

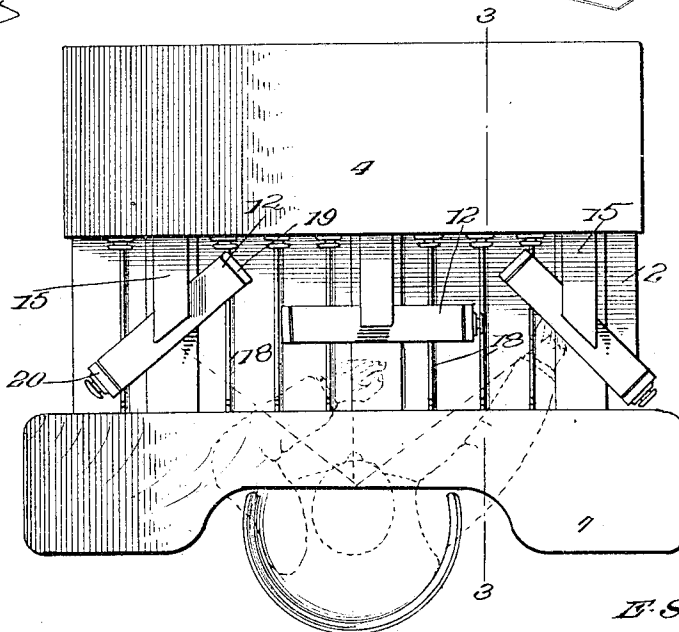
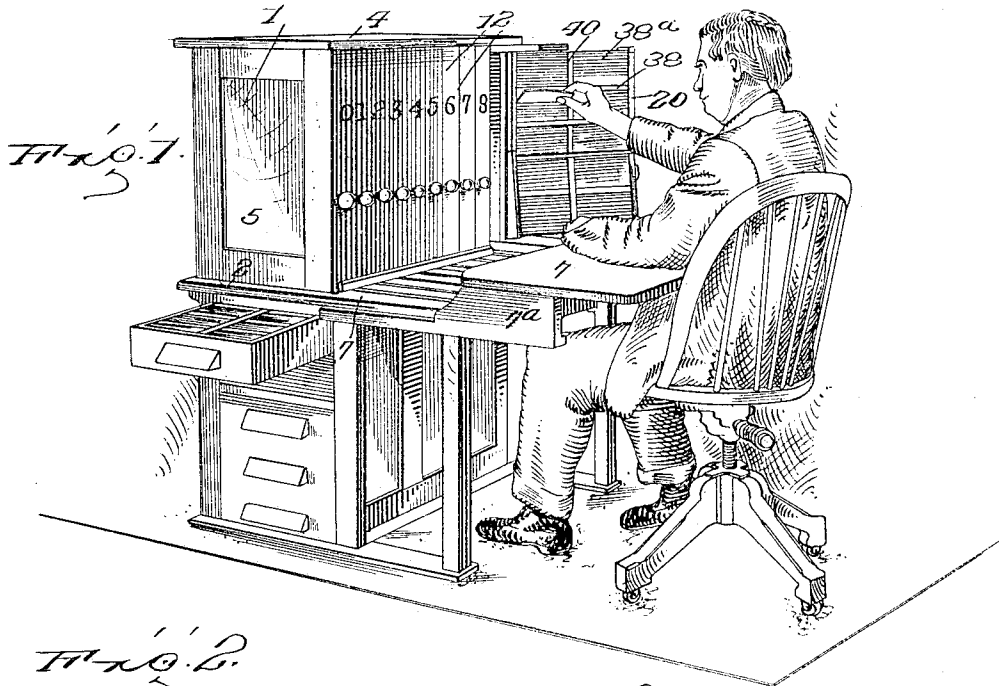
E. S. DAVIS.
FILING CABINET.

APPLICATION FILED JULY 10, 1912.

Patented Dec. 15, 1914.

3 SHEETS-SHEET 1.

1,121,330.



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3 SHEETS—SHEET 2.

