C. A. NAUCK.

DEPOSITING BOX AND TIME STAMP.

APPLICATION FILED DEC. 2, 1909.

957,083.

Patented May 3, 1910.

3 SHEETS—SHEET 1.

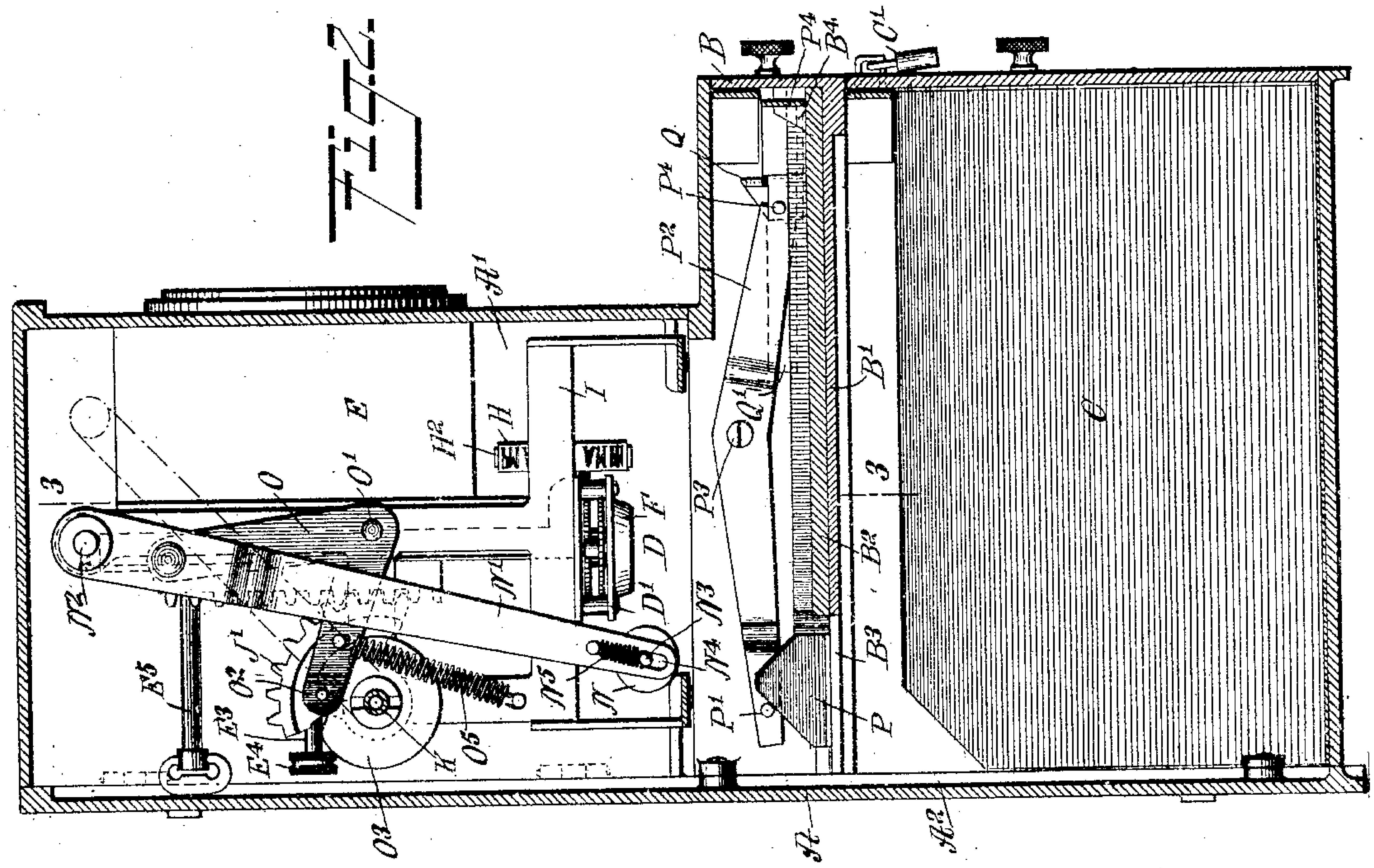

Fig. 1.

