3 Sheets--Sheet 1.

J. P. MICHAELS.

Toy.

No. 169,020. Patented Oct. 19, 1875.

Fig. 1.

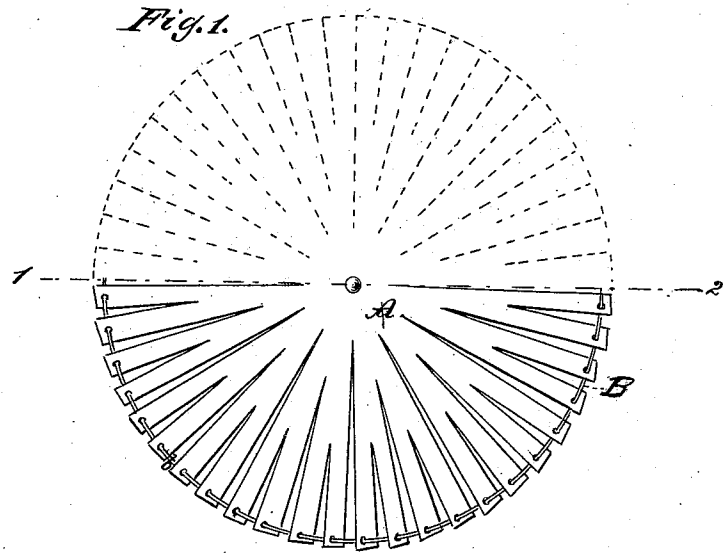
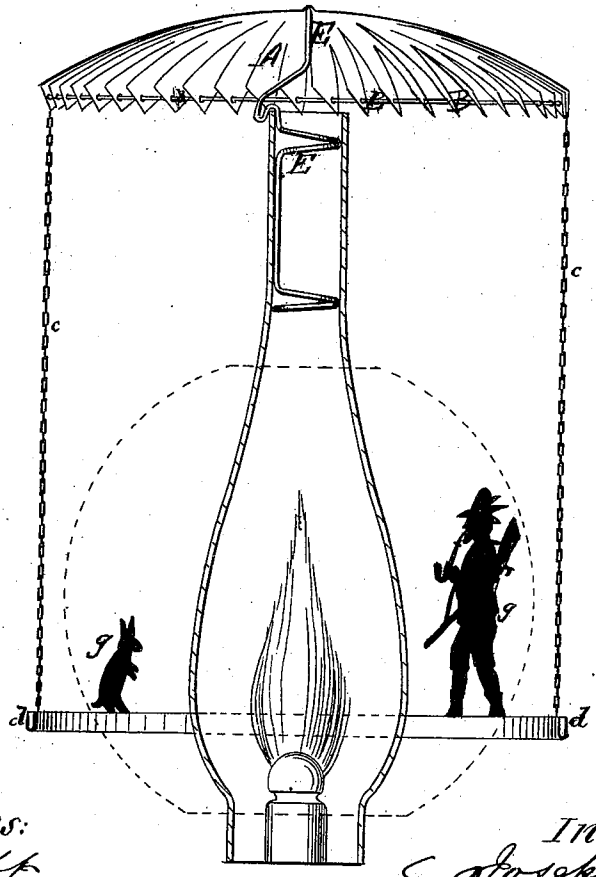


Fig. 2.



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No. 169,020. Patented Oct. 19, 1875.

Fig. 3.

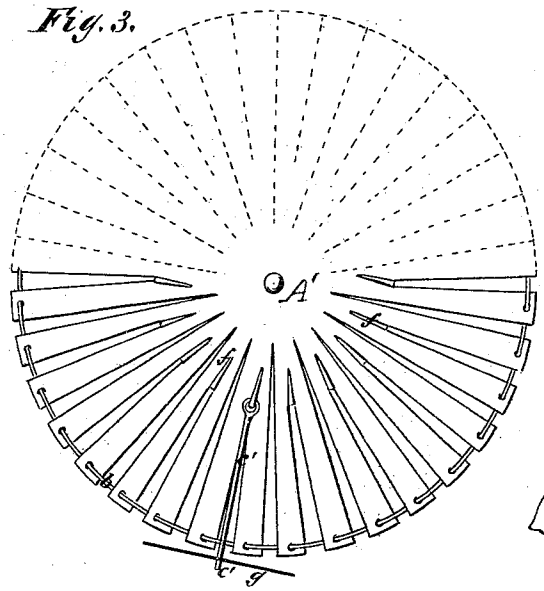

Fig. 5.

