

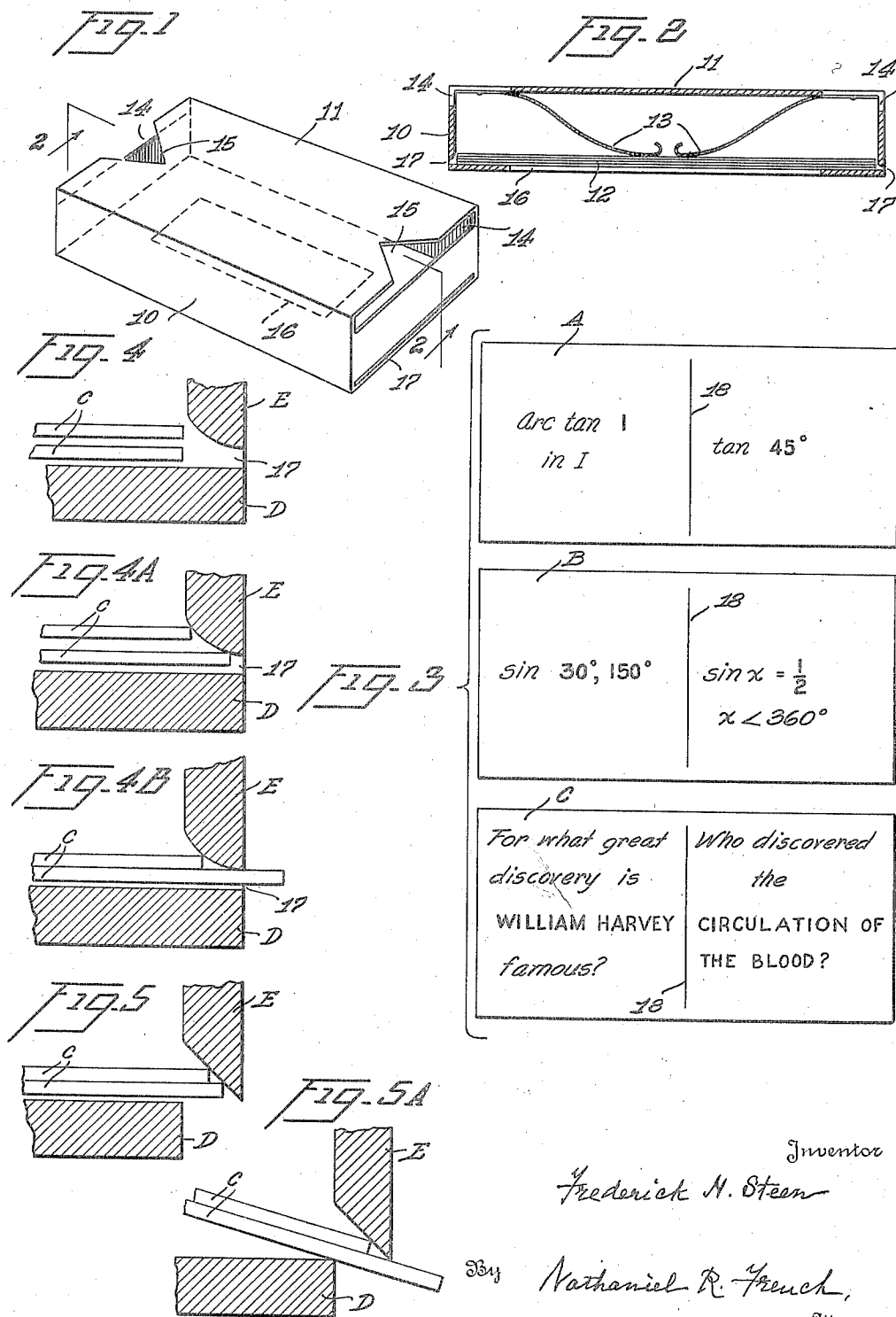
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MEMORY AID SYSTEM

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## MEMORY AID SYSTEM

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This invention relates to means for facilitating the memorizing of data of various kinds, said means being adaptable for use as an auxiliary in drills, reviews, or memorizations in any study-field whatever; such for example, as mathematics, languages, history, geography, all branches of science, "contract-bridge" rules, etc.

