

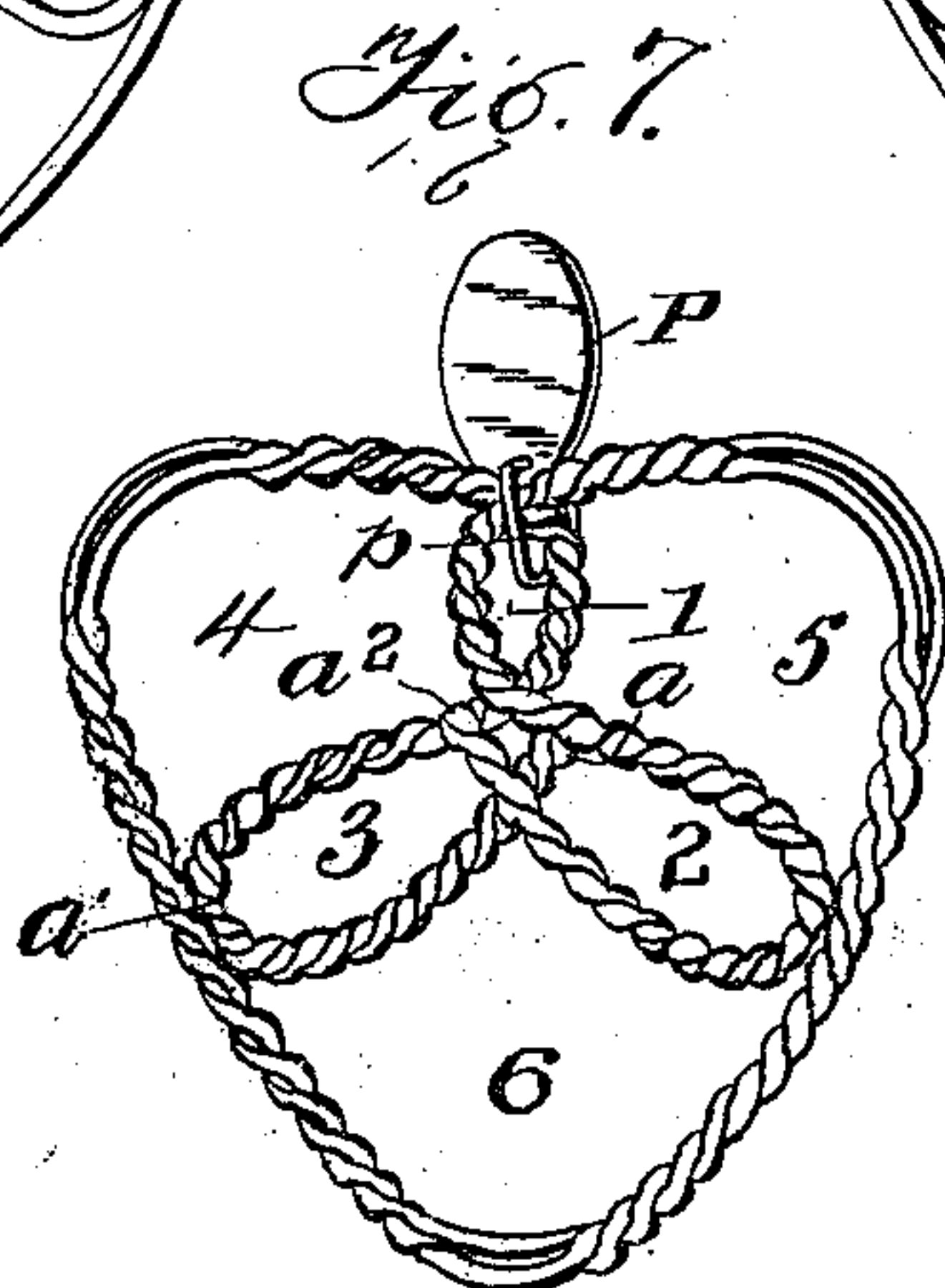
