Feb. 22, 1966 C. R. STEIN 3,236,523

DUPLICATE BRIDGE BOARD

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FIG. 1.

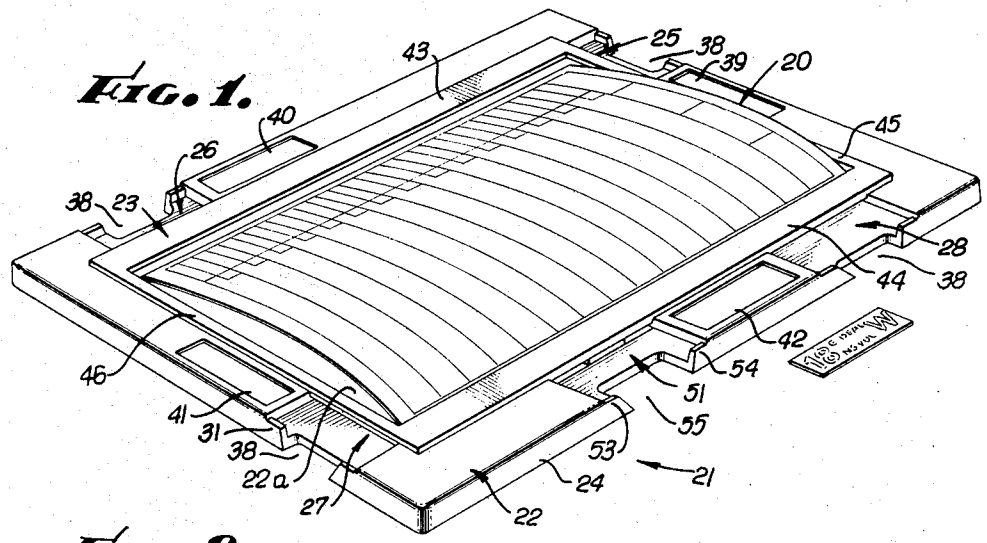

FIG. 2.

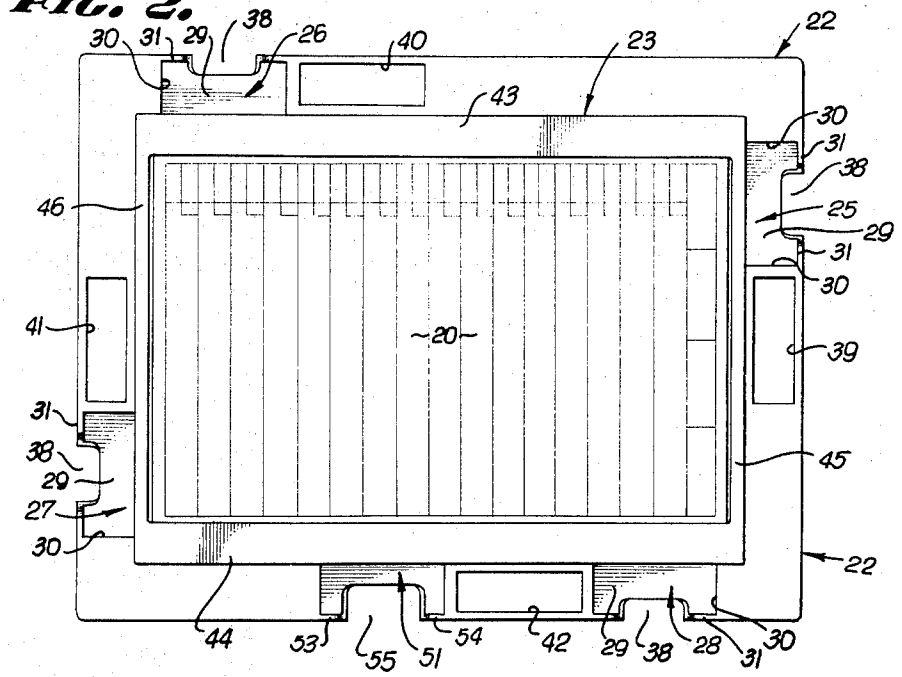

FIG. 3.

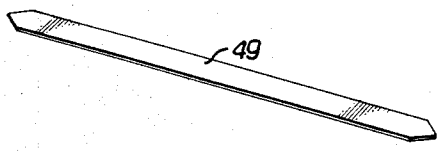

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FIG. 4.

