

No. 709,843.

Patented Sept. 23, 1902.

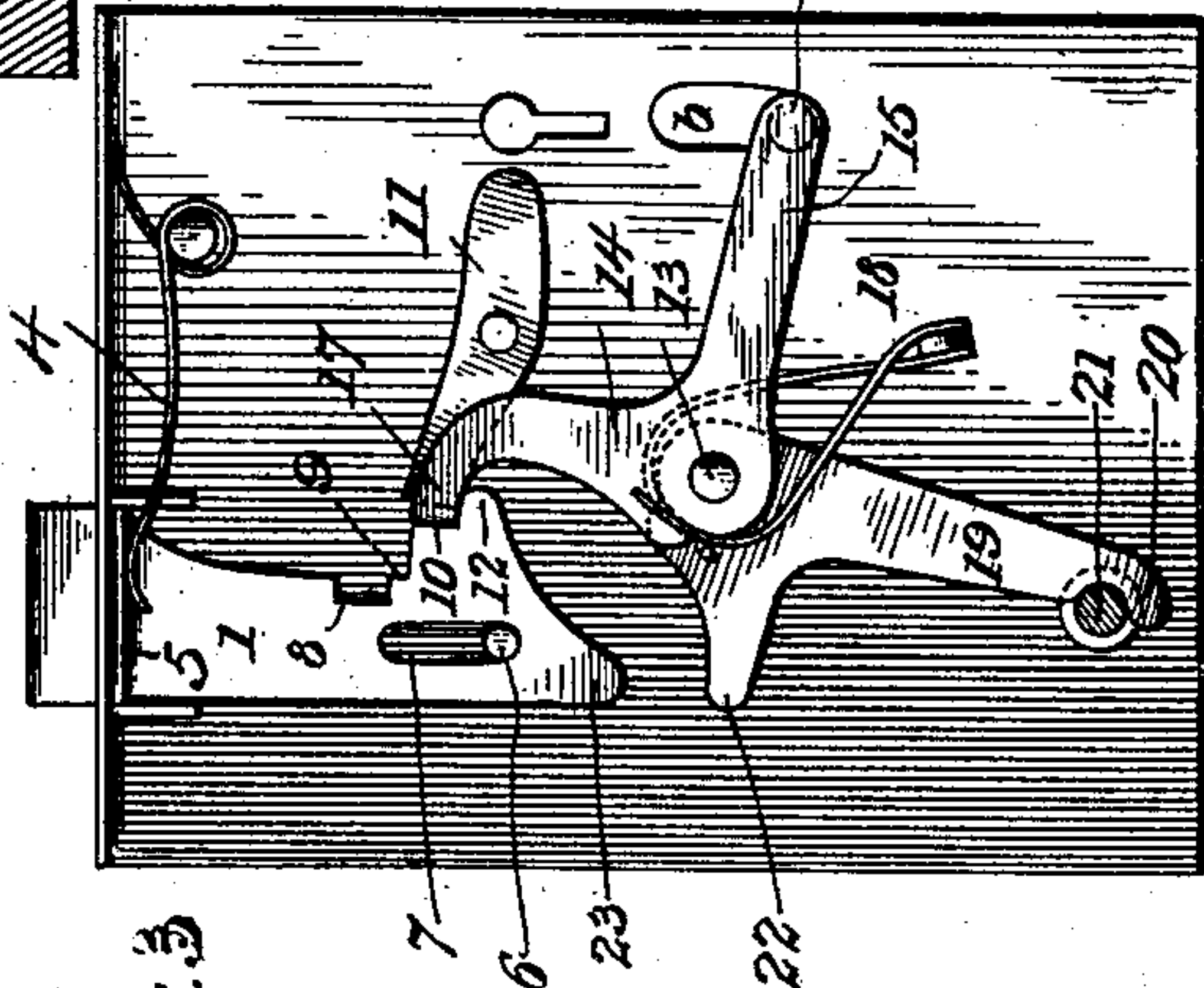
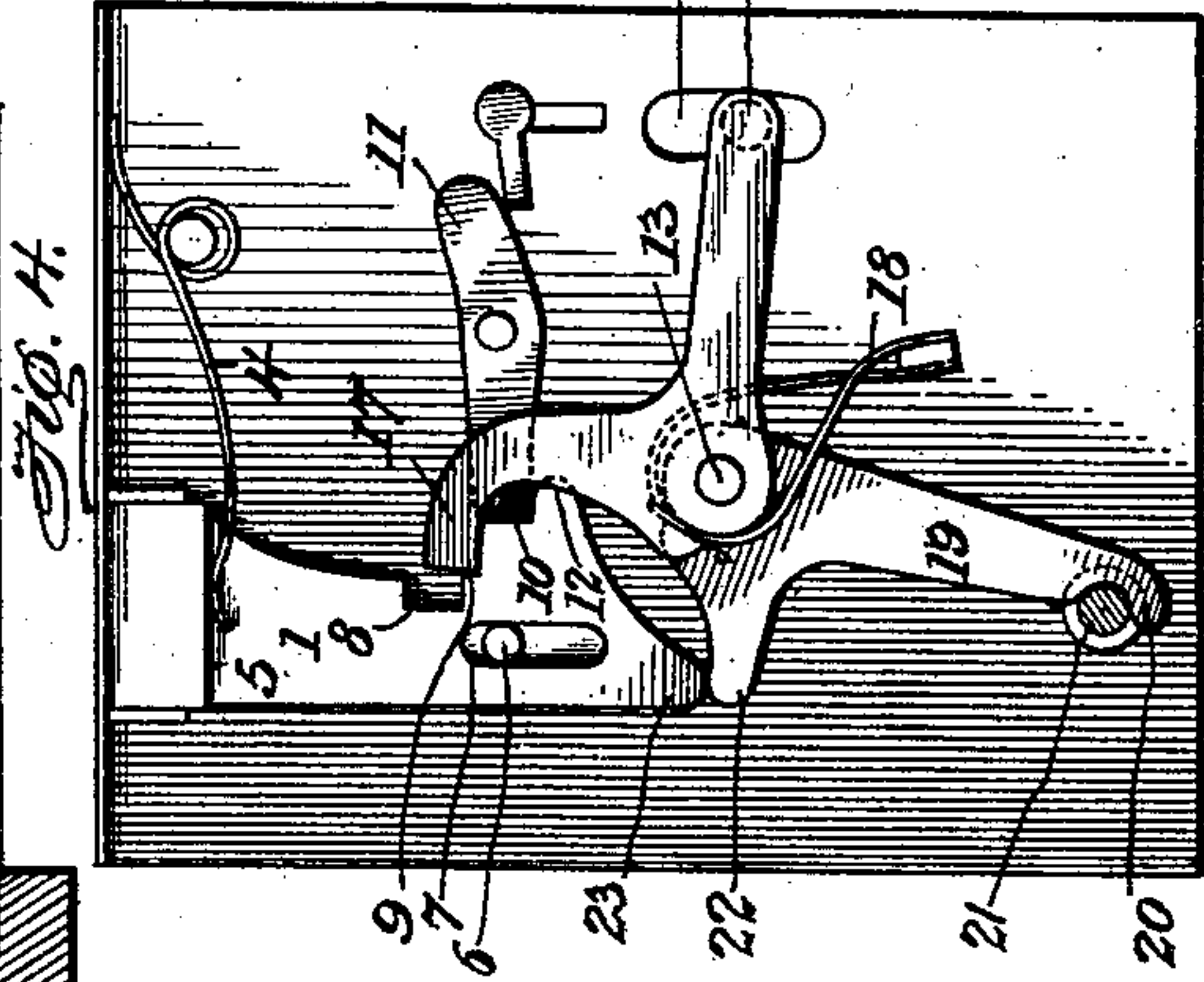
