

SEAL LOCK.

APPLICATION FILED JUNE 29, 1909.

954,910.

Patented Apr. 12, 1910.

2 SHEETS—SHEET 1.

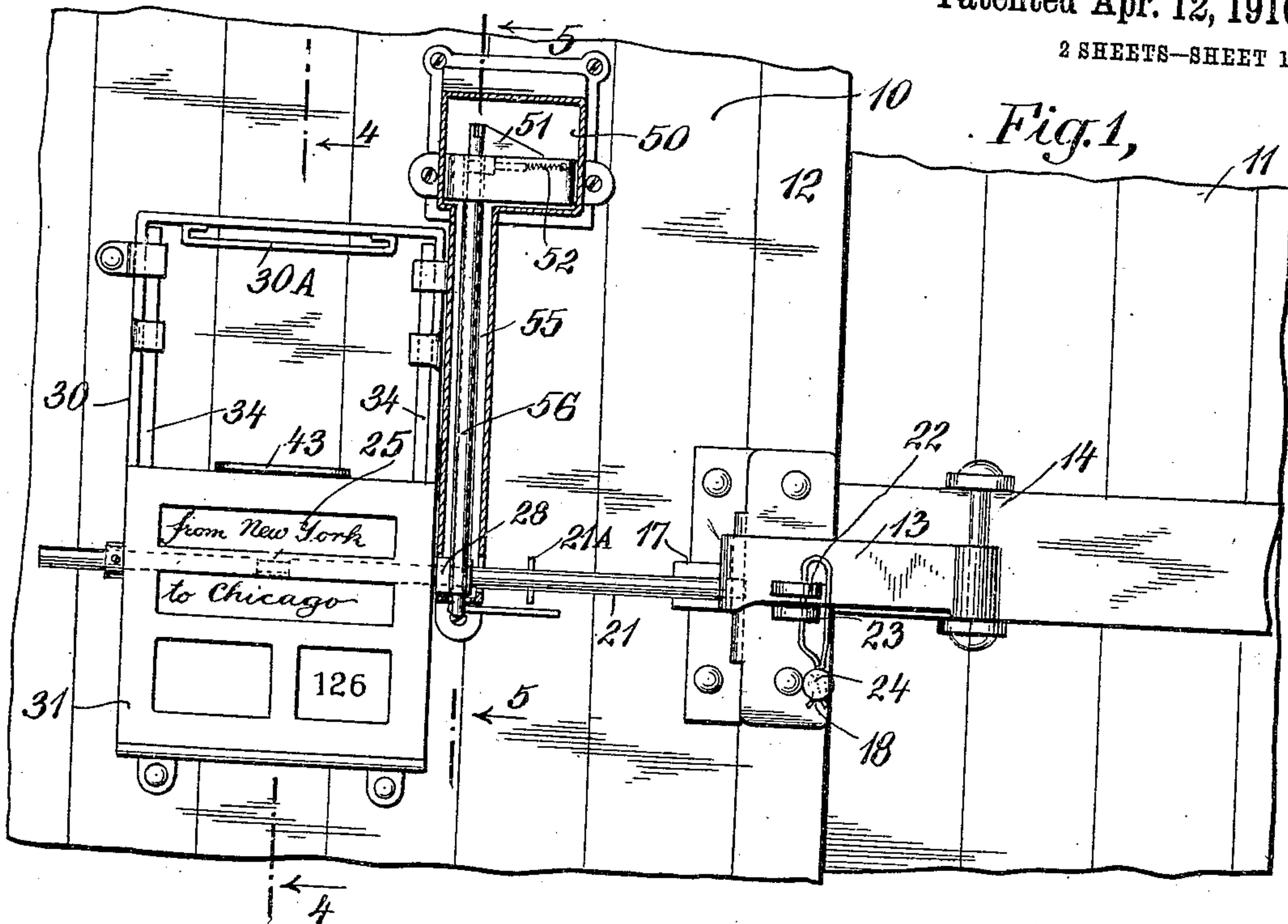


Fig. 2,

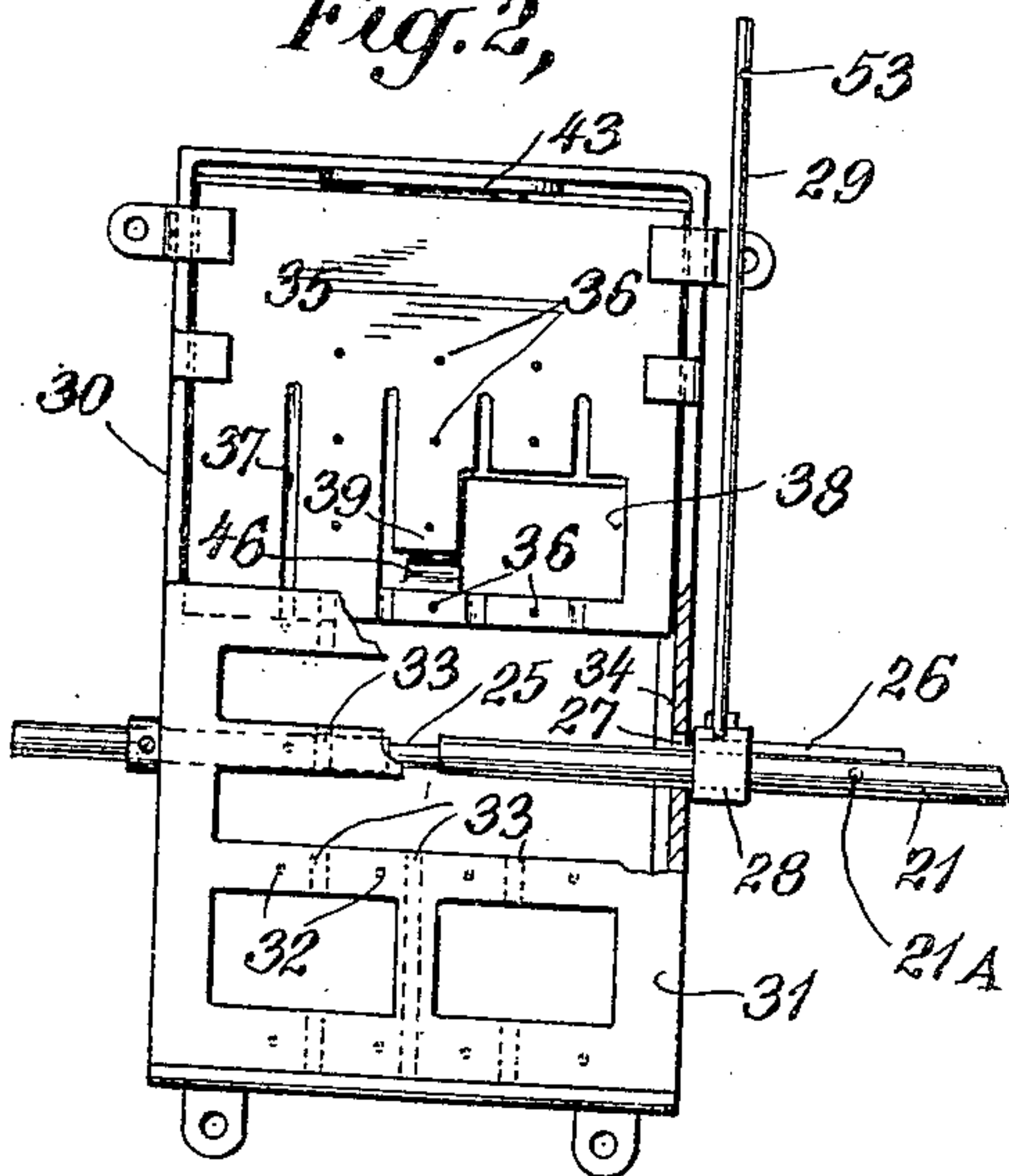
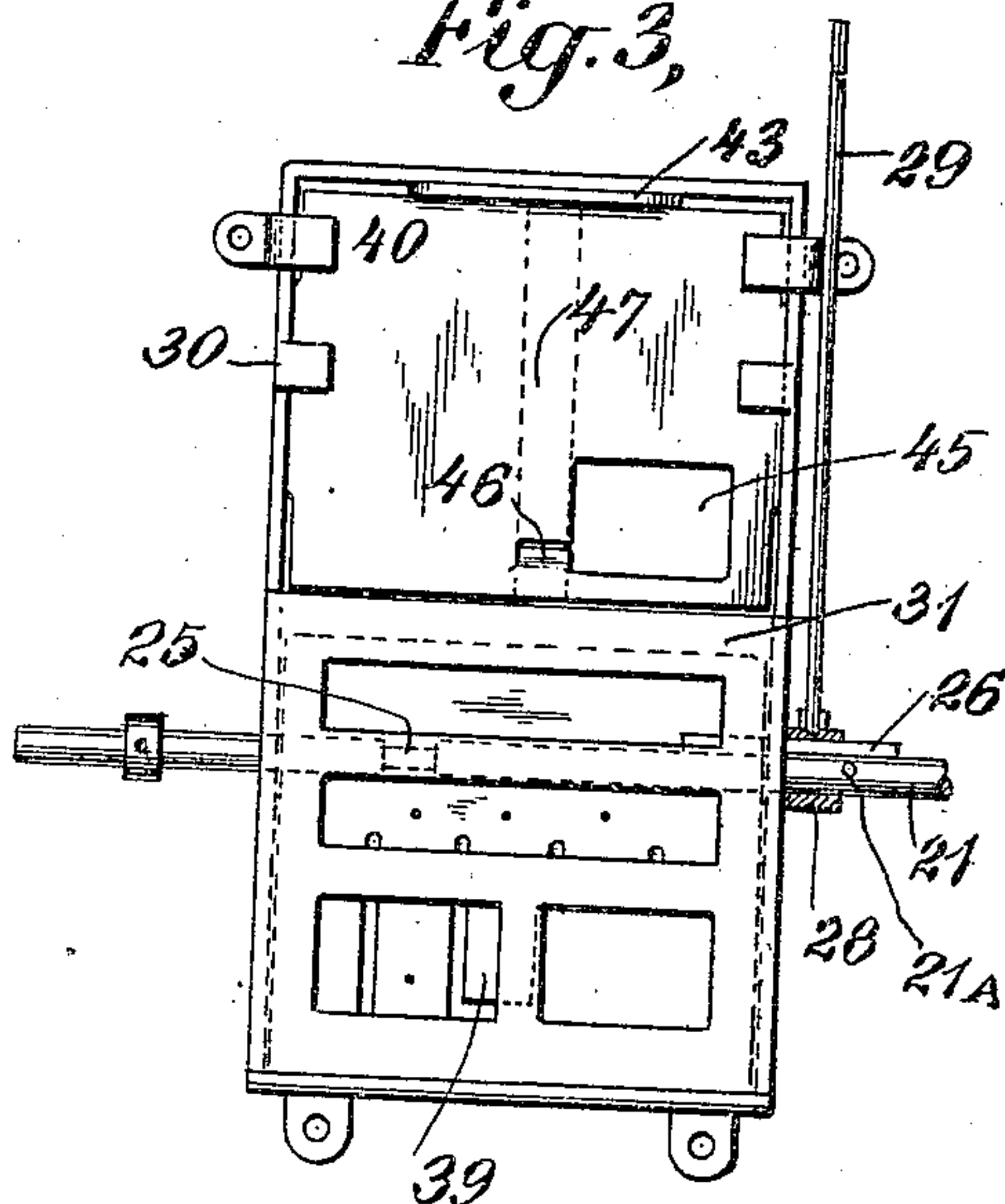


