Dec. 7, 1937. A. H. MEUCHE 2,101,034

DRAWING AND MAP FILE

Filed Jan. 25, 1936 4 Sheets-Sheet 1

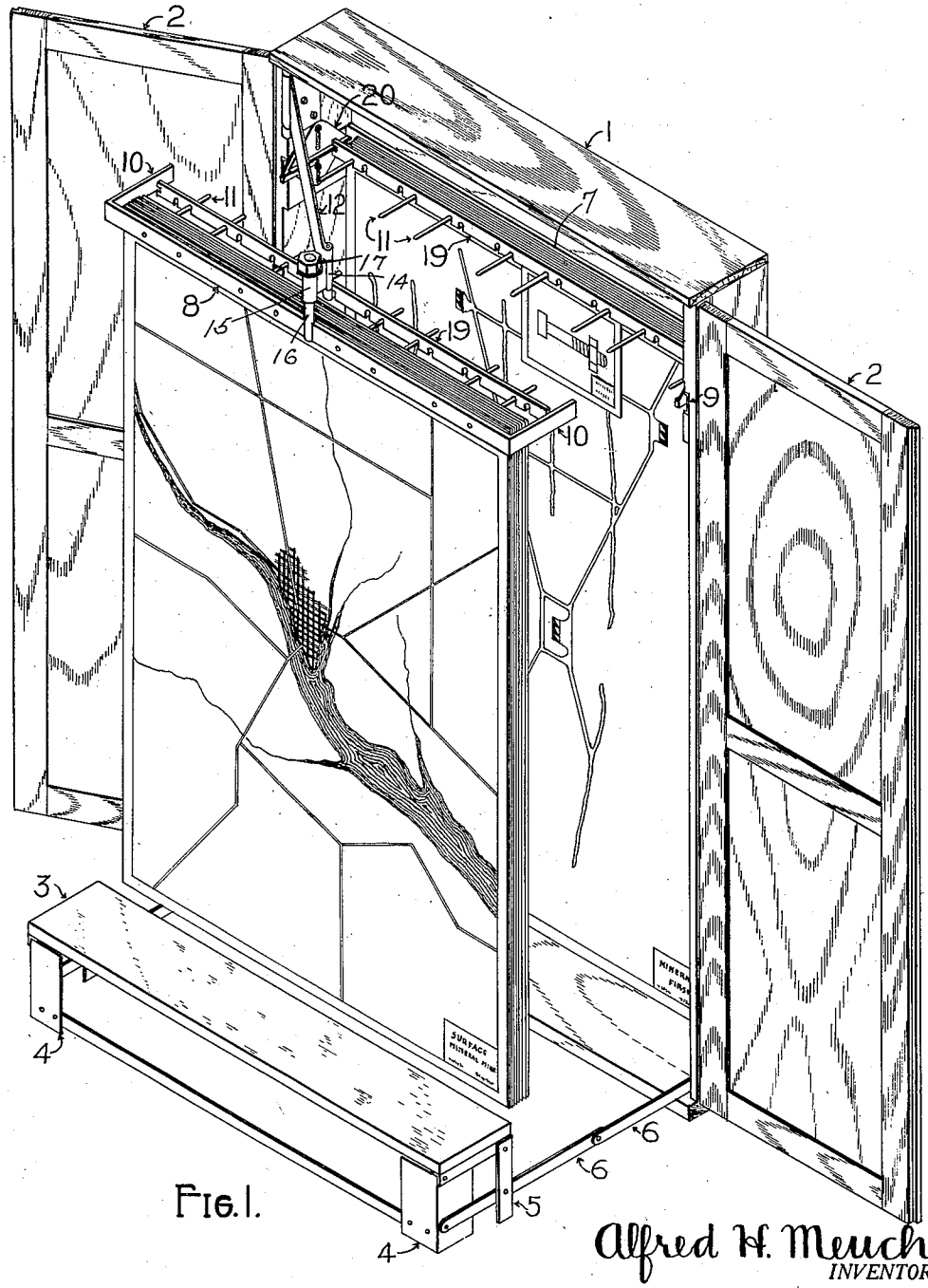

Fig. 1.

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Dec. 7, 1937. A. H. MEUCHE 2,101,034