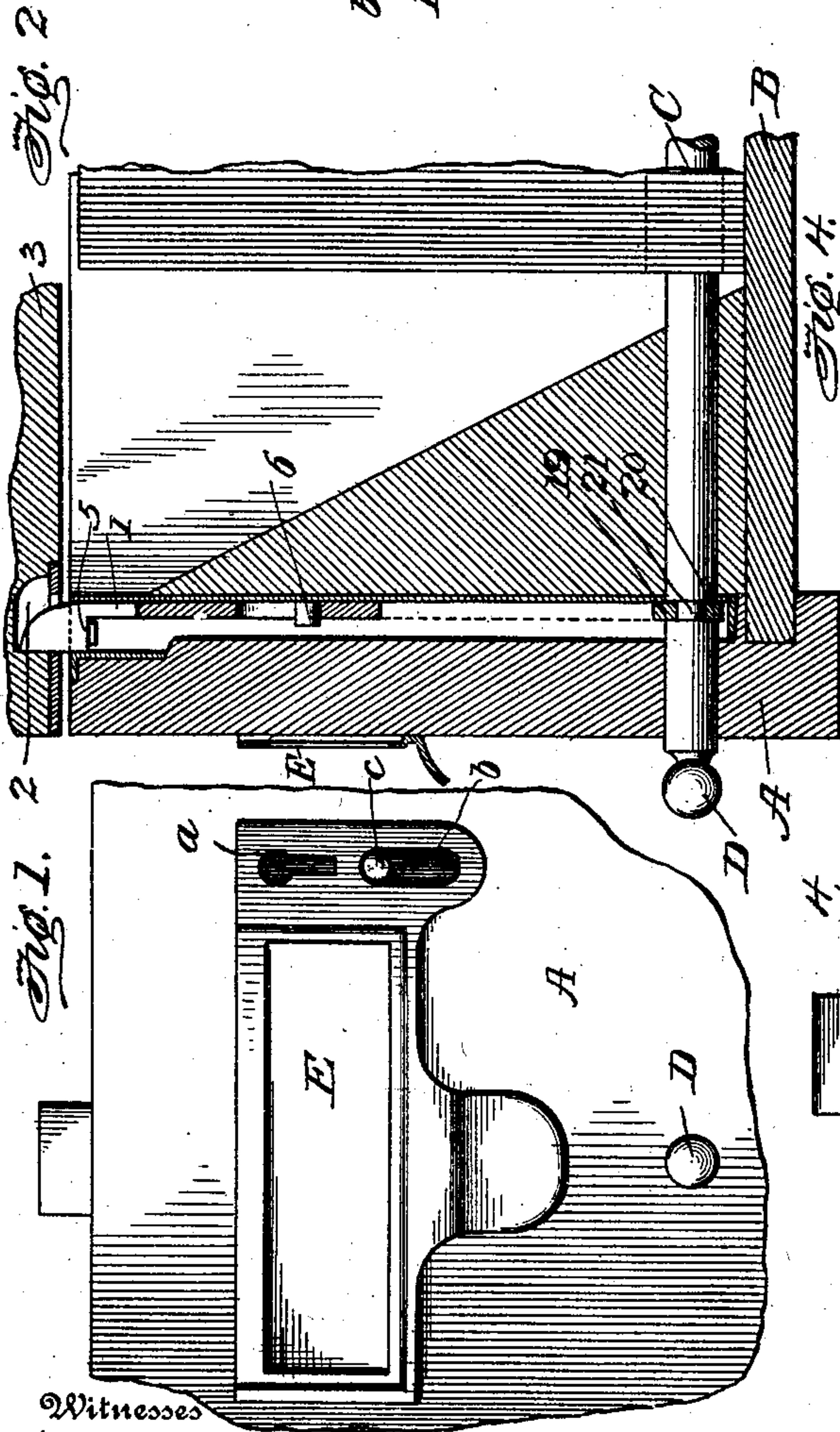
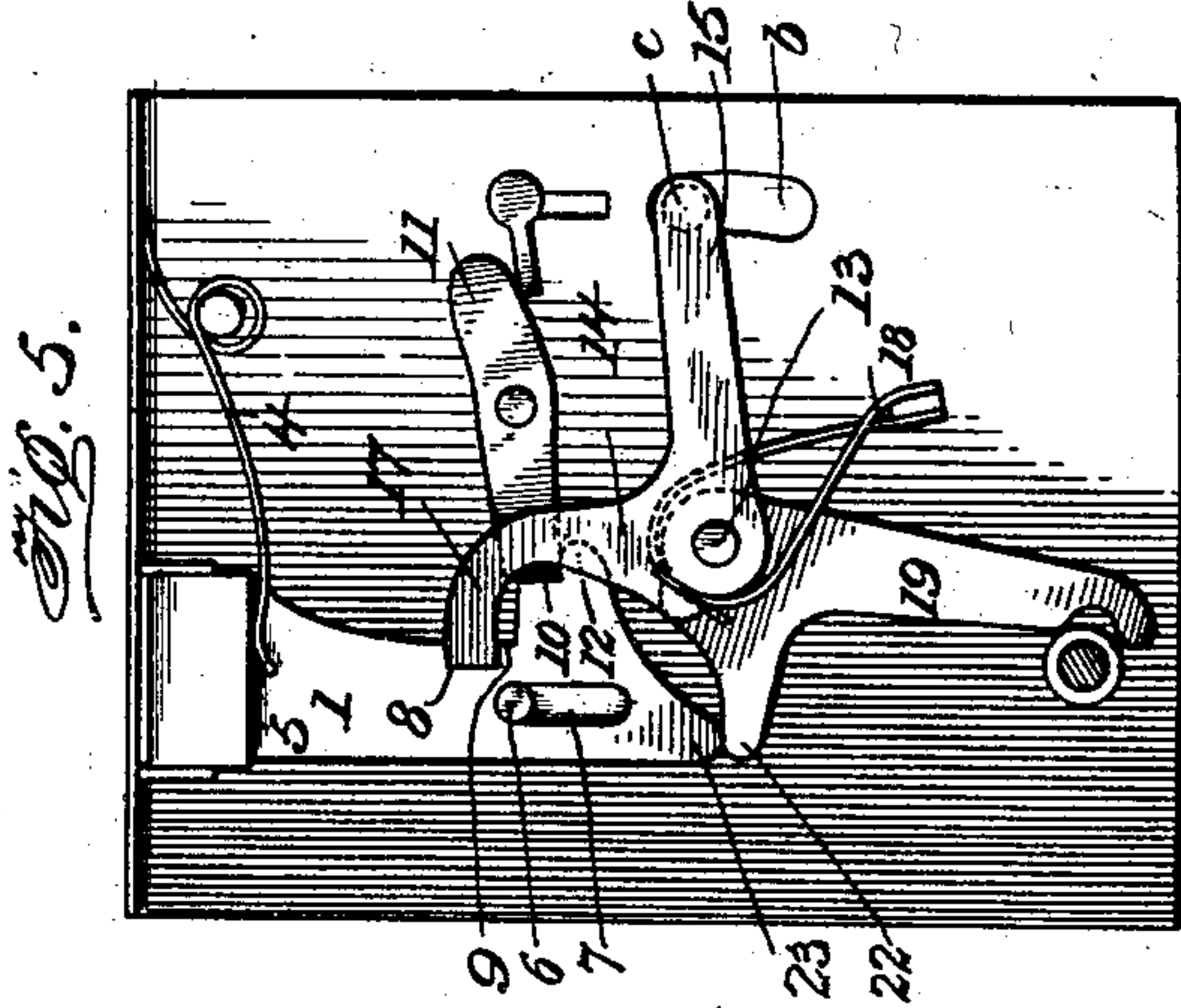
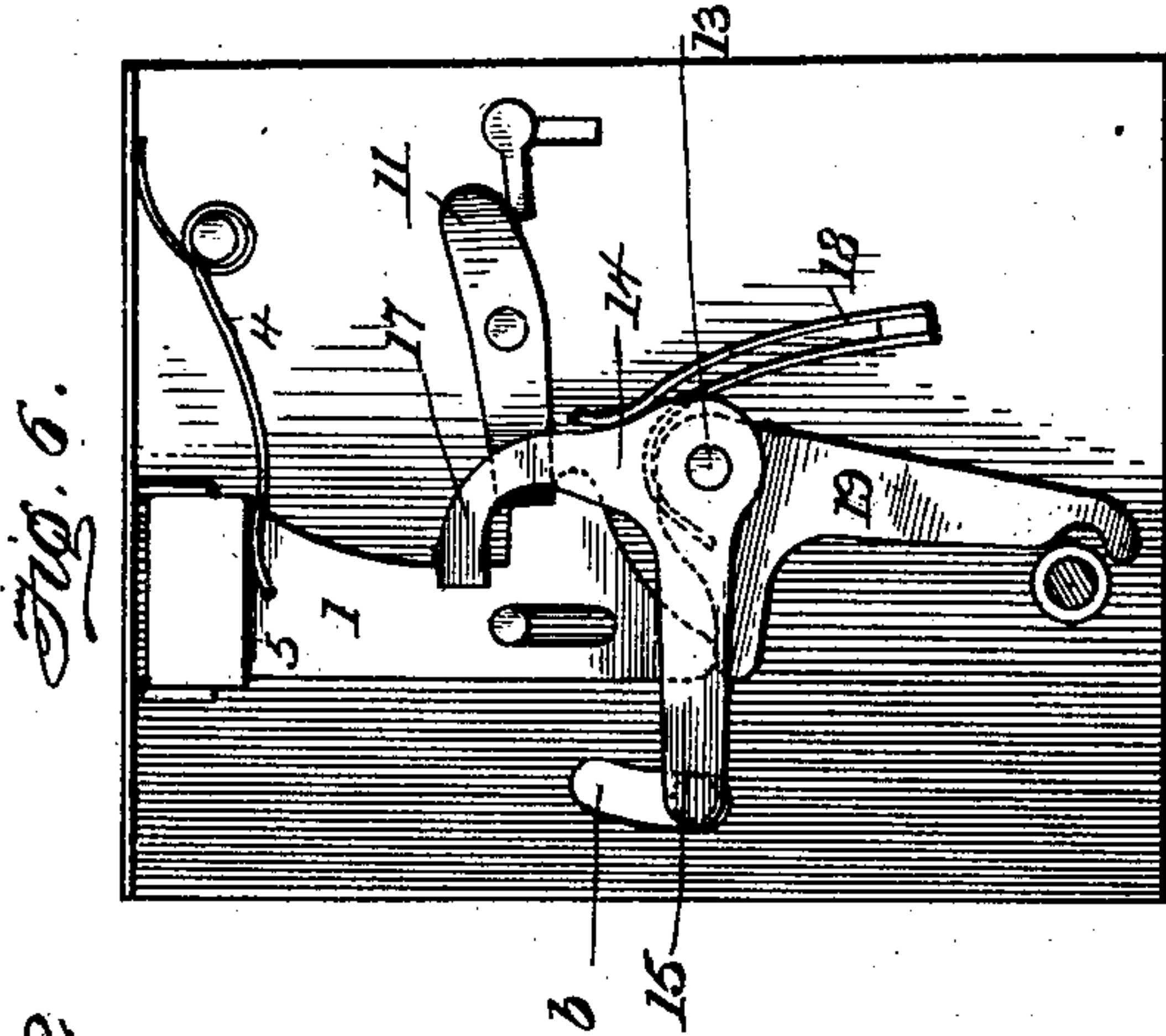
D. E. WRIGHT.

