April 23, 1940. J. M. FREED 2,197,859

PACKAGE

Filed Oct. 10, 1938

Fig. 1.

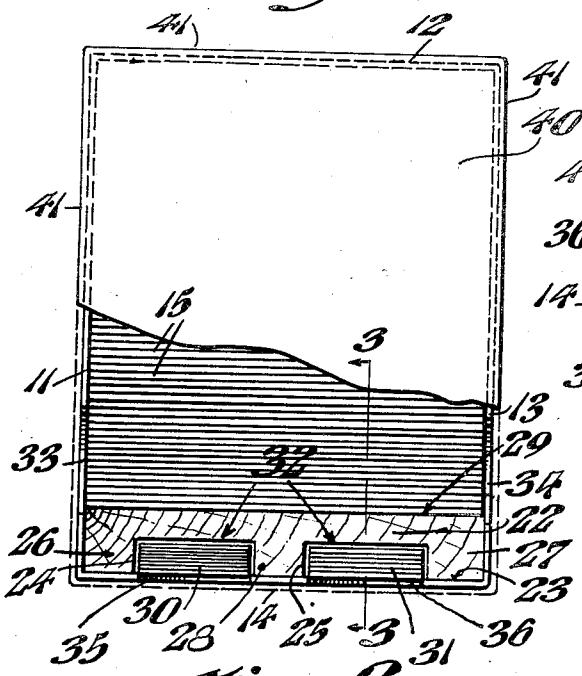


Fig. 3.

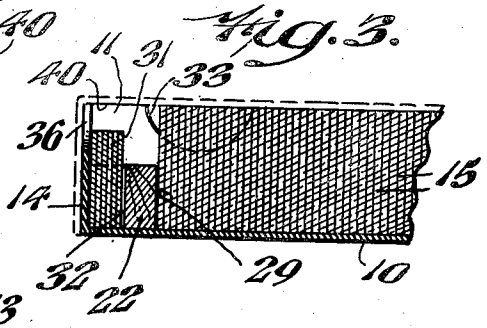


Fig. 5.

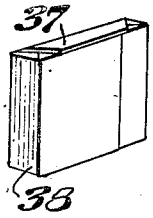


Fig. 2.

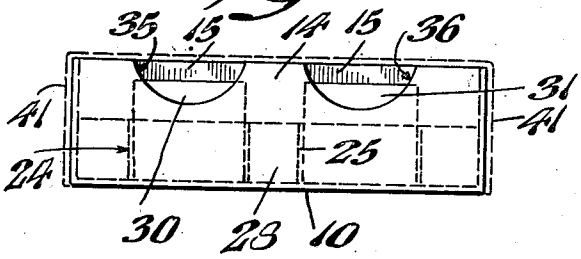
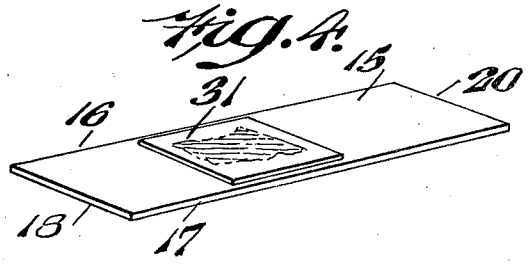


Fig. 4.



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Patented Apr. 23, 1940 2,197,859

UNITED STATES PATENT OFFICE

2,197,859

PACKAGE

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Application October 10, 1938, Serial No. 234,079

4 Claims. (Cl. 206—46)

This invention relates to packages and particularly to a combined package for shipping, displaying and dispensing small planar articles such as microscopic slides.

In the use of microscopic slides for biological and other research purposes the slides preferred are usually rectangular in outline and sufficiently elongated as to be manipulated beneath a microscope. In the ordinary course smears or the like are impressed upon the surface of a slide, and the slide placed in operable relation to the microscope for examination purposes and if no more or less permanent record is desired the slide may be dispensed with or the smear removed for subsequent re-utilization of the slide. It frequently happens, however, that for purposes of record it is desired to preserve the smear or other specimen against either contamination or injury and it has become common practice to delicately cover the smear with an extremely thin rectangular or round protecting cover which is caused to be adherent to the main slide in any suitable manner as by adhesive between the slide and cover. In this connection it will be understood that the cover plate must be such as to have no adverse optical effect upon the assembly and this necessitates the provision of cover plates of extreme thinness and of consequent fragility.

It is among the objects of this invention; to provide a package combining in a single entity oblong slides for microscopic purposes and also a package of thin cover plates in mutually guarded relation; to provide a dispensing package and slides and cover plates therefore arranged for selective alternative withdrawal without disturbing the other unselected elements; to provide an improved package for microscope slides; to provide a package containing heavy microscope slides and light slide covers with spacing shock absorbing means, and many other objects and advantages will become more apparent as the description proceeds.

In the accompanying drawing:

Fig. 1 represents a plan of the package of this invention with the cover partially removed to show the relation of the heavy slides, wooden or analogous spacing bar and the fragile cover plates and showing the cover plates as of two grades or relative thicknesses.

Fig. 2 represents an end elevation of the package of Fig. 1 but with the cover indicated in dotted lines.

Fig. 3 represents a longitudinal vertical section on line 33 of Fig. 1 but with the cover indicated in dotted lines.

Fig. 4 represents a perspective of a slide and an associated cover plate as assembled subsequent to withdrawal to the package of Fig. 1, for instance.

Fig. 5 represents a perspective of a package of cover plates as wrapped and initially disposed in the package of this invention.

