

(No Model.)

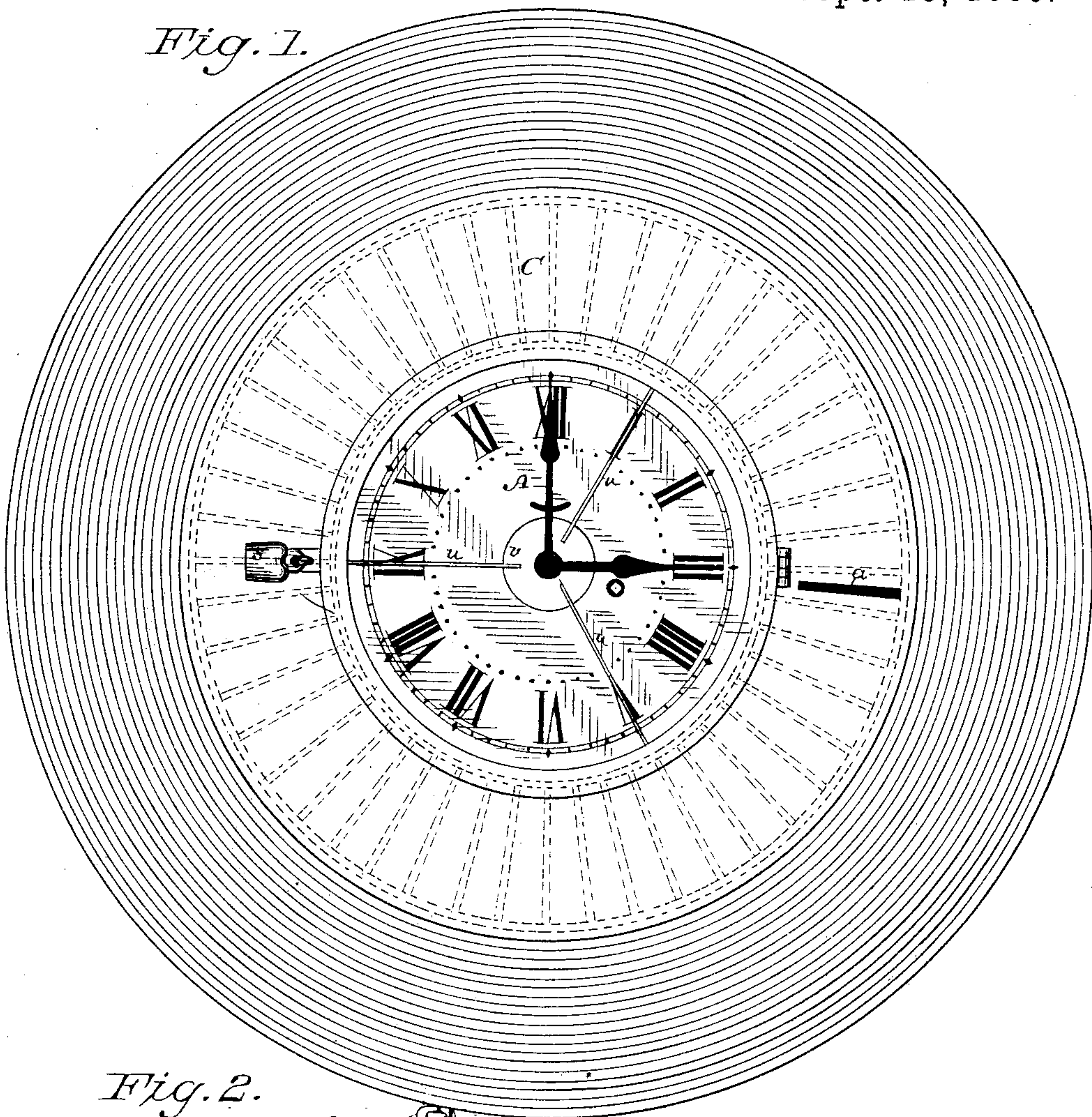
2 Sheets—Sheet 1.

