

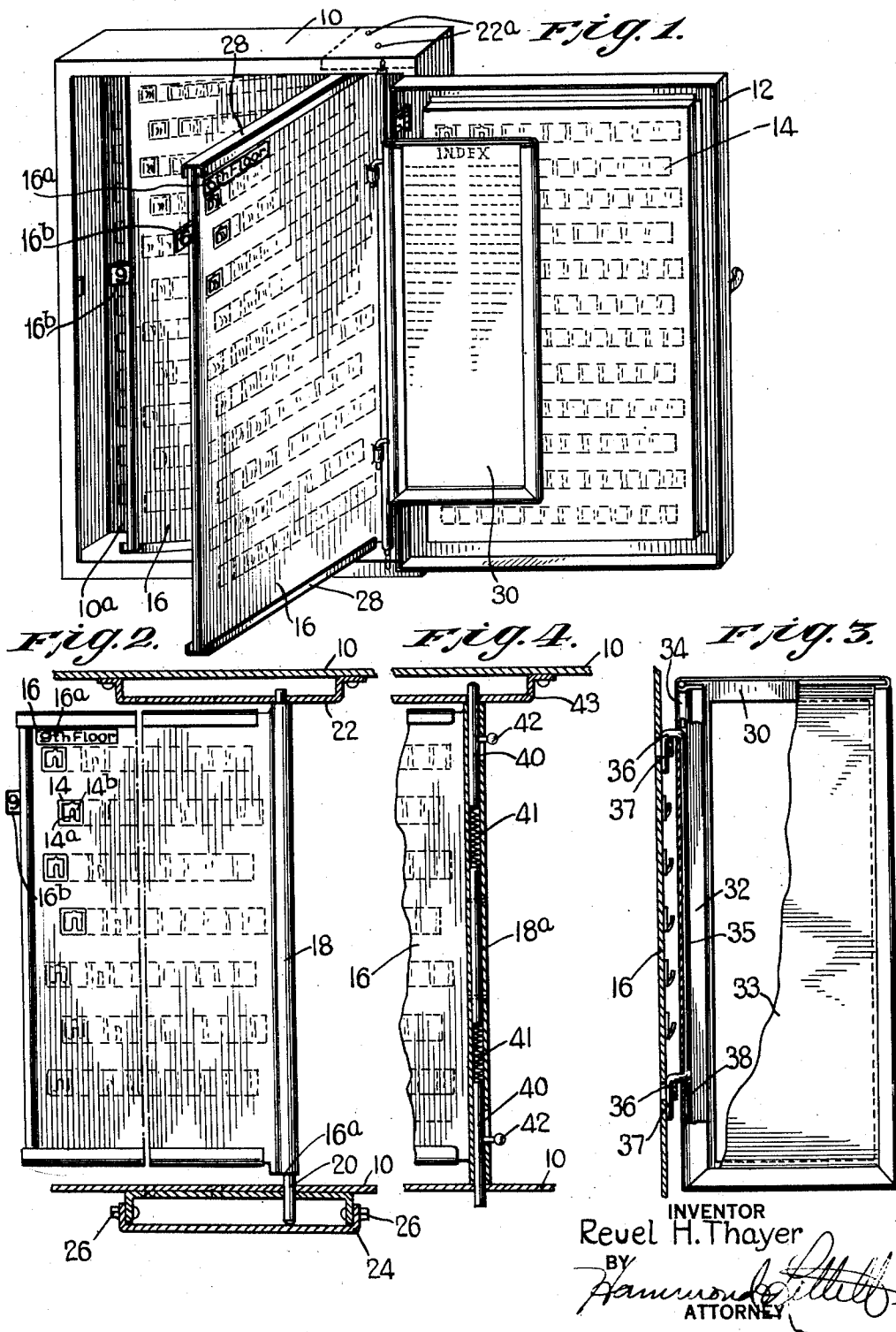
Feb. 27, 1934.

