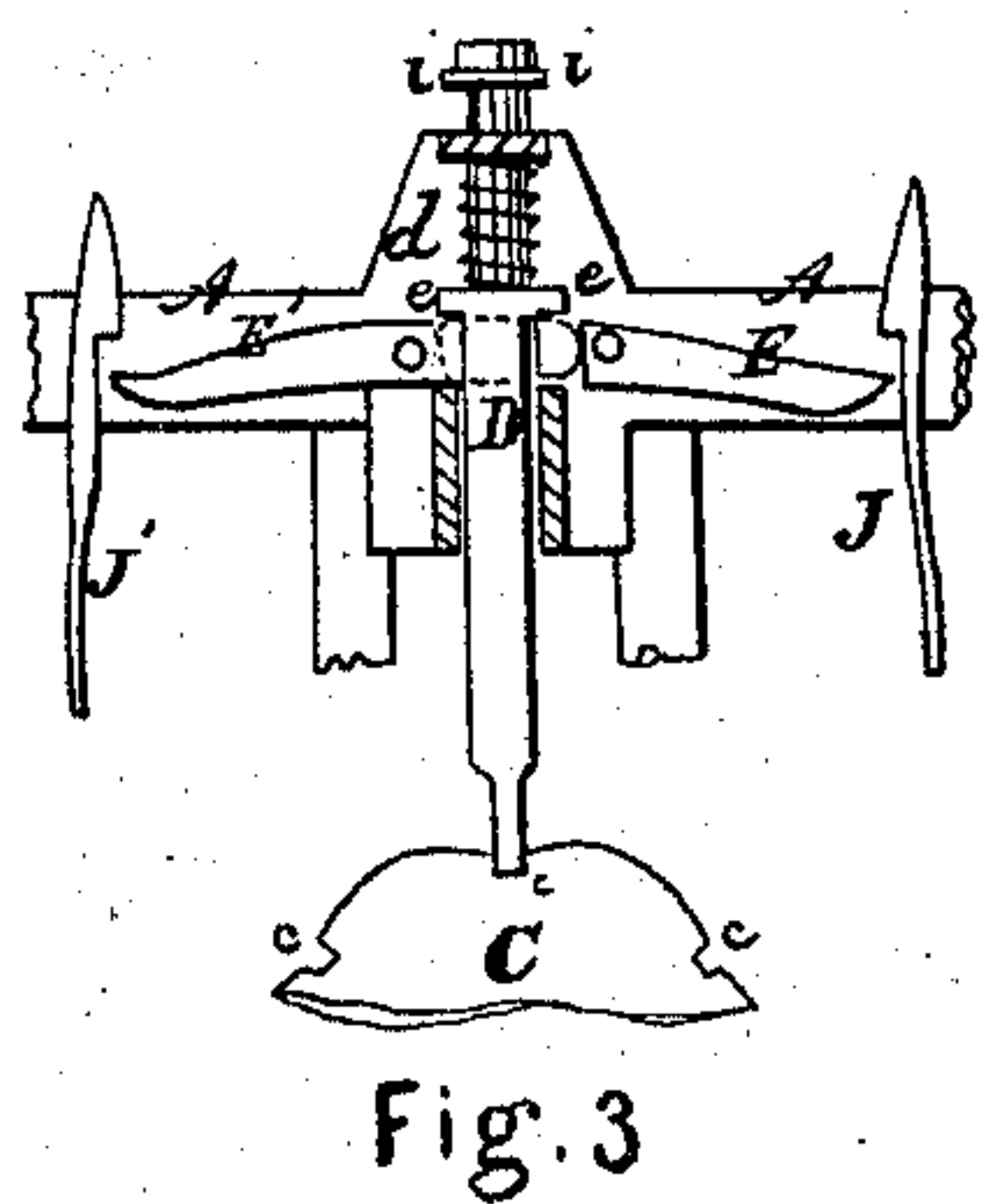
