

R. W. EMMONS.
FILE CABINET.

APPLICATION FILED SEPT. 28, 1909.

968,754.

Patented Aug. 30, 1910.

3 SHEETS—SHEET 1.

Fig. 1.

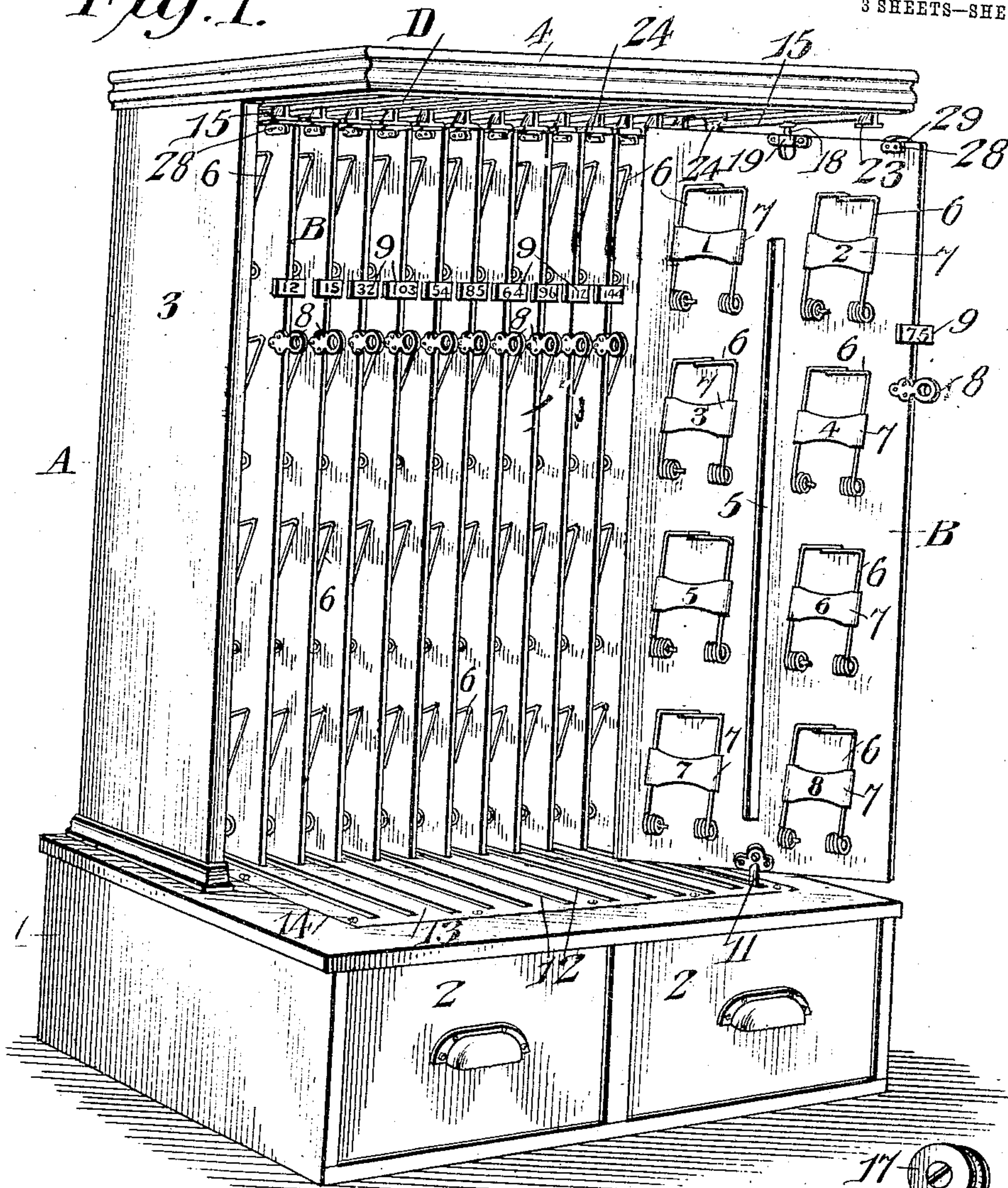


Fig. 5.

