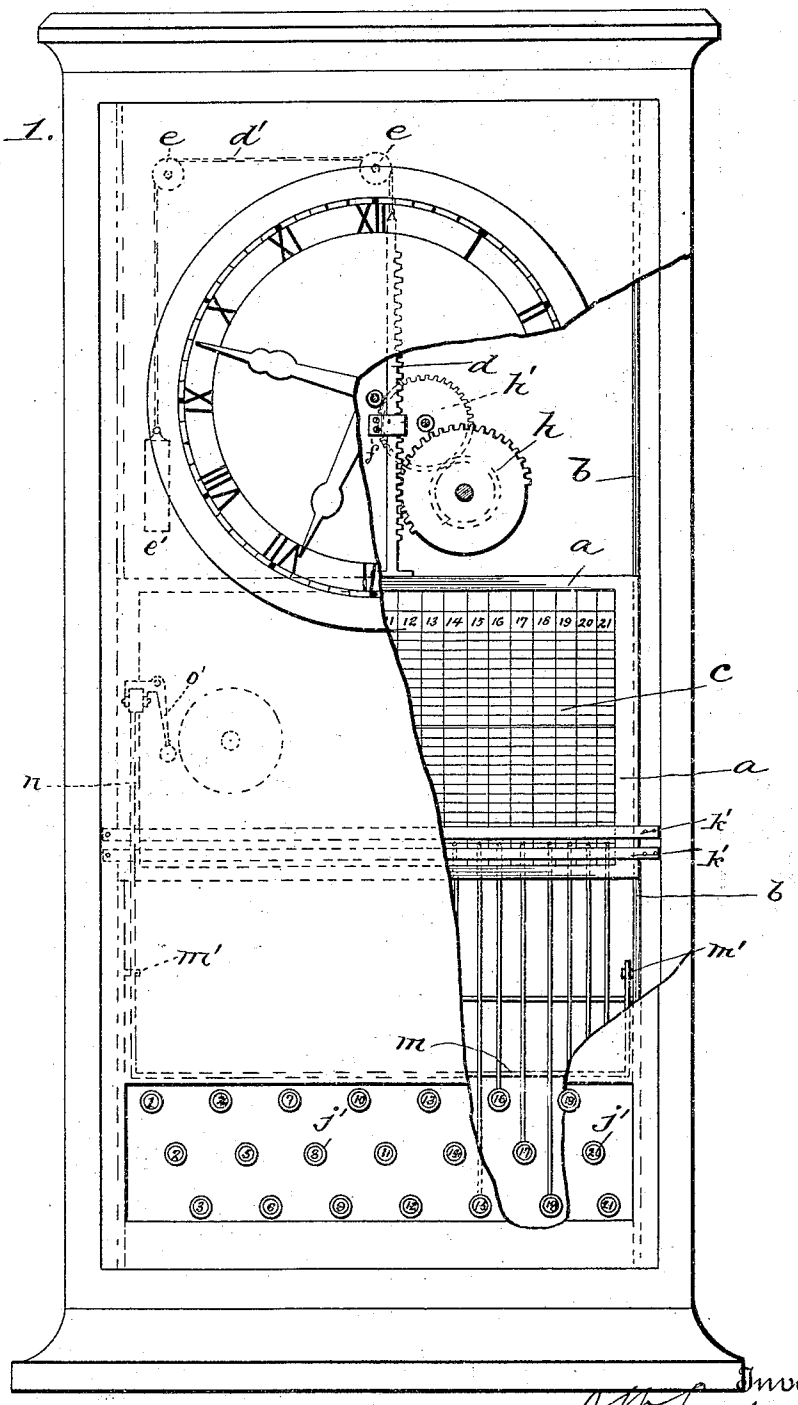
(No Model.) 2 Sheets—Sheet 1.

J. W. LAMBERT.

WORKMAN'S TIME RECORDER.

No. 553,033. Patented Jan. 14, 1896.

Fig. 1.



Witnesses
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Inventor
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(No Model.) 2 Sheets—Sheet 2.

J. W. LAMBERT.

WORKMAN'S TIME RECORDER.

No. 553,033. Patented Jan. 14, 1896.

Fig. 2.

