

(No Model.)

C. M. GORMLY.
Toy.

No. 243,120.

Patented June 21, 1881.

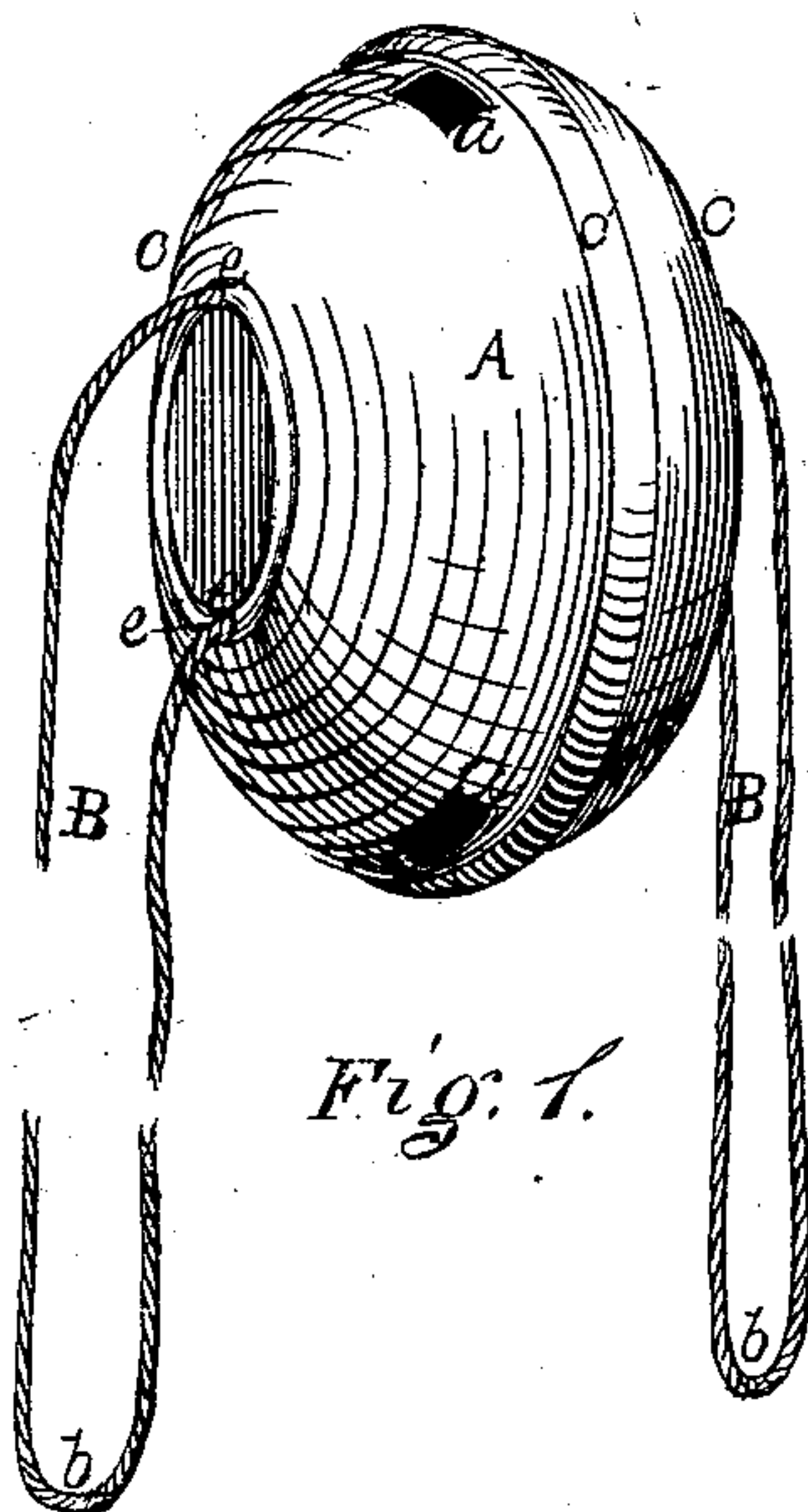


Fig. 1.