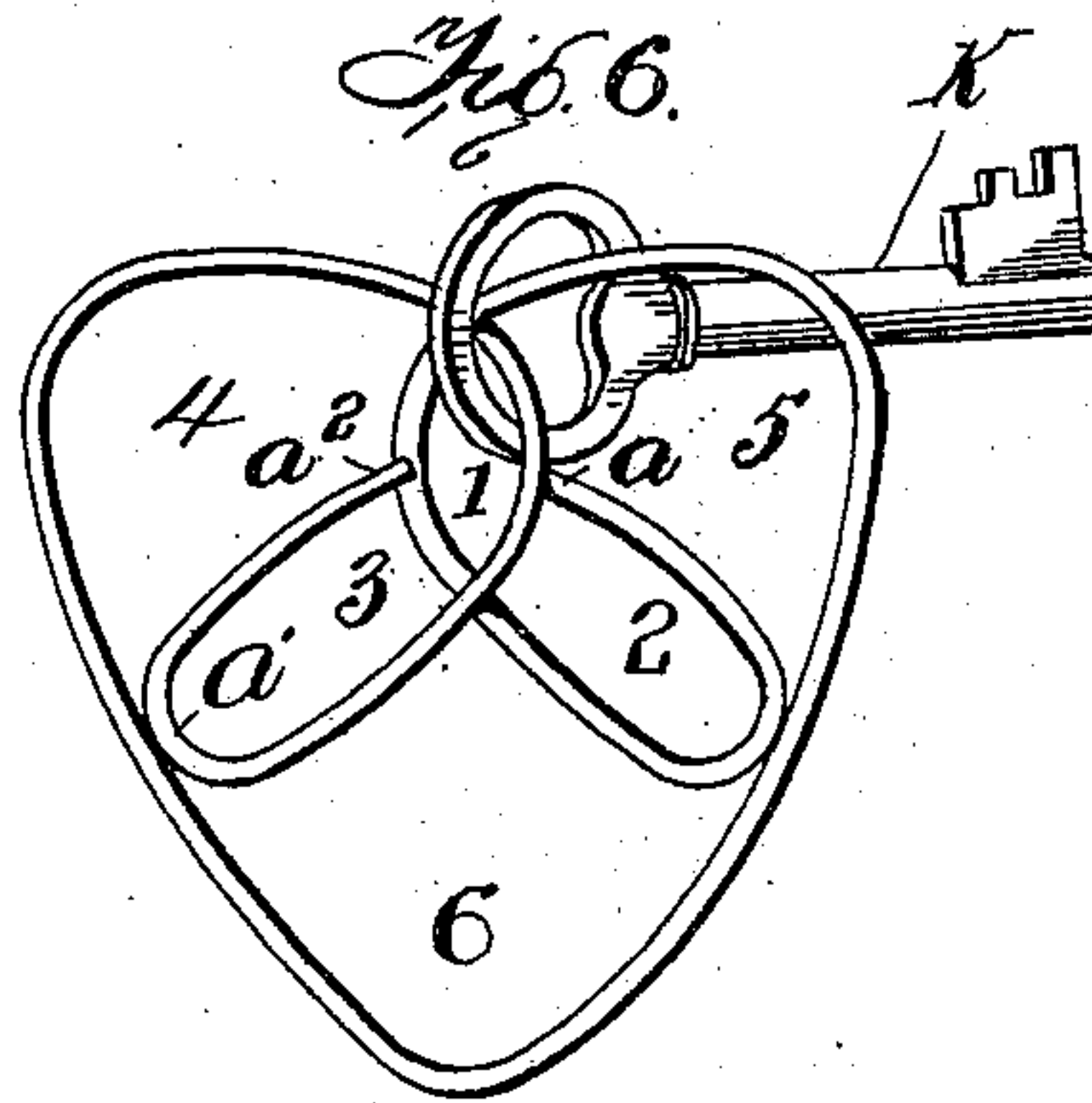
