

R. D. HAYES.
DRAWER FOR CARD CATALOGUES.
APPLICATION FILED MAR. 22, 1907.

965,517.

Patented July 26, 1910.

3 SHEETS—SHEET 1.

Fig. 1.

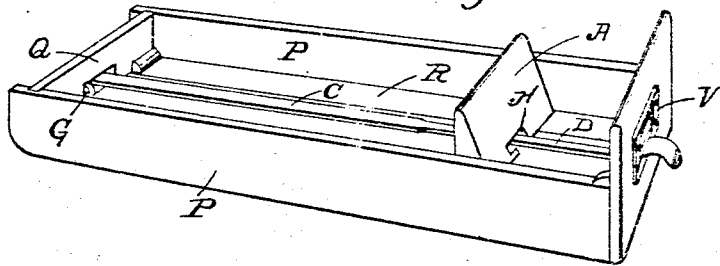


Fig. 2.

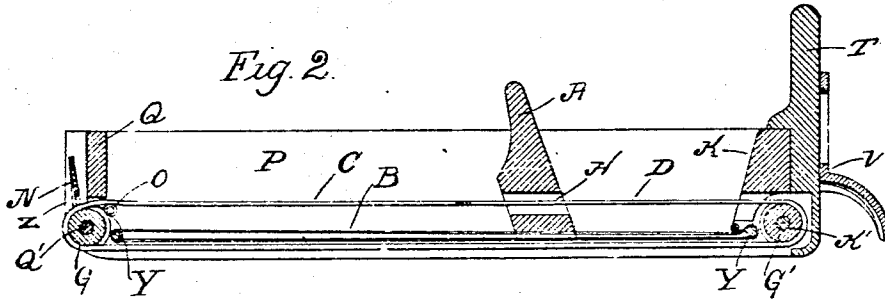
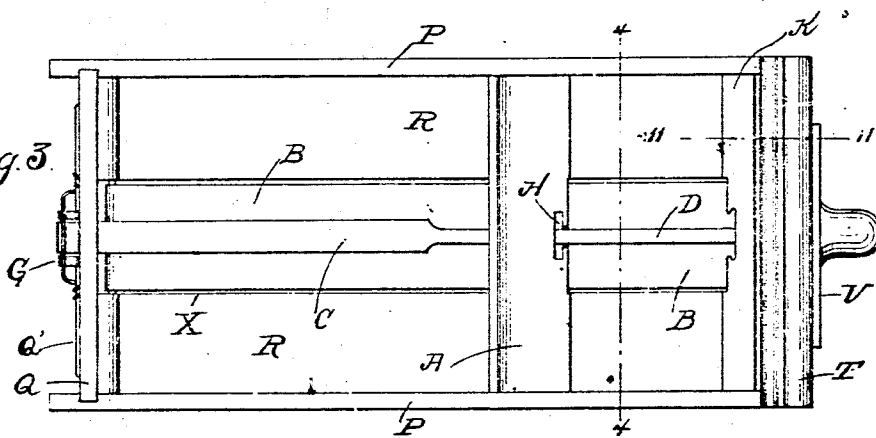


Fig. 3.



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Fig. 4.

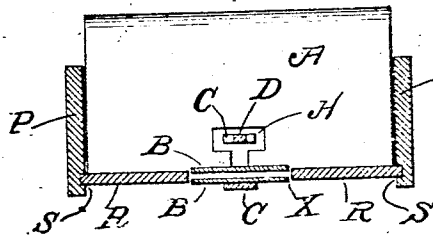


Fig. 5.

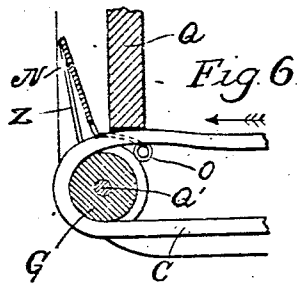
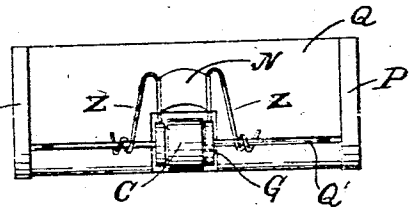


Fig. 6.

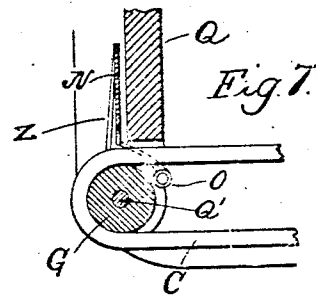


Fig. 7.

Fig. 8.

