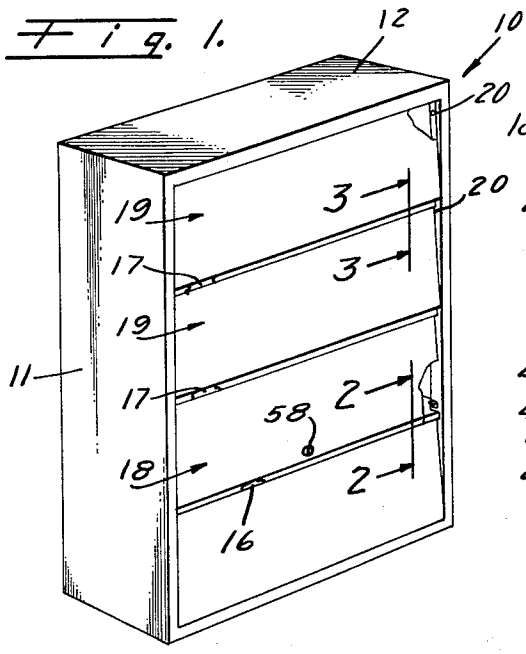
Dec. 14, 1965 J. E. ROBERTS 3,223,466

FILING CABINET

Filed Nov. 12, 1963

Fig. 1.



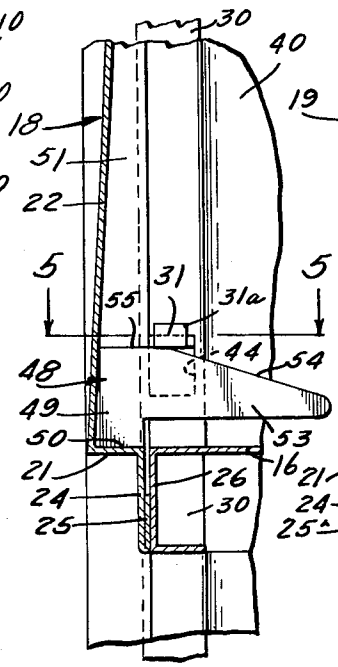


Fig. 2.

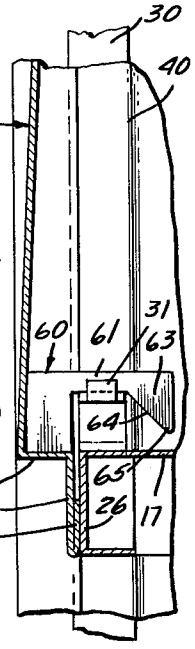


Fig. 3.

Fig. 4.

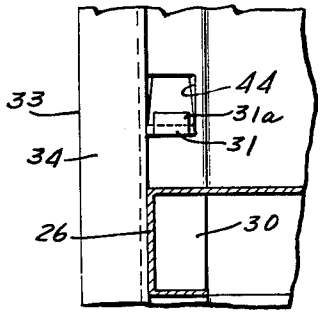


Fig. 6.

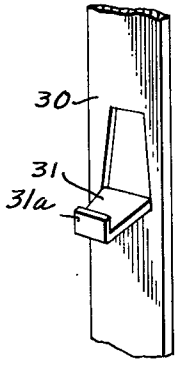


Fig. 7.

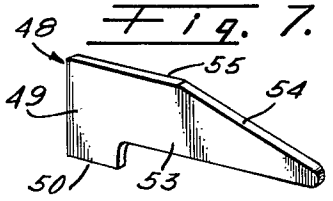


Fig. 8.

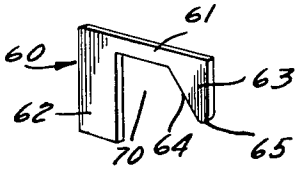
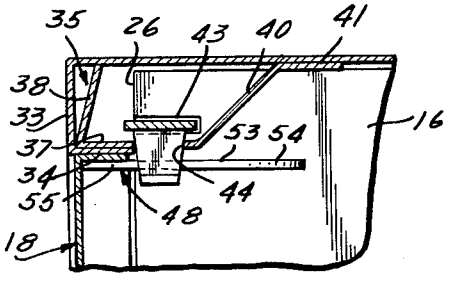


Fig. 5.



