June 12, 1928. 1,673,291

F. J. MATCHETTE

SERVICE CABINET

Original Filed Aug. 13, 1919 5 Sheets-Sheet 1

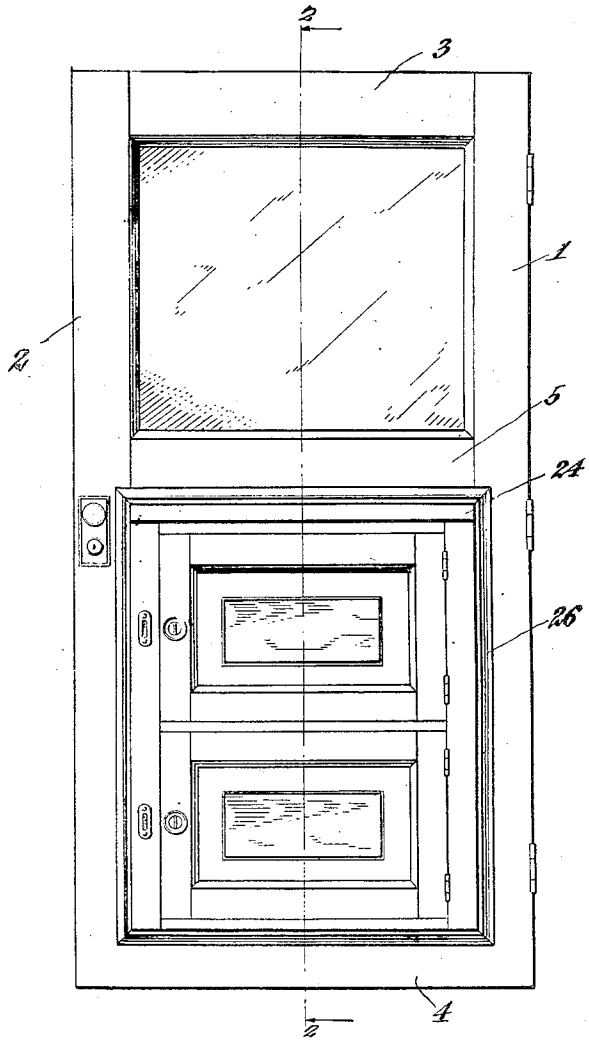


Fig. 1.

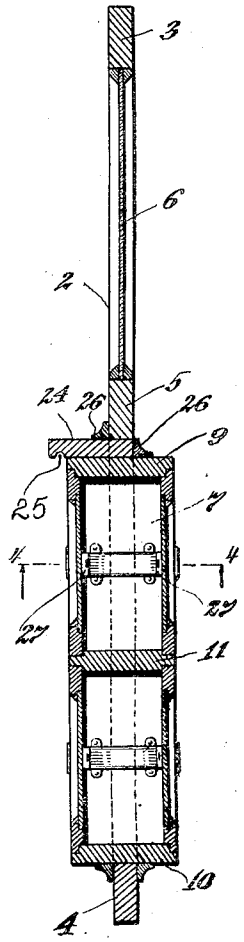


Fig. 2.

INVENTOR

Frank J. Matchette

BY Brown, Boettcher & Dienner

ATTORNEY

June 12, 1928. 1,673,291

F. J. MATCHETTE

SERVICE CABINET

Original Filed Aug. 13, 1919 5 Sheets-Sheet 2

Fig. 5.

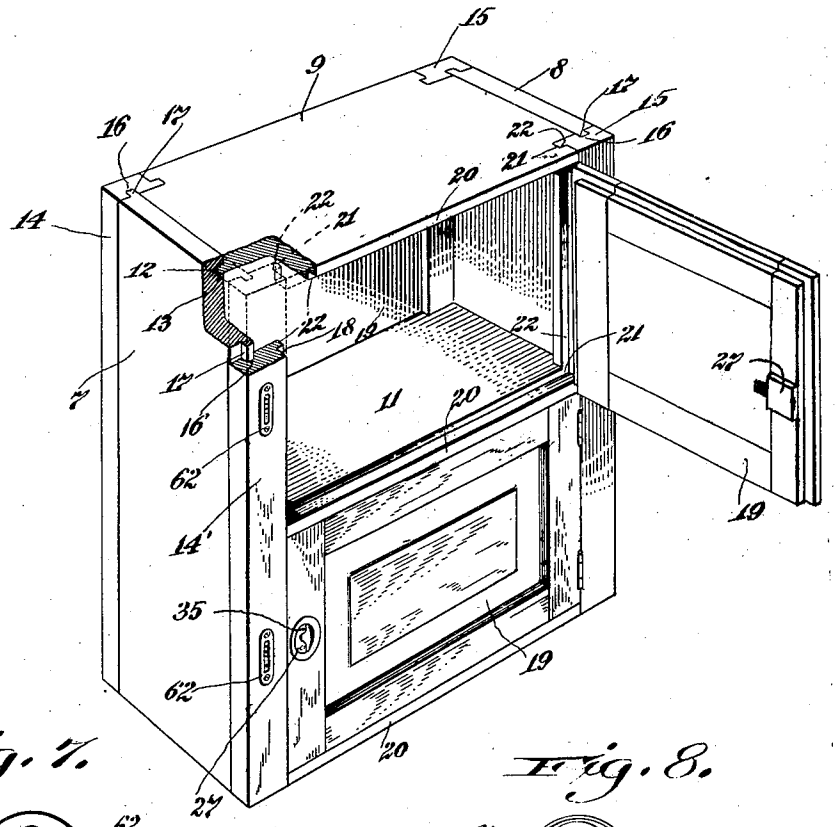


Fig. 7.

