

(No Model.)

J. W. STARRITT.  
BICYCLE BELL.

No. 576,986.

Patented Feb. 9, 1897.

Fig. 1.

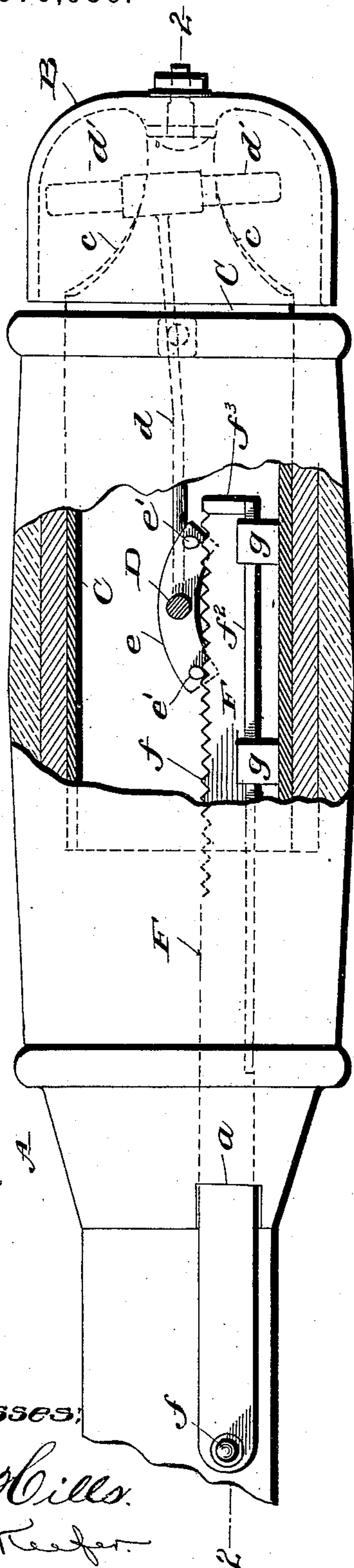
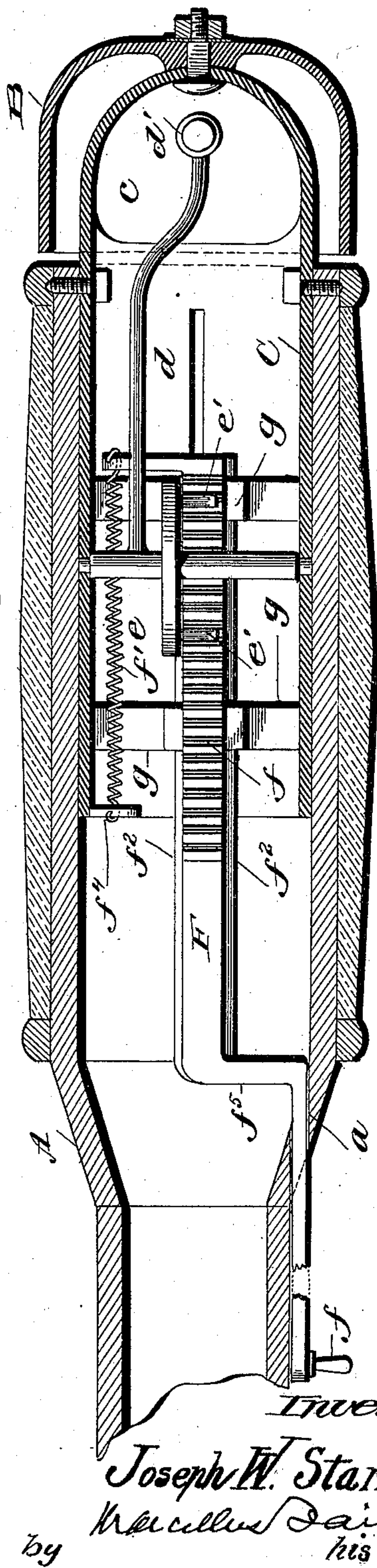


Fig. 2.



Witnesses:  
L. C. Hills.  
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his Atty.



# UNITED STATES PATENT OFFICE.

JOSEPH WILLIAM STARRITT, OF RICHMOND, VIRGINIA.

## BICYCLE-BELL.

SPECIFICATION forming part of Letters Patent No. 576,986, dated February 9, 1897.

Application filed November 16, 1895. Serial No. 569,178. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH WILLIAM STARRITT, a citizen of the United States, and a resident of Richmond, county of Henrico, and State of Virginia, have invented a certain new and useful Improvement in Bicycle Alarm-Bells, of which the following is a specification.