Fig. 3,



WITNESSES:

~~Teacher~~
~~Max Hensley~~

INVENTOR

George H. Barker

BY

E. W. Marshall
ATTORNEY

G. H. BARKER.

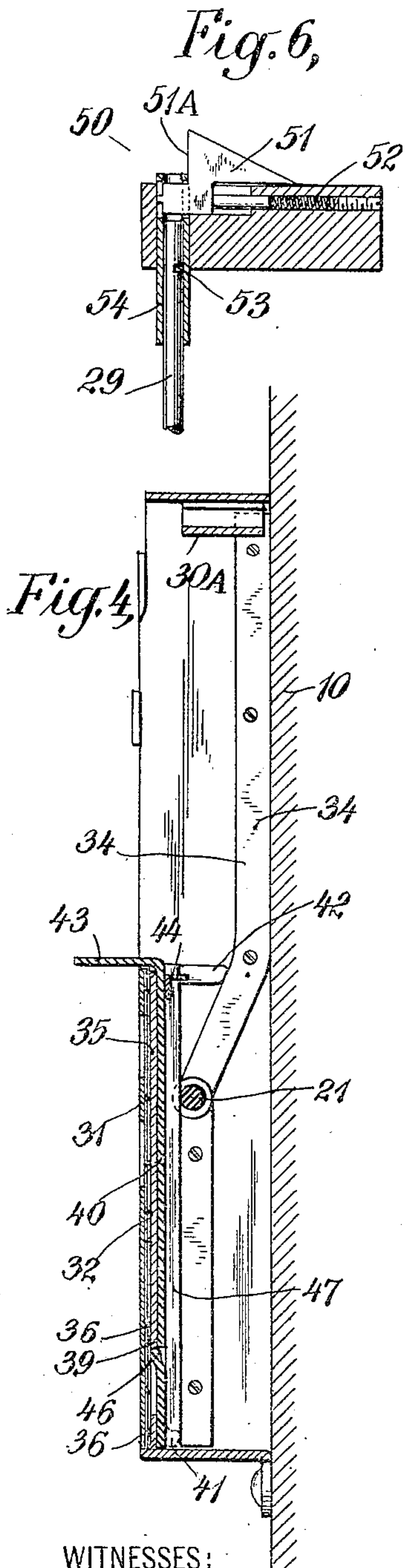
SEAL LOCK.

