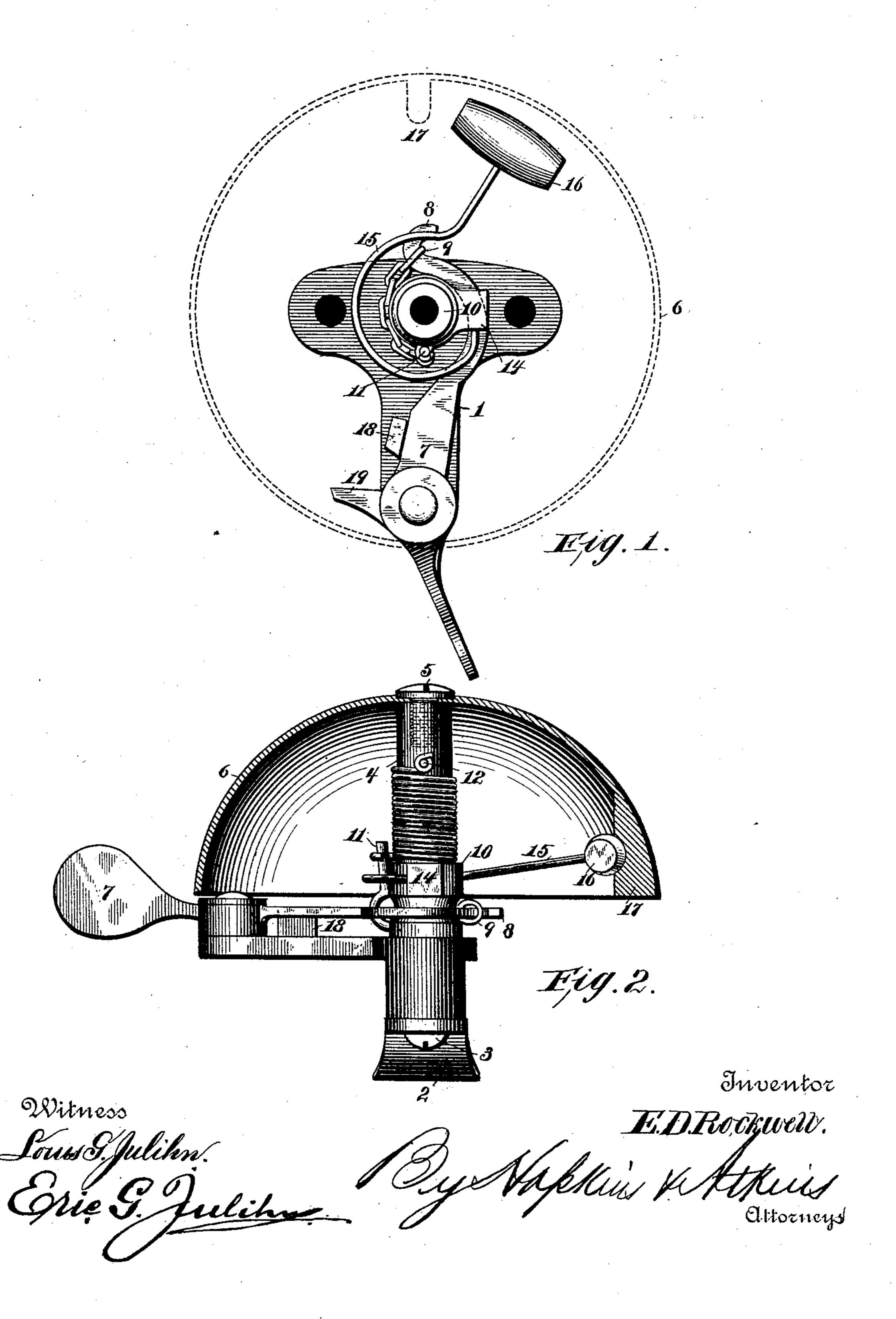
# E. D. ROCKWELL. BICYCLE BELL.

No. 483,084.

