

No. 661,678.

Patented Nov. 13, 1900.

A. R. VERDIER.  
OFFICE INDICATOR AND REGISTER.

(Application filed Apr. 2, 1900.)

(No Model.)

2 Sheets—Sheet 1.

Fig. 1.

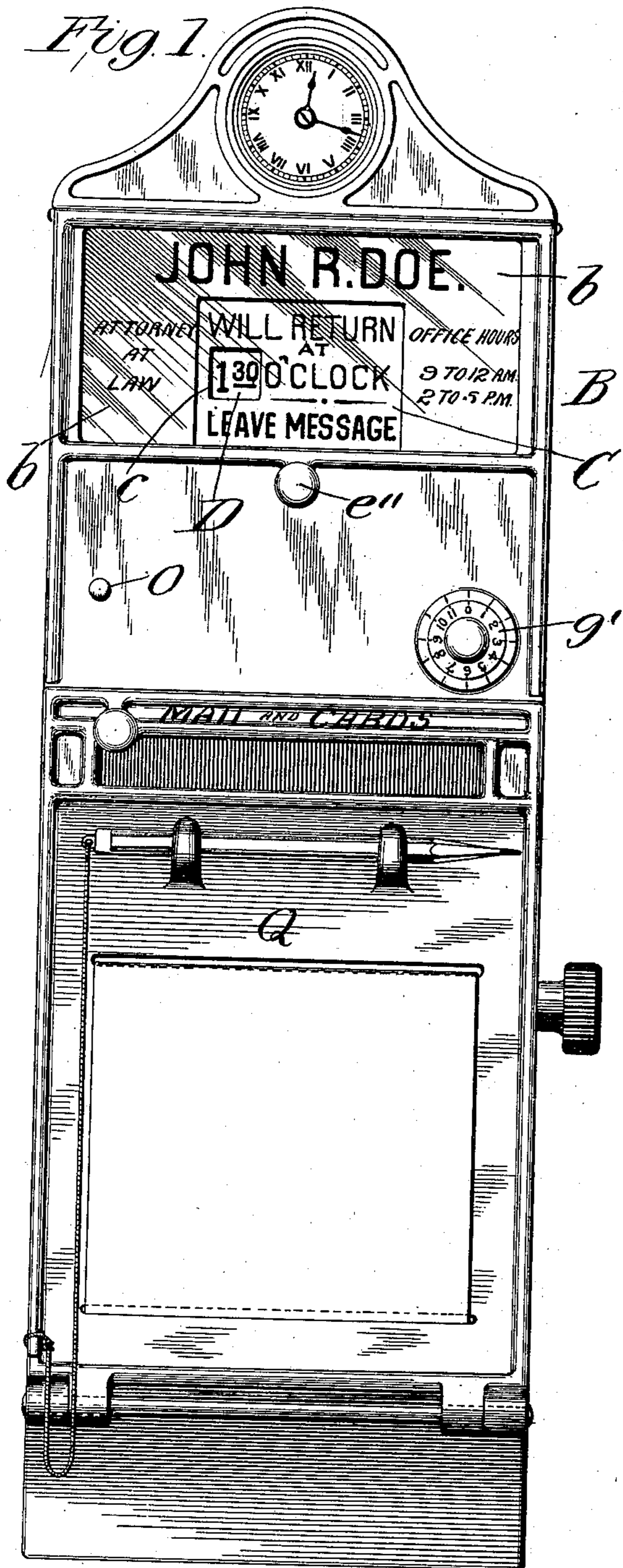
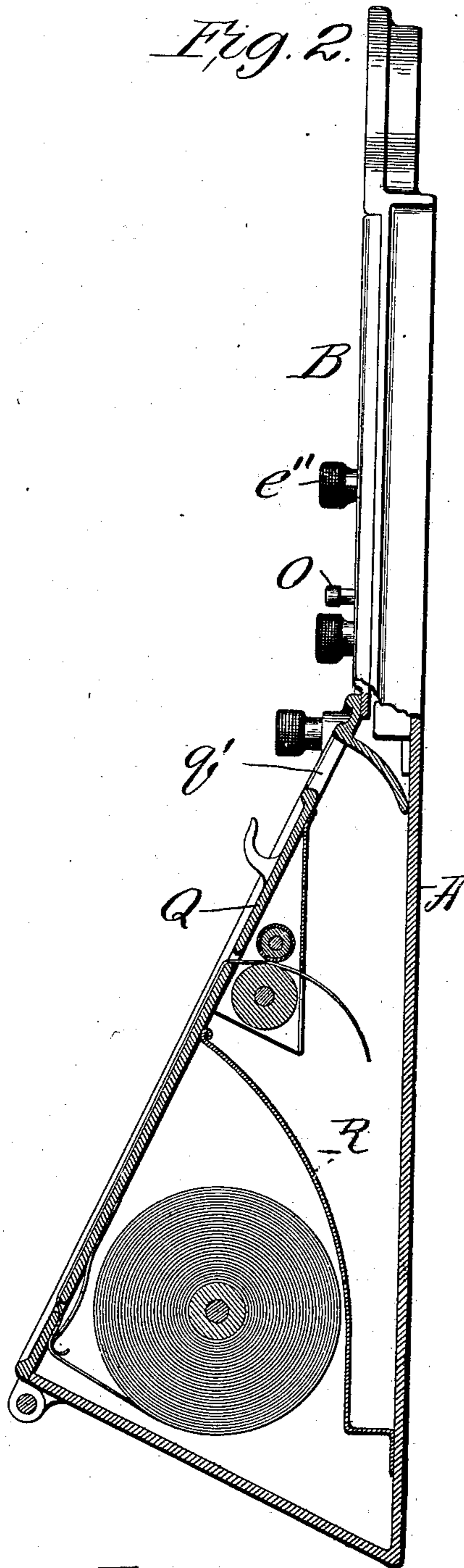


