Feb. 9, 1932. R. J. WOOD 1,844,376

FILING CABINET

Original Filed Feb. 15, 1924 2 Sheets-Sheet 1

Fig. 1

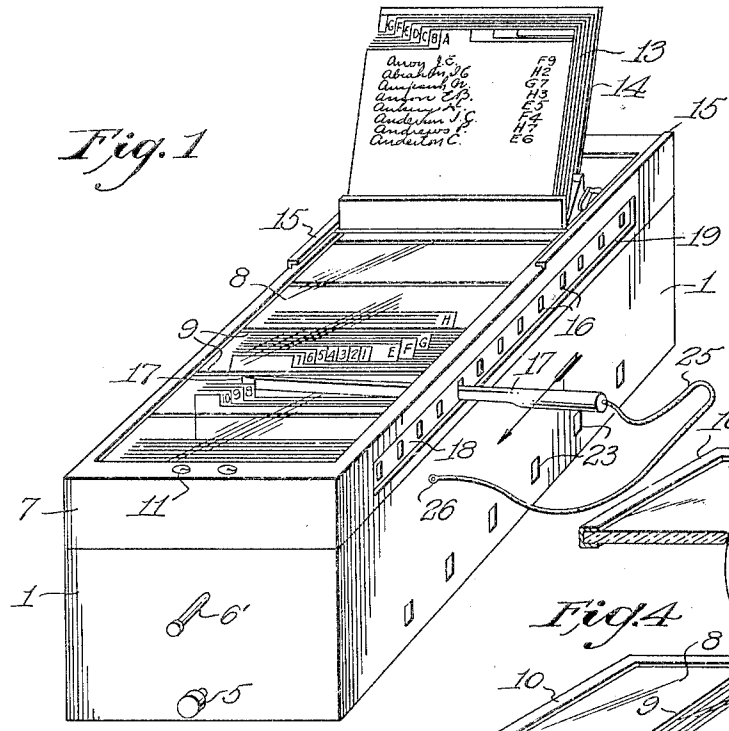



Fig. 3

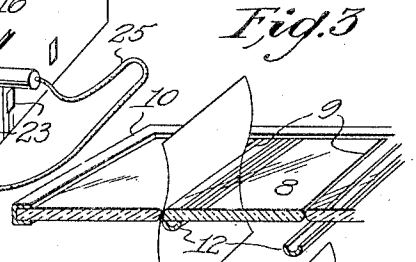



Fig. 4

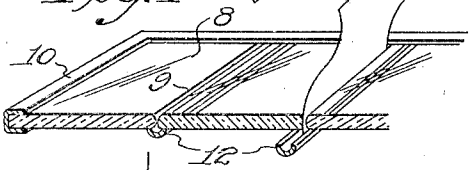
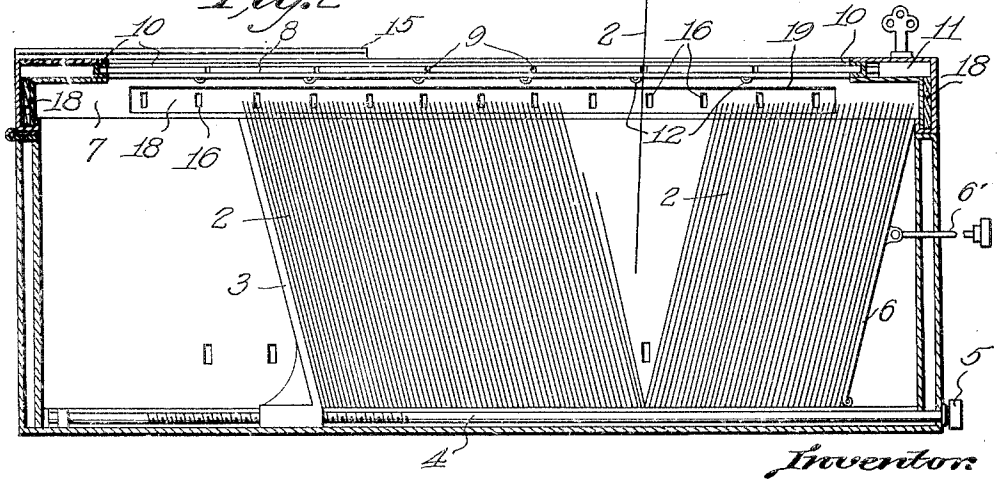



