J. P. SCHMITZ.

STATION INDICATOR.

No. 189,794. Patented April 17, 1877.

Fig. 1.

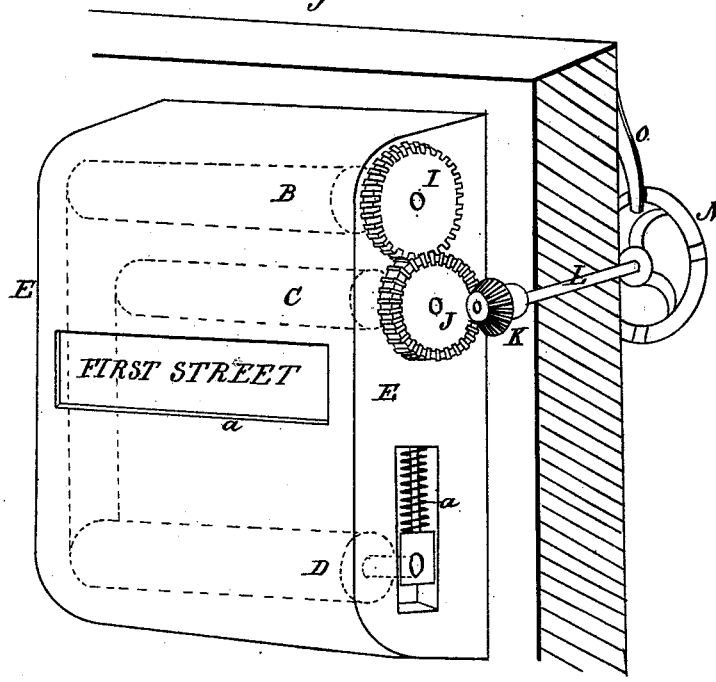


Fig. 2.

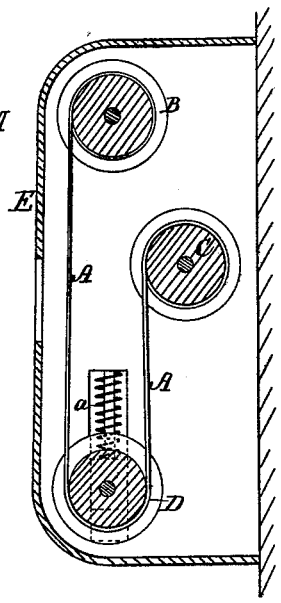
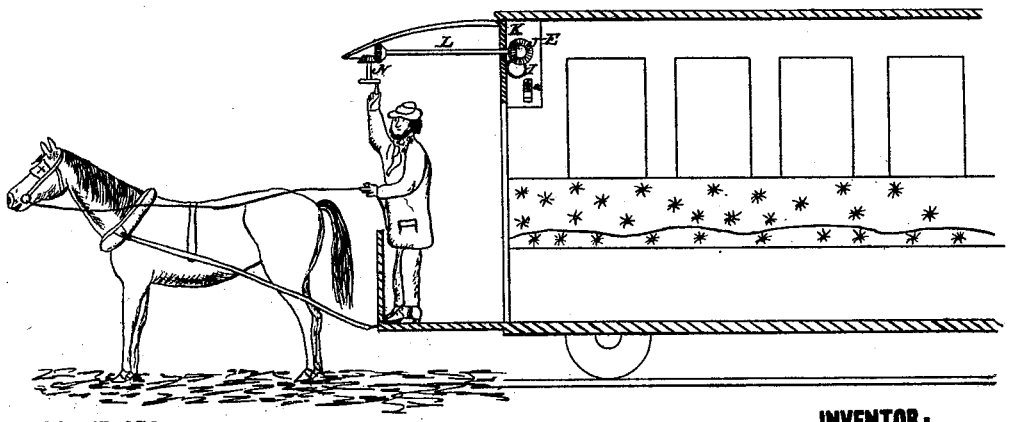


Fig. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN PETER SCHMITZ, OF SAN FRANCISCO, CALIFORNIA.

IMPROVEMENT IN STATION-INDICATORS.

Specification forming part of Letters Patent No. **189,794**, dated April 17, 1877; application filed February 12, 1877.

To all whom it may concern:

Be it known that I, JOHN PETER SCHMITZ, of the city and county of San Francisco, and State of California, have invented a new and Improved Street or Station Indicator; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming part of this specification, in which—

Figure 1 is a perspective view of my improved indicator, the wall of the car being in section. Fig. 2 is a vertical section on line *x x* of Fig. 1. Fig. 3 is a vertical section of a fragment of a street-car, showing the practical application and manner of operating the indicator.

The object of my invention is to furnish an improved device or apparatus for use on street and steam-railway cars for the purpose of indicating to the passengers the names of streets or stations on the route.

The construction of the device or apparatus is as hereinafter described.

Referring to the drawing, the names of the streets or stations are printed upon a sheet or apron, A, made of cloth or other flexible material, whose respective ends are attached to rollers B and C, and which passes intermediately around an idle roller, D. The latter is journaled in blocks placed in vertical slots in the ends of the case E, and spiral springs *a* exert a constant pressure on the blocks, and thereby on the roller D, so that the apron is subjected to constant tension and tightly stretched. The rollers B C are journaled in the sides of the box or case E, through the slot *a* of which the names of the streets or stations are successively visible. The case E is suitably attached to the end wall of the car, as shown in Fig. 3. The journals of rollers B and C project through the side of the case E, and are, respectively, provided with a spur-gear, I, and a combined spur and bevel gear, J. These gears mesh, and a bevel-pinion, K, on shaft L also meshes with the bevel portion of gear J. Thus rotation imparted to shaft L by means of hand-wheel M causes the rollers B C to rotate simultaneously, and carries the apron A around the idle roller D in one direction or the other.

It is obvious the apron will be caused to move up or down, according as the car is traveling in one direction or the other on the route. The movement is, however, intermittent, the wheel M being turned at each street or station the distance necessary to enable the spring-pawl O to enter the next notch in the side of the wheel. The position and number of the notches in said wheel necessarily correspond with the number and position of the names of streets or stations in the apron, so that when the spring O enters a notch a name will always appear opposite the slot in the case E.

Fig. 1 shows the shaft L extended through the end wall of a car, and the wheel M fixed on its outer end; but I show in Fig. 3 the shaft L extended beneath the awning of a street-car, and an additional shaft, N, placed vertical and geared with shaft L, to enable the driver to more conveniently operate the indicator.

What I claim is—

In combination with the slotted case, the apron bearing the names of streets or stations, the rollers, meshing-gears, notched wheel, and spring-stop, as and for the purpose specified.

JOHN PETER SCHMITZ.

Witnesses:

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