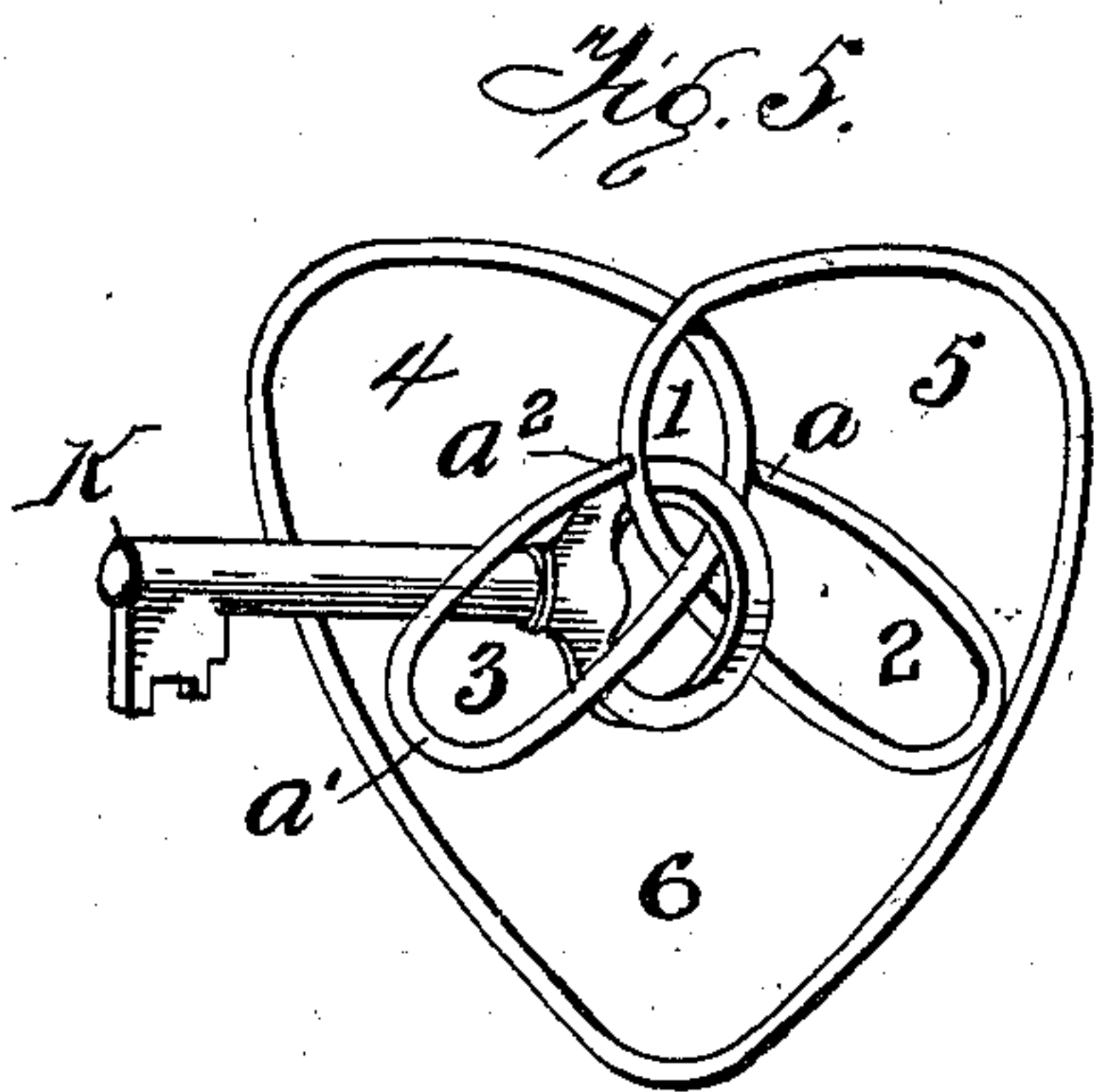
