2 Sheets—Sheet 2.

F. C. D. McKAY.

Station-Indicators.

No. 210,798. Patented Dec. 10, 1878.

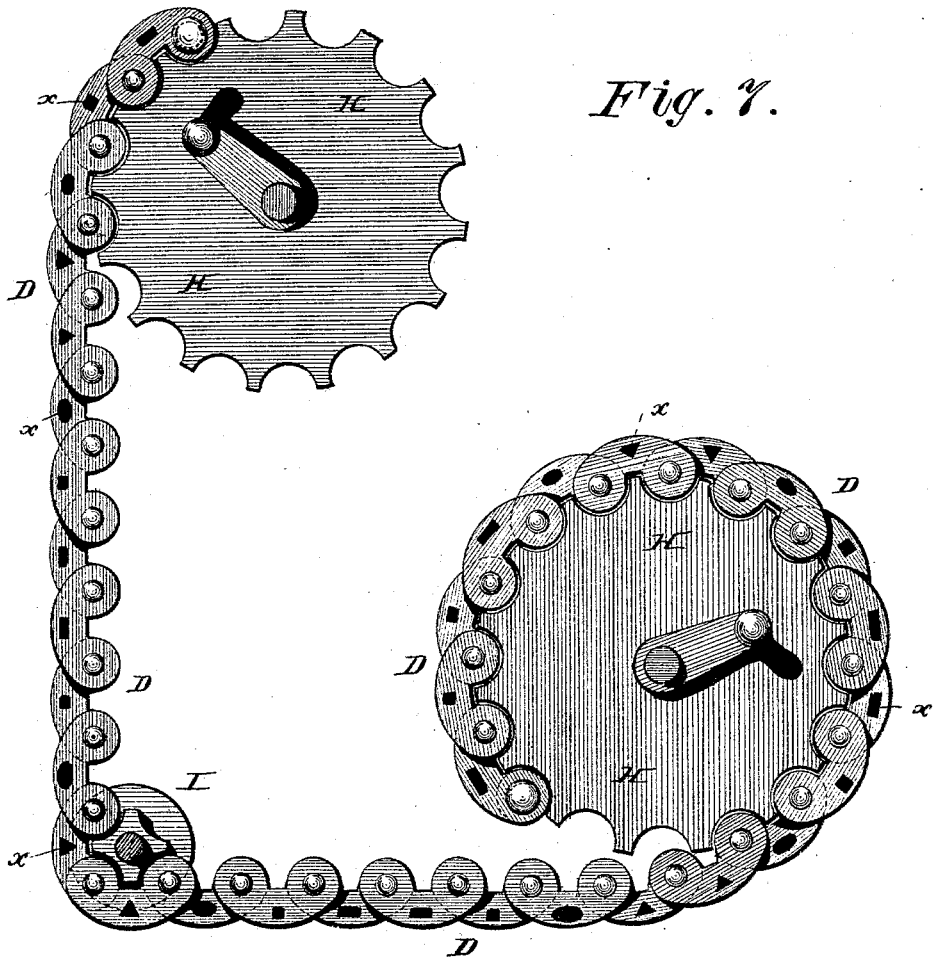

Fig. 7.

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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN STATION-INDICATORS.

Specification forming part of Letters Patent No. **210,798**, dated December 10, 1878; application filed November 12, 1878.

To all whom it may concern:

Be it known that I, FERDINAND C. D. McKAY, of Paterson, in the county of Passaic and State of New Jersey, have invented certain new and useful Improvements in Station-Indicators; and I do hereby declare that the following is a full, clear, and exact description thereof, which 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 letters of reference marked thereon, which form a part of this specification.

The nature of my invention consists in the construction and arrangement of an indicator to be used in a car for indicating the next station or place a car or train will pass or stop at, as will be hereinafter more fully set forth.

In the annexed drawing, to which reference is made, and which fully illustrates my invention, Figure 1 is a front elevation of my indicator, with the outer case removed. Fig. 2 is a plan view, and Fig. 3 is a transverse vertical section, of the same. Fig. 4 is an end view of the indicator-chain. Fig. 5 is a front view of the case inclosing the indicator. Fig. 6 shows a modification of the invention. Fig. 7 is also a modification thereof.