In the device in which this invention is comprised the bell is a vibrating bell, the gong is attached to one end of the handle-bar of the bicycle, the clapper is actuated by a sliding spring-retracted toothed bar operating on a pallet attached to the rock-shaft on which the clapper is secured, and the said operating mechanism is contained and concealed within the handle-bar.

The invention will first be described in connection with the accompanying drawings, forming part of this specification, and will then be more specifically pointed out in the claims.

In the drawings, Figure 1 is a plan of the under side of one end of the handle-bar of a bicycle provided with the improvement. Fig. 2 is a section on line 2 2, Fig. 1, with the pallet in elevation.

The hollow handle-bar, only one end of which is shown, is indicated at A. To the outer extremity of this end is attached the alarm-gong B. The attachment of the gong to the handle-bar in this position is effected in the present instance by means of a tubular cylindrical shell C, which may be longitudinally split, as shown, for a portion of its length to facilitate its insertion into the hollow handle-bar. The end of this shell, which protrudes beyond the end of the handle-bar, has a closed head to which the gong is securely fastened, and the sides of this protruding portion of the shell are cut away at points *c c* to permit the vibrating clapper to reach and contact with the gong.

In the shell C is mounted the transverse rock-shaft D, from which projects the stem *d*, upon the outer end of which the clapper *d'* is secured. Upon the rock-shaft is also secured the pallet *e*, provided upon each side of the shaft with a pin *e'*. These pins when struck by a suitable instrumentality will cause the rocking of the shaft and consequently the vibration of the clapper. The actuating instrumentality made use of for

this purpose consists of the longitudinally-sliding bar F, provided with teeth *f*, which engage the pallet-pins *e'*. The toothed sliding bar is supported within the handle-bar in suitable guides. It is pushed in one direction (outwardly) by a knob *f* on its inner end, and it is retracted in the other direction by a spring *f'*. The guiding of the bar in its longitudinal movement is accomplished by providing it upon its opposite longitudinal edges with ribs *f<sup>2</sup>*, which enter, engage, and slide in correspondingly-shaped undercut guide-grooves formed in guide blocks or bars *g*, attached in suitable position to and within the shell C. The retracting-spring *f'* is attached at one end to a horn or projection *f<sup>3</sup>* on the outer end of the toothed bar F and at the other end to a stationary part *f<sup>4</sup>* in the shell C. The toothed bar F, near its inner end, makes a right-angled bend at *f<sup>5</sup>*, at or near the point where the enlarged or handle part proper of the handle-bar joins the main part of that bar and then is again turned horizontally, passing out through a guide hole or slot *a* at that point in the handle-bar, and thence extending outside of and parallel with the handle-bar. Upon this exposed part of the toothed bar is placed the operating-knob *f*.

The mode of operation of the device is obvious from the foregoing description and requires no further explanation.

Having described my improvement and the best way now known to me of carrying the same into effect, I state in conclusion that I do not restrict myself narrowly to the mechanical details herein set forth in illustration of my invention; but

What I claim, and desire to secure by Letters Patent, is as follows:

1. An alarm-bell for bicycles comprising the combination with the hollow handle-bar, of a shell C fitted and contained in said bar, a gong attached to the outer end or head of the shell, a clapper and clapper-actuating mechanism mounted in and carried by said shell, and a handle forming part of said mechanism projecting beyond the shell and through the handle-bar in position to be operated by the rider, substantially as set forth.

2. The combination of the hollow handle-bar; the gong upon the end of said bar, the rock-shaft the clapper-supporting stem se-

cured to said rock-shaft, and the clapper carried by said stem; the pallet attached to said rock-shaft; and the sliding toothed bar, engaging the pallet, supported in guides within  
5 the handle-bar, and provided with an operating handle or knob upon the exterior of the handle-bar, substantially as hereinbefore set forth.

3. The combination of the hollow handle-  
10 bar; the shell C fitted in said bar; the gong attached to the head or outer end of said shell; the transverse rock-shaft mounted in said shell; the clapper and its supporting-  
15 stem attached to said rock-shaft; the pallet secured to said rock-shaft; the toothed oper-

ating-bar engaging said pallet, supported in suitable guides on said shell, and provided with an extension which projects through to the exterior of the handle-bar, and is there provided with an operating knob or handle; 20 and the spring for retracting the toothed operating-bar—substantially as and for the purposes hereinbefore set forth.

In testimony whereof I have hereunto set my hand this 1st day of October, 1895.

JOSEPH WILLIAM STARRITT.

Witnesses:

J. M. POWERS,  
J. F. LEONARD.