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by

United States Patent Office 3,223,466 Patented Dec. 14, 1965

3,223,466

FILING CABINET

Judson E. Roberts, Northridge, Calif., assignor to Holga Metal Production Company, Van Nuys, Calif., a corporation of California

Filed Nov. 12, 1963, Ser. No. 322,777
11 Claims. (Cl. 312—220)

This invention relates generally to filing cabinets and relates more particularly to a locking mechanism for multi-shelf filing cabinets.

While the invention has particular utility embodied in multi-shelf steel filing cabinets, and is shown and described embodied therein, it is to be understood that its utility is not confined thereto.

Certain problems and difficulties are encountered in providing a suitable locking mechanism for filing cabinets having a plurality of horizontal, vertically spaced shelves dividing the cabinet into a plurality of compartments, each of which is provided with a door. One of such problems involved in this type of filing cabinet is the provision of a locking mechanism which will lock all of the doors and is controlled from a single location or station.

It is therefor a general object of the invention to provide a locking mechanism for cabinets of the above described character that will solve the problems involved and overcome the difficulties thereof.

It is another object of the invention to provide a locking mechanism of this character that will effectively lock all of the doors of the cabinet by actuation of a single door.

It is still another object of the invention to provide locking mechanism of this character wherein the lock rods are moved to the locking position by actuation of one of the doors.

It is a further object of the invention to provide locking mechanism of this character that is extremely simple in construction.

A still further object of the invention is to provide locking mechanism of this character that is simple in operation.

It is another object of the invention to provide locking mechanism of this character that is rugged and durable.

It is still another object of the invention to provide locking mechanism of this character wherein wear and breakage of locks is reduced to a minimum.

It is a further object of the invention to provide a locking mechanism of this character that is substantially tamper-proof.

It is a still further object of the invention to provide mechanism of this character that is relatively inexpensive to manufacture.

The characteristics and advantages of the invention are further sufficiently referred to in connection with the following detailed description of the accompanying drawings, which represent one embodiment. After considering this example, skilled persons will understand that variations may be made without departing from the principles disclosed, and I contemplate the employment of any structures, arrangements or modes of operation that are properly within the scope of the appended claims.

Referring to the drawings, which are for illustrative purposes only:

FIG. 1 is a perspective view of a portion of a filing cabinet having locking mechanism embodying the present invention;

FIG. 2 is an enlarged sectional view taken on line 2—2 of FIG. 1;

FIG. 3 is an enlarged sectional view taken on line 3—3 of FIG. 1;

FIG. 4 is an enlarged fragmentary view, partially in section, showing a lock-dog on an installed lock-rod;

FIG. 5 is an enlarged sectional view taken on line 5—5 of FIG. 2;

FIG. 6 is an enlarged fragmentary view of a lock-rod with a lock-dog;

FIG. 7 is an enlarged perspective view of a lock-rod lift; and

FIG. 8 is an enlarged perspective view of a lock-hasp.

Referring more particularly to the drawings, there is shown a filing cabinet, indicated generally at **10**, having side walls **11**, a top wall **12**, a back wall, not shown, a bottom wall, not shown, and a plurality of horizontal vertically spaced shelves, one of said shelves being indicated at **16** and the rest of the shelves being indicated at **17**. While there are shelves **17** shown above the shelf **16**, it is to be understood that there could be shelf **17** below the shelf **16** with the shelf **17** below the shelf **16** spaced vertically apart and also spaced vertically from the shelf **16**.

The spaces between the shelves and defined by said shelves and adjacent portions of the cabinet walls, comprise storage compartments for the storage of files of various well known character. Each compartment is provided with a door having a horizontal pivotal axis adjacent the upper horizontal edge thereof. Each door has end flanges or walls **51** which are pivoted on pivots **20** adjacent the upper ends thereof, the pivots of each door being in axial alignment. The door for the compartment above the shelve **16** is indicated at **18** and the doors for the other compartments are indicated at **19**. The doors have their upper ends spaced inwardly of the plane of the front edges of the walls of the cabinet and when said doors are in the closed position they are downwardly and forwardly inclined. Each door has an inturned flange **21** extending along the lower edge of the main body **22** of the door and normal to the plane thereof. From the rear edge of flange **21** there is a depending flange **24** with a back-turned edge portion **25** which is adapted to abut against the front face or edge **26** of the adjacent shelf.

The cabinet structure, feature and elements above described are of well known character and hence it is believed to be unnecessary to show and describe further details.

