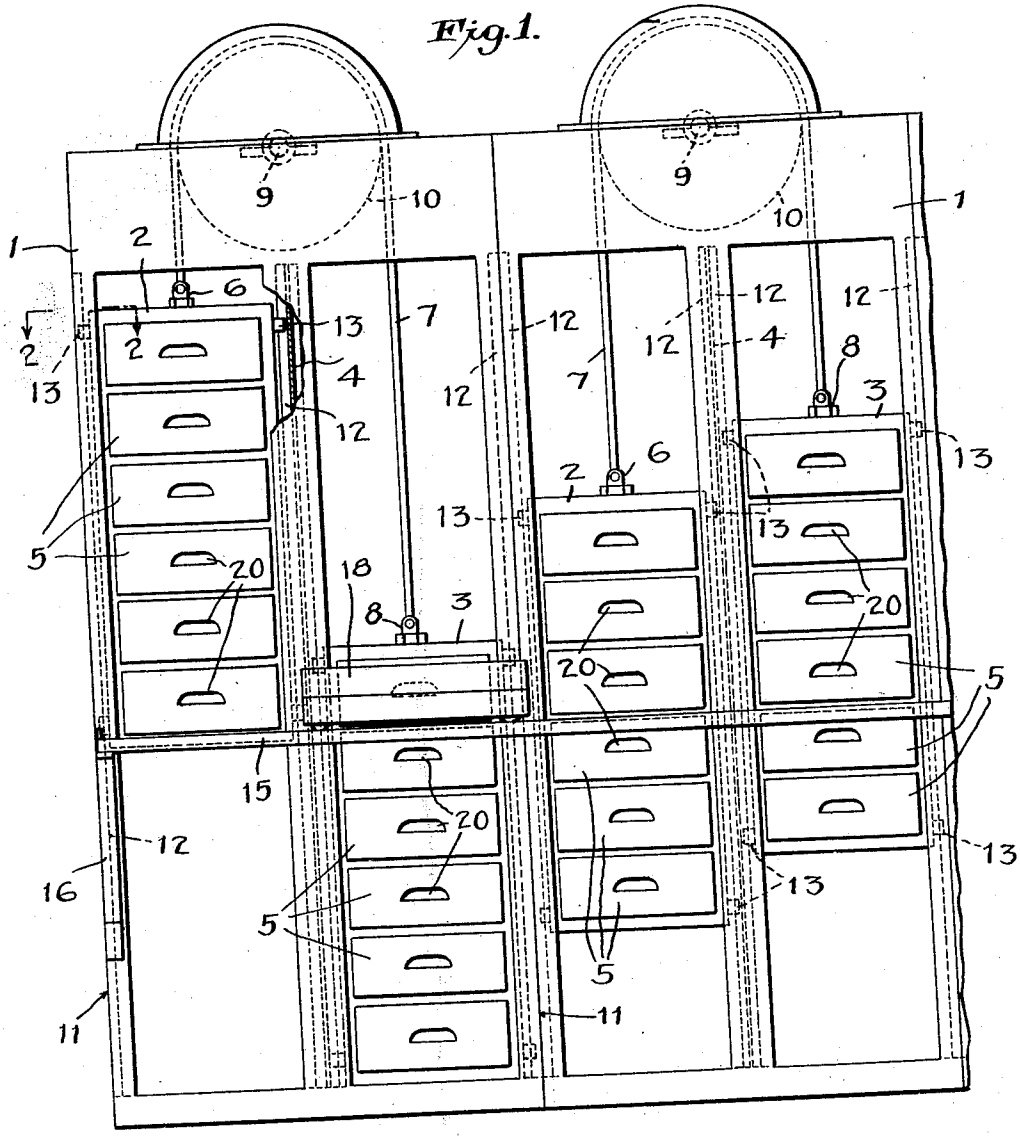
April 19, 1932. H. MULLER 1,854,756

COUNTERBALANCED FILE CABINET

Filed April 25, 1929 2 Sheets-Sheet 1

Fig. 1.



