

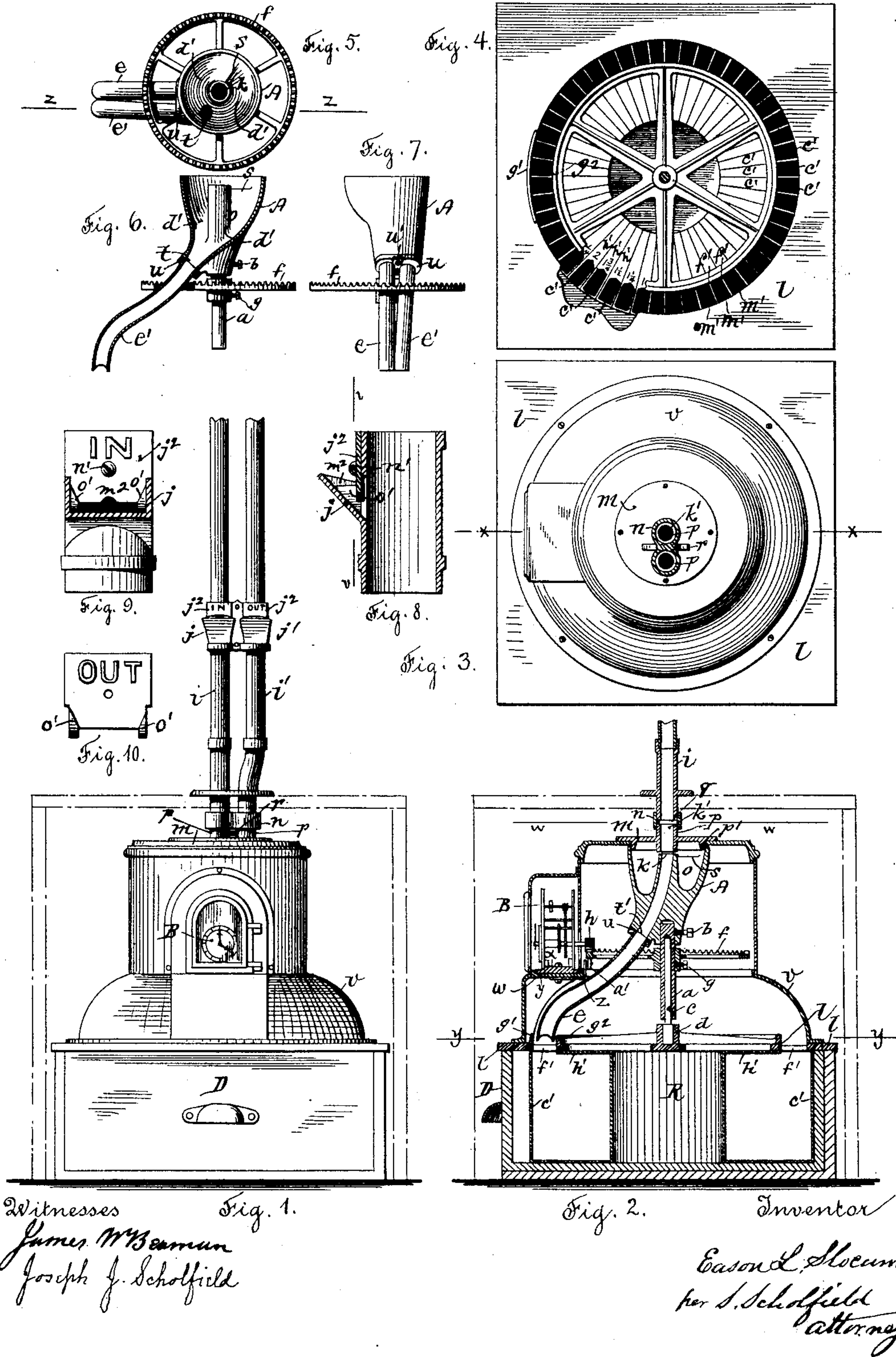
(No Model.)