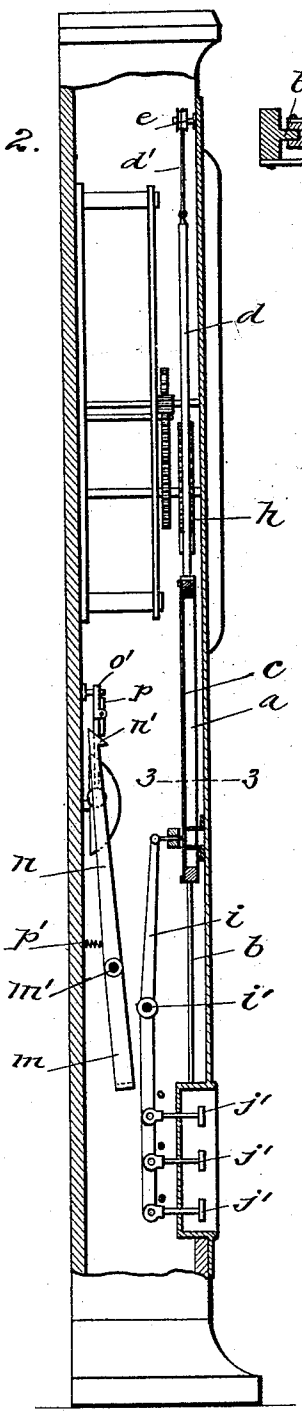


Fig. 3.

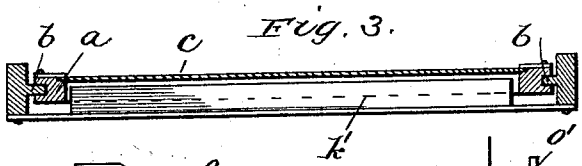


Fig. 4.

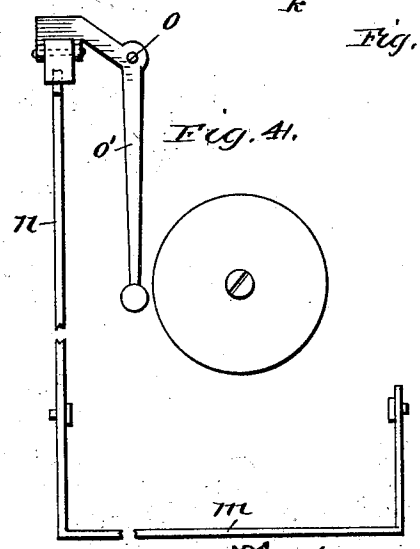


Fig. 5.

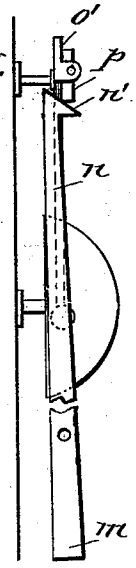


Fig. 6.

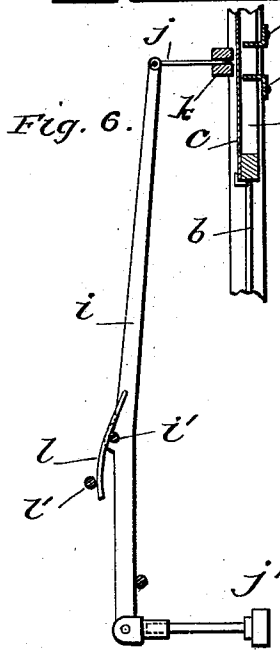
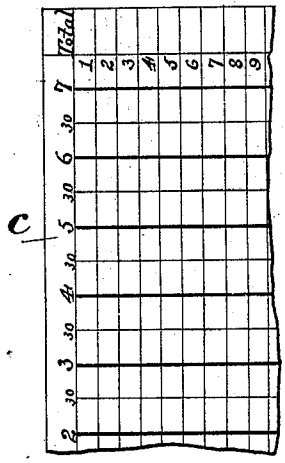


Fig. 7.



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN W. LAMBERT, OF ANDERSON, INDIANA, ASSIGNOR TO THE BUCKEYE MANUFACTURING COMPANY, OF SAME PLACE.

WORKMAN'S TIME-RECORDER.

SPECIFICATION forming part of Letters Patent No. 553,033, dated January 14, 1896.

Application filed April 17, 1895. Serial No. 546,099. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. LAMBERT, a citizen of the United States, residing at Anderson, in the county of Madison and State of Indiana, have invented certain new and useful Improvements in Workmen's Time-Recorders, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to a time recording or registering apparatus to be used where the hours of labor of a number of workmen are to be recorded, a series of keys being provided and each key being numbered and employed for recording the time of one workman, the record being made upon a vertically-moving time-sheet divided into vertical columns, one column being used for each workman, as more fully hereinafter set forth.