R. H. THAYER
KEY FILING SYSTEM

1,948,738

Filed May 9, 1931

2 Sheets-Sheet 1

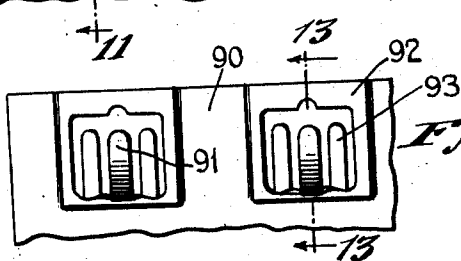
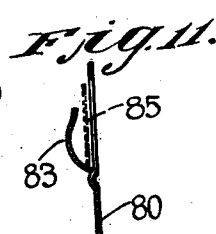
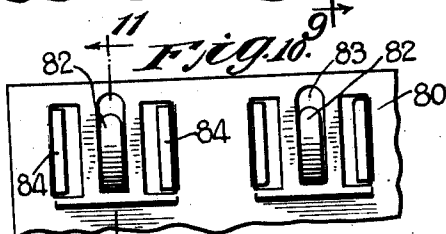
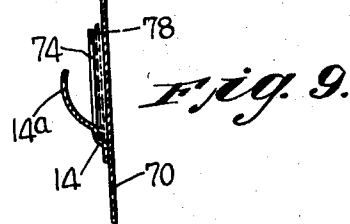
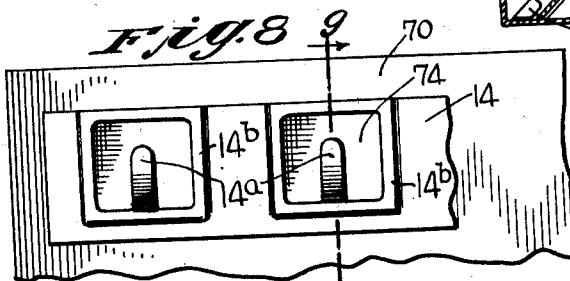
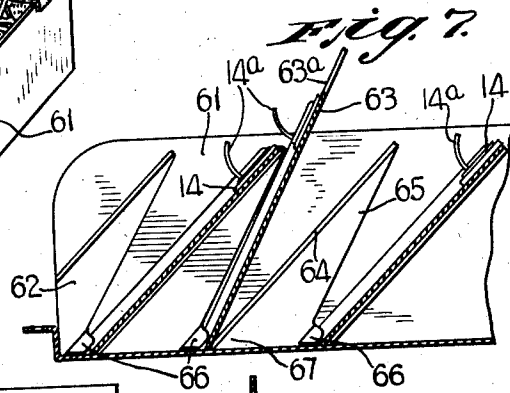
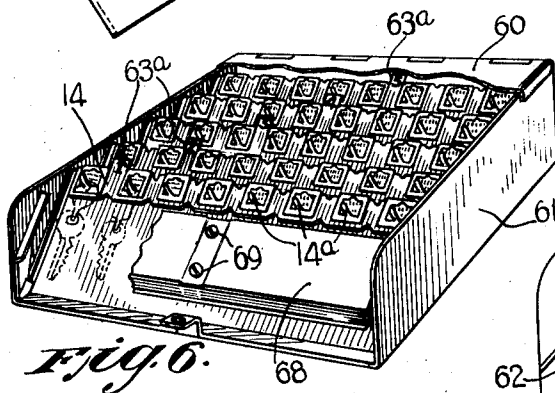
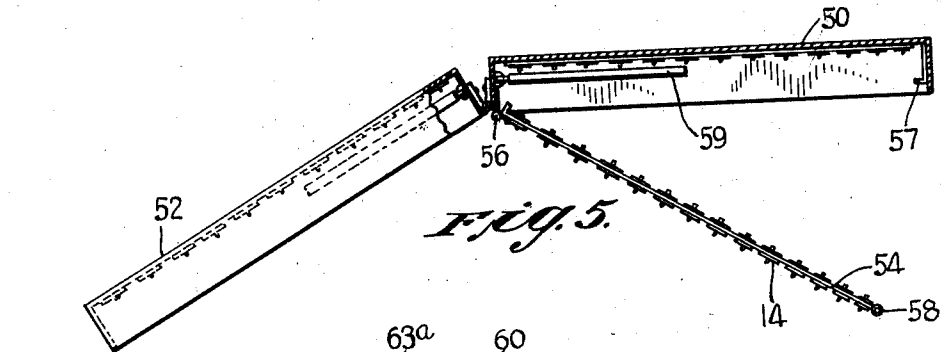


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2 Sheets-Sheet 2



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KEY FILING SYSTEM

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12 Claims. (Cl. 40—19.5)

This invention relates to improvements in key control and filing systems and more particularly relates to equipment for the proper care and control of large numbers of identified keys in a compact space so that they may readily be available for inspection and use by means of interleaved panels each having hooks and associated identifying label pockets.

