No. 800,391. PATENTED SEPT. 26, 1905.

H. B. PALMER.

TIME CARD.

APPLICATION FILED NOV. 3, 1904.

FIG. 1.

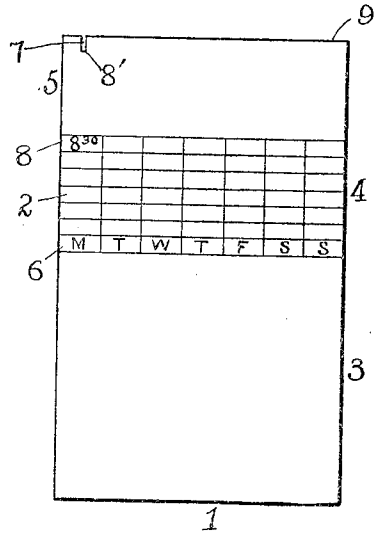
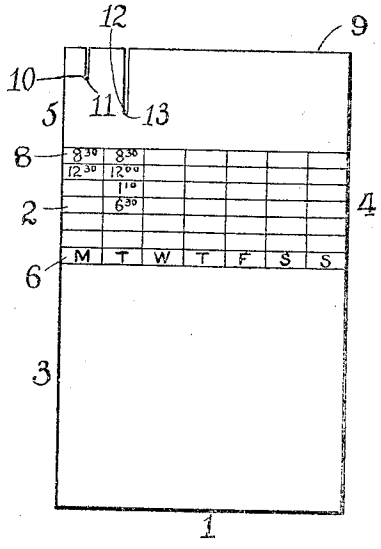


FIG. 2.



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TIME-CARD.

No. 800,391. Specification of Letters Patent. Patented Sept. 26, 1905.

Original application filed March 9, 1903, Serial No. 146,936. Divided and this application filed November 3, 1904. Serial No. 231,197.

To all whom it may concern:

Be it known that I, HARRY B. PALMER, a citizen of the United States, and a resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Time-Cards, of which the following is a specification.

This invention relates to time-cards, and particularly to a time-card for operating an automatic time-recorder for accurately determining the times at which different workmen begin and end their respective periods of work.

The principal object of the present invention is to provide a time-card capable both of preserving an exact record of an employee's time and of acting as an element of such automatic time-recorder when the card is operated upon by such automatic mechanism to make a record of the employee's time, and such card is used as a means for recording the time of the employee on different days of the week. I therefore consider within the scope of this invention any time-card capable of operating as an element of an automatic time-recording mechanism and having elements coöperative with such mechanism which correspond to different days of the week and to one or more periods of each day and control the making of records corresponding to such elements of the card. A machine capable of coöperating with such a time-card and also capable of forming such coacting elements of the card is shown, described, and claimed in a prior application filed by me March 9, 1903, Serial No. 146,936, in which application I have also shown the time-card constituting the subject-matter of the present invention, which is a division of such prior application.

The elements of my improved time-card which are intended to coöperate with the mechanism of an automatic time-recorder and which correspond to different days of the week and to one or more periods of each day will usually constitute feed-indicators coöperative with suitable means embodied in such a mechanism for locating a card in different feed positions with respect to a given point—that is, with respect to the printing-point of such mechanism. These feed-indicators may be formed in any manner which will enable them to control the making of a record on the time-card and are preferably in the form of feed-openings or feed-notches made by punching or otherwise mutilating the card. In all cases these feed-indicators, whatever may be the particular construction thereof, will be located in positions corresponding to different days of the week and to one or more periods of each day, such feed-indicators being preferably located in different positions in the direction of one dimension of the card, which positions correspond to different days of the week and also located in different positions in the direction of the other dimension of the card, which positions correspond to different periods of each day.

In the drawings accompanying this specification and forming part of the present application, Figure 1 shows a time-card having a feed-indicator corresponding to one period of one day. Fig. 2 is a similar view showing feed-indicators corresponding to different periods of different days.

For the purpose of coöperating with the mechanism of an automatic time-recorder to record on a time-card time indications corresponding to feed-indicators constituting elements representing different days of the week and one or more periods of each day I prefer to make use of a time-card blank having record-spaces thereon, each of which bears a different relation to its appropriate feed-indicator. Usually the time-card or time-card blank has a portion of its surface set off from the remainder, and this space is divided up into smaller spaces, each one of which constitutes a record part and when properly impressed or otherwise operated on forms a time-record. Preferably these record parts are placed in rows running in two directions, one lengthwise and the other crosswise of the time-card 1, the spaces forming such record parts and in which the time-records are made being preferably produced by ruling cross-lines on the card near the center thereof in order to leave a considerable length of card at one end for handling and a sufficient length of card at the other end to permit the formation of feed-indicators or feed-notches of the proper sizes. The record spaces or parts formed by the cross-lines are designated 2, and in this case they are forty-two in number, there being seven rows running lengthwise of the card, one row for each day of the week and six spaces or record parts in each row, one for

each of the four times of the day when an employee ordinarily begins and leaves off working and two others corresponding to the times when an employee may have occasion to work at night.