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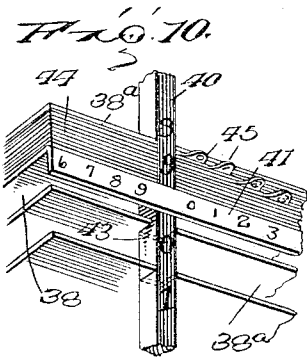
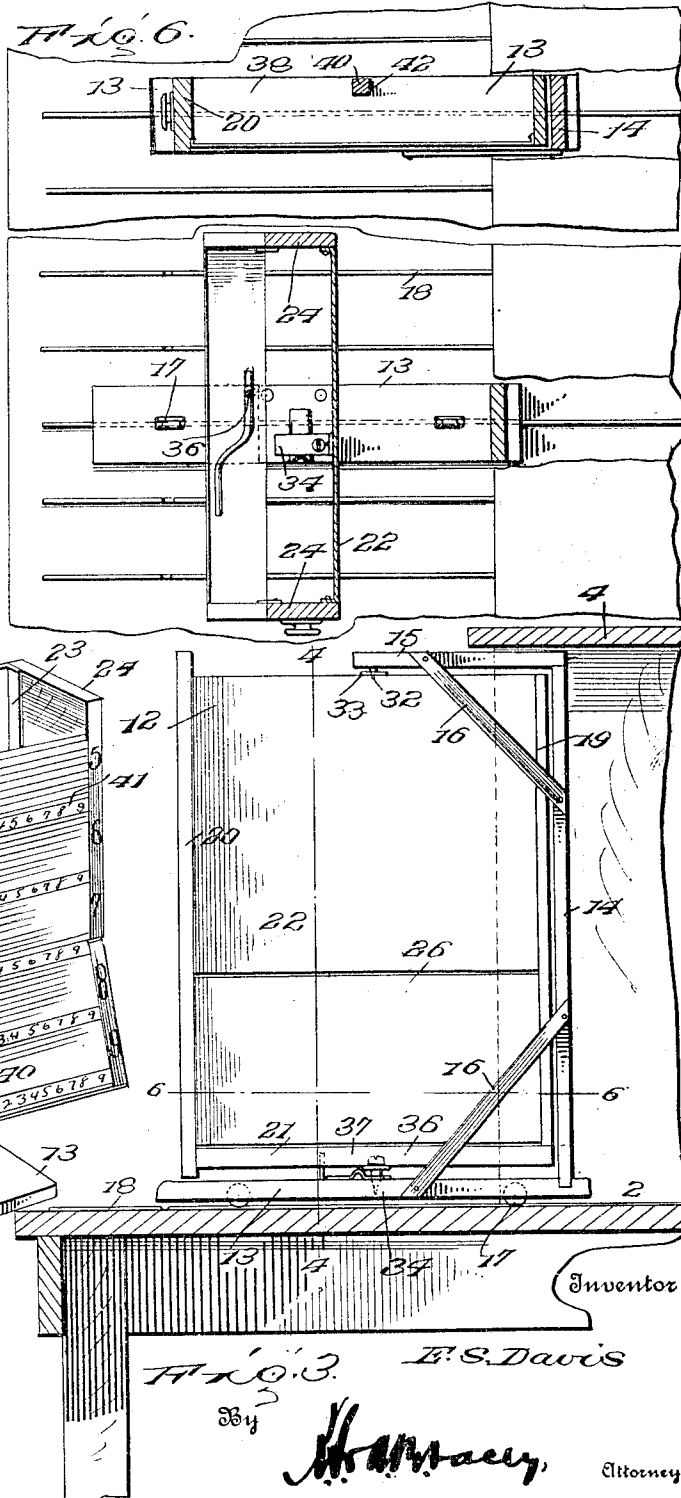
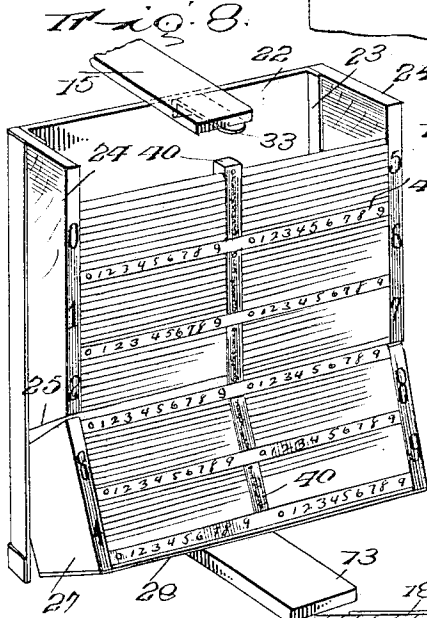


Fig. 7.



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Fig. 3.