J. S. GOLDSMITH.  
APPARATUS FOR RECEIVING TIME CHECKS.

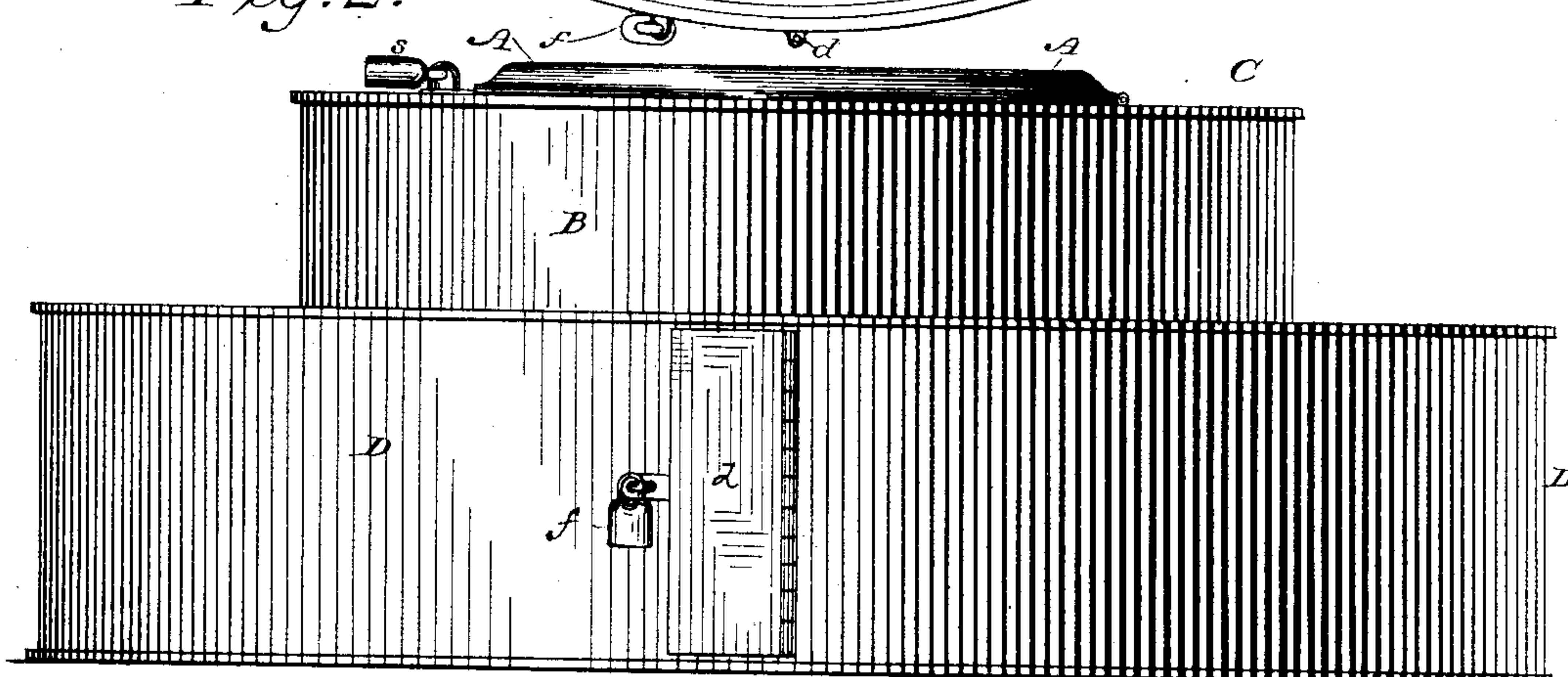
No. 326,494.

Patented Sept. 15, 1885.