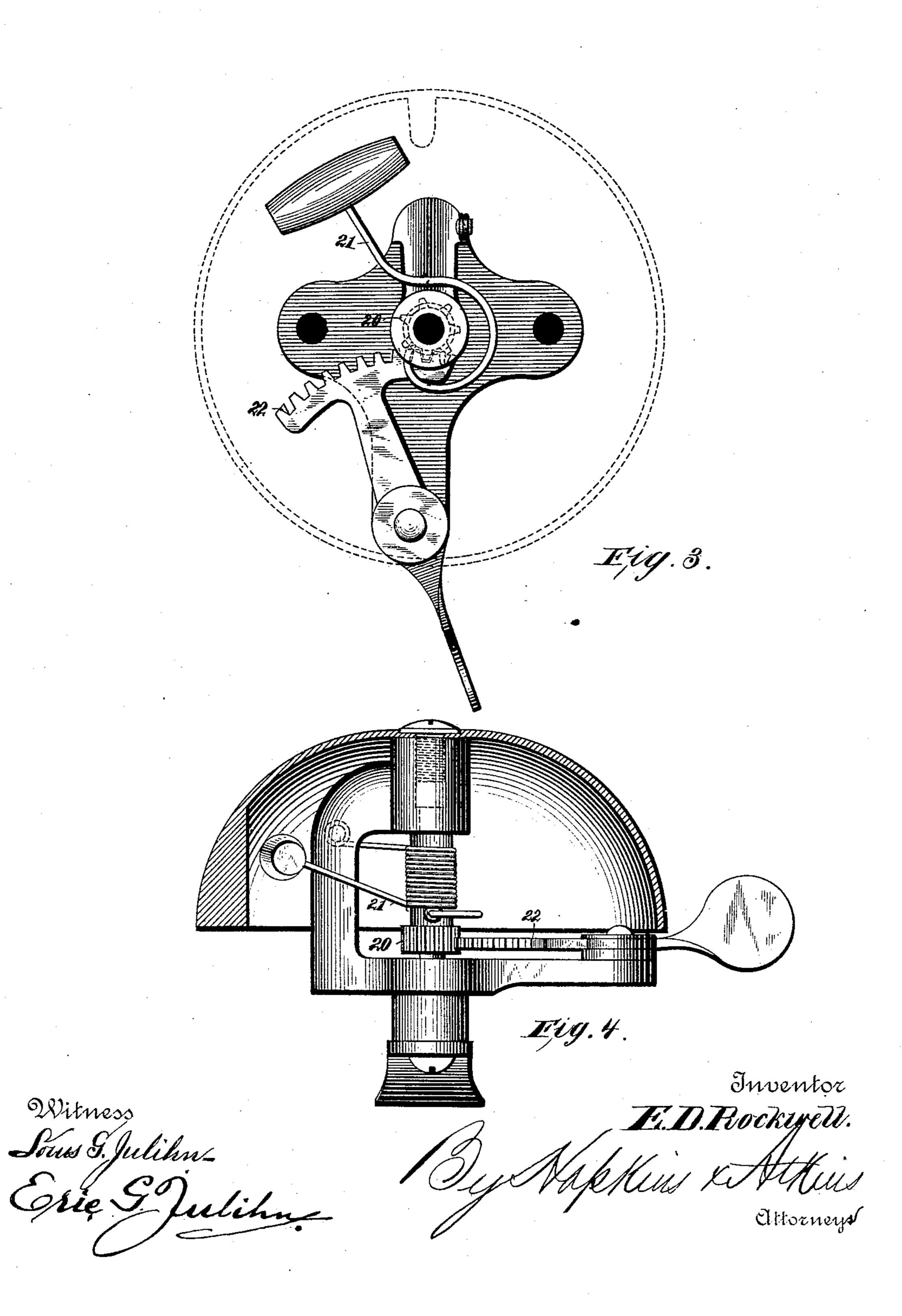
Patented Sept. 20, 1892.



