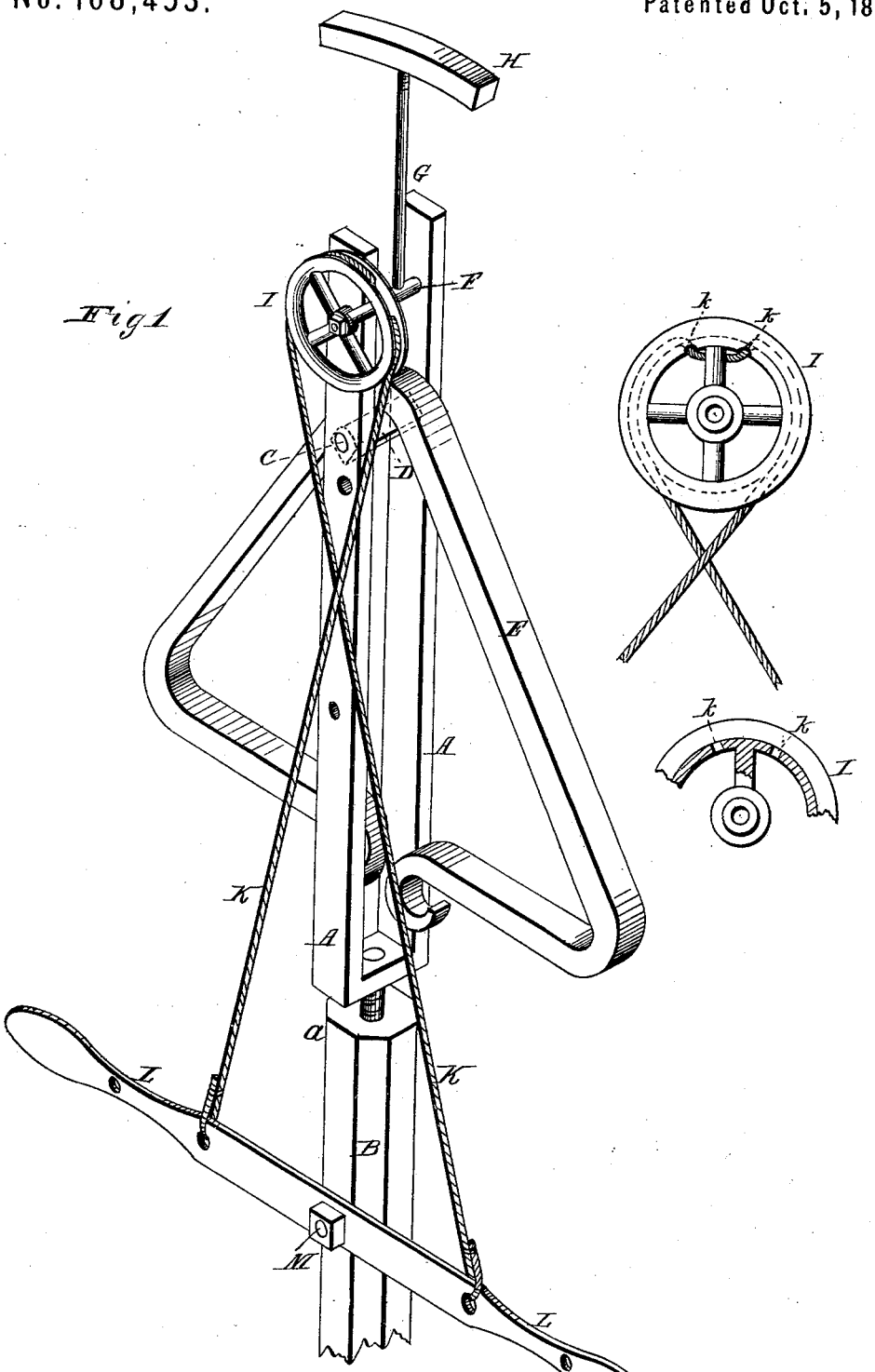
G. H. COLLINS.
Bell-Ringing.

No. 168,453. Patented Oct. 5, 1875.

