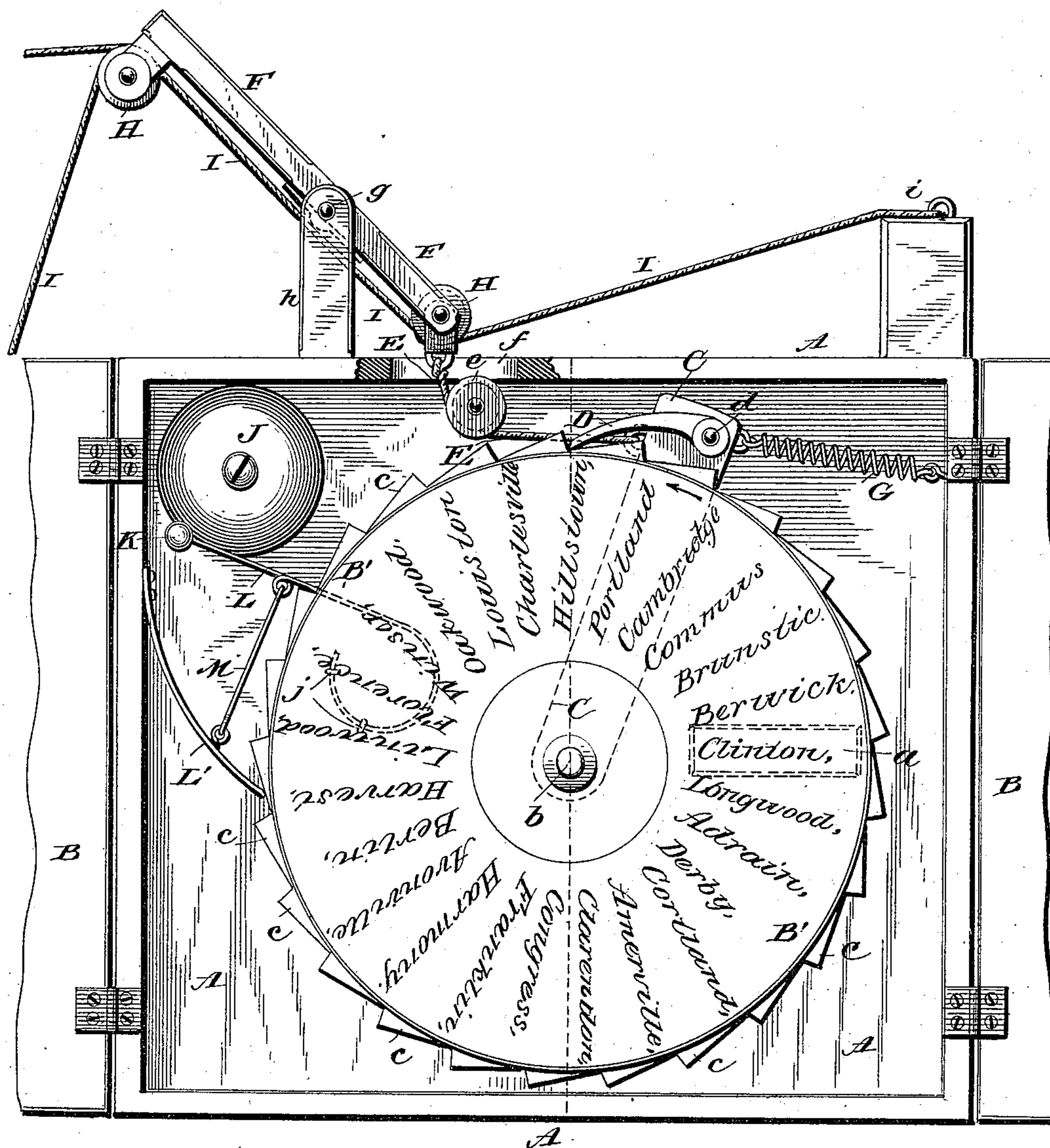


(No Model.)

S. G. TRAVIS.
STATION INDICATOR.

No. 441,719.

Patented Dec. 2, 1890.



WITNESSES:

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STATION-INDICATOR.

SPECIFICATION forming part of Letters Patent No. 441,719, dated December 2, 1890.

Application filed June 2, 1890. Serial No. 353,994. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL G. TRAVIS, a citizen of the United States, residing at Leavenworth, in the county of Leavenworth and State of Kansas, have invented certain new and useful Improvements in Station-Indicators; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawing, making a part of this specification, and to the letters of reference marked thereon.

This invention relates to certain new and useful improvements in station-indicators; and it has for its object, among others, to provide a simple, cheap, and efficient device of this character, of few parts, and those readily assembled and not liable to get out of order.

