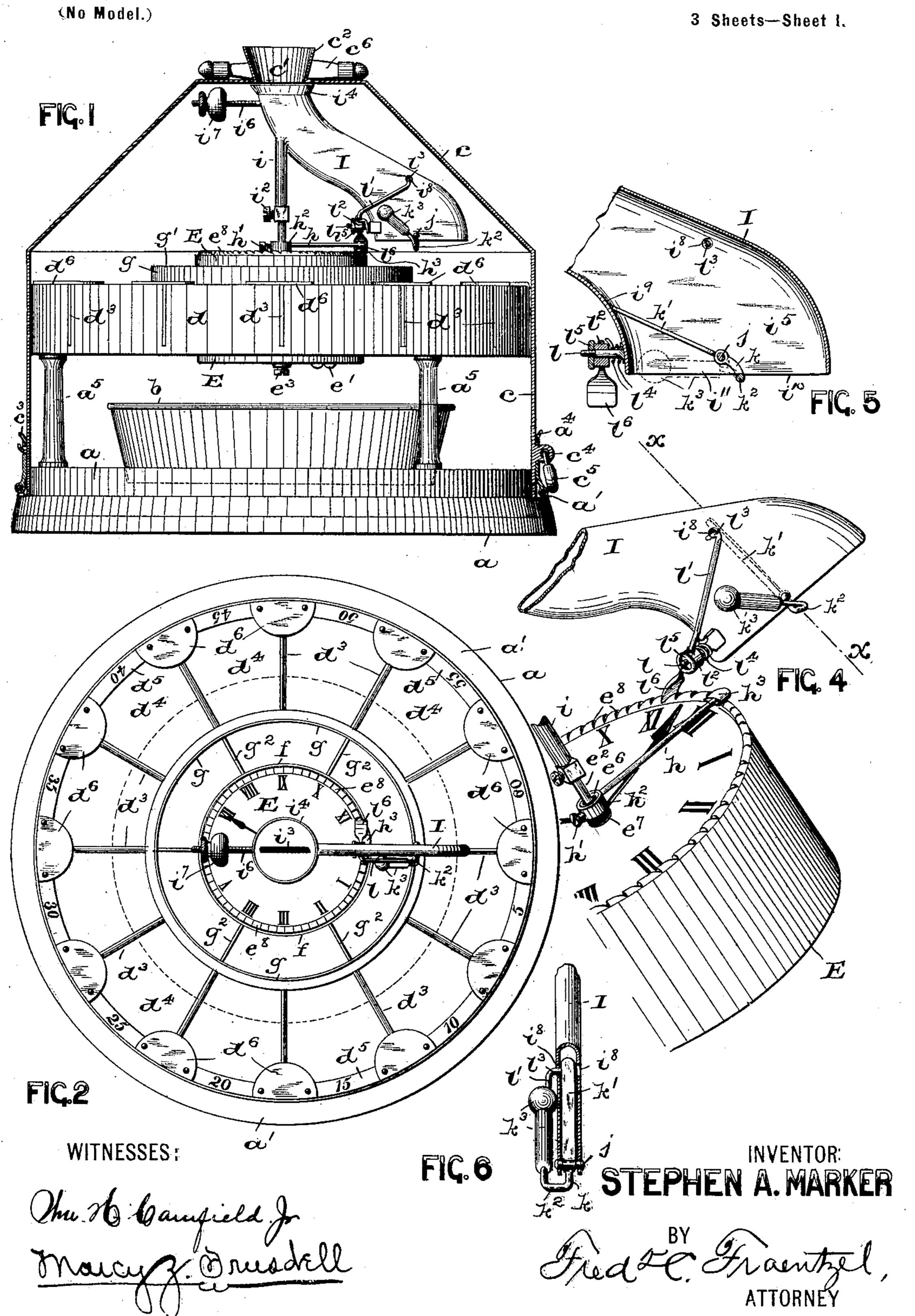
S. A. MARKER. TIME RECORDER.

(Application filed Nov. 11, 1897.)



No. 614,564.