A cardboard shell is provided having a bottom 10, side edge 11, rear edge 12, edge 13 and front wall 14. The side and end walls are preferably each of a vertical extent substantially the same as the width of the elongated slide elements 15. The slides 15 have top and bottom surfaces respectively 16 and 17 connected by the lateral side edges 18 and 20 and the length of the slides is such that edges 18 and 20 are in substantial abutment with a slight clearance relative to the inner surface of the side walls 11 and 13 of the box. A desired number of slides 15 are mounted transversely in the box with one end of the stack engaging the inner surface of wall 12 while the front end abuts the rear surface 29 of a wooden or analogous abutment 22 having a front wall 23 in turn engaging the inner surface of the front wall 14 of the box. It will be observed that the block 22, which may be of any suitable dampening or shock absorbing material other than wood, such as rubber, a molded plastic, or the like, is recessed as at 24 and 25. The recesses are separated from the side walls by the solid portions 26 and 27 and from each other by the solid front wall portion 28. The recesses 24 and 25 form with the front wall 14 of the box a cover plate receiving rectangular pocket or recess within which a plurality of thin cover plates can be vertically slidably mounted. Illustratively recess 24 receives a plurality of one grade of cover plates as, for instance, the thinner plates 30, while pocket 25, has a different grade of slide thicker cover plates, 31. It is preferred that there be a slight clearance 32 between the rear surface of the package of thin cover plates and the front wall of the separating or spacing block 22 at the recesses 24 and 25. It will be observed that the heavy slides resting their full weight upon the block 22, in other positions or attitudes of the box, will transmit their weight directly to the front wall 14 without imposing any crushing strains upon the pluralities of thin cover plates.

To facilitate withdrawal of selected slides a pair of registering thumb holes, respectively 33 and 34 are provided in the respective side walls 11 and 13, so as to facilitate grasping of the

side edges 18 and 20 of the elongated slides between a thumb and finger of the user of the package. Similarly, to facilitate withdrawal of the thin cover plates thumb holes 35 and 36 are provided in the front wall 14 of the box in registration with the upper portions of the respective cover plates. In this connection, it will be apparent that the thickness of spacer block 22 between the rear wall of each of the recesses 24 and 25 to the slide engaged inner wall 29 thereof is such as to enable the finger of the user of the device to enter sufficiently as to cooperate with the thumb engaging the front cover plate 30 or 31 so as to withdraw same easily and quickly if it does not move upward readily enough by frictional engagement with the thumb alone. This latter is the usual operation.

It is customary, although not in any way necessary, to wrap the individual groups or pluralities of thin cover plates in a transparent wrapper 37 to form compact units 38 disposed in the appropriate recess 24 or 25 during the shipment and sale of the package. The operator or user of the goods will remove the cover 37 when the package is opened ready for use.

When the lid 40, preferably provided with suitable depending walls 41, is applied to the box all of the thumb holes are covered and the inner surface of the lid 40 is disposed in substantial contact with the longitudinal side edges 16 or 17 of the slides 15, and in such close relation to the upper edges of the small cover plate packages as to prevent either the package or individual cover plates from falling out of the respective recesses 24 or 25 during manipulations of the package.

It will be understood that the clear glass of the slides 15 may be used to enable the observation of printed indicia on the inner surface of the bottom wall 10 of the box and that with the lid removed the package effects an ornamental display of the articles contained in the package and that for dispensing purposes the device provides a single compact unit within which the operator finds each of the elements he will need for instant and easy dispensing.

It will be obvious that various changes might be made in the structure disclosed as by changing the number of cover plate sockets, for instance, as by providing more or less than the two illustratively disclosed. Such changes are to be construed as within the scope of the invention unless otherwise specifically limited in the appended claims.

I claim as my invention:

1. A package comprising a box, a plurality of microscope slides mounted in the box resting on edge on the bottom thereof and of such length as to have substantially guided relation to the said box, a plurality of microscope cover plates mounted in the box resting on edge on the bottom thereof and of appreciably less length than the said slides, means separating the slides and cover plates and the cover plates from a side of the box.

2. A package comprising a box having a bottom and four walls, a spacer block having a full length vertical frontal recess of appreciably less width than the distance between confronting walls and disposed in said box in engagement with an end wall thereof, a plurality of microscope slides of substantially the same length as the width of said box between said confronting walls so as to have a substantially sliding fit therein disposed in the box in parallelism with said spacer block and mounted between the spacer block and the opposite end wall of said box resting on edge on the bottom of said box, a plurality of cover plates for slides of shorter length than said slides mounted on edge on the bottom of said box in said recess in said spacer block.

3. A package comprising a box having a bottom and side and end walls, a spacer block having a frontal recess mounted in the box in engagement with the side walls and in abutment with an end wall of the box, a plurality of microscope slides mounted in the box in parallel relation to the spacer block of substantially the same vertical height as the said side walls and thumb hole formed in a side wall adjacent said spacer block to facilitate withdrawal of the slides from said box, a plurality of cover plates disposed in the recess in the block of less thickness than the depth of said recess, said last mentioned end wall having a thumb hole adjacent said cover plates to facilitate independent removal of individual cover plates.

4. A package comprising a box having a bottom and side and end walls, a spacer block having a frontal recess mounted in the box in engagement with the side walls and in abutment with an end wall of the box, a plurality of microscope slides mounted in the box in parallel relation to the spacer block of substantially the same vertical height as the said side walls, a thumb hole formed in a side wall adjacent said spacer block to facilitate withdrawal of the slides from said box, a plurality of cover plates disposed in the recess in the block of less thickness than the depth of said recess, said last mentioned end wall having a thumb hole adjacent said cover plates to facilitate independent removal of individual cover plates and a box cover having side walls telescoping over the side and end walls of the box and having a planar portion overlying the box in substantial contact with the side edges of the slides and in such close proximity to the cover plates as to prevent undesired withdrawing movements of the cover plates.

JOHN MELVIN FREED.