(No Model.)

J. OSTERMANN.

BICYCLE BELL.

No. 585,780. Patented July 6, 1897.

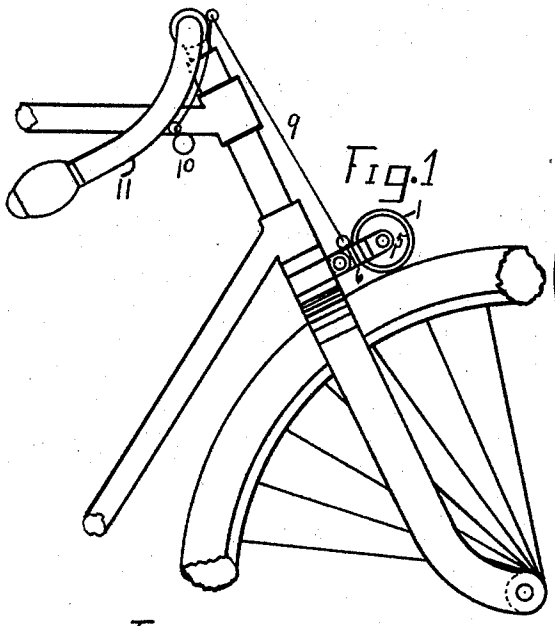

Fig. 1

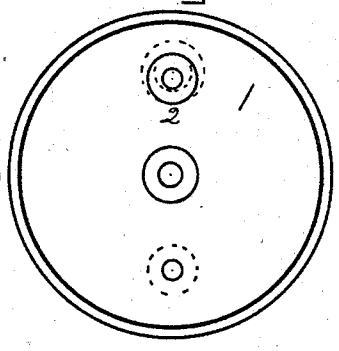

Fig. 2

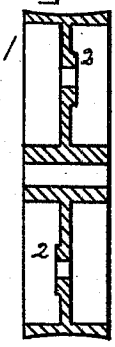

Fig. 3

Fig. 4

Fig. 5

Fig. 6

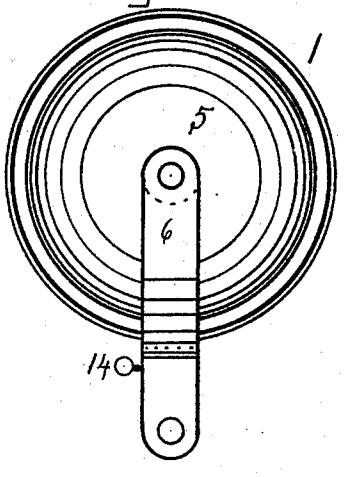

Fig. 7

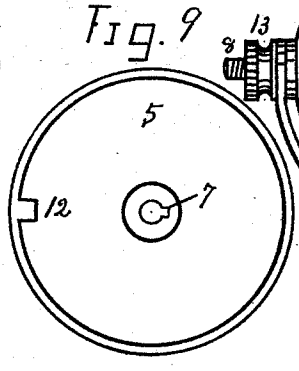

Fig. 9

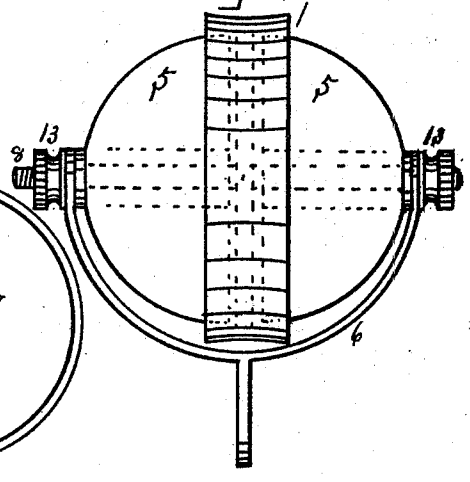

Fig. 8

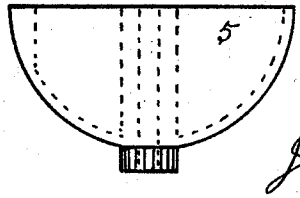

Fig. 10

WITNESSES:

R. Mareus Shinn.

Horace Hefflefinger

INVENTOR

Joseph Ostermann

BY

John Shinn.

