J. H. JENKINS.

SPINNING-TOY.

No. 190,438. Patented May 8, 1877.

Fig. 1.

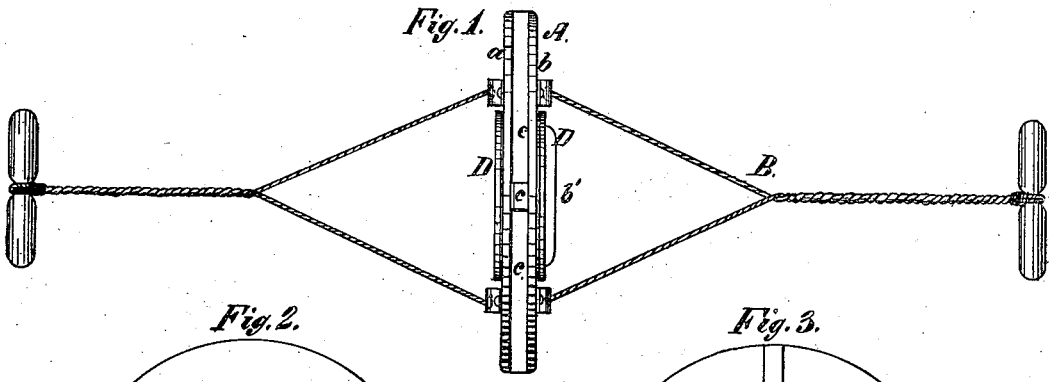


Fig. 2.

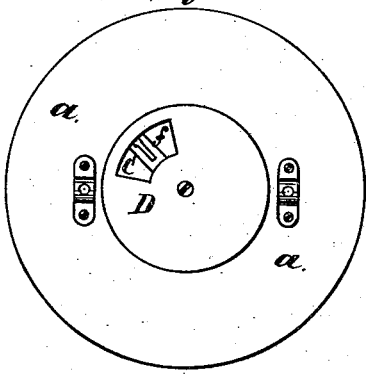


Fig. 3.

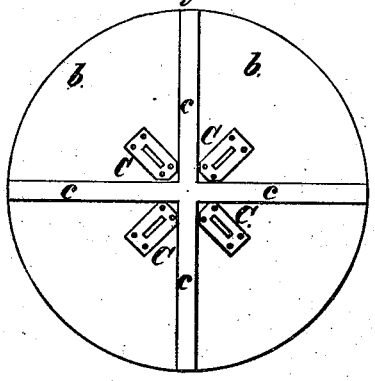
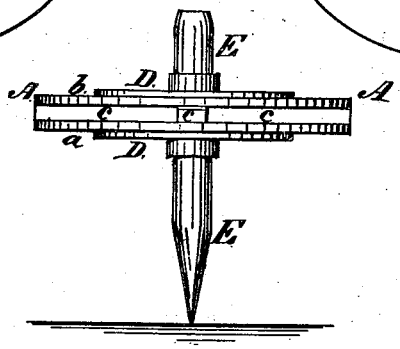


Fig. 4



Witnesses:

Henry Eichling.

H. Wells Jr.

Inventor.

James H. Jenkins.

per James A. Whitney

Atty.

UNITED STATES PATENT OFFICE.

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

IMPROVEMENT IN SPINNING-TOYS.

Specification forming part of Letters Patent No. **190,438**, dated May 8, 1877; application filed January 13, 1877.

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 Axially-Revolving Toys, of which the following is a specification:

This invention relates to that class of toys which, like tops, whirligigs, &c., revolve around their own axes, and the present invention is designed to provide a toy of the class indicated, which shall not only afford amusement by the sight of its movements, but which shall emit, when in operation, a varying musical and pleasing sound.

And to this end the invention comprises the combination, in a toy of the class indicated, of two or more whistles, reeds, or like devices, arranged in due relation with radial passages, and one or more automatically-operating slotted plates, which, when the toy is rotating, gradually shifts its place with reference to the whistles or reeds, so as to cause the whistles or reeds to act in succession to give a varying musical character through a wide range of notes to the sound emitted by the toy when in operation.

Figure 1 is a side view of an axially-rotating whirligig embracing my said invention. Fig. 2 is a side view of the same. Fig. 3 is an internal view thereof. Fig. 4 is a side view, representing the invention as embraced in a top.

Having reference first to Figs. 1, 2, and 3, the whirligig A is operated in the usual manner by the strings B, which, being twisted as represented in the drawing, and as commonly well understood, communicate revolving motion alternately in opposite directions by an alternately elongating and shortening of the string twisted upon itself. The whirligig A may be best made of two plates, *a b*, having between them radial partitions *c*, as represented in Fig. 3, the spaces between these partitions forming radial passages, as hereinafter more fully explained. Around the axes of the whirligig A are placed a number of reeds, or, in lieu of these, whistles, (either may be adopted, as desired,) as shown at C, the two plates *a b* being fastened together by screws or any other suitable means, with the partitions *c* between. Upon each side of the whirligig, as thus constructed, is placed a circular plate, D, in which is an opening or slot, *f*. This opening should be of such length as to embrace the width of one of the reeds or whistles C, and also the space between said reed or whistle and the next, these plates D being so arranged that when rotated around their pivots—in other words, around the axis of the whirligig—the opening *f* will be brought over the reeds or whistles C in succession. When the whirligig is revolved, as hereinbefore set forth, one of the reeds or whistles C, at each side of the whirligig, will be open to the outer atmosphere through the opening *f* in the adjacent plate D, and the rapid revolution of the whirligig, throwing the air radially outward through the radial passages provided between the partitions *c*, causes the air to be drawn inward through such reeds or whistles C, thereby causing the same to emit a musical sound, and inasmuch as the plates D are loose upon their pivots *a'*, and are revolved merely by the frictional contact of the adjacent surface of the whirligig, it follows that these plates D revolve with less velocity than the whirligig itself, and consequently the position of the opening *f* in each of the plates D is gradually shifted in succession from one to another of the reeds or whistles C, so that the tone, note, pitch, or quality of the musical sound emitted from the whirligig, as herein explained, is gradually but materially changed, and a far more pleasing and musical sound is obtained continuously from the apparatus than would otherwise be possible. When preferred, the outer surfaces of the plates D may be provided with fins *b'*, as indicated in Fig. 1, in order that the atmosphere may afford a greater resistance to the rotation of the plates D as compared with that of the whirligig itself, and thereby cause the more rapid shifting of the opening with reference to the reeds or whistles, and hence a quicker variation in the musical sounds.

Having reference to Fig. 4, the construction is substantially the same as that represented in Figs. 1, 2, and 3, except that the whirligig A, instead of being rotated by the string B, is placed upon an axial stem, E, pointed at bottom, to afford a bearing, thereby constituting the toy a top, the sole difference being

that in the one case the rotatory movement is communicated by means of the string B, in the other by the usual means of revolving a top, the mere means by which the toy is rotated being, so far as concerns the principle of my invention, an immaterial matter, the *modus operandi* of my said invention being the same in the top as in the whirligig.

What I claim as my invention is—

In an axially-rotating toy, the combination of one or more independently-rotated plates D, having an opening, *f*, and with one or more reeds or whistles provided in due relation with passages for the centrifugal movement of the air, substantially as and for the purpose herein set forth.

JAMES H. JENKINS.

Witnesses:

EDWARD HOLLY,

H. WELLS, JR.