No. 646,933. Patented Apr. 3, 1900.

C. D. WEAVER.

MEMORANDUM AND INDICATING DEVICE.

(No Model.) (Application filed Apr. 8, 1899.)

2 Sheets—Sheet 1.

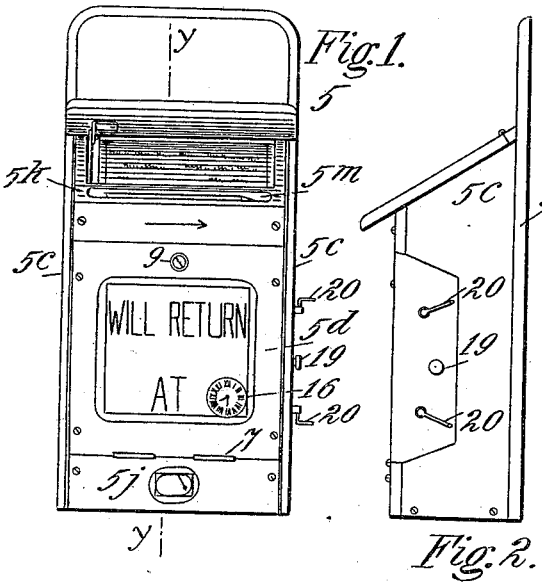

Fig. 1.

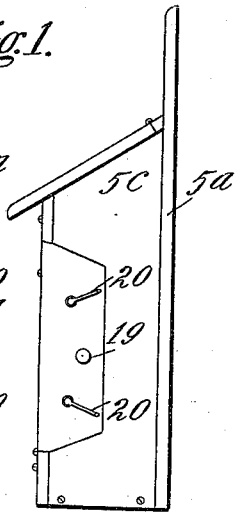

Fig. 2.

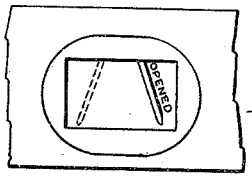

Fig. 4.

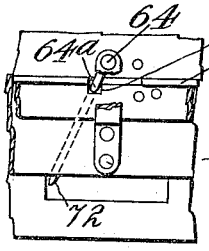

Fig. 5.

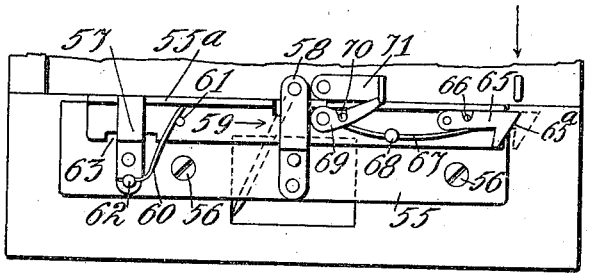

Fig. 6.