Whatever may be the positions of the different rows of spaces for different days and for different times of each day the feed-indicators should be so located as to control them properly and have a certain correspondence thereto. Preferably this correspondence will be such that the feed-indicators representing different days of the week will be separated by intervals corresponding to the spacing of the time-spaces for different days, and the feed-indicators representing different periods of a day will also preferably be separated by or will correspond in length to the intervals representing the spacing of the different time-spaces for each individual day.

As before stated, the time-card is divided lengthwise thereof into three main parts, which are designated herein 3, 4, and 5, respectively. The first of these designates the portion of the card which is grasped by the employee while he is making his time-record on the card. The second represents the space allotted to the time-records. The third represents the corresponding space allotted to the feed-indicators corresponding to such time-records. A fourth and minor division of the card is indicated at 6, this portion of the card being appropriated to the headings of the columns for the different days, the first letter of each day being placed at one end of its day-column in this subdivision of the card.

In Fig. 1 a time-card is shown in which a single feed-indicator and a corresponding time-record are shown. These are designated, respectively, 7 and 8. The feed-indicator in this case is a feed-opening or feed-notch and is located at one edge of the card. The portion of such feed-opening which controls the feed of the card is in this case the wall 8, which indicates by its distance from the edge of the card the extent of the feed movement of the card and by virtue of its position constitutes the means for locating the card in a new feed position as compared with the initial position in which the card is located by the edge 9 thereof.

In Fig. 2 I have shown how feed-indicators representing different days and different periods thereof are located with respect to corresponding record parts of the card, the time-records carried by such record parts being shown also. It is not important how these feed-indicators are formed so long as they are so placed as to correspond to their respective record parts or time-records on the portion 4 of the card allotted to the records. In this case each feed-indicator representing the second and other succeeding periods of any given day is formed as a continuation of the first feed-indicator or feed-opening for that day. This results where a card is notched from one edge thereof in long notches extending from such edge, the length of the notch being dependent upon the period of time at which the record is being made. When the record is to be made in the second period—that is, when the employee goes out to lunch—the length of the notch will, as indicated at 10, be twice that of the notch 7, and the wall 11 thereof will be twice as far from the edge 9 as the wall 8.

When the feed-indicators are intended to correspond to time-records made on different days of the week, such feed-indicators should be so disposed on the time-card as to permit the grouping of a plurality of feed-indicators or feed-openings apart from feed-indicators or feed-openings corresponding to other days of the week. Here this result is accomplished by locating the feed-indicators or feed-notches corresponding to different days of the week in different positions in the direction of one dimension of the card, while all of the feed-indicators or feed-notches for any single day run in the direction of the other dimension of the card and are preferably in alinement with one another. The feed-indicators for different days of the week are here shown as extending crosswise of the time-card, while those corresponding to different periods of any single day run lengthwise of such card. This is clearly shown in Fig. 2, from which it will be seen that a feed-indicator or feed-notch 12, corresponding to the fourth period of time of the second day of the week, is formed in alinement with and in this particular case constitutes an extension of other feed indicators or notches representing previous periods of the same day, and that each feed-indicator corresponding to a period of the second day is in alinement with the second column of time-records on the card, and is therefore located in a different position crosswise of the card from that occupied by any feed-indicator or feed-notch corresponding to a time-record of the first day of the week. The wall 13 at the inner end of the notch 12 is located at a greater distance from the wall 9 than either the wall 11 of the feed-notch 10 or the wall 8′ of the feed-notch 7, this increased distance being proportionate to the distance of the fourth time-record in the second column from the first record in such column. Thus a certain correspondence is preserved between each feed-indicator and the time-record corresponding thereto.

It will be noticed that when the feed-indicators are formed in a time-card by notching the same from one edge thereof different distances corresponding to different periods of a given day the feed-indicating walls, such as 8′ and 11 of the feed-indicators or feed-notches first formed are removed when another or other feed-notches are made in the same line; but this is true only when the feed-indi-

cators are formed in the particular manner shown in the drawings, and I do not limit myself thereto. It will be seen also that not only does each feed-indicator correspond to a record part or time-record of the card, but that the feed-indicator and the time-record of each pair are located in the same relation to each other, as will be evident by comparing the feed-notch 7 and its record part—that is, the space or time-record which follows the time record "8.30" in the first column, with the feed-notch 10 and its record part—that is, the record part or space which follows the time-record "12.30," and also by comparing both of these with the feed-notch 12 in the second column and its record part—that is, the space or time-record which follows the time-record "6.30." The different pairs of feed-indicators and time-records are, however, as will be evident, located in different relations both lengthwise and crosswise of the card.