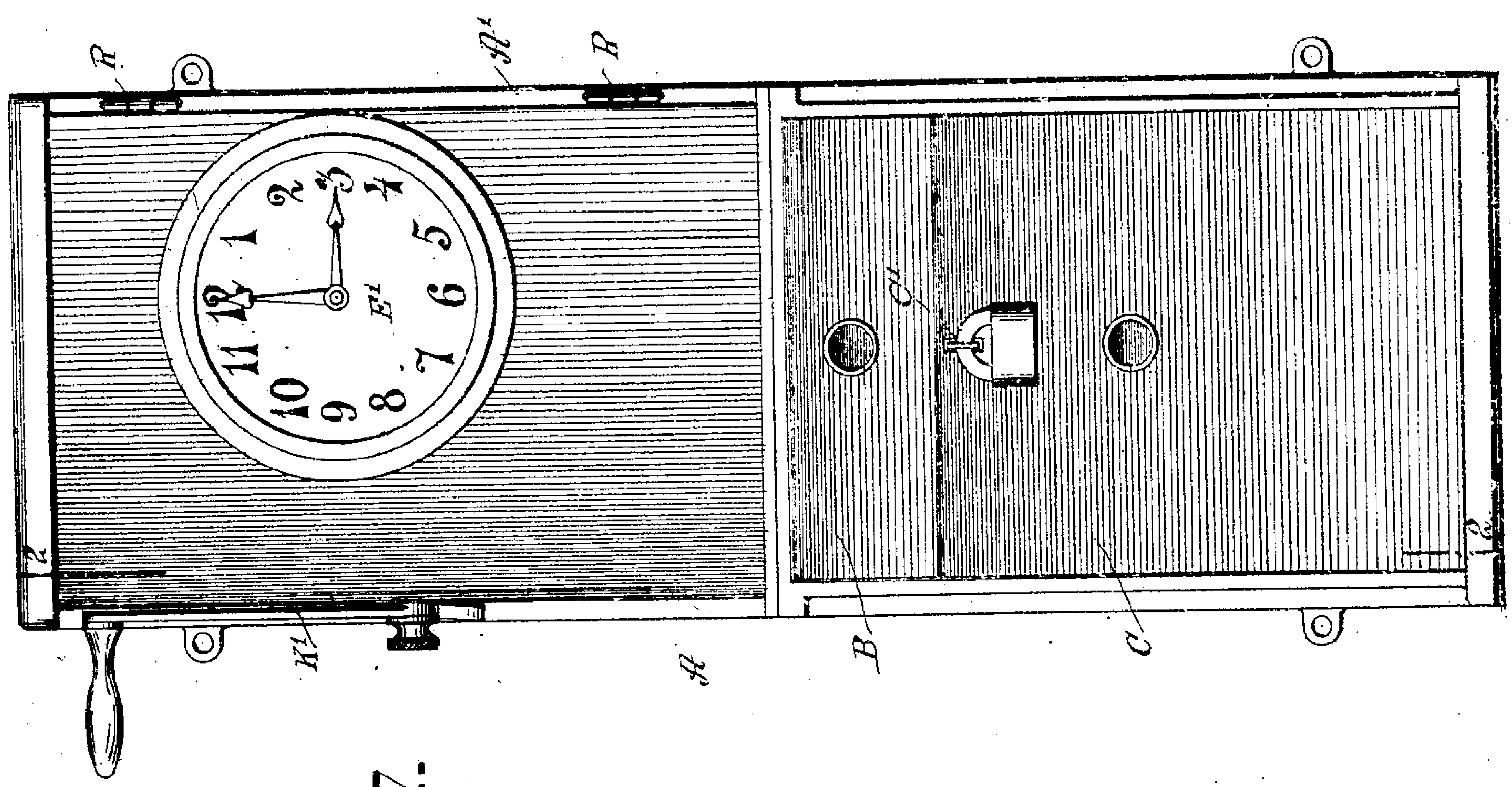

Fig. 2.

WITNESSES

Ben. Joffé

Rudolph Horstmann

INVENTOR

Carl A. Nauck

BY Munn & Co.

ATTORNEYS

ANDREW B. GRAHAM CO., PHOTO-LITHOGRAPHERS, WASHINGTON, D. C.

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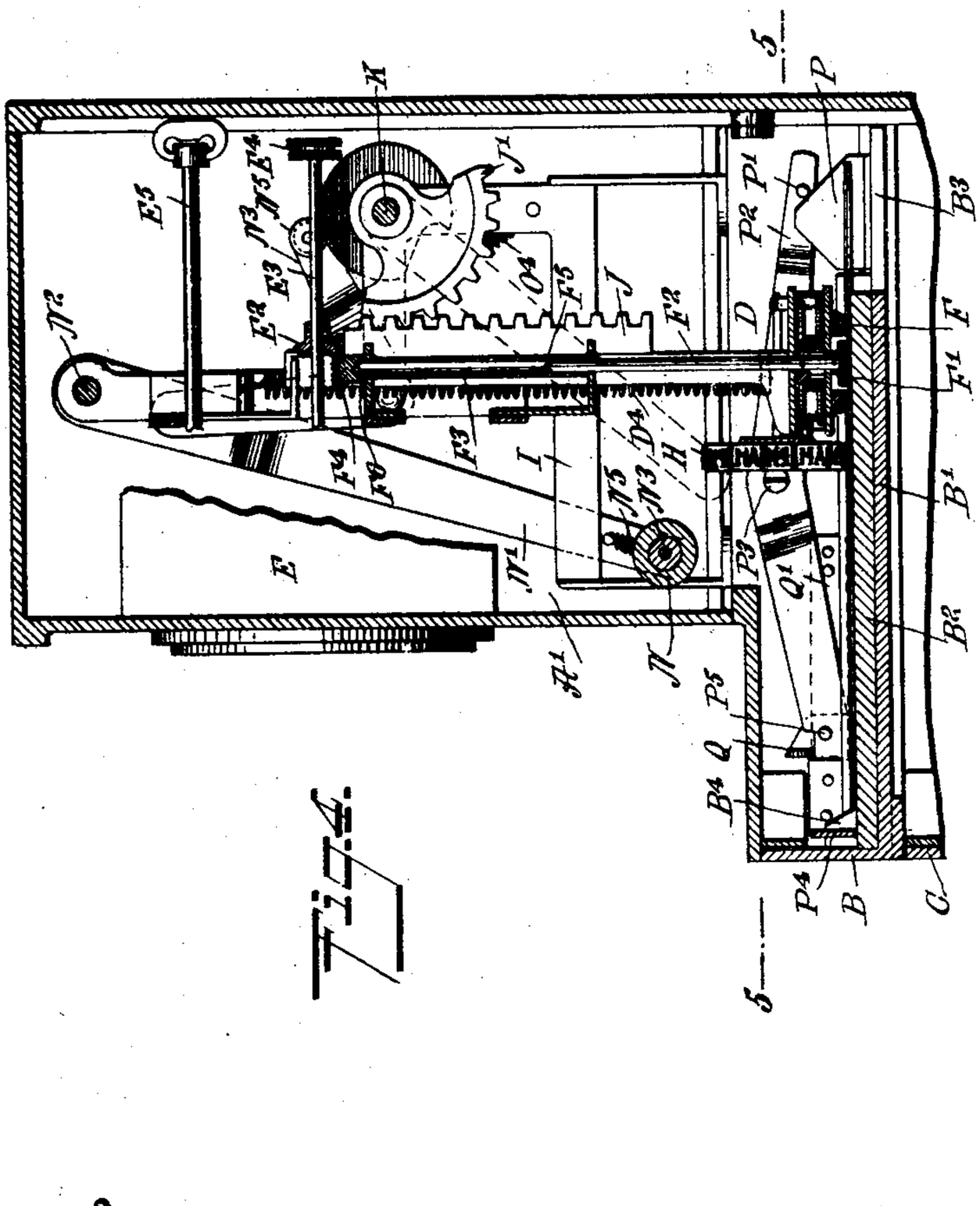

FIG. 4.

