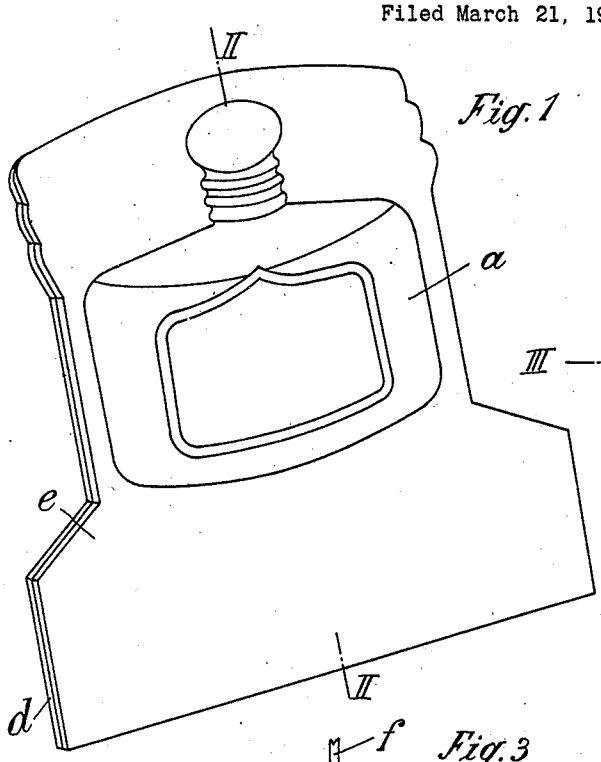
Dec. 16, 1930. P. KRESLAWSKY 1,784,937

SHOW ARTICLE

Filed March 21, 1928

Fig. 1



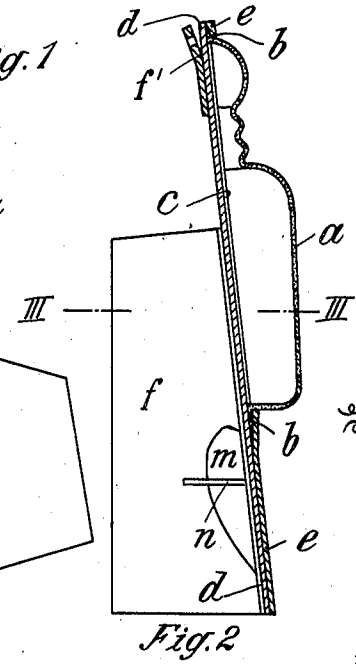


Fig. 2

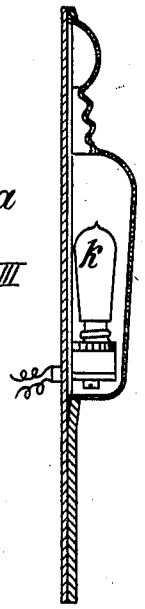


Fig. 4

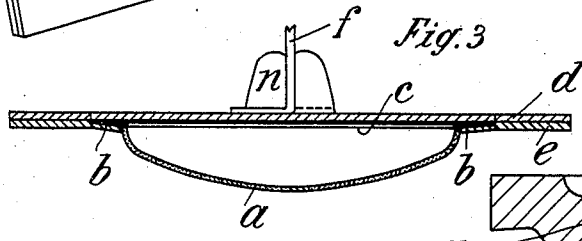


Fig. 3

Fig. 6

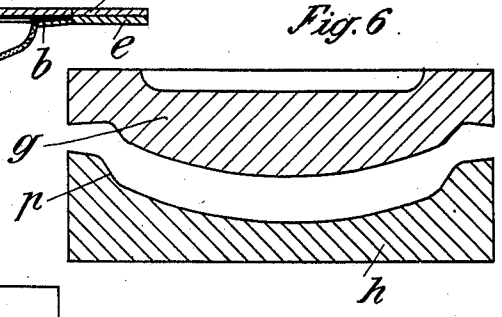
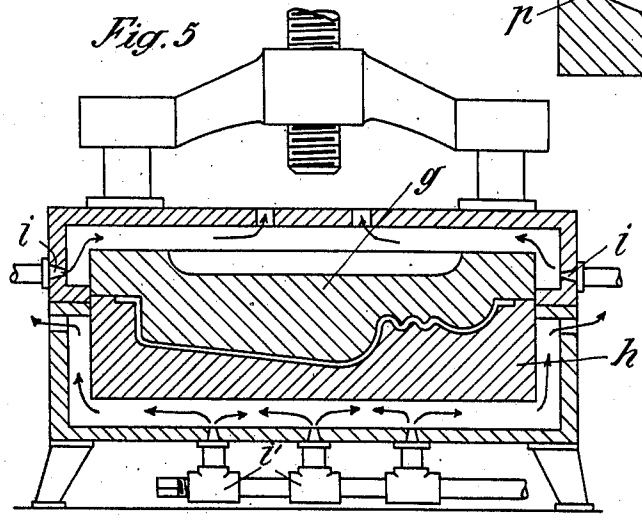


Fig. 5



Inventor:
Paul Kreslawsky
per:
Dr. Adolph Zinnemann
Attorney.