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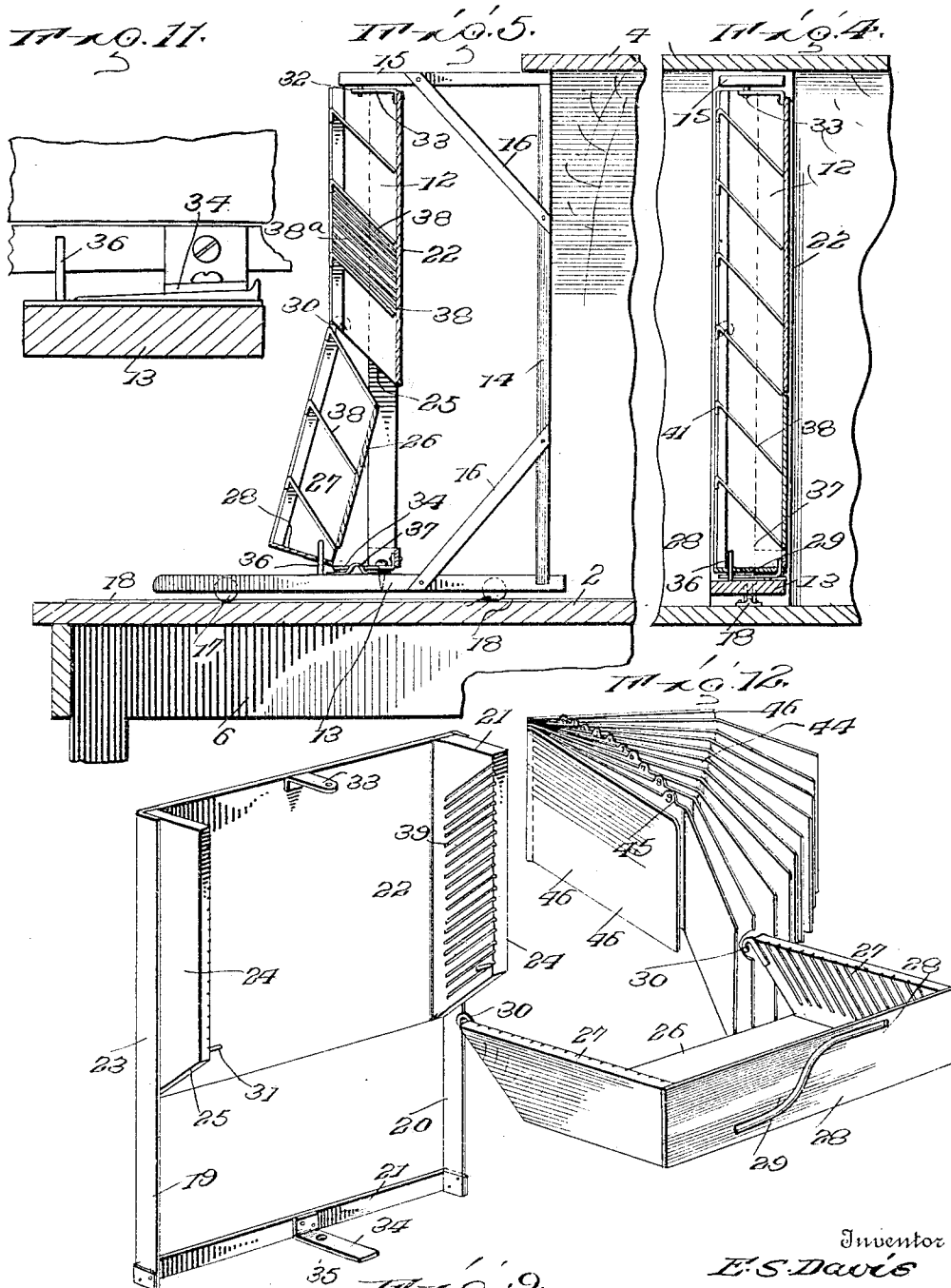
E. S. DAVIS.
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3 SHEETS—SHEET 3.

1,121,330.



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UNITED STATES PATENT OFFICE.

ERNEST SPENCER DAVIS, OF BRISTOL, TENNESSEE, ASSIGNOR TO DAVIS AUTOMATIC FILING COMPANY, INC., OF BRISTOL, TENNESSEE.

FILING-CABINET.

1,121,330.

Specification of Letters Patent.

Patented Dec. 15, 1914.

Application filed July 10, 1912. Serial No. 708,719.

To all whom it may concern:

Be it known that I, ERNEST S. DAVIS, citizen of the United States, residing at Bristol, in the county of Sullivan and State of Tennessee, have invented certain new and useful Improvements in Filing-Cabinets, of which the following is a specification.

This invention relates to certain new and useful improvements in cabinets for indexing records of any character, such as insurance records, claims, real estate records, and the like, the invention being particularly designed for use in railroad offices for keeping index card records of the arrival, departure, destination, or location of freight cars. It is to be understood, however, that the invention is not limited to any specific use, but is applicable wherever records of any character are to be kept by a card index system.

The invention has for its primary object an improved cabinet for filing index records of the card type, in which the cards or pages, or the equivalent thereto, are so grouped and indexed that a minimum amount of mental selection is required of the operator in order to find any card desired, the cards themselves being provided with indicia designating numerically the particular compartment or pocket in which they are disposed, and the cabinet providing primary, secondary, and tertiary compartments, whereby the operator in selecting a card or replacing a card, or the equivalent thereof, may turn immediately to the proper compartment. The cards are preferably so arranged that they may be inserted in their compartment in any order and yet be taken therefrom without the necessity of looking over all the cards in the same compartment.

A further object of the invention is to improve upon and simplify the indexing apparatus or cabinet as described in my pending application, filed on the 31st of October 1911, Serial No. 657,846.

A further object is to improve upon the details of construction disclosed in said pending application so as to simplify the apparatus and means for selecting the cards.

My invention is illustrated in the accompanying drawings, wherein:—

Figure 1 is a perspective view of a cabinet constructed in accordance with my invention, the view showing the manner in which the cabinet is to be used; Fig. 2 is a plan view of the cabinet illustrated in Fig. 1, an

operator being shown in dotted lines, and several cases or drawers of the cabinet being opened to show the relative positions taken by these cases or drawers when drawn out; Fig. 3 is a vertical section through a portion of the cabinet illustrated in Fig. 1, showing one of the drawers or cases opened out of the cabinet, the section being taken on the line 3—3 of Fig. 2. Fig. 4 is a sectional view on the line 4—4 of Fig. 3. Fig. 5 is a like view to Fig. 3, the card-containing case, however, being turned to a position at right angles to the position shown in Fig. 3 and being in section; Fig. 6 is a horizontal sectional view on the line 6—6 of Fig. 3; Fig. 7 is a like view to Fig. 6, but showing the card-containing case at right angles to the position shown in Fig. 6; Fig. 8 is a perspective view of one of the card-containing cases; Fig. 9 is a perspective detail view of one of the card-containing cases, the lower swinging portion thereof being detached; Fig. 10 is a perspective detail view showing the front of one of the card-containing sections and the means for locking the dividing plates of the sections in place; Fig. 11 is a detail view of the means for limiting the rotative movement of the case or drawer; Fig. 12 is a perspective view of a card book with the leaves or cards unfolded.

