

No. 627,507.

Patented June 27, 1899.

H. P. KING.
PUZZLE BOX.

(Application filed Jan. 20, 1898.)

(No Model.)

Fig. 1.

