

(No Model.)

I. A. McCORMACK & A. H. WALKER.
SCHEDULE INDICATOR.

No. 579,930.

Patented Mar. 30, 1897.

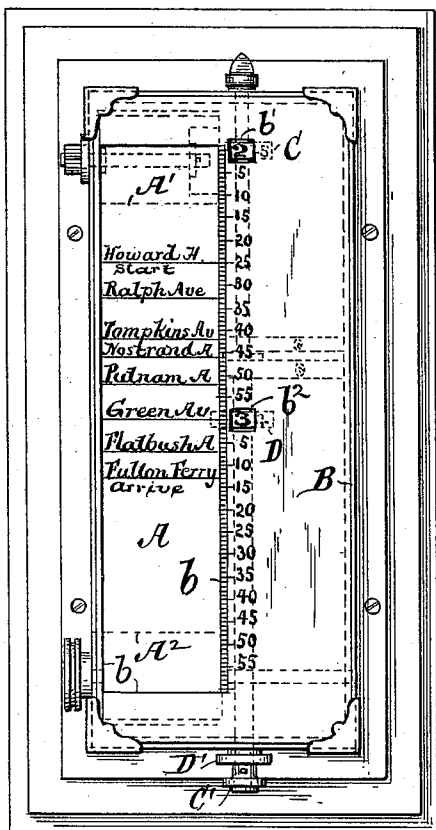


Fig. 1

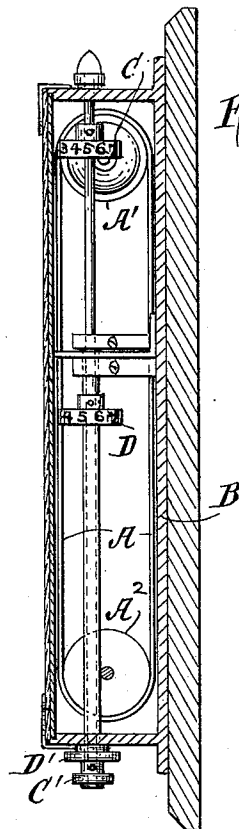


Fig. 2

Fig. 3

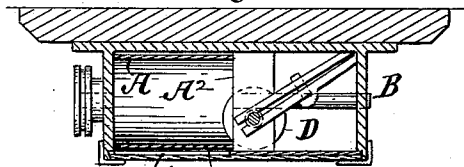


Fig. 5

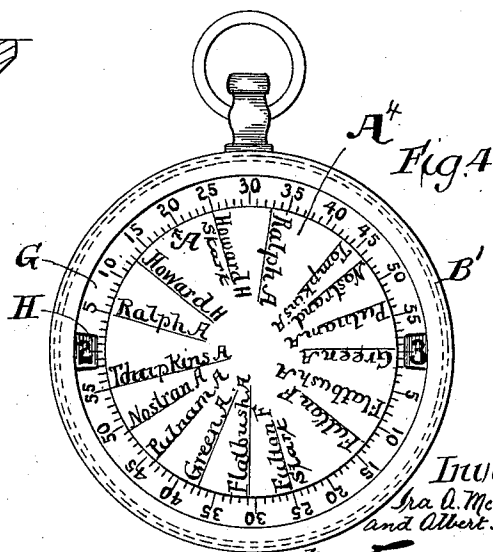
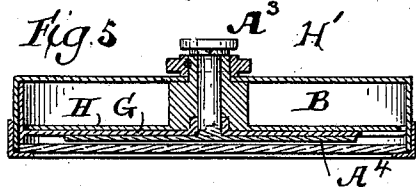


Fig. 4

Witnesses
Geo. Wadman
Ernest Hopkinson

Inventors
Ira A. McCormack
and Albert H. Walker
by Edwin H. Brown
their attorney

UNITED STATES PATENT OFFICE.

IRA A. MCCORMACK AND ALBERT H. WALKER, OF BROOKLYN, NEW YORK.

SCHEDULE-INDICATOR.

SPECIFICATION forming part of Letters Patent No. 579,930, dated March 30, 1897.

Application filed May 27, 1896. Serial No. 593,236. (No model.)

To all whom it may concern:

Be it known that we, IRA A. MCCORMACK and ALBERT H. WALKER, of Brooklyn, in the county of Kings and State of New York, have invented a certain new and useful Improvement in Schedule-Indicators, of which the following is a specification.

The object of our improvement is to provide a simple and inexpensive indicator of scheduled times, as, for instance, the times at which a car is due at different points of a trip.

With these objects in view the invention consists in the novel features of construction and arrangement hereinafter more fully described.