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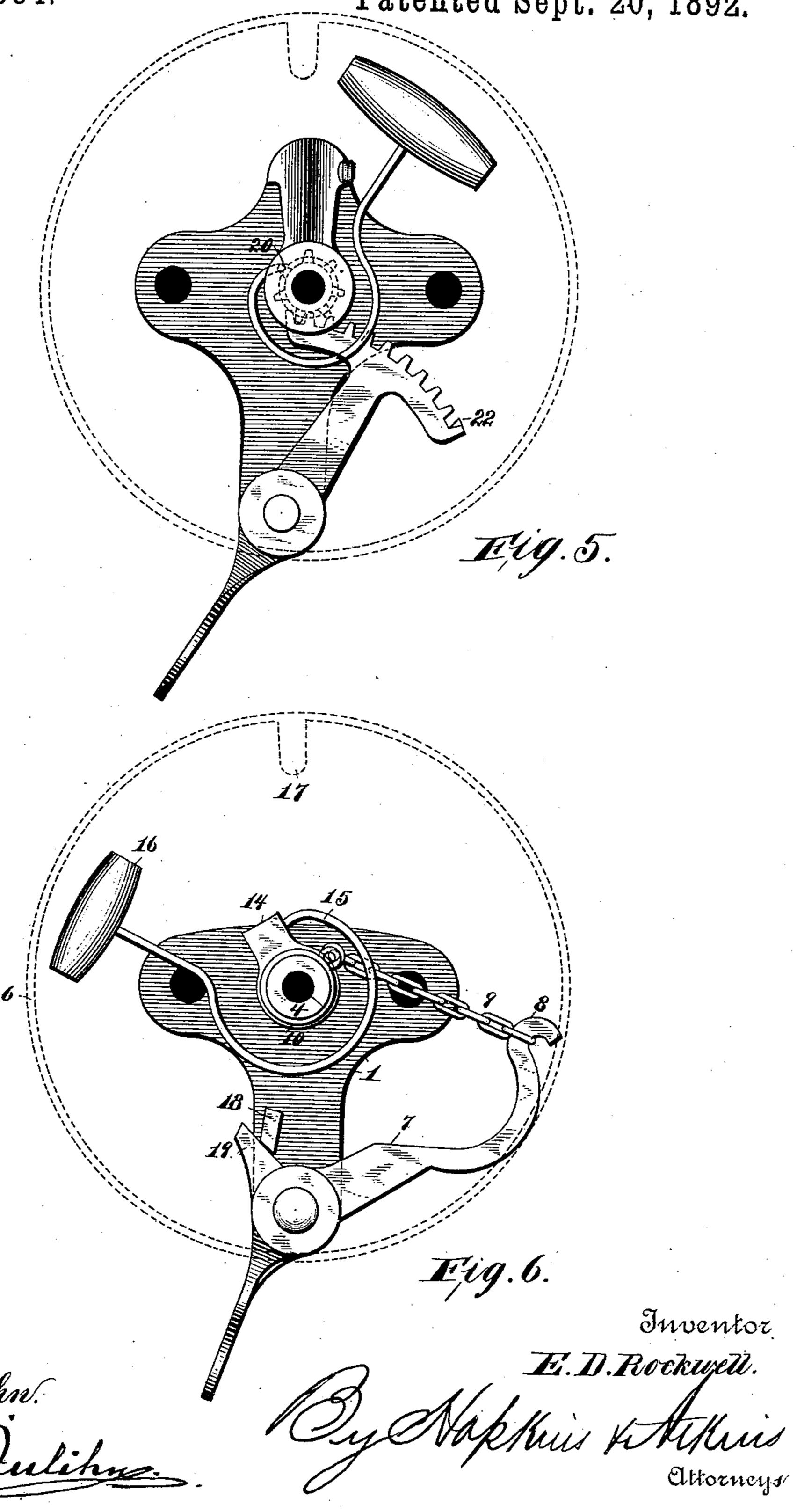
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### United States Patent Office.

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

#### BICYCLE-BELL.

SPECIFICATION forming part of Letters Patent No. 483,084, dated September 20, 1892.

Application filed March 9, 1892. Serial No. 424,329. (No model.)

To all whom it may concern:

Be it known that I, EDWARD D. ROCKWELL, of Bristol, county of Hartford, and State of Connecticut, have invented certain new and 5 useful Improvements in Bicycle-Bells, of which the following is a specification, reference being had to the accompanying drawings.

The object of my invention is to produce a 10 bicycle-bell of light and compact construction, that by a very simple and inexpensive contrivance is adapted to produce a double stroke for each pressure and to bring out of

the gong its best possible tone.

In the accompanying drawings, Figure 1 is a top plan view of my bell, with the gong shown in dotted lines. Fig. 2 is a central vertical section of the same, the parts shown in elevation. Fig. 3 is a similar view to Fig. 1, 20 illustrating a modification of my invention, and Fig. 4 a view of the same similar to Fig. 2. Fig. 5 is a view similar to Fig. 3, showing mechanism in the opposite position. Fig. 6 is a view similar to Fig. 1, showing the mech-25 anism in the opposite position.

