June 9, 1931. R. R. HEYWOOD, JR 1,809,298

DISPLAY DEVICE

Filed Feb. 8, 1929 2 Sheets-Sheet 1

Fig. 2.

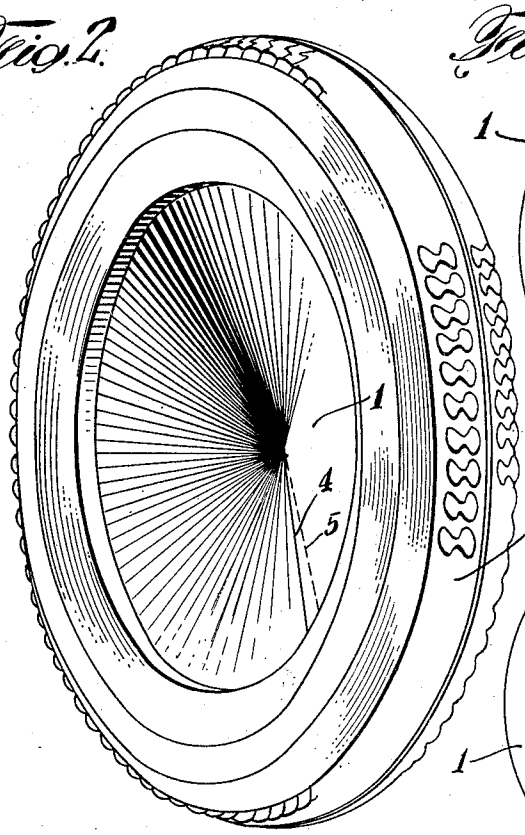


Fig. 1.

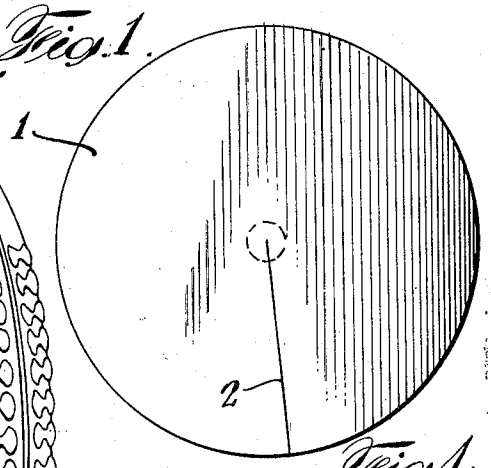


Fig. 4.

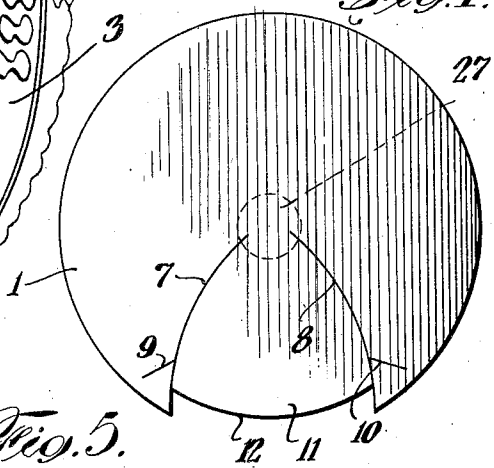


Fig. 3.

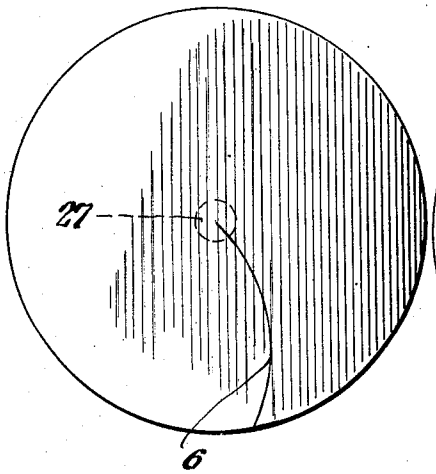
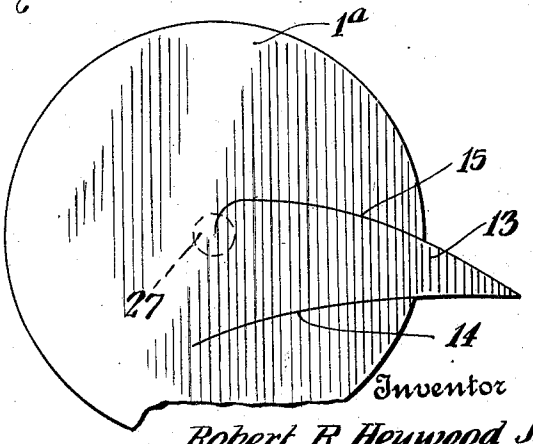


Fig. 5.