APPLICATION FILED JUNE 29, 1909.

954,910.

Patented Apr. 12, 1910.

2 SHEETS—SHEET 2.



WITNESSES:

*Edward
M. H. H. H.*

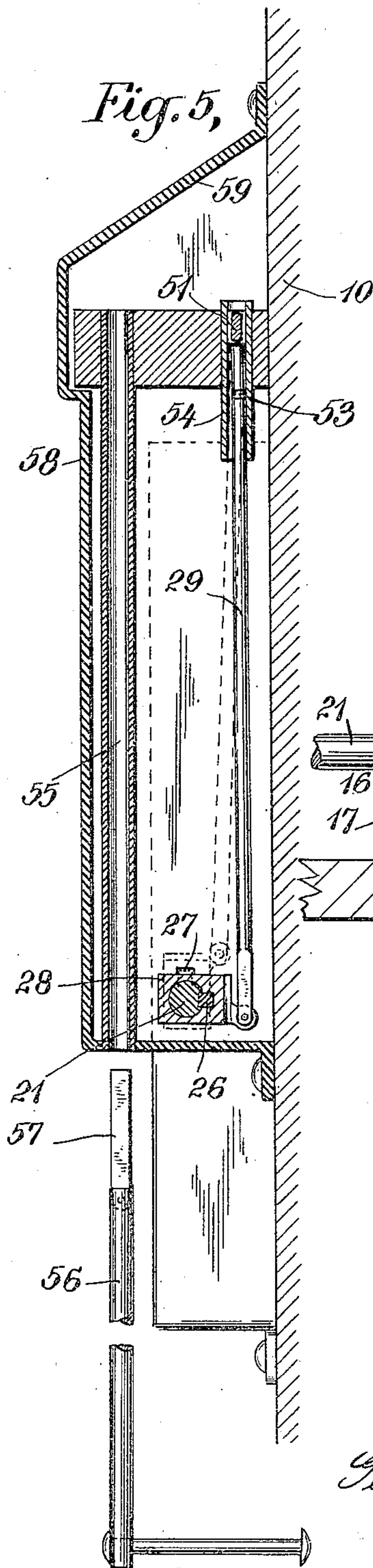
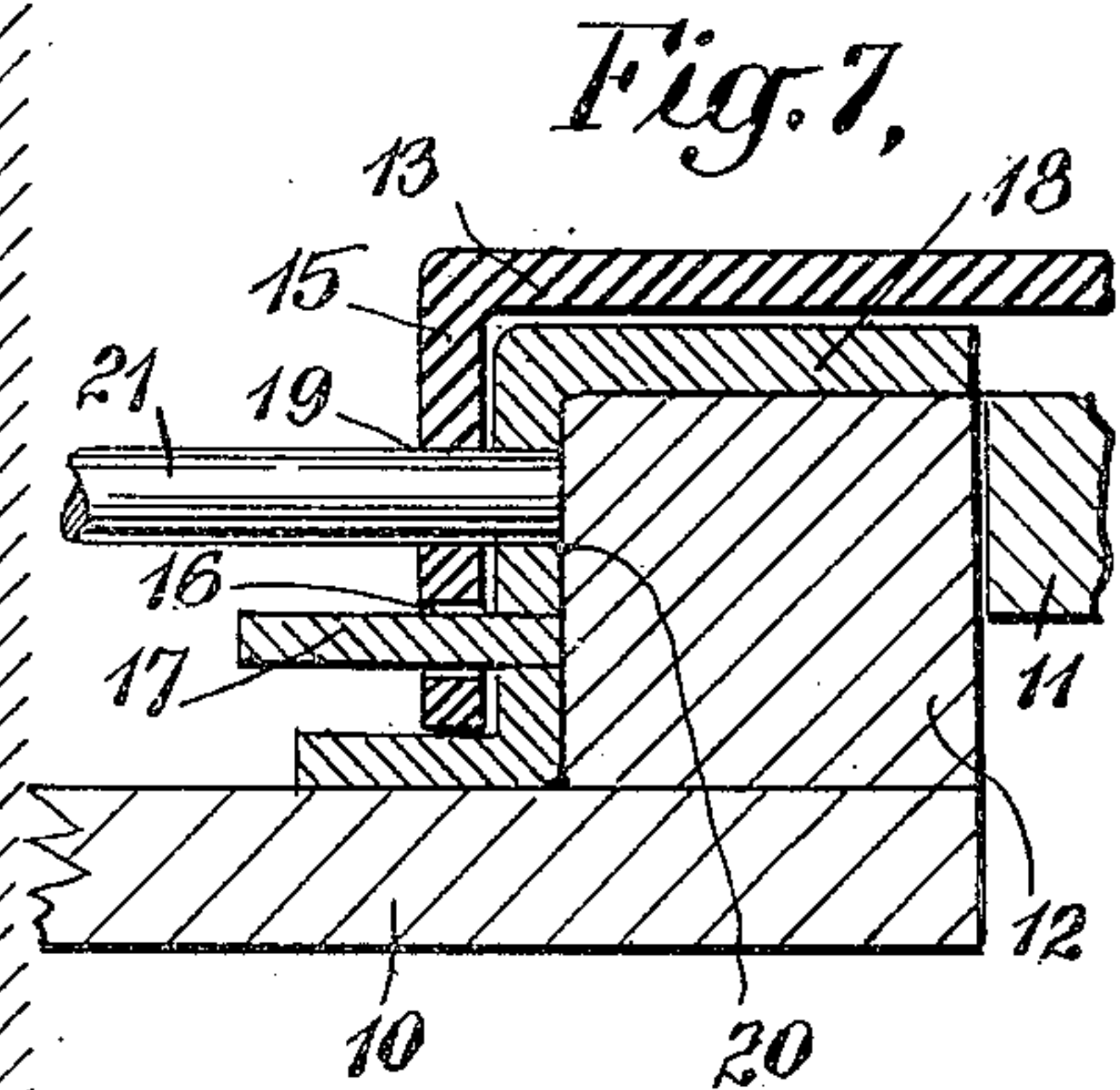


