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Endres

[11] **3,747,262**

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[54] **CARD HOUSE TOY**

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[73] Assignee: **Oakley Die & Manufacturing Company, Inc.**, Cincinnati, Ohio

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[52] **U.S. Cl.** **46/31**

[51] **Int. Cl.** **A63h 33/10**

[58] **Field of Search** 46/31, 30

[56] **References Cited**

UNITED STATES PATENTS

1,523,347 1/1925 Murmann 46/31

FOREIGN PATENTS OR APPLICATIONS

25,961 11/1909 Great Britain 46/31

Primary Examiner—Louis G. Mancene
Assistant Examiner—J. Q. Lever
Attorney—J. Warren Kinney, Jr.

[57] **ABSTRACT**

A plurality of unique connector members are provided for frictionally connecting the edge-adjacent portions of playing cards or the like for providing a card house toy.

7 Claims, 7 Drawing Figures

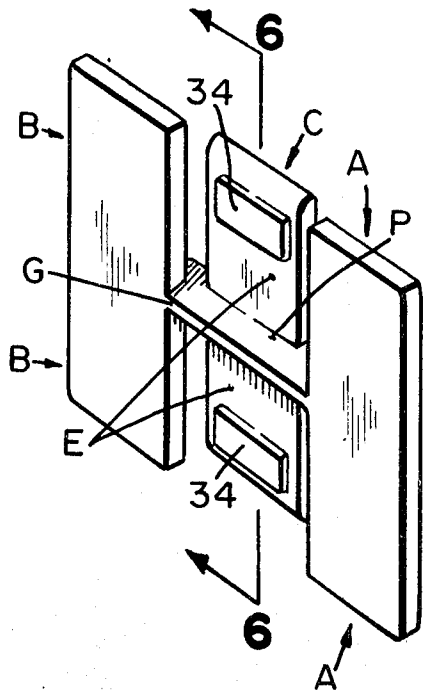


FIG-1

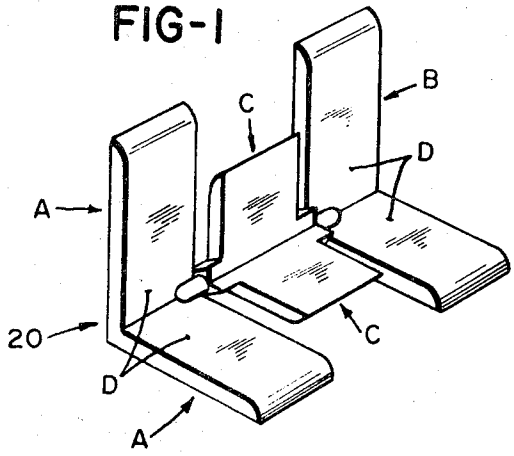


FIG-2

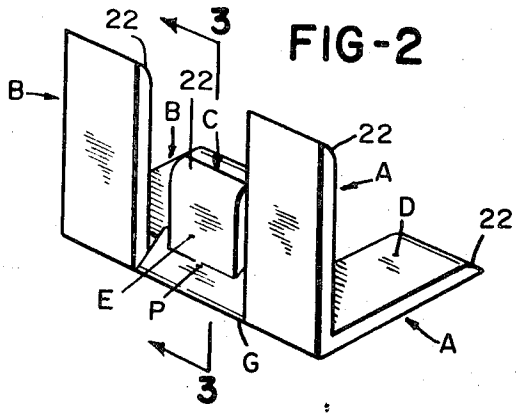


FIG-3

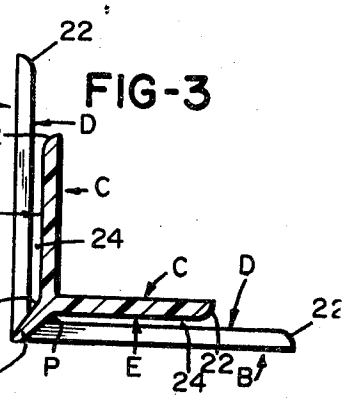


FIG-4

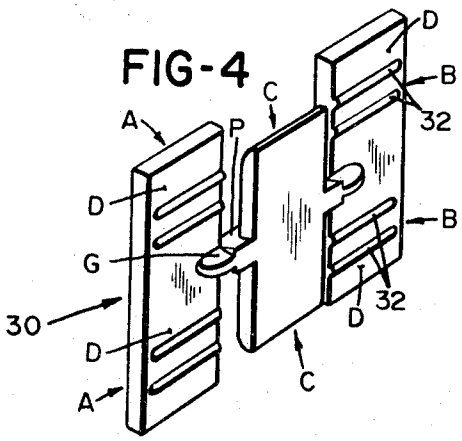


FIG-5

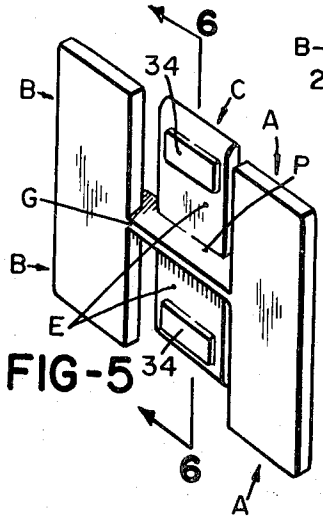


FIG-6

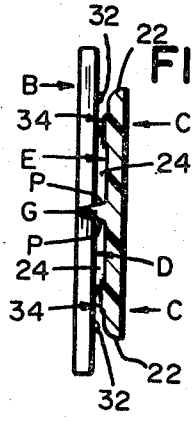
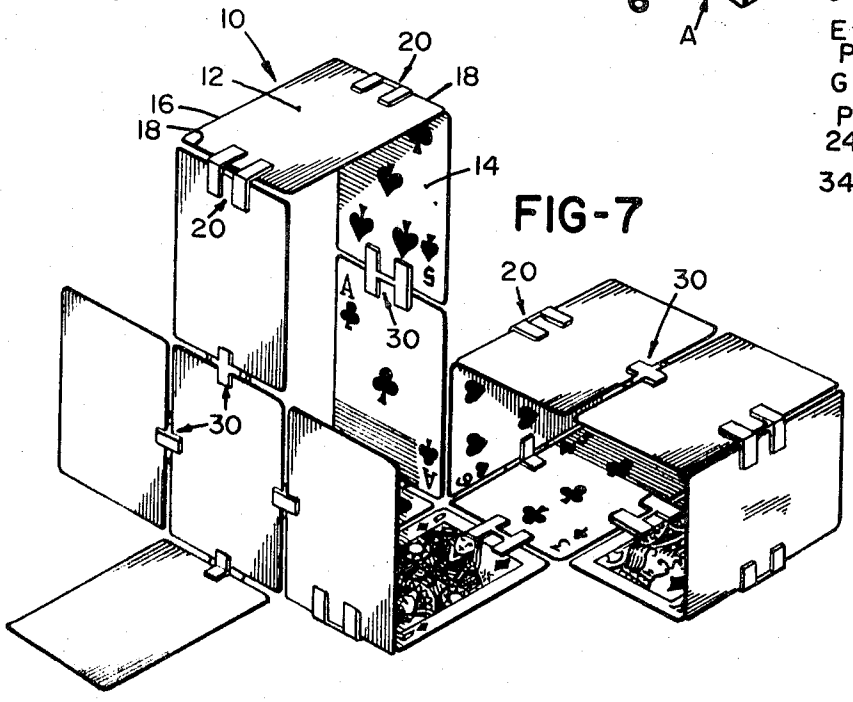


FIG-7



CARD HOUSE TOY

BACKGROUND OF THE INVENTION

1. Field of the Invention

The invention relates generally to a card house toy and particularly to connector means for securely, though releaseably, interconnecting the edge-adjacent portions of adjacent cards.