2 Sheets—Sheet 1.

E. L. SLOCUM.  
TIME CHECK REGISTER.

No. 465,394.

Patented Dec. 15, 1891.



(No Model.)

2 Sheets—Sheet 2.

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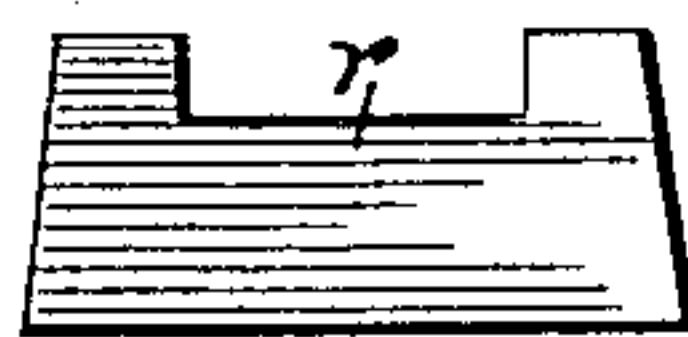
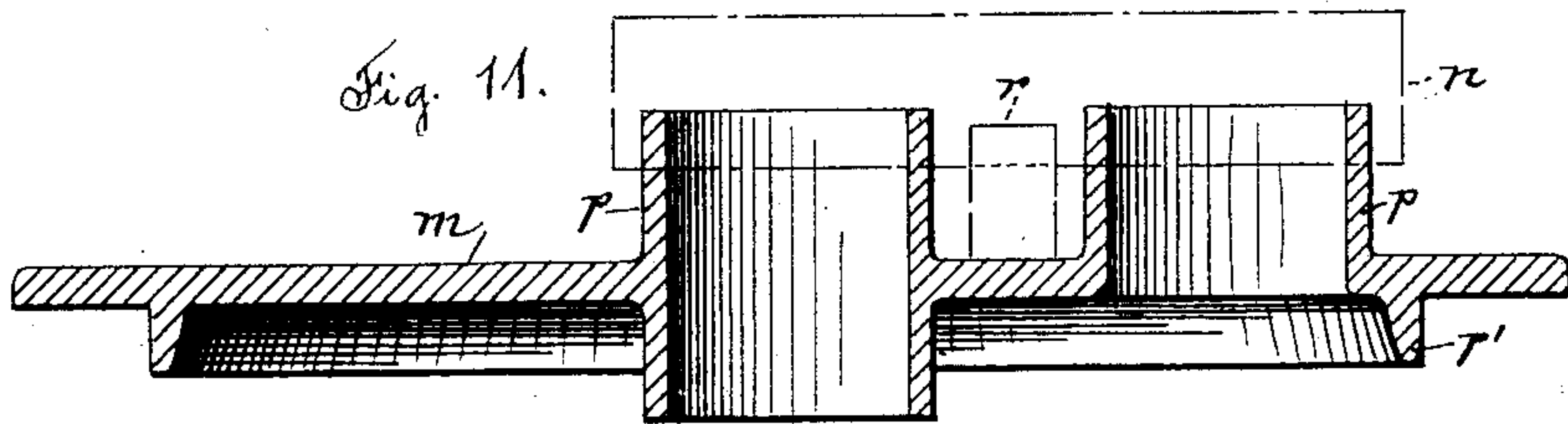


Fig. 12.

