No. 770,125. PATENTED SEPT. 13, 1904.

J. M. SMITH.

DEVICE FOR TURNING ELECTRIC CAR SIGNS.

APPLICATION FILED JAN. 25, 1904.

NO MODEL.

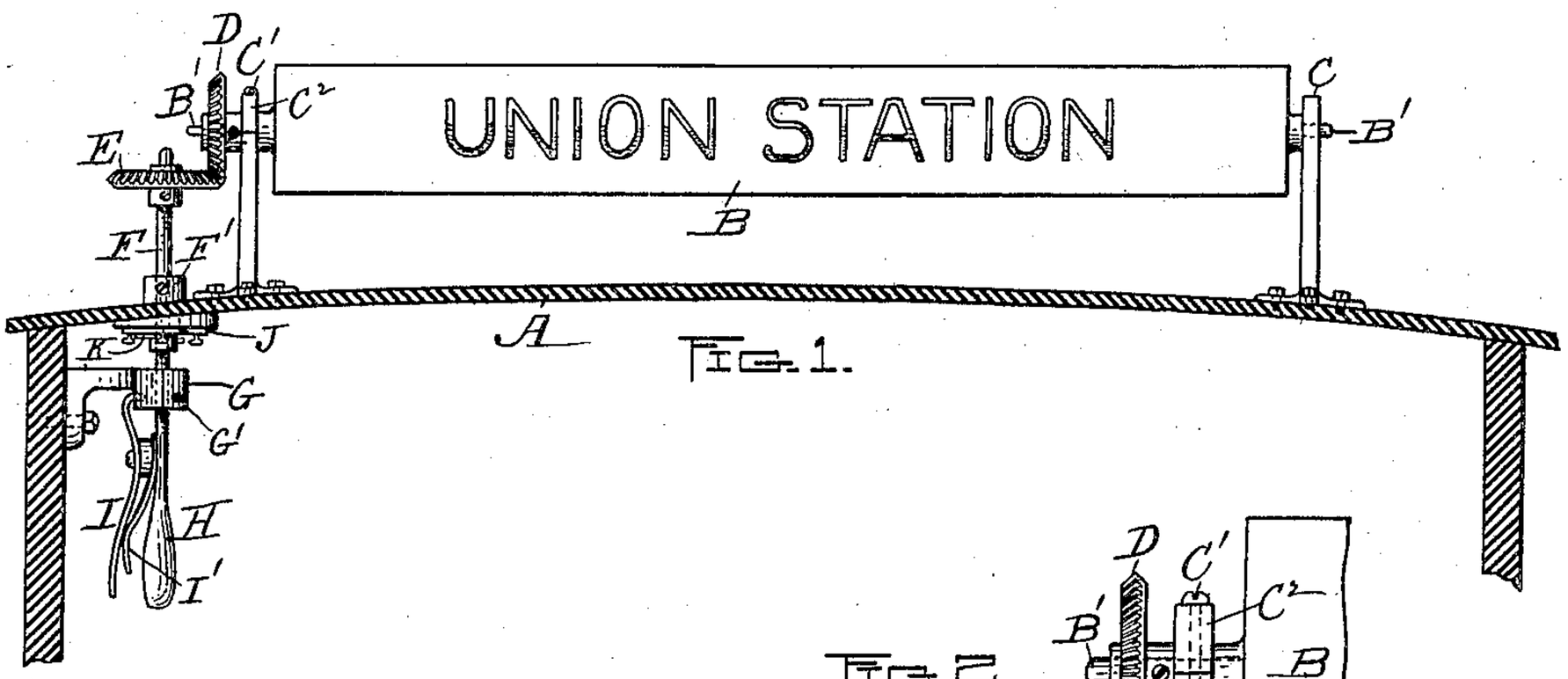


FIG. 1.

FIG. 3.

