A. JEDEL.

PYROTECHNICAL TOY.

APPLICATION FILED JAN. 18, 1913.

1,067,520. Patented July 15, 1913.

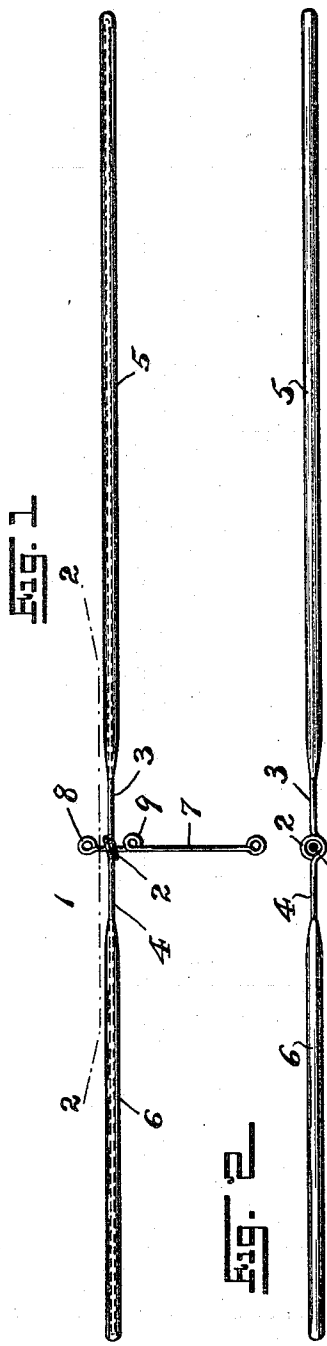


Fig. 1

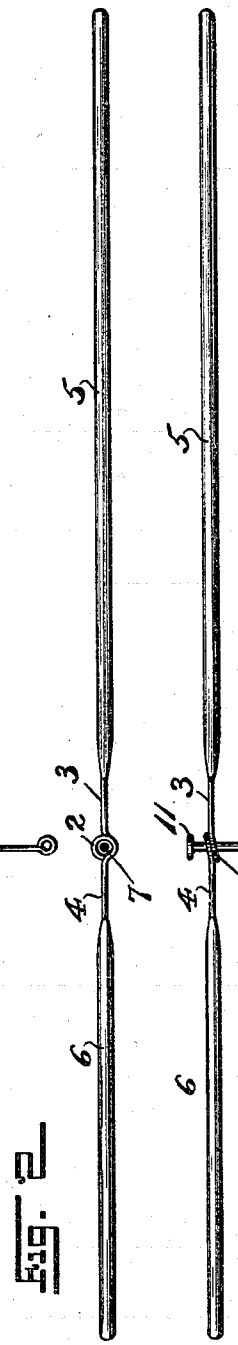


Fig. 2

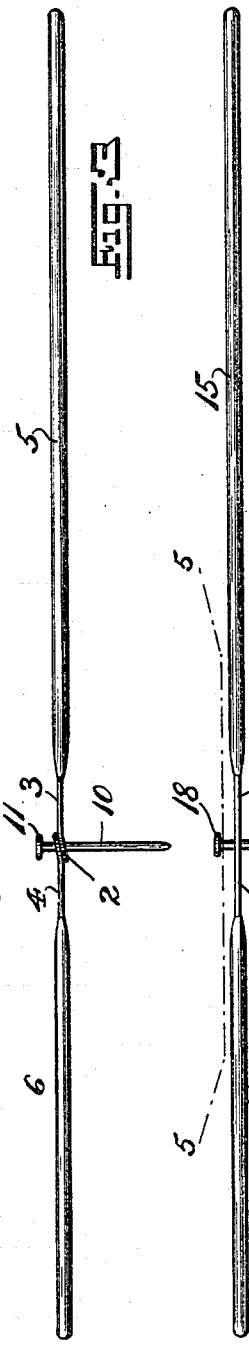


Fig. 3

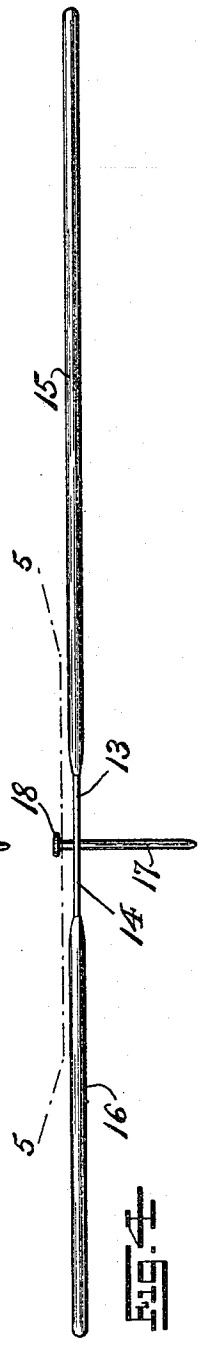


Fig. 4

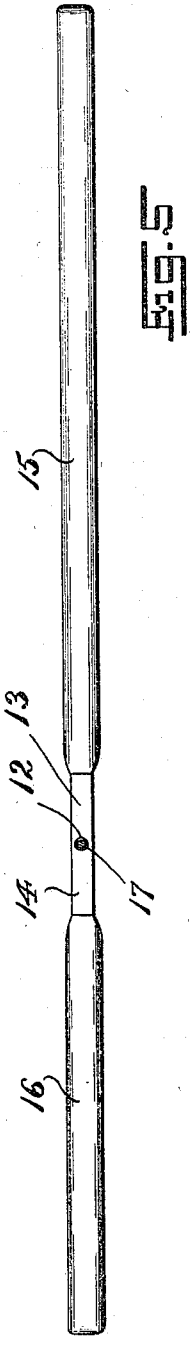


Fig. 5

WITNESSES:

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PYROTECHNICAL TOY.

1,067,520. Specification of Letters Patent. Patented July 15, 1913.

Application filed January 18, 1913. Serial No. 742,779.

To all whom it may concern:

Be it known that I, AARON JEDEL, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Pyrotechnical Toys; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to characters of reference marked thereon, which form a part of this specification.

The present invention has reference, generally, to improvements in pyrotechnical toys; and the invention relates, more particularly, to a novel form of pyrotechnical toy, which is known in the art as a sparkler, and the same consists, generally, in the application of a suitable pyrotechnical composition, which when ignited produces a fire-work display, to portions of a suitable wire, reed or other support, which is rotatably connected to a stem or handle, so that, when used the device can be swung or rotated about the stem to produce variegated and double pin-wheel effects.

The present invention has for its principal object to provide a novel and simple pyrotechnical toy of the general character hereinafter more particularly described, and which can be easily and readily manipulated and safely handled during the ignition of the pyrotechnical composition.

Other objects of this invention not at this time more particularly enumerated will be clearly understood from the following detailed description of the same.

The invention is clearly illustrated in the accompanying drawings, in which:—

Figure 1 is a side elevation of the novel pyrotechnical toy, illustrating one embodiment of the present invention; and Fig. 2 is a horizontal section of the same taken on line 2—2 in said Fig. 1, looking downward. Fig. 3 is a side elevation of the novel pyrotechnical toy, illustrating a slightly modified construction of handle or stem element for rotatably mounting the same. Fig. 4 is another side elevation of the novel pyrotechnical toy, illustrating the pyrotechnical composition mounted upon a reed base instead of wire; and Fig. 5 is a horizontal section of the same taken on line 5—5 in said Fig. 4, looking downward.