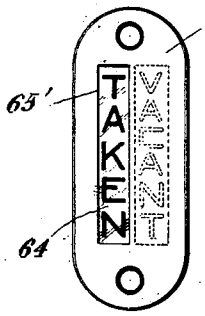


Fig. 9

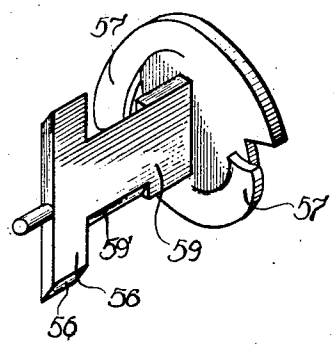
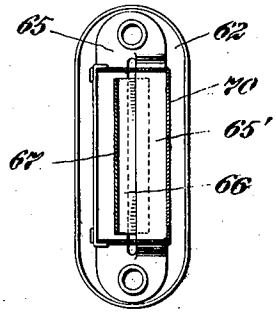


Fig. 8.



INVENTOR.
Frank J. Matchette
BY
Brown, Brettcher & Riemer
ATTORNEY.

June 12, 1928. 1,673,291

F. J. MATCHETTE

SERVICE CABINET

Original Filed Aug. 13, 1919 5 Sheets-Sheet 3

Fig. 4.

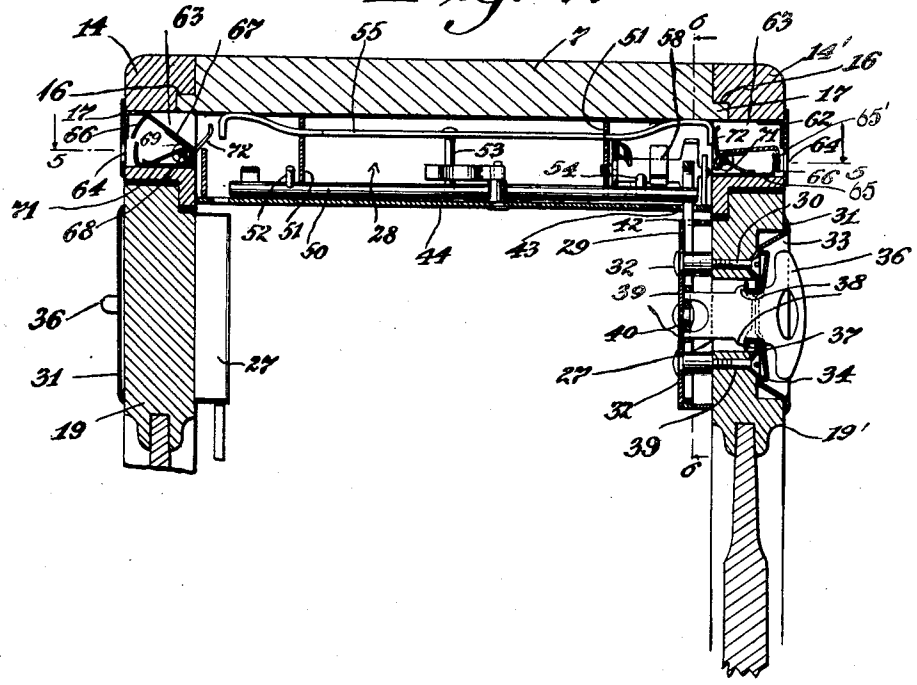


Fig. 5.

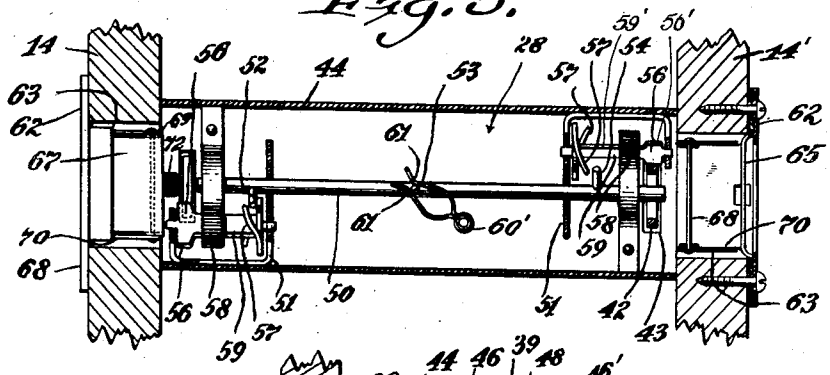
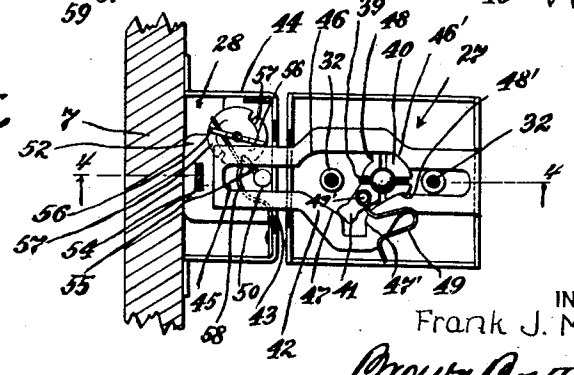


Fig. 6.



INVENTOR
Frank J. Matchette
BY Brown Bortlett & Kenny
ATTORNEY

June 12, 1928.

