Dec. 15, 1959 J. M. GREGORY ET AL 2,917,167

MOBILE PACK

Filed Sept. 12, 1957 2 Sheets-Sheet 1

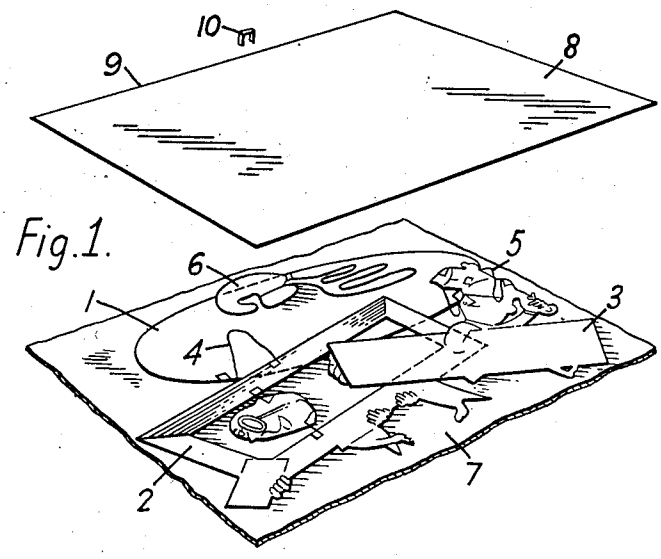


Fig. 1.

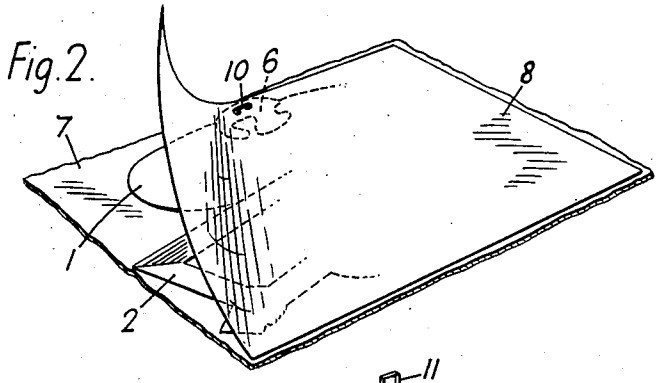


Fig. 2.

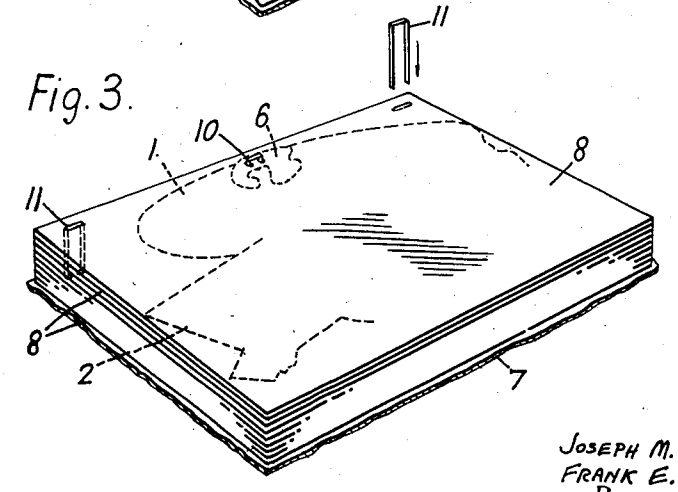


Fig. 3.