LOCKING MECHANISM FOR CARD INDEX SYSTEMS OR THE LIKE.

(Application filed May 22, 1902.)

(No Model.)

3 Sheets—Sheet 1.



Witnesses  
Gordon St. John,  
J. J. Nelligan.

Inventor  
Darius E. Wright  
By  
Stewart & Pruey  
Attorneys.

No. 709,843.

Patented Sept. 23, 1902.

D. E. WRIGHT.

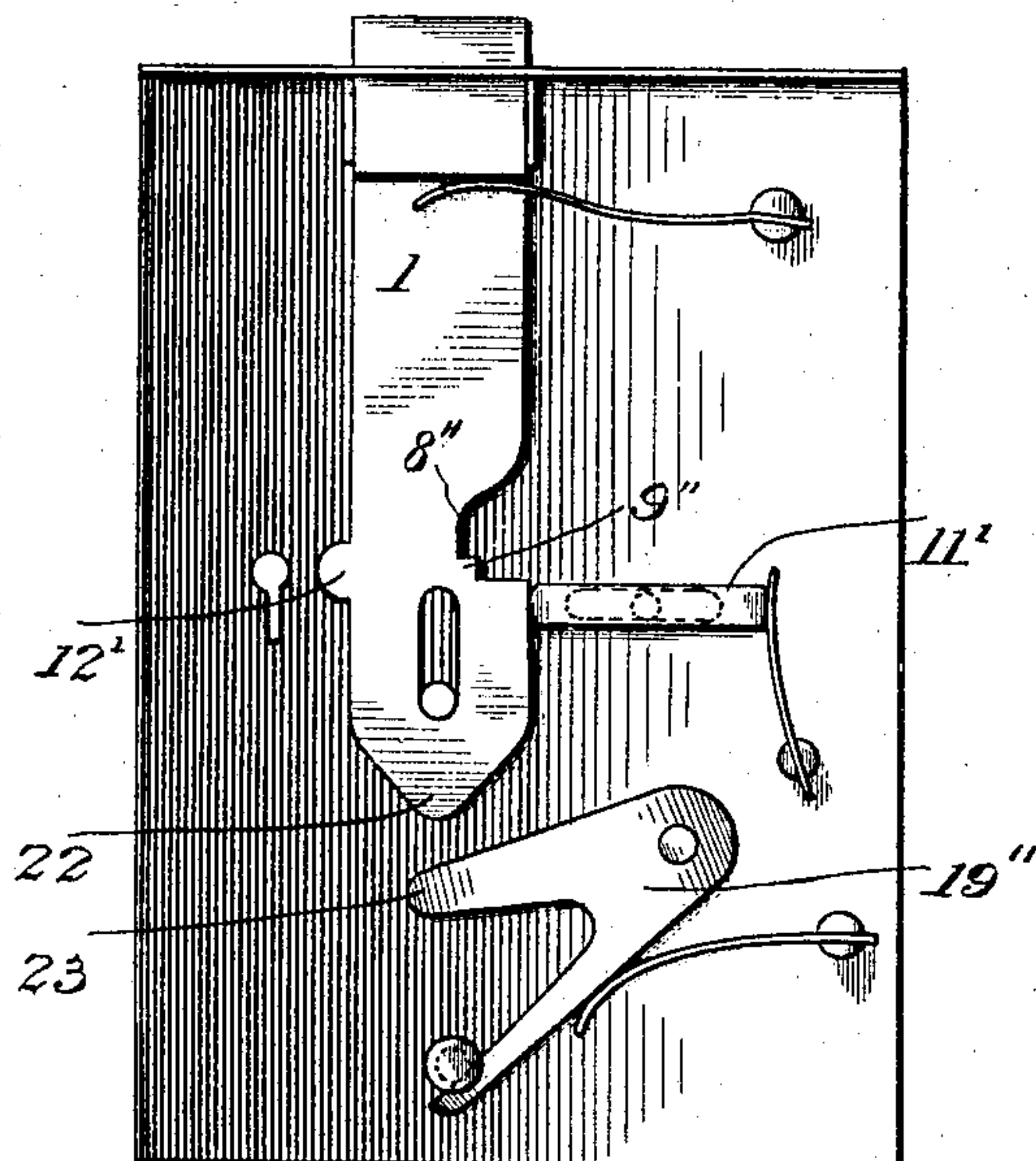
LOCKING MECHANISM FOR CARD INDEX SYSTEMS OR THE LIKE.