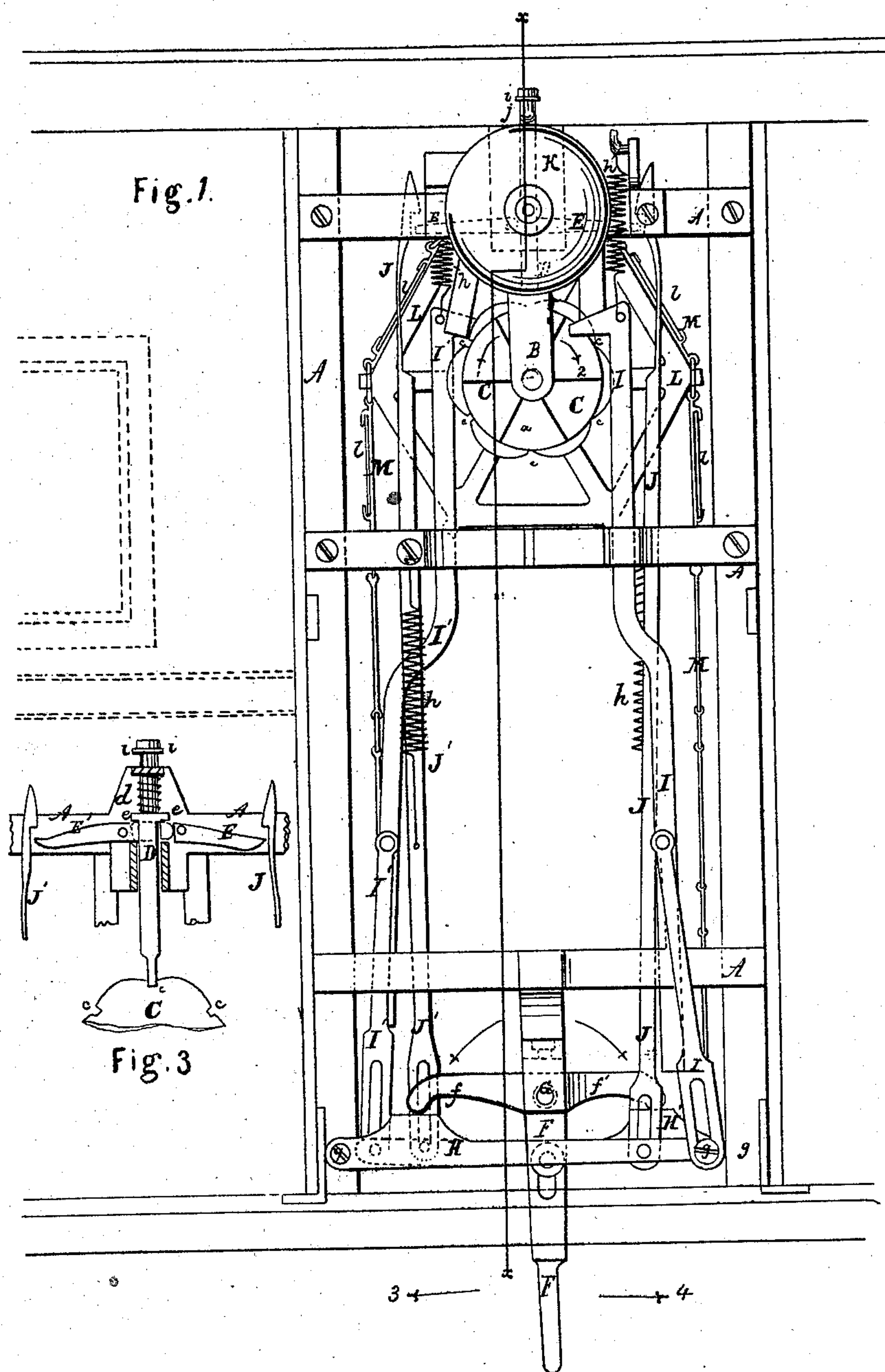