One of the objects of the invention is to provide an indexed key file and key filing system having a plurality of leaves each having individual hooks for receiving keys and having a key identifying device adjacent each hook to permit instantaneous identification of each key. Another object of the invention is to provide a key filing or control system comprising a plurality of interleaved swinging panels each adapted to accommodate a predetermined number of keys and indexed so that the keys for any particular floor of a building for example may be quickly located.

Another object of the invention is to provide a key cross-index panel within a key filing cabinet which is provided with removable indicators adapted to indicate alphabetical and serial number indexes with cross-reference to the room number indicating insignia adjacent the key hooks.

Another object of the invention is to provide a key filing cabinet with interleaved, movable panels each provided with integral key hooks and integral identifying label pockets for indicating the adjacent key on said hook.

Another object of the invention is to provide an interleaved panel for key filing cabinets with projecting hooks in staggered relation for individual keys and label pockets for individual key identification mounted adjacent to said hooks.

Another object of this invention is to provide an integral key hook and identifying label pocket on a hook receiving panel by stamping and deforming the panel.

Another object of the invention is to provide a key filing cabinet with removable panels each provided with a plurality of individual key hooks and label pockets whereby the capacity of the cabinet can be revised as necessary.

Further objects and advantages of this invention will appear from the following description, taken in connection with the attached drawings which illustrate preferred forms of embodiment thereof and in which;

Figure 1 is a perspective of a wall key file with the door and a panel in the open position.

Figure 2 is a front elevation of a wall file panel showing the hinge securing means in cross section.

Figure 3 is a front elevation of an index card holder with parts broken away to show the details of the hinge construction.

Figure 4 is a front elevation similar to Figure 2 partially in detail showing a modified form of demountable key panel.

Figure 5 is a top plan view, partially in section showing a modified form of a wall file with interior panels.

Figure 6 is a perspective view, partially in section of a drawer key file comprising a plurality of interleaved panels.

Figure 7 is a vertical section through a part of a drawer key file showing one panel pulled forward.

Figure 8 is a front elevation of a part of a key panel showing the integral key hook and label pocket.

Figure 9 is a vertical section through the hook substantially on the line 9—9 of Figure 8.

Figure 10 is a front elevation similar to Figure 8 but showing further modified form of key hook and identifying label pocket.

Figure 11 is a vertical cross section on the line 11—11 of Figure 10.

Figure 12 is a front elevation similar to Figures 8 and 10 but showing a still further modified form of key hook and identifying label pocket.

Figure 13 is a vertical cross section on the line 13—13 of Figure 12.

The control of keys including the proper filing and indexing and identification particularly of duplicate sets of keys has become a problem of great importance particularly with large office buildings, industrial plants, apartment houses, hotels and the like, and in fact wherever keys are used. With the larger buildings, thousands of keys classified as to floor and particular use must be orderly arranged to prevent the costly confusion when a particular key is greatly needed. In the present invention I have provided a system whereby a large number of keys may be orderly arranged, identified and indexed and by means of swinging panels divided into units or floors, said system contemplating in general either wall storage safes or drawer storage files. In brief I have applied the visible index filing system to the control of keys by means of interleaved panels of the wall or drawer type. In the embodiment of the invention shown in Figure 1 the wall file cabinet 10 is provided with a door 12, which may if desired be provided with a plurality of hooks

and identifying labels such as 14. The back wall 10a of the cabinet may if desired also be provided with hooks and label pockets of any desired form. The interior of the cabinet is however provided with a plurality of interleaved panels 16 which may be in any number depending upon the size of the system and which are free to move within the safe 10 and to a position of ready accessibility and these interleaved panels 16 are similarly provided with hooks having identifying means such as the pockets 14 whereby the key on each hook may be identified. Each panel 16 is preferably provided with panel identifying insignia 16a or 16b which identify the floor to which the keys on that panel belong and if possible it is desirable to have a separate panel for each floor so that on removal of a particular panel all the keys for that floor may be removed or if it is desired to locate the duplicate key to room 1257 the operator merely swings the first eleven panels aside and removes the key on hook number 57 of the 12th floor panel.