The invention in its preferred embodiment comprises, as hereinafter described in detail, a pack of cards, each having preferably on both sides, data to be memorized or studied, and a container therefor of special construction, which serves not only to encase the study cards—making the system portable in coat, vest or shirt pocket—but also to facilitate the use of said cards as memory aids.

Each pack would ordinarily be composed of cards that relate to the same general subject, or to the particular formulae or drill-problems that are to be met in a given study course. Each card has at least two distinct sections or areas, constituting a pair, one of which contains say a question to which the other contains the answer; or, in more general terms, the datum appearing on one section is, in some distinct way, topically related to that on the other; as for example, in the case of a language-study course, one section of each card will contain a word or phrase in one language and on the other section will appear the corresponding word or phrase in a different language.

In the preferred embodiment of the invention the related or paired sections are on the same face of each card, being formed by a line which divides said face into two areas, ordinarily of equal size. Thus, if one section of a particular card contains a question, the adjoining section will contain the answer thereto, this being the most convenient arrangement for the majority of uses. In such cases the problem (or question) and the solution thereof (or answer thereto) are so framed, or are so displayed by the use of colors or distinctive type, that each is the inverse of the other. That is, each will serve as a question (or problem) to which the other supplies the proper answer (or solution). This reversible question-and-answer relationship of the several members of each pair of sections of a datum card to each other, which is a distinctive feature of this invention, may take any of a variety of forms, all of which are intended to be embraced in the phrase, "topically related," as hereinafter used, especially in the appended claims.

The container is or may be of conventional box form and of any suitable size and shape. It is

provided with structural features, believed to be novel, which adapt it—not only to contain a pack of datum cards, such as briefly described above, but also—to co-operate in the use thereof for accomplishing the purposes of the invention. More specifically, the container has structural features which facilitate the exposure of one member only of each pair of the topically related sections of the entire pack of cards successively (or of any number of cards pertaining to the same study course) and which facilitate the reversal of the cards and a review thereof with the other members of each pair (which were hidden during the preceding run) successively exposed to view. This and other features and objects of the invention will be clearly understood from the following detailed explanation, in connection with the accompanying drawing, wherein

Fig. 1 is a perspective view of a preferred form of container;

Fig. 2 is a lengthwise vertical section of the container shown in Fig. 1 and its contents;

Fig. 3 shows diagrammatically three memocards;

Figs. 4, 4A, 4B, are diagrams illustrating on an enlarged scale the use of the system; and

Figs. 5 and 5A are similar diagrams illustrating the use of a container having a different form of exit opening.

Referring to Figs. 1 and 2, the container, having a body part 10 and a top or cover 11, is of ordinary box form and of convenient size and shape to hold with loose fit a pack of memocards, indicated at 12, Fig. 2. The container may be made of wood, cardboard, or other suitable box-making material. The cover 11 can, of course, be removable if desired; though it is not removed while the system is being used for its intended purpose.

The cards, stacked one above another, are held in position (so as not to shake about) by the yielding pressure of springs 13, attached to the underside of cover 11. These may be leaf springs, of steel or other spring metal or material, shaped as shown, so as to exert a constant, but slight, pressure upon the entire stack of cards, be the number few or many.

At each end of the container and immediately beneath the cover 11 is a narrow opening 14 extending practically the entire width of the box or case. These openings serve for the re-insertion of the cards individually as they are removed successively from the bottom of the pack. Notches 15, 15, one at each end of cover 11, facilitate the insertion of the cards. Springs 13

are so shaped at their free ends as to permit the forward edge of each card, as it is inserted, to lift the spring and slide easily into its place.

In the bottom of the box or case midway between the ends and sides is a slot 16 of a width sufficient to admit the tip of the user's finger for frictional contact with the bottom card; and at each end of the container at the bottom thereof is a narrow slit 17, just wide enough to permit the free egress of one card at a time.

The described construction makes the device usable for exposure, removal and re-insertion of cards at each end. Obviously the construction may be modified in many ways without sacrificing this advantage of the invention. The use of the system will be more fully described below in connection with Figs. 4 and 5.