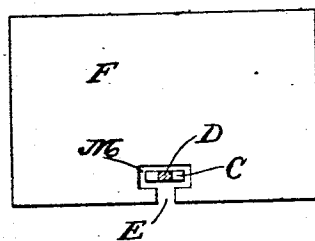
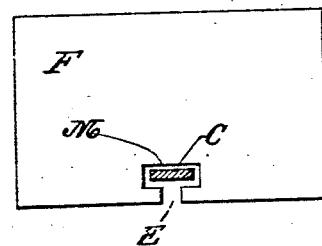


Fig. 9.



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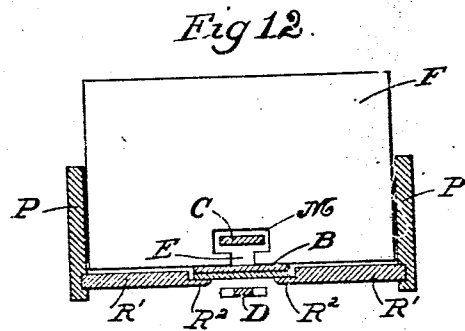
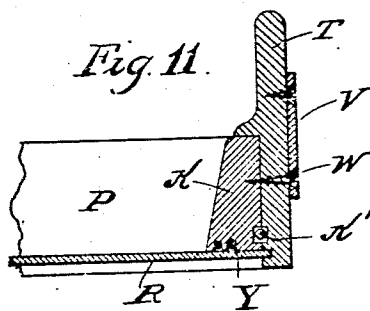
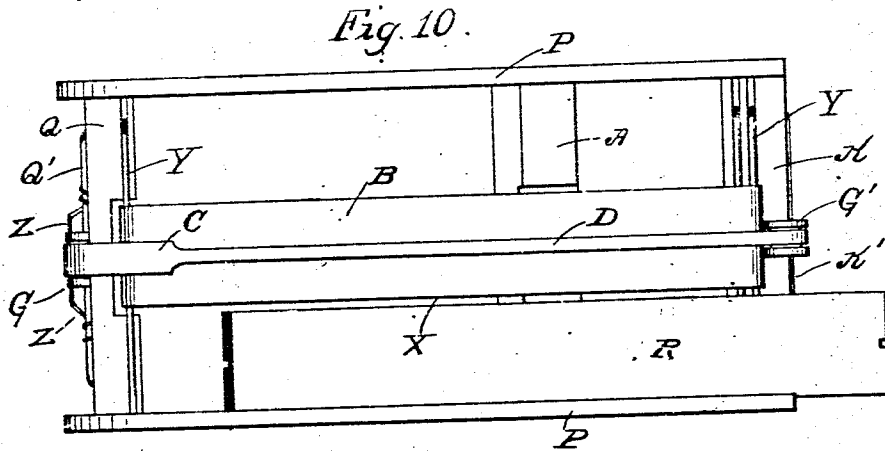
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3 SHEETS—SHEET 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

ROBERT D. HAYES, OF NEW HAVEN, CONNECTICUT.

DRAWER FOR CARD-CATALOGUES.

965,517.

Specification of Letters Patent.

Patented July 26, 1910.

Application filed March 22, 1907. Serial No. 363,982.

To all whom it may concern:

Be it known that I, ROBERT D. HAYES, of the city and county of New Haven and State of Connecticut, have invented new and useful Improvements in Drawers for Card-Catalogues and Similar Uses, of which the following is a full, clear, and exact description when taken in connection with the accompanying drawings, which form a part thereof.

This invention relates to drawers or other receptacles for holding in place cards of a card catalogue or for similar uses, and has for its object the production of a novel and efficient form of drawer, and simple and effective means for supporting the cards and retaining them in place, which may be easily operated when desired to release the cards.

One of the features of the invention consists of an endless belt to which is attached a support for the cards so that the support may be moved longitudinally in the drawer without lifting it therefrom. By this construction a certain elasticity is given the support, so that the space between the cards may be increased when desired for inspection by pressing the top of the support backward.

Another feature of the invention consists in the construction of the drawer itself whereby it may be readily separated into its parts or assembled as desired.

The invention further consists of a band for holding the cards in the drawer. The band engages the cards and by moving it any particular card may be released so that it may be withdrawn from the drawer. The particular method by which the band described hereafter engages the cards arises from the varying width of the band itself. The cards are so formed that when the wider portion of the band engages them they are held from removal, but when the narrower portion is brought opposite the desired card it may be readily removed.

The invention consists of the above features, and the several improvements and combinations of parts set forth and claimed hereinafter.