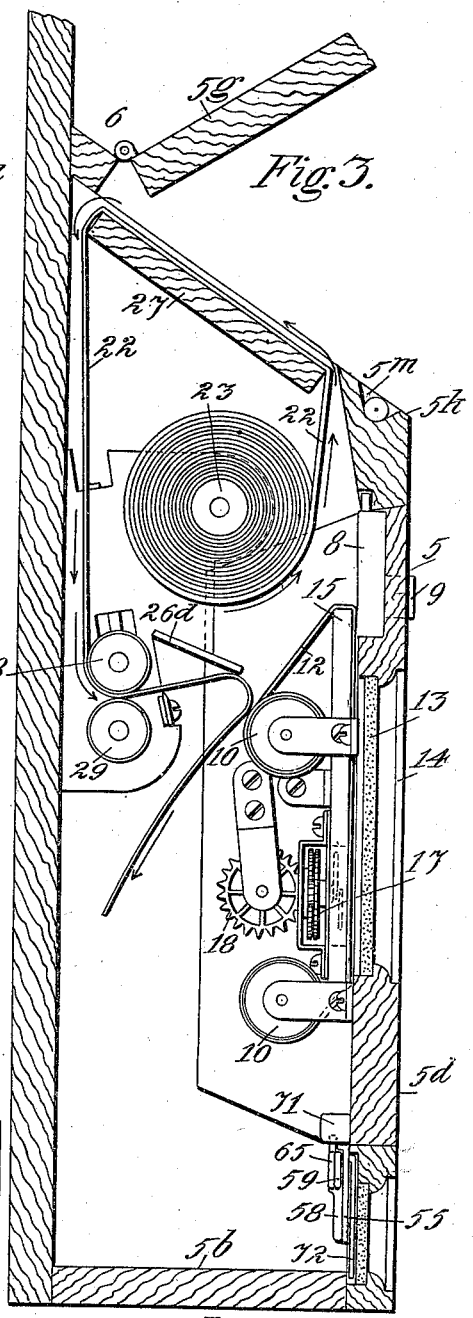

Fig. 3.

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Fig. 8.

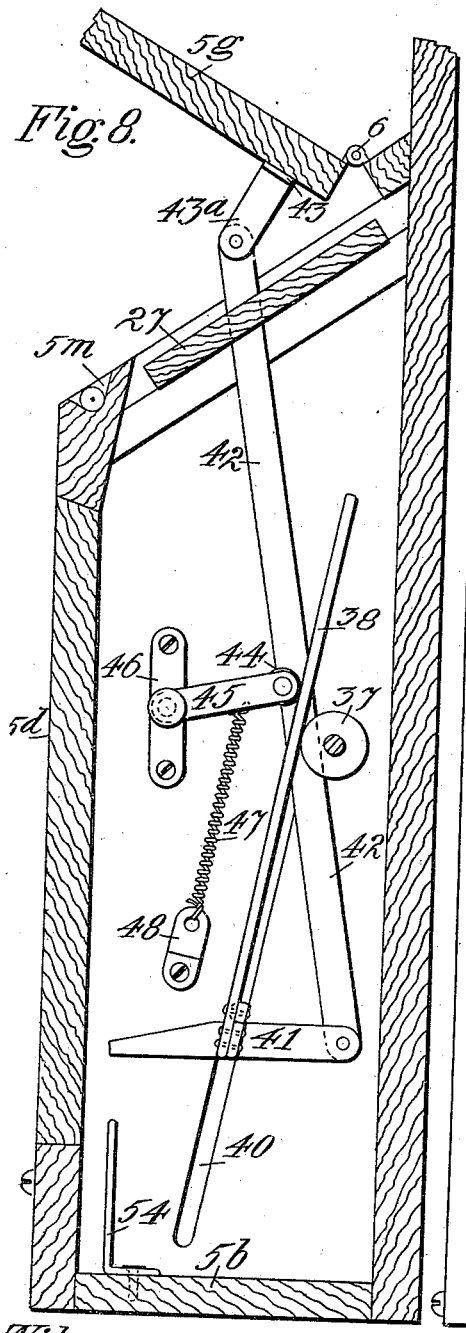
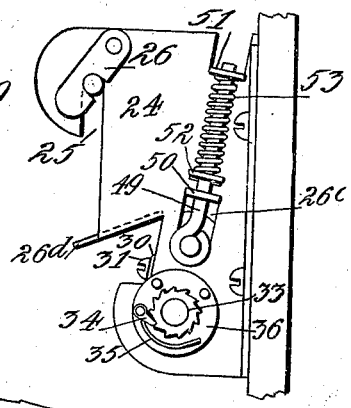


Fig. 9.