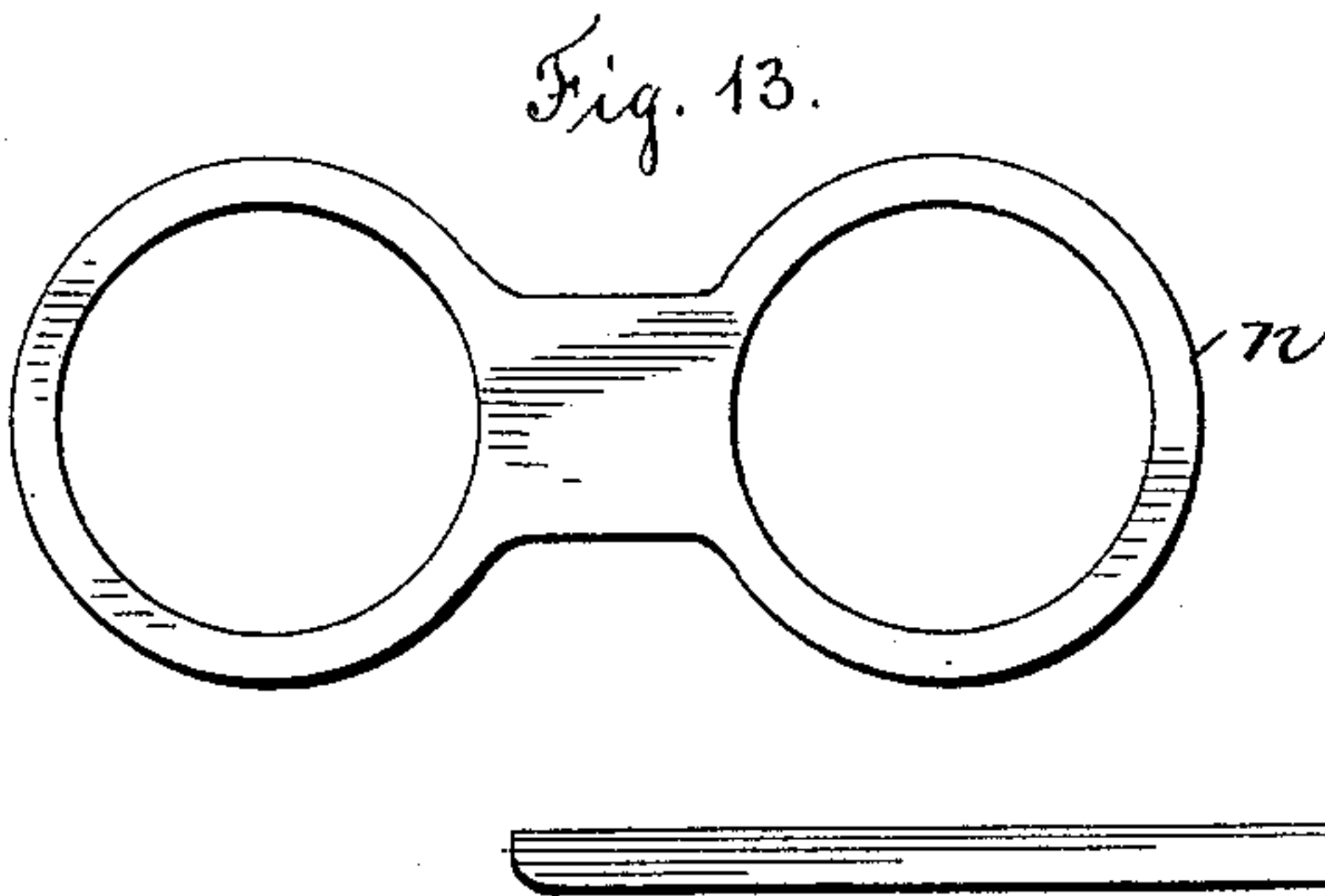