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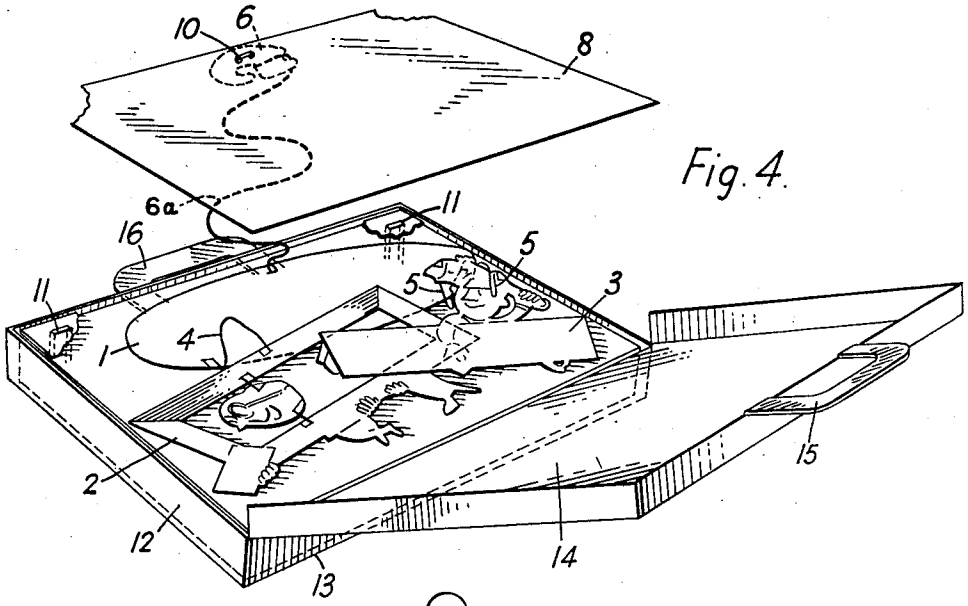


Fig. 4.

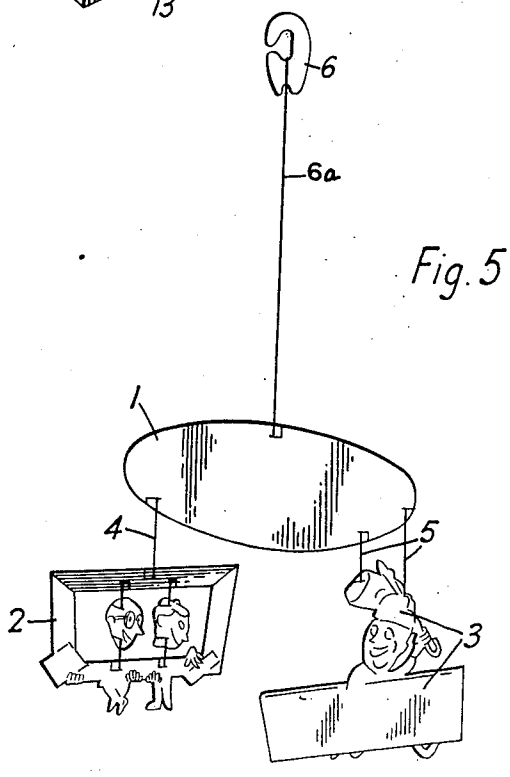


Fig. 5

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MOBILE PACK

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1 Claim. (Cl. 206—65)

This invention relates to devices (hereinafter termed mobiles) for use in advertising or for display, entertainment or decorative purposes.

A known form of mobile comprises a plurality of elements made of sheet material which, when in use, are suspended from one another by means of threads or the like, the mobile, when suspended, being susceptible to even light air currents which cause the elements to rotate, usually without fouling one another. The threads are of such length and are connected to the elements at predetermined attachment points to enable the mobile to behave in the desired manner when suspended. The elements, particularly when used for advertising purposes, may bear printed advertisements on both sides and have various shapes to provide an attractive display effect.

It is of considerable advantage to be able to pack mobiles of the above kind in a condition in which they are immediately ready for suspension after removal from the pack, i.e. without being in the form of a sheet in which the mobile elements are substantially severed and have to be pushed out from the sheet by the customer or user before the mobiles can be suspended.

The object of this invention is to provide a light-weight mobile pack, i.e. consisting of a plurality of superimposed mobiles which when removed from the pack are immediately ready for suspension, the pack being of such construction that the mobiles are substantially preserved against damage during transit and are readily capable of being removed individually without risk of entanglement of or damage to the mobile elements and/or threads and without seriously disturbing the remaining mobiles of the pack.

