Jan. 22, 1929. 1,699,712

A. J. PRATT

PROCESS FOR PRODUCING RECEPTACLES

Filed Aug. 21, 1925 2 Sheets-Sheet 1

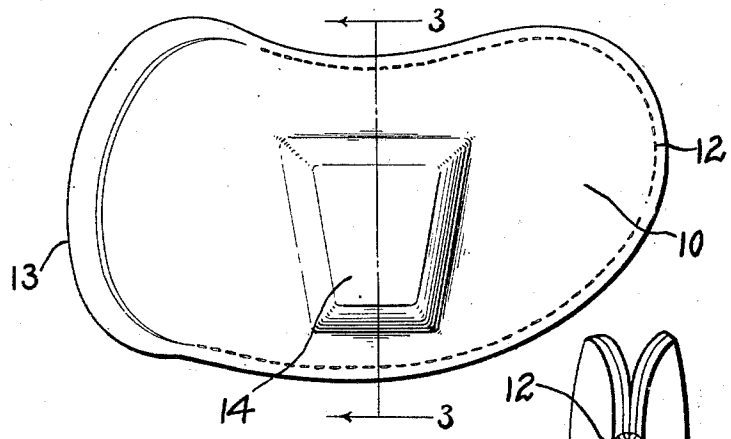


Fig. 1.

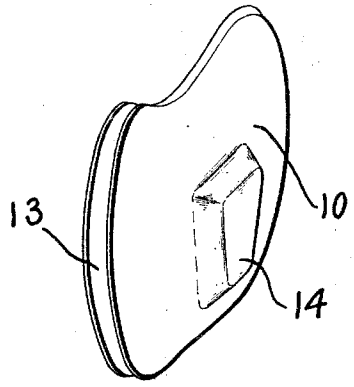


Fig. 2.

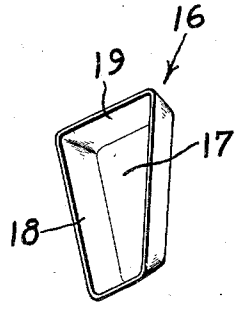


Fig. 4.

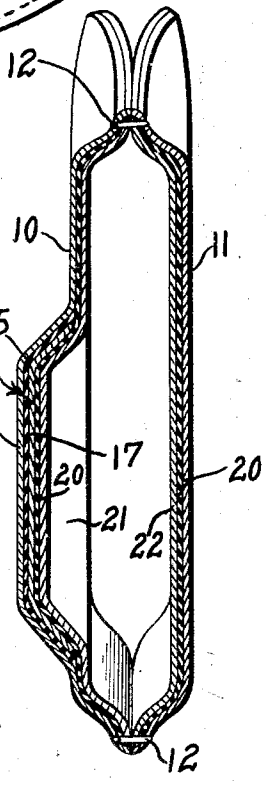


Fig. 3.

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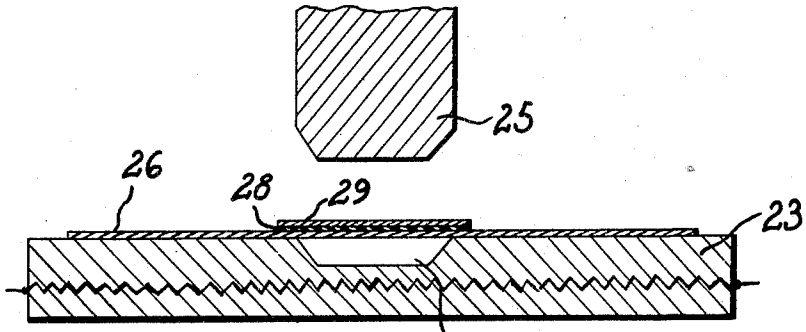


Fig. 5.