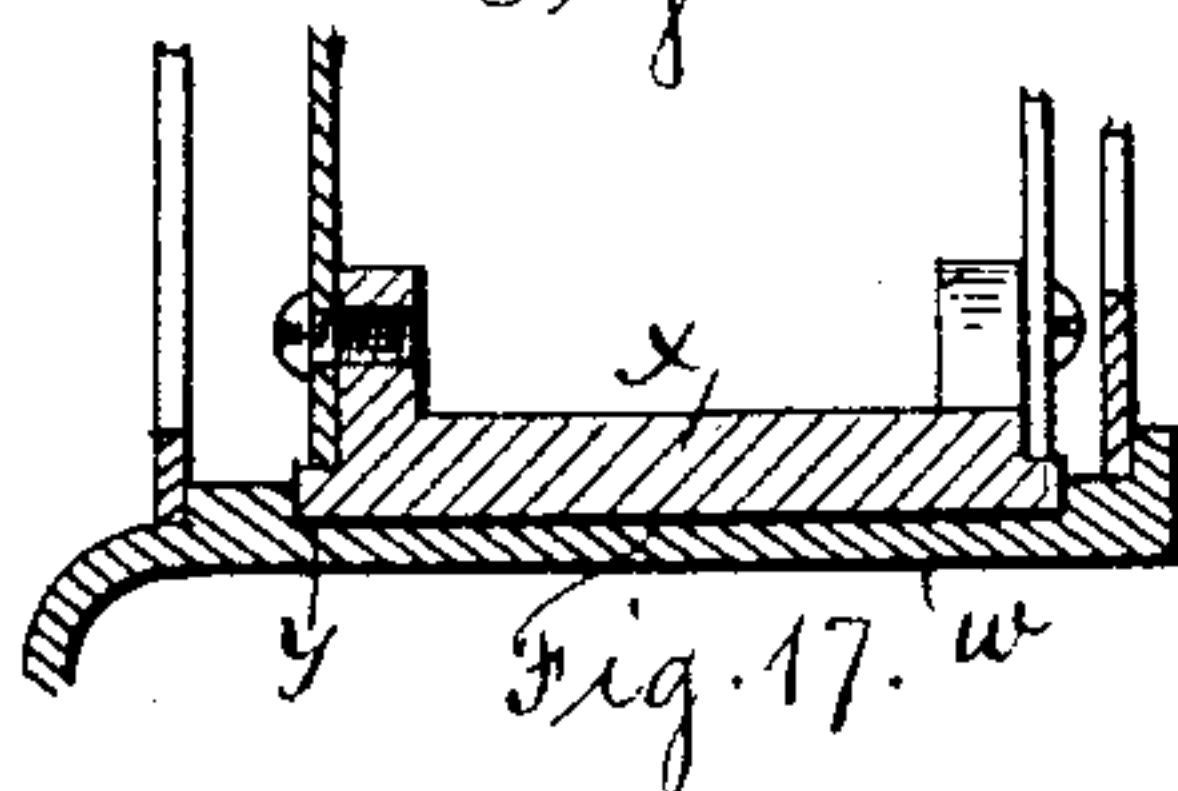
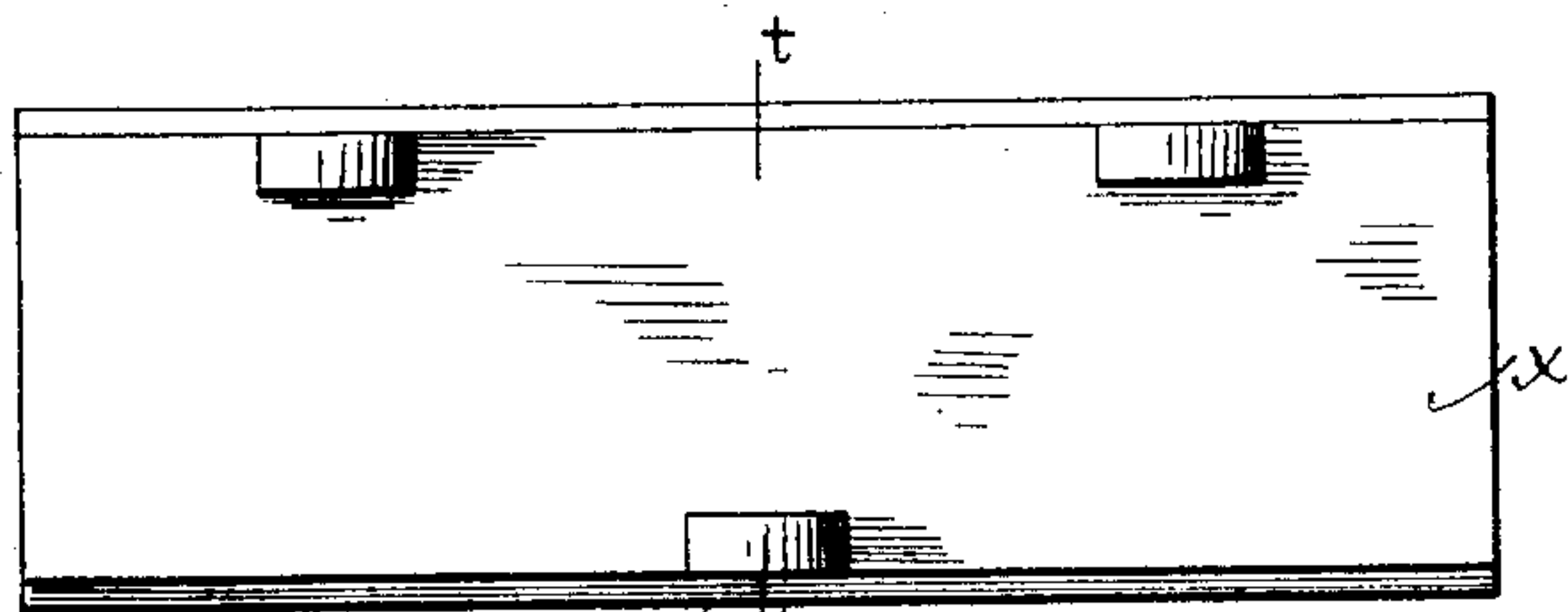