Fig. 2

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Original Filed Feb. 15, 1924 2 Sheets-Sheet 2

Fig 5

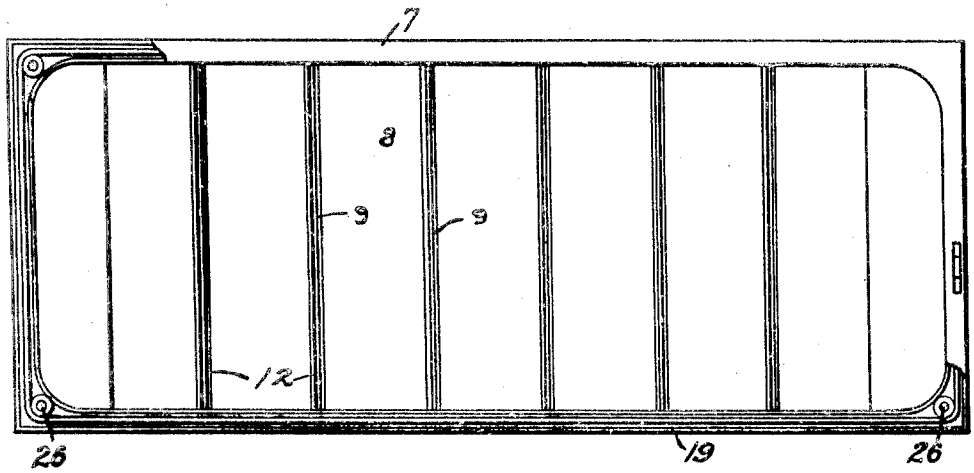



Fig. 6

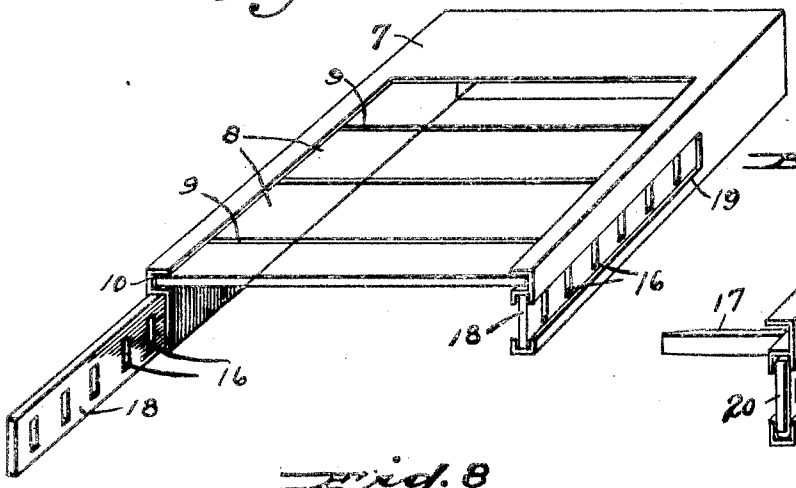



Fig. 7.

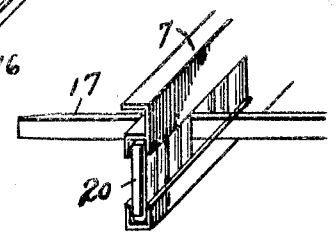
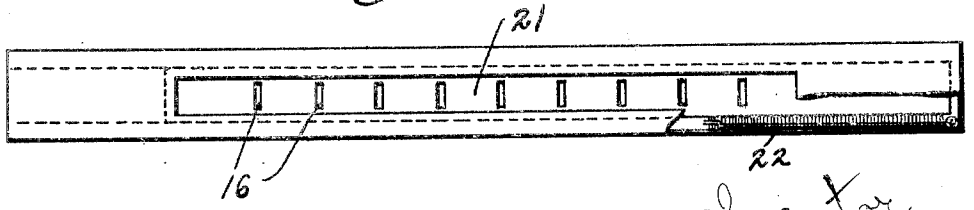



Fig. 8

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Patented Feb. 9, 1932

1,844,376

# UNITED STATES PATENT OFFICE

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## FILING CABINET

Original application filed February 15, 1924, Serial No. 693,057. Divided and this application filed September 17, 1928. Serial No. 306,438.

