Dec. 27, 1927. 1,654,053

J. H. RAND

INDEX DEVICE

Filed April 14, 1922 2 Sheets-Sheet 1

Fig. 1.

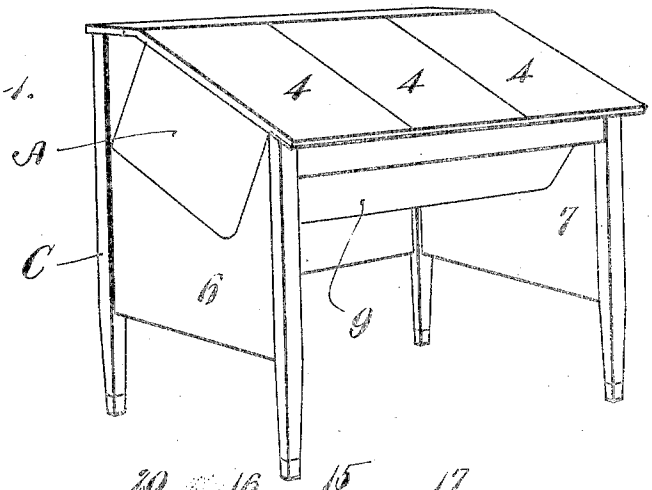
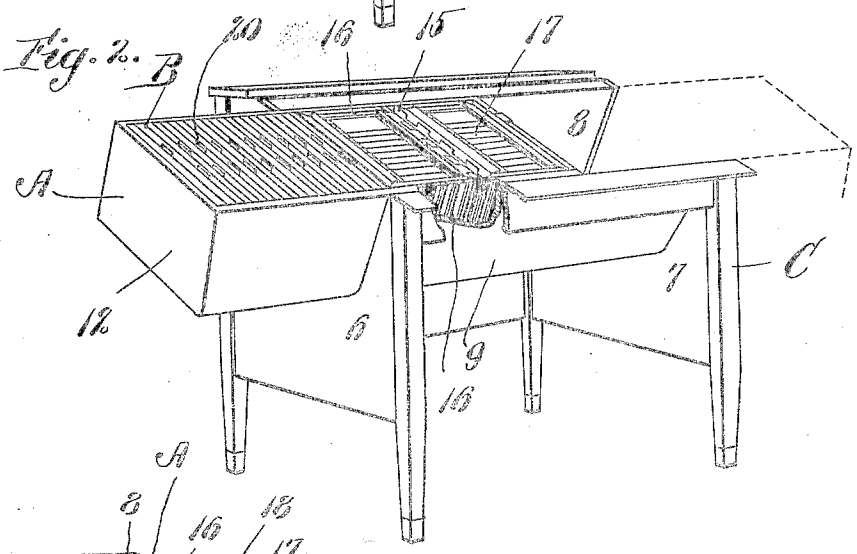


Fig. 2.



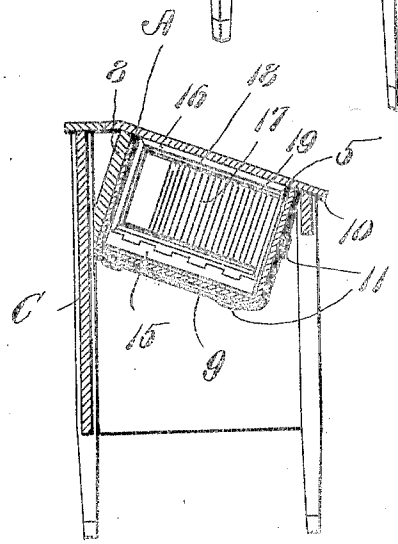


Fig. 3.

