

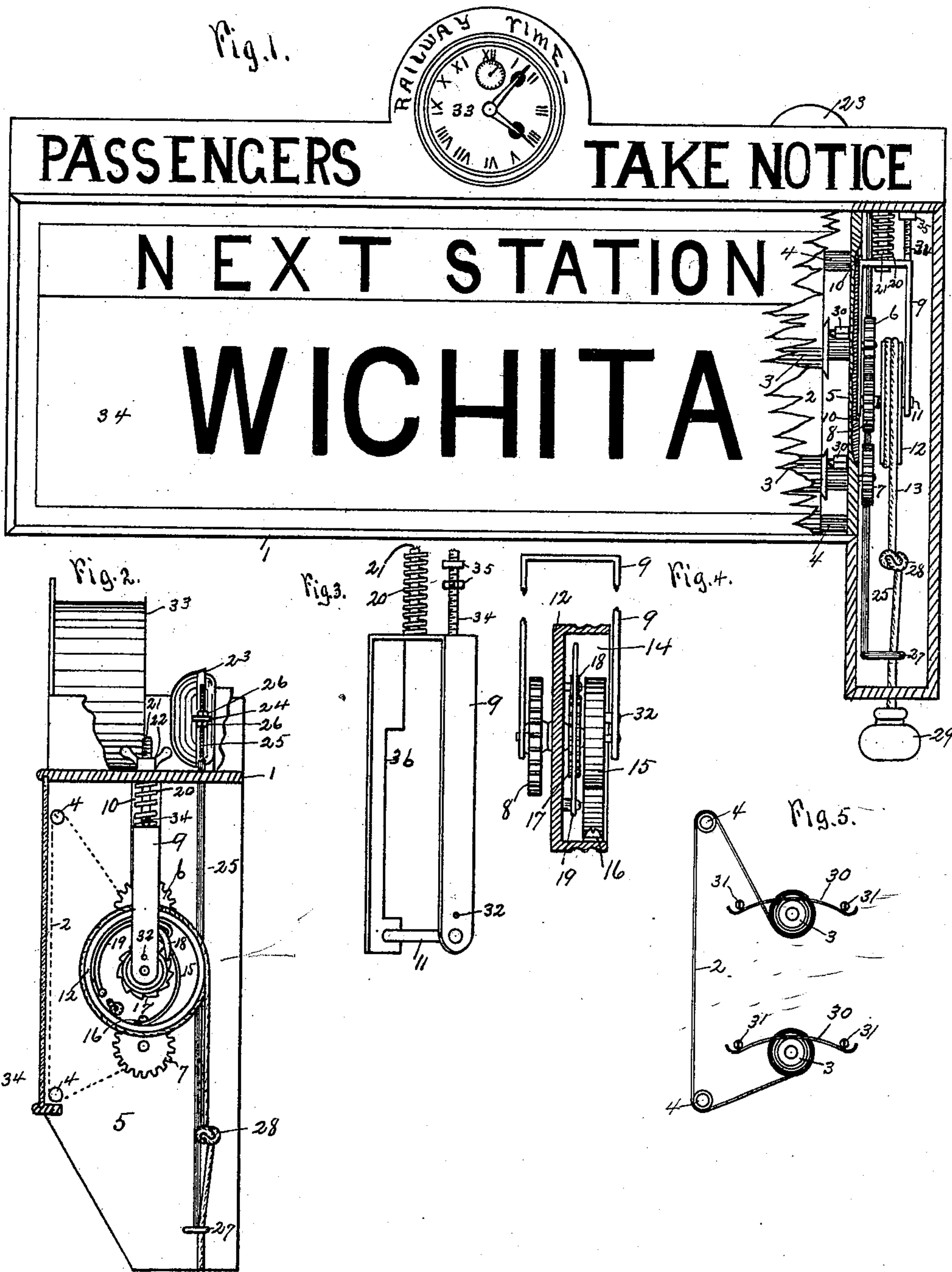
No. 618,813.

Patented Jan. 31, 1899.

C. E. COLE.  
STATION INDICATOR.

(Application filed Dec. 2, 1897.)

(No Model.)



Witnesses

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# UNITED STATES PATENT OFFICE.

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## STATION-INDICATOR.

SPECIFICATION forming part of Letters Patent No. 618,813, dated January 31, 1899.

Application filed December 2, 1897. Serial No. 660,524. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES E. COLE, a citizen of the United States of America, residing at Winfield, in the county of Cowley and State of Kansas, have invented certain new and useful Improvements in Station-Indicators, of which the following is a specification, reference being had therein to the accompanying drawings, and the figures of reference thereon, forming a part of this specification, in which—

Figure 1 is a front view of my improved station-indicator with a portion of glass broken away to show the operating mechanism. Fig. 2 is an end section of the same. Fig. 3 is a perspective detail. Fig. 4 is a detail of said working mechanism; and Fig. 5 is a detail showing the ends of the rolls with the idlers, canvas, and tension-springs.

This invention relates to certain improvements in station or street indicators; and it consists in the construction and arrangement of parts of the working mechanism; and the object of my invention is to produce a station-indicator adapted to be placed on the inside of the end of a car, and one that can be very easily and quickly operated.

Referring to the drawings, 1 represents the case of said station-indicator.

2 represents a long strip of canvas with the ends secured to the rolls 3. Said canvas runs over the idler-rollers 4. Said rollers 3 and 4 are journaled at one end in the case 1 and at the other end in the partition 5. 6 represents a gear-wheel keyed to the end of the upper of said rollers 3. 7 represents a gear-wheel keyed to the lower of said rollers 3.

