No. 657,347. Patented Sept. 4, 1900.

W. HOMAN

CABINET.

(Application filed May 7, 1900.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1.

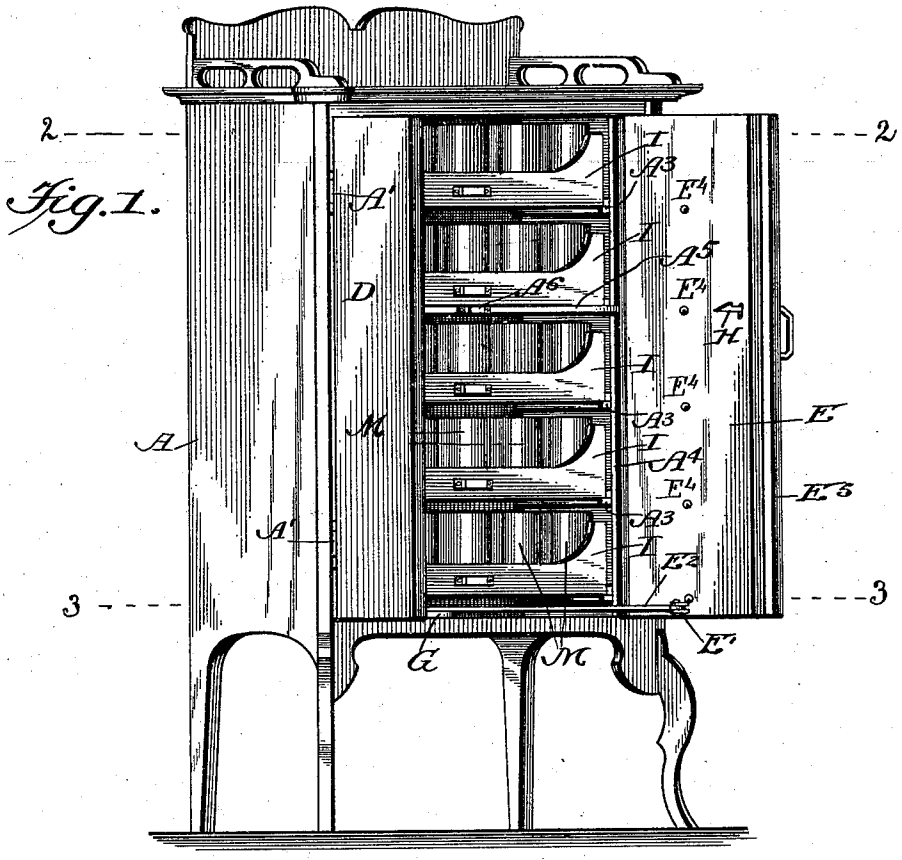
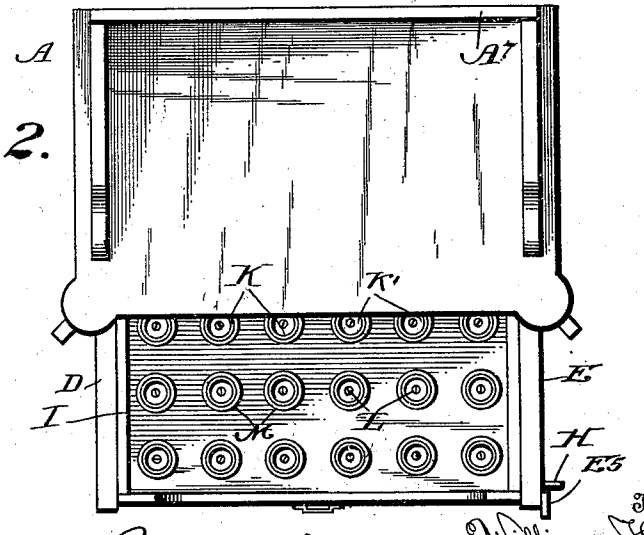


Fig. 2.



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Fig. 3.