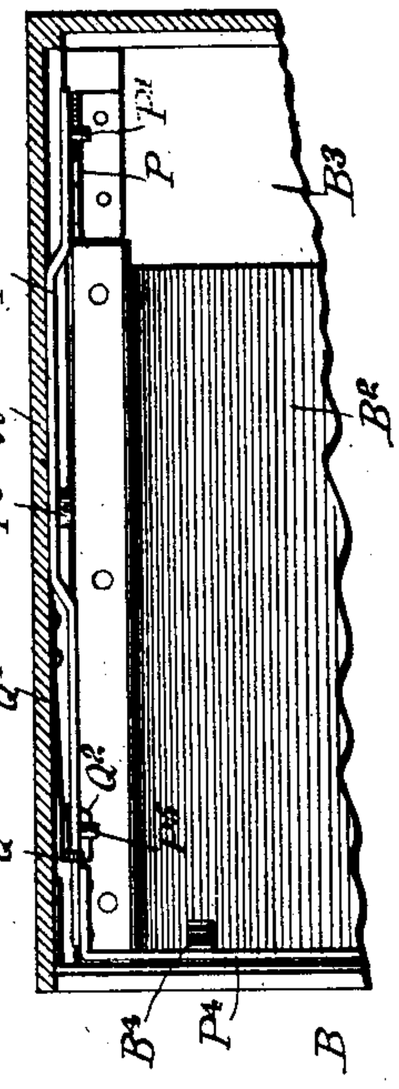

FIG. 5.

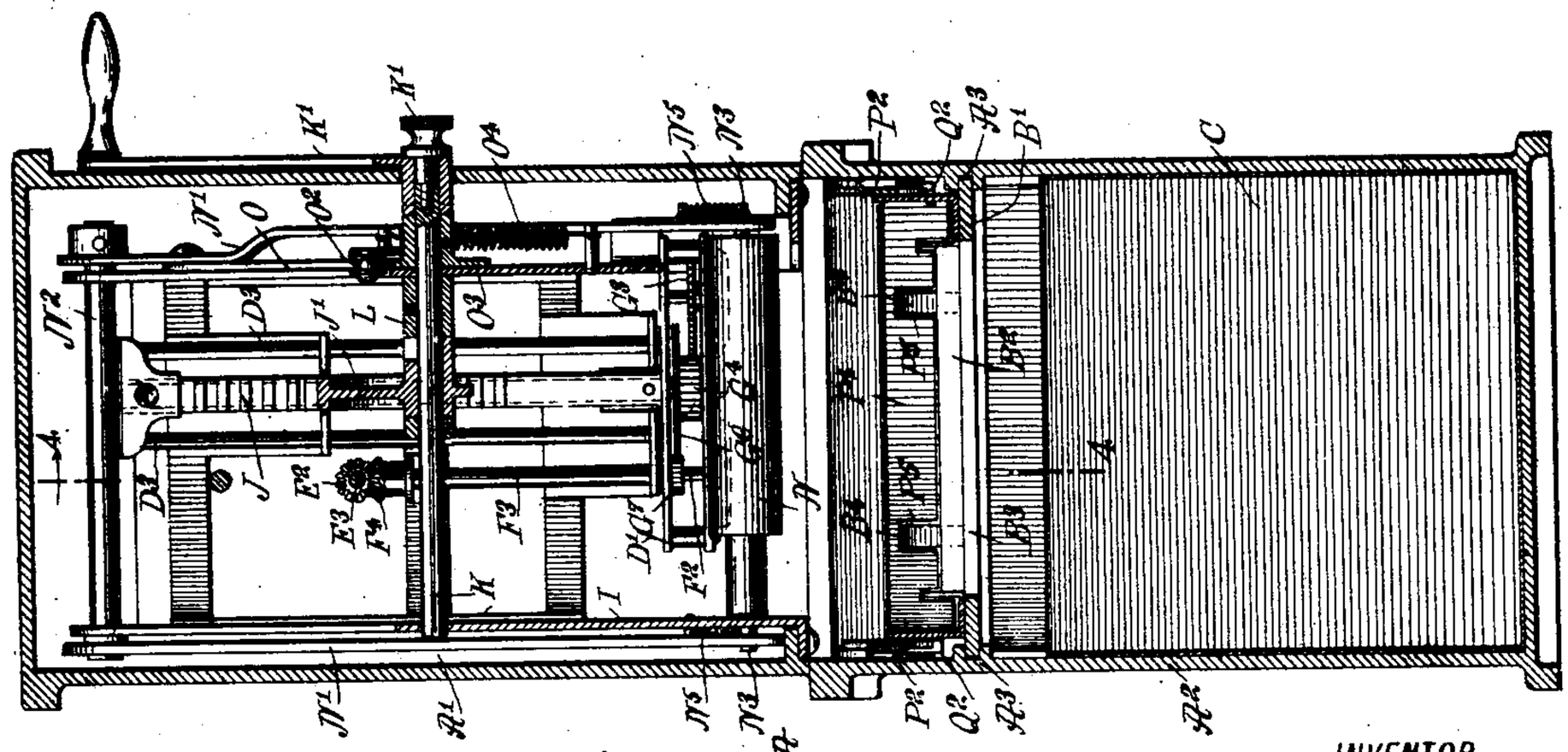

FIG. 3.

WITNESSES

Ben. Joffé

Rud. J. Hoster

INVENTOR

Carl A. Nauck

BY Munn & Co

ATTORNEYS

ANDREW B. GRAHAM CO., PHOTO-LITHOGRAPHERS, WASHINGTON, D. C.

C. A. NAUCK.

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Fig. 6.