Fig. 8,



INVENTOR

George H. Barker

BY

E. M. Marshall
ATTORNEY

UNITED STATES PATENT OFFICE.

GEORGE H. BARKER, OF YONKERS, NEW YORK.

SEAL-LOCK.

954,910.

Specification of Letters Patent.

Patented Apr. 12, 1910.

Application filed June 29, 1909. Serial No. 505,039.

To all whom it may concern:

Be it known that I, GEORGE H. BARKER, a citizen of the United States, and a resident of the city of Yonkers, in the county of Westchester and State of New York, United States of America, have invented certain new and useful Improvements in Seal-Locks, of which the following is a specification.

My invention relates to seal locks and its object is to provide a simple device in which the shipping-cards for freight-cars may be placed, but from which they cannot be removed. In some forms of my invention I combine this holder with a locking and sealing device for the car doors. By this arrangement tampering with the shipping-cards and seals is prevented, and the doors must remain closed and locked until opened by persons with authority at the car's destination. To accomplish these results I have invented the devices which I will proceed to describe, and the novel features of which I will set forth in the appended claims.

Referring to the drawings, Figure 1 shows in side elevation, partly in section, a portion of a freight-car and its door with my invention applied thereto. Fig. 2 is a front elevation of the card holder with its parts in their open positions. A portion of the outer casing in this figure is broken away to more clearly show the construction. In Fig. 3 the same parts are shown in front elevation, but in different relative positions. In Fig. 4 I have shown the device on a larger scale in sectional side elevation. The section in this figure is taken on the line 4—4 of Fig. 1. Fig. 5 is a sectional side elevation on the line 5—5 of Fig. 1 with the key which is shown in Fig. 1 removed. Fig. 6 is a sectional front elevation of a detail of a locking mechanism. Fig. 7 shows in sectional plan view a portion of the car door lock. In Fig. 8 the special key which I have designed to be used with this arrangement is shown.

Like characters of reference designate corresponding parts in all of the figures.

10 designates the side of a car to which my invention is applied.

11 is the car door which is arranged in the usual manner to slide against a door-post 12 when closed.

13 is a hasp pivoted to the door at 14. Its other end is bent over at right-angles as shown at 15 and is provided with a slot 16 which fits over a lug 17. This lug projects from a bracket 18 which fits over two sides

of the door-post 12 and is affixed thereto and to the sides 10 of the car. A circular hole 19 is provided in the end of the hasp, and a similar hole 20 is provided in that part of the bracket 18 which is over the side of the door-post. These two holes are in alignment with each other when the door is closed and the hasp is down to latch it, and are adapted to receive a sliding bolt 21 which locks these two parts together.