*A.C. Rodgers.*  
*R.R. Station Indicator.*

No 95,046.



**Witnesses:**

Wm. A. Morgan  
P. C. Dietrich

P. C. Dietrich

Inventor:

A. C. Rodgers  
per Mum & Co  
Attorneys

per *Wm. L.*  
attorneys

Anthony

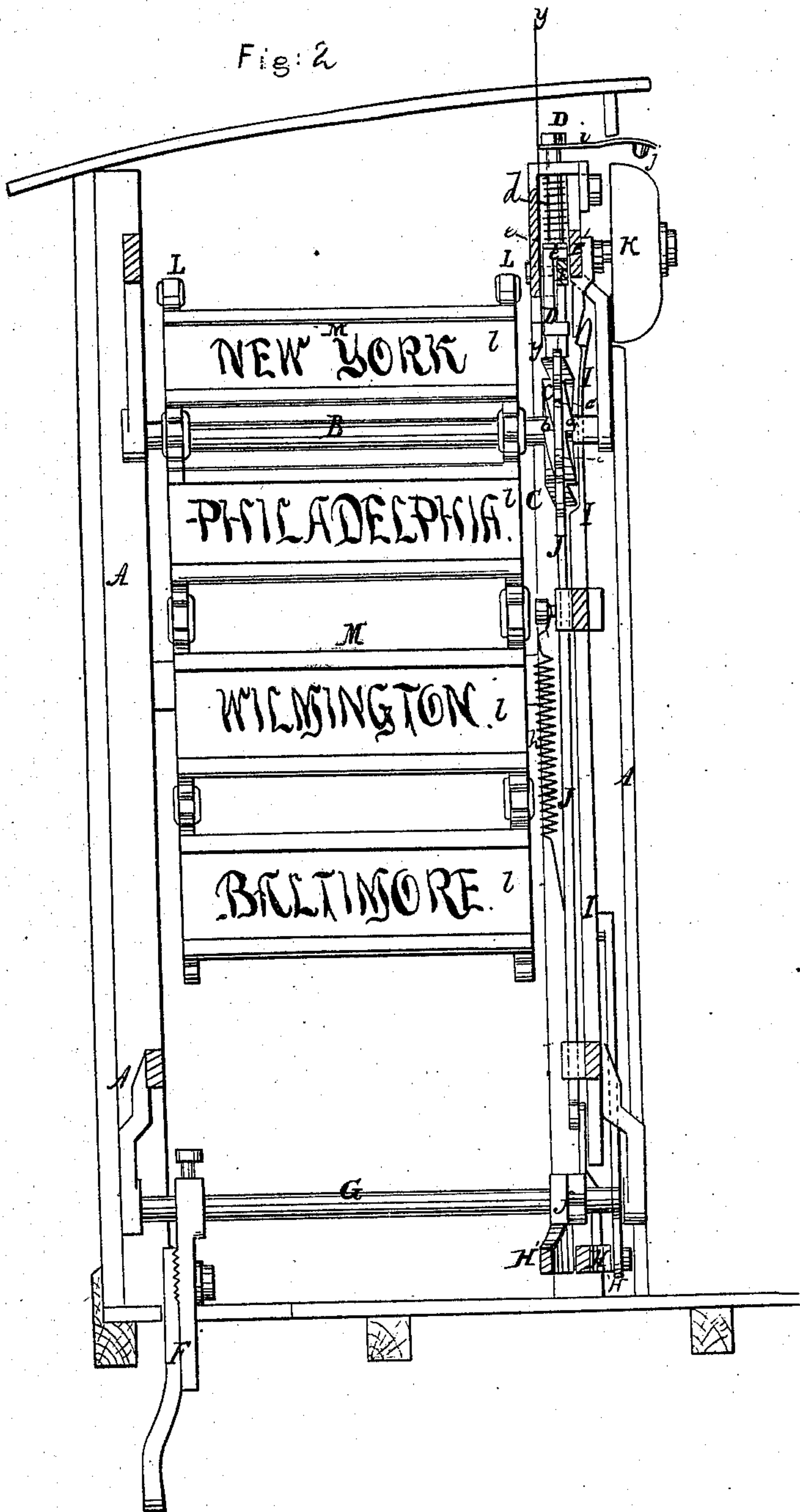
*A.C. Rodgers:*  
*R.R. Station Indicator.*

*2. Sheets.*  
*Sheet 2.*

*No 95,046*

*Patented Sept 21. 1869.*

Fig: 2



Witnesses:  
*Wm A Morgan*  
*P. C. Dietrich*

Inventor:  
*A. C. Rodgers*  
*per Munn & Co*  
*attorneys*



# UNITED STATES PATENT OFFICE.

A. C. RODGERS, OF FORT WASHINGTON, PENNSYLVANIA, ASSIGNOR TO HIMSELF AND LEWIS SHAFFER, OF SAME PLACE.

## IMPROVEMENT IN RAILROAD-STATION INDICATORS.

Specification forming part of Letters Patent No. 95,046, dated September 21, 1869.

*To all whom it may concern:*

Be it known that I, A. C. RODGERS, of Fort Washington, in the county of Montgomery and State of Pennsylvania, have invented a new and Improved Railroad-Station Indicator; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skill in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1, Sheet I, represents a front elevation of my improved railroad-station indicator. Fig. 2, Sheet II, is a vertical section of the same, taken on the plane of the line *x x*, Fig. 1. Fig. 3, Sheet I, is a detail vertical section taken on the plane of the line *y y*, Fig. 2.

Similar letters of reference indicate corresponding parts.