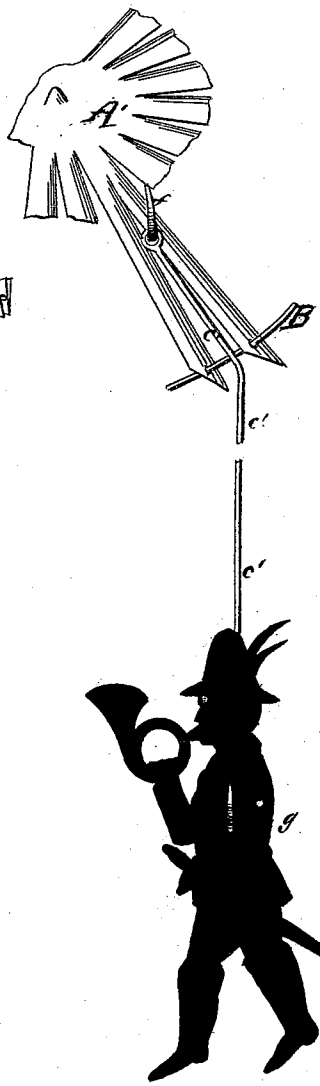

Fig. 4.

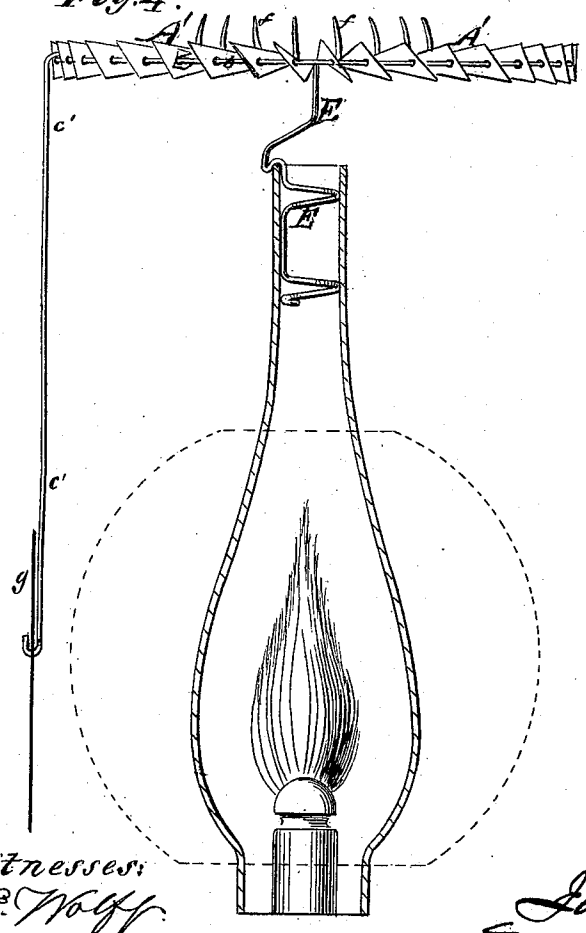

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Fig. 7.

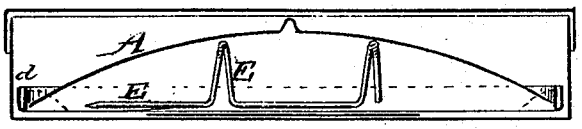
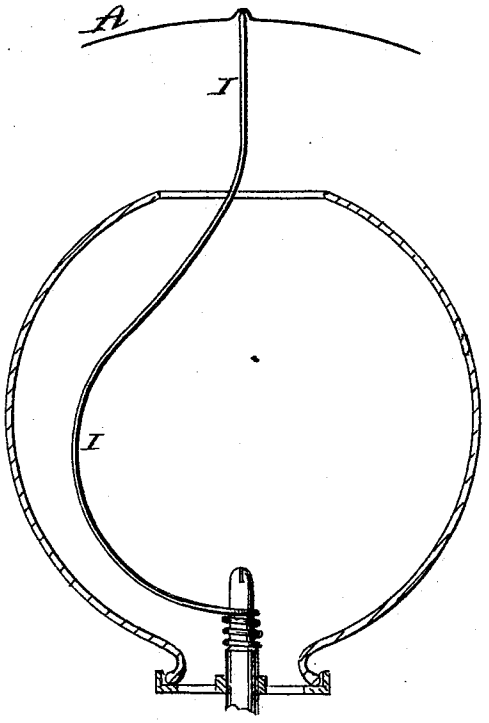


Fig. 6.