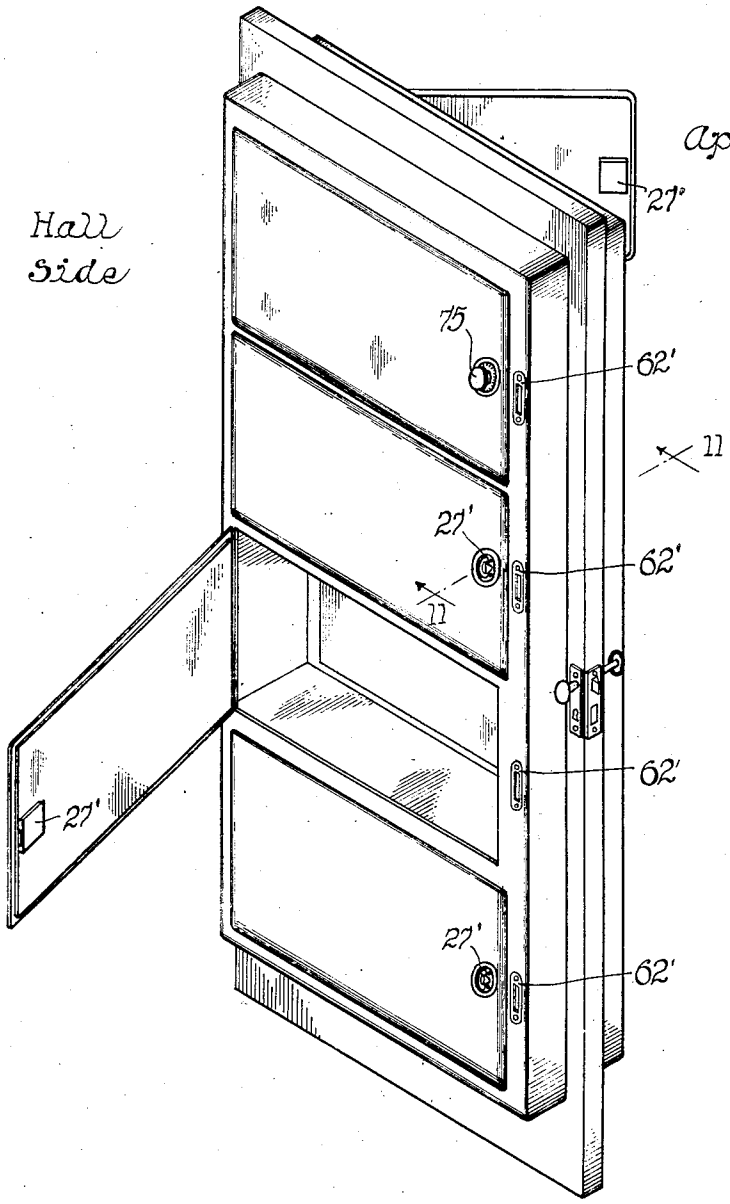
1,673,291

F. J. MATCHETTE

SERVICE CABINET

Original Filed Aug. 13, 1919 5 Sheets-Sheet 4

Fig. 10



Inventor
Frank J. Matchette
By Brown, Boettcher & Kiemer
Attorneys

June 12, 1928

1,673,291

F. J. MATCHETTE

SERVICE CABINET

Original Filed Aug. 13, 1919

5 Sheets-Sheet 5

Fig. 11

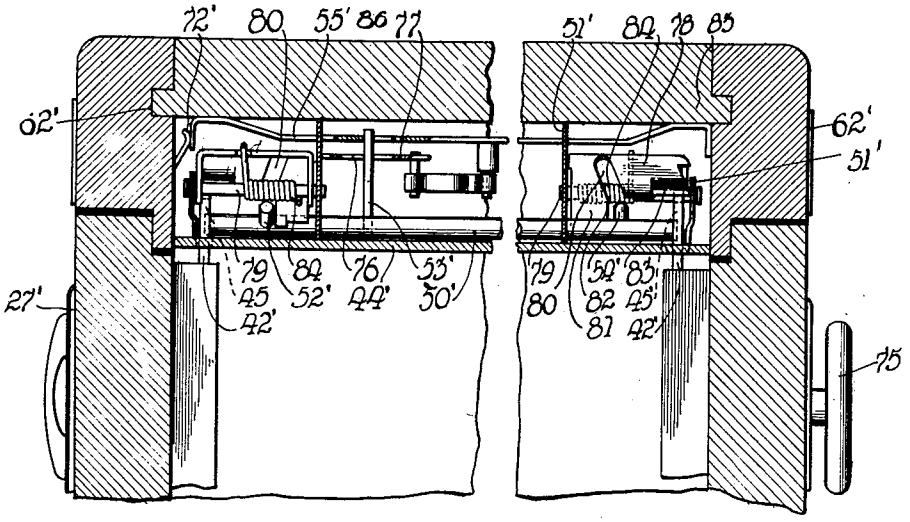


Fig. 12

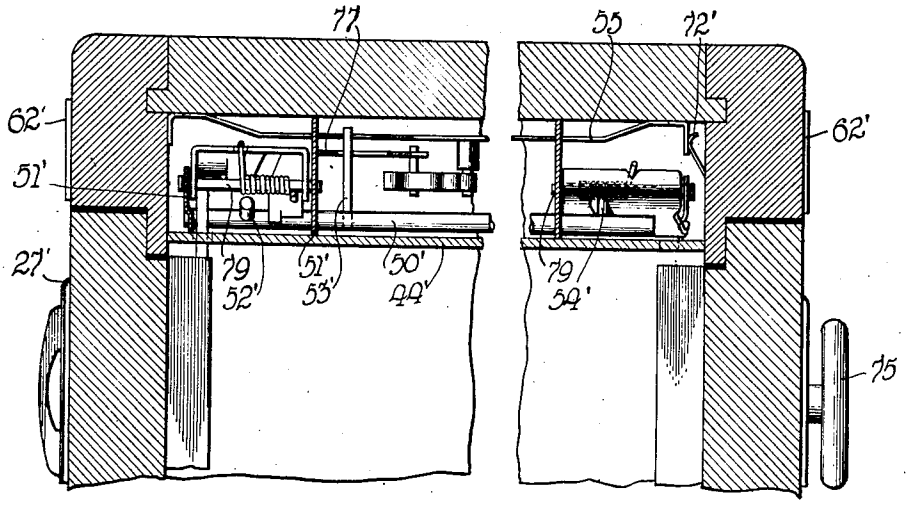
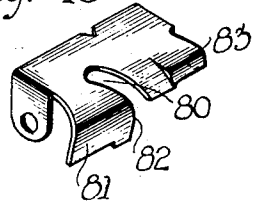


Fig. 13



Inventor
Frank J. Matchette
By Brown, Coettsher & Kiemer
Attorneys

Patented June 12, 1928. 1,673,291

UNITED STATES PATENT OFFICE.

FRANK J. MATCHETTE, OF NEW YORK, N. Y.

SERVICE CABINET.

Original application filed August 13, 1919, Serial No. 317,176. Patent No. 1,439,566. Divided and this application filed November 18, 1922. Serial No. 601,921.

