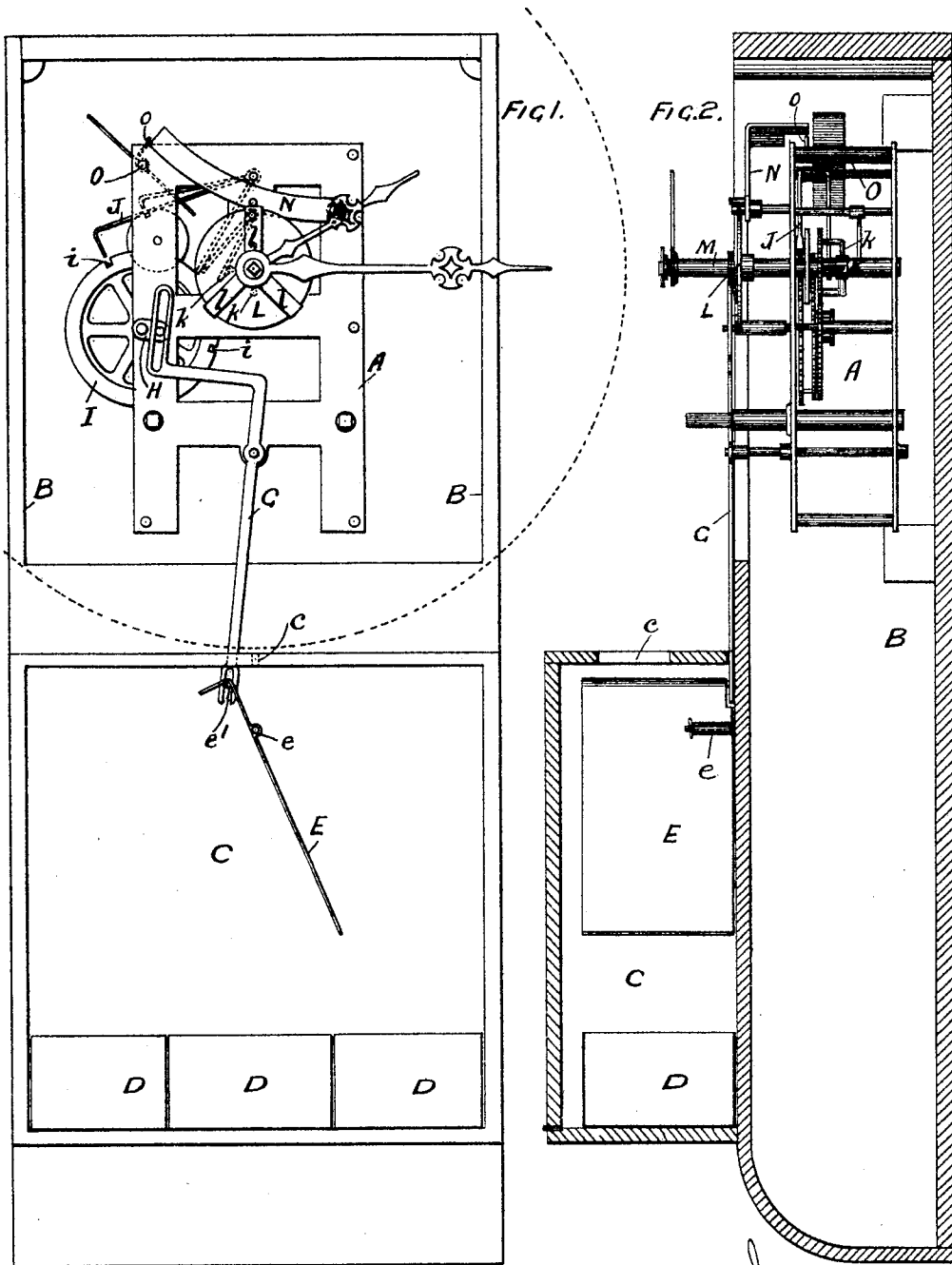


(No Model)

J. L. CORBETT.
TIME CHECK.

No. 583,169.

Patented May 25, 1897.



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN LORIMER CORBETT, OF GLASGOW, SCOTLAND.

TIME-CHECK.

SPECIFICATION forming part of Letters Patent No. 583,169, dated May 25, 1897.

Application filed October 12, 1896. Serial No. 608,585. (No model.)

To all whom it may concern:

Be it known that I, JOHN LORIMER CORBETT, watchmaker, of 65 Jamaica street, in the city of Glasgow, Scotland, have invented certain new and useful Improvements in Time-Checking Apparatus, of which the following is a specification.

This invention, which relates to apparatus for checking the time of arrival or departure of workmen, has for its object to adapt ordinary clockwork to operate a chute or deflector which serves to direct the workmen's time-checks into one or other of the boxes or compartments provided for the reception of "early" and "late" checks.

The invention is illustrated by the accompanying drawings, Figure 1 of which is a front elevation, and Fig. 2 a side elevation, of the apparatus.

