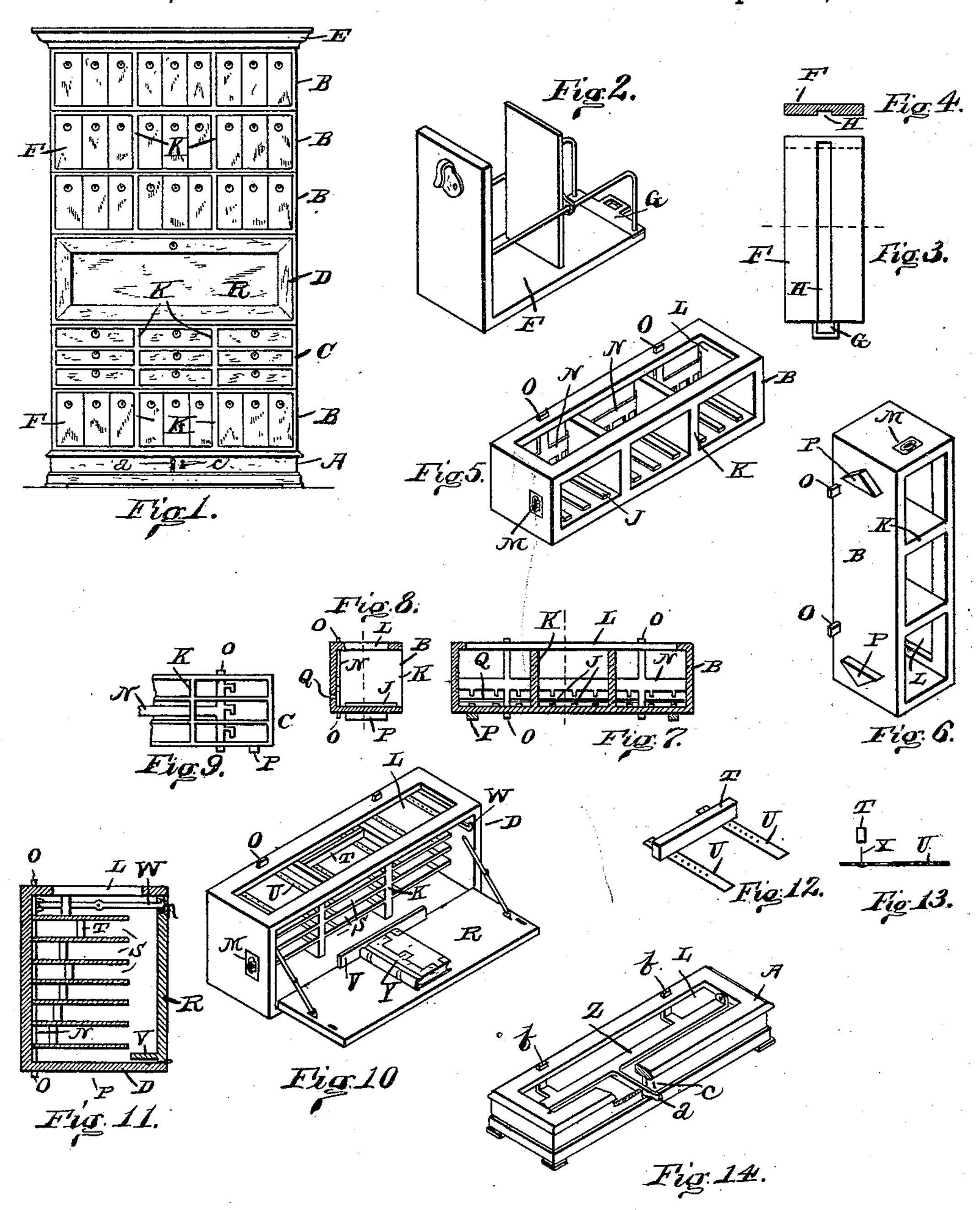
## J. W. SEE. OFFICE CABINET.