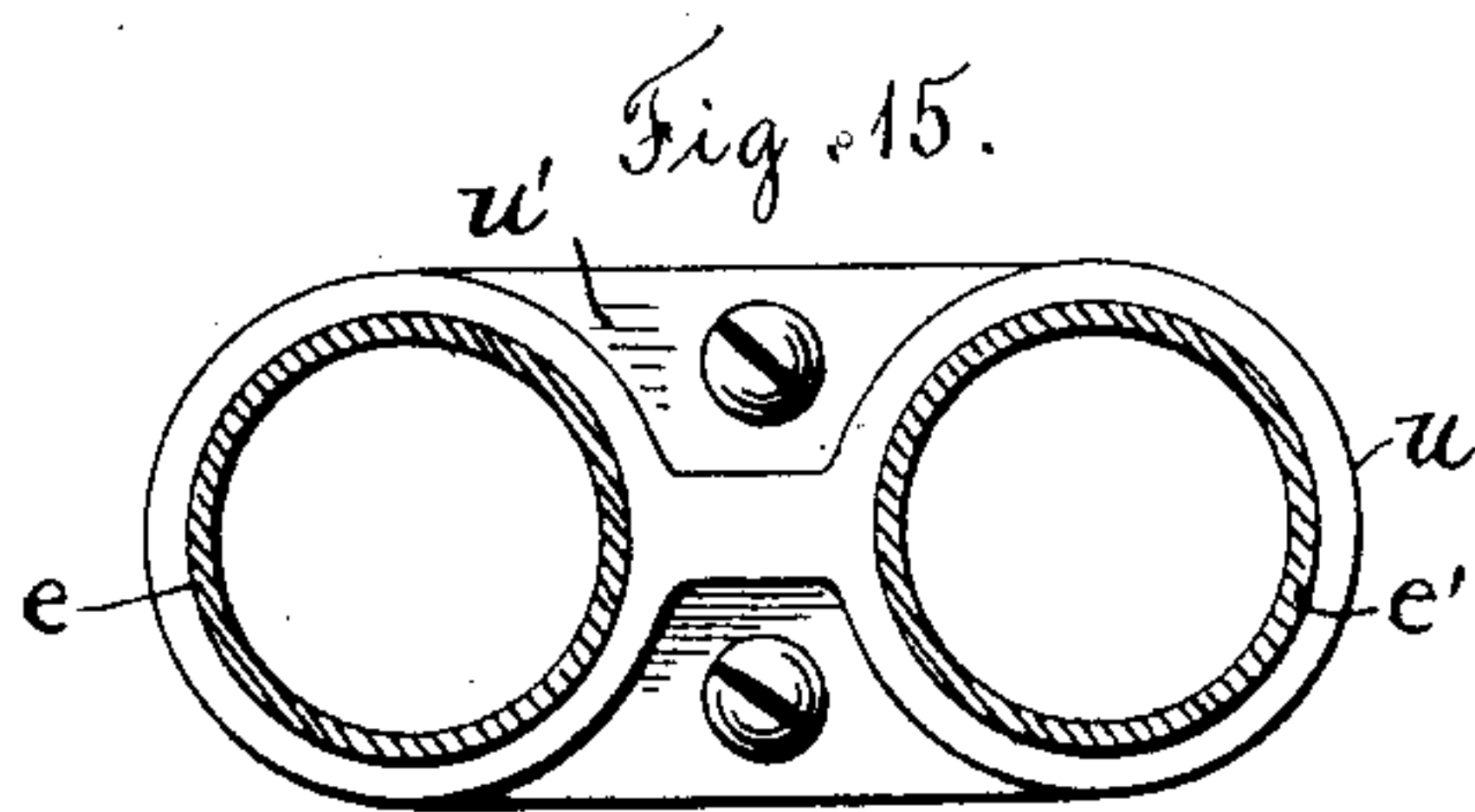