Referring to the drawings, the numeral 1 designates the body or housing of my improved cabinet, the same being formed with a base 2, a back, a top 4 and sides 5, the front of the cabinet being open and the base extending forward of the open front to provide for the support of front supporting bars hereinafter described. If desired, the cabinet may be supported upon a specially devised table frame 6, used in connection with a shelf or leaf 7. This shelf or leaf 7 is mounted upon slides 7^a mounted upon the frame of the table so that the shelf may be slid in or out toward or from the face of the cabinet or housing mounted upon the table and when said shelf is shifted outward it is at such a distance from the front of the cabinet that the cases mounted in the cabinet may be easily handled. When the shelf is moved inward, however, it is supported immediately above the top of the table, thus economizing in space. The shelf, of course, is disposed in a plane above the plane of the table.

The cabinet 1 contains a plurality of slid-

able cases which may be compared to vertically disposed drawers. These cases are preferably vertically disposed for reasons more fully disclosed later, and said cases, designated 12, when retracted or closed are flush with the open front of the cabinet 1.

I have illustrated in the drawings the cabinet as being provided with ten of these drawers, numbered from 0 to 9. It is understood, however, that the invention is not limited to this number nor to any particular number of drawer-like cases, as the number depends upon the size of the record to be kept. Preferably, however, there are ten of these cases or drawers for each cabinet. As these cases 12 are all alike, a description of one will suffice, the case number 9 at the right hand end of the cabinet being selected for this purpose.

The case includes a slide consisting of a bottom supporting bar 13 extending forwardly over the forward extension of the base 2, as clearly illustrated in Fig. 3, a rear standard 14 rigid with and rising upward from the supporting bar 13 near the rear end thereof, and a relatively short upper bar 15 connected to and extending forward from the upper end of the standard 14. These bars 15 and 13 are at right angles to the rear standard 14 and are held in this rectangular relation by diagonal braces 16 which constitute stops for the case. The lower bar 13, which forms the base of each of the drawers or cases, is curved to partially house grooved wheels 17 which engage with tracks 18 extending outward upon the shelf or base 2. This permits each drawer to be very readily shifted and aids the easy operation of the device. Between the lower bar 13 and the upper bar 15 is a card-supporting frame composed of two vertical members 19 and 20 connected at their lower ends by means of a cross piece 21 and also connected by a back piece 22 formed of sheet metal. The member 20, it will be observed, is longer than the member 19 and is sufficiently long so as to entirely close the opening in the cabinet, within which the slide is mounted, thus preventing the entrance of dust into the interior of the cabinet. This member 20, therefore, forms the front end of the drawer or case and is, of course, to be finished in the same style as the cabinet itself.

The back plate 22 is of sheet metal, and, as illustrated in Fig. 9, has side flanges 23. This back plate 22 is only a portion of the length of the bar 19 and the bar 20, but the side flanges 23 are nearly the full length of these bars, as plainly illustrated in Fig. 9. At the lower end these side flanges 23 are connected by means of the cross piece 21, previously referred to, which is also of sheet metal.

Attached to the back plate 22 and extend-

ing out at right angles therefrom at each side are the side pieces 24 which are preferably made of wood and are formed with a plurality of downwardly and rearwardly inclined grooves on their inside faces, the purpose of these grooves being later described. The lower edge of each of the side pieces 24 is downwardly and inwardly inclined, as at 25. These side pieces 24 are rigidly attached in any suitable manner to the bars 19 and 20, so that the upper portion of the card-supporting frame is rigid. The lower portion of the card-supporting frame is pivotally connected or hinged to the upper portion, said lower portion being illustrated detached from the upper portion in Fig. 9, and consists of a back plate 26 formed of sheet metal, the opposed side members 27 formed of wood internally grooved in the same manner as the side pieces 24, and the lower ends of these side pieces are connected by a transversely extending member or members, as illustrated in Fig. 9. These side pieces 27 are connected by a plate having therein a curved slot 29, for a purpose to be later stated. The upper ends of the side pieces 27 are formed with hooks 30 adapted to engage over studs 31 projecting from the inside faces of the side pieces 24 at the outer lower corners thereof. It will be noted that the upper ends of the side pieces 27 are beveled or inclined to correspond with the inclination of the lower ends 25 of the side pieces 24, so that the portion of the supporting frame formed by the members 27, 26 and 28 may swing either into alinement with the upper portion of the card-containing frame or may swing out at an angle thereto, as illustrated in Fig. 5.

