W. A. RINGLER.

BOX FOR INDEX CARDS.

APPLICATION FILED NOV. 9, 1918.

1,325,537. Patented Dec. 23, 1919.

Fig. 1.

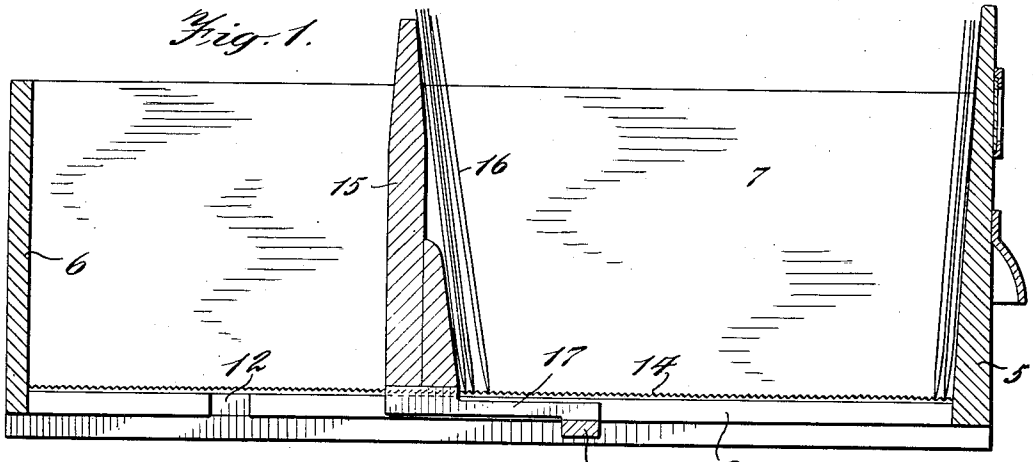


Fig. 2.

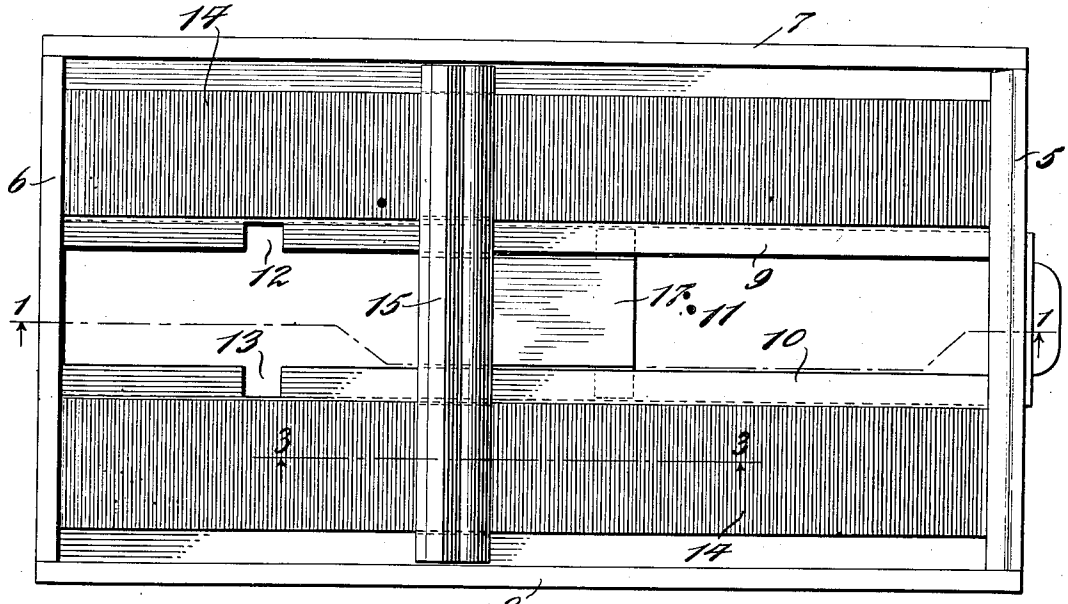


Fig. 4.