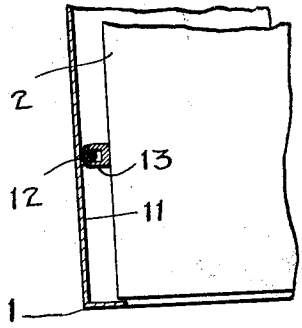


Fig. 2.

INVENTOR

Henry Muller

BY

H. J. Bissing

ATTORNEY

April 19, 1932. H. MULLER 1,854,756

COUNTERBALANCED FILE CABINET

Filed April 25, 1929 2 Sheets-Sheet 2

Fig.3.

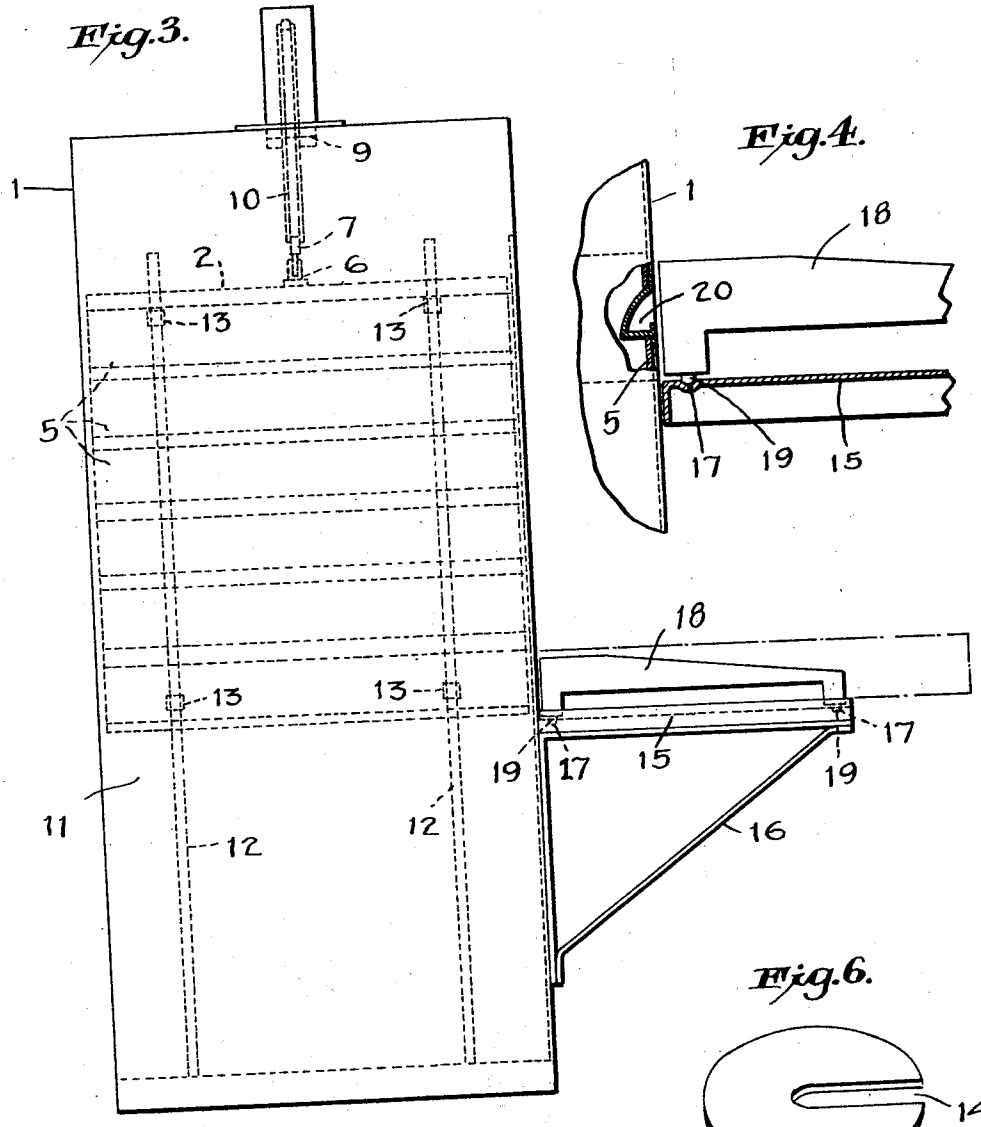


Fig.4.