In the accompanying drawings, Figure 1 is a front view of the schedule-indicator. Fig. 2 is a longitudinal section of the same. Fig. 3 is a transverse section. Fig. 4 is a front view of another form of schedule-indicator. Fig. 5 is a transverse section of the latter.

Referring first to Figs. 1, 2, and 3, A designates an endless belt, which for convenience is designated the "station-surface." This belt is mounted upon rollers A' A², journaled in a case B, the roller A² having a handle projecting outside the case to admit of turning it and thereby adjusting the belt. On the belt at different distances apart are marked the names of stations for one trip along a route for a car, and also a second set of these stations in the reverse order for a return trip along the route. The belt may be adjusted to present either of these sets of markings opposite an opening b, formed in the front of a case. On one of the longitudinal edges of this opening are marked graduations indicative of time, and at intervals these are suitably numbered, as, for instance, "5," "10," "15," &c., the entire number of the first set of the graduations being sixty and below them being a second set of sixty similar graduations. At the head of the first set of graduations is an opening b', opposite which is a movable indicator-surface, constituted in the present construction by a roller or indicator-wheel C, bearing the numbers "1" to "12," inclusive, to indicate hours. This roller is journaled in opposite ends of the case B in a position at right angles to the rollers A' A² or can be worked on same journals of rollers A' and A². One of its journals projects

through the case and has a handle C', by which it may be turned. By rotating the roller any one of its numbers may be brought opposite the opening b'. If, for instance, a car were to start at 2.25, the roller C would be adjusted to display its number "2" through the opening b, and the upper line of the first set of markings on the belt would be brought opposite to that graduation which is marked "25" in the first set of graduations. In the front of the case at the junction of the two sets of numbered graduations is an opening b², through which may be seen any one of a series of numbers from "1" to "12," inclusive, marked upon a roller D, which is made in the form of a sleeve surrounding the roller C and suitably supported within the case B. At one end it projects through the case and is provided with a handle D'. In the illustration given, inasmuch as the roller C has been set to indicate "2," the roller D will be set to indicate "3," and thus the schedule-indicator, as a whole, will indicate various times at which different streets or stations are to be passed and also that the final end of the trip is to be made at 3.13.

This indicator will enable the conductor to make the scheduled time, and it will also announce to passengers the time when they ought to arrive at their destinations.

In Figs. 4 and 5 we have shown a disk-shaped case B' and the stations marked upon a disk A⁴ instead of a belt A. This disk operates in connection with another disk G, which is marked with two sets of graduations severally indicating sixty minutes and having notches between the two sets of graduations. Behind this disk is another disk H, which is marked with two sets of numbers differently colored or otherwise distinguished, which may be severally brought opposite the notches in the disk G. The notched disk is intended to be stationary and the other two disks movable by means of handles A³ and H'.

From the above it will be apparent that our invention consists, broadly, of a casing provided with an opening at the edge of which are marks indicative of minutes, a movable indicator-surface having marks indicative of hours arranged near the point of commencement of the minute-marks, and a surface movable in the opening of the casing, con-

taining the names of the various stations at which stops are made.

What we claim as our invention, and desire to secure by Letters Patent, is—

5 1. In an indicator, the combination of a casing provided with an opening having at its edge marked graduations indicative of minutes, a movable indicator-surface adjacent the end of the minute-graduations and
10 bearing marks indicative of hours and a surface movable in the opening of the casing and having the names of stations marked thereon, substantially as described.

15 2. In an indicator, the combination of a casing provided with an opening having at its edge marked graduations indicative of time, an endless belt adapted to move longitudinally in the opening of the casing having the names of stations marked thereon, and
20 means for moving the belt longitudinally within the opening to bring the names of the stations to register with the graduations at the edge of the opening, substantially as described.

25 3. In an indicator, the combination of a casing provided with an opening having at its edge marked graduations indicative of time, an endless belt movable longitudinally

within the opening, and having two series of names thereon representing stations, the names of one series being duplicates of those of the other but being arranged in reverse relation, and means for moving the belt to bring one or the other of the series of names to register with the graduations at the edge
35 of the opening, substantially as described.

4. In an indicator, the combination of a casing provided with an opening having marked graduations at its edge indicative of minutes, and with a slot adjacent the initial
40 graduation, an indicator-wheel registering with the slot having marks thereon indicative of hours, means for rotating the wheel, and a surface movable within the opening of the casing containing the names of stations which
45 register with the graduations of the casing, substantially as described.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

IRA A. MCCORMACK.
ALBERT H. WALKER.

Witnesses:

V. W. WICKES,
F. J. SPAULDING.