(No Model.)

M. BRADLEY. COLOR MIXING TOP.

No. 537,887.

Patented Apr. 23, 1895.

Fig. Z.

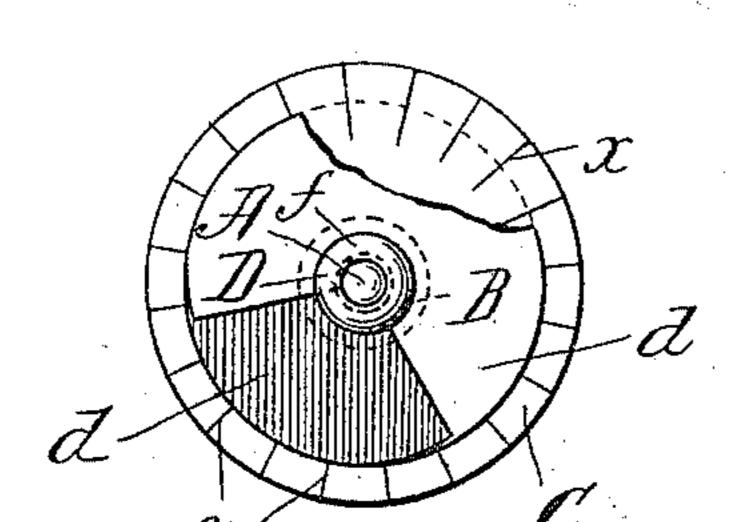


Fig. 2.

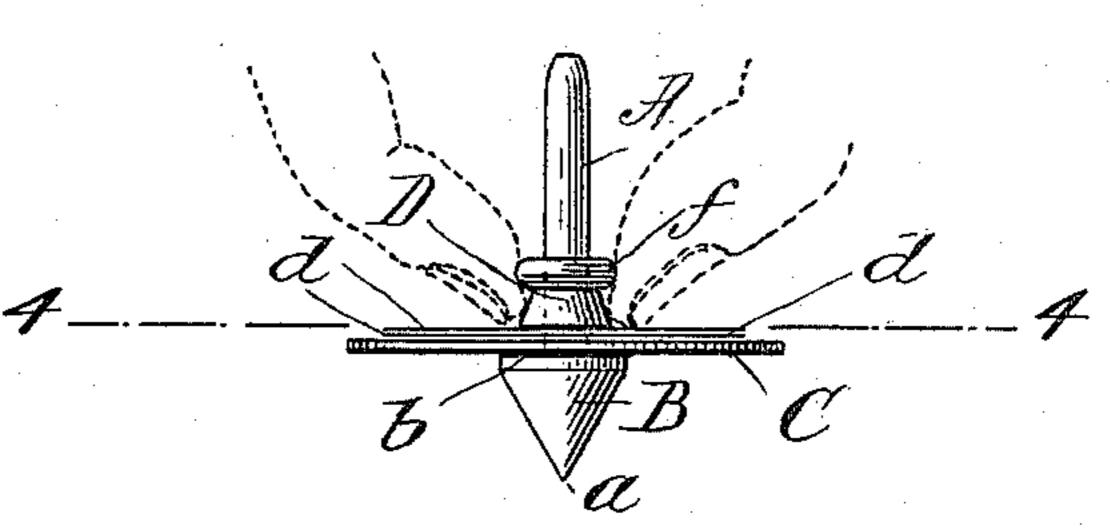
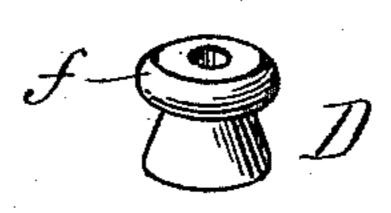


Fig. 3.



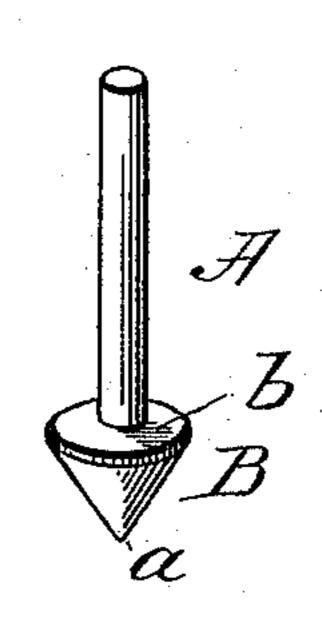
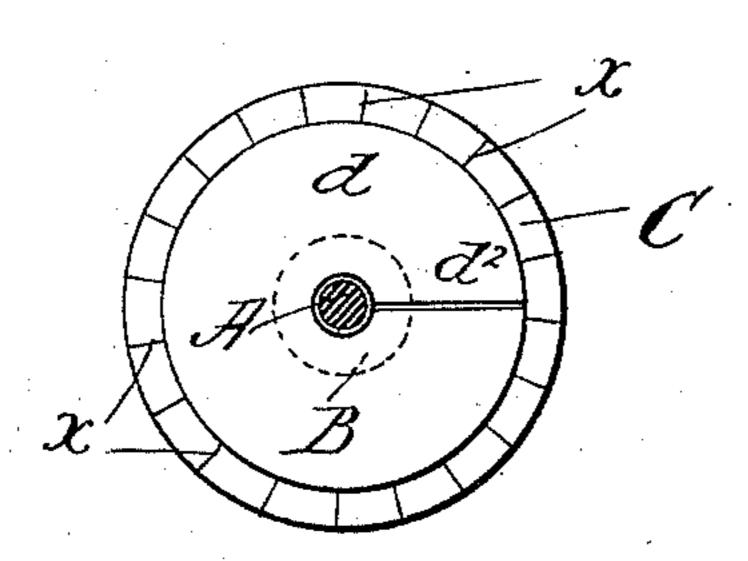


Fig.4.