Referring to the figures on the drawings, 1 indicates a frame of a bicycle-bell, which is adapted to be secured, as usual, to the steering-head of a bicycle by means of the bridge 30 2 and screws 3. A simple form of the frame is shown in the drawings, in which the base is elongated on one side, and at right angles to it is provided a standard or stud 4, to the top of which, by a screw 5, is fixed a 35 gong 6. A notch in the top of the standard and a corresponding projection on the under side of the gong may be provided for holding the parts rigidly united; but this is a mere detail of construction.

7 indicates a lever, preferably pivoted to the extremity of the elongated part of the base of the frame. Its inner end is curved, as illustrated in the drawings, and is provided with a hook 8, to which may be fastened at 45 one end a chain 9, or the like flexible connection, which is fastened at its other end to a revoluble hub 10. It is desirable that this hub should be spring-actuated in one direction. For that purpose a pin or projection 50 11 on the top of the hub and another pin 12 on the side of the standard and a spring

coiled around the standard and having its opposite ends fastened to the pins respect-

ively may be provided.

14 indicates a projection on one side of the 55 hub, to which is fastened a spring-arm 15, that carries on its outer end, near the inside of the gong, a hammer 16. By operating the lever 7 the hammer may be swung around until it strikes the lug 17, formed on the inner face 60 of the gong, when, upon the lever being released, the hammer, by the force of the springarm, will swing in the opposite direction and strike the lug on the other side. By this arrangement the hammer will swing around the 65 entire inside of the gong before each stroke, and thereby insure, even in connection with the smallest gong, a loud and clear tone. It is desirable that the lever should be limited in its movements, and for that purpose I pro- 70 vide on one side, on top of the base of the frame, a lug 18, and on the side of the lever a projection or lug 19, which parts, coming in contact, limit the movement of the lever in one direction. Its movement in the opposite 75 direction is limited by the side of the lever striking against the lug 18 when the lever is actuated by the spring.

I do not desire to limit myself to the construction above described, because, obviously, 80 it may be in many respects varied without departing from the scope of my invention. For instance, as shown in Fig. 3 of the drawings, instead of the chain connection I may use a pinion 20 and a segmental gear upon 85 the end of the lever 7. Instead of employing a straight standard I may use a curved standard and pivot the pinion between the base and the upper part of the curved standard. The pinion-shaft may be large enough and 90 long enough to carry the hammer and a spring-arm 21 for operating it, as in the construction first illustrated. To limit the movement of the lever, stops 22 on the ends of the

segmental gear may be provided.

It will be observed in both illustrated forms of my bell that the stops which limit the movement of the lever are placed so as to interrupt its movement before the hammer strikes the lug on the gong in either direction tion. The momentum of the hammer imparted by the lever is sufficient to overcome

the resistance of the spring-arm which carries it, so that it strikes the lug and instantly rebounds, producing clearness of tone. This, however, being commonly used in gong-striking apparatus, is not a part of my invention.

1. A standard with a gong secured thereto, having a lug on its inner face, a pivoted lever, a hub rotatable on said standard, a hammer secured thereto, adapted to strike said lug, means connected with said lever and hub for rotating the latter in one direction, and a spring secured to said hub and said standard for returning the hub, as and for the purposes set forth.

2. A standard with a gong secured thereto, having a lug on its inner face, a pivoted lever with a projection thereon, a hub rotatable on said standard and having a hammer secured thereto, adapted to strike said lug, means connected with said lever and hub for

rotating the latter in one direction, a spring connected with the standard and hub for returning the latter, and a stop with which said lever and projection thereon are adapted to 25 engage, substantially as and for the purpose specified.

3. A standard with a gong secured thereto, having a lug on its inner face, a pivoted lever, a hub rotatable on said standard, and a 30 hammer secured thereto, adapted to strike said lug, a flexible connection attached to one end of the lever and to the hub, and a spring secured to said hub and said standard for returning the hub, substantially as and 35 for the purposes specified.

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

EDWARD D. ROCKWELL.

Witnesses: E. B. Spring,

M. B. ROCKWELL.