C. WHITAKER. RAILWAY TIME INDICATOR. APPLICATION FILED OUT. 17, 1904.

TRAINNO AR. LV. TIME OF ARRIVAL WILL BE NOTED BELOW EAST BOUND TIME WESTBOUND 7.45 800 am 8 am 19 - ZATE Fig.1 12-0 Fig. 2. 23 13 Witnesses:-L.L. Leibrock. S.F. Christy. Inventor, Charles Whitaker.

UNITED STATES PATENT OFFICE.

CHARLES WHITAKER, OF EUFAULA, INDIAN TERRITORY.

RAILWAY TIME-INDICATOR.

No. 798,987.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, Charles Whitaker, a citizen of the United States, residing at Eufaula, Creek Nation, Indian Territory, have invented a certain new and useful Railway Time-Indicator, of which the following is a specification.

The objects of my invention are to provide an indicator of simple, durable, and inexpensive construction that may be quickly and easily applied to any ordinary indicator-board, so that an operator in his office may quickly and easily display upon the indicator-board, located at a point exterior to his office, the time when various trains are expected to arrive and to indicate whether or not said trains are late, and if so how long they will be delayed.

My invention consists in the construction, arrangement, and combination of the various parts of the device, whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which—

Figure 1 shows a front view of an indicator-board with portions of the time-indicating disks visible through openings in the board. Fig. 2 shows a front elevation of the time-indicating disks. Fig. 3 shows a rear elevation of the disks, which are to be set by the operator as required to turn the time-indicating disks; and Fig. 4 shows a vertical central sectional view of the complete device.

Referring to the accompanying drawings, I have used the reference-numeral 10 to indicate a railway time-board of the ordinary kind. This board is provided on its face with vertical and transverse lines, the first ver-4° tical column to the left indicating the trainnumbers, the next the schedule time for the arrival of the trains, the third the schedule time for the departure of the trains, and on the large column to the right a space for 45 the time of the arrival of the train to designate whether the train will arrive on time according to schedule, or if it is late to what extent. The board is also provided with a number of horizontally-arranged lines upon 50 which are marked the general direction in which the various trains are traveling. the board between the horizontally-arranged lines under the column denoting the time of arrival I have formed an opening 11 oppo-55 site each train-number, and means hereinafter described are provided for displaying through

these openings statements as to the time when the certain train will arrive.

The numeral 12 indicates a shaft one end of which is mounted in the board below the 60 row of openings, and the other end is extended rearwardly from the board and designed to pass through a wall into a room occupied by the operator. Fixed to the outer end of the shaft 12, directly in the rear of the board 65 10, is a relatively small disk 13, having formed on its front face, near its periphery, a series of lines dividing said space into oblong figures. Within one of said figures are the words "On time," and within the remaining 70 ones of said figures are words and figures indicating different times with the word "Late" in each figure. The said figures on the disk are so arranged with relation to the board 10 that the words on the figures may be seen 75 through the lower one of the openings 11 in the board. On the other end of the shaft 12 is a disk 14, which may be smaller than the disk 13, if desired, and this disk is fixed to the shaft 12 by the set-screw 15. It is 80 formed with a series of openings 16 near its periphery, and adjacent to these openings are numbers corresponding to the figures and words on the disk 13. Said disk 14 is preferably provided with a handle 17, so that the 85 disk may be easily rotated.

Rotatably mounted upon the shaft 12 is a sleeve 18, and fixed to one end of the sleeve is the disk 19, immediately in the rear of the disk 13 and of somewhat greater diameter 90 than the disk 13. This disk is also formed with figures upon its front face near its periphery, which figures may be seen through the next to the lower opening in the board 10. The sleeve 18 is slightly shorter than the 95 shaft, and mounted upon the other end of said sleeve is the disk 20 of slightly-larger diameter than the disk 14 and formed with a handle 21 and a series of openings 22. Mounted upon the sleeve 18 is another sleeve provided 100 with a disk on its outer end larger than the adjacent disk in front of it, and on the other end of this sleeve is a smaller disk slightly larger than the adjacent disk, before described, in the rear of it. Any number of sleeves and 105 disks may be provided in the same manner. All of the disks in the rear of the board have figures upon their front faces to indicate the time of arrival of trains, and each is slightly larger in diameter than the one in front of 110 it, so that a portion of its front face near its periphery may be seen through one of the

openings in the board. For each of such sleeves and disks there is a disk at the rear end of the shaft fixed thereto by a set-screw and formed with openings, as before described.

