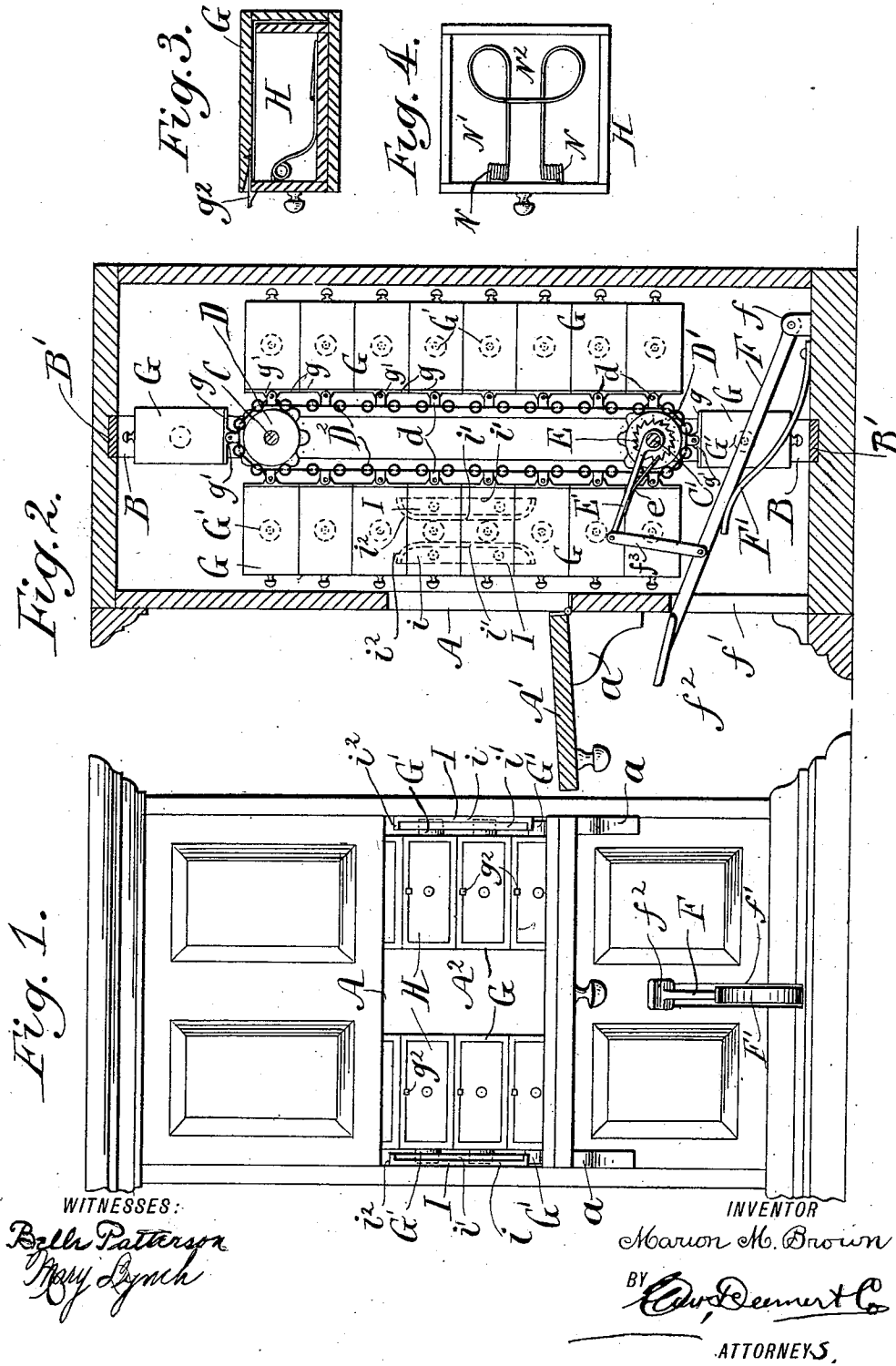


M. M. BROWN.
FILING CABINET.

APPLICATION FILED OCT. 26, 1901.

NO MODEL.



UNITED STATES PATENT OFFICE.

MARION M. BROWN, OF NEW YORK, N. Y.

FILING-CABINET.

SPECIFICATION forming part of Letters Patent No. 742,829, dated November 3, 1903.

Application filed October 26, 1901. Serial No. 80,051. (No model.)

To all whom it may concern:

Be it known that I, MARION M. BROWN, a citizen of the United States, and a resident of New York, county of New York, and State of New York, have invented certain new and useful Improvements in Filing-Cabinets, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar letters of reference indicate corresponding parts.

The subject of the present invention is a file-cabinet, more particularly designed for office and similar uses, wherein it is desired to systematically file and store a large number of papers, documents, &c.; and the object of my invention is to not only provide large filing facilities, but afford convenient and ready access to any particular file drawer or compartment.