*Fig. 1.*



*Fig. 2.*



WITNESSES  
*Al. C. Newman,*  
*Ed. Q. Newman,*

INVENTOR.  
*JOHN S. GOLDSMITH,*  
*By his Attorney* *Wm. L. Ewin.*



(No Model.)

2 Sheets—Sheet 2.

J. S. GOLDSMITH.  
APPARATUS FOR RECEIVING TIME CHECKS.

No. 326,494.

Patented Sept. 15, 1885.

Fig. 3.

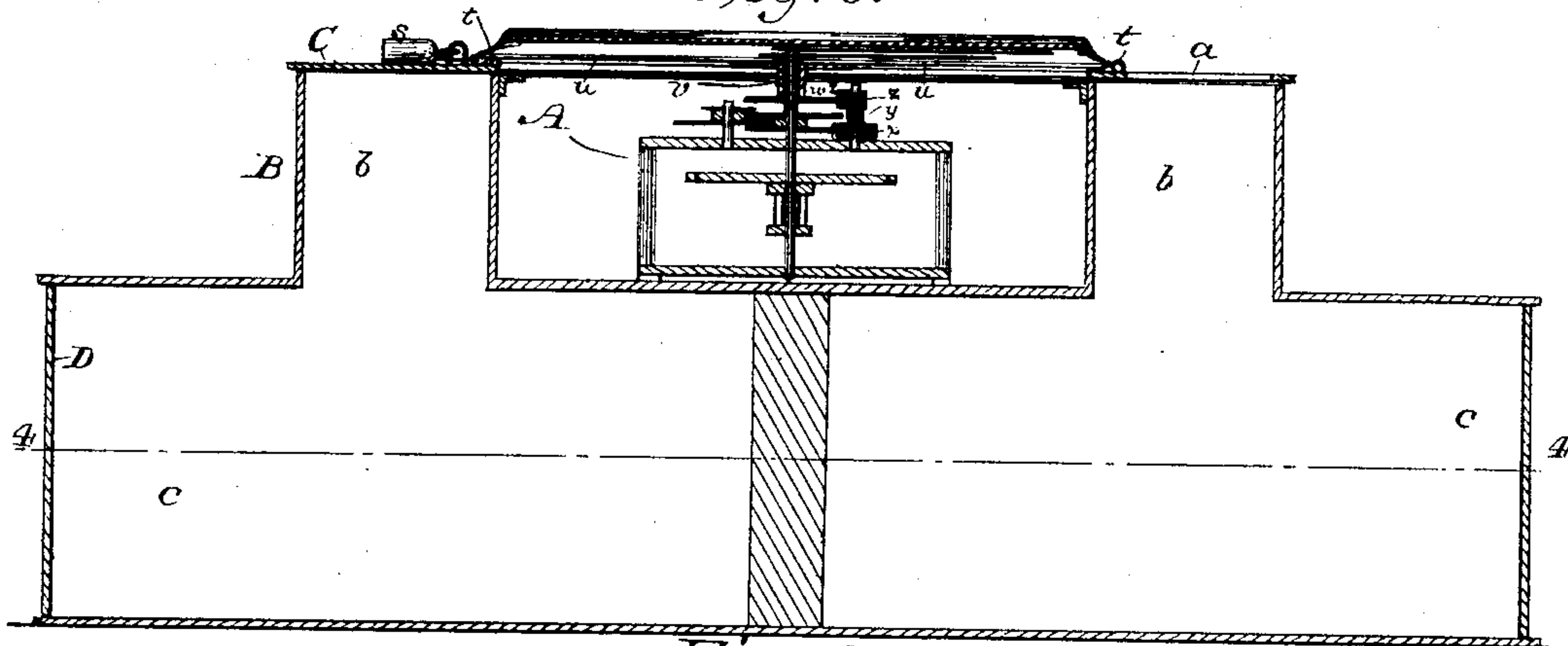


Fig. 4.