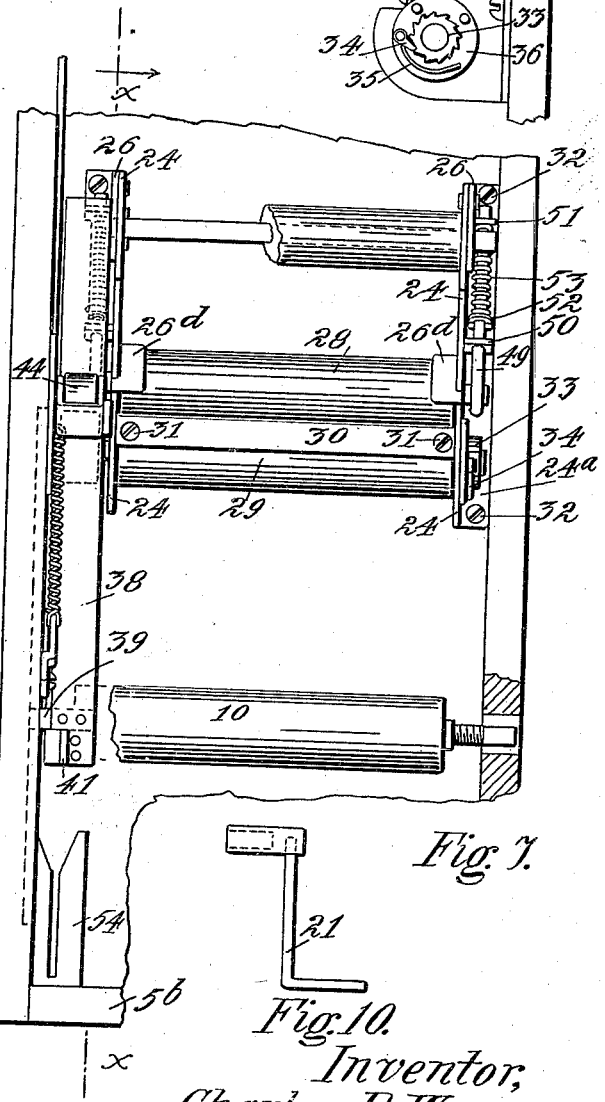


Fig. 7.

Fig. 10.

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UNITED STATES PATENT OFFICE.

CHARLES D. WEAVER, OF GREELEY, COLORADO.

MEMORANDUM AND INDICATING DEVICE.

SPECIFICATION forming part of Letters Patent No. 646,933, dated April 3, 1900.

Application filed April 3, 1899. Serial No. 712,276. (No model.)

To all whom it may concern:

Be it known that I, CHARLES D. WEAVER, a citizen of the United States of America, residing at Greeley, in the county of Weld and State of Colorado, have invented certain new and useful Improvements in Memorandum and Indicating Devices; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to an improved memorandum and indicating device adapted for use by professionals and adapted for keeping a secret record of any number of messages that may be left, access being only gained to said messages by the person for whom they are intended, who holds a key for unlocking the cabinet or case in which they are contained. The device also indicates from the outside whether or not it has been operated, and consequently whether there is a message within, so that the owner does not have to unlock the device to obtain this information. The mechanism for concealing the messages and bringing a blank piece of paper into place for the next caller, as well as the indicating mechanism, is all operated from a movable lid, upon which or adjacent to which are printed directions for using the device. These directions are simple, as it is only necessary for the caller to raise the lid, write his message, and close the lid. The closing of the lid actuates the paper-carrying rolls within the case, whereby the strip of paper upon which the message is written is drawn into the case and a new piece brought into position to be exposed as soon as the lid is again raised. The first operation of the lid actuates the indicating mechanism, which shows that the device has been operated. The indicating hand or pointer remains in this position until the door of the device is unlocked and opened, after which it returns to its original position.

While well adapted for the use of professional people generally, it will be readily understood that this device is more especially valuable to physicians, since the caller may leave a message as specific as he may desire without danger of its being read or scrutinized by any except the person for whom it is intended.

Having briefly outlined some of the main features of the improvement, I will proceed to describe the same in detail, reference being made to the accompanying drawings, in which is illustrated an embodiment thereof.

