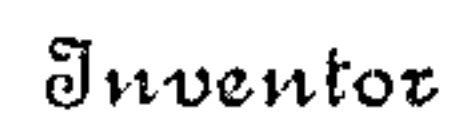


APPLICATION FILED MAR. 25, 1908..

Patented July 13, 1909.

2 SHEETS—SHEET 1.



By Victor J. Evans

Attorney

Witnesses

Thank You
O. H. North.

B. L. ROBERTS.
INDEX BOX.

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927,754.

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2 SHEETS—SHEET 2.

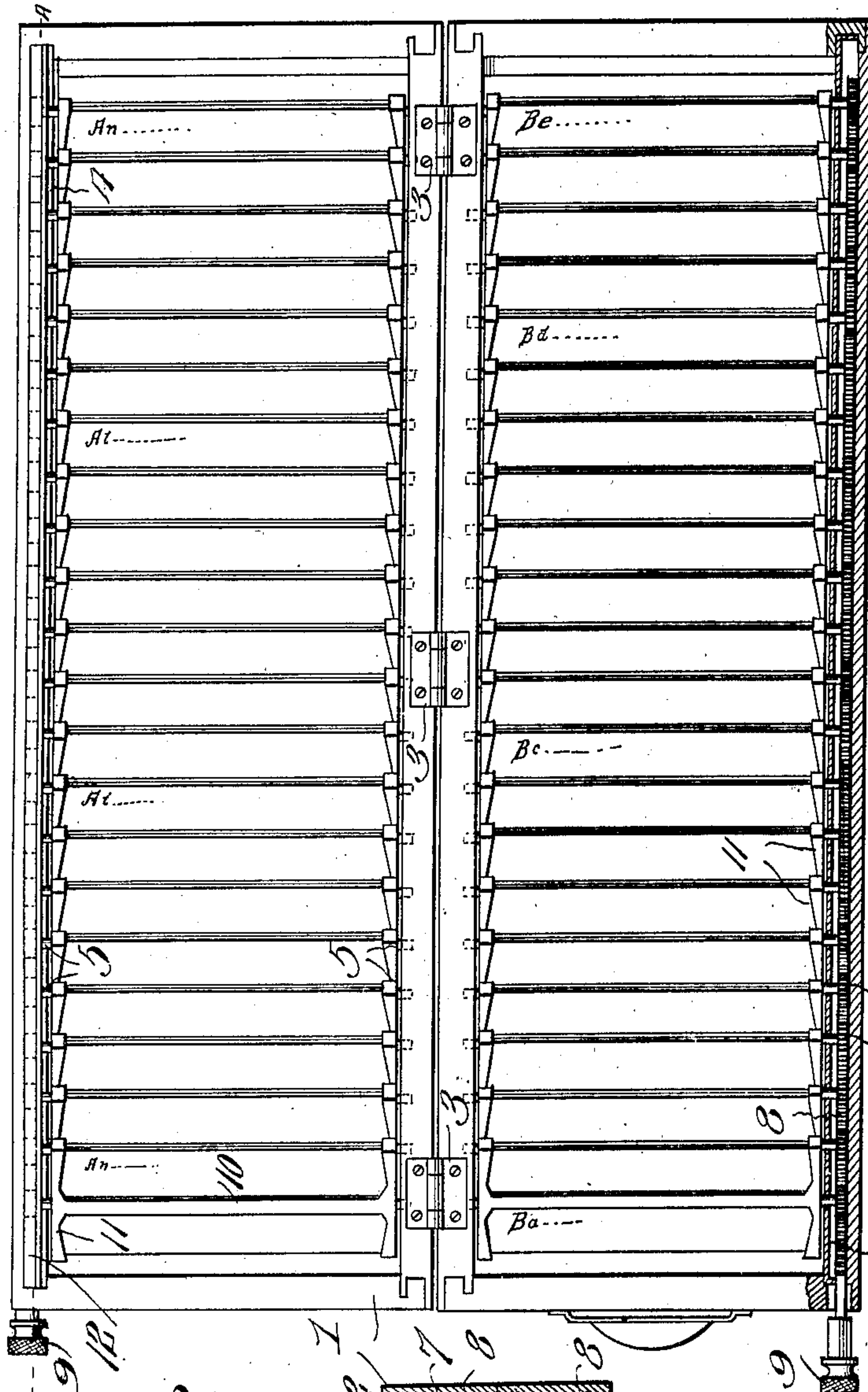


Fig. 2.

Fig. 5.