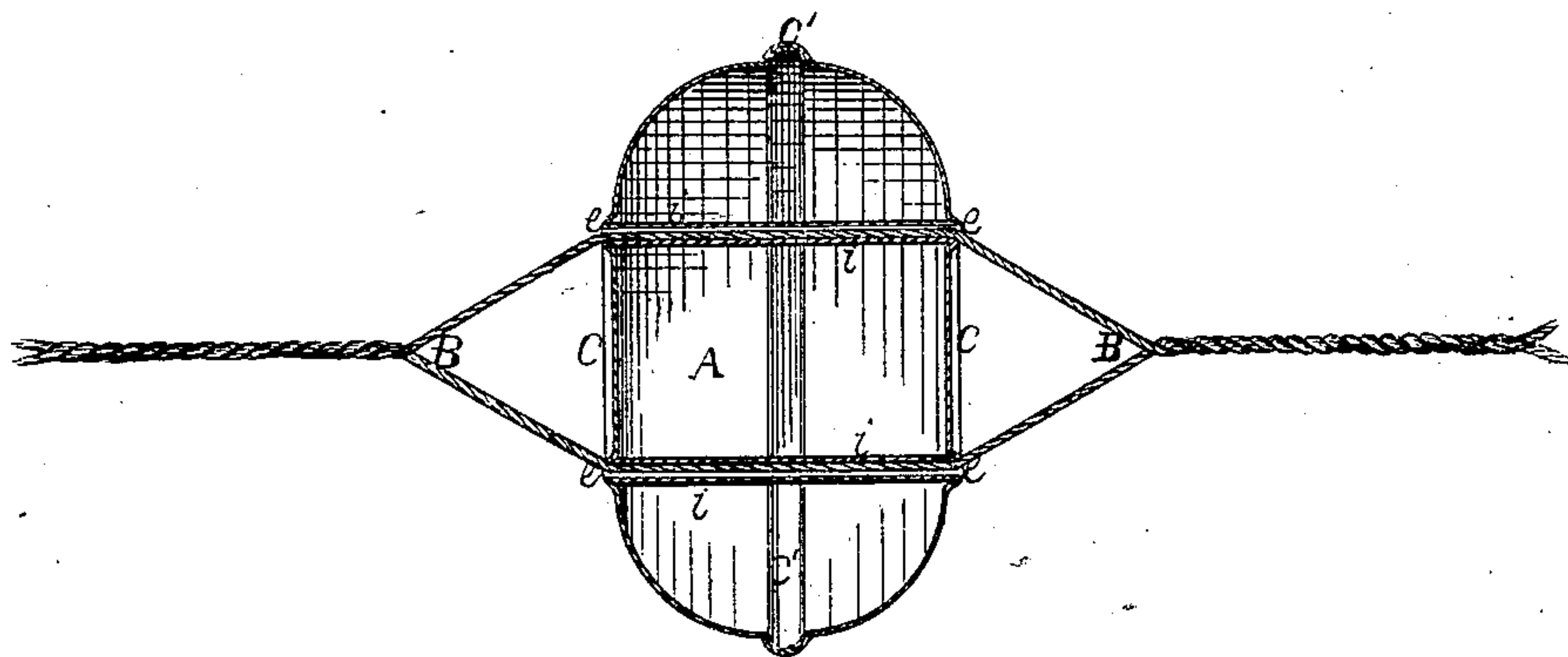


Fig. 2.

Witnesses.
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UNITED STATES PATENT OFFICE.

CHARLES M. GORMLY, OF PITTSBURG, PENNSYLVANIA.

TOY.

SPECIFICATION forming part of Letters Patent No. 243,120, dated June 21, 1881.

Application filed April 15, 1881. (No model.)

To all whom it may concern:

Be it known that I, CHARLES M. GORMLY, of Pittsburg, county of Allegheny, State of Pennsylvania, have invented or discovered a new and useful Improvement in Toys; and I do hereby declare the following to be a full, clear, concise, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—like letters indicating like parts—

Figure 1 is a perspective view of a rotary toy embodying my invention, and Fig. 2 is a sectional view of the same.