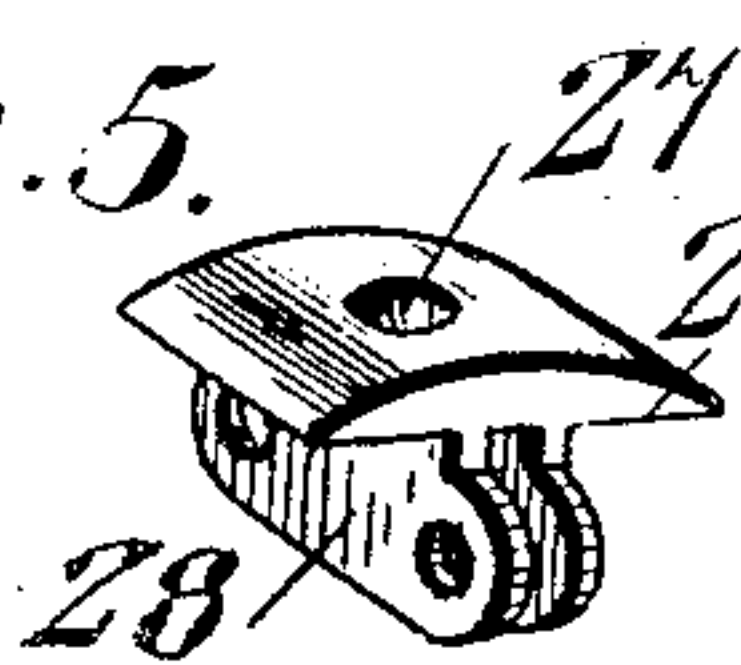
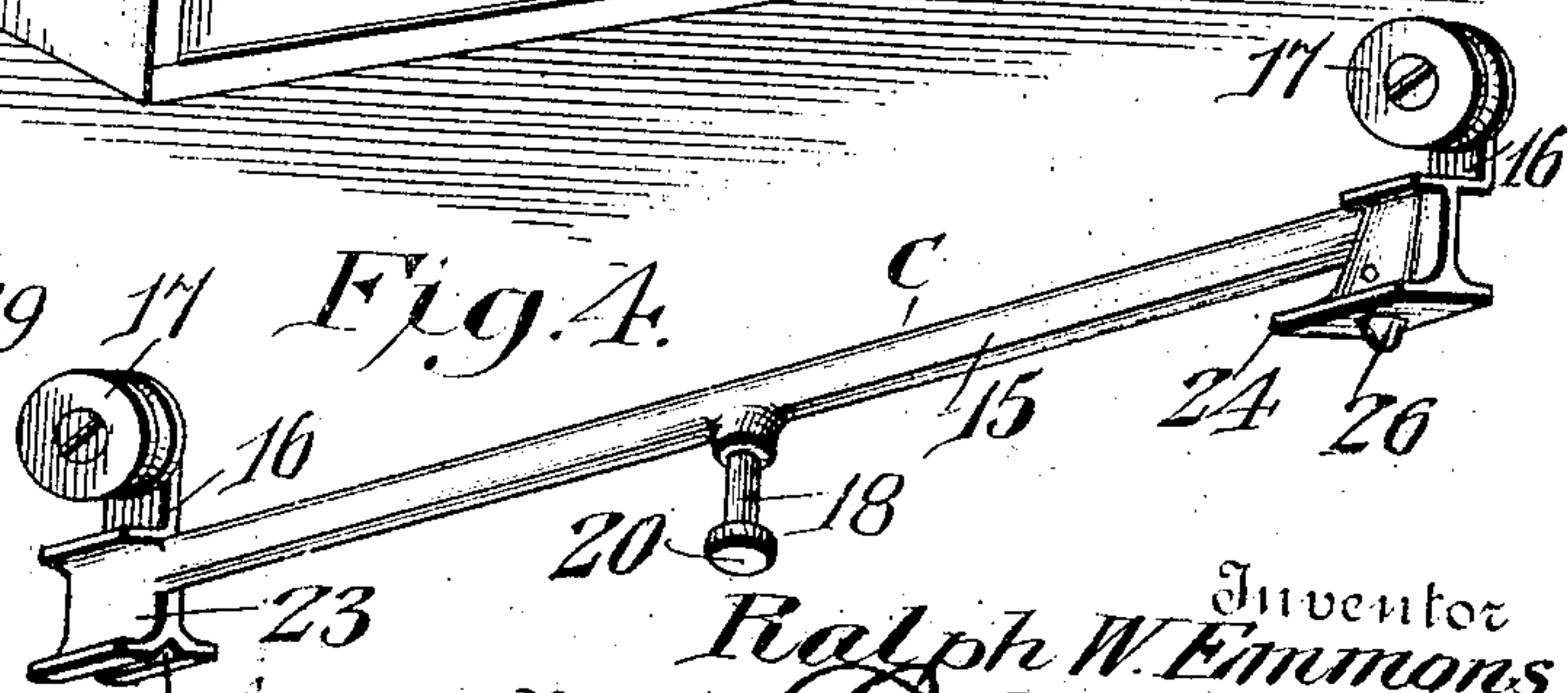


Fig. 4.