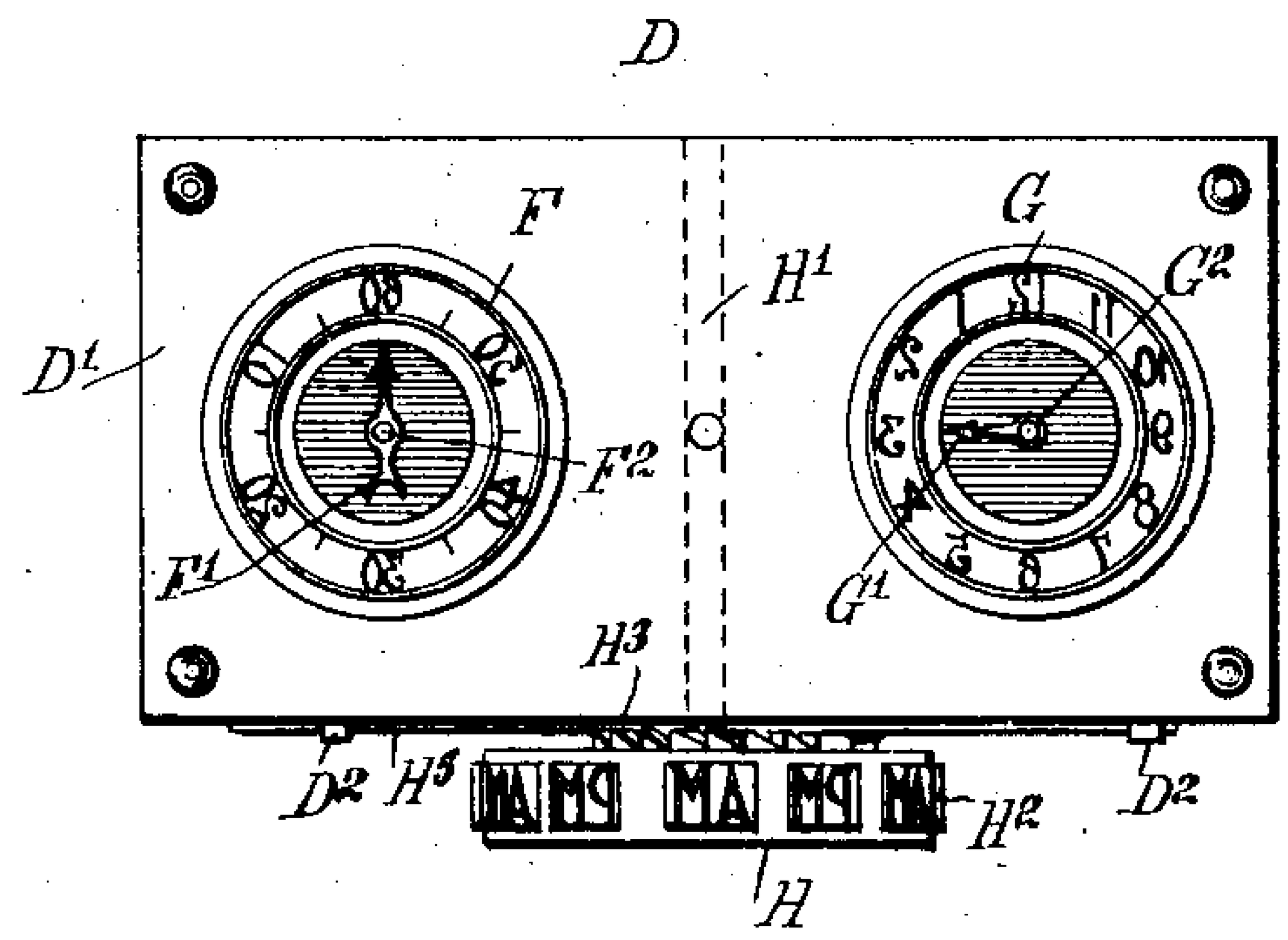


Fig. 7.