An ordinary "American" clock A may be conveniently employed, and with its case B is combined a locked box or case C, containing two, three, or more drawers or compartments D, adapted to receive the workmen's checks or tallies, one box being for the reception of the checks of workmen who arrive early or in time, a second for those of workmen who arrive, say, within a quarter of an hour of time, and a third for those of workmen arriving over, say, fifteen minutes late. A slit *c* is provided in the top of the box or case C, through which the checks or tallies are dropped, and within the check-case C is fitted a chute or deflector E, which is preferably of L or T shape or formed by a flat plate having its upper end bent over at about right angles, as shown at Fig. 1. This deflector E is centered or fitted to swing on a pivot *e* at or near its mid-length, its movement being governed by the striking part of the clockwork mechanism A, so that in one position it directs the checks or tallies inserted through the slits *c* into one compartment D, in another position it directs them into another compartment, and in an intermediate position the angled or bent upper end of the deflector closes the slit *c* and intercepts the checks or prevents their insertion. Thus the deflector E when operated by the clockwork A first opens or uncovers the slit *c* to admit the tallies of the early arrivals into the early box, when again operated serves to direct the

tallies of the late arrivals in the late box, and, lastly, prevents the admission of the tallies of workmen arriving later than the hours prescribed, the clock A which operates the checking apparatus at the same time showing each workman the time at which he arrives. The deflector E may obviously be arranged to direct the tallies into any one of a greater number of drawers or compartments when it is desired to check the time at a greater number of short intervals, as, for example, every five minutes.

The swing or like movement of the deflector E is effected from the striking mechanism of the clock A by means of a beam or other lever G, one end of which engages the deflector E or a pin or arm *e'* on it, while the other end is slotted to engage a crank H on the arbor of the pin-wheel of the clockwork A—that is, the pin-wheel which in an ordinary clock lifts the striking-hammer. The usual locking-wheel and striking-hammer for striking the hours are dispensed with and the locking-wheel is replaced by a similar wheel I, having only four notches *i* when the checking mechanism is to be operated at intervals of a quarter of an hour or such other number of notches as may be required when the intervals of checking are varied. The locking-lever J, which engages the locking-wheel I, is lifted by pins *k* on the minute-arbor K of the clock, the pins *k* being fitted to act at every quarter of an hour or other interval. A disk L is fitted on the hour-socket M of the clock, the said disk being either formed with cam-like projections or, as is preferred, being fitted with adjustable projecting pieces *l*. These projections *l* are spaced apart and adjustable around the disk L to correspond to the periods of the day at which the checking of the workmen's time is to be effected—as, for example, at starting time in the morning and at the usual breakfast and dinner hours. As the disk L rotates with the hour-socket M the projections *l* in turn act on and lift a lever N, that normally engages a pin *o* on the fly-pinion arbor O and prevents the action of the striking-train, the train being freed on the raising of the lever N by any one of the projections *l*. When the striking-train is freed, as at any given hour corresponding to that for which one of the adjustable projections

is set, the crank H on the pin-wheel I is set in motion and operates the lever G, which swings the deflector E of the checking device from one position to another and thereby directs the workmen's checks or tallies into the early or late compartment, as the case may be.

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

10 1. In an apparatus for checking workmen's time the combination with a casing having a number of receptacles, and a slot for the insertion of tallies or checks, of a single deflector pivoted beneath the slot and adapted
15 when in one position to close the slot and when in another position to deflect the tallies in one of the receptacles, and, clock mechanism for moving said deflector, substantially as described.

20 2. In an apparatus for checking workmen's time, the combination with the casing having a slot and receptacles for receiving workmen's tallies of a deflector pivoted beneath the slot and having a laterally bent upper
25 end adapted in one position of the lever to close said slot, and clock mechanism for swinging said deflector to open the slot and direct the tallies into one or another of said receptacles according to the time of arrival
30 of the workmen, substantially as described.

3. In an apparatus for checking workmen's time, the combination with the locking-wheel of an ordinary clock, of a casing having a slit therein, a series of compartments within
35 said casing, the deflector pivoted within the casing, and a pivoted lever having a sliding

pivotal connection directly with said deflector at one end and a sliding connection with the clock mechanism at the other end, substantially as described.

4. In apparatus for checking workmen's time the combination with a striking clock of a rotating disk fitted on the hour-socket of the clock and having cam-like projections thereon a pivoted lever normally engaging
45 the fly-pinion arbor and adapted to be raised out of engagement therewith by said projections on the rotation of the disk, a locking-lever adapted to engage a suitably-notched locking-wheel and to periodically release said
50 wheel, a crank on the wheel spindle or arbor, a pivoted lever operated by said crank and a deflector actuated by said lever and serving to guide the tallies entering a casing within which the deflector is placed substan-
55 tially as described.

5. In an apparatus for checking workmen's time in combination, the casing, having a slit therein, a plurality of compartments in said casing and a pivoted plate having a laterally-
60 extending end with means for operating the same, the said lateral end being adapted to be registered with said slit to close the same, and the main portions thereof being adapted to act as a deflector when said slit is open,
65 substantially as described.

Signed at Glasgow, Scotland, this 24th day of September, 1896.

JOHN LORIMER CORBETT.

Witnesses:

WALLACE FAIRWEATHER,
JNO. ARMSTRONG, Jr.