(No Model.)

E. D. ROCKWELL.

BELL.

No. 482,696. Patented Sept. 13, 1892.

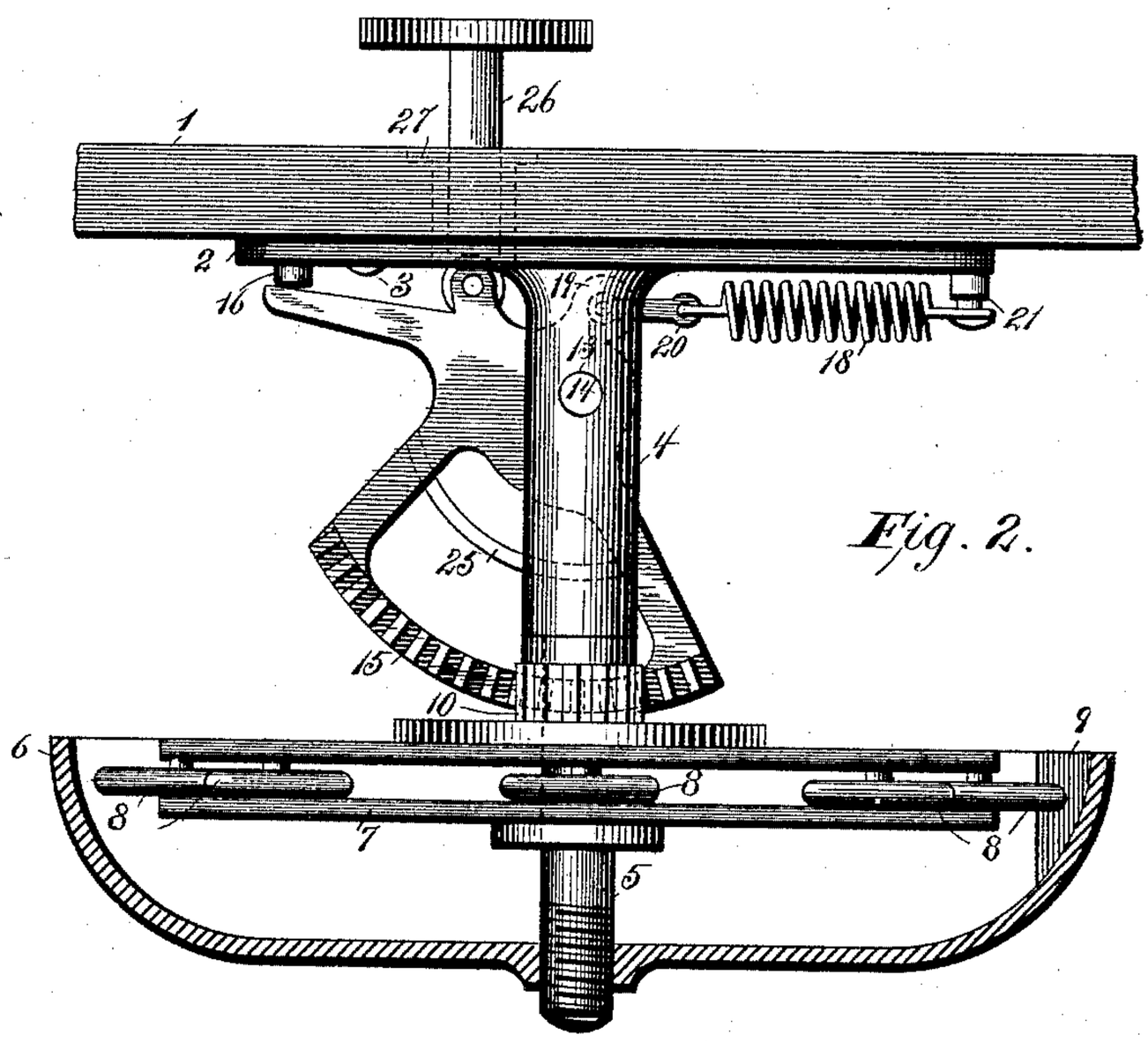

Fig. 2.

