(No Model.) 2 Sheets—Sheet 1.

H. R. COFFEY.

FARE REGISTER.

No. 384,425. Patented June 12, 1888.

Fig. 1

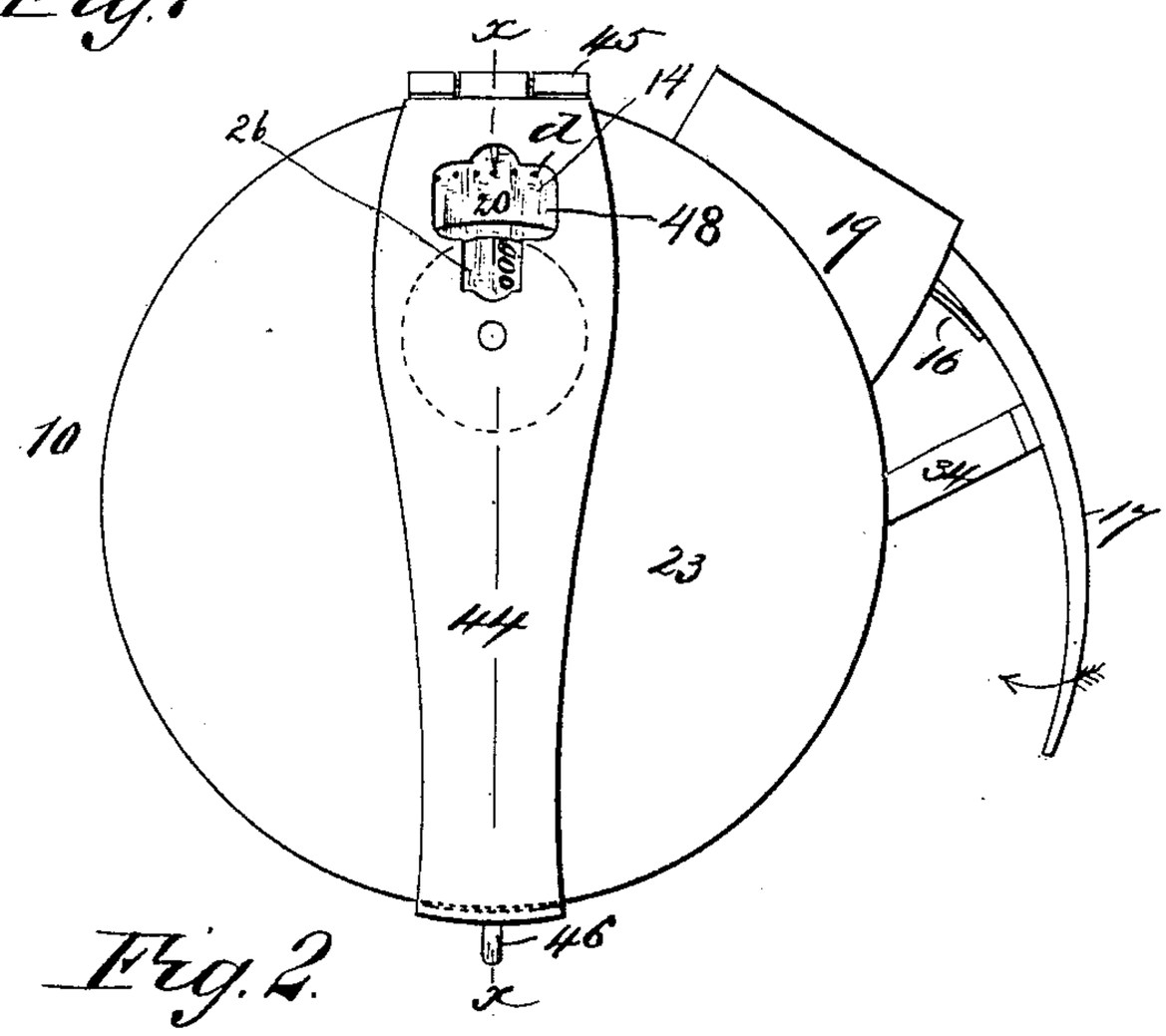
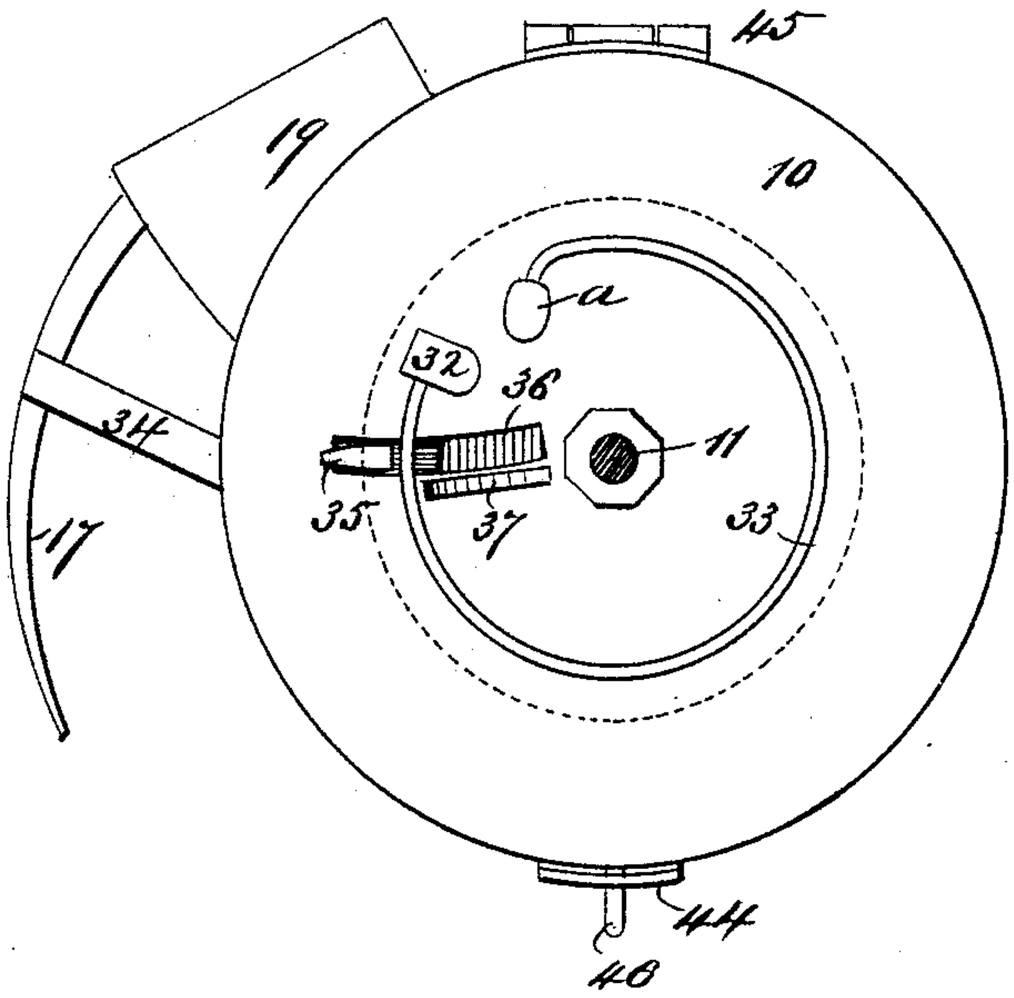