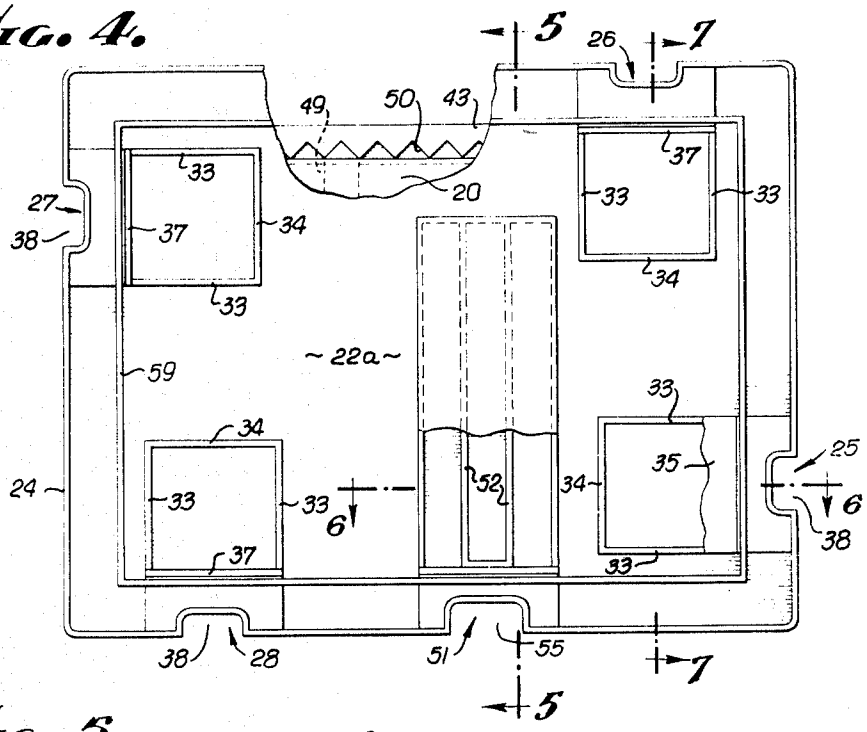


FIG. 5.

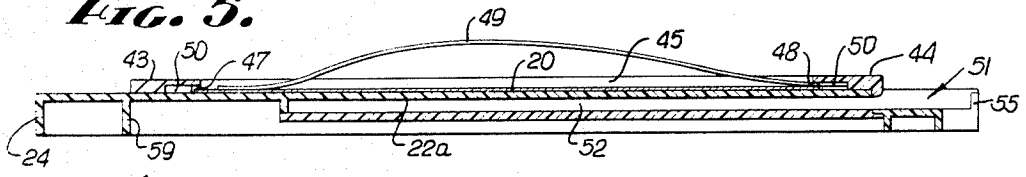


FIG. 6.

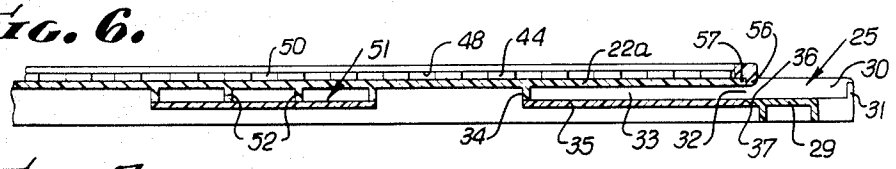


FIG. 7.

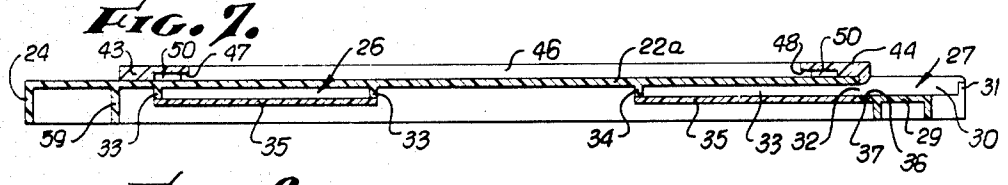
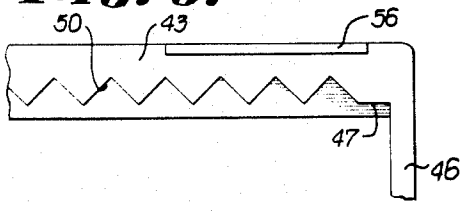


FIG. 8.