Fig. 2.



Attest:  
Jm. H. Ford  
George Bakewell

Inventor:  
Albert R. Verdier  
by Bakewell and Cornwall  
Attys.

No. 661,678.

Patented Nov. 13, 1900.

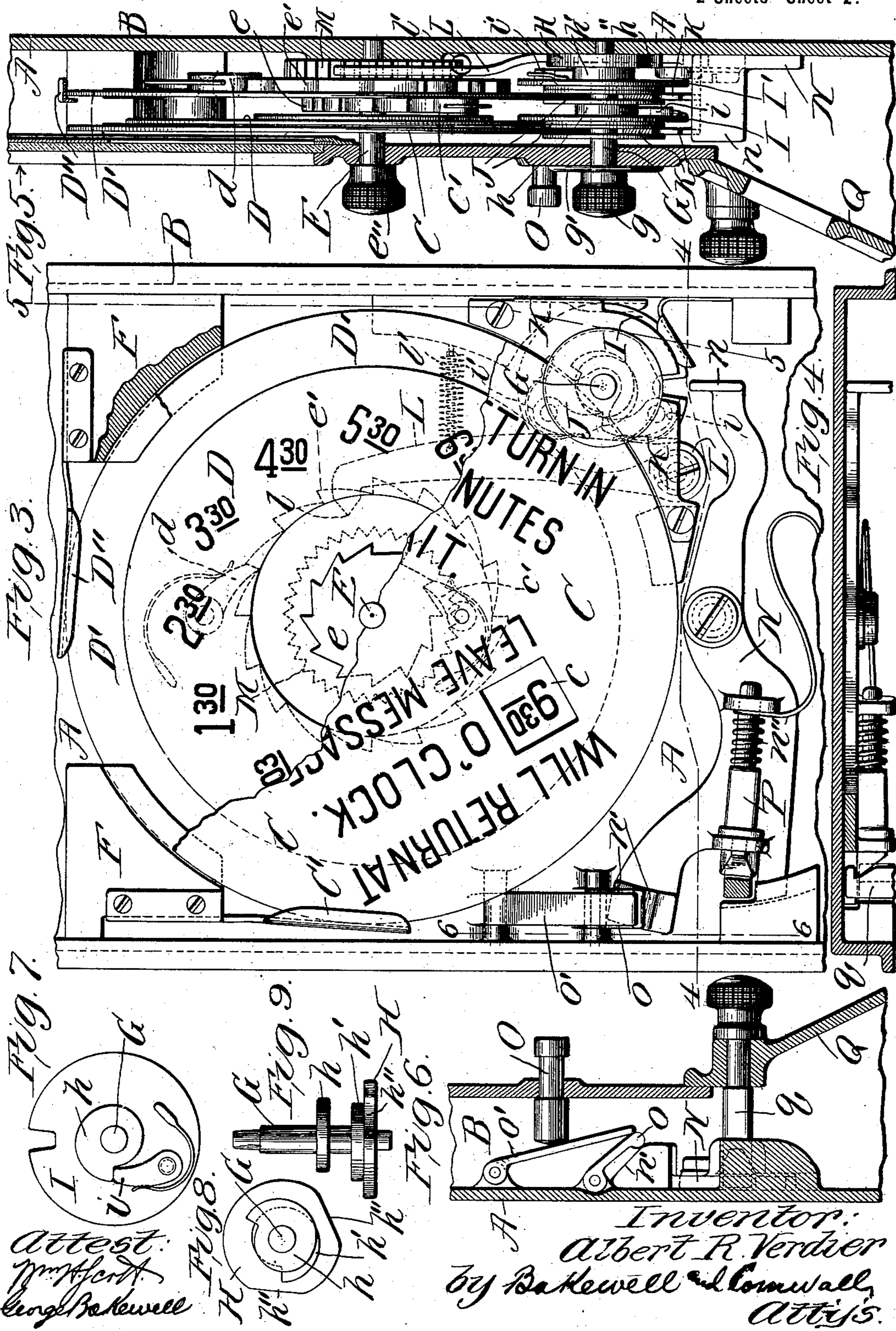
A. R. VERDIER.