The present locking mechanism includes a vertical lock-rod **30** at each side of the cabinet, each rod **30** being a flat strip of metal having a plurality of longitudinally spaced lock-dogs **31** punched from the body of the rod and extending at right angles to the plane of the lock-rod, said lock-dogs all extending in the same direction, there being a lock-dog for each of the doors. Each lock-dog **31** has an upturned flange **31***a* at the free end which prevents entry into the filing compartments by pulling on the door thereof, deflecting the lock hasps hereinafter described or otherwise causing the lock-hasps to be forced inwardly and away from the lock-dogs.

The lock-rods are of the same construction and arrangement and the means for operably mounting said rods has the same construction and arrangement except that such means is arranged in opposing relationship with the lock-dogs also arranged in opposing relationship at the sides of the front of the cabinet. Hence, a description of one such mounting or retaining means will be sufficient.

Referring to FIG. 5, the side wall of the cabinet has an inturned flange **33** along the front edge and at the inner edge of said flange **33** there is a backwardly turned flange **34** having its rear free edge engaging the front edges **26** of the shelves adjacent their ends. The top and bottom

walls of the cabinet also have a similar construction along the front thereof.

A stiffener member, indicated generally at **35**, is provided and includes a part **37** spaced from the adjacent side wall and substantially parallel thereto, said part **37** having a forward portion in abutment with the back-turned flange **34** of the adjacent side wall and secured thereto by spot welding or other suitable means. There is an out-turned flange **38** along the front vertical edge of the part **37**, said flange **38** being somewhat wider than the distance between the part **37** and the adjacent side wall and said flange **38** is in such engagement with the adjacent part of the side wall as to provide a wedging action to additionally secure the stiffener **35** in position. Part **37** has a flange **40** extending obtusely rearwardly from its rear vertical edge and the flange **40** terminates at its outer end in a flange **41** abutting the inner side of the adjacent side wall and spot welded or otherwise suitably secured to said side wall.

The shelf is provided with a notch **43** extending rearwardly from the front edge thereof and of sufficient size to operably receive the lock-rod and retain same at each station. The portion or part **37** of the stiffener **35** is provided with a slot **44** therethrough at each station for reception of the respective lock-dog which extends through the notch or slot **44** inwardly of the cabinet relative to said part **37**. The slots **44** are of sufficient vertical length to permit the dogs and the rods **30** to move vertically between a locking position and a release position.

With a lock-rod extending vertically at the inner side and adjacent the forward or front edges of the side walls **11** of the cabinet, means is provided for actuating said rods. This means comprises a lock-rod lift **48** secured by spot welding or the like at the lower corners of one of the doors, such as the door **18**, which is an intermediate door of the cabinet. The lock-rod lift members are of the same construction and include a front portion **49**, the lower edge **50** of which rests on the rearwardly turned flange **21** of the door. To one of the end walls **51** of each door the portions **49** of the respective lock-rod lifts are welded or otherwise secured. Each of the lock-rod lifts has a cam **53** which extends from the inner side of the door at substantially right angles to the face **22** thereof and each cam has a cam surface **54** which extends from the free end thereof upwardly and outwardly when the door is closed, there being a substantially horizontal edge **55** which extends outwardly from the upper end of the cam edge or surface **54** when the door is closed.

When the door **18** is opened the cam is, of course, inoperative. At this time both of the lock-rods are at their lowermost position, being urged to such position by gravity and limited in the downward movement by engagement of the lock-dog **31** with the lower end wall of the slots **44**, the dogs then being spaced a limited, predetermined distance above the horizontal surface of the adjacent shelf

When the door **18** is moved to the closed position the inner end portions of the cam surfaces **54** of the lock-rod lifts of door **18** engage the respective adjacent lock-dogs **31** and effect upward movement of the rods **30**. When the door **18** is completely closed the respective lock-dogs thereof rest on the horizontal surfaces or edges **55** of said lock-rod lifts to thereby positively prevent downward movement of said lock-rods **30** when the door **18** is closed.

Door **18** is locked in the closed position by any suitable well known locking means, such as the key-operated lock **58**, FIG. 1. It is to be understood, of course, that any other suitable locking means may be used whereby the free swinging edge of the door **18** is secured to a fixed or immovable part of the cabinet, such as the shelf **16**. Other locking means may be of the combination type, for example. When the door **18** is unlocked and raised the lock-rod lifts disengage their respective lock-dogs **31** and the lock-rods will move downwardly under the influence of gravity to their lower limit of movement.

Each of the other doors of the cabinet have a lock-hasp, indicated generally at **60**, at each corner of the free end. The lock-hasps are of the same shape and construction except that they are of opposite hand for the respective ends of a door and hence a description of one will be sufficient.