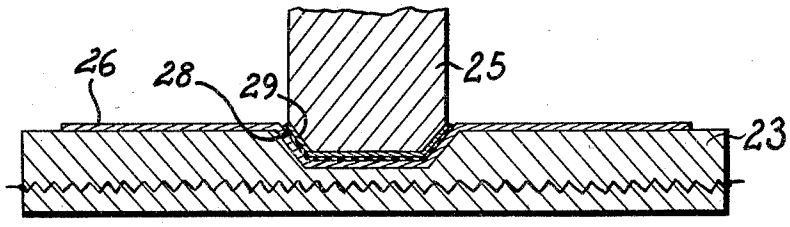


Fig. 6.

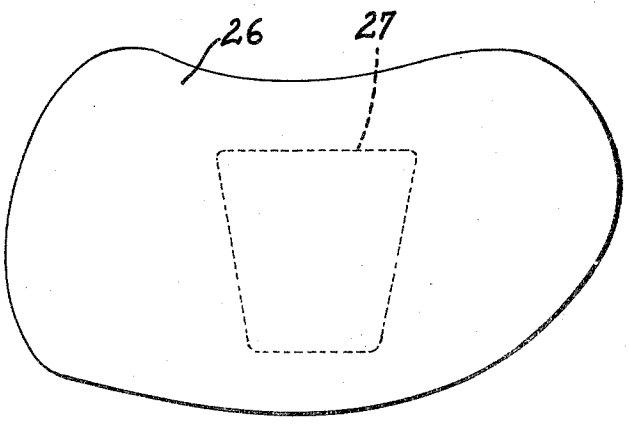


Fig. 7.

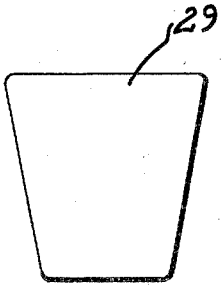


Fig. 8.

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UNITED STATES PATENT OFFICE.

ARTHUR J. PRATT, OF CAMBRIDGE, MASSACHUSETTS, ASSIGNOR TO AMERICAN OPTICAL COMPANY, A VOLUNTARY ASSOCIATION OF MASSACHUSETTS, OF SOUTHBRIDGE, MASSACHUSETTS.

PROCESS FOR PRODUCING RECEPTACLES.

Application filed August 21, 1925. Serial No. 51,712.

My invention relates to new and useful improvements in the construction of receptacles and to a new and novel process for producing the same.

One of the principal objects of my invention is to provide a receptacle of the character stated having a hollow raised, metal reinforced portion adapted to receive therein the bridge, fingerpiece or the like of an eyeglass spectacle or the like, for the purpose of protecting the same against accidental breakage or damage.

Another object of my invention is the provision of a flexible receptacle having a hollow raised portion within which is arranged and secured a relatively rigid metal reinforcing member.

Another object of my invention is to provide a process for producing such a receptacle wherein both the flexible raised portion and the metal reinforcing member are simultaneously formed and secured togther by means of a single stamping operation.

Another object is to provide a process for making a receptacle having the above mentioned characteristics in which the number of operations necessary to complete the same will be reduced to a minimum and wherein such operations may be easily and quickly performed.

Other objects and advantages will become more readily apparent during the following description when taken in connection with the accompanying drawings.

In the drawings forming a part of this application and wherein like characters of reference denote corresponding parts throughout the several views:

Figure 1 is a plan view of a flexible receptacle having a rigid reinforced protuberance made in accordance with the invention.

Fig. 2 is a perspective view of the same.

Fig. 3 is a transverse sectional view taken on line 3—3 of Figure 1.

Fig. 4 is a perspective view of the metal reinforcing member.

Fig. 5 is a sectional view showing the relative positions of various parts at the beginning of the stamping operation.

Fig. 6 is a similar view after the stamping operation.

Fig. 7 shows a sheet of leather or the like which is used in forming the case.

Fig. 8 is a metal blank from which the reinforcing member is made.

Referring now to the drawings and more particularly to Figures 1 to 4 inclusive, the numerals 10 and 11 designate respectively the front and rear sides of an eyeglass case constructed in accordance with the present invention. These two sides are secured together adjacent their marginal edges by means of the stitching 12 which, it will be noted by reference to Figure 1 extends only along the two sides and one end of the case, thus leaving the other end open as indicated at 13 to permit the insertion of the eyeglass.