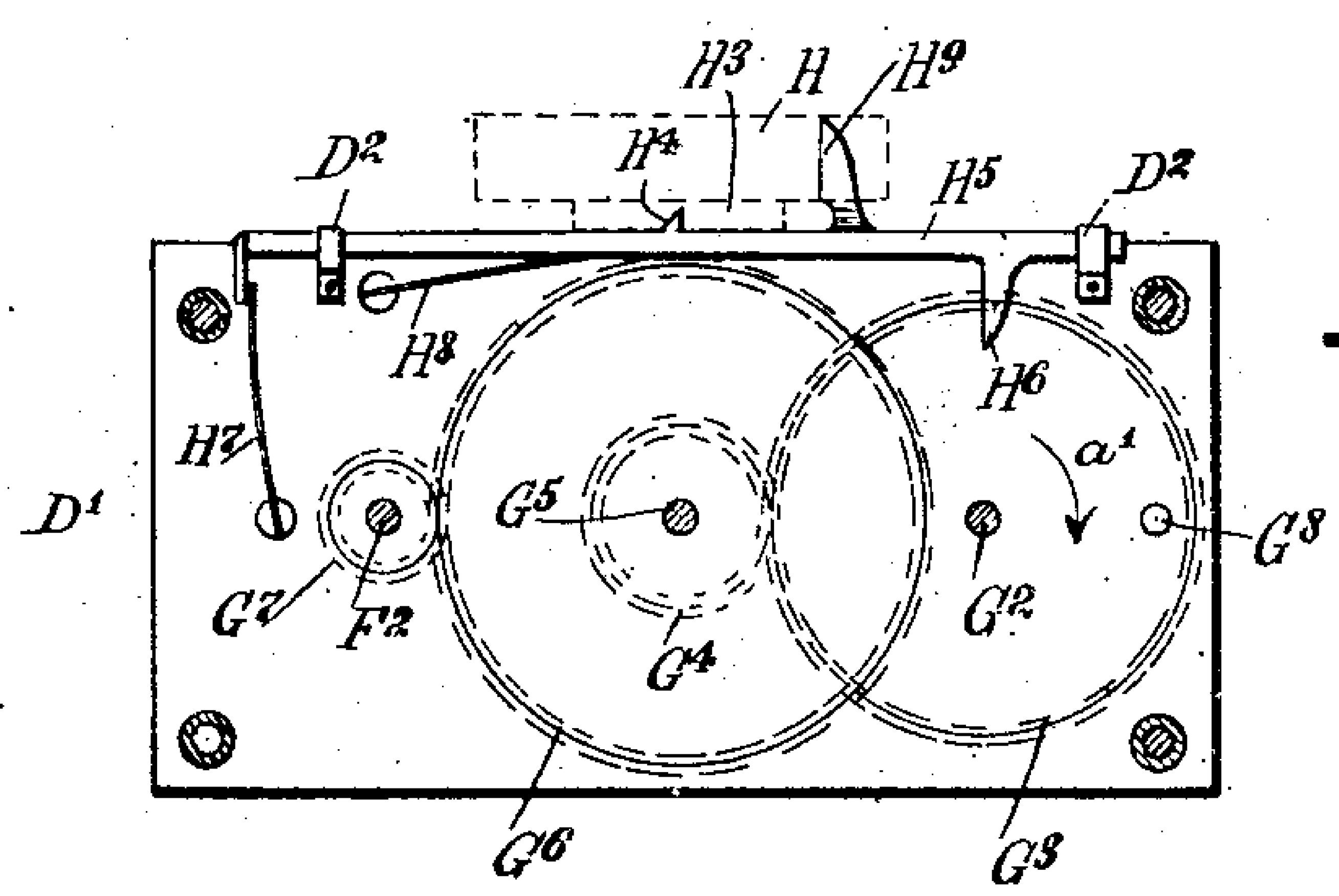
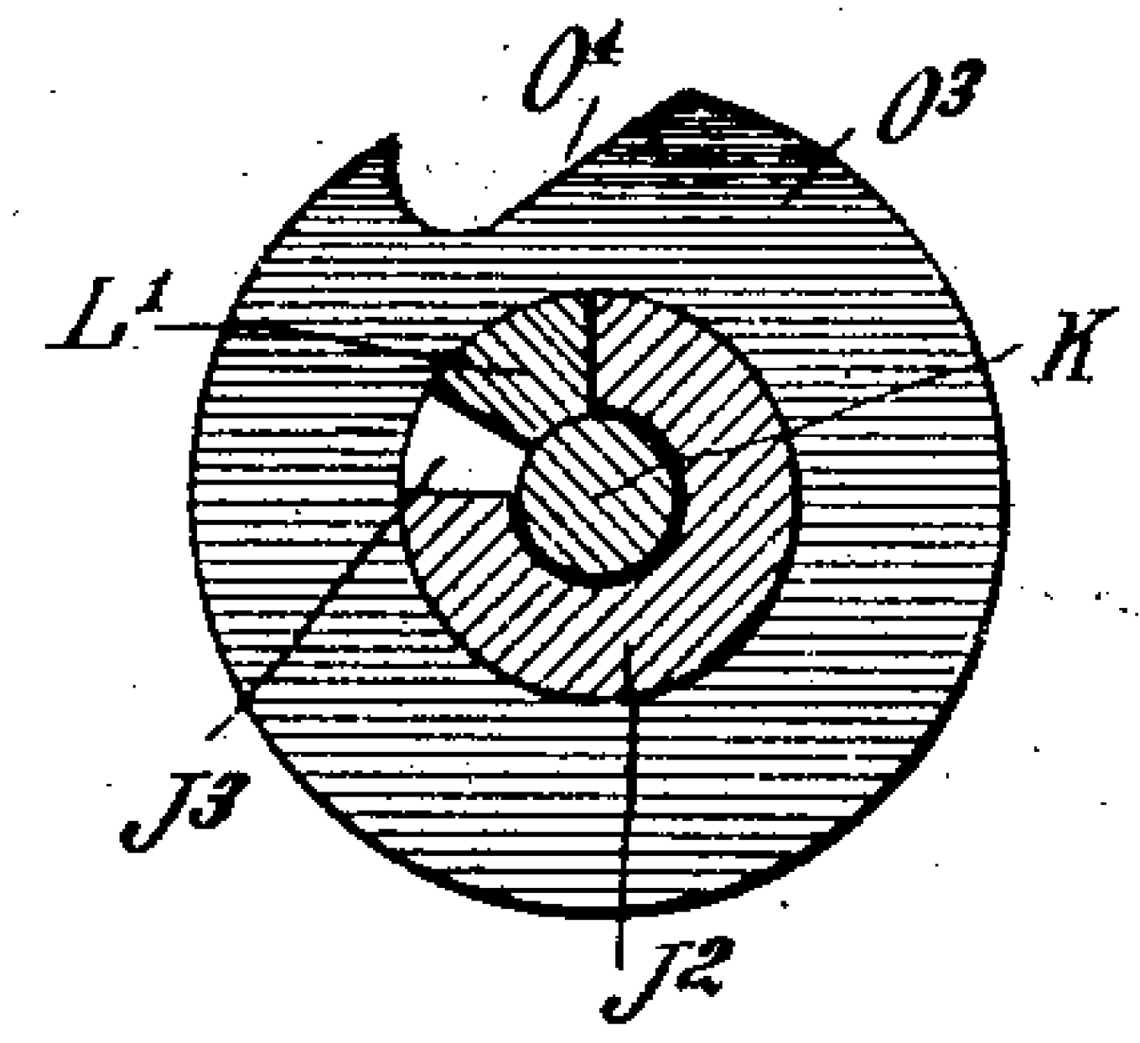


Fig. 8.



WITNESSES:

Ben Joffe'

Rudy. Hortz

INVENTOR

Carl A. Nauck

BY Munn & Co

ATTORNEYS

ANDREW B. GRAHAM CO., PHOTO-LITHOGRAPHERS, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CARL ADOLPH NAUCK, OF LITTLE ROCK, ARKANSAS.

DEPOSITING-BOX AND TIME-STAMP.

957,083. Specification of Letters Patent. **Patented May 3, 1910.**

Application filed December 2, 1909. Serial No. 531,083.

To all whom it may concern:

Be it known that I, CARL A. NAUCK, a citizen of the United States, and a resident of Little Rock, in the county of Pulaski and State of Arkansas, have invented a new and Improved Depositing-Box and Time-Stamp, of which the following is a full, clear, and exact description.

