

(No Model.)

2 Sheets—Sheet 1.

J. S. BROWN.
STATION INDICATOR.

No. 256,282.

Patented Apr. 11, 1882.

Fig. 2.

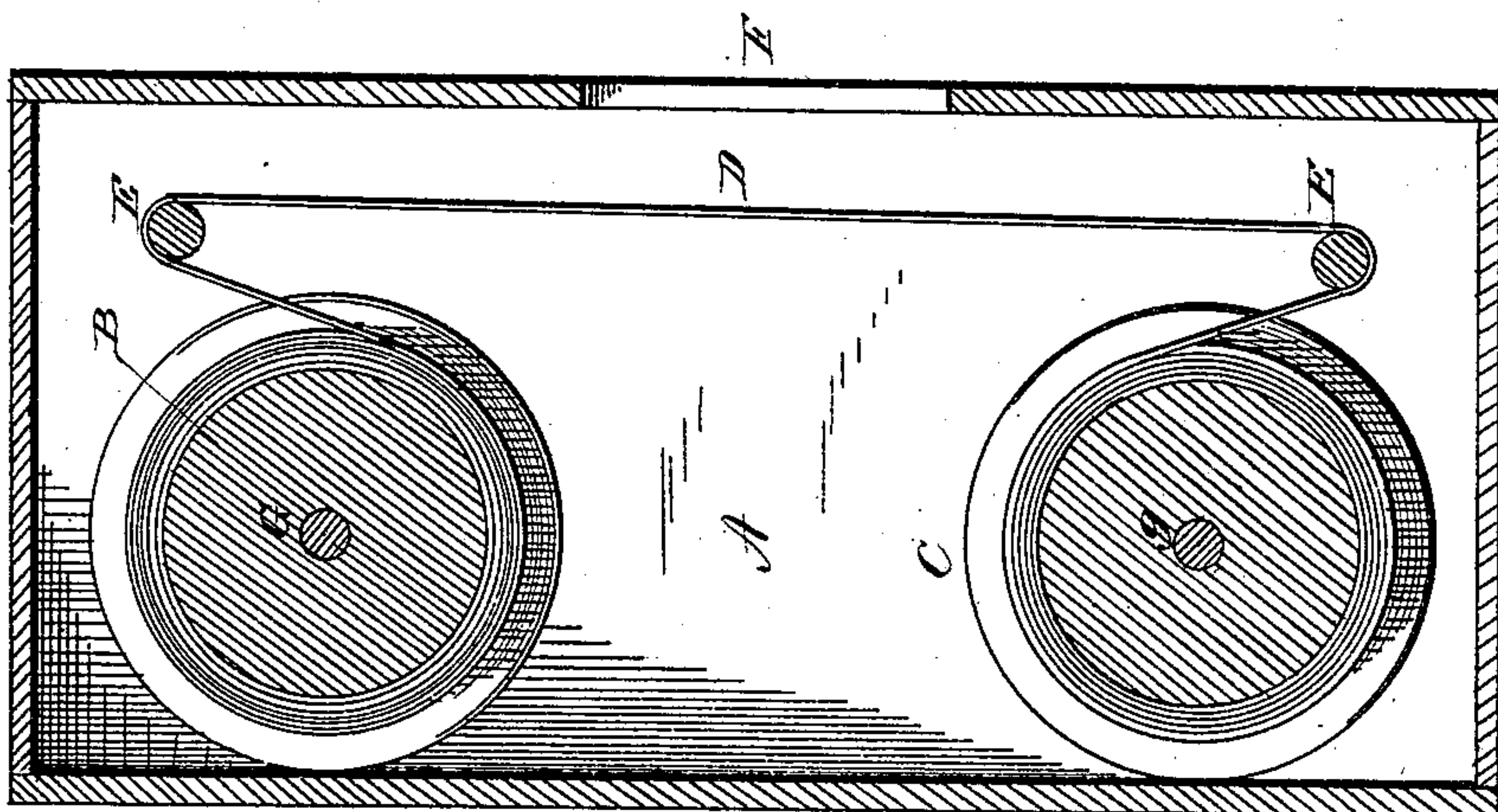
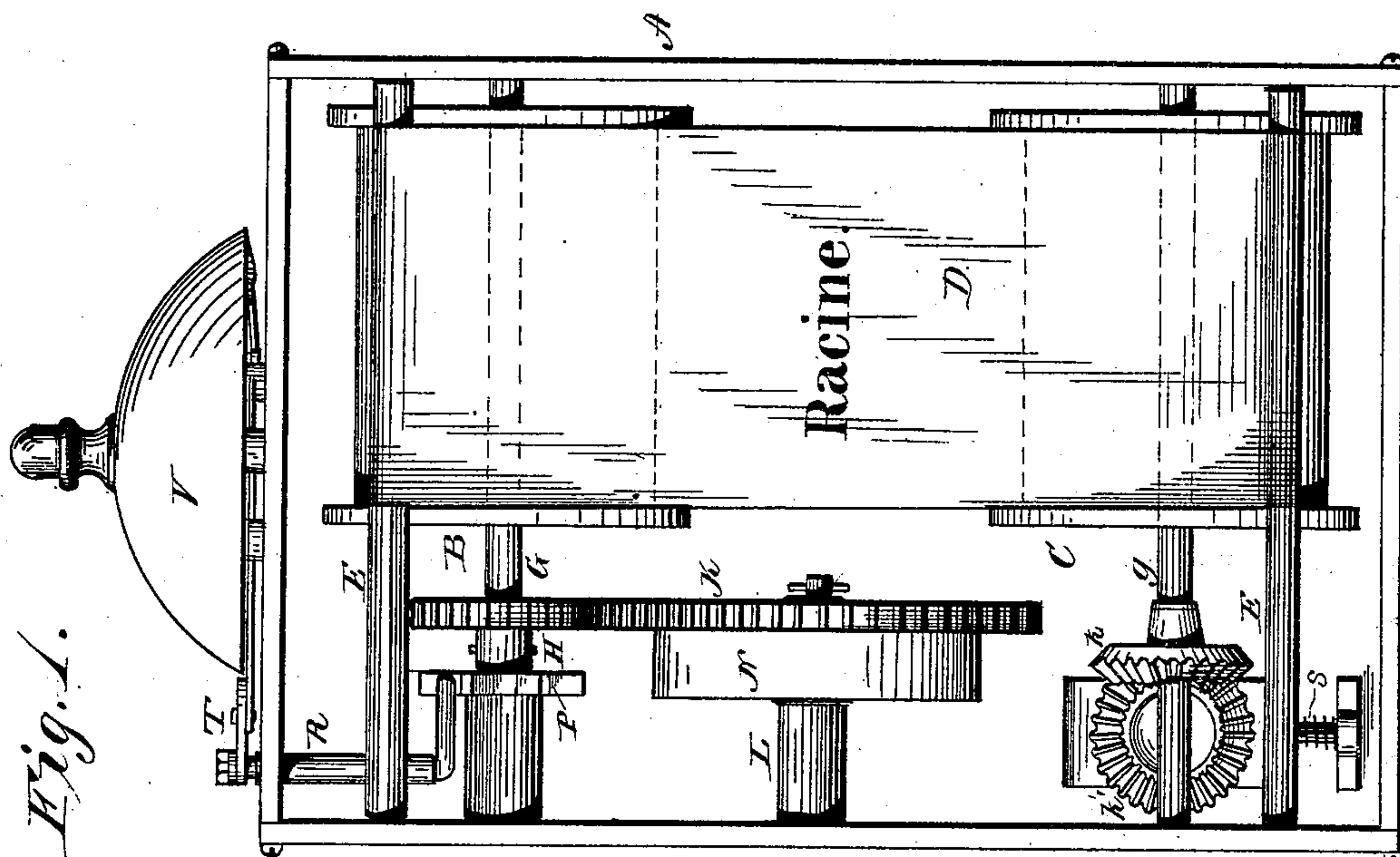