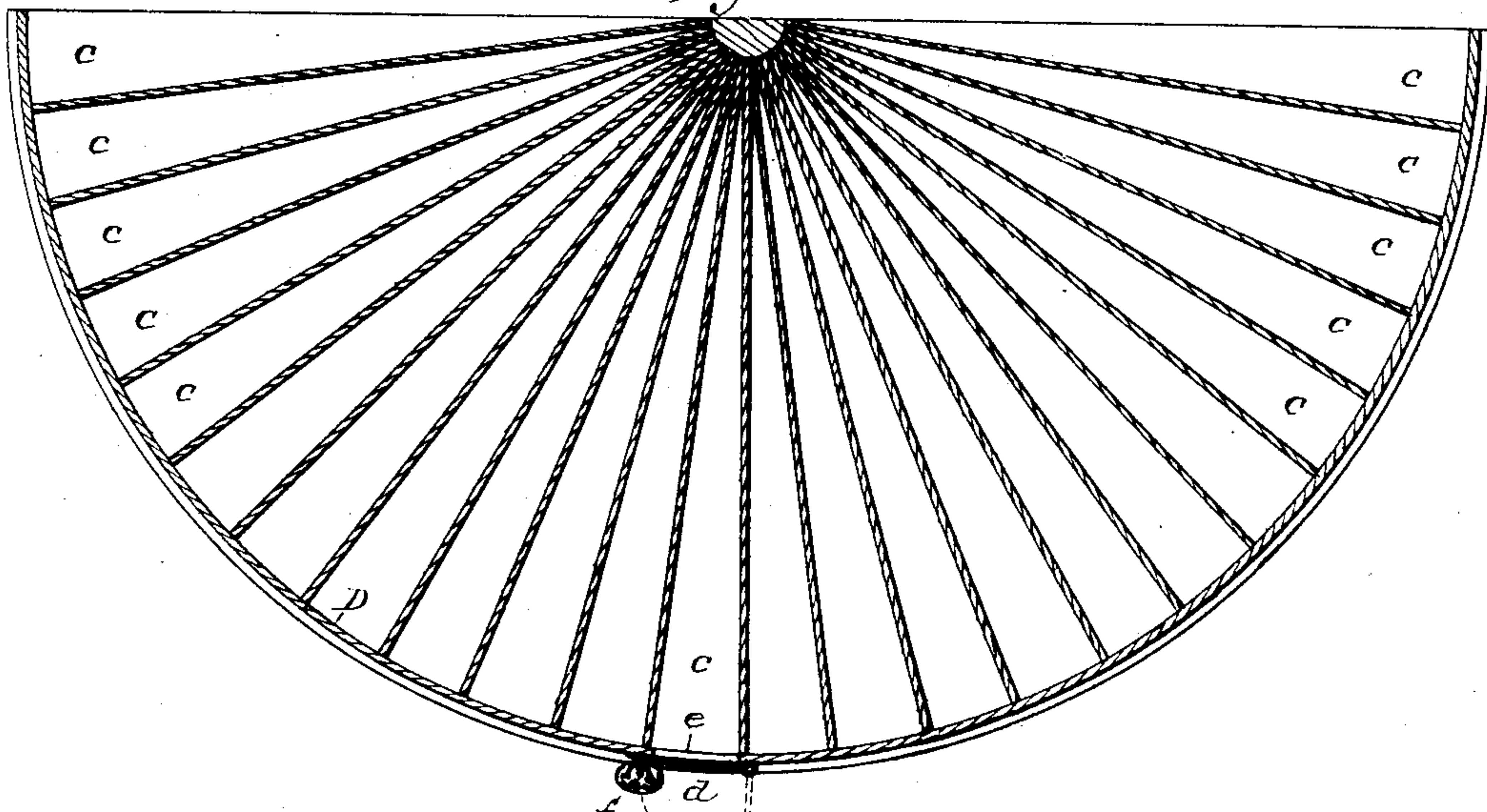