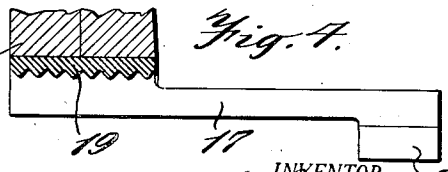
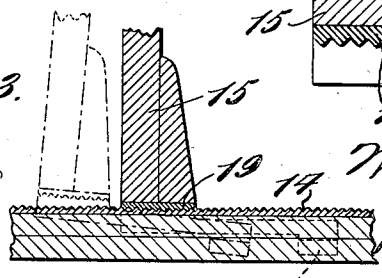


Fig. 3.



WITNESS:

Geo. L. Cheney.

INVENTOR.

William A. Ringler

BY

Rosenbaum, Stockbridge & Rose

ATTORNEYS.

UNITED STATES PATENT OFFICE.

WILLIAM A. RINGLER, OF NEW YORK, N. Y.

BOX FOR INDEX-CARDS.

1,325,537. Specification of Letters Patent. Patented Dec. 23, 1919.

Application filed November 9, 1918. Serial No. 261,911.

To all whom it may concern:

Be it known that I, WILLIAM A. RINGLER, a citizen of the United States, residing at the city of New York, in the borough of Manhattan and State of New York, have invented certain new and useful Improvements in Boxes for Index-Cards, of which the following is a full, clear, and exact description.

My invention relates to boxes or drawers for index cards, sheets and the like, of that class in which an adjustable back piece is employed for regulating the length of the space in which the index cards are placed.

One of the objects of the invention is to provide novel means for locking the adjustable back piece in place. A further object is to provide means for retaining the index cards or sheets in properly spaced relation, so that one or more of them may be readily removed and replaced without disturbing the remaining ones, by preventing sliding of the lower edges of the cards or sheets along the bottom of the box or drawer.

Other objects and advantages of the invention will hereinafter appear and the novel features thereof will be set forth in the claims.

In the drawing:

Figure 1 is a longitudinal sectional view of a box or drawer embodying my invention, the section being taken on the line 1—1 of Fig. 2;

Fig. 2 is a plan view of the same;

Fig. 3 is a detail sectional view on the line 3—3 of Fig. 2; and

Fig. 4 is an enlarged sectional elevation of the lower part of the adjustable back piece.

The front piece 5, rear piece 6 and the sides 7 and 8 of the improved box or drawer are secured together in any suitable or preferred manner, and the box formed thereby may be of any suitable shape and dimensions. The bottom of the box or drawer has been shown as made of two parts or sections 9, 10, both lying in the same horizontal plane and being separated from each other by an elongated space or opening 11 which preferably extends from one end of the box or drawer to the other. Notches 12, 13 have been shown in the inner edges of the bottom sections 9 and 10, the same being located opposite each other and adjacent the rear piece 6. The upper surfaces of the parts 9 and 10 of the bottom are ribbed or corrugated, preferably by securing thereto ribbed or corrugated strips 14, of soft rubber or other like material. The ribs or corrugations on the strips 14 extend transversely of the box or drawer, and have been shown as disposed very close to each other with the grooves between them extremely shallow.

Coöperating with these parts is an adjustable back piece 15 which normally stands in upright position and extends transversely of the box or drawer. The index cards or sheets 16 are located in the space between said back piece 15 and the front 5, and the purpose of making the back piece 15 adjustable is to provide for regulating the depth of the space in which the index cards are placed to compensate for variations of the number of cards in such space. The back piece 15 has secured to the lower edge thereof a centrally-disposed forwardly extending strip 17 which is located in the space 11 between the inner edges of the bottom sections 9 and 10. Secured to the forward end of the strip 17, upon the underside thereof, is a transversely extending cleat or bar 18. This cleat projects beyond the sides of the strip 17 and its ends lie beneath the bottom sections 9 and 10, directly engaging the lower surfaces of said bottom sections when the back piece 15 is in its normal upright position. On each side of the strip 17 the lower edge of the back piece 15 is provided with a ribbed or corrugated surface preferably formed by a strip 19 of corrugated rubber or other soft material. The strips 19 are located directly above the strips 14 on the bottom sections 9 and 10, and the ribs or corrugations thereon preferably conform in shape, size and character with the ribs or corrugations on the strips 14.

