

(No Model.)

T. HOERMANN.  
BICYCLE BELL.

No. 577,618.

Patented Feb. 23, 1897.

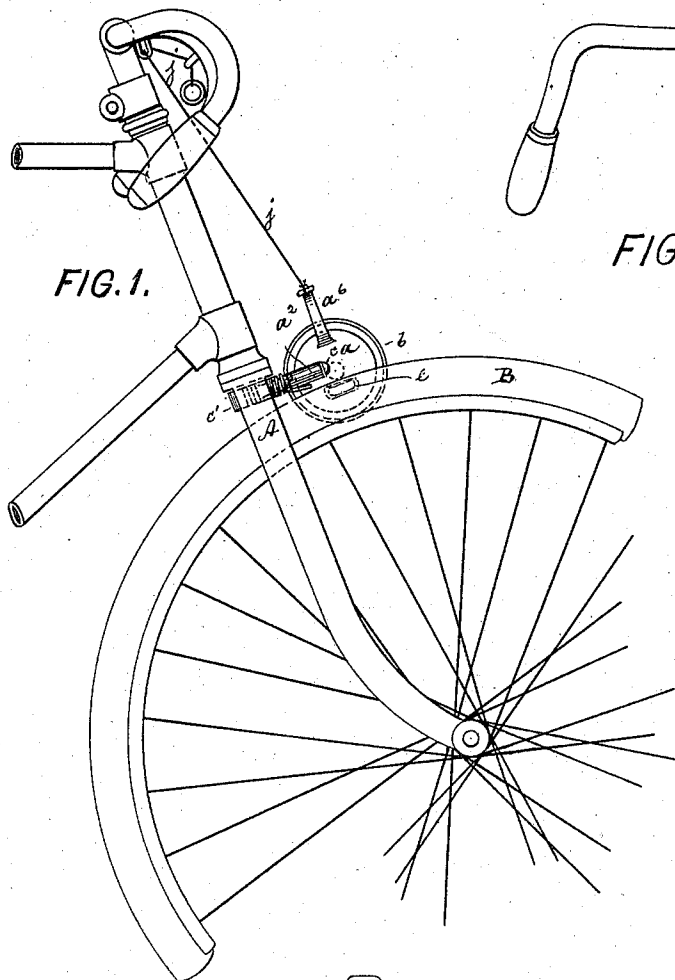


FIG. 1.

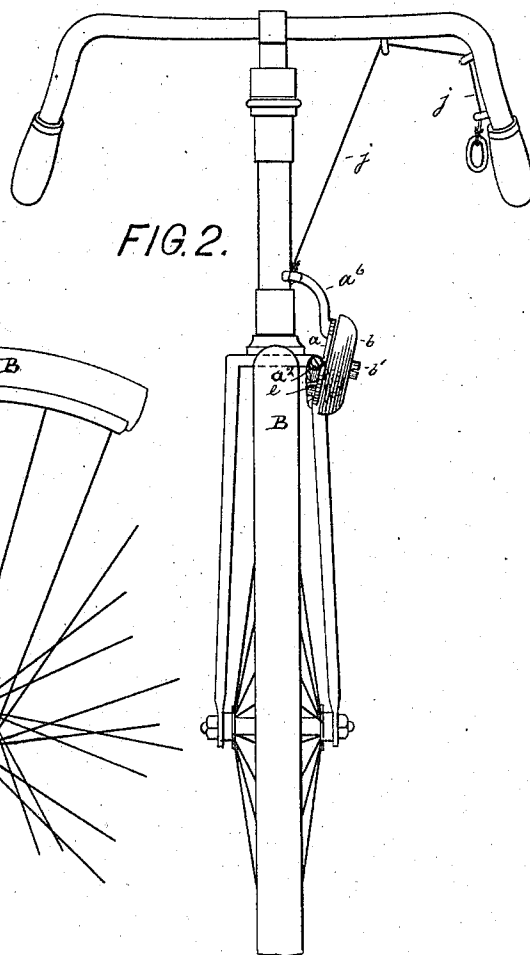


FIG. 2.

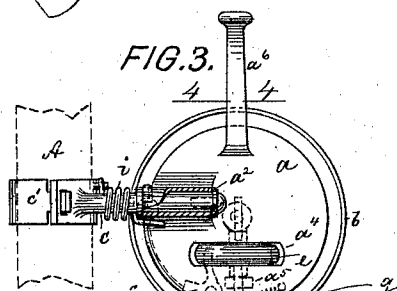


FIG. 3.

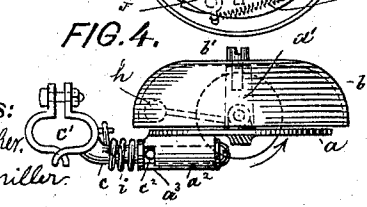


FIG. 4.