(Application filed May 22, 1902.)

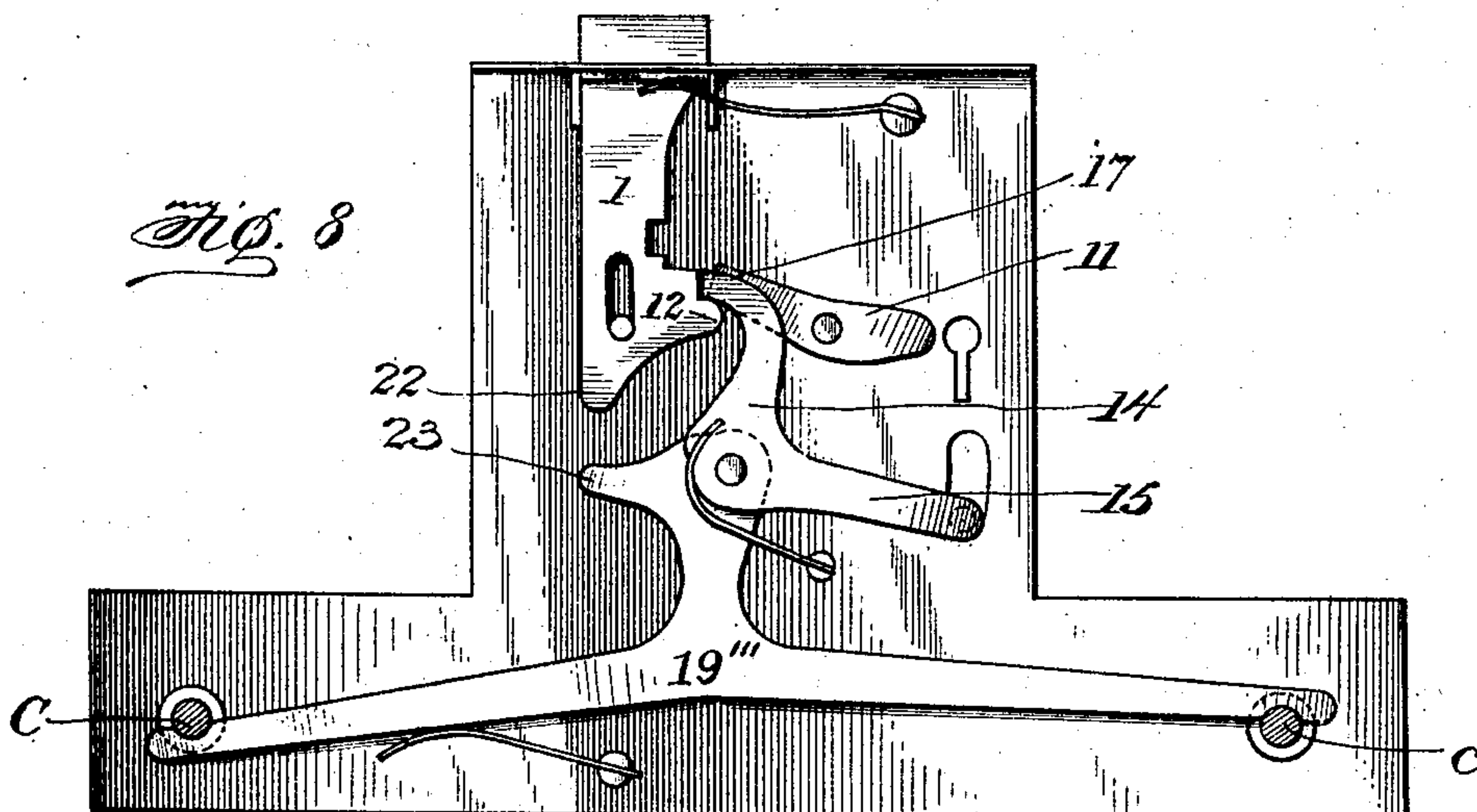
(No Model.)

3 Sheets—Sheet 2.

*Fig. 7.*



*Fig. 8.*



Witnesses  
*Gordon S. Felt,*  
*J. J. Nelligan.*

*Darwin E. Wright* Inventor

By *Stewart & Greeley*  
Attorneys



No. 709,843.

Patented Sept. 23, 1902.