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June 9, 1931. R. R. HEYWOOD, JR 1,809,298

DISPLAY DEVICE

Filed Feb. 8, 1929 2 Sheets-Sheet 2

Fig. 6.

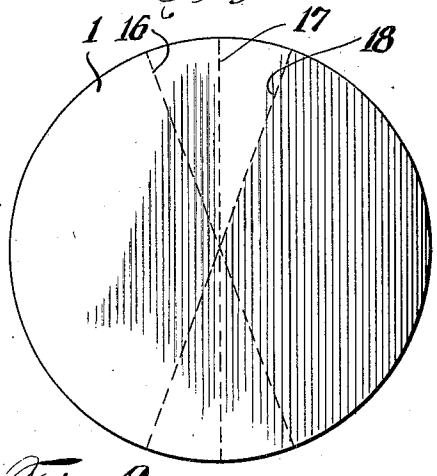


Fig. 7.

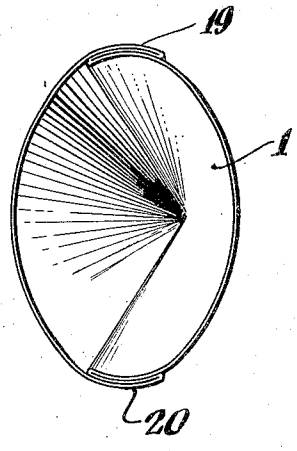


Fig. 9.

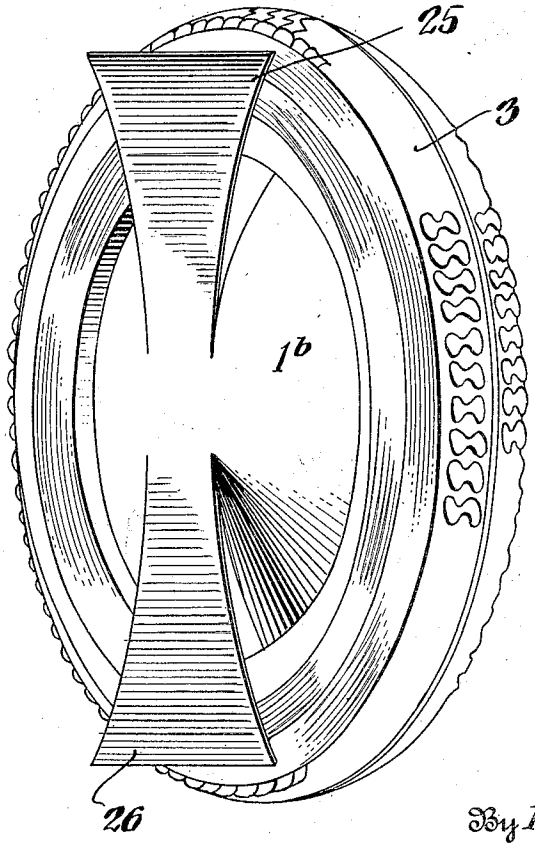
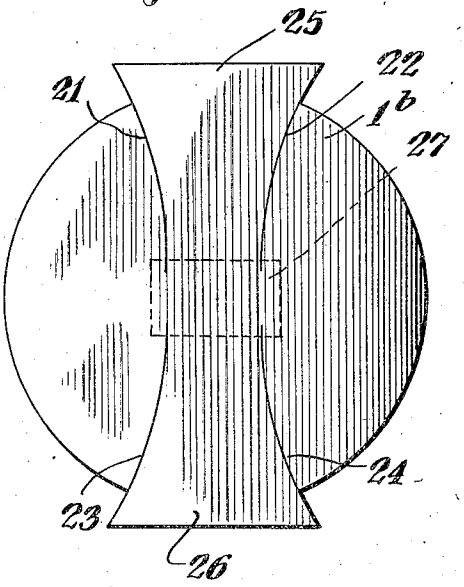


Fig. 8.



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UNITED STATES PATENT OFFICE

ROBERT R. HEYWOOD, JR., OF ORANGE, NEW JERSEY

DISPLAY DEVICE

Application filed February 8, 1929. Serial No. 338,402.