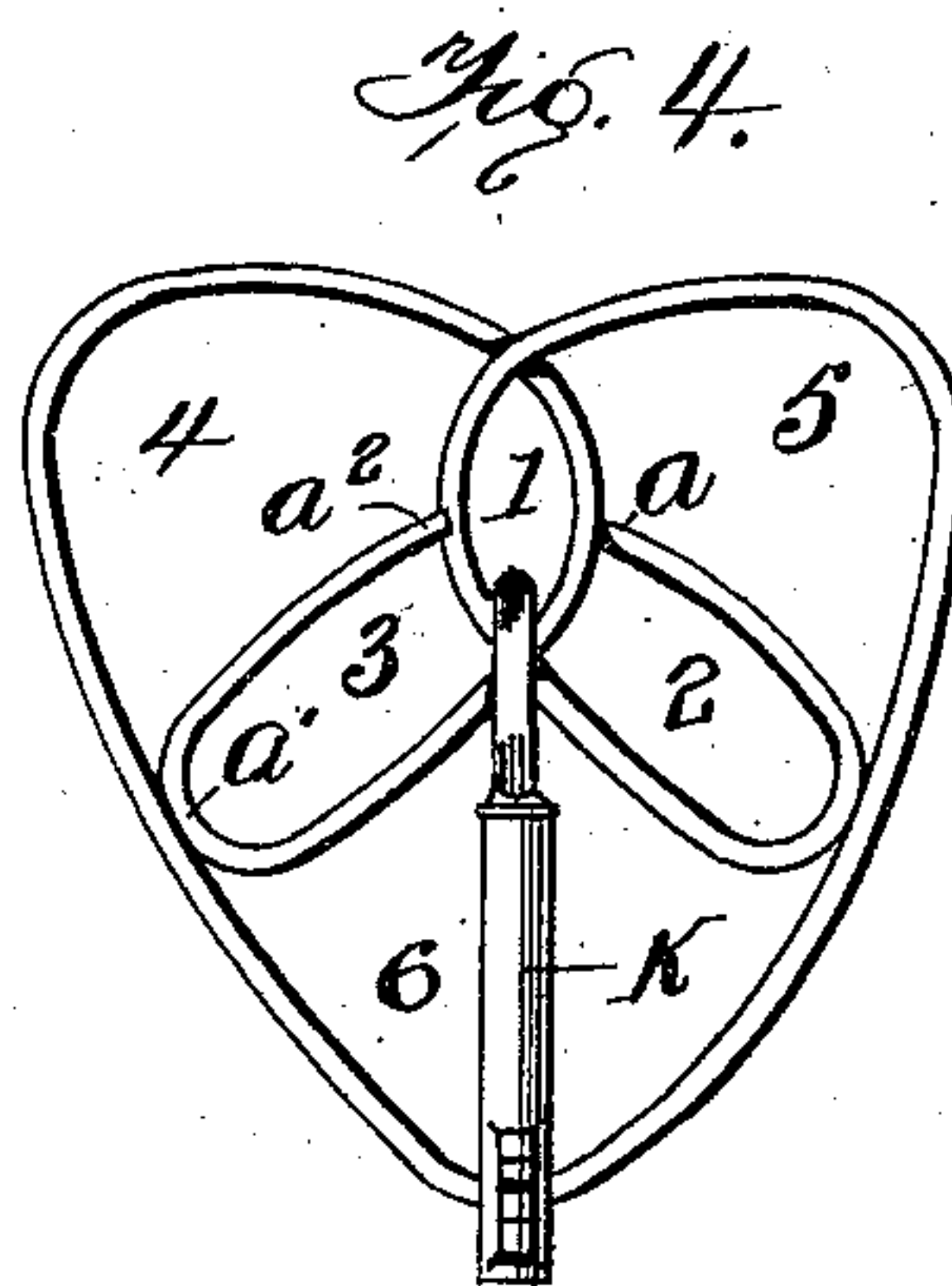