A represents a frame-work of any suitable construction, in which two parallel shafts, B B, have their bearings. Upon each shaft B are secured two toothed wheels, C C, and over the corresponding wheels on the two shafts are placed endless chains, each of which is composed of two series of curved links, D D, pivoted together at their ends, and constructed to fit over the toothed wheels, as shown particularly in Fig. 4.

F F represent the signs, which are shown constructed of sheet metal with bent-over flanges *a a* along their side edges, under which the card or label is inserted having the station, place, or street printed thereon; but it is evident that these signs may be constructed in any desired manner, and that they may have the names of the stations, &c., permanently or otherwise attached thereto. Along the inner edge of each sign F is fastened a rigid metal bar, *b*, which projects a suitable distance beyond the ends of the signs. The signs F are attached to the inner series of links of the two endless chains by the projecting ends of the bars *b*, which ends are polygonal in cross-section, being inserted in prismatic slots *x* made in said links.

Instead of the continuous bar *b* for each sign, a lug may be used at each end, according to the construction of the sign.

The holes *x* in the chains may be made square, oblong, oval, triangular, or any other shape that will, when the correspondingly-shaped lugs or ends of the bars *b* are inserted therein, prevent the signs from turning, as upon pivots, but always retain the same position with relation to their respective links of the chains. The signs will therefore change their position when the chains pass around over the toothed wheels, or simply around shafts.

The manner of connecting the sign to the chains may be reversed by having sockets in the ends of the signs, and lugs on the links of the chains to enter said sockets. The signs may also be connected to the chains near the center of the ends of the signs, instead of at the edge, as shown in the drawing.

It will readily be seen that when the chain is moved up or down, or horizontally either way, or when the chains change position, it causes a change of position of the signs, making a new indication at each change.

The device is inclosed within a box or case, G, having a suitable opening at *d*, through which the signs may be seen in succession; and by the construction of the indicator as described it can be arranged in any required position to show the signs from either side at the top or bottom, or from the top or bottom.

This device is principally intended to be used in a car for indicating the next station or place a car or train will pass or stop at. It is also useful in railroad depots as an indicator to show the train, and time the next train or trains will start and at what stations they will stop.

The indicator may be operated by a crank, as shown, or by any other suitable means. The chains to which the signs are attached may be arranged to pass over a series of wheels or pulleys—for instance, as indicated in Fig. 6—which will give long chains for a great number of signs in a small compass. These chains

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Fig. 1.

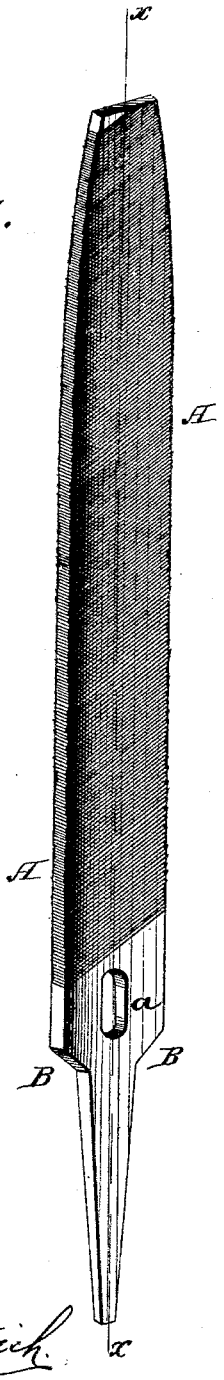
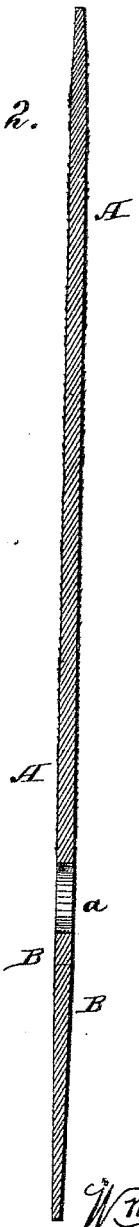


Fig. 2.



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