No. 846,564. PATENTED MAR. 12, 1907.

A. B. HART.

MAIL COLLECTOR.

APPLICATION FILED FEB. 4, 1904. RENEWED NOV. 9, 1905.

2 SHEETS—SHEET 1.

Fig. 1.

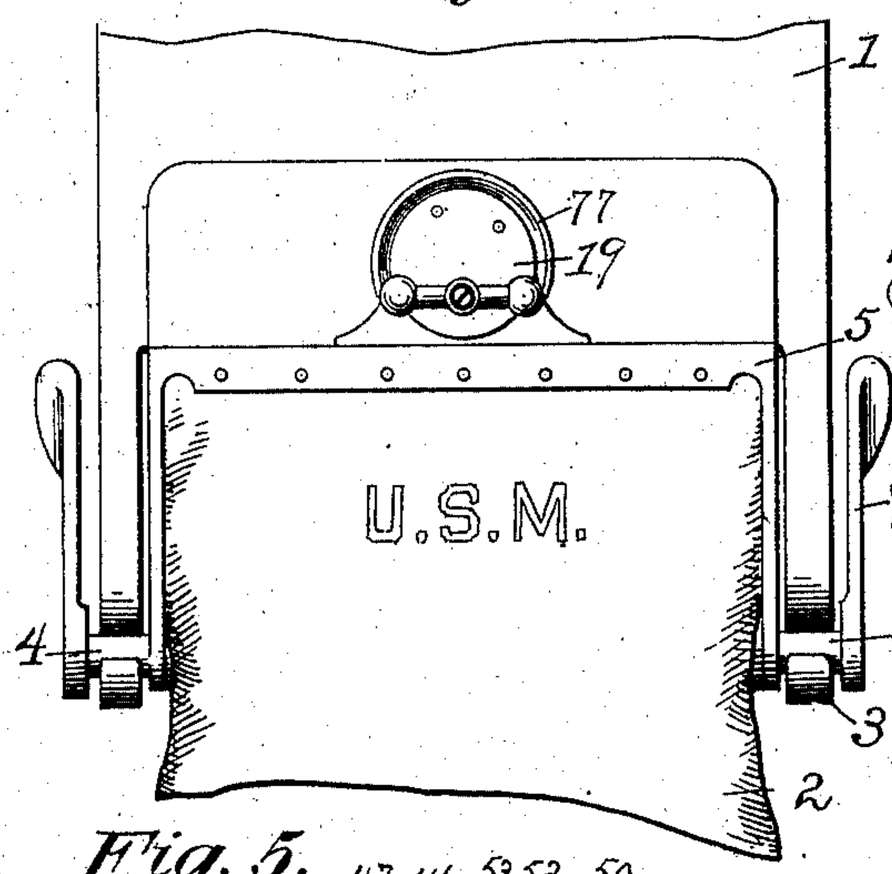


Fig. 2.

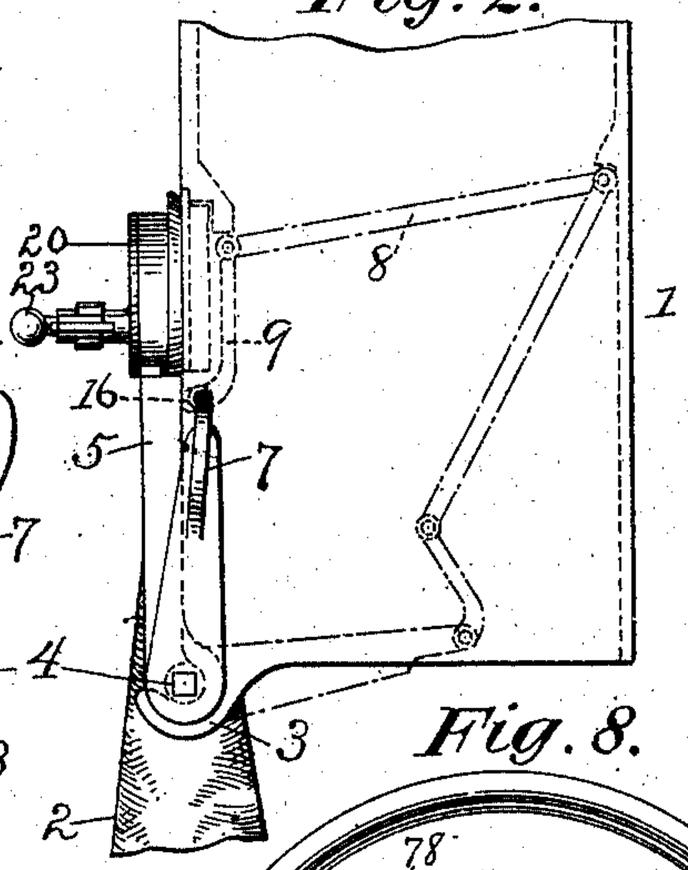


Fig. 8.

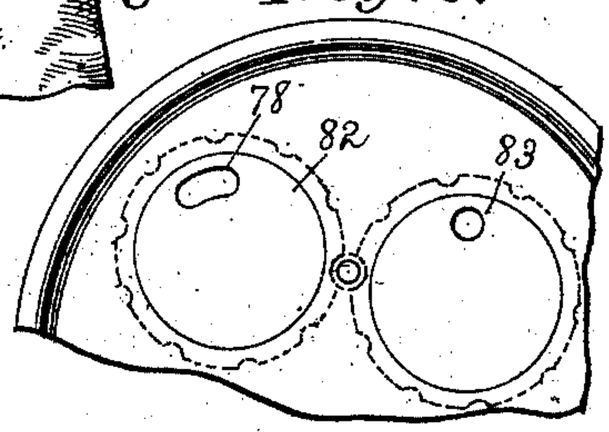


Fig. 5.

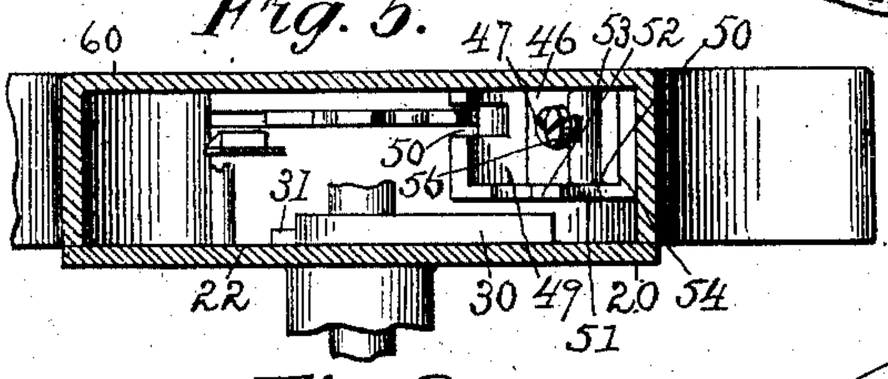


Fig. 7.