This invention relates to service cabinets.

The primary aim of this invention broadly stated, is to provide an improved cabinet of the type illustrated in my United States Patent No. 1,222,964, granted April 17, 1917. The present application is a division of my co-pending application Serial No. 317,176, filed Aug. 13, 1919, on which Patent No. 1,439,566, was granted Dec. 19, 1922.

Cabinets of the type referred to have proved to be of great utility as a means for transferring articles of food, clothing, parcels, and the like to or from the occupants of dwellings, apartments, flats, rooms, etc. The cabinet forms a seal or lock, for the reception or deposit of articles and a channel through which the articles may pass to or from the interior of the premises. For this purpose the cabinet is ordinarily installed at a point where it is readily accessible from both the inside and outside of the premises. The cabinet may comprise one or more compartments entry to which from either side being controlled by suitable doors.

Although the cabinet may be installed in a fixed partition or wall, it has been found particularly advantageous to mount it within a door structure. This is because the doorway is always kept clear of articles of furniture and hence the cabinet is always accessible. Furthermore, particularly in the case of apartments and rooms, the door naturally marks the location of the consumer's premises.

In order to conserve space and produce a neat appearance it has been found desirable to so mount the cabinet that it projects substantially equal distances beyond the inside and outside of the door. When mounted in the outer door of a building it becomes quite a problem to so construct the cabinet that it will permanently withstand the effects of the weather. This is especially true when the cabinet is made of wood, due to the tendency of the various parts to warp. As is well known the holding effect of nails and glue is ordinarily quickly destroyed by rain water. The parts of the cabinet are then free to spread and thus produce open seams which not only present an unsightly appearance but also destroy the effect of the cabinet as a seal for the goods deposited therein.

One object of this invention is to provide a cabinet of the type referred to so constructed that it will effectively withstand the effects of the weather.

Another object is to provide a suitable water shed for the outwardly projecting portion of the cabinet.

Cabinets of this type are usually provided with an interlocking mechanism for controlling the opening of the cabinet doors. This interlocking mechanism is designed primarily for the purpose of preventing the opening of both doors of a single compartment at one time. Thus there is never a clear passage through the cabinet through which one outside might enter the premises.

Another object of this invention is to provide a simple and improved interlocking mechanism for the purpose above outlined.

Another object is to provide an improved interlocking mechanism for determining the order in which the doors of a compartment may be opened.

Another object is to provide a simple and inexpensive lock particularly applicable for use in connection with an interlocking mechanism.

Another object is to provide an effective lock which is reversible,—that is, one that can be used equally well on the right or left side of a door without modifying its construction.

Signals are commonly employed to indicate the condition of the cabinet or, in other words, to indicate the presence or absence of goods in any of the compartments thereof. Such a signal is usually displayed beside each door. The width of the space occupied by the signal naturally limits the size of the door opening. To increase the efficiency of the cabinet it is necessary that the door opening be of such size as to admit an article of maximum dimensions.

Another object of this invention is therefore to provide a novel signal mechanism so constructed as to occupy a minimum space.

Another object is to provide a simple and inexpesive signal especially adapted for use with a cabinet of the type referred to.

Other objects and advantages will hereinafter appear.

Embodiments of the invention are illustrated in the accompanying drawings.

Figure 1 is a front elevation of a door equipped with a cabinet made in accordance with the present invention.

Figure 2 is a vertical section taken substantially on the line 2—2 of Figure 1.

Figure 3 is a perspective view of the cabinet, one corner thereof being broken away to illustrate the manner of joining the several parts.

Figure 4 is a fragmentary horizontal section on a somewhat larger scale taken substantially on the line 4—4 of Figures 2 and 6, and illustrating a form of interlocking and signalling mechanism employed.

Figure 5 is a vertical section taken substantially on the line 5—5 of Figure 4.

Figure 6 is a vertical section taken substantially on the line 6—6 of Figure 4 and illustrating a form of lock and interlock mechanism employed.

Figure 7 is a front elevation of a form of signal which may be employed.

Figure 8 is a vertical section through the signal.

Figure 9 is an enlarged view in perspective of a cam employed with the interlocking mechanism illustrated in Figures 4, 5 and 6.

Figure 10 is a view in perspective of another embodiment of the present invention.

Figure 11 is a horizontal section on a somewhat larger scale taken substantially on the plane of the lines 11—11 of Figure 10, and illustrating a different form of interlocking mechanism.

Figure 12 is a view similar to Figure 11 but showing the parts of the interlocking mechanism in a different position.

Figure 13 is a view in perspective of a cam employed with the interlocking mechanism illustrated in Figures 11 and 12.

I have shown in Figures 1 and 2 of the drawings a two compartment cabinet mounted in a door of ordinary construction. The door comprises the usual hinge and lock stiles 1 and 2, top and bottom rails 3 and 4 and intermediate rail 5. A glass pane 6 closes the space between rails 3 and 5 and the stiles. The panel or panels which ordinarily bridge the space beneath the rail 5 have been replaced by the cabinet.

The cabinet may be constructed of any appropriate material, such for instance as wood or metal. When made of wood, however, it is important that the parts be so joined as to withstand the effect of the weather. This is accomplished by means of a construction such as shown more particularly in Figure 3 of the drawings. The cabinet therein shown comprises end frame members 7 and 8, top and bottom members 9 and 10 and a horizontal partition 11 which divides the interior of the cabinet into two compartments. It will be understood, however, that the partition may be omitted, or that any number of partitions may be employed to divide the cabinet into any convenient number of compartments. The top and bottom members as well as the partition are provided with tongues such as shown at 12 which fit tightly in corresponding grooves 13 in the end pieces. Corner members 14—14′ and 15—15 serve as a further connection between the end members and the top, bottom and partition members. For this purpose the corner members are grooved as at 16 to take the tongues 17 of the end members. The free edges of the corner members as well as the top, bottom and partition members are preferably cut away as at 18 to form suitable seats for the hinged doors 19—19. The projecting tongues 20 thus formed on the top, bottom, and partition members are undercut as shown at 21 to receive the tongues 22 of the end members.