Fig. 14.



Witnesses.  
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Joseph J. Scholfield

Inventor  
Eason L. Slocum  
per J. Scholfield  
Attorney



# UNITED STATES PATENT OFFICE.

EASON L. SLOCUM, OF PAWTUCKET, RHODE ISLAND.

## TIME-CHECK REGISTER.

SPECIFICATION forming part of Letters Patent No. 465,394, dated December 15, 1891.

Application filed November 18, 1889. Serial No. 330,784. (No model.)

*To all whom it may concern:*

Be it known that I, EASON L. SLOCUM, a citizen of the United States, residing at Pawtucket, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Time-Check Registers, of which the following is a specification.

My invention consists in the improved construction and combination of the several parts, as hereinafter fully set forth.

Figure 1 represents a front elevation of my improved time-check-registering apparatus. Fig. 2 represents a central vertical section of the same. Fig. 3 represents a transverse section taken in the line *ww* of Fig. 2. Fig. 4 represents a top view, the upper part above the line *yy* of Fig. 2 being removed, with a slight portion of the covering-plate for the till-chamber broken away to show the outer edge of a few of the radial receiving-tills. Figs. 5, 6, and 7 are detail views of the funnel and the attached check-distributing tubes, Fig. 5 being a top view, Fig. 6 a vertical section, and Fig. 7 a side elevation. Fig. 8 represents a vertical section of one of the receiving-stations. Fig. 9 represents a front view of the receiving-station shown in Fig. 8. Fig. 10 represents a front view of one of the check-guides separate from the station. Fig. 11 represents an enlarged central vertical section of the cover of the receiving-funnel. Fig. 12 represents an enlarged side view of the key for supporting the double connecting-sleeve for the conducting-tubes from the stations. Fig. 13 represents an enlarged top view of the double connecting-sleeve. Fig. 14 represents an enlarged side elevation of the supporting roller and bracket for the rim of the crown-wheel upon the shaft of the receiving-funnel. Fig. 15 represents an enlarged under side view of the double connecting-sleeve for connecting the distributing tubes to the lower end of the funnel. Fig. 16 represents an enlarged top view of the clock-plate; and Fig. 17 represents a transverse section of the same, taken in the line *tt* of Fig. 16.

In the accompanying drawings, A represents the receiving-funnel for the checks deposited at the station, which funnel in form approximates an inverted cone, and extending downwardly therefrom is a hollow shaft

or spindle *a*, which is secured to the funnel by means of the set-screw *b*, the said spindle *a* being made to fit the upright stationary spindle *c*, which is attached to the stationary hub *d* upon the covering-plate *l* of the till-chamber R, so that the receiving-funnel A and the attached distributing-pipes *e e'* will be caused to revolve upon the supporting-spindle *c*. To the hollow shaft or spindle *a* is attached the crown-wheel *f* by means of the set-screw *g*, the teeth of the said crown-wheel engaging with the pinion *h* of the clock mechanism B, by means of which the funnel A is to be intermittently rotated.

