Sept. 25, 1928. 1,685,411

C. ARNOLD

INTERCHANGEABLE TRANSPARENT DISK ON SPARK PRODUCING TOYS WITH CHANGING PICTURES

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Fig. 1

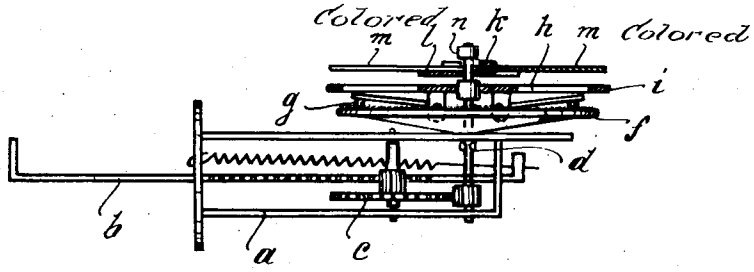
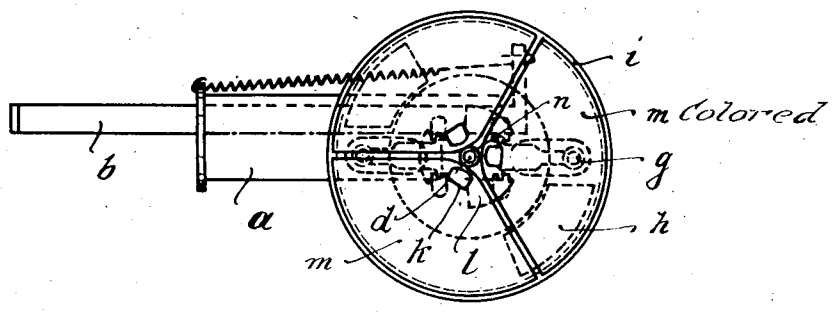


Fig. 2



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UNITED STATES PATENT OFFICE.

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INTERCHANGEABLE TRANSPARENT DISK ON SPARK-PRODUCING TOYS WITH CHANGING PICTURES.

Application filed August 1, 1927, Serial No. 209,880, and in Germany July 8, 1927.

This invention relates to a spark-producing toy with colored transparent disks and is distinguished over toys of known type in that, above the spark-producing mechanism on the shaft of the same a disk is loosely mounted so that it can rotate with said shaft, different colored transparent panes being fixed on the disk by means of flaps. After the flaps have been bent up other colored transparent disks may be substituted. Owing to this arrangement the playing child can alter at will the color-effect, so that the toy becomes more interesting.

On the accompanying drawing the invention is illustrated, by way of example,

Fig. 1 is a side elevation, partly in section.

Fig. 2 is a top plan view.

The driving mechanism *c* arranged in a casing *a* and operated by a rack *b* communicates a rapid rotation to a shaft *d*. On the casing *a* one element of a spark-producing device, for instance an emery-disk *f*, is fixed while the other element, i. e. a cerium-stone *g*, fixed in flaps, is fixed to a disk *i*, loosely mounted on the shaft *d* so that it can be coupled with the same and having several apertures *h* through which the sparks can pass. Above the disk *i* a disk *l* is loosely mounted on the shaft, said disk *l* having flaps *k*, designed to secure in position differently colored transparent panes *m*. A removable knob *n* serves for holding the disk *l*.

When the toy is being operated, the disk *l* with the transparent panes *m* is rotated merely by friction so that the sparks change color only slowly.

To interchange the transparent panes *m* first the knob *n* and then the disk *l* have to be removed from the shaft *d* and the flaps *k* have to be bent up, whereupon the transparent panes can be removed and transparent panes of other colors inserted.

I claim:

A spark producing toy with changing pictures, comprising in combination with a disk carrying cerium-stones and having apertures, an emery-disk underneath said cerium-stone disk, a vertical shaft, and a driving mechanism for rapidly rotating said shaft, a disk having apertures loosely mounted on said shaft above said cerium-stone disk flaps at the sides of said apertures, and differently colored transparent panes on the apertures and removably fixed on said disk by means of said flaps.

In testimony whereof I affix my signature.

CARL ARNOLD.