Oct. 4, 1966 F. S. SCHADE 3,276,145

CONCEALABLE DEVICE FOR COVER BOUND SELF-INSTRUCTION PAGES

Filed Aug. 25, 1964 3 Sheets-Sheet 1

FIG. 1.

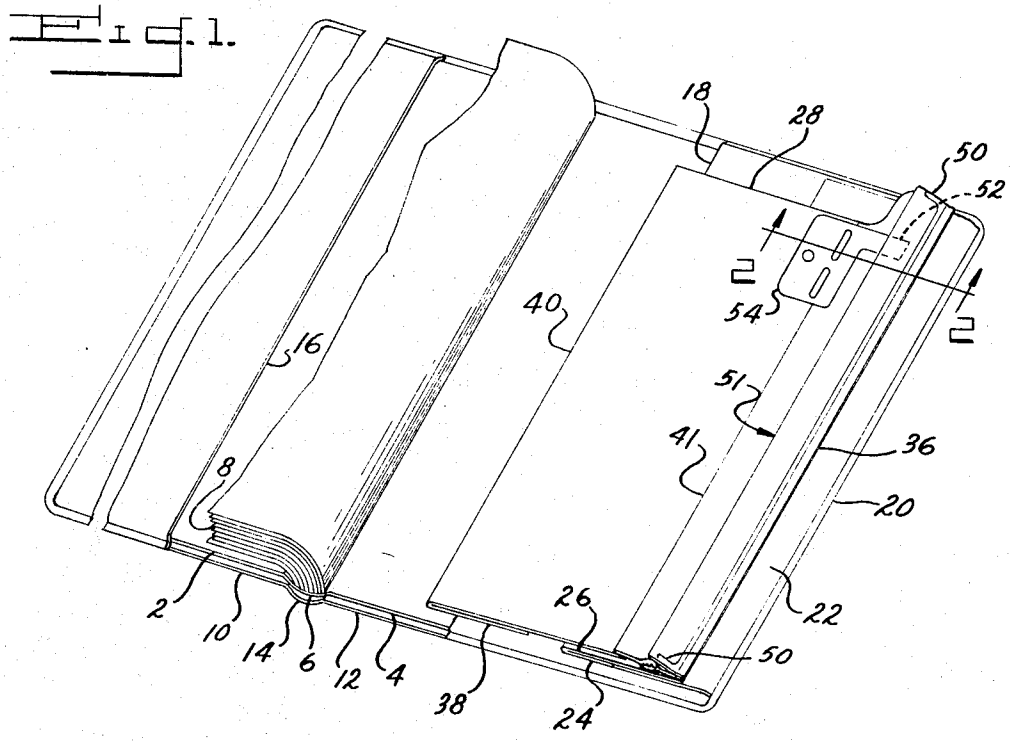
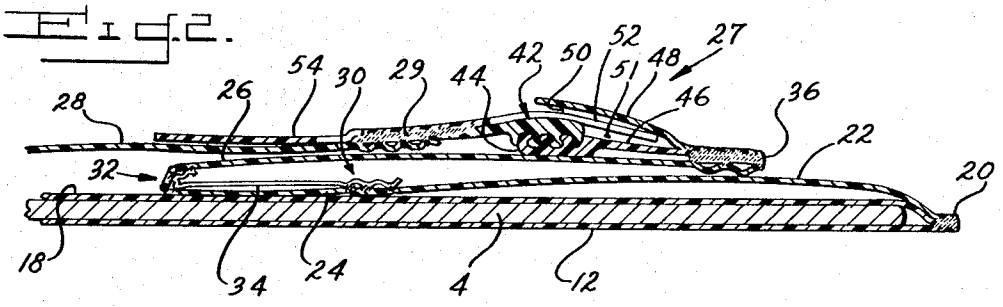


FIG. 2.



