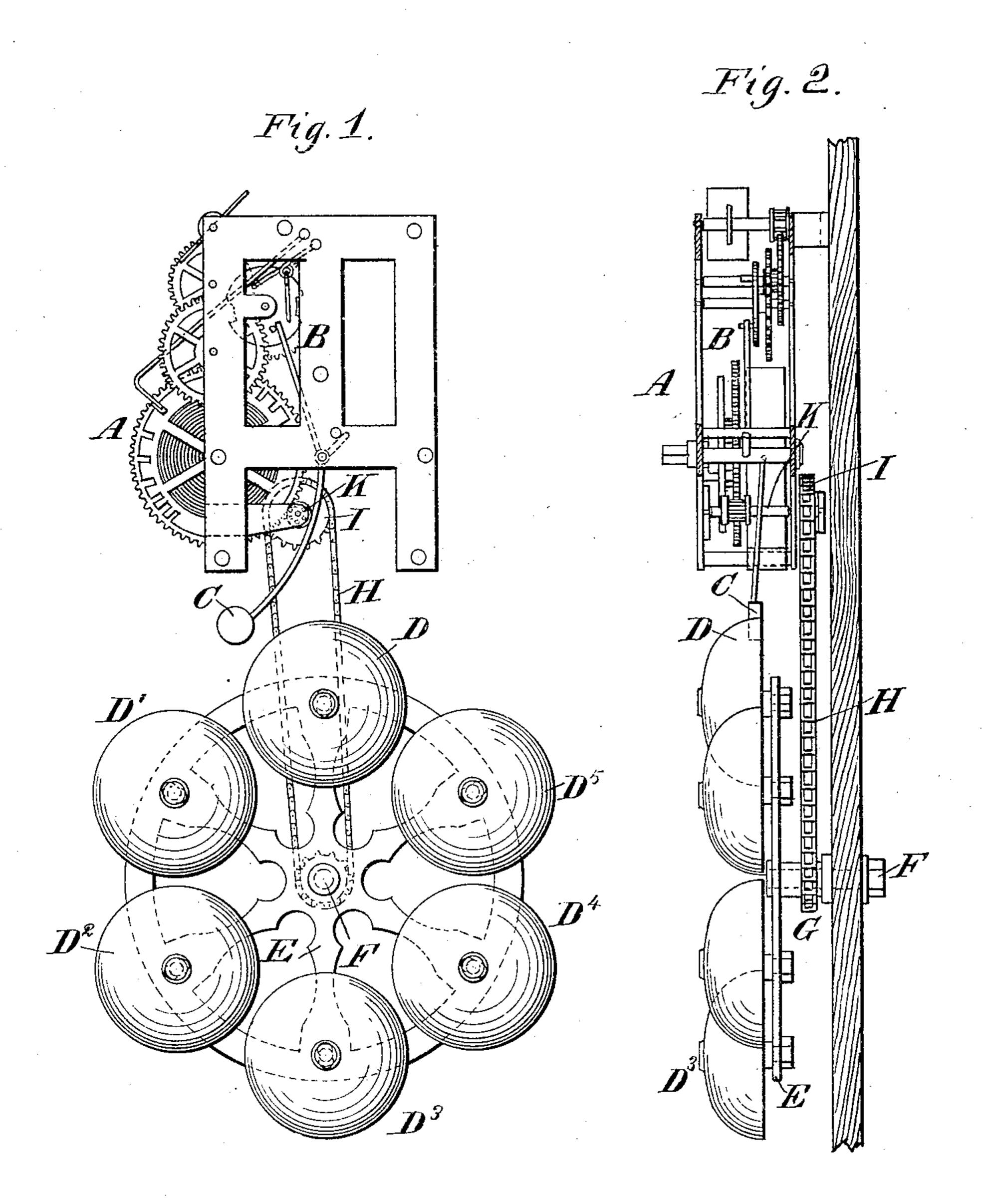
(No Model.)

## G. W. SHUMAN. CLOCK STRIKING MECHANISM.

No. 454,299.

Patented June 16, 1891.



MITNESSES: J. H. Sheberath. -6. Sedgwick S.W. Shuman

BY

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## United States Patent Office.

GRANT W. SHUMAN, OF LAKE STATION, INDIANA.

## CLOCK STRIKING MECHANISM.

SPECIFICATION forming part of Letters Patent No. 454,299, dated June 16, 1891.

Application filed March 2, 1891. Serial No. 383,359. (No model.)

To all whom it may concern:

Be it known that I, GRANT W. SHUMAN, of Lake Station, in the county of Lake and State of Indiana, have invented a new and useful Improvement in Clocks, of which the following is a full, clear, and exact description.

The invention relates to clocks having striking mechanism and a bell; and its object is to provide certain new and useful improvements, whereby the striker sounds another bell at each stroke, so that the sound of the struck bell continues its full length without being interrupted and deadened by a second striking of the striker, as is the case with clocks now in use.

The invention consists of a series of bells mounted to travel so as to come successively in the path of the striker.

The invention also consists of certain parts and details and combinations of the same, as

will be hereinafter fully described, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a face view of the improvement, and Fig. 2 is a side elevation of the same.

The clock-work A, of any approved construction, is provided with a suitable striking mechanism B, containing the striker C, adapted to sound bells D D' D<sup>2</sup> D<sup>3</sup> D<sup>4</sup> D<sup>5</sup>, secured on a wheel or frame E, mounted to turn on a stud F, secured on the frame-work or casing of the clock. The bells D D', &c., may have the same or different sounds, as desired.

On the hub of the frame or wheel E is secured a sprocket-wheel G, around which passes a sprocket-chain H, also passing over a sprocket-wheel I held on a shaft K, connected by pinion or other means with the clock-work A, so as to be actuated by the latter at the time the striking mechanism B is actuated—that is, when the latter strikes the hour, quarter, and half hours. When the

shaft K is rotated, the sprocket-wheel I, the chain H, and the sprocket-wheel G impart a rotary motion to the frame or wheel E, so that the bells D D'D², &c., move successively into the path of the striker C, so that at each 50 stroke of the latter another bell is in the path of the striker and sounded by the same.

As shown in the drawings, the bells D D' D², &c., are arranged in a circle on the wheel or frame E; but they may be differently arsanged and actuated by other means as long as they come successively, however, in the path of the striker to be sounded by the latter, each bell only receiving one stroke and then moving out of the path of the striker, so that 60 another bell is sounded at the next stroke, and so on. In this manner the sound of the struck bell continues its full length, as it is not interrupted or deadened by the striker again striking the same bell. Besides this advantage, the device gives a very ornamental appearance to the clock.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. A clock provided with a series of bells mounted to travel so as to come successively in the path of the striker, substantially as shown and described.

2. In a clock, the combination, with a striker, 75 of a series of bells mounted to travel and adapted to come successively in the path of the said striker, substantially as shown and described.

3. In clocks, the combination, with a clock- 80 work and a striking mechanism, of a series of bells mounted to travel and actuated from the said clock-work and arranged so as to come successively in the path of the striker of the said striking mechanism, substantially as 85 shown and described.

GRANT W. SHUMAN.

Witnesses:

P. A. GRISTY, H. E. KERN.