No. 450,196.

Patented Apr. 14, 1891.



game M. Sec

Inventor.

Witnesses:

Waservard Amy wo

## United States Patent Office.

JAMES W. SEE, OF HAMILTON, OHIO.

## OFFICE-CABINET.

SPECIFICATION forming part of Letters Patent No. 450,196, dated April 14, 1891.

Application filed May 7, 1887. Serial No. 237,426. (No model.)

To all whom it may concern:

Be it known that I, James W. See, of Hamilton, Butler county, Ohio, have invented certain new and useful Improvements in Office-Cabinets, of which the following is a specification.

This invention pertains to cabinets for office use, designed for the preservation, in accessible form, of papers both flat and folded.

The improvements will be readily understood from the following description, taken in connection with the accompanying drawings, in which—

Figure 1 is a front elevation of a four-sec-15 tion cabinet illustrating my improvements; Fig. 2, a perspective view of one of the document-drawers intended for the reception of folded papers; Fig. 3, a bottom view of the same; Fig. 4, a vertical transverse section of 2c the bottom of the same; Fig. 5, a perspective view of one of the cabinet-sections B, adapted for receiving nine of the document-drawers; Fig. 6, a perspective view of one of the same cabinet-sections illustrated as standing upon 25 end, so as so exhibit the bottom; Fig. 7, a vertical longitudinal section of the same; Fig. 8, a vertical transverse section of the same; Fig. 9, a front elevation of a part of the cabinet, section C, adapted to receive vertically 30 sliding drawers, the drawers being omitted in the figure; Fig. 10, a perspective view of the cabinet-section D, adapted for the reception, in proper compartments, of blanks, flat papers, &c., the falling door of this cabinet-35 section being shown as open; Fig. 11, a vertical transverse section of the same, the falling door being shown as closed; Fig. 12, a perspective view of the device for adjusting the depth of the individual compartments 40 in the cabinet-sections D; Fig. 13, a side elevation of the same, the back-stop T being shown as lifted from its pins; and Fig. 14, a perspective view of the cabinet-base, a portion of the front being broken away to ex-45 hibit more clearly the locking-lever.

In the drawings, A indicates the cabinetbase, the same being a mere base structure intended to raise the cabinet proper a sufficient distance from the floor to render the lower drawers, &c., accessible, and also to contain lock mechanism adapted for actuating the locking device of all the cabinet-sections;

B, cabinet-sections consisting of rectangular frames having open fronts adapted for the reception of document-drawers, or drawers 55 whose height is much greater than their width, the horizontal length and depth of these cabinet-sections being such as to properly match with the dimensions of the upper surface of the cabinet-base, four of these cabinet-sections 60 appearing in Fig. 1, one just above the base of the cabinet, the other three at the top of the cabinet arranged in order just below the cornice; C, a cabinet-section having horizontal dimensions to match the other cabinet-sections, 65 &c., but divided by horizontal and vertical partitions into compartments adapted for the reception of ordinary drawers, or, if desired, drawers such as are usually employed in the more modern styles of letter-filing cabinets, 70 such drawers being provided with interior mechanism for more perfectly retaining the papers in compact order; D, a cabinet-section having horizontal dimensions to match the other cabinet-section, &c., but having an open 75 front closed by a falling door and having its interior divided by horizontal and vertical partitions into compartments for the reception of blanks and other flat papers; E, a cornice adapted to furnish a finish for the top of the 80 cabinet, but formed of a structure separable from other sections of the cabinet, the lower surface of this cornice—that is, the surface which rests upon the cabinet-section immediately below it—being of a dimension and character 85 identical with the lower surface of the cabinetsections intermediate between the cornice and base, as will be hereinafter more fully explained; F, document-drawers fitted to slide in and out of the fronts of the cabinet-sec- 90 tions B, these document-drawers being of greater vertical depth than horizontal width, and intended for the reception of folded documents which are to be stood upright within =7 the drawers, the drawers being provided with 95 adjustable backs and with skeleton sides, and presenting in general structure no points of novelty over what is common in the art; G, a mortised tail-piece attached to and projecting rearwardly beyond the floor of each of the 100 document-drawers F; H, a shallow guidegroove disposed in the center of and extending from front to rear of the under surface of