Fig 1



WITNESSES

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GILES H. COLLINS, OF KALAMAZOO, MICHIGAN.

IMPROVEMENT IN BELL-RINGING.

Specification forming part of Letters Patent No. **168,453**, dated October 5, 1875; application filed September 29, 1875.

To all whom it may concern:

Be it known that I, GILES H. COLLINS, of Kalamazoo, in the county of Kalamazoo and State of Michigan, have invented certain new and useful Improvements in Bells or Gongs, of which the following is a specification:

This invention relates to certain improvements in hanging triangular gongs or bells, and devices for operating the same; and it consists in the combination, with the gong and bifurcated standard, of a rock-shaft journaled in the opposite arms of the standard, above the gong, and carrying a hammer, which moves in the arc of a circle as the rock-shaft is oscillated, which strikes first one side and then the other of the gong, the rock-shaft being oscillated by means of a pulley secured at one end, over which passes a cord or chain, the ends of which are attached to opposite sides of an oscillating lever below.

In the drawings, Figure 1 is a perspective view of my improvement, and Fig. 2 a detached elevation and sectional view of the pulley.

The letter A represents a bifurcated standard, of cast or wrought metal or other suitable material, provided with a screw-shank, *a*, or other convenient device below, by means of which it may be attached to a proper base or support. In the present instance the standard is represented as mounted upon the top of a post or standard, B, which is set in the ground or otherwise supported in an upright position. C represents a pin or cross-bar extending through apertures in the opposite arms of the bifurcated standard at sufficient height to allow the gong to swing clear of the lower part of said standard when in position. Said pin or cross-bar is secured in place in any convenient manner. In the present instance it is provided with a head on one end and a screw-shank on the other, over which fits a screw-nut to clamp it in place. Said pin is covered with a rubber sleeve, D, over which the gong E sets at its upper angle or apex. The letter F represents a rock-shaft journaled at the ends in opposite arms of the bifurcated standard above the pin C. To said rock-shaft, between the arms of the bifurcated standard, is secured one end of a rod or bar, G, carrying at its other end a hammer, H. One end of said rock-shaft projects through the arm on which it is journaled, and upon it is secured a pulley, I. Said pulley may be keyed thereon, or the end of the shaft may be squared or otherwise shaped so that it may be securely fastened to said shaft, so as to prevent turning thereon. In the present instance the end of the shaft is made oval in cross-section, and fits in a correspondingly-shaped aperture in the pulley, the pulley being secured to the shaft by means of a screw-nut setting over the end of the shaft, which is properly threaded for the purpose. K represents a cord, rope, or chain passing over the pulley, and secured to the same, to prevent slipping at the proper point, by passing it through apertures *k k*, formed in the rim thereof, or it may be secured in any other convenient manner. The ends of said cord or chain extend downward, and are secured to the lever L on opposite sides of the fulcrum-pin M, by which it is attached to the standard B or other support.

The operation of my apparatus will be readily understood from the above description. Upon oscillating the lever I, which is within reach of the operator, a corresponding oscillating motion will be given to the rock-shaft F, causing the hammer to move back and forth in the arc of a circle, striking first one side and then the other of the gong. The rubber sleeve E on the pin C, which supports the gong, will cause the same to vibrate smoothly, and prevent the harsh, disagreeable noise common to such bells or gongs.

Instead of journaling the rock shaft above the pin which supports the gong or bell, it may be journaled below the same, so as to oscillate or vibrate within said bell or triangle. For this purpose apertures N O are formed in the arms of the bifurcated standard. When the rock-shaft is journaled in the upper bearings N the hammer extends downward and strikes the lower inside portions of the gong; but when it is journaled in the lower bearings O the hammer extends upward, as in the first-mentioned instance, striking the sides of the gong near the top.

Having thus described my invention, what

I claim, and desire to secure by Letters Patent, is—

In combination with the bifurcated standard A and gong E, the rock-shaft F, hammer H, pulley I, cords or chains K, and oscillating lever L, the whole arranged to operate substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand in the presence of the subscribing witnesses.

GILES H. COLLINS.

Witnesses:

JOS. L. COOMBS,

ALBERT H. NORRIS.