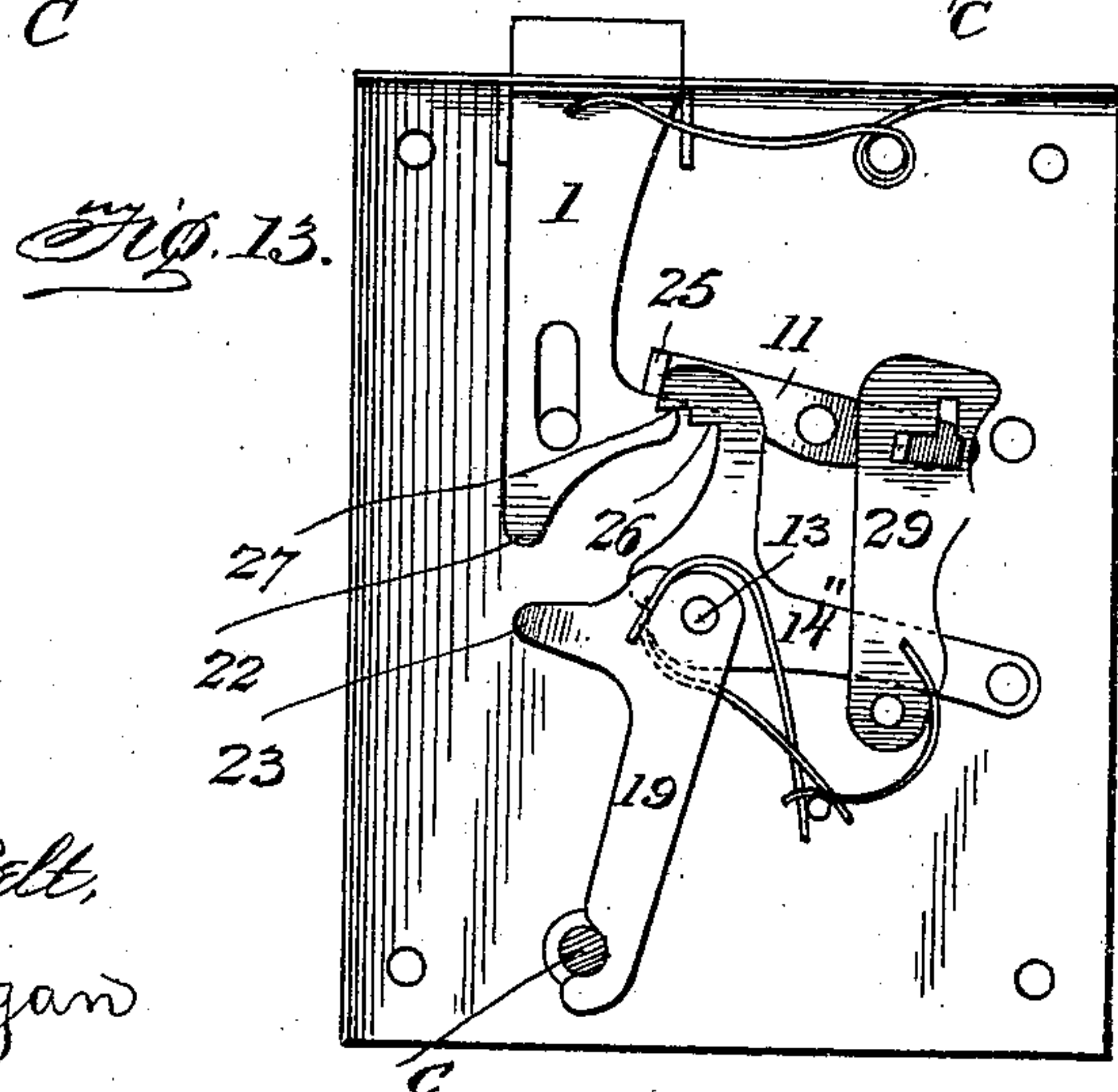
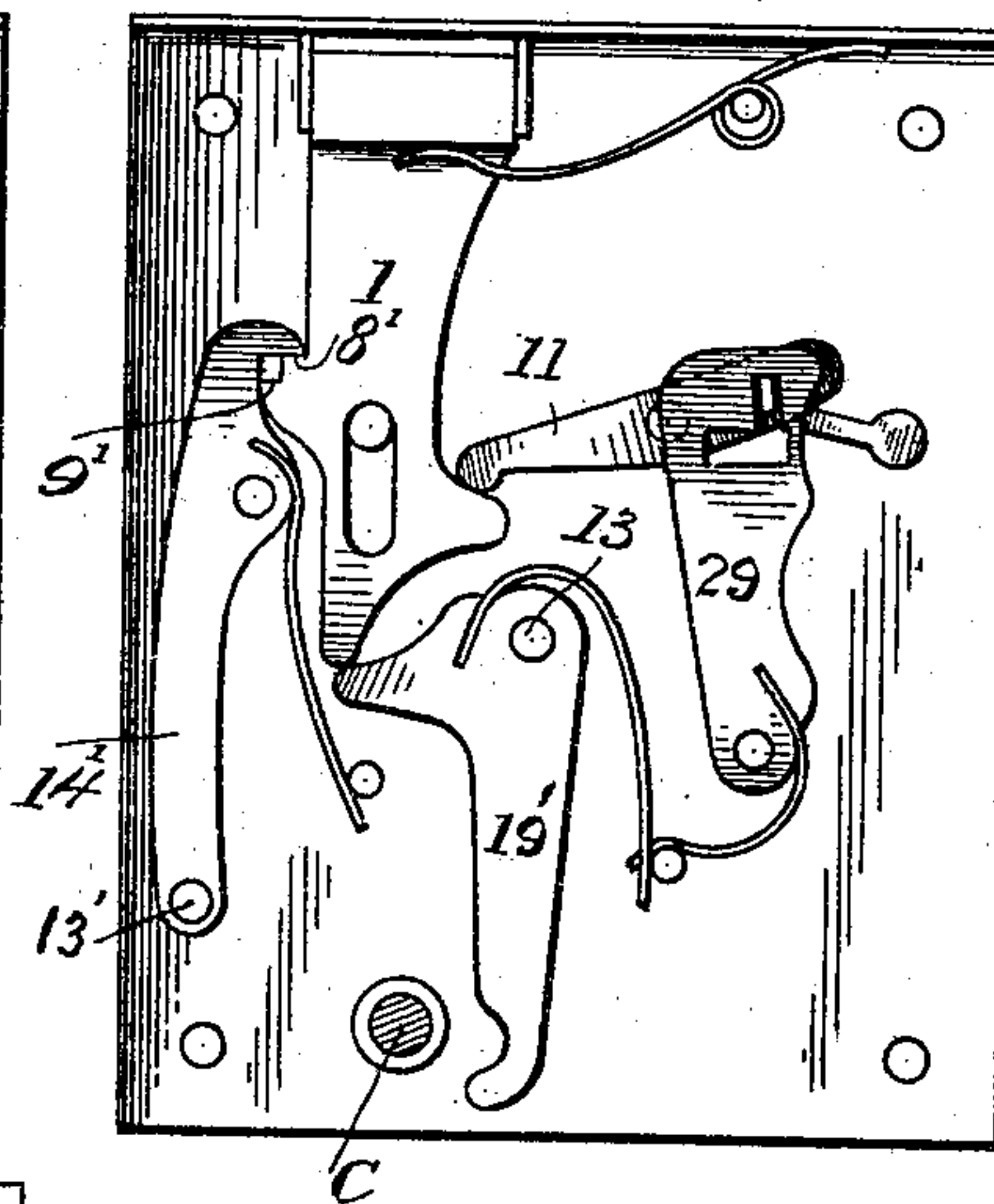
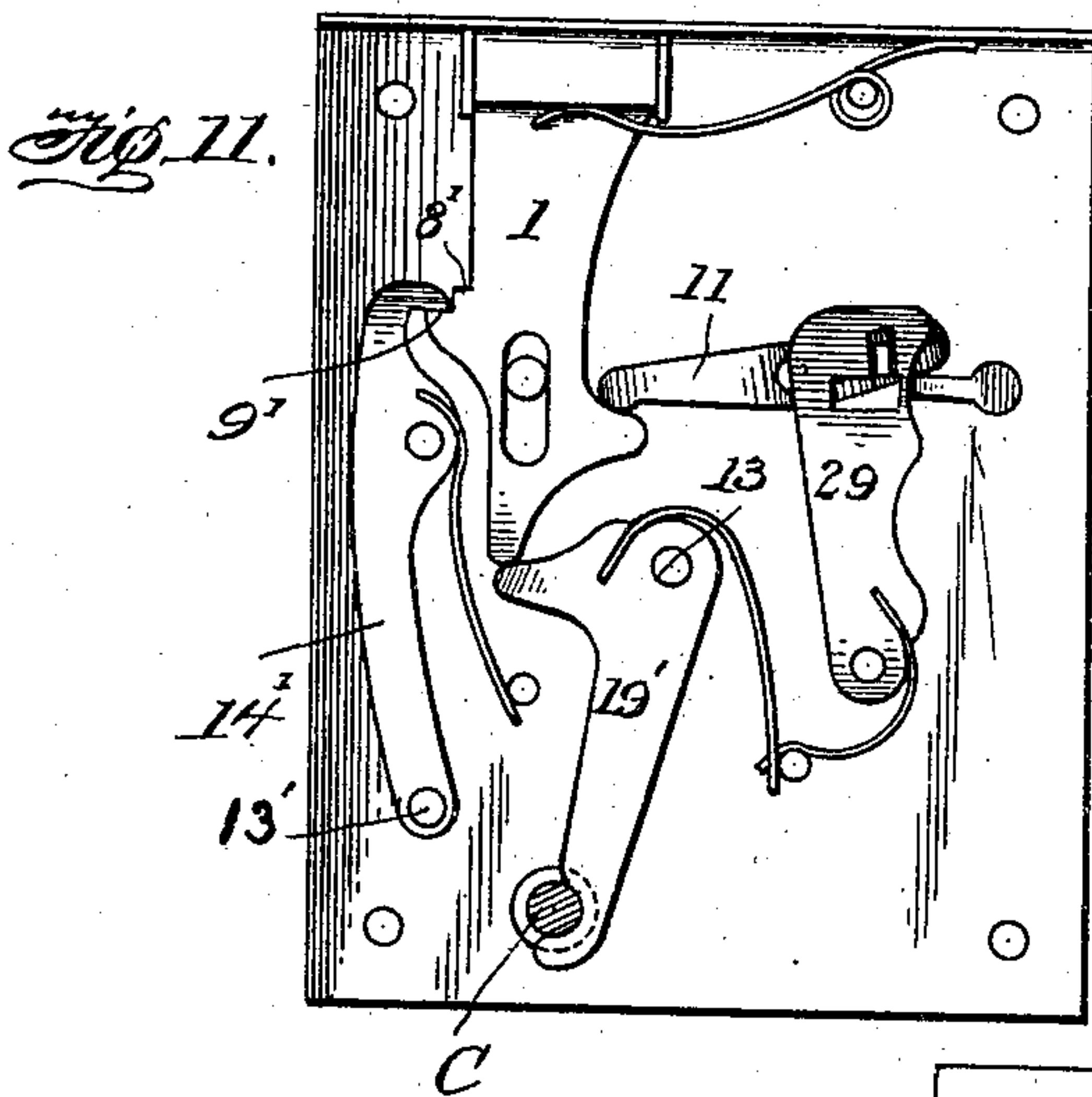
