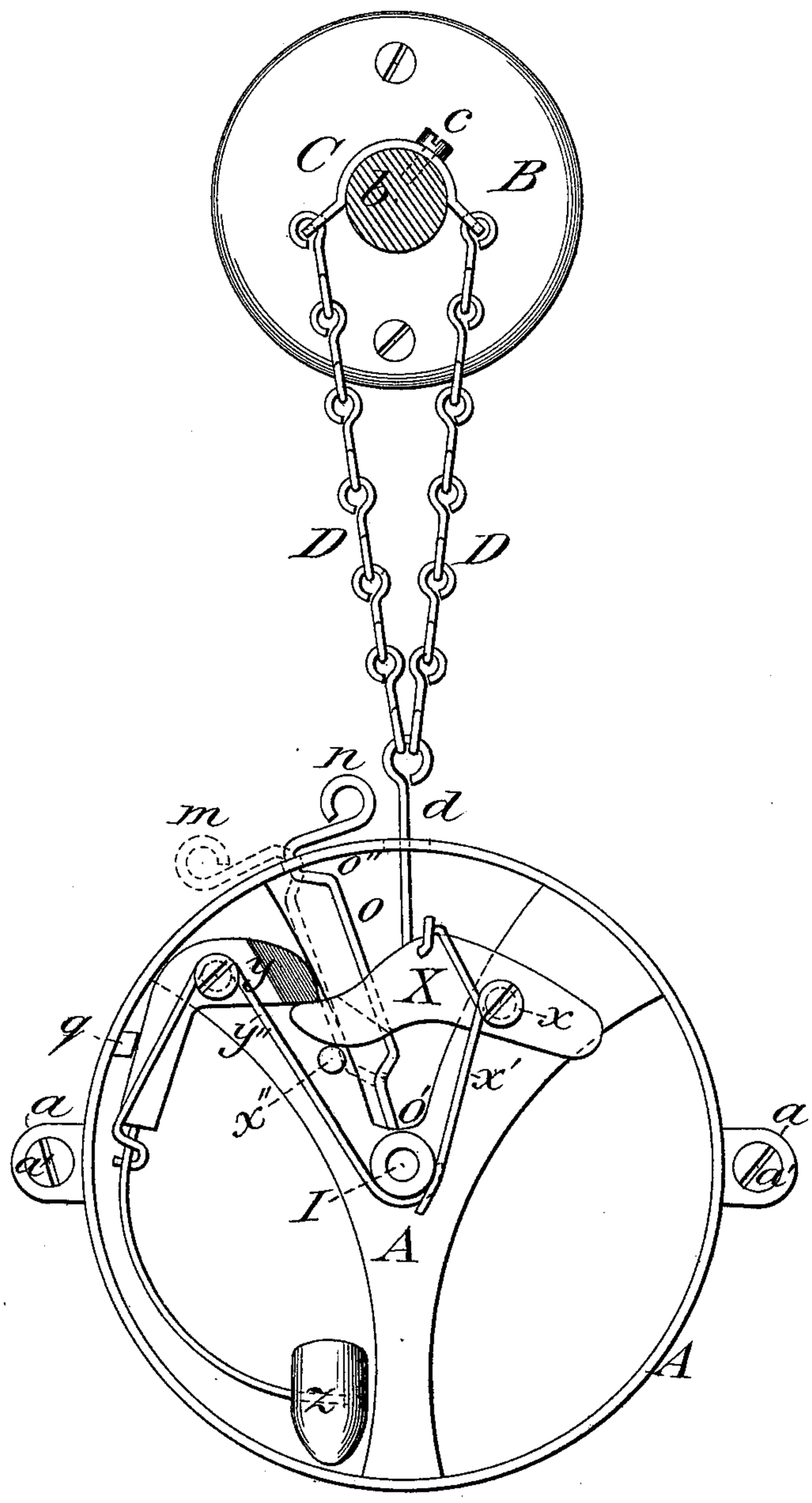
E. J. CUBLEY.

Door-Alarm Bell.

No. 214,111. **Patented April 8, 1879.**



Attest:

James J. Keogh.
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Inventor:

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UNITED STATES PATENT OFFICE.

EDWIN J. CUBLEY, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF HIS RIGHT TO THOMAS J. THOMPSON, OF SAME PLACE.

IMPROVEMENT IN DOOR-ALARM BELLS.

Specification forming part of Letters Patent No. **214,111**, dated April 8, 1879; application filed December 26, 1878.

To all whom it may concern:

Be it known that I, EDWIN J. CUBLEY, of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Door-Alarm Bells, which improvement is fully set forth in the following specification, reference being had to the drawing, which is a plan view of my invention, but in which the gong of the bell is not shown, the same not being necessary to illustrate my invention.

