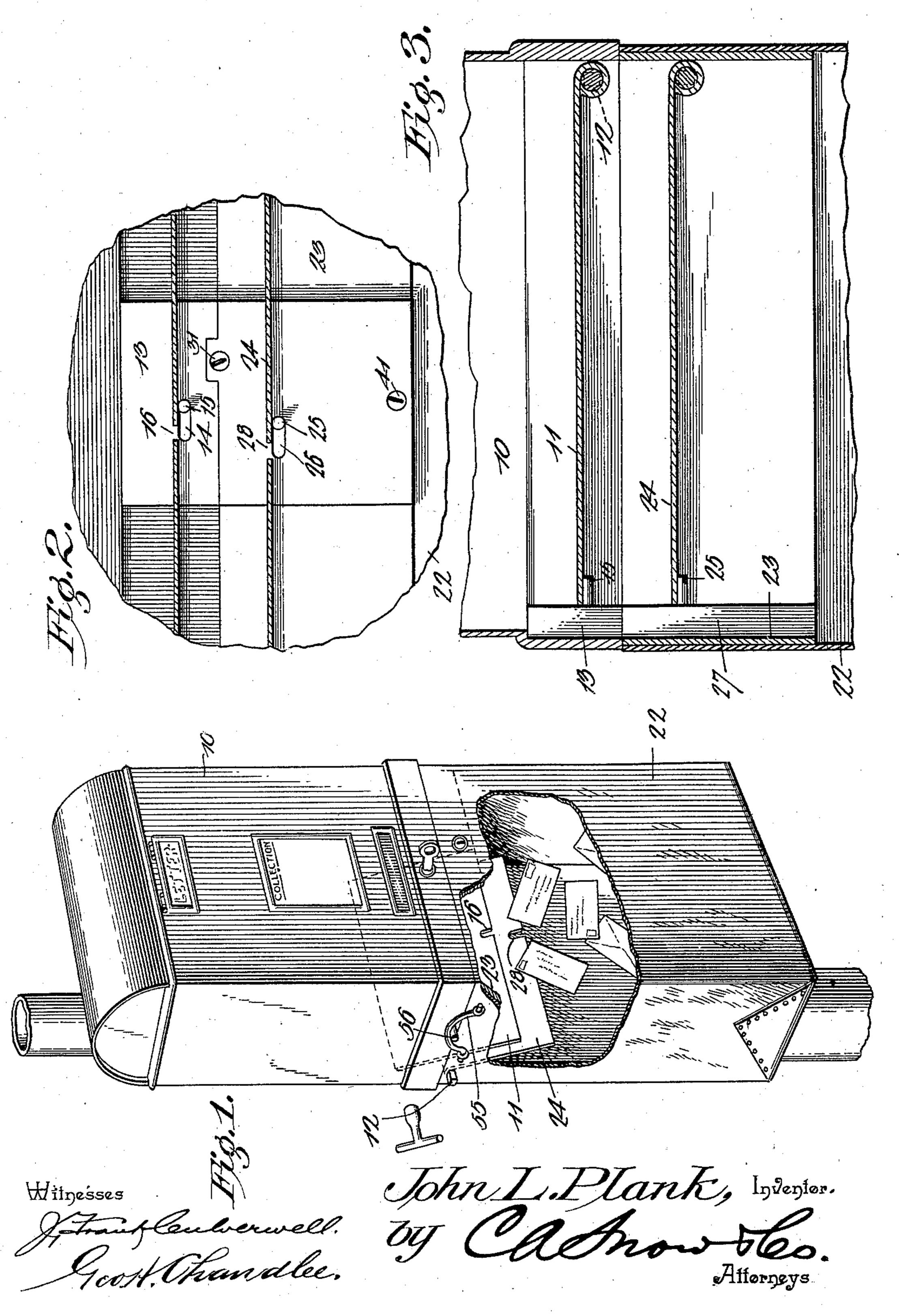
J. L. PLANK.

MAIL BOX ATTACHMENT.

(Application filed Apr. 8, 1901.)

(No Model.)