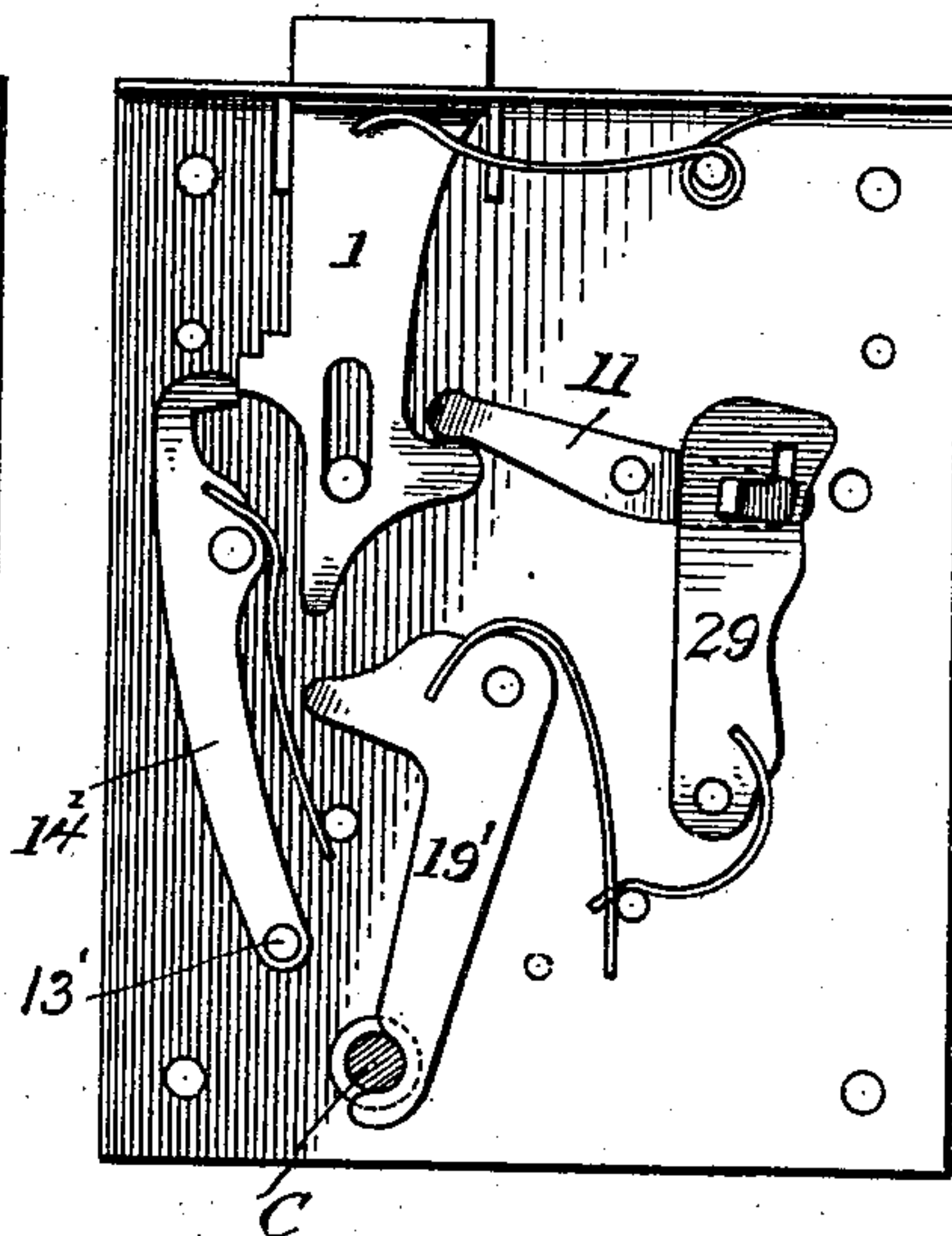
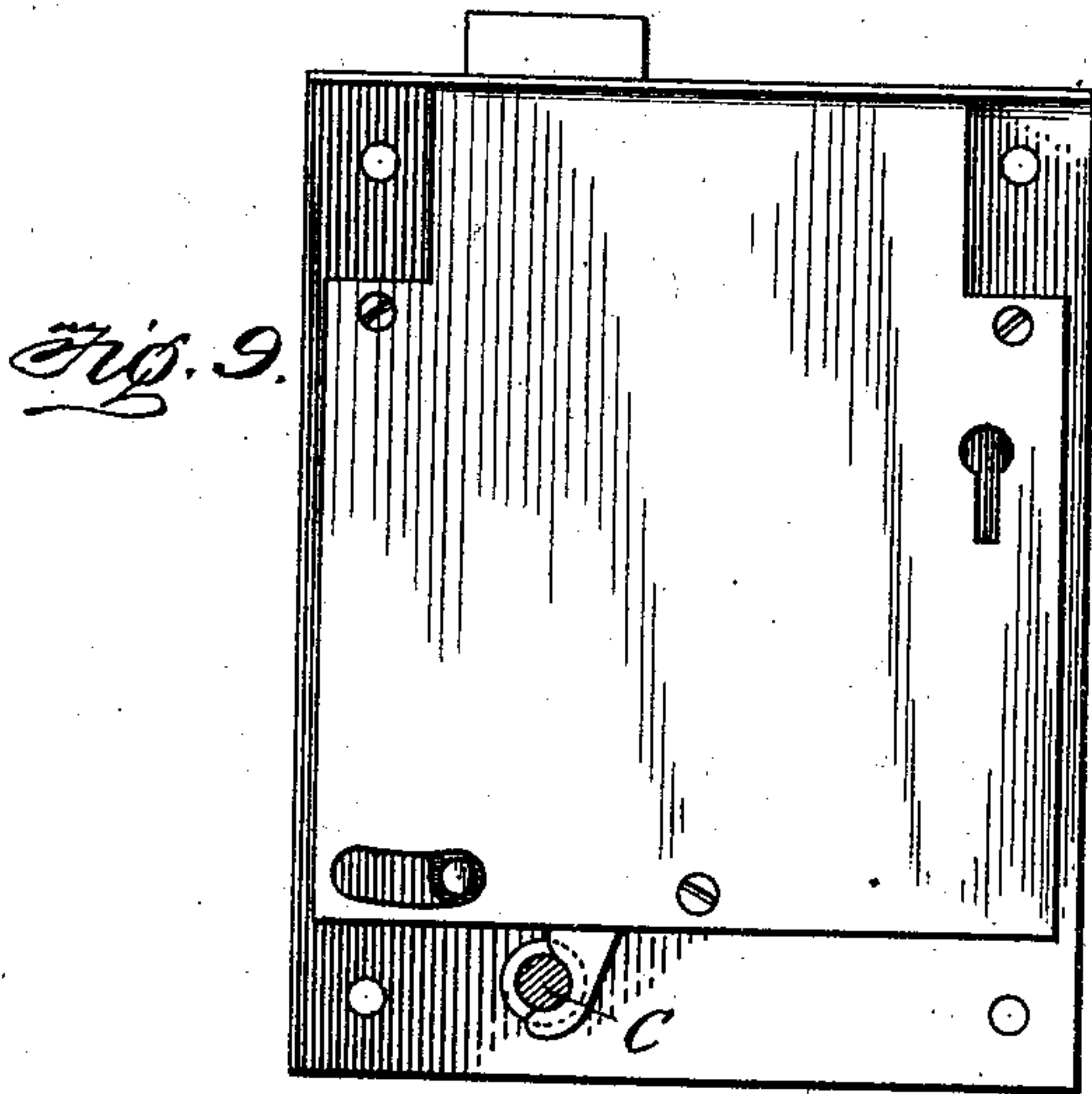
D. E. WRIGHT.