With the above purposes in view the invention consists, primarily, in a file cabinet or case comprising a series of drawers or compartments peculiarly mounted to move externally on a vertically-disposed endless belt conveniently actuated from the front of the cabinet or case and also around the upper and lower turns of said belt, so as to successively bring each drawer or compartment into such position that access thereto may be readily had. In the embodiment of the invention presented in the present application I have employed a vertically-extended cabinet or case provided with a front lower hinged door, which when lowered will bear on suitable supports to serve as a desk or rest upon which the file-drawers after removal may be placed to facilitate the convenient examination of the contents. The opening closed by this door and the door itself may be of such restricted dimension that only a limited number of file-drawers will be exposed at any one time, thus desirably concealing all others of the series. The arrangement by which the drawers are removably supported comprises a light metal frame of such rectangular configuration vertically secured within the cabinet that while it supports the shafts, sprocket-wheels, and endless conveyers, the latter arranged at each side and each carrying a vertical series of drawers, said frame will in no way interfere with the radial changes assumed

by each drawer as it passes around the upper and lower limits of the flight of its conveyer.

With a view of rendering the drawers readily removable supports in which they slide are positively connected with the endless conveyers, suitable fastening devices being employed to securely hold each drawer within its support, clamping or clip provision within the drawer holding the drawer contents to prevent their disturbance during the changing position of the drawer experienced at the upper and lower limits of its travel. Obviously with the drawers supported and operating as generally mentioned a comparatively large number of the same will be handily located at the front of its conveyer and as well as in the forward part of the cabinet, while an equally large number will at the same time be stored in the rear portion of the cabinet.

There are other novel features connected with my improved file-cabinet which will be set forth hereinafter.

In the accompanying drawings, forming part of this specification, Figure 1 is a front elevation of the improved file-cabinet, the door being in a lowered position to serve as a rest. Fig. 2 is a vertical sectional view of the structure illustrated in Fig. 1, the section being taken in a plane slightly to one side of the vertical center. Fig. 3 is a detail longitudinal sectional view through one of the drawer-supports and its drawer; and Fig. 4 is a plan view of one of the drawers, illustrating more particularly the spring clip or clamp for positively holding the contents of the drawer against such disturbance as might be incurred through the shifting movements imparted by the endless conveyer.

The cabinet or case proper is of extended vertical character and presents the front familiar paneling and base and top molding to render it an attractive adjunct to an office or other place of usage. It has medietely a front opening A, closed by a door A', hinged at its lower edge, so that when lowered it will bear upon front brackets a a at each side to constitute a rest or shelf. The interior space provided by this cabinet will depend somewhat upon the number and individual capacities of the file-drawers to be arranged within the same. A vertical metal frame rectangular in shape is located within the

cabinet interior and comprises the side members B B and upper and lower transverse members B' B', the former being firmly secured to the sides of the cabinet, while the latter are embedded in the top and bottom of the same, as generally indicated in Fig. 2. Bearing in the side members B B are upper and lower transverse shafts C C', which extend across the cabinet interior and upon which at a point considerably to one side of the vertical center of the cabinet are mounted to turn therewith pairs of upper and lower sprocket-wheels D D', a vertically-movable endless belt or conveyer D² passing around each pair comprising an upper and lower sprocket-wheel.

At a central point on the lower shaft C' is keyed a ratchet-wheel E, contiguous to which is loosely hung the inner end of an arm E', carrying a pawl e, adapted to successively engage the teeth of the ratchet when the arm is downwardly swung to effect the intermittent rotation of the ratchet, its shaft C', and parts geared therewith, the upward movements of the arm merely resulting in the pawl riding ineffectively over the teeth of the ratchet and occasioning no movement thereof in a manner well understood.

With a view of conveniently operating the pawl in a simple manner and not interfere with the employment of both hands of the attendant in manipulating the file-drawers and examining and arranging the contents thereof I provide a lower lever F, having its rear end pivotally mounted in a bearing f on the floor of the cabinet, near the rear thereof, said lever extending forwardly through a centrally-located narrow opening f' in the cabinet-front below the door-closed opening A thereof, the projecting extremity of the lever F carrying a pedal f².

The lever F is pivotally connected by a link f³ with the outer end of the pawl-arm E' to effect the depressing movements of the same and intermittent actuation of the ratchet-wheel, a bent leaf-spring F', secured to the cabinet-floor, having its free end bearing against the under side of the lever F to restore the same to its elevated position after each depression thereof, thus aiding in the intermittent engagement and disengagement of the pawl with the ratchet-wheel.