My invention relates to rotary humming toys; and it consists of an inclosed chamber or shell, having an opening or openings in the shell arranged and adapted to produce sound when the shell is rotated, and also having openings in its side faces on either side of its center, with tubes extending from side to side, and connecting two opposite openings, thereby affording comparatively long and smooth passages through which cords are passed for rotating the shell, as presently described.

In the drawings, A represents a spheroidal chamber or shell, such shell being made of tin, zinc, glass, or other suitable material. In its surface is made one or more openings, *a*, adapted to produce a humming, singing, or other sound when the shell is rotated. Those skilled in the art of making humming toys can readily shape and arrange both the shell A and openings *a* so as to produce a variety or number of sounds. The shell shown is made of two segments, *c c*, which are united along the line of division, between the two parts, by an ordinary seam or joint, *c'*, or in any other suitable and convenient way. The shell and inclosed space thus secured is substantially spheroidal in form or flattened on two opposite sides; but I do not wish to limit my invention to this or any particular form of shell, nor to any particular form or location of the openings *a* made therein, as these features may be varied in many ways and still employ one or more of the features of my invention. Near the center of such a shell, but on, or nearly on, opposite sides of such center, are made two or more cord-holes, *e*, through which are passed cords or strings B, the ends of which may be united,

if desired, forming thereby an endless cord. In order to prevent cutting the cord, and also to prevent passage of air through these holes *e* to or from the chamber A, I connect opposite holes *e* by small tubes *i*, the ends of which are soldered or otherwise secured in the holes, so as to make a continuous tight passage through from side to side. This also affords a smooth extended surface-bearing for the cord, and avoids cutting-edges, which would otherwise be presented at *e*.

Heretofore in this class of toys it has been customary to bring the two side plates together at the center, and to make cord-holes through the parts in contact, thereby preventing escape or passage of air through such holes to or from the annular chamber around the periphery of the shell. Such toys have also been made by simply punching holes *e* through the sides, and relying upon the cord to fill the same, so as to prevent injurious passage of air. Both such methods of forming cord-holes are open to the objection that the cord is soon worn off, owing to the limited extent of bearing afforded, which, in either case, is no more than the combined thickness of the two side plates. By using interior connecting-tubes, *i*, as above described, I secure a large chamber within the shell, and also a long smooth bearing for the cord, whereby its durability is very much increased.

The cord B is, by preference, twisted and of considerable strength and durability. It is passed through each opening *e*, as stated, and by preference the ends are united, thus giving a length of double cord of, say twelve or eighteen inches. The length, however, is not essential, and it may be varied more or less, as convenience and size may suggest.

To operate such a toy, the two ends *b b* of the cord are grasped in the hands and the shell A is revolved by slight impulse from the hands, thereby winding the cords on both sides, as represented in Fig. 2. This being done, longitudinal strain is given the cord in opposite directions, causing it to unwind and the shell to revolve or rotate rapidly. The speed and momentum secured in this way are considerable and sufficient to cause the shell to continue rotation after the first twist is unwound, and

thereby to wind the cords in the opposite direction, end strain on the cords being released as soon, at least, as the first twist is out. This second twist is again unwound by like end strain, causing the shell to rotate in the opposite direction. Thus, by alternately drawing and releasing the string at suitable intervals, the rotation of the shell may be kept up, though the direction of rotation is changed for each winding up of the cords. The speed of rotation attainable in this way is very great, and can be secured with small expenditure of force, so that a small child can readily give the shell such speed as to produce through or by means of the openings *a* musical notes and humming sounds of different kinds and power, depending upon the form and arrangement of the shell and openings, and the direction and speed of rotation.

The direct control which the operator has

over the operation of this toy, and the fact that he can continue the rotary movement and the sound produced as long as he may wish, make this toy very attractive and desirable for children.

I claim herein as my invention—

A rotary humming toy consisting of a shell, A, of any desired form, having one or more sound-producing openings, *a*, therein, in combination with interior connecting-tubes, *i*, passing through the shell on either side of its center, and double or endless cord B, substantially as and for the purposes described. 30

In testimony whereof I have hereunto set my hand.

CHARLES M. GORMLY.

Witnesses:

JAMES A. McKEAN,
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