March 3, 1936. E. H. DAMMEYER 2,032,871

TOY

Filed May 15, 1935

Fig. 1.

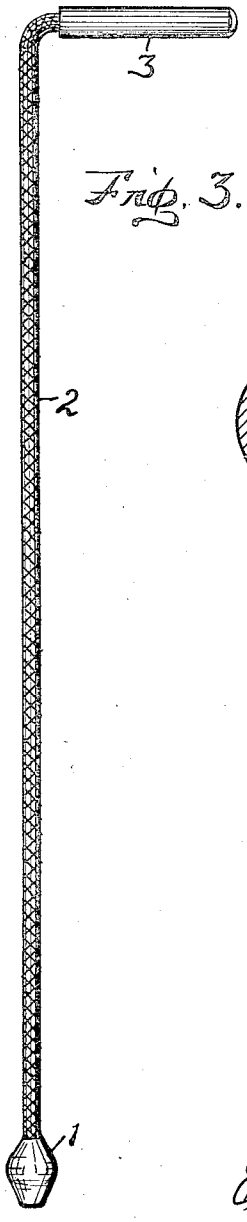


Fig. 3.

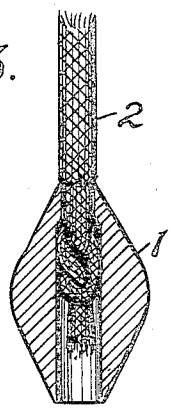
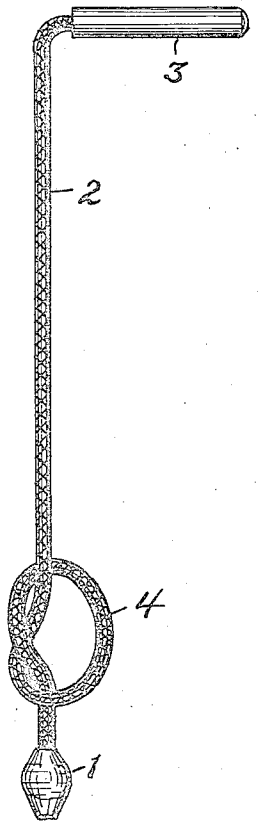


Fig. 2.



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Patented Mar. 3, 1936 2,032,871

UNITED STATES PATENT OFFICE

2,032,871

TOY

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Application May 15, 1935, Serial No. 21,594

1 Claim. (Cl. 46—1)

This invention relates to improvements in a toy having in part the characteristics of a plumb-bob, and an object thereof is to afford an amusement device requiring exercises of dexterity in its manipulation. Another object is to so construct the toy as to facilitate manipulation and to insure safety in its operation. Other objects and advantages of the invention will appear in the following description.

An illustrative embodiment of the invention is shown in the accompanying drawing, in which:—

Fig. 1 is a side elevation of a structure in which the invention is embodied, shown in normal position for commencement of its operation;

Fig. 2 is a similar view of the toy as it appears upon completion of its operation; and

Fig. 3 is a fragmentary elevation of the plummet and its rope, the plummet being in section.

The illustrated embodiment of the invention consists of a plummet 1 preferably formed of yielding material, such as rubber or other substance of similar weight and resilience so that danger of breaking fragile objects or injuring one's person, if accidentally struck by the plummet, is negligible. Preferably, the plummet is so shaped as to taper from its middle portion inwardly toward each end.

The plummet 1 is secured in any suitable manner to one end of a length of rope 2, and the opposite end of the rope has secured thereto a handle 3 so that the rope extends axially from one end of the handle. The rope preferably is formed of soft, pliant strands braided loosely together to accentuate bulkiness of the rope body and so that when torque is applied to the rope selectively in either direction, angularly with respect to its axis, the strands of the rope will not become disarranged and are sufficiently tense as to insure turning of the rope responsively to torsional movement manually imparted to the handle in either direction so that corresponding movement selectively is applied to the plummet. Thus, when the plummet and its rope are suspended from the handle as a pendulum the rope normally assumes a neutral limp state without inherent tendency to unwind or twist angularly in either direction.

Operation

In operation, the handle is grasped by the operator whereby the plummet and its cord are held suspended so as to swing pendently from the handle. While the plummet and its rope are held dangling from the handle the operator, by applying a quick movement in the direction away from the plummet, followed by a second movement in a spiral direction toward the plummet, and simultaneously therewith rotating the handle axially, the rope becomes slackened and a complete coil of the rope is formed through which the plummet is encompassed, thus forming a loosely coiled knot 4 in the rope as indicated in Fig. 2.

An essential feature of the invention resides in the character of the rope 2 which is peculiar because of its bulkiness whereby when the knot 4 is formed in normal operation of the toy, the loop of the knot remains open which permits the plummet to enter or be withdrawn readily through the loop to undo the knot. Also, as the strands of the rope are braided instead of twisted together, as an ordinary cord is made, the braided rope tends to coil when the handle is rotated in either direction.

Another characteristic feature of the invention is in the peculiar shape of the plummet 1 which preferably is shaped to have conical top and bottom portions that taper respectively from the middle of the plummet inwardly toward the corresponding ends thereof. By thus shaping the plummet its passage through the loop of the knot as the knot is either being formed or undone is greatly facilitated.

Successful operation of the toy is accomplished by skill upon the part of the operator which only is acquired by considerable practice since the several movements during manipulation of the handle must occur in proper sequence and be timed with precision.

Characteristic features of the invention are the peculiar structure of the rope which is so formed that upon axial turning movement of the handle the plummet is caused to rotate upon its axis accordingly, and the plummet is tapered inwardly especially its free end so as to permit it to readily enter a loop formed in a rope, its entrance being aided because the plummet is revolved due to the torque of the rope as the loop is formed, the rotation being in the direction to cause the plummet to roll against the rope and into the loop.

I claim:—

A toy comprising a rope having a handle secured to one of its ends and a plummet secured to its other end, said plummet having a tapered free end, said rope being of considerable stiffness and so formed that when suspended with the plummet at its lower end assumes a substantially neutral limp state without inherent tendency to twist angularly in either direction, the stiffness of the rope being of such degree that permits the transmission of a torque axially thereof when the handle is moved to varying positions.

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