22 and 23 are lugs projecting from the hasp 13 and the bracket 18, respectively. Holes are drilled through these lugs for the reception of the wire of an ordinary seal 24 which may be used when desired, although such a seal is not necessary when my invention is used. A portion of the sliding bolt 21 is cut away at 25. This co-operates with another part of the device to prevent the bolt being moved while such other part is in a certain position as will be fully shown hereinafter.

30 is a rectangular metallic casing through the sides of which the bolt 21 passes. This casing is provided with suitable lugs by means of which it may be affixed to the side of a car. The back and upper half of the front of this casing is open, but a plate 31 which is a part of the casing covers its lower half. The shipping card is to be placed behind this plate; therefore the latter is cut away as shown to provide openings over those parts of the card upon which are the printed or written characters. From the inner surface of this plate 31 project a plurality of pins 32 and between these pins are a plurality of vertical grooves 33. Affixed to the inner vertical sides of the casing are cam-rails 34.

35 is a card-plate which is substantially flat, except that from its upper surface project a plurality of pins 36, and its upper surface is cut away as shown at 37, in the form of either grooves or slots. At 38 a portion of this plate, corresponding in size and shape with one of the openings through the cover-plate 31, is removed. A portion of this card-plate between two of the slots 37 is also cut away to leave a tongue 39. The grooves or slots 37 are in vertical alignment with the pins 32 which project inwardly from the rear surface of cover-plate 31, and the grooves 33 in the rear surface of the cover-plate are in alignment with the pins 36. The sides of the casing 30 and its cover-plate 31 are arranged to prevent the

removal of this card-plate, but the latter is left free to be moved up and down within the casing.

Back of the card-plate is the locking-plate 40. This rides upon and is guided by the cam-rails 34. To facilitate this the lower corners of the locking-plate are provided with lugs 41, and its upper corners with lugs 42 which project backward and rest upon the cam-rails. The upper edge of the locking-plate is bent forward as shown at 43 to form a handle by means of which it may be manipulated. Back of this handle is a projecting lip 44 which is so arranged that it may be caught in a strap 30^A which is affixed to the upper side of the casing, and which is provided for the purpose of holding this locking-plate up when so desired. The portion near the lower right-hand corner of this plate is cut away to correspond with the similar openings in the cover and card-plates. Near the lower edge of the locking-plate and in vertical alinement with the tongue 39 is a projecting catch 46. Affixed to the rear of the locking-plate, or an integral part of the latter if desired, is a vertically disposed projecting rib 47. This is in alinement with the cut-out portion 25 of the sliding bolt 21 when the bolt is in its locking position.

Before describing the other parts of my invention which are shown in the drawings, I will point out the operation of those parts which I have above described. With the plate 40 held in its upper position the car is not locked but the bolt 21 may be moved back and forth at will. When the car is ready to be forwarded its door is closed and latched by the hasp. The peculiar construction of the hasp and its bracket are such as to insure proper alinement of the holes 19 and 20 and to hold the door closed even when it is not locked. The bolt 21 is now slipped into these holes and firmly secures the hasp. A shipping-card with the desired matter printed or written thereon, such as the seal number and destination of the car, is now taken and placed over the card-plate which is first moved to the upper portion of the casing. The card is pressed down upon the plate and will adhere to it because the pins 36 will stick into the card or slightly through it. The plate and card are then allowed to drop down behind the cover-plate through the openings in which the characters upon the card may be seen. Now the locking-plate is released from the holding strap 30^A and pushed down behind the card-plate. The cam-rails 34 will cause the locking-plate to move forward and to push the card-plate against the cover-plate so that the pins 32 in the latter will puncture the card. When both of the movable plates are in their upper positions as shown in Fig. 2, the catch 46

is back out of engagement with the tongue 39, but when the card-plate is down and the locking-plate is pushed down behind it as above described, the catch 46 will spring into engagement with the tongue 39. It may be seen that the rib 47 cannot pass the bolt 21 unless the bolt is in its locking position so that the locking-plate cannot be pushed down. But if the bolt is in its locking position the rib 47 will pass the cut-out portion 25 so that after the locking plate is down the bolt will be held thereby.

I have shown that there is no backing for that portion of the card which is in register with the lower right-hand opening, or that part on which is the numeral 126 in Fig. 1. This part may be used for the car's seal number. The object of this construction is to make it impossible for anyone to cut out this seal number and to stick it on again, or to replace it with another. Now, the car cannot be unlocked without destroying the shipping-card, and to release the locking-bolt it is necessary to first lift the locking-plate; but the card-plate will then also be lifted because of the engagement of the catch 46 and the tongue 39. The pins 32 and 36, all of which project into or through the card, will then mutilate the card so that it cannot be again used. The advantages of this arrangement are obvious, and of course, these parts may be used by themselves. I have, however, for the more thorough protection of the car, designed a further lock for the bolt 21 which is arranged to be actuated by a key. The construction and operation of this will now be described.

