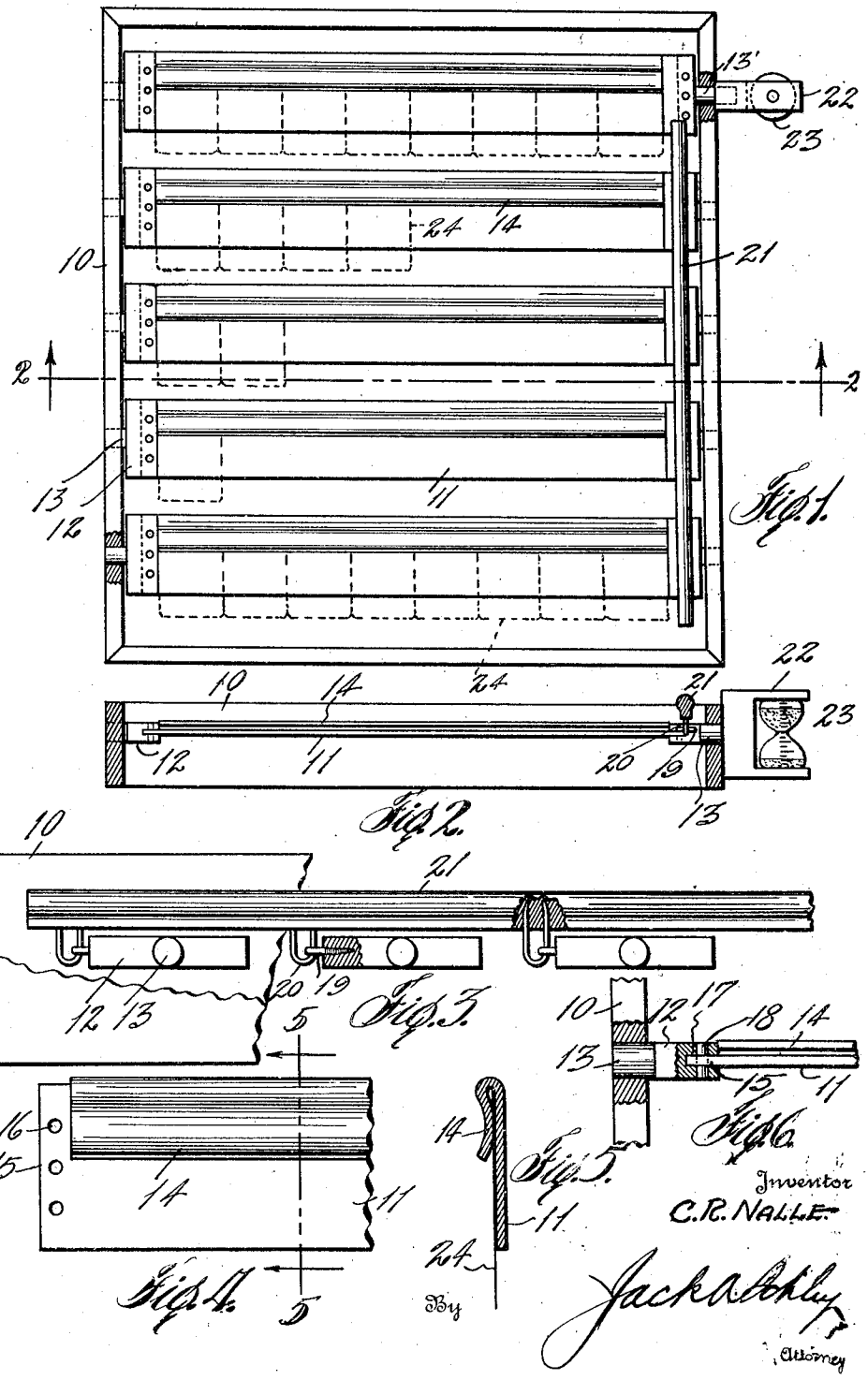
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C. R. NALLE

EDUCATIONAL APPLIANCE

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UNITED STATES PATENT OFFICE.

CHARLES R. NALLE, OF WICHITA FALLS, TEXAS.

EDUCATIONAL APPLIANCE.

Application filed June 5, 1923. Serial No. 643,565.

To all whom it may concern:

Be it known that I, CHARLES R. NALLE, citizen of the United States, residing at Wichita Falls, in the county of Wichita and State of Texas, have invented certain new and useful Improvements in Educational Appliances, of which the following is a specification.

This invention relates to new and useful improvements in educational appliances.

The object of the invention is to provide a device for training the memory, increasing the accuracy of the vision and making the student more alert as well as quicker of perception.

Another object of the invention is to provide an appliance arranged to display a plurality of cards or the like in rows and to be manipulated to quickly invert the cards, whereby their faces are hidden, and to again be manipulated to display the cards.

A further object of the invention is to provide means for holding a plurality of cards in rows arranged so that the cards may be quickly slipped into place and readily removed.

Among other objects of the invention are, a transparent holder for the cards, whereby both sides may be displayed; and a timing means for regulating the period for which the cards are displayed or hidden.