As shown in Figure 2, the panels 16, having the key receiving hooks and label pocket units 14 are preferably provided with an enlarged tubular portion 18 acting as a guide for the central post 20 by which the panel is pivoted in the cabinet. The top of the cabinet 10 is provided with a bearing member 22 through which the upper end of the rod 20 projects, and the bottom of the cabinet 10 is provided with a two-part bearing 24 on which the rod rests supporting the panel above the bottom of the cabinet. Suitable bolts 26 are provided whereby the lower half of the bearing member 24 may be removed thus permitting the panel 16 to drop so that the shoulder 16a contacts with the bottom of the cabinet 10 which movement will be sufficient to permit the upper end of the rod 20 to come out of the bearing 22 so that the panel may be removed from the cabinet. As shown in Figure 1, the bearing member 22 is provided with a plurality of apertures 22a to receive the upper end of the rods 20 and so the number of panels in the cabinet may be increased as desired.

The panels 16 may be provided with a plurality of U shaped angle members 28 at the top and bottom thereof extending the width of the panel and acting as stops or guides to prevent the panels from closing on one another and preventing the hooks or keys from inter-engagement. It is to be understood that the panel 16 may be provided with hooks on one or both sides depending on the size of the unit and the type of indexing system installed.

Each hook unit 14 is provided with a hook 14a and an identifying label which may be placed in a pocket adapted to receive a suitable label to identify the particular key or other device suspended from the hook. The keys may be marked and suspended from the hooks or may be provided with suitable indicating markers secured to the key and secured to the hook.

Regardless of the size of the cabinet by means of the interleaved and indexed panels the entire file is readily accessible and compactly stored, missing keys can be quickly detected and desired keys quickly located, duplicate keys may be filed on the same hook and the panels 16 may be provided with projecting tabs 16a giving the number of the panel so that any particular panel may be quickly turned to without having to thumb through each individual panel.

For greater convenience in cross referencing

the key, an index panel 30 may be provided, which index can readily be supported on the panel or as desired. The index can preferably be placed between each bank of keys and may preferably be provided with cross reference as to alphabet, the number, or occupant of the office or apartment. It will be possible with such a cross index to refer to a key by serial number as well as by alphabetic description or as to tenant or lock.

As shown in Figure 3 the indexed panel 30 is a rectangular frame provided with a central groove 32 in which the index card or cards 33 are inserted. The hinged portion 34 of the panel is adapted to receive a wire rod member 35, which being bent on itself and in U shape form at 36 acts as a hinge. Suitable projections 37 may be depressed from the key panel 16 offering the complementary hinge portion to the pins 36. Additional pin members 38 may be inserted within the enlarged hinge portion 34 of the index panel 30 for reinforcing purposes.

A modified form of construction for removably securing the key panels 16 in the cabinet 10 is shown in Figure 4. In this form, the hinge portion 18a of the panel 16 is provided with spring pressed lugs 40 held in position by the springs 41 so that the lugs 40 will act as axes on which the panel 16 will swing. By means of projections 42 the lugs 40 may be withdrawn from the bearing members 43 at the top and bottom of the cabinet so that the panel 16 may readily be withdrawn and reinserted. Other methods may also be provided for removing or adding panels to enlarge or diminish the capacity of the cabinet as desired without departing from the scope of the invention.

The wall cabinet file 50 shown in Figure 5, is of slightly different construction than the file 10 in Figure 1, inasmuch as the file 50 is provided with a hinged door 52 of substantially equal depth to the file 50. Such a construction may be preferred when the file is to be secured to the surface of a wall, thus permitting the file to be opened and occupy the least external space. The file shown in Figure 1 is more suited for installations within the wall where its greater depth will not be objectionable.

The file shown in Figure 5 is also provided with extra swinging key panels 54 supported on the hinges 56 and provided with key hooks and label pockets 14. The file 50 is provided with stops 57 cooperating with the projections 58 on the free end of the panels 54 to prevent the key hooks from overlapping, and cross index panels 59 are also movably secured within the file 50 and the cover 52 in such manner that the cross index will be between the key panels for most effective cross reference. The panel construction is particularly advantageous in that it permits of the filing of the maximum number of keys in a minimum space, yet with the maximum of efficiency in that closer classification can be used and smaller units of keys will be held on a single panel. The greater the classification the more quickly the particular panel can be selected and the particular key removed or replaced. While only one swing panel 54 is illustrated in this figure it will be understood that any number of swinging panels may be used as desired.