each of the document-drawers; J, guide-ribs

projecting above the floor of the cabinetsections B and running from front to rear thereof, these guide-ribs being of a dimension and having such disposition with refer-5 ence to each other, and to the transverse walls of the cabinet-sections B, that the guidegrooves H in the document-drawers will properly engage the ribs, and thus enable the document-drawers to be guided into place in proper ro relation to each other side by side; K, vertical transverse partitions in the cabinet-sections, these partitions reaching from the floor of the cabinet-sections to the top framing thereof, and serving to support the top framing and to 15 tie the framing firmly together at points between the ends of the cabinet-sections, and at the same time to divide each cabinet-section into a horizontal series of compartments; L, rectangular openings in the tops of all of 20 the cabinet-sections, and in the cabinet-base A, these openings in the various sections, &c., being of uniform length and also of uniform width at their ends, the openings being formed by constructing the tops of the cab-25 inet-sections and the cabinet-base in an open or frame-like manner; M, lifting-handles, preferably of that class known to the trade as "flush chest-handles," secured near the front of each end surface of each cabinet-section, 30 these handles being arranged with the handle-axes vertical, as shown, and so disposed with reference to the cabinet-sections that the backs of the cabinet-sections are downward and the fronts of the cabinet-sections 35 upward when the sections are supported by these handles, after the manner of a trunk being lifted or moved by its handles; N, a lock-bar disposed against the inner rear wall of each of the cabinet-sections B and also of 40 the cabinet-sections C, these lock - bars extending from end to end of the respective cabinet-sections and through mortises in the partitions K and being adapted for vertical movement bodily, each lock-bar being pro-45 vided with downwardly-projecting fingers adapted to enter the mortises of the tailpieces of the drawers contained by the respective sections in such manner that when the lock-bars are down the tail mortises of 50 each drawer is engaged by the lock-bar finger, thus preventing the drawers from being withdrawn; O, vertical projections upward and downward from these lock-bars, projecting through the tops and bottoms of their re-55 spective cabinet-sections, the degree of projection when the lock-bars are down being equal at the bottoms to something less than the thickness of the tops of the cabinet-sections, and when the lock-bars are up equal 60 to something less at the top of the cabinetsections than the thickness of the bottoms of the cabinet-sections; P, triangular projections rigidly secured to the bottom of each cabinet-section, one near each end of each 65 section, the dimensions of these projections when measured across the cabinet-sections being equal to the exact width of the open-