ATTORNEY.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOSEPH OSTERMANN, OF PHILADELPHIA, PENNSYLVANIA.

BICYCLE-BELL.

SPECIFICATION forming part of Letters Patent No. 585,780, dated July 6, 1897.

Application filed July 20, 1896. Serial No. 599,860. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH OSTERMANN, a citizen of the United States, residing at Philadelphia, (Manayunk,) in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Bicycle-Bells, of which the following is a specification.

My invention relates to that class of bells for bicycles in which the sounding of the bell is due to the friction contact of the wheel of the machine and the periphery of the disk carrying the clappers; and it consists in mounting the clappers loose on a revolving disk, said disk revolving on a fixed shaft, to which shaft is fixed one or two cup-shaped bells. The loose clappers, when the disk is put in motion by a contact with the wheel of the bicycle, will cause the clappers to fly out, strike and sound the bell. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a side view of a portion of a front bicycle-wheel, fork, and handle-bar with my improved bell attached. Fig. 2 is a side view of the disk for carrying the clappers. Fig. 3 is a vertical section of Fig. 2. Figs. 4 and 5 are views of the clappers. Fig. 6 is a view of the screw for carrying the clapper. Fig. 7 is a side view of the bell, disk, and holding-frame. Fig. 8 is a top view of Fig. 7. Figs. 9 and 10 are views of the bell-cup.

Similar numerals of reference refer to like parts in all figures.

1 represents the disk, which may be made of any suitable metal, cast or forged. On each side of the center web of this disk, and in a vertical line, are made projections 2. (See Fig. 3.) These projections being in line, one will balance the other. The periphery of this disk is made concaved, so as to fit the curve of the wheel-tire.

3 represents the bell-clapper, made of iron, and may be forged or cast. The clapper 3 is connected to the disk 1 by the screw 4, and so connected that it may freely slide between the projection 2 and the head of the screw 4. The hole in the clapper being much larger than the stem of the screw 4 permits it to fly out by the centrifugal force when the disk is put in rapid motion.

5 represents the bell, made of any suitable bell-metal, and may be cast or forged cup shape, having a hub and a striking-lug 12. (See Fig. 9.) In the hub of the bell is formed a key-seat 7, by which it is keyed to shaft 8, which shaft passes through the frame 6, bells 5 5, and disk 1. At each end of the shaft 8 is cut a screw-thread, upon which thread are screwed milled nuts 13.

The frame 6, carrying the bells, is jointed to a clip, which clip is fastened to the fork of the bicycle-frame.

9 is a connecting-cord connecting the frame 6 to a ring 10.

11 is a fixed hook under the handle-bar.

The operation of my improvement is as follows: When it is desirous to sound the bell, the ring 10, connected to cord 9, is unhooked from the hook 11, and the disk 1 will rest on the tire of the bicycle-wheel, which, if in motion, will give the disk a rapid revolving motion. The rapid revolving motion of the disk will by centrifugal force cause the clappers 3 to fly out, as shown by dotted lines on Fig. 2, and as they pass the lug 12 will strike it and sound the bell. When the bell is not desired to ring, the ring 10 is hooked on the hook 11. This raises the disk 1 from the wheel-tire, stops its revolutions, and the bell is mute. When desired, the rider of the bicycle puts the sounding mechanism into contact with, and by the operation of the bicycle-wheel the bell will continue to ring as long as the rider chooses to maintain the contact.

The drawings show a double or two bells on the shaft 8; but it is obvious a single bell with one or two clappers placed on one side of the disk may be used.

Having, as above, fully described my invention, what I claim as new, and desire to secure to me by Letters Patent, is—

A bicycle-bell and means for operating the same, consisting of the combination of the following elements: one or two cup-shaped bells, each bell provided with a striking-lug, a revolving disk carrying one or more loose clappers, a steering-wheel of a bicycle, means for putting the disk into and out of contact with the steering-wheel; whereby when in contact the steering-wheel gives a rapid revolving motion to the disk; the centrifugal force causes the clappers to fly out, strike the lug and sound the bell, all substantially as shown and described.

JOS. OSTERMANN.

Witnesses:
JOHN SHINN,
H. R. LUKENS.