Witteesses:

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MILTON BRADLEY, OF SPRINGFIELD, MASSACHUSETTS.

COLOR-MIXING TOP.

SPECIFICATION forming part of Letters Patent No. 537,887, dated April 23, 1895.

Application filed February 16, 1894. Serial No. 500,431. (No model.)

To all whom it may concern:

Be it known that I, MILTON BRADLEY, a citizen of the United States of America, residing at Springfield; in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Color-Mixing Tops, of which the following is a specification.

This invention relates to improvements in what are known as color mixing tops, that is tops having thereon segments or non-concentric areas of various colors which, as the top is spun, are mixed, or blended, showing a new

color, shade, or tint.

The object of the present invention is to 5 produce a color top which has a capacity for greatly diversified results in color combinations,—one which may be readily taken apart or "knocked down" so that it may occupy small space when kept in stock, or in trans-20 portation,—one in which an analysis of any of the color combinations may be demonstrated at a glance,—and one in which the changes for new combinations may be most easily and quickly effected, (and without lia-25 bility of soiling the faces of the color disks employed,) and in which, when the new arrangements are effected, they will be secure against accidental derangement, and all as will become more apparent from the descrip-30 tion and explanations hereinafter given.

To the ends set forth the invention consists in constructions and combinations of parts all substantially as below specified and pointed

out in the claim.

Reference is to be had to the accompanying

drawings, in which-

Figure 1 is a plan view of the top showing portions of the color disks broken away to expose an underlying portion of the graduated circular card-board which constitutes the body of the top. Fig. 2 is an elevation of the top with an indication of the manner of removing the clamping collar, or nut. Fig. 3 is a perspective representation of the stem and point or peg of the top, and of the clamping collar detached. Fig. 4 is a horizontal section taken on the line 4—4, Fig. 2.

In the drawings, A represents the stem of the top having at its lower end the conical ensurement, B, the apex of which forms the point or peg, a, while the upper part consti-

tutes the shoulder, or rest, b, for the card-board body, C. The stem is slightly tapered toward its upper end, and is preferably turned out of wood integrally with the said lower end en- 55 largement. The card-board body, C, is in the form of an annulus fitted by its central hole over the base of the stem, its efficient support being had upon said rest, b. The upper marginal face of the body, C, has the series of ra- 60 dial graduations, x, which may be divisional of the perimeter of the body into fractional sections including any number or degrees, or

percentages of the perimeter.

d drepresent the color disks or annuli which 65 are made of thin paper, a suitable number being provided, as for instance, one each of red, yellow, blue, green, orange, violet, black and white. These are slit, as seen at d^2 , so that in being placed about the stem and at 70 rest upon said body, C, the leaf, or portion, next to the radial slit of one of the color disks comprising a greater or lesser segment of the whole may be slid through the slit of another disk so as to be overlaid by the portion there-75 of at one side of its slit, and in this manner segments of two or more of the color disks may be exposed. These, when set as desired, are held firmly in place by the clamping collar, D, which is of wood and is pressed with 80 a friction-tight fit about the base of the stem, next above the enlargement, B, so that its lower end face bears and binds the disks against the body, and the latter against the seat, b, therefor.

The spinning of the top imparts the color blending rotation to the clamped disks so that a new resultant color, shade, or tint, is produced, all as will be understood by persons familiar with the well known Maxwell color 90 rotating machine, or the principle thereof.

It will be noted that the clamping collar has the peripheral bead, or enlargement, f, at its upper end. This has been found quite important and valuable as it enables the person 95 to so grasp the collar for its removal that only the nails of the forefinger and thumb rest upon the upper face of the disk or disks, while the balls of the finger and thumb have a rest against and under the said bead whereby a 100 lever action may be insured by such digits between and against the upper face of the top

and the collar for loosening the latter from its clamping bind. Therefore the faces of the disks will not become soiled or blurred, and, furthermore, as no twisting motion is necessary upon the collar to release it, the disks will not become gouged, torn, or ruptured.

The clamping collar engages the stem of the top by friction, and does not screw onto said stem. Thus the collar may be lifted or pressed to down without such a rotating movement as would tend to disturb the relation of the color disks.

With a color rotating machine in the hands of a teacher, and a color top in the possession of each pupil, a rudimentary instruction in color combinations may be readily induced, while the novelty and attractiveness of the device will immediately awake an unusual in-

terest in the subject of color effects among persons of all ages.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

The top for exhibiting colors, consisting essentially of the stem with the enlargement 25 and point, the disk supported on said enlargement in position to support the colored sheets, and the clamping collar having a central perforation which slides vertically and engages by friction with the stem, said collar having 30 an enlargement at its upper end, substantially as described.

MILTON BRADLEY.

Witnesses:

WM. S. BELLOWS, K. I. CLEMONS.