

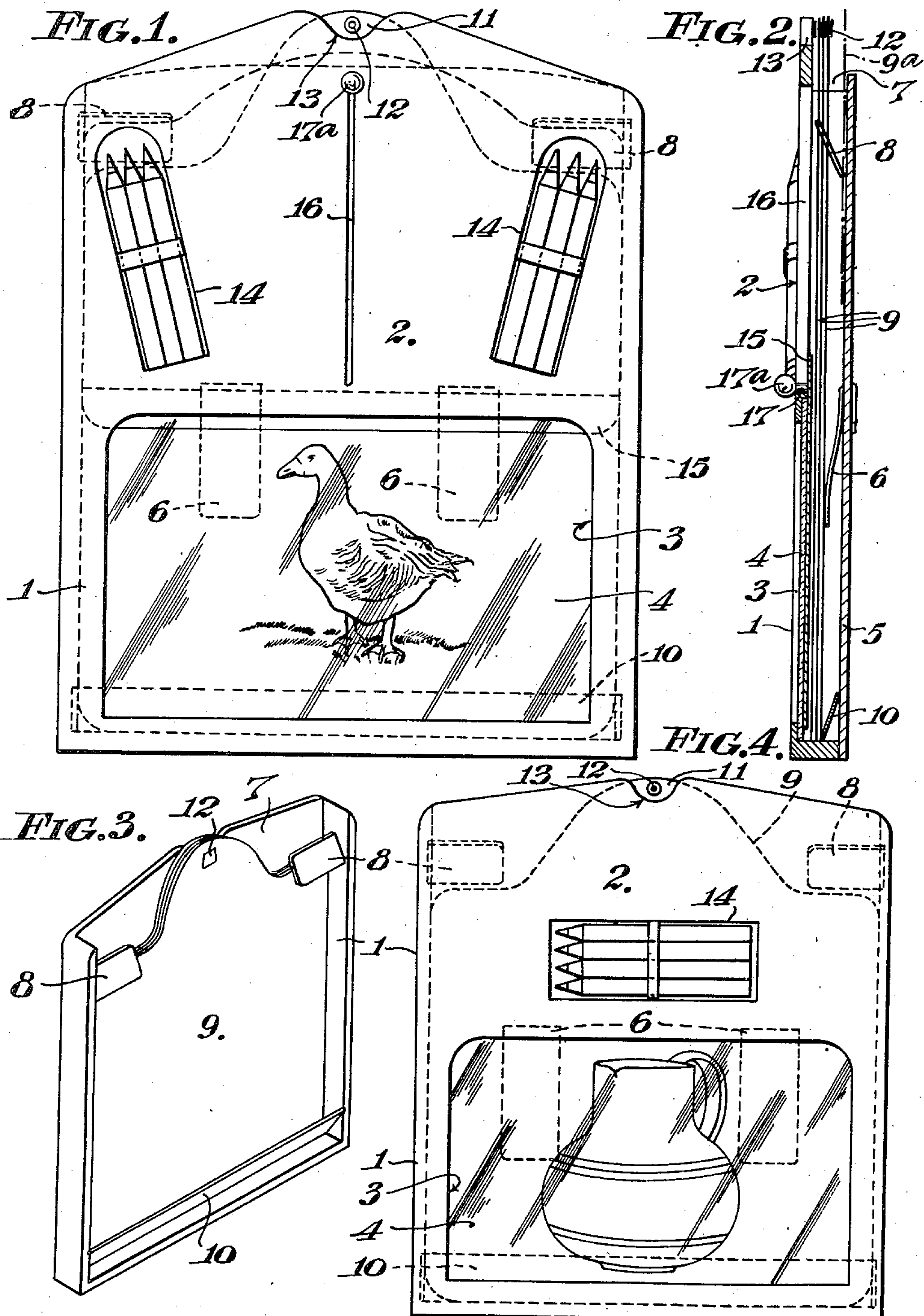
Sept. 16, 1947.

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2,427,612

TRACING DEVICE

Filed April 17, 1945



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UNITED STATES PATENT OFFICE

2,427,612

TRACING DEVICE

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EnglandApplication April 17, 1945, Serial No. 588,763
In Great Britain February 5, 1945

7 Claims. (Cl. 35—62)

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This invention relates to a child's tracing device, and has for its primary object to provide a device wherein one of a plurality or stack of cards having pictures, words, or the like thereon and all housed within the device, is positioned behind and against the rear face of a translucent panel or window so that said picture can be traced on the panel. It is a further object of the invention to provide a tracing device wherein the matter being traced can be obscured so that the tracer can see the tracing, picture or the like on the window surface.

