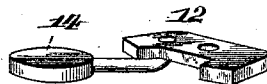
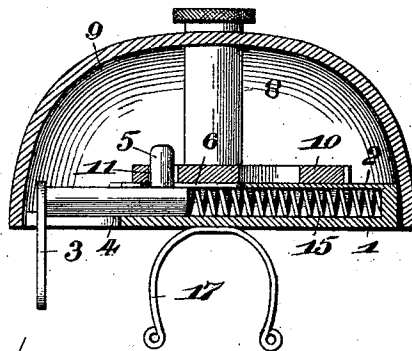
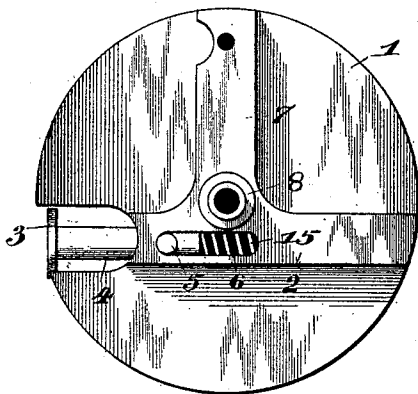
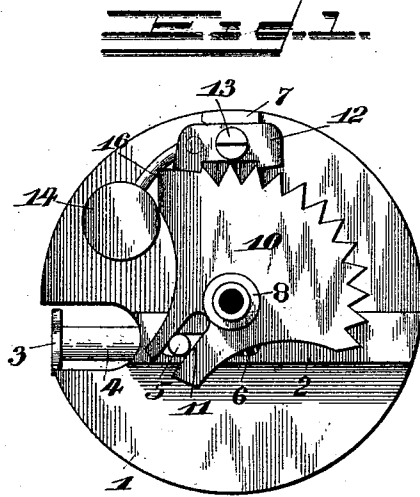


(No Model.)

C. W. STORM & W. F. HUNTER.
BICYCLE BELL.

No. 538,607.

Patented Apr. 30, 1895.



Witnesses

W. F. Ayler,
R. M. Smith.

By their Attorneys.

Inventors
Charles W. Storm,
William F. Hunter.

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

CHARLES W. STORM AND WILLIAM F. HUNTER, OF ELGIN, ILLINOIS.

BICYCLE-BELL.

SPECIFICATION forming part of Letters Patent No. 538,607, dated April 30, 1895.

Application filed March 6, 1895. Serial No. 540,751. (No model.)

To all whom it may concern:

Be it known that we, CHARLES W. STORM and WILLIAM F. HUNTER, citizens of the United States, residing at Elgin, in the county of Kane and State of Illinois, have invented a new and useful Bicycle-Bell, of which the following is a specification.

This invention relates to an improvement in alarm bells, being constructed and arranged with special reference to use in connection with bicycles.

The object of the invention is to provide a simple and inexpensive construction of alarm bell which shall be strong, durable, not liable to get out of order, which shall be proof against rattling, which shall be thoroughly efficient in use, and adapted to be easily applied and removed from the handle bar of a bicycle.

To this end the invention consists in the features and details of construction hereinafter described, illustrated in the drawings, and pointed out in the claim.

In the accompanying drawings, Figure 1 is a plan view of the inner face of the bottom disk with the bell removed to show the interior mechanism. Fig. 2 is a similar view with the segmental gear and hammer omitted. Fig. 3 is a vertical section through the slotted sleeve, disk, &c., showing the form of the return-spring and the spring-clip for securing the same to the handle-bar of a bicycle. Fig. 4 is a detail perspective view of the escapement-lever and the bell-hammer attached thereto.

Similar numerals of reference indicate corresponding parts in the several figures of the drawings.

Referring to the drawings, 1 indicates the main supporting disk or bottom plate to which all the other parts of the operating mechanism are attached.

2 indicates a hollow rib or sleeve formed integrally with the supporting disk 1 and extending across the same in the same horizontal plane therewith, as indicated in Fig. 3.

3 indicates a push button, and 4 the integrally formed shank thereof adapted to slide within and lengthwise of the sleeve 2. The shank of the push button is provided with a laterally extending pin 5 projecting through a slot 6 in the upper inner wall of the sleeve 2. The push button 3 is limited in its move-

ments back and forth by terminating the slot 6 at suitable points lengthwise of the sleeve.

A rib 7 of a height corresponding to the height of the sleeve 2 extends from said sleeve at right angles thereto to the periphery of the disk, the purpose of which is to give increased strength to the disk 1, and also to afford a support for the other parts of the device about to be described.

8 indicates the central post fixedly attached at its lower end to the disk 1 at the junction of the sleeve 2 and rib 7, the bell 9 being secured to and supported upon the upper end of said central post and held in place by means of a milled screw or in any usual manner.

10 designates a segmental gear plate which is pivoted to the central post 8 near the base thereof and adapted to turn around the same when operated upon by the laterally projecting pin 5 carried by the shank 4 of the push button, said pin operating the segmental gear by means of a slot 11 in which said pin moves. The teeth of the segmental gear engage and impart motion to a pivoted escapement lever 12 attached to the upper face of the rib 8 by means of a central screw 13, as shown. 14 indicates the bell hammer which has a fixed relation to and is carried by said escapement lever. When the push button is in its normal position or pressed outwardly by the return spring 15, an inclined tooth 16 of a different shape from the rest of the teeth on the segmental gear rests against the inclined face of one of the teeth on the escapement lever thereby effectively preventing the escapement lever, bell hammer, and other parts from rattling.

From the foregoing description it will be seen that a very simple and inexpensive form of alarm bell is provided, which on account of its simplicity, few parts and the anti-rattling feature, above described, is especially adapted for use on bicycles. By a single push on the push button, the escapement lever, and the hammer carried thereby are given a rapid vibration, producing a rapid repetition of strokes of the bell. A spring clip 17 secured to the under side of the supporting disk or bottom plate and made in horseshoe form, as indicated, adapts the alarm as a whole to be applied to the handle bar of a bicycle.

Various changes in the form, proportion, and

the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

- 5 Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

10 In an alarm bell for bicycles, the combination with a supporting disk or bottom plate, of a slotted sleeve extending in the same horizontal plane with and across the inner face of said disk, a push button provided with a shank sliding within said sleeve, and provided with a pin projecting laterally through the slot
15 thereof, a return spring located in said sleeve, a segmental gear having a radial slot through which the pin or shank of the push button op-

erates, an escapement lever operatively connected with the segmental gear, a bell hammer carried by the escapement lever, an inclined tooth adapted to fit snugly against the inclined edge of one of the teeth of the escapement lever for engaging and wedging the escapement lever and preventing rattling of the parts, and means for attaching the bell to a
20 bicycle substantially as specified.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

CHARLES W. STORM.
WILLIAM F. HUNTER.

Witnesses:

W. G. C. MUNRO,
GUSTAVE Y. STANSON.