(No Model.)

# A. A. BEVIN & J. C. WELLS.

## BELL.

No. 483,341. Patented Sept. 27, 1892.

Fig. 1.

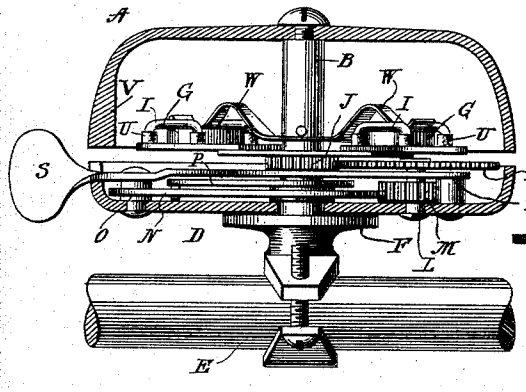



Fig. 2.

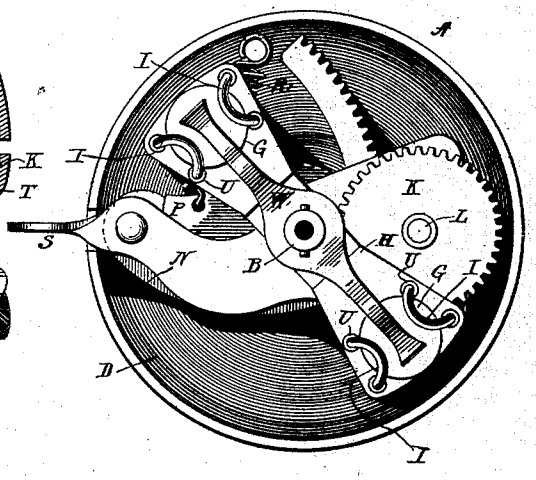



Fig. 3.

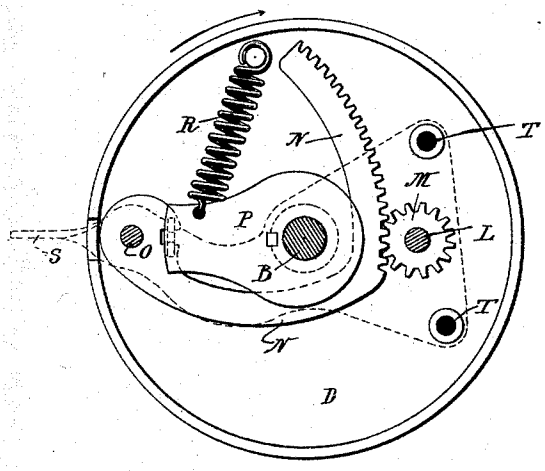



Fig. 4.

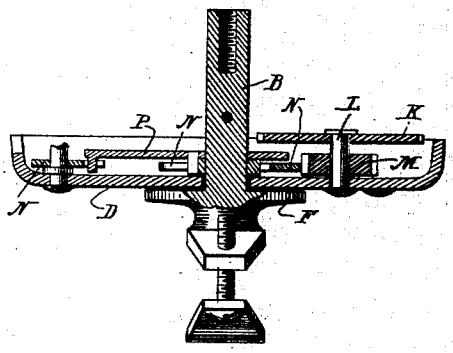
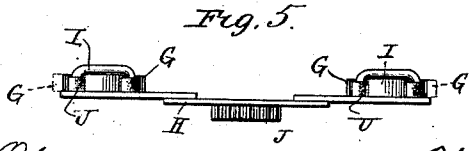



Fig. 5.




WITNESSES:

Frank S. Ober

Fredk Schlesinger

INVENTORS

Abner A. Bevin.

John C. Wells.

BY

R. C. Mitchell.

ATTORNEY.

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

# UNITED STATES PATENT OFFICE.

ABNER AVERY BEVIN AND JOHN C. WELLS, OF EAST HAMPTON, CONNECTICUT.

## BELL.

SPECIFICATION forming part of Letters Patent No. 483,341, dated September 27, 1892.

Application filed June 6, 1892. Serial No. 435,587. (No model.)

*To all whom it may concern:*

Be it known that we, ABNER AVERY BEVIN and JOHN C. WELLS, citizens of the United States, residing at East Hampton, Middlesex county, and State of Connecticut, have invented a new and useful Improved Bell, of which the following is a full, clear, and exact specification.

Our invention relates to an improved bell; and it consists in the novel arrangement of the striker-actuating mechanism and also a novel construction of the striker.

The object of our invention is to provide in a bell a striker and actuating mechanism that shall be simple, durable, and effective.