OFFICE INDICATOR AND REGISTER.

(Application filed Apr. 2, 1900.)

(No Model.)

2 Sheets—Sheet 2.



# UNITED STATES PATENT OFFICE.

ALBERT R. VERDIER, OF ST. LOUIS, MISSOURI.

## OFFICE INDICATOR AND REGISTER.

SPECIFICATION forming part of Letters Patent No. 661,678, dated November 13, 1900.

Application filed April 2, 1900. Serial No. 11,088. (No model.)

*To all whom it may concern:*

Be it known that I, ALBERT R. VERDIER, a citizen of the United States, residing at the city of St. Louis, State of Missouri, have invented a certain new and useful Improvement in Office Indicators and Registers, of which the following is a full, clear, and exact description, 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, forming part of this specification, in which—

Figure 1 is a front elevational view of my improved office indicator and register. Fig. 2 is a side elevational view, the lower portion thereof being shown in section. Fig. 3 is an enlarged elevational view of the upper portion of the indicator. Fig. 4 is a sectional view on line 4 4, Fig. 3. Fig. 5 is a vertical sectional view on line 5 5, Fig. 3. Fig. 6 is a sectional view on line 6 6, Fig. 3. Fig. 7 is a plan view of one of the rotary tumblers and its pawl-and-ratchet mechanism. Fig. 8 is a detail view of the locking-disk for the indicator-dial, and Fig. 9 is a side elevational view of the same.

This invention relates to a new and useful improvement in an office indicator and register, the object being to construct a device of the character described which will indicate the time when an occupant will return, a strip of paper being provided on which a message may be written by the caller and then placed in a receptacle, so as to be accessible only to the person to whom it is addressed.

The invention consists in the construction, arrangement, and combination of the several parts, all as will hereinafter be described and afterward pointed out in the claims.

In the drawings, A indicates a back plate on which are mounted the several elements constituting my improved office indicator and register.

As shown in Fig. 1, the upper end of this back plate supports a clock, both for the convenience of an occupant of an office and those who may call during the absence of the occupant. The office indicator and register shown in the accompanying drawings is designed to be arranged on or near a desk or door of an office or other suitable place and is designed to be so manipulated that when the occupant is absent a caller will be able to see when the

occupant will return or the cause of his absence. The caller may also write a message on a slip of paper and place the written portion of the slip in a suitable receptacle, so as to be inaccessible to the public, but accessible to the occupant. This receptacle may also be employed for receiving mail and cards. The indicator before referred to is preferably contained in a suitable frame B, in the upper portion of which is arranged a glass panel *b*, a card or other printed matter being arranged behind the glass panel and containing the advertisement of the occupant of the office. This card is provided with an opening or perforation through which is exhibited printed matter arranged on a disk C—such, for instance, as “Will return at — o’clock. Leave message.” The time of return is exhibited through an opening *c* in the dial C, said time being printed on a dial or disk D, which is arranged immediately behind the disk C. Disk C contains appropriate printed matter, so that by rotating said disk different printed matter will be exhibited through the opening. Disk D contains different numbers, so that by rotating the same different numbers may be exhibited through the opening *c* of the disk C. Both disks C and D are mounted upon a spindle E and carry pawls *c'* and *d'*, respectively, which coöperate with oppositely-arranged ratchet-wheels *e* and *e'*, fixed to the spindle E. A handle *e''* is arranged on the outer end of spindle E, by which said spindle may be rotated.

It will be obvious that when said spindle is rotated to the left, according to the construction shown in Fig. 3, the ratchet *e'* will cause the disk D to be rotated through its pawl *d'*, the pawl *c'* of disk C riding idly over its coöperating ratchet *e* when the spindle is moving in this direction, and when the spindle is rotated to the right the ratchet *e* will drive the disk C, the disk D remaining idle. A friction-brake C' preferably coöperates with the periphery of disk C to hold the same stationary in an adjusted position and overcome the tendency of the drag of pawl *c'*, riding over the ratchet-wheel *e*, to rotate said disk backward.