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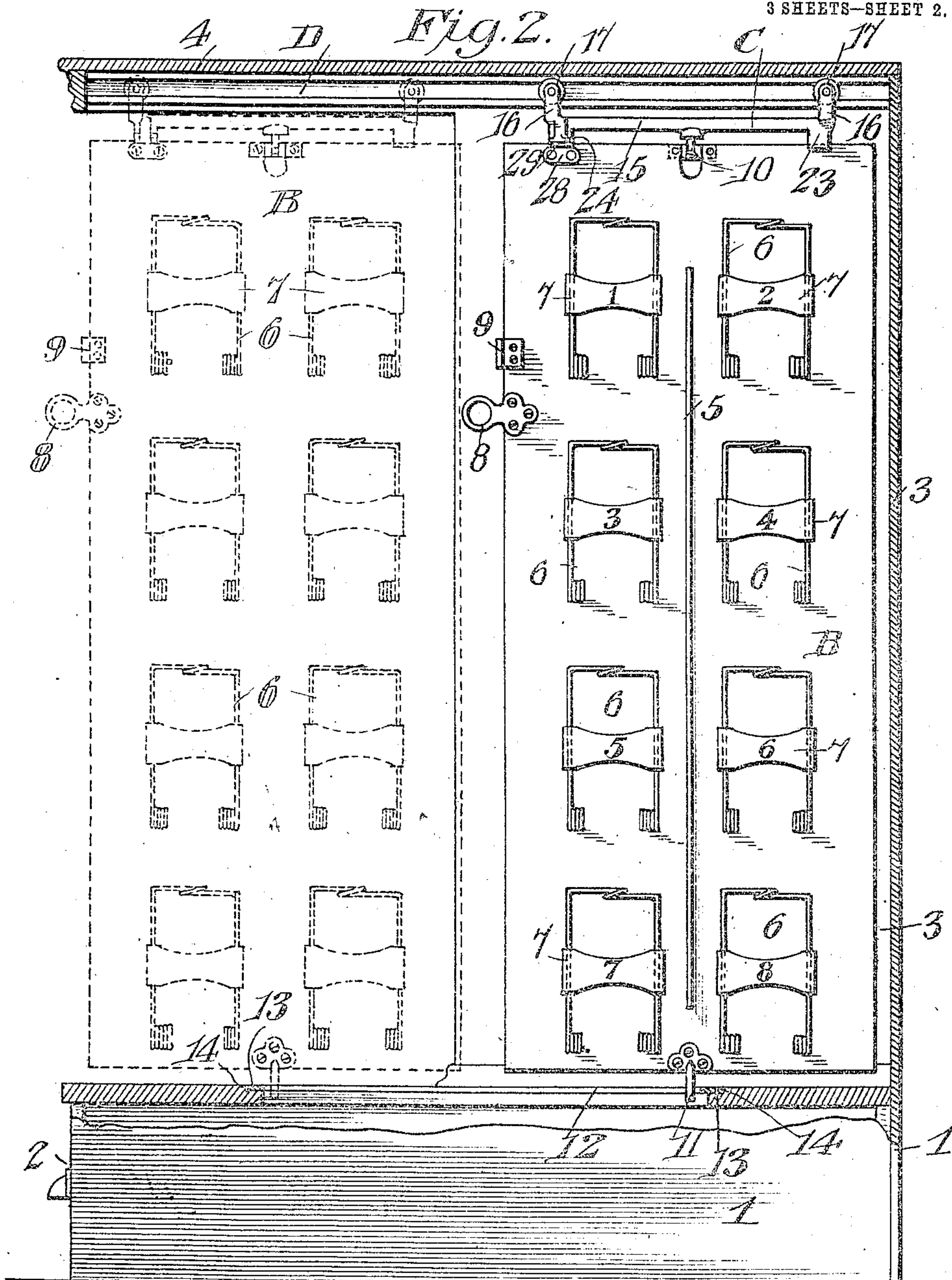
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3 SHEETS—SHEET 2.