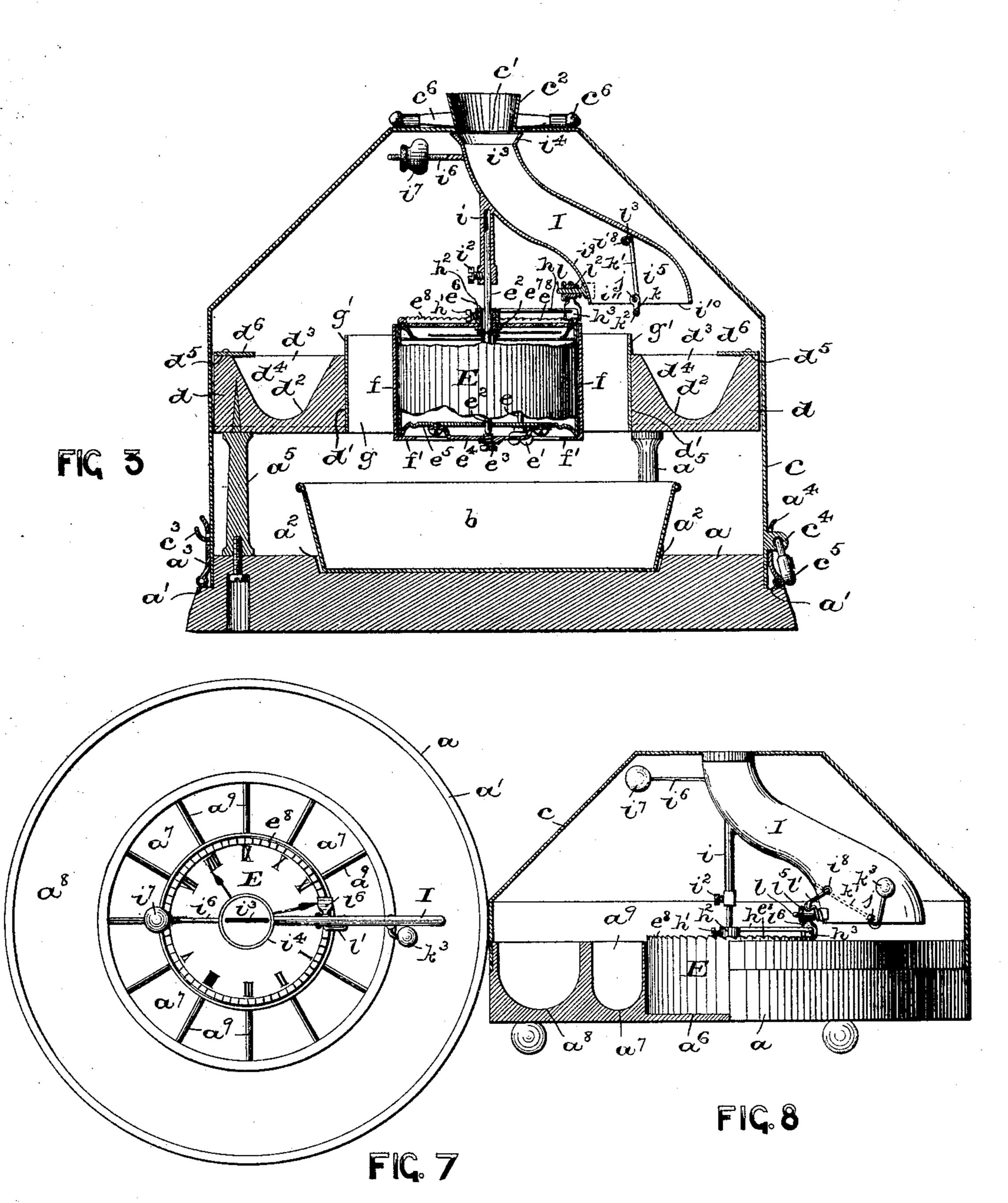
Patented Nov. 22, 1898.

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(No Model.)

3 Sheets—Sheet 2.



WITNESSES:

Mu Blampild. Jo Marcy Frusdell INVENTOR:

STEPHEN A. MARKER,

Fred Fraintzel, ATTORNEY No. 614,564.

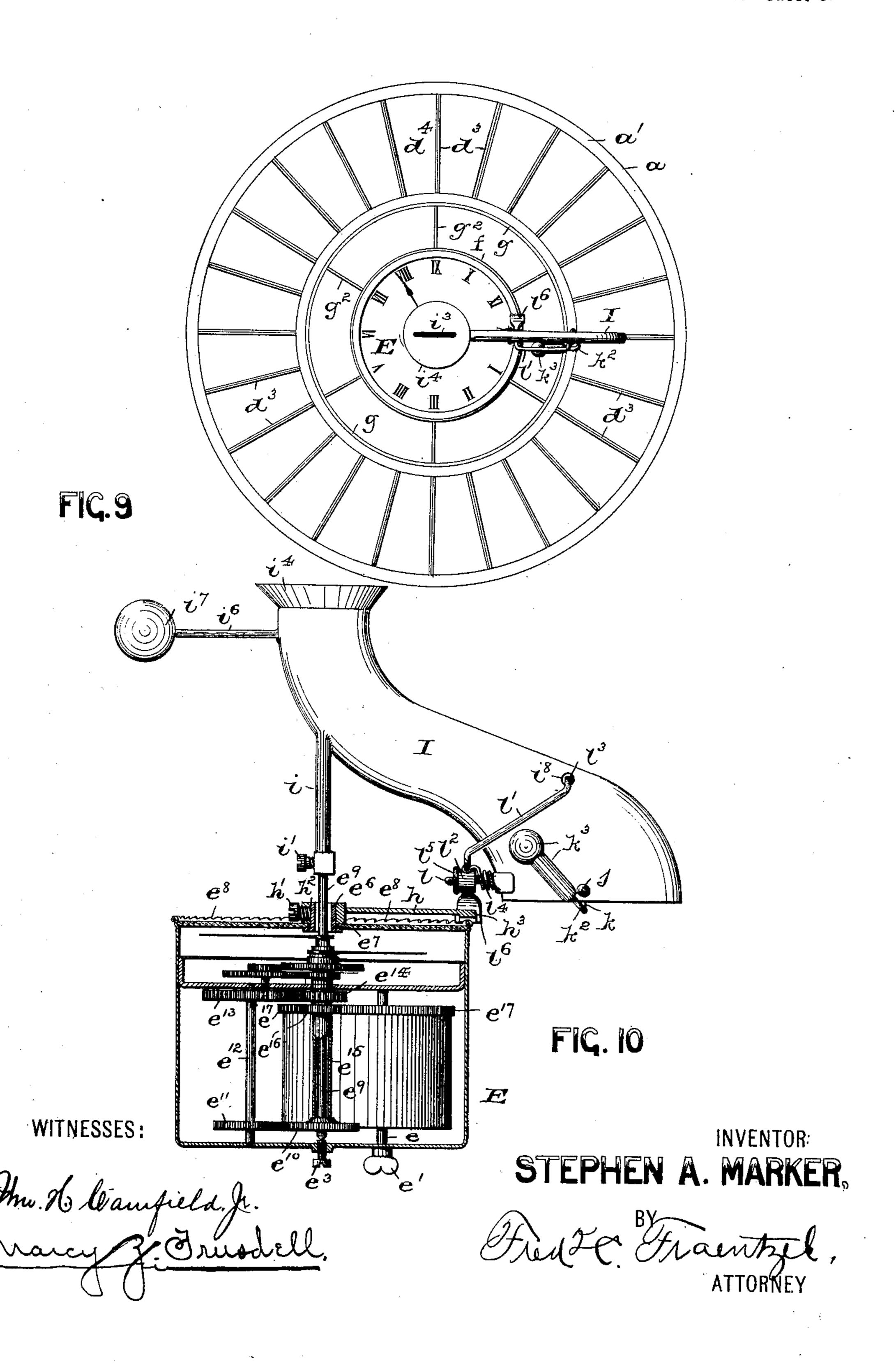
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S. A. MARKER. TIME RECORDER.