Similar characters of reference are employed in all of the above described views to indicate corresponding parts.

Referring now to the said drawings, the reference character 1 indicates the complete pyrotechnical toy embodying the principles of the present invention, and the same comprises a suitable rod of wire or strip of metal which is provided at a point between its ends with a loop or ring-portion 2, forming an eye-member, which is so located with relation to its distance from the respective ends of said rod or strip as to provide a long arm 3 extending in one direction from said eye-member, and a short arm 4 extending in the opposite direction from said eye-member. The said long arm 3 of said rod or strip is coated with a pyrotechnical compound or mixture 5, and said short arm 4 is, in like manner, coated with a pyrotechnical compound or mixture 6. The respective coatings 5 and 6 of pyrotechnical compound or mixture, may be compounded to produce the same pyrotechnical effect when ignited, but I prefer, and consider it a part of my invention, to so compound the respective coatings 5 and 6 of pyrotechnical compound or mixture, that they will respectively produce a different pyrotechnical effect when ignited, for example, one coating may be adapted to produce a star shaped sparkle or emanation, whereas the other coating may be adapted to produce what is known as the chrysanthemum shaped sparkle or emanation; and it will also be understood that coloring matter may be introduced into the compound or mixture so as to produce a variegated color effect. It will also be understood that the respective coatings may be, if desired, so compounded that the coating of the short arm will burn somewhat slower than the coating of the long arm, so that the difference in length of the arms and their coatings will be compensated for in relation to the period of ignition. Such an arrangement would still maintain the general effect of the double pin-wheel which my invention seeks to produce. A further variation of the construction, still producing the effects desired, would be to make one of the two coatings of the compound heavier or of greater volume than the other. The said loop or ring-portion 2 forming the eye-member is loosely arranged over a suitably formed stem or handle member 7 which passes through said eye-member so as to be