Fig.6.

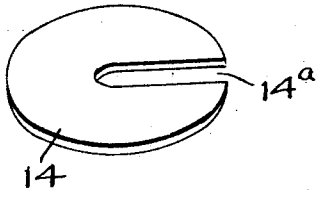
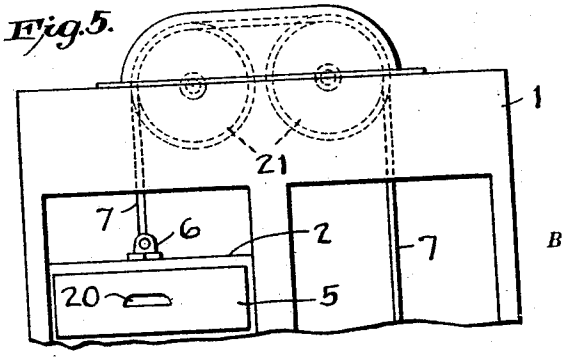


Fig.5.



INVENTOR

Henry Muller

BY

W. F. Bissing.

ATTORNEY

Patented Apr. 19, 1932

1,854,756

UNITED STATES PATENT OFFICE

HENRY MULLER, OF MAPLEWOOD, NEW JERSEY

COUNTERBALANCED FILE CABINET

Application filed April 25, 1929. Serial No. 358,021.

My invention relates to a counterbalanced card index file cabinet consisting of a pair of housings arranged side by side, each containing a like series of superposed drawers, the housings being suspended in an enclosing frame by means of a cable attached to the housings and passing over pulley. Each housing with its drawers and contents of cards is so constructed and arranged as to at all times counterbalance the other housing with its drawers and contents of cards, the pulley and cable permitting the housings to be raised and lowered to bring the individual drawers to any desired level. In particular, the invention relates to such a cabinet in which substantially all of the contents of the filing drawers remain permanently within the drawers and are not withdrawn as, for example, a card index filing cabinet in which only a few, if any, of the cards are removed from a drawer at a time.

One of the objects of my invention is to provide a counterbalanced file cabinet consisting of a pair of housings which may be raised and lowered by means of a pulley and cable, each housing having a like series of superposed drawers, one housing and its drawers and contents being at all times counterbalanced by the other housing and its drawers and file contents, the individual drawers of each series being adapted to be moved horizontally to permit easy access to the contents thereof, without affecting the counterbalancing relation.

Another object is to provide a work board for such a counterbalanced file cabinet, which board is mounted in front of the cabinet and carries a desk slidingly arranged on the board. The desk may be moved alongside of a drawer which has been pulled out and the user may use the desk when examining the contents of the drawer.

Another object is to provide the face of each filing drawer with a recess, which forms a depression handle for each drawer, thus avoiding injury to the user's hand when pulling down a drawer to the level of the work board.

Another object is to provide a counterbalanced file cabinet of simplified construction in which a multiplicity of moving parts is avoided.

With the above and other objects in view, my invention consists in the part, improvements and combinations more fully pointed out hereinafter.

Referring to the drawings:

Figure 1 is a front elevation illustrating two counterbalanced cabinets and showing the housings which contain the series of drawers, and the means for raising and lowering the housings.

Figure 2 is a detail view of the enclosing frame and housing and the means for guiding the housing in the frame.

Figure 3 is a side elevation, partly in section, showing a drawer in its horizontally moved position and illustrating the sliding desk alongside of the drawer.

Figure 4 is a detail view, partly in section, showing the drawer with a recess in its front face which provides the depression handle, and

Figure 5 is a detail view showing the pair of pulleys provided for raising and lowering the housings when provided with filing drawers of large width.

Figure 6 is a detail view of the weighted disk used for compensating for variations in the counterbalancing relation.