INVENTOR.
FRANK STANLEY SCHADE
BY Clapin & Neal
Attorneys

Oct. 4, 1966 F. S. SCHADE 3,276,145

CONCEALABLE DEVICE FOR COVER BOUND SELF-INSTRUCTION PAGES

Filed Aug. 25, 1964 3 Sheets-Sheet 2

Fig. 3

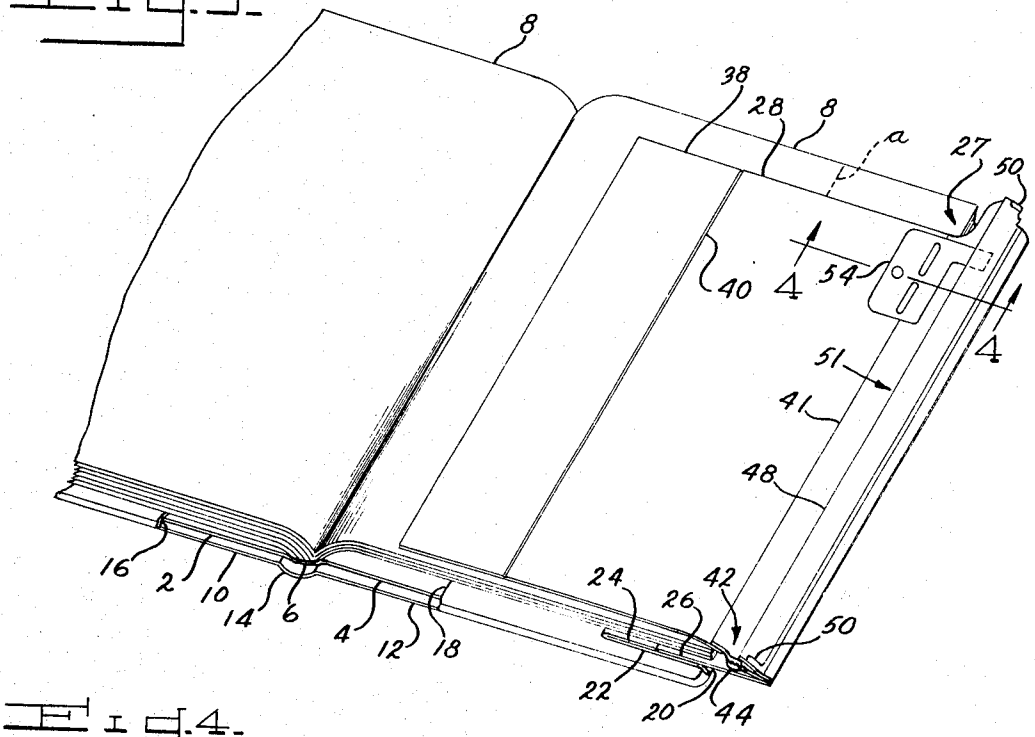
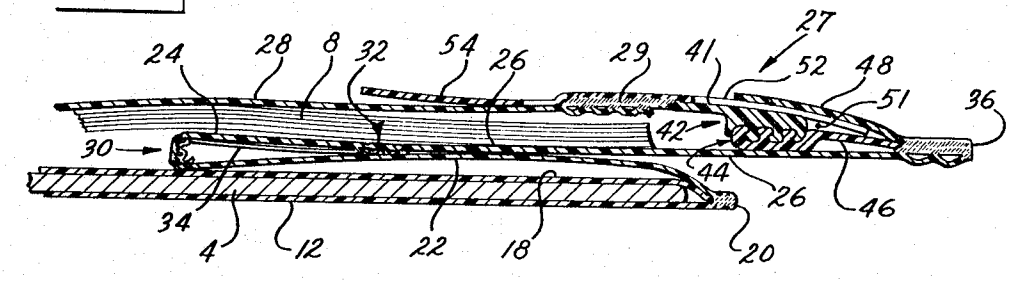


Fig. 4



INVENTOR.
FRANK STANLEY SCHADE
BY Chapin & Neal
Attorneys

Oct. 4, 1966 F. S. SCHADE 3,276,145

CONCEALABLE DEVICE FOR COVER BOUND SELF-INSTRUCTION PAGES

Filed Aug. 25, 1964 3 Sheets-Sheet 3

FIG. 5.