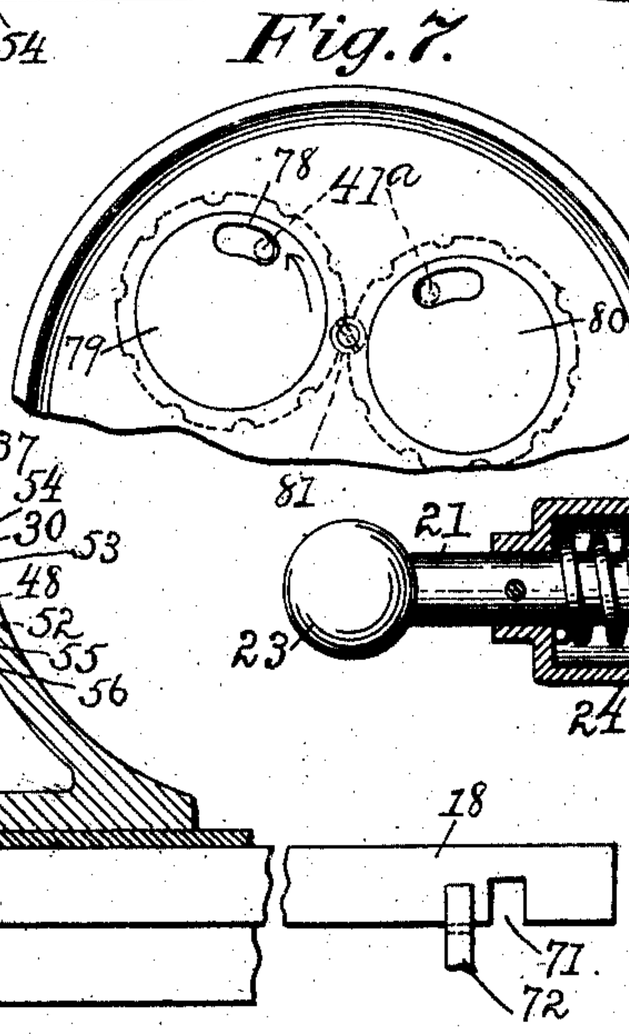


Fig. 3.

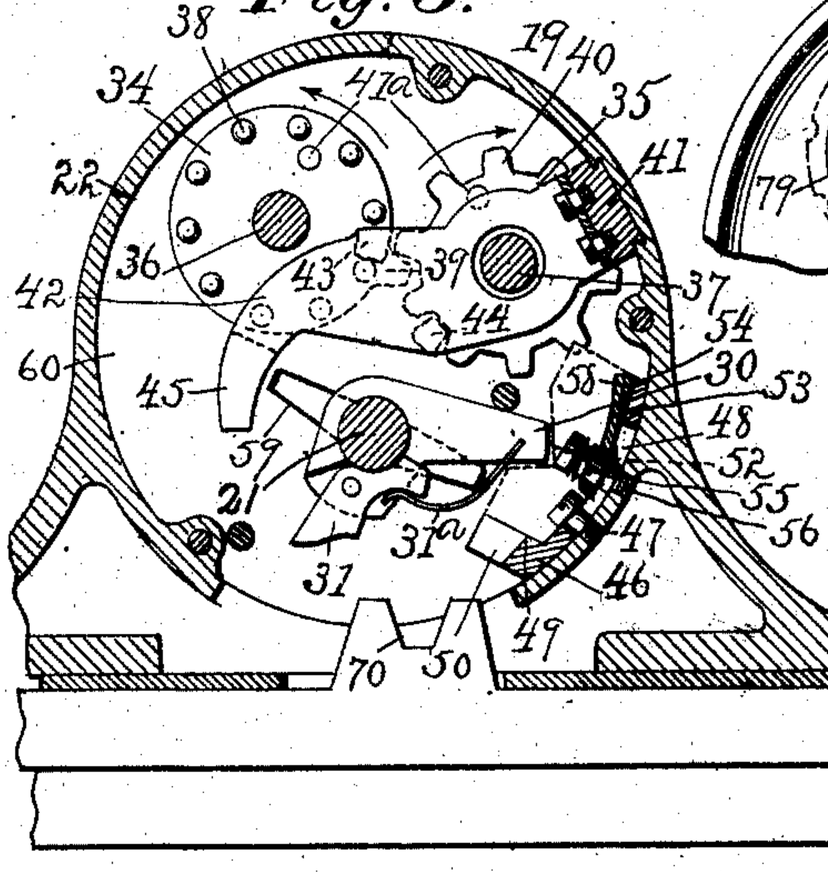


Fig. 4.

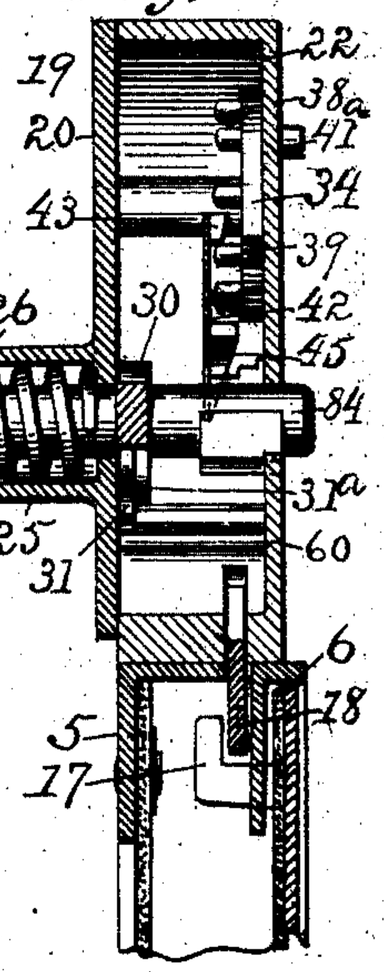
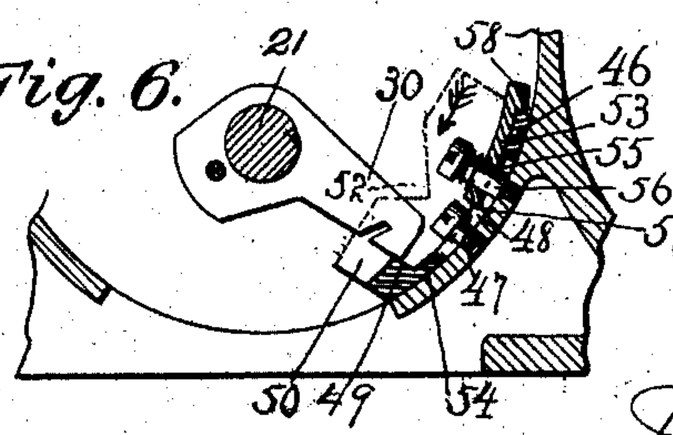


Fig. 6.