8 represents an idler gear-wheel keyed to the short shaft 11, which is journaled in the frame 9. 9 represents a vertically-adjustable frame for carrying said short shaft 11. 10 represents a grooved portion in said partition 5 for the inner arm of said frame 9 to slide in vertically. 12 represents a pulley-wheel sleeved on said short shaft 11. 13 represents a cord or wire surrounding said pulley. Said pulley is hollowed out, as shown at 14, Fig. 4. 15 represents a spring with one end secured to the periphery of said pulley at 16, and the other end is secured to said frame 9 by the pin 32. 17 represents a ratchet-

wheel keyed to said short shaft 11 and inside of said hollowed-out portion 14, said ratchet-wheel operated by the ratchet 18, which is journaled to the inside wall of the pulley 12, as shown. 19 represents a spring for holding said ratchet down on said ratchet-wheel. 20 represents a coil-spring with one end pressing against the top of said frame 9 and the other end pressing against the top of the case 1. 21 represents a post made integral with said frame 9, adapted to pass through the top of said case 1. The end of said post is provided with a screw-thread on which thumb-screw 22 works.

23 represents an alarm-bell of the construction of an ordinary bicycle-bell, having the lug 24 out at one side, through which passes the rod 25. Said rod is provided with the nuts 26, above and below said lug 24, for adjusting said rod, which is provided at the lower end with a loop 27, through which the cord 13 passes. Said cord is provided with the knot 28, which will come in contact with the lower end 27 of said rod 25 when said cord is pulled downward by the knob 29.

30 represents tension-springs, one of which presses on one end of each of the rollers 3.

31 represents screws which are placed into the partition 5 and are for holding the tension on said canvas 2.

33 represents a clock.

36 represents said inner arm of said frame 9, notched out to allow the journal-bearing of the gear-wheels 6 and 7 to pass through without interfering with said vertical movement.

In use this station-indicator is operated in the following manner: The indicator is placed on the front end of the car, where it can easily be seen by the passengers and where the brakeman or conductor can easily reach it. When the train is starting in the direction from a division-point on the road, the canvas is all wound on one of the rollers. On leaving said station the brakeman will pull the knob 29, which will, through the medium of the cord 13, rotate the pulley 12, when the ratchet, which is secured to said pulley, will engage the ratchet-wheel 17, which is keyed to the short shaft 11. When the cord is released, the spring 15 will bring said pulley back to the starting-point. The idler gear-



wheel is also keyed to said shaft 11, and will rotate at the same time with said ratchet-wheel, and being in mesh, say, with the gear-wheel 6, as shown in Fig. 1, the canvas roller 3 will rotate, carrying said canvas 2 with it, at the same time said canvas will unwind from the lower roller 3 and over the two idler-rollers 4, thus bringing the names of next station on the road in view. In pulling said knob, as has been described, at the same time said station-name is changed the knot 28 will engage the end 27 of the rod 25, which will ring the bell 23, thus calling the attention of the passengers to the indicator, when they will see the notice for "Passengers take notice." "Next station Wichita." In like manner the cord is pulled on leaving each station, giving the passengers who are to leave the train time to prepare for their departure. When the end of the division is reached and opposite end of the car is to be the front end, the indicator is placed on said opposite end of said car, the thumb-screw 22 is released, while through the medium of the spring 20 the frame 9 will slide down, carrying the mechanism with it, until said idler-wheel 8 will come in mesh with the gear-wheel 7, when by pulling the cord, as has been described, the canvas will unwind from said lower roller and wind up on said upper rollers, thus bringing the names of the different towns to view in their regular order. The adjusting-nuts 35 on the rod 34 will prevent the idler-gear from meshing too hard with said gear-wheels 6 and 7. The springs 30 are for the purpose of keeping the canvas taut.

Having thus described my invention, what I claim as new and useful, and desire to secure by Letters Patent, is as follows:

1. A station-indicator consisting of the combination of a case having rollers journaled in said case, a canvas having the several station or street names printed thereon, adapted to roll on said rollers, gear-wheels keyed to one

end of said rollers, a partition in said frame, a vertically-adjustable frame secured to said partition having the shaft 11 secured to the lower end, the gear-wheel 8 keyed to said shaft, the threaded post 34 having the nuts 35, a hollowed-out pulley-wheel sleeved on said shaft, an operating-cord wound around said pulley with one end secured thereto, the other end passing out of said case, a coil-spring in said hollowed-out portion with one end secured to the periphery of said pulley-wheel and the other end secured to the adjustable frame 9, the ratchet-wheel keyed to said shaft, and the pawl secured to said pulley substantially as shown and described.

2. A station-indicator consisting of the combination of a case, rollers 3 and 4 journaled in said case, a canvas having the names of stations or streets printed thereon, adapted to be rolled on said rollers 3 and over the rollers 4, gear-wheels keyed to one end of each of said rollers 3, a frame having the shaft 11, said frame adjustably secured to said case, the screw 34 having the adjusting-nuts 35, a gear-wheel keyed to said shaft 11 and adapted to alternately mesh with said gear-wheels 6 and 7, a hollowed-out pulley sleeved on said shaft 11, an operating-cord wound around the periphery of said pulley-wheel with one end secured thereto, a coil-spring in said hollowed-out portion with one end secured to the periphery of said pulley and the other end secured to the adjustable frame 9, a ratchet-wheel keyed to said shaft, a pawl secured to said pulley, springs secured to said partition and bearing on said rollers 3, a signal-bell adapted to be operated by said cord through the medium of the rod 25 substantially as shown and for the purpose specified.

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Witnesses:

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