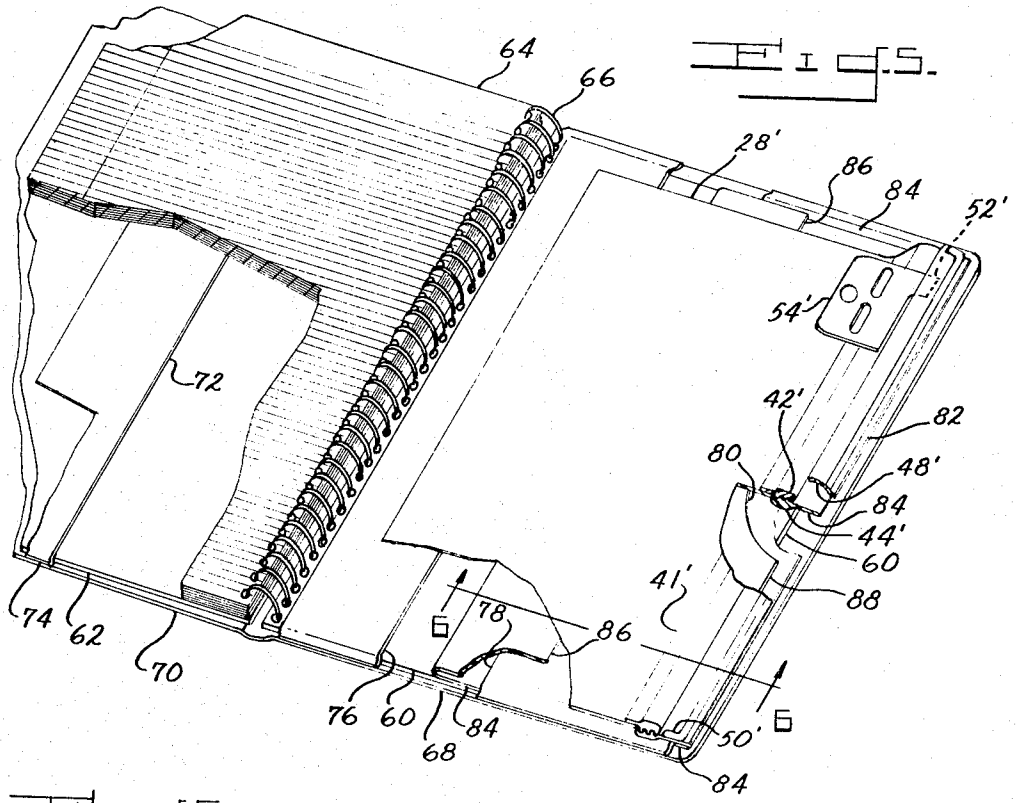


FIG. 6.

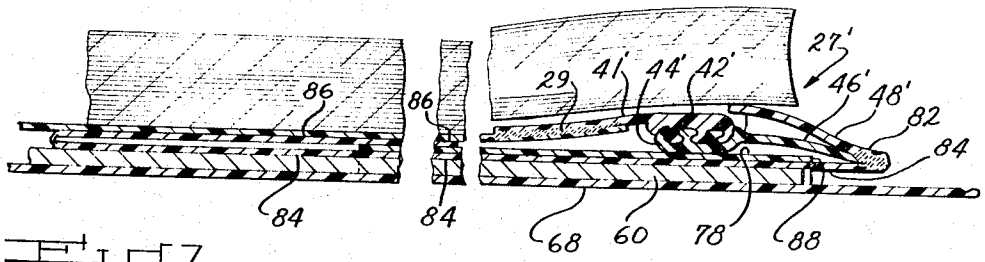
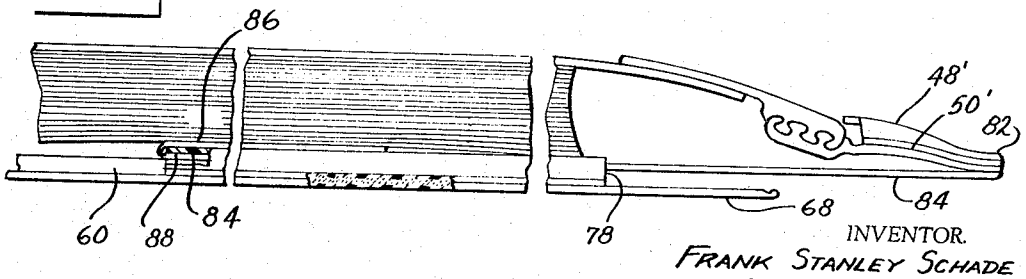


FIG. 7.



INVENTOR.
FRANK STANLEY SCHADE
BY Chapin & Neal
Attorneys

United States Patent Office

3,276,145

Patented Oct. 4, 1966

3,276,145

CONCEALABLE DEVICE FOR COVER BOUND SELF-INSTRUCTION PAGES

Frank Stanley Schade, Holyoke, Mass., assignor to National Blank Book Company, Holyoke, Mass., a corporation of Massachusetts

Filed Aug. 25, 1964, Ser. No. 391,848
8 Claims. (Cl. 35—9)

This invention relates to masking devices for use with "program learning" or "program teaching" texts and similar bound pages for self-instruction purposes. In particular, it relates to a novel arrangement for a concealable device for mounting with cover bound self-instruction pages so that when incorporated and assembled with a hard-back book cover or the stiff cover member of a loose leaf binder the device can be used as intended and, when not in use, can be easily shifted to a concealed position of storage.