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(No Model.)

3 Sheets—Sheet 3.



United States Patent Office.

STEPHEN A. MARKER, OF NEWARK, NEW JERSEY, ASSIGNOR OF ONE-HALF TO WILLIAM H. FRISBY, OF NEW YORK, N. Y.

TIME-RECORDER.

SPECIFICATION forming part of Letters Patent No. 614,564, dated November 22, 1898.

Application filed November 11, 1897. Serial No. 658,133. (No model.)

To all whom it may concern:

Be it known that I, STEPHEN A. MARKER, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Time-Recorders; and I do hereby 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 letters of reference marked thereon, which form a part of this specification.

My present invention has reference to that class of apparatus which serve the purposes of recording or indicating the times of the arrival of workmen in factories or the employees in stores and other places and which can also be employed as a check on night-watchmen.

The invention is designed to provide an inexpensive and simply-constructed apparatus comprising a suitable timepiece and its train of gear mechanism, a series of check-receiving compartments, and a check-delivery chute.

The main object of this invention is to provide, in connection with a train of gearing or other operating mechanism to be used as a prime mover, a series of check-receiving compartments, a check-delivery chute, and means connected therewith whereby the deposited check bearing the number or name of the depositor is carried into one of said compartments, whereby by noting the compartment in which the check is found the timekeeper will immediately know the time when the check was dropped into the apparatus, which is the time of arrival of the depositor of the check.

The invention consists in such novel arrangements and combinations of parts and in the details of construction, all of which will be fully set forth in the accompanying specification and finally embodied in the clauses of the claim.

plates a^3 and a^4 , which are hinged or otherwise secured on the base a and are sprung over said lugs c^3 and c^4 , a lock c^5 being employed to securely lock said casing c in position upon the base a and whereby the device can be carried by a handle c^6 on the top of

The several features of the invention and the various advantages resulting therefrom will be more fully set forth hereinafter.

The invention is fully illustrated in the accompanying sheets of drawings, in which—

Figure 1 is a side view of my novel form of time recorder or indicator, a casing to be used in connection therewith being represented in vertical section. Fig. 2 is a top or plan view of the device, the casing having been removed. 55 Fig. 3 is a longitudinal vertical section of the apparatus. Fig. 4 is a perspective view of a portion of a clock, a delivery-chute, and certain mechanism to be used in connection with these parts. Fig. 5 is a longitudinal vertical 60 section of the lower part of the delivery-chute, and Fig. 6 is a cross-section taken on line xin Fig. 4. Fig. 7 is a top view, and Fig. 8 a part vertical section and part elevation, of a time recorder or indicator of a modified form 65 of construction, but still embodying the principles of my invention. Fig. 9 is a top view of still another modified construction of timerecorder, and Fig. 10 is a detail section of a gear-operating mechanism and side view of 70 the delivery-chute to be used in connection with the device illustrated in said Fig. 9.

Similar letters of reference are employed in all of the above-described views to indicate corresponding parts.

In said drawings, a indicates a suitable base provided with an annular offset or shoulder a' and with a central depression a^2 , in which may be placed a suitable receptacle b. Removably placed upon said shoulder a' 80 is an ornamental cover or shell c, provided at the top with an opening c', which is preferably surrounded by a funnel-shaped or flaring wall c^2 for the reception of a timecheck. Said casing or shell c is preferably 85 provided with a holding-lug c^3 on one side and a perforated lug or ear c^4 on the opposite side, with which can be made to engage in any well-known manner a pair of catchplates a^3 and a^4 , which are hinged or other- 90 over said lugs c^3 and c^4 , a lock c^5 being employed to securely lock said casing c in position upon the base a and whereby the device can be carried by a handle c^6 on the top of 95 said casing. Said base α is provided with a suitable number of ornamental posts or uprights a^5 , on the tops of which is arranged and suitably secured thereon a time-checkreceiving plate or device d. Said plate d is 100 2

