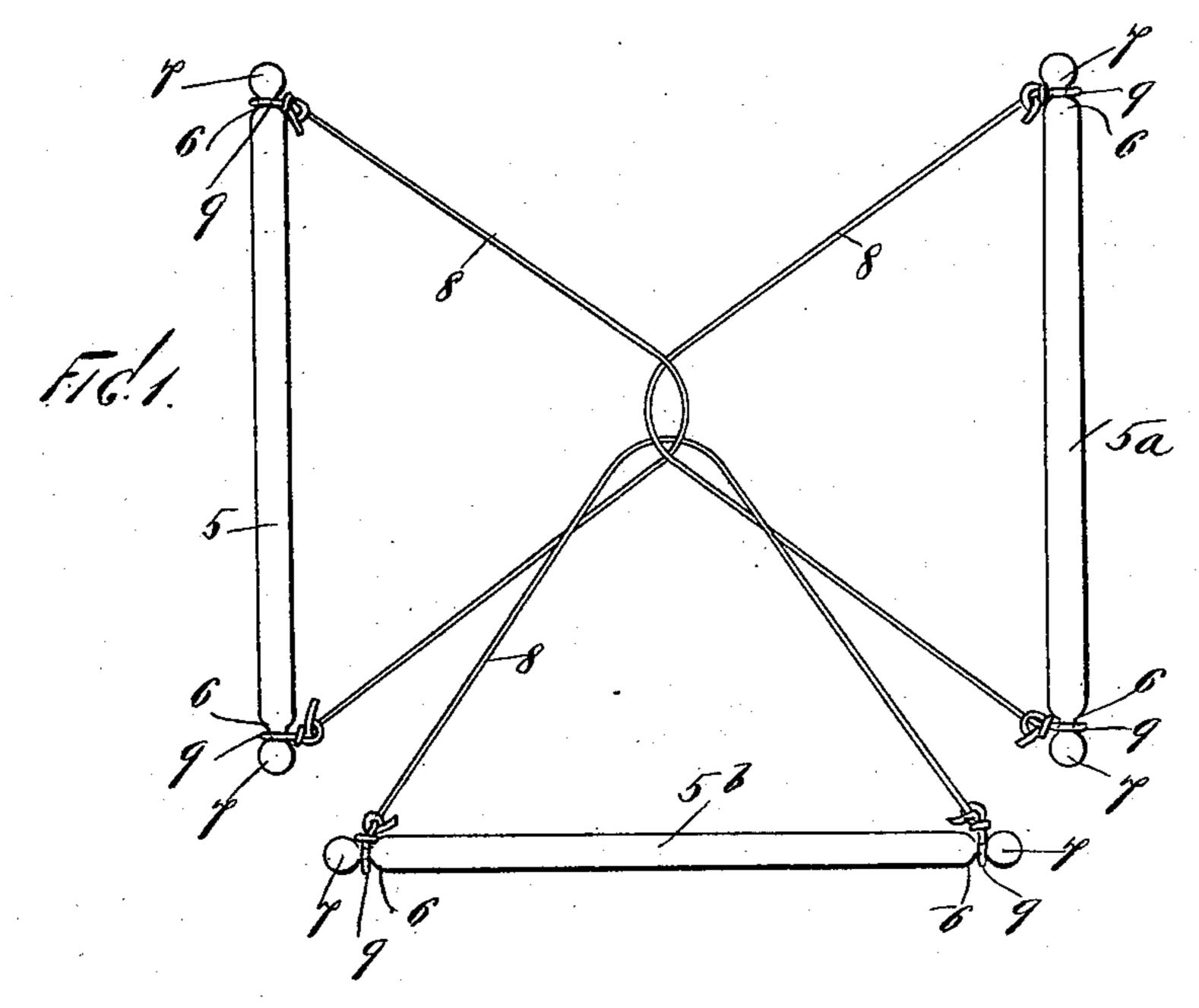