My invention relates to card filing devices and more particularly to a protected file unit or box to contain a succession of data sheets or record cards, with means to enable the selection of a desired card or data sheet with facility and dispatch, while preventing unauthorized tampering with the records or the removal of such sheets or cards.

In the present invention there is embodied a box-like container, having a transparent normally locked lid or cover through which the data sheets or cards may be observed, the container having access openings therein through which a spatula or other suitable instrument may be inserted for the purpose of turning the cards or separating the collection of cards into portions by oscillating them to and fro to expose any selected card. To facilitate the turning over or oscillation of the cards within the container, the access openings for the spatula or implement are preferably located in a movable section, in the present instance in a traveling belt, which passes over guide rollers at the corners of the lid, and is intermittently advanced by the pulling effort upon the inserted spatula or instrument, necessary to turn or separate the cards. In lieu of the endless belt there may be employed a succession of short rollers arranged side by side with sufficient play or lost motion to permit the insertion of the separating spatula between any two rollers, or such access openings for the insertion of the card-turning implement may be made in a reciprocatory bar, mounted in the side of the container. If it is desired that cards or data sheets shall be placed in the file box or container, the transparent lid is provided with spaced transversely arranged slots through which additional cards or data sheets may be deposited between particular guides of the card or sheet collection within the box. If it is desired to lock the container against such deposit of additional cards or data sheets, transverse stop bars or wires are provided which by relative movement of the slotted transparent top and such stop wires are brought into registry with the slot or moved out of registry at the will of the operator. To prevent the deflection of a card or data sheet over or around such stop bar, the transverse rods or bars are preferably channelled. The relative adjustment of the slotted transparent top and such stop rods or bars is controlled by a key-operated lock. The object of the invention is to improve the structure as well as the operation of file boxes or containers whereby they will not only be cheapened in construction and economical in manufacture, but will be easily and quickly operated to effect the selection of the desired card or data sheet, compact in form, adaptable to a wide range of uses and unlikely to get out of repair.

A further primary object of the invention is to provide full and complete protection against the intentional abstraction or accidental loss of record cards or data sheets, or the alteration of records contained thereon by rendering the information or data sheets contained in the file box inaccessible for removal or alteration or destruction, yet easily and quickly available for observation.

A further object of the invention is to provide improved protective means for a series of cards or data sheets, which while preventing removal or tampering therewith, will nevertheless enable the addition or insertion at selected points of additional cards or data sheets and to further provide means for locking the file box or container against the insertion of such additional record sheets.

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 box or container, showing the cards therein, and a file index mounted on top of the box or container. Fig. 2 is a longitudinal sectional view of the file box or container, with a series of cards therein. Figs. 3 and 4 are detail perspective views of a slotted closure top in unlocked and

locked positions. Fig. 5 is a bottom plan view partly broken away of a transparent top or lid removed from the box or container. Fig. 6 is a sectional perspective view of the transparent closure lid, showing the relation of the endless traveling apertured belt. Fig. 7 is a detail perspective view illustrating a modification wherein a series of independent rollers are employed in lieu of an apertured belt. Fig. 8 is a side elevation of the lid or closure partly broken away, illustrating a reciprocatory bar having apertures therein to be employed in lieu of the belt or rollers.