Fig. 2.



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(No Model.) 2 Sheets—Sheet 2.

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Fig. 3

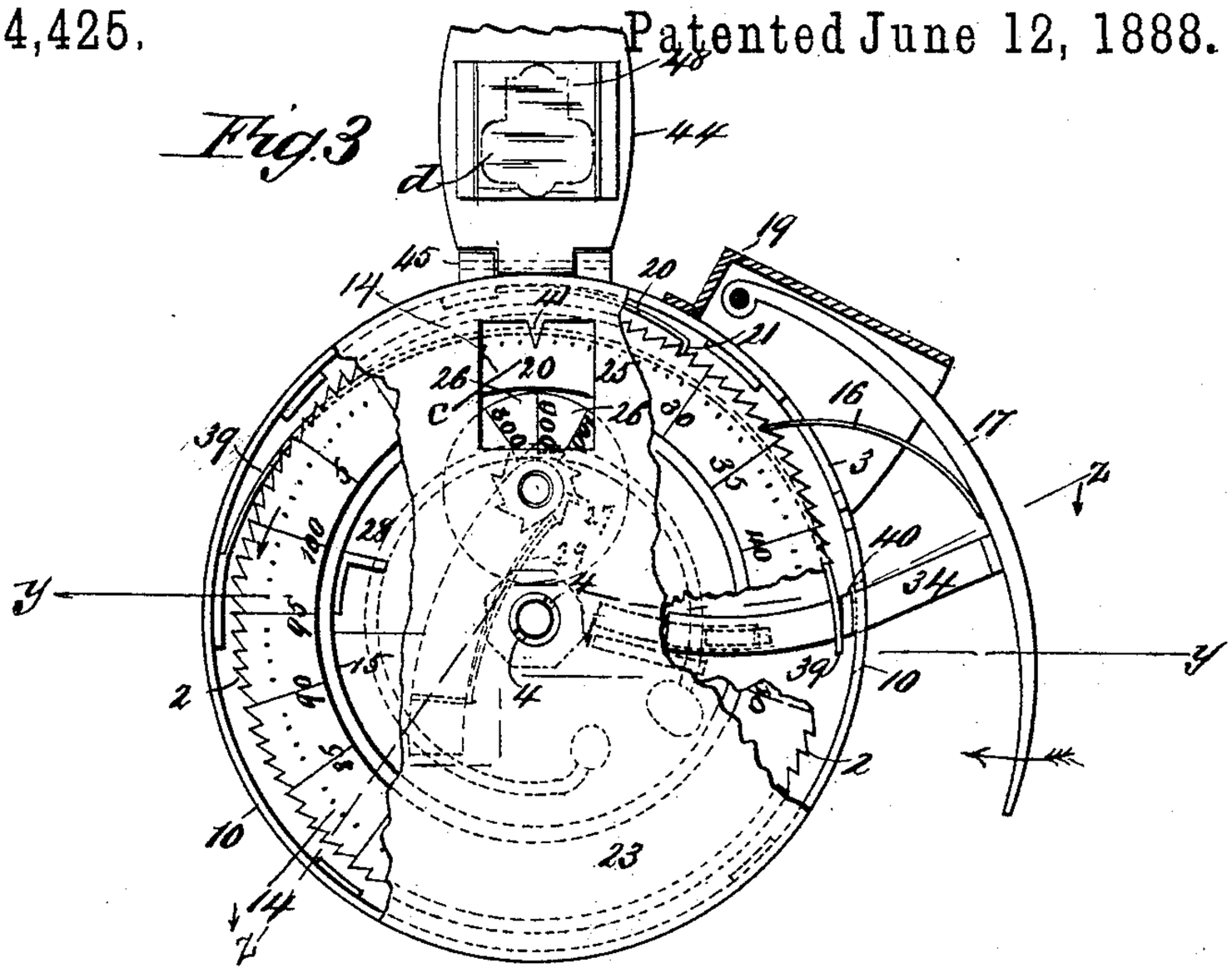


Fig. 4

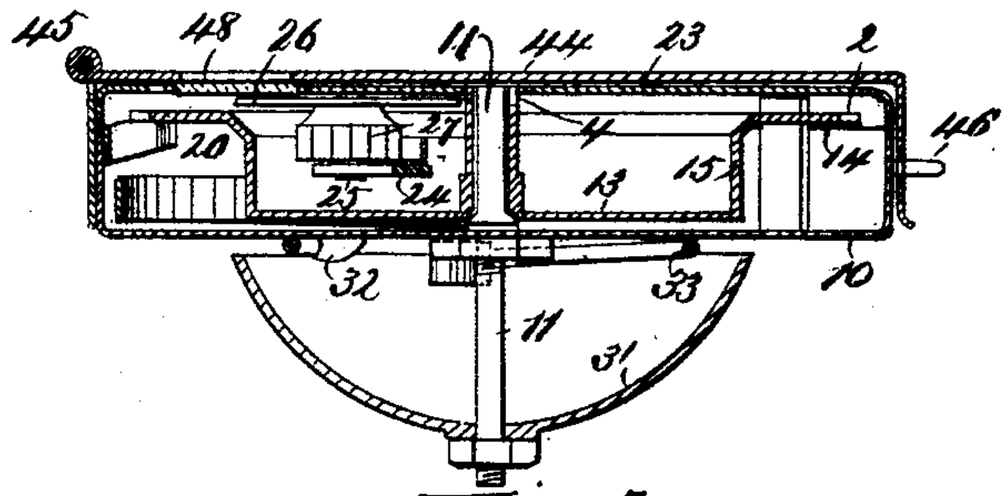


Fig. 5.