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DUPLICATE BRIDGE BOARD

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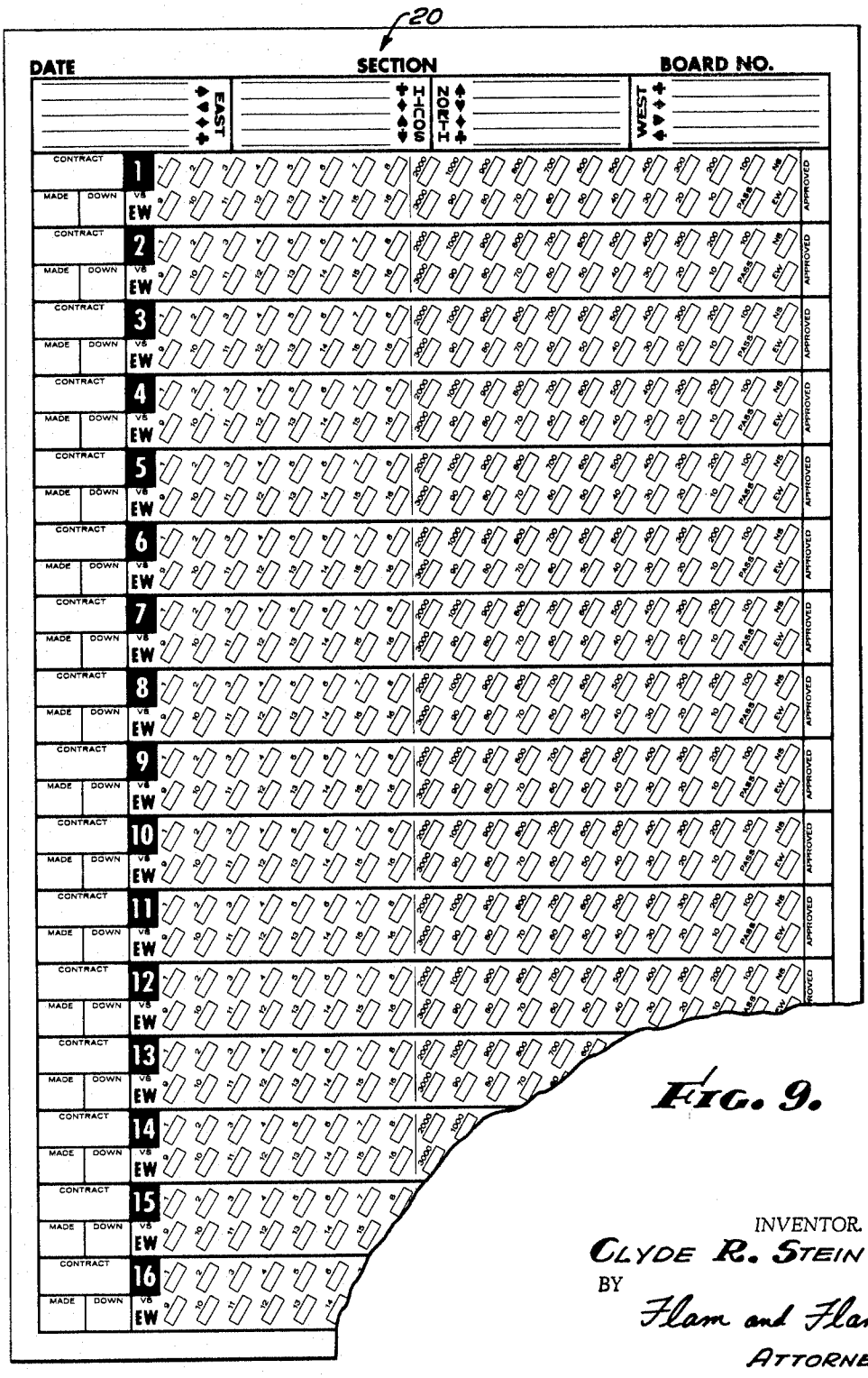

FIG. 9.

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3,236,523

DUPLICATE BRIDGE BOARD

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Filed Sept. 24, 1962, Ser. No. 225,805
8 Claims. (Cl. 273—148)

This invention relates to duplicate bridge, and particularly to a duplicate bridge board of the type suggested in United States Letters Patent No. 3,044,693 issued July 17, 1962, to Frederick H. Flam, entitled "Match Point Duplicate Bridge Scorer." In said prior patent there is disclosed a duplicate bridge board having provisions for holding a data card on which all players enter their scores for that board. By so providing a data card, machine scoring is made practical.

In order to use such a combined duplicate board and data card holder, the scores must be concealed from the players next playing the board. Otherwise, no tournament could be run.