In the drawings, Figure 1 is a front elevation of a clock provided with my apparatus, a portion of its face being broken away to better show the working parts; Fig. 2, a vertical sectional view of the same; Fig. 3, a horizontal section on the line 3 3 of Fig. 2; Figs. 4 and 5, detail views of the alarm-ringing devices; Fig. 6, a detail vertical section showing more clearly the arrangement of the keys and puncturing-needles, and Fig. 7 a detail view of a portion of the time-sheet employed in this apparatus.

Referring to the drawings by letters, *a* is a rectangular frame grooved vertically at its side edges to embrace the ways *b* formed on the inner sides of the clock-frame, this frame *a* carrying the removable time-sheet *c*, the sheet being preferably inserted in the frame from the back thereof. The time-sheet is divided into a series of vertical columns which are numbered consecutively from left to right, and these columns are divided by horizontal lines to indicate the hours, as clearly shown in Fig. 7. Attached to the upper edge of the frame *a* is a vertical rack-bar *d*, which has attached to its upper end a cord *d'*, said cord being passed up over pulleys *e* journaled in the upper part of the clock-frame and carrying a weight *e'* on its lower end, this weight being sufficient to normally raise the frame and the rack-bar when the latter is released from the operating mechanism. The rack-bar is guided vertically by keeper *f* secured to a suitable part of the clock-frame. Meshing with the rack-bar is a mutilated gear *h*, which is toothed over a little more than half its periphery and which is revolved in the direction of the arrow shown on Fig. 1 once every twenty-four hours, suitable gear-wheels *h'* operated by the clock mechanism being employed for giving the diurnal rotation to the mutilated gear.

A series of key-levers *i* are pivoted on a rod *i'* extending horizontally across the clock-casing at a suitable point below the normal position of the frame *a*, each of the levers carrying a puncturing-needle *j* at its upper end and an operating-key *j'* at its lower end. The needles *j* work through openings in a horizontal guide-rod *k* extending across the clock-frame close to the rear side of the time-sheet, and in front of the time-sheet and parallel with the guide-bar *k* is a pair of separated bars *k'*, which serve to support the paper while being punctured by the punches or needles. To withdraw the punches or needles from the paper, suitable flat springs *l* (shown in Fig. 6) are employed, these springs being secured to the key-levers above their fulcra and bearing against a bar *l'* extending across the clock-frame immediately below. The keys *j'* work through a suitable plate set in the lower part of the clock-frame and are each provided with a number corresponding with the number in the column immediately above it on the time-sheet.

The operation of the apparatus is obvious. The rotation of the gear *h* forces the time-sheet frame down, and at the end of the working day the rack-bar is released by coming opposite the toothless part of the gear, and the weight automatically raises the frame to its starting-point so as to have it ready for operation the next morning. By the next morning the gear *h* will have rotated far enough for its teeth to engage the rack-bar and the descent of the frame will be repeated. By pressing in the keys the times at which the workmen begin work and quit work can be punctured in the respective columns, so that the number of hours each employé has worked will be registered on the sheet and in separate columns, whereby the bookkeeper can readily sum up the total number of hours worked by each employé. Of course a new

time-sheet will be placed in the frame each day.

The alarm mechanism consists of a depending frame m pivoted at m' on the inside of the clock-frame and extending across the same at a point below the supporting-rod of the keys. Extending up from the depending frame m is a vertical lever n, whose upper end is beveled outwardly at n'. Pivoted at o to the rear side of the clock-frame is the angle-lever o', which carries at its depending end the bell-hammer and on the end of its lateral arm a depending pivoted dog p, which depends into the path of the beveled end n' of the vertical lever. As will be seen, when a key is pressed in and the lever n is swung frontward the beveled part n' will engage the dog p and raise the lateral arm of the angle-lever, so that when the lever n is past the dog the lateral arm of the angle-lever will fall and the hammer will be thrown against the bell. When the lever n is drawn back by a spring p' or otherwise, the dog p will swing on its pivot and permit the lever n to pass behind it.

Having thus fully described my invention, what I claim is—

In a time recorder, the combination of a clock, a vertically-sliding frame mounted therein, a removable time-sheet secured in the sliding-frame, a rack-bar attached to said frame, means for normally holding up the frame, a mutilated-gear engaging the rack-bar and adapted to rotate once a day, the gear permitting the frame to resume its normal position when the mutilated part approaches the rack bar, mechanism for rotating said gear, a horizontal guide-bar extending across the clock close to the time sheet, a horizontal series of needles working through said guide bar and adapted to puncture the time sheet, and a series of keys connected to said needles, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN W. LAMBERT.

Witnesses:
PET PARENT,
H. E. LONGENECKER.