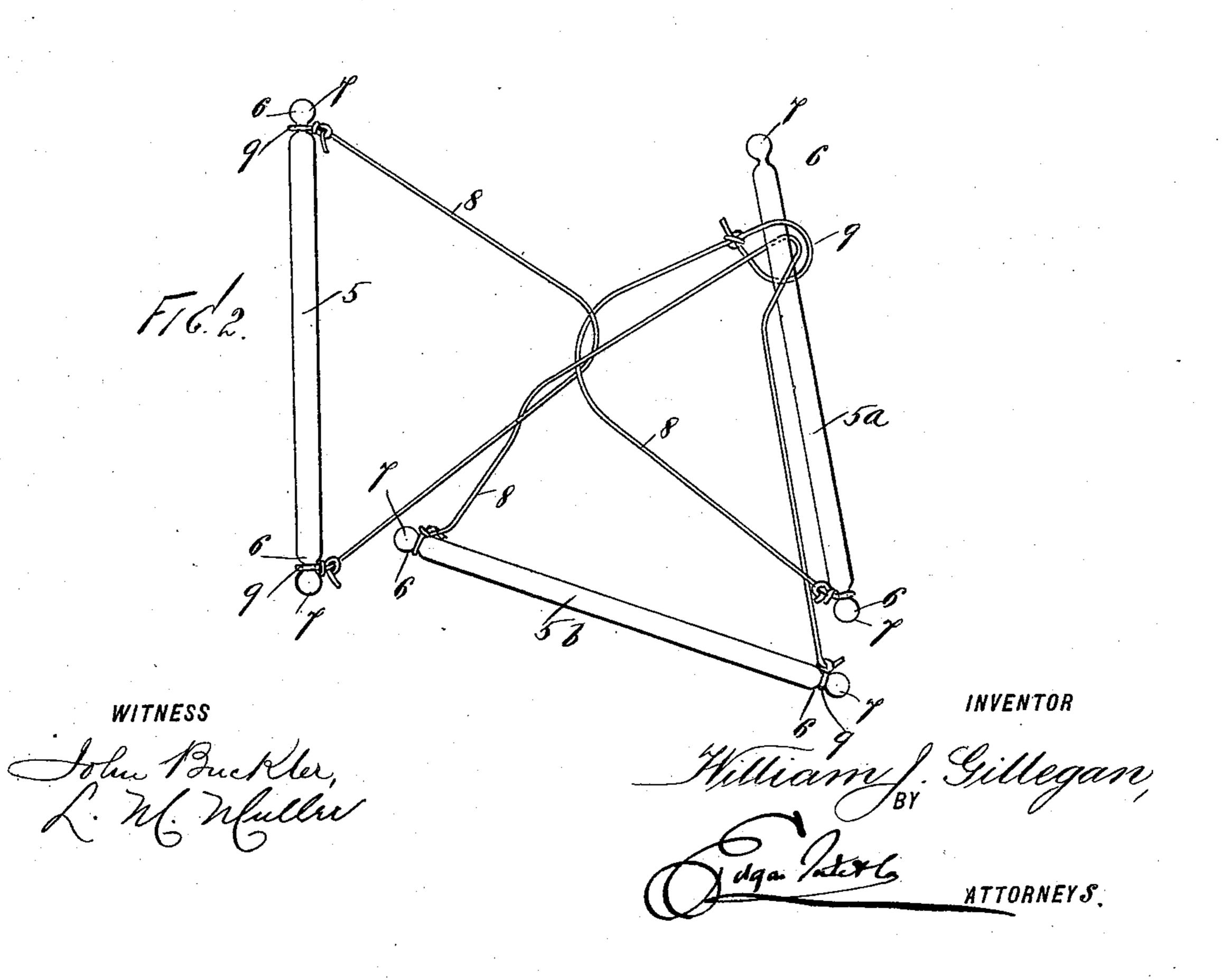
(No Model.)