Referring to FIG. 8, the lock-hasp has a narrow intermediate part **61** which is in a vertical plane and is relatively narrow. At the outer end, relative to the door, there is a depending part **62** which is in the same vertical plane as the intermediate part **61**. At the inner end of the intermediate part there is a generally triangularly shaped depending inner end part **63** having a cam edge or surface **64** at the forward end, said cam surface being inclined upwardly and toward the front of the cabinet when the door is closed from the lower free end **65** of said inner end part. The forward part and the inner end part are spaced apart longitudinally relative to the lock-hasp.

The forward part **62** of each lock-hasp is secured to a respective end wall of a door by spot welding or any other suitable means. When the lock-hasps are secured to the doors the flanges **67** are oppositely arranged and are turned toward each other.

When the lock-rods **30** are in their released position, that is, when they are at their lowermost limit of movement, the lock-dogs thereof for the doors **19** are out of the notches **70** of the lock-hasps. However, when the door **18** is moved to its closed position to effect raising of the lock-rods to their uppermost position whereat the lock-dogs **31** for the door **18** are resting on the surfaces **55** of the lock-rod lifts **48**, the lock-dogs for the doors **19**, assuming said doors are closed, enter the notches **70** so that the door **19** cannot be opened.

The pressure required to raise the lock-rods is exerted by the actuation of the door **18** to the closed position, not by the turning of a key. This reduces wear and breakage of locks. Should a door **19** not be completely closed when the door **18** is closed, the lock-dogs **31** for said door **19** will engage the cam surfaces **64** of the lock-hasps of said door **19** and will force the door to the closed position as said dogs are raised to their upper positions, as shown in FIG. 3.

The invention and its attendant advantages will be understood from the foregoing description and it will be apparent that various changes may be made in the form, construction and arrangement of the parts of the invention without departing from the spirit and scope thereof or sacrificing its material advantages, the arrangement hereinbefore described being merely by way of example, and I do not wish to be restricted to the specific forms shown or uses mentioned except as defined in the accompanying claims, wherein various portions have been separated for clarity of reading and not for emphasis.

I claim:

1. A filling cabinet, comprising:

(A) side walls, top and bottom walls, and a back wall defining a cabinet enclosure;

(B) a plurality of horizontal, vertically spaced shelves dividing the cabinet interior into a plurality of compartments;

(C) a door for each compartment;

(D) pivot means for each door adjacent the upper edge thereof, said pivot means having a horizontal axis whereby the door may be swung forwardly and upwardly and vice versa, said pivot means being spaced rearwardly of the plane of the front of the cabinet and said door, when closed, being inclined downwardly and forwardly without projecting ahead of the plane of the front of the cabinet, each door having rearwardly turned side flanges, a horizontal bottom flange extending rearwardly when the door is closed and along the free edge of the door, a vertical flange depending from the rear edge of the bottom flange and adapted to abut against the for-

ward edge of the shelf at the bottom of the respective compartment;

(E) said side walls each having a laterally turned vertical portion along the front edge thereof, the laterally turned portions of the side walls facing each other and being in the plane of the front of the cabinet, there being a rearwardly extending vertical flange along the inner edge of the laterally turned portion of each side wall;

(F) a stiffener member for each side of the cabinet, each stiffener having an intermediate part extending rearwardly from the laterally turned portion of the respective side wall and parallel to said side wall, said intermediate part having a plurality of longitudinally spaced slots therein spaced upwardly from the adjacent shelf against which the depending flange of the door is adapted to engage, said stiffener including an outwardly and rearwardly extending vertical flange along the forward edge of the intermediate part, the free edge of said flange engaging the adjacent side wall;

(G) a vertical flange along the inner edge of said intermediate part of the stiffener and forming an obtuse angle therewith, and a vertical flange at the outer edge of the last mentioned flange engaging and secured to the adjacent side wall, each shelf having a notch extending rearwardly from the forward edge thereof and adjacent each end in spaced parallel relation to the side walls;

(H) a flat lock-rod operably received in the notches of the shelves and slidable vertically therein, each lock-rod having a plurality of laterally turned lock-dogs spaced longitudinally of said rod and extending through the slots in the intermediate stiffener part, each of said lock-dogs having an upturned flange at the free end thereof, the movements of the lock-rod vertically upwardly and downwardly being limited by the upper and lower edges of the slots in said intermediate stiffener parts;

