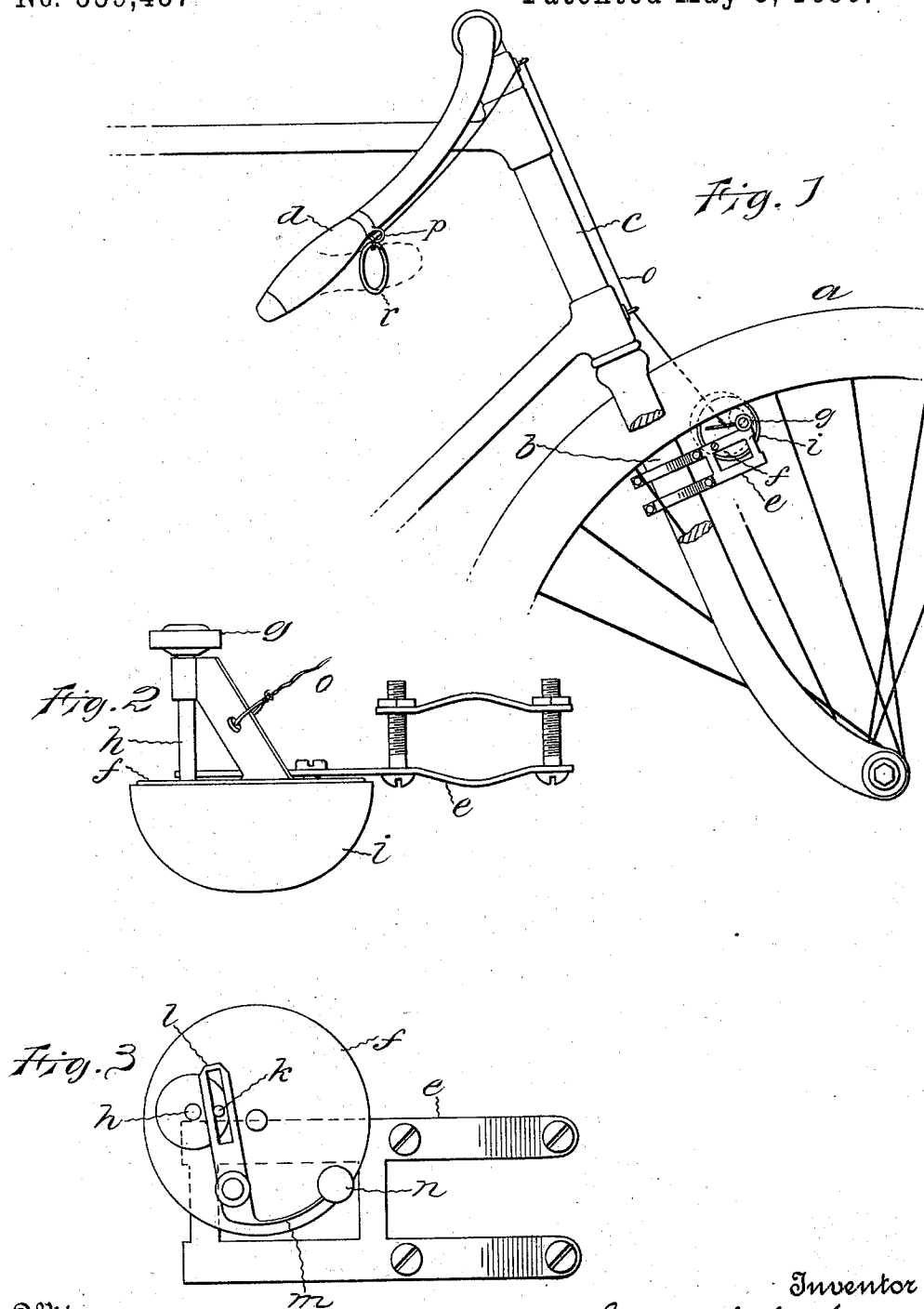


(No Model.)

M. L. CARPENTER.
BICYCLE BELL.

No. 559,437

Patented May 5, 1896.