Each endless carrier or conveyer D², which, as before explained, is off to one or the other side of the vertical center of the cabinet, comprises a series of joined links, each of which has an outwardly-projecting pair of ears d, between which is rigidly secured the inwardly-extending lug g' of a casting g, secured at the rear side of one of the drawer-supports G, there being a corresponding arrangement for each support of the entire series. The rigid character of the connection of each support G, with its conveyer and the tension of the latter, is such that when traveling under the actuation of the geared shafts each support, with its drawer, even if weight-

ed to its limit, can be moved upward with the rear member of the conveyer and be carried positively around the upper sprocket-wheel, as illustrated in Fig. 2, and become closely assembled with those supports which have preceded it and are supported by the front member of the conveyer above the turn around the lower sprocket.

Each support G is in the nature of a box or rectangular casing open at the side opposite to that connected with its conveyer, to permit its file drawer or receptacle H to be slid within the same or removed therefrom. The top of each support G has a spring-catch g², projecting beyond the open side thereof, to engage the top edge of the drawer-front and securely hold said drawer in position within its support. By simply raising the catch of any particular drawer the latter will be released and may be completely withdrawn.

For the purpose of positively holding the contents of the drawers H within the same, and also with the idea of preventing their disturbance under the changing positions which the drawers assume when passing around the upper and lower sprocket-wheels I have located within each drawer a spring clip or clamp, comprising a section of spring-wire bent to form the forward coils N N, having their short terminals secured to the drawer-front at the inner side of the same, so that said coils will be some distance above the drawer-bottom, the remaining portions of the wire presenting downwardly and rearwardly extending parallel members N' N', integrally connected by the compound looped portion N², normally held by the coils N N down against the drawer-bottom. By raising the looped portions N² papers or documents may be introduced below and held by the same in an orderly and compact manner. The extended width of the portion N² permits it to uniformly exert its clamping effect practically throughout the entire width of the drawer-compartment.

In order to hold rigid the supports G of these drawers H which are immediately opposite the front A of the cabinet, while permitting the complete withdrawal of either or both of said drawers, short vertical guides I I, are secured within the cabinet, to the side walls thereof adjacent to the opening A. These guides I, which are of metal, consist each of a flat web i, perforated for the passage of securing-screws, and an integral flange i' at right angles to the web, both flange and web being curved at their upper and lower ends, so that when a pair of these guides are arranged with their flanges immediately opposite each other, as indicated by broken lines, Fig. 2, their curved portions will mutually form upper and lower flaring approaches i².

A roller G' is centrally and loosely mounted on that side of each support G which is nearest to the adjacent cabinet side. By the arrangement of guides I I and rollers G' as the

successive supports G move into position immediately opposite the opening A their rollers will enter the upper flaring approach i^2 of the nearest guides and pass to a position between the parallel flanges of the same, with the result that those supports which have their rollers so engaged will be so steadied as to permit their drawers to be disengaged from their catches g^2 and completely removed from their supports without requiring any holding of the supports and without in any way straining the endless conveyer carrying the same.

It will thus be seen that the two series of vertically-traveling supports are steadied at both sides of the cabinet as their respective members arrive opposite the front opening A thereof.

From the foregoing it will be appreciated that the improved file-cabinet embodying my invention affords great capacity for the filing and storing of papers, &c., without requiring a structure of any very considerable front dimensions, and, further, notwithstanding such great capacity any particular file-drawer may be readily brought within immediate reach for removal and the convenient access to its contents.

By arranging the two vertical series of file drawers or cases considerable to each side of the center of the cabinet the space A^2 between the same at the front may be utilized for the location of a plurality of small stationary compartments or recesses serviceable for small drawers accessible through the opening A.

I do not wish to be understood as limiting myself to the exact construction or arrangement of parts shown and described, as they may be considerably modified and changed and still be within the spirit of my invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a file cabinet or case, the combination with vertical supports secured in said cabinet, shafts journaled one above the other in said supports, and extending between said supports, and wheels mounted on said shafts; of endless conveyers passing around and connecting said wheels, ears rigidly attached to the outer surface of said conveyers, carriers rigidly attached to the said ears and moving with them, file-drawers moving with and carried by said carriers, a treadle, and means whereby it is connected to and enabled to actuate said mechanism.

2. In a file cabinet or case, the combination with shafts journaled one above the other in said cabinet, and wheels mounted on said shafts, of endless conveyers passing around and connecting said wheels, carriers rigidly fastened to the outer surfaces of said conveyers, ears upon the links of said conveyers rigidly connecting said carriers to said conveyers, removable file-drawers carried by and moving with said carriers, a ratchet-wheel mounted on said lower shaft, a pawl engaging said ratchet, a treadle actuating said pawl, and said ratchet-wheel pawl and treadle arranged to actuate said shafts the wheels mounted thereon and the said conveyers running on said last-named wheels.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 11th day of October, 1901.

MARION M. BROWN.

Witnesses:

BELLE PATTERSON,
MARY LYNCH.