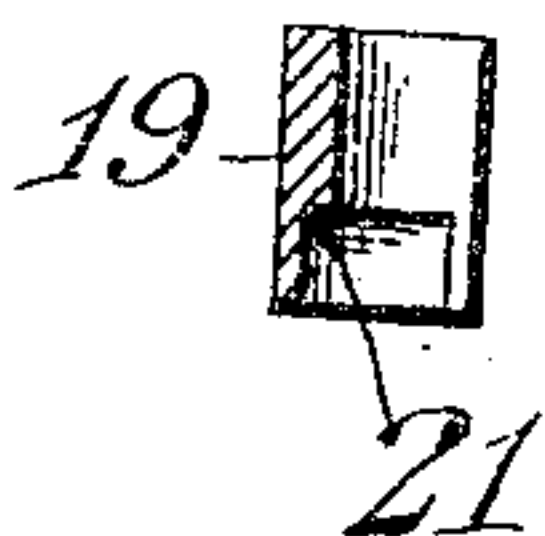
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3 SHEETS—SHEET 3.



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364

Attorney

UNITED STATES PATENT OFFICE.

RALPH W. EMMONS, OF EAST ROCHESTER, OHIO.

FILE-CABINET.

968,754.

Specification of Letters Patent. Patented Aug. 30, 1910.

Application filed September 28, 1909. Serial No. 519,927.

To all whom it may concern:

Be it known that I, RALPH W. EMMONS, a citizen of the United States, residing at East Rochester, in the county of Columbi-
ana and State of Ohio, have invented a new and useful File-Cabinet, of which the following as a specification.

This invention relates to a file cabinet more especially adapted for account credit systems wherein a plurality of slidable carriers in the form of plates having record slip holding clips are employed, such as disclosed in my co-pending application Serial No. 437,394, filed June 8, 1908.

The invention has for its principal object to provide an improved carrier having novel means for slidably and rotatably supporting the same on its track, together with yielding locking means for holding the carrier in alinement with the track for facilitating the withdrawal and returning of the carrier.

Another object of the invention is the provision of a comparatively simple and inexpensive track on which the carrier is supported.

With these objects in view and others, as will appear as the description proceeds, the invention comprises the various novel features of construction and arrangement of parts which will be more fully described hereinafter and set forth with particularity in the claims appended hereto.

In the accompanying drawings, which illustrate one embodiment of the invention, Figure 1 is a perspective view of the file cabinet showing one of the carriers in withdrawn or extended position and partially turned. Fig. 2 is a vertical section of the cabinet taken parallel with the carriers and showing one of the latter in forward position by dotted lines. Fig. 3 is a fragmentary sectional view of a portion of the cabinet, showing sections of several of the carriers in different planes. Fig. 4 is a perspective view of one of the plate carriages. Fig. 5 is a perspective view of the socket piece on the upper ends of the plates for holding the latter in alinement with their carriages. Fig. 6 is a fragmentary sectional view, showing the spring-pressed follower of the carriage engaging in a socket piece. Fig. 7 is a perspective view of one of the carriage rails or tracks with an intermediate portion broken away. Fig. 8 is a fragmentary sectional view of the end of the

carriage opposite from that shown in Fig. 6. Fig. 9 is a detail view of the pivotal connection between the carriage and carrier. Fig. 10 is a perspective view of the bearing of the pivotal connection. Fig. 11 is a sectional view on line 11—11, Fig. 10.

Similar reference characters are employed to designate corresponding parts throughout the views.

Referring to the drawings, A designates the cabinet which preferably consists of a base 1 which is divided into compartments having sliding drawers 2, which may be used for any desired purpose in connection with the account system, and rising from the base is a box-like compartment 3 which is open at its front and is preferably located on the rear portion of the base, the top 4 being extended to overhang the forward portion of the base.

