(No Model.)

2 Sheets—Sheet 1.

J. A. HUDSON.

ORDER CASE FOR TELEGRAPH OPERATORS.

No. 523,312. Patented July 17, 1894.

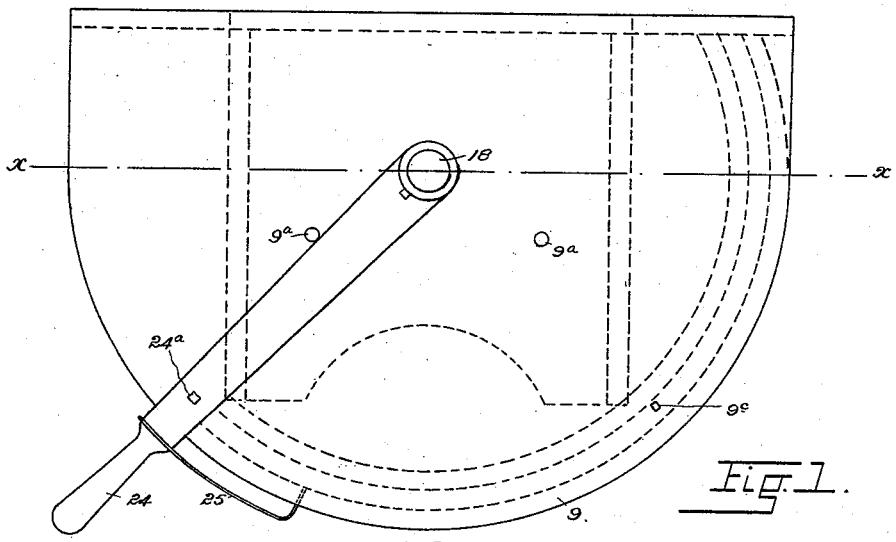

Fig. 1.

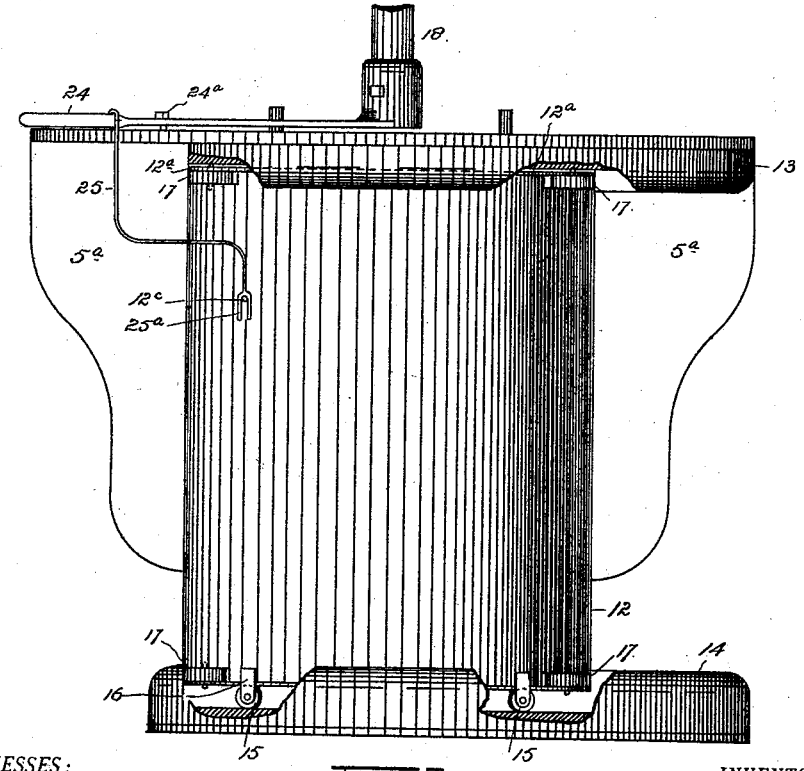

Fig. 2.

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INVENTOR

J. A. Hudson

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(No Model.)

2 Sheets—Sheet 2

J. A. HUDSON.

ORDER CASE FOR TELEGRAPH OPERATORS.

No. 523,312. Patented July 17, 1894.

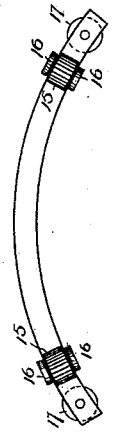

Fig. 4.