Fig. 1.



Witnesses:
P. L. Ourand
Philip L. Masi.

Inventor:
J. S. Brown
by Anderson Smith
his Atty

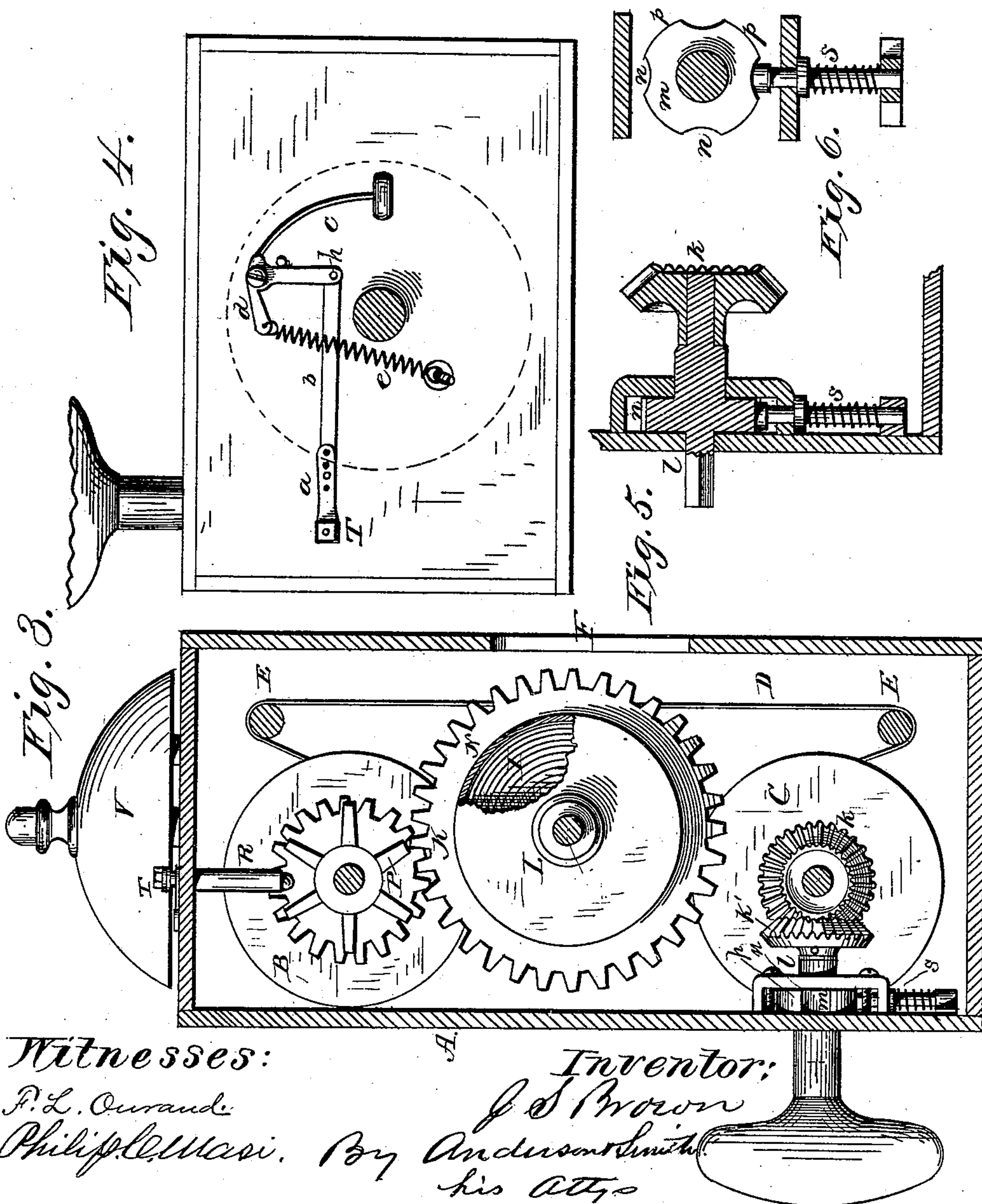
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UNITED STATES PATENT OFFICE.

JOHNATHAN S. BROWN, OF RACINE, WISCONSIN.

STATION-INDICATOR.

SPECIFICATION forming part of Letters Patent No. 256,282, dated April 11, 1882.

Application filed December 8, 1881. (No model.)

