April 24, 1951 J. W. MAMER 2,550,279

FOLDING EASEL

Filed May 10, 1949

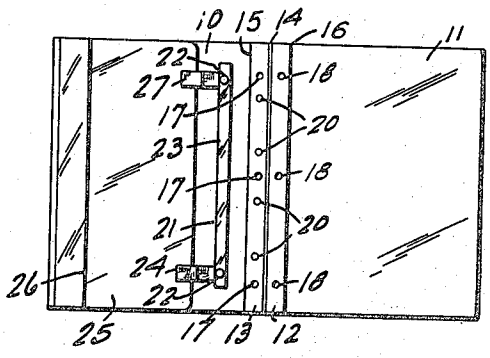


FIG. 1

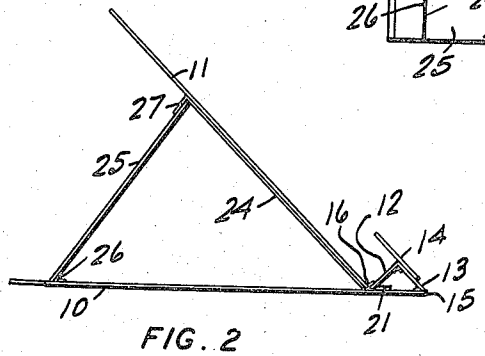


FIG. 2

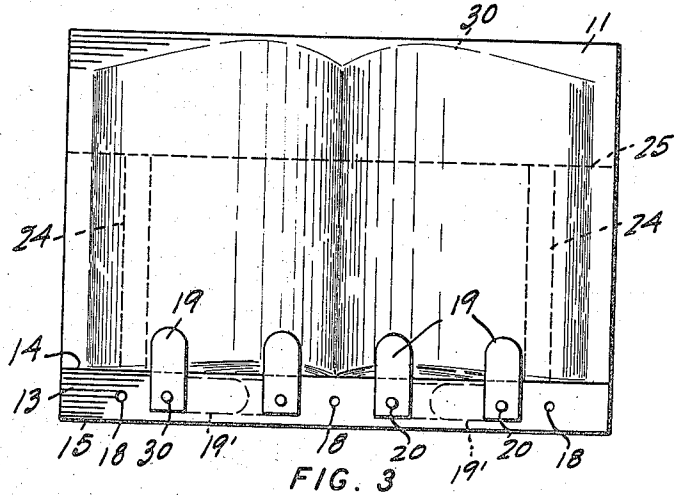


FIG. 3

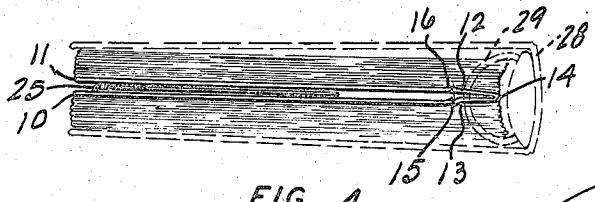


FIG. 4

INVENTOR.

John W. Mamer

BY

Philip A. Trudell

Attorney

Patented Apr. 24, 1951

2,550,279

UNITED STATES PATENT OFFICE

2,550,279

FOLDING EASEL

John W. Mamer, Berkeley, Calif.

Application May 10, 1949, Serial No. 92,269

3 Claims. (Cl. 45—80)

1

This invention relates to improvements in easels and provides a new type of easel which folds into book form and which is provided with the conventional eyelets for filing in the customary loose-leaf folder where it is always accessible for use for convenience or through necessity.

Conventional easels are usually bulky and when not in use must be stored separately from any notes, sketches, or the like, therefore not being convenient or instantly accessible for such purposes.

The easel which is the subject of my invention, folds flat and can be filed in the conventional loose-leaf binder along with any notes, sketches, copies or the like, and when required, can be removed from the binder as easily as any loose-leaf sheet and instantly set up for use for research work, taking notes, copying from books, pamphlets, and for any other purpose where it is desired to support an element in a position perpendicular to the line of sight, and is therefore also very convenient for stenographers.

The objects and advantages of the invention are as follows:

First, to provide an easel which is complete with base, ledge and table and which will fold into a flat, compact unit when not in use.

Second, to provide an easel as outlined which can be filed in a conventional loose-leaf binder when folded flat.

Third, to provide an easel as outlined which can be set up for use in an absolute minimum of time and with minimum effort, and which when set up will provide a rigid support for a book or the like.

Fourth, to provide an easel as outlined with leaf holders which can be retracted when not to be used.

Fifth, to provide an easel as outlined which is simple in construction and economical to manufacture, instantly collapsible, storable in a loose-leaf binder if desired, and which is immediately accessible for use.