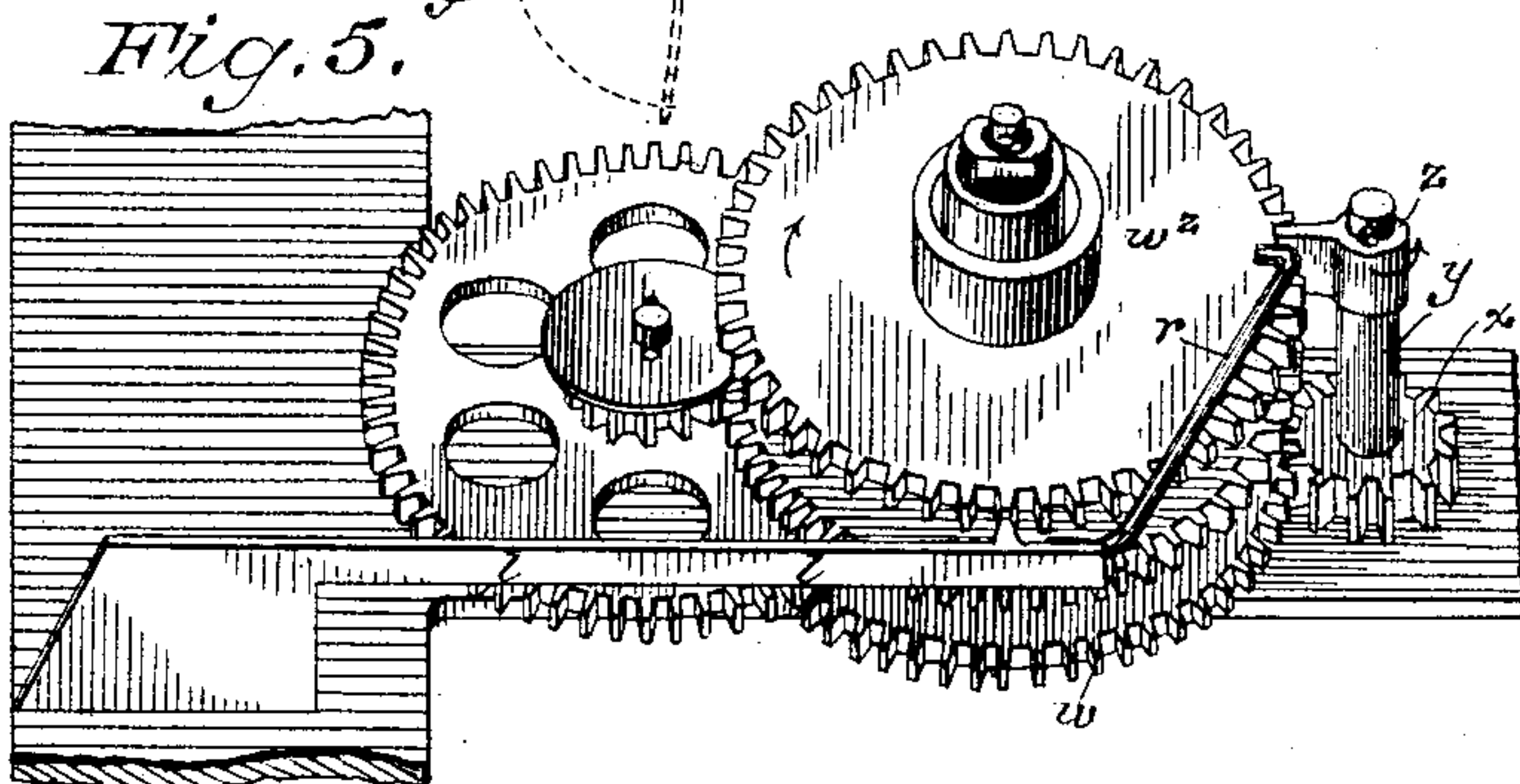