D' indicates a disk located behind but conjoined to the disk D, and which to all intents and purposes is the same as the disk D, the

space between said disks being employed to accommodate the mechanism. In fact it might be said that the disk D is merely a face-plate elevated or extending forward from the disk D', so as to be close to the disk C. Disk D' has a friction-brake D'' bearing on its periphery for well-understood purposes.

F indicates grooved blocks secured to the back plate for guiding the disks C and D' and properly spacing them apart.

G indicates the spindle of a lock, provided with a knob *g* on its outer end by which the same may be rotated. This spindle also carries a dial-plate *g'*, provided with numbers around its edge similar to a combination-lock. Spindle G also carries two one-tooth ratchets *h* and *h'*, which are oppositely arranged, the shoulders or teeth thereof being circumferentially displaced about one hundred and twenty degrees. A disk H is also secured to the spindle G, whose periphery is flattened, as at *h''*. (See Fig. 8.)

I and I' indicate tumblers loosely mounted on the spindle G and carrying oppositely-arranged pawls *i* and *i'*, cooperating with the ratchets *h* and *h'*.

J indicates washers strung on the spindle G in front of the tumblers I and I', respectively, said washers being arranged in sets, preferably three in each set, two of which in each set are next the tumblers, while the third is spaced apart by bridles K (see Fig. 5) in order to permit the disks C and D' to rotate freely without affecting the position of the tumblers, or the tumblers which overlap said disks to rotate freely without affecting the position of said disks. Tumblers I and I' are provided with a notch in their peripheries, and it is obvious that when spindle G is rotated in one direction one of the tumblers will be positively operated, and when said spindle is rotated in the other direction the tumbler first operated will be left in a certain position and the other tumbler will be positively rotated to a position wherein the notches in the peripheries of said tumblers will be in alinement. The position of the tumblers may be determined by the dial-plate *g'*, carrying the numbers which come opposite a fixed point to determine the position of the notches of the respective disks when the spindle is operated in one direction or the other.

The plate H, which is fixed to the spindle G and which, as before stated, has its periphery flattened at *h''*, cooperates with a pivoted arm L, whose free end carries a tooth or projection *l*, cooperating with a notched disk M, secured to spindle E. Whenever the disk H is in such a position that its full periphery is presented to the arm L, said arm is forced inwardly, so that its tooth enters one of the notches of disk M and prevents spindle E from being rotated, and whenever a flattened portion of disk H is presented to arm L said arm is withdrawn from engagement with the notched disk M by a spring *l'*, so that the

spindle E may be rotated. Flattened portions of disk H are presented to the arm L only when one or the other of the notches in tumblers I and I' is brought opposite the projection *n*.

N indicates a lever having a projection *n* at one end designed to fit in the notches in the tumblers I and I', and when either of said tumblers is moved so that the notches are not in registration opposite the projection on said lever said lever is locked against movement. The other end of this lever carries a cam-face *n'*, with which cooperates a pivoted wing *o*, said pivoted wing being moved by another wing *o'*, having a greater arc of movement and cooperating with a push-button O. Whenever the notches of tumblers I and I' are in registration, the push-button may be operated so as to actuate the lever and force its lateral projection into said notches, and when the notches are out of registration opposite the projection on this lever the lever is locked in position. Lever N carries a spring-pressed bolt P, having its front face beveled, as shown in Figs. 3 and 4. A spring *n''* tends to hold the lever N in such position that its lateral projection will be out of the notches in the tumblers I and I' at all times except when the push-button O is operated.

Q indicates the hinged cover of a receptacle arranged at the lower portion of the device, the back plate A extending forwardly at its lower end, as shown in Fig. 2, and said cover being hinged to the forward edge of this extension. Cover Q carries a notched projection *q*, (see Fig. 4,) which cooperates with the spring-pressed bolt P, and when said cover is closed the spring-pressed bolt P locks the same.