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

Referring to the drawings, 1 is a box or container preferably, though not necessarily formed from sheet-metal and having hollow walls 2, which afford stability. The box 1 is adapted to contain a series or collection of file cards, data sheets or other record cards 2. They are supported in inclined grouped relation by an adjustable follower 3, movable longitudinally by a screw shaft 4 in the bottom of the box, and operated by a revoluble knob 5, projecting exteriorly thereof. At the forward portion of the box, is provided a hinged plate or follower 6, operated by a push rod or stem 6′, to oscillate rearwardly such portion of cards 2 as may have been shifted forward to expose a selected card or data sheet. The container 1 is provided with a closure lid 7, which may be hinged to the box 1 but which is normally locked to prevent access to the box or container, and tampering with the cards or data sheets therein. The box lid or cover is provided with a transparent panel 8, through which the inscriptions upon the cards or data sheets 2 may be observed. In the event that it is intended that additional cards or data sheets shall be inserted or deposited within the box or container between certain selected cards of the collection 2, the transparent panel 8 is composed of a series of spaced sections of transparent material preferably glass, leaving therebetween narrow slots or crevices 9. Such slots 9 are of comparatively narrow width, only sufficient to admit the card or sheet to be deposited, but not wide enough to permit the insertion of any implement by which the deposited cards or sheets might be withdrawn. If the file container is intended merely as a depository for records to which no additions are to be made by persons not having access to the container, the transparent observation panel 8 may be continuous throughout and the depository slots 9 may be omitted. However, by providing for the deposit of such additional record cards through the slotted top, the file may be employed for stock accounting, directory purposes, or for workmen's time records. In such application, the guide cards of the file group 2 may indicate different classes of stock of which additions and deductions are indicated upon record cards deposited between the guides. Likewise the guides may indicate districts of delivery routes and the deposited cards may comprise a directory of such districts or routes, to which additions may be made from time to time. When used as a paymaster's record, the guides may disclose the names or numbers assigned to different workmen whose dialy time cards may be filed by being deposited through the slots. Whether provided with the deposit slots or not, the file may be used for a series of protected ledger cards. In any event, the record upon any card or sheet may be observed through the transparent panel, upon separating the cards by the spatula inserted through the lateral access opening, and from time to time additional cards or memoranda sheets may be deposited if desired, through the slots in association with particular previously filed cards. To provide for the locking of such cover against the insertion or deposit of additional sheets or cards, the spaced transparent sections of the panel 8 are mounted in a suitable frame 10, which in turn is mounted for limited reciprocatory movement in a fore and aft direction, or transverse to the direction of the slots 9 in the cover lid 7. The to and fro movement of this transparent framed panel is controlled by a key-operated lock 11, the ordinary lock bolt of which is connected to the panel frame, so that the frame is shifted to and fro as the lock is manipulated. Fixedly secured tranversely in the main frame of the closure lid or top 7, and in spaced relation corresponding with that of the deposit slots 9, is a series of stop bars or wires 12. These stop bars or wires are preferably, though not necessarily, channelled, and are approximately of the size and shape of the ordinary umbrella rib of the preesnt time. By the to and fro shifting movement of the transparent panel 8, the deposit slots 9 thereof are moved into and out of registry with the stop wires or baffles 12. When such slot 9 is out of registry with the stop wire or baffle 12, the record card or data sheet may be freely inserted as shown in Fig. 3. However, when adjusted to bring the slot 9 into registry with the stop wire or baffle 12, the slot will be closed, and the insertion of additional sheets or cards prevented, as shown in Fig. 4. The grooved character of the baffle wire or stop 12, causes the trapping or engagement of the edge of the sheet or card, which might otherwise be passed over or around the stop baffle, and into the container.

In the event that the file box or container is employed as a record file or to hold cards and sheets pertaining to personal transactions, as stock and bond records, signature cards for banks, policy records or the like, the records within the container may be di-

vided numerically or the divisions and subdivisions may embody both letters and numerals, in which event an alphabetical name index 13 is preferably though not necessarily mounted on top of the container or box. Such an index has been shown in Fig. 1, consisting of a series of name lists, subdivided and tabbed alphabetically. This collection of name lists or alphabetical index is mounted in a suitable carrier 14, detachably engaged beneath overhanging ledges or flanges 15, projecting from the margins of the closure lid 7.