In any of its various applications, the assembly of the present invention is designed to permit the shifting of a program learning mask device, per se, to and from a position in which it lies substantially concealed within the confines or outline of a cover or the pages in an unobtrusive manner, and, an extended operative position in which a mask in the form of a slidable panel or flap may be manipulated as intended with respect to the underlying pages of self-instruction or programmed material.

A principal object of the invention is to provide a slidable flap or panel for masking purposes which can be incorporated in a book or other bound sets of sheets without any alteration whatsoever in the usual construction of the book and no special provisions for the addition thereof.

Additional objects are to provide a concealable device which will add a minimum of bulk to a book or binder assembly, to make a device for interchangeable use with other books or notebooks of the same size and general character, and to do so without detracting from the normal clean, attractive, appearance of a book or binder without such added equipment.

These and other objects and advantages of the invention will be apparent from the following description thereof in connection with the accompanying drawings, in which—

FIG. 1 is a perspective view of an embodiment of a masking device assembled with a book and shown in "concealed" position against the cover, the book pages being turned away from said "concealed" position;

FIG. 2 is a sectional view on line 2—2 of FIG. 1;

FIG. 3 is a perspective view of the assembly shown by FIG. 1 but with the device shifted to operative position, the mask overlying several pages of the book;

FIG. 4 is a view on line 4—4 of FIG. 3;

FIG. 5 is a perspective view of another embodiment of the invention showing an alternative arrangement of mask mounting and holding means to permit shifting to and from a concealed position;

FIG. 6 is a view on line 6—6 of FIG. 5; and

FIG. 7 is a fragmentary edge view from the bottom of the assembly of FIG. 6 with parts in section.

The invention in general terms comprises a device for bound self-instruction pages in which a flat mounting member carrying a masking panel or flap is engaged against the inner surface of the cover of a book or binder, and a holding means is secured to the cover to engage the mounting member for shifting the latter to and from a concealed position and an operative position. In its concealed position the mask and flat mounting member including its outer edge portion lie against the cover substantially underlying the bound pages and within the outline of the cover. In its operative position the flat mounting member

and mask are shifted so that the outer edges of both are carried to a position outwardly adjacent the free edges of the pages of text. The masking flap is swingable upwardly of the mounting member so as to be readily placed in overlying relationship to the pages when brought from concealed position and further to permit turning each page of the book from under the mask.

The masking panel or flap shown herein and means for slidably engaging the same for use with programmed learning texts is, per se, a known device being disclosed in my prior patent granted March 24, 1964, No. 3,125,813 for "Masking Panel Construction for 'Program Teaching' Use." The form of slide mask disclosed has been adopted and widely used for programmed learning material comprising sets of successively arranged questions and answers which are progressively unmasked so that the user may learn a "programmed subject in step by step fashion and by self-instruction methods.

As outlined above the present invention concerns a concealable device for incorporation with bound self-instruction sheets. It is capable of use in the ordinary manner without alteration of a book or binder assembly. And it may also be tucked away and concealed in a book when not in use so that the book retains its ordinary appearance and the device is protected against wear.

Referring to FIGS. 1–4 a bound book is shown with covers 2 and 4 and binding back 6 on which pages 8 are bound. The form of invention shown is incorporated with a conventional type of book cover dust jacket. Cover panels are at 10 and 12 and a connecting back panel at 14. Panels 10 and 12 are provided with pocket panels 16 and 18 heat sealed at the edges thereof, the jacket being formed of any suitable thermoplastic sheet material. The covers 2 and 4 are inserted in the pockets in the usual manner.

The jacket pocket attachable to cover 4 forms a part of the holding means for mounting the concealable masking assembly against the cover. At the outside sealed edge 20 of the pocket a panel member 22 is also heat sealed as indicated by the composite seal shown by FIG. 2, the remaining parts of the masking assembly also preferably being formed of heat sealable thermoplastic sheet material. Panel member 22 includes a connecting strip 24 which engages a mounting panel member 26 by which the attachment assembly 27 for slidably engaging the masking flap 28 is carried as will be later described.

