S. W. Anderson,

Chameleotrope.

No. 100,248. Patented Mar. 1. 1870.

Fig. 1.

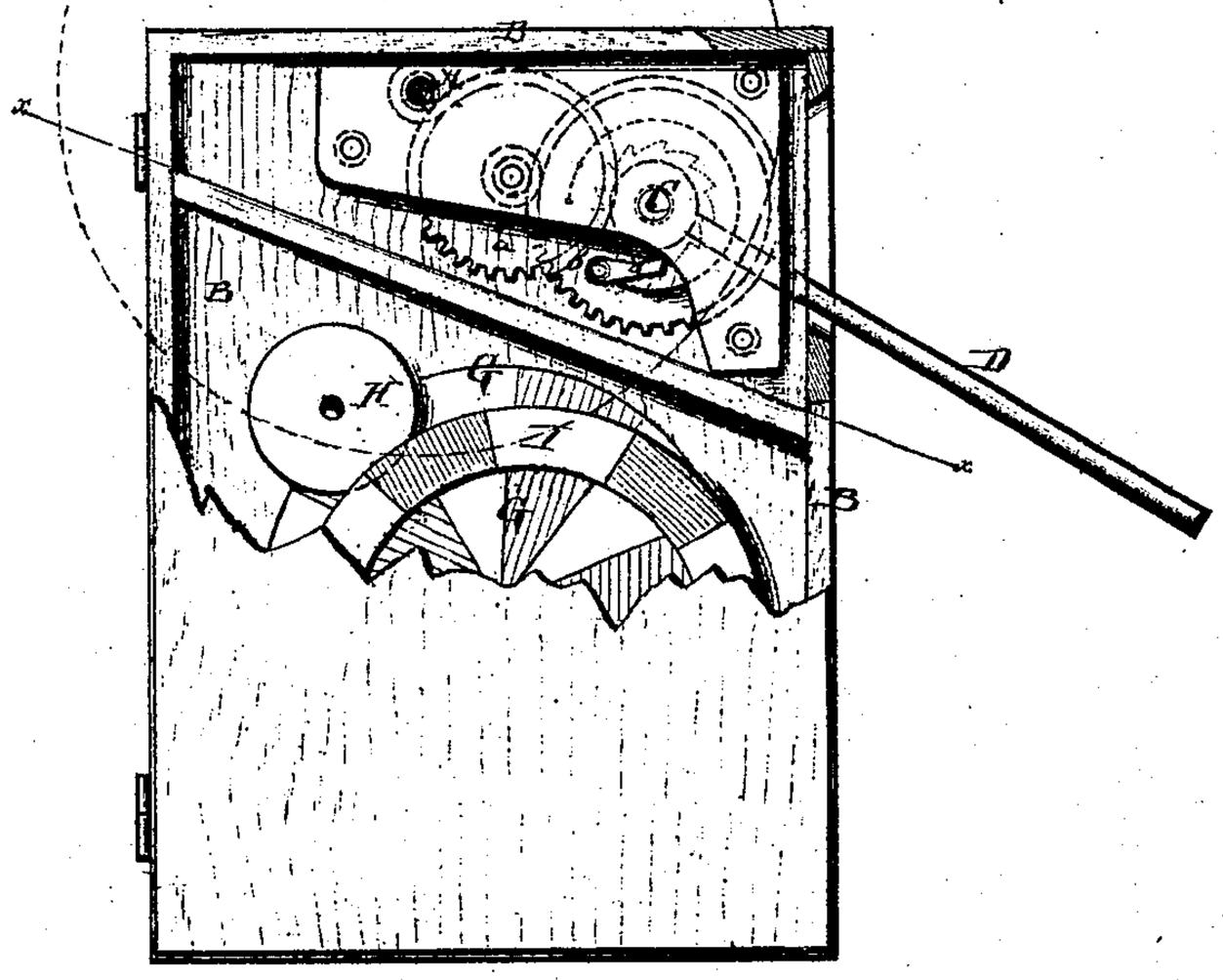


Fig. 4.

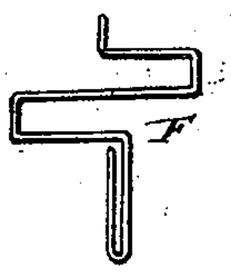


Fig. 2.