vertically disposed with relation to the said arms 3 and 4 of the rod or strip. Formed in said stem or handle member 7 are loops or ring-portions 8 and 9, located respectively above and below the eye-member of the rod or strip. Said loops or ring-portions 8 and 9 are adapted to provide stop portions which prevent undue lateral movement or accidental displacement of the rod or strip from its assembled or connected relation with said stem or handle member, but which will not prevent the rotary or swinging movement of the former upon the latter.

Instead of providing the construction of stem or handle portion shown in Figs. 1 and 2 I may provide, a stem or handle member 10 provided with a head 11, as shown in Fig. 3 of the drawings, the said eye-member being loosely or pivotally associated with said stem or handle member 10 so that the arms will rotate, but are prevented by the head 11 from flying off of said stem or handle member 10.

Referring now to Figs. 4 and 5 of the accompanying drawings, I have illustrated a slightly modified construction of my present invention, but still embodying the principles thereof. In this construction I take a rod or strip of reed, bamboo, or some similar material and provide the same with perforations 12 so located as to provide the oppositely extending arms 13 and 14. The said respective arms are then provided with their respective coatings 15 and 16 of a suitable pyrotechnical compound or mixture. A suitable stem or handle member 17 is then inserted through said perforation 12, so that said arms are rotatably associated therewith, and said stem or handle member 17 is provided with a suitable head 18 which maintains said arms in rotatable relation to said stem or handle-member when the device is operated.

The manner of using the device is as follows; the coating of pyrotechnical compound of the respective arms are ignited at their free ends, and then by a swinging motion of the handle-member the said arms are caused to swing or rotate thereon so that the respective ends of the burning coatings will describe an inner and outer circle of light modified by the peculiar sparkling emanations of the particular pyrotechnical compound, thus producing a delightful and pleasing sight, after the manner or in the form of a double pyrotechnical pin-wheel.

Of course I am aware that changes may be made in the general arrangements and combinations of the parts, as well as in the details of the construction of the same, without departing from the scope of my present invention as defined in the claims which are appended to this specification. Hence, I do not limit my invention to the exact arrangements and combinations of the parts as described in the foregoing specification and as illustrated in the accompanying drawings, nor do I confine myself to the exact details of the construction of any of the said parts.

I claim:—

1. A pyrotechnical toy comprising a rod provided with an eye-member so located between the ends of said rod as to divide the same into oppositely extending arms of unequal length, a handle-member adapted to be inserted through said eye-member to rotatably mount said rod thereon, means connected with said handle-member for preventing the accidental displacement of said rod therefrom comprising loops projecting from said handle-member and extending upon opposite sides of said eye-member, and a coating of pyrotechnical compound upon each arm.

2. A pyrotechnical toy comprising a rod provided with an eye-member so located between the ends of said rod as to divide the same into oppositely extending arms of unequal length, a handle-member adapted to be inserted through said eye-member to rotatably mount said rod thereon, means connected with said handle-member for preventing the accidental displacement of said rod therefrom, a coating of pyrotechnical compound upon one arm adapted to produce one pyrotechnical effect, and a coating of pyrotechnical compound upon the other and opposite arm adapted to produce a different pyrotechnical effect.

3. A pyrotechnical toy comprising a rod bent between its ends to form a ring-like eye-member from which extends in one direction a short-arm and in another direction a long arm, a handle-member adapted to be inserted through said eye-member to rotatably support said arms, stop-portions formed in said handle-member upon each side of said eye-member to prevent lateral movement and displacement of said rod from said handle-member, a coating of pyrotechnical compound upon said short arm adapted to produce one pyrotechnical effect, and a coating of pyrotechnical compound upon said long arm adapted to produce a different pyrotechnical effect.

In testimony, that I claim the invention set forth above I have hereunto set my hand this fourteenth day of January, 1913.

AARON JEDEL.

Witnesses:
J. D. LOONEY,
F. C. KENNEDY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."