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Fig. 4

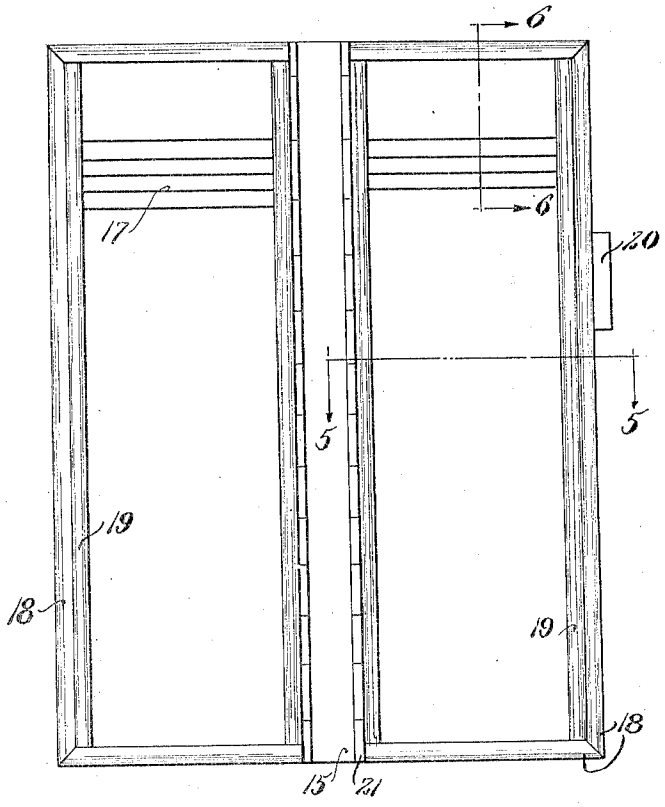


Fig. 5

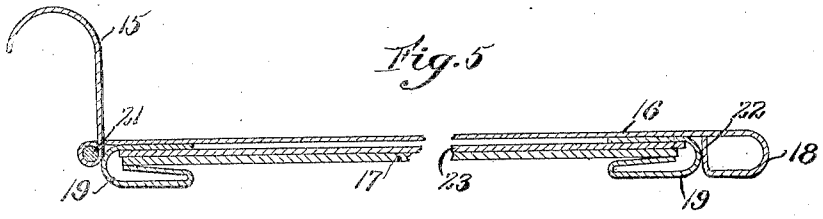
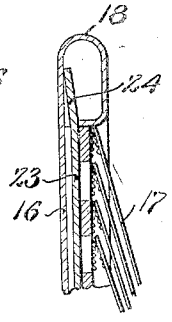


Fig. 6



Inventor;
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Patented Dec. 27, 1927. 1,654,053

UNITED STATES PATENT OFFICE.

JAMES H. RAND, OF NORTH TONAWANDA, NEW YORK, ASSIGNOR, BY MESNE ASSIGNMENTS, TO REMINGTON RAND INC., OF TONAWANDA, NEW YORK, A CORPORATION OF DELAWARE.

INDEX DEVICE.

Application filed April 14, 1922. Serial No. 552,794.

This invention relates to index devices of the type having removable index holders or panels for displaying the classified subject-matter of the indices and more particularly to that type in which the frame or container within which the holders or panels are disposed is bodily movable to a position in which the desired panel is conveniently accessible for inspection.

The principal objects of the invention are to improve the appearance of offices and to conserve office space by housing voluminous indices within articles of furniture such as desks which may be advantageously utilized for other purposes when the index records are not being consulted, to provide not only for movement of the desired index holder to a position adjacent the user but to so arrange the parts that when the holder is withdrawn for inspection it is exposed as in the position of a book open upon a desk, to retain the space in which the index belongs clear and open while the index is being consulted and in general to overcome the defects of previous devices of this kind.

The genus of the invention is illustrated by the concrete embodiment shown in the accompanying drawings, in which,

Figure 1 is a perspective view showing the device in closed position when not in use;

Figure 2 is a view similar to Fig. 1 showing the device in use, parts being cut away to show the interior structure;

Figure 3 is a vertical transverse section;

Figure 4 is a plan view of one of the index holders;

Figure 5 is a section on the line 5—5 of Fig. 4;

Figure 6 is a section on the line 6—6 of Fig. 4.

The embodiment of the invention shown for the purpose of illustration comprises a movable frame or container A in which a plurality of movable index devices B are vertically disposed in parallel juxtaposed relation, the frame being mounted for movement upon a suitable support C.

The support is preferably in the form of an article of office furniture such as a desk of usual appearance and provided with a top slightly inclined downwardly toward the user of the desk. This top is removable and is preferably in sections 4. Disposed beneath the removable sections 4 is an elongate recess disposed longitudinally within the desk in the form of a channel 5 generally rectangular in cross section as indicated in Fig. 3 and inclined in conformity to the angle of the top sections 4. This recess or channel extends entirely through the sides 6 and 7 of the desk and is formed on one side by an angularly disposed back beam or plate 8 (Fig. 3). The bottom and front sides of the channel may be constructed in any desired manner but are preferably formed by a piece of sheet metal 9 suitably shaped, the front edge of which is outwardly bent to form a flange 10 which rests upon the front longitudinal portion of the desk and extends beneath the projecting portions of the removable sections 4 of the top. Suitable means for permitting free sliding movement of the frame A longitudinally of the channel are provided such as roller bearings 11 mounted in suitable depressions in the sheet metal lining 9 of the channel.