A further object of the invention is to provide a device wherein a card can be removed from the said device after tracing and which upon its reinsertion is guided to the rear of the stack unless it is required to return the card to the front.

Another object of the invention is the provision of a device in which the stack is urged forwardly so that the front card is pressed against the window.

Other objects will be apparent from the following description with reference to the accompanying drawings which illustrate two preferred examples of the invention, and wherein:

Fig. 1 is a front view of one device.

Fig. 2 is a cross sectional side view thereof with the screen between the stack and the window.

Fig. 3 is a rear perspective view with the back removed; the parts illustrated being common to both embodiments, the second embodiment being illustrated in front view in Fig. 4.

Referring to the drawings, the shallow box like structure 1 is made of thin or plywood or other suitable material and is of general rectangular form. In the front face 2, and occupying about one half, is a rectangular aperture 3, on the rear of which is fixed a panel 4 of translucent glass Celluloid or other suitable material. The back wall 5 of the box, which may be of cardboard carries on its inner face one or more blades 6 of a springy nature which are formed or positioned so as to slope inwardly. For example, and as illustrated brass strips each secured at one end to the back; extend downwardly and forwardly, the other or lower end being free and projecting into the box. Alternatively there may be provided one or more strips of thin wood, formed or packed at the fixed end to project as mentioned above.

To each side wall 1 of the box and near the top or open end 7, a strip 8 forming a guide surface is secured. These strips 8 one at each

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side, project across the open end for a short distance and incline so that a card 9a inserted into the open end is guided to the rear of the stack of cards 9. The guide strips may be of wood as shown or thin metal or other suitable rigid material. At the bottom of the box and adjacent the bottom wall and extending from side to side, is a further strip 10 which slopes downwardly and from rear to front. This serves to guide the bottom of an inserted card, and assists in keeping the stack together. This strip 10 in cooperation with the springs holds the face of the front card hard against the window. It will be noted that the cards are shaped at their sides so that the upper edges normally lie below the members 8.

To facilitate the removal of the cards 9, the tops 11 thereof which project from the box, are provided with projections for finger gripping, eyelets or the like. As illustrated the top of the box 1 is arched and the cards also are arched but at a steeper curve. In the centre of each card an eyelet or aperture 12 is provided which is closed at the rear or blind like a socket, and a cut away portion 13 is formed in the top edge of the front face, centrally thereof. To remove the front card, a pencil end is inserted in the hole and the card is lifted.

The card so removed is now slipped in the open end of the box when the guides at the top will feed same to the rear of the stack. Moreover the guiding strips at the top allow only the front card to be removed as the clearance between their front edges and the rear of the front face is substantially equal to the thickness of a card. The bottom guide keeps the bottom of the stack forward. The top guides 8 are positioned above the top edges of the cards at the sides when the removed card is inserted, the cards being shaped to allow for this. The front face of the box may also be provided with one or more recesses 14 adapted to receive pencils and the like.

In the construction illustrated in Figs. 1 and 2, means are provided whereby a screen may be placed between the picture and the window. This enables the tracer to study the work carried out, without being confused by the lines of the picture on the card. A sheet 15 of white Celluloid or like material of an opaque nature is mounted within the box and means are provided whereby said sheet can be slid in front of the first picture or withdrawn clear thereof. The front face 2, above the window 4, is provided with a centrally disposed slot 16 extending from just above the window to near the upper edge of the

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box, and a pin or stud 17 is arranged to slide in the slot, the inner end being secured to the top edge of the opaque screen or shutter 15. The stud has a head portion 17a for finger manipulation and normally the stud is drawn upwardly and the picture visible in the window but by drawing the stud downwardly the screen 15 is positioned between the picture and window.

It will be appreciated that a removed card may be replaced at the front of the stack if desired by inserting it between the front and upper edges of the members 8 and the rear of the front face. In this respect, cards may have matter to be traced on both sides, or where no screen is provided and the rear face is plain, a card may be inserted with its rear face to the window so that the matter traced can be clearly studied.

I claim:

1. A tracing device comprising a shallow box like structure open at the top, a window in the front wall of the structure of a translucent nature to form a tracing surface, a stack of cards adapted to be housed in said structure back of the window, means for forcing the stack forwardly to press the front card against the front wall of the structure, and inclined guide means within the open top of the structure adapted to guide a removed card to the rear of the stack said last-named means being spaced from the interior side of said front wall of the structure the thickness of one of the cards to allow said card to be replaced at the front of the stack upon its insertion, if desired.