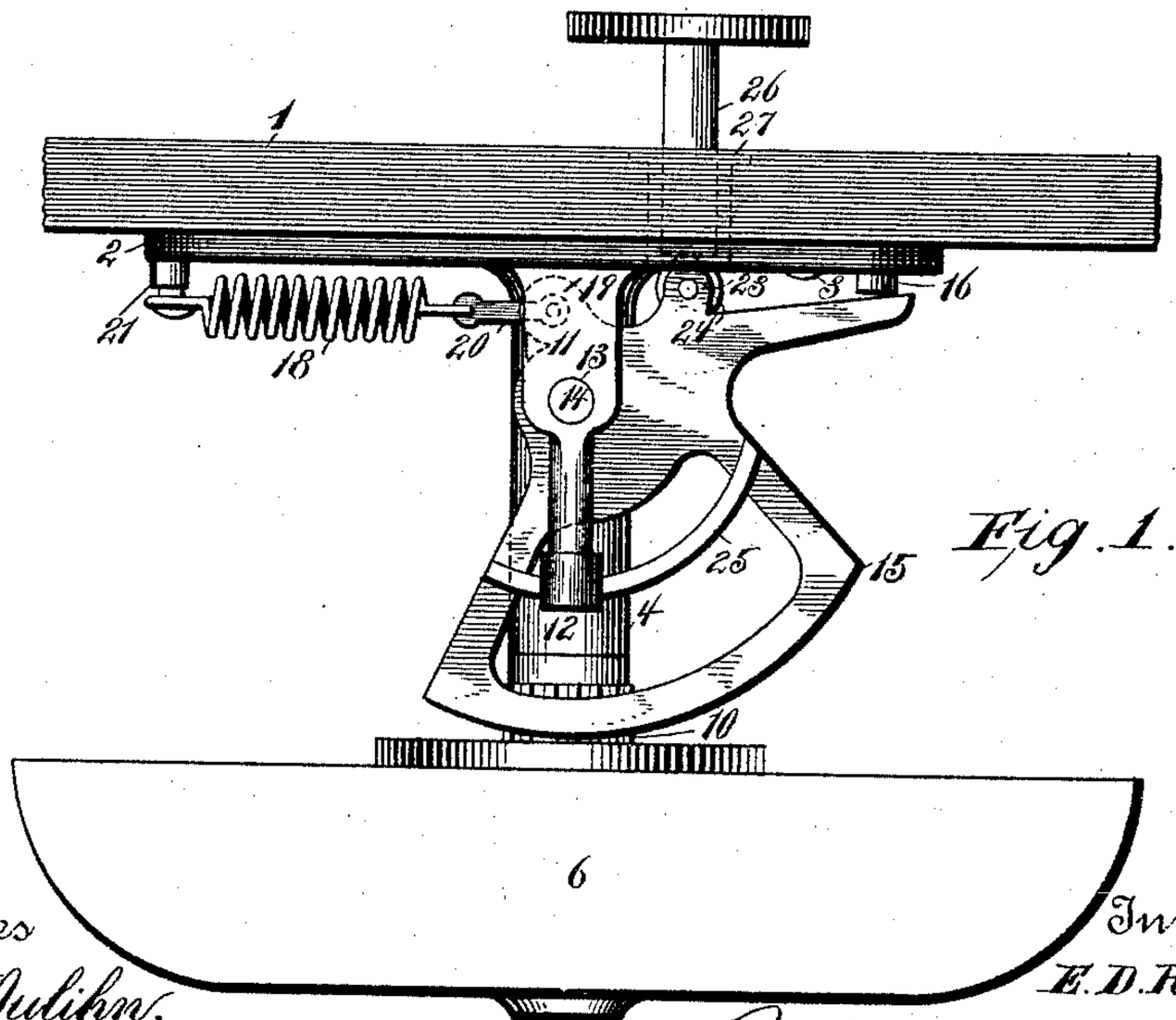

Fig. 1.

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UNITED STATES PATENT OFFICE.

EDWARD DAYTON ROCKWELL, OF BRISTOL, CONNECTICUT, ASSIGNOR TO THE NEW DEPARTURE BELL COMPANY, OF SAME PLACE.

BELL.

SPECIFICATION forming part of Letters Patent No. 482,696, dated September 13, 1892.

Application filed April 7, 1892. Serial No. 428,105. (No model.)

