

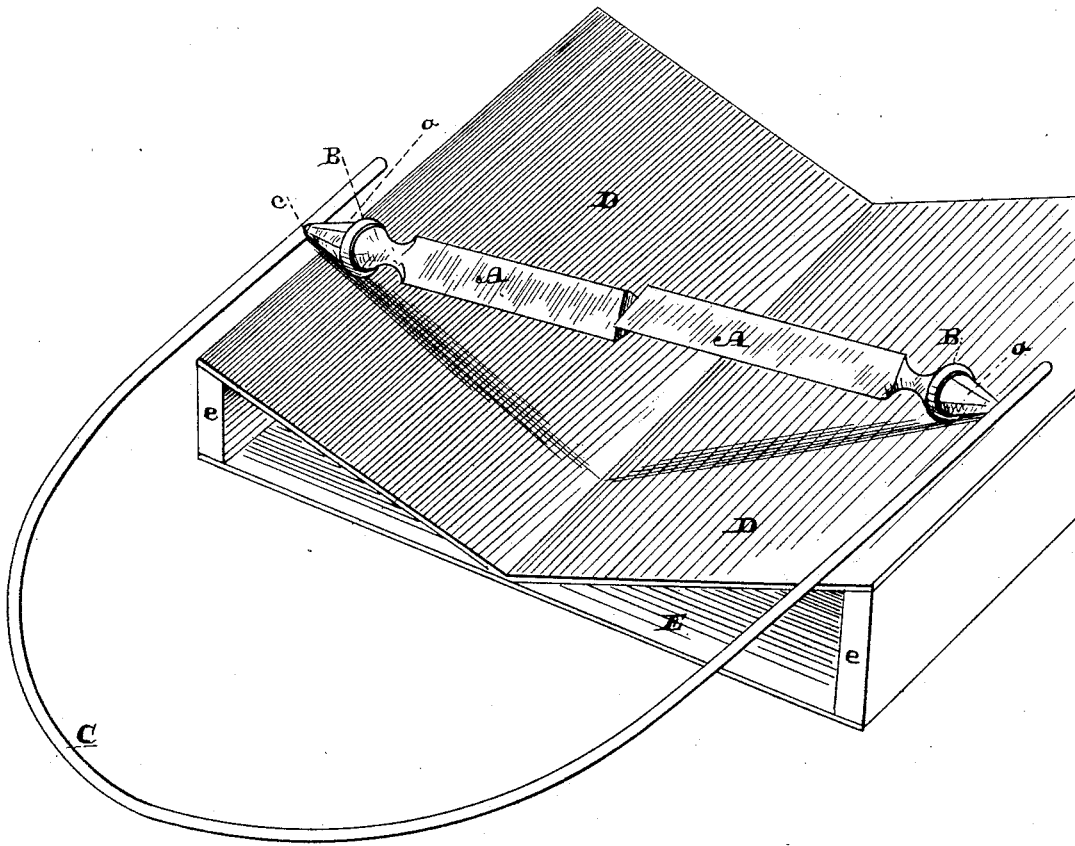
(No Model.)

S. S. BUTLER.

PRISMATIC TOY.

No. 301,562.

Patented July 8, 1884.



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UNITED STATES PATENT OFFICE.

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PRISMATIC TOY.

SPECIFICATION forming part of Letters Patent No. 301,562, dated July 8, 1884.

Application filed January 7, 1884. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL S. BUTLER, of Los Gatos, in the county of Santa Clara and State of California, have invented an Improvement in Prismatic Toys; and I hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to a new and useful toy in which a prism is adapted to refract the rays of light and throw them in widely-distributed and varying prismatic colors.

My invention consists in a prism having formed near each end suitable wheels or rolling surfaces, and properly mounted or journaled in a frame or handle, whereby it may be rolled along over an opaque surface, or over a peculiarly-arranged mirror or reflecting-surface.

The object of my invention is to provide a toy which shall combine instruction with amusement.

Referring to the accompanying drawing, the figure is a view of my prismatic toy.

A is a prism having conical ends *a*. Near each end is a wheel or rolling surface, B. This may be formed by attaching to the prism an annular band of suitable material; but I prefer to have it fashioned, with the prism, of glass, either in the first casting, molding, or cutting, or subsequently by the attachment of a glass band.

C is a frame or handle in the shape of a bail. Near the ends of this are formed sockets *c*, into which the ends or points *a* of the prism are inserted. The sockets thus serve as bearings, while the ends *a* serve as journals, whereby the prism is mounted in the frame, and may be rolled along on its rolling surfaces B, turning on its own axis. When thus handled in the sunlight, the prismatic colors are thrown about and are constantly moving. The best place in which to observe the effect is in a darkened apartment, the prism being rolled on a window-sill, upon which the rays of light fall.

It will be observed that the prism which I here show is a novel one, in that the angles or apexes of its sides are not continuous throughout its length, but are broken at the center, and are set at an angle or out of line with

each other. The effect of this is to divide the prism into two, causing a break in the colors and a succession and greater variety of the spectra. The break in the prism may be the result of two separate prisms joined at a suitable angle; or the prism may be thus made integral originally.

Although I have shown but one prism, I do not confine myself to that number, but may mount several in the handle, and thus roll them simultaneously to produce a more varied result.

My invention contemplates, in connection with this prism, the employment of a mirror or reflecting-surface, over which the prism is rolled, whereby the spectra are increased and rendered more interesting. This mirror, which I designate by D, may be a plane surface; but I prefer, for better effect, to make it, as shown, of pieces set at an angle, and supported suitably, as by the sides *e* of a box, E. This box may be also used for packing the toy. A strip of reflecting material might also be laid flat between the side pieces; or a greater number could be used to increase the reflecting capacity of the toy.

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

1. In a toy, the prism A, having wheels or rolling surfaces B near each end, whereby it may be rolled along in the light, substantially as and for the purpose herein described.

2. In a toy, the prism A, having wheels or rolling surfaces B near each end, in combination with a suitable frame having bearings, in which the prism is journaled, whereby said prism may be revolved on its axis by traveling on its rolling surfaces, substantially as herein described.

3. In a toy, the prism A, having wheels or rolling surfaces B near each end and conical or pointed ends *a*, in combination with the bail or handle C, having sockets *c*, in which the ends of the prism are journaled, substantially as and for the purpose herein described.

4. In a toy, the prism A, having the apexes of its sides broken and set at an angle or out of line, as shown, said prism having wheels or rolling surfaces B near each end, in combina-

tion with a handle-frame, in which said prism is mounted, and by which it is rolled, substantially as herein described.

5 5. In a toy, the prism A, having wheels or rolling surfaces B near each end and the handle or bail C, in which it is journaled, in combination with a mirror, upon which the wheels B travel, substantially as herein described.

10 6. In a toy, the prism A, having wheels or rolling surfaces B near each end and the han-

dle or bail C, in which it is journaled, in combination with the angled mirror D, upon which the wheels B travel, substantially as herein described.

In witness whereof I have hereunto set my hand.

SAMUEL S. BUTLER.

Witnesses:

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