May 15, 1951 C. N. CROSS 2,553,174

HINGED SECTION FOR MOUNTS

Filed May 4, 1945

Fig. 1.

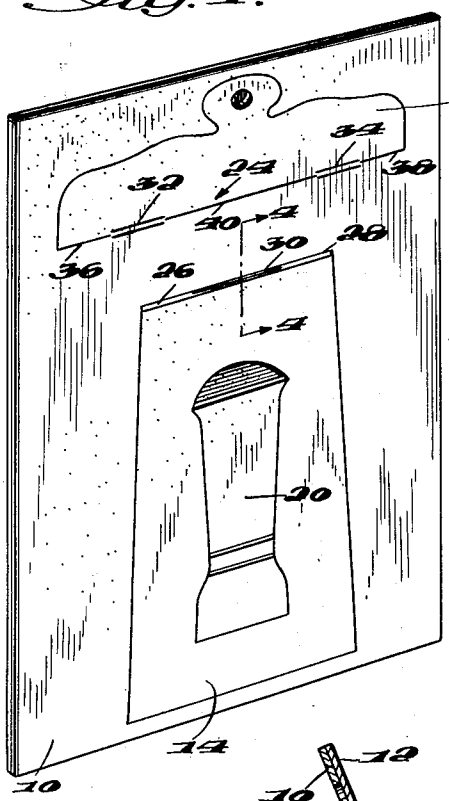


Fig. 2.

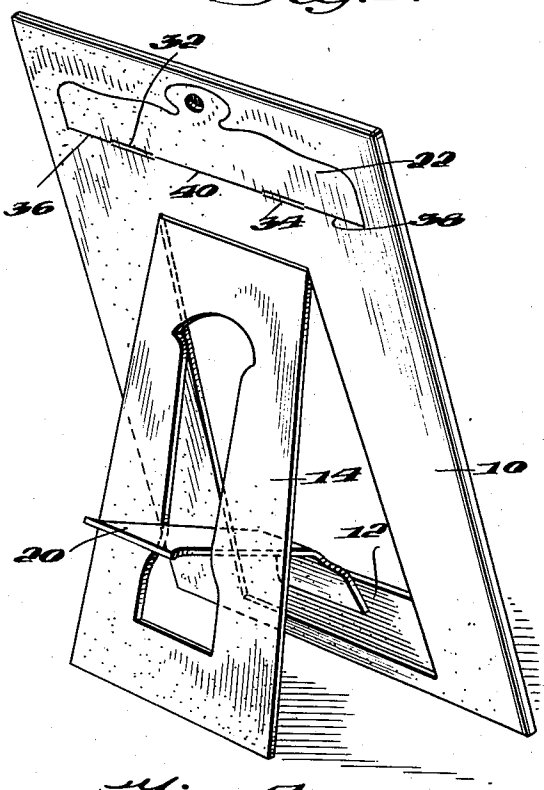


Fig. 3.

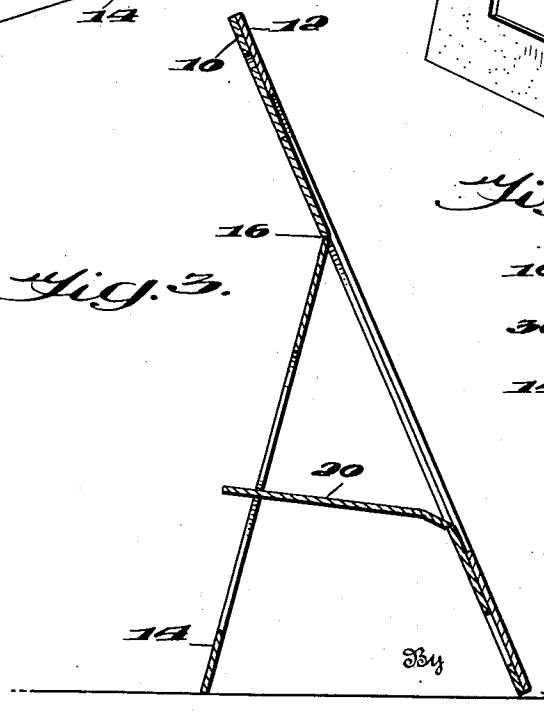
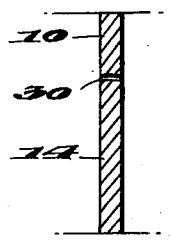


Fig. 4.



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HINGED SECTION FOR MOUNTS

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1 Claim. (Cl. 248—35)

1

This invention relates to display mounts and more particularly to hinged sections constituting parts of such display mounts.