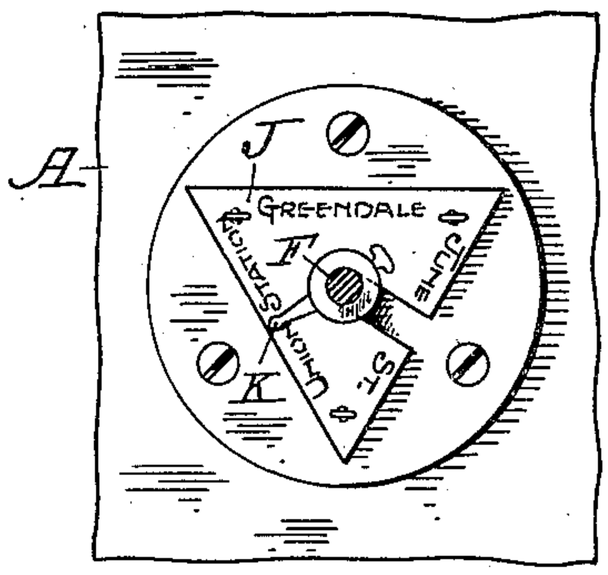


FIG. 2.

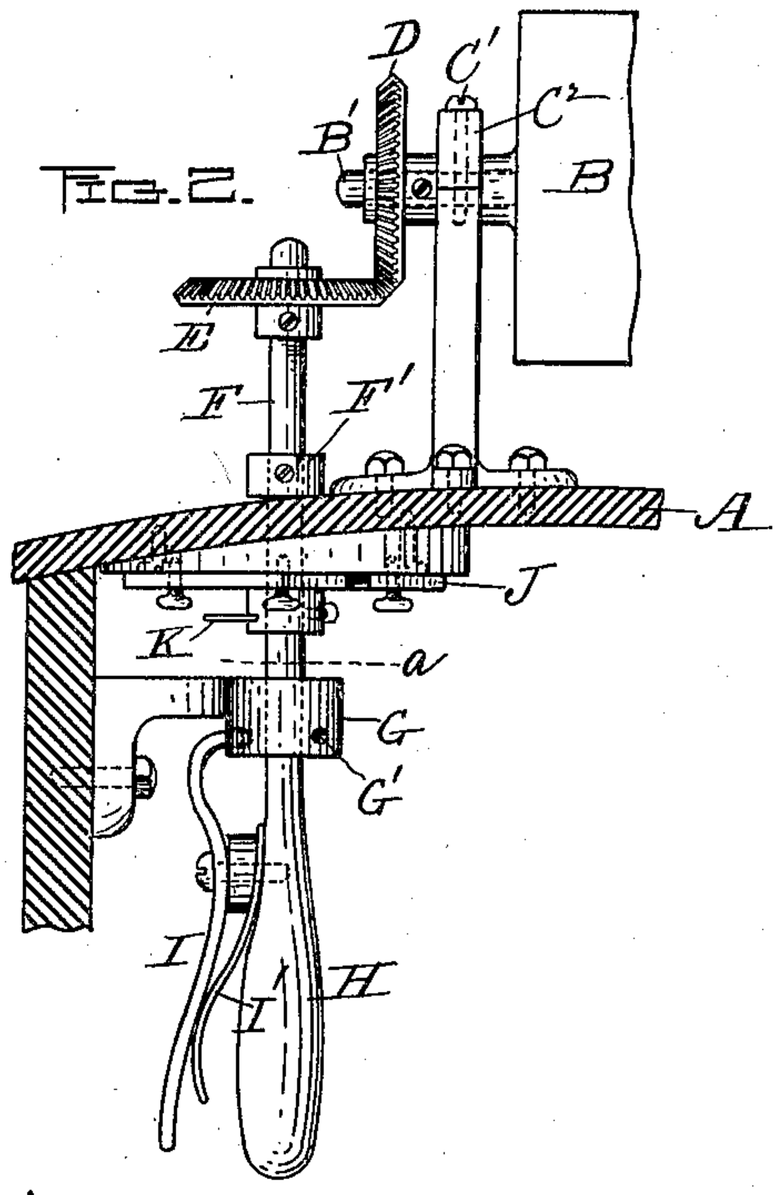
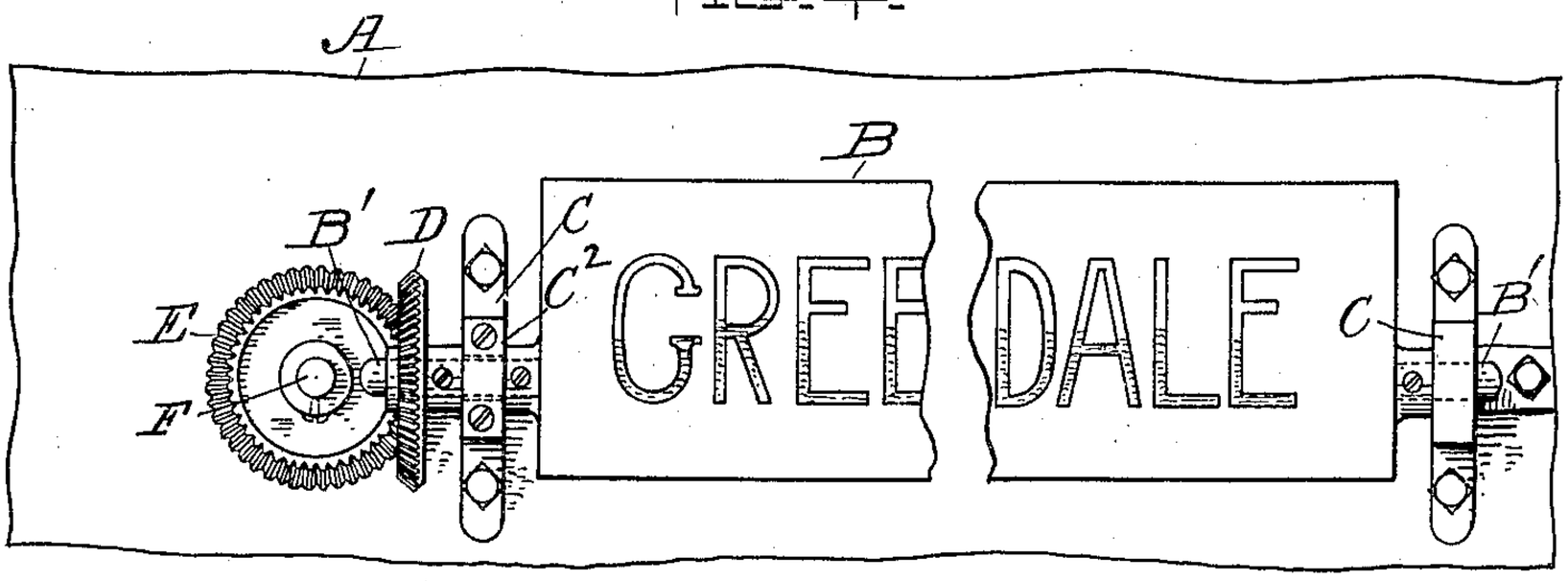