ings L in the top of the cabinet-sections, &c., and the distance from the extreme outside of one projection to the extreme outside of its 70 fellow projection on the same cabinet section, measured lengthwise of the cabinet-section, being equal to the exact length of the opening L in the tops of the cabinet-sections, &c.; Q, a horizontal slot in the back of each cabinet-75 section B, this slot extending from end to end of its cabinet-section, its vertical width and its distance from the floor of its cabinet section being such that when the document-drawers are in place the tail-pieces Gof the document-draw- 80 ers will properly enter the slots with freedom; R, the falling hinged door of the cabinet-section D, the same being provided with suitable supporting and usual braces to retain it in horizontal position when opened; S, horizon-85 tally-arranged compartments in the cabinetsection D, formed by proper vertical and horizontal partitions therein; T, adjustable backstops in these compartments, these stops being formed of shallow blocks fitting the com- 90 partments vertically and also lengthwise, so as to form back walls for the compartments; U, strips laid upon the floors of the compartments S, two to each compartment, each strip being provided with a longitudinal series of 95 perforations, these perforations serving for the insertion of headed pins upwardly through the strips into the back-stops, whereby the back-stops may be secured to the strips at chosen distances along the strips; V, a rigid 100 ledge projecting from the inner face of the door R near its lower edge, this ledge projecting inwardly when the door is closed and upwardly when the door is opened; W, latchlevers pivoted to the inner end wall of the 105 cabinet-sections B and having their hooked front ends adapted to engage, latch-like, in suitable mortises in the inner faces of the door R, the rear ends of these latch-levers engaging articulately the lock-bar of this cab- 110 inet-section, this lock-bar not appearing in the drawings, but being the same as in the other cabinet-sections, except that it has no locking-fingers; X, the headed pins inserted upward through the chosen perforations in 115 the strips U and engaging the back-stops T, these pins being inserted in proper holes in the back-stops, so that they can be inserted and withdrawn at pleasure by the fingers; Y, a hook, as an index, lying against the inner 120 face of the door R and against the ledge V; Z, a rock-bar disposed within the cabinetbase A and extending from end to end thereof and pivoted thereto at its ends; a, a locking-lever projecting from the lock-bar for- 125 wardly through a mortise in the front of the cabinet-base and provided with a handle by which it may be oscillated; b, prong-levers projecting from the rock-bar rearwardly and upwardly through the top of the base in such 130 position as to correspond with the projections O of the lock-bars of the cabinet-sections, and c a lock set in the front of the cabinetbase, this lock being of any ordinary construc-

TOO

tion, such as is used upon doors and capable of throwing its bolt sidewise, so that the bolt may be shot under the lock-lever c when the same is raised.

It will now be understood that the top of the cabinet-base and that the top of each of the individual cabinet-sections constitute female receiving-surfaces of uniform character, and that the bottom of the cornice and of the to individual cabinet-sections form male surfaces uniform in character and size and adapted to intermember indiscriminately with any of the female receiving-surfaces. Thus the cornice may be set upon and will fit the 15 cabinet-base, or any individual cabinet-section may be interposed between the cornice and base. If, therefore, we take the cabinetbase and set upon it the lowest cabinet-section B and omit all of the upper cabinet-sec-20 tions and set the cornice upon the top of this cabinet-section, we will have a complete cabinet consisting of one document-drawer holding cabinet-section provided with a base and cornice.

Cabinet-sections may be added below the cornice, as desired, and all of the cabinet-sections may be of the kind adapted for receiving document-drawers, as B, or of the kind for receiving ordinary drawers, as C, or of 30 the kind for receiving flat papers, as D, or selections and arrangements from the classes may be made at will, and the relative order of arrangement may be changed at pleasure by simply separating the sections and repil-35 ing them.

Where a section like D is employed with a falling door, it is of course desirable that this section be arranged in order at such height that the falling door will be at convenient 40 height for desk purposes or for use in handling papers, consulting indexes, and the like. This height may be secured, as is indicated in Fig. 1, by disposing below this cabinet-section the proper number of sections to secure 45 the desired height. In the arrangement of cabinet-sections in order it is desirable, of course, that these sections containing the papers most frequently needed should be arranged at the most accessible height, leaving 50 those papers least needed in the most inaccessible positions.

If two boards are laid together with the outer surfaces of the two exposed to the air, and the contacting surfaces of the two pro-55 tected from the air, the boards are very liable to warp, no matter how thoroughly seasoned they may be. The openings L in the top of | the cabinet-sections, &c., admit air to the lower surface of the bottom of the cabinet-60 sections, and this to a great extent prevents that warping which would result from a closed complete contact. This prevention of warping secures permanent steadiness in the compound cabinet and secures permanency in 65 the closed appearance of the joint-lines between the various cabinet-sections, and it also