The card-supporting frame for each of the drawers or cases is pivotally supported at its upper and lower ends, so that they may be turned either parallel to the bars 15 and 13 or at an angle thereto, as illustrated in Fig. 2. To this end, the bar 15 is formed, near its extremity, with a downwardly projecting pivot-stud 32, and attached to the back plate 22 at the upper face thereof is an outwardly projecting finger 33 formed with a perforation for the reception of the stud 32. The cross bar is also provided with an outwardly projecting angular finger 34 formed with a perforation for the reception of a pivot-stud 35 projecting upwardly from the slide bar 13, as shown clearly in Fig. 5. The pivot-stud 35 is in the form of a screw. This finger 34 is extended as shown in Fig. 11 some little distance beyond the screw 35 and is adapted to frictionally engage with a wedge-shaped member 36 attached to the slide. This member is formed at its outer end with a stop 36^a with which the extension of the finger 34 engages to limit the rotative movement of the card-supporting frame or case. It will be seen that the degree of fric-

tional engagement between the finger and the member 36 may be regulated by turning the screw threaded pivot pin 35.

In order to cause the lower portion of the case to swing outward when the case is turned into angular relation to the sliding frame upon which it is supported, I provide an upwardly projecting pin, designated 37, and attached to the slide bar 13, this pin being disposed on the middle line of the bar but outward of the pivotal center 36 upon which the card case rotates and engaging the curved slot 29, so that, when the card case is in a position parallel to the bar 13, the lower or hinged portion of the card case will be swung into alinement with the upper portion of the case, but, when the case is turned at an angle to the supporting frame of the case, the lower portion thereof will be swung outward in the manner illustrated in Fig. 5, so that the face of this lower portion of the case will be disposed in angular relation to the face of the upper portion of the case. The purpose of this will be later described.

It will be seen that so far as described, I have provided a cabinet having cases or drawers mounted to slide into or out of the cabinet and also mounted so as to be rotated into an angular position with relation to the face of the cabinet, so that the face of any particular case may be presented at right angles to the line of vision of an operator, as illustrated in Figs. 1 and 2. It will be obvious that in order that each particular drawer may be turned into a position at right angles to the line of vision of an operator seated at the middle of the shelf 7, it is necessary to cause the middle cases or drawers to turn nearly parallel to the face of the cabinet, but that those drawers or cases near the ends of the cabinet cannot turn into such a position but must be turned merely at an angle to the face of the case and that this angle will vary with the position of the drawer. By changing, for each particular drawer or case, the position of the stop 36, it will be obvious that the degree of rotative movement of each particular case or drawer may be limited, so that when fully rotated to a position where the finger 34 strikes the stop 36 the case or drawer will be in proper position for observation. This is a very important feature of my invention, and tends greatly to reduce the strain and effort on the part of the operator, as the cards contained in each case are supported directly at right angles to the line of the operator's vision, and in such position that they may be most easily handled. It will likewise be seen that I have provided means whereby the lower portion of each case or drawer is swung outward, thus bringing the cards therein, which are disposed in the case or drawer at an inclination, into such position that they may be

readily observed by the operator. It will be obvious that with the cards or leaves arranged at an inclination, so that the cards extend rearward and downward, the cards in the lower portion of the case would not be presented ordinarily so as to be readily observed by the operator, but that when the lower portion of the case is turned outward, this difficulty is obviated. This turning outward of the lower portion of the case is entirely automatic and, of course, whenever a drawer or case is drawn outward and then turned to its proper angle.

There are preferably ten of the cases or drawers referred to, and each case or drawer forms a primary receptacle divided into secondary sections by means of suitable separating members, designated 37. There are preferably ten of these sections, each section being defined by the separating member 38 which extends from front to rear of the case and downward and rearward. Each of these sections in turn is divided into a plurality of card or leaf compartments forming tertiary compartments. These tertiary compartments are formed by plates 38^a inserted in the grooves 39 cut in the inside faces of the side pieces 24 and 27, as illustrated in Fig. 9.

As illustrated in this form of my invention, the space between the side members 24 and the side members 27 is long enough for two sets of cards, and in order to divide the two sets of cards, I provide a middle dividing strip or member, designated 40, which extends down from top to bottom of the case and which is connected to the plates 38 and the plates 38^a in any suitable manner. Preferably, the plates 38, as illustrated in Fig. 4 and in Fig. 10, are formed at their forward edges with downwardly extending flanges 41, these flanges presenting the appearance of relatively wide strips defining the several sections of the card case. Each of these plates 38 is provided at its middle, inside of the flange 41, with an opening 42 through which the bar 40 extends, as illustrated in Fig. 6, so that the bar 40 acts to lock the plates 38 in place, and the plates at the same time act to lock the bar 40 in place. The intermediate plates 38^a, which separate the space between the plates 38 into subsidiary or tertiary compartments, are simply formed with a recess 43, as shown in Fig. 10, which embraces the bar 40. This bar 40, it will be seen, forms the locking bar for these plates 38^a which prevents the plates from being pulled upward, the plates being, of course, supported in the grooves 39, previously referred to.