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2 SHEETS—SHEET 2.

Fig. 9.

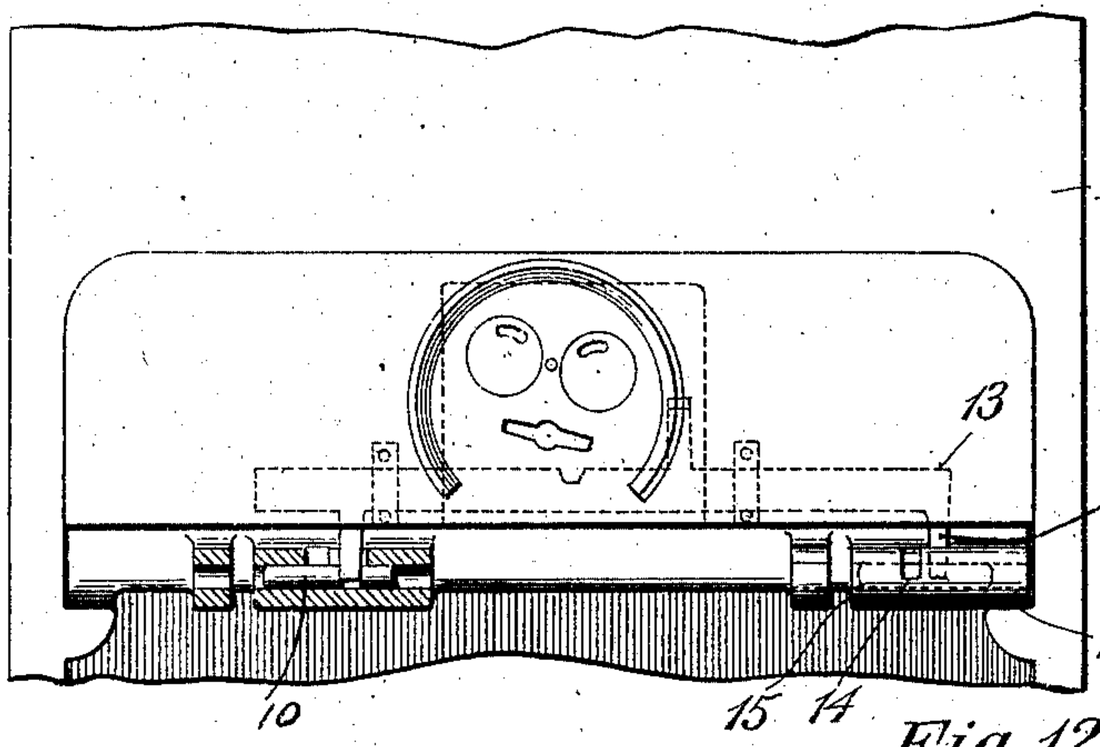


Fig. 10.

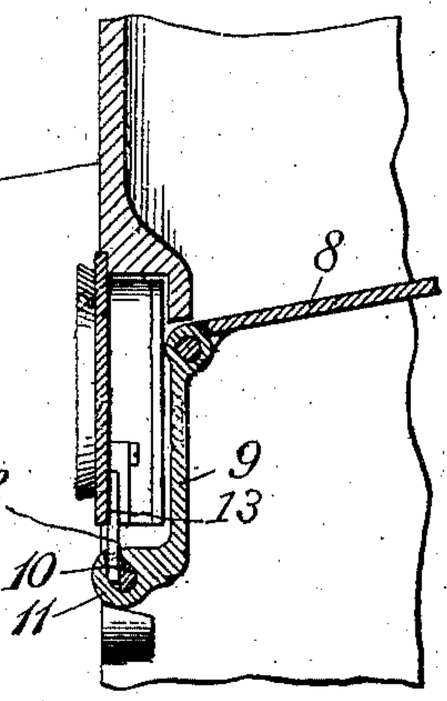


Fig. 12.

Fig. 11.

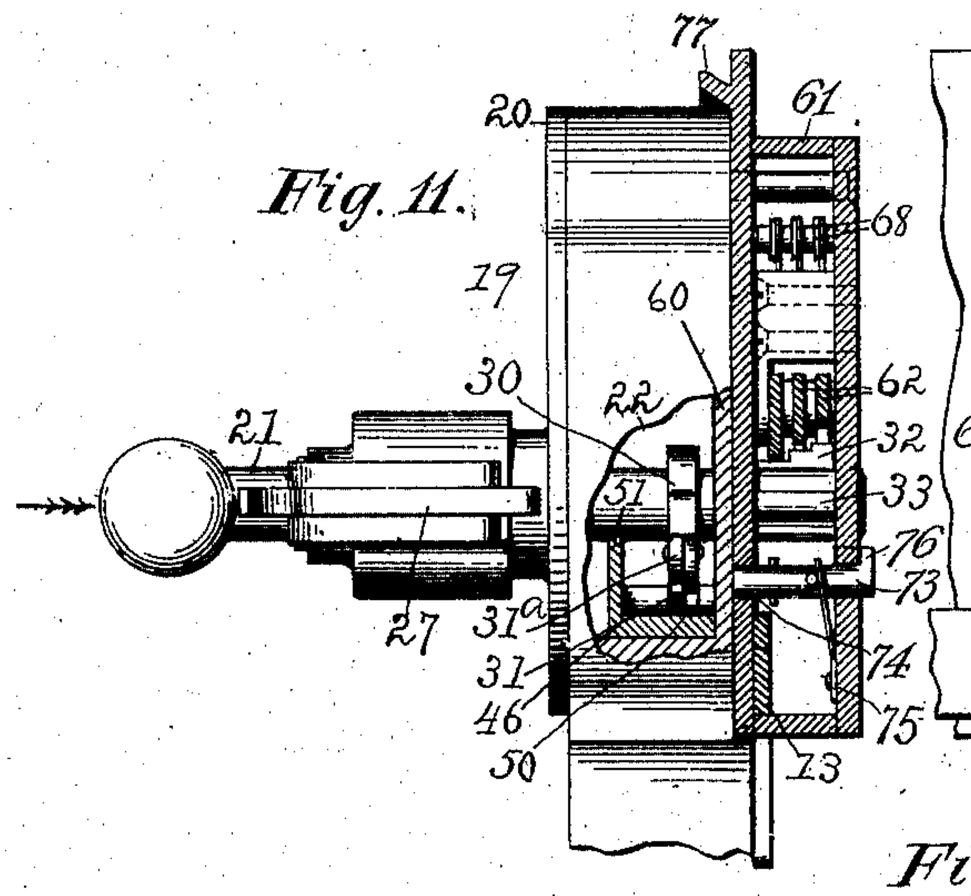


Fig. 13.