The parts may be assembled in the following manner. The several corner members are first secured in position on the edges of the end members with the tongues 17 fitting tightly within the grooves 16. The top, bottom and partition members are then assembled with the end and corner members by inserting the tongues 12 at the top, bottom and partition members into the corresponding grooves of the end members and permitting the tongues 22 to take into the undercut portions behind the tongues 20. The parts may be secured together by any convenient means such as nails, screws, dowel pins, or by gluing or by any combination of such means.

After the cabinet is assembled it is mounted within the door frame and firmly wedged between and secured preferably to the hinge and lock stiles thereof by any convenient means. Thus it will be seen that the top, bottom and partition members are held firmly in position and against warping by means of integral interconnection with the end members. Likewise the corner members are firmly held by integral interconnection with the top, bottom and partition members. The integral interconnections between the corner members and the end members prevent the latter from warping out of shape. It will be further noted that the bracing effect of the hinge and lock stiles 1 and 2 of the door against the end pieces serves not only as an additional means for holding the end pieces in shape but also prevents lateral spreading of the cabinet and thus maintains the various parts in interlocking engagement.

Suitable means may be provided for shedding rain water from that portion of the cabinet which projects from the exposed side of the door. In the present instance this means includes a drain board 24. This board is preferably positioned on top of the cabinet and is shown extending from beneath the intermediate rail 5 a sufficient distance to overhang the front of the cabinet. Any con-

venient means such as a groove 25 may be employed to shed the water.

In order to present a finished appearance and to aid in holding the cabinet in place strips of molding 26 may be employed on either side of the door surrounding and secured to the cabinet and drain board.

As previously pointed out each compartment of the cabinet is closed by a pair of doors 19—19, one on each side thereof, the opening and closing of which is controlled by suitable lock mechanism. The lock mechanism includes a lock 27—27 carried by each of the doors, both cooperating with an interlocking mechanism 28 for controlling the order in which the doors are locked or unlocked.

A preferred form of lock mechanism employed is illustrated in Figures 4, 5 and 6. Since the locks carried by the doors are identical one with the other only one need be described. The lock is completely enclosed in a suitable casing 29 secured to the inside of the door by means of screws which pass through the escutcheon 31 and door and take into the interiorly threaded studs 32. The escutcheon is preferably formed with a conical depression 33 countersunk in the outer side of the door. It will be noted that the heads of the screws are seated in depressions formed in the base of the conical depression and that they are covered by a disc 34. Suitable openings 35 (Figure 3) are formed in the disc through which access may be had to the screws when the openings are in register therewith.

A key 36 is preferably employed as a permanent part of the lock. The key and disc are rotatably supported in a suitable bearing in the base of the conical depression of the escutcheon. The key may be made as an integral part of the disc 34 or it may be fixed thereto. In either event however the disc rotates with the key so that the position of the openings 35 is dependent upon the position of the key or in other words upon the condition of the lock. The arrangement is such that the openings 35 register with the screws only when the lock is in its unlocked condition. Thus the lock cannot be removed from the door by loosening the screws so long as the door is locked.

In the present instance the key and disc are made in separate parts. The key forms a connecting element between the disc and a retainer member 37 therefor. The shank of the key passes through a circular bearing in the escutcheon, and through a slot in the retainer member, the parts being fixed in assembled relation by striking up projections or shoulders 38 on the shank of the key.

The inner end of the key is suitably fashioned to engage and operate the lock. For this purpose it is provided with prongs 39 which project into slots in the bolt operating cam 40. This cam is pivotally mounted preferably on the back wall of the casing 29 and is provided with a finger 41 for operating the bolt 42.

The bolt is mounted for longitudinal sliding movement in suitable slots in the end walls of the casing 29, and when advanced to its locking position engages in a slot 43 in a wall of a housing 44 hereinafter referred to. As shown more particularly in Figure 6 the bolt is longitudinally slotted at 45 so that it will not interfere with the studs and for the purpose of co-operating with an interlocking mechanism to be later described.

The central portion of the bolt is somewhat enlarged as shown and cut away to form curved shoulders 46—46′ for engagement with the cam member 40 to limit the movement of the bolt. The body of the bolt is further cut away to form cam surfaces 47—47′ for co-operation with the active and of finger 41.

The cam member is preferably formed with shoulders 48—48′ adapted to engage a wall of the slot 45 to limit rotation of the cam. A biasing spring 49 is connected between one wall of the casing and a pin 49′ mounted on the cam 40. The spring serves as a snap means for throwing the cam after it passes center and to yieldably maintain a shoulder of the cam in engagement with a wall of the slot 45 after the bolt has been thrown.

The bolt is thrown in either direction by rotating the key and hence the cam 40 through substantially 90°. During this rotation the finger 41 engages one of the cam surfaces 47—47′, to force the bolt 42 into either a locking or unlocking position. From the construction shown it will be noted that the end of the finger 41 by its engagement with the cam surfaces 47—47′ holds the bolt against withdrawal from a locked or unlocked position until the cam has been again rotated. Thus the bolt is effectively blocked against accidental displacement.

It will be further noted that the bolt is symmetrical in form whereby the lock may be used on either the right or left side of a door with equal facility.

Various forms of interlocking mechanism may be employed for controlling the operation of the door locking means. In Figures 4, 5, 6 and 7, I have illustrated an interlocking mechanism similar in some respects to that shown in the patent hereinabove mentioned. The mechanism includes a rod 50 slidably mounted in suitable brackets 51 secured within the housing 44 heretofore mentioned. The rod 50 serves as a detent for interlocking with the adjacent door locks 27—27′ alternately.

The rod is provided with a number of arms 52, 53 and 54. The arm 53 is rigidly connected with a slide bar 55 to prevent

turning of the rod and also to operate the signalling mechanism, as will be later explained. The arms 52 and 54 are each engaged by a cam member adjacent each of the lock bolts 42. Each cam member comprises a disc portion carrying cams 57 and a ratchet portion having arms 56 each provided with a beveled edge 56'. The body portion of each cam member is formed with flat faces 59 and beveled edges 59' for co-operation with a leaf spring 58 mounted within the housing 44.