Strip 24 is hingedly related to both panels 22 and 26 and serves to shift the masking panel 28 from its concealed storage position of FIGS. 1 and 2 to an operative position as shown by FIGS. 3 and 4. Strip 24 is joined to panel 22 by a fold or hinge line section indicated at 30 and to panel 26 by a hinge line section indicated at 32. For reinforcement purposes a flexible strip 34 is heat sealed in the area of hinge lines 30 and 32 and extends therebetween.

As best shown by FIG. 2 strip 24 in concealed position lies flatly against the jacket panel 18 of cover 4. In this position the outer sealed edge at 36 of panel 26 and the attaching assembly 27 lies inwardly of edge 20 of the jacket. Thus the entire unit is within the outline of the book cover 4 for substantially concealing the same when the pages 8 of the book lie against cover 4 or the book is closed.

In its operative position (FIGS. 3, 4) the strip 24 as an extension of panel 22 is turned on its hinge lines 30 and 32 and reversely directed to lie against the holder panel 22, so that panel 26 now carries the outer edge 36 outwardly adjacent the edge of pages 8 and outer edge 20 of the cover. In this position the masking flap 28 is shown in overlying relation to pages 8 for masking any printed material on the immediately underlying page. An inner portion of mask 28 as at 38 is hinged along

a line 40 to provide an extendable part of the flap. In concealed position (FIG. 1) the portion 38 is turned back under mask 28 and in operative position extends (FIG. 3) to substantially cover the entire surface of the underlying page 8.

Referring to FIG. 3 the assembly 27 for slidably engaging mask 28 allows the latter to slide vertically of an underlying page. As will readily be understood in connection with "programmed" learning texts, the mask will be moved downwardly in step by step progression to uncover sequentially arranged questions and answers printed on a page 8. A common practice is to place an answer to each question in an offset relation immediately below the question to which it applies. Thus the user is able to move the mask to expose a question, supply his own answer and immediately thereafter expose the correct answer to test the accuracy of the answer he has made and proceed to the next question. In FIG. 3 the dotted line *a* is to indicate a dividing line between question and answer sections arranged in columnar fashion.

The various parts of the attaching assembly 27 and relationship thereof are disclosed in prior Patent No. 3,125,813 above mentioned. Briefly (FIGS. 2 and 4), the inner slidably held edge of mask 28 is formed with a marginal web portion 41 to the underside of which mask 28 is welded by heat sealing indicated at 29. The web 41 is formed with an extruded portion 42 having downwardly facing tongues and grooves which engage mating upwardly facing tongues and grooves of a portion 44 of a web 46 which has its outer edge sealed along the edge 36 of a panel 26. The mask is thus engaged for sliding movement. While in its preferred form mask 28 is itself limply flexible so that it may be swung upwardly of the underlying pages 8, the web 46 assists in providing a desirable hinge action whenever mask 28 needs to be raised.

Overlying web 46 a narrow panel 48 is heat sealed along the edge 36 and also heat sealed at the top and bottom edges at 50 at the ends of web 46. A channel pocket 51 is thus formed adjacent the slidably engaged portions 42 and 44. Into this channel is fitted the projecting finger 52 of a tab 54, which is attached at the top section of the mask 28 in the weld area 29, which joins the web 41.

Tab 54 provides a convenient finger grip for controlled movement of mask 28. And in the full masking position of mask 28, finger 52 is located at the top of the channel pocket 51. It will be seen that when the mask slides downwardly it will be prevented from endwise separation of the tongue and groove connections by the finger 52 abutting the lower end weld at 50. The upper weld 50 provides a stop for limiting upward travel of the mask.

It is to be noted that the sheet thermoplastic material used will preferably be of extremely thin gauge. The thicknesses shown in the drawings have been exaggerated for clarity. In actual embodiments of the device the composite thickness of superposed panels occupy very little space and, for example, amount to no more than the thickness of several book pages. Accordingly, in the concealed position the device adds very little bulk to a bound book or binder assembly which will thus retain the appearance designed for it by the book publisher or binder manufacturer. In the operative position the device is marginally exposed to the slight degree necessary for the intended functional relation and purpose. It is unobtrusive, convenient and easy to use, is exposed only when necessary for operation, and can be removed and used with a similar size of book or binder, all without subjecting the device to unnecessary wear when not in use.