A structure designed to carry out the invention together with other particular features will be hereinafter described.

The invention will be more readily understood from a reading of the following specification and by reference to the accompanying drawings, in which an example of the invention is shown and wherein:

Fig. 1 is a plan view of an appliance constructed in accordance with my invention,

Fig. 2 is a cross-sectional view taken on the line 2—2 of Fig. 1,

Fig. 3 is an enlarged partial transverse sectional view,

Fig. 4 is a detail of one of the card holders,

Fig. 5 is a cross-sectional view taken on the line 5—5 of Fig. 4, and

Fig. 6 is a detail of the pivotal mounting for the holders.

In the drawings the numeral 10 designates a rectangular frame in which are pivoted a plurality of card holders 11. Each holder comprises an elongated clip member having a gudgeon 12 at each end. Each gudgeon has a trunnion 13 fulcrumed in the one of the vertical side walls of the frame.

Each holder comprises an elongated plate bent upon itself to form a clip 14 which has its free edge curved outwardly from the face of the plate to permit the free insertion of a card thereinto. The plate may be formed of any transparent material such as "amberoid" or the like and could be modified so as to avoid the use of transparent material. The clip is terminated short of each end of the plate and the projecting portion forms a tenon 15 which is punched with holes 16.

Each gudgeon has a mortise 17 in which a tenon is received and held by pins 18 passing through the holes 16. The gudgeons along the right hand side of the frame are provided with screw eyes 19 in one end. Each screw eye engages in a staple 20 depending from a common operating bar 21 which is shaped to be easily grasped between the fingers.

It will be seen that by swinging the bar upwardly and longitudinally the card holders 11 will be inverted. Moving the bar in one direction inverts the holders and moving it in the opposite or return direction restores the holders to their original position. One of the trunnions 13′ is extended through the side wall of the frame and a yoke shaped bracket 22 is secured thereon. A sand glass 23 is mounted in the bracket at right angles to the card holders so that the glass will be vertical and the holder horizontal. The glass may have suitable graduations thereon.

In using the appliance a deck of playing cards or other cards which may be combined in pairs are employed. The cards 24 are dealt out and slipped side by side into the clips 14 so as to lie face down on the holders. The cards will project over the front edges of the holders. After the holders have been filled the appliance is ready to use.

The bar 21 is grasped and moved upwardly and outwardly, whereby the card holders 11 are inverted and the cards 24 presented face upward and observable through the transparent plates of the holders. The student is instructed to memorize the location of as many cards as he can which make pairs or any other combinations. The cards

are then restored by swinging the bar 21, whereby their faces are hidden. The student is instructed to remove the cards in pairs or other combinations which he has mentally formed. His success at this determines his alertness and perception.

In order that the device may be used expeditiously and the cards changed without loss of time the plates are extended beyond the clips 14 so as to form supports or tables onto which the cards may be dealt rapidly. The cards must be placed face down otherwise one could study and memorize the same while they were being placed. The plates must be transparent so that the cards may be seen when the plates are inverted. The cards are placed on the plates and pushed into the clips, quickly and easily.

When the holders are inverted to display the faces of the cards the length of time which is allowed for the student to observe them, may be regulated by the sand glass. After the sand has run out to a certain graduation the holders may be restored. This period may be shortened or lengthened. The appliance may be used as game and many interesting and edifying procedures may be worked out.

Various changes in the shape and design of the different parts as well as alterations and modifications may be made within the scope of the appended claims.

What I claim, is:

1. In an educational appliance, a frame, a plurality of card holders journaled in said frame, means on each holder for detachably holding cards, and means for inverting all the holders at the same time.

2. In an educational appliance, a frame, a plurality of card holders journaled in the said frame, said holders being spaced apart, means on each holder for detachably holding cards, and means for inverting all the holders at the same time.

3. In an educational appliance, a frame, a plurality of card holders having card retaining elements for detachably holding cards dealt upon said holders, said holders being fulcrumed in the frame, and means for simultaneously inverting the card holders.

4. In an educational appliance, a frame, a plurality of card holders having card retaining elements for detachably holding cards dealt upon said holders, said holders being fulcrumed in the frame, means for simultaneously inverting the card holders having transparent portions for displaying the cards when the holders are inverted.

5. In an educational appliance, a frame, a plurality of card holders journaled in said frame for revolution in a vertical plane, means on each holder for detachably holding cards, means for rotating the holders simultaneously, and a sand glass connected with one of the card holders and rotated therewith.

6. In an educational appliance, a frame, a plurality of card holders pivoted in the frame and each having a longitudinal clip for holding a row of cards, and an actuating bar pivoted to the holders for swinging the same at the same time.

7. In an educational appliance, a frame, a plurality of card holders having at each end a gudgeon provided with a trunnion fulcrumed in the frame, each holder having a longitudinal clip extending along one edge, and an actuating bar having pivotal connection with the edge of the gudgeon at one end of each holder.

In testimony whereof I affix my signature.

CHARLES R. NALLE.