DRAWING AND MAP FILE

Filed Jan. 25, 1936 4 Sheets-Sheet 2

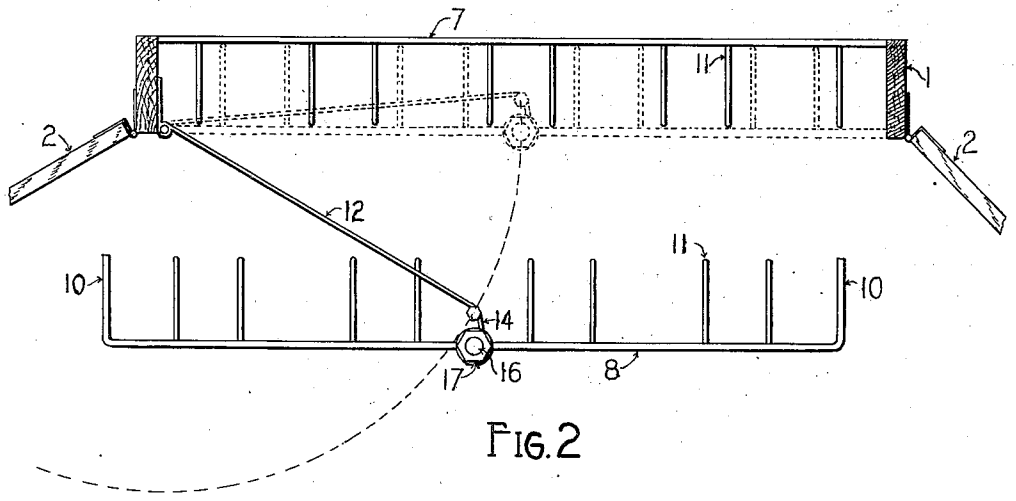

FIG. 2

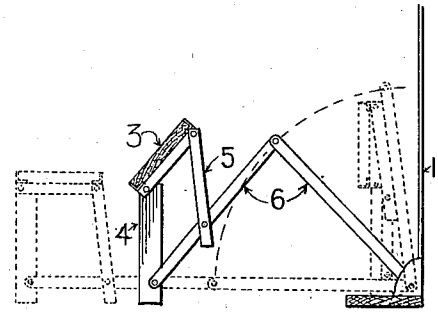

FIG. 3

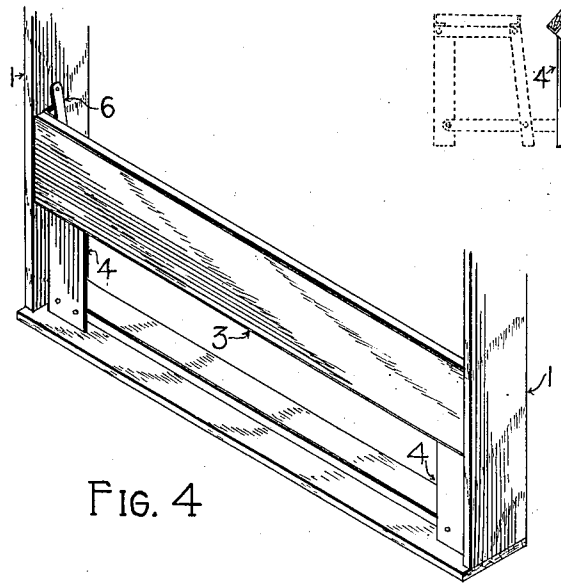

FIG. 4

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Dec. 7, 1937. A. H. MEUCHE 2,101,034

DRAWING AND MAP FILE

Filed Jan. 25, 1936 4 Sheets-Sheet 3

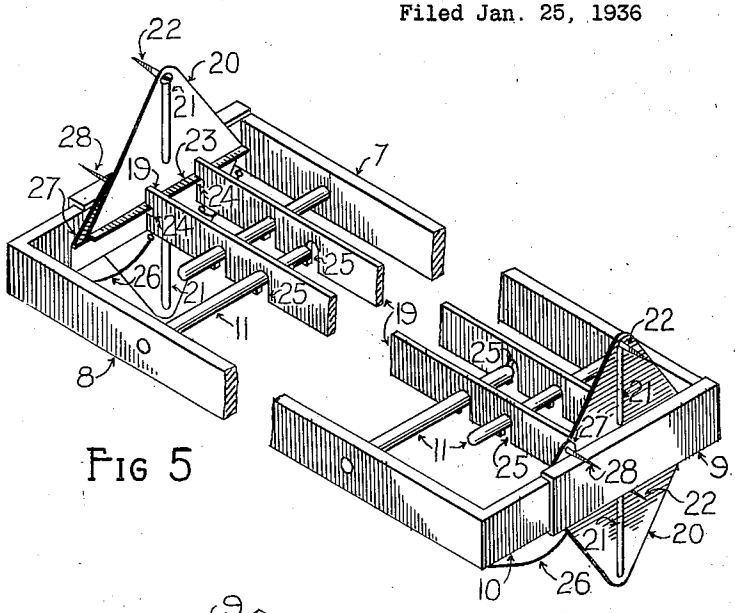

FIG 5

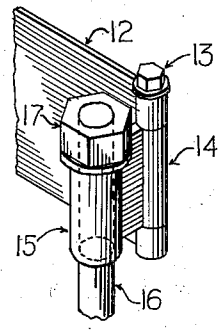

FIG. 7.

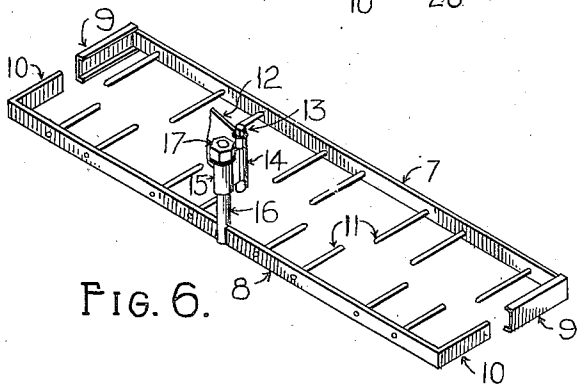

FIG. 6.

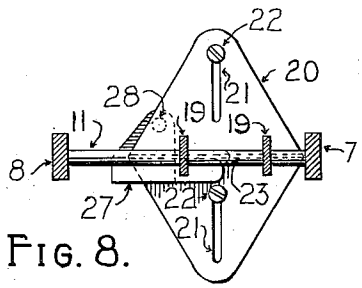

FIG. 8.

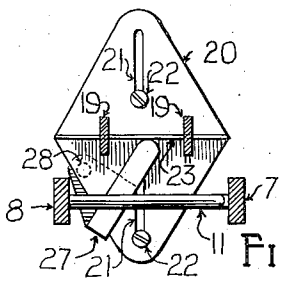

FIG. 9.