I provide a rotary wheel carrying the indicating characters, and an alarm sounded by the revolution of the wheel, dispense with springs or clock mechanism for revolving the wheel, and simplify and cheapen the construction.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be specifically defined by the appended claims.

The invention is clearly illustrated in the accompanying drawing, which, with the letters of reference marked thereon, form a part of this specification, and in which is shown a face view of my improved device, with the doors shown open and broken away, and parts in section.

Referring now to the details of the drawing by letter, A designates the inclosing case or box, of any desired size and material, being preferably a shallow rectangular box within which the principal operating parts are inclosed, and provided with hinged door or doors B, one of which, if two are employed, should be provided with a suitable aperture *a*, covered by a transparent medium or not, as preferred, through which the indicating character is displayed.

B' is a wheel journaled on a shaft or axle *b* within the case, and provided upon its face with the desired indicating marks—such, for instance, as the different stations on a line of railroad, or, it may be, the streets of a city on the line of a street railway—the particular

marks not being a part of the invention. These are arranged radially, and preferably in the order in which the stations or streets occur. The periphery of this wheel is provided with inclined teeth *c*, one for each indicating mark, as shown.

On the shaft or axle *b* is a lever C, which extends beyond the periphery of the wheel, and has pivoted thereto on a pivot-pin *d* a gravity-pawl D, designed to engage the teeth of the wheel B', as shown in the drawing. This lever near its free end has connected thereto in any suitable manner one end of a rope, cord, or chain E, which passes under the pulley *e*, suitably journaled in the case, and its other end passes through an opening *f* in the top of the case, and is connected with one end of the arm or lever F, which is fulcrumed at *g* on the top of the case or a standard *h* rising therefrom.

G is a spring connected with the free end of the lever C, opposite the connection of the cord E, and serving to normally hold the lever in the position in which it is shown in the drawing, the other end of the spring being connected to the case in any suitable manner.

H are pulleys, suitably journaled one near each end of the arm or lever F, and I is a cord or rope passed over one pulley and under the other, with one end fixed to the case, as at *i*, and the other end extended to the conductor or any other desired place where it may be operated. Two or more of these cords may be employed, leading to different points, if desired, by placing two or more pulleys at each end of the arm or lever F.

J is a bell fixedly secured within the case, and K is its hammer, carried by the spring-arm L, which is attached at one end, as shown at *j*, to the inner wall of the case.

L' is a spring-arm, attached at one end to the end wall of the case, with its other end arranged in the path of the teeth of the wheel B', as shown. This spring-arm is connected with the hammer-arm by the link M, pivotally connected at its ends.

The operation is simple and apparent. Pulling on the operating-cord moves the wheel one notch in the direction of the arrow, and the desired indicating mark is exhibited through the aperture in the door of the case. As the wheel moves forward the spring-arm L'

rides over a tooth of the wheel and brings the hammer away from the bell. When the spring-arm drops off the tooth over which it has been riding onto the next one, the hammer flies
5 against the hammer and sounds an alarm. By the arrangement of the arm or lever F and the operating-cord it will be seen that as the cord is pulled it pulls down on one end of the lever and lifts upon the other, thus aiding in
10 the operation.

The parts are simple, readily assembled, not liable to get out of order, and the wheel may be readily set to any desired point by opening the door of the case.

15 The device is designed to be placed in a car or a station, or any other desired point, and may be made as fanciful as the tastes of the manufacturer or purchaser may dictate.

What I claim as new is—

20 1. The combination, with the wheel having teeth, of the lever on the axle of the wheel, the pawl pivoted on the lever, the cord attached to the lever, the arm pivoted outside the case, the pulleys near each end thereof, the connection between the arm and the cord,
25 and the cord attached at one end to a fixed support and passed over and under the pulleys on the arm, as and for the purpose specified.

2. The combination, with the case and the

wheel within the case and having peripheral
30 teeth, of the bell within the case, the hammer-arm, also within the case, and a spring-arm, also within the case and connected with the hammer-arm and actuated by the wheel, as
35 set forth.

3. The combination, with the case and the wheel within the case and having peripheral
40 teeth, of the bell within the case, the hammer-arm, also within the case, of spring material fast at one end, and the spring-arm connected
45 with the hammer-arm and actuated by the wheel, as set forth.

4. The combination, with the wheel having peripheral teeth, of the bell, the hammer, the
50 spring-arm therefor, the spring-arm L', attached at one end to a fixed support and connected with the hammer-arm and arranged with its free end to ride over the teeth of the wheel, and the case inclosing said parts, substantially as and for the purpose specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

SAMUEL G. TRAVIS.

Witnesses:

WM. C. MCGREGOR,
F. E. HUNT.