provided with a central opening d', in which may be secured a cylindrical sleeve-like shell g, the upper edge g' of which extends, preferably, above the upper surface of said plate. 5 In said plate a and concentric with the opening d' is an annular depression or groove d^2 , provided with radially-disposed partitions d^3 to form the time-check-receiving compartments or chambers d^4 , of which there are usually 10 twelve in number to correspond with the numbers on the dial of the clock used in connection with the apparatus; but it will be evident that any multiple of twelve may be employed, or I may use less than twelve com-15 partments. At each junction of said partitions d^3 and the annular edge or rim d^5 of said plate d I have secured certain small plates d^6 , which act as shields or stops to prevent the time-checks from rolling over the 20 edge or rim d^5 as they are deposited in said compartments d^4 . Said edge or rim d^5 may also be provided with the numerals "5," "10," "15," "20," "25," "30," "35," "40," "45," "50," and "55," as indicated in Fig. 2, 25 or with any other desirable numbers. Centrally arranged within said sleeve g by means of suitably-placed brackets or supports g^2 is a second sleeve f, having a supportingflange f', said brackets or supports g^2 be-30 ing secured to the inner cylindrical surface of the sleeve g and the outer cylindrical surface of the sleeve f in any well-known manner. Removably arranged on the flange f' of said sleeve f is an ordinary clock mech-35 anism arranged within a casing or frame E, said mechanism being provided with a winding arbor e and key e', connected therewith. The central arbor e^2 , which is operated by the gear mechanism in the well-known man-40 ner and is provided with the hour and minute hands, may be arranged upon and rotate upon the end of an adjusting-screw e^3 , which is arranged in a screw-threaded hole in a suitable bracket e^4 , secured to the bottom e^5 45 of the casing or frame of the clock. Said arbor e^2 in the present construction extends through a suitable sleeve e^6 in a hole e^7 in the glass cover of the casing, and the upper annular edge or rim of said casing may be pro-50 vided with V-shaped serrations or notches e^8 , the purpose of which will be more fully set forth hereinafter. Secured to said collar or sleeve e^6 by means of a set-screw h' is the hub h^2 of an arm or bar h, which is provided 55 at its exterior end directly above the serrated edge of the clock-casing with an enlargement h^3 , substantially as illustrated. By loosening the screw h' said hub h^2 can be turned on said collar e^6 and the arm h and 60 said enlargement h^3 properly adjusted in any desired position above said clock-casing. The time-check-receiving chute is indicated

by the reference-letter I, said chute having a tubular post or support *i*, by means of which it can be arranged upon the upper end of the central arbor e^2 of the clock and secured thereon, preferably by means of a set-screw i^2 , in

order that the flat chute be directly above and in line with the minute-hand of the clock, and in the construction illustrated in Figs. 1, 2, 70 and 3 makes the same number of revolutions as the minute-hand, owing to the fact that the said hand and chute are both secured upon the same arbor e^2 . Said chute I, which is preferably of the shape illustrated in the several 75 figures of the drawings, has an inlet-opening i^3 in the top, preferably surrounded by an outwardly-flaring rim or bead i^4 , and in the bottom there is an outlet-opening i^5 , which terminates directly above the compartments d^4 80 in said plate d and also above the open space between the two sleeves g and f, as clearly illustrated in Fig. 3. The space between the two side walls of said chute and the widths of the inlet and outlet openings are just large 85 enough to permit the insertion of a time-check and its passage along the chute to prevent the placing of two checks at one time into the same, and thereby render the device inoperative. At or near the top of said chute is a rod go i^{6} , which is provided with a weight i^{7} , said weight being either adjustably arranged on said rod or being placed in a fixed position thereon, as will be understood from an inspection of the several figures of the drawings. 95 Said rod i^6 and weight i^7 act as a balance to prevent any undue strain upon the central arbor e^2 , connected with the clock mechanism, but said rod may also be used as a lever to set the hands of the clock, as will be understood. The 100 said arbor e^2 , resting upon the screw e^3 in the manner hereinabove stated, will remove the weight of the heavy chute I and the parts connected therewith from the gear mechanism of the clock, so as not to interfere with the proper 105 workings of the same. As will be seen from an inspection of Figs. 1, 3, 4, 5, and 6, the said chute is provided in its side walls with perfor at ions i^8 , and in the outlet-opening of said chute is a pin j, on which I have secured a 110 trip-arm k, provided with a flat arm or plate k', movable in the space between the said walls of the chute, said arm k extending from the outlet-opening is in said chute and being provided with a bent portion k^2 and a weight k^3 , 115 as more clearly illustrated in Figs. 5 and 6. When said arm or plate k' and the other parts connected with the arm k are in the positions indicated in Fig. 5, then the said arm or plate k' will bear against the inner edge i^9 of said 120 chute, and a time-check coming through said chute will pass over said plate or arm k' and out from the chute at the part i^{10} of its outletopening i^5 , and the check will drop into one of the compartments d^4 in the plate d. Pivotally 125 arranged on a suitable pin l, as clearly illustrated, is the hub l^2 of an arm l', having a bent portion l^3 , which is normally forced into the perforations i^8 in the side walls of the chute I by the action of a suitable spring l^4 , which en- 130 circles said pin l and is fastened thereto and to said hub l^2 . A nut l^5 may be used on the threaded end of the pin l to prevent accidental displacement of the several parts. Said hub

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l? may also be provided with a dog l6, the lower end of which is in sliding engagement with the serrated edge of the clock casing or frame E, whereby the forward movement of the several parts of mechanism is permitted; but said dog does not allow of any backward movements, and hence prevents any tampering with the apparatus after it has been placed in position for receiving the time-checks of the workmen

10 in a factory or the clerks in stores.