Mounted in the compartment 3 are any desired number of carriers B which are preferably in the form of flat plates of a length corresponding approximately to the height of the compartment 3, and of a width substantially the same as the lateral depth of the compartment. These plates are stiffened by longitudinal ribs 5 arranged at the center thereof and in the form of rods riveted or otherwise secured in place. By this means, relatively thin sheet metal stock may be employed, which has the advantage of lightness. On these plates are a plurality of spring clips 6 for holding the individual accounts in the usual manner, the clips having number plates 7 for distinguishing the various account slips. The front edges of the plates are equipped with tabs or handles 8, whereby the plates can be conveniently withdrawn or returned, and each plate also has a number device 9. At the top and bottom of the plate B are upwardly and downwardly-extending pivot devices 10 and 11 on which the plate is adapted to turn for exposing either side to the front for rendering the account slips accessible. The upper pivot is connected with a carriage C, while the lower pivot slides in a slot 12 in a plate 13 set into an opening 14 in the top of the base 1, and in this plate are as many slots as there are carriers B. The carriages C move back and forth in individual rails or tracks D secured to the top 4 of the cabinet. The slots 12 and rails D project forwardly from the compartment 3 for the carriers so

that the latter can be drawn forwardly out of the compartment for rendering the accounts accessible.

The carriage C for each carrier is clearly shown in Fig. 4 and consists of a horizontal bar 15 formed at its ends with upstanding brackets or posts 16 that carry flanged wheels 17, which support the carriage on its track. Depending from the center of the bar 15 is a vertical pivot 18 which engages in the pivot bearing 19 riveted or otherwise secured to the carrier plate B. This pivot has a head 20 which engages the shoulder 21 in the bearing 19, which latter has one side open so as to permit the carrier to be detached from its carriage. As long as the head 20 engages the seat, the parts are locked together, but by an upward movement of the carrier B sufficient to project the head 20 out of the bottom of the bearing 19, the carrier can be removed laterally, since the reduced portion of the pivot can freely pass out of the open side of the bearing. This upward movement of the carrier is permitted by the pivot 11, since the latter is merely a straight finger loosely engaging in its slot 12 in the bottom of the plate 13. The carrier plate B has an opening 22 for accommodating the head of the pivot, and this opening is elongated vertically to allow the carrier B to be raised when disconnecting it from the carriage.

In order to prevent turning of the carrier on its carriage, the ends of the carriage have carrier-engaging devices in the form of depending lugs 23 and 24, the former of which has a recess 25 in its bottom to engage the top edge of the carrier, while the other lug has a spring-pressed follower 26 in its bottom which is adapted to engage in a depression 27 in the socket piece 28 attached to the carrier. This socket piece is riveted or otherwise secured to the top edge of the carrier at such distance from the pivot as to aline with the yielding catch or follower 26. As shown in Fig. 5, the socket piece is formed with a plate 29, the top surface of which is curved from opposite sides so as to form a cam which engages the follower 26 and presses the same inwardly, during the locking of the carrier, until the socket 27 is opposite the follower, when the latter enters the socket, to thus yieldingly hold the carrier parallel with its carriage. The follower is beveled or so shaped that it forms a positive lock but will readily yield when the carrier B is turned on its pivots.

Each track D, as shown in Fig. 7, consists of a metal strip which is doubled longitudinally on itself to form a lateral flange 30, the top plate 31 of which has a depending rib 32 at one edge formed by doubling the edge of the metal strip from which the track is made. The bottom portion 33 of the flange 30 has a vertical flange 34 extending longi-

tudinally of the track and the bottom thereof is bent laterally opposite from the flange 30 and carries an upstanding longitudinal rib 35 which is spaced from the rib 32 so as to form, together, a guideway in which the grooved wheels 17 of the carriage move. The flange 30 has apertures 36 for receiving screws or other fastenings for securing the tracks to the under side of the top of the cabinet.

With an apparatus constructed in this manner, the individual carriers B can be pulled out to operative position, as shown at the right of Fig. 1, and by dotted lines in Fig. 2. When the carrier is in this position, it can be readily turned on its pivot, or removed. The yielding catch device 26 holds the carrier in alinement with its carriage so that they move as a unitary device in withdrawing or returning the carrier. In turning the carrier, it is merely necessary to exert a lateral pressure on the handle 8, whereupon the catch 26 will yield and allow the carrier to move on its pivots for exposing one side or the other to the front of the cabinet. It will thus be seen that the apparatus can be readily manipulated, and that while the construction is comparatively simple and inexpensive, it satisfactorily answers the purpose for which it is designed.