Fig. 5.



WITNESSES

Ed. A. Newman.  
Al. C. Newman.

INVENTOR

JOHN S. GOLDSMITH,

By his Attorney

Ed. A. Newman.



# UNITED STATES PATENT OFFICE.

JOHN S. GOLDSMITH, OF NEW YORK, N. Y.

## APPARATUS FOR RECEIVING TIME-CHECKS.

SPECIFICATION forming part of Letters Patent No. 326,494, dated September 15, 1885.

Application filed December 8, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN S. GOLDSMITH, a citizen of the United States, residing at New York, in the State of New York, have invented  
5 a new and useful Improvement in Apparatus for Receiving Time-Checks, of which the following is a specification.

In common with an "improvement in check-tickets for messenger-service," and an "im-  
10 provement in apparatus for controlling the issue of time checks," described and claimed in two other specifications of even date herewith, this invention relates, primarily, to means for insuring promptness and correct  
15 charges in messenger-service, and for preventing the concealment of pilfering and other fraudulent practices on the part of those employed to collect and account for all that class  
20 of monetary charges which are determined as to amount, wholly or in part, by the duration of the service or privilege charged for. The apparatus may also be used as a substitute for watchmen's and workmen's time-recorders.

The present invention consists in an auto-  
25 matic apparatus adapted to receive check-tickets, check-disks, or the like, and to keep in separate compartments all those received during given successive periods of time; also, in means giving access to the compartments in-  
30 dividually for emptying them and making test-inspections of the contents; also, in a special construction of the apparatus whereby it may be given any required capacity without in-  
35 creasing the load of the clock-work by which its controlling-mask is operated, and, finally, in a particular mechanism for transmitting motion to the latter from the main arbor of a central clock and for locking it after each  
40 actuation thereof, so as to preclude fraudulent hand movements of the mask.

Three sheets of drawings accompany this specification as part thereof. Figure 1 of these drawings is a face view of my said apparatus for receiving time-checks, and Fig. 2 is a side  
45 elevation thereof. Fig. 3 represents a vertical radial section of the same; Fig. 4, a half-horizontal section on the line 4 4, Fig. 3, and Fig.  
5 a perspective view of part of the clock-work.

Like letters of reference indicate corresponding parts in the several figures.

The present apparatus, like my said apparatus for controlling the issue of check-tickets,

is designed for use upon a table, counter, or shelf, with its clock-face, Fig. 1, at top, as represented in the drawings. Its upper part  
55 comprises a central clock, A, surrounded by an annular series of vertical check-chutes, *b*, Figs. 1 and 3, corresponding in number and distribution with the quarter-hour divisions of the clock-dial. These check-chutes are  
60 embraced within a continuous circumferential wall, B, and are guarded at top by an annular horizontal mask, C, having a narrow radial slot, *a*, through which check-tickets, folded in customary manner, or check-disks or the like  
65 may be conveniently dropped.

The lower part of the apparatus, made of any required diameter and depth for a given maximum capacity, has a circular bottom plate, an annular top plate, embracing said  
70 wall B, and interposed vertical partitions coinciding with those between said chutes *b*, forming check-compartments *c*, which communicate at top with said chutes and have open outer ends. The latter are guarded by  
75 a circumferential ring-slide, D, having a hand-hole, *e*, closed by a door, *d*, which is provided with a lock or seal fastening, *f*, to prevent access to the check-compartments by any other  
80 than the proprietor or authorized persons. The door *d*, when opened, as shown in dotted lines in Fig. 4, affords convenient means by which to shift the slide D, and the hand-hole  
85 *e* corresponds in area with the outer end of each check-compartment *c*, so as to provide for emptying the compartments individually, and keeping the checks from each or any compartment separate from the others for exami-  
90 nation; and, owing to said construction of the apparatus of two diameters, as aforesaid, each check-compartment may have a large capacity, while the rotary mask C, which guards the inlet-chutes *b*, may be of relatively small diameter, so as to keep at a minimum the work of the clock A, (or its equivalent,) by  
95 which said mask is automatically rotated step by step.