According to this invention, a mobile pack comprises a plurality of superposed mobiles disposed substantially flat but in a condition substantially ready for use, each mobile being overlaid with a thin protective sheet connected in a readily separable manner to a part of the underlying mobile.

Preferably, the protective sheets but not the mobiles are separably connected together, and the entire assembly of mobiles and sheets is snugly confined in a cardboard or the like carton which, if desired, is provided with a carrying handle. In order to retain the assembly within the carton, the securing means for the sheets is desirably attached also to the bottom of the carton. The securing means may comprise staples, threads or the like.

In the accompanying drawings, Fig. 1 is a perspective view illustrating an initial stage in the formation of one example of mobile pack according to this invention.

Fig. 2 is a perspective view similar to Fig. 1 but shows the upper protecting sheet separably connected to the underlying mobile.

Fig. 3 is a perspective view illustrating an assembly or pad of protecting sheets and mobiles according to Figs. 1 and 2.

Fig. 4 is a perspective view of a mobile pack according to Fig. 3 accommodated within a carton, a lid of which is shown open and the top protecting sheet being

shown detached from the remaining sheets but still attached to a suspension part of the underlying mobile.

Fig. 5 is a perspective view for illustrative purposes only of one construction of mobile used in forming the mobile pack according to Figs. 1–4.

Referring first to Fig. 5, the mobile comprises elements 1, 2 and 3, of which supporting element 1 is connected by a thread 4 to element 2 and by threads 5 to element 3, the mobile including a hanger element 6 connected by a suspension thread 6*a* to element 1. Although the example of mobile pack to be hereinafter described utilises this particular mobile, it is to be understood that any other form or design or mobile may be employed in the formation of a mobile pack according to this invention.

The first stage of production of the mobile pack is illustrated in Figs. 1 and 2. The mobile of Fig. 5 which is in a condition ready for use is assembled or arranged to lie substantially flat on a flat support which in Fig. 1 is illustrated for convenience and by way of example as a carrier sheet 7 of cardboard, the suspension thread 6*a* of the mobile being in an exposed, accessible position as shown. A thin protecting sheet 8, for example a paper sheet is then laid on top of the mobile and is preferably of rectangular shape. The sheet 8 is next connected to the mobile hanger element 6 which is disposed beneath the sheet near one edge 9 thereof and approximately mid-way along it. The sheet is connected to the upper surface of the suspension element in a readily separable manner as, for example, by means of a small staple 10, a thread, a spot of adhesive or in any other desired manner.

The next stage is to arrange another mobile, which may be the same as or different from the mobile on cardboard sheet 7, on top of the protecting sheet 8 so that it lies substantially flat. The hanger element of the second mobile is preferably disposed in a substantially similar position to hanger element 6 of the first mobile. A second protecting sheet similar to sheet 8 is laid on top of the second mobile and is connected to the element 6 thereof in a similar manner to that above described in connection with sheet 8 and element 6.

The above procedure is repeated until the desired mobile pack comprising superposed mobiles, each covered by a protecting sheet 8, is formed. Such a mobile pack is illustrated in Fig. 3. The protecting sheets 8, but not the mobiles, are next separately connected together so as to form a unitary pad of sheets which protect the mobiles and minimise the risk of relative movement thereof. In the example, staples 11 are used for connecting the sheets 8 together at the two corners thereof between which the mobile elements 6 are disposed. In Fig. 3 one staple 11 is shown applied and the other in the course of application. Any known stapling machine may be employed for applying the staples. It is to be understood the sheets 8 may be separately connected together in any alternate manner. For instance, in forming the mobile pack, each sheet after being laid over a mobile may be adhesively united to the lower, adjacent protecting sheet at corner positions. If desired, the sheets may be separately connected together at only one corner of the pad or at all four corners. Their connection at the two corners illustrated in Fig. 3 has an advantage, however, as will be hereinafter appreciated.