To enable the selection of any desired card, and separation of the collection or group of record cards 2 into portions to expose the selected card by tilting a portion of such cards forwardly, the box or container 1 is provided in the side wall thereof, with a series of spaced apertures 16. A spatula or other thin bladed instrument 17, may be introduced through any one of the apertures 16, and by looking through the transparent panel 8 of the lid, the operator may guide such spatula or instrument 17 between any two adjacent cards. By movement of the spatula or selecting instrument 17, those cards in advance of the point of separation may be tilted forwardly in the same manner that a card file is opened by manual manipulation when access is afforded direct to the cards. There being a series of the apertures 16 which are located at spaced intervals, the operator selects the aperture most convenient to the point of operation or in other words, close to the card to be selected. The group or collection of record cards may be separated at different points by inserting the implement 17 through different apertures 16, and then transmitting through such inserted implement 17, the motion necessary to tilt the advance portion of the cards forwardly. These apertures 16 for the insertion of the selecting instrument 17 may be fixedly located in the side wall of the box or container. However, for convenience of operation, they are movable in relation with the container, whereby instead of a prying or oscillatory movement of the implement 17 as is necessary to separate the records when the apertures are stationary, the entire implement 17 may be drawn forwardly and thus be made to follow the advance of the tilted or separated portions of the cards or record sheets. While several methods of enabling such shifting movement of the selecting implement 17, and the aperture 16 through which the implement is inserted may be employed, the preferred construction consists of an endless traveling belt 18, extending about guide rollers 26 located adjacent to the corners of the closure lid 7 and in which the apertures 16 are formed. The lid 7 is provided at one side with a slot 19, with which the traveling belt 18 registers, and by which the slot is closed except for the apertures 16 in the traveling belt. The belt 18 may be of any suitable flexible material. It may be of thin metal, or of composition. However, in practice a leather belt 18 having the apertures 16 formed therein at intervals is found very satisfactory particularly in view of the fact that it is noiseless in its movement. The implement 17 being inserted through an aperture 16 of the traveling belt 18, in close proximity to the card to be selected, and thence inserted between the selected card and the one in advance thereof, the implement 17 is bodily drawn forwardly as indicated by the arrow in Fig. 1, carrying with it not only the separated portion of the cards within the box or container, but also the traveling apertured belt 18. By employing an endless belt passing entirely about the closure lid 7, it is not necessary to return the belt preparatory to the next selecting operation. After each operation, the endless belt 18 is left in its advanced position and upon the succeeding operation, the implement is inserted through another aperture and the belt again advanced. Thus the apertured belt 18 travels through an intermittent step-by-step movement around the lid 7, being enclosed within the hollow or tubular margins of such closure lid.

In Fig. 7 there is shown a modification, wherein in lieu of the endless traveling apertured belt 18, a series of independent studs or rollers 20 are located side by side in the channelled or tubular sides of the closure lid 7, to form a continuous series movable about the lid. The rollers are so proportioned that when closely assembled in their containing tube or channel, there will be slight play between the respective rollers or studs sufficient to permit the insertion through an opening in the sides of the channel of the selecting implement 17 between any two adjacent rollers or studs 20. That is to say, the series of studs or rollers does not quite fill the track or circuit, so that sufficient play or lost motion is permitted to enable any two studs or rollers to be separated a sufficient distance to enable the insertion of the selecting implement 17. When this implement is inserted between adjacent studs or rollers 20 and engaged with the selected cards within the box or container, it may be drawn forwardly, thus advancing the entire series of rollers or studs 20 in quite the same manner that the endless belt 18 is advanced.

As a further modification of this construction, there has been shown in Fig. 8 a reciprocatory bar 21, mounted for to and fro movement in the side frame of the closure lid 7 and having therein the apertures for the insertion of the selecting implement 17. This bar 21 is normally retracted by a spring 22. The selecting implement 17 being inserted through any one of the apertures 16, the implement and with it the bar 21 may be drawn

forwardly against the tension of the spring 22, to tilt the separated portion of the card group. Upon release of the reciprocatory bar 21, it will be retracted by the spring 22 preparatory to the next selection operation. The primary objection to the constructions shown in Figs. 7 and 8 is only the fact that they are somewhat more noisy than the endless belt construction shown in the preceding figures, and induce a clicking sound as the rollers are displaced one against the other, or as the reciprocatory bar 21 is returned by the retraction of the spring.