to a great extent secures such an equal shrink-

age of the part as will secure that the various sections will at all times readily interchange. The projections P engage within the ends of 70 the opening L and secure proper registry of contiguous cabinet-sections. Some shrinkage at all times takes place in furniture, and it is desirable that these projections fit the openings with proper registering accuracy. In 75 course of time shrinkage may so contract the openings that the projections will not readily and indiscriminately engage them. Were these projections rectangular in form, thus presenting extended surface to the walls of So the openings, the effect of the shrinkage might be to burst the frames. Furthermore, an ordinary office man, in case he should find the shrinkage too much for the ready engagement of the projection, would require the services 85 of a mechanic with good tools to reduce the dimension of the projection in case they had the extended surfaces incident to a rectangular form. By giving the projections the triangular form shown and described they pre- 90 sent only thin edges to the walls of the openings. These thin edges will crush under the pressure of the walls of the shrinking opening, and become, therefore, to a great extent self-adjusting in dimension, and thus accom- 95 modate themselves to shrinkage. In rearranging the cabinet-sections an ordinary office man reduces the dimension of the projections by simply trimming the sharp edges with a jack-knife.

The guide-ribs J in the cabinet-section B, in conjunction with the guide-grooves H in the bottom of the document-drawers, serve as guides for the drawers. They are of much simpler and cheaper construction than inter- 105 posed vertical partitions between all of the document-drawers, and they reduce the cost and weight of the cabinet-sections, and also reduce to a minimum the amount of vertical wood in the cabinet-sections subject to side 110 shrinkage. By securing these guide-ribs firmly but removably in their places, they may be rearranged in the compartments of the cabinet-sections, and the front opening of the cabinet-sections may thus be readily 115 changed so as to receive few wide drawers or a greater number of narrower documentdrawers.

The tail-piece G of the document-drawers entering the slots Q of their cabinet-sections 120 serve in holding the rear end of the document-drawers down when in place. The rear ends of the document-drawers are thus prevented from being elevated by a forward pull upon the tops of the fronts. This guards 125 against the lock-bars being lifted by manipulating the front of the document-drawers.

When the lock-bar N of a cabinet-section is down, the fingers of the lock-bar engage the tail-pieces of the document-drawers, and 130 thus lock all of the document-drawers in place. The lock-bars may descend into locking position by mere force of gravity. If this lock-bar be elevated by pushing upward

upon the projection O at the bottom of the cabinet-section, and so held, all of the document-drawers in that cabinet-section will be unlocked. This lock-bar will be pushed upward by the upward movement of the lockbar in the cabinet-section below it, and in this way all of the lock-bars move simultaneously, thus permitting a single actuation to unlock the entire cabinet.

The manipulation of the lever a in the base in an obvious manner serves to elevate the lock-bars of all of the superposed cabinet-sections, and the lock c of the cabinet-base may in an obvious manner be utilized in locking

15 the lever  $\alpha$  against actuation.

The lock-bar N of the cabinet-section C, Fig. 9, may have its fingers engage in tail-pieces upon ordinary drawers contained in that cabinet-section.

The movement of the lock-bar of the cabinet-section D serves in an obvious manner in oscillating the latch-levers W, which serve

in fastening the door R.

In case of fire the sections of the cabinet may readily be separated and removed to places of safety by means of the handles M, and the peculiar disposition of the handles is such as to secure against danger of the drawers, &c., sliding from the sections while being

30 hurriedly transported.

The partitions of the cabinet-section D—the one with the falling door—have their front edges set back some distance from the front of the cabinet-section, so as to leave a space between the fronts of these partitions and the rear face of the door when the door is closed. This space may be occupied by an index or other book. When the door is closed, the book stands upon the ledge V, and when the door is opened the book is brought forward in proper position for ready reference, and the simple closure of the door effects the proper placing of the book. By this arrangement indexed files may be consulted with peculiar readiness.

