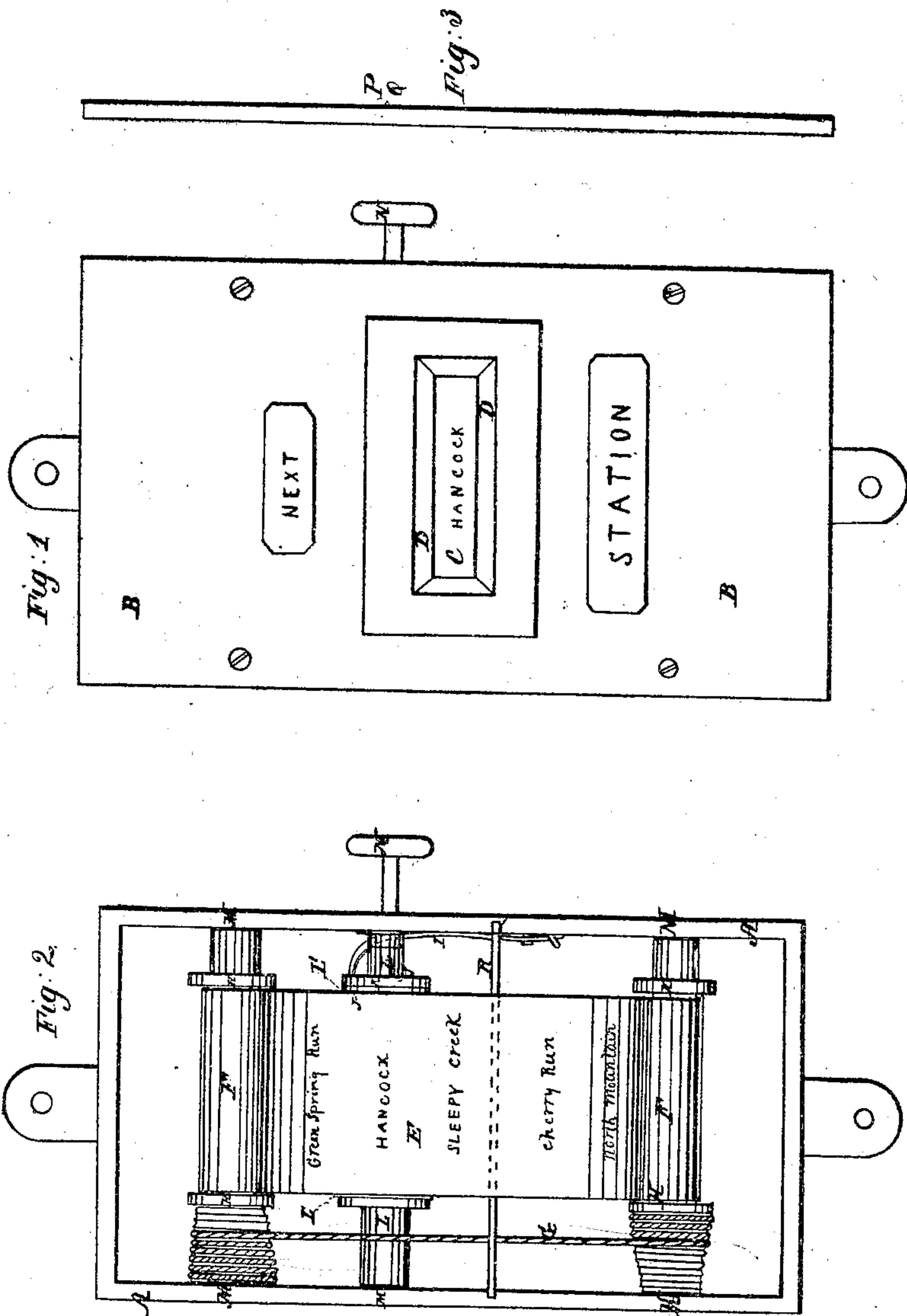


J. F. ZACHARIAS.
RAILROAD STATION INDICATOR.

No. 78,349.

Patented May 26, 1868.



Witnesses
J. H. Phillips
C. Sanford

Inventor;
J. F. Zacharias

United States Patent Office.