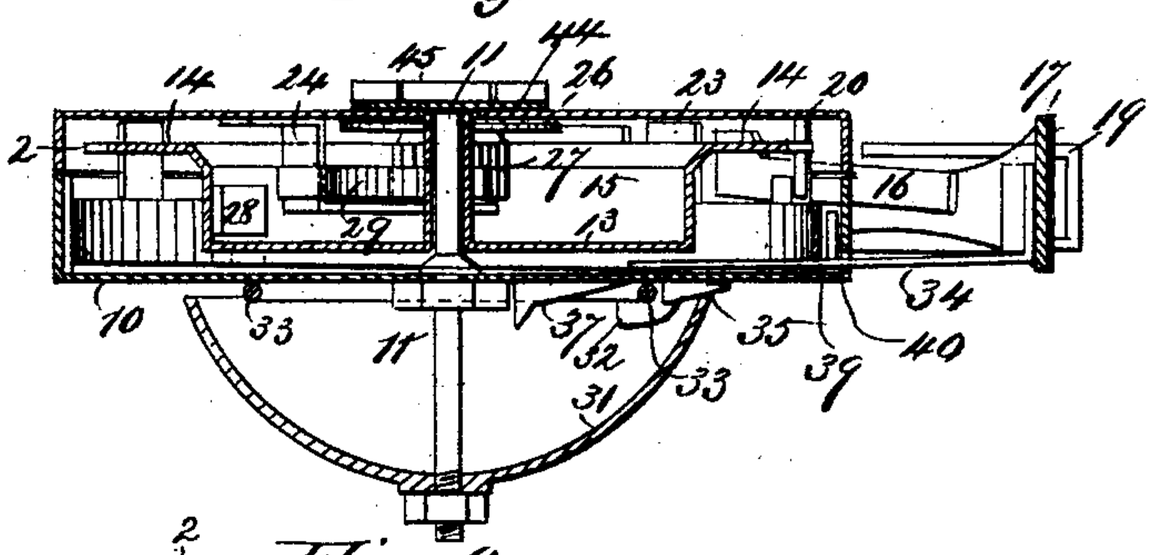
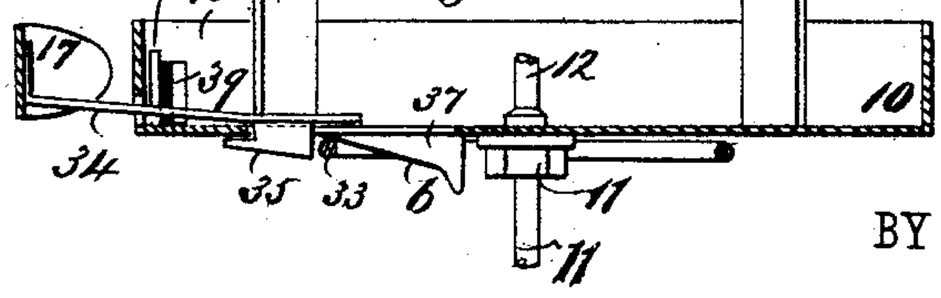


Fig. 6



WITNESSES:
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UNITED STATES PATENT OFFICE.

HENRY R. COFFEY, OF STOCKTON, CALIFORNIA.

FARE-REGISTER.

SPECIFICATION forming part of Letters Patent No. 384,425, dated June 12, 1888.

Application filed October 28, 1887. Serial No. 253,613. (No model.)

To all whom it may concern:

Be it known that I, HENRY R. COFFEY, of Stockton, in the county of San Joaquin and State of California, have invented a new and Improved Fare-Register, of which the following is a full, clear, and exact description.