It will be noted from Fig. 8 that the side pieces 24 and 27 are of sufficient width to receive on their edges the numerals from 0 to 9, and that the faces of the flanges 41 are also wide enough to receive the nu-

merals 0 to 9. From this portion of the description, it will be seen that I have provided a primary case or drawer divided into secondary sections, and that these secondary sections are in turn divided into tertiary card compartments. Each case is divided into ten secondary sections numbered (upon the adjacent side piece 24 or 27) from 0 to 9, and that each of these secondary sections is divided into ten minor compartments or pockets also numbered from 0 to 9. The numbers for the tertiary compartments or card-containing compartments are displayed upon the face of the bar 40, as illustrated in Fig. 8.

Each of the compartments, divided by the plates 38^a and forming card-containing compartments, is designed to contain ten cards or leaves, and as there are ten of these compartments, each section will contain one hundred cards. As there are ten sections in each case or drawer, each case will contain one thousand cards, and as in the illustration of my invention shown in Fig. 1, there are ten of these cases or drawers, the cabinet will contain ten thousand cards.

The cards, 44, contained within the compartments 26 are all of the same character and differ from each other merely in the fact that the tab 45 of the cards designed for the same compartment is differently placed on the card from the tab of any other card, for instance, one of the cards of a compartment has its tab 45 placed at the end, this tab being numbered "0," the card having the tab placed to the right of the tab of the first card is numbered "1," the next succeeding card has its tab so disposed that it is to the right of the card having thereon the tab carrying the numeral "1," and so on, so that the cards are in proper position within the proper compartment. The tabs "0", "1", "2", "3", "4", "5", "6", "7", "8", "9" will be seen immediately above the numerals 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, marked upon the separating member or plate 38. Thus, by reading downward upon the vertical separating member or bar 40 and then reading upward along the inner column designated by the numerals 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, the proper card may be immediately secured, this card having its tab projecting at a point intersected by a line extending from the proper numeral upon the separating member 38 and the separating member or bar 40.

Each pocket or compartment divided by the separating plates or members 38^a contains ten cards, and each card carries upon its face four or more indexing numerals. For example, one pocket or compartment may contain ten cards, one of the cards being indexed 9451, all of the other cards in the same pocket or compartment will be in-

dexed with the first three digits of this number, that is, with the 945, but the fourth digit should be different, as for instance, 9452, 9453, 9454 and so on up to 9459, the series beginning with 9450.

The fourth digit from the right of each card containing the numeral 9 will refer to the drawer or case in which all cards whose first digit is 9 are to be found. If it is desired to find the card containing the index card number 9453, the operator will pull out the case having the numeral 9 at the top. The next numeral on the card is 4, and, therefore, the operator refers to the fourth section containing all cards whose first digit is 9 and whose second digit is 4. If now the third digit be 5, the operator will refer to the column of vertical figures on one wall of the section 9 until he arrives at the compartment numbered 5. All cards belonging to the ninth case, fourth section, and the fifth compartment will be found in this compartment 5. The last numeral on the card being 3, the operator will select the card whose tab projects in alinement with numeral 3 on the face of the flange 41, which will be the card numbered 9453. In placing the card back in the receptacle he will follow the same operation.

It will be seen that with this system, a card numbered 9453 belongs in the ninth case, fourth section, fifth receptacle, and has a tab which projects up in the third column of said receptacle. As another example, if the operator desires the card with the index card number 8321, he will pull out No. 8 drawer or case, reach his hand toward the section denoted and reaching into the compartment No. 2 will extract the card having thereon "1" as its last digit. It is believed that these two examples are sufficient to show the operation of my cabinet. It will be understood that the card does not necessarily contain only four digits, as they might contain many more. Thus, if the operator should desire the card numbered 129453 or 309453, he will still go to the ninth case, and to the fourth section of said case and extract from the fifth compartment, the card numbered 3. For each card indexed as 9543, the number printed thereon will contain a plurality of duplicates of such number with spaces in front wherein the other numbers preceding the "9" may be placed. Thus, each card, leaf, or equivalent indicia-containing member is adapted to contain data relating to more than one car or subject.

It will be seen that the cabinets forming the subject-matter of this invention are adapted to contain and has been devised for containing a card catalogue system worked out on a basis of tens and also on a basis of four digits for the lowest number in a series. The fourth digit or numeral from the right of the number is the key or starting numeral,

the second digit referring to the secondary compartment, the third digit referring to the tertiary subdivision or compartment within the section, and the fourth digit referring to the place of the card within the said compartment.

While I have referred to the index cards as being of an ordinary form, and while cards having an ordinary form may be used perfectly with my invention, I have devised for use with this cabinet, an arrangement of cards such as illustrated in Fig. 12, which has been found particularly convenient in practice, and which is rendered necessary by the fact that ordinary sized cards, such as are commonly used in card index systems, are too small for containing all of the data desired to be placed upon the card. It is, therefore necessary to use a card approximately double the size of the ordinary card and therefore to provide for the card being folded. In Fig. 12, 44 designates the cards for a compartment. There are ten of these cards, each card being double the size of an ordinary card and normally folded at its middle. The upper long edge of the card is provided upon the main body thereof with the upwardly projecting tabs 45, these tabs being numbered from 0 to 9, as previously described. The ten cards are contained between covers of thin paper or any suitable material, these covers being designated 46 and being shown as attached to the left-hand ends of the cards, so as to bind all of the ten cards together in the form of a book. It will be noted that the tabs are disposed upon the side edges of the cards and are exposed along the side edge of the covers, but that the cards open out or unfold lengthwise of the covers 46. This arrangement of the cards is of particular advantage in that the cards may be most readily lifted out of the proper pocket and that as the package of cards is drawn out from a pocket by taking hold of the tab of the card required, the folded portion or extension of the card will open out, and the book as a whole will open at the card, the tab of which is held by the hand. I have found in practice that this book of cards or package is extremely convenient and very much facilitates the work of handling the cards, and, furthermore, permits the cards or leaves 44 to be of such size as to contain a full record, such as is necessary where my filing cabinet is used at the main offices of a railroad company. It will be understood, however, that by the term "cards", I mean to include any leaves whether of paper or cardboard and whether bound in the form of a book, as illustrated in Fig. 12, or loose as used in the ordinary card index systems.