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Dec. 7, 1937. A. H. MEUCHE 2,101,034

DRAWING AND MAP FILE

Filed Jan. 25, 1936 4 Sheets-Sheet 4

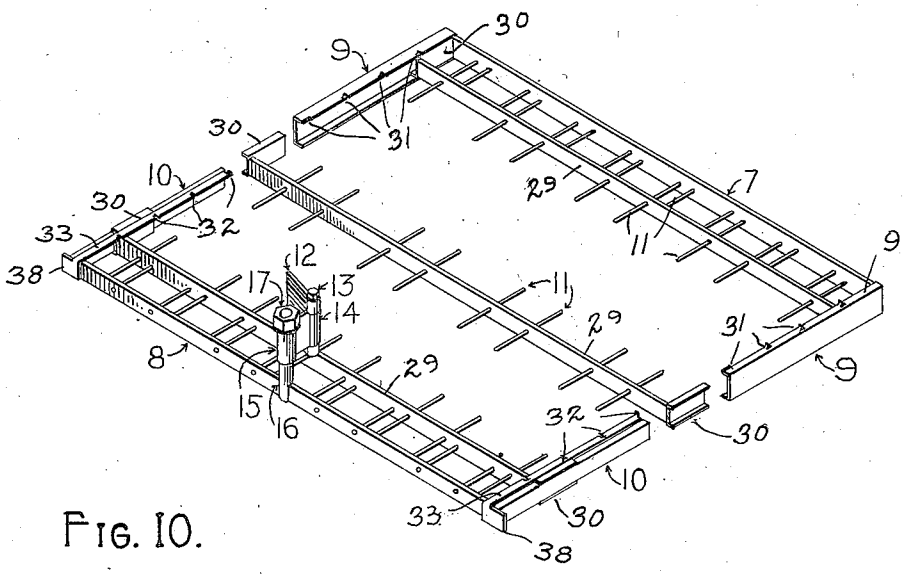

FIG. 10.

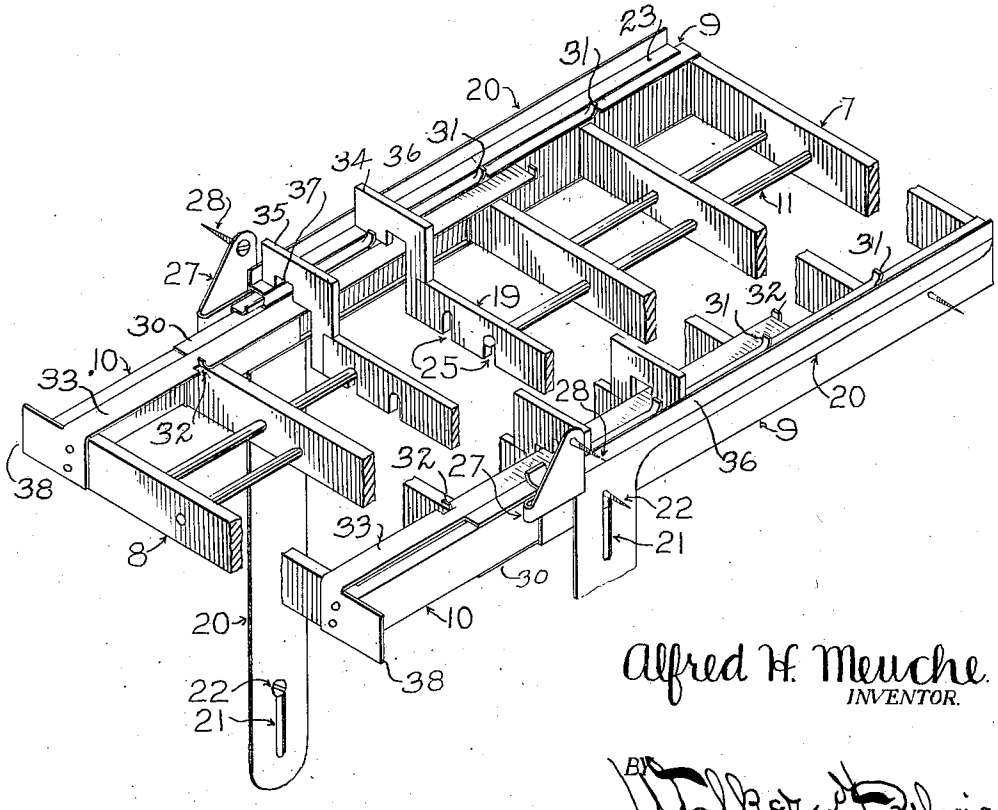

FIG. II.

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Patented Dec. 7, 1937

2,101,034

UNITED STATES PATENT OFFICE

2,101,034

DRAWING AND MAP FILE

Alfred H. Meuche, Washington, D. C.

Application January 25, 1936, Serial No. 60,626

24 Claims. (Cl. 40—28)

This invention relates to filing units for relatively large loose sheets, and more particularly to a vertical file hanger or support and enclosure especially adapted for filing drawings, blue prints, maps, and charts, but which may be used for storage and display of fabrics, tapestries, rugs, or the like.

The storage of drawings, prints and other large sheets in horizontal drawers, racks or other filing cabinets, not only requires considerable space but it is quite difficult to examine the underlying sheets without removal from the file, and the weight of overlying sheets renders it quite difficult to withdraw and reinsert the sheets, frequently resulting in them becoming mussed or crumpled and torn.

