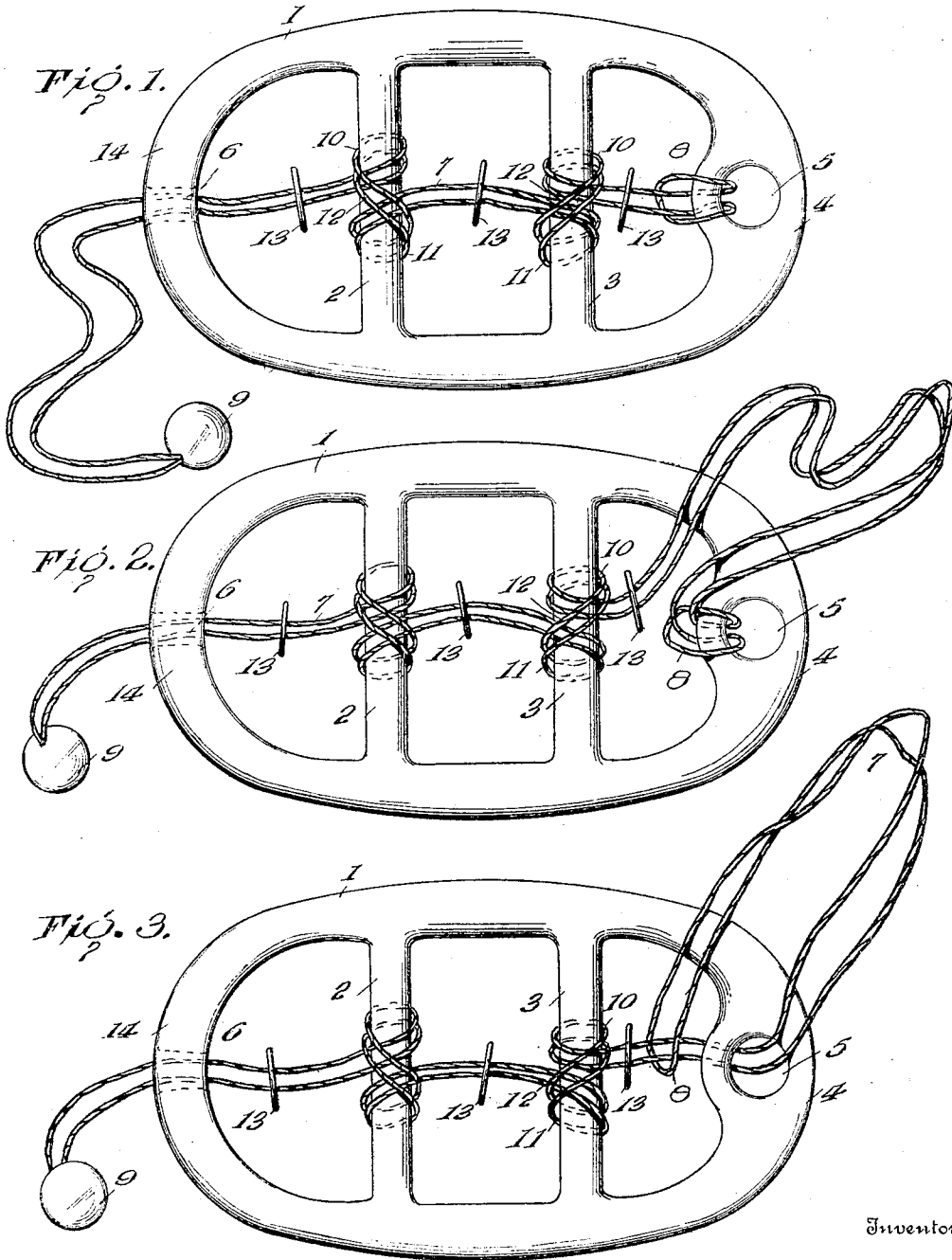


B. SILFA.
PUZZLE.

APPLICATION FILED APR. 25, 1905.