(I) a lock-rod lift secured to an intermediate door at each of the free corners thereof, each of said lock-rod lifts projecting inwardly of the cabinet when said intermediate door is closed, and having an upwardly and outwardly inclined upper cam surface and a horizontal surface at the outer end of said cam surface, the cam surfaces of the lock-rod lifts being adapted to engage adjacent the lock-dogs as the intermediate door is closed and effect raising of the lock-rods, the horizontal portion of the lock-rod lifts moving beneath respective lock-dogs when the intermediate door is completely closed to thereby positively prevent downward movement of the rods;

(J) a lock-hasp at the free corners of the other doors, each hasp including an intermediate part in a vertical plane, a forward vertical part attached to its door, and an inner vertical end part depending in the same plane as the intermediate and forward parts and having an outer cam edge extending from the lower end of said inner end part upwardly and forwardly, said forward part and inner end part being spaced apart and defining, with the intermediate part, a lock-dog receiving notch, respective lock-dogs on the lock-rods being moved into the notches of said lock-hasps of said other doors when the latter are closed and the intermediate door is closed, said dogs engaging the lower edges of the intermediate parts and being so positioned as to prevent said other doors from being opened when the intermediate door is closed;

(K) and lock means for releasably locking the intermediate door in the closed position.

2. A filing cabinet, comprising:

(A) walls, including side walls, defining a cabinet enclosure;

(B) a plurality of horizontal, vertically spaced shelves dividing the cabinet interior into a plurality of compartments, each shelf having a notch adjacent each end thereof extending rearwardly from the forward edge, the notches at each end of said shelves being vertically aligned;

(C) a door for each compartment;

(D) pivot means for each door, said pivot means having a horizontal axis adjacent the upper edge of the door whereby said door may be swung forwardly and upwardly from the closed position and vice versa, said pivot means being spaced inwardly of the plane of the front of the cabinet and said door, when closed, being inclined downwardly and forwardly but being behind the plane of the front of the cabinet, each door having rearwardly turned side flanges, a horizontal bottom flange extending rearwardly along the free edge of the door, and a vertical flange depending from the rear edge of the bottom flange and adapted to abut against the forward edge of the shelf defining the lower part of the respective compartment;

(E) a stiffener member secured to and extending vertically along the inner side of each of the cabinet adjacent the front edge thereof, each stiffener having a part adjacent to a side wall and parallel thereto, said part having a plurality of longitudinally spaced slots therein spaced upwardly from the adjacent shelf against which the depending flange of the door is adapted to engage, the notches in said shelves being between the slotted part of the stiffener and the adjacent side wall;

(F) a flat lock-rod received in the vertically aligned notches at each end of the shelves and slidable vertically therein, each lock-rod having a plurality of laterally extending lock-dogs spaced longitudinally of said rod and extending through the slots in said stiffener part, the limit of movement of the lock-rod vertically upwardly and downwardly being limited by engagement of said lock-dogs with the upper and lower edges of the notches in said stiffener members;

(G) a lock-rod lift secured to the inner side of an intermediate door adjacent the free edge thereof, each of said lock-rod lifts projecting inwardly of the cabinet when said intermediate door is closed, and having an upwardly and outwardly inclined cam surface and a horizontal surface at the outer end of said cam surface, said cam surfaces being adapted to engage an adjacent lock-dog as the intermediate door is closed and effect raising of the lock-rod of said dog, the horizontal portion of the lock-rod lift moving beneath said lock-dog when the intermediate door is completely closed;

(H) lock-hasps adjacent the free edges of the other doors, said hasps including an intermediate part, a forward part attached to an adjacent part of the door to which it is secured, and a depending inner end part at the forward end of the intermediate part and having a cam edge extending from the lower end of said inner end part upwardly and forwardly of the cabinet, said forward part and inner end part being spaced apart and defining, with the intermediate part, a notch, respective lock-dogs on the lock-rods being moved into the notches of said hasps when the doors having such hasps are closed, the intermediate door is moved to the closed position, said dogs engaging the intermediate parts of said hasps to thereby prevent said remaining doors from being opened when the intermediate door is closed;

(I) and lock means for releasably locking the intermediate door in the closed position.