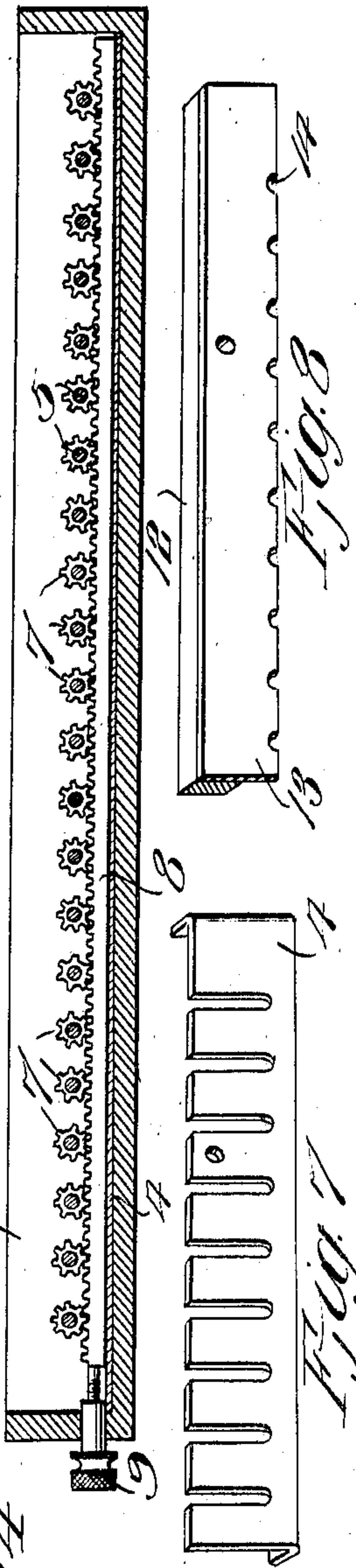
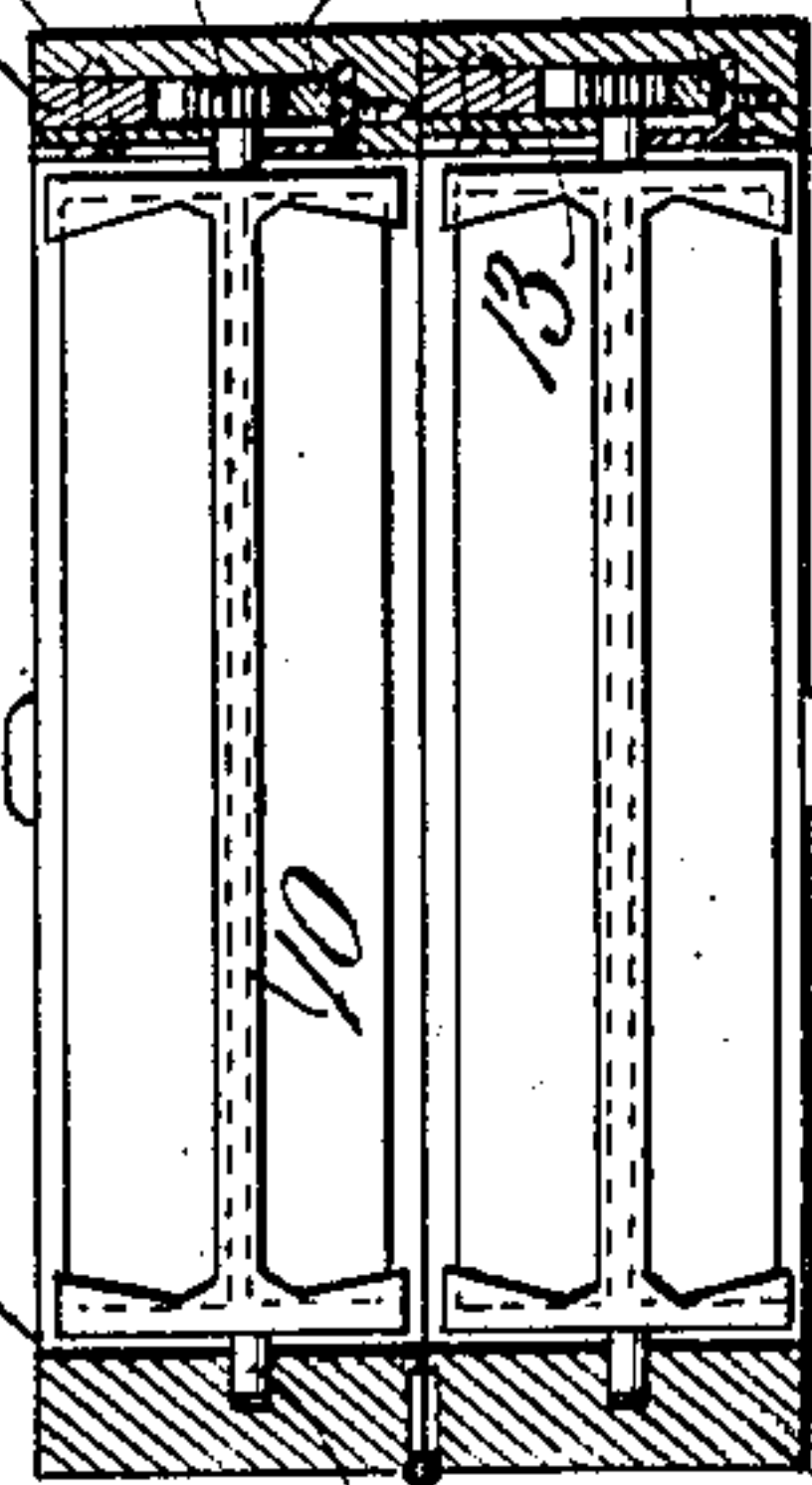


