

UNITED STATES PATENT OFFICE.

BALTHASAR KITT, OF CINCINNATI, OHIO.

RINGING-BELL.

Specification of Letters Patent No. 28,586, dated June 5, 1860.

To all whom it may concern:

Be it known that I, BALTHASAR KITT, of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Double-Clapper Bells; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, which form a part of this specification.

The nature of my invention consists in so arranging the outside clapper of a double clapper bell, that it will strike the bell at a proper position and at appropriate intervals of time, to produce harmonious sounds or a chime and make a consonant not a discordant sound, and also in so arranging the clapper that it can be kept out of use if required or regularly tolled without moving the bell.

In the drawings Figure 1 is a view of the bell when the inside clapper is striking it and the outside clapper is at its extreme distance from it, and Fig. 2 is a view when the outside clapper is striking and the inside clapper is hanging freely in the center of the bell. Fig. 3 is a detached view of the rollers between which one of the ropes that move the outside clapper is allowed to work freely up and down.

The bell C is hung in the usual manner by a yoke D which has bearings in two vertical standards B, which are secured to any suitable bed as A. On one of the journals of the yoke there is a wheel E in whose grooved periphery the rope O, by which the bell is swung reposes being attached to the periphery of the wheel E in the usual manner. The inner clapper F is hung from the center of the bell and on each side is a spring G to prevent it striking the bell out of its time and to bring it sharply back after it has struck the bell.

One standard B' is extended considerably above the top of the yoke and to a small platform on its top there is secured a projection H which is provided with a small box at the end nearest the standard, in which there are three friction rollers *a* and *b*, *a* being parallel with the standard and *b* *b* being parallel with the yoke of the bell, these allow the rope M to pass freely through them and work up and down without wearing it. The use of the small rollers *b* will be seen more fully in the operation when described. At the end of H the bar I is

pivoted. In its upper end are a series of holes to which the ends of the ropes M and N can be attached, and at its lower end the outside clapper J is suspended. Secured to the back of projection H is a small supplementary standard K in which there is a small grooved wheel L and over this the rope N passes, and the end of the rope can be secured to a small pin *c* that is fixed in the bed A. The end of the rope M is always secured to one of the arms of the wheel E at such a point as the motion of the outside clapper requires. The rod I is bent below its connection with projection H in such a manner as to allow of the yoke swinging without interfering with its motion. The rope O which swings the bell by the wheel E is allowed to hang in the usual manner.

The operation of my invention is as follows: When the rope O is pulled in the ordinary manner, the inside clapper E first strikes the bell and gives the sound to which the bell is tuned, in so doing or rather when the bell assumes the position seen in Fig. 1, then the cord or rope M, being attached to one of the radial arms of the wheel E is pulled between the rollers *a*, *b*, *b*, and here their advantage is seen for as the roller *a* allows the rope M to pass freely over it without wearing, so also do the side rollers *b*, *b* as they are alternately brought into use by the oscillation of the wheel E taking the rope M from side to side; the rope M being as I explained before, pulled, and so elevates the outside clapper J, which when the bell is allowed to swing back, the cord M being loosened strikes the bell and produces according to its position a note or tone harmonious with the one struck by the inner clapper being either a third or fifth above it in the scale.

When it is desired that the bell should remain stationary the clapper J can be used as a tolling clapper, by pulling the rope N and operating the lever I and clapper J alone without in any way disturbing the bell, and if desired the rope N can be secured to the pin *c* in the bed A and the outside clapper J kept from action altogether while the bell is swung and the inner clapper rings the bell. By this arrangement it will be seen that one bell may be made to act as a chime and that for churches small public edifices etc. it will be not only very convenient but will vary the continual monotony of the repetition of but one sound on the ears of the

passers by, when from any festive or other occasion the bells are rung. By producing a greater sound from the same bell it will be valuable for alarm bells and such as are used in any position to call attention to anything, as on steamboats or railroads.

Having thus described my invention what I claim and desire to secure by Letters Patent is—

10 1. The arrangement of the clapper J attached to the curved vibrating arm I and pivoted to projection H and operated by the

cord M, passing between the rollers *a* and *b b* and secured to an arm of the wheel E as and for the purposes shown and described. 15

2. The arrangement herein described in relation to the bell of the two clappers F, and T, by which the sounds shall follow each other at equally successive intervals and with harmonious or concordant sounds.

BALTHASAR KITT.

Witnesses:

PHILIP BRILEAU JONES,
WM. R. McCOMAS.