In describing the invention reference will be had to the accompanying drawings, in which:

Fig. 1 is a top plan view showing the invention in wide open or extended position.

Fig. 2 is a side elevation of the invention shown set up for use.

Fig. 3 is a front elevation of the invention with a book supported and held in open position.

Fig. 4 is an end view of the invention as filed in a loose-leaf ring type binder.

The invention consists of a folding easel which can be made of fiberboard, pressboard or the like

2

with or without fabric or paper facing, or of plastic, and consists of a pair of covers including a base 10 formed of a rectangular sheet of the material and an easel table 11 of the same material and of the same size as the base, and a hinged back consisting of two elongated strips of the same material, 12 and 13 which are hinged together along one edge as indicated at 14 and with the other edges hinged to the respective covers or base and table as indicated at 15 and 16.

Both back strips are provided with registerable binder holes or eyelets as indicated at 17 and 18, and a plurality of fingers or page holders 19 are retractably secured to the back member 13 as by riveting indicated at 20; these holders being preferably formed of a resilient material such as fiber board, plastic or spring metal and are arranged to turn down to a position parallel with the edges of the back strip as indicated by the dotted fingers at 19'.

A rest 21 is secured to the base 10 as indicated at 22 with the back edge 23 located a distance equal to approximately 1.4 times the width of the back member 13 from the hinge 15, and a pair of flexible members such as tape 24 are coincidently fastened at one end by the fasteners 22 with the end of the flexible member secured under the rest.

A support or strut 25 formed of the same material as the base and table has one edge hinged to the base adjacent the rear end as indicated at 26, and the two straps 24 have their other ends fastened to the forward edge of the strut as indicated at 27.

For filing the easel in a binder or for storing when not in use, the easel is folded at the hinge joint 14, with the strut 25 lying flat on the base as indicated in Fig. 4, the holders 19 being retracted to the position 19', the device being filed in the folder 28 with the rings 29 passing through the eyelets 17 and 18.

To set up the easel, the table 11 is swung up and the strut is raised as high as the straps will permit. The table is lifted and moved back, causing the hinged back to hinge about the joint 15, and the joint 16 is rested back of the rest 21 and the table is rested against the strut, thus completing the easel with the ledge 12 at right angles to the easel table. A book 30 or other papers can be placed in position and the holders 19 turned up to the positions shown in solid lines to keep the leaves from turning and maintaining the position in the book.

As illustrated, the easel assumes an angle of 45

degrees, though this angle is easily varied by widening or narrowing the back member 13 to maintain the ledge at right angles to the easel table, though the 45 degree angle is most satisfactory, both from a visibility standpoint and because the easel is more easily folded back with the members 12 and 13 of equal width.

This easel also provides a very satisfactory display device, and is excellent for those who like to read in bed, therefore having many uses. It is also very economical to construct.

I claim:

1. A folding book type easel comprising, a first cover member, a first back member, a second back member, and a second cover member all hinged together in series and formed of relatively rigid sheet material, a support member having one edge hinged adjacent the free end of the second cover member, and movement limiting means cooperating between the second cover member and the free end of the support member for limiting the angular rise of said support member, and locating means on said second cover member for cooperating with and maintaining the hinge connection point between the first cover member and first back member in predetermined position when the back members are moved over the second cover member with said first back member forming a ledge and said second back member forming a support therefor, and said support member providing support for the first cover member in inclined position to form the easel, said locating means comprising a strip of material extending parallel to the back members and located with its cooperative edge at a distance of substantially 1.4 times the width of said first back member to adjust the back members to angles of approximately 45 degrees to the surface of the second cover member, to form said ledge and said support therefor, and fixed to said second cover member, and said first cover member being supported at the same angle by said support to form the ledge at right angles to the easel formed by the first cover member.

2. A structure as defined in claim 1; said movement limiting means comprising a plurality of flexible straps having each one end fixed to the free end of the support member and the other end fixed under said strip and forming coincidently a part of said locating means to cooperate with the back of said hinge connection point to prevent movement of the said hinge connection point toward the free end of the second cover member to form a rigid easel.

3. A structure as defined in claim 2; registrable eyelets formed in said first and second back members for filing on the rings of a loose-leaf binder, and page-holding fingers formed of resilient material and movable to two positions, respectively projecting upwardly above the ledge, and folded flat against the ledge longitudinally thereof for closing of the easel.

JOHN W. MAMER.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,198,180	Berg	Sept. 12, 1916
2,012,551	Steen	Aug. 27, 1935
2,152,557	Moore et al.	Mar. 28, 1939
2,165,255	Hamilton	July 11, 1939
2,490,356	Hummel	Dec. 6, 1949