In Fig. 3 are shown, by way of examples, three memo-cards A, B and C, which illustrate certain features of the invention, specially what is herein designated the "topical relationship" between the paired sections occupying one face of each card. As shown in Fig. 3 each card is divided into two sections by a line 18, the two sections being of equal area; though obviously they may be, and preferably are in some instances unequal. Cards A and B belong to a study course in trigonometry. They show how for the purposes of this invention, the legends may be conveniently abbreviated and how the topical relationship between the two sections of a pair may be indicated by printing the significant part of each legend in distinctive type, or in color, or otherwise. Thus, card A asks (right hand section) "What is the tangent of 45°?" The answer is in the adjoining section "1." The significant words, "45°" and "1", are in block type, the rest of the legend being in a different letter. When used from the left the question is, "What is the angle whose tangent is 1 in the first quadrant?"

Card C belongs to a course in biology (or medical history). From the right the question is, "Who discovered the circulation of the blood?" From the left, the question is, "For what discovery is William Harvey famous?" And the significant words, constituting the answer, are "William Harvey" in the one case and "circulation of the blood" in the other; those words being printed in distinctive type.

The method of using the "memo-pak" will now be described more in detail, with reference first to Figs. 4, 4A, 4B, which show one construction of the card-exit aperture, and then with reference to Figs. 5, 5A, which show an alternative construction.

In the first series of diagrams a part of the base D and a part of an end piece E and parts of two cards cc are shown in vertical section, the dimensions of the parts being much exaggerated. The outer surface of end piece E is about flush with the edge of base-board D and the lower edge of the former is rounded as shown, so that the card-exit passage is flaring in section, that is, of diminishing width towards the aperture 17, where it is somewhat wider than the thickness of a single card but substantially less in width than the combined thickness of two cards. It is found that, owing to the pressure of the user's finger, the bottom card is not in frictional contact with the base of the container. Hence as the user's finger slides this bottom card towards the exit slot 17,

the curved surface of the lower edge of end-piece E guides and forces said card into said aperture, while at the same time holding back the other cards.

As shown in Figs. 5, 5A, the outer surface of end piece E of the container is beyond the edge of baseboard D, the inner surface of end-piece E being about flush therewith, and in these figures piece E has a flat beveled bottom edge, which, co-operating with the user's finger, deflects the forward edges of the cards downwards, guiding and forcing the lowermost card through aperture 17, and arresting the other cards. An advantage of this arrangement is that no card can shake out, since before a card can emerge it must be tilted, which requires pressure of finger from beneath.

It is obvious that in Figs. 4, 4A, 4B the end-piece E may have a flat beveled edge as in Figs. 5, 5A, and vice versa; also that many other modifications may be made without departing from the spirit of the invention or from the scope of the appended claims.

In using the "memo-pak" in the form described above, the case is held in left hand, while the second finger of right hand is pressed lightly against the surface of the under card at left end of slot 16. By moving the finger to the extreme right of slot 16 the bottom card will slide half way out, as described above. The user, after completing formula or solving problem mentally, withdraws card and verifies the answer by the legend on left section of card, particularly by the part in distinctive type or color. User then slides card into container through one of the openings 14. He may go through the pack completely in this manner, removing and inserting cards at right; and he may then repeat, removing cards at bottom of left end and turning each card over before reinserting same at top. He may then repeat, both left and right for this side of pack, which was previously the underside.

It will be readily perceived that the invention is susceptible of embodiment in various forms which differ more or less in respect to details of construction from that shown in the accompanying drawing, without departing from the principle of the invention or going beyond the scope of the appended claims. The embodiment shown in the drawing is, however, that which is preferred as the best suited to ordinary uses. For specific uses of an exceptional sort it may be found desirable to depart in substantial respects from structural details illustrated in the drawing.

I claim:

1. A memory-aid system comprising a pack of cards and a container therefor; each card having one of its faces divided transversely into two spaces and in each space a memory legend, said legends being topically related each to the other; said container being of substantially rectangular form, having at one end an egress aperture, and having a slot which permits contact of the user's finger with the proximate card, said slot being of a length approximately equal to the question part of the card.

2. A memory-aid system as set forth in claim 1, wherein each of the topically related legends serves as a question to which the other is the answer.

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