The object of my invention is to so connect an ordinary alarm-bell, to be placed on a door, money-till, or other place where it is designed for use, with the door-knob or other appliance for opening the door, drawer, or whatever else it may be attached to, as that the alarm will be sounded upon the bell by the act of opening the door, drawer, or other appliance on which the bell may be used.

In the accompanying drawing, A A represent a circular-shaped standard or base of the alarm-bell, constructed of any suitable metal, either cast or wrought, of any required dimensions; and *a a* are processes or flanges projecting from the outer rim thereof, on opposite sides, provided with suitable holes for the reception of screws *a′ a′*, to attach the standard to the door or other place of attachment. I represents an upright post or process issuing out and forming part of the base A, to the top of which is securely fastened and affixed, by means of a metallic screw, an ordinary alarm-bell gong. B represents the plate of an ordinary door-knob, and *b* the shank of the knob. C represents a collar or yoke, being a U-shaped bent piece of any suitable metal, about one-half inch in width, and is made to firmly clasp the shank *b*, to which it is secured by the shank-screw *c*, or by any other suitable means. D D are small flexible chains connecting the respective ends of the collar or yoke C with the hook end bar *d*, the end to which the chains D D are fastened being formed into an eye to receive them, as shown in the drawing.

X is an irregularly-shaped lever having its fulcrum at the pin *x*, upon which it revolves freely, and provided with a spring, *x′*, by whose recoil the lever X, when not operated on by the bar *d*, is restored to rest upon the stationary pin or stop *x″*.

Y is a hammer-lever, whose fulcrum is at the pin *y*, upon which it revolves freely, and provided with a spring, *y″*, by whose recoil the hammer-lever is caused to strike a blow upon the gong. A stop, *q*, is cast upon the standard A, upon which the hammer-lever Y rests when not in use.

When the device is at rest, or not in use, the chains D D are taut, and the lever X is held rigidly in place upon the stop *x″* by the spring *x′*; but when in use one or the other of the chains D D is drawn in the direction of the knob-plate B by the turning of the knob. This raises that end of the lever X which impinges upon the hammer-lever Y until the end of the lever X draws back the end of the hammer-lever Y, and continues engaged until it passes by and disengages itself from the end of the hammer-lever Y, when the latter, by the recoil of the spring *y″*, flies back to its condition of equilibrium, in doing which the hammer *z* strikes the gong and gives the alarm.

As soon as the tension upon the chain D is relaxed the recoil of the spring *x′* causes the lever X to fly back until it reaches the stop *x″* and is restored to its equilibrium.

The end of the hammer-lever Y which impinges upon the lever X is constructed in the shape of an inclined plane, having the thin edge toward the rim of the standard A, in order that when the end of the lever X, after engaging the hammer-lever Y, seeks to be restored to its condition of rest upon the pin or stop *x″*, it readily slips over the inclined side of the hammer-lever Y, and by a downward pressure of the spring *x′* is forced down in front of the hammer-lever Y, in position to again engage said hammer-lever upon tension being applied to one of the chains D.

It may sometimes be desirable to throw the apparatus out of gear, so that the alarm will not be sounded when the knob is turned.

To meet this requirement, a curved rod, O, is provided and located immediately under the lever X, having one end loosely fitting into the standard A at the point *o′*, and working

through a hole in the rim of the standard at the point o'', and having a bent end, n, outside the standard easily operated by the hand.

Whenever it shall be desired to stop the alarm the bent end n of the curved rod O is turned so as to stand at right angles to the plane of the standard A. The curved rod O thus elevates the end of the lever X, which impinges upon the end of the hammer-lever Y, so that the lever X will not engage the hammer-lever Y, but will pass over the same, and thus the bell will remain mute.

I do not limit the use of this alarm to doors, but it may be applied to money-tills or to any other proper use.

I am aware of the existence of Letters Patent No. 206,899 for a similar device, and I do not claim any part of that device or of its combination. I also do not claim the alarm-bell, or door-knob, or the collar C upon the door-knob, nor the lever X, nor the hammer-lever Y, or any of their appendages; but

What I do claim, and seek to obtain by Letters Patent, is—

1. The combination of the collar C, the chains D D, the hook end bar d, the lever X, the hammer-lever Y, the short arm of which is shaped in the form of an inclined plane, having its thin edge toward the rim of the standard A, to allow the lever X to pass over the same after striking an alarm, the springs x' and y'', and the stop x'', substantially as described and set forth.

2. The curved rod O, provided with a suitable handle, and pivoted in the standard A, underneath the lever X, in combination with the lever X and the spring x', substantially as shown and described, for the purposes set forth.

In witness whereof I have hereunto set my hand this 21st day of December, A. D. 1878.

EDWIN J. CUBLEY.

Witnesses:

HENRY C. WHITNEY,
JAMES J. HOCH.