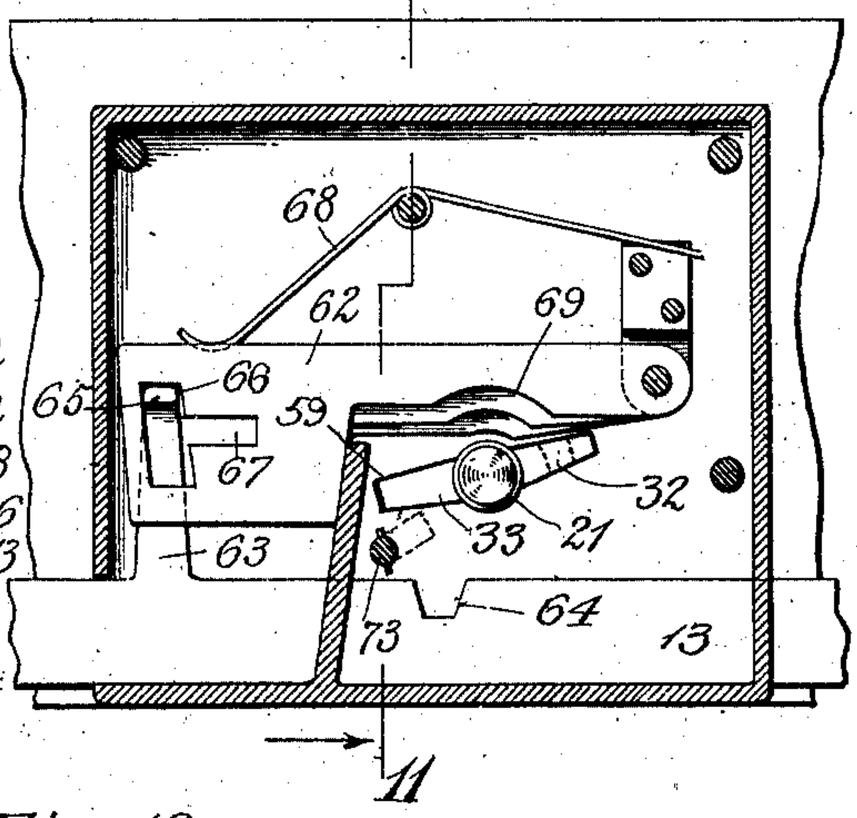
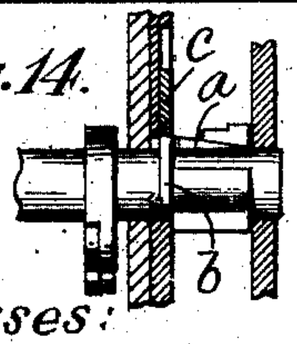


Fig. 14.



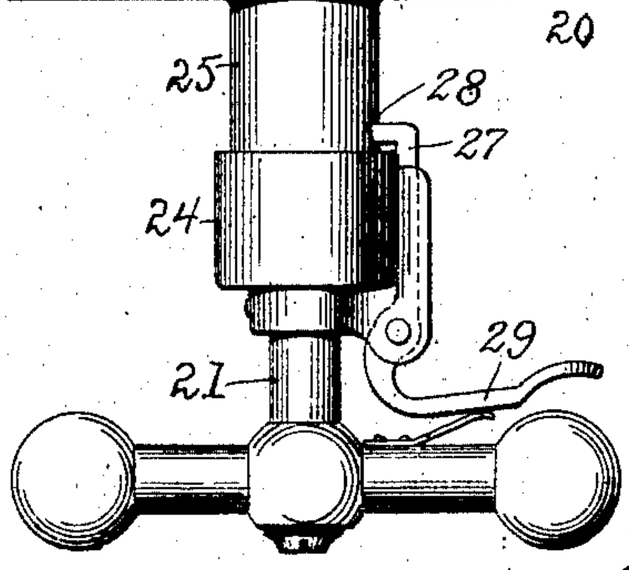
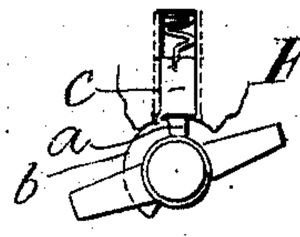


Fig. 15.



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UNITED STATES PATENT OFFICE.

ALBERT B. HART, OF HARTFORD, CONNECTICUT, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE AMERICAN SERIAL LOCK COMPANY, OF HARTFORD, CONNECTICUT, A CORPORATION OF CONNECTICUT.

MAIL-COLLECTOR.

No. 846,564. Specification of Letters Patent. Patented March 12, 1907.

Application filed February 4, 1904. Renewed November 9, 1905. Serial No. 286,495.

To all whom it may concern:

Be it known that I, ALBERT B. HART, a citizen of the United States, and a resident of Hartford, in the county of Hartford and State of Connecticut, have invented a certain new and Improved Mail-Collector, of which the following is a specification.

My invention relates to the class of devices used for collecting mail from mail-boxes, and especially to that class of devices in which the mail-bag is locked to the box, the box and bag then opened and the mail delivered to the bag; and the objects of my invention are to provide a device of this class in which the mechanism shall be greatly simplified as compared with prior devices of this class, and a further object is to provide a device that shall compel the collection of mail successively from the different boxes in predetermined rotation, and a further object is to provide a device of this class in which any attempt to manipulate the lock independently of a box may be readily detected, and a further object it to provide means that shall insure the placing of a section of the lock in proper engagement with the mail-box before the key can be operated to open the parts. A device in the use of which these objects may be attained is illustrated in the accompanying drawings, in which—

Figure 1 is a view in front elevation of the lower part of a mail-box and the upper part of a mail-bag locked in place thereon. Fig. 2 is a view in side elevation of the same, showing my improved lock. Fig. 3 is a detail view in section, on enlarged scale, through that portion of the lock which is attached to the mail-bag. Fig. 4 is a detail view in cross-section through the same. Fig. 5 is a detail view, on enlarged scale, in section through the lock, showing in edge view a portion of the mechanism and especially the means for permitting rotation of the key. Fig. 6 is a detail view, on enlarged scale, in section through a portion of this part of the lock and showing the operation of the mechanism to prevent rotation of the key. Fig. 7 is a detail view, on enlarged scale, of a portion of the back of this part of the lock, showing the index-dials. Fig. 8 is a similar view, but showing the index-dials in an advanced position. Fig. 9 is a detail view, partly in section, of the lower part of the mail-box, showing in face view that portion of the lock attached to the mail-box and the operation of the bolt for securing the mail-bag. Fig. 10 is a detail view in section through the mail-box and that part of the lock attached thereto, showing the operation of the parts. Fig. 11 is a detail side view, on enlarged scale, of my improved lock and in section through that part attached to the mail-box. Fig. 12 is a detail face view, on enlarged scale, of that part of the lock attached to the mail-box and with the back plate removed. Fig. 13 is a detail view, on enlarged scale, showing means for normally locking the key against axial movement. Fig. 14 is a detail view, on enlarged scale, showing a modified form of means for preventing operation of the key except when the two sections of the lock are in engagement, the key being shown in side view. Fig. 15 is a detail end view of the key, showing this modified form.