The front side 10 is formed with a hollow raised portion 14 and arranged within the raised portion and secured thereto by means of glue, cement or the like 15 is a metal reinforcing member 16 having the outer wall 17 and the side and end walls 18 and 19 respectively.

Secured respectively to the inner faces of the front and rear sides 10 and 11 by means of a suitable adhesive substance 20 is the front and rear lining 21 and 22. The lining is of approximately the same size as the sides of the case and is secured together adjacent its marginal edges by means of the same stitching 12 which secures the sides 10 and 11 together. It will be noted that the front lining 21 fits snugly within the hollow metal member 16 and is secured thereto by means of the adhesive substance 20.

Reference now being had to Figures 5 to 8 inclusive in which I have disclosed one method for forming the hollow raised metal reinforced portion of the case, the numeral 23 designates a heated form having the recess 24 therein and above which recess is suspended a punch 25 the lower end portion of the punch and the recess being of the same shape while the size of the punch is slightly smaller than the recess in order that it may be received therein during the stamping operation.

In forming the front side of the case I first take a strip of leather or the like 26 such as is shown in Figure 7 and properly position the same upon the form 23, the dotted lines 27 in Figure 7 showing the position of the recess with respect to the leather after the leather has been placed on the form.

I then place upon that portion of the material directly above the recess a layer of glue,

cement or the like 28 and then place upon this adhesive substance a flat metal blank 29 such as is shown in Figure 8.

The punch 25 is then lowered with the result that as it comes into contact with the metal blank it forces the same together with the leather, into the recess as shown in Figure 6. This action causes the leather to be pushed outwardly to form the raised portion 14 and at the same time forms the metal reinforcing member 16 and forces the same into the raised portion. When the material is pressed into the recess the heat from the form will cause the adhesion of the metal member 16 and the leather 14.

From the above it will be appreciated that there has been provided a process wherein three distinct steps are accomplished by a single operation. That is to say, as the punch is lowered it presses the leather and the metal into the recess thus forming the raised portion 14 and the metal member 16 and simultaneously securing the two together due to the heat from the form. After the front side has been so formed it is removed from the form and the lining is then glued to the inner faces of the leather and of the metal member.

I then form the rear side 11 by simply taking a similar strip of leather or the like and securing to the inner face thereof the rear lining 22 after which the two sides, together with the lining are stitched together adjacent their marginal edges whereby to form a completed case.

While I have disclosed one completed case, also a process for producing the same, it is to be understood that certain minor changes in the particular construction of the case may be found advisable and I therefore, do not wish to be limited to any specific details other than those recited in the appended claims.

For instance, while the contour of the raised metal reinforced portion is shown as being that of an equal angle trapezoid it will be readily appreciated that this is shown merely for the purpose of illustration and that it may be of any desired shape.

What I claim is:

1. The process of making a flexible receptacle with a reinforced rigid portion and having flexible base and cover members comprising cupping up a portion of one of the flexible members into an outwardly extending protuberance removed from all of its edges, adhesively securing a rigid supporting member of the shape of the protuberance within the protuberance and securing together the edges of the flexible members for a portion of their extent, leaving a portion thereof unsecured and open whereby the whole receptacle is flexible except the reinforced protuberance, the bulge of which extends outwardly from the said cupped up member when in secured position.

2. The process of making a flexible receptacle with a reinforced rigid portion and having flexible base and cover members comprising coating one of said flexible members with an adhesive, placing a relatively rigid metallic member on the coated surface, said metallic member being removed from all of the edges of the flexible member, placing a flexible lining over the coated surface and over the metallic member, cupping up the flexible member, the flexible lining and the metallic member lying therebetween into an outwardly extending protuberance, coating a second flexible member with adhesive, placing a flexible lining over the adhesive, and securing together the edges of the two lined flexible members throughout a portion of their extent leaving a portion unsecured and open, the convexity of the protuberance being on the outside of the cupped member when in secured position, whereby the whole receptacle is flexible except the reinforced cupped up portion.

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