3. A filing cabinet, comprising:

(A) walls, including side walls, defining a cabinet enclosure;

(B) a plurality of horizontal, vertically spaced shelves dividing the cabinet interior into a plurality of compartments, each shelf having a notch adjacent each

end thereof extending rearwardly from the forward edge, the notches at each end of said shelves being vertically aligned;

(C) a door for each compartment;

(D) pivot means for each door, said pivot means having a horizontal axis adjacent the upper edge of the door whereby said door may be swung forwardly and upwardly from the closed position and vice versa, said pivot means being spaced inwardly of the plane of the front of the cabinet and said door, when closed, being inclined downwardly and forwardly but being behind the plane of the front of the cabinet, each door having rearwardly turned side flanges, a horizontal bottom flange extending rearwardly along the free edge of the door, and a vertical flange depending from the rear edge of the bottom flange and adapted to abut against the forward edge of the shelf defining the lower part of the respective compartment;

(E) a stiffener member secured to and extending vertically along the inner side of each side of the cabinet adjacent the front edge thereof, each stiffener having a part adjacent to a side wall and parallel thereto, said part having a plurality of longitudinally spaced slots therein spaced upwardly from the adjacent shelf against which the depending flange of the door is adapted to engage, the notches in said shelves being between the slotted part of the stiffener and the adjacent side wall;

(F) a flat lock-rod received in the vertically aligned notches at each end of the shelves and slidable vertically therein, each lock-rod having a plurality of laterally extending lock-dogs spaced longitudinally of said rod and extending through the slots in said stiffener part, the limit of movement of the lock-rod vertically upwardly and downwardly being limited by engagement of said lock-dogs with the upper and lower edges of the notches in said stiffener members;

(G) a lock-rod lift secured to the inner side of an intermediate door adjacent the free edge thereof, each of said lock-rod lifts projecting inwardly of the cabinet when said intermediate door is closed, and having an upwardly and outwardly inclined cam surface and a horizontal surface at the outer end of said cam surface, said can surfaces being adapted to engage an adjacent lock-dog as the intermediate door is closed and effect raising of the lock-rod of said dog, the horizontal portion of the lock-rod lift moving beneath said lock-dog when the intermediate door is completely closed; and

(H) lock-hasps adjacent the free edges of the other doors, said hasps including an intermediate part, a forward part attached to an adjacent part of the door to which it is secured, and depending inner end part at the forward end of the intermediate part and having a cam edge extending from the lower end of said inner end part upwardly and forwardly of the cabinet, said forward part and inner end part being spaced apart and defining, with the intermediate part, a notch, respective lock-dogs on the lock-rods being moved into the notches of said hasps when the doors having such hasps are closed, the intermediate door is moved to the closed position, said dogs engaging the intermediate parts of said hasps to thereby prevent said remaining doors from being opened when the intermediate door is closed.

4. A filing cabinet, comprising:

(A) walls, including side walls, defining a cabinet enclosure;

(B) a plurality of horizontal, vertically spaced shelves dividing the cabinet interior into a plurality of compartments, said shelves having a set of vertically aligned notches adjacent respective sides of the cabinet;

(C) a horizontally pivoted door for each compartment,

the pivotal axes of said doors being adjacent the upper edges thereof, whereby said doors are swingable forwardly and upwardly and vice versa, said doors, when closed, being positioned inwardly of the plane of the front of the cabinet and said door, when closed, having a lower edge part abutting against the forward edge of the shelf defining the lower part of the respective compartment;

(D) a longitudinally movable lock-rod operably secured in the respective sets of notches, said lock-rods being disposed within said cabinet and adjacent the front edges of the side walls of said cabinet, each rod having a plurality of lock-dogs spaced longitudinally of said rod at one side thereof, each of said lock-dogs having an upturned flange at the free end thereof;

(E) means limiting movement of the lock-rod vertically upwardly and downwardly;

(F) a lock-rod lift for each lock-rod, said lock-rod lifts being secured to one of the doors and having cam parts and retaining parts, said cam parts being adapted to engage adjacent respective lock-dogs as said one door is closed and thereby effect raising of the lock-rods, the retaining parts of the lock-rod lifts which move beneath said lock-dogs when said one door is completely closed to thereby positively prevent downward movement of the lock-rods;

(G) and lock-hasps on the inner sides of the other doors, said hasps having respective notches in the lower ends thereof and a cam part at the free end thereof engageable by respective lock-dogs to positively move the doors to the fully closed position.