Referring to the drawings, Figure 1 represents a perspective view of a drawer embodying the invention, Fig. 2, a longitudinal central vertical section through the same, Fig. 3, a top view of the same, Fig. 4, a transverse vertical section on line 4-4 of Fig. 3, Fig. 5, a rear end view of the drawer, Figs.

6 and 7, detail sectional views through the spring locking mechanism shown in Fig. 5, Figs. 8 and 9, detail views of one of the cards, showing the method of holding it in place, Fig. 10, a bottom view of the drawer, some of the parts having been removed, Fig. 11, a longitudinal vertical section on line 11-11 of Fig. 3, and Fig. 12, a section similar to Fig. 4 of a modification of the drawer.

In all figures, similar letters of reference represent like parts.

The construction of the drawer or receptacle is as follows: It consists of the sides which are designated in the drawings by the letter P, and the rear end Q, and the forward end K, and is open at the top and bottom. The bottom of the drawer is partially closed by means of two strips R which are adapted to slide lengthwise in longitudinal grooves or ways S in the sides P, as more particularly shown in Figs. 4 and 10. The strips R when in place are held from removal by a front plate T, Fig. 11, which is adapted to be secured to the forward end K, and may be provided with the usual holder V for the card or paper indicating the contents of the drawer. One or more screws W, which secure the holder to the front plate T are, as shown more particularly in Fig. 11, adapted to project through the front plate and engage the front end K of the drawer, thereby holding the plate T in place. An open space is left along the middle of the bottom of the drawer between the strip R, so that dirt or dust may sift from the drawer through this opening.

A designates the movable support for the cards which are held between the support A and the forward end K of the drawer. The front face of the movable support A and the rear face of the front end K of the drawer are inclined downward and inward in well known manner, as shown more particularly in Figs. 2 and 3, so that when the cards are in place they will incline forwardly or rearwardly. The movable support A is secured to an endless belt B (Figs. 2 and 3) adapted to pass over axles Y (Figs. 2 and 10) in the rear end Q and the forward end K of the drawer, and fit in the open space between the strips R. When the belt B is moved longitudinally the movable support A will be moved correspondingly lengthwise in the drawer, so as to provide more or less space for the cards between it and the front end K. Owing to the flexible nature of the belt

the support A has a certain elasticity so that it may be pressed backward to permit the cards to be separated farther if desired.

The drawer as above described is obviously adapted for use with any desired form of card, and with or without means for locking or retaining the cards in place in the drawer.

The present invention provides, as has already been stated, means for ordinarily holding the cards in place, consisting of a band adapted to engage the cards when in the drawer. While I do not intend to limit myself to the exact form of band and method of engaging the cards with the band, I will describe the method which I prefer to use.

Mounted on an axle Q' in the rear end Q of the drawer is a spool or pulley G and in the front end mounted on an axle K' is a similar wheel or pulley G'. Over these pulleys G and G' passes an endless band having one portion C' wider than the other portion D. As the band C—D is adapted to pass freely through a slot or opening H in the movable support A it is capable of movement independent of the support and irrespective of the location of the support in the drawer. While various forms of cards may be adapted for use in connection with this belt the one shown herein is that of well known construction having at the bottom a narrow slot or entrance E to a wider slot or groove M. The narrow portion D of the band is sufficiently narrow to take into the opening or entrance E of the slots in the card or cards F, as more particularly shown in Fig. 8, so that when any particular card F is above the narrow portion D of the band it may be freely lifted from the drawer. On the other hand, the portion C of the band C—D, as shown more particularly in Fig. 9, is too wide to pass laterally through the narrow slot E, and when therefore it is in the slot M it prevents the removal of the card F. By this form of band C—D, the cards are therefore held in place so long as the wider portion C of the band engages in the slot M. As the band C—D is movable longitudinally over the spools or pulleys G and G', the band may be moved so as to bring either the narrow portion D or the wide portion C in or out of any particular card or number of cards.

To prevent the accidental movement of the band C—D locking mechanism is provided as follows: A spring plate N is mounted by means of wires Z on the axle Q' of the pulley C. The plate is provided with a forwardly projecting roll or wedge O, which extends under the upper strand of the band C—D, Figs. 2, 6 and 7. When the spring plate N is in its normal position (Figs. 2 and 6) the roll O is adapted to bear on the under side of the band and press it upward

against the rear end Q of the drawer. The attempted movement of the band in the direction indicated by the arrow (Fig. 6) merely tends to wedge the roll O between the pulley G and band and squeeze the band between the roll and the end Q of the drawer. To release the band the plate N is pressed forward to substantially the position indicated in Fig. 7, wherein the roll O is forced downward away from the belt C, which is free to move longitudinally.