A slightly different modification of construction of interleaved panel is shown in Figures 6 and 7 applied to a drawer file 60 provided with upstanding sides 61 having section guides 62 which may be welded or otherwise secured to the

sides. Between respective section guides 62 are key panels 63 similarly provided with hook strips and identifying label pocket units 14. For use in ordinary desk drawers the file is of relatively low height and for easy accessibility a single row of hooks is provided along the top edge of the panel 63, although any number of rows may be provided depending upon the depth or slope of the file.

The section guides 62 are provided with rear edges 65 which are at an angle with the front edges 64 of the adjacent section guide preferably of about 15°, the front edge 64 against which the panel 63 rests being approximately 45° with the horizontal and the rear edge being about 60° with the horizontal. This construction permits the panel to be swung forward as shown in Figure 7 whereby the keys may be more conveniently removed from the rear panel, and also permits complete visibility of all keys identifying labels and hooks. Projections 66 at the bottom of each section guide 62 cooperate with the front corner point 67 of the next rear section guide which acts as a pivot or loose hinge to permit this movement. As the panels 63 are not secured however they may be entirely removed as desired to permit the removal of an entire unit of keys, such as a floor or the like at one time.

Each of the panels 63 is visibly indexed by projecting tabs or panel labels 63a so that each panel may be quickly turned to and as the hooks on each panel are numbered each key may be quickly located. A cross index 68 is adapted to be carried by the front section guide 62 which is not of sufficient depth to carry an additional key panel. The index 68 is particularly suited for cross indexing the keys which are already visibly indexed. The card index 68 includes both an alphabetical and a numerical index the alphabetical index being in one half the index, for example to the right of the center, and the numerical index on the left. Both indexes correspond to the visible index. The cover may be centrally bound at 69 so that either or both the alphabetical and numerical indexes may be used at once. One form of construction of hook and label pocket unit is shown in Figures 8 and 9. The panel 70 which may be either the short pivoted panel similar to the panel 63 or the hinged wall cabinet file panel such as shown at 16 and 54 is provided with suitable key receiving hooks 14a which may be stamped out of the strip 14 leaving the aperture 74. Cooperating with the hooks 14a and stamped around the hook is a label pocket 14b which has the rectangular aperture 74 through which the label will be visible. The pocket 14b is suitably projected from the planar surface of the strip 14 so that it will receive a label 78 within the socket formed. Such a pocket is adapted to guide the label not only on the sides but at the top.

Another modification of hook strip is shown in Figure 10 in which the panel 80 is provided with an integral hook 82 stamped from the strip and leaving the aperture 83 and also provided with the struck up projections 84 on the side forming a label pocket adapted to receive a label there between and adjacent the hook 82. The label 85 will rest on the hook 82 at the bottom as shown in Figure 11. Such a construction is extremely simple and may be formed from a single stamping operation.

Another form of construction is shown in Figures 12 and 13 in which the panel 90 is provided with integral key hooks and label pockets. The key hooks 91 are pressed up from the panel 90 as

well as the label receiving pockets 92 by a suitable forming operation. Upstanding lugs 93 may be projected back of the planar face of the panel 90 to act as a support for the label within the pocket 92. It will be understood that the hook and label pockets illustrated are merely by way of illustration and that hooks with gummed or stamped identifying labels might be used.

The constructions shown are preferably formed of metal in order to withstand the weight and wear of supporting metal keys. It will be understood however, that other materials of construction may be used and that the forms of embodiment may be changed from those illustrated. My invention contemplates broadly the application of the visible index system to the compact storage of keys by means of indexed swinging key panels and may therefore be embodied in various forms of apparatus without departing from the spirit of my invention or the scope of the appended claims.

I claim:

1. In a key file a plurality of vertically pivoted swinging key panels, visible index means on each panel, a plurality of integral hooks on each panel for supporting a plurality of keys, a card receiving pocket adjacent each key hook adapted to receive a card for identifying said hook in accordance with the respective key therefor, and a separate key index and cross reference mounted for vertical swinging between panels and carried by said file.

2. In a key file of the class described, a cabinet, a plurality of key receiving panels, means to support said panels within said cabinet, said key receiving panels adapted to rock with respect to their support, key supports on said panels to support a plurality of keys on said panels, means to index each support, and a swinging pocket mounted on one of said panels, adapted to receive a cross index card.