J. F. ZACHARIAS, OF LEESBURG, VIRGINIA.

Letters Patent No. 78,349, dated May 26, 1868.

IMPROVEMENT IN RAILROAD-STATION INDICATORS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, J. F. ZACHARIAS, of Leesburg, in the county of Loudon, and State of Virginia, have invented certain new and useful Improvements in Machinery or Apparatus for Marking or Showing the Stations upon Railroads, and all other means or routes of public travel, by showing the stations inside of the vehicles of conveyance; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a front face view, as seen *in situ* in car or other conveyance.

Figure 2 is a plan view, with the lid removed.

Figure 3 is an edge view of lid, showing rollers.

A represents an oblong square frame or box, closed upon all sides. B is the lid of said box. Near its middle or centre is an opening, C, with glass, D, over it, to keep out all dirt or dust from the works inside. E is an apron or band, upon which are printed or marked the different stations along the route. F F' are rollers, intended to receive the band or apron E upon them, F having a screw cut upon one end of it, bevelled from within outwards, F', another roller, with its screw bevelled inwards from the end, the larger end of each screw being equal in size to the circumference of the entire roller and band when said band is rolled around it, the smaller-end of said screws being equal in size to the roller without the band. Each screw has exactly the same number of threads as there are rounds of cloth on band E, when it is rolled around either of the said rollers F F'.

These rollers F F' are united, at their screw-ends, by means of cord G, so placed upon roller F, at its smaller part, as to be opposite and united to the larger part of roller F'. Upon each of these rollers F F' are two shoulders or flanges, H H H H, between which the apron or band E is wound, and are also intended to keep the apron or band E from slipping or moving from side to side. I is a spring-pawl, to work into notches J J J J, upon the circular metal plate K, on the end of the driving-roller or shaft L.

M M M M M are stationary pivots upon the sides of box A, and upon which the rollers F F', and one end of driving-roller L, turn. N is a key, with one end screwed into the circular plate K, on the end of driving-roller L, and intended to move the driving-roller L backwards or forwards. P P are two small roller-wheels, placed upon the inside of lid B, said roller-wheels acting upon, or pressing the apron or band E hard down upon, the India-rubber straps or bands L' L'', upon driving-roller L, thus creating sufficient adhesion upon these India-rubber straps or band L' L'' to cause the apron E to follow the movements of the driving-roller L, said band E being attached by one end to roller F, and by the other end to roller F'. Q is the shaft upon which the small roller-wheels P P turn.

Any desired or necessary degree of tension or tightness may be given to the apron or band E by placing springs to act upon the supplemental roller or shaft R. The names of each successive station, the distance from the preceding, and the distance from the starting and to the termination, may all be equally well shown at every exhibit, as the parties using may desire.

The operation of my machine is as follows:

The band E being wound upon either of the rollers F F', the cord G is wrapped upon the screw of the other one, commencing at the larger part of the screw, so that the cord may be last wrapped upon the smaller part of the screw of the empty or receiving-roller, the band or apron E being on top of the driving-roller L, in such a way that the first station will be directly opposite to the middle of glass D on lid B. Then turn the key N, and thus the roller L, either forwards or backwards, as the case may be, until you hear or feel the spring-pawl I catch in one of the notches J upon circular plate K, thus bringing the name of the next station in view. By continuing this operation in this way, you bring every station successively and regularly in view.

To mark the stations for the home trip, you only have to turn the key N in an opposite direction, and, in the same manner of proceeding, you have the stations properly and regularly marked or shown.

It is intended that this machine shall be placed at one end of the car, either permanent or movable, so as to suit the changes in the position of the seats; and it is also obvious that this mechanism may be operated by

the conductor inside, or the brakeman outside, by simply making a hand-hole in the end of the car, at the option of the railroad-companies or other parties using my apparatus.

What I claim in my invention is—

1. The combination of the apron or band E, rollers F F', cord G, and operating-roller L, substantially as described.
2. In combination with the foregoing, the supplemental roller or shaft R, substantially as described.
3. The arrangement, with the elements in the foregoing first clause, of the pressure-rollers P P, substantially as described.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses.

J. F. ZACHARIAS.

Witnesses:

CHAS. L. DU BOIS,

T. C. CONNOLLY.