Fig. 4.

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UNITED STATES PATENT OFFICE.

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INDEX-BOX.

No. 927,754.

Specification of Letters Patent.

Patented July 13, 1909.

Application filed March 25, 1908. Serial No. 423,263.

To all whom it may concern:

Be it known that I, BENJAMIN L. ROBERTS, a citizen of the United States, residing at New Haven, in the county of New Haven and State of Connecticut, have invented new and useful Improvements in Index-Boxes, of which the following is a specification.

This invention relates to a card index, and the object of the invention is to provide a box or drawer with a plurality of index cards secured in a frame pivotally connected within the sides of the box and provided with means so as to revolve the frames to reverse the faces of the cards.

Another object of the invention is to provide a card index box having a plurality of rotary frames containing cards and means for rotating the frames, the box or drawer being divided into an upper and a lower compartment hingedly secured together, both of the compartments being arranged with the frames and cards, and the cards in the upper compartment contained in the lower portion of the frames being brought into view when the compartment is swung open, thus disclosing the cards in the lower compartment for inspection.

A still further object of the present invention is to provide a device of this character which is extremely simple, durable and effective and in which the necessity of handling the cards is entirely obviated.

With these and other objects in view the invention resides in the novel construction of elements and their arrangement in operated combination, hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of the card index box constructed in accordance with this invention. Fig. 2 is a top plan view showing the sections of the box swung open. Fig. 3 is a central longitudinal sectional view of Fig. 1. Fig. 4 is a longitudinal sectional view upon the line 4—4 of Fig. 2. Fig. 5 is a transverse sectional view upon the line 5—5 of Fig. 3. Fig. 6 is a perspective view of the card frame. Fig. 7 is a detail perspective view of the bearing plate. Fig. 8 is a similar view of the retaining plate.

As illustrated in the accompanying drawings the card index box comprises a rectangular frame composing an upper section 1 and a lower section 2. The sections 1 and 2 are of an approximately equal size and formation and are secured together by hinges 3.

The longitudinal walls of the sections opposite those hingedly secured together are cut away or reduced to provide for the reception of a bearing plate 4. This plate 4 is preferably constructed of a single strip of metal having its ends and bottom intumed and its face provided with a plurality of vertically extending slits. This bearing plate 4 is secured to the reduced wall by suitable retaining elements, and the intumed flanges provide a substantial compartment when the bearing plate is in position, by spacing the face of the plate away from the inner face of the wall. The opposite longitudinal faces of the compartments are provided with a plurality of centrally arranged spaced perforations, adapted to aline with the lower walls provided by the vertical slits in the plate 4. The perforations and walls provided by the slits of the plate are adapted for the reception of trunnions 5, provided upon a card frame 6. One of the trunnions 5 of each card frame has secured thereto a toothed wheel 7, adapted to be interposed within the compartment formed between the inner face of the reduced side and the inner face of the plate 4. This compartment is also adapted for the reception of a sliding toothed rack 8, adapted to mesh with the toothed wheels 7 of the frame 6 and being provided with a suitable knob or operating element 9, projecting outwardly from the face of the box. The card frame 6 is provided with an intermediate centrally arranged member 10, comprising spaced plates having a centrally arranged longitudinally extending partition or floor. The member 10 is provided with side members 11, comprising suitable arms having recesses alining with the channel provided by the spaced plates of the member 10. These side members 11 are adapted to extend from each end of the member 10, to comprise a pair of separate card receiving frames.