This invention relates to fare-registers, the object of the invention being to provide a simple, cheap, convenient, and durable registering implement which may be readily carried about the person of the operator, all as will be hereinafter more fully described, and specifically pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a face view of my improved fare-register. Fig. 2 is a view of the back of the register, the bell being removed and the bell standard or post being shown in section. Fig. 3 is a face view of the register with the clasp thrown back, parts being broken away and shown in section to disclose the interior construction. Fig. 4 is a sectional view taken on line *x x* of Fig. 1. Fig. 5 is a sectional view taken on line *y y* of Fig. 3, the clasp, however, being shown as in its locking position; and Fig. 6 is a sectional view taken upon a line corresponding with the line *z z* of Fig. 3.

In constructing the register illustrated in the drawings above referred to I provide a main case, 10, which is preferably circular, and through the center of which there extends a post or standard, 11, the inner end of this post or standard 11 forming the arbor of a disk, 13, which carries a flange, 14, the flange being arranged in a plane that is substantially parallel with that of the disk, and being connected thereto by a rim, 15.

The peripheral edge of the flange 14 is formed with a number of teeth, 2, of which there are preferably one hundred, and these teeth 2 are engaged by a spring-pawl, 16, that is connected to a lever, 17, at its inner narrow end, said lever being pivotally mounted within a housing, 19, which is secured to the peripheral edge of the case 10, the wide outer end of said lever being outside of the housing and the spring-pawl entering the case through a slot or opening, 3, that is formed therein, the arrangement being such that when the lever 17 is moved in the direction of the arrow shown in connection therewith the flange 14 and disk 13 will be advanced in the direction of its arrow, all retrograde movement of the flange being prevented by a spring-arm, 20, which is connected to the casing 10, said arm being formed with a catch-tooth, 21, which engages the teeth 2 as they are advanced. The teeth of the flange 14 are numbered, as shown best in Fig. 3.

The case 10 is closed by means of a cover, 23, which is fitted to the case, and to the inner face of this cover there is secured a bracket, 24, which carries one end of a short shaft, 25, upon which there are mounted a disk, 26, and a ratchet-wheel, 27, the ratchet-wheel being provided with ten teeth, while upon the face of the disk there are ten radial lines, numbered, consecutively, from one hundred to one thousand, inclusive.

Upon the rim 15 there is an arm, 28, which extends inwardly, so that at every revolution of the rim the arm will engage one of the teeth of the ratchet 27 and advance it one step, any retrograde movement of the ratchet 27 and the disk 26, arranged in connection therewith, being prevented by a spring-arm, 29, which is carried by the bracket 24 and arranged to engage the teeth of the ratchet 27.

Upon the outwardly-extending section of the post 11, I mount a bell, 31, the hammer of which is shown at 32, said hammer being carried by a curved spring-arm, 33, which is connected to the case 10 at the point *a*. (See Fig. 2.)

To the lever 17, I connect an arm, 34, which extends inward through the case 10 and carries a projection, 35, one face of which is inclined, while the other face extends at about right angles to the supporting-arm 34. The projection 35 extends outward through a slot, 36, that is formed in the case 10, the arrangement being such that as the lever 17 is forced inward the spring-arm 33 will be borne upon by the rectangular face of the projection 35 and carried inward toward the post 11; but as the arm 33 is so carried inward it is forced to move from the case over the inclined face *b* of a lug or projection, 37, that is fixed to the case 10, so that after sufficient movement has

been imparted to the spring-arm it will be carried above and clear of the projection 35, and the hammer 32 will be suddenly thrown against the bell 31. Then, as the lever 17 is returned to its normal position—that is, to the position in which it is shown in the drawings—the inclined face of the projection 35 will bear against the spring-arm 33, the arm will be slightly raised, and will eventually fall into the position in which it is shown in Fig. 6, ready for a repetition of the movement just described.

The return of the lever 17 to its normal position may be brought about by any properly-arranged spring; but I prefer to employ a flat spring, 39, one end of which is connected to the inner face of the rim of the case 10, while the other end bears against an inwardly-extending projection, 40, that is secured to the arm 34.

In the cover 23 there is an opening, *c*, into which there extends a pointer, 41, the opening *c* being large enough to disclose a section of the face of the disk 26 and a section of the flange 14.

