

(No Model.)

J. H. STRAIN.
BELL RINGING MECHANISM.

No. 565,306.

Patented Aug. 4, 1896.

Fig. 2.

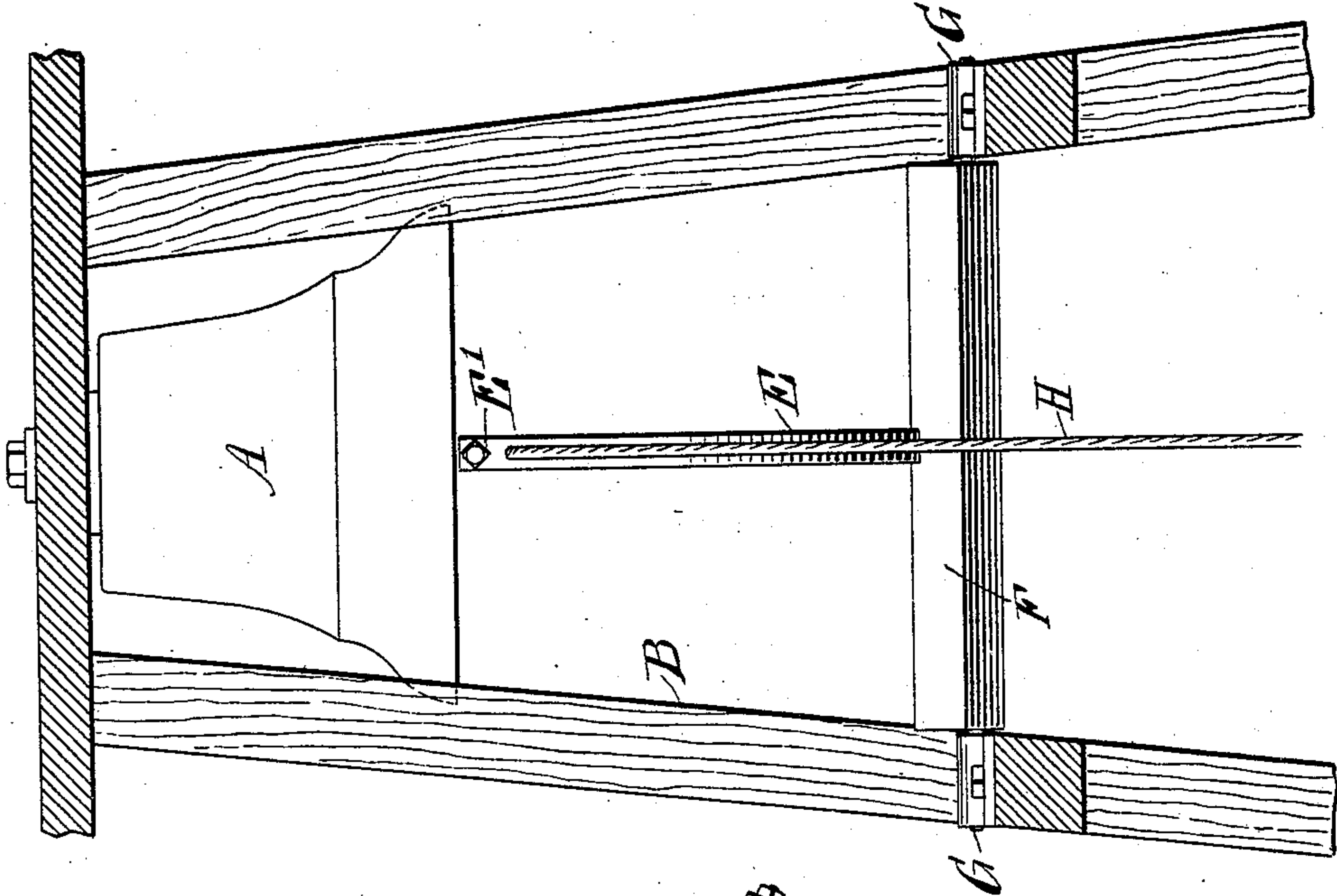
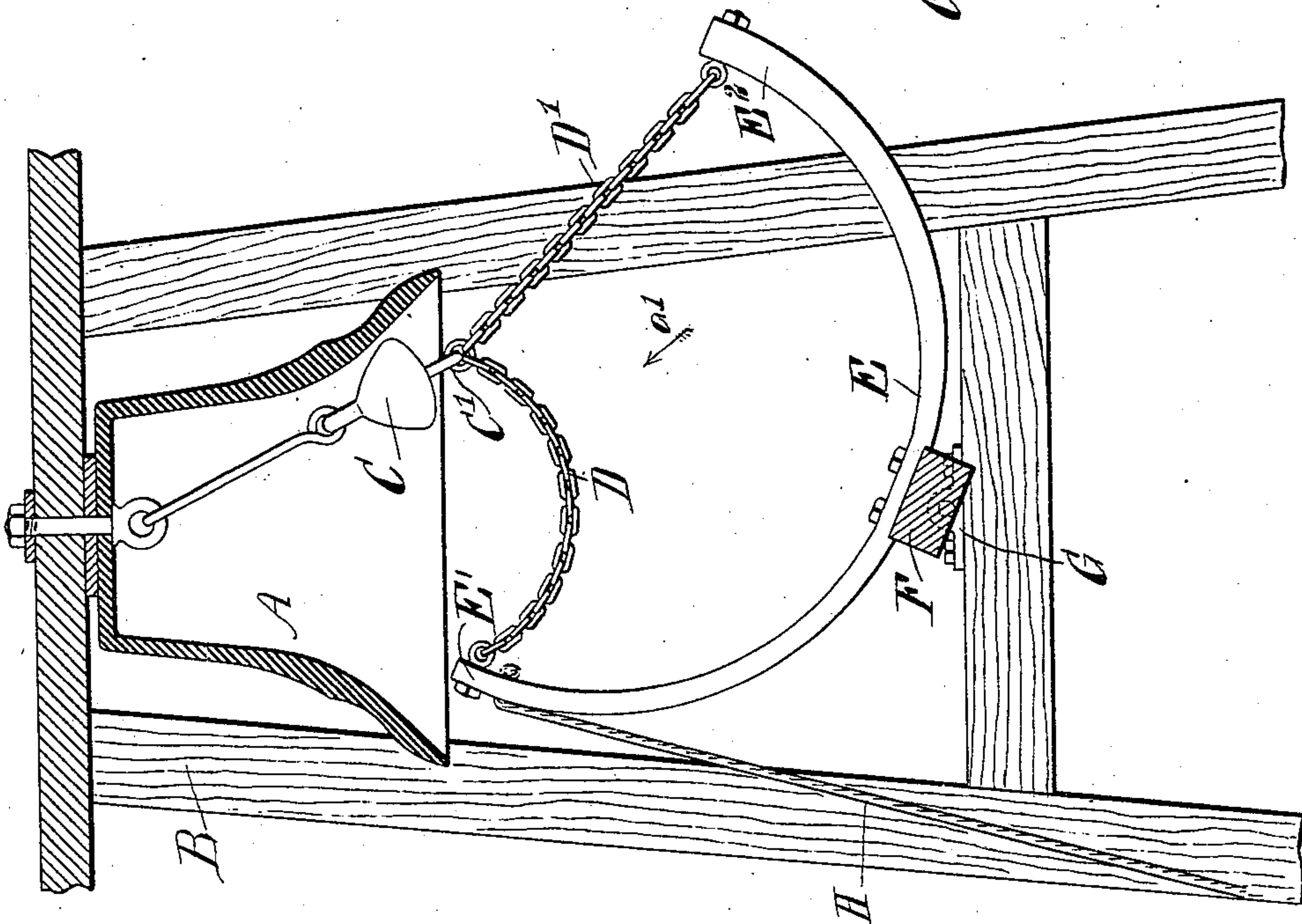