To all whom it may concern:

Be it known that I, EDWARD DAYTON ROCKWELL, of Bristol, county of Hartford, and State of Connecticut, have invented certain new and useful Improvements in Bells, of which the following is a specification, reference being had to the accompanying drawings.

The object of my invention is to produce an improved bell specially adapted for use on a street-car from which a warning-signal must be sounded at frequent intervals by an operator whose hands are otherwise employed—as, for instance, by a gripman on a cable-car—although adapted equally well for various other purposes.

In the accompanying drawings, Figure 1 is a side view of my bell, and Fig. 2 is a view of the other side of my bell, showing the gong in cross-section and the parts in the position they occupy when at rest.

Referring to the figures on the drawings, 1 indicates a section of the floor of a car, for example.

2 indicates a plate adapted to be secured in place, as upon a car, by bolts 3, passing through holes in the plate and the bottom of the car.

4 indicates a stud projecting from the face of the plate, with which it may be made in one casting, as illustrated.

5 indicates a spindle, which carries on its lower end, by means of screw-threads, preferably, a gong 6, preferably within which on a suitable bearing around the spindle 5 revolves a balance-wheel carrier or revolving frame 7, provided around its outer edge with a number of loosely-pivoted revoluble strikers 8, that are adapted by the rotation of the balance-wheel to be whirled upon their pivots and strike the gong. Where a concentrically-pivoted carrier is used, a lug or projection 9 is provided on the inside of the gong. The carrier is provided on one side with a pinion 10, which may be cast integrally with it.

11 indicates a pin or projection extending from the plate 2 parallel with and a little removed from the stud 4. It carries on its lower end an antifriction-roller 12. The stud and pin projection are pierced near their base with holes 13, through which is inserted a journal 14, which carries a segmental gear 15, that meshes with the pinion 10 to impart rotary motion to the balance-wheel.

Upon the plate 2 are provided upon opposite sides of the segmental gear a lug or projection 16 for the segmental gear to impinge against in its oscillatory movement. To keep the segmental gear in position for operating the balance-wheel, I provide restoring mechanism, as a spring 18, fastened at one end to a lug 19 by means of a link 20 and at the other to a pin 21, projecting from the plate 2. The lug 23 carries an antifriction-roller 24. The segmental gear is also preferably provided on one side with a curved boss 25, which, bearing against the antifriction-roller 12, serves to hold the gear rigidly in mesh with the pinion 10. Any suitable and equivalent means, however, may be employed for holding the segmental gear in the desired position and restoring it to that position after each operation.

26 indicates a prime mover, push-rod, or foot-piece carried in a suitable bearing-piece 27, secured to the floor. The foot-piece is located so as to strike the roller 24 and is adapted upon being pressed against it with sufficient force to rotate the segmental gear upon its axis and impart motion to the balance-wheel to ring the gong. Upon release of the foot-piece the spring 18 will restore the segmental gear to its first position, thereby operating the balance-wheel in the reverse direction and ringing the bell.

I do not confine myself to details of construction as herein illustrated, as they may be varied in many ways without departing from the scope of my invention.

What I claim is—

1. In a bell adapted to be secured to the under side of a platform of a car, the combination, with a gong and a revolving frame adapted to sound the same, of actuating mechanism for operating the frame, restoring mechanism for operating the same in one direction, and a foot-piece or push-rod adapted to be operatively connected with the actuating mechanism below the platform and to extend upward through the platform for imparting motion to the actuating mechanism in opposition to the force of the restoring mechanism, substantially as set forth.

2. In bell mechanism adapted to be secured to the under side of a platform of a car, the combination, with a gong suitably supported and a revolving frame adapted to sound the same, of mechanism for actuating the frame and a foot-piece or push-rod designed to extend upward through the floor of the platform for communicating motion to the actuating mechanism, substantially as set forth.

3. In bell mechanism adapted to be secured to the under side of a platform of a car, the combination of a stud, a gong carried on the lower end thereof, a revoluble frame carried concentrically within the gong, a pinion adapted to rotate the frame, a gear meshing with the pinion, and a foot-piece or push-rod vertically movable in fixed bearings in the platform, adapted to rotate the gear, substantially as set forth.

In testimony of all which I have hereunto subscribed my name.

EDWARD DAYTON ROCKWELL.

Witnesses:
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