No. 663,466. Patented Dec. 11, 1900.

K. PUTTKAMMER & F. ORTHMANN.

WORKMAN'S TIME CHECK.

(Application filed Jan. 9, 1900.)

(No Model.) 2 Sheets—Sheet 1.

Fig 1

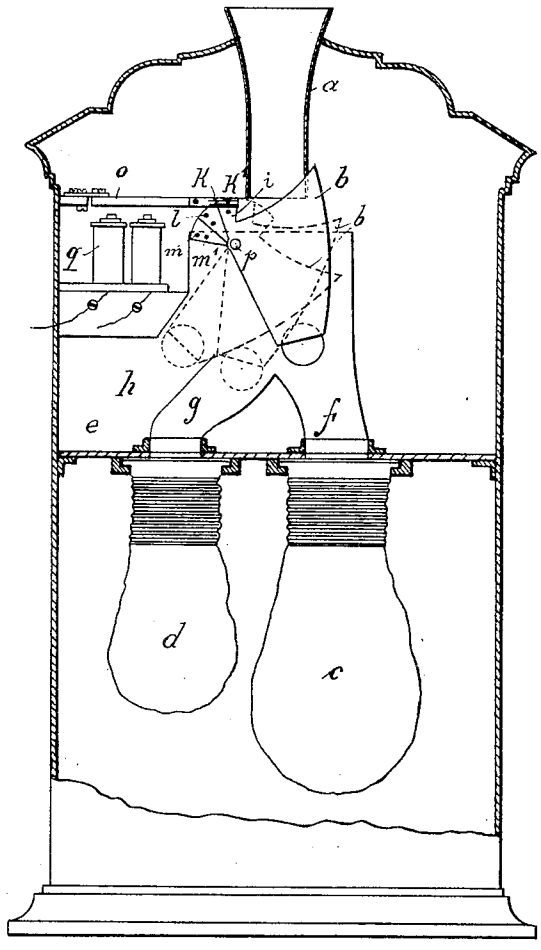
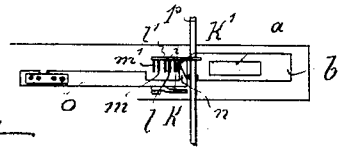


Fig 2



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Fig. 3.

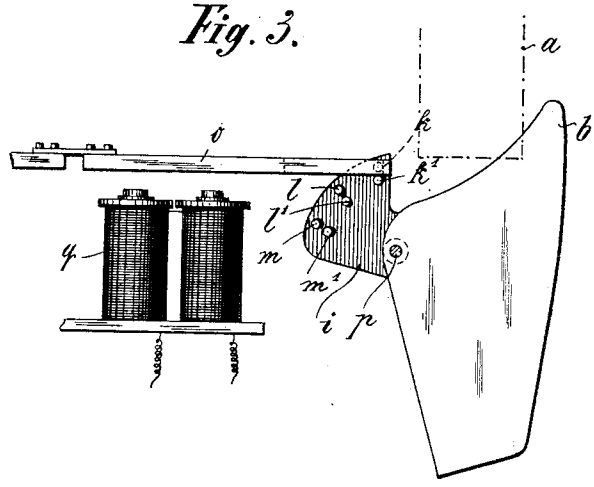
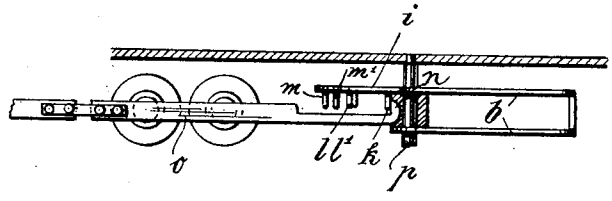


Fig. 4.



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UNITED STATES PATENT OFFICE.

KARL PUTTKAMMER AND FRIEDRICH ORTHMANN, OF CHARLOTTENBURG, GERMANY.

WORKMAN'S TIME-CHECK.

SPECIFICATION forming part of Letters Patent No. 663,466, dated December 11, 1900.

Application filed January 9, 1900. Serial No. 818. (No model.)

To all whom it may concern:

Be it known that we, KARL PUTTKAMMER, merchant, residing at 4 Pestalozzistrasse, and FRIEDRICH ORTHMANN, engineer, residing at 13 Goethestrasse, Charlottenburg, in the Kingdom of Prussia, German Empire, subjects of the German Emperor, have invented certain new and useful Improvements in Apparatus for Checking Workmen's Time; and we do hereby declare the nature of this invention and in what manner the same is to be performed to be particularly described and ascertained in and by the following statement.