FIG. 4.



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No. 770,125. Patented September 13, 1904.

UNITED STATES PATENT OFFICE.

JOSEPH M. SMITH, OF WORCESTER, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO GEORGE L. CHURCH, OF WORCESTER, MASSACHUSETTS.

DEVICE FOR TURNING ELECTRIC-CAR SIGNS.

SPECIFICATION forming part of Letters Patent No. 770,125, dated September 13, 1904.

Application filed January 25, 1904. Serial No. 190,482. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH M. SMITH, of the city and county of Worcester, State of Massachusetts, have invented certain new and useful Improvements in Devices for Turning Electric-Car Signs; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, forming a part of this specification, and in which—

Figure 1 represents a vertical section through the upper front end of an electric car, showing a front side view of the usual triangular rotatable sign thereon and my improved device for turning the same from the inside of the car. Fig. 2 is an enlarged view of said device and part of the sign shown in Fig. 1, all the following figures also being shown upon the same enlarged scale. Fig. 3 is a horizontal section on line *a*, Fig. 2, looking up and showing a bottom view of some of the operating parts of the device not clearly shown in the other figures; and Fig. 4 represents a top or plan view of the parts shown in Fig. 1 with the central portion of the sign broken away.

The object of my invention is to provide a device connected with the pivot-shaft of the usual sign on an electric car whereby said sign may be turned from the interior of the car to indicate the destination of said car.