In the present invention there is contemplated a hanger structure including stationary and movable sections from which the drawings, prints, maps or other sheets are vertically suspended. The file hanger is such that the assembly of suspended sheets is divisible between any two succeeding sheets. One such selected group of sheets is adjustable away from the remaining portion to afford easy access for examination, removal or replacement of individual sheets. Automatic stop means is provided for retaining the sheets on the supporting sections of the hanger structure so long as they are separated. The detent members are automatically withdrawn upon the return of the separated groups of sheets to a single collective assembly by the closing of the file device.

The object of the invention is to simplify the construction as well as the means and mode of operation of filing units for large sheets whereby they may not only be economically manufactured but will be more efficient in use, automatic in operation, convenient, secure and unlikely to get out of repair.

A further object of the invention is to provide a filing unit which is compact in form and which will occupy minimum floor space and wherein the sheets will be vertically suspended.

A further and highly important object of the invention is to provide accessibility and enable selected sheets of various sizes to be easily and quickly removed and reinserted in their proper order.

A further object of the invention is to enable the entire area of a selected sheet to be rendered visible readily and quickly without the necessity of bodily removal from the collection of sheets in the file.

A further object of the invention is to provide means for automatically marking the place of a removed sheet so that the sheet may be restored to its proper sequence in the series.

A further object of the invention is to provide means for maintaining the filed sheets flat and to avoid mussing, wrinkling, or defacement thereof.

A further object of the invention is to provide markers and detent members automatically positioned upon separation of the collection of sheets into groups.

A further object of the invention is to provide an enclosure for the suspended sheets and to provide a retractable support for the operator to facilitate inspection and removal of sheets.

A further object of the invention is to provide a filing device and method of operation having the meritorious characteristics and the advantageous structural features herein mentioned.

With the above primary and other incidental objects in view, as will more fully appear in the specification, the invention consists of the features of construction, the parts and combinations thereof, and the mode of operation, or their equivalents, as hereinafter described and set forth in the claims.

Referring to the accompanying drawings wherein is shown the preferred but obviously not necessarily the only form of embodiment of the invention Fig. 1 is a perspective view of the assembled file unit forming the subject matter hereof showing the file open and the collection of filed sheets separated into groups, Fig. 2 is a top plan view, Fig. 3 is a detail side elevation showing the elevated step in a partially unfolded position. Fig. 4 is a detail perspective view showing the operator's step fully retracted, Fig. 5 is a detail perspective view of the suspension rack in partially closed relation. Fig. 6 is a detail perspective view of the suspension rack portion separated one from the other, Fig. 7 is a detail view of the mounting of the movable rack upon the crane arm. Figs. 8 and 9 are detail views of the automatic guard operating means in different positions of adjustment.

Figs. 10 and 11 illustrate an enlarged file structure for carrying an increased number of sheets.

Like parts are indicated by similar characters of reference throughout the several views.

In the present file structure the maps and drawings or other large sheets are suspended from an overhead hanger which may be attached directly to a wall, a supporting post or other structure, but is preferably mounted within a cabinet or closet 1 having closure doors 2 for the protection of the suspended sheets. To enable the overhead suspension racks to be con-

veniently reached for attaching and removing sheets therefrom and for observing indicia adjacent to the top of the maps, drawings or other filed sheets, there is associated with the cabinet an elevated duo-functional folding platform or step 3 upon which the operator may stand when the cabinet is open and which when retracted within the cabinet tends to hold the lower portion of the suspended sheets in compact relation and resist any tendency of the sheets to curl under influence of the humidity conditions.

The folding step or platform 3 is supported upon pivotally connected legs 4 and 5 which are connected with the cabinet 1 by inter-pivoted folding links 6. One member of each pair of links 6 is inter-pivoted to both legs 4 and 5 in parallel relation with the step 3. The oscillation of the links 6 affects a parallel movement of the legs relative to each other causing the step 3 to be tilted and the legs 4 and 5 together with the links 6 to be retracted into a common plane relation within the cabinet 1 as is illustrated in Fig. 4.

The overhead suspension structure from which the maps, drawings or other sheets are hung comprises a rectangular frame slidingly separable into angular U-shaped sections 7 and 8. The section 7 is stationarily mounted upon a wall or other support. In the present instance it is fixedly secured against the rear wall of the closet or cabinet 1.

Forwardly extending terminal arms 9 of the stationary hanger section 7 are flanged to slidingly receive the terminal arms 10 of the relatively movable section 8 of the hanger frame. The hanger sections 7 and 8 are each provided with a series of pins 11 arranged in pairs, one member of each pair of pins being carried by each of the hanger frame sections 7 and 8. The pins 11 of the respective sections project in opposite directions in paralleled spaced relation and are engageable through corresponding holes in the top margin of the maps, drawings or other sheets to be filed. When the hanger frame is in its contracted condition the suspended sheets, drawings or maps may be supported conjointly by the pins 11 of both sections 7 and 8.

However the pins 11 are of such length as to not extend entirely across the intervening space between the frame portions 7 and 8 but the pins of each series terminate in spaced relation with the opposite frame member. Therefore the maps, drawings or other sheets suspended from the carrier pins 11 may be slidingly adjusted thereon beyond the ends of one group or other group of the pins, whereby a greater or less number of suspended sheets will be supported entirely by the pins 11 of one or the other of the hanger frame section 7 or 8 and independently of the pins of the opposite section.