While the feed-indicators may be of various kinds suitable for the operation of an automatic time-recorder, and while they may be formed in various ways, preferably each feed-indicator or feed-notch is formed in the time-card substantially at the same time that the time-record is made or printed on the card. In practice the feed-notches will preferably be cut immediately after the time-record is made. For example, the time-card is located in an automatic time-recorder by the edge 9 when a record is to be printed in the first space of any day, and immediately following the printing of the record in such space the feed-indicator or feed-notch controlling the positioning of the card for the printing of a record in the second space is made. Thus the time-record "8.30" is printed when the card is located by the edge 9, and immediately following the making of such record and before the time-card is removed from the machine the feed-indicator or feed-notch 7 is cut therein. When the card is again inserted in the machine, it will be positioned by the wall 8′, and a time-record will be made or printed in the second space of that day. Immediately following the making of this second record "12.30," and before the card is a second time removed from the machine the feed indicator or notch 10 will be formed, and the wall 11 will serve when the card is again placed in the machine to position such card for the making of a record in the third space in the first column of the time-card. In a similar manner when records are to be made in alinement with the column corresponding to the second day of the week the card will be first located by the edge 9 to print the first record "8.30" in the second column, suitable means being provided in such an automatic time-recording mechanism for locating the time-card in a different position laterally or crosswise thereof with respect to the recording mechanism.

When a time-card of this type is employed, it will be seen that each time the card is put in a machine and a time-record printed thereon the card will be mutilated in such a manner that the mutilation will bear a certain relation to such time-record, and thus the fact that a machine has been operated by an employee is checked in two different ways, one of these checks—to wit, the feed-indicator—serving to prevent the making of a time-record in any space except the first of each column unless a notch has been cut indicating that the previous record has been properly made.

What I claim is—

1. A time-card bearing a plurality of feed-indicators controlling different feed positions of said card and located in different positions in two directions on said card said positions corresponding to different days of the week and to different periods of each day.

2. A time-card having a plurality of feed-openings located in different positions in two directions on said card said positions corresponding to different days of the week and to different periods of each day.

3. A time-card bearing a plurality of feed-indicators controlling different feed positions of said card and located in different positions both crosswise and lengthwise of the card and corresponding to different days of the week and to a period of each day.

4. A time-card bearing a plurality of feed-openings controlling different feed positions of said card and located in different positions both crosswise and lengthwise of the card and corresponding to different days of the week and to different periods of each day.

5. A time-card having a plurality of feed-notches located at different points along one edge of the card and corresponding to different days of the week and to a period of each day.

6. A time-card having a plurality of feed-notches of different depths located at different points along one edge of the card and corresponding to different days of the week and to different periods of each day.

7. A time-card having a plurality of pairs of record parts and feed-indicators, the record part and the feed-indicator of each pair being located in the same relation to each other, and the different pairs being located in different relative positions corresponding to different days of the week and to a period of each day.

8. A time-card having a plurality of pairs of time-records and feed-indicators, the time-record and the feed-indicator of each pair being located in the same relation to each other, and the different pairs being located in different relative positions in two directions on said card said positions corresponding to different days of the week and to a period of each day.

9. A time-card having a plurality of pairs of time-records and feed-openings, the time-record and the feed-opening of each pair being located in the same relation to each other, and

the different pairs being located in different relative positions corresponding to different days of the week and to a period of each day.

10. A time-card having a plurality of pairs of time-records and feed-indicators, the time-record and the feed-indicator of each pair being located in the same relation to each other, and the different pairs being located in different relative positions in two directions on said card said positions corresponding to different days of the week and to different periods of each day.

11. A time-card having a plurality of pairs of time-records and feed-indicators, the time-record and the feed-indicator of each pair being located in the same relation to each other, and the different pairs being located in different relative positions both crosswise and lengthwise of the card which positions correspond to different days of the week and to different periods of each day.

12. A time-card having a plurality of pairs of time-records and feed-openings, the time-record and the feed-opening of each pair being located in the same relation to each other, and the different pairs being located in different relative positions both crosswise and lengthwise of the card which positions correspond to different days of the week and to different periods of each day.

13. A time-card having a plurality of pairs of time-records and feed-indicators, the time-record and the feed-indicator of each pair being located in the same relation to each other and in alinement in the direction of one dimension of the card, and the different pairs being located in different relative positions in the direction of the other dimension of the card such positions corresponding to different days of the week.

14. A time-card having a plurality of pairs of time-records and feed-indicators, the time-record and the feed-indicator of each pair being located in the same relation to each other and in alinement in the direction of one dimension of the card, and the different pairs being located in different relative positions in the directions of both dimensions of the card such positions corresponding to different days of the week and to different periods of each day.

15. A time-card having a plurality of pairs of time-records and feed-notches, the time-record and the feed-notch of each pair being located in the same relation to each other and in alinement in the direction of one dimension of the card, and the feed-notches of different pairs being located in different relative positions in the direction of the other dimension of the card and extending different distances from the edge thereof.

Signed at New York, in the county of New York and State of New York, this 6th day of October, A. D. 1904.

HARRY B. PALMER.

Witnesses:
EDGAR A. FELLOWS,
C. S. CHAMPION.