The invention relates to time recorders, and its object is to provide a new and improved depositing box and time stamp, designed for receiving articles, such as envelops, filled with transfer tickets as used by railways, the device providing the article with a stamp indicating the time of day or night, and depositing the accumulated articles in a box, for convenient removal after the day's work is over. For the purpose mentioned, use is made of a casing having a drawer for receiving an article, and presenting to it a manually-controlled time stamp arranged within the casing, the stamped article on the next outward movement of the drawer being deposited in the receiving box of the casing.

The invention consists of novel features and parts and combinations of the same, which will be more fully described hereinafter and then pointed out in the claims.

A practical embodiment of the invention is represented in the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a front elevation of the depositing box and time stamp; Fig. 2 is a transverse section of the same on the line 2—2 of Fig. 1; Fig. 3 is a sectional side elevation of the same on the line 3—3 of Fig. 2; Fig. 4 is a cross section of the same on the line 4—4 of Fig. 3; Fig. 5 is a sectional plan view of part of the improvement on the line 5—5 of Fig. 4; Fig. 6 is an enlarged inverted plan view of the time stamp; Fig. 7 is a plan view of the same, parts being in section; and Fig. 8 is an enlarged sectional side elevation of the actuating cam for the inking device.

In a suitably constructed casing A is mounted to slide a drawer B, dividing the casing A into an upper compartment A′ and a lower compartment A^2, containing a removable box C for removing the accumulated envelops or like articles after the day's work is over, the said box C being normally locked in position by a suitable locking device C′, such as a padlock and a hasp, as indicated in Figs. 1 and 2. In the upper compartment A′ is arranged a time stamp D adapted to be bodily moved in a downward direction, so as to stamp the envelop or other article in the drawer B at the time the latter is in a closed position, as indicated in Figs. 2 and 4; and the said time stamp D is controlled by a clock E, of any approved construction, and attached to the casing A, in the upper compartment A′ thereof, the dial E′ of the clock being on the outside of the casing at the front thereof, as will be readily understood by reference to Figs. 1 and 2.

The time stamp D (see Fig. 6) is mounted on a frame D′, provided on the under side with spaced dial stamps F and G, of rubber or other suitable material, the dial stamp F being divided into minutes, while the dial stamp G is divided into hours, and pointer stamps F′ and G′ indicate on the said dial stamps F and G, to indicate the minutes and hours at the time, it being understood that when the said stamps F, G, F′, G′ are inked and moved downward into contact with the envelop or other article contained in the drawer B, then an impression is made on the envelop or other article, indicating the time as represented by the pointer stamps F′ and G′ on the dial stamps F and G. A wheel stamp H has its shaft H′ journaled in the frame D′ of the time stamp D, and the said wheel stamp H is provided on its peripheral face with stamps H^2, indicating A. M. and P. M., and of which the lowermost at the time makes an impression on the envelop or other article at the time the stamps F, F′, G, G′ make their impression. The shafts F^2, G^2 carrying the pointer stamps F′, G′ are disposed vertically and journaled in the frame D′, and on the shaft G^2 is secured a gear wheel G^3 in mesh with a pinion G^4 secured on a shaft G^5 journaled in the frame D′, and carrying a gear wheel G^6 in mesh with a pinion G^7 secured on the shaft F^2. The shaft F^2 extends upwardly and is mounted to slide in a hollow shaft F^3 journaled in suitable bearings arranged on a frame-work I held within the upper compartment A′, and on the upper end of the hollow shaft F^3 is secured a bevel pinion F^4 in mesh with a similar pinion E^2 secured on the shaft E^3 carrying the minute hand of the clock E previously mentioned. The shaft E^3 is provided with a knob E^4, adapt-

ed to be taken hold of by a person, for setting the clock and consequently the pointer stamps F′, G′ to the correct time whenever necessary. The upper end of the shaft F^2 is provided with a polygonal offset F^5, adapted to engage a correspondingly shaped socket F^6, formed in the under side of the bevel pinion F^4, so that when the time stamp D is in its normal uppermost position, the offset F^5 is in engagement with the socket F^6 and consequently the shaft F^2 is turned by the pinion F^4, to turn the pointer stamp F′ and also the pointer stamp G′ by the train of gear wheels G^3, G^4, G^6 and G^7 previously described.

On the face of the wheel stamp H is secured a ratchet wheel H^3, engaged by a lug or pawl H^4 held on a rod H^5 mounted to slide loosely in bearings D^2 forming part of the frame D′. On the rod H^5 is formed a lug H^6 adapted to be engaged by a pin G^8 secured on the face of the gear wheel G^3 previously mentioned, and rotating in the direction of the arrow *a*′. A spring H^7 presses the rod H^5, to normally hold the same in the retracted position indicated in Fig. 7, it being understood that when the wheel G^3 makes a complete revolution then the pin G^8 moves the rod H^5 to the right, so that the lug or pawl H^4 turns the ratchet wheel H^3 and with it the wheel H, to bring the next following stamp H^2 into lowermost position. As soon as the pin G^8 leaves the lug H^6, then the spring H^7 returns the rod H^5 to normal position.

In order to insure an easy return gliding of the pawl H^4 over the teeth of the ratchet wheel H^3, the rod H^5 is mounted loosely in the bearings D^2 and pressed on by a spring H^8. In order to hold the wheel stamp H against accidental turning while making impressions, a lug H^9 held on the rod H^5 projects between successive stamps H^2 on the return movement of the rod H^5, as previously explained. It is understood that when the rod H^5 is shifted by the action of the pin G^8, the lug H^9 moves out of engagement with the wheel stamp H, to allow of turning the latter as before explained. It is also understood that the face of the lowermost stamp H^2 is in the plane of the stamps F, F′, G, G′ (see Figs. 2 and 4), so that when the time stamp D is moved bodily downward, an impression is made on the envelop or other article by the several stamps H^2, F, F′, G, G′.