Fig. 1.



WITNESSES:

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BELL-RINGING MECHANISM.

SPECIFICATION forming part of Letters Patent No. 565,306, dated August 4, 1896.

Application filed March 25, 1896. Serial No. 584,827. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. STRAIN, of Gentryville, in the county of Spencer and State of Indiana, have invented certain new and useful Improvements in Tower-Bells, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved tower or belfry bell for use on churches, schools, factories, fire-houses, &c., and arranged to prevent undue strain on the belfry, tower, or like structure on which the bell is supported, and to insure a proper and full sounding of the bell without injuring the building by jarring, as is so frequently the case when bells of ordinary construction are sounded.

The invention consists principally of a bell secured to the belfry, tower, or like support, and a mechanism of special construction for imparting a swinging motion to the clapper of the bell.

The invention also consists of certain parts and details and combinations of the same, as will be fully described hereinafter, 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 characters of reference indicate corresponding parts in both the figures.

Figure 1 is a sectional side elevation of the improvement, and Fig. 2 is an end elevation of the same.

The bell A is rigidly secured at its top to a belfry, tower, or like support B, as illustrated in the drawings, and on the under side of the clapper C for said bell is formed an eye C', connected with the ends of chains D D', extending in opposite directions and connected at their outer links with the ends E' E², respectively, of a curved arm E, attached at or near its middle to a transversely-extending shaft F, journaled in suitable bearings G, attached to the support B. The end E² of the arm E is weighted, so as to normally hold said arm E in the position shown in Fig. 1, and the other shaft E' of said arm is connected with a rope H for imparting a swinging motion to the arm E to actuate the clapper C, so as to sound the bell A.

Now it will be seen that by the arrange-

ment described the bell A is rigidly supported in the tower, belfry, or like support, and a swinging motion is given to the clapper C by the operator pulling and releasing the rope H, so that the said clapper strikes and sounds the bell alternately on opposite sides. It is understood that when the rope H is released by the operator the weighted end E² draws the arm E into its normal position, (shown in Fig. 1,) and when the rope H is pulled a swinging motion is given to said arm E in the direction of the arrow a', to move the clapper C in contact with the bell on the left side thereof. By imparting this swinging motion to the arm E the chains D D' become alternately taut and slack, to move the clapper C to the left and right, as above explained, so as to sound the bell.

By the construction described no undue strain is exerted on the support of the bell or the building containing the bell, as the latter remains stationary instead of swinging, as is the case with ordinary bells now constructed. It will further be seen that by the arrangement described the clapper C, after striking and sounding the bell, instantly leaves the inner surface of the bell, so that the undesirable jarring sound so frequently heard when bells of ordinary construction are sounded is entirely avoided, as the clapper does not remain in contact with the sides of the bell for any length of time.

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

1. A device of the class described, comprising a bell rigidly secured to a belfry, tower or like support, a rocking arm attached at or near its middle to a shaft and at its ends connected to a bell-clapper, said shaft being journaled in bearings attached to said support and means as described, for imparting motion to said rocking arm, as and for the purpose specified.

2. A device of the class described, comprising a belfry, tower or like support, a bell rigidly secured at its top to said support, a curved arm mounted to swing and under the control of the operator, and a chain connection between the ends of said curved arm and the clapper of the bell, as set forth.

3. A device of the class described, comprising a belfry, tower or like support, a bell rigidly secured at its top to said support, a curved arm weighted on one end and connected at
5 its ends with the clapper of the bell, a rope connected with the arm at the end opposite the weighted end, and a shaft carrying said

arm and mounted to turn in suitable bearings, substantially as shown and described.

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Witnesses:

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