2. Description of the Prior Art

The prior art of which applicant is aware discloses various types of connector elements which are adapted to secure the edge-adjacent portions of playing cards or the like in abutting relationship, as more fully disclosed in the following U.S. Patents, to wit:

U.S. Pat. No. 1,505,034 which discloses connector clips fabricated from wire and/or sheet metal having integrally formed tongues which are distortable by the edge of a card inserted between the tongues, said connectors being bendable for disposing the tongues of a clip at different angles.

U.S. Pat. No. 1,398,852 which discloses a building toy which utilizes a plurality of U-shaped metal clips the legs of which are spaced apart to receive the edge of a playing card, and wherein the bases of two or more of the metal clips are permanently interconnected by welding or soldering.

U.S. Pat. No. 1,426,087 which discloses a toy building construction wherein the edges of cardboard sheets are interconnected by means of rectangular blocks having sheet-receptive, elongate grooves cut therein.

U.S. Pat. No. 1,523,347 which discloses a building outfit wherein elongate junction bars have edges which are adapted to be slidingly received between the plies of flat plates.

U.S. Pat. No. 1,623,641 which discloses a building card structure in which adjacent cards are interconnected by means of flat key panels opposite ends of which are adapted to be received under U-shaped staples secured and adjacent the edges of cards to be interconnected.

U.S. Pat. No. 2,497,657 which discloses a construction toy embodying elongate, cylindrical connector members having elongate, panel-receptive slots therein for receiving the ends of cards which are interconnected thereby.

SUMMARY OF THE INVENTION

The card house toy of the present invention is adapted to be fabricated from a plurality of planar members such as playing cards, or the like, the adjacent edges of which are adapted to be positioned in desired relationship with respect to the edge of another planar member or card by means of a unique connector member fabricated from plastic and having sets of three locking panels which are adapted to receive and selectively engage the end edge-adjacent portions of the panels or cards.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of one side of a right angle connector member embodying the teachings of the present invention.

FIG. 2 is a perspective view of the other side of the member of FIG. 1.

FIG. 3 is a sectional view taken on line 3—3 of FIG. 2.

FIGS. 4 and 5 are perspective views of the opposite sides of an in-line connector member embodying the teachings of the present invention.

FIG. 6 is a sectional view taken on line 6—6 of FIG. 5.

FIG. 7 is a perspective view illustrating a card house structure or toy fabricated from the connector members of FIGS. 1 and 4.

DESCRIPTION OF THE PREFERRED EMBODIMENT

With particular reference to FIG. 7, the numeral 10 denotes a plurality of planar members such as, by way of example, playing cards, each having opposited, flat, axial surfaces 12 and 14, side edges 16 and end edges 18, wherein said planar members are interconnected by connector members 20 and 30 to provide the structure illustrated.

The numeral 20 denotes a corner connector member, whereas the numeral 30 denotes a straight, or in-line connector member.

Each connector member includes sets of three substantially parallel, laterally spaced, locking panels A, B and C, two of which, viz A and B, are in common plane and have a flat, inner abutment surface D. The third panel, C, is interposed between panels A and B and has a flat, outer axial surface E.

Each set of three locking panels, A, B, and C, is permanently interconnected at their lower ends by means of an integrally formed spine G which, in the connector of FIGS. 1–3, maintains the locking panels of each of said sets at substantial right angles.

In the preferred embodiment of the invention, the free, outer ends of the locking panels are tapered, as at 22, whereby to facilitate the edge-wise entry of a planar member between the adjacent abutment surfaces of each set of locking panels.

As best illustrated in FIGS. 3 and 6, the outer abutment surface E of centermost locking panel C is offset relative to the inner abutment surface D of panels A and B to provide a throat or space 24 whereby said abutment surfaces will positively though releaseably engage the opposed axial surfaces of a planar member inserted edge-wise into throat 24.

In order to enhance the frictional engagement of the abutment surfaces of the locking members with the axial surfaces of a planar member, said abutment surfaces may be provided with elevated areas 32 and 34, as best illustrated in FIGS. 4–6.