2 SHEETS—SHEET 1.



Inventor

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Witnesses

J. Amie
W. N. Woodson

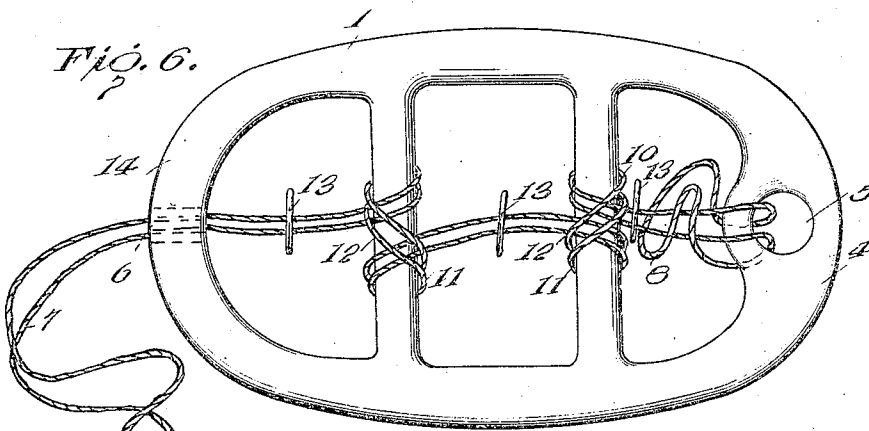
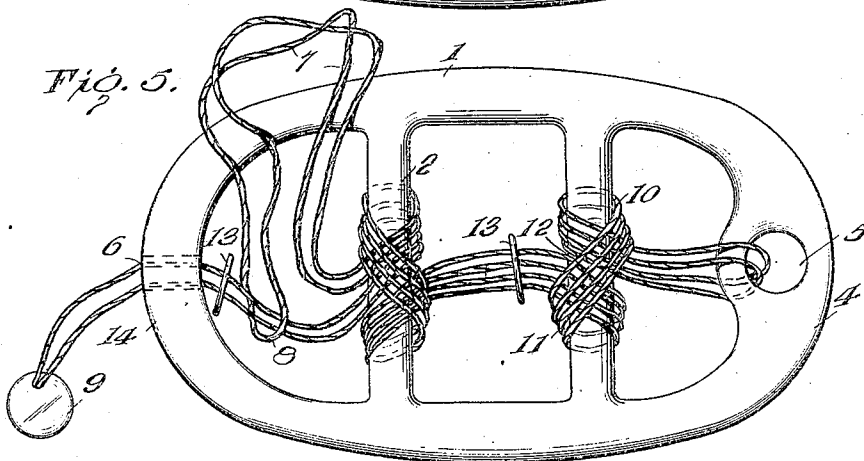
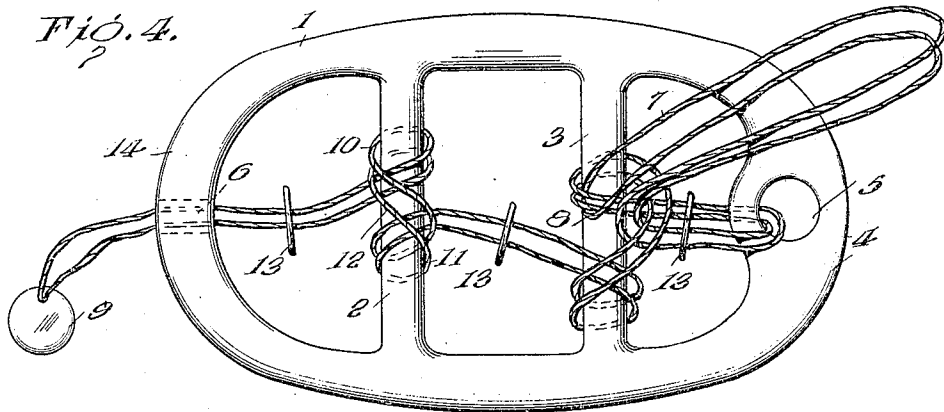
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B. SILFA.
PUZZLE.

APPLICATION FILED APR. 25, 1905.

2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

BELISARIO SILFA, OF COLUMBUS, OHIO.

PUZZLE.

No. 801,406.

Specification of Letters Patent.

Patented Oct. 10, 1905.

Application filed April 25, 1905. Serial No. 257,334.

To all whom it may concern:

Be it known that I, BELISARIO SILFA, a citizen of Santo Domingo, West Indies, residing at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Puzzles, of which the following is a specification.

This invention relates to a puzzle, the same comprising a frame having a series of cross-bars, a cord having one end passed loosely through an eye or opening in an end bar of the frame and having its other end connected by a slip-knot to the opposite end of the bar of the frame and having the intermediate portion connected with intermediate cross-bars of the frame by two half-hitches in a manner similar to a clove-hitch, and rings or like devices loose upon the parts of the cord between the end and cross bars of the frame, the loose end of the cord having a ball or like object to prevent its passage through the eye or opening in the proximal end bar of the frame.

The invention also consists of the novel structural features, which hereinafter will be more particularly set forth, illustrated, and finally pointed out in the appended claims.

In the accompanying drawings, forming a part of the specification, Figure 1 is a detail view of a puzzle constructed in accordance with this invention and as it appears preliminary to its solution. Fig. 2 is a view similar to Fig. 1, showing the first step in the solving of the puzzle. Fig. 3 shows the bight or loop after being passed through the eye or opening formed in the end bar of the frame, to which the cord is attached by means of a slip-knot. Fig. 4 shows a further step in the solving of the puzzle, the loop of the cord having been passed under the stand of the first half-nitch and in the act of being passed around the latter. Fig. 5 shows the loose portion of the cord passed around the cross-bars of the frame and conforming to the half-hitches thereon and in the act of passing through the opening or eye formed in the opposite end bar of the frame. Fig. 6 shows the first step in the operation of replacing the cord after the puzzle has been solved by removing the cord and rings from the frame.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The frame 1 may be of any formation and constructed of any material, such as metal, wood, paper, or any composition. In the pref-

erable construction the frame 1 is of elliptical or oblong formation and comprises a series of intermediate cross-bars 2 and 3. An end bar of the frame, as 4, is widened at a central point and formed with a transverse opening or eye 5. The opposite end bar is provided with an eye or opening 6, which is preferably in the plane of the frame, whereas the opening or eye 5 is in a plane at a right angle to the frame. The number of cross-bars may be varied according to the intricacy of the puzzle, it being understood that the difficulty encountered in solving the puzzle is increased according to the number of cross-bars.