26 is a rib or feather projecting from one side of the bolt. This, when the bolt is unlocked, is on the top of the bolt as shown in Figs. 2 and 3, and in alinement with the slot 27 in the side of casing 30.

28 is a block through which the bolt and its key are arranged to slide. A rod 29 is connected with one side of this block and extends upward to this locking mechanism 50. This mechanism comprises a latch 51 pressed by a spring 52 into a groove 53 in the side of the slot when the bolt is not locked to hold the feather 26 in alinement with the slot 27, but over the top of rod 29 when the bolt is locked.

54 is a tube which guides the upper end of rod 29 in the path of the latch 51.

55 is a vertical tube which forms an elongated key-hole for the lock. The key is shown in Fig. 8. It comprises a rod 56 somewhat longer than the tube 55, and a pivoted member 57 on the end of the rod. The key may be pushed up through the tube 55, and after the pivoted member has passed through the tube, it will drop over into a position at right-angles to the tube. A slight turn of the rod will then bring the pivoted member against the projecting sur-

face 51^A of the latch and will push the latter back against the action of the spring 52. 58 is an inclosing cover for this locking mechanism, a portion of which is constructed to form an internal surface 59 obliquely disposed to the tube 55. This surface serves the purpose of pushing the pivoted member 57 over into its operative position.

The feather 26 is so proportioned that when the bolt 21 is in its locking position its end will be outside of the casing 30. Now, when the latch 51 is pushed back by the key, the bolt may be given a quarter turn by means of a pin 21^A, which is provided to facilitate this operation. This will cause the parts to assume the positions in which they are shown in Fig. 5, in which the latch 51 is shown over the top of rod 29. The feather 26 will then prevent the bolt being slipped back so that the car-door hasp cannot be released until first unlocked by releasing the latch 51 by means of the key, and then rotating the bolt until its feather 26 is again in alinement with the slot 27, after which the bolt may be moved back to unlock the hasp.

Of course, other forms of key-locks may be used if desired, but I prefer to use the construction herein shown because the locking mechanism is out of the way where it cannot be injured nor interfered with, and the peculiar shaped key, both simple and strong, is one which cannot be easily lost or mislaid by the freight-handlers.

What I claim is:—

1. A pair of disconnected plates between which a card may be held, pins projecting from each of these plates into or through the card, and means for preventing the separation of the plates, except by sliding them apart and thereby destroying the card.

2. A card-holder comprising a card plate and a cover-plate disconnected therefrom, a plurality of pins projecting from the adjacent surfaces of the plates, said plates being arranged to hold a card between them, and means for preventing the separation of said plates, except by sliding them apart and thereby destroying the card.

3. A car-door lock combined with a pair of disconnected plates between which a card may be held, pins projecting from each of the plates into or through the card, means for preventing the separation of the plates, except by sliding them apart, thereby destroying the card, and means for securing the door-lock when said plates are together.

4. A sliding bolt arranged to lock a door, a casing through which said bolt passes, a movable plate within said casing between which and the front of said casing a card may be held, pins projecting from the plate and the casing into or through the card, means for preventing separation of the plate from the front of the casing, except by sliding it away and thereby destroying the

card, and means engaging with and arranged to hold said bolt in locking position when said plates are together.

5. A card-holder comprising a casing having a cover-plate, a card-plate within the casing, a plurality of pins projecting from adjacent surfaces of said plates; and a locking-plate within the casing arranged to push the card-plate toward the cover-plate to hold said plates together and thereby secure a card, and arranged to slide the card-plate away from the cover-plate to destroy the card.

6. A card-holder comprising a casing having a stationary cover-plate, a movable card-plate within the casing, a plurality of pins projecting from adjacent surfaces of said plates, and a locking-plate within the casing arranged to push the card-plate toward the cover-plate to hold said plates together to thereby secure a card, and to slide the card-plate away from the cover-plate to destroy the card; combined with a sliding-bolt passing through said casing and arranged to be held in locking position by the locking-plate when the locking-plate is in position to hold the card-plate against the cover.

7. A card-holder comprising a casing having a cover-plate, a card-plate within the casing, a plurality of pins projecting from adjacent surfaces of said plates, a pair of cam-rails within the casing; a locking-plate supported and guided by the cam-rails and arranged to slide the card-plate away from the cover-plate to destroy the card.