The operation of the device illustrated in Figs. 1 to 6, inclusive, is as follows: Suppose it is desired to take the time of the workmen in a factory coming in, say, between the 15 hours of half-past six and eight o'clock in the morning. The timekeeper or other person in charge of the apparatus, after having wound the clock mechanism, sets the minute-hand, say, about five minutes before the time of 20 admittance of the men—that is, in this instance, at twenty-five minutes after six o'clock—and then he returns the clock in position in the sleeve f, so as to bring the numeral "XII" on the dial of the clock directly 25 in line with the partition separating the two compartments between the numbers "5" and "55" on the rim d^5 of the plate d. He next swings the arm l' on the pin l to remove the bent portion l^3 from the perforations i^8 and 30 turns the parts connected with the pivoted arm k into the positions indicated in Figs. 1, 3, and 4 and allows the portion l^3 of the spring-actuated arm l' to drop back into the holes i^8 , directly in front of the now-raised 35 plate or arm k', whereby the same is held in such raised position. (Indicated more especially in said Figs. 3 and 4.) By this means the part i^{10} of the outlet i^{5} in the bottom of the chute is closed and the part i^{11} of said 40 outlet i⁵ which is directly above the open space between the sleeves g and f is opened. Thus it will be evident that as the arbor e^2 rotates the chute I will also be caused to rotate and any time-checks dropped into the 45 chute will pass directly through the same and out at the open part i^{11} , then down through the space between said sleeves g and f, and finally into the receptacle b or into a depression formed in the base a of the device 50 until the minute-hand has passed beyond the numeral "XII" on the dial, when the dog l^6 , connected with the arm l', passes directly upon the top of the enlargement h^3 of the arm or bar h, thus removing the bent portion l^3 55 from the holes i^8 in the chute, and the parts of the trip-arm k will assume the positions illustrated in Fig. 5, and the checks which are now dropped into the chute will pass from said chute at the open part i^{10} and directly 60 into one of the compartments d^4 beneath the same.

When the apparatus is opened, say, at eight o'clock, the timekeeper will immediately know that the time-checks in the receptacle b were all deposited before seven o'clock, and that the men represented by the numbers on said checks were on time, while the remaining

checks found in the several compartments d^4 were deposited five, ten, fifteen minutes, &c., after seven o'clock, thus indicating that the 70 depositors represented by the numbers on these checks were correspondingly late, and the timekeeper so notes the fact on his timebook opposite the number or the name of the person represented by the number on the 75 check.

From the above description it will be evident that by properly winding the clock and setting the check-directing mechanism connected with the chute I the time can be taken 80 for any hour of the twelve hours indicated by the clock, and by simply removing the arm or rod h, with its enlargement h^3 , and allowing the plate or arm k' to remain in the positions indicated in Fig. 5 the apparatus 85 can be used as a watchman's time-recorder, the checks being dropped into the chute—say at every hour—all being deposited in the compartment 5, which denotes the fact that the watchman was prompt in making his hourly 90 rounds; but any checks found in the other compartments would indicate that he has been tardy in making the rounds of the factory.

In Figs. 7 and 8 I have illustrated a slightly-95 modified form of construction of time-recording apparatus. In this construction the clockcasing E is placed directly in a central recess a^6 of the base of the apparatus, said base having a pair of concentrically arranged 100 grooves or depressions a^7 and a^8 , the inner groove being provided with partitions a^9 , similar to those illustrated in Fig. 2 in the plate d, to form check-receiving compartments. In this construction the arrangement of the 105 check-receiving mechanism in the lower portion of the chute I is similar to that hereinabove described; but the bent portion k^2 has the weight k^3 acting in the opposite direction from that illustrated in Figs. 4 and 5, where- 110 by the checks deposited before the hour set for the beginning of work will pass into the outer channel or groove a^8 and those deposited after the hour will pass directly into the compartments in the channel a^7 of the said 115 device.

Further description of the working parts of the device illustrated in Figs. 7 and 8 is not deemed necessary, as the constructions and operations thereof are similar to those 120 described hereinabove.

In Fig. 9 I have illustrated a plan view of the apparatus, in which the plate d is provided with twenty-four compartments instead of twelve, which renders the device of 125 better use in stores where some of the clerks return at one o'clock and others at two o'clock. In this construction the arbor carrying the chute I has to make but one revolution to two revolutions of the minute-hand of the 130 clock. The central arbor in this construction is indicated by the letter e^9 and is provided with a gear e^{10} , which meshes with a gear e^{11} on an arbor e^{12} , rotating in suitable

bearings in the frame carrying the gear mechanism of the clock. A gear e^{13} meshes with a pinion e^{14} on a tubular arbor e^{15} , loosely arranged over said arbor e^9 , and said arbor e^{15} 5 is actuated by a gear e^{16} from the gear e^{17} of the clock mechanism. In this manner the motion of the arbor e^{15} , which actuates the clock-hands, is transposed to the arbor e^9 , the reduction of the speed being made in the 10 proper proportions, so that the minute-hand makes two revolutions to one of the arbor e^9 and the chute thereon, or, in other words, the chute makes but one revolution during every two hours.

From the above description it will be seen that the apparatus is simple in its construction, can be cheaply made, and is very effect-

ive and useful.