To all whom it may concern:

Be it known that I, JOHNATHAN S. BROWN, a citizen of the United States, resident at Racine, in the county of Racine and State of Wisconsin, have invented a new and valuable Improvement in Station-Indicators; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a front view of my device with one side removed, showing the internal mechanism. Fig. 2 is a cross-section showing how the strip is wound upon the drums. Fig. 3 is a vertical section, showing the manner of gearing. Fig. 4 is a top view, showing the striking apparatus; and Figs. 5 and 6 are detail views.

This invention has relation to station-indicators for railway-cars; and it consists in the novel construction and arrangement of parts, as will be hereinafter fully described, and particularly pointed out in the claims.

In the accompanying drawings, the letter A designates the incasement, which is provided with suitable bearings for the different shafts and rollers.

B indicates the upper drum, and C the lower drum. These drums are parallel, and to them are attached the ends of the paper or cloth strip D, upon which are arranged in succession the names of the stations. The strip D is usually wound in opposite directions on the drums, and is also carried over the small stretching or guide rollers E E, which are arranged parallel to the drums and near the front of the case, in which an aperture, F, is made of sufficient size to enable the name presented in front by the list-strip D to be seen. This aperture should be glazed.

On the shaft G of the upper winding-drum is fastened a pinion, H, which engages the teeth of a barrel-wheel, K, within which is coiled a spring, I, which is attached by its ends, respectively, to the bearing L and to the wall of the spring recess or boxing N. In traveling in one direction the list-strip is wound from the upper drum, B, upon the lower drum, C, by operating the key for turning the lower drum, and at the same time the spring I is

coiled within the boxing N on its bearing L, and the names of the stations on the list-strip are successively displayed through the opening F, the spring I regulating the tension of the strip D. In traveling in the opposite direction the spring I will uncoil when the cam m is released, and turn the wheel K and pinion H in the opposite direction, causing the list-strip to be rewound upon the drum B, and thereby display the names of the stations on said list-strip in reverse succession.

To the shaft G may also be secured a trip wheel or collar having a number of radial arms, P, which, as the shaft is revolved, engage the arm R of the vibratory post T of the striking mechanism of the alarm. The radial distance between the arms P is designed to correspond to the distance between the station-names on the list-strip, in order that when the drum is turned in changing the name at the aperture the bell V will be sounded and call attention to the new name presented to view.

The striking mechanism consists of an arm, a, secured to the upper end of the post T, an angle-lever, b, carrying the hammer c at the end of its spring-arm d, the spring e, and connection h, extending in line, or nearly in line, with the arm a, and so arranged that said mechanism will work in either direction.

The shaft g of the lower drum carries a bevel-wheel, k, which engages a bevel-wheel, k', the shaft l of which carries also a cam, m, having peripheral projections p and intervening concaves n. The end of this shaft is designed to project through the incasement, and is provided with a key-seat to receive a turning-key, which is used by the brakeman in operating the indicator. A spring-stop, s, serves to engage the concaves or depressions n of the cam as the shaft is turned, and thereby holds the bevel-wheels and lower drum in fixed and steady position when the adjustment has been effected and the key removed. The depressions n of the cam must be arranged to correspond to the distance between the names on the station-strip D, so that the latter will be held in proper position when the adjustment has been made.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

1. A station-indicator having one of its wind-

ing-drums, C, secured to a shaft, *g*, provided with a bevel-wheel, *k*, meshing with a bevel-wheel, *k'*, on a shaft, *l*, having a cam, *m*, with peripheral projections *p* and concaves *n*, in combination with a drum, B, geared to a toothed wheel, K, carrying a spring, I, whereby the latter drum is turned in a direction to wind the strip D from the lower to the upper drum, substantially as specified.

10 2. In a station-indicator, the combination, with the drum B on the shaft G, having the pinion H and trip-wheel P, the barrel-wheel K, having spring I, and the drum C on shaft *g*,

having bevel-wheel *k*, shaft *l*, having cam *m*, with projections *p*, concaves *n*, and bevel-wheel *k'*, and the spring-stop *s*, of the rollers E E and strip D, and the post T, arm *a*, angle-lever *b*, bell-hammer *c*, spring *c*, and bell V, substantially as specified. 15

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses. 20

JOHNATHAN S. BROWN.

Witnesses:

A. P. DUTTON,

MICHAEL SHIEL.