It will be seen that I have provided a very simple and efficient cabinet for indexing which will facilitate to a considerable degree

the operation of finding any card indexed or replacing any card in its proper position. The system is a continuous one, for instance, after any card has been filled, it may be removed from the case and filed away among permanent records and replaced by a new card. In order to make the cabinet most effective, it is necessary that it should contain ten thousand cards, no more or no less; that there should be ten cases contained within the cabinet, each case containing one thousand cards and being divided into ten sections numbered consecutively from 0 to 9; that each section be in turn subdivided into ten compartments numbered consecutively from 0 to 9, and each compartment should contain ten cards or leaves corresponding to the numerals 0 to 9 disposed across the front of the compartment.

While each card might be used for one particular item, as for instance, notation relative to one particular car, where the cards are used for indexing a large number of items, as for instance, in keeping track of the arrival and departure of freight cars, etc., each card contains ten transversely extending spaces, each for the record of one car. Opposite each space is placed the number of the car, as for instance, 9510, or this number is placed adjacent the uppermost space. To the left of this number are vertical columns for additional numerals, the combination numerals opposite any space giving the full number of the car. Thus, for instance, if it is desired to index a car No. 149510, a card having the four digits 9510 is used and the first two digits 14 of the number 149510 are placed in the two columns on the end of the key numeral 9. All cars which have a number whose last four digits are 9510 are to be indexed under 9510 card.

On an ordinary card there are ten spaces for ten entries, thus giving a capacity for the whole cabinet of one hundred thousand entries, but this is doubled by using the back of the card for entries as the front of the card is used. Ordinarily, however, the capacity for one hundred thousand entries is amply sufficient. When a card is completely filled it is removed to a duplicate filing system and a new card having a same number put in place of the old, the new card containing indicia showing that the old card has been removed to the duplicate system.

In order to show how completely my system may be carried out, it is pointed out that the front panel of each case may be provided with numerals indicating what are the numerals affixed to the key numeral of cards placed in that particular case. Thus, case No. 1, as illustrated in Fig. 1, may have thereon numerals 1—11—21—31—41—51—131—141—151, the numeral 1 being the key numeral indicating the case in which the cards are contained, the numeral to the left

of the key numeral 1 being the first and second numerals of the car number. The numerals to the left of the key numeral and the key numeral itself may be used as a means for finding the card.

It may be said that this cabinet has been thoroughly tested in connection with keeping track of freight cars, and that, whereas by the ordinary system in use by railroads, it takes sometimes as much as two hours to find a record of a particular car, by the use of my cabinet, the card required may be discovered within a few seconds. Further, the cards in any one compartment do not require to be handled in order that one card may be selected from the pack, but the position of the tab 28^a plainly indicates the card wanted. This is true even where the cards are bound together in the form of a book, as illustrated in Fig. 12. If this book is lifted from the pocket by the tab of the particular card desired, the book will open at the proper place and none of the other cards in the book need be touched. In ordinary card index systems, it is necessary that the card belonging to a certain subdivision be at least handled in order to discover one card of that particular subdivision record.

It is also to be particularly noted that all the cards in any one case are displayed at the same time, and that because of the fact that the pockets are superposed one upon another in a vertical series and that the pockets extend downward and rearward, the tabs on the cards will be displayed one above another. The tabs on the cards for any one pocket will, of course, be located in a horizontal line but inasmuch as the tabs for the cards of a series belonging in any one pocket are disposed differently to each other, no tabs are obscured. Where vertically placed cards are arranged in a horizontal series and separated into sub-sections by division cards, it is very difficult to pick out a card that is wanted as all the cards of the sub-section must be examined before the particular card wanted in that section can be found. This is not the case in my arrangement. The card desired can be seen and picked out at once. Further, it is pointed out that the cards do not have to be placed in any regular order in any one pocket. It is sufficient if the card is placed in the pocket in which it belongs without regard to the relation of the cards in the same pocket, and this is for the reason that the tab on any one card has its particular position on that card and that the tab on any one card in a pocket is differently placed from the tabs on any other cards in the pocket. It follows also that with this arrangement, when a card is removed from the pocket, its absence is plainly indicated by the lack of a projecting tab at the point

where the tab should be. Also if a card is placed in a wrong pocket, the fact is obvious because of there being two cards having corresponding tabs in that pocket. There is very little chance, therefore, with my arrangement of any mistake in placing or displacing the cards, and these mistakes may be readily seen and readily corrected.

