions 20 of the strip are then rocked downwardly and the upper flange 18 is snapped over the retaining elements or ledges 15 on the side wall 11. The rocking movement of the end portions 20 is continued until they are depressed sufficiently to enable the lower flange 17 thereof to be hooked over the free or exposed edge of the associated end wall 12 of the housing. The end portions are then returned to positions substantially parallel to the edges of the end walls and the upper flanges 18 are snapped over the adjacent retaining elements or ledges 15.

In bending the moulding strips into their U-shaped form, the end portions 20 are preferably set at an angle such that they are yieldably urged against the end walls 12 of the housing. This serves to maintain the flanges 18 in effective engagement with the retaining elements 15. The end portions 20 of the strip are thus securely anchored and are thus enabled to maintain a similar engaging relation between the upper flange of the intermediate portion 19 of the strip and the retaining elements 15 on the side wall 11 of the housing. The strip and housing are therefore effectively retained in assembled relation. As no screws or similar fasteners are required for securing the parts together, the moulding strip presents a smooth and attractive appearance.

It will be apparent from the foregoing that the invention provides a novel article and moulding strip assembly which is inexpensive to manufacture and assemble, and which presents a neat and attractive appearance. The novel method of applying the moulding strip to the article materially reduces the time and labor involved, with a consequent saving in cost.

I claim as my invention:

1. The combination with an open ended shell of sheet metal or the like having upright side and end walls with exposed lower free edges and retaining elements on said walls defining outwardly directed upwardly facing ledges spaced from the free edges of said walls, of a moulding strip of channel cross section having an intermediate portion of substantially the same length as the side wall of the shell and rearwardly turned end portions slightly shorter than the end walls of the shell, said strip having a lower inturned flange throughout substantially its entire length hooked under the free edges of the end walls and one side wall of the shell, and an upper inturned flange extending substantially the entire length of said strip and engaged with said ledges, the lower edges of the side and end walls of the shell being cut away at the corners formed by the walls to provide clearance for the moulding strip in its assembly with the shell.

2. The combination with a generally rectangular sheet metal article open at one end, of a channel-shaped moulding strip extending around at least three sides of the article and masking the edge thereof adjacent its open end, said moulding strip having a continuous inwardly turned flange at one edge hooked over the edge of said article, a series of retaining elements on said article defining ledges projecting outwardly from the surface of the article and uniformly spaced from the edge of the article, said strip having an inwardly turned flange along its other edge engaged with said elements to hold the strip in assembled relation with the article, the edge portions of said article adjacent the corners thereof being notched to facilitate assembly of the strip with the article.

3. A sheet metal article having, in combination, a side wall and end walls disposed substantially at right angles thereto and connected therewith by integral corner portions, said side and end walls each presenting at least one free edge all disposed in a common plane, retaining elements formed on the outer faces of said walls defining ledges uniformly spaced from their free edges, a moulding strip for masking the free edges of said walls comprising an intermediate portion of a length corresponding to the width of said side wall, and end portions disposed substantially at right angles to said intermediate portion, a continuous inwardly turned flange extending along one edge of said moulding strip hooked over the free edges of said walls, and an inwardly turned flange extending along the other edge of said moulding strip engaged with the ledges defined by said retaining elements to hold the moulding strip in assembled relation with said walls.

JOSEPH W. SCHLAF.

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