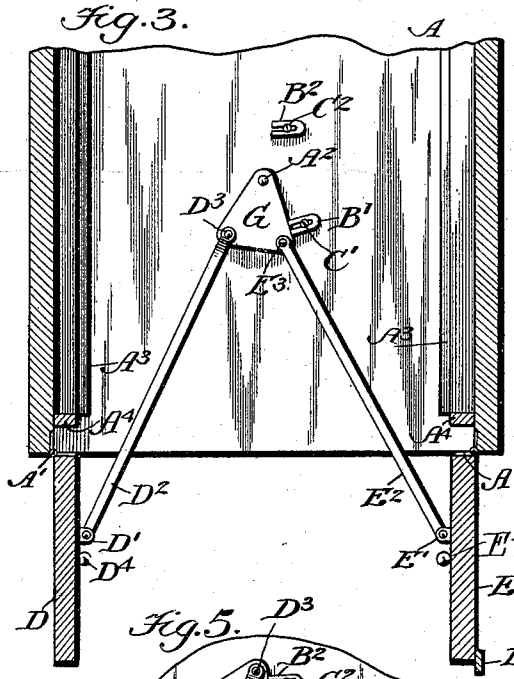


Fig. 4.

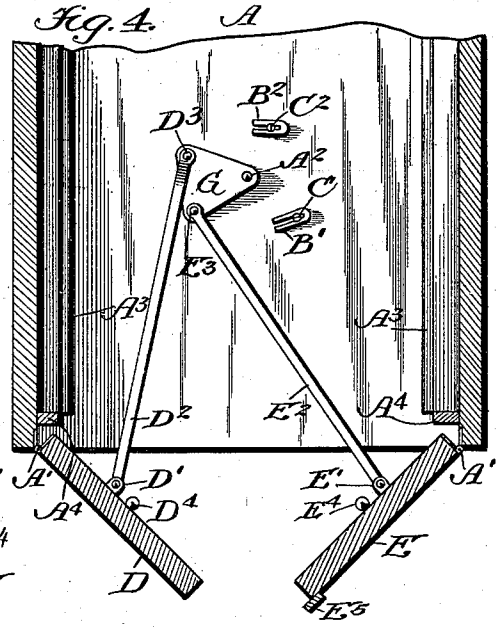


Fig. 5.

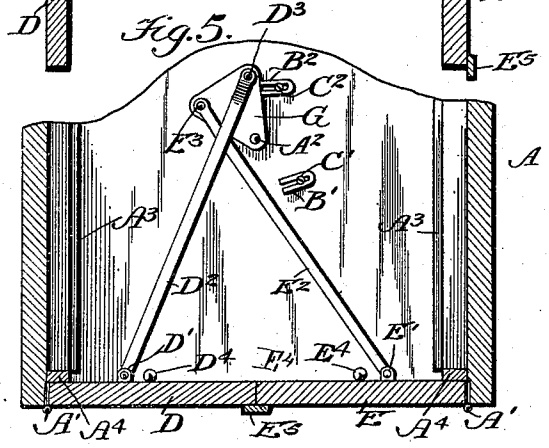
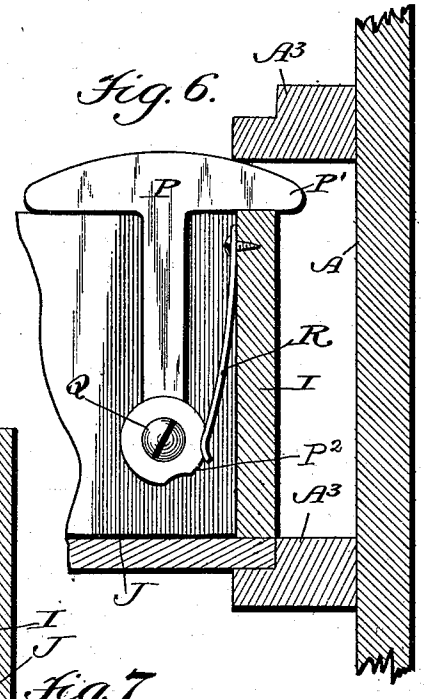


Fig. 6.