The hanger pins are however sufficiently long to hold at one time the entire lot of sheets filed between the coacting hanger frames. The purpose in providing more than two pins in relatively closely spaced relation is to enable the suspension thereon of sheets of different sizes.

The movable section 8 of a hanger frame is carried upon a swinging crane arm 12, which, in the present instance, is mounted within the cabinet 1 but might be attached to any other suitable support. The interconnection of the adjustable hanger frame section 8 with the swinging crane arm is preferably though not necessarily by a double hinge connection as shown in detail in Fig. 7.

To the end of the swinging arm 12 there is hinged upon the vertical axis 13 a relatively swinging leaf 14 with which there is integrally formed a bearing sleeve 15. The adjustable hanger frame section 8 is provided at mid-length with a vertical stud 16 rotatively journaled in the bearing sleeve 15 of the swinging leaf 14 and having threaded on its upper end a nut 17. The upper end of the bearing sleeve 15 is preferably somewhat enlarged to afford a thrust bearing for the nut 17. Between such nut and the terminal face of the bearing sleeve 15 washers or other anti-friction devices are preferably interposed. The double pivotal joints between the adjustable sections of the hanger frame and the swinging arm 12 affords a maximum degree of flexibility and increases the range of adjustment of the relatively adjustable section 8 when disengaged from the fixed section 7. This extreme flexibility of the interconnection of the adjustable section 8 of the hanger frame with the supporting crane arm 12 also facilitates the adjustment of the hanger section to enable the terminal arms 10 thereof to be slidingly engaged within the terminal arms 9 of the stationary section when the frame is to be adjusted to its normal or retracted condition.

When the hanger frame sections 7 and 8 are interengaged in their contracted relation the collection of drawings, prints, maps or other sheets which are suspended therefrom by engagement of the pins 11 in corresponding holes in the sheets may be separated into groups at any desired point. The swinging arm 12 and the differential coupling 14 associated therewith enables the movable hanger to be easily and readily withdrawn from the fixed hanger in a relatively straight path of travel determined by the sliding adjustment of the terminal arms 10 within the arms 9 of the stationary hanger and thereafter permits a continuing movement of the movable hanger into laterally offset relation with the fixed hanger to afford easy access to the sheets supported by either portion. Upon the return movement of the movable hanger incident to the swinging action of the arm 12, the sliding arms 9 and 10 are re-engaged as the hanger approaches its final position, thereby directing the approach in a path of movement substantially perpendicular to the respective hangers. Upon subsequent separation of the hanger frame section, one group of such sheets will be retained suspended upon the pins 11 of the stationary frame section 7 while the other group of sheets will be carried by the pins 11 of the movable section 8 and upon disengagement of the hanger section the latter group may be adjusted by the swinging movement of the crane arm 12 away from the former group to afford access to the exposed sheets of either group. When so separated the exposed sheets of the respective groups are not only accessible for inspection but may be easily removed from their supporting pins 11 or other sheets may be introduced therebetween by engaging them over the carrier pins 11 of either section.

To prevent accidental dislodgement of sheets from the carrier pins of either frame section while the file is open, detent or guard bars 19 are provided which are automatically dropped into position in front of the sheets of each group, as the file is opened, and likewise automatically raised above the level of the upper margins of the sheets as the file is closed. One of the guard or detent bars 19 remains with the stationary hanger frame section 7 in front of the group of

sheets suspended therefrom while the other detent or guard bar is carried with the adjustable hanger frame section 8 during its swinging movement toward and from the stationary portion.

To automatically adjust the guard or detent bars 19 there are provided sliding elevator plates 20 at each end of the hanger frame. The elevator plates are positioned inside the slidingly engaged arms 9 and 10 of the hanger frame sections. They are provided with vertical slots 21 through which extend stationary guide studs or screws 22 fixed in position in the end walls of the cabinet 1 or other support. Each elevator plate 20 has an inwardly projecting horizontal flange 23 which extends within notches 24 in the ends of the guard or detent bars 19. As the elevator plates 20 are raised and lowered the guard or detent bars 19 are vertically adjusted in unison therewith. In their lowermost position the bars 19 rest upon and are supported by the hanger pins 11, which engage in marginal notches 25 in the lower edges of the guard bars 19. Each detent or guard bar 19 is connected with its corresponding hanger frame section by flexible cable or by a link 26 of somewhat less length than the carrier pins 11. The flexible cable 25 confines the guard bars 19 to a range of adjustment within the length of the pins 11 and they may not pass therebeyond. The elevator plates 20 are slidingly adjusted upwardly upon the studs 22 as the movable hanger section 8 approaches the closed position, wherein its arms 10 slidingly engage within the arms 9 of the stationary section 7. During its final contractive movement the frame portion 8 engages with an elbow lever 27 pivoted at 28 to the wall of the cabinet or other support, the free end of which engages beneath the inwardly projecting flange 23 of the corresponding elevator plate. As the adjustable frame section approaches its home position it oscillates the elbow levers 26 at each end of the hanger frame from the position shown in Fig. 8 to that illustrated in Fig. 9 thereby lifting the elevator plates, and with them the guard or detent bars 19. By such upward movement of the plates 20 the guard bars 19 are lifted off the carrier pins 11 and raised entirely above the level of the upper margins of the suspended maps, drawings or other sheets.