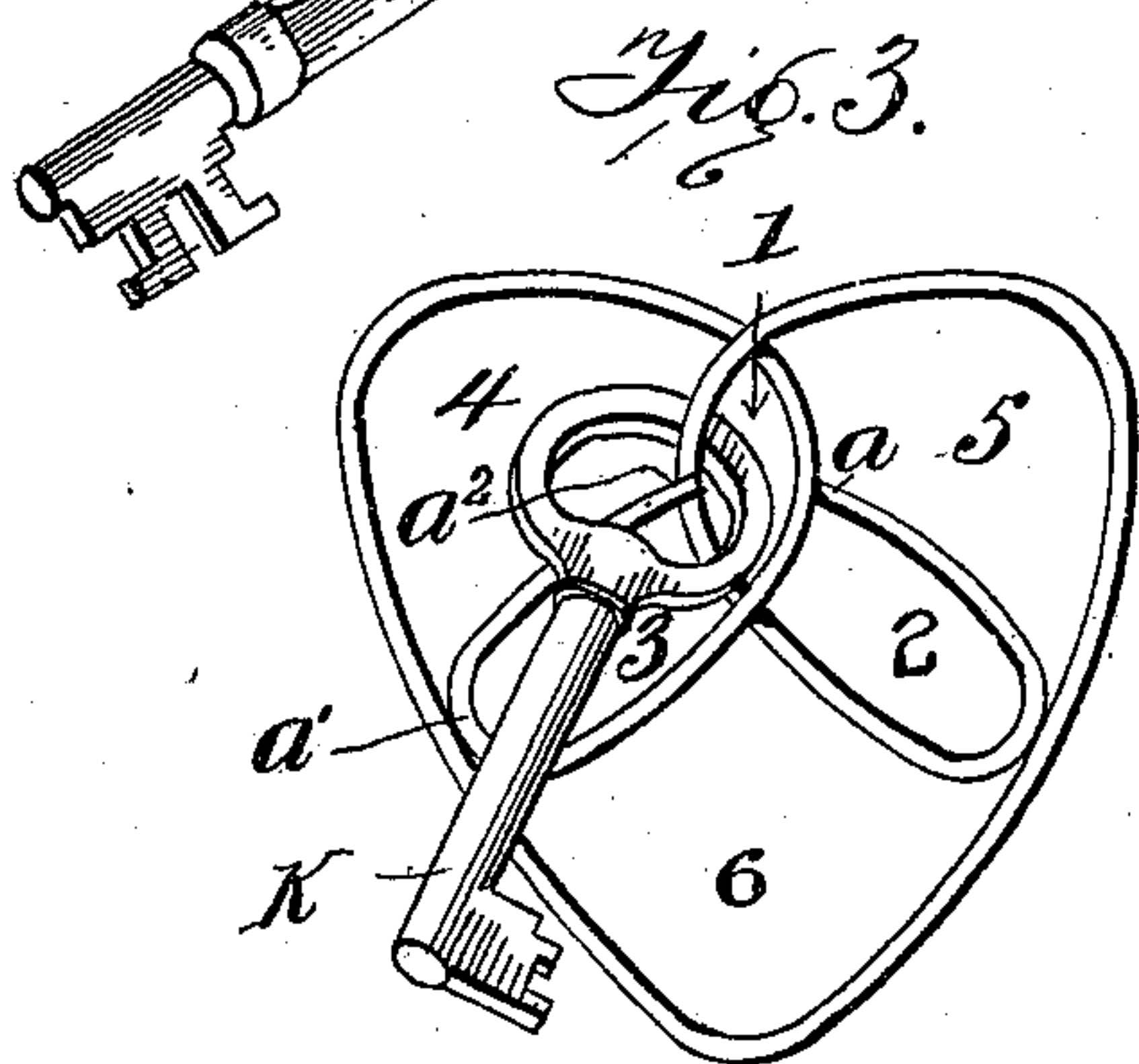