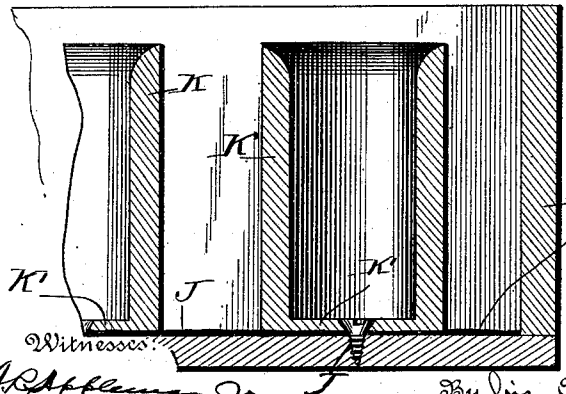


Fig. 7.

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UNITED STATES PATENT OFFICE.

WILLIAM HOMAN, OF NEW YORK, N. Y., ASSIGNOR TO THE ANDREW HOMAN COMPANY, OF SAME PLACE.

CABINET.

SPECIFICATION forming part of Letters Patent No. 657,347, dated September 4, 1900.

Application filed May 7, 1900. Serial No. 15,714. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HOMAN, a citizen of the United States, residing in New York, in the borough of Manhattan and State of New York, have invented a certain new and useful Improvement in Cabinets, of which the following is a specification.

My improvement relates to that class of cabinets in which there are two doors each carrying supports for the drawers swinging outward and arrested and held in positions parallel to each other. It is common to provide such with mechanism for causing them to turn simultaneously in opening and closing. I have devised improved means for effecting these motions and for supporting the drawers. My invention allows the drawers to be moved farther outward than the ordinary construction and to be easily taken out entirely when required. It also provides improved means for receiving and presenting phonograph-records in such cabinets and may serve as an improved filing-cabinet for papers of all kinds.

The following is a description of what I consider the best means of carrying out the invention:

Figure 1 is a front view, slightly in perspective, with the doors open. Fig. 2 is a horizontal section of the front portion on the line 2 2 in Fig. 1, with the doors open and one of the drawers drawn out until arrested by the proper stop. Figs. 3 to 5, inclusive, are corresponding horizontal sections on the line 3 3 in Fig. 1. Fig. 3 shows the doors open. Fig. 4 shows them partly closed, and Fig. 5 shows them completely and tightly closed. Figs. 6 and 7 are on a larger scale. Both are vertical sections through portions of a drawer and its adjuncts.

Similar letters of reference indicate corresponding parts in all the figures where they appear.

A is the body of the cabinet, certain parts being designated, when necessary, by super-numerals.

D and E are the doors, turning on hinges A'. Each door has on its inner face, near the bottom, an eye D' E', respectively, to which is pivoted a link D^2 E^2, respectively, extending horizontally into the cabinet and pivoted to a flat piece G, which is capable of turning horizontally on a pivot A^2, set on the bottom of the interior of the cabinet. The extent of the swinging motion of which this piece G is capable is limited by two stops B' and B^2, held adjustably on the bottom of the cabinet by corresponding screws C' C^2, received in slots in said stops. On slacking these screws the stops may be adjusted to the right and left, so as to give more or less liberty to the partially-revolving plate G. The pivots A^2 D^3 E^3 are arranged triangularly, as shown. Opening or closing the door E turns the piece G on its pivot A^2 and, through the link D^2, correspondingly moves the other door. The reverse effect is the same, either door being turned by the operator correspondingly turns the other by the connections through the turning piece G.

A^5 is a cross-bar set at a convenient height at the front and carrying a keeper A^6. The door E is fitted with a lap-strip E^5 and also with a lever-catch H, which latter is arranged to engage and disengage the keeper A^6.