A cam member is rotatably mounted in each of the brackets 51 in such position that the ratchet portion thereof is opposite a lock bolt 42. When a lock bolt is in withdrawn position the spring 58 bears against a flat face 59 of the corresponding cam member to yieldably hold an arm 56 thereof in the path of movement of the lock bolt. In this position the beveled edge of the arm projects toward the lock bolt. (See left side of Figure 5.) As the bolt is advanced to locking position the end thereof engages this beveled edge 56' of the arm thus causing rotation of the cam member against the action of the spring 58. However, after a beveled edge 59' of the body portion of the cam member has passed center with respect to the spring 58, the spring acts to aid the rotation of the cam member and in fact throws the cam member to such position that the opposite arm 56 thereof is yieldably pressed against a longitudinal edge of the advanced bolt 42 (see Figure 6). When the advanced bolt is again withdrawn the spring forces the arm 56 to the position previously described where it may be again engaged by the end of the bolt upon the next advance thereof.

During the advance of a bolt and consequent rotation of its corresponding cam member a cam 57 of the cam member acts upon the corresponding arm 52 or 54 of the rod 50 to project the rod into the slot of the advanced bolt 42 (see right side of Figures 4 and 5). It will be noted from Figures 4 and 5 that the rod is of such length that when shifted to position to interlock with the bolt just advanced it also releases the other bolt so that the released bolt may be withdrawn.

Thus it will be seen that as the bolt of a lock on one side of a compartment is advanced to locking position, it acts upon its corresponding cam mechanism to throw the rod 50 into locking engagement with the bolt thus advanced. When the lock bolt on the other side of the compartment is advanced to locking position it acts upon its corresponding cam mechanism to shift the rod 50 in the opposite direction whereby the last advanced bolt is secured against withdrawal and the first mentioned bolt is released.

In order to insure that the rod 50 remains in either of its shifted positions a snap spring such as shown at 60 may be employed. This spring is conveniently mounted on a pin 60' secured to the housing and is bent to form opposed yieldable shoulders 61 between which the arm 53 is forced when the rod is shifted.

The slide bar 55 is mounted for longitudinal movement in the brackets 51 and as above pointed out is actuated by the rod 50. The bar is designed to alternately operate the signals on the opposite sides of a compartment.

The construction and operation of the signals employed are novel and are of importance.

Two signals are provided for each compartment, one on the outer or receiving side of the compartment to indicate to a deliveryman whether a compartment is in condition to receive an article and one on the inner or consumer's side to indicate whether or not a delivery has been made.

Each signal is supported by a face plate 62 secured to a corner member or door jamb 14 or 14' adjacent the lock of a compartment door (Figures 3, 4 and 5) and projects into a suitable recess 63 in the corner piece. The face plate is provided with an opening or display window 64 whose long dimension is preferably vertically arranged in order to conserve space horizontally. A sign plate 65 (Figure 8) fixed to the face plate is provided with a legend bearing portion 65' disposed behind the window. From an inspection of Figures 4 and 5 it will be noted that the legend bearing portion 65' is spaced somewhat from the window to admit a movable target 66 between the plate and window. The movable target also bears a suitable legend different from that on the fixed sign plate.

The target is preferably formed as an integral part of a plate 67 pivotally mounted upon a vertical pin 68 which passes through ears 69 formed on the plate. The pin 68 is preferably mounted in the opposite walls of a bracket or housing 70 secured to or formed integral with the fixed sign plate 65. A spring 71 positioned between the plate 67 and a vertical wall of the housing yieldably maintains the target in its normal retracted position. (See left side of Figure 4.) The target is moved to exposed position in front of the sign plate by means of an angularly disposed finger 72 preferably formed as an integral part of the plate 67, engageable with the end of the slide bar 55 previously referred to.

The slide is mounted for longitudinal movement in the brackets 51 and as previously pointed out, is actuated by the interlocking detent rod 50. When the detent rod is shifted by the locking of a door, the slide bar is also shifted toward the signal adjacent the door to shift the movable target to

exposed position. At the same time the finger 72 of the opposite signal is released by the slide bar whereby the fixed sign plate of that signal is exposed.

The fixed sign plate of the signal on the outer or receiving side of a compartment and the movable target of the opposite signal bear the same legend, such as the word "vacant". Likewise the movable target of the outer signal and the fixed sign plate of the opposite signal bear the same legend such as the word "taken". Thus the same sign is displayed on both sides of a compartment at any one time.

The operation of the mechanism above described may now be briefly summarized. When a deliveryman desires to deliver a package or parcel to the occupant of the room or compartment, he selects such compartment in the cabinet as he finds to be indicated as "vacant". He then unlocks the door, deposits the article and then locks the door. As the lock bolt 42 of this door advances to locking position it operates the interlocking mechanism as above described so that the detent rod 50 enters the slot 45 thereof to maintain the locked condition of this door so that the deposited article cannot be removed by one outside the premises. This movement of the rod 50 releases the lock on the inner door of the compartment. At the same time the slide bar 55 is actuated by the rod 50 to change both signals of the compartment. The target of the outer signal is moved to exposed position while that of the inner signal is retracted and the fixed sign plate thereof is exposed. Both signals are thus changed to indicate that the compartment is "taken". The occupant of the premises can tell at a glance that a delivery has been made and which compartment contains the delivered article. After the inner door has been opened and the article removed the door is closed and locked. The operation of the parts in connection with the locking of the inner door is the same as described for the outer door. This leaves the inner door locked against opening and leaves the lock of the outer door in released condition so that the compartment is in condition to receive another article.

Another embodiment of the invention is illustrated in Figures 10, 11, 12 and 13. In this form the cabinet extends the full length of the door and is divided into several compartments. The manner of constructing this cabinet and the manner of mounting the same within the door frame may be similar to that hereinbefore described.