From the above construction it will be observed that when the parts are in the position shown in Fig. 3 either of the dials C or D' may be rotated, as desired, and that the push-button may be operated to depress the lever N and throw the spring-pressed bolt out of the path of the projection *q*, so that the cover Q may be lowered and access gained to the receptacle. When pressure is relieved from the push-button O, the lever N returns to its normal position, and when the cover Q is closed the projection *q* forces the spring-pressed bolt P laterally until the notch in the end of said projection is in alinement with said bolt, which now moves outwardly to lock the cover. The disks having been adjusted properly, the knob *g* is rotated first to the right and then to the left to carry the notches of the tumbler out of the path of the lateral projection on the lever N and also move the arm L inwardly to lock the spindle E against movement. Persons unfamiliar with the combination of the lock are now prevented from tampering with either of the disks C or D' and access cannot be gained to the receptacle. Any person, however, knowing the combination of the lock may rotate the same properly, which will result in releasing spin-

dle E and alining the notches in the tumblers in the path of the lateral projection on lever N, so that the push-button O may be operated to unlock the cover Q.

5 Cover Q, as shown in Fig. 2, is provided with a slot or opening  $q'$  near its upper end through which mail or cards may be passed into the receptacle. This cover is also preferably provided with a support for a pencil.  
 10 The receptacle of which the cover Q forms the closure is divided into two compartments by a yielding partition-wall R, secured at its lower end to the back plate A. In the lower compartment is arranged a roll of paper which  
 15 passes through an opening in the cover Q and thence returns through another opening into the top compartment, passing between two rollers, one of which is a driving-roller whose spindle is provided with a knob outside of  
 20 the casing for the purpose of rotating said roller. Pawl-and-ratchet mechanism is also provided in connection with this driving-roller, whereby when a message is written on the strip of paper the same may be turned to  
 25 place the message inside of the receptacle for well-understood purposes.

The details of construction of the autographic feature of my improved office indicator and register form the subject-matter of  
 30 another application filed by me of even date herewith, and I will not therefore give a detailed description of the same here.

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

35 1. The combination with independently-operable disks, of a spindle on which the same are mounted, a notched disk on said spindle, an arm cooperating with said disk to lock the  
 40 same against movement, and a disk having a flattened portion on its periphery for cooperating with said locking-arm; substantially as described.

2. The combination with independently-  
 45 rotatable disks, of a spindle on which the same are mounted, a notched disk M, mounted on said spindle, a locking-arm cooperating with said notched disk, a disk H provided with a flattened portion on its periphery for actu-  
 50 ating said locking-arm, a spindle on which said disk H is mounted, and notched tumblers which are driven from said spindle, for locking said spindle against movement; substantially as described.

55 3. The combination with indicating-disks, of means for locking the same against movement, said means comprising a locking-arm, a toothed disk, a flattened disk for operating said arm, a spindle on which said disk is  
 60 mounted, a knob on said spindle for indicat-

ing the position of the flattened portion of the disk carried by said spindle, and a dial on said spindle; substantially as described.

4. The combination with a spindle G, of notched tumblers loosely mounted on said  
 65 spindle G, ratchets fixed to said spindle, pawls carried by the notched tumblers for cooperating with said ratchets, a lever cooperating with said notched tumblers, a locking-arm L, a toothed disk for cooperating with said lock-  
 70 ing-arm, and means on said spindle for actuating said locking-arm, and locking the indicating-disks against movement; substantially as described.

5. In an office indicator and register, the  
 75 combination with a back plate, of a casing arranged thereon, the lower portion of said casing forming a receptacle, a hinged cover for said receptacle, indicating-disks arranged in the upper portion of the casing, a spindle,  
 80 notched rotatable tumblers which are driven from said spindle, a locking-arm, a toothed disk M, means on said spindle for actuating said arm for locking said disks against move-  
 85 ment, a lock for the cover of the receptacle, and a lever carrying said lock and cooperating with said notched tumblers; substantially as described.

6. The combination with indicating-disks, of means for rotating the same, a spindle for  
 90 said disks, a notched disk M mounted on said spindle, a locking-arm L cooperating with said disk, a spindle G carrying a disk formed with a flattened periphery for operating said locking-arm, and washers on said spindle G  
 95 which serve as antifriction devices to prevent the rotation of either the indicating-disks, or the flattened disk, from affecting the position of the other disk or disks; substantially as described.

7. The combination with indicating-disks,  
 100 of a toothed disk M, a spindle G, a locking-arm L, means operated by said spindle for actuating said locking-arm to lock said indicating-disks against movement, a cover for a  
 105 receptacle, a lever carrying a locking-bolt for cooperating with said receptacle-cover, notched tumblers on spindle G cooperating with said lever to lock and release the same, pivoted wings also cooperating with said lever  
 110 to rock the same when released by the notched tumblers, and a push-button cooperating with said wings; substantially as described.

In testimony whereof I hereunto affix my signature, in the presence of two witnesses,  
 115 this 31st day of March, 1900.

ALBERT R. VERDIER.

Witnesses:

WM. H. SCOTT,  
 A. S. GRAY.