Heretofore display mounts have been made of flexible cardboard stock and hinged sections thereof such as easel struts and closures for material-inserting passages have been formed in a base panel of such mounts for angular movement about hinge lines that have been scored to render the hinge more flexible. In previous constructions of this kind the character of the material, i. e., the thickness of the cardboard or other flexible stock and the limited flexibility of the same, has been such that when hinged sections have been manipulated into angular position about a scored hinge line at the base of such sections, considerable stress was transmitted to the area of the base panel adjacent the hinge line. The repeated application of strain to such relatively fragile sections frequently resulted in serious damage to the mount or the distortion thereof to render such mounts relatively useless in a short period of time. Furthermore, such hinged sections of prior construction display a marked tendency to return to the angularly displaced position when once so displaced.

It is the object of this invention to render the hinge line at the base of hinged sections more flexible so that the hinged section may be manipulated into angular position about the hinge line without transmitting stress to the adjacent panel area.

The object of the invention is attained by providing hinged lines at the base of such hinged sections which lines consist of a part at which the section is integrally attached to the panel and a part at which the section is severed from the panel, thereby reducing the resistance to angular movement by reducing the length of the line and as a consequence also the mass of the material at which the section is integrally attached to the panel.

The nature of the invention will be more fully understood after reading the following detailed description with reference to the drawing forming a part hereof and in which drawing:

Figure 1 is a perspective view looking at the back of a display mount;

Figure 2 is a perspective view of the same mount showing hinged sections in angularly displaced position;

Figure 3 is a longitudinal sectional view along the center line of the mount; and

Figure 4 is a cross sectional view on line 4—4 of Figure 1.

2

Display mounts ordinarily include a back panel 10 and a face panel 12. Either or both of these panels may have hinged sections therein that are angularly movable from the plane of the panel for the purpose of inserting display material or for supporting the mount in display position. Ordinarily the back panel 10 has formed therein an easel or supporting strut 14 which may be moved into angular position with reference to the plane of the back panel 10 and to facilitate such angular manipulation there is provided a hinge line 16 at the base of the supporting strut. It is common practice to provide a locking tongue 20 that cooperates with the supporting strut 14 for holding the strut in its mount-supporting position.

As shown herein, the display mount and particularly the back panel 10 thereof may have formed within its margins a section 22 which may be moved angularly about a hinge line 24 at the base thereof, and when so manipulated display material may be inserted between the panels 10 and 12 whereafter the section 22 may be returned to its position within the plane of the back panel 10 to effectively close the material-inserting passage.

The invention herein relates primarily to the nature of the hinge lines such as the hinge lines 16 and 24. Heretofore these lines were formed by scoring the flexible material at the base of the hinged section, but, as hereinabove noted, these score lines did not render the hinge sufficiently flexible to eliminate the transmission of stress and strain to the body panel adjacent such lines. To overcome the objection noted, the hinge lines of the present invention consist of a part at which the section is integrally attached to the panel and a part at which the section is severed from the panel.

The specific manner in which the cut and integral sections are alternated is not of particular importance and may therefore be arranged in a number of different ways. As examples of the manner in which the invention may be applied to hinged sections of display mount, the hinge line 16 herein is shown as differing in its specific arrangement from the hinge line 24. The hinge line 16 consists of scored end portions 26 and 28 at which the supporting strut 14 is integrally attached to the back panel 10 and these portions 26 and 28 are spaced by the section 30 at which the material between the base of the supporting strut 14 and the adjacent panel is severed.

The hinge line 24 at the base of the hinged

section 22 is formed by scoring a plurality of relatively short portions of the line as at 32 and 34. The line 24 is completed by severing the material of the back board at the end portions 36 and 38 and at the intermediate portion 40.

Thus the invention may be practiced in a number of different ways and the practice thereof shall not be limited other than by limitations imposed by the following claim:

A hinge structure for display mounts which include in their structure a back panel formed of flexible stock comprising, a section formed in a flexible stock back panel for repeated angular movement about a straight hinge line, a straight hinge line at the base of said section about which the same is adapted to move, said line consisting of segments at the ends thereof along which said section is integrally attached to said panel and at least one intermediate segment in alignment throughout its length with said first named segments; along which said section is severed from said panel, said severance being by a slot of

such limited width as to permit the facing walls thereof to remain in substantial contact with each other during angular movement of said section whereby the hinge line is rendered flexible and the hinged section may be manipulated without transmitting a substantial amount of stress to adjacent panel area.

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REFERENCES CITED

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

UNITED STATES PATENTS

Number	Name	Date
735,925	Winter	Aug. 11, 1903
812,993	Harper	Feb. 20, 1906
816,274	Thompson	Mar. 27, 1906
1,442,056	Edmonds	Jan. 16, 1923
1,524,338	Chesney	Jan. 27 ,1925
2,172,273	Chilcote	Sept. 5, 1939
2,373,873	Cross	Apr. 17, 1945