LOCKING MECHANISM FOR CARD INDEX SYSTEMS OR THE LIKE.

(Application filed May 22, 1902.)

(No Model.)

3 Sheets—Sheet 3.



Witnesses  
*Emory S. Bell,*  
*J. J. Nelligan*

Inventor  
*Darwin E. Wright*  
By  
*Stewart & Buckley*  
Attorneys



# UNITED STATES PATENT OFFICE.

DARWIN E. WRIGHT, OF WASHINGTON, DISTRICT OF COLUMBIA.

LOCKING MECHANISM FOR CARD-INDEX SYSTEMS OR THE LIKE.

SPECIFICATION forming part of Letters Patent No. 709,843, dated September 23, 1902.

Application filed May 22, 1902. Serial No. 108,554. (No model.)

*To all whom it may concern:*

Be it known that I, DARWIN E. WRIGHT, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Locking Mechanism for Card-Index Systems or the Like, of which the following is a description, reference being had to the accompanying drawings and to the letters and figures of reference marked thereon.

My invention relates to an improvement in devices adapted for filing away letters and documents or for filing away cards, sheets, and the like containing information which may be readily accessible to authorized persons.

In its particular embodiment herein illustrated the invention is shown as applied to the well-known system of card-indexing now in such extensive use; and the object of the invention, briefly and broadly stated, is to provide an arrangement of locking mechanism for such systems, whereby the drawer and card-rod may be locked without the use of a key, the manipulation of the key for unlocking purposes acting first to unlock the drawer and in its further manipulation to unlock the card-rod, the drawer-lock and card-lock being arranged to mutually coact.

The invention therefore consists, primarily, of a filing-receptacle having means for holding and locking the papers or cards to be filed and having means for locking the receptacle, with operative connections between the receptacle-lock and the card-lock, whereby they may successively or simultaneously act to lock or unlock the respective elements.

Secondly, the invention comprises a filing drawer or receptacle, a card rod or support therein, a locking-bolt for the drawer or receptacle, and means for locking the card rod or support, with connections between the locking-bolt and the devices for locking the card rod or support, whereby in the operation of one of said locking devices the other is also operated.

Thirdly, the invention comprises a filing drawer or receptacle, a card rod or support therein, a locking-bolt for the drawer or receptacle, and means for locking the card rod or support, with connections between the locking-bolt and the devices for locking the card

rod or support, whereby in the withdrawal of the bolt the card-rod will also be unlocked and in the locking of the card-rod the drawer will also be locked.

The invention also consists in the mechanism for adapting the invention to a series of card rods or supports; and, finally, it consists in the various matters hereinafter described, and referred to in the appended claims.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a face view of a card-index drawer provided with my invention. Fig. 2 is a horizontal section. Fig. 3 is a face view with the outer plate of the casing removed and showing the mechanism in position when both drawer and card-rod are locked. Fig. 4 is a similar view showing the drawer-bolt drawn and the card-rod locked. Fig. 5 is a similar view showing both drawer and card-rod unlocked. Fig. 6 is a similar view of a modification. Fig. 7 is a similar view of another modification. Fig. 8 is a similar view showing the application of the invention to the locking of two card-rods. Fig. 9 is a front view. Figs. 10, 11, and 12 are similar views with the cover removed, showing a different construction and arrangement of the bolt-locking lever from that illustrated in the other figures of the drawings; and Fig. 13 is a view similar to Fig. 5, showing the lock arranged with the lever to operate the key-lever instead of the bolt. All these figures—10, 11, 12, and 13—illustrate a key mechanism for obtaining several key changes.

At the outset I desire it to be understood that while I show, describe, and claim certain mechanical devices for carrying out my invention so far as the broad invention made by me is concerned, I do not wish to be restricted to such mechanical details, but believe I am, broadly, the first to so connect up the drawer-locking mechanism with the card-locking mechanism that the manipulation of one will manipulate the other, and I wish to claim such whether the coaction of the two be simultaneous or successively dependent one on the other, as herein shown, in which the withdrawal of the drawer-bolt to unlocked position merely does not unlock the card-rod nor the mere locking of the card-rod force the bolt to locking position, but in both the



unlocking and locking of the parts further movement is unnecessary beyond that necessary to simply manipulate one. The present arrangement, however—viz., to make the unlocking action of the drawer and card-rod and the locking action of the card-rod and drawer, respectively, follow each other successively—is preferable, although the converse of this or the simultaneous coöperation is within the scope of my invention.

A represents the front face of a card-index drawer B, of usual construction, through the lower end of which projects the usual card-rod C, having on its outer end the knob D, which passes through and supports the cards or other papers to be filed away in the manner common to such devices. E represents a drawer-plate having a keyhole-opening *a* and also an opening *b*, through which passes a manipulating knob or pin *c* for setting in motion the locking devices.

The locking-bolt for the drawer is represented at 1, it being normally pressed outwardly into engagement with the locking-slot 2 in the casing 3 of the cabinet by a spring 4, bearing on the shoulder 5, said bolt being guided vertically in a straight path by the pin and slot 6 and 7 near the lower end of said bolt.

One side of the locking-bolt is provided with a series of notches 8, 9, and 10, with the lower one of which, 10, engages one end of the swinging lever 11, the opposite end of which is adapted to be elevated by the turning of the key to the left, which thus throws down the opposite end of the lever against the shoulder 12 on the bolt, forcing the bolt downward and withdrawing it from locking engagement with the cabinet.

Pivoted upon the pin 13 is a bell-crank lever 14, one arm 15 of which carries on its outer end the pin or knob *c*, projecting through the slot *b*. The other arm 17 of the lever is formed to normally engage by spring 18 the notch 10 and successively the notches 9 8 as the bolt is moved downwardly, thus holding the bolt in its retracted or unlocked position after the key has been withdrawn from contact with the lever 11, and this arm 17 remains in engagement with one or the other of said notches until positively removed therefrom by manipulation of the pin *c* and arm 15. Also pivoted upon the pin 13 is the upper end of the card-rod-locking lever 19, normally spring-pressed so that a rounded opening 20 in its lower end embraces the reduced portion 21 of the card-rod C. This lever 19 has a portion 22 projecting into the path of the lower end 23 of the locking-bolt and preferably located at such distance below it that the withdrawal of the bolt sufficiently to merely unlock the drawer will not cause the part 23 to engage the projection 22 sufficiently to swing the arm 19 on its pivot to release the same from engagement with the card-rod, but will simply cause the arm 17 to engage the second notch 9 and hold the bolt in unlocked position.

Any further downward movement of the bolt, however, will swing the lever 19 away from the card-rod, and the upper end of arm 17 will spring into the notch 8, when the key may be withdrawn and the parts are unlocked. To lock the parts again, it is only necessary to move downwardly the pin *c* and arm 15, when successively the card-rod and drawer will be locked.