In order to move the time stamp D bodily up and down, the following arrangement is made: The frame D′ of the time stamp D is provided with upwardly-extending guide rods mounted to slide in suitable bearings on the frame-work I, and the time stamp D, the frame D′ and the guide rods D^3 are normally held in an uppermost position by the action of a spring D^4, secured at one end to the frame-work I and at the other end to the frame D′. On the said frame D′ and its guide rods D^3 is also secured an upwardly-extending rack J, in mesh with a segmental gear wheel J′, mounted to rotate loosely on a shaft K, journaled in the frame-work I, and provided at one end with a handle K′, located on the outside of the compartment A′, and having its hub projecting through an aperture in the side of the compartment A′, to connect with the shaft K, as indicated in Fig. 3. The hub J^2 of the segmental gear wheel J′ is provided with a cut out portion J^3 (see Fig. 8), into which projects the tooth L′ of a clutch L, secured on the shaft K, so that when the latter is turned by the operator manipulating the handle K′, then the segmental gear wheel J′ remains stationary during a portion of the turning of the shaft K, that is, during the time the time stamp D is in its uppermost position. This arrangement is made for the purpose of allowing an inking roller N to pass over the stamps H^2, F, F′, G, G′, to ink the same prior to the time stamp D moving down for making the impression on the envelop or other article. The inking roller N is journaled in a lever N′ fulcrumed at N^2 on the frame-work I, and the said lever N′ is pivotally connected with one arm of a bell crank lever O, fulcrumed at O′ on the frame-work I, the other arm of the said bell crank lever O, carrying a friction roller O^2 in engagement with the peripheral face of a cam O^3 secured on the shaft K. The cam O^3 is in disk form and provided with a notch O^4 for the friction roller O^2 to pass in, in order to give a swinging motion to the bell crank lever O and to the lever N′, with a view to move the inking roller N over the stamps and back again to a rearmost normal position, as hereinafter more fully described. A spring O^5 is connected with the bell crank lever O, to hold the friction roller O^2 thereof in peripheral engagement with the cam O^3. The inking roller N is yieldingly mounted in the lever N′, and for this purpose the shaft N^3 of the inking roller extends through elongated slots N^4 in the lever N′, and the said shaft N^3 is pressed on at its ends by springs N^5 attached to the lever N′. Thus by the arrangement described, the inking roller N is held in yielding contact with the stamps of the time stamp D, to properly ink the same. The inking roller N is supplied periodically with the necessary ink to properly ink the time stamp D.

The drawer B has the sides of its bottom B′ mounted to slide in suitable guideways A^3, formed in the sides of the compartment A^2, and on the said bottom B′ is held a platen B^2, of wood or other suitable material, and on which the envelop or other article to be stamped is placed. The bottom B′

has a rear cut-out portion B^3, to allow the envelop or other article to be readily dropped into the box C below, on pulling the drawer B outward, and in order to move the envelop or other article off the platen B^2 the following arrangement is made: On the inner end of the bottom B′ at the sides thereof are secured double cams P, adapted to engage with their rear inclined faces pins P′, on the rear ends of lever arms P^2, fulcrumed at P^3 on the side of the compartment A^2, the forward ends of the lever arms P^2 being rigidly connected with each other by a transversely-extending push bar P^4, adapted to engage the front end of the envelop or other article and push the same off the platen B^2 on opening the drawer B. It is understood that when the drawer B is moved into a closed position, the cams P act on the pins P′, so as to swing the rear ends of the lever arms P^2 upward and the front ends downward, thus moving the push bar P^4 down onto the upper surface of the platen B^2 in front of the front end of the envelop or other article. The cams P are also adapted to engage pins P^5, arranged near the forward ends of the lever arms P^2, so that when the drawer B is drawn out, the front inclined edges of the cams P engage the pins P^5 and thus swing the forward ends of the lever arms P^2 and the push-bar P^4 upward, to allow of conveniently placing the envelop or other article in position on the platen B^2, with the rear end of the envelop projecting beyond the now raised push bar P^4. The front ends of the lever arms P^2 are adapted to be locked in place when in a lowermost position by catches Q mounted on springs Q′ attached to the sides of the compartment A^2, and the said catches Q are provided with projections Q^2 (see Fig. 3), extending into the path of the cams P, so that when the drawer B is drawn outward, the cams P act on the projections Q^2, to press the same outwardly and thus move the catches Q out of engagement with the lever arms P^2 immediately previous to the cams P engaging the pins P^5, to swing the front ends of the lever arms P^2 and the push bar P^4 upward. The front of the drawer B is provided with lugs B^4 projecting into cut-out portions B^5 in the push bar P^4, so that when the drawer is opened and the envelop or like article is placed upon the platen B^2, then the front end of the envelop or other article abuts against the inner ends of the lugs B^4, and when the drawer B is subsequently closed and the push bar P^4 swings downward, then the push bar P^4 is in the front of the front end of the envelop or other article.

The compartment A′ has its front and sides preferably in one piece and connected by hinges R with the back of the casing, to permit of opening the compartment A′ for giving access to the mechanism contained therein, especially for supplying ink to the inking roller N and for winding up the clock E by the winding key E^5.

Presuming that the apparatus is used at a street railway terminal, for receiving the conductor's envelops filled with transfer tickets, then the operation is as follows: The conductor, on reaching the terminal, pulls the drawer B open and places the filled envelop into the drawer on top of the platen B^2, as previously explained, and then moves the drawer shut, after which he takes hold of the handle K′ and swings the same downward to its full extent, and then releases the handle and goes about his business. Now when the drawer B is shut by the conductor, the envelop is moved rearwardly, so that a portion of the envelop is below the time stamp D, and when the conductor swings the handle K′ downward, then the inking roller N is moved forward over the time stamp D, to ink the stamps thereof, and at the time the inking roller N reaches a forward position, as shown in Fig. 4, and is clear of the time stamp D, then the further downward swinging movement of the handle K′ causes a downward sliding of the time stamp D, to make an impression on the envelop. As soon as the conductor releases the handle K′, as above described, the several parts are returned to their normal position by the action of the spring D^4, that is, the time stamp D glides upward to its normal raised position, and the inking roller N returns to its rearmost position, and in doing so again inks the time stamp D while passing from the front to the rear. Now the stamped envelop remains in the drawer B until the next conductor pulls the drawer B open, for repeating the above-described operation. Now when the drawer is pulled open the stamped envelop is engaged by the push bar P^4 and pushed off the platen B^2, to drop through the cut-out portion B^3 of the bottom B′ into the box C.