In the present instance, however, three of the compartments are for use as in-going compartments or channels, while the other compartment is for use as an outgoing compartment or channel. It is obvious that any one or more of the compartments may be designed as an outgoing compartment but in the cabinet illustrated in Figure 10, the top compartment has been selected for this purpose. The three lower in-going compartments are equipped with signals 62′, locks 27′ and interlocking mechanisms, similar to those hereinbefore described. The top outgoing compartment is however, preferably equipped with a different form of interlocking mechanism which permits the opening of either door any number of times in succession so long as the opposite door is in locked condition. Thus in the event that the outer door has been opened by a conveyer and inadvertently closed and locked before removing the article intended for collection, the door may again be opened for the removal of the article without necessitating an operation of the inner door lock. Upon opening one door however the interlocking mechanism insures the closed condition of the outer door so that at no time is there a clear passage through the compartment through which one on the outside might gain access to the premises.

The lock 75 for the outer door of the top, outgoing compartment may comprise a simple combination lock, or it may be otherwise guarded, as by a key in the hands of the conveyer. The lock 27′ on the inner door may be similar to that on the doors of the other compartments. Both of the locks of the top compartment however include lock bolts 42′ having slots 45′, as in the cabinet hereinbefore described, for co-operation with the interlocking mechanism.

The interlocking mechanism includes a detent rod 50′ which in this instance is adapted to project into the slot 45′ of either lock bolt or into the slots of both lock bolts simultaneously. The rod 50′ is mounted for lengthwise sliding movement in the bracket 51′ fixed within the housing 44′.

The rod is provided with arms 52′, 53′ and 54′. The arm 53′ projects through a slot 76 formed in a plate 77 fixed to one of the brackets 51′ to prevent turning of the rod in its bearings and to operate the signal mechanism, as will be later explained. Arms 52′ and 54′ are each engageable with a cam member 78 controlled by a lock bolt 42′ whereby the position of the rod 50′ is controlled by the door locks. Each cam member is rockably supported upon a spindle 79 mounted in a bracket 51′ adjacent a door lock, and each is provided with a cam slot 80 for co-operation with an arm 52′ or 54′ of the detent rod. An extended portion 81 of each cam member forms a shoulder 82 for limiting the shifting movement of the rod and for guiding an arm 52′ or 54′ into the open end of the cam slot. Another portion of each cam member is cut away adjacent the slot to permit shifting movements of an arm out of alignment with the slot, and to

form a cam edge 83 for co-operation with a lock bolt 42'. A coiled spring 84 preferably mounted on the spindle 79 and engaging the rear edge 85 of the cam member tends to rock the cam member toward an arm 52' or 54' of the detent rod.

When both lock bolts are in advanced locking position, as illustrated in Figure 11, the cam edge 83 of each cam member is engaged by the end of a lock bolt and is held in retracted position against the action of the coil spring 84. In this position both arms 52' and 54' of the detent rod 50' are disengaged from their corresponding slots 80, but are positioned opposite the open ends thereof. It will be noted that in this position the opposite ends of the detent rod project into the slots 45' in the lock bolts 42'. With the parts in this position the lock bolt on either door may be withdrawn to unlocking position.

Figure 12 illustrates the position of the parts when the lock bolt of the outer door is withdrawn. As this lock bolt is withdrawn the spring 84 of the corresponding cam member acts to throw the cam slot 80 into engagement with the arm 54' to shift the arm, and consequently the detent rod 50' to the left. This movement of the rod causes the same to disengage the lock bolt to permit complete withdrawal of the same. At the same time the arm 52' is shifted so that it no longer remains in alignment with its cam slot 80. Consequently should it be attempted to withdraw the lock bolt of the inner door when that of the outer door has been withdrawn, the cam mechanism corresponding to the inner lock bolt would be released but it could not act to shift the detent rod to release the inner lock bolt because the arm 52' would not enter the slot 80. Thus it will be apparent that as long as the outer door is unlocked it is impossible to unlock the inner door.

Upon again advancing the lock bolt of the outer door to locking position, the end of the bolt engages the cam edge 83 of its corresponding cam member and rocks the same back to its retracted position. By this movement of the cam member the cam slot 80 acts upon the arm 54' causing the same to again shift to the right back to the position shown in Figure 11. Again both arms 52' and 54' are opposite their respective cam slots. Consequently either of the lock bolts may be withdrawn. Should the lock bolt of the inner door be withdrawn the operation of the parts would be substantially the same as that described in connection with the withdrawal of the lock bolt of the outer door.

The signals employed in connection with the top outgoing compartment may be the same as those employed with the cabinet hereinabove described.

As in the first instance each signal is operated by means of an angularly disposed finger 72' engageable with an end of a slide bar 55' mounted for lengthwise movement in the brackets 51'. In the present instance however the slide bar is actuated in a manner quite different from that hereinabove described. The slide bar is provided with a slot 86 for slidably receiving the arm 53' of the detent rod 50' to form a lost motion connection between the bar and the rod. The bar is preferably of such length as to engage the fingers 72' of both signals at all times. A snap spring 59' similar to that previously described may be employed to retain the bar in either of its shifted positions. The spring is preferably mounted on a pin 87 carried by the rod and is engageable with a pin 88 supported by the fixed plate 77.

Figure 11 illustrates the position of the bar after the inner door (left door) of the compartment has been opened to deposit an article in the compartment and the door again closed and locked. In this position of the parts both signals represent that the compartment is "taken". Should the lock bolt of the inner door be again withdrawn to deposit another article in the compartment, the detent rod would be shifted to the right to permit complete withdrawal of this lock bolt and to insure the locked condition of the outer door, as above described. The position of the slide bar 55' would not be changed however since the arm 53' of the detent rod would move idly in the slot 86. The signals would therefore still indicate "taken". Should the lock of the outer door (right door) be withdrawn to the position of Figure 12 however and the outer door opened for the removal of the article, the detent rod would be shifted to the left as previously described and the arm 53' in engagement with the left end of the slot 86 would shift the slide bar 55' to the left causing a change in the signals to the "vacant" condition. Upon relocking the outer door the detent rod is again shifted to the right to its intermediate position of Figure 11, but the position of the slide bar and consequently the signals remain unchanged due to the idle movement of the arm 53' in the slot 86. In fact the signals are not again changed until the lock of the inner door has been released for the purpose of depositing another article in the compartment.