2. A tracing device comprising a shallow box like structure open at the top, and having side, front, and rear walls, a window in the front wall of the structure of a translucent nature to form a tracing surface, a shutter mounted behind said front wall, said shutter being slidable to thereby cover the window or be drawn clear thereof, a stack of cards normally housed within the structure, eyelet means defined in each card whereby the front card can be withdrawn from the box to expose the next card in the window by insertion of a pointed implement in the eyelet to raise the card from its position inside the structure, guiding means for guiding a removed card to the rear of the stack, said means comprising inclined surfaces mounted in the side walls and located one at each side within the structure and near the open end, said surfaces sloping downwardly and towards the rear of the structure, the upper ends of said surfaces being spaced from the rear side of the front wall of the said structure a distance slightly greater than the thickness of one of said cards in the stack past the upper ends of said surfaces, said cards being so shaped and so proportioned at their sides that the upper edges normally lie below the said surfaces.

3. A tracing device comprising a shallow box like structure open at the top having side, bottom, front, and rear walls, a window of translucent nature in the front wall of said structure, a central longitudinally disposed slot in the said front wall above the window, a shutter behind the front wall connected by a pin projecting from the slot to a hand operated slider member, the movement of said member along the slot raising the shutter clear of the window or lowering same to cover the window, a stack of cards normally housed within the structure between the front and rear walls, socket means formed in the top of each card whereby the front card can be withdrawn from the structure to expose

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the next card by insertion of a pointed implement in the socket to elevate the card from its position at the front of the stack in the interior of the said structure.

4. A tracing device comprising a shallow box like structure open at the top having side, front and rear walls, a window in the front wall of the structure of a translucent nature to form a tracing surface, a shutter mounted behind said front wall, arranged to slide to cover the window or be drawn clear thereof, a stack of cards normally housed within the structure with means whereby the front card can be withdrawn from the box to expose the next card in the window, guiding means for guiding a removed card to the rear of the stack, said means comprising inclined surfaces mounted in each side wall and located near the open end, said surfaces sloping downwardly and towards the rear of the structure, said surface being spaced apart to provide a gap between the front of said surfaces and the rear of the front wall, said cards being shaped at their sides so that the upper edges normally lie below the said surfaces, and an aperture centrally of each card end projecting from the stack for removal of the front card by a pencil or the like.

5. A tracing device comprising a shallow box like structure open at the top having side, bottom, front, and rear walls, a stack of cards adapted to fit within said structure from the open end, an aperture in the front wall of said structure, a translucent window covering said aperture and forming a tracing surface, spring blades at the rear of the structure for forcing the stack forwardly, members sloping rearwardly and downwardly mounted in each side wall for guiding a removed card to the rear of the stack upon its reinsertion into the box the marginal side portions of the cards residing below the said sloping members, a downwardly and forwardly sloping strip across the bottom of the box, a central longitudinal aperture through the front wall and centrally thereof, a shutter within the structure against the rear of the front face, a pin connected near the top edge of the shutter and projecting through the slot, and a knob on the projecting end of said pin, whereby the movement of the knob and connected pin carried by the shutter along the slot imparts raising and lowering movement to said shutter for masking and unmasking the front card of the stack normally exposed for tracing through said window.

6. A tracing device comprising a shallow box like structure open at the top, said structure having side, bottom, front and rear walls adapted to receive and hold a stack of cards inserted therein from the top, the front wall of the structure having an aperture therein closed by a sheet of translucent material to form a tracing surface, yieldable members attached to the rear wall adapted to press the cards forward against the window, whereby the matter on the front card is held against the translucent material for tracing, a sliding shutter member housed behind the front wall, said shutter being positioned clear of the translucent material during tracing, and means carried by said shutter, whereby the said shutter may be manually slid so as to reside between the front card and the translucent material when it is desired to mask out the said front card to observe the matter traced on the translucent material.

7. A tracing box for use with freely removable

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cards having matter thereon to be traced, comprising a structure open at the top and having bottom, side, front, and rear walls, a window in the front wall of the structure of a translucent nature adapted to provide a tracing surface, a shutter slidably mounted in the box behind the front wall arranged to slide behind the window or to be raised clear thereof, yieldable arms on the inner face of the rear wall adapted to press a stack of cards forward and thereby press the front card of the stack against the window when the shutter is raised, and a downwardly and forwardly sloping elongated strip mounted in the bottom wall of the box adapted to direct the bottom of cards inserted in the box toward the front wall thereof.

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