One object of this invention is to provide a simple duplicate board that has the smallest possible dimensions in order to occupy the smallest possible area at the center of the bridge table and in order to occupy the smallest possible height.

Another object of this invention is to provide a duplicate board that nests or interlocks companion boards to facilitate handling.

Another object of this invention is to provide a duplicate board having the foregoing characteristics that may be made essentially in two molded plastic parts.

Plastic duplicate boards have been provided heretofore. But this prior duplicate board was a laminated structure and did not prove durable. Breaks occurred at the edges around the pocket openings where a great deal of stress occurs. An object of this invention is to provide a duplicate board in which the entire part of the board adjacent or forming a part of the pocket opening is made as a single piece of material, as for example by molding. Adhered parts completing the pocket are all located remote from the pocket opening so that they cannot be subjected to undue stresses. At the same time, a finished appearance is provided.

Another object of this invention is to provide a data card that can be easily marked by the players, and without danger of accidental markings.

This invention possesses many other advantages, and has other objects which may be more clearly apparent from a consideration of one embodiment of the invention. For this purpose, there is shown a form in the drawings accompanying and forming a part of the present specification, and which drawings are true scale. This form will now be described in detail, illustrating the general principles of the invention; but it is to be understood that this detailed description is not to be taken in a limiting sense, since the scope of this invention is best defined by the appended claims.

Referring to the drawings:

FIGURE 1 is a pictorial view of a duplicate board incorporating the present invention;

FIG. 2 is a top plan view of one part of the duplicate board;

FIG. 3 is a pictorial view of a concealer member for use with the duplicate board;

FIG. 4 is a bottom plan view of the duplicate board, portions of the board being broken away;

FIGS. 5, 6 and 7 are enlarged sectional views taken along planes corresponding to lines **5—5**, **6—6** and **7—7** of FIG. 4, FIG. 6 being a fragmentary view;

FIG. 8 is a fragmentary elevational view showing the undersurface of a corner of the frame; and

FIG. 9 is a fragmentary plan view of a data card for use with the duplicate board shown in FIGS. 1 to 8.

The data card **20** shown in FIG. 9 has, in this instance, a series of sixteen rectangular strips or lines bearing lengths 1 to 16. The distance from the top edge of the card to the first strip is greater than the distance from the bottom edge of the card to the last strip. This a symmetry prevents improper placement of the card in a manner to be hereinafter described. The following explanations and instructions for marking are given:

The sixteen rectangles on the lefthand side of the strip are used to identify the EW team number. The twenty-four rectangles on the righthand side of the strip are used to indicate the score obtained. It is the duty of North to mark the data card. It is the duty of West to approve after verification. A rectangle is marked by coloring it in completely, going back and forth over the same area a few times so that no white or light spots occur within the rectangle.

Detail instructions for North

(1) Locate your line on the data card by the large numeral corresponding to your NS team number.

(2) After the auction is completed:

(a) Print the contract and by whom played in the space provided. Use "X" for doubled, and "XX" for redoubled.

(b) Mark the rectangle corresponding to the EW team number.

Note: If the hand is passed, first print "pass" under "contract" and mark the "pass" rectangle near the right-hand side of the data card. Omit Step 3.

(3) After the hand is played:

(a) Print the appropriate number under "made" or "down."

(b) Mark the rectangles corresponding to the score.

(c) Mark either the NS or EW rectangle depending, of course, upon which side scored.

A seventeenth rectangular strip, equal to size to the other sixteen, is also provided at the top of the data card. This strip is used to provide a hand record for convenient duplication or preparation of the board. The strip is divided into four parts, as shown, for the hands of North, South, East and West. Guide lines and printing orientation make the hand record parts readable or accessible simultaneously by players seated at a bridge table.

A reading device (not shown) senses the existence of marks in the rectangles and transmits the corresponding information to a data processor whereby the scores are match pointed and the results tabulated.

The marking rectangles are about twice as high as they are wide. All of the rectangles are rotated slightly in a clockwise direction from a true vertical position in order to conform to the normal angularity of the writing of a righthanded person. By a very simple and normal manipulation, the rectangles can be blackened according to directions.

By virtue of the angularity of the rectangles, extensions of the markings in any one rectangle will miss the adjacent rectangles. Accordingly, there is no danger of accidentally marking an adjacent rectangle.

The data card **20** is inserted in a duplicate board **21** at the start of a bridge tournament session where it remains until the conclusion of the session. The duplicate board **21** comprises two main molded parts. One of the parts is a base or support **22** (FIG. 2), and the other of the parts (FIG. 1) is a frame element **23** fastened to the base part **22** for receiving the data card. The frame will be described more fully hereinafter.