W. J. GILLEGAN.
PUZZLE.

No. 592,089.

Patented Oct. 19, 1897.





## United States Patent Office.

WILLIAM JAMES GILLEGAN, OF SAILORS' SNUG HARBOR, NEW YORK.

## PUZZLE.

SPECIFICATION forming part of Letters Patent No. 592,089, dated October 19, 1897.

Application filed July 24, 1897. Serial No. 645,837. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM JAMES GILLE-GAN, a citizen of the United States, residing at Sailors' Snug Harbor, in the county of Richmond and State of New York, have invented certain new and useful Improvements in Puzzles, of which the following is a full and complete specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to puzzles; and the object thereof is to provide an improved device of this class which is simple in construction, but the solution of which is difficult, said solution being capable of accomplishment, however, by the exercise of care, skill, and ingenuity in the manipulation of the separate parts of the puzzle.

The invention is fully disclosed in the following specification, of which the accompany-

ing drawings form a part, in which—

Figure 1 is a diagrammatic view of my improved puzzle, and Fig. 2 a similar view showing one position of the separate parts theres of in the process of solving the puzzle.

In the drawings forming part of this specification the separate parts of my improvement are designated by the same numerals of reference in each of the views, and in the 30 practice of my invention I provide a puzzle consisting of three similar sticks or bars 5, 5<sup>a</sup>, and 5<sup>b</sup>, each of which is provided near its end with an annular groove 6, whereby spherical heads 7 are formed at each end of each 35 of said sticks. I also provide three similar cords or strings 8, and these cords are connected with the separate sticks 5, 5<sup>a</sup>, and 5<sup>b</sup>, as clearly shown in the drawings, by having the ends thereof tied around the sticks in the 40 grooves 6, or said strings or cords may be provided with loops 9 at their ends, through which the ends of the sticks are inserted, said loops being adapted to be drawn tight, as will be readily understood. In this opera-45 tion of connecting the strings or cords 8 with the sticks 5, 5<sup>a</sup>, and 5<sup>b</sup> said strings or cords are also formed into loops which are interlocked or passed through each other, as clearly shown in the drawings, and the solu-50 tion of the puzzle consists in separating these

sticks or in disconnecting the loops formed by the strings or cords 8 without disconnecting either of said cords from its corresponding stick. This solution is exceedingly difficult, but may be accomplished by the exer- 55 cise of care, skill, and ingenuity in the manipulation of the separate parts of the device, and in order to accomplish the same one of the loops 9 is enlarged, as shown in Fig. 2, and the corresponding stick 5<sup>a</sup> is slipped 60 partly therethrough, as is also shown in said figure, and one of the other sticks, the stick 5<sup>b</sup>, as shown in the drawings, is then passed through said last-named loop, and this operation will disconnect the string or cord con- 65 nected with the stick 5<sup>b</sup> from that connected with the stick 5°, and one of the loops by which the string or cord of the stick 5 is connected therewith is then enlarged in the same manner, and the stick 5<sup>b</sup> is passed 70 therethrough, and this operation will disconnect the stick 5<sup>b</sup>, or the string or cord connected therewith, from the strings or cords connected with the other sticks 5 and 5a, and the disconnection of the sticks 5 and 5a, or 75 the strings or cords connected therewith, will then be apparent.

This device is simple in construction and operation, and perfectly adapted to accomplish the result for which it is intended, and 80 it will be apparent that changes in and modifications of the construction herein described may be made without departing from the spirit of my invention or sacrificing its advantages.

Having fully described my invention, I claim as new and desire to secure by Letters

Patent—

1. A puzzle comprising three similar sticks, each of which is provided near its end with 90 an annular groove, and three similar cords or strings, one of which is connected with each of said sticks by means of loops formed in the ends thereof, and connected with said annular grooves, said strings or cords being 95 adapted to be connected or interlocked, substantially as shown and described.

2. A puzzle comprising three similar sticks, each of which is provided near the opposite ends thereof, with an annular groove, and 100

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three similar strings or cords, the ends of which are provided with loops by means of which they are connected with said sticks, said strings or cords being also formed into loops which are interlocked, substantially as shown and described.

In testimony that I claim the foregoing as

my invention I have signed my name, in presence of the subscribing witnesses, this 21st day of July, 1897.

WILLIAM JAMES GILLEGAN.

Witnesses:

HERMAN GANSON, WILLIAM SEIGEL.