In Fig. 6 the operation of the parts is similar to that shown in Figs. 3, 4, and 5, except that the arm 15 of the bell-crank lever 14 extends toward the opposite side of the lock and works in the slot *b*.

In Fig. 10, 11, and 12 instead of a bell-crank lever 14 being used a lever 14', pivoted at 13', is provided, and only two notches 8' 9' are used. Furthermore, the arrangements of the springs are slightly different.

In Fig. 13 the bell-crank lever 14'' (which corresponds to lever 14 in Figs. 3, 4, and 5) is arranged to lock the key-lever 11, this key-lever having a shoulder 25 upon it and the lever 14 having two shoulders 26 27 respectively engaging the notch 9' on the bolt.

In Figs. 10, 11, 12, and 13 a key mechanism (marked generally 29) has been provided, whereby several key changes may be obtained; but it will be understood that the latch-bolt may be controlled by customary key mechanism of any sort.

In the operation of the device, referring first to Figs. 3, 4, and 5, in Fig. 3 the bolt and card-rod are shown as locked. Manipulation of the key to the left will force up one end of the lever 11 and cause its outer end to bear upon the shoulder 12 of the bolt, thus forcing the same downward, and when the position shown in Fig. 4 is reached the upper ends 17 of the bell-crank lever 14 will engage the notch 9, thus holding the bolt withdrawn. Further movement of the key to cause the lever 11 to take the position shown in Fig. 5 will cause the end 23 of the bolt to engage the projection 22 on the lever 19, swing out the lower end of the latter, and release the card-rod. In Fig. 6 the parts are shown as unlocked. The key is then taken out, and to lock the parts again the pin *c* has only to be forced to the bottom of the slot *b*, thus forcing arm 19 into engagement with the rod and releasing the bolt 1.

In Figs. 10, 11, and 12 the parts are shown in the same relative positions as in Figs. 3, 4, and 5, except that the lever 14' when the parts are in locked position is arranged with its nose beneath the shoulder on the bolt, and the downward movement of the bolt will swing out the lever 14', and it will successively engage the notches 9' 8'. In these figures the card-rod-locking lever is indicated at 19'.

In Fig. 13 the action is slightly different, the lever 14 serving to lock the key-lever instead of locking into the bolt. This is of advantage, for the reason that where the lever 14 locks into the bolt and always presses against



it it might prevent said bolt from working perfectly free when closing the drawer. Also, if the drawer is closed quickly the bolt might move in far enough for the catch to lock it.

5 These objections are overcome by the arrangement where the lever locks the key-lever, leaving the bolt perfectly free.

In Fig. 7 the key-lever 11' is simply a sliding bolt which as the key engages the shoulder 12' on the bolt to move the same downward moves, respectively, into the notches 9" 8". In this arrangement also, while the construction of the locking-lever 19" is different from that shown in the other figures, the  
15 action is substantially the same.

In Fig. 8 the application of the mechanism shown in Fig. 5 to a drawer containing a plurality of card-rods is illustrated, in which the lever 19''' has oppositely-extending arms, one  
20 embracing the upper side of one card-rod C and the other the lower side thereof, and the two card-rods are locked or unlocked simultaneously.

Various minor modifications and changes in the construction of the parts may be made without departing from the spirit of my invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters  
30 Patent, is—

1. A filing-receptacle having means for holding and locking the papers or cards to be filed, means for locking the receptacle, operative connections between the receptacle-lock  
35 and the paper or card lock, whereby the operation of one will operate the other; substantially as described.

2. A filing drawer or receptacle, a card rod or support therein, a locking-bolt for the  
40 drawer or receptacle, and means for locking the card rod or support, with connections between the locking-bolt and the card rod or support locking devices, whereby in the operation of one of said locking devices, the  
45 other is also operated; substantially as described.

3. In a filing-receptacle, a card rod or support, a locking-bolt for the receptacle, a locking-lever for the rod, and devices brought  
50 into action by the movement of the bolt in one direction to unlock the card-rod, means for holding the bolt in its retracted position, and means for actuating the card-rod-locking lever, when the locking-bolt is released; substantially as described.  
55

4. In a filing-receptacle, a card rod or support, a locking-bolt for the receptacle, a locking-lever for the bolt, a locking-lever for the rod normally engaging the latter, means for  
60 releasing the card-rod-locking lever when the locking-bolt is retracted, a catch for holding the bolt in retracted position, and means for releasing the catch to allow the bolt and card-lock to operate; substantially as described.  
65

5. In a filing-receptacle of the character described, a locking-bolt for the receptacle, and

means for operating it, a card-rod, a locking-lever engaging therewith and having a portion arranged in the path of movement of the  
70 locking-bolt, whereby the retraction of the bolt releases the lever from the rod, and means for returning the parts to normal position; substantially as described.

6. In a filing-receptacle of the character described, a locking-bolt for the receptacle, and means for retracting it, a card-rod, a locking-lever engaging therewith, and having a portion arranged in the path of movement of the  
75 locking-bolt, whereby the retraction of the bolt releases the lever from the rod, a catch for holding the bolt in retracted position, and means for releasing the same to allow the return of the parts to normal position; substantially as described.  
85

7. In a filing-receptacle of the character described, a locking-bolt, means for retracting it, a spring-catch to hold it in retracted position, a card-rod, a swinging arm normally  
80 spring-pressed to engage the rod, and arranged to be operated to release the rod, by the retraction of the bolt a predetermined distance; substantially as described.  
90

8. In a filing-receptacle of the character described, a locking-bolt, means for retracting  
95 it, a spring-catch to hold it in retracted position, a card-rod, a swinging arm normally engaging the rod, and having a projection adapted to be engaged by the bolt when the latter has been retracted a predetermined distance,  
100 and means for releasing the spring-catch to allow the parts to return to normal position; substantially as described.

9. In a filing-receptacle of the character described, a locking-bolt for the receptacle, a  
105 key-lever engaging the same to retract it under the action of the key, a catch for holding the bolt in retracted position, means extending within reach of the operator for releasing the catch, a card-rod, a locking-lever therefor  
110 brought into inoperative position by the retraction of the bolt and released to operate when the spring-catch is released; substantially as described.

10. In a card-index system or similar filing  
115 apparatus, a locking device for the receptacle, a card rod or support, and means for locking the same, with suitable connections between the locking device for the receptacle and the card-rod-locking device, whereby the operation  
120 of one will effect the operation of the other either to lock or unlock; substantially as described.

11. In a card-index system or similar filing  
125 apparatus, a locking device for the receptacle, a plurality of card-rods, a single locking-lever for said card-rods, and means for unlocking in one operation both the receptacle and the card-rods; and means for returning the devices to locking position; substantially as  
130 described.

12. In a card-index system or similar file apparatus, a locking device for the receptacle, a card rod or support and means for locking



the same, means for unlocking in one operation both the receptacle and the card rod or support and means for returning the devices to locking position; substantially as described.

5 13. In a card-index system or similar file apparatus, a locking device for the receptacle, a card rod or support and means for locking the same, means for unlocking in one operation both the receptacle and the card rod or support and means for successively returning at one operation the devices to locking position; substantially as described.

10 14. A card-index system or similar file ap-

paratus, a locking device for the receptacle, 15 a card rod or support and means for locking the same, means for unlocking successively at one operation both the receptacle and the card rod or support and means for returning the devices to locking position; substantially 20 as described.

In testimony whereof I affix my signature in presence of two witnesses.

DARWIN E. WRIGHT.

Witnesses:

FRANK D. BLACKISTONE,  
J. R. T. REEVES.