Patented Dec. 16, 1930

1,784,937

UNITED STATES PATENT OFFICE

PAUL KRESLAWSKY, OF BERLIN, GERMANY

SHOW ARTICLE

Application filed March 21, 1928, Serial No. 263,448, and in Germany April 4, 1927.

This invention relates broadly to show articles and the like, and in particular to articles of this kind mentioned which constitute a high-relievo reproduction of an object, preferably in its natural size, and ordinarily consisting of thermo-plastic material, which reproduction emerging almost entirely from the base or back-ground to which it is secured constitutes to all appearance a very realistic and absolutely true imitation of the respective object. In further pursuance of my invention it also refers to a method of producing such show articles, or any desired number of them, and to greatly facilitate and simplify the manufacture of such article. Broadly considered my invention is distinguished from the previous art of manufacturing show cards and the like from celluloid or similar material by the fact that a substantially exact high-relievo reproduction of the desired object is secured by means of a flange or marginal projecting portions to the back-side of the marginal portion of an aperture corresponding to the size of said reproduction and provided in a suitable base or backing, while, as heretofore suggested, the piece of celluloid or of equivalent flexible material containing a plane, instead of stereometric reproduction of the object, was concavely bent behind the aperture and away from the looker-on and inserted with its edges in slots or the like of the base or backing. Such representations failed to produce the illusion of the natural object, and were moreover liable to be easily damaged. In my invention these drawbacks are avoided both by the method of manufacture which insures a resistible, plastic, but not foldable reproduction and by the manner of fastening such reproduction to the back-ground.

My invention will be more particularly described with reference to the accompanying drawing showing by way of example an embodiment of the principles of my invention, as applied to the reproduction of a bottle, a piece of soap or of an equivalent article, and to the method and apparatus of producing such reproduction. In the drawings:—Figure 1 is a perspective view of a show card with the representation of a bottle; Figure 2 is a sectional view on the line 2—2 of Figure 1, and Figure 3 is a horizontal sectional view on the line 3—3 of Figure 2. In Figure 4 a somewhat modified construction is shown, illustrating the production of illuminating effects. Figure 5 is a longitudinal sectional view of a pressing device, used in connection with my invention, and Figure 6 is a diagrammatic representation of the pressing members.

The high-relievo article *a* of thermoplastic material, such as for instance celluloid, cellon, gelatine-compounds, viscose-compound and other suitable material is provided with peripheral projections or flanges *b* which are engaged and secured at the rear of the marginal parts of an aperture provided in the front sheet or layer of a base *e* and corresponding to the general outlines of the relievo-representation. These projections or flanges may be secured and retained in position by a suitable adhesive or they may be detachably and exchangeably retained between the front sheet and a back sheet *d* secured to the front sheet *e* of the base or backing in any suitable manner. Inasmuch as the flange or projection is hardened and condensed by the method of manufacture to be described, it will be easily retained in position and secured against bending, splitting or other injuries. At the inside of the back sheet *d* and behind the opening in the front sheet *e* in the exemplification shown I may secure a piece of tin-foil, or some other bright or shining coating which, particularly if the reproduction *a* is colored, will produce the illusion of a clear, highly refractive liquid content of the reproduction *a*. According to a somewhat modified construction, shown in Figure 4, a light *k* may be placed in the cavity of the representation *a*; or the cavity may contain scientific or other articles to be exhibited and viewed through the transparent wall of the representation *a* or informatory or pictorial matter may be contained on the back-ground instead of or in combination with the shining coating *c*.

f' in the drawing indicates an apertured flap, an eye or the like, to suspend the backing with the representation *a* from a wall or

the like, and *f* is a swingingly disposed vertical piece of card board or the like provided with an aperture *m* in the interior of which a horizontal swingingly mounted, for instance indented piece *n* of card-board may be operated, so as to secure the vertical, horizontally swingable flap or piece of card-board *f* in a suitable position to allow of the entire show case being erected and kept standing on a support.