This invention relates to a new apparatus for displaying within railroad-cars the name of the station which the car is approaching or at which it has arrived.

The invention consists of a system of levers and toothed wheels by which intermittent rotary motion in either direction can be imparted to a drum around which a belt or chain containing the names of the stations is placed. The apparatus is set in motion by a stop arranged on the track striking a lever suspended from the car.

The invention is equally applicable to horse-cars as it is to cars on steam-roads. A bell is arranged on it to call the attention of the passengers to a change of name, the bell being struck whenever a new name is displayed.

A in the drawings represents the frame of my improved indicator. It is arranged either in a corner of the car or in the middle, or in any other suitable part of the same. It is intended to extend from the floor to the ceiling of the car, and is made of wood, metal, or other suitable material. In the upper part of the frame are the bearings of a horizontal shaft, B, which has near one end a toothed wheel, C, mounted on it. The wheel C has two sets of teeth on its faces. The teeth *a* on one face are ratchet-teeth, as well as those, *b*, on the other face. The teeth *a* and *b*, however, are in reverse directions, as shown in Fig. 2. The edge of the wheel C is provided

with notches *c*, as shown, their number being equal to that of the teeth *a* or *b*.

D is a sliding rod fitted in the frame A, so that one end of it fits against the edge of the wheel C, a spring, *d*, pressing it toward the wheel. This rod D, fitting into one of the notches *c*, prevents the wheel C from turning. A shoulder, *e*, is formed on the rod D, as shown in Fig. 3.

E E' are two levers pivoted to the frame A, so that their inner ends fit under the shoulder *e*, as in Fig. 1.

The lever F, by which the apparatus is operated, is suspended from a rock-shaft, G, that has its bearings in the lower part of the frame A. The rock-shaft has two bearings, *f* and *f'*, projecting in different directions, as shown.

To the frame are pivoted two levers, H and H'. H is under the end of the crank *f* and H' under that of *f'*, as in Fig. 1. When the rock-shaft G is swung in the direction of the arrow 1, its crank *f* will press upon the lever H, and will swing the same on its pivot *g*. To the end of the lever H are pivoted the lower ends of two sliding bars, I and J. The bar I has a hook at its upper end, that fits over the front teeth, *a*, of the wheel C. The bar J has also a tooth on its upper end, which fits over the end of the lever E. As soon, therefore, as the lever H is swung down, as aforesaid, the lever J will pull down the end of the lever E, and will thereby cause the rod D to be raised out of the notch *c*, when the lever I will catch a tooth *a* and turn the wheel C and its axle B in the direction of the arrow 2. As soon as the lever F strikes an object while the car passes in the direction of the arrow 3, it will be swung in the direction of the arrow 1, and will impart motion to the wheel C, as aforesaid. The lever H' is in a similar manner connected with rods I' and J', of which each has a hook at its upper end. The bar I' meshes into the teeth *b* of the wheel C, while the bar J' engages the lever E', so that if the lever F is swung in the direction of the arrow 2 during the motion of the car in the direction of the arrow 4 the lever H' will be swung so as to release the rod D and turn the wheel C in the direction of the arrow 1.

The bars I and I' should be jointed, as shown, while the bars J and J' should have springs at their upper ends, as shown. All the bars, I, I',



J, and J', are pulled up by means of springs *h* after each motion. The lever F may be made longitudinally adjustable, as shown, so as to fit higher or lower stops on the ground.

From the rod D may project an arm, *i*, to which a hammer, *j*, would be fixed, as shown, said hammer striking a bell, K, whenever the pin D is forced down again into a notch *c* by the spring *d*, after it has been elevated by the action of the bar J or J'.

On the shaft B may be mounted a drum or polygonal disks, L, over which a chain or belt, M, may be placed, as shown in the drawings. This chain or belt contains the names of the stations through which the car is to pass, and displays one of these names through an aperture in a casing that surrounds the frame A.

Whenever the lever F strikes a stop on the ground, it causes the shaft B to be turned to display another name through the aperture,

and at the same time the bell is struck by the hammer to call attention to the change. The names on the belt or chain should be removable, for which purpose I prefer to print, paint, or otherwise affix the names on plates *ll*, which are slipped into grooves provided in the chain, as is clearly shown in the drawings.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The wheel C, having two sets of teeth, *a b*, on its two faces and notches *c* in its edge, in combination with the levers F H H', bars I I' and J J', levers E E', and rod D, all arranged and operating as described, for the purpose specified.

A. C. RODGERS.

Witnesses:

JOSEPH REX,

JOHN M. REX.