On the interior of the cabinet A are horizontal cleats A^3, each having a rabbet on its inner edge. These cleats extend the whole depth from the front to the rear of the cabinet, terminating at the front in a vertical strip A^4. On the inner face of the door D in the proper relation to each of these cleats is set a ball D^4, having a fastening-screw made integral, and on the inner face of the door E is similarly set a ball E^4. The construction allows the drawers to be drawn out farther than is ordinarily permitted or taken out entirely, if desired.

I I, &c., are the drawers. I can use them for containing ordinary papers, as music, &c., dental and surgical instruments, collections of coins, curios, &c., without further equipment; but for holding phonograph-records I cover the bottom of each drawer with a soft material, as canton-flannel J, glued down, and upon this soft bed secure peculiarly-formed hollow-turned wooden pegs K K', the part K being a hollow cylinder and the part K' being a nearly-closed bottom thereto. I hollow-turn the pegs to accommodate the la-

bel describing the selection on the phonograph-record, thus also providing a space to accommodate an index-number to identify the same. There is a small hole in the bottom which receives a screw L. The pegs are held in position by both gluing and screwing. The records M, fitting loosely over these pegs, may be ordinary records and handled in the ordinary manner. I make the pegs K K′ preferably of wood. The drawers slide backward and forward on the rabbets in the cleats A^3 in the ordinary manner. The balls D^4 E^4 stand at just the proper level to receive the corresponding edges of the drawers as they are drawn out and support them. Each drawer upon being pushed back to the fullest extent is arrested by striking the back A^7. When the drawer is moved forward to its extreme limit, I provide special front stops to allow it to come forward or outward farther than is usually done. These front stops also serve another useful function. In addition to arresting the forward motion each runs close under the cleat above and being at the rear of the drawer supports the drawer against being tilted by its weight or by any extra weight imposed thereon when it is in the drawn-out position. I make these stops capable of being adjusted out of use, and so adjust them when it is desired to remove the drawers completely. P P′ are such drawer guides and stops made T-shaped, each capable of turning on a pivot-screw Q. These stops may be of stout sheet-iron or malleable cast-iron. The T shape allows them to serve on either side interchangeably. When they are turned in the upright position, a wing P′ projects out beyond the side of the drawer, and when the drawer is moved forward to its extreme limit this wing strikes the inner face of a vertical strip A^4 and arrests the forward motion. When, on the contrary, it is desired to pull out the drawer completely for any purpose, it is necessary simply to turn the two stops P P′ inward. In the erect position of these stops their smooth upper surfaces traverse each against the under side of the cleat A^3 above and hold down the rear of the drawer, so that the drawer cannot tilt when it is pulled out.

R is a spring, one for each stop P, acting against the hub thereof. It serves to hold the stop reliably in position in all ordinary conditions. When the stops are turned inward to be ineffective, the spring tends to hold it in such position.

I attach importance to the triangular form of the plate G and the arrangement of the pivots thereon. It serves the important end of holding the doors in the shut or open positions with more firmness than in any intermediate position. The links D^2 E^2 must not come in line with the fixed pivot A^2 when the doors are shut, but they may come near such line, as shown in Fig. 5. It is easy by the momentum of the parts to swing the plate G around into the proper position. The stop B^2 is set to prevent its ever swinging too far. Now the doors are held with much firmness in the closed position; but a sufficient pull on either door or both doors will cause the triangular plate to commence its proper revolution. After having commenced the rest of the motion is easy. The same condition applies to the holding of the doors in the exactly-correct open position. Then the links D^2 E^2 again range nearly in line with the fixed pivot A^2, but not quite. The stop B′ is set to prevent the plate G from ever swinging too far in this direction. In closing more effort is required to start the doors than to move them after they are started.