While the guard bars are held in such elevated position the suspended sheets may be slidingly adjusted to and fro upon the carrier pins 11 to enable any desired sheet to be selected. While supported in elevated position by the flanges 23 the guard bars may be adjusted to and fro above the suspended sheets preparatory to being dropped in front of the separated groups of sheets. When the desired sheet has been found all of those in front of it are swung aside by the withdrawal of the hanger frame section 8 and swinging movement of the crane arm 12. However, as the disengaging movement of the frame section 7 and 8 is initiated the pressure of the section 8 upon the elbow levers 26 being relaxed the elevator plates 20 will be permitted to descend under influence of gravity assisted if necessary by hand pressure on the guard bars to present the guard or detent bars 19 intermediate the separate groups of sheets before the hanger frame has been moved sufficiently to withdraw the carrier pins 11 of the adjustable section 8 from the sheets of the group retained upon the stationary portion 7. One of these guard bars 19 being connected with the stationary hanger frame section 7 by the flexible cables or links 25 will remain positioned upon the carrier pins of said section in front of the suspended sheets to prevent their accidental disengagement therefrom. The other guard or detent bar 19 being connected by like flexible cables or links 25 with the adjustable hanger frame section 8 will move therewith out of engagement with the elevator plates 20 at each end of the bar and will rest upon the carrier pins 11 of the section 8 in front of the separated group of sheets.

These guard or detent bars may be easily manually lifted to enable sheets to be removed from either group of carrier pins 11 or to permit additional sheets to be engaged therewith. However, the guard bars normally resting upon the carrier pins in front of the sheets of each group prevent accidental dislodgment of the sheets from their carrier pins.

Such guard or detent bars 19 are preferably weighted along their lower margins to keep them in upright position or vertical plane while resting upon the carrier pins and while being adjusted thereabove by the movement of the elevator plates.

In Figs. 10 and 11 a modification is shown wherein the capacity of the file is greatly increased. The purpose of the modification is to prevent sagging or bending of the pins when the file is heavily loaded. The embodiment illustrated comprises intermediate relatively adjustable hangers supported upon either or both the sections 7 and 8 and slidingly adjustable relative thereto and to each other.

As shown in Fig. 10 the arms 9 and 10 of the hanger section are extended and one or more supplemental hangers 29 are slidingly mounted thereon. These hangers 29 are provided with terminal portions 30 telescopically engaged in the arms 9 and in turn slidingly engaged by the arms 10 of the opposing hanger section. The supplemental hangers carry supporting pins 11 which project in opposite directions therefrom.

The elevator 20 is elongated to correspond with the increased size of the structure and is located outside the hanger sections instead of inside and previously described.

As shown in Figs. 10 and 11 although the elevator member 20 is of different shape performs the same function. If desired the elevator may be shaped similarly to that shown in Figs. 8 and 9. In order that the guards 19 may be retained at different positions the limiting cable is omitted and a series of stops 31 are mounted on the arms 9. Complementary stops 32 are provided on strips 33 connected to the transverse rail of the section 8. The stops 31 and 32 are so spaced that they position the guards 19 substantially coincident with the ends of the pins 11 upon which the filed sheets are retained by said guards 19, regardless of the number of supplemental hangers 29. Since the ledges 23 of the elevators are above the level of the arms 9 and 10 and in order to clear the stops 31 and 32 the guards 19 are provided with terminal extensions 34 and 35 which engage with the ledge 23 to raise and lower the guards 19 over the pins 11. In its lower position one of the guards 19 engages with the stops 31 while the notches 36 in the lower margins of the extensions 34 permits the stops 32 to move without interference with the guard. The notches 37 in the lower margins of the extensions 35 permit a like movement of the stops 31 relative to the other guard rail 19. The swinging actuators by which the elevator plates 20 are raised as the hanger frames are adjusted to closed relation is operated

by engagement therewith of an extension **38** upon the stop bar **33** affixed to the hanger frame **8**, instead of by direct engagement of the frame **8** as in the primary construction.

From the above description it will be apparent that there is thus provided a device of the character described possessing the particular features of advantage before enumerated as desirable, but which obviously is susceptible of modification in its form, proportions, detail construction and arrangement of parts without departing from the principle involved or sacrificing any of its advantages.

While in order to comply with the statute, the invention has been described in language more or less specific as to structural features, it is to be understood that the invention is not limited to the specific features shown, but that the means and construction herein disclosed comprise the preferred form of several modes of putting the invention into effect, and the invention is therefore claimed in any of its forms or modifications within the legitimate and valid scope of the appended claims.

Having thus described my invention, I claim:

1. In a filing unit for loose sheets, a pair of complementary hanger members, one of said hanger members being fixed, a support upon which the other hanger member is movable relative to the fixed member, overlapping relatively spaced pins carried by the respective hanger members engageable through registering holes in the sheets to be filed and upon which such sheets are capable of to and fro sliding motion, guide means for the movable hanger member by which the pins carried thereby are registered with corresponding holes in sheets suspended from the pins of the other member as the movable hanger member approaches the fixed member, detent means for restricting the suspended sheets to the limits of the pins of the respective hangers when the hangers are separated, and means for automatically adjusting the detent means into and out of sheet restricting relation controlled by the relative movement of the movable hanger.

2. In a filing unit for loose sheets, a pair of complementary hangers relatively movable, guide means for directing at least one of the hangers in successive unaligned directions to and from the other hanger, a portion of which is in a direction perpendicular to such other hanger and the remainder of which is in a direction angular to the aforesaid movement, groups of relatively spaced pins carried by the respective hangers and extending in overlapping relation through corresponding holes in sheets suspended therefrom when the hangers are adjusted together, one or the other group of pins being withdrawn from certain of the sheets leaving the sheets suspended from the pins of the other group upon separation of the hangers, and guide means directing their relative approach to register the holes in the sheets carried by one group of pins with the pins of the other group whereby they may enter thereinto upon further adjustment of the hangers.