2 Sheets—Sheet I.

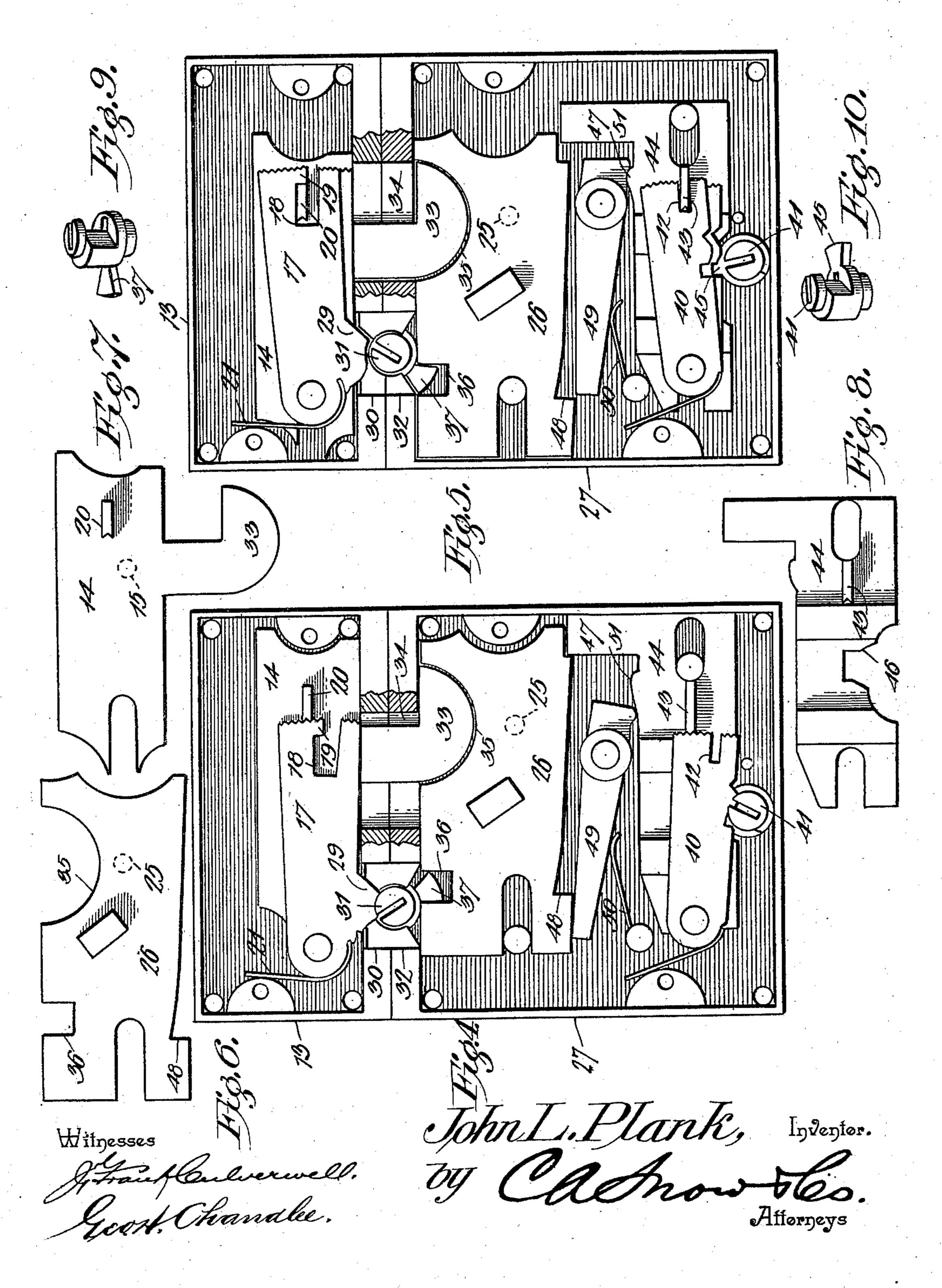


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2 Sheets-Sheet 2.



United States Patent Office.

JOHN L. PLANK, OF ROCHESTER, NEW YORK.

