May 2, 1950 M. MUNKACSI ET AL 2,505,787

PHOTOGRAPH-PHONOGRAPH RECORD COMBINATION

Filed Oct. 30, 1946

Fig. 1

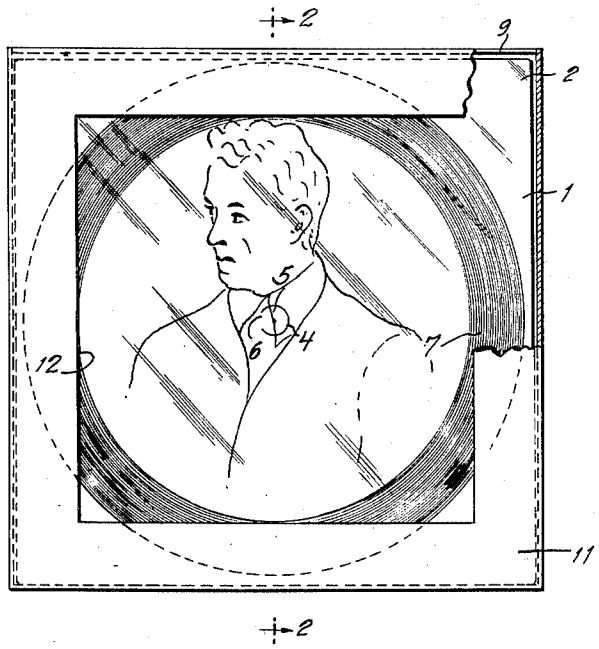


Fig. 2

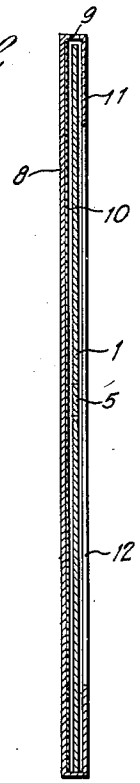
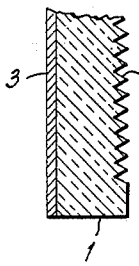


Fig. 3



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PHOTOGRAPH-PHONOGRAPH RECORD COMBINATION

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5 Claims. (Cl. 274—42)

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The present invention is directed to a combination of photograph and phonograph record for display and other purposes.

It has heretofore been proposed to provide a phonograph record of plastic material having thereon spiral grooves containing a sound record. There has also been provided a printed sheet of paper with decorative effects which was pasted or otherwise cemented to the sound record. In some instances, the printed paper was attached to the back of the record and in other cases, to the front of the record. In the latter case, the sound grooves mutilated the paper and injured the printed matter.

In another prior art device of this character, there was provided a printed or other picture which was circular in outline and of opaque material. There was also provided an annular member fitting around the edges of the picture and constituting a frame for the same. This annulus was provided with grooves and a sound record was formed thereon.

Such devices had numerous disadvantages and limitations. Usually they required special elements in order to provide the complete arrangement. Some of the devices were relatively complicated and expensive to produce.

The present invention, which is known as or is named Photoral, is intended to overcome the difficulties and disadvantages inherent in prior structures of the type described, it being among the objects of the present invention to provide a combination of sound track record and picture element which are integral and which constitute a single unit.

It is also among the objects of the present invention to provide a combination of a sound track record and a direct positive photograph which can be produced quickly and easily and wherein the image is always distinct and clear.

It is still further among the objects of the present invention to provide a method of making devices of the type described, which is simple and accurate and which may be operated by relatively unskilled persons.

In practicing the present invention, there is provided a transparent plate of synthetic plastic material such as that normally used in photographic film, including cellulose acetate, cellulose nitrate and other compositions. The plate is sufficiently thick so that it is self-supporting and does not fold by its own weight. It is sufficiently thin so that it is flexible. A positive photographic emulsion is provided on one side of the plate. On the opposite side a sound track record may be

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cut after the exposure of the emulsion to provide an image.

There may also be provided, if desired, a frame or holder for the plate, one face of the holder being open and the inside of the opposite face being opaque and usually light-colored or white to form a background for the photograph. The photograph Photoral sound track record is inserted into the frame, whereupon the image becomes readily visible.

When used to reproduce the sound, the plate is removed from the holder and a central opening therein allows the same to be placed over the spindle of a record player. To prevent mutilation of the image, a flap is provided which covers said opening in the plate. Preferably the flap is integral with the plate and is part thereof, being cut through over sufficient of the area of the opening so that it will flex out of position when the plate is placed on the turn-table of the record player. When the plate is removed from the record player, the flap by the inherent resiliency of the plastic material, will fall back into position and thus reconstruct the complete image.

In the accompanying drawing constituting a part hereof and in which like reference characters indicate like parts,

Fig. 1 is a front elevational view of a sound photographic record made in accordance with the present invention, some parts being broken away for clearness;

Fig. 2 is an enlarged vertical cross-sectional view thereof taken along line 2—2 of Fig. 1 and centrally of said record, and

Fig. 3 is an enlarged fragmentary cross-sectional view of the film element showing more in detail the structure thereof.

With reference to the drawing, there is provided a plate 1 shown in rectangular form 2 but adapted to be of any suitable size or shape. The plate is of transparent synthetic plastic material and is sufficiently thin to be flexible. Since it is to be used as a sound record, its weight should be sufficient so that when placed on the turn-table of the record player, frictional engagement thereof with the felt covering of the turn-table will be sufficient so that the record will adhere to the turn-table against the action of the playing needle. In actual practice it has been found that a thickness of plate of .03 to .04 inch is highly suitable. The invention is not limited to said thickness but considerable variation therein is possible, as for instance, the plate may be between .01 to .10 inch thick.