3. In a filing unit for loose sheets, a pair of complementary relatively movable hangers, supporting means therefor, groups of relatively spaced pins carried by the respective hangers and extending in overlapping relation through corresponding holes in sheets suspended therefrom when the hangers are adjusted together, one or the other group of pins being withdrawn from certain of the sheets leaving the sheets suspended from the pins of the other group upon separation of the hangers, detent means for retaining the suspended sheets upon the pins during separation of the hangers and means for automatically rendering the detent means ineffective upon approach of the hangers to permit sliding adjustment of the suspended sheets upon the pins.

4. In a file for suspended sheets, a pair of complementary relatively movable hangers, sheet supporting means thereon from which separate groups of filed sheets may be suspended and upon which the sheets are slidingly adjustable from one hanger to the other when the hangers are in closed position whereby they may be optionally supported by one hanger or the other when the hangers are separated, and supporting means for the hangers upon which at least one of the hangers and associated group of filed sheets are bodily movable initially in a direction perpendicular to the other hanger and thence in an arcuate path relative to the other hanger and its associated group of sheets.

5. In a file unit for suspended sheets, a pair of complementary relatively movable hangers including sheet supporting portions upon which suspended filed sheets are slidingly transferable from one hanger to the other when the hangers are positioned closely to each other, a support upon which one of the hangers is stationarily mounted and a carrier for the other hanger upon which the hanger is mounted for successive reciprocatory and oscillatory movements by which the hangers and associated sheets are bodily adjustable one relative to the other.

6. In a file for sheets, a pair of complementary relatively movable hangers including sheet supporting portions upon which filed sheets are slidingly adjustable from association with one hanger into association with the other hanger when the hangers are in closely positioned relation, supporting means upon which at least one of the hangers and associated filed sheets are bodily adjustable into laterally offset relation to the other hanger and associated sheets, and guide means extending beyond the margins of the filed sheets for aligning the hangers in parallel sheet transferring relation during their approach one toward the other.

7. In a file for sheets, a pair of complementary relatively movable hangers including sheet supporting portions upon which filed sheets are slidingly adjustable from association with one hanger into association with the other hanger when the hangers are in closely positioned relation, supporting means upon which at least one of the hangers and associated filed sheets are bodily adjustable into laterally offset relation to the other hanger and associated sheets and means for guiding such hanger in a relatively straight path of travel into and out of sheet transferring relation with the associated hanger, and retractable detent means for retaining the sheets in association with the respective hangers when the hangers are separated.

8. In a file for sheets, a pair of complementary relatively movable hangers including sheet supporting portions upon which filed sheets are slidingly adjustable from association with one hanger into association with the other hanger when the hangers are in closely positioned relation, supporting means upon which at least one of the hangers and associated filed sheets are bodily adjustable relative to the other hanger

and associated sheets, adjustable detent means for retaining the sheets in association with the respective hangers when the hangers are separated and means for automatically adjusting the detent means into and out of sheet restraining relation by relative adjustment of the hangers.

9. In a filing unit for loose sheets, a pair of relatively movable hangers each adapted to independently support separate groups of sheets thereon, guide means for aligning the hangers in sheet transferring relation when closely positioned to each other whereby sheets may be transferred directly from one hanger to the other without detachment therefrom, means for preventing displacement of the sheets from their associated hanger when the hangers are separated, at least one of the hangers being mounted for bodily movement of the hanger and associated sheets relative to the other hanger and guiding means directing the movable hanger through a dual movement a portion of which is in a direction perpendicular to the opposing hanger, and the remainder of which is in a lateral direction into laterally offset relation to the opposing hanger.

10. In a filing unit for loose sheets, a pair of relatively movable hangers, a group of relatively spaced pins carried by each hanger and projecting toward the other hanger in laterally offset overlapping relation, and engageable in correspondingly spaced holes in the sheets to be filed, upon which the sheets are slidingly adjustable into separate groups, and supporting means for the hangers in which at least one of the hangers and sheets carried thereby are bodily movable relative to the other hanger into laterally offset relation, and aligning means directing the approach of the hangers and their initial separation in a path substantially at right angles to the respective hangers.

11. In a filing unit for loose sheets, a pair of relatively movable hangers, a group of relatively spaced pins carried by each hanger and projecting toward the other hanger in laterally offset overlapping relation, and engageable in correspondingly spaced holes in the sheets to be filed, upon which the sheets are slidingly adjustable into separate groups, and a swinging arm upon which one of said hangers and the sheets associated therewith are adjustable relative to the other hanger into laterally offset relation with the opposing hanger, and a double pivotal coupling associated with the swinging arm permitting the hanger a differential movement in a relatively straight path of travel into and out of final adjusted sheet transfer relation with the opposing hanger.

12. In a filing unit for loose sheets, a pair of relatively movable hangers, a group of relatively spaced pins carried by each hanger and projecting toward the other hanger in laterally offset overlapping relation, and engageable in correspondingly spaced holes in the sheets to be filed, upon which the sheets are slidingly adjustable into separate groups, slidably interengageable guide portions upon the respective hangers for aligning the pins of one hanger with the holes of sheets carried by the other hanger, and supporting means for the hangers enabling at least one of the hangers and associated filed sheets to be bodily moved relative to the other hanger into and out of laterally offset relation with the opposing hanger and guide means for directing the final approach and initial separation of the hangers in a path of movement substantially perpendicular thereto.