Of course it will be evident that many 20 changes may be made in the several arrangements and combinations of the mechanism and parts herein set forth, as well as in the details of the construction thereof, without departing from the scope of my invention. 25 Hence I do not limit myself to the exact arrangements and combinations of the mechanism and parts herein described, and illustrated in the drawings, nor to the exact details of the construction thereof.

Having thus described my invention, what

I claim is—

1. In a time-recorder, the combination, with a casing, comprising a base and a centrally and removably arranged check-receiving re-35 ceptacle on said base, of a clock mechanism arranged directly above said central checkreceiving receptacle, a series of check-receiving compartments, and a check-delivery chute rotatively arranged above the same and op-40 erated by said clock mechanism, and adapted to deliver, before a predetermined time, all checks into said central check-receiving receptacle and after such predetermined time to deliver the deposited checks into said 45 check-receiving compartments, substantially

as and for the purposes set forth.

2. In a time-recorder, the combination, with an operating mechanism, and a central arbor operated thereby and extending above the 50 frame or casing of said mechanism, of a series of check-receiving compartments concentrically disposed around said mechanism, and a check-delivery chute on said arbor, whereby said chute is rotatively arranged above said 55 compartments, and adapted to deliver a deposited check into one of said compartments, and means connected with said operating mechanism and said chute to prevent the backward movement of said chute, substan-60 tially as and for the purposes set forth.

3. In a time-recorder, the combination, with an operating mechanism and its frame or casing, of a centrally and removably arranged check-receiving receptacle in said casing, a 65 series of check-receiving compartments concentrically disposed around said mechanism,

above said compartments, and mechanism in the discharge-opening of said chute, whereby said discharge-opening can be closed or 70 opened, for the delivery, before a predetermined time, all checks into said central checkreceiving receptacle and after such predetermined time to deliver the deposited checks into said check-receiving compartments, sub-75 stantially as and for the purposes set forth.

4. In a time-recorder, the combination, with an operating mechanism and its frame or casing, of a centrally and removably arranged check-receiving receptacle in said casing, a 80 series of check-receiving compartments concentrically disposed around said mechanism, a check-delivery chute rotatively arranged above said compartments, mechanism in the discharge-opening of said chute, whereby said 85 discharge-opening can be closed, and means connected with the frame or casing of the said operating mechanism for actuating said closing mechanism in the delivery-chute to open its discharge-opening for the delivery, before 90 a predetermined time, all checks into said central check-receiving receptacle and after such predetermined time to deliver the deposited checks into said check-receiving compartments, substantially as and for the purposes 95 set forth.

5. In a time-recorder, the combination, with a clock, its mechanism, and a central arbor operated thereby and extending above the face of the clock, of a series of check-receiv- 100 ing compartments concentrically disposed around said clock, a check-delivery chute on said arbor, rotatively arranged above said compartments, and mechanism in the discharge-opening of said chute, whereby said 105 discharge-opening can be closed or opened, for the delivery of a deposited check into one of said compartments, and means connected with said operating mechanism and said chute to prevent the backward movement of said 110 chute, substantially as and for the purposes set forth.

6. In a time-recorder, the combination, with a clock, its mechanism, and a central arbor operated thereby and extending above the 115 face of the clock, of a series of check-receiving compartments concentrically disposed around said clock, a check-delivery chute on said arbor, rotatively arranged above said compartments, mechanism in the discharge- 120 opening of said chute, whereby said dischargeopening can be closed, and means connected with said operating mechanism for actuating said closing mechanism in the delivery-chute to open its discharge-opening for the delivery 125 of a deposited check into one of said compartments, and means connected with said operating mechanism and said chute to prevent the backward movement of said chute, substantially as and for the purposes set forth. 130

7. In a time-recorder, the combination, with a clock, its mechanism, and a central arbor operated thereby and extending above the a check-delivery chute rotatively arranged l face of the clock, of a series of check-receiv-

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ing compartments concentrically disposed around said clock, a check-delivery chute on said arbor, rotatively arranged above said compartments, and mechanism in the dis-5 charge-opening of said chute, whereby said discharge-opening can be closed or opened, for the delivery of a deposited check into one of said compartments, consisting, essentially, of a pivoted trip-arm k and a plate k', all arro ranged, and means connected with said operating mechanism and said chute to prevent the backward movement of said chute, substantially as and for the purposes set forth.

8. In a time-recorder, the combination, with 15 a clock, its mechanism, and a central arbor operated thereby and extending above the face of the clock, of a series of check-receiving compartments concentrically disposed around said clock, a check-delivery chute on 20 said arbor, rotatively arranged above said compartments, mechanism in the dischargeopening of said chute, whereby said dischargeopening can be closed or opened, for the delivery of a deposited check into one of said 25 compartments, consisting, essentially, of a pivoted trip-arm k and a plate k', and means for actuating said trip-arm and its plate, consisting of a spring-actuated arm l' adapted to engage said plate k' and hold it in its raised 30 position, and a dog l⁶ connected with said arm l', said dog, when operated, causing the disengagement of said plate k' and arm l', substantially as and for the purposes set forth.

9. In a time-recorder, the combination, with 35 a base, and a centrally and removably arranged check - receiving receptacle on said base, a plate d having a central opening, of an operating mechanism removably arranged in said opening, a series of check-receiving com-40 partments in said plate d concentrically disposed around the opening in said plate, and a check-delivery chute rotatively arranged above said operating mechanism and said compartments, adapted to deliver, before a 45 predetermined time, all checks into said central check-receiving receptacle and after such predetermined time to deliver the deposited checks into said check-receiving compartments, substantially as and for the purposes so set forth.