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UNITED STATES PATENT OFFICE.

JOSEPH PORTER MICHAELS, OF NEW YORK, N. Y.

IMPROVEMENT IN TOYS.

Specification forming part of Letters Patent No. **169,020**, dated October 19, 1875; application filed August 16, 1875.

To all whom it may concern:

Be it known that I, JOSEPH PORTER MICHAELS, of New York, United States of America, at present residing in Vienna, Empire of Austria, have invented a new and useful Improvement in Toys, to be used in connection with lamps, which invention is fully set forth in the following specification, reference being made to the accompanying drawings.

This invention relates to a toy to be used in connection with any kind of lamp having a chimney, or in connection with an ordinary gas-burner and globe, and the said toy is made to revolve on a pivot by the draft from the chimney, or by the ascending current of hot air caused by the flame of a gas-burner, so as to cause any set of figures hanging therefrom to move around the light.

The apparatus consists of a piece resting above the chimney, or at any suitable height over the light on a pivot, and which piece may be any form of screw, wheel, or vanes, which is capable of being rotated by a draft from the chimney, or by the current of hot air created by the flame of a burner. To this piece is hung, in any convenient manner, the part intended for carrying the figures.

I shall now proceed to describe, with reference to the accompanying drawings, a suitable form of apparatus according to this invention.

Figure 1 is a plan view of the wheel revolving by the draft of the chimney; and Fig. 2 shows the whole apparatus, the wheel and the chimney being in section on line 1 2 of Fig. 1. Figs. 3 and 4 show a modification of the apparatus, in which the figures are suspended by wires from the wheel, which, in this case, is also of a modified form. Fig. 5 represents a part of the wheel, showing in detail one of the vanes or wings of the same, and the manner of suspending the figures by means of wires from the points formed on the wheel. Fig. 6 shows a modification of the apparatus in its application to an ordinary gas-fixture, and Fig. 7 shows the entire apparatus packed in a box.

A, in Figs. 1 and 2, is the revolving wheel; B, a wire ring, from which the figures *g* are hung by means of the chains *c* and the gallery *d*. E is the pivot on which the wheel A revolves.

In Figs. 3, 4, and 5, A′ indicates the revolving wheel; B, the wire ring around the same; and *f*, the points formed on the wheel, from which points the figures *g* are hung by means of the wires *c*′, in the manner clearly shown in Fig. 5.

At Fig. 6 the apparatus is modified simply by the use of differently-shaped supporting and pivotal wire or stand I, made of such form and size as to fit onto an ordinary gas-burner, and properly support the motive wheel or vanes centrally over the gas-globe and flame.

The construction shown may, of course, be modified in many ways without departing from the principle of my invention. Thus, the wheel A may be made without the wire ring. The supporting-piece E may be flat, forming a bearing instead of a pivot, and the pivot-point may be formed on the piece A. Instead of chains *c*, pieces of wire may be used; the gallery *d* be flat, and the paper figures set astride on it, or may have points for sticking on the figures. The supporting-piece E may fit partly outside of, instead of inside of, the chimney, and the same variation may be made as to the wire stand I. (Seen in Fig. 6.)

Where the apparatus is intended for use in connection with gas-burners provided with globes, the stand I may be made so as to be secured to or placed on the "globe-holder;" or, in lieu of such stand, some different sort of support may be devised and applied, adapted to rest on the glass globe of the gas-fixture.

Having so fully explained my new toy apparatus that any skilled person can make and use it, what I claim therein as new, and desire to secure by Letters Patent, is—

1. The combination, with a screw-wheel, or vanes, or other devices adapted to be rotated on its axis by currents of air, of a suitable stand, to hold said screw-wheel centrally over a lamp or gas-burner, and a hanging gallery for supporting figures, the whole arranged to operate substantially as described.

2. In combination with a screw-wheel or vanes, adapted to be rotated by currents of

air, and a means for properly supporting such screw-wheel over a lamp or gas-burner, the series of pendent wires c', for separately supporting the figures or pictures to be caused to travel around the light.

3. In combination with the wheel A and a gallery, d, the flexible connections c, the whole arranged and operating in the manner and for the purposes set forth.

4. A rotary wheel, A′, with points f, adapted to the attachment of hanging wires c', substantially as shown and described.

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