8. A card-holder comprising a casing having a stationary cover-plate, a movable card-plate within the casing, a plurality of pins projecting from adjacent surfaces of said plates, a pair of cam-rails within the casing; a locking-plate supported and guided by the cam-rails arranged to push the card-plate toward the cover-plate to hold said plates together to thereby secure a card, and arranged to slide the card-plate away from the cover-plate to destroy the card; combined with a sliding-bolt passing through the casing and arranged to be held in locking position by the locking-plate when the locking-plate is in position to hold the card-plate against the cover.

9. A card-holder comprising a casing having a stationary cover-plate, a movable card-plate within the casing, a plurality of pins projecting from adjacent surfaces of said plates; a locking-plate within the casing arranged to push the card-plate toward the cover-plate to hold said plates together to thereby secure a card, and arranged to slide the card-plate away from the cover-plate to destroy the card; a sliding-bolt passing through said casing, a rib projecting from the locking-plate and arranged to engage with said sliding-bolt to hold said bolt in locking position when the locking-plate is

in position to hold the card-plate against the cover.

10. A car card-holder comprising a pair of disconnected plates between which a card having a seal number thereon may be held, pins projecting from each of the plates into or through the card, and means for preventing the separation of the plates except by sliding them apart and thereby destroying the card, both of said plates being cut away about the portion of the card upon which is the seal number.

11. A car card-holder comprising a casing having a stationary cover-plate, a movable card-plate within the casing, a plurality of pins projecting from adjacent surfaces of said plates, said plates being arranged to hold between them a card having a seal number thereon; and a locking plate within the casing arranged to push the card-plate toward the cover-plate to hold said plates together to thereby secure the card, and arranged to slide the card-plate away from the cover-plate to destroy the card, all of said plates being cut away about that portion of the card upon which is the seal number.

12. A sliding-bolt arranged to lock a door, a casing through which said bolt passes, a pair of plates within said casing between which a card may be held, pins projecting from each of the plates into or through the card, means for preventing separation of the plates except by sliding them apart and thereby destroying the card, means for holding said bolt in locking position when said plates are together, and supplementary means for further locking said bolt.

13. A sliding-bolt arranged to lock a car-door, a casing through which said bolt passes, said casing being arranged to support a card, a member arranged to hold the card within the casing and to lock said bolt, and to destroy the card when moved to release the bolt, and supplementary key-actuated locking mechanism for further locking the bolt within said casing.

14. A sliding-bolt arranged to lock a car-door, a casing through which said bolt passes, means within the casing for holding a car-card and securing said bolt, and a supplementary locking mechanism for further securing the bolt within the casing, said locking mechanism having a tube through which a key may be inserted, and a cover constructed to form a deflecting surface for the key.

15. A card-holder comprising a casing having a stationary cover-plate, a movable card-plate within the casing, a plurality of pins projecting from adjacent surfaces of said plates; a locking-plate within the casing arranged to push the card-plate toward the cover-plate to hold said plates together to thereby secure a card, and arranged to slide the card-plate away from the cover-plate to destroy the card; a sliding bolt passing through said casing, a rib projecting from the locking-plate and arranged to engage with said sliding-bolt to hold said bolt in locking position when the locking-plate is in position to hold the card-plate against the cover; a supplementary locking-mechanism for further securing the bolt within the casing, said locking mechanism having a tube through which a key may be inserted, and a cover constructed to form a deflecting surface for the key.

16. A car card-holder comprising a casing having a stationary cover-plate, a movable card-plate within the casing, a plurality of pins projecting from adjacent surfaces of said plates, said plates being arranged to hold between them a card having a seal number thereon, a pair of cam-rails within the casing; a locking-plate supported and guided by the cam-rails, and arranged to push the card-plate toward the cover-plate to hold said plates together to thereby secure the card, and arranged to slide the card-plate away from the cover-plate to destroy the card, all of said plates being cut away about that portion of the card upon which is the seal number; a sliding-bolt, arranged to lock a car-door, passing through said casing, a rib projecting from the locking-plate and arranged to engage with said sliding-bolt to hold said bolt in locking position when the locking-plate is in position to hold the card-plate against the cover; and a supplementary locking mechanism for further securing the bolt within the casing, said locking mechanism having a tube through which a key may be inserted, and a cover having an internal oblique surface arranged to deflect an end of the key into operative position.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEORGE H. BARKER.

Witnesses:

AARON O. WHALEY,
ROBERT A. LILLEY.