In the drawings, Figure 1 is a front elevation of my improved device, showing the lid partly raised. Fig. 2 is a side view of the same. Fig. 3 is a vertical longitudinal section of the device, taken on the line Y Y, Fig. 1, looking toward the right in the direction indicated by the arrow, the parts being shown on a larger scale. Fig. 4 is a fragmentary front view of the indicating portion of the device on a larger scale than in Fig. 1. Fig. 5 is a fragmentary inside view of the indicating mechanism shown on a scale still further enlarged. Fig. 6 is a similar view showing the indicating mechanism complete. Fig. 7 is a fragmentary front view of the device with the door removed. One of the rolls mounted on the door is shown in place in this view for the sake of clearness, since a lengthwise view of these rolls (which are exactly alike) is nowhere else shown. Fig. 8 is a section taken on the line X X, Fig. 7, looking in the direction of the arrow. Fig. 9 is an outside view of one of the brackets in which the strip-operating rolls and supply-roll are journaled. Fig. 10 is a detail view of the detachable key for operating the rolls carrying the intelligencer-strip.

Similar reference characters indicating corresponding parts in the views, let the numeral 5 designate a closed cabinet or case provided with a back 5^a, sides 5^c, a hinged front door 5^d, and an inclined lid 5^g, hinged to the body of the case, as shown at 6. The door 5^d is hinged at its lower edge, as shown at 7, and is adapted to open outwardly and downwardly. Its upper portion is provided with a lock 8, operated by means of a suitable key inserted in a revoluble barrel or cylinder 9. Upon the inside of this door 5^d are mounted two rolls 10, to which is attached a strip of material 12, upon which is printed information adapted to apply to the whereabouts of the person sought. This intelligencer-strip is arranged to pass between a piece of glass 13 or other suitable transparent material and a panel 15,

attached to the door on the inside, the panel being so attached as to leave a space between it and the body of the door for the purpose. The glass 13 closes an opening 14, formed in the door. In a portion of the intelligencer-strip occupied by a statement such as "Will return at" is formed an opening disclosing a dial 16, provided with hands connected with suitable mechanism 17, operated by a toothed wheel 18, upon whose spindle is mounted a small knob or disk 19, by the turning of which the hands on the dial may be set to indicate the time when the absent person will return. The rolls 10 may be operated by keys 20, which, together with the knob 19, may be detached from their posts or spindles, and the key 21, (see Fig. 10,) carried by the owner, used to operate all of the said parts, whereby tampering with the device by unauthorized persons is prevented. These openings in the strip for exposing the clock-dial are only large enough to properly perform this function. Hence it becomes practicable to expose the clock-dial only when it is desired to tell the caller the time when the absent person will return. At all other times the said dial is concealed.

The mechanism pertaining to the operation of the message-strip will now be described in detail. This strip, which is designated by the numeral 22, is carried by a supply-roll 23, journaled in the upper portion of two brackets 24. The spindle extremities of this roll are inserted in slots 25, formed in the brackets and held in place by means of buttons 26, pivoted on the brackets, whereby the roll is readily detachable. The message-strip, which is preferably composed of paper, when first drawn from this roll is passed upward over a stationary inclined board or plate 27, mounted on the upper part of the cabinet and occupying a position directly beneath the lid 5^g when the latter is closed. This plate 27 forms a support for that portion of the strip 22 upon which the message is written. From this plate the strip is carried downward and passed from the rear between two rolls 28 and 29 and thence drawn forward over the edge of a transverse knife 30, which is secured to the brackets 24 by means of screws 31. The roll 29 is journaled in the brackets 24, which extend parallel with the sides 5^c of the case and are located a short distance from the said sides, being made fast to the back 5^a of the casing by means of screws 32, passed through flanges 24^a, formed on the brackets and extending outwardly toward the sides 5^c. The journals of the roll 29 both project through the brackets. On the protruding portion of one of these journals is made fast a ratchet-wheel 33. (Best shown in Fig. 9.) This ratchet is engaged by a dog 34, held in place by a spring 35, the dog and spring being secured to a washer 36, riveted to the bracket. The function of this dog and ratchet is to prevent the roll from turning in the reverse direction under the influence of the roll-actuating mechanism during the raising of the lid 5^g, as hereinafter explained. Upon the protruding portion of the opposite journal of the roll 29 is made fast a friction-wheel 37, which is located between the bracket 24 and the side of the case. The periphery of this friction-wheel is preferably composed of rubber, and it is arranged to be engaged by the flat face of a bar 38, provided with a pin 39, projecting into a guide groove or way 40, formed in the side of the case. To the lower extremity of the bar 38 is made fast an arm 41, whose rear extremity is connected with the lower end of a long link 42, whose upper extremity is pivotally connected with the arm 43^a of an angle-bracket 43, secured to the hinged lid 5^g. Hence as the lid 5^g is closed the link 42, the arm 41, and the friction-bar 38 are forced downwardly and the friction-wheel 37, together with the roll 29, actuated and the paper drawn through between the rolls 28 and 29 far enough to conceal the portion of the strip 22 containing the message within the cabinet.