From the foregoing description, it will be seen that when the back piece 15 is in one of its adjusted positions, as shown for example in Fig. 1 of the drawing, it is firmly locked against rearward movement by the engagement of the cleat 18 with the underside of the bottom sections 9 and 10 and the engagement of the corrugated strips 19 on the underside thereof with the corrugated strips 14 on the bottom sections 9 and 10. Any rearward pressure against the back piece 15 will tend to rock the same so as to bring the corrugations on the strips 19 into closer locking engagement with those on the strips 14, so that slipping or accidental movement of the back piece 15 is effectually prevented

and the same is firmly retained in position. When it is desired, however, to move the back piece 15 in one direction or the other for the purpose of adjusting the size of the space in the box or drawer occupied by the index cards or sheets, it is merely necessary to swing the back piece forwardly, as indicated in dotted lines in Fig. 3 on the drawing. This action removes the projecting ends of the cleat 18 from their engagement with the lower sides of the bottom sections 9 and 10 and releases the corrugated strips 19 from their engagement with the strips 14. The back piece 15 is then free to be moved in either direction. When moved to its proper position the mere releasing of the back piece causes it to return to its normal upright position in which it is automatically locked in the manner heretofore described. The slots or notches 12 and 13 provide for the removal of the adjustable back piece from the box or drawer. These notches correspond in shape and dimensions with the projecting ends of the cleat 18 so that when the back piece is moved to a position in which the ends of the cleat register with the notches 12 and 13, the back piece as a whole may be lifted bodily from the box or drawer.

One of the principal objections to the index boxes or drawers now in use is that the lower edges of the index cards or sheets slip and slide along the smooth surface of the bottom of the box on which they rest, causing the lower edges of the cards or sheets to tightly pack at one end of the card-space and the cards themselves to fall from upright or substantially upright position. When this occurs, it is difficult to remove and readily replace in its proper location one of the cards and considerable time is consumed in rearranging the cards for the purpose of removing and afterward replacing one or more of them. By providing the ribbed or corrugated strips 14 of soft rubber or the like, the objection above noted is effectually overcome. That is, when the cards are arranged in the card space between the adjustable back 15 and the front piece 5, each card assumes a proper position on the bottom of the box and the upper edges of the cards may be swung in one direction or the other for the purpose of getting at a desired card without moving or disturbing the bottom edges of the cards. The bottom edges of the cards are prevented from slipping in one direction or the other so that any particular card desired may be readily removed and when used may be readily replaced to the position it originally occupied. The corrugated strips 14 thus serve the double function of preventing the slipping of the index cards or sheets in the box or drawer and of locking the adjustable back 15 in any position to which it may be moved.

What I claim is:

1. A box or drawer for index cards or sheets having a ribbed or corrugated strip of soft rubber on the upper surface of the bottom thereof.

2. The combination with a box or drawer for index cards or sheets having a ribbed or corrugated surface on the bottom thereof, of an adjustable back piece having a ribbed or corrugated surface on its lower edge cooperating with the corresponding surface on said bottom.

3. The combination with a box or drawer for index cards or sheets having a roughened surface on the bottom thereof for preventing the slipping of the index cards thereon, of an adjustable back piece having a roughened surface on the lower edge thereof coöperating with the corresponding surface on said bottom for retaining said back piece in adjusted position.

4. The combination with an index box or drawer having the bottom thereof made in a plurality of parts separated from each other, each part being provided with a ribbed or corrugated upper surface, of an adjustable back piece having a strip extending forwardly from the lower edge thereof, the said strip fitting the space between the parts of said bottom and provided with a transversely extending bar engaging the lower sides of the two parts of said bottom, the said back piece being further provided with ribs or corrugations on its lower edge cooperating with the ribs or corrugations on the two parts of said bottom.

In witness whereof, I subscribe my signature.

WILLIAM A. RINGLER