It is understood that during the time the time stamp is moving down for making the impression and returning to normal position, the time stamp is disconnected from the clock E, and hence the pointer stamps F′, G′ do not move for the time being, thus making a proper non-blurred impression on the envelop.

As the conductors, on arrival at the terminal, successively place their envelops into the device and actuate the same, it is evident that the envelops are stamped with the correct time of the day, and the accumulated stamped envelops are removed from the casing by authorized persons unlocking the box C, removing it from the compartment A^2, emptying it of its contents and returning the empty box C into

the compartment A^2, and locking it therein by the locking device C'.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. A depositing box and time stamp, comprising a casing having a drawer dividing the casing into an upper compartment and a lower receiving box, a time stamp in the said upper compartment and adapted to stamp an article in the said drawer at the time the drawer is closed, and means for delivering the stamped article to the said receiving box on opening the drawer.

2. A depositing box and time stamp, comprising a casing having a drawer dividing the casing into an upper compartment and a lower receiving box, a time stamp in the said upper compartment and adapted to stamp an article in the said drawer at the time the drawer is closed, manually-controlled means for moving the said time stamp bodily into and out of stamping engagement with the article, and means for delivering the stamped article to the said receiving box on opening the drawer.

3. A depositing box and time stamp, comprising a drawer for receiving the article to be stamped, a bodily movable time stamp adapted to be moved into and out of engagement with the article at the time the latter is in the closed drawer, and means for removing the article from the drawer after the article is stamped.

4. A depositing box and time stamp, comprising a drawer for receiving the article to be stamped, a bodily movable time stamp adapted to be moved into and out of stamping engagement with the article at the time the latter is in the closed drawer, means for removing the article from the drawer after the article is stamped and the drawer is opened, and manually-controlled means for moving the said time stamp.

5. A depositing box and time stamp, comprising a drawer for receiving the article to be stamped, a bodily movable time stamp adapted to be moved into and out of stamping engagement with the article at the time the latter is in the closed drawer, means for removing the article from the drawer after the article is stamped and the drawer is opened, manually-controlled means for moving the said time stamp, and a clock-work having connection with the said time stamp to set the latter.

6. A depositing box and time stamp, comprising a casing having a drawer for the reception of the article to be stamped, the drawer dividing the casing into a compartment above the drawer and a receiving box below the drawer, a bodily movable time stamp in the said compartment, and a manually-controlled gearing mounted in the said compartment and connected with the said time stamp to move the latter into and out of stamping engagement with the article contained in the said drawer at the time the latter is closed.

7. A depositing box and time stamp, comprising a casing having a drawer for the reception of the article to be stamped, the drawer dividing the casing into a compartment above the drawer and a receiving box below the drawer, a bodily movable time stamp in the said compartment, a manually-controlled gearing mounted in the said compartment and connected with the said time stamp to move the latter into and out of stamping engagement with the article contained in the said drawer at the time the latter is closed, and means for inking the said time stamp.

8. A depositing box and time stamp, comprising a casing having a drawer for the reception of the article to be stamped, the drawer dividing the casing into a compartment above the drawer and a receiving box below the drawer, a bodily movable time stamp in the said compartment, a gearing in the said compartment and connected with the said time stamp, to move the latter into and out of stamping engagement with the article contained in the said drawer, a shaft mounted in the said compartment and having one end extending to the outside thereof, a handle on the outer end of the shaft, a clutch connecting the said shaft with the said gearing, and an inking device for the said time stamp and controlled from the said shaft.

9. A depositing box and time stamp, comprising a casing having a drawer for the reception of the article to be stamped, the drawer dividing the casing into a compartment above the drawer, a bodily movable time stamp in the said compartment, a gearing in the said compartment and connected with the said time stamp to move the latter into and out of stamping engagement with the article contained in the said drawer, a shaft mounted in the said compartment and having one end extending to the outside thereof, a handle on the outer end of the shaft, a clutch connecting the said shaft with the said gearing, an inking roller for the said time stamp, and a lever and cam mechanism carrying the said inking roller and connected with the said shaft to move the inking roller across the time stamp at the time the latter is disconnected from the shaft by the said clutch.

10. A depositing box and time stamp, comprising a casing having a drawer for the reception of the article to be stamped, the drawer dividing the casing into a compartment above the drawer and a receiving box below the drawer, a bodily movable time stamp in the said compartment and having an hour stamp, a minute stamp and an A. M.

and P. M. wheel, a clock-work having a sliding connection with the said time stamp to set the hour stamp, the minute stamp and the A. M. and P. M. wheel, and manually-controlled means for moving the said time stamp bodily into and out of stamping engagement with the article in the closed drawer.

11. A depositing box and time stamp having a casing, a drawer mounted to slide therein and adapted to receive the article to be stamped, a time stamp above the said drawer and adapted to be moved bodily down to stamp the article, and a pushing device operating in conjunction with the said drawer to push the stamped article off the drawer on opening the latter.

12. A depositing box and time stamp having a casing, a drawer mounted to slide therein and adapted to receive the article to be stamped, a time stamp above the said drawer and adapted to be moved bodily down to stamp the article, a pushing device operating in conjunction with the said drawer to push the stamped article off the drawer on opening the latter, the said pushing device having a lever arm carrying a push bar and mounted to swing in the said casing, and a cam on the drawer for actuating the said lever arm and its push bar.

13. A depositing box and time stamp having a casing, a drawer mounted to slide therein and adapted to receive the article to be stamped, a time stamp above the said drawer and adapted to be moved bodily down to stamp the article, a pushing device operating in conjunction with the said drawer to push the stamped article off the drawer on opening the latter, the said pushing device having a lever arm carrying a push bar and mounted to swing in the said casing, a cam on the drawer for actuating the said lever arm and its push bar, and a spring catch for the said lever arm to lock the latter and controlled by the said cam.

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

CARL ADOLPH NAUCK.

Witnesses:

M. C. BREN,

S. C. MOON.