J. H. JENKINS.

WHIRLING TOY.

No. 186,255. Patented Jan. 16, 1877.

Fig. 1.

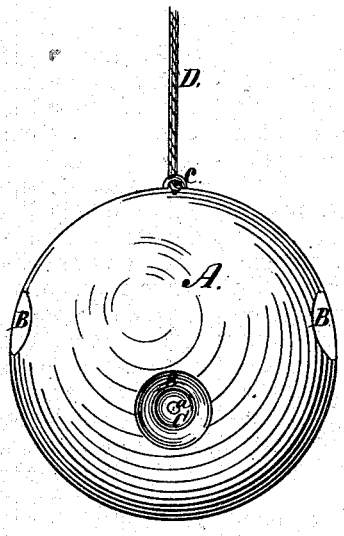
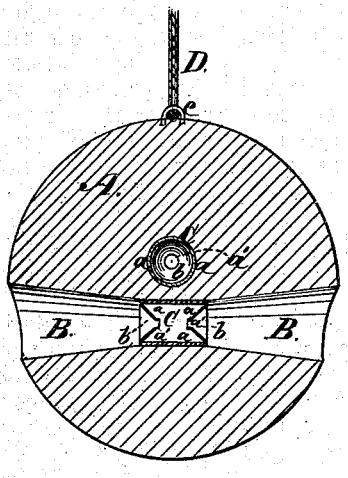


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

JAMES H. JENKINS, OF NEW YORK, N. Y.

IMPROVEMENT IN WHIRLING TOYS.

Specification forming part of Letters Patent No. **186,255**, dated January 16, 1877; application filed November 23, 1876.

To all whom it may concern:

Be it known that I, JAMES H. JENKINS, of the city, county, and State of New York, have invented certain Improvements in Whistling Toys, of which the following is a specification:

This invention relates to a whistling toy, to which a whirling motion is given by means of a string held in the hand; and it comprises a toy of this description constructed with one or more bores or openings, extending entirely through the block or body, tapered to a diminished diameter at the center, arranged nearly or quite at right angles to the radius of motion, and provided with a whistle, whereby a peculiar warbling or whistling sound is produced as the air passes through the toy.

The invention also comprises the toy constructed with these doubly-tapered bores, arranged at an angle to each other, and each provided with a whistle, whereby one of the bores is always presented for the direct passage of air therethrough, and consequently a whistle caused to sound, whatever side of the block is foremost in whirling.

The invention further comprises a novel combination, with the block attached to a suitable cord or string of a peculiarly-constructed whistle, whereby the air is gathered to the orifice or mouth of said whistle in such volume and at such velocity as to insure the sensitive action of said whistle and its clear and musical sounding when the toy is operated.

Figure 1 is a side view of a sensitive whistling-toy constructed according to my invention, and Fig. 2 is a central transverse section of the same.

A is a block, which may be of any suitable shape, but which, preferably, is of spherical form. Extended through block A are two or more holes, openings, or orifices, B, these orifices being placed at an angle to each other, as indicated in the drawings, and each opening being preferably flared from its center outward, as shown more fully in Fig. 2. In the center of each opening is placed the whistle C. This whistle comprises a cylindric body, *a*, each end of which is provided with funnel-shaped ends *b*, at the centers of which are mouths *a'*, which, by the passage of air therethrough, give the whistling or musical sound desired. The block A is attached by means of a suitable eye or staple or otherwise to a string, C, which may be of any suitable length.

In the use of the toy, the string is held in the hand with a sufficient length between the latter and the block A to permit the swinging or rotation of the block circularly around the axis formed by the grasping of the string by the hand, as aforesaid. Inasmuch as the openings or bores B are placed at an angle to each other, it follows that, whichever side of the block is foremost, the air will be caused to pass through one or the other of the said bores or orifices, it being, of course, understood that such bores or orifices in their position approach more or less a right angle to the string C when the latter is strained straight by the centrifugal action of the block A while being whirled or rotated, as hereinbefore explained. As the block A is thus rotated its passage through the air causes a vacuum to be formed behind the same at the same time that the movement of the said block against the air in front tends to compress the latter, so that the air passes with a velocity proportioned to the speed with which the block A is caused to move into and through the bores or openings B, and, passing through the whistle C, causes the same to sound with a whistling or musical noise.

It is to be especially observed that the funnel-shaped ends *c* of the whistle, converging inward to the mouths *a'* of the latter, gather or compress the air to the said mouths *a'*, thereby increasing its velocity in passing through such mouths *a'*, and insuring a more sensitive action of the whistle, the sound or whistling being varied both in tone and pitch, according as the velocity of the air passing through the mouths *a'* is varied ever so slightly. By this means an extremely-sensitive action of the whistle and a clear musical and pleasing whistling is obtained.

What I claim as my invention is—

1. The herein-described whirling toy, constructed with one or more bores, B, funnel-shaped or tapering to a diminished diameter at the center of the block A, arranged at right

angles to the radius of rotation, and provided with a whistle, substantially as and for the purpose set forth.

2. In a whirling toy, two or more funnel-shaped or oppositely-tapering bores, B, arranged at an angle to each other, and each provided with a whistle, substantially as and for the purpose herein set forth.

3. In the block A, the whistle C, constructed with the funnel-shaped ends *b*, converging to the mouths *a'*, the said whistle being placed midway in a bore or orifice extending through the block A, substantially as and for the purpose herein set forth.

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Witnesses:
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