On one side of plate 1 is deposited a thin film 3 of positive photographic emulsion. Such emulsions are light-sensitive and are adapted to provide a positive image directly on plate 1. The sensitized plate or film 1 held in suitable light protective covering is exposed as is usual in photography to provide a positive image on emulsion 3. The film is then developed and fixed as usual, whereby the image becomes visible, and may be used as a transparency photograph with no backing.

At the center 4 or adjacent thereto, there is provided an opening of such size so that plate 1 may fit over the spindle of a record player. This may be provided by merely punching out a piece from the center of the plate. Preferably in order to avoid mutilation of the image, instead of cutting out a center portion, a cut 5 is made in the plate, said cut being circular but being incomplete so as to leave a connecting neck 6 attaching the cut-out portion to the plate. Such a cut 5 is practically invisible and hardly interferes with the image, which appears practically perfect. When the plate 1 is placed on the turntable of the record player, the flap so formed is pushed upwardly by the spindle allowing the plate to fit perfectly on the turn-table. When the plate is removed therefrom, the flap returns to its original position due to the inherent resiliency of the plastic material so that the image on the plate appears without blemish.

On the side of plate 1 opposite to film 3, there is cut a spiral groove 7 containing a sound record. This may be accomplished by any of the usual methods and preferably the groove and sound record are cut simultaneously. Thereby one may first expose plate 1 to provide a picture of an individual or of a group of persons, develop the same and in a short time record on the opposite side of the plate a sound record made by said individual or group.

In order to exhibit the image or photograph, there is provided a frame which may be used if a non-transparent photograph is desired and which has a back 8 with an opening or slit 9 in the upper end thereof. The inner face of back 8 is provided with an opaque sheet of material of light color such as white paper to act as a background for the photograph. The frame has a front portion 11 all around its edges for the purpose of providing an opening 12 through which the photograph may be viewed. Because of the white background 10 and the transparent quality of plate 1, a perfect image is obtained by viewing through opening 12.

The invention is capable of many uses, as will be realized. For instance, it may be used for advertising purposes and may contain a photograph of an article of manufacture, with a sound track record made part thereof, whereby the potential customer may see a photograph of the article being sold and then listen to the story behind the article or an explanation thereof contained on the sound record. Also, photographs of individuals may be placed thereon and a message of some kind sent with the photograph, as for example, a message of greeting to relatives or friends. There may be provided a photograph of a performer together with a record of the voice of said performer so that the purchaser of a record may have a permanent direct photograph of the individual. The invention may be utilized as a prelude in making an inexpensive motion picture screen test by the individual recording his picture and voice. These and other uses of the invention are possible within the spirit hereof.

There are numerous advantages residing in the present invention. For example, the plate 1 and frame 8 as a unit are capable of being shipped by mail without danger of breaking because of the relative stiffness and yet flexibility of plate 1. Therefore, records of this type may be mailed for long distances and arrive in excellent condition. The cost of making such a record is relatively low as a photograph may be first taken on the plate and shortly thereafter, at the same sitting, the record may be produced on the same plate. Other uses for the invention will be apparent, as for instance, a testator may dictate his will and have a photograph record of the occasion simultaneously.

These and other variations in the invention may be made within the principles herein set forth as claimed in the claims appended hereto.

We claim:

1. In an article of manufacture having a plate of a synthetic plastic material and a spiral sound track record cut in one face of said plate, the improvement which comprises a positive photographic emulsion on one face of said plate to provide a direct positive image having opaque and transparent portions, an opening in said plate to allow insertion of said plate over the spindle of a record player and a flexible flap integral with said plate and wholly covering said opening when said plate is not on said spindle, part of said image covering said flap.

2. In an article of manufacture having a plate of a synthetic plastic material and a spiral sound track record cut in one face of said plate, the improvement which comprises a positive photographic emulsion on one face of said plate to provide a direct positive image having opaque and transparent portions, an opening in said plate to allow insertion of said plate over the spindle of a record player and a flexible flap integral with said plate and wholly covering said opening when said plate is not on said spindle, part of said image covering said flap, said flap having a narrow neck connecting the same to said plate.

3. In an article of manufacture having a plate of a synthetic plastic material and a spiral sound track record cut in one face of said plate, the improvement which comprises a positive photographic emulsion on one face of said plate to provide a direct positive image having opaque and transparent portions, an opening in said plate to allow insertion of said plate over the spindle of a record player and a flexible flap integral with said plate and wholly covering said opening when said plate is not on said spindle, part of said image covering said flap, said flap having a narrow neck connecting the same to said plate, said plate being relatively thick and of sufficient weight so that friction between the same and the turntable of said record player will hold said plate in position against the force of the needle during rotation of said turntable.

4. In an article of manufacture having a plate of a synthetic plastic material and a spiral sound track record cut in one face of said plate, the improvement which comprises said plate having a picture on one face thereof, an opening in said plate to allow insertion of said plate over the spindle of a record player and a flexible flap integral with said plate and wholly covering said opening when said plate is not on said spindle, part of said picture covering said flap.

5. In an article of manufacture having a plate of a synthetic plastic material and a spiral sound

track record cut in one face of said plate, the improvement which comprises said plate having a picture on one face thereof, an opening in said plate to allow insertion of said plate over the spindle of a record player and a flexible flap integral with said plate and wholly covering said opening when said plate is not on said spindle, part of said picture covering said flap, and having a narrow neck connecting the same to said plate.

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