5. In a filing cabinet:

(A) walls, including side walls, defining a cabinet enclosure;

(B) a plurality of horizontal, vertically spaced shelves dividing the cabinet interior into a plurality of compartments;

(C) a horizontally pivoted door for each compartment, the pivotal axes of said doors being adjacent the upper edges thereof, whereby said doors are swingable forwardly and upwardly and vice versa, said doors, when closed, being positioned inwardly of the plane of the front of the cabinet and said door, when closed, having a lower edge part abutting against the forward edge of the shelf defining the lower part of the respective compartment;

(D) a longitudinally movable lock-rod operably secured at each side of the cabinet, within said cabinet and adjacent the front edges of the side walls of said cabinet, each rod having a plurality of lock-dogs spaced longitudinally of said rod at one side thereof, there being a dog of each rod for each compartment, said lock-dogs including means for preventing disengagement therefrom of locking-hasps when the doors are closed;

(E) means limiting movements of the lock-rod vertically upwardly and downwardly;

(F) a lock-rod lift for each lock-rod, said lock-rod lifts being secured to one of the doors and having cam parts and retaining parts, said cam parts being adapted to engage adjacent respective lock-dogs as said one door is closed and thereby effect raising of the lock-rods, the retaining parts of the lock-rod lifts moving beneath said lock-dogs when said one door is completely closed to thereby positively prevent downward movement of the lock-rods;

(G) and lock-hasps on the inner sides of the other doors, said hasps having respective notches in the lower ends thereof and a cam part at the free end thereof engageable by respective lock-dogs to positively move the doors to the fully closed position.

6. In a filing cabinet:

(A) walls, including side walls, defining a cabinet enclosure;

(B) a plurality of horizontal, vertically spaced shelves

dividing the cabinet interior into a plurality of compartments;

(C) a horizontally pivoted door for each compartment, the pivotal axes of said doors being adjacent the upper edges thereof, whereby said doors are swingable forwardly and upwardly and vice versa, said doors, when closed, being positioned inwardly of the plane of the front of the cabinet and said door, when closed, having a lower edge part abutting against the forward edge of the shelf defining the lower part of the respective compartment;

(D) a longitudinally movable lock-rod operably secured to each side of the cabinet, within said cabinet and adjacent the front edges of the side walls of said cabinet, each rod having a plurality of lock-dogs spaced longitudinally of said rod at one side thereof, each of said lock-dogs having a laterally turned flange adjacent the free end thereof;

(E) a lock-rod lift for each lock-rod, said lock-rod lifts being secured to one of the doors and having cam parts and retaining parts, said cam parts being adapted to engage adjacent respective lock-dogs as said one door is closed and thereby effect raising of the lock-rods, the retaining parts of the lock-rod lifts moving beneath said lock-dogs when said one door is completely closed to thereby positively prevent downward movement of the lock-rods;

(F) and lock-hasps on the inner sides of the other doors, said hasps having respective notches in the lower ends thereof and a cam part at the free end thereof engageable by respective lock-dogs to positively move the doors to the fully closed position.

7. In a filing cabinet:

(A) walls, defining a cabinet enclosure, open at the front;

(B) a plurality of horizontal, vertically spaced shelves dividing the cabinet interior into a plurality of compartments;

(C) a horizontally pivoted door for each compartment, the pivotal axes of said doors being adjacent the upper edges thereof, whereby said doors are swingable forwardly and upwardly and vice versa, said doors, when closed, being positioned inwardly of the plane of the front of the cabinet and said door, when closed;

(D) a longitudinally movable lock-rod operably secured at each side of the cabinet and adjacent the front edges of opposite walls of said cabinet, each rod having a plurality of lock-dogs spaced longitudinally of said rod at one side thereof;

(E) a lock-rod lift for each lock-rod, said lock-rod lifts being one of the doors and having cam parts adapted to engage adjacent respective lock-dogs as said one door is closed and thereby effect raising of the lock-rods;

(F) and lock-hasps on the inner sides of other doors, respective hasps having upwardly opening notches therein and a cam part at the free end thereof engageable by respective lock-dogs to positively move the doors to the fully closed position.

8. In a filing cabinet:

(A) walls, defining a cabinet enclosure, open at the front;

(B) a plurality of horizontal, vertically spaced shelves dividing the cabinet interior into a plurality of compartments;

(C) a horizontally pivoted door for each compartment, the pivotal axes of said doors being adjacent the upper edges thereof, whereby said doors are swingable forwardly and upwardly and vice versa;

(D) a longitudinally movable lock-rod operably secured at each side of the cabinet, within said cabinet and adjacent the front edges of opposite walls of said cabinet, each rod having a plurality of lock-dogs spaced longitudinally of said rod at one side thereof;

(E) a lock-rod lift for each lock-rod, said lock-rod lifts being one of the doors and having cam parts adapted to engage adjacent respective lock-dogs as said one door is closed and thereby effect raising of the lock-rods;

(F) and lock-hasps on the inner sides of other doors, respective hasps having upwardly opening notches therein and a cam part at the free end thereof engageable by respective lock-dogs to positively move the doors to the fully closed position.

