J. S. LAMAR.

Improvement in Bell-Ringing Apparatus for Locomotives.

No. 128,801. Patented July 9, 1872.

Fig: 1.

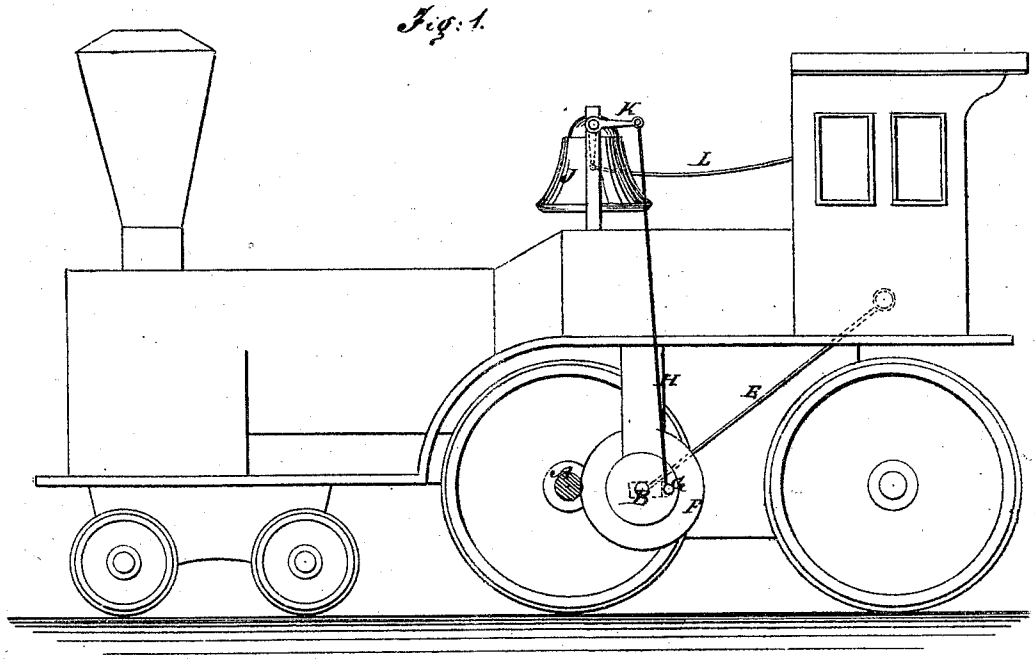
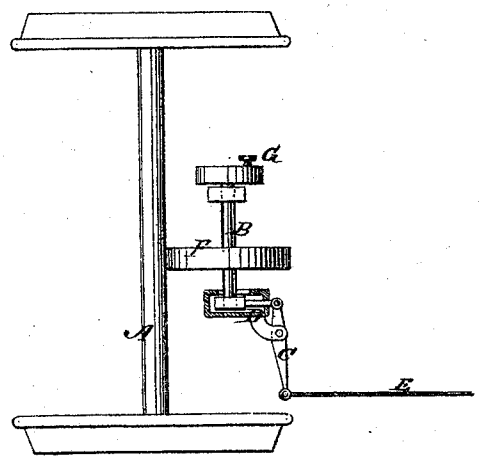



Fig: 2.

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# UNITED STATES PATENT OFFICE.

JAMES S. LAMAR, OF AUGUSTA, GEORGIA.

## IMPROVEMENT IN AUTOMATIC BELL-RINGING APPARATUS FOR LOCOMOTIVES.

Specification forming part of Letters Patent No. 128,801, dated July 9, 1872.

Specification describing a new and Improved Automatic Bell-Ringing Apparatus for Locomotives, invented by JAMES S. LAMAR, of Augusta, in the county of Richmond and State of Georgia.

My invention consists of a crank-shaft mounted on the locomotive, and provided with a friction-wheel or a gear-wheel in such a manner that it can be readily geared or ungeared with one of the axles to ring the bell, which is connected to the crank by a cord, automatically, when the locomotive is in motion, and thus save the labor of ringing it by hand, which in some cases is considerable, in large towns where the distances along which the bell is required to be rung are long.

Figure 1 is a longitudinal sectional elevation of part of a locomotive, showing the application of my improvement, and Fig. 2 is partly a horizontal section.

Similar letters of reference indicate corresponding parts.

A represents one of the axles of the locomotive or tender; B, a short counter-shaft, arranged parallel with it, in any suitable supports connected with the truck, and with one end movable toward or from the axle, said end being provided with a lever, C, and push-pin D, or any suitable contrivance by which it may be moved by a cord, E, and a spring or other means. F is a friction-wheel on said shaft to be brought into contact with the axle for turning the crank G for ringing the bell J by means of the cord H, which connects them. The cord E will extend into the cabin where it can be taken by the driver to set the ringing apparatus in gear. The wheel F will be of any approved size to give the requisite motion, and the wrist-pin may be adjustable toward or from the shaft B, for increasing or diminishing the length of the movement imparted to the bell, or the pin on the bell-arm K may be so arranged. The bell-cord L, commonly used to work the bell by hand will be retained to work it that way when required.

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

The combination, with axle A, of the friction wheel F on a movable shaft, B, the pin D, the lever C, and the bell-rope E, all arranged in connection with locomotive or tender, as and for the purpose set forth.

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