The check-receiving conductors *i i'* are arranged above the funnel A. The conductor *i* for receiving the "in" checks passes from the check-receiving station *j* to the central aperture *k'* of the funnel-covering plate *m*, which is directly in line with the central aperture *k* of the funnel A, the said aperture being provided at its lower end with the check-distributing pipe *e*, which is curved at its end portion in order to direct the falling checks squarely into the receiving-tills.

The conductor *i'* for receiving the "out" checks runs parallel with the conductor *i*, and both conductors are connected to the funnel-covering plate *m* by means of the double sleeve *n*, the conductor *i'* being arranged eccentrically of said plate, so that the checks passing downward through said conductor will enter the cavity *o* of the funnel A. The covering-plate *m* is provided with the short upwardly-extending tubes *p p*, over which the double sleeve *n* is placed, and in effecting the connection of the said conductors *i i'* to the said tubes of the cover-plate *m* the said double sleeve *n* is held in an elevated position, so as to inclose the joint *q*, as shown in Fig. 2, by means of the removable key *r*, thus preventing the escape of the thin checks at the joint *q* and facilitating the removal of the registering portion of the apparatus for repairs without disturbing the conductors *i i'*. The cavity *o* of the funnel A is provided with an apex *s*, and the interior surface of the funnel provides two oppositely-receding spiral channels *d' d'* from the said apex, which are so constructed as to present a rounded surface in every part, the said channels terminating in the eccentric circular opening *t*,



which is arranged diametrically opposite the apex *s*, and from the lower end of the said opening connection is made to the receiving-tills by means of the distributing-pipe *e'*, which  
 5 is arranged parallel with the distributing-pipe *e* and similarly bent for conducting the checks squarely into the receiving-tills, and the parallel pipes *e e'* are connected to the lower end of the funnel A by means of the double sleeve  
 10 *u*, fitting closely to the apertures *t* and *t'* of the funnel, and secured to the lower surface of the said funnel by means of screws passing through the flange *u'* of the sleeve, the said conducting-pipes being made to fit tightly  
 15 within the apertures of the said sleeve, thus forming a smooth and uninterrupted passage for the checks from any station to the receiving-tills. The circular cover *m*, arranged over the top of the cavity *o* of the funnel A, is provided with the downwardly-extending circular flange *p'*, adapted to fit closely within the circular wall of the cavity *o*, the said flange being adapted to prevent the checks as they strike into the cavity *o* from rebounding out  
 25 of the same.

By reference to Fig. 2 it will be seen that the lower portion of the parallel tubes *e e'* is bent to conform to the curvature of the inclosing dome *v*, and that near the end of said tubes they approach a vertical position, this  
 30 form insuring the delivery of the checks into the tills without the possibility of their shooting out upon the till-cover. Upon the dome *v* is constructed a shelf *w* for a clock-rest. The clock is firmly secured upon the plate *x*,  
 35 which fits into the groove *y* of the clock-rest, and upon the under surface of the clock-rest is secured the arm *z*, which supports at its outer end the friction-roller *a'*, the said roller  
 40 being adapted to bear against the lower side of the rim of the crown-wheel in order to prevent the possibility of the disengagement of the teeth of the crown-wheel from the teeth of the pinion by mischievous employés.

The stationary cover-plate *l*, which serves to cover the chamber R for the tills *c' c'*, is provided with the radial apertures *m'*, which are separated from each other by means of ribs *f'*, which correspond in number with the  
 50 number of the tills *c'*.

A vertical guard-flange *g'* is provided exteriorly of the mouths of the distributing-pipes *e e'* to prevent the checks from shooting out onto the cover-plate *l* under the clock-rest *w*, and a similar guard-flange *g<sup>2</sup>* is provided interiorly of the mouths of the distributing-pipes to prevent the inward rebound of the said checks.