While my invention has been termed herein a "mail-collector," it relates more especially to the lock for securing the mail-bag to the mail-box, one portion of the lock being secured to the mail-bag and the other portion being located on the mail-box.

In the accompanying drawings the numeral 1 indicates the lower portion of the mail-box, and 2 a mail-bag to be secured to the box for the purpose of receiving mail therefrom. The device is intended and adapted for such use that the operator cannot obtain access either to the mail-bag or the mail-box, the parts being so constructed that the bag must be locked to the box before the former can be opened, and after delivery of mail from the box to the bag both receptacles must be closed before the bag can be removed from the box, the operation of locking the bag to the box at the same time unlocking the box and bag, and vice versa.

The lower part of the mail-box is provided with hooks 3, in which studs 4 from the mail-bag are engaged. These studs are in line with or form the pivot of the jaws 5 and 6 of the mail-bag. Handles 7 are secured to the studs 4 and serve as a means of throwing the jaw 6 of the mail-bag away from the jaw 5 to open the bag and also to open the mail-box when the two parts are locked together.

The bottom 8 of the box consists of a swinging piece pivoted to the box, and at the front

edge of this swinging bottom is a toggle 9. This toggle is pivoted to the front edge of the swinging bottom, and its lower end is provided with knuckles 11, having recesses in which clamping-bolts 10 are located. The upper part of each knuckle has a lengthwise slot, through which project fingers 12 from the box-locking bolt 13, supported and movable lengthwise in guides on the mail-box. Finger-slots 14 extend laterally through the upper part of the knuckles 11, and eye-receiving slots 15 also extend laterally across the knuckles. The eye-receiving slots are adapted to receive eyes 16, located upon the jaw 6 of the mail-bag, these eyes being adapted to receive the clamping-bolts 10, which are moved into the eyes by the action of the box-locking bolt 13 and fingers 12 borne thereon. The jaws 5 and 6 are locked together as by means of locking-hooks 17, borne on the jaw 6, these hooks passing through openings in one wall of the chamber in the jaw 5, as shown in Fig. 4 of the drawings. The bag-locking bolt 18 is movable lengthwise in this chamber in the jaw 5 and engages the locking-hooks 17 in its lengthwise movement to lock the parts together. In the operation of the device the box-locking bolt 13, the clamping-bolts 10, and the bag-locking bolt 18 are simultaneously operated to unlock the bag and box and to clamp the bag to the box, and vice versa.

All of the parts hereinabove described are of old and well-known construction, and therefore, except in combination with the other parts to be hereinafter described, form no part of my invention and are not claimed by me. The jaw 5 of the bag is preferably composed of a metallic frame suitably formed with a chamber for the bag-locking bolt and with means for attachment of the leather portion of the bag. My improved lock is composed of two sections which must be joined together before the mechanism in either can be operated. The bag-section 19 of the lock is secured to or mounted on the upper edge of the metallic frame of the bag and includes a case in which are located the operative parts of this portion of the lock. A removable cover 20 is secured to the outer face of this section of the lock, and through this cover the spindle 21 of the key extends. This spindle projects through the chamber 22 in this section of the lock and is provided with a handle 23, by means of which the key may be turned, and with a sleeve 24, encircling a sleeve projection 25 from the cover-plate. A spring 26, thrusting against the inner surface of the sleeve 24, holds the key normally at the outer limit of its play. A locking-lever 27, pivoted to the handle, has its lower bent end or nose engaging a notch 28. This lever is held normally in engagement with the notch, as by means of a spring secured to the under side of the handle, as shown in Fig. 13 of the drawings, and is operated, as by means of the handle 29, to disengage the lever from the notch.

A bag-bolt web or bit 30 is secured to the spindle or stem 21 of the key, and on this bit is pivoted a pawl 31. This pawl is held by a spring 31^a, with one arm in engagement with a shoulder on the bit 30. The stem of the key is further provided with a tumbler-bit 32 and a box-bolt bit 33. The tumbler-bit is provided with shoulders for the operation of tumblers to be hereinafter described, and the pawl 31 is also adapted to operate upon a dial to be hereinafter described.

The case of the bag-section 19 of the lock is preferably of circular form, as shown, and within the chamber of the case are mounted index-wheels 34 and 35. These index-wheels are secured to shafts 36 and 37, suitably mounted in the case. The index-wheel 34 bears on one face pins 38 and preferably on its edge a tooth 39, adapted to engage the recesses between the teeth 40 on the index-wheel 35. Each of these index-wheels bear on the opposite face a pin 41^a. There are preferably ten of the pins 38 on one face of the index-wheel 34 and ten of the teeth 40 on the index-wheel 35. From this construction it will be seen that ten successive movements may be imparted to the wheel 34 by a device coming in contact with each of the pins and that at the tenth movement a partial movement will be imparted to the wheel 35 by reason of the engagement of the tooth 39 with one of the teeth 40.

A detent-block 41 is secured in a dovetailed groove extending depthwise of the case of the bag-section 19, and to this block is secured a spring detent-plate 42. This detent-plate 42 projects into the case and overlies the detent-wheels 34 and 35. On the under surface of this detent-plate are located detents 43 and 44, the one adapted to engage the pins 38 on the index-wheel 34 and the other to engage the teeth 40 on the index-wheel 35. A detent-plate cam 45 is located on the end of the detent-plate and is adapted to be engaged by the pawl 31. As the stem of the key is turned this pawl 31 engages the cam 45, lifting the detent-plate until the detents 43 and 44 are nearly clear from the pins 38 and the teeth 40, respectively, of the index-wheels 34 and 35. The ends of these detents are beveled, so that they will hold the index-wheels against accidental movement, as by a jar or the like; but a slight force applied to the wheels will allow pins 38 and the teeth 40 to pass the detents. A guard 46 is secured to one side of the case of the bag-section 19, and this guard has a certain permissive movement circumferentially of the inner surface of the case, a guard-screw 47 passing through a slot 48 formed through the back of the guard. This guard has an end wall 49, in which is formed a slot constituting

a bit-pass 50. This slot is of just a width and a depth to permit passage of the bag-bolt bit 30 when the guard is in its normal or operative position. It will be noted that the stem 21 of the key being located eccentrically of the case and between its center and the wall of the case to which the guard 46 is secured that when the guard is moved in the direction of the arrow shown in Fig. 6 the bottom of the bit-pass 50 will be carried toward the key-shank 21, as illustrated in Fig. 6, the guard 46 in this figure having been moved out of normal position. This causes the bottom of the bit-pass to be carried inward beyond the end of the bag-bolt web, so that the latter strikes the end wall of the guard, as shown in Fig. 6, and prevents movement of the key in a direction to operate the mechanism of the lock.

