No. 742,397. PATENTED OCT. 27, 1903.

W. S. DAY.

PUZZLE.

APPLICATION FILED MAY 20, 1903.

NO MODEL.

Fig. 1.

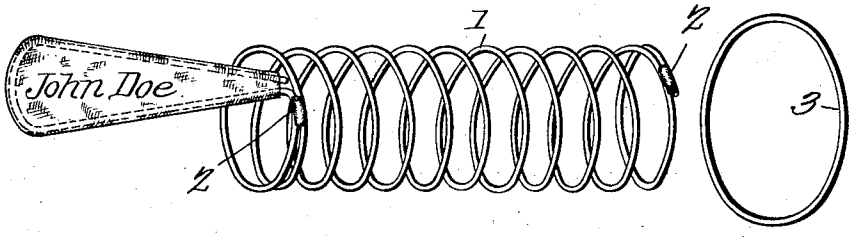


Fig. 2.

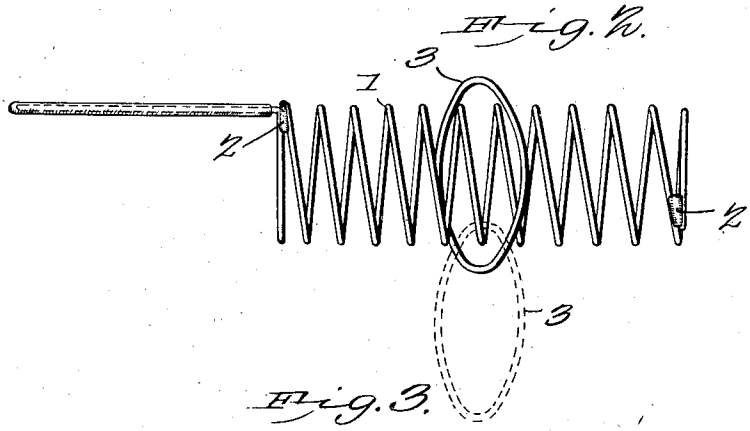
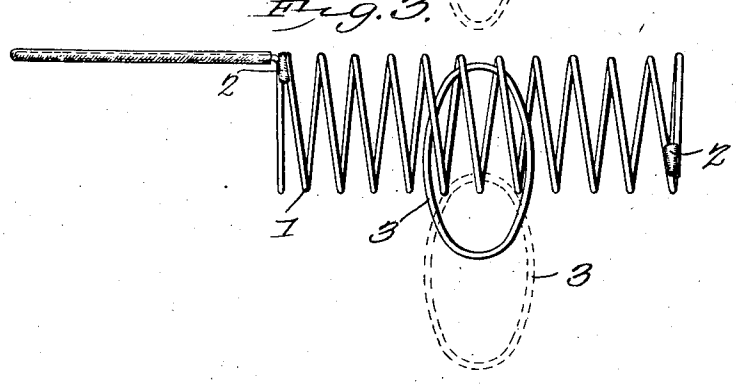


Fig. 3.



Witnesses
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 742,397. Patented October 27, 1903.

UNITED STATES PATENT OFFICE.

WILL SUMNER DAY, OF SPOKANE, WASHINGTON.

PUZZLE.

SPECIFICATION forming part of Letters Patent No. 742,397, dated October 27, 1903.

Application filed May 20, 1903. Serial No. 158,032. (No model.)

To all whom it may concern:

Be it known that I, WILL SUMNER DAY, a citizen of the United States, residing at Spokane, in the county of Spokane and State of Washington, have invented a new and useful Puzzle, of which the following is a specification.

This invention relates to that class of toys which are known as "puzzles," and specifically to that class of puzzles which are composed of separate parts or members, the puzzle consisting in so connecting said members that apparently they may not be disconnected without resorting to force, while when disconnected they may not apparently be restored to what would appear to be a permanently-connected condition.

The invention consists of a coil or helix, one end of said coil being extended to form a loop or handle whereby the coil may be held while the device is being manipulated, and in the combination with said coil of a ring to be connected therewith, substantially as will be hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a perspective view illustrating the coil and ring of my puzzle separated from each other. Fig. 2 is a front view showing the ring passed over the coil and with dotted lines indicating its position supported by one of the coils of the helix. Fig. 3 is a front view, with dotted lines indicating the position of the ring after it has been twisted so as to make this removal apparently impossible, and with full lines showing how the said ring when raised in the act of attempting its removal will be intercepted by the opposing coils of the helix.

Corresponding parts in the several figures are indicated by similar numerals of reference.

1 designates a helical spring, the ends of which are made fast to the coils adjacent thereto by means of solder or in any other suitable manner, as shown at 2. The wire of which the spring is formed is extended beyond one of the end coils and bent upon itself to form a loop 3, which is disposed approximately at right angles to the coil of the spring, the end of said loop being made fast to the end coil by means of the solder 2 which fastens the said end coil. The loop 3 is of a convenient size and shape to form a handle by means of which the spring or helix may be held and exposed to an audience while the trick is being performed. This forms the one member of my improved puzzle. The other member thereof is formed by a ring 4 of slightly larger diameter than the coils of the helix. Brass wire or any other suitable material may be employed in the construction of the members of my device.

To connect the members, the helix is passed partially through the ring, as shown in Fig. 2, and the ring is then dropped to the position shown in dotted lines in said figure. It is obvious that while the ring is thus suspended by one of the coils of the helix it may be readily removed by simply raising it to the position shown in full lines, when the helix may be withdrawn through the ring.

To so connect the members as to make their separation apparently impossible, the ring 3, after being dropped to the position shown in dotted lines in Fig. 2, is given a half turn or twist, causing it to occupy the position shown in dotted lines in Fig. 3, when the sides of said ring will be engaged by the adjacent coils of the helix to the coil which supports it, so that when the said ring is raised in the act of attempting its removal to the position shown in full lines in Fig. 3 it will be intercepted by said adjacent coils and its removal apparently be rendered impossible. If it is attempted to remove the ring by following the coils of the helix to either end of the latter, the removal of said ring will be prevented, owing to the ends of the helix being fastened, as shown at 2 2. The puzzle is solved by discovering the only way of removing the ring—namely, giving it a reverse half twist or turn, restoring it to the position shown in Fig. 2 of the drawings.

The loop 3, which constitutes the handle of the device, may be utilized for advertising purposes by providing it with a covering (indicated at 5) of strong paper, thin leather, parchment, or other suitable material, which may be attached thereto in any suitable and convenient manner. The space thus formed, while not of great extent, may be profitably used as an advertising-space. The cost of production of the puzzles is so moderate that

it may be found profitable to manufacture the same for gratuitous distribution, the profits being derived from the disposal of the advertising-space.

Having thus described my invention, I claim—

A puzzle comprising, in combination with a ring, a helical spring having its ends permanently connected with the adjacent coils, a loop extending from one of said coils, and a covering for said loop adapted to receive an imprint for advertising purposes.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WILL SUMNER DAY.

Witnesses:
F. B. GREGG,
WM. A. TABB.