In order that the cover 23 may be firmly locked to place upon the case 10, I provide a clasp, 44, which is connected to the case 10 by a hinge, 45, the other end of the clasp being arranged to engage with an eye or staple, 46, through which a padlock or other proper locking attachment may be inserted; or any proper means might be employed to lock the free end of the clasp to the case 10. In this clasp 44 there is an opening, *d*, that is preferably protected by a glass plate, 48.

In order to set the register above described, the clasp 44 is thrown back, as shown in Fig. 3, and the disk 26 is moved until the numeral 900 is in line with the pointer 41. The disk 13 and its flange 14 are then advanced until its numeral 100 is in line with the pointer, the forward movement of the disk being brought about by means of a key that is arranged to engage recesses 4, that are formed in the upper or outer end of the hub of the disk, the cover 23 being apertured to provide for the introduction of the key.

After the register has been set as described, the first inward movement of the lever 17 will carry the flange 14 forward one step, and in so moving forward the arm 28 will strike against one of the teeth of the ratchet 27, and said ratchet will be advanced a single step, so that the numeral 1000 will be exposed. After a hundred fares have been rung up, the flange 14 will have made a complete revolution, and the arm 28 will once more have been brought to a position to engage with one of the teeth of the ratchet 27, and as the one hundred and first fare is rung up said arm will advance the ratchet, and consequently move the disk 26 so that the numeral 100 will be exposed.

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

1. In a fare-register, the combination, with the casing 10, the clasp 44, hinged to one side of the casing and provided with a glazed opening, *d*, and the staple 46 at the opposite side of the casing engaged by the free end of the clasp, of the cover 23 on the casing under the clasp, and having an opening, *c*, registering with the glazed opening thereof, and the rotary registering-disks within the casing having their graduations successively brought past said openings, substantially as set forth.

2. The combination, with the case, the disk 13, journaled therein and provided with a rim, 15, and a toothed graduated flange, 14, the projection 28 on the inner face of the rim and the disk 26 in the space inclosed by the said rim, but independent thereof, and having its axis parallel with that of the disk 13, a ratchet-wheel in the path of the projection 28, and the operating-lever having a pawl engaging the teeth of the flange 14, substantially as set forth.

3. The combination, with the case, the rotary disk journaled therein and provided with a rim having a toothed graduated flange and a projection on its inner face, a cover having an opening, *c*, and provided with a bracket, 24, a registering-disk, 26, provided with an operating-ratchet and journaled on said bracket, the ratchet being in the path of the said projection when the cover is in place, and the flange and disk 26 being visible through said opening, the hood 19 on the periphery of the casing, the lever 17, pivoted therein at its inner end, and the pawl 16 on the under side of the lever and projecting through the casing into engagement with the toothed flange, substantially as set forth.

4. The combination, with the casing having a bell, a registering mechanism, hammer-arm 33, and a fixed inclined projection, 37, adjacent to the inner side of said arm, of the lever 17, operating said registering mechanism, and having an arm, 34, provided with a projection, 35, adjacent to the outer side of the said arm, whereby when the arm 34 is moved inward the hammer-arm will be moved up the fixed inclined projection until it is free to pass the engaging edge of the projection 35, substantially as set forth.

5. The combination, with the casing 10, the post 11, secured within the casing, projecting through the rear face thereof, and having a gong, 31, on said outer end, the disk 13, journaled on the inner end of the post and provided with the rim 15, having toothed flange 14 and a projection on the inner side, and the cover 23, having a bracket and the disk 26, journaled thereon, and having ratchet 27 in the path of the said projection, of the lever 17, pivoted at its inner end to the casing and having a pawl, 16, projecting through the rim of the casing into engagement with the toothed flange, and an arm, 34, also projecting into the casing, and having a projection, 35, on its inner end extending through the casing under

the gong, and a second projection, 40, the spring 39 acting on said projection, the spring-hammer-arm 33, secured at *a* and extending into the path of the projection 35, and the inclined releasing projection 37 in the inward path of the spring-arm 33, substantially as set forth.

6. The combination, with the casing 10, the post 11, the registering-disk 13, having a hub notched at 4 and mounted on the post, the disk 26, rotated from the disk 13, and the operating mechanism, of the cover 23, having a central aperture to register with the outer notched end of the hub, and the hinged clasp 44, holding the cover in place on the casing and closing the said central aperture, substantially as set forth.

HENRY R. COFFEY.

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