I have provided means for holding all of the disks at the rear end of the device accurately spaced apart and for locking each individual disk as follows: The numeral 23 indicates a bracket secured to a stationary support 24 and formed with notches in its lower end, each designed to receive the edges of the disks at the rear of the shaft 12 and sleeves 18. The said bracket 23 is formed with a series of openings 24, designed to coincide with the openings of the said disks, so that the pins 26 may be passed through the openings in the bracket and into any selected one of the openings in the disks. Supporting-chains 27 are provided for said pins.

In practical use and assuming that the large disks are arranged in the rear of a board provided with openings as described and divided by vertical and horizontal lines and provided with indicia designating the subject-matter before explained and assuming that the other set of disks were arranged in the operator's room, then if the operator received information that a certain train would be ten minutes late he would then grasp the pin 26 belonging to the disk which applied to the particular train designated and would remove said pin. He would then grasp the handle of said disk and rotate the disk until the opening

therein marked with the numeral 10 would be directly under the bracket 23. He would then replace the pin in position through the bracket and the opening indicated by the numeral 10. This operation would move the disk in the rear of the board that related to the particular train desired to such position that the figure on the said disk in which was contained the words "Ten minutes late" would be visible through the opening in the board corresponding to the train designated. The object in providing the pins 26 is to prevent

any of the disks from turning except the particular one that the operator grasps. If they were not thus locked, others of the disks might be inadvertently moved when the disk was 50 moved to the desired position.

Ordinarily the room in which a railway operator or station agent is located is entirely inclosed and it is necessary to leave the room in order to write upon a board the time when certain trains are expected to arrive. This operation has to be gone through very often,

because when a train is late the operator frequently receives information stating that the train will arrive at different times. Therefore the posting of the expected time of the 60 arrival of various trains is a matter which consumes considerable of an operator's time and requires him to leave his office frequently. By means of my improvement the small disks at the inner end of the shaft may be located 65 inside the operator's room and at a point where they may be conveniently moved from the operator's chair, so that the operator need lose little time in accurately posting upon the indicator-board all of the information he re- 7° ceives from time to time in regard to the arrival of trains.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States therefor, is—

1. The combination with a board having openings therein, of a shaft rotatably mounted in the rear of the board, a disk on the shaft having a portion of its face visible through one of the openings, a disk fixed to the other end of the shaft, a sleeve rotatively mounted on the shaft, a disk fixed to its front and of larger diameter than the first-mentioned disk and located in the rear of said first-mentioned disk and having a portion of its face visible through another one of the openings in the board, a disk on the rear end of the sleeve, a bracket formed with notches to receive the disks at the rear of the shaft and sleeve, and means for locking said disks to the bracket.

2. The combination of a board formed with openings, a shaft rotatably mounted in the rear of the board, a disk fixed to the front of the shaft with a portion of its face visible through one of the openings, a sleeve rota- 95 tably mounted on the shaft, a disk at the front thereof of larger diameter than the aforesaid disk and located immediately in the rear of it with a portion of its face visible through another one of the openings in the board, disks 100 fixed to the rear ends of the shaft and sleeve and formed with openings near their peripheries, a bracket formed with notches to receive the rear disks and also formed with openings designed to coincide with the openings 105 in the disks and pins designed to pass through the openings in the brackets and to enter one of the openings in each disk.

CHARLES WHITAKER.

Witnesses:

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S. F. Christy.