The guard 46 is also provided with a side wall 51, through which is formed a bag-bolt-web recess 52. When the guard 46 is in its normal position, the bag-bolt web or bit may be passed freely through the recess 52 by a lengthwise movement of the stem 21 of the key; but when said guard has been moved into the position shown in Fig. 6 of the drawings it is impossible to remove the bag-bolt web from within the inclosure in the guard, as the web 30 will strike the surface of the said wall 51 of the guard. A guard-holder 53 is held in yielding engagement with the bottom wall 54 of the guard, as by means of a spring 55, located on a pin 56, passing through the holder and through the slot 48 in the guard. This guard-holder 53 is provided on its under surface with teeth 57, engaging teeth on the bottom wall of the guard 46, and at one end of the holder 53 is a tooth 58, adapted to engage with the end of the bottom wall of the guard 46. From this construction it will be seen that when the guard is moved from its normal position it will be held against a reverse movement by the teeth on the guard-holder and that when it has been moved to a sufficient extent the tooth 58, locking over the end of the guard, will form a supplemental lock to hold the guard against movement. The rear wall of the case of the bag-section 19 of the lock is provided with an opening 59, through which the tumbler and box-bolt bits 32 and 33 may pass, the normal location of these bits when the device is not in use being within the chamber in the bag-section 19. The box-section 61 has a chamber in which are pivoted tumblers 62. The box-locking bolt 13 passes through the chamber in the box-section 61 and has a tumbler-engaging arm 63 and a bit-recess 64. The arm 63 has a nose 65, engaging locking and unlocking recesses, respectively, in each of the tumblers 62. The locking-recesses 66 extend across the end of the unlocking-recesses 67, the two forming a recess of T shape. Springs 68 are employed for holding each of the tumblers in normal position with the bolt 13 locked against movement. Each of the tumblers is recessed, as at 69, these recesses being of different depths on the several tumblers and adapted to register with the shouldered bit 32. The shoulders on the bit and the recesses in the tumblers are of such form that when the bit is in engagement with the tumblers the latter are raised, so that the unlocking-recesses 67 are all in line and opposite the nose 65. At the time that the bit 32 has engaged the tumblers and the latter are raised in position to permit movement of the bolt 13 the bit 33 is in engagement with the bit-recess 64, and a further turning of the stem 21 of the key causes the bolt 13 to be thrown to a position with the fingers 12 opposite the finger-slots 14. This movement of the box-locking bolt 13 has also moved the clamping-bolts 10 through the eyes 16 on the jaw 6 of the mail-bag, locking the bag to the knuckles 11 on the toggle 9. This movement of the stem 21 has also caused the bag-bolt web 30 to engage a recess 70 in the bag-locking bolt 18, moving the latter so that the recesses 71 in the bolt are placed opposite the locking-hook 17, projecting from the jaw 6 of the bag. The parts are now in position, with the bag and the box unlocked and the jaw 6 of the bag locked to the toggle 9 of the mail-box. The handle 7 may now be swung downward, opening both the bag and the mail-box and allowing the mail to fall into the bag.

A feeler 73 is located in the box-section 61 of the lock, this feeler having its end 74 normally projecting through the front wall of the chamber. This feeler is normally pressed inward by a spring 75. In its normal position a foot 76 on the feeler lies within the chamber in position to form a stop against which the box-bolt bit 33 will strike. When the bag-section 19 of the lock is firmly in place within the beveled flange 77 and flat against the front wall of the section 61 of the lock, this feeler has been pushed inward so that the foot 76 has been moved out of the chamber and the key is free to be turned. If, however, the bag-section 19 shall not be in proper position, the feeler will not be pushed in to its full extent, and the foot 76, lying within the chamber and preventing rotation of the key, will denote that the parts are not in proper position.

The pins 41[a] on the movable registering index or index-wheels 34 and 35 are adapted to engage slots 78 in the stationary index or governors 79 and 80. These governors consist of disks rotatably mounted in the front wall of the section 61 of the lock, and they may be adjusted rotatably, as by means of the peripheral notches and the adjusting-screw 81. These governors are so adjusted on the successive boxes from which mail is to

be collected that the pin 41ª on the index-wheel 34 when the bag-section 19 is in place will engage one end of the slot 78 in the governor 79, and then as the index-wheel 34 is rotated in the operation to open the box and deliver the mail to the bag the pin will be moved to the opposite end of the slot 78, moving in the direction of the arrow shown in Fig. 7. This slot 78 on the next succeeding box will be located in a position slightly in advance of the slot in the governor 79 just described or as indicated in the governor 82. (Shown in Fig. 8 of the drawings.) This will cause the pin which has been moved to its new position to engage the same end of the slot in the governor 82 as that previously occupied in the governor 79, and the operation of the mechanism will now cause the pin to be moved forward. It will be seen from the construction that the pin 41ª in the index-wheel 35 moves only at the time when the wheel 34 has been moved ten successive steps and that there is therefore no requirement for a slot in the governor 80 except on the tenth box from which mail is collected, as the pin 41ª on the wheel 35 will be moved only when the parts are in engagement on this tenth box and each succeeding tenth box. For this reason there has been shown in the drawings in Fig. 8 a hole only in the governor 83.