From the foregoing description, taken in connection with the accompanying drawings, the advantages of the construction and of the method of operation will be readily apparent to those skilled in the art to which the invention appertains, and while I have described the principle of operation of the invention, together with the apparatus which I now consider to be the best embodiment thereof, I desire to have it understood that the apparatus shown is merely illustrative, and that such changes may be made when desired as are within the scope of the claims appended hereto.

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

1. The combination of a cabinet, rails mounted therein, carriages movable on the rails, carriers, devices for pivotally and detachably connecting the carriers to the carriages, lower pivots for the carriers, and means for guiding the said pivots.
2. The combination of a cabinet, a plurality of upper guideways, a plurality of lower guideways, carriers disposed between the guideways, carriages movable in the upper guideways, members on the carriers loosely engaging in the lower guideways, and devices for pivotally and detachably connecting the carriers to the carriages and providing for detachment of the carriers by an upward and lateral movement thereof.
3. The combination of a support, guide rails carried thereby, carriages on the guide

rails, carriers disposed under the carriages, means for guiding the carrier at the bottom, and devices for pivotally mounting the carriers on the carriages and having detachably
5 connected parts held in interlocking relation by the weight of the carriers.

4. The combination of a support, guideways carried thereby and a carriage, a carrier disposed under the same, a central pivot
10 on the carriage, and a bearing on the carrier in which the pivot is detachably engaged, said bearing being open at one side for permitting lateral detachment of the carrier, and means for guiding the lower
15 end of the carrier.

5. The combination of a support, guideways carried thereby and a carriage, a depending pivot having a head, a carrier, and a bearing on the carrier open at one side and
20 having an inset shoulder with which the head engages, the head normally serving to prevent lateral detachment of the carrier from the pivot, and means for guiding the carrier at the bottom.

6. The combination of a support, guideways carried thereby and a carriage, a depending pivot having a head, a carrier disposed under the carriage and having an opening into which the head extends, and a
30 bearing on the carrier adjacent the opening for receiving the pivot, said bearing being open at one side and having an inset shoulder at its bottom with which the head of the pivot engages, and means at the bottom of
35 the support for guiding the carrier.

7. In an apparatus of the class described, the combination of a support, guideways carried thereby and a carriage, a carrier, means for pivotally mounting the carrier on the
40 carriage, and a yielding locking device for preventing turning of the carrier.

8. In an apparatus of the class described, the combination of a support, guideways carried thereby and a carriage, a carrier, means for pivotally mounting the carrier on the carriage, and a yielding locking device for preventing turning of the carrier, said device including interlocking parts on the carrier and carriage, one of the parts in-
50 cluding a spring-pressed member engaging the other part.

9. In an apparatus of the class described, the combination of a support, guideways

carried thereby and a carriage, a carrier, means for pivotally mounting the carrier on
55 the carriage, and a yielding locking device for preventing turning of the carrier, said device including interlocking parts on the carrier and carriage, one of the parts including a spring-pressed member engaging
60 the other part, and a notched seat on the carriage into which the carrier engages to cooperate with the said device for preventing turning of the carrier.

10. The combination of a track, a carriage
65 movable thereon, a carrier, a pivot connecting the carrier with the carriage, and devices at opposite sides of the pivot for yieldingly engaging the carrier with the carriage to prevent relative turning.
70

11. The combination of a track, a carriage movable thereon, a carrier consisting of a plate having stiffening ribs, means for pivotally suspending the carrier on the carriage, and means for guiding the bottom of the
75 carrier during the movement of the carriage.

12. The combination of a cabinet, a plurality of tracks supported on the top thereof, a slotted plate at the bottom of the cabinet having slots alined with the tracks, carriages
80 movable on the tracks, carriers suspended on the carriages and pivotally and detachably connected therewith, and finger-like pivots extending from the lower ends of the carriers and loosely engaging in the said slots.
85

13. The combination of a cabinet, a plurality of tracks supported on the top thereof, a slotted plate at the bottom of the cabinet having slots alined with the tracks, carriages movable on the tracks, carriers suspended on
90 the carriages and pivotally and detachably connected therewith, finger-like pivots extending from the lower ends of the carriers and loosely engaging in the said slots, and interlocking devices between the upper ends
95 of the carriers and carriages for yieldingly holding the carriers in alinement with their carriages.

In testimony, that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

RALPH W. EMMONS.

Witnesses:

JOHN C. MILLER,
J. T. DE FORD.