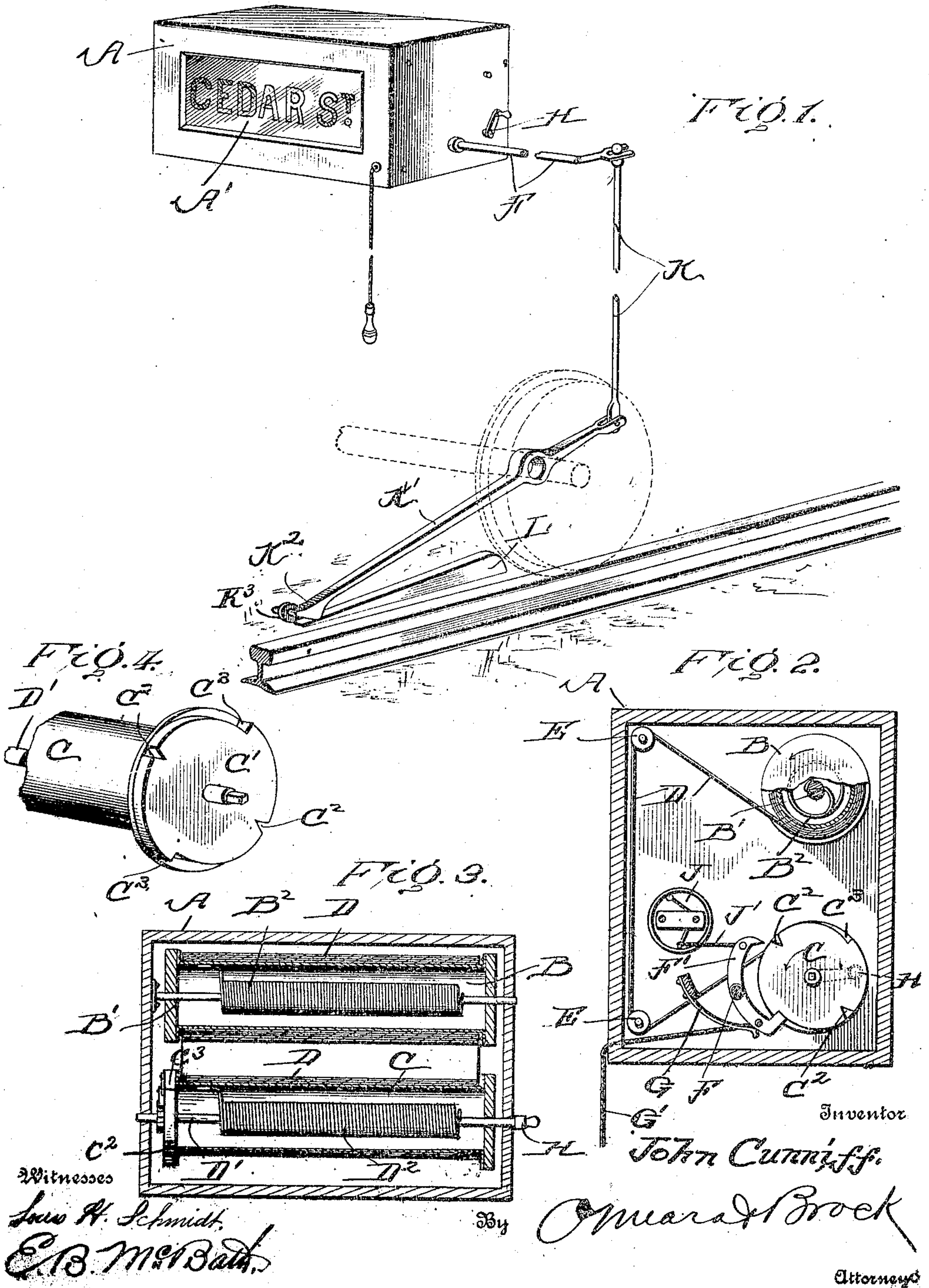


No. 877,298.

PATENTED JAN. 21, 1908.

J. CUNNIFF.
INDICATOR.

APPLICATION FILED APR. 17, 1906.



UNITED STATES PATENT OFFICE.

JOHN CUNNIFF, OF WYLAH, ALABAMA.

INDICATOR.

No. 877,293.

Specification of Letters Patent.

Patented Jan. 21, 1908.

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To all whom it may concern:

Be it known that I, JOHN CUNNIFF, a citizen of the United States, residing at Wylam, in the county of Jefferson and the State of Alabama, have invented a new and useful Improvement in an Indicator, of which the following is a specification.

This invention relates to a street or station indicator for use in passenger cars or coaches, and the object of the invention is to bring into view at the end of the car the name of the next street, station or stopping point.

The invention consists of the novel features of construction hereinafter set forth, pointed out in the claims, and shown in the accompanying drawings, in which:

Figure 1 is a detail perspective view illustrating the use and operation of my invention, parts being broken away, and a car wheel and axle being shown in dotted lines. Fig. 2 is a section through the casing. Fig. 3 is a section taken lengthwise through the casing and at right angles to Fig. 2. Fig. 4 is a detail perspective end view of one of the rollers.