This invention relates to apparatus for checking workmen's time of that class in which the counters or checks are collected in different receivers, according to the time at which they are dropped into the apparatus. In existing apparatus of this type the check-receivers are moved in succession into the path of the chute in connection with the inlet-aperture, the intermittent movement at the required time being generally obtained by means of a clock-driver contact. This arrangement requires an electromagnet for each receiver, which allows only of a limited number of receivers being adopted, besides rendering the apparatus unwarrantably costly.

The improved apparatus constructed in accordance with our present invention requires but a single electromagnet for operating any desired number of receivers, while at the same time the insertion of counters or checks after time is rendered impossible.

With the object of enabling a single electromagnet to operate a number of receivers we arrange between the stationary inlet-chute and the receivers a guide-chute adapted to be adjusted as to position for delivery into the one or the other receiver at the proper times.

The apparatus is represented in the drawings, in which—

Figure 1 is a sectional elevation; Fig. 2, a plan view of the armature-lever operating the guide-chute. Fig. 3 is an elevation of the armature-lever operating the guide-chute at a greater scale; Fig. 4, a plan view of Fig. 3.

In order to enable our invention to be clearly understood and readily carried into practice, we will now more fully describe the same.

In the casing containing the mechanism of the apparatus is arranged a stationary or fixed inlet-chute *a*, which may be made large enough to enable several workmen to simultaneously deposit their counters or checks without fear of their jamming in the interior. A guide-chute *b* is adapted to be adjusted at the proper times in such a manner as to lead either toward one of the bags or receivers *c d* or toward a compartment *e*, according to whether it is placed above one of the three channels *f g h*. (The positions of the chute *b* over the channels *g h* are drawn in dotted lines.) The bag or receiver *c* serves to receive the counters or checks from workmen entering during the interval between the opening of the workshops and starting work, the other bag *d* serves to receive those from men entering at the last minute, and the above-mentioned compartment *e* receives those from men who arrive after time or too late.

To enable the position of the guide-chute *b* to be adjusted at the required time, so as to lead into the one or other of the three channels *f g h*, as required, it is formed with a segment *i*, on which are provided pins *k l m*, so arranged as to be acted upon by the projection *n* on the armature-lever *o*. Thus when the first pin *k* is engaged by the projection *n* the guide-chute *b* is above the first channel *f*, while the other two pins *l m* correspond to the other two channels *g* and *h*. It will be understood that the weight of the guide-chute *b* is greater than that of the segment *i*, and consequently the said chute *b*, which is pivoted, has the tendency to fall in sucession from one position into the next in the other of the channels directly the armature *o* is attracted by its electromagnet *g*, and thereby releases the projection *n*.

As it is not desirable to allow the guide-chute *b* to alter its position too suddenly and in order to enable the counters or checks to drop into the channels *f* and *g* up to the very last moment of the limit of time allowed, we provide three supplementary pins or studs *k' l' m'* close to the pins *k l m*, above described,

for the projection n to catch onto after leaving the first-named pins k l m, so holding the guide-chute until it can drop into its next position.

The apparatus hereinbefore described in addition to the advantages already cited possesses another appreciable advantage in that any number of apparatus may be regulated by a single clock, so that the guide-chutes in all such apparatus move at exactly the same time.

Obviously more than the two bags or receivers may be adopted in any one apparatus, and instead of the above-mentioned compartment a bag may be used, if desired, and, again, the bags may be replaced by any other convenient receiver.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is—

1. In an apparatus for checking workmen's time the combination of a guide-chute b pivotally supported and provided with controlling stops or pins, an electromagnet and armature controlling the guide-chute by means of the said stops or pins, a plurality of bags or receptacles for receiving counters from the said chute, and chutes or channels conducting to the respective bags or receptacles, substantially as set forth.

2. In an apparatus for checking workmen's time, the combination of a movable guide-chute b, bags or receptacles c, d, e for counters, of a segment i, pins k, l, m and supplemental pins k', l', m' for holding the chute b stationary for a short time to deliver to the respective bags, and means for engaging the respective pins and thereby directing the said chute to the respective bags, substantially as set forth.

Signed this 27th day of November, 1899, at Berlin, Germany.

KARL PUTTKAMMER.
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