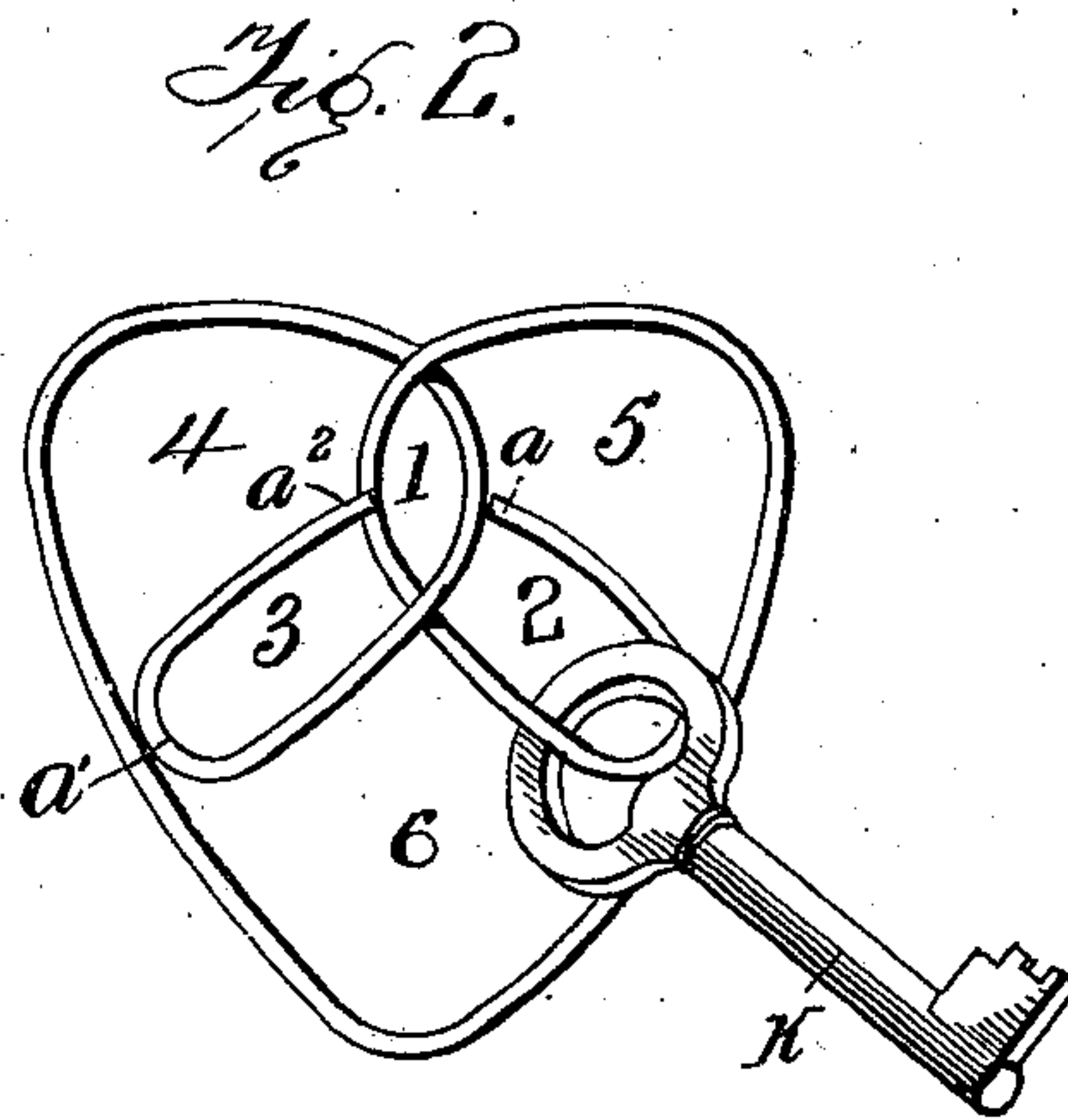