According to an important but nevertheless optional feature of this invention, the mobile pack is snugly accommodated in a cardboard or the like carton which facilitates transport of the mobile pack. Fig. 4 shows a cardboard carton in the form of a tray part 12 having a bottom wall 13. The tray 12 is dimensioned to receive the mobile pack, Fig. 3, as a snug fit. Alternatively, the bottom wall 13 may serve the same function

as flat support 7, Fig. 1, in that the mobile pack may be built up on wall 13 until the tray is substantially full of mobiles and protecting sheets 8, the staples 11 used for connecting the sheets being also connected to wall 13. The carton illustrated has a hinged lid 14 carrying one part 15 of a carrying handle. When the lid is closed, the handle part 15 registers with a similar handle part 16 on the tray, thereby forming a strong carrying handle. When the lid is closed, the mobile pack is fully protected and the mobiles are safeguarded against any movements liable to damage the mobile connecting threads 4, 5, even when the carton of mobiles is subjected to rough treatment during handling or while being transported. In order to reduce still further any liability of the elements to move about in the pack, at least one surface of each protecting sheet 8 may be treated, for example by applying wax, flock or the like thereto to give the surface a high co-efficient of friction. It will probably be desirable, however, to restrict the treatment to one surface of each sheet and to arrange the sheets so that each mobile is positioned between a treated surface of one sheet and an untreated surface of the other adjacent sheet, thereby eliminating risk of the two sheets sticking together and thus preventing eventual separation thereof for removal of the mobiles as will be hereinafter described.

A mobile pack according to this invention within a carton is particularly, but not exclusively suitable for use by sales representatives. Such use will now be described with reference to Fig. 4, it being assumed that it is desired merely to remove the top mobile from the pack when the lid 14 is opened. The top protecting sheet 8 is ripped off staples 11 and lifted upwards, thereby carrying with it the mobile element 6 connected to it. The sheet is next detached from staple 10 of mobile element 6, thereby enabling the exposed mobile to be lifted carefully out of the carton for suspension in a position of use as indicated in Fig. 5. The remaining mobiles, if not required, are left in the carton where they remain protected by the sheets 8 still connected together by staples 11. It will be appreciated that the chosen positions of the staples 10, 11 in the illustrated example of mobile pack facilitates sequential and individual removal of the sheets 8 and mobiles.

It is to be understood that the construction of carton for accommodating the mobile pack may be different from that illustrated in Fig. 4 so long as it gives access to the mobile pack for individual removal of the mobiles as and when required.

Although but one embodiment of this invention has been hereinbefore described and illustrated in the accompanying drawings, it will be apparent that various changes and modifications may be made therein without departing from the spirit of the invention or from the scope of the appended claims.

For instance, each superposed mobile may be disposed between two protecting sheets formed by folding a single paper sheet in half, the upper sheet of the pack being separately connected adjacent its free edge and near the middle thereof to a suspension part of the mobile positioned between the sheets. All the folded sheets are stapled or otherwise separately secured together adjacent the free corners of the sheets and, if desired, at other places to complete the mobile pack.

Further, a mobile pack according to either of the above embodiments could be merely wrapped in paper, for example Kraft paper, instead of being placed in a carton. When a carton is used and the mobile pack does not completely fill it, a packing insert may be used to prevent undesired movement of the mobile pack within the carton. The insert may be made of folded cardboard in concertina shape and act as a resilient pressure packing between the mobile pack and a wall of the carton.

What we claim and desire to secure by Letters Patent of the United States is:

As an article of manufacture, a package comprising, in combination, a plurality of units each containing a carrier sheet and a plurality of preformed mobile images connected by threads to a supporting element, said images and supporting element all being substantially flat and superimposed in stacked relation on said carrier sheet with the connected threads promiscuously folded about the images, a suspension thread for the supporting element, a hanger connected to the end of the thread opposite the supporting element, a protecting sheet overlying the stacked connected mobiles, and a releasable connection between the protecting sheet and the hanger for lifting the connected mobile images from the carrier sheet for suspension by the hanger when it is detached from the protecting sheet.

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