The support shown in FIG. 2 is generally rectangular

in form but longer and wider than the data card. The base part **22** has a central flat area **22***a* forming a backing for the data card **20**, which is shown in the process of being inserted. The support **22** has a downwardly extending, interrupted peripheral flange **24**, the lower edge of which is adapted to rest upon a card table or the marginal portion of the support of a similar duplicate board.

The support **22** provides four card pockets **25**, **26**, **27** and **28**, each accommodating thirteen playing cards constituting a bridge hand corresponding, respectively, to South, East, North and West. These playing cards (not shown) are adapted to project beneath the flat area **22***a* upon which the data card **20** is supported and as shown in FIG. 6.

The outer portion of the card pocket **25**, for example, is formed by a depressed or downwardly offset wall part **29** located beyond the area of the data card. This depressed wall part **29** is joined to the support by side walls **30** and front rails **31**. The front rails **31** extend upwardly from truncated portions of the peripheral flange **24**. An elongated opening or slot, as at **32** (FIG. 6) is formed at the offset between the area **22***a* and the depressed wall **29** between the side walls **30**. A stack of thirteen cards can be inserted through this opening, the slot **32** corresponding in length to the major dimension of a standard playing card, and corresponding in height to the thickness of thirteen such cards.

Side walls **33** (FIG. 4), formed as depending ribs on the support **22**, form inward continuations of the side walls **30** at the outer end of the card pocket. A rib or end wall **34** joins the side walls or ribs **33** and forms the inward terminus of the card pocket.

The bottom wall of the card pocket **25** is formed by a separate cover plate **35** (FIG. 6) that is generally of rectangular form. The edges of the side walls **33** and the end wall **34** are engaged by the marginal portion of the cover **35**. The inner surface of the cover plate **35** forms an inward continuation of the offset wall **29**.

In order to provide an area of contact for the cover **35** at the edge of the wall **29**, the under surface of the offset wall **29** at this edge and the end of the cover **35** are rabbeted, as at **36** and **37**.

Thirteen playing cards are readily inserted into the card pocket **25** by flexing the cards to cause them to pass over the front rails **31**. The front rails **31** desirably project above the plane of the top of the inner portion of the card pocket in order to prevent accidental removal of the cards.

The front rails **31** are separated by a thumb hole **38**, as shown in FIG. 2, whereby the cards may be flexed upwardly and gripped for removal.

The card pockets **26**, **27** and **28** are formed in the same manner as the card pocket **25**. On the marginal portion of the support and adjacent each of the card pockets are shallow recesses **39**, **40**, **41** and **42** in which placards or tabs may be accommodated to indicate the player positions N, S, E and W and the conditions of play.

The frame element **23** for retaining the data card has side rails **43** and **44** and top and bottom rails **45** and **46**. The frame is fastened to the top of the support about the central area **22***a*. Its peripheral edges slightly overlie the upward openings of the card pockets. The top and bottom rails **45** and **46** are spaced apart a distance corresponding to the major dimension of the data card. The side rails **43** and **44** are spaced apart a distance that is slightly less than the corresponding minor dimension of the data card **20**. However, as shown clearly in FIGS. 5 and 8, the side rails **43** and **44** each have longitudinally extending recesses or slots **47** and **48**. By flexing the data card **20** as shown in FIG. 1, the side edges of the data card may pass beneath the overhanging portions of the side rails **43** and **45** and into the recesses **47** and **48**, whereby the data card is retained.

In order to conceal the scores after they are marked on the strips or marking areas, concealer members **49** (FIG. 3) are provided. These concealer members **49** are made of material such as fairly heavy gauge laminated vinyl or spring steel in order to provide suitable resilient characteristics for purposes presently to be described.

The width of the concealer member **49** corresponds to the width of the marking strip and the hand record strip over any of which it may be placed to conceal information. In order to retain the concealer members **49** in place and against shifting, their ends enter individual recesses **50** (see FIGS. 5 and 8) extending inwardly from the frame slot **49** and aligned with the strips. The concealer members must be flexed in order to enter the recesses, and as shown in FIG. 5. The recesses **50** will be aligned with the strips only if the card is inserted with the hand record strip to the right of the West position. Thus with the card inverted, the concealers will cover half of one strip and half of another, signalling improper card placement. This ensures against any improper composition of hands from the hand record.