In these drawings A represents a suitable casing provided with a transparent panel A'. Within this casing are mounted one above the other rollers B and C. The roller B is hollow and is mounted upon a shaft B' and within the roller is a coil spring B² which encircles the shaft B' and one end of the spring is connected to the shaft B' and the opposite end to the roller or drum B. A flexible sheet D is mounted upon the said rollers and is adapted to travel from one roller to the other. To bring the said sheet in the proper position with reference to the panel A', I provide rollers E arranged respectively adjacent the upper and lower sides of the panel A' and the shaft D travels over these rollers in winding and unwinding upon and from the drums B and C. The sheet D carries upon its outer face the names of the stopping places upon the route of the car in the order in which they are passed and in order to bring these names in alignment with the panel A' at the proper time and to hold each name in position the proper length of time, the following described mechanism is employed:—

One end of the drum C carries a disk C' which is notched upon its periphery as shown at C², said notches being opposite each other, and between the notches the disk is partially cut away to form shoulders C³ at points midway the notches. A shaft F is ro-

tatably mounted in the casing A and in advance of the drum C and upon this shaft is fixed a pawl F' one end of which is adapted to engage with the shoulder C³ while the opposite end of the pawl is adapted to engage with the notches C². A spring G normally bears upon the said pawl so as to hold one end in engagement with one of the said shoulders and thus prevent rotation of the drum C.

In order that the sheet D may be rewound by hand, a handle H is connected to a projecting end portion of a shaft C⁴ upon which the drum C is mounted. A cord G' is connected to the pawl F' and passes loosely through an opening in the front of the casing and by pulling downwardly upon said cord the pawl can be disengaged from the drum so that the same can be readily rotated by the handle H. A bell J is also arranged within the casing and the bell striker is connected by a link J' to the pawl F' so that actuation of the pawl will sound the bell and thus attract the attention of the passengers when the flexible sheet D is shifted. To shift the sheet automatically the rod F projects from an end of the casing A and said projecting end is angled and bifurcated. The upper end of a rod K is loosely held in the bifurcated portion of the rod F and the lower end of the rod K is pivotally connected to a lever K' which lever is pivotally mounted intermediate its ends upon an axle of the car. The lower and free end of the lever K' is provided with a shoe K² which is adapted to contact with and ride upon a wedge shaped plate L arranged adjacent one of the track rails.

In practice I prefer to place the plates L a sufficient distance from the track rail to permit a wagon wheel to pass between the plate and the track rail and when the device is used in connection with street cars, I prefer to place the plates L on the side of the intersecting street opposite that upon which the car stops so that after each stop the car will pass over the plate L and bring the name of the next street or stopping place into view, and it will be understood that there are as many of the plates L as there are names upon the sheet D.

While it is not absolutely necessary that the roller C be hollow, I prefer to have it a duplicate of the roller B and mounted upon a shaft D' and placed within it a spring D² secured at one end to the shaft D' and at the opposite end to the roller C. I also place a

roller K³ upon the shaft K² to prevent wear of the shaft.

The operation of the device is as follows: As the roller K³ comes into contact with the plate L and rides up upon said plate, the opposite end of the lever K' would be depressed, drawing down the rod K and giving a partial rotation to the shaft F. This will throw the pawl F' and will release the larger end of the pawl which has been in engagement with one on the shoulder C³ and will throw the smaller pointed end of the pawl into the adjacent notch C² and will at the same time cause the bell J to be sounded. The pawl F' having its smaller end locked in one of the notches C² holds the rollers or drums against rotation until the roller K³ has traveled up the incline of the plate L and drops from said plate. The dropping of the roller K³ and shaft K² will lower the rod K and partially rotate the shaft F back to its original position throwing the smaller end of the pawl out of engagement with its notch C² and the rollers B and C will rotate and unwind the sheet D until there has been a one half rotation when the larger end of the pawl will be again engaged by the shoulder C³ and the rotation of the rollers B and C will be stopped until the operation is again repeated at the next plate L.

30 Having thus fully described my invention,

what I claim and desire to secure by Letters Patent, is:—

1. A device of the kind described comprising drums, a flexible sheet winding thereon, a rotatable rod angled adjacent one end, means carried by the rod for controlling a step by step movement of the drums, a lever pivotally mounted upon an axle of a car, a rod pivotally connecting the upper end of the said lever with the angled end of the rod, and a wedge shaped tripping blade adapted to be engaged by the lower end of said lever.

2. A device of the kind described comprising two drums, a flexible sheet winding and unwinding upon said drums, means for rotating the drums, a disk carried by one drum, said disk being cut away upon opposite sides to form shoulders and having V-shaped notches between the shoulders, a spring pressed pawl having an end portion to engage the shoulders and an end portion to engage the notches, a tripping mechanism to actuate the pawl and means arranged adjacent the car track to actuate the tripping mechanism, as and for the purpose set forth.

JOHN CUNIFF.

Witnesses:

W. B. MITCHUM,
SAM'L FOURNIER.