The compartment S of the cabinet-section D may have their inner depths regulated by adjusting the stop-blocks T. The strips U reach from front to back of the compartments 50 and the stop-blocks may be attached to these strips at any proper distance from their front ends to suit the depth of papers. The strips with the attached stop-block are then pushed into the compartments. The depth of com-55 partments may thus be adjusted variously and at will for different widths of papers, and the adjusting apparatus is readily withdrawn by pulling forward upon the strips. The strips U may be made of tin, and thus occupy 60 practically no space in the compartments. If made of very thick material, they should lie in suitable grooves cut into the floors of the compartments. When a pile of papers—such as legal blanks, for instance—is pushed into 65 one of these compartments, the backward movement of the pile is of course limited by

pile may possibly work under the back-stop, but it can go no farther than against the pins X, and when the pile is exhausted to the last 70 sheet that sheet may still be readily withdrawn.

Where cabinets have required to maintain their true form in order to secure the continued proper fitting within them of close-fit- 75 ting interior details, and where it has been attempted to associate such cabinets by piling one upon the other, a fatal trouble has been found to result from the warping of the contracting joint-surfaces by reason of the fact 80 that the joint-boards would have one of their surfaces exposed to the air and the other protected therefrom. It is not known or believed that prior to the present invention the construction indicated has ever been found 85 practicable. In the present device the cabinet-sections are constructed with but one complete horizontal joint-wall to each section, each section thus having one complete horizontal wall and one skeleton like open wall, whereby 90 each horizontal wall of the system has both of its faces subjected to about equal exposure to the atmosphere. In practice with the improved construction no difficulty whatever is experienced in maintaining proper condition 95 of the cabinets for years even in unfavorable climates. The skeleton like construction of the open horizontal wall of each section serves also in forming the female intermembering dowel element of the system. Furniture has 100 been heretofore constructed with horizontal skeleton partitions, the entire structure being integral. I do not claim such construction, nor do I claim constructions in which superposed elements have complete contacting sur- 105 faces, whereby one surface of each horizontal wall is improperly protected from the reach of air; nor do I claim constructions in which the superposed sections are without floors, save such as may be furnished by the roof of 110 the sections below them.

Cabinets have heretofore been arranged with locking-bars, &c., so arranged that the manipulation of a single part in the base of the cabinet would serve in throwing the bolts 115 for a number of drawers or the like. I make no claim to such general arrangement; but I have no knowledge of any prior device in which the locking-bar of a separable cabinetsection was arranged to project through the 120 wall of the section, so as to be adapted to operate the lock-bars of other sections which might be superposed, whereby the manipulation of some single part in the base would serve in throwing the lock-bars of all of the 125 cabinet-sections which might be permanently or temporarily superposed upon the base.

I claim as my invention—

in suitable grooves cut into the floors of the compartments. When a pile of papers—such as legal blanks, for instance—is pushed into one of these compartments, the backward movement of the pile is of course limited by the back-stop T. The bottom sheet of the

2. In an office-cabinet, a series of drawers F, having bottom grooves H, and a drawerreceiving cabinet-section adapted to receive several of said drawers immediately side by 5 side and having a horizontal series of removable ribs J, combined substantially as and for the purpose set forth.

3. In an office-cabinet, a drawer-receiving cabinet-section having a slot Q in its rear and 10 provided with a rising and falling lock-bar, and a document-drawer F, provided with mortised tail-piece Gengaging said slot, combined

substantially as and for the purpose set forth. 4. In an office-cabinet, a vertical series of 15 cabinet-sections, an independent lock-bar N in each of said sections, provided with projections O, working through the tops and bot-

toms of the sections, and a rock-bar engaging the lock-bar of the lowermost section of the series, combined substantially as and for the 20 purpose set forth.

5. In an office-cabinet, a cabinet-section D, falling door R, and ledge V upon said door contiguous to the hinge thereof, combined substantially as and for the purpose set forth. 25

6. In an office-cabinet, a cabinet-section D, having compartments S, perforated strips U, back-stop T, and pins X, combined substantially as and for the purpose set forth.

JAMES W. SEE.

Witnesses: W. A. SEWARD, A. Myers.