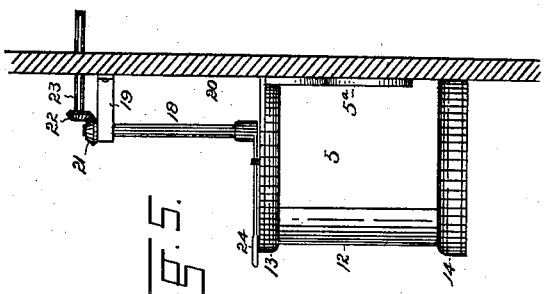

Fig. 5.

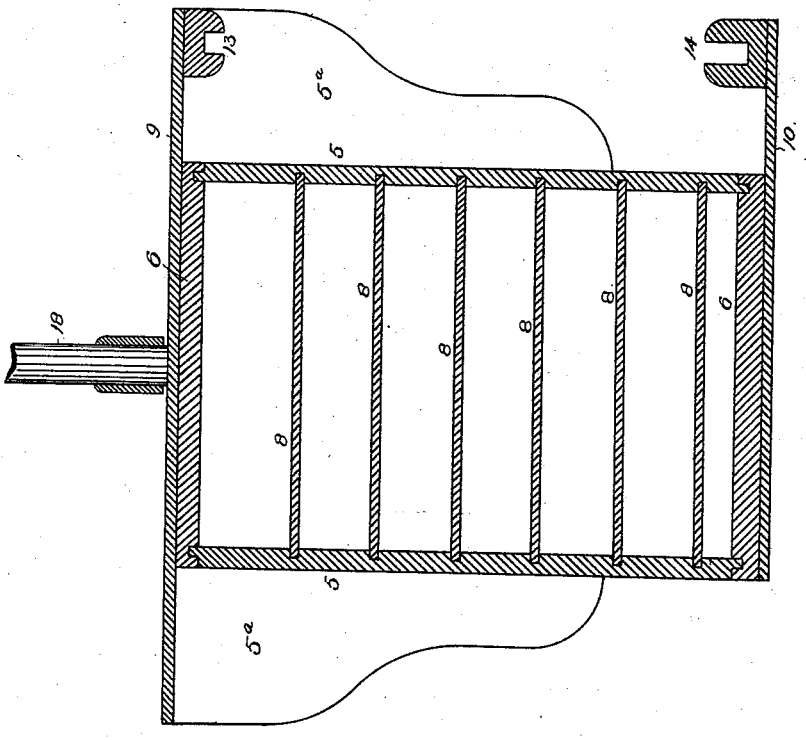

Fig. 3.

WITNESSES:

Chas. E. Dawson

INVENTOR

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UNITED STATES PATENT OFFICE.

JAMES ARTHUR HUDSON, OF BUENA VISTA, COLORADO.

ORDER-CASE FOR TELEGRAPH-OPERATORS.

SPECIFICATION forming part of Letters Patent No. 523,312, dated July 17, 1894.

Application filed January 8, 1894. Serial No. 496,033. (No model.)

To all whom it may concern:

Be it known that I, JAMES ARTHUR HUDSON, a citizen of the United States of America, residing at Buena Vista, in the county of Chaffee and State of Colorado, have invented certain new and useful Improvements in Order-Cases for Telegraph-Operators; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in cases for use by telegraph operators in the railway service, and the object is to prevent mistakes by failing to give the red or order signal to approaching trains in accordance with the orders of the train dispatcher. For instance, the operator receives information from the dispatcher that a certain train must stop or meet another train at a point other than the regular stopping place. The operator also receives instructions at the same time to give orders to this effect, to the men in charge of the train in question. This necessitates the giving of a signal, whereby the trainmen may know there are orders for them at the station in charge of said operator. Under the system heretofore in vogue, it is possible for the telegrapher to copy the orders for the trainmen and forget to give the order or stop signal, and if he is located at a point not a regular stopping place for that train, the train may go on and a collision occur; or, if the station is a regular stopping place, the conductor might fail to ask for orders unless the order signal were displayed.

My improved case is designed to contain the blanks which the operator must use in copying the orders. These blanks are always arranged with carbon sheets between to expedite the work, and prevent delay. The case is provided with several shelves numbered according to the copying blanks they contain, since sometimes it is necessary to make but three copies,—one for the conductor, one for the engineer, and one to be retained by the operator; while on other occasions, the number of copies necessary may be greater by reason of the changed circumstances or requirements.

The door of my improved case is normally closed, and is so connected with the arm employed in displaying the order signal, that the operator cannot open the door without moving the arm and displaying the signal. In other words, the signal must be first displayed, and the orders copied afterward, so that there can be no possibility of mistake.

The invention consists further of the features, arrangements and combinations hereinafter described and claimed, all of which will be fully understood by reference to the accompanying drawings, in which is illustrated an embodiment thereof.