This invention relates to an advertising display device, in particular such a device made of flexible material, of circular or curved form and adapted to be supported on its edges in an annular holder or an article in connection with which the advertising display is to be used. The invention is particularly applicable in connection with the display advertising of automobile tires and the like, although other applications of the invention will readily suggest themselves to one versed in the advertising art.

Heretofore flat discs of cardboard or similar flexible material have been used for displaying advertising matter in connection with displays of automobile tires, such discs being fitted at their edges within the annular groove which in the normal use of the tire contains the inner tube. One difficulty that has hitherto attended the use of such discs has been that of properly inserting and centering the discs in the tire and maintaining them in a centered position. If it is attempted to force a disc of larger diameter than the inner diameter of the tire into the groove, the disc is frequently torn or otherwise marred in appearance. Also, it has been practically impossible to insert a disc of the types heretofore used and sufficiently large in diameter to be maintained properly centered if inserted, without irreparable damaging the disc.

According to the present invention, the production of discs or similarly shaped display devices which may be inserted and properly centered in holders and articles of the type described without encountering the difficulties hitherto attendant thereon is made possible.

One of the features of the invention consists in forming display devices of the type indicated with one or more slits extending inwardly from the edge of the disc or other curved display device or card so that the portions adjacent the slit or slits may be brought into overlapping relation producing a cupped effect, thereby decreasing the apparent diameter of the card or disc while it is being inserted in the tire or other holder. In this way a disc of even greater diameter than that of the holder may be used with the desirable result that the advertising display may be presented on either a conical or inverted conical surface,—a feature that is particularly desirable where certain artistic effects are to be obtained.

Certain of the objects of the invention may be accomplished, particularly when the disc is made of suitable material for the purpose, by scoring the disc to permit folding and then shaping the same into a conical form. This modification is described and claimed in my co-pending application Ser. No. 415,403, filed December 20, 1929.

The invention also has as an aim to incorporate into a circular or curved device of the type indicated advertising display means of various shapes attached to and forming a part of the disc member per se.

Other objects of the invention will appear from the following detailed description and the accompanying drawings, in which:

Fig. 1 is an elevation of one form of the invention in which a single slit is used;

Fig. 2 is a perspective view showing the disc of Fig. 1 in position in a holder,—in the example given, an automobile tire;

Fig. 3 is an elevation of another modification in which the slit is somewhat differently formed;

Fig. 4 is an elevational view of another modification in which the desired decrease in diameter during the inserting step is secured by means of a plurality of slits;

Fig. 5 is an elevational view of still another modification illustrating the carrying out of the principle of the invention in connection with an exteriorly extending flap or display member;

Fig. 6 is an elevational view of a modification in which instead of providing silts, the disc is scored at suitable points to permit temporary folding;

Fig. 7 is a perspective view showing the disc of Fig. 6 with two folds formed therein to produce cupping for insertion in the tire or other holder;

Fig. 8 is an elevation of still another modification in which a special display member is attached to the slitted disc member and adapted to cooperate therewith in producing

still another improved form of the display; and

Fig. 9 is a perspective view showing the display member of Fig. 8 inserted in the tire.

Referring to the drawings, the numeral 1 designates a plain circular disc made of a suitable flexible material, such for example as heavy paper stock or cardboard, provided with a single cup or slit 2, shown as extending radially from the edge to the center, although it will be understood that it is not essential that the slit extend entirely to the center nor that it be truly radial in direction, so long as it is of sufficient length and so directed as to permit the desired cupping effect when the disc is to be inserted.

In Fig. 2 the disc 1 is shown as inserted in the tire 3 and of such size as to assume an inverted conical form when positioned therein. In this position the overlapping of the edges of the cut or slit 2 is illustrated at 4 and 5. It will be understood that the face of the disc exposed to view will carry the advertising matter to be displayed; also, that the construction shown permits of the display of such advertising matter on both sides of the disc so that it can be reversed if desired.

In Fig. 3 a single cut 6 of curved form is shown, while in Fig. 4 two slits 7 and 8 are shown, thus illustrating how the shape and position of the slits may be still further modified to accommodate the given advertising matter to be displayed.