The particular mechanism represented as means for taking said motion of the mask C from the clock A is shown in Figs. 3 and 5,  
100 and consists of a wheel, *w*, of sixty teeth, fast on the main arbor or minute-arbor of the clock, a pinion, *x*, of fifteen teeth, in mesh with said wheel *w*, a sleeve spindle, *y*, on the lower end



of which said pinion is fast, a one-toothed pinion,  $z$ , fast on the upper end of said spindle, and a wheel,  $wz$ , of forty-eight teeth, having a sleeve-hub or sleeve-arbor, which loosely embraces that of the hour-wheel, so that the two wheels rotate freely independently, both being twelve-hour wheels, however. Said wheel  $w$  revolves once every hour. Said pinion  $x$ , spindle  $y$ , and one-toothed pinion  $z$  rotate once every quarter of an hour, and the latter turns said wheel  $wz$  one-forty-eighth of a revolution every quarter of an hour. A locking-lever,  $l$ , connected by a spring-shank to the clock-work frame and having a detent-lug which interlocks with the teeth of said wheel  $wz$ , is retracted to unlock the latter by the contact of the tooth of said pinion  $z$  with a rigid arm,  $r$ , projecting from said locking-lever, as shown in Fig. 5, immediately before said tooth engages another tooth of said wheel  $wz$ , and relocks the latter after each movement thereof, so as to preclude fraudulent hand movements of the mask C, the locking-lever resuming its effective action as soon as said tooth of the pinion  $z$  passes out of contact with said arm  $r$ . A collar,  $v$ , Figs. 1 and 3, tightly embracing said sleeve-arbor of said wheel  $wz$ , is provided with three or more radial arms,  $u$ , the outer ends of which are attached (by solder or otherwise) to the outer hinge-frame,  $t$ , of the hinged face-cover of the clock A. The clock-hands are secured in place above said collar  $v$ , and the face-cover is then closed and fastened by a lock or seal,  $s$ . The mask is thus connected with said wheel  $wz$ , and secured against being removed to afford access to the deposited checks for tampering therewith.

Apart from the clock A and its immediate appurtenances and the fastenings  $f$ ,  $s$ , the apparatus above described is represented as made of sheet metal and wire in a preferred style. Other materials may be employed in its construction, and its mechanical details may be correspondingly varied without departing from the spirit of the invention.

The clock A, apart from the attachments thereto shown in Fig. 5, may be, as represented, an ordinary spring-driven time-piece with a mainspring of sufficient power; or it may be driven, instead, by electricity or otherwise; or the wheel  $wz$  may receive its step-by-step motion through the medium of electrical or pneumatic connections—for example, from a time-piece at a distance therefrom governing, it may be, similar apparatus situated at several different points so that they shall be absolutely isochronous.

Mechanics skilled in the art of operating time-controlled apparatus will readily understand the foregoing so as to carry the same into effect without further suggestions.

I also propose to use in connection with a central clock the supplemental mask-shifting movement described and claimed in the specification of my said improvement in appara-

tus for controlling the issue of time-checks, with the locking and unlocking device thereto belonging, as substitutes for those hereinbefore described, and the latter may likewise be used for actuating and locking and unlocking the masks of my said issue-controlling apparatus.

Supposing my said receiving apparatus to be used in connection with check-tickets adapted for the messenger-service of a district telegraph-company, a patron having an account with the company calls a messenger at fifty minutes past one o'clock, for example, and one is ready to go. Appropriate entries are made under "messenger" and "called" on the ticket, and the messenger starts. He is dismissed so that he should return to the district-office at three o'clock, and is thus occupied one hour and ten minutes, having been authorized to spend twenty cents for car-fare. The caller is consequently charged fifty-five cents, being thirty cents per hour for the time occupied plus expenses, as noted on the ticket. The ticket is now deposited in the receiving apparatus. (See Figs. 1 and 3.) Its mask C has just come to rest, and the ticket, dropped through the slot  $a$ , passes through the chute  $b$  and into the check-compartment  $c$  corresponding with the period 3 to 3.15, followed by all other checks received during this period, after which the mask is shifted for the period 3.15 to 3.30, and so on.