In the drawings, Figure 1 is a top or plan view of the device. Fig. 2 is a front elevation, the track being partly broken away and sectionized to show the anti-frictional rollers attached to the door. Fig. 3 is a vertical section taken on the line x—x, Fig. 1. Fig. 4 is an underneath view of the door showing the rollers. Fig. 5 is a side elevation of the case shown on a smaller scale, and in connection with the signal operating mechanism.

Similar reference characters indicating corresponding parts or elements of the mechanism in the several views, let the numeral 5 designate the vertical sides of the case having the bottom 6, the top 7 and the intermediate shelves 8.

The case is located between the top and bottom plates 9 and 10 respectively, and the sides are provided with wings or flanges 5^a, whereby the case may be attached to any suitable stationary support.

The front of the case is provided with a door 12, curved or arc-shaped in horizontal section, and adapted to travel in the upper and lower curved tracks 13 and 14 which receive the corresponding edges of the door. These tracks 13 and 14 are preferably formed of metal, and are made fast to the top and bottom plates 9 and 10 respectively. The lower edge of the door rests upon rollers 15 which engage the bottom of the track and have horizontal axes supported in depending metal hangers 16 made fast to the door. The upper and lower edges of the door are both provided with rollers 17 having vertical axes.

The thickness of the door is somewhat less than the diameters of the rollers 17 whose peripheries engage the sides of the grooves formed in the metal tracks, and thus reduce the friction to a minimum. The edges of the door are preferably provided with metal plates or straps 12^a to prevent the door from warping or changing its shape. The door is recessed to receive the rollers 17 which are located between the metal plates 12^a and the body of the door.

Centrally journaled in the top plate 9 above the case, is the vertical shaft 18 whose upper extremity is further journaled and supported in a box 19 made fast to the wall of the room, or other suitable stationary support 20. The upper extremity of this shaft is provided with a fast bevel gear 21 meshing with a similar gear made fast to one extremity of a horizontal shaft 23 which passes through the outer wall of the room and carries the order signal (not shown) which must be so located as to be visible to men in charge of approaching trains. To the lower part of shaft 18 is made fast an arm 24 located in suitable proximity to the top of plate 9 and provided with an angular arm 25 provided with a forked extremity 25^a engaging a projection 12^c made fast to the door 12.

The arrangement of the signal operating mechanism, is such, with reference to the door, that when the latter is closed, the order signal is not displayed.

Now if the operator in charge of the station has received instructions from the train dispatcher to give certain orders to the men in charge of an approaching train, it will be necessary for him to open the door of the case to get his order blanks which are placed upon the shelves 8, which should be numbered to designate the number of the copying blanks which they contain; but the door of the case can only be opened by shifting the arm 24 in such a direction as to give a partial rotation to the vertical shaft 18, and a corresponding movement to the horizontal shaft 23, this last named movement being sufficient to display the order signal. Hence it results that the signal must be displayed before the orders can be copied, thus obviating the possibility of mistake. The top plate 9 is provided with pins or projections 9^a which form stops for the arm 24 and prevent its being thrown farther in either direction than is necessary in the performance of its function, as heretofore stated. The arm 24 is also provided with a locking device 24^a adapted to enter apertures 9^c formed in the plate 9 when the arm is at its limit of movement in either direction. This feature prevents the accidental movement of the arm when adjusted.

Having thus described my invention, what I claim is—

1. The combination with the operating arm of the signaling mechanism, of the stationary case, a movable door suitably attached to the case, and means for connecting the signal operating arm with the door, whereby the movement of the arm actuates the door, substantially as described.

2. The combination of the case having a door whose edges are provided with anti-frictional rollers, upper and lower grooved tracks to receive the rollers, and the operating arm of the signaling mechanism suitably connected with the door, substantially as described.

3. The combination with the case provided with the door, curved or arc-shaped in horizontal section, of stationary grooved tracks adapted to receive the upper and lower edges of the door, and the operating arm of the signaling mechanism, said parts being suitably connected with the door, the parts being connected and arranged in such a manner that the displaying of the signal and the opening of the door are accomplished simultaneously, substantially as described.

4. The case provided with the door circular in cross-section, the upper and lower edges being provided with vertical rollers, the lower edge being further provided with horizontal rollers, in combination with the tracks grooved to receive the roller edges of the door, and the operating arm of the signaling mechanism, said arm being suitably connected with the door, substantially as described.

5. The combination with the shaft and operating arm of the signaling mechanism, of the stationary order case, the movable door attached to said case, and an auxiliary arm connecting the door with the signal operating arm, whereby the movement of the signaling arm actuates the door, substantially as described.

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

JAMES ARTHUR HUDSON.

Witnesses:

CHAS. E. DAWSON,

F. H. JOHNSON.