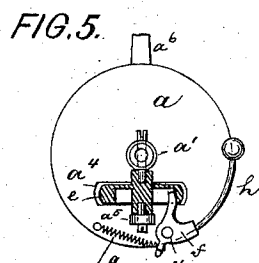


FIG. 5.

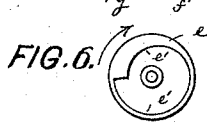


FIG. 6.

Witnesses:  
John Becker,  
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# UNITED STATES PATENT OFFICE.

THEODOR HOERMANN, OF BERLIN VILLAGE, NEW YORK, ASSIGNOR TO  
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## BICYCLE-BELL.

SPECIFICATION forming part of Letters Patent No. 577,618, dated February 23, 1897.

Application filed October 30, 1896. Serial No. 610,560. (No model.)

*To all whom it may concern:*

Be it known that I, THEODOR HOERMANN, a citizen of Germany, and a resident of Berlin Village, Queens county, New York, have invented an Improved Bicycle-Bell, of which the following is a specification.

This invention relates to a bicycle-bell of the class in which the clapper is actuated by a temporary engagement of its actuating mechanism with the wheel-tire.

By my invention the bell is so placed and operated that it will not interfere with the use of a brake, while, moreover, the actuating mechanism is such that a positive and reliable motion will be transmitted to the clapper.

In the accompanying drawings, Figure 1 is a side elevation of the fore part of a bicycle provided with my improved bell. Fig. 2 is front view thereof; Fig. 3, a side view, partly in section, of the bell detached; Fig. 4, a section on line 4 4, Fig. 3; Fig. 5, an inner face view of base-plate *a*, showing the actuating mechanism partly in section; and Fig. 6, a detail of cam-wheel *e*.

The letter *a* represents a base-plate provided with a tapped post *a'*, to which the gong *b* is attached by screw *b'*. On its outer side the plate *a* is made with a tubular bearing or knuckle *a<sup>2</sup>*, engaged by one end of a pivot *c*, the other end of which is adapted to be attached to the bicycle-fork *A* by clasp *c'*. The bell is thus attached to the bicycle in such a manner that it may be tilted toward and away from the wheel-tire *B*, to the side of which it is hung, Fig. 2. The extent of this tilting motion is limited by a pin *c<sup>2</sup>* on pivot *c*, that engages a notch *a<sup>3</sup>* of knuckle *a<sup>2</sup>*, Fig. 4.

The plate *a* is slotted, as at *a<sup>4</sup>*, and through this slot projects outwardly the rim of a laterally-extending wheel *e*, which turns in the post *a'* and in a bearing *a<sup>5</sup>*, projecting from the inner face of plate *a*. The wheel *e* is provided with an interior cam *e'*, Fig. 6, which is engaged by one arm of a bell-crank *f*, pivoted to plate *a* at *f'*. The bell-crank is actuated, moreover, by a spring *g* and is connected at its free arm to the clapper *h*, adapted to strike the gong *b*.

The outwardly-extending rim or section of wheel *e* is placed opposite the side of the tire *B*, but is normally held away from such tire by a spring *i*, which has a tendency to tilt the bell with its lower end outwardly. If the bell is to be sounded, it is tilted in an opposite direction, so that the wheel *e* will contact with the tire *B* and will be rapidly revolved by the same. This tilting of the bell is effected by means of a hand-string *j*, which is attached to an arm *a<sup>6</sup>* of plate *a* and extends to within easy reach of the rider. As the wheel *e* is rotated by tire *B* it will, in connection with spring *g*, cause the bell-crank *f* to be rapidly vibrated, so as to vibrate the clapper and sound the alarm. The alarm will be sounded as long as a pull is exerted upon the hand-rope and will cease as soon as such pull is relaxed, because the spring *i* will then be free to tilt the bell away from the tire.

It will be seen that as my improved bell is placed at and engages the side of the tire *B* it will not interfere with the free application and use of a brake. Moreover, my improved mechanism is such that the clapper is positively actuated and is under the full control of the rider.

What I claim is—

1. The combination in a bicycle-bell of a gong with a cam-wheel adapted to engage the side of the tire, a clapper actuated by said wheel, and a spring-knuckle that connects the gong to the bicycle-frame and permits a lateral tilting motion of the gong, substantially as specified.

2. The combination of a tilting base-plate having a knuckle, with a pivot engaging the same, means for connecting said pivot to the bicycle-frame, means for limiting the tilting motion of the base-plate, a cam-wheel projecting through the base-plate, a spring-actuated bell-crank engaging the same, and a clapper actuated by the bell-crank, substantially as specified.

THEODOR HOERMANN.

Witnesses:

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