

(No Model.)

E. L. BRAINARD & A. W. BARTON.

SLEIGH OR HARNESS BELL.

No. 371,249.

Patented Oct. 11, 1887.

Fig. 1.

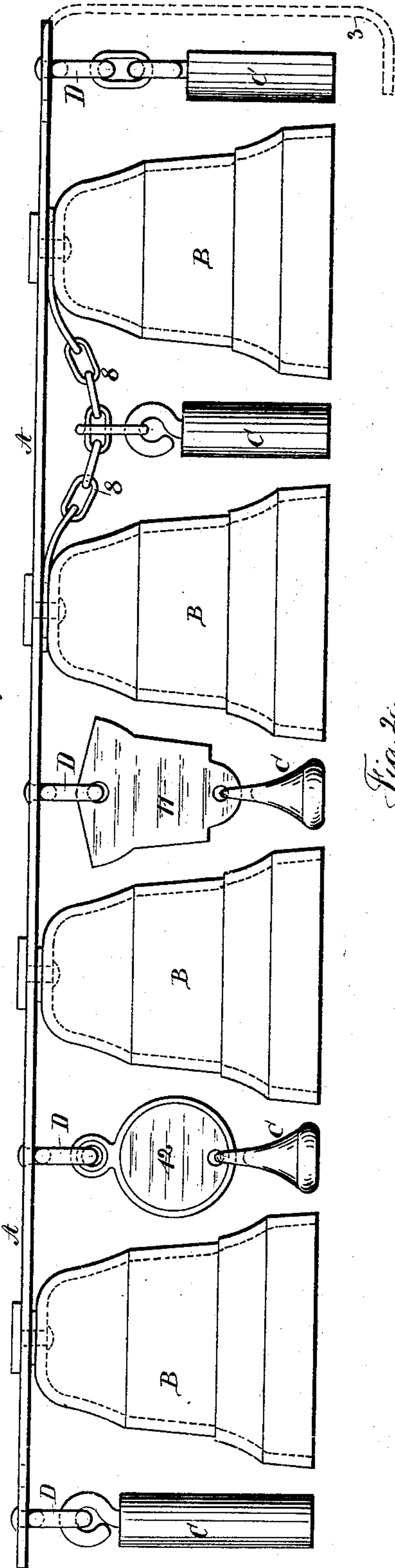
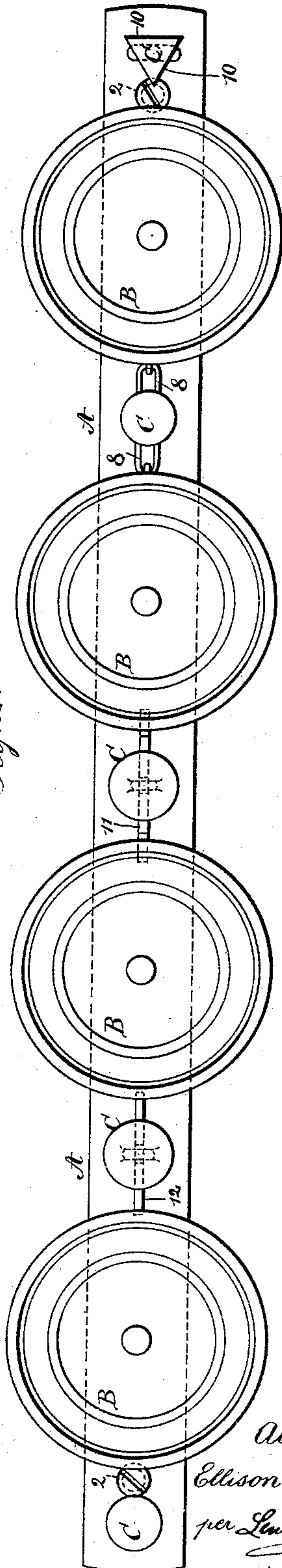


Fig. 2.