When the card frames 6 have their trunnions positioned within the bearings provided by the side of the compartments and the plates 4, the projecting space between the top of the plate 4 and the trunnions of the frames is provided with a longitudinally extending retaining plate 12 having an offset or member 13 provided with a plurality of semi-circular cut away portions 14, adapted to overlie the trunnions of the frame and to prevent the frame being accidentally removed from the box, as well as forcing the toothed wheels 7 into contact with the teeth of the rack 8.

In practice the card frame 6 has each of its upper and lower card receiving compartments provided with suitable index cards, preferably two to each compartment, arranged back to back and the indexing placed upon the outer faces of the cards. When the compartments of the box are positioned one upon the other, as illustrated in Fig. 1 of the drawings the faces of one series of the cards are revealed, a suitable transverse stop being arranged at one of the ends of the compartments of the box and adapted to contact with the frame nearest the end to prevent the frames and cards from tilting so as to contact with each other. Should the card directly opposite the card exposed be desired for inspection the knob or operating element 9 is pushed to slide the rack and rotate the frames through the medium of the toothed wheels 7 engaging the teeth of the sliding rack. Should the cards contained in the lower compartment of the frames be desired for inspection, the upper section 1 of the box is turned upon its hinged connection with the lower section 2 of the box, when the cards will be revealed for inspection. Should the card below the card thus revealed be desired for inspection the operating knob is manipulated to revolve the frames to bring the card to view. The cards in the lower compartment or section 2 are operated to be brought to view in a manner similar to that above described, when the cards in the upper compartment of the frame are desired for inspection. When the cards in the lower compartment of the frames are to be inspected, the box is simply turned upside down and the sliding rack manipulated, when the desired card is brought into view and is observed through the opened bottom of the section 2.

From the above description it will be noted that there is provided a simple, cheap, durable and effective card index box in which a great number of cards may be retained in a comparatively small space, in which four distinct cards are positioned upon a single frame, each of which may be readily brought into view by simply operating a knob and by swinging open the sectional index box. It will be noted that cards may

be readily inserted and withdrawn from the card frame, and that during the inspection of the cards the handling of the cards and consequently soiling and destroying is entirely obviated.

Having thus fully described the invention what is claimed as new is:

1. In a device of the character described, a plurality of index cards secured in frames pivotally connected with the box, and means for revolving each of the frames to simultaneously reverse the faces of the cards.

2. In an index box of the character described, a plurality of frames, each frame having a central shaft pivoted between the sides of the box, index cards adapted to be positioned upon the frame at diametrically opposite sides of the shaft, and means for rotating the frames to simultaneously reverse the faces of the cards.

3. In an index box of the character described, a plurality of frames having trunnions connected between the sides of the box, a toothed wheel upon each of the trunnions, and a rack bar connecting the toothed wheels to rotate the frames.

4. In an index box of the character described, a plurality of frames provided with central trunnions mounted in bearings upon the sides of the box, said frames comprising a transverse member and side members arranged diametrically opposite the trunnions and adapted for the reception of index cards, and means for simultaneously revolving the trunnions to reverse the faces of the cards within the frames.

5. In an index box, card receiving frames having trunnions and being provided with card receiving compartments arranged in diametrically opposite positions upon each side of the trunnions, toothed wheels upon one of the trunnions, one side of the box being provided with bearing openings for the trunnions, the opposite side of the box being provided with a bearing plate having its bottom and ends provided with offsets and its face provided with cut away portions arranged vertically and adapted for the reception of the opposite trunnions of the frames, a sliding toothed rack upon the offset bottom of the plate and engaging the toothed wheels of the frames, an operating knob for the toothed rack, and a retaining plate provided with an offset having semi-circular cut away portions adapted to engage the upper portions of the trunnions.

6. An index box comprising a pair of frames hingedly secured together, each of the sections of the box being provided with a plurality of card receiving frames mounted in trunnions between the sides of the box, and means for rotating all of the frames simultaneously so as to reverse the faces of the cards within the frames.

7. In an index box, a plurality of index

cards secured in frames pivotally connected with the box, means for simultaneously revolving the frames to reverse the faces of the cards, and a stop provided upon the box
5 adapted to be contacted by one of the frames, substantially as and for the purpose described.

In testimony whereof I affix my signature in presence of two witnesses.

BENJAMIN L. ROBERTS.

Witnesses:

E. LEE PERRY,
ALFRED N. WHEELER.