Modifications may be made without departing from the principle or sacrificing the advantages of the invention. The depth and correspondingly the number of the drawers and their appurtenances in a given size of the cabinet may be varied. The depth of the cabinet from the front to the rear may be greatly increased. In such case the balls D^4 E^4 may be set farther outward on the doors, farther from the hinges A′. Two or more of these balls or equivalent short supports may be used for each drawer at the proper level on each door. The form and the connections of the links D^2 E^2 may be varied. I have shown the link D^2 as raised by bending sufficiently to allow the pivot E^3 and the link E^2 to pass under it as required in effecting the motion; but the same end can be obtained by having both links straight and having the pivot-pin D^3 higher and causing it to hold all that portion of the link D^2 higher. The material may be varied. Any metal or wood may serve for the front stops P P′. Instead of the bright metal balls I can use various other forms of projections in their place. It is only necessary that they should be strong and properly adapted to carry the drawer smoothly as it moves thereon and that they shall be short to allow the door to shrink or swell with hygrometric changes.

Parts of the invention can be used without the whole. I can omit the adjustability of the stops B′ B^2, taking care to set them exactly right in the manufacture. I can dispense with the turning quality of the drawer-stops P P′ and make them permanent. In such case the back can be taken off when it is required to take out one or more drawers for alterations or any other purposes. I can use the stops P P′ without the projections P^2 and without the springs R. I can dispense with the peculiar pegs K K′ and use solid wood pegs, or can use paper tubes. I can dispense with pegs entirely and use the drawers to store other objects than records. When music is stored, it may be well to make the drawers shallower and have a greater number with ordinary provisions by an opening at the bottom near the front for inserting the fingers from below when the whole or any portion of the contents is to be taken out. I can make my cabinet with one or more drawers

deep and carry pegs for phonograph-records, while the remainder are shallow, adapted to contain sheet-music or other things.

I claim as my invention—

1. The combination with a cabinet having two doors opening outward to positions at right angles with the front, of a single turning piece G, pivoted in the cabinet, pivots on such piece arranged triangularly relatively to the fixed pivot, and links connecting the doors respectively with the two movable pivots, arranged to come to rest at the end of each motion with each nearly in line with the fixed pivot, adapted to serve substantially as herein specified.

2. The combination with a cabinet having two doors opening outward to positions at right angles with the front, of a single turning piece G, pivoted in the cabinet, pivots on such piece arranged triangularly relatively to the fixed pivot, and links connecting the doors respectively with the two movable pivots, arranged to come to rest at the end of each motion with each nearly in line with the fixed pivot, and with stops C', C^2, set in the cabinet to limit the motion of the turning piece, all adapted to serve substantially as herein specified.

3. The combination with a cabinet having two doors opening outward to positions at right angles with the front, of a single turning piece pivoted in the cabinet, and links connecting the doors respectively with pivots D^3 E^3 on such piece arranged triangularly relatively to the fixed pivot and with stops set in the cabinet to limit the motion of the turning piece and with means for adjusting the positions of the stops all substantially as herein specified.

4. The combination with a cabinet having two doors opening outward to positions at right angles with the front, of means as shown for limiting the opening motion, short supports D^4 E^4 on the inner faces of the doors arranged to support the drawers in the drawn-out position the vertical strips A^4 on the cabinet, and front stops carried on the rear of the several drawers arranged to engage said strips and to serve therewith as herein specified.

5. The combination with a cabinet having two doors opening outward to positions at right angles with the front, of means as shown for limiting the opening motion, short supports D^4 E^4 on the inner faces of the doors, arranged to support the drawers in the drawn-out position, of the vertical strips A^4 on the cabinet, and front stops carried on the rear of the several drawers such stops having smooth upper surfaces arranged to contact with guiding parts above and adapted to perform the double function of contacting with the vertical strips A^4, to arrest the forward motion, and bearing against guiding parts above to maintain the level position when the drawers are severally pulled out, substantially as herein specified.

6. The combination with a cabinet having two doors opening outward to positions at right angles with the front, of means as shown for limiting the opening motion, short supports D^4 E^4 on the inner faces of the doors arranged to support the drawers in the drawn-out position, the vertical strips A^4 on the cabinet and front stops P P′ pivoted near the backs of the drawers adapted to be easily turned to be out of use when required, all substantially as herein specified.

In testimony that I claim the invention above set forth I affix my signature in presence of two witnesses.

WM. HOMAN.

Witnesses:
JOHN D. CARBERRY,
J. B. CLAUTICE.