10. In a time-recorder, the combination, with a base, and a centrally and removably arranged check-receiving receptacle on said base, a plate d, having a central opening, of a 55 clock, its mechanism, and a central arbor operated thereby and extending above the face of the clock, a series of check-receiving compartments in said plate d concentrically disposed around the opening in said plate, and 60 a check-delivery chute on said arbor, whereby said chute is rotatively arranged above said compartments, and adapted to deliver, before a predetermined time, all checks into said central check-receiving receptacle and after 65 such predetermined time to deliver the deposited checks into said check-receiving compartments, substantially as and for the purposes set forth.

11. In a time-recorder, the combination, with a base, and a centrally and removably 70 arranged check-receiving receptacle on said base, a plate d having a central opening, of an operating mechanism removably arranged in said opening, a series of check-receiving compartments in said plate d concentrically dis- 75 posed around the opening in said plate, a check - delivery chute rotatively arranged above said operating mechanism and said compartments, and mechanism in the discharge-opening of said chute, whereby said 80 discharge-opening can be closed or opened for the delivery of a check either into the opening in said plate d or into one of said check-receiving compartments, and before a predetermined time deliver all checks into 85 said central check-receiving receptacle and after such predetermined time deliver the deposited checks into said check-receiving compartments, substantially as and for the purposes set forth.

12. In a time-recorder, the combination, with a base, and a centrally and removably arranged check-receiving receptacle on said base, a plate d having a central opening, of an operating mechanism arranged in said open- 95 ing, a series of check-receiving compartments in said plate d concentrically disposed around the opening in said plate, a check-delivery chute rotatively arranged above said operating mechanism and said compartments, mech-100 anism in the discharge-opening of said chute, whereby said discharge-opening can be closed or opened for the delivery of a check either into the opening in said plate d or into one of said check-receiving compartments, and 105 means connected with said operating mechanism for actuating said opening and closing mechanism in the discharge-opening of the check-delivery chute, and before a predetermined time deliver all checks into said cen- 110 tral check-receiving receptacle and after such predetermined time deliver the deposited checks into said check-receiving compartments, substantially as and for the purposes set forth.

13. In a time-recorder, the combination, with a base, and a plate d having a central opening, of a clock, its mechanism, and a central arbor operated thereby and extending above the face of the clock, a series of check- 120 receiving compartments in said plate d concentrically disposed around the opening in said plate, a check-delivery chute on said arbor rotatively arranged above said compartments, and mechanism in the discharge-open-125 ing of the chute, whereby said dischargeopening can be closed or opened for the delivery of a check either into the opening in said plate d or into one of the said check-receiving compartments, and means connected 130 with said operating mechanism and said chute to prevent the backward movement of said

chute, substantially as and for the purposes set forth.

14. In a time-recorder, the combination, with a base, and a plate d having a central 5 opening, of a clock, its mechanism, and a central arbor operated thereby and extending above the face of the clock, a series of checkreceiving compartments in said plate d concentrically disposed around the opening in 10 said plate, a check-delivery chute on said arbor rotatively arranged above said compartments, mechanism in the discharge-opening of the chute, whereby said discharge-opening can be closed or opened for the delivery of a 15 check either into the opening in said plate dor into one of the said check-receiving compartments, and means connected with said clock for actuating said opening or closing mechanism in the discharge-opening of said 20 check-delivery chute, and means connected with said operating mechanism and said chute to prevent the backward movement of said chute, substantially as and for the purposes set forth.

25 15. In a time-recorder, the combination, with a base, and a plate d having a central opening, of a clock, its mechanism, and a central arbor operated thereby and extending above the face of the clock, a series of check-30 receiving compartments in said plate d concentrically disposed around the opening in said plate, a check-delivery chute on said arbor rotatively arranged above said compartments, and mechanism in the discharge-open-35 ing of the chute, whereby said dischargeopening can be closed or opened for the delivery of a check either into the opening in said plate d or into one of the check-receiving compartments, consisting, essentially, of

40 a pivoted trip-arm k and a plate k', and means connected with said operating mechanism and said chute to prevent the backward movement of said chute, substantially as and for the purposes set forth.

45 16. In a time-recorder, the combination, with a base, and a plate d having a central opening, of a clock, its mechanism, and a central arbor operated thereby and extending above the face of the clock, a series of check-50 receiving compartments in said plate d concentrically disposed around the opening in said plate, a check-delivery chute on said arbor rotatively arranged above said compartments, mechanism in the discharge-opening 55 of the chute, whereby said discharge-opening can be closed or opened for the delivery of a check either into the opening in said plate d or into one of the check-receiving compartments, consisting, essentially, of a pivoted 60 trip-arm k and a plate k', and means for actuating said trip-arm and its plate, consisting

of a spring-actuated arm l'adapted to engage said plate k' and hold it in its raised position, and a dog l^6 connected with said arm l', 65 said dog, when operated, causing the disen-

gagement of said plate k' and arm l', substantially as and for the purposes set forth.