MAIL-BOX ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 686,328, dated November 12, 1901.

Application filed April 8, 1901. Serial No. 54,905. (No model.)

To all whom it may concern:

Be it known that I, John L. Plank, a citizen of the United States, residing at Rochester, in the county of Monroe and State of New 5 York, have invented a new and useful Mail-Box Attachment, of which the following is a

specification.

This invention relates to mail-boxes and collecting-pouches; and it has for its object to to provide a construction wherein the box will have a door provided with a lock, and the collection-pouch will have also a door provided with a lock, and in which the lock of the box can be operated to unlock the box 15 only when the pouch is in place thereagainst, and wherein, furthermore, when the box is unlocked the pouch is locked fast to the box, so that the collector is not permitted to handle the mail-matter.

A further object of the invention is to provide a construction wherein after the pouch has been once unlocked and then locked while upon the box its lock cannot be operated to again unlock the mail-box until after it has 25 been first unlocked with a different key, act-

ing upon a separate set of tumblers.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several 30 views, Figure 1 is a perspective view showing a mail-box with the pouch attached, a portion of the pouch being broken away to illustrate the doors of the box and pouch in open positions. Fig. 2 is a sectional view 35 showing portions of the lower part of the mail-box and the adjacent part of the attached pouch with the locks thereof in engaged positions and the doors raised. Fig. 3 is a transverse vertical section through the 40 mutually adjacent portions of the box and pouch. Fig. 4 is a plan view of the engaged locks with the tops of the casings thereof removed, the parts being in position to lock the pouch to the box and unlock the doors of 45 the box and pouch to permit of discharge of mail from the former to the latter, as shown in Fig. 1. Fig. 5 is a view similar to Fig. 4 and showing the positions of the parts of the locks when the locks are first connected and 50 previous to the unlocking of the box and pouch, which operation locks the pouch to the box. Fig. 6 is an elevation showing the

shiftable bolt which is located in the lock carried by the pouch. Fig. 7 is an elevation showing the shiftable locking-bolt of the lock 55 carried by the box. Fig. 8 is a detail elevation showing the shiftable keeper of the lock, carried by the lock upon the pouch. Fig. 9 is a detail perspective view showing the locking-cylinder that engages and slides the bolt 60 of the lock on the box. Fig. 10 is a detail perspective view showing the locking-cylin-

der of the lock upon the pouch.

Referring now to the drawings, there is shown a mail-box 10, having a door 11 at its 65 bottom and which door has an angular trunnion 12 projecting through an end of the box for engagement of a key or handle to raise and lower the door, and when the door is in raised position it is held by a lock. This lock 70 consists of a casing 13, in which is disposed a slidable bolt 14, provided with a pin 15, which projects into the box and against the upper side of which the door lies when the pin is in locked position. When the bolt is shifted to 75 unlocked position, the pin is under a slot 16 in the door, and thus permits the door to swing downwardly into open position. To hold the bolt 14 in locked position, tumblers 17 are provided and have slots 18 therein, 80 which are broadened at their inner ends to form nibs 19, and which slot lies normally out of alinement with a stud 20 upon the bolt. When the tumblers are raised by a key, as hereinafter described, the slots thereof are 85 brought into alinement with the stud, and if the stud lie outside of the slots, as shown in Fig. 4, the bolt may be then moved to carry the stud into the slots, which is the locked position of the bolt, the springs 21 of the 90 tumblers being disposed to move the latter when the key is withdrawn from engagement with the tumblers to bring the nibs of the tumblers behind the stud of the bolt, and thus prevent outward movement of the stud from 95 the slots to carry the pin 15 to its unlocked position. When the bolt is in the unlocked position, the stud thereof lies against the ends of the tumblers, above the slots thereof. and the ends of the tumblers, as also the ad- 100 jacent end of the stud, are serrated so as to prevent accidental displacement of the tumblers.

The collecting-pouch 22 has a rigid frame

23 at its mouth, and in this frame operates a hinged door 24, which is to be held in closed position by a pin 25, carried by a bolt 26, disposed slidably in a casing 27 upon the frame 5 of the pouch, this pin being adapted for movement into and out of alinement with a slot 28 in the door of the pouch to permit or prevent inward movement of the door to open position.