The tills *c'*, which are radially arranged in  
 60 the chamber R, are upright tin boxes placed in a drawer D and made in the shape of a truncated wedge, the inner portion of the till being provided with a permanently-attached cover *h'*, which serves to prevent the possibility of the checks bounding out of the till  
 65 while being delivered therein.

The check-receiving stations *i i'* are each

provided with a check-guide *j<sup>2</sup>*, which consists of a flat plate of metal adapted to fit into the hopper *m<sup>2</sup>* of the station and secured in place  
 70 by means of the screw *n'*, the said guide being provided with wedge-shaped flanges *o' o'*, which fit into the hopper of the station and form side walls for the same, the said walls serving to allow only a single check of the  
 75 desired size to pass through the receiving-opening of the station, and by simply changing the check-guide *j<sup>2</sup>* the station may be adapted for checks of various sizes.

I claim as my invention—

1. The combination, with the receiving-funnel A, having the central opening *k*, the cavity *o*, the eccentric opening *t* at the bottom of the cavity *o*, the apex *s*, arranged opposite the opening *t*, the opposite spirally-descending channels *d' d'*, the hollow shaft or spindle  
 85 *a*, and the stationary supporting-spindle *c*, of the stationary cover *m*, provided with the annular flange *p'* and openings *k' k<sup>2</sup>*, conducting-pipes *i i'*, and the distributing-pipes *e* and *e'*, substantially as described.

2. The combination, with the receiving-funnel A, the stationary cover *m*, provided with the openings *k'* and *k<sup>2</sup>*, and the upwardly-extending short tubes *p p*, of the check-receiving stations *j* and *j'*, the conducting-pipes *i*  
 95 and *i'*, the double sleeve *n*, adapted to inclose the joint *q* between the pipes *i i'* and tubes *p p*, and the key *r* for holding the sleeve *n* in its elevated position, substantially as described.

3. The combination, with the receiving-funnel A, provided with the hollow shaft or spindle *a*, the central opening *k*, the cavity *o*, the eccentric opening *t* at the bottom of the cavity *o*, the apex *s*, arranged opposite the opening *t*, and the opposite spirally-descending channels *d' d'*, of the stationary supporting-spindle *c* and the distributing-pipes *e* and *e'*, connected to each other by means of the double sleeve *u*, which is attached to the funnel A,  
 100 substantially as described.

4. The combination, with the receiving-funnel A, provided with the hollow shaft or spindle *a*, the stationary supporting-spindle *c*, and the crown-wheel *f*, of the driving-pin  
 105 *h*, connected with the clock-movement B, and the friction-roller *a'*, adapted to prevent the disengagement of the teeth of the pinion from crown-wheel, substantially as described.

5. The combination, with the receiving-funnel A, provided with the hollow shaft or spindle *a*, and the crown-wheel *f*, operated by the clock-movement B, of the stationary supporting-spindle *c*, the driving-pin  
 115 *h*, the clock-movement B for imparting movement to the pinion *h*, the grooved clock-rest *w*, and the clock-holding plate *x*, held in the groove *y* of the clock-rest, substantially as described.

6. The combination, with the receiving-funnel A, provided with the hollow shaft or spindle *a*, the crown-wheel *f*, operated by the clock-movement B, and the distributing-pipes *e* and *e'*, of the cover-plate *l* for the till-chamber R, provided with the stationary support-  
 130



ing-spindle  $c$ , the apertures  $m' m'$  over the receiving-opening of the tills, and the guard-flanges  $g'$  and  $g^2$ , which serve to prevent the escape of the checks, substantially as described.

which fit the hopper and form side walls for the same between which the checks will pass to enter the conducting-pipe, substantially as described.

EASON L. SLOCUM.

In presence of—

EDWARD W. BLODGETT,  
W. B. TANNER.

7. The combination, with the check-receiving hopper  $m^2$ , of the removable plate  $j^2$ , provided with the wedge-shaped projections  $o' o'$ ,