The operation of the device, briefly described, is as follows: The bag 2 is attached to the box by the mechanism described and as shown in Fig. 1 of the drawings and the bag-section 19 of the lock forced into the beveled opening within the flange 77, which flange guides the section of the lock to place. In this movement the feeler 73 has been forced inward, so that the foot 76 has been removed from the chamber in the section 61 of the lock. The handle 23 of the key being grasped and the locking-lever 27 moved outward by a grasp on the handle 29, the key is now pushed inward with the end 84 of its shaft or stem passing into the opening in the rear wall of the section 61 of the lock. The bits 32 and 33 of the lock are now within the chamber in the section 61 and are of just a width to form a stop and determine this extent of endwise movement of the key, so that the bag-bolt web will be in proper position to pass through the bit-pass 50. The key now being turned, the bit 32 raises the tumblers 69, so that the unlocking-recesses 67 register, and the bit 33, coming in contact with the bit-recess 64, moves the box-locking bolt 13, so that the fingers 12 are located opposite the finger-slots 14. The bag-clamping bolts 10 have also been moved into engagement with the eyes 16 in the jaw 6 of the bag. This same movement of the key has caused the bag-bolt bit 30 to move through the bit-pass 50 in the guard 46 and to engage the slot 70 in the bag-locking bolt 18. This movement of the bolt causes the recess 71 to be located opposite a hook 17. A movement of the handle 7 now causes the jaw 6 of the bag to be moved downward, carrying with it the toggle 9 and the bottom 8 of the mail-box, the knuckles 11 moving downward and the pins 12 passing through the slots 14 and the hook 17 passing through the slot 71 in the bag-locking bolt 18. The mail is delivered to the bag, and a reverse movement given to the handle 7 brings the parts into engagement, the key being given a reverse movement to lock the parts and placing the mechanism of the lock in position so that the two sections of the lock may be separated. The movement of the key to unlock the mechanism has caused the pawl 31 to engage the cam 45 on the detent-plate 42, lifting the plate so that the detents 43 and 44 disengage the pins 38 and teeth 40 on the wheels 34 and 35. After passing the cam 45 the pawl engages a pin 38, moving the wheel 34 a one-step movement, a pin 38, in engagement with the detent 43, being forced past the detent. If the tooth 39 on the wheel 34 is in engagement with the teeth 40 on the wheel 35, the latter wheel is also of course given a one-step movement. As the key is turned backward the pawl 31 yields and allows its point to pass the pins on the wheel 34 without operating the latter. If an attempt shall be made to turn the key without having the two sections of the lock in position to determine just the extent of longitudinal movement to be given to the key to allow the bag-bolt web 30 to move through the pass 50, it will be practically impossible to determine the extent of this endwise movement of the key sufficient for this end. If the key be given a movement too far or not far enough, the bag-bolt web 30 will strike the edge on one or the other side of the pass 50 and cause the guard to be moved in the direction of the arrow shown in Fig. 6. This movement of the guard brings the bottom wall of the pass into such position that the bag-bolt web will strike against the front wall of the guard, as shown in Fig. 6, so that it is utterly impossible to now move the web 30 through the pass. This movement of the guard has also placed the bag-bolt-web recess 52 in such position that the web 30 will strike the inner side wall of the guard and cannot be moved through said recess. In fact, the key is now in position with the webs 32 and 33 projecting through the rear wall of the section 19 of the lock, and it will be impossible for the operator to now place the key in proper position without opening the section 19 of the lock. This cannot be done, for the reason that this section of the lock is sealed, and the fact that the operator has endeavored to tamper with the lock must become known.

In Figs. 14 and 15 of the drawings there is shown a modified form of means for preventing operation of the key except when the two

sections of the lock are in engagement. This device consists of a rib *a*, extending lengthwise of the spindle of the key, this rib terminating in a circumferential rib *b*. A spring-pressed pin *c* is located in the wall 60 of the case and rests normally on this rib. As it is impossible to turn the key until it has been forced inward to its innermost position, the pin rests normally on the rib *a*, and then when the key has reached its seat and in position to operate the lock the pin will be located opposite the rib *b*, so that in the rotation of the key the pin remains on this rib. It will be seen that in an attempt to operate the key without the two sections of the lock in engagement, and therefore without any gage to determine the amount of lengthwise movement of the key, should the key be given too little or too great a movement lengthwise the pin *c* will pass off from the rib *a* against a shoulder formed by the rib and then prevent movement of the key in either direction. It is obvious that this sectional lock and its mechanism is not confined to use in connection with mail collection and delivery boxes, or, in fact, to collection or delivery devices of any sort, as it is capable of various and extended uses and the application of the sectional lock with its mechanism to any use whatever will be deemed as coming within the scope or intent of the invention.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A receiver, a collector, means for locking the receiver and collector in engagement and including a sectional lock, a key movably secured within one section of the lock and having a bit permanently located therein and bits to be projected into the opposite section of the lock to operate mechanism therein, interengaging index devices borne upon the meeting faces of the two sections of the lock, those upon one section being movable and operated by a bit on the key during the rotation of the latter.

2. A receiver, a collector, means for locking the receiver and collector in engagement and including a sectional lock, movable index devices located on one section of the lock, a key movably secured to said section and having a bit permanently located therein and another bit projected into the opposite section of the lock to operate mechanism therein, and stationary index devices borne upon the last-mentioned section of the lock to register with the movable indexes on the opposite section of the lock.

3. A receiver, a collector, a sectional lock with a section borne on each of said parts, a key movably secured within one section of the lock but movable to locate it in the opposite section of the lock and having a different movement to operate the mechanism of both sections of the lock, an index located on one section of the lock, and a movable registering-index located on the opposite section of the lock, said index being operated by the key in its turning movement.

4. A receiver, a collector, a sectional lock having a section borne upon each of said parts, a key movably secured within one section of the lock but having movement to locate it in the opposite section and a different movement to operate the mechanism of both sections of the lock, said key having devices for acting upon the mechanism in each section of the lock, a stationary index upon one section of the lock and a movable interengaging index upon the opposite section of the lock operated by the key in its rotation.

5. In a mail-collecting device, a mail-box having locking devices and a section of a lock for operating said devices, a mail-bag having locking devices and a section of a lock bearing lock mechanism including a key movably secured and having a bit permanently located therein, and bits to be projected into the opposite section of the lock, said bits operating the mechanism of both sections of the lock in the turning movement of the key.

6. A receiver, a collector, means for locking said parts together, said means including a sectional lock and a key having bits, said key being movably secured and having one bit permanently located in one section of the lock but movable to locate a bit in the opposite section of the lock, the mechanism of both sections being operated by the bits in the turning movement of the key.

7. A receiver, a collector, means for locking said parts in engagement, said means including a key having bits one of which is permanently located in one section of the lock, said key being movable to locate a bit in the opposite section of the lock, and the mechanism of both sections of the lock being operated by the key in its turning movement.

8. A receiver bearing one section of a lock including a locking-bolt, a collector bearing another section of a lock including a locking-bolt, tumbler mechanism for locking a bolt against movement, and a key movably secured to and having a bit permanently located within one section of the lock but movable to locate a bit in the opposite section, the mechanism of both sections being operated by the key in its turning movement.

9. In a mail-collecting device, a receiver and a collector, lock mechanism appurtenant to said parts, a key for a lock, means for locating the key in its working position, and a guard operated by the movement of the key when located out of its working position.

10. A receiver, a collector, a section of a lock borne upon each of said parts, a key movably secured to one of said sections but movable into the opposite section to operate the mechanism of both sections, and a guard to prevent longitudinal movement of said key.

11. A receiver, a collector, sections of a lock borne upon each of said parts, a key movably secured within one section of the lock but movable into the opposite section to operate the mechanism of both sections, means for locating the key in its working position, and a guard to prevent rotation of the key when located out of its working position.

12. A receiver, a collector, sections of a lock borne upon each of said parts, a key movably secured to one of said parts but movable into the opposite part to operate the mechanism of both sections of the lock, and a lock to prevent rotative and longitudinal movement of the key.