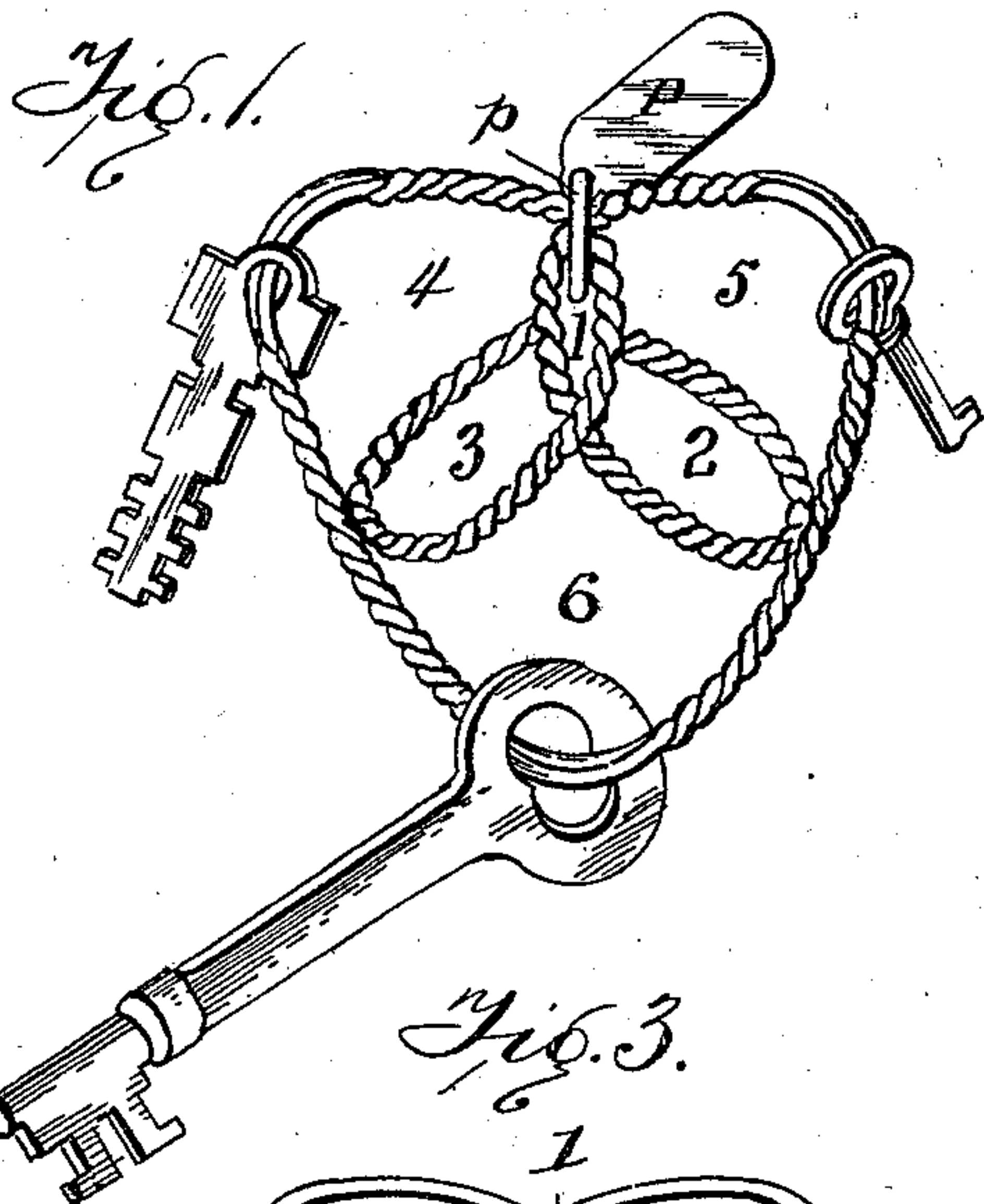
No. 726,781.