In FIGS. 5, 6 and 7 an alternative arrangement is shown for holding the masking means for shifting movement between concealed and operative positions. This form is incorporated with a book cover jacket of slightly altered construction. Instead of pockets to hold the book covers, the jacket is provided with panels holding the covers in sleeved fashion. The pages are bound as by a spiral wire notebook binding.

In FIG. 5 the covers of the book are at 60 and 62 and with pages 64 are contained in the usual manner on wire 66. The cover panels of the jacket are at 68 and 70. Panel 70 is held on cover 62 by panel sleeve 72 heat sealed at its top and bottom edges to the top and bottom edges of cover 70, the bottom edge seal being shown at 74. Panel 68 is held on cover 60 by a pair of similarly attached spaced sleeve panels 76 and 78. Inner panel 76 lies adjacent the wire binding while outer panel 78 lies adjacent the outer edge of the jacket extending inwardly therefrom and terminating in spaced relation to the opposed edge of panel 76. Panel 78, for purposes to be later described, at the central portion of its outer edge is provided with a recess as indicated by the semi-circular cut-out at 80.

The masking flap and parts for slidable action are in all substantial respects identical with the parts corresponding thereto as disclosed in FIGS. 1–4. Accordingly, such parts are designated by primed numbers in FIGS. 5–7. Mask 28′ is slidably movable on its attaching means 27′ which includes the web 46′ and its superposed channel pocket panel 48′, web 46′ and panel 48′ being heat sealed at 82 at their outer edges to the outer edge of a mounting panel at 84.

Mounting panel 84 is inserted between panel sleeve 78 and the inner surface of the book cover 60. In concealed position (FIG. 5) panel 84 extends from the outer edge of sleeve 78 inwardly beyond sleeve 78. At this inner edge a folded extension 86 is reversely directed to overlie the inner marginal edge portion of sleeve 78. Thus panel 84 together with assembly 27′ with mask 28′, can be outwardly withdrawn from the concealed position to an operative position (see FIGS. 6, 7). In concealed position the outer edge of sleeve 78 indicated at 88 (FIG. 6) limits inward travel of panel 84 by insertion against the sealed area 82 between web 46′ and panel 84. This is the position shown in FIG. 5 where the masking slide assembly is disposed in underlying relation to pages 64 when the latter are swung against cover 60.

As has been noted the free edge of reversely turned extension 86 overlies the inner edge of sleeve 78. Thus, when panel 84 is withdrawn it may be shifted outwardly to an operative position in which the fold between panel 84 and extension 86 abuts the inner edge of sleeve 78. In the latter position the sealed edge 82 is carried outwardly of the edges of the pages 64 on cover 60 and in the form shown as in FIG. 7 to the extent that mask 28′ will readily overlie a fairly substantial stack of pages 64.

It will also be noted from considering FIGS. 5 and 6 that shifting movement particularly from concealed position will be most easily effected by grasping the central edge portion between the thumb and forefingers, the latter being slipped between panel 84 and cover 60. In doing so the cut-out 80 permits a firm squeezing and pulling action without interference from any portion of the holding sleeve 78. Otherwise the frictional drag against sleeve 78 would impede an easy withdrawal of mounting panel 84.

The two forms of the device, as disclosed, illustrate some of the various relationships which may be desirable in connection with the application of the invention to a particular book or binder form. The device when used with "hard-back" bound volumes or books, as in FIGS. 1 and 2, may dispose the complete unit of mask 28 and attaching assembly 27 entirely within the outline of overlying pages when in concealed position. On the other hand in the case of a wire bound unit, as in FIGS. 5–7, the covers conventionally do not extend beyond the edges of the pages to any extent and the cover 68 of the jacket is therefore dimensioned to overlap cover 60 at its outer edge (see FIG. 6) to an appreciable degree. As a result in concealed position the sealed edge at 82 of the masking unit lies immediately adjacent the edge of cover 60 but

is well protected by the marginal edge portion of jacket cover **68**.

The device may be adapted for many conventional cover-bound units either for permanent or semi-permanent use therewith. Either of the forms shown are particularly useful where school and student use is involved. The book publisher may print and bind a text without regard to any physical considerations other than the printing format desired. No alteration of standard binding procedures is necessary to accommodate masking equipment. The devices when incorporated in book jacket form as shown can either be assembled on the books where issued to students or separately issued for use with a series of books of comparable size. Not being integral with a book the masking device when worn or damaged for any reason may be replaced in the same way a fresh dust jacket is normally supplied. The useful life of a school book is thus not affected by the need to guard against damage to any permanently attached necessary auxiliary equipment.