17. In a time-recorder, in combination, with a clock-casing, its mechanism, a central arbor operated thereby and extending above the 70 face of the clock-casing, and serrations e^{8} on said casing, a series of check-receiving compartments concentrically disposed around said clock-casing, a check-delivery chute on said arbor, whereby said chute is rotatively 75 arranged above said clock-casing and said compartments, and adapted to deliver a deposited check into one of said compartments, and a dog pivoted to said chute and in engagement with said serrations e^8 , substan- 80 tially as and for the purposes set forth.

18. In a time-recorder, in combination, with a clock-casing, its mechanism, a central arbor operated thereby and extending above the face of the clock-casing, serrations e^8 on said 85 casing, a series of check-receiving compartments concentrically disposed around said clock-casing, a check-delivery chute on said arbor, whereby said chute is rotatively arranged above said clock-casing and said com- 90 partments, and is adapted to deliver a deposited check into one of said compartments, a dog pivoted to said chute and in engagement with said serrations e^8 , and mechanism in the discharge-opening of said chute, where-95 by said discharge-opening can be closed or opened for the delivery of a deposited check into one of said compartments, substantially as and for the purposes set forth.

19. In a time-recorder, in combination, with 100 a clock-casing, its mechanism, a central arbor operated thereby and extending above the face of the clock-casing, serrations e^{s} on said casing, a series of check-receiving compartments concentrically disposed around said 105. clock-casing, a check-delivery chute on said arbor, whereby said chute is rotatively arranged above said clock-casing and said compartments, and is adapted to deliver a deposited check into one of said compartments, 110 a dog pivoted to said chute and in engagement with said serrations e^8 , mechanism in the discharge-opening of said chute whereby said discharge-opening can be closed, and means connected with said clock-casing for 115 actuating said closing mechanism in the delivery-chute to open its discharge-opening for the delivery of a deposited check into one of said compartments, substantially as and for the purposes set forth.

20. In a time-recorder, in combination, with a clock-casing, its mechanism, a central arbor operated thereby and extending above the face of the clock-casing, serrations e^{s} on said casing, a series of check-receiving compart- 125 ments concentrically disposed around said clock-casing, a check-delivery chute on said arbor, whereby said chute is rotatively arranged above said clock-casing and said compartments, and is adapted to deliver a de- 130 posited check into one of said compartments, a dog pivoted to said chute and in engagement with said serrations e^{8} , and mechanism in the discharge-opening of said chute, where-

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23. In a time-recorder, in combination, a 45

clock-casing, its mechanism, a central arbor

by said discharge-opening can be closed, consisting, essentially of a pivoted trip-arm k and a plate k', all arranged, substantially as

and for the purposes set forth.

21. In a time-recorder, in combination, with a clock-casing, its mechanism, a central arbor operated thereby and extending above the face of the clock-casing, serrations e^8 on said casing, a series of check-receiving compart-10 ments concentrically disposed around said clock-casing, a check-delivery chute on said arbor, whereby said chute is rotatively arranged above said clock-casing and said compartments, and is adapted to deliver a de-15 posited check into one of said compartments, a dog pivoted to said chute and in engagement with said serrations e^8 , mechanism in the discharge-opening of said chute, whereby said discharge-opening can be closed, consist-20 ing, essentially of a pivoted trip-arm k and a plate k', and means for actuating said triparm and its plate, consisting of a spring-actuated arm l' adapted to engage said plate k'and hold it in its raised position, and said arm 25 l' being connected with said dog to cause the disengagement of said plate k' and arm l' at a predetermined time, substantially as and for the purposes set forth.

22. In a time-recorder, in combination, a clock-casing, its mechanism, a central arbor operated thereby and extending above the face of the clock-casing, an arm h connected with said clock-casing, having an enlargement h^3 , a series of check-receiving compartments concentrically disposed around said clock-casing, a check-delivery chute on said arbor, rotatively arranged above said clock-casing and compartments, a pivoted trip-arm k and plate k', and means connected with said chute engaging with said plate k' to close the disdischarge-opening in the chute, said means being engaged by said enlargement h^3 to re-

lease said plate k', substantially as and for

the purposes set forth.

operated thereby and extending above the face of the clock-casing, an arm h connected with said clock-casing, having an enlargement h^3 , a series of check-receiving compartments 50 concentrically disposed around said clock-casing, a check-delivery chute on said arbor, rotatively arranged above said clock-casing and compartments, a pivoted trip-arm k and plate k', and a spring-actuated arm l' for engaging said plate k' and holding it in a raised position to close the discharge-opening of said chute, and a dog l^6 connected with said arm l', adapted to be raised by said enlargement h^3 to release said plate k', substantially as and 60 for the purposes set forth.

24. In a time-recorder, the combination, with a casing, a base in said casing, and a centrally and removably arranged check-receiving receptacle b, of a clock mechanism, a 65 central arbor operated thereby, and a check-delivery chute on said arbor, substantially as

and for the purposes set forth.

25. A clock for a time-recorder, combining, in combination, with the casing thereof, its 70 mechanism, a central arbor operated thereby, a check-delivery chute on said arbor, an opening-and-closing device in the discharge-opening of said chute, and means connected with said chute and the clock-casing for actuating 75 said opening-and-closing device, and means connected with said operating mechanism and said chute to prevent the backward movement of said chute, substantially as and for the purposes set forth.

In testimony that I claim the invention set forth above I have hereunto set my hand this

6th day of November, 1897.

STEPHEN A. MARKER.

Witnesses:

FREDK. C. FRAENTZEL, WM. H. CAMFIELD, Jr.