PATENTED APR. 28, 1903.

N. B. STONE.
KEY RING.

APPLICATION FILED JUNE 13, 1902.

NO MODEL.



Witnesses
Chas. K. Davis
David Stuart Walters.

Inventor
Nathaniel B. Stone,
per, E. W. Bradford
Attorney

UNITED STATES PATENT OFFICE.

NATHANIEL B. STONE, OF OUTLOOK, WASHINGTON.

KEY-RING.

SPECIFICATION forming part of Letters Patent No. 726,781, dated April 28, 1903.

Application filed June 13, 1902. Serial No. 111,505. (No model.)

To all whom it may concern:

Be it known that I, NATHANIEL B. STONE, a citizen of the United States, residing at Outlook, in the county of Yakima and State of Washington, have invented certain new and useful Improvements in Puzzle Key-Rings, of which the following is a specification.

My said invention consists in a key-ring of improved form, which shall also constitute a puzzle, whereby a key-ring is provided possessing various advantages as such and one possessing the additional advantage of providing means for amusement, such as is afforded by the working of puzzles, all as will be hereinafter more fully described and claimed.

Referring to the accompanying drawings, which are made a part hereof, and on which similar reference characters indicate similar parts, Figure 1 is a view of a key-ring embodying my said invention with keys thereon at different places indicating different subdivisions of said key-ring and a name-plate P, the ring *p* whereof embraces the branches of said key-ring in the position which constitutes the solution of the puzzle feature, this figure being intended as a diagrammatic view illustrating the use of the device; Figs. 2, 3, 4, 5, and 6, views of the device, illustrating the working of the key to the central loop, as in the solution of the puzzle feature; and Fig. 7, a view showing a modified form.

In Figs. 1 and 7 I have shown a device composed of two strands of wire twisted together, and this I regard as a desirable form both because of its ornamental appearance and the increased flexibility secured with appropriate bulk and strength. In the other figures I have shown the device constructed of a single spring-wire both for convenience in illustration and to show a form which may be used, if preferred. Said device consists, as shown, of a spring-wire bent into a heart-shaped form, its ends crossing at the central point of the heart and again crossing a short distance within to form the central loop 1. The ends are doubled back toward said central loop, forming loops 2 and 3 on each side thereof which extend to opposite sides of the device, thus dividing said key-ring into three parts or divisions 4, 5, and 6, separated from each other by said loops 1, 2, and 3. By this arrangement the user is enabled to divide his

keys into separate bunches, if he should so desire, placing those used for one purpose on the part of the bar around division 4, those for another purpose on the part around division 5, and those for a third purpose on the part of the bar around division 6. The device being of spring-wire, it is an easy matter to slip the keys onto the bar to whichever of these positions is desired by simply placing the bow of the key over one end of the wire and sliding it around until the desired point is reached. In order, however, to place the key or ring around the two branches of the wire at the point where they cross above loop 1, as shown in Fig. 6, considerable study and practice will be required, and this constitutes the puzzle feature. This result is accomplished by placing the bow of the key over the end *a* of the wire and bringing it within loop 2, as shown in Fig. 2. The bar of the key is then brought around beneath the opposite end of the wire at the point *a'*, the bow thereof being slid up on the wire to within loop 1, and then the bar of the key is brought around to the top of the wire and its bow placed over the end of the wire at *a''*, as shown in Fig. 3. The key is then drawn down over the loop 3, which being of spring metal easily compresses to permit this result, when the key will hang as shown in Fig. 4. The key is again turned and brought under the end of loop 3 at the point *a'*, as shown in Fig. 5, and then is brought around to a vertical position between the two bars at the top of loop 1 and given a half-turn, when it readily comes into the position shown in Fig. 6. The key is removed by reversing the operation.

In Fig. 7 I have shown substantially the same form of device, except that the ends of the loops 2 and 3 are bent under and upwardly from the outside instead of over and downwardly, as shown in the other figures.

Having thus fully described my said invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A key-ring comprising spring-wire bent into proper form with its ends crossed and doubled back to form a central loop and two side loops, the extremities of the wire extending to each side of said central loop, substantially as set forth.

2. A key-ring puzzle comprising spring-wire

bent to the desired form, its ends crossing
each other and being then bent to again cross
each other to form the central loop 1, and
again bent back toward said central loop 1 to
5 form said side loops 2 and 3 which extend
each way from said central loop toward the
sides of the device, substantially as set forth. |

In witness whereof I have hereunto set my
hand and seal, at Washington, District of Co-
lumbia, this 11th day of June, A. D. 1902. 10

NATHANIEL B. STONE. [L. S.]

Witnesses:

E. W. BRADFORD,

DAVID STUART WAUTERS.