In the drawings, and in accordance with my invention, the counterbalanced file cabinet consists of an outer, enclosing frame 1, which is preferably open-faced at its front. A pair of housings 2, 3, are provided which are arranged to slide, side by side, within the frame 1, on opposite sides of division wall 4. Each housing contains a like series of superposed filing drawers 5. Housing 2, at its top, carries a bracket 6, to which is secured one end of cable 7 and housing 3, is provided at its top with a bracket 8, to which the other end of cable 7 is attached. Suitably mounted in the top of the frame 1, is a shaft 9, which carries a guide pulley 10, over the top of which the cable 7, passes, for raising and lowering the housings, with a minimum amount of friction.

This construction whereby the housings are suspended by a cable which passes over and

engages substantially the upper circumference of the guide pulley, permits the housings to be freely movable by hand.

Means are provided for guiding the housings in the frame 1, so that they may be raised and lowered easily and without oscillation. In the form shown, these means comprise tracks 12, a pair of which tracks are carried by the inner sides 11 of frame 1, and by the sides of the division wall 4. The outer sides of the housings each carry guides 13, which are adapted to slidingly engage the tracks 12, thereby permitting the housings to be easily raised and lowered without oscillation.

The individual drawers of each series are slidingly mounted in their respective housings in a known manner, so that they may be moved horizontally, that is pulled out for substantially their entire length, to enable the user to examine the contents of the drawer.

The drawers of the series contained in each housing are of like number and the cards to be filed therein is so arranged within the drawers of both series, that one housing with its drawers and contents of cards at all times substantially counterbalances the other housing with its drawers and contents of cards. By these means any drawer of either series may be pulled down to a desired working level and moved horizontally in its housing, that is pulled out, without displacement, so that its contents may be examined. The housing containing a drawer and contents which has been pulled out for use will be maintained stationary in its position by means of the counterbalancing effect of the other housing with its drawers and contents.

My invention is particularly adapted to be used with a card index filing system or other system in which substantially all of the contents of the drawers remain permanently within the drawers and are not withdrawn. However, it will be understood, a small portion of the contents of a drawer may be removed without disturbing the counterbalancing relation. Disks 14, having slots 14*a*, are provided, see Figure 6, which may be placed about the cable 7, above one housing or the other, to compensate for slight variations of the counterbalancing relation if, for any reason, this should occur.

As shown, a work board 15, is provided which is secured by braces 16, to the frame 1, and extends along and in front of the cabinet. The front and back of board 15 is provided with a groove or track 17. Slidingly arranged on the board is a desk 18, having rollers 19, adapted to run in the grooves or tracks of the board. When a drawer of one series is to be used, the desk is moved along the grooves away from this series, and the drawer is brought down to the level of the board and pulled out. The desk may then be moved back alongside of the pulled out drawer. The desk is preferably of the same height as the filing drawer. This provides a convenient working arrangement for the user of the cabinet, and avoids working in shadows which might be thrown by the drawer which has been pulled out. The desk and board are constructed of such a width with relation to the length of the drawer that the desk may be conveniently used with a drawer irrespective of the portion of the contents, front or back, of the drawer which is to be examined. The desk 18, may also be equipped with trays for holding pencils, pens or other materials to be used in connection with the records contained in the cabinet. The rear edge of board 15, may also be provided with suitable cushioning means to avoid damage to the drawer or board should a drawer be pulled down and out too fast. The cabinet with its drawers, the workboard and the desk mounted slidingly thereon present a unitary device enabling entries to be made with cards while a drawer is withdrawn, and insuring the proper and prompt refiling of the cards in the drawers.

The cabinets may be arranged in a row or battery, see Figure 1. Each cabinet contains a pair of housings and in each housing of a pair a like number of drawers are contained, so that each housing of a pair with its drawers and contents counterbalances the other housing of the pair, with its drawers and contents. With such an arrangement a single work board may be used mounted in front of all the cabinets of a row and one desk 18, slidingly arranged on the board may be used with all the drawers of the cabinets.

The front face of each drawer, see Figure 4, is provided with a downwardly and inwardly extending recess which forms a depression handle 20. This avoids the possibility of injury to the user's hand as by jamming the fingers between the drawer handle and the board. By providing the depression handle, each drawer may be grasped and brought down in such a manner that the slant of the handle forces the fingers out of the boards as the drawer reaches the level of the work board.