In Fig. 1 there have been shown additional apertures 23, located in proximity to the bottom of the box or container 1, through which the implement 17 may be inserted and by a prying or oscillatory movement employed to straighten or adjust the cards within the box or container, or to shift their lower bearing edges within the box or container to accommodate an adjustment of the follower block 3. Such additional apertures 23 are not ordinarily necessary nor essential but may be desirable under certain conditions of use.

In lieu of the plunger stem 6′ for returning the cards, the forward follower 6 may be drawn upwardly and rearwardly by a cord 25, attached at one end to the oscillatory follower 6 and at its opposite end to the spatula 17 as shown in Patent No. 1,685,011 above referred to. This cord 25 not only prevents the spatula being misplaced, and keeps it readily at hand, but provides a convenient means by which the cards may be restored and the spatula inserted for a subsequent selection almost as a single motion. While holding the spatula preparatory to making the selection, a slight pull upon the cord 25 will restore the tilted cards. The present application is a division of application Ser. No. 693,057 filed Feb. 15, 1924, since matured into Patent No. 1,685,011 dated Sept. 18, 1928.

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.

Having thus described my invention, I claim:

1. In a protected filing device, a protective housing for a series of data sheets having a transparent observation panel through which the data sheets and their inscriptions may be observed, means permitting adjustment of the data sheets from the exterior of the housing to expose to view any selected sheet, said housing having therein a deposit slot through which additional data sheets may be deposited in association with previously filed sheets, and a closure member for the deposit slot by which additional data sheets may be excluded.

2. In a protected filing device, a protective housing for a series of data sheets having a transparent observation panel through which the data sheets and their inscriptions may be observed, means permitting adjustment of the data sheets from the exterior of the housing, to expose to view any selected sheet, said housing having therein a deposit slot through which additional data sheets may be deposited in association with previously filed sheets, and means for temporarily closing the deposit slot to exclude additional sheets from the container.

3. In a protected filing device, a protective housing for a series of data sheets having a transparent observation panel through which the data sheets and their inscriptions may be observed, means permitting adjustment of the data sheets from the exterior of the housing, to expose to view any selected sheet, said housing having therein a deposit slot through which additional data sheets may be deposited in association with previously filed sheets, and lock-controlled means for preventing the insertion of additional data sheets through said slot.

4. In a protected filing device, a protective housing for a series of data sheets having a transparent observation panel through which the data sheets and their inscriptions may be observed, means permitting adjustment of the data sheets from the exterior of the housing, to expose to view any selected sheet, said housing having therein a deposit slot through which additional data sheets may be deposited in association with previously filed data sheets, a baffle member for closing the slot, the slotted portion of the container and the baffle being relatively adjustable to shift the slot and closure baffles into and out of registry.

5. In a protected filing device, a protective housing for a series of data sheets having a transparent observation panel through which the data sheets and their inscriptions may be observed, means permitting adjustment of the data sheets from the exterior of the housing, to expose to view any selected sheet, said housing having therein a deposit slot through which additional data sheets may be deposited in association with previously filed sheets, and a baffle member for closing the slot, the slotted portion of the housing and the baffle being relatively movable into and out of registry one with the other.

6. In a protected filing device, a container for a plurality of data sheets including a transparent panel through which the data sheets may be observed, means operable from the exterior of the container for adjusting the data sheets for observation, said transparent panel having therein a series of slots

extending substantially parallel with the data sheets within the container, through which data sheets may be deposited in association with those already within the container, a reciprocatory grid mounted in juxtaposition to the slotted panel and having bars extending parallel with the slots and lock-controlled means for relatively shifting the transparent panel and the grid in relation one to the other to move the grid bars and slots into or out of registry.

7. In a protected filing device, a container for a plurality of data sheets including a transparent panel through which the data sheets may be observed, means operable from the exterior of the container for adjusting the data sheets for observation, said transparent panel having therein a series of slots extending substantially parallel with the data sheets within the container, through which data sheets may be deposited in association with those already within the container, a grid mounted in juxtaposition to the slotted panel and having bars extending parallel with the slots, and means for relatively shifting the transparent panel and the grid in relation one to the other to move the grid bars and slots into and out of registry.