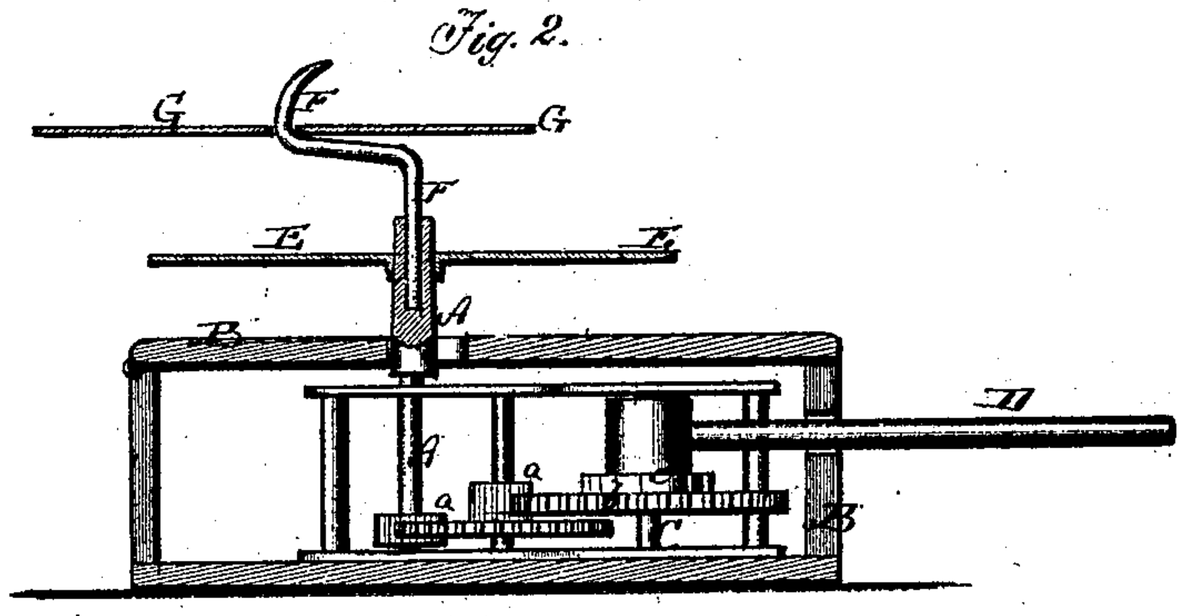
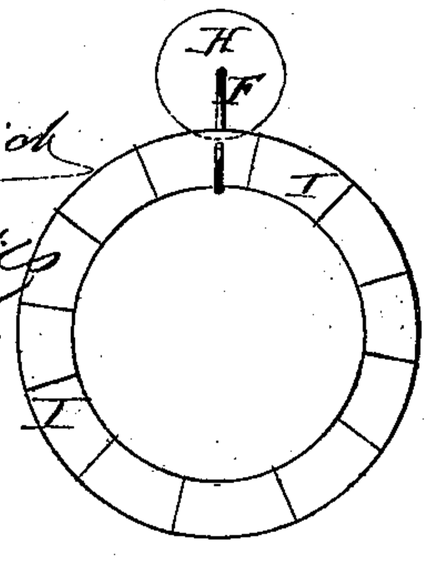


Fig. 3.



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SMITH W. ANDERSON, OF NEW YORK, N. Y.

Letters Patent No. 100,248, *dated March* 1, 1870.

CHAMELEOTROPE.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, SMITH W. ANDERSON, of the city, county, and State of New York, have invented a new and improved Chameleotrope; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings forming part of this specification, in which—

Figure 1 represents a plan or top view, partly in section, of my improved chameleotrope.

Figure 2 is a vertical transverse section of the same taken on the plane of the line *x x*, fig. 1.

Figure 3 is a detail plan view of a part of the same.

Figure 4 is a detail side view of a double disk support.

Similar letters of reference indicate corresponding parts.

The object of this invention is to produce a spinning toy which will exhibit in constant variation a beautiful array of colors.

The invention consists in the employment of a holder or support, which will retain a colored disk eccentric to the rotating shaft on which the said holder is secured.

The invention also consists in connecting the said shaft by suitable gear connection with a hand-lever, so that its revolutions may be unequal, being produced by muscular power.

The colored disk suspended on an eccentric arm of the shaft is, by the unequal revolution of the same, turned on its own axis so as to thereby constantly change the color which is above the center of the shaft.

The blending together of the colors produces very beautiful effects. The independent motion given to the disk is necessary, because if the same would merely revolve concentrically around the shaft, its colors would blend into one shade, while the mere eccentric rotation would not show the desired variations.

A, in the drawing, represents a vertical shaft hung in a frame, B, and connected by suitable gear-wheels *a a* with a larger toothed wheel, *b*, that is hung loose upon a shaft, C.

The shaft C carries a ratchet wheel, *c*, into which a pawl, *d*, pivoted to the wheel *b* engages.

D is a lever projecting from the shaft C. By oscillating it the wheels will be revolved in one direction. When the lever is carried back the pawl slips on the ratchet.

A fly-wheel, E, is mounted upon the shaft A to gather and equalize the power. The motion is, however, never quite equal, as it would be if the shaft was revolved by other than muscular power.

To the upper end of the shaft is secured, or on it is formed a hook-shaped holder, F.

The same serves to support a disk or plate, G, the surface of which is divided by radial lines or otherwise into differently colored spaces.

The hook supports the disk eccentric to the shaft A, and therefore one of the colored sections is in the center of rotation—not the real center, where all colors converge.

The constant shifting of the disk on the holder produced by the unequal motion of the shaft, causes a constant change of color to take place, and during the changing a very beautiful blending together of the several colors.

The holder may be double-hook shaped, as in fig. 4, to hold a disk, H, and a colored ring, I, in separate centers, or two disks or plates, as may be desired.

Fig. 1 shows several of the disks and a ring, I, placed in a box formed by the frame B.

Having thus described my invention,

I claim as new, and desire to secure by Letters Patent—

1. The holder F, secured upon a rotating shaft, A, for the purpose of holding a colored disk or plate in an eccentric position to produce a varying display of colors, as set forth.

2. The combination of the lever D with the shafts C and A, and with the holder F, all arranged to produce a somewhat uneven motion of the shaft A, as specified.

Witnesses: SMITH W. ANDERSON.

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