The ends of the concealer members **49** are pointed or cut at 45° angles from opposite sides, and the recesses **50** are correspondingly formed to fit them. Other configurations could be provided. Once in place, the concealer members can be removed only by a deliberate manipulation. Accidental removal is made all the more difficult when several strips are placed in side-by-side relationship whereupon the lateral edges of the respective strips engage to restrain lateral flexure.

A fifth pocket **51** is provided for concealer members **49**. The pocket **51** is generally similar to the pockets **25**, **26**, **27** and **28** except that it is longer to accommodate the length of the strip **49**. Furthermore, the pocket **51** is divided into two parts by divider rails **52** and to conform to the width of the concealer members **49**. End rails **53** and **54** prevent the concealer members from sliding out of their pockets and requiring that they be flexed upwardly for removal. To facilitate individual removal of the strips, a thumb hole **55** is provided that is slightly deeper than the thumb holes for the playing cards. Thus the strips can be engaged along their side edges.

In order to lend stability to the frame **23**, and to locate the frame relative to the base, bars, as at **56**, are formed to fit over the edges **57** at the inner end of the upper card pocket openings and the upper opening of the opening for the concealer members. The flanges **56** furthermore hide from view the discontinuities formed at the offset openings, as at **32**, so that a pleasing finished appearance is provided. Also, the corners of the flanges **56** are rounded, thereby guiding playing cards or concealer members into the pocket.

A depending rail **59** is formed in order to receive the frame **23** of a companion board, thereby accomplishing an interlocking or nesting relationship between them.

The inventor claims:

1. In combination: a flexible and resilient data card having a series of marking regions of equal size extending one above the other for placement by the teams of information corresponding to their scores; a duplicate bridge board having pockets for reception of playing cards, said board providing edges forming a frame in which the data card is fitted; means forming slots beneath the edges at the ends of the said regions; and a series of individual flexible concealer members having a width corresponding to the marking regions for overlying them, and ends adapted to be received respectively in said slots upon flexure of said concealer members for retention by said board over said marking regions; said board having means forming a pocket for said concealer members.

2. In combination: a data card of flexible resilient material and having opposite side edges; a frame for the data card and having edges spaced closer to each other than the said opposite edges of said data card; means forming slots beneath said frame edges for receiving the edges of said data card; and means forming supplemental recesses

extending inwardly from said slots for receiving the ends of flexible concealer members.

3. The combination as set forth in claim 2 in which said data card is rectangular, and substantially longer than it is wide, the said edges of the data card being the longer edges.

4. In combination: a rectangular data card of flexible resilient material having opposite side edges; a flat support; a unitary frame element fastened to the support and having a top surface and a bottom surface engaging the flat support; the bottom surface of the frame element being relieved to form with the support slots along opposed inner edges of the frame receiving opposite edges of said data card upon flexure thereof; said bottom surface along said slots being further relieved to form individual recesses opening at the inner end of the slot for receiving the ends of flexible concealer members.

5. In combination: a data card of flexible resilient material and having opposite side edges; a frame for the data card and having edges spaced closer to each other than the said opposite edges of said data card; means forming slots beneath said frame edges for receiving the edges of said data card; means forming supplemental recesses extending inwardly from said slots for receiving the ends of flexible concealer members; and flexible concealer members having ends received in the supplemental recesses.

6. The combination as set forth in claim 5 in which said data card is rectangular, and substantially longer than it is wide, the said edges of the data card being the longer edges.

7. In combination: a rectangular data card of flexible resilient material having opposite side edges; a flat support; a unitary frame element fastened to the support and having a top surface and a bottom surface engaging the flat support; the bottom surface of the frame element being relieved to form with the support slots along opposed inner edges of the frame receiving opposite edges of said data card upon flexure thereof; said bottom surface along said slots being further relieved to form individual recesses opening at the inner end of the slot for receiving the ends of flexible concealer members; and flexible concealer members having ends received in the individual recesses.

8. In a duplicate bridge board: a top part moldable as a unit and having an upper portion and four separate downwardly offset portions, each defining the outer exposed end of a card pocket, there being a slot formed between the upper portion and each of the downwardly offset portions providing access from the corresponding downwardly offset portion to the under surface of said upper portion, said top part having upwardly extending wall means laterally and frontally of each of said downwardly offset portions normally confining lateral and outward movement of a packet of cards extending through the corresponding slot; and means at least partially formed separately from said top part and attached to the under surface of said top part forming with the under surface of the top part, four inner pockets registering with said slots, and substantially entirely concealed beneath said moldable top part whereby all seams between said means and said top part are likewise substantially concealed.

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