Said invention consists in combining with the top of the car and the horizontal pivot-shaft of the sign a vertical shaft fitted to turn in suitable bearings in the car-top, gearing for connecting said vertical shaft with the pivot-shaft of the car-sign, means whereby said vertical shaft may be turned from the inside of the car, means for fastening said vertical shaft in any adjusted position, an adjustable name-plate fitted over the vertical shaft and attached to the car-top having the same names printed thereon as upon the car-sign, and an adjustable indicator mounted on said vertical shaft for indicating the name it is desired to have displayed upon said car-sign, all as will be hereinafter more fully set forth.

To enable others to better understand the nature and purpose of my said invention, I will now proceed to describe it more in detail, with reference to the accompanying drawings.

In said drawings, A represents so much of the top of an electric car as is necessary to illustrate my invention.

B is the usual car-sign mounted over the front end of the car on a horizontal shaft B′, fitted to turn at the ends in suitable bearings C C′, one bearing, C, being provided with simply an opening to receive one end of the shaft and the other bearing, C′, with a removable cap C^2 to admit of the other end of said shaft being placed and held in said bearing. Upon said end of shaft B′ is mounted and secured a bevel-gear D, which engages with a bevel-gear E, fastened to the upper end of vertical shaft F, which is fitted to turn in a suitable bearing in the car-top and in a bearing G, secured to the interior side of the car. Said shaft F may be held in position vertically by a suitable collar F′, fastened to the shaft above the car.

The bottom of shaft F is provided with a suitable handle H, whereby it may be turned to operate the gearing and in consequence the sign B, and upon said handle is arranged a spring-catch I, whose upper end is adapted to engage with holes or notches G′ in the bearing G, being held in engagement therewith by the spring I′, also attached to handle H.

The upper end of the catch is disengaged from bearing G by pressing inward on its lower end.

To the under side of the car-ceiling is attached a name-plate J, preferably the same shape in outline as the cross-sectional shape of the sign B—in this instance triangular in shape. The same names are printed on said interior plate as on the exterior sign, a name being printed upon each side of the triangle, as shown, corresponding to each side of the sign. Said name-plate is in practice constructed so that it may be readily removed and replaced by another to correspond to the sign used upon the exterior of the car, so that one may correspond with the other. Beneath said name-plate on the vertical shaft is arranged an adjustable indicator K, which may

be fastened on the shaft to point in any desired direction.

In practice the various parts are so adjusted as to bring one of the holes or notches G′ in the bearing G in the proper position to hold the shaft, so that the indicator will point to the same name on the plate J as is represented on one of the sides of the sign. When a certain name is desired to be displayed on the sign—as, for instance, "Union station"—the conductor from the inside of the car grasps the handle H and compressing the handle of spring-catch I forces its upper end out of engagement from the fixed bearing G. He then turns shaft F to bring the indicator K thereon in line with the name on plate J that is desired to be exhibited on the car-sign, which causes said sign to be turned through the connections previously described to bring the desired name facing front from the car, any other name being of course exhibited in the same way by simply turning the indicator so as to point to the name on the plate that is desired upon the exterior sign.

By the use of my device much trouble and inconvenience, as will be seen, is obviated in changing the car-signs which have to be changed at the termination of each trip, and it is of especial advantage in cold or stormy weather.

In practice it is designed to protect the exterior working parts with a suitable hood; but as it does not constitute a part of my invention I have not illustrated the same. The construction of the parts may be varied more or less in practice in carrying out my invention, and I therefore reserve the right to make such modifications therein as come within the principle thereof.

Having now described my invention, what I claim therein as new, and desire to secure by Letters Patent, is—

The combination of the car-top and the horizontal shaft of the usual rotatable sign of an electric car, with a vertical shaft fitted to turn in suitable fixed bearings, gearing for connecting said vertical shaft with the sign-shaft, means for controlling the vertical movements of the vertical shaft, and for turning said vertical shaft from the inside of the car, means for fastening said vertical shaft in any adjusted position, an adjustable name-plate arranged over the vertical shaft and adjustably secured to the ceiling of the car, and an indicator adjustably secured to said vertical shaft adapted to point to a name on the name-plate corresponding to the name to be displayed on the exterior sign, substantially as set forth.

JOSEPH M. SMITH.

Witnesses:
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