It should be understood that, if desired, elevated areas such as 32 and 34 may be applied to surfaces D and E of locking panels A, B and C, respectively, of the connector member illustrated in FIGS. 1–3, or, if desired, the elevated areas 32 and 34 may be omitted from panels A and B. It should likewise be understood that the free outer ends of locking panels A and B of FIGS. 4–6 may be rounded or tapered as in FIGS. 1–3.

In the preferred embodiment of the invention a stop member in the form of a transverse ledge P is provided at the bottom or inner end of the center locking panel C. Ledge C is an integral portion of spine G which is common to the innermost ends of the various locking panels which collectively comprise a set of locking panels of a connector member. With particular reference to the in-line connector of FIGS. 4–6, it should be understood that the inner ends of the center locking panels C are defined by spine G, wherein the inner end of

the center panel C of one set of locking panels is at and on one side of spine G, whereas the inner end of the center panel of the other set of locking panels is at and on the other side of the spine. The peripheral edge, **16** or **18** of a planar member will engage transverse ledge P, which spans the space between the outermost panels A and B, for limiting the amount by which the edge may be inserted into throat **24.**

The two outermost panels of a set are of the same length, whereas the third, or central panel, is of a different length to facilitate the edge-wise insertion of a planar member between the adjacent abutment surfaces of the locking panels of a set. If desired the two outermost panels A and B may be of a length less than the length of center panel C in lieu of the arrangement illustrated in the drawings.

The connector members of FIGS. **1–6** may be utilized for fabricating a card house toy, as illustrated in FIG. **7**, by merely inserting the outer edge of adjacent planar members between the locking panels of a set. The inherent resilience of the locking the and their relationship with spine G permits the panels to flex slightly incident to the insertion of a planar member between the locking panels of a set to thereby positively, though releasably, secure the planar members in desired relationship and against accidental or unintentional disengagement. Throat C is dimensioned whereby to preclude damage to the axial faces of the various planar members. Uniformly satisfactory results have been obtained in those instances in which the connector members have been fabricated, by injection molding, from plastic such as polystryene, polypropelene, or th like.

What is claimed is:

1. A card house toy comprising, in combination:

a plurality of planar members having a pair of opposed, flat, axial outer surfaces, side and end edges, and a plurality of connector means each of which receives an edge of one of said planar members for securely though releasably connecting said edge to an edge of another of said planar members,

said connector means including at least two sets of three substantially parallel, laterally spaced locking panels, two of which are of the same length and are in a common plane having flat inner surfaces engaging one outer axial surface of a planar member, the third panel interposed between and offset from the aforesaid two panels and having a flat outer surface engaging the other outer axial surface of said planar member and having a different length than said two locking panels whereby to facilitate the edge-wise insertion of a planar member between the adjacent surfaces of said locking panels, the locking panels of each set adapted to engage the end-adjacent portions of the outer axial surfaces of different planar members, the free outer ends of said locking panels tapered to facilitate the edge-wise entry of a planar member between the panel-engaging, adjacent surfaces of the locking panels, and those surfaces of the locking panels which engage axial surfaces of the planar members including elevated areas for increasing the frictional engagement of said panels with said surfaces.

2. A toy as called for in claim **1**, wherein the third locking panel includes a stop member engageable by an edge of a planar member inserted between the adjacent surfaces of said three locking panels.

3. A connector as called for in claim **1**, wherein the connector comprises an injection-molded, unitary piece wherein the locking panels of each set are independently movable incident to the insertion of the edge of a planar member between the abutment surfaces thereof.

4. A connector member as called for in claim **1**, wherein the locking panels of each set are secured to, carried by and project outwardly from a common spine.

5. A connector member as called for in claim **1**, wherein the inner end of the third or centermost locking panel of each set includes a stop member which determines and limits the extent to which an edge of a planar member is receivable between the abutment surfaces of the locking members which collectively comprise a set.

6. A connector member as called for in claim **5**, wherein the stop member comprises a transverse ledge which spans the space between the outermost of the locking panels of a set.

7. A connector member as called for in claim **6**, wherein the transverse ledge comprises an integral portion of a spine which is common to all locking panels of a connector member.

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