

(Model.)

A. A. BEVIN.

TEAM BELL.

No. 262,358.

Patented Aug. 8, 1882.

Fig. 1.

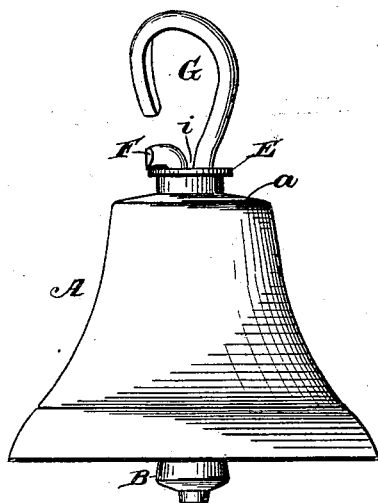
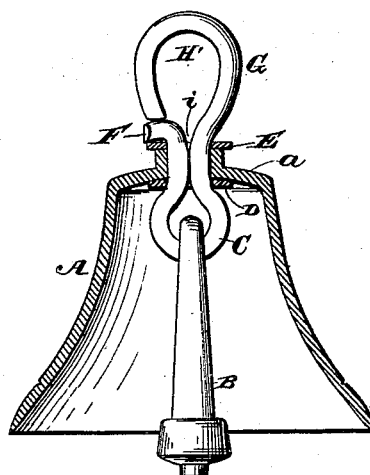


Fig. 2.



Witnesses.

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UNITED STATES PATENT OFFICE.

ABNER A. BEVIN, OF EAST HAMPTON, CONNECTICUT, ASSIGNOR TO THE
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TEAM-BELL.

SPECIFICATION forming part of Letters Patent No. 262,358, dated August 8, 1882.

Application filed April 25, 1882. (Model.)

To all whom it may concern:

Be it known that I, ABNER A. BEVIN, a citizen of the United States, residing at East Hampton, in the county of Middlesex and State of Connecticut, have invented new and useful Improvements in Team-Bells, of which the following is a specification.

Prior to this invention the tongue or clapper-bolt of a bell has been formed of a wire bent at one end to form a loop as a means for suspending the clapper, and then passed up through the ear or head end of the bolt and bent into a hook, so as to afford means for suspending the bell. This construction is shown in patent to Smith, No. 176,083. In such bells the straight portion of the wire that passes through the head end of the bell is continued a short distance above the same, and the hook or eye is bent so as not to touch the bell, in order to avoid impairing its resonant properties; but this method of forming the wire clapper-bolt is objectionable, for the reason that the wire soon works loose in its bearing, owing to the wear that is induced by the weight of the bell and the constant vibrations to which the bell is subjected, and as soon as the wire becomes thus loosened the bell will lose in a great measure its sonorous properties, and hence to restore to the bell its proper tone a new wire must be inserted, which is decidedly objectionable, since it will usually necessitate sending back the bell to the factory, and this will in most instances involve about as much expense as the original cost of the bell. The tongue or clapper of a bell has in another instance been secured in position by a bolt constructed with one eye and two arms, which are passed through a single opening in the top of the bell and an opening in a bell-supporting strap, the projecting ends of the two arms being then turned down into a depression in the strap. This affords a desirable mode of attaching bells to shafts, but necessitates the employment of a bell-supporting strap for the purpose of attaching the bell to the shaft or other device.

It is the object of my invention to obviate these objections, and to so secure the wire to the bell that any wear of the wire or its bearing, and hence any looseness of the wire in the head end of the bell, will be rendered impossi-

ble. To such end, instead of forming the loop in the wire from which the bell is suspended at one end of the wire, I form it so as to leave the two ends of the wires extending from the loop of such length that both of said ends can be passed up through the head end of the bell. After forming the loop in this manner I provide a metal washer adapted to fit against the under side of the head end of the bell, and pass the ends of the wire through the perforation in the bell-head, and also through a metal washer which I apply to the top side of the bell-head. In forming the loop one of the ends of the wire will be left shorter than the other, and this end, after passing through the two washers and the bell-head, will be clamped firmly down upon the top washer, thereby binding the bell and the two washers rigidly together. The longer end of the wire, extending above the washer, will then be bent into hook or loop form, or, if preferred, its extremity can be bent down to meet the extremity of the short part of the wire that is clinched down upon the upper washer, thus forming a large loop. It will be seen that by this arrangement the three parts—to wit, the bell and the two washers—will be bound firmly together, and that owing to the fact that there are two instead of one wire passing through the bell the latter cannot well turn upon the same. I also spread the two ends of the wires apart at the point just above the upper washer, which gives additional rigidity to the fastening, since they will press and bind upon the washer in opposite directions.

In the drawings, Figure 1 is a side view of a bell having the wire clapper-bolt secured thereto in accordance with my invention, and Fig. 2 is a vertical central section.

The letter A indicates the bell, and B the tongue or clapper, which is suspended within the bell from the wire loop C. The wire forming this loop is passed through an eye in the clapper, and the loop is drawn tightly against the washer D, that lies closely against the under side of the head *a* of the bell-head. The two ends of the wire above this loop pass through said washer and bell-head, and also through a washer, E, that is fitted upon the upper side of the bell-head. The shorter end, F, of the wire is bent down and clinched upon the upper

washer, E, while the longer end, G, of the wire is bent to form a hook, H. In Fig. 2 I have shown it closed upon the short wire to form a loop or eye, H. As before stated, it will be
5 seen that these wires are spread apart at the point i, so that they press outwardly upon the washer in opposite directions.

These bells can be attached to harness or vehicle-shafts, or can be used in any other desired connection.
10

In conclusion, I will remark that the washers not only serve to provide an enlarged bearing for the wires, but also serve to prevent contact of the loop or the hook with the bell, and
15 thereby prevent any injury to the tone of the same.

What I claim is—

1. The combination, with a bell having a perforation through its head, of the wire clapper-bolt bent to form a loop for suspending the clapper, and having its two ends passed up
20 through the bell-head, one of said ends being clinched upon the bell-head and the other being bent into hook or loop form, substantially as described.
25

2. The combination, with a bell having a

perforation through its head, of the wire clapper-bolt bent to form a loop for suspending the clapper, and having its two ends both passing through the perforated bell-head and through
30 a washer fitted against the head of the bell, one of said ends of the wire being clinched upon the upper washer and the remaining end of the wire being bent into hook or loop form, substantially as described.
35

3. The combination, with a bell having a perforation through its head, of the wire clapper-bolt bent to form a loop for suspending the clapper, and having its two ends passed through the perforated head and through washers fitted to the top and bottom side of the bell-head,
40 one of said ends of the wire being bent to form a hook above the outer washer and the remaining end of the wire being clinched upon the said washer, substantially as described.
45

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

ABNER A. BEVIN.

Witnesses:

NATHL. C. SMITH,
FRED. SMITH.