The pins or engaging portions 29 of the tumblers 17 project from the casing 13 and lie in a recess 30 in the casing, and the casing 13 has no means whatever for receiving a key in operative relation to these pins, the key-15 cylinder 31 therefor being carried in a projecting portion 32 of the lock-casing 27 and which is adapted to fit into the recess 30 when the pouch is moved to rest with its frame against the lower end of the mail-box to re-

20 ceive the mail therefrom. The upper lock is normally in closed or locking position, as shown in Fig. 5, and when the pouch is moved into place, as shown also in said figure, a finger 33, carried by the bolt 14 25 and projecting from casing 13, enters casing 27 through an opening 34 therein, and when the bolt 14 is moved to position to carry its pin 15 into position to unlock the box this finger engages the inner face of the upper side 30 of casing 27 and holds the pouch in place against the mail-box. To thus move the bolt 14, the second bolt 26 has a recess 35 in its upper edge, which receives the finger 33, and said bolt 26 has a second recess 36 in its up-35 per edge, which receives the wing 37 of the cylinder 31, so that when said cylinder is rotated in one direction the bolt 26 is moved to carry the finger 33 into position to hold the lock-casings together, and when the cylinder 40 is rotated in an opposite direction the finger 33 is carried to its releasing position. As the finger 33 is moved the bolt 14 is also moved and therewith the pin 15, the locking position of finger 33 being the unlocking position of 45 the pin, and vice versa. Also as the bolt 26 is moved its pin 25 also moves, the two pins being moved simultaneously into locking and unlocking position. Thus when the doors of the box and pouch are unlocked the pouch is 50 locked to the box, and when the pins are moved to lock the doors the pouch is unlocked from the box. In this connection also, some means must be provided for preventing the pouch to be applied to unlock the pouch and 55 box, then the pouch to be unlocked from the box without locking the doors of the pouch and box, and then, after the mail has been removed from the pouch, to apply the pouch to the box, swing the doors into closed posi-60 tions, and then lock them. To prevent this operation, the bolt 26 is provided with a set of tumblers to be operated and connected mechanism for moving the bolt with a separate key from that used in the cylinder 31, 65 and the mechanism is such that after the bolt 26 is moved to unlock the box and pouch and

then moved to lock them and release the pouch |

from the box it cannot be again operated from the key in cylinder 31 until after the bolt 26 has been operated with its separate key.

The tumblers for the bolt 26 are shown at 40, and adjacent thereto is the key-cylinder 41, these tumblers having slots 42 therein, which when the tumblers are raised by engagement of a key therewith aline with a 75 stud 43 on a slide 44 and permit this slide to be moved rearwardly by engagement of the wing 45 of the cylinder 41 in a recess 46 in the slide, and when the bolt 26 is in position to lock the pouch this slide is in re- 80 tracted position, as shown in Fig. 5, and the upwardly-projecting portion 47 thereof lies in the path of movement of the bolt 26, so that the latter cannot be moved to unlock the pouch without shifting the slide 44, as shown 85 in Fig. 4. The bolt 26 has a shoulder 48 on its under side, adapted for engagement by the end of a pivoted finger 49, having a spring 50, which holds it yieldably in its engaging position, and when the slide 44 is in the posi- 90 tion shown in Fig. 5 this finger is held rocked, with its engaging end out of the path of movement of this shoulder by engagement of a cam 51 on slide 44 with the opposite end of the finger. When the bolt 26 is moved to 95 unlock the pouch and box, the shoulder is taken inwardly of the free end of the finger, so that said finger lies against the lower edge of the slide and the slide may freely move, and at the same time the cam 51 is carried 100 from beneath the opposite end of the finger, so that the spring 50 may move the free end of the finger upwardly and close against the slide. When, however, the bolt 26 is returned to position to release the pouch from 105 the box, the shoulder 48 is taken beyond the end of the finger, which latter snaps up and lies behind the shoulder and prevents movement of the bolt 26 to unlock the pouch and box or lock the pouch to the box. The only 110 manner in which the finger 49 can be moved from engagement with the shoulder is to return the slide 44 to engage the cam 51 under the butt-end of the finger, and this can be done only by manipulation of the cylinder 41 115 with its special key, which is kept at the post-office, the collector being furnished only with a key to the cylinder 31. It will be thus seen that in order to have access to the pouch the collector must leave the mail-box and the 120 pouch open, and will thus show that he has had access to the box and pouch, it being understood that when the pouch is given to the collector it is locked, and when it is returned it must also be locked.