In using such devices for more than one volume of self-instruction books the form of FIGS. 1–4 may be removed from one book and then assembled on another of like size. The form of FIGS. 5–7 may also be used in the same manner. It is also adapted for separation of the mounting panel member **84** from the remainder of the assembly by folding back the extension **86** and withdrawing panel **84** from under the sleeve **78**. Thus only panel **84** and mask **27'** need be withdrawn where other similar textbooks are supplied with the dust jacket cover portion only, and the panel **84** sub-assembly used for a plurality of books.

What is claimed is:

1. Concealable masking apparatus for cover-bound self-instruction pages and the like comprising

a flat mounting member engageable against the inside surface of a cover for said pages,

a holder member attachable to said cover and including means coacting with said mounting member for guided shifting movement of the latter between an extended position in which the outer edge portion of said mounting member lies adjacent the outer edge of the cover and outwardly of pages thereon, and an inner storage position in which said mounting member lies substantially within the outline of the cover;

said mounting member having an overlying masking sheet, the outer marginal edge portions of said sheet and said member having interengaging means for relative sliding movement of the sheet longitudinally of said outer edge of the member,

said masking sheet being swingable upwardly of said mounting member at its edge portion to overlie said pages in extended operative position and to underlie said pages in said inner storage position.

2. Concealable masking apparatus for cover-bound self-instruction pages and the like comprising

a flat panel for mounting against the inside of a cover for said pages,

a flat holder panel having means for attachment to said cover and means for engagement with said mounting panel for guided shifting of the latter between a laterally extended position relative to said cover and an inwardly related position substantially overlying said cover,

said mounting panel having a masking sheet in overlying relation thereto and said panel and sheet at the outer edges thereof having interengaging means for sliding the sheet longitudinally of said panel outer edge,

said masking sheet being swingable upwardly of the mounting panel for overlying said pages in said extended position and for underlying said pages in said inwardly related position, said latter position being one of substantial concealment of said mounting panel and masking sheet between said pages and cover.

3. The structure of claim **2** in which:

an extension is provided at the inner edge of one of said panels and is hingedly related thereto, said extension coacting with the other panel for limiting travel of the mounting panel in at least one direction of movement.

4. The structure of claim **2** in which

the means for attaching the holder panel to the cover comprises a dust jacket having cover panels with a pocket formed at each side for insertion of the bound covers therein, and said holder panel is affixed at its outer edge to the outer edge of one of said pockets.

5. The structure of claim **4** in which

the inner edge of the holder panel is provided with a hinged foldable extension and the inner edge of said mounting panel is hingedly connected to the extension at its other edge, the said extension defining the extent of movement between said extended and inwardly related positions of said mounting panel.

6. The structure of claim **5** in which

said dust jacket, said panel members and said masking sheet are of heat sealable thermoplastic sheet material, and

said extension when in co-planar relation with the holder panels carries the outer edge of the mounting panel to a concealed storage position offset inwardly of the outer edge of said jacket and, when reversely folded against the holder panel, carries said mounting panel edge to an operative outwardly offset relation to said jacket edge.

7. Concealable masking apparatus of thermoplastic sheet material for cover-bound self-instruction pages and the like comprising

a dust jacket having cover panels, each having a panel affixed at the inside to the top and bottom edges thereof to form a sleeve for engagement of bound covers,

a mounting panel inserted under one of said sleeves with a masking sheet overlying the sleeve and means interconnecting the outer edges of the panel and sheet for sliding movement of the latter longitudinally of said outer edge,

said mounting panel being of greater width than said sleeve panel and having an extension reversely folded back over the inner marginal position of said sleeve,

said panel and masking sheet being shiftable between a laterally offset position of the outer edges thereof relative to the outer edge of said jacket cover and a position wherein said outer edges lie inwardly of said outer jacket edge.

8. The structure of claim **7** in which

the sleeve-like panel of the dust jacket with which the mounting panel and masking sheet carried thereby are associated, is provided at its outer central edge with a recessed portion whereby the edge portions of the mounting panel and masking sheet may be manually grasped for lateral shifting of said panel and sheet.

References Cited by the Examiner

UNITED STATES PATENTS

3,125,813 3/1964 Shade ..... 35—9

EUGENE R. CAPOZIO, *Primary Examiner.*