Witnesses

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MILTON L. CARPENTER, OF EAST HAMPTON, CONNECTICUT.

BICYCLE-BELL.

SPECIFICATION forming part of Letters Patent No. 559,437, dated May 5, 1896.

Application filed January 25, 1896. Serial No. 576,812. (No model.)

To all whom it may concern:

Be it known that I, MILTON L. CARPENTER, a citizen of the United States of America, residing at East Hampton, in the county of Middlesex and State of Connecticut, have invented a certain new and useful Improvement in Bicycle-Bell Attachments, of which the following is a description, reference being had to the accompanying drawings, wherein—

Figure 1 is a side view of a portion of a front bicycle wheel, fork, and handle-bar with my improvement attached. Fig. 2 is a detail view from above looking down upon the bell. Fig. 3 is a detail side view of the bell with the sounding-shell removed and showing the interior mechanism which is supported upon the base-plate.

The improvement pertains to bells for bicycles. Its object is to provide a mechanism which, at the will of the rider, puts the sounding mechanism into contact with and operation by a wheel of the bicycle, so that the bell continues to ring as long as the rider chooses to maintain the contact.

In the accompanying drawings the letter *a* denotes the bicycle-wheel; *b*, one of the legs of the fork; *c*, the steering-head, and *d* a handle.

The letter *e* denotes the bell-supporting frame clamped to the fork-leg *b*. The base-plate *f* of the bell is pivoted eccentrically to this bell-supporting frame with the result that the bell as a whole has the capability of a limited rotary reciprocating motion and with the further result that gravity, when allowed to operate, holds the bell in the position indicated by full lines in Fig. 1, in which position the friction-wheel, soon to be described, is out of contact with the tire of the bicycle-wheel and the bell is silent. The dotted lines in Fig. 1 indicate the position of the bell when it is thrown upward, so as to bring the said friction-wheel in contact with the under side of the tire of the bicycle-wheel for the purpose of making the bell ring.

The letter *g* denotes the said friction-wheel borne upon the shaft *h*, which shaft, within the sounding-shell *i*, carries a crank and crank-pin *k*, taking into the slot of the piv-

oted arm *l*, which, through the medium of the spring *m*, carries the hammer *n*. It will be readily understood that when the friction-wheel is in contact with the under side of the bicycle-tire, and thus caused rapidly to rotate, it will, as a consequence, give the bell hammer rapid vibration and continue to ring the bell as long as the friction-wheel thus rotates.

The letter *o* denotes a cord attached either directly or indirectly to the base-plate *f* of the bell, thence running up to the handle-bar, and along the handle-bar through the eyes *p* to the vicinity of the handle *d*, where it is provided with a ring *r*. When the rider wishes to sound the bell, he inserts his thumb through the ring *r*, gives a short lateral pull, and this raises the bell so as to bring the friction-wheel in contact with the under side of the bicycle-tire, with the result that this friction-wheel rotates rapidly and the bell continues to ring so long as the rider continues the contact, and, when the rider permits, gravity causes the bell to fall, taking the friction-wheel out of contact with the bicycle-tire, and the ringing ceases.

I claim as my improvement—

1. The improved bell attachment for bicycles herein described, consisting of the clamping-frame *e*, for attachment to the fork of the machine, base-plate *f* pivoted eccentrically thereto, bell *i*, secured to the said base-plate, friction-wheel *g*, borne also upon the base-plate, shaft *h*, crank and crank-pin *k*, slotted pivoted arm *l*, spring *m*, and hammer *n*, substantially as specified.

2. In combination with the fork and wheel of a bicycle, a clamping-frame *e*, base-plate *f* pivoted eccentrically thereto, bell *i*, secured to the said base-plate, and a friction-wheel and bell-hammer, secured also to the said base-plate, and movable with it and with the bell at the will of the rider, whereby contact with the revolving wheel is made and a signal given, substantially as specified.

MILTON L. CARPENTER.

Witnesses:

LEONARD WILLEY,
LEGRAND S. CARPENTER.