The frame or container A for the index holders is preferably in the form of a tray shaped to fit closely within the channel. This tray is preferably constructed of wood and has an open top, the ends 12 being so disposed as to make a tight closure for the channel openings in the sides 6 and 7 of the desk support when the tray is in its normal position shown in Fig. 1.

Any suitable or desired type of index holder or panel may be provided for use in the tray, the preferred form being of the book index type having a back 15, U-shaped in cross section as indicated through the cut-away portion of Fig. 2. Hinged to the free edges of the back are a plurality of leaves 16 in the form of index holders or panels. In this case the leaves are two in number having plane outer faces and means on the opposed inner faces for removably supporting the index strips or cards 17. These panels may be provided with a marginal flange 18 for the purpose of giving rigidity to the panels and for protecting and providing space for the index cards 17 which may be retained thereon by spring clips 19, the entire panel being preferably constructed and arranged in the manner disclosed in detail in Figs. 4 to 6. Flange 18 which as shown is provided on three sides of each of the holders, (the fourth or inner side having the hinged connection 21 to the back 15) is preferably formed by rounding over the marginal portions or edges of the blank from

which holder 16 is made, the free edges being again bent to abut the holder 16 as indicated at 22 and to form the inner closure for the hollow flange 18. The means for mounting the spring clips 19 which are preferably bent from a single piece of sheet material as clearly indicated in Fig. 5 preferably comprise reenforcing strips 23 of sheet material of suitable size, the ends of which extend beneath the integral flanges 18 at the top and bottom of holders 16 whereby strips 23 are securely held in place. The extreme ends of strips 23 are backwardly bent to a slight extent as indicated at 24 (Fig. 6) to space the rest of the strip sufficiently from the holder 16 to accommodate the back face of the spring clips 19, the parts being so proportioned that said clips abut with their outer curved faces the side marginal flanges 18 and the hinge connections 21 respectively.

When the index device is to be used the top sections 4 are entirely or partly removed. An operator sitting or standing before the desk may then push the tray A in either direction to dispose the desired index holder B in convenient position for inspection, the anti-friction devices 11 permitting easy movement of the tray. The desired book index is then grasped by the projecting index tabs 20 and lifted upwardly until the hinged panels may be opened to rest upon the top edges of the adjacent panels in the position shown in Fig. 2. The index material is now disposed in the most convenient position for inspection being in the position of an open book upon the top of the desk. The hinged back 15 of the book index still remains within the tray A between the adjacent book indexes, thus retaining the place of the withdrawn index, which may be restored to place merely by closing the leaves or panels 16 and letting it slide back into its former position.

The herein disclosed apparatus not only provides an exceptionally convenient and accessible arrangement for a voluminous index but also an attractive and compact housing therefor within an article of office furniture which may be advantageously used for other office purposes when the index is not being consulted.

I claim:

1. An index device comprising a support, having guides thereon, an open topped index tray mounted for sliding movement on said guides, a removable cover for the tray, and a plurality of index holders vertically disposed in juxtaposed parallel relation within said tray, each holder comprising a back and a plurality of leaves hinged thereto, the back being adapted normally to remain between the holders adjacent thereto, whereby a leaf may be swung relatively to the back to rest upon the upper edges of the adjacent holders to permit convenient inspection of the index material thereon.

2. An index device comprising a desk having a transverse channel in its top, an open topped index tray movable longitudinally in said channel, a removable cover for the channel and a plurality of index holders vertically disposed in juxtaposed parallel relation within said tray, each holder having a back and a plurality of leaves, the back being adapted to remain between the holders adjacent thereto when the holder is withdrawn, whereby a leaf may be swung relatively to the back to rest upon the upper edges of the adjacent holders to permit convenient inspection of the index material thereon.

3. An index device comprising a desk having a transverse channel in its top the ends of the channel being open, an index tray fitting within said channel and having ends shaped to normally close both the open ends of the channel, the tray being movable in the channel so as to project from either end thereof, and a plurality of removable index holders fitting within said tray, said tray being movable to an extent sufficient to dispose any desired index holder in convenient position for inspection.

4. An index device comprising a desk having a channel in the top thereof extending transversely the full width of the desk and being open at its opposite ends, an index tray fitting within said channel and having ends adapted normally to close both ends of the channel, a plurality of removable index holders fitting within said tray, said tray being movable longitudinally in either direction in said channel to dispose any desired index holder in convenient position for inspection, and a removable cover normally closing the top of said channel.

Signed by me at Boston, Mass., this 20th day of March, 1922.

JAMES H. RAND.