To insure the proper performance of its function, the friction-bar is engaged on the front side or that opposite the wheel 37 by an auxiliary wheel 44, journaled in a swinging link-support 45, pivoted on a bracket 46, made fast to one side of the casing. The tension of this wheel 44 or its pressure upon the bar 38 is controlled by a coil-spring 47, one extremity of which is connected with the link 45, while the other extremity is made fast to a bracket 48, mounted on the side of the casing. The bar 38 is rearwardly inclined, and the wheel 44 is hung in such a manner that the pull of the spring forces it tightly against the bar. The downward movement of the bar 38 also has a tendency to cause the said wheel to grip the bar more tightly, while the upward movement of the bar has the opposite tendency. Hence the power of the wheel 44 in forcing the bar 38 against the friction-wheel 37 depends upon the strength or tension of the spring 47 and increases as the power of the spring is augmented.

The journals of the roll 28, which may be called the "tension-roll," pass through slots 26^e, formed in the brackets 24, and engage eyes formed on the extremities of short rods 49, which pass through apertured lugs 50 and 51, formed on the brackets. Each of these rods is provided with a stop 52, and between this stop and the lug 51 is located a coil-spring 53, which surrounds the rod. Hence these spring-actuated rods force the roll 28 tightly against the roll 29, whereby the turning of the latter roll in the manner heretofore described turns the roll 28 and actuates the message-strip 22 in the direction indicated by the arrows in Fig. 3. Each bracket 24 is provided with a flange 26^d, which guides the message-strip downwardly into the lower part of the cabinet after the said strip is drawn between the rolls 28 and 29.

The indicating mechanism will now be described.

To the bottom 5^b of the cabinet and at one side thereof is secured a slotted bracket 54, which forms a guide for the forward extremity of the arm 41 as the latter is forced downward to its limit of movement. The indicating mechanism is mounted on the inside of the front part 5^j of the cabinet below the door. To the inner surface of this part 5^j is made fast a metal plate 55. Between an inwardly-projecting narrow top flange 55^a, formed on this plate, and two metal straps 57 and 58, which are secured to the plate 55, is slidingly mounted a transverse bar 59, which is held at its limit of movement in the direction indicated by the arrow in Fig. 6 by a leaf-spring 60, which is held by a pin 62 and bears against a pin 61 on the bar 59. This bar 59 is provided with a notch 63, whose extremities engage the strap 57 and limit the movement of the bar in both directions. In the upper extremity of the metal strap 58, which projects above the plate 55, is pivoted one extremity of an indicating pointer or hand 64, provided with a bend 64^a, engaging a notch 59^a, formed in the upper edge of the bar 59. From this bend the pointer projects downwardly, forward of the plate 55, and is exposed through an opening formed in the part 5^j of the case, the said opening being closed by a piece of transparent material, as glass, which is set therein and designated by the numeral 72. Hence as the bar 59 is moved back and forth it is evident that the position of the pointer is correspondingly changed. To one extremity of the bar 59 is pivotally connected a dog 65, whose upper edge is engaged by a stop-pin 66, mounted on the bar. This dog is normally held in the horizontal position by means of a leaf-spring 67, passed through a pin 68. One extremity of this spring engages the dog 65, while the other extremity supports a dog 69 at its upward limit of movement, said dog being prevented from moving upward too far by a stop-pin 70, engaging a slot in the upper edge of the dog. The function of the dog 69 is to engage a bracket 71, mounted on the lower part of the door, and lock the bar 59 and the indicator 64 in the operated position, which is the position of the parts shown in full lines in Fig. 6. Before the device has been operated or after the door has been opened and the dog 69 released from the bracket 71 the bar 59 is at its limit of movement toward the right (referring to Fig. 6) and the dog 65 is in the position shown in dotted lines in the same figure. The outer extremity of this dog when in this position lies in the path of the forward extremity of the arm 41 and yields as it is engaged by the downwardly-moving arm until the latter has passed below it, when the dog returns to the dotted-line position under the influence of its spring. When the lid 5^g is raised and the arm 41 moved upwardly, said arm engages the beveled face 65^a of the dog and forces the latter, together with the bar 59 and the pointer 64, toward the left, referring to Figs. 5 and 6, and toward the right, referring to Figs. 1 and 4, when the pointer is in the operated position shown by full lines in Fig. 4. The dog 69 then engages the bracket 71 and locks the said parts in the operated position until the door is opened to take out the message, when the dog 69 is released and the parts returned to their normal position under the influence of the spring 60.