Now, by collusion between the messenger and the clerk in the example above stated, fraud could be accomplished in a way which has heretofore been successfully practiced by dishonest messengers and clerks—that is to say, the messenger dismissed by the caller walks back instead of riding, and returns, consequently, at four o'clock, instead of at three. The twenty cents which he should have spent for car-fare, or the corresponding car-tickets, are divided between the messenger and clerk, and the company loses the same plus an hour of the messenger's time. As the ticket could not be deposited in the receiving apparatus with those of a period one minute earlier than the period during which the messenger actually returns, any such pilfering or the late return of a messenger would be detected.

In some uses of the apparatus ordinary check-disks of metal, card-board, or other materials, numbered or otherwise marked, could be used, and when the apparatus is employed as a substitute for watchmen's or workmen's time-recorders each user may simply deposit a card or slip bearing his name or number in the receiving apparatus.

Test inspections of the contents of the receiving apparatus are readily made by turning its ring-slide D so that its hand-hole  $e$  shall correspond with the check-compartment  $c$  of a given time-period, and removing the contents of this compartment for examination and comparison with the record of the office.

Having thus described my said improve-



ment in apparatus for receiving time-checks, I claim as my invention and desire to patent under this specification—

1. An apparatus for receiving time-checks, 5 having a series of check-compartments corresponding with successive uniform time-periods, an annular series of chutes communicating therewith, and a rotary mask which guards the upper ends of said chutes, having 10 a radial slot to admit time-checks into one of said chutes at a time, and automatically shifted to give access to the next of the series at the beginning of said time-periods successively, substantially as herein specified.
2. In an apparatus for receiving time-checks, 15 the combination of a horizontal mask revolving step by step and having a radial inlet-slot therein, a radial series of check-compartments with which said slots communicate at 20 top successively, and a ring-slide forming the outer walls of said compartments, and having a hand-hole, which is adapted to be aligned with the open outer end of either of said compartments at will, and is fitted with a door 25 having a lock or seal fastening, substantially as herein specified.
3. In an apparatus for receiving time-checks, the combination of a central clock surrounded by any annular series of check-chutes, and a 30 rotary mask guarding the upper ends of the latter and actuated periodically by the movement of said clock at the top of the apparatus, with a relatively large base occupied by ra-

dial check-compartments communicating at top with said chutes, substantially as herein 35 specified.

4. In combination with a rotary mask having an aperture for the passage of time-checks, a clock-movement having a supplemental spur-wheel carried by its main arbor, a pinion in 40 mesh therewith carrying a spindle, a one-toothed pinion carried by said spindle, and a spur-wheel having a sleeve-arbor loosely embracing that of the hour-wheel, substantially as herein specified, for revolving said mask 45 step by step in the manner herein set forth.

5. In combination with a rotary mask having an aperture for the passage of time-checks, a clock-movement having a supplemental spur-wheel carried by its main arbor, a pinion in 50 mesh therewith carrying a spindle, a one-toothed pinion carried by said spindle, a spur-wheel having a sleeve-arbor loosely embracing that of the hour-wheel, and a locking-lever having a lug to lock the wheel last named 55 after each actuation thereof, and provided with a rigid arm engaged by said one-toothed pinion to unlock this wheel at the beginning of each actuation thereof, substantially as 60 herein specified.

Dated at Brooklyn this 3d day of October, 1884.

JOHN S. GOLDSMITH.

Witnesses:

JACOB G. CARPENTER,  
NEVILLE W. McEVoy.