Witnesses:  
J. Staib  
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Inventors:  
Abner W. Barton  
Ellison L. Brainard  
per Samuel W. Lee  
att'y



# UNITED STATES PATENT OFFICE.

ELLISON L. BRAINARD AND ABNER W. BARTON, OF EAST HAMPTON,  
CONNECTICUT, ASSIGNORS TO THE BARTON BELL COMPANY, OF SAME  
PLACE.

## SLEIGH OR HARNESS BELL.

SPECIFICATION forming part of Letters Patent No. 371,249, dated October 11, 1887.

Application filed February 7, 1887. Serial No. 226,773. (No model.)

*To all whom it may concern:*

Be it known that we, ELLISON L. BRAINARD and ABNER W. BARTON, of East Hampton, in the county of Middlesex and State of Connecticut, have invented an Improvement in Sleigh and Harness Bells, of which the following is a specification.

The object of this invention is to increase the volume of sound from sleigh and harness bells, and to cause the rebound of the clapper or hammer to intensify the stroke upon the adjacent bell, the hammer being suspended outside of one bell and between the same and the next bell, so that the shaking movements to which the bells and clappers are subjected will cause the bells to emit more varied sounds, because one hammer or clapper will strike first one bell and then another, and one bell will be struck on opposite sides by two clappers, thereby varying the sounds according to the weights and characters of the clappers.

In the drawings, Figure 1 is an elevation of our improvements, and Fig. 2 an inverted plan of the same.

The bar or strap A, upon which the bells B are suspended or permanently fastened, is of any desired size, and it may be straight and fastened by screws 2 to the under side of the shaft or pole, or the ends of the strap may be extended downwardly, as shown by dotted lines at 3, to fasten upon the top of the shaft or pole, or to be connected to the saddle or hame or dash-board. When connected to the saddle, there will usually be holes near the ends of the strap for the terret.

Between the bells, and preferably at each end of the row of bells, are dangles or hammers C, which may be of any desired shape. We have shown them cylindrical, and at the upper end of each dangle is an eye by which it is suspended. Usually there will be a second eye, D, upon the strap A for each dangle; but the dangle may be suspended by the short chains shown at 8, which chains are fastened at their ends to washers above the tops of the adjacent bells.

Usually the bells will be rigidly fastened to the strap or shaft; but if they hang loose the operations will not be interfered with.

It will now be apparent that when these

bells are in use the shaking or agitation to which they are subjected will swing the dangles and cause them to strike upon the respective bells, and the elasticity or recoil will throw off the dangles and accelerate the swinging movement as such dangles move toward and strike the opposite bells, thus obtaining clearness of sound, because the dangles do not remain in contact with the bells, and a variety of sounds, because the dangles will not strike with uniformity upon the respective bells, either in consequence of the differences in the weight of the dangles or of the usually slightly-inclined position of the strap A causing such dangles to hang nearer to one bell than the other.

We have shown one of the dangles as cylindrical; but we prefer to make the dangles with flat polished surfaces to reflect the sunlight as they swing.

The dangles themselves may be prismatic, so as to have three or more flat polished surfaces, as seen at 10, or there may be flat metallic plates or links above the clapper portions of the dangles to form the reflecting-surfaces, as seen at 11 and 12.

We claim as our invention—

1. The range of bells B B and the bar or strap A, from which they are suspended, in combination with the dangles, that are also suspended and hang loosely between the bells, so as to strike the same in either direction, substantially as specified.

2. The combination, with a range of bells, of a strap below which they are suspended, dangles hanging between the bells and having eyes at their upper ends, and eyes fastened to the strap and receiving the eyes upon the dangles, substantially as set forth.

3. The combination, with a range of bells, of metallic dangles hanging between the bells, so as to strike the same, and provided with flat polished reflecting-surfaces, substantially as set forth.

Signed by us this 12th day of January, 1887.

ELLISON L. BRAINARD.  
A. W. BARTON.

Witnesses:

EMMET B. RICH,  
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