Thus it will be understood that the interlocking mechanism employed in the top outgoing compartment will permit the opening of either door any number of times successively but that the signals are not changed except upon the first operation of a door lock after the other door lock has been operated. In other words, the condition of the signals will at all times depend upon which door was last opened.

Numerous changes may be made in the embodiments of the invention hereinabove specifically described without departing from or sacrificing the advantages of the invention defined in the following claims.

What I claim is:—

1. The combination of a compartment having a plurality of openings therein, movable closures for said openings, means for insuring that at least one opening is closed at any one time, a plurality of signals corresponding to said openings, and means actuated by said first named means for engaging said signals one at a time to operate them.

2. The combination of a compartment, means permitting access to said compartment at either of two points dependent upon predetermined conditions, means for determining the point at which access may be had, signals for indicating the condition of said cabinet, and means actuated by said determining means for engaging said signals one at a time to operate them.

3. The combination of a compartment, means permitting access to said compartment at a plurality of points, means for determining the point at which access may be had, a plurality of independent signals corresponding to the points of access and means actuated by said last named means for actuating said signals.

4. The combination with a cabinet having a plurality of doors and interlocking mechanism for controlling the operation of said doors, of a signal mounted in a wall of said cabinet having a movable target, and a slide bar operated by said interlocking mechanism for controllling the position of said movable target.

5. The combination of a cabinet having a pair of doors, locks for said doors, an interlocking detent actuated by and controlling the operation of said locks, an arm on said detent and a spring embracing said arm for yieldably maintaining said detent against accidental movement.

6. The combination of a cabinet having a plurality of doors, locks on said doors, an interlocking slidable detent actuated by and controlling the operation of said locks, a member for holding the detent against turning, and a spring engageable with said member for yieldably resisting the actuation of said detent to prevent accidental displacement thereof.

7. The combination of a cabinet having a plurality of doors, locks for said doors and an interlocking mechanism interlocked with all said locks when all the locks are in locked condition but releasable to permit the unlocking of only one door at a time.

8. The combination of a cabinet having a plurality of doors, locks for said doors, and an interlocking mechanism interlocked with all of said locks when said locks are in locked condition, said mechanism having means for releasing one of the locks when said lock is operated to an unlocked condition and for maintaining the locked condition of at least one of the other doors.

9. The combination of a cabinet having a pair of doors, a lock for each door, a detent interlocked with both of said locks simultaneously when both of said locks are in locking position, and means for shifting said detent to release one of the locks only when said lock is operated to unlocked condition and to insure the locked condition of the other door.

10. The combination of a cabinet having a pair of doors, a lock for each door, a slidable detent interlocked with both of said locks when said locks are in locking position, and cam means for shifting said detent to release one of the locks only when said lock is operated to unlocking position and to insure the locked condition of the other door.

11. The combination of a cabinet having a pair of doors, a lock bolt carried by each door and provided with a slot, a movable detent adapted to project into either slot or into both slots simultaneously, and cam means controlled by either lock bolt for actuating said detent.

12. The combination of a cabinet having a pair of doors, a lock bolt carried by each door and provided with a slot, a slidable detent adapted to project into either slot or into both slots simultaneously, and a pair of cams for moving said detent in either of two directions, each of said cams being controlled by a lock bolt in that when one bolt is withdrawn to unlocked position, the detent is projected through the slot of the other lock bolt.

13. The combination of a cabinet, a pair of doors, a lock bolt carried by each door and provided with a slot, a single movable detent adapted to project into either slot, a pair of cams for moving said detent in either of two directions, both of said cams being held in inactive position when both lock bolts are in locking position, and means for actuating one of said cams when a lock bolt is withdrawn to project said detent into the slot of the other lock bolt.

14. The combination of a compartment having a plurality of openings therein, closures for said openings, interlocking means permitting the opening of any one of the closures any number of times in succession without opening of the other of the closures but preventing the opening of another closure when one closure is open, and a signal operated by said interlocking means.

15. The combination of a compartment having a plurality of openings therein, closures for said openings, interlocking means for preventing the opening of one door when

another door is open, a signal and means actuated by said interlocking means for operating said signal, said last named means including a lost motion connection with said interlocking means.

16. The combination of a compartment having a pair of openings, closures for said openings, interlocking means actuated by the release of either closure for preventing the release of the other closure while the first closure is released but permitting the release of the first closure any number of times in succession, a signal operated by said interlocking means, and a lost motion connection between said signal and said interlocking means whereby the signal will be operated only upon the first release of either closure.

17. The combination with a cabinet, having a plurality of doors, and interlocking mechanism for controlling the operation of said doors, of signals mounted adjacent each door, and a slide bar operated by said interlocking mechanism for causing simultaneous operation of all said signals.

18. The combination with a cabinet having a plurality of doors, and interlocking mechanism for controlling the operation of said doors, of signals mounted adjacent each door, said interlocking mechanism including a slide bar and each signal comprising a fixed target and a movable target adapted to cover said fixed target, connections between the slide bar and the movable target for moving the movable target into operative position in accordance with operation of said slide bar, and yielding means for holding the movable target in inoperative position.

19. In combination, a cabinet, doors closing said cabinet, locks for the doors, an interlocking detent actuated by and controlling the operation of said locks, and means for releasably holding the detent in either of its operative positions.

20. In combination, a cabinet, doors closing said cabinet, locks for the doors, an interlocking detent actuated by and controlling the operation of said locks, the detent being in locking relation to both of the locks when the doors are closed and locked, and means for releasably holding the detent in position in locking relation to both locks, said means permitting movement of the detent out of locking relation to either of said locks, selectively.

In witness whereof, I hereunto subscribe my name this 13th day of November, 1922.

FRANK J. MATCHETTE.