From the foregoing description the operation of the mechanism will be readily understood. The device is placed in a conspicuous position and secured to a stationary object. The person owning it turns the intelligencer-strip until the proper statement is exposed and sets the clock-hands to indicate the hour he will return, if this is the nature of the information he desires to leave. When a caller arrives, he raises the lid 5^g, drawing the link 42, the arm 41, and the bar 38 upwardly, the arm 41 engaging the beveled face of the dog 65 and forcing the bar 59 and the pointer 64 to the operated position, where they are held by the dog 69, engaging the bracket 71. As the bar 38 moves upwardly, its tendency is to release or diminish the pressure of the wheel 44, whereby the friction between the bar and the wheel 37 is reduced to a minimum. At the same time the roll 29 is prevented from turning by the spring-actuated dog 34 engaging the ratchet 36, fast on the journal of the said roll. After the lid 5^g is raised the caller writes his message on the portion of the message-strip extending above the plate 27 and then closes the lid, during which operation the long link 42, the arm 41, and the friction-bar 38 are forced downwardly, the rolls 28 and 29 actuated by the engagement of the bar 38 with the wheel 37, and the portion of the strip 22 upon which the message is written drawn into the case, while its position above the plate 27 is taken by a blank piece of the message-strip, which is ready for the next caller when he raises the lid. The operation of the parts, as heretofore described, is of course repeated every time the lid is raised, except that the indicating mechanism being once operated remains in the operated position. When the person owning the device returns and observes by the position of the indicator 64 that the device has been operated, he unlocks the door 5^d, and as it moves forward in the act of opening the bracket 71 is drawn away from the dog 69, allowing the bar 59 and the pointer 64 to return to their normal position. The portion of the message-strip containing the messages is then removed by drawing it over the edge of the knife 30, after which the door is closed and locked, when the device is again ready for use.

The upper part 5^k of the cabinet adjacent the inclined plate or table 27 is provided with a pencil-groove 5^m, in which may be placed a lead-pencil (see Fig. 1) for the convenience of callers.

Having thus described my invention, what I claim is—

1. In a memorandum and indicating device, the combination with a suitable case or cabinet having a movable lid, of message-strip-operating devices, an indicating device, and means connected with the said lid for actuating the said devices as the lid is operated.

2. The combination with a suitable case having a movable lid, of an indicator, rolls inclosed by the case, and means connected with the lid for actuating the rolls and indicator as the lid is operated.