To assist in holding the pouch to the box, handles 55 are provided, which are adapted for engagement over pins 56 on the box.

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What is claimed is—

1. The combination with a locking mechan- 130 ism including a bolt and tumblers, of a second locking mechanism including a bolt and a key-receiving cylinder disposed and constructed for operating the second bolt and

holding a key in position for operating the | for releasing the holding mechanism to pertumblers, and means carried by one bolt for actuating the other bolt when the mechan-

isms are in juxtaposition.

2. The combination with a box having a locking mechanism including a bolt and tumblers for locking and unlocking the box, of a pouch having a bolt and a key-receiving cylinder, said cylinder being disposed for op-10 erating the tumblers of the first lock and the

bolt of the second lock.

3. The combination with a locking mechanism including a bolt and tumblers, of a second locking mechanism including a bolt and 15 a key-receiving cylinder disposed and constructed for operating the second bolt and holding a key in position for operating the tumblers, and means carried by the first bolt for engagement with the second bolt for ac-20 tuating the first bolt.

4. The combination with a locking mechanism including a bolt and tumblers, of a second locking mechanism including a bolt and a key-receiving device disposed to operate 25 the second bolt and to hold the key in position to operate the tumblers, and a lockingfinger carried by the first bolt for locking the mechanisms together, said finger being adapted for engagement with the second bolt for 30 movement thereby into and out of operative

position.

5. The combination with a lock mechanism including a bolt and tumblers, of a second lock mechanism including a bolt and a key-35 receiving device disposed to operate the second bolt and to hold a key in position for operating the tumblers, and a locking-finger carried by the first bolt for locking the mechanisms together, said finger being adapted 40 for engagement with the second bolt for movement thereby for movement of itself and its connected bolt into and out of locking position.

6. The combination with a box having a 45 lock, of a second lock carried by a pouch and including an element essential to the lock upon the box and a locking-bolt, means for holding said essential element against operation to operate the first lock, and means operable 50 by actuation of the second lock mechanism mit of a cycle of operation of the essential element.

7. The combination with a box having a door provided with a lock having an essen- 55 tial element missing, of a pouch for attachment to the box and carrying a lock including said essential element as a part of its mechanism, a retaining device for holding the essential element against operation and means 60 operable by actuation of the second lock for permitting a cycle of operation of the essential element.

8. The combination with a mail-box having a door of a lock therefor including a bolt and 65 tumblers for holding the bolt in locked and unlocked positions, a second lock carried by a collecting-pouch and including a lockingbolt, a key-receiving cylinder disposed for operation of the second bolt and to hold a key 70 in operative relation to the tumblers, means for limiting the movement of the second bolt to one cycle under the influence of said cylinder, and a key-operated device for releasing said limiting means to permit of a second cy-75

cle of operation of the cylinder.

9. The combination with a mail-box having a door provided with a lock including a bolt and tumblers for holding the bolt in opposite positions, a collecting-pouch having a lock 80 including a bolt, a key-receiving cylinder disposed to operate the second bolt and hold a key in operative relation to the tumblers, the first bolt having a locking-finger for engagement with the second lock to hold the locks 85 in close relation, and the second bolt being adapted for engagement by the finger to actuate it and its bolt, a retaining-finger disposed to hold the second bolt in locked position, and a separate key-operated device dis- 90 posed to move the finger from operative position and being operable by unlocking movement of the second bolt to release the finger.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 95 the presence of two witnesses.

JOHN L. PLANK.

Witnesses:

CHARLES STANTON, S. P. HALDERMAN.