13. In a filing unit for loose sheets, a pair of relatively movable hangers, a group of relatively spaced pins carried by each hanger and projecting toward the other hanger in laterally offset overlapping relation, and engageable in correspondingly spaced holes in the sheets to be filed, upon which the sheets are slidingly adjustable into separate groups, vertically movable guard bars extending transversely of the pins of each hanger, and means for effecting vertical movement of the guard bars into and out of the path of sliding adjustment of the sheets upon said pins by the relative movement of the hangers.

14. In a filing unit for loose sheets, a pair of hangers movable one relative to the other into laterally offset relation, a group of relatively spaced pins carried by each hanger and projecting toward the other hanger in laterally offset overlapping relation, and engageable in correspondingly spaced holes in the sheets to be filed, upon which the sheets are slidingly adjustable into separate groups, and guard bars associated in transverse relation with the pins of each hanger and automatically movable into and out of the path of movement of the sheets upon the pins coincident with the separation and approach of the hangers one relative to the other.

15. In a file unit a pair of complementary hanger members common to a plurality of sheets to be suspended therefrom, one of said hanger members being fixed and the other movable into and out of laterally offset relation to said fixed member and aligning means directing the approach of the movable hanger in a path substantially perpendicular to the fixed hanger and detent means associated with each of the hanger members for retaining separated groups of sheets suspended from the respective members during movement of one hanger member relative to the other.

16. In a file unit for loose sheets, a hanger frame separable into relatively adjustable portions, overlapping carrier pins upon the respective hanger frame portions common to a collection of sheets suspended therefrom upon which suspended sheets are slidingly adjustable into separated groups, a swinging carrier for one of the frame portions by which said portion and a selected group of suspended sheets may be moved from and toward the other hanger portion and group of sheets suspended therefrom and a differential coupling associated with the swinging arm permitting movement of the movable frame member eccentric to the path of movement of the swinging carrier.

17. In a file unit for loose sheets, a pair of relatively movable hanger members common to a collection of sheets to be suspended therefrom upon which the sheets are movable from one hanger member to the other, a carrier for at least one of the hanger members upon which said member is bodily movable into and out of laterally offset relation to the other hanger member and aligning means for directing the hangers into predetermined final adjusted relation upon approach of the movable member.

18. In a file unit for loose sheets, a cabinet, hanger at the top of the cabinet from which loose sheets may be suspended, a support upon which the operator may stand while installing and inspecting the suspended sheets, links connecting the support with the cabinet for movement in a prescribed path toward and from the suspended

sheets, said support being retractable to a position in front of and against the lower portions of the suspended sheets for retaining them in compacted relation.

19. In a file unit for loose sheets, a cabinet, a hanger at the top of the cabinet from which loose sheets may be suspended, a folding step upon which when erected an operator may stand while installing and inspecting the sheets, said step being adjustable into and out of the cabinet within which it assumes a position in front of and against the suspended sheets, and a linkage system by which the step is automatically collapsed and erected by its movement into and out of the cabinet.

20. In a file unit for loose sheets, a cabinet, a hanger in the top of the cabinet from which the sheets may be suspended, a swinging support, upon which an operator may stand for installation and inspection of the sheets, mounted at the bottom of the cabinet for swinging movement into and out of the cabinet, said support when retracted being positioned in front of and against the lower portions of the sheets.

21. A file unit for loose sheets, including two opposed sheet supporting members, a mounting for at least one of the supporting members permitting movement thereof successively in perpendicular and arcuate paths relative to and into and out of juxtaposition with the other supporting member, and a group of sheet engaging pins on each of said supporting members, the pins of each group being relatively spaced to accommodate sheets of various sizes and lying in overlapping relation with the pins on the other supporting member when the supporting members are juxtaposed.

22. A file unit for loose sheets, including two opposed sheet supporting members, a pivotal mounting for at least one of the supporting members permitting movement thereof successively in perpendicular and arcuate paths about axes parallel to the vertical plane of the supporting member relative to and into and out of juxtaposition with the other supporting member, and a group of sheet engaging pins on each of said supporting members, the pins of each group being relatively spaced to accommodate sheets of various sizes and lying in overlapping relation with the pins on the other supporting member when the supporting members are juxtaposed.

23. A file for loose sheets including opposing complementary sheet supporting members, a group of sheet engaging pins on each member extending toward the other member in overlapping parallel relation with the pins thereon, and relatively spaced to accommodate sheets of various sizes suspended in overlapping relation, and guide means for directing withdrawal of the movable member while maintaining its pins in parallel relation with those of the opposing member until the pins of the respective members are out of overlapping relation and means for movably supporting the withdrawn member for further movement laterally out of opposing relation with the complementary member to afford easy access to the sheets.

24. A file for loose sheets including opposing complementary sheet supporting members, multiple spaced pairs of parallel sheet supporting pins, the pins of each pair being carried upon the respective members and extending therefrom in opposite directions in parallel overlapping relation, interengaging sliding connections upon which the supporting members are relatively adjustable into and out of such overlapping relation of the pins while maintaining the parallel relation thereof, and into and out of engagement with each other and means for guiding the movable member laterally into and out of registry with the complementary member when disconnected therefrom to afford easy access to the sheets.

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