

(No Model.)

F. OAKLEY.
TOY.

No. 420,463.

Patented Feb. 4, 1890.

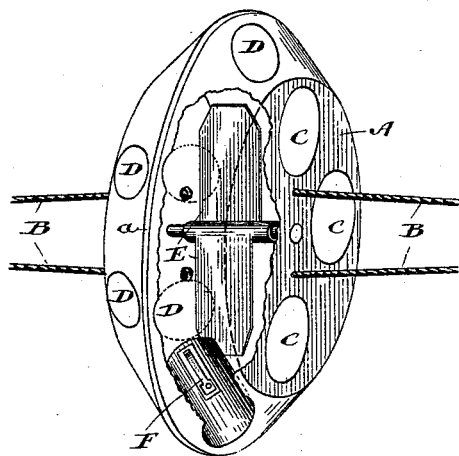


Fig. 1.

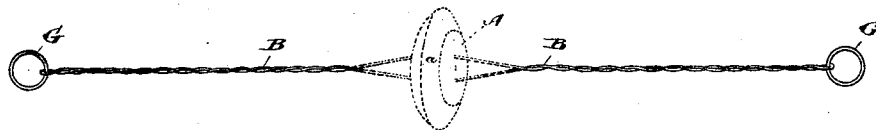


Fig. 2.

Witnesses.

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FREDERICK OAKLEY, OF TORONTO, ONTARIO, CANADA.

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SPECIFICATION forming part of Letters Patent No. 420,463, dated February 4, 1890.

Application filed July 31, 1889. Serial No. 319,247. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK OAKLEY, carpenter, of the city of Toronto, in the county of York, in the Province of Ontario, Canada, have invented a certain new and Improved Toy, of which the following is a specification.

The object of this invention is to produce an amusing toy; and it consists in the peculiar construction, arrangement, and combination of parts hereinafter more particularly described, and then definitely claimed.

Figure 1 is a view of my improved toy in full size, parts being broken away. Fig. 2 is a view showing the manner of operating the said toy.

In the drawings, A represents two concavo-convex plates jointed together, as indicated, to form a hollow disk-shaped body, as shown.

B represents two strings located on opposite sides of the center *a* of the disk. An inner row of holes C is pierced through the plates A, and an outer row of holes D is pierced around the disk near its periphery.

E is a fan carried inside the plates A on a spindle located in the center of the plates, and loosely journaled so that the said fan may revolve freely.

F is a musical reed placed between the plates A in any suitable position, so that the revolving of the disk formed by the said plates shall produce a musical sound. The ends of the strings B are connected to rings G.

In order to operate the toy, the rings G are seized hold of and the strings B twisted together, when, by pulling upon the cords G, so as to tighten and then loosen the strings, the disk is caused to revolve rapidly first in one direction and then the other. When revolving, a musical sound is produced by the reed, and the revolving fan E, seen through the perforations in the plates A, has a very beautiful effect, the perforations making the disk appear like a solid center with two rings surrounding it, but apparently not connected.

It will be observed that the fan E, as before stated, is loosely suspended in the plates, and it can therefore move independently of the same. Owing to this it moves at varying speed, sometimes in the same direction as the plates, but generally at a slower speed and frequently in opposite directions, the speed at all times continually changing. When, for instance, the plates begin to revolve, the fan is stationary, but immediately begins to move in the same direction as the plates, owing to a slight friction between the fan and the spindle and the current of air generated by the rapid revolution of the plates. When the plates are reversed, the fan keeps up its revolution for a short time and will then run in an opposite direction, when it again travels with the plates until the latter are reversed. These constant variations of the speed and direction of the fan with respect to the speed of the plates produces a peculiar change in the appearance of the space seen through the holes C.

What I claim as my invention is—

1. As an improved article of manufacture, a toy comprising two perforated plates coupled together, strings for revolving the plates, and a fan suspended within the same adapted and constructed to move independently of the plates, substantially as described.

2. The combination, in a toy, of two concave perforated plates, a spindle running from one to the other, strings for rotating the same, and a fan loosely mounted on the spindle and moving independently of the strings and plates, substantially as described.

Toronto, June 20, 1889.

FREDERICK OAKLEY.

In presence of—

CHARLES C. BALDWIN.

W. G. McMILLAN.