We illustrate our invention by the accompanying drawings, in which—

Figure 1 is a side view of our improved bell, showing the gong portion and the base in section and showing one method of attaching the bell to a suitable standard. Fig. 2 is a plan view of Fig. 1 with the gong portion removed. Fig. 3 is a plan view of the striker-actuating mechanism. Fig. 4 is a longitudinal section through the center of Fig. 3, and Fig. 5 is a side elevation of the strikers and supporting-arm.

A is the gong, suitably attached to a post B, said post extending directly through the base-plate D of the bell and suitably formed at its lower end to be attached to a standard E, (in this case a bicycle-handle.) Near the lower end of this post B a flanged seat F may be formed for the base-plate D to rest on. This plate D is loosely carried on the post B. The striker preferably used in connection with this invention is described as follows: A rotating arm H, loosely carried on the post B, supports at each end movable striker-pieces G. These strikers are preferably disk-shaped and are held at or near the extremities of the arm H by two staples I I, (clearly shown in Figs. 2 and 5,) riveted to the arm H. The four ends of these staples are placed at such a distance apart that a disk G, placed within the same, cannot escape in any direction. The upper end of these staples may be curved slightly inward, as shown in Fig. 2, so that the disk G cannot rise out of the surrounding posts. By this means a case is formed around the disk G, that permits the disk to loosely play within the said case for the reasons hereinafter fully described. We do not desire to limit ourselves to this specific form of construction of the disk-retaining case, for it will be seen that the same principle will be carried out by simply heading the tops of the four surrounding posts sufficiently to extend partially or fully over the top of the disk G. On the lower side of the rotating arm H is fixed a pinion J. A cog-wheel K and a pinion M are keyed to the same shaft L. Cog-wheel K meshes with the pinion J.

N is an L-shaped arm, one end of which is pivoted at O to the base-plate D. The other end forms a segmental toothed rack which meshes with pinion M.

P is an arm keyed to the post B. The outer end of this arm forms a slot-and-pin connection with the arm N, as shown in Fig. 3. A spring R, one end of which is fixed to the base-plate D and the other end to the arm P, tends to normally hold the arm P in the position shown in Fig. 3, so that the toothed rack of the arm N will rest in the pinion M at or near the end where the angle in the L-shaped arm N is formed. It will now be seen that by rotating on the post B the loosely-carried base-plate in the direction of the arrow in Fig. 3 the arm P, which remains stationary with the post B, will cause the L-shaped arm N to turn on its pivot, and thereby swing the segmental toothed rack across the pinion M, causing the same to rotate, thereby rotating the toothed wheel K, which meshes with and rotates the pinion J on the arm H, causing the said arm H to rotate and throwing the strikers outward by centrifugal force, so as to hit against any suitable inwardly-projecting lug V, Fig. 1, on the gong, and thereby cause the gong to vibrate. As soon as the pressure in one direction on the base-plate is released the spring R will cause the said base-plate to be drawn back into its original position, (shown in Fig. 3,) causing the arm H to be rotated in the opposite direction. Any suitable handle S may be fixed to the base-plate D to permit the easy rotation of the said plate. In the drawings it is represented as being a continuation of a piece extending from the inside of the bell; but it will be observed that this piece is fixed at three places O T T, which makes the said

handle S rigid with the base-plate D. When it is desired that this bell be used in connection with a bicycle, it is preferred that small pieces of rubber tubing U U be placed around the staple-posts to deaden the rattling of the disks G G, and a suitable spring W, pressing on the top of the said disks, may tend to hold the disks snugly against the rotating arm H and further lessen the tendency to rattle.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. The combination, with a gong, of a rotating striker-arm H, striker-pieces G G, loosely carried within the staples I I at the extremity of said arm, said pieces G G being operated by centrifugal force to impinge against a lug on the inside of the gong, substantially as described.

2. The combination, in a call-bell, of the gong A, the post B, and base-plate D, adapted to rotate thereon, the arm P, fixed on said post B, and the L-shaped arm N, pivoted to the base-plate D and carrying a segmental toothed rack, said arm N being loosely connected to the fixed arm P, and the pinion M, toothed wheel K, and striker-arm H, connected to the toothed wheel K by pinion J and adapted to be rotated thereby, substantially as described.

3. The combination, in a call-bell, of the gong A, the post B, and base-plate D, adapted to rotate thereon, the arm P, fixed on said post B, and the L-shaped arm N, pivoted to the base-plate D and carrying a segmental toothed rack, said arm N being loosely connected to the fixed arm P, and the pinion M, toothed wheel K, and striker-arm H, connected to the toothed wheel K by pinion J and adapted to be rotated thereby, and the striker-pieces G G, loosely held at the extremities of the arm H, substantially as and for the purpose specified.

ABNER AVERY BEVIN.
JOHN C. WELLS.

Witnesses:
CHAS. W. BEVIN,
S. MILLS BEVIN.