The method of manufacture of the article of manufacture described is substantially as follows:—

A casting of the object or pattern to be imitated by the reproduction *a* is first produced in the usual manner, using gypsum or the like, and of the said casting an accurate mould or matrice *h* is made to correspond to the high-relievo article to be produced, and consisting of highly resisting material, preferably metal with highly polished interior surface. Both the mould *h*, as well as the complemental die *g* or stamp must be absolutely smooth, and the marginal part of the inside of the mould is preferably shaped, so as to be slightly flaring outwards, in order to admit of the upper die being readily introduced and fitted into the mould. The said upper die preferably consists of tough, but somewhat resilient leather or highly compressed card-board or artificial leather. It has been ascertained that by the cooperation of a metallic or similar mould with a die of somewhat resilient properties the occurrence of folds and plaitings in the material to be pressed is avoided. This material, as above set forth, comprises celluloid or equivalent substances, generally of thermo-plastic properties, a suitably cut piece of which is introduced between the two pressing and shaping members *g* and *h*, after it has been heated to a temperature of, say for instance, about 120 degrees centigrade. The area of the cut sheet of heated material must be considerably larger than would correspond to the development of the article to be reproduced therefrom, inasmuch as in the pressing and shaping operation the weight of the pressing members expands the material and forces it down into the mould and there condenses and compacts it. The sheet should be so quickly introduced into the press, constituted by the members *g*, *h*, as not to become substantially cooled, and both pressing members *g* and *h* are kept hot before and during the pressing operation by heating means *i*, *i'*, though it should be understood that the invention is not restricted to the use of burners as indicated by way of example in the drawings. The pressing operation itself should take place gradually and very uniformly, and the machine with the pressing members completely engaged should be kept in this position with the pressing members at rest for a period of time ranging up from three to four seconds. When the operation is finished the press is opened, the pressed, hardened and condensed, and highly polished article is removed and shows the exact reproduction of the main part of the body of the original with a surrounding marginal portion. It is then colored, if necessary, and is cut out to present a substantially uniform surrounding rim of, say about four-tenths of an inch width or of other suitable dimensions. In this condition it may be provided, if desired, with labels or the like. A correspondingly cut backing *e* the aperture of which corresponds to the general outline of the article is then placed upon the mould *h*, and the compressed and shaped article is introduced into the mould through the opening of the backing *e*; the flange or marginal part is then laid down on the back-side of said backing *e* and may be secured thereto, if desired, by a suitable adhesive. The flange and the opening may then be covered, if desired by the rear sheet *d* to which the coating *c* may be previously applied. For some uses, however, the rear sheet *d* may not be necessary.

The material for the reproduction *a* may be transparent, translucent, or opaque according to requirements. Instead of a bottle, as shown in the exemplification, it may represent a piece of toilet soap or the like, or other toilet or household articles. But it should be understood that the invention is not restricted to the reproduction of any specific articles or the use of any particular kind of material, and the procedure may be modified to suit the convenience of the operator, except as otherwise appears from the appended claims.

I claim:—

1. In a show and exhibiting article, a hollow, forwardly closed, rearwardly open, cross-sectionally substantially channel shaped relievo-facsimile of a natural object, a marginal flanged portion around the edges of said facsimile, an inwardly bright covering sheet, closing the cavity of the facsimile and secured to the rear side of the flanged portion, and a surrounding frame upon the other side of the flanged portion and conforming to the outlines of the facsimile, and attached to the covering sheet and rockingly disposed supporting means at the back-side of the covering sheet and at an angle thereto.

2. In a show and exhibiting article a hollow, forwardly closed, rearwardly open, cross-sectionally substantially channel-shaped, transparent, thermo-plastic, high-relievo facsimile of a natural object, and marginal flanged portions at the edges thereof, a back-sheet at the rear side of the flanged portion engaging therewith and covering the cavity of the facsimile and extending beyond the flanged portion, frame-like apertured securing means, conforming to the outlines of

the facsimile and engaging the front side of the flanged portion and pasted to the back-sheet, and supporting means upon the back of the back-sheet.

3. In a show and exhibiting article a hollow, rearwardly open, cross-sectionally substantially channel-shaped, thermo-plastic, transparent, embossed facsimile of a natural object, and marginal, flanged portions at the edges thereof, a back-sheet engaging the rear side of the flanged portion and extending beyond the same, and covering the cavity of the facsimile, and a light-radiating glossy back-ground on the back-sheet inside of said cavity, frame like apertured securing means engaging the front side of the flanged portion and pasted to the back-sheet beyond said flanged portion, rockingly disposed supporting flaps, mounted on the back of the back-sheet, substantially at right angles to each other and engaging each other.

4. In a show and exhibiting article, a hollow, forwardly closed and rearwardly open, substantially high-relievo, plastic, transparent facsimile of a natural object, an inwardly glossy and light radiating back sheet closing the cavity of said facsimile and secured thereto, and rockingly disposed supporting means at the lower portion of the back of said back-sheet.

5. In a show and exhibiting article, a hollow, forwardly closed and rearwardly open, substantially plastic, transparent, embossed facsimile of a natural object, an inwardly glossy back-sheet closing the cavity of said facsimile and secured thereto. An apertured supporting flap rockingly disposed at the lower portion of the back of the back-sheet and at an angle thereto, and an additional flap rockingly disposed on said back within the aperture of the first-mentioned flap and at substantially right angles thereto and engaging said first mentioned flap, and thereby locking it in position.

In testimony whereof I affix my signature.

PAUL KRESLAWSKY.