It will be noted that each track is provided with depressions, one of the depressions being at the rear end of the track and the other depression near the forward end thereof. These depressions form stops engaging the wheels upon which the case is run so as to check the movement of the case as it is drawn out or forced into the cabinet, and furthermore the rear depression in each track tends to hold the case corresponding thereto in position within the cabinet and tends to prevent any one case being accidentally drawn out when another case at the side thereof is intentionally drawn out.

What I claim is:

1. A filing cabinet including a housing, a plurality of slides mounted in the housing and freely shiftable out therefrom, a plurality of cases rotatably mounted, one in each slide, means for limiting the middle cases to a rotation through approximately 180°, and means for limiting the rotative movement on each side of the middle cases to gradually decreasing angular distances in regular order from the middle toward the ends of the cabinet.

2. A filing cabinet including a sliding rotatable case formed of upper and lower sections, the upper section being rigid and the lower section being hinged thereto, and means for automatically swinging the lower section outward as the case is rotated to a display position.

3. A filing cabinet including a housing, a case sliding into and out of the housing and rotatably mounted for movement in a horizontal plane, said case being formed of upper and lower sections, the upper section being rigid and the lower section being hinged thereto, and means for automatically swinging the lower section outward as the case is rotated.

4. A filing cabinet including a housing, a case movable from the housing to display position and supported for rotatable movement when withdrawn from the housing, means for supporting cards within the case, and means for automatically changing the angular position of said card supporting means with relation to the plane of the case as the case is rotated.

5. A filing cabinet including a housing, a slide in the housing comprising upper and lower members and a vertically disposed connecting member, a case pivotally mounted between the upper and lower members

for rotation in a horizontal plane, said case including a rigid frame, an upper compartmented section rigid with the frame, a lower compartmented section hingedly mounted at its upper end, and means on the slide and case coacting to shift the lower end of the lower section outward as the case is rotated to a display position at an angle to the front of the housing.

6. A filing cabinet including a housing, a slide in the housing comprising upper and lower members and a vertically disposed connecting member, a case pivotally mounted between the upper and lower members for rotation in a horizontal plane, said case including a rigid frame, an upper compartmented section rigid with the frame, a lower compartmented section hingedly mounted at its upper end, and a pin projecting from the lower member of the slide and engaging a slot in the lower end of the lower section, said pin being set in advance of the pivotal axis of the case whereby to shift the free end of the lower section outward as the case is rotated to a position of angularity with relation to the slide.

7. A filing cabinet including a housing, a slide in the housing comprising upper and lower members and a connecting member, a vertically disposed case, a finger projecting from the upper end of the case and pivotally connected near its ends to the upper member, a finger projecting from the lower edge of the case and pivotally mounted upon the lower member for movement in a horizontal plane, said lower finger projecting beyond the pivotal axis of the lower end of the case, and a stop projecting upwardly from the lower slide and limiting the angular movement of the case relative to the slide.

8. A filing cabinet including a housing, a slide in the housing comprising upper and lower members and a connecting member, a vertically disposed case, a finger projecting from the upper end of the case and pivotally connected near its ends to the upper member, a finger projecting from the lower edge of the case and pivotally mounted upon the lower member for movement in a horizontal plane, said lower finger projecting beyond the pivotal axes of the lower end of the case, and a stop pin projecting upwardly from the lower slide and limiting the angular movement of the case relative to the slide, said finger at its extremity having frictional en-

gagement with the upper face of the lower member.

9. A filing cabinet including a housing open at its front, a plurality of slides mounted in said housing, each comprising an upper member and a lower member and a vertically disposed connecting member, a plurality of cases, each pivotally mounted between the upper and lower member of a corresponding slide for rotation in a horizontal plane, and means for limiting the amount of angular rotation of said cases from the middle case in regular order toward the end cases whereby to provide for rotating the cases to a display position at right angles to the radii extending from the middle of the forward edge of the table.

10. In a filing cabinet of the character described, a housing, a vertically disposed, rotatable case sliding into and out of the housing and including a vertically disposed frame and a card-containing support pivotally mounted at its upper end in said frame, and means for shifting the lower end of the support outward as the case is rotated to an angle with said frame.

11. In a filing cabinet of the character described, a housing, upper and lower slides mounted in the housing, a case pivotally mounted between said slides, a card-containing support hingedly mounted at its upper end between said slides, and means mounted on the lower slide engaging the lower end of the card support and shifting the lower end outward as the card support is turned from a position in alinement with the slide in a position at an angle thereto.

12. In a filing cabinet of the character described, a vertically disposed case rotatable in a horizontal plane, a card containing support mounted in the case, the lower portion of the support being movable outwardly to a greater degree than the upper portion thereof, and means for automatically shifting the lower portion of the card support outward to a greater extent than the upper portion upon the rotation of the case from one angular position to another.

In testimony whereof I affix my signature in presence of two witnesses.

ERNEST SPENCER DAVIS. [L. s.]

Witnesses:

FREDERIC B. WRIGHT,
P. C. THOMPSON.