13. A receiver, a collector, sections of a lock borne upon each of said parts, a key movably secured to one of said sections and movable into the opposite section to operate the mechanism of both sections, means for locating the key in its working position, and a guard operated by the key to lock it against lengthwise and rotative movement and by turning movement of the key when located out of its operative position.

14. A receiver, a collector, sections of a lock borne upon each of said parts, a movable index located upon one section and an interengaging immovable index located upon the opposite section, a key movably located in one of the sections and movable into the opposite section to operate the mechanism of both sections, and including a bit normally disengaged from the index but operating said index in its turning movement.

15. In a mail-collecting device, a receiver and a collector each bearing a section of a lock to be operatively engaged, locking and unlocking mechanism located in each section of the lock, one of said mechanisms including a key adapted to engage both sections of the lock, a bit located upon the key to engage the mechanism of each section of the lock, and a guard for one of said bits.

16. In a mail-collecting device, a receiver and a collector each bearing a section of a lock, lock mechanism in each of said sections, a key normally located in one section of the lock but movable and having bits to engage the mechanism of each section of the lock, and a movable guard for one of said bits.

17. In a lock, in combination, a key having a bit, a movable guard having a recess for the passage of said bit in the normal position of the guard, but out of registering position with the bit when moved from normal position.

18. In a lock having lock mechanism, a key having a bit to operate said mechanism, a movable guard having a recess and a pass for the reception of said bit in the normal position of the guard but preventing passage of the bit in the abnormal position of the guard.

19. In a lock including its locking mechanism, a key having a bit to operate said mechanism, a movable guard having a pass for the reception of said bit in the normal position of the guard, but preventing passage of the bit in the abnormal position of the guard.

20. In a lock including its lock mechanism, a key having a bit to operate said mechanism, a movable guard having means to permit the passage of the bit in the normal position of the guard, but preventing passage of the bit in the abnormal position thereof, and means for holding the guard against backward movement.

21. In a mail-collecting device, a mail-box containing a section of a lock, a mail-bag containing the opposite section of the lock, means for operating the sections of the lock, said means including a key to be located in each section to operate the mechanism thereof, registering index-dials on the meeting faces of the lock, a detent-plate for holding the dials against movement, and a bit on the key to disengage the detent-plate from said dials.

22. In a mail-collecting device, a receiver bearing a section of a lock, a collector bearing another section of the lock, a key to be located in each section of the lock to operate its mechanism, and a guard having means to allow passage of the key in its normal position but preventing such passage in its abnormal position.

23. A receiver bearing a section of a lock, a collector bearing another section of the lock, a key to be located in each section of the lock to operate its mechanism, a guard having means to allow passage of the key in its normal position, but preventing such passage in its abnormal position, and means for holding the guard against backward movement.

24. A receiver bearing a section of a lock, a collector bearing another section of the lock, a key to be located in each section of the lock, index-dials located on the meeting faces of the sections of the lock, a detent-plate to hold the dials against movement, and a bit on the key to disengage the detent and to rotate a dial.

25. A receiver bearing a section of a lock, a collector bearing another section of the lock, a key to be located in each section to operate the mechanism thereof, a guard having means permitting passage of the key in the normal position of the guard, but preventing movement of the key in its abnormal position, index-dials located on the adjacent faces of the sections of the lock, a detent-plate to prevent movement of the dials, and a bit on the key to disengage the detent-plate and move a dial.

26. In combination with a lock, a key having bits located upon opposite sides thereof and adapted for turning movement

within the lock, tumblers located upon one side of the key and a bolt located upon the opposite side of the key, said tumblers and bolt to be operated by said bits.

27. In a sectional lock, including the lock mechanism, tumblers and a bolt located in one section, index-dials located on the opposite section, and a key having a bit for the operation of the tumblers, a bit for the operation of said bolt and a bit for the operation of the dials.

28. A receiver bearing a section of a lock including a bolt, a collector bearing another section of the lock including a bolt, index-dials on the adjacent faces of the sections of the lock, a key having bits to be located in each section of the lock to operate the bolts and to operate said dials.

29. A receiver having a section of a lock, a collector bearing another section of the lock, a locking-bolt appurtenant to one of said sections and having an arm, a series of tumblers each having lateral slots to engage said arm to permit movement of the tumblers and a lengthwise slot to engage the arm and permit lengthwise movement of the bolt, and a key having bits to be located in both sections of the lock to operate said tumblers and their lock mechanism.

30. In combination in a lock including a bolt with an arm extending therefrom, tumblers having crosswise slots to engage said arm and permit movement of the tumblers and lengthwise slots to permit lengthwise movement of the bolt, and a key having a bit to operate said tumblers and a bit to engage the bolt to move the same.

31. A receiver, a collector, means for locking the receiver and collector together and including a sectional lock, a key movable to engage and operate each section of the lock, and means for preventing rotation of the key except when in proper position and to lock said key in its turning movement out of proper position.

32. A receiver, a collector, means for locking the receiver and collector together and including a sectional lock, a key movable to engage and operate each section of the lock, a guard to prevent movement of the key except when in proper position, and a gage for determining the proper position of the key to operate the sections of the lock.

33. A receiver, a collector, means for locking the receiver and collector together and including a sectional lock, a key located in one section of the lock and movable into the opposite section to operate the mechanism of both sections, a guard to prevent movement of the key except when in proper position, and a gage to determine the proper position of the key.

34. A receiver, a collector, a section of a lock borne upon each of said parts, a key located in one section but having movement into the opposite section and a different movement to operate the mechanism of both sections of the lock, a guard to prevent movement of the key except when in proper position, and means for determining the proper position of the key.

35. In a lock, in combination, a key arranged for movement into proper position to operate the lock, means for determining the proper position of the key to operate the mechanism, and a block operated by the key to lock the latter in a movement when located in an improper position.

36. In a lock, in combination with a longitudinally-movable key, means for determining the proper position of the key to operate the mechanism, and means to lock said key against movement in a movement of the key when out of its proper position.

37. In a sectional lock, two sections to be secured together, a key movable from one section into the opposite section to operate the lock mechanism, and a stop to prevent movement of the key to operate the mechanism except when the two sections of the lock are in proper engagement.

38. In a sectional lock, two sections to be united, a key movable from one section into the opposite section, a stop for said key, and a feeler extending from the stop and operated by engagement of the two sections of the lock to remove the stop from the path of the key.

39. In combination in a sectional lock, two sections to be united, a key movable from one section into the opposite section, a stop adapted to be located in the path of movement of the key and also to be located in a recess in one section of the lock, and a feeler projecting through the wall of one section of the lock to engage the opposite section whereby the stop is removed from the path of the key only when the two sections of the lock are properly seated.

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