In Fig. 4 a further feature of the invention is shown, namely that of providing two short slits 9 and 10 intersecting the respective slits 7 and 8 near the edge of the disc. When the disc 1 is cut and inserted in the tire or other holder the slits 9 and 10 receive the adjacent edges of the portion 11 of the disc and tend to strengthen this member at its edges and prevent distortion when the disc is held in cupped position in the holder. The disc is also shown in Fig. 4 as cut away at the bottom as indicated at 12, although it will be understood that this feature may be dispensed with.

In Fig. 5 is shown a disc 1*a* carrying a flap 13 extending beyond the peripheral edges of the disc and formed partially within the disc by means of the slits or cuts 14 and 15. This construction is of particular utility where it is desired to display certain advertising matter on the disc portion held within the tire or other holder and to display certain other advertising matter in association with the tire or other holder outside the inner periphery thereof. The flap 13 provides such means for display.

In Fig. 6 there is shown a disc 1 in which the desired result as regards decreasing the diameter of the disc for inserting same in a holder or tire is achieved by scoring the disc in the manner shown by the intersecting lines 16, 17 and 18. When this method is used of course the disc must be made of material that will permit of repeated bending back and forth at the scoring lines without tearing.

In Fig. 7 a method of folding the disc shown in Fig. 6 is illustrated. In this figure the disc is shown as folded at the two sides as indicated at 19 and 20, although it will be understood that the desired result may be obtained by folding only one of the sides.

In Fig. 8 there is shown still another modification of the invention in which a partial disc 1*b* is shown as slitted from the opposite sides, as indicated at 21, 22, 23 and 24, to provide two flap members 25 and 26. These members are shown as extending somewhat beyond the outer edge of the disc proper. The disc 1*b* is shown in Fig. 9 as applied to a tire 3 with the members 25 and 26 held against the front of the tire in display position.

In order to prevent tearing of the discs or other form of sheet member from the terminating points of the slits, a suitable nontearable reinforcing strip may be applied on the reverse side of the display device, as shown at 27 in several of the figures.

Various changes in the details of the construction may be made without departing from the invention which is not to be deemed as limited other than as indicated in the appended claims.

What I claim is:

1. In a device of the kind described, in combination, a flexible sheet member having peripheral edges at least in part curved in form, a holder of lesser diameter than that of said member, said member having adjacent portions adapted to be brought into overlapping relation when it is being inserted in the holder, and having peripheral edges held in grooves in said holder, said member being of such diameter that when so inserted a substantially unbroken conical surface is presented for advertising display.

2. In a device of the kind described, in combination, a flexible sheet member having peripheral edges at least in part curved in form, a slit extending from a peripheral edge inwardly to permit adjacent edges of such slit to be brought into overlapping relation, a holder having an endless groove adapted to receive the peripheral edges of said member, and an opening in said holder, of lesser diameter than the said groove, through which said sheet member is inserted, said sheet member being fitted in the said groove in said holder and of such diameter that when so inserted a substantially unbroken conical surface is presented for advertising display.

3. In a device of the kind described, in combination, a flexible sheet member having peripheral edges at least in part curved in form, spaced slits extending inwardly to permit adjacent edges of such slits to be brought into temporary overlapping relation, a flap

member defined between such slits and extending beyond the regular peripheral edges of said sheet member, a holder having an annular groove adapted to receive the regular peripheral edges of said sheet member, and an opening in said holder, of lesser diameter than the said groove, through which said sheet member is inserted, said holder and said sheet member being so associated that the regular peripheral edges of said sheet member are fitted in said groove and the said flap member extends outside said holder.

4. In a device of the kind described, in combination, a flexible sheet member having peripheral edges at least in part curved in form, an annular holder of lesser diameter than that of said member, said member having adjacent portions adapted to be brought into overlapping relation when it is being inserted in the holder, and having peripheral edges held in grooves in said holder, said member being of such diameter that when so inserted it assumes a conical form and presents a substantially, unbroken surface on each side for advertising display.

5. In a device of the kind described, in combination, a flexible sheet member having peripheral edges at least in part circular in form, a slit extending from a peripheral edge inwardly to permit adjacent edges of such slit to be brought into overlapping relation, an annular holder having an endless groove adapted to receive the peripheral edges of such member, and an opening in said holder, of lesser diameter than said groove, through which said sheet member is inserted, said sheet member being fitted in said groove and of such diameter that when so inserted a conical surface is presented for advertising display.

In testimony whereof, I have signed my name to this specification this 5th day of February, 1929.

ROBERT R. HEYWOOD, JR.