As shown, the ends of cable 7, are attached to the respective housings a pair at the top center thereof and the rotatable means provided in the top of frame 1, extend from center to center of the housings. This permits the housings to be easily and rapidly manipulated without sticking. In Figure 1, a single pulley 10 is shown for each pair of housings, the diameter of the pulley being equal to the distance from center to center of the housings. When drawers of extra large width are used, see Figure 5, a pair of pulleys may be provided. In the latter case, these pulleys 21 are each of such diameter that, mounted closely together, the pulleys take up a dis-

tance equal to the distance from center to center of the pair of housings.

The counterbalanced cabinet of my invention, it will be seen, is of simplified construction and avoids a multiplicity of moving parts. The superposed drawers effect a large saving of floor space and facilitate the work of the cabinet user, making it possible to examine numerous records without change of position.

Having thus described the invention its operation will be clear. It will be understood that changes may be made without departing from the principle of the invention.

What I claim is:

1. A counterbalanced file cabinet comprising an open-faced frame, a division wall, a pair of housings, one at each side of said division wall, means for guiding the housings along the frame and division wall, a like series of superposed drawers carried by each housing, and free to slide horizontally therein, one housing with its drawers and contents substantially counterbalancing the other housing with its drawers and contents, a cable for suspending the housings, and a freely rotatable guide pulley mounted in the top of said frame, said cable engaging substantially the upper semi-circumference of the guide pulley and passing directly from said guide pulley to said housings, whereby the housings are freely movable.

2. A counterbalanced file cabinet comprising a pair of housings arranged side by side, a series of superposed drawers carried by each housing and free to slide horizontally therein, one housing with its drawers and contents substantially counterbalancing the other housing with its drawers and contents, a cable from which the housings are suspended for raising and lowering the housings, a freely rotatable guide pulley over which the cable passes directly to the housings, a work board extending in front of said housings and arranged at a suitable working level, and a desk slidingly arranged on said work board.

3. A counterbalanced card index file cabinet comprising an open-faced frame, a pair of housings arranged side by side in said frame, a like series of superposed drawers carried by each housing and free to slide horizontally therein, one housing with its drawers and contents substantially counterbalancing the other housing with its drawers and contents, a cable from which the housings are suspended, a rotatable guide pulley over which the cable passes directly to the housings, a workboard secured to the frame and extending in front of the housings, front and back grooves in said board, and a desk provided with rollers engaging said grooves.

4. A counterbalanced card index file cabinet comprising an open-face frame, a pair of housings arranged side by side within the frame, a series of superposed drawers carried in each housing and free to slide horizontally therein, one housing with its drawers and contents substantially counterbalancing the other housing with its drawers and contents, a cable suspending the housings for raising and lowering said housings, a freely rotatable guide pulley mounted in the top of said frame, said cable passing over said pulley directly to said housings, a workboard secured to the frame and arranged in front of said housings, and a desk slidingly arranged on said board, each of said housing drawers having a recess in its front face forming a depression handle.

5. A counterbalanced card index file cabinet comprising an open-face frame, a pair of housings arranged side by side within the frame, a series of superposed drawers carried by each housing and free to slide horizontally therein, one housing with its drawers and contents substantially counterbalancing the other housing with its drawers and contents, a cable for suspending the housings, and freely rotatable guide means over which the cable passes directly to the housings, said guide means being mounted in said frame and extending from center to center of the housings.

6. A row of counterbalancing card index file cabinets, each cabinet comprising an open frame, a pair of housings arranged side by side within each frame, a series of superposed drawers carried by each housing and free to slide horizontally therein, one housing with its drawers and contents substantially counterbalancing the other housing of each frame with its drawers and contents, a cable for suspending the housings, freely rotatable guide means for the cable, said cable passing over said means directly to said housings, a workboard extending in front of said row of file cabinets, and a desk slidingly arranged on said board.

In testimony whereof, I have signed my name to this specification;

HENRY MULLER.