As shown more particularly in Fig. 2, the wheel G projects slightly beyond the rear end of the drawer. When therefore the drawer is removed from its case and tilted so that the wheel G rests upon any surface such as a table top, the wheel G may be rotated to move the band C—D as desired, when the spring locking mechanism is released as above described.

As shown more particularly in Figs. 10 and 11, the wire axles Y are held in place by the strips R, and the axle K' is retained in the front end K by the plate T. To remove these axles and the band and belt supported thereby, it is only necessary to release the plate T and withdraw the strips R, when the axles may be taken out, and the band or belt released.

In the modification shown in Fig. 12, the strips R' are shown provided with projections R² which extend under belt B. By this construction when a card or number of cards are placed in the box they will bear on the upper strand of the belt B and press it down on the lower strand which in turn bears on the projections R². The weight of the cards will, therefore, squeeze the two strands of the belt together, and the frictional contact of the two strands will tend to prevent the movement of the belt B and the support A. This will aid to obviate accidental movement of the movable support A.

Having now described my invention, what I claim and desire to secure by Letters Patent, is:—

1. In a card catalogue, or similar article, the combination with a drawer or receptacle for cards; a belt mounted in said drawer and movable therein; and a support for the cards secured to said belt, substantially as described.

2. In a card catalogue, or similar article, the combination with a drawer or receptacle for cards; of an endless belt mounted in said drawer; and a support for the cards secured to said belt, substantially as described.

3. In a card catalogue, or similar article, the combination with a drawer or receptacle; of a band movable in said drawer adapted to engage the card or cards to hold them in said drawer, substantially as described.

4. In a card catalogue, or similar article, 130

the combination with a drawer or receptacle; of a band of varying width, the wider portion of which is adapted to engage the card or cards to hold them in said drawer, substantially as described.

5 5. In a card catalogue, or similar article, the combination with a drawer or receptacle; of an endless band adapted to engage the card or cards to hold them in said drawer, substantially as described.

10 6. In a card catalogue, or similar article, the combination with a drawer or receptacle; of an endless band of varying width, the wider portion of which is adapted to engage the card or cards to hold them in said drawer, substantially as described.

15 7. In a card catalogue, or similar article, the combination with a drawer or receptacle; of an endless band movable in said drawer; and means for checking the movement of said band, substantially as described.

20 8. In a card catalogue, or similar article, the combination with a drawer or receptacle; of a pulley; an endless band passing over said pulley; and means for checking the movement of said band, substantially as described.

25 9. In a card catalogue, or similar article, the combination with a drawer or receptacle; of an endless band movable in said drawer; and yielding means for checking the movement of said band, substantially as described.

30 10. In a card catalogue or similar article, a drawer or receptacle, having a removable front plate; and means in said drawer for holding the cards in place, the supports of which are made accessible upon the removal of said front plate, substantially as described.

35 11. In a card catalogue, or similar article, the combination with a drawer or receptacle for cards; of a support or follower slidable in the drawer for holding the cards in a substantially upright position; and means for yieldingly holding said support or follower

in substantially an upright position, whereby it may be moved from said position without releasing said means, substantially as described.

12. In a card catalogue, or similar article, a drawer having an opening in the bottom thereof, and a flexible belt in said opening, substantially as described.

13. In a card catalogue, or similar article, the combination with a drawer or receptacle; of a movable support for the cards; a band adapted to engage the card or cards to hold them in place, said band being movable independently of said support, substantially as described.

14. In a card catalogue, or similar article, the combination with a drawer or receptacle for cards; of an endless belt mounted in said drawer; a support for the cards secured to said belt; and means restraining the movement of said belt when the cards are in place, substantially as described.

15. In a card catalogue, or similar article, the combination with a drawer or receptacle, having a portion of the bottom removable; of an endless band or belt in said drawer, said removable portion being adapted to hold the supports for said band or belt in place, substantially as described.

16. In a card catalogue, or similar article, the combination with a drawer or receptacle for cards; of a support or follower slidable in the drawer for holding the cards in a substantially upright position; and a connection between said support or follower and drawer, whereby the support or follower may be moved to and from its normal upright position without disengagement of said connection, substantially as described.

In witness whereof, I have hereunto set my hand on the 20th day of March, 1907.

ROBERT D. HAYES.

Witnesses:

M. OLIVE WILLIAMS,
SAMUEL H. FISHER.