The cord 7 is preferably doubled upon itself, so as to provide a loop or bight 8 at one end, the opposite end being provided with a ball 9 or like object of sufficient size to prevent its passage through the eye or opening 6 and to give a finished appearance to the loose ends of the cord and provide positive connecting means therefor. The loop or bight 8 is passed through the eye or opening 5 and connected with the end bar 4 by means of a slip-knot. The opposite end portion of the cord is passed loosely through the eye or opening 6 in the end bar 14. The cord is connected with each of the cross-bars in a similar manner, as by means of half-hitches 10 and 11, the same passing under the stand 12 in opposite directions and forming what is known as a "clove-hitch." A ring 13 or like object is loosely mounted upon the cord between the cross-bars and between the latter and the end bars of the frame. The puzzle when in condition to be solved appears substantially as shown in Fig. 1.

In the solution of the puzzle the loose end portion of the cord is taken up so as to appear at the end of the frame provided with the eye or opening 5, as shown most clearly in Fig. 2. The loop or bight 8 is passed along the cord, as indicated in Fig. 3, thence under the stand of the clove-hitch of the cross-bar 3 and around the half-hitches 10 and 11, thence around the cross-bar 2, following the half-hitches in a manner similar to the operation described in connection with the clove-hitch applied to the cross-bar 3. The loop is then passed through the opening 6 and around the end of the cord provided with the ball 9 and is drawn back through the opening 6 and around the cross-bars 2 and 3 and back through the opening 5, when it will be found free and may be readily disconnected from the cross-bars 2 and 3 in the manner well understood. It is to be understood that the loop is passed through each of

the rings or objects 13 before following the path of the half-hitches around the cross-bars in order to clear and release said rings in the solving of the puzzle.

5 To replace the cord and rings after the puzzle has been solved, the loop or bight 8 of the cord is passed through the opening 6, thence around the cross-bars 2 and 3 in succession to form the clove-hitch thereon, thence through
10 the eye or opening 5, as indicated in Fig. 6, after which the path of the clove-hitch must be traversed, after which the loop 8 is passed through the opening 6, thence around the ball 9 and drawn back through the opening 6,
15 around the cross-bars and back through the eye or opening 5, when the puzzle will appear as shown in Fig. 1.

Having thus described the invention, what is claimed as new is—

20 1. A puzzle comprising a frame embodying end bars and an intermediate cross-bar, the end bars being provided with eyes or openings, and a cord having an end portion passed loosely through the opening of one end bar
25 and connected by a slip-knot at its opposite end with the other end bar of the frame and having the intermediate portion connected with the cross-bar by two half-hitches to form a clove-hitch.

30 2. A puzzle comprising a frame embodying end bars and an intermediate cross-bar, the end bars being provided with eyes or openings, a cord having an end portion passed loosely through the opening of one end bar and con-
35 nected by a slip-knot at its opposite end with the other end bar of the frame and having the intermediate portion connected with the cross-bar by two half-hitches to form a clove-hitch, and rings or like objects loosely mounted

upon the portions of the cord extending be- 40
tween the cross-bar and the end bars of the frame.

3. A puzzle comprising a frame embodying end and intermediate cross bars, and having an end bar widened and formed with a trans- 45
verse opening and having the opposite end bar provided with an opening in the plane of the frame, and a cord having a ball or like object at one end and provided with a loop at the opposite end, said cord having a slip-knot 50
connection with the widened end-bar of the frame and passed through the opening in the opposite end bar and having its intermediate portion connected with the cross-bars by two half-hitches to form a clove-hitch. 55

4. The herein-described puzzle comprising an oblong frame provided with cross-bars and having an end bar widened and formed with a transverse opening and having the 60
opposite end bar provided with an opening in the plane of the frame, a cord doubled upon itself and having the ends connected by a ball and having the bight connected with the widened end bar by means of a slip-knot, and having the opposite end portion passed loosely 65
through the opening in the other end bar, and having the intermediate portion connected with the cross-bars by means of two half-hitches to form a clove-hitch, and rings or like objects loosely mounted upon the por- 70
tions of the cord between the cross-bars and the end bars of the frame.

In testimony whereof I affix my signature in presence of two witnesses.

BELISARIO SILFA. [L. s.]

Witnesses:

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