8. In a protected file box, a housing for a series of data sheets including a transparent panel through which the data sheets may be observed, said housing having a slot therein extending transversely of the data sheets for the introduction of a selective implement and movement of the same longitudinally of the slot to separate the data sheets for observation, and a movable closure for the slot.

9. In a protected file box, a housing for a series of data sheets including a transparent panel through which the data sheets may be observed, said housing having a slot therein extending transversely of the data sheets for the introduction of a selective implement and movement of the same longitudinally of the slot to separate the data sheets for observation and a closure for said slot movable in unison with the movement of the selective implement.

10. In a protected file box, a housing for a series of data sheets including a transparent panel through which the data sheets may be observed, said housing having a slot therein extending transversely of the data sheets for the introduction of a selective implement and movement of the same longitudinally of the slot to separate the data sheets for observation, and an apertured movable closure for said slot.

11. In a protected file box, a housing for a series of data sheets including a transparent panel through which the data sheets may be observed, said housing having a slot therein extending transversely of the data sheets for the introduction of a selective implement and movement of the same longitudinally of the slot to separate the data sheets for observation, and a movable closure for the slot adapted to admit and be actuated by the selective implement.

12. In a protected file box, a housing for a series of data sheets including a transparent panel through which the data sheets may be observed, said housing having a slot therein extending transversely of the data sheets for the introduction of a selective implement and movement of the same longitudinally of the slot to separate the data sheets for observation, and a traveling apertured closure for the slot through the apertures of which the selective implement is introduced.

13. In a protected file box, a housing for a series of data sheets including a transparent panel through which the data sheets may be observed, said housing having a slot therein extending transversely of the data sheets for the introduction of a selective implement and movement of the same longitudinally of the slot to separate the data sheets for observation and an endless traveling apertured closure for the slot movable through a circuitous path through which the selective implement is insertable at separated intervals.

14. In a protected file box, a housing for a series of data sheets including a transparent panel through which the data sheets may be observed, said housing having a slot therein extending transversely of the data sheets for the introduction of a selective implement and movement of the same longitudinally of the slot to separate the data sheets for observation, and an endless flexible band having spaced apertures therein movable past the slot and registering therewith to form a closure, the selective implement being insertable through the apertures of the band and movable therewith within the limits of the slot.

15. In a protected file box, a housing for a series of data sheets including a transparent panel through which the data sheets may be observed, said housing having a slot therein extending transversely of the data sheets for the introduction of a selective implement and movement of the same longitudinally of the slot to separate the data sheets for observation, and an apertured closure for said slot movable through a circuitous path of travel throughout a portion of which it registers with said slot and through which the selective implement may be inserted into engagement with the data sheets.

16. In a construction of the character described, a housing having an access slot in the wall thereof and a perforate closure for the slot movable longitudinally thereof through which an implement may be introduced into the housing for movement therein within the limits of the slot.

17. In a construction of the character described, a housing having an access slot in the wall thereof for the introduction of an

implement into the housing for relative movement within the limits of the slot and closure means for progressively closing the slot in unison with the movement of the implement.

18. In a construction of the character described, a housing having in the wall thereof an access slot and a traveling closure for said slot movable longitudinally thereof, through which an implement may be introduced into the housing for travel movement in unison with the traveling closure.

19. In a construction of the character described, a housing having a wall provided with a deposit slot, a recessed channel bar positioned with its recessed side contiguous to the slot in said wall for blocking said slot, said slotted wall and said channel bar being relatively movable one to the other to unblock the slot in said wall and permit insertion of index sheets into said housing through the slotted wall.

20. In a construction of the character described, a housing having a wall member provided with a deposit slot, a closure member within the housing and normally blocking the slot in said wall, and shifting means on the exterior of the housing, said shifting means being manually operable to move one of said members relative the other to unblock the slot in said wall member and permit insertion of index sheets into said housing through the slotted wall member.

In testimony whereof, I have hereunto set my hand this 8th day of September A. D. 1928.

RODNEY J. WOOD.