9. In a filing cabinet:

(A) walls defining a cabinet enclosure having an open side;

(B) a plurality of spaced shelves dividing the cabinet interior into a plurality of compartments;

(C) a door for each compartment, said doors being pivoted at one edge so that said doors swing outwardly;

(D) at least one longitudinally movable lock-rod operably mounted substantially normal to the pivoted edge of said doors;

(E) a plurality of lock-dogs on said lock-rod and spaced longitudinally of said rod at one side thereof;

(F) a lock-rod lift for said lock-rod, said lock-rod lift being secured to one of the doors and having a cam part adapted to engage an adjacent respective lock-dog as said one door is closed and thereby effect raising of the lock-rod;

(G) and a lock-hasp on the inner side of another door, said hasp having a notch for reception of a lock-dog and a cam part at the free end thereof engageable by said lock-dog to positively move the door to the fully closed position.

10. In a filing cabinet:

(A) walls defining a cabinet enclosure having an open side;

(B) a plurality of spaced shelves dividing the cabinet interior into a plurality of compartments;

(C) a door for each compartment, said doors being pivoted at one edge so that said doors swing outwardly;

(D) at least one longitudinally movable lock-rod operably mounted substantially normal to the pivoted edge of said doors;

(E) a plurality of lock-dogs on said lock-rod and spaced longitudinally of said rod at one side thereof;

(F) a lock-rod lift for said lock-rod, said lock-rod lift being secured to one of the doors and having a cam part adapted to engage an adjacent respective lock-dog as said one door is closed and thereby effect raising of the lock-rod;

(G) and a lock-hasp on the inner side of another door, said hasp having means for positively moving the door thereof to the closed position.

11. In a filing cabinet:

(A) walls defining a cabinet enclosure open at the front;

(B) a plurality of horizontal, vertically spaced shelves dividing the cabinet interior into a plurality of compartments, said shelves having notches therein in vertical alignment;

(C) a horizontally pivoted door for each compartment, the pivotal axes of said doors being adjacent the upper edges thereof, whereby said doors are swingable forwardly and upwardly and vice versa, said doors, when closed, being positioned inwardly of the plane of the front of the cabinet and said doors, when closed, having a lower edge part abutting against the forward edge of the shelf defining the lower part of the respective compartment;

(D) a longitudinally movable lock-rod operably secured in the aligned notches of said shelves, said lock-

rod being disposed within said cabinet, each rod having a plurality of lock-dogs spaced longitudinally of said rod at one side thereof, each of said lock-dogs having an upturned flange at the free end thereof;

(E) means limiting movement of the lock-rod vertically, upwardly and downwardly;

(F) a lock-rod lift for said lock-rod, said lock-rod lift being secured to one of the doors and a cam part and a retaining part, said cam part being adapted to engage adjacent respective lock-dogs as said one door is closed, and thereby effect raising of said lock-rod, the retaining part of the lock-rod lift moving beneath said lock-dogs when said one door is completely closed to thereby positively prevent downward movement of said lock-rod;

(G) and lock-hasps on the inner side of the other doors, said hasps having respective notches in the lower ends thereof and a cam part at the free end thereof engageable by respective lock-dogs to positively move the doors to the fully closed position.

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UNITED STATES PATENT OFFICE

CERTIFICATE OF CORRECTION

Patent No. 3,223,466 December 14, 1965

Judson E. Roberts

It is hereby certified that error appears in the above numbered patent requiring correction and that the said Letters Patent should read as corrected below.

Column 2, line 32, for "shelve" read -- shelf --; line 44, for "feature" read -- features --; column 4, line 56, for "filling" read -- filing --; column 5, line 47, strike out "the", first occurrence; column 6, line 22, after "each" insert -- side --; column 7, line 45, for "can" read -- cam --.

Signed and sealed this 6th day of December 1966.

(SEAL)
Attest:

ERNEST W. SWIDER
Attesting Officer

EDWARD J. BRENNER
Commissioner of Patents