3. As an article of manufacture of the class described, in combination with a key file, a panel for increasing the capacity of said key file mounted between walls of the key file, said panel having two faces, each face having a plurality of key receiving hooks projecting therefrom, said panel having a plurality of extended portions formed adjacent to and cooperating with said key receiving hooks for receiving a label or identifying insignia for identifying each hook, means, including projecting members in alignment with one edge of the panel carried by said panel, whereby said panel may be secured in said key file, and a plurality of projections on each face of the panel, said projections rotatably receiving a cross index device.

4. As an article of manufacture of the class described a wall cabinet key file to receive a plurality of separately identified keys, said file comprising a plurality of wall panels, and a swinging panel member interleaved between the wall panels, a plurality of rows of key receiving hooks mounted on all of said panels, said rows being spaced closer together than the length of the keys, the hooks in adjacent rows being staggered with respect to a vertical plane, the interleaved panel member having a plurality of hooks on each face thereof, means to identify each hook, and a cross index mounted between adjacent panels to cross index the hooks with respect to the keys carried thereby.

5. As an article of manufacture of the class described a wall cabinet for a key file comprising a plurality of interleaved panels, a plurality of

- rows of key receiving hooks mounted on said panels, the hooks in adjacent rows being staggered with respect to a vertical plane, and a cross index card receiving member pivotally mounted between each pair of adjacent panels to receive a cross index card, said member facing the adjacent panel indexed, said panels having a plurality of label identifying pockets each adjacent to a hook.
6. A wall file for the classification and filing of a plurality of keys or the like comprising a cabinet and a movable panel within said cabinet, said panel having a plurality of rows of key supporting hooks integral therewith, and a plurality of key identifying label pockets adjacent said hooks to identify each of said hooks, and means to removably mount said panel, said means for mounting said panel including a removable bearing, whereby said panel may be removed when said bearing is removed.
7. A key file cabinet comprising a wall section and a door section, said sections having a plurality of key hooks secured thereto, and an interleaved panel between said sections, said panel having a plurality of rows of staggered key receiving hooks mounted thereon, means for removably holding said panel in place, a holder for a cross index and means securing said holder to said panel.
8. In a key file of the class described, the combination of a cabinet having inner walls and key panels on said walls, and a swinging key receiving panel mounted between said inner walls, each of said key receiving panels having a plurality of rows of key supports, said supports being spaced relatively close together in horizontal and vertical relation, said cabinet being relatively deep with respect to the projected distance of the supports so that said cabinet may be closed, an identification receiving pocket adjacent each of the key supports adapted to receive an identifying means corresponding to the identification of the key adapted to be carried by the respective key support, and index panels swingably mounted within said key file, each index panel being mounted between key receiving panels, said index panels being swingably secured whereby both faces may be used for further identifying means for the respective groups of keys on the adjacent panel.
9. A key file of the class described a cabinet, a plurality of vertically pivoted key receiving panels, means to secure all of said panels within the cabinet, said key receiving panels having a plurality of key supports in closely spaced horizontal and vertical rows, a label pocket adjacent each key support, identifying means adjacent said key supports corresponding to the identified key adapted to be carried thereby, indexing tabs on said key supporting panels, a swinging panel carried between adjacent pairs of key supporting panels, said swinging panel adapted to receive a cross index for the keys on the panel facing the index.
10. A storage unit file for a plurality of keys comprising a relatively deep cabinet, the back of which is adapted to be secured to a support, a key receiving panel mounted within said cabinet against said back, a hinged front completing said cabinet and having a key receiving panel mounted thereon, additional key panels vertically hinged within said cabinet and adapted to be exposed when the front is opened, key hooks on the exposed faces of all of said panels, and a swinging member between adjacent hook supporting panels adapted to receive a cross-index, said cabinet having an all over depth exceeding the total depth of the key hooks and interleaved swinging index receiving members, whereby said front may be closed to completely enclose all of said keys.
11. In a key index file, a plurality of swinging panels hinged in compact organization, each panel having a plurality of key supporting means thereon, each key supporting means having a key identifying means adjacent thereto, means on each panel indicating the group of keys supported thereon visible in a row while said panels are in closed compact relation, each panel being movable about a pivot relative to the adjacent panels to secure better access to the keys thereon.
12. A key index file for holding a plurality of keys in a small space comprising a box-like compartment having therein a plurality of panels hinged at one edge thereof to permit access to keys on adjacent panels, each panel having a plurality of key supporting means thereon, each key supporting means having a key identifying means adjacent thereto, a projecting tab on each panel indicating the group of keys thereon, the said tabs being visible in a row in their normal position within the compartment.
- REUEL H. THAYER.

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