3. In a memorandum and indicating device, the combination with a suitable case having a movable lid, an indicator, a supply-roll and strip-operating rolls inclosed thereby, of means connected with the lid for actuating the indicator and the operating-rolls as the lid is operated, whereby the strip is drawn from the supply-roll by the action of the operating-rolls.

4. In a memorandum and indicating device, the combination with a suitable cabinet or case having a movable lid, of an indicator, a main roll having a friction-wheel, a tension-roll coöperating with the main roll, and a friction-bar operated from the lid and engaging the friction-wheel of the main roll and means connected with the friction-bar for operating the indicator as the lid is actuated.

5. The combination with a case having a movable lid, a plate beneath the lid, an indicator for supporting the message-strip, a supply-roll, and strip-operating rolls, of means connected with and actuated by the lid for actuating the indicator and strip-operating rolls, whereby the strip is drawn from the supply-roll over the said supporting-plate.

6. The combination with a case having a hinged lid, inclosing a supply-roll, of a main strip-operating roll, a tension-roll coöperating with the main roll, a friction-wheel fast on the spindle of the main roll, a bar engaging the friction-wheel, an arm attached to said bar, and a link connecting said arm with the lid of the case, whereby as the lid is operated the friction-bar actuates the strip-operating rolls.

7. The combination with a suitable case having a hinged lid, of strip-operating rolls, one of which is provided with a friction-wheel, a bar engaging the friction-wheel, an arm attached to said bar, a link connecting said arm with the hinged lid of the case, and a spring-held pressure-wheel mounted on the case and engaging the friction-bar on the surface opposite the friction-wheel.

8. The combination with a suitable case having a movable lid and a front door, of an indicating-pointer pivotally mounted on the case, a spring-held transverse bar slidingly supported on the case and connected with the pointer in such a manner that the shifting of the bar operates the pointer, a spring-held dog mounted on the end of the said bar and arranged to move downwardly without actuating its bar, its face being beveled or inclined, an auxiliary spring-held dog mounted on the sliding bar, a bracket attached to the door and arranged to engage the auxiliary dog when the sliding bar is shifted from the normal to the operated position, a link connected with the top lid of the case, and an arm connected with the opposite extremity of said link and adapted to move downward and actuate the end dog of the sliding bar without shifting the bar and to engage said dog and shift the bar and indicating-pointer as it moves upward, the said arm being actuated from the lid of the case.

9. The combination with a suitable case having a movable lid, of an indicating-pointer movably hung in the case, a link connected at one extremity with the lid, an arm attached to the opposite extremity of the link, and means lying in the path of said arm for operating the indicating-pointer as the lid is actuated.

10. In a memorandum and indicating device, the combination with a case having a movable lid, of rolls for operating the message-strip, a friction-wheel carried by one roll, a bar adapted to engage said wheel, means for guiding the bar, an arm attached to the said bar, a link connecting said arm with the lid of the case, an indicating-pointer movably hung in the case, and means lying in the path of said arm for operating the indicating-pointer as the lid-actuated parts are operated.

11. In a memorandum and indicating device, the combination with a case having a movable lid, of rolls for operating the message-strip, a friction-wheel carried by one roll, a bar adapted to engage said wheel, means for guiding the bar, an arm attached to said bar, a link connecting said arm with the lid of the case, an indicating-pointer movably hung in the case, and means lying in the path of the said arm for operating the indicating-pointer as the lid-actuated parts are operated, the arrangement being such that as the lid is opened the indicator is operated, while as the lid is closed the operating-rolls are actuated.

12. In a memorandum and indicating device, the combination with a case having a movable lid, of rolls for operating the message-strip, a friction-wheel carried by one of said rolls, means for locking this roll against movement in one direction, a bar adapted to engage said wheel, means for guiding the bar, an arm attached to said bar, a link connecting said arm with the lid of the case, an indicating-pointer movably hung in the case, and means lying in the path of said arm for operating the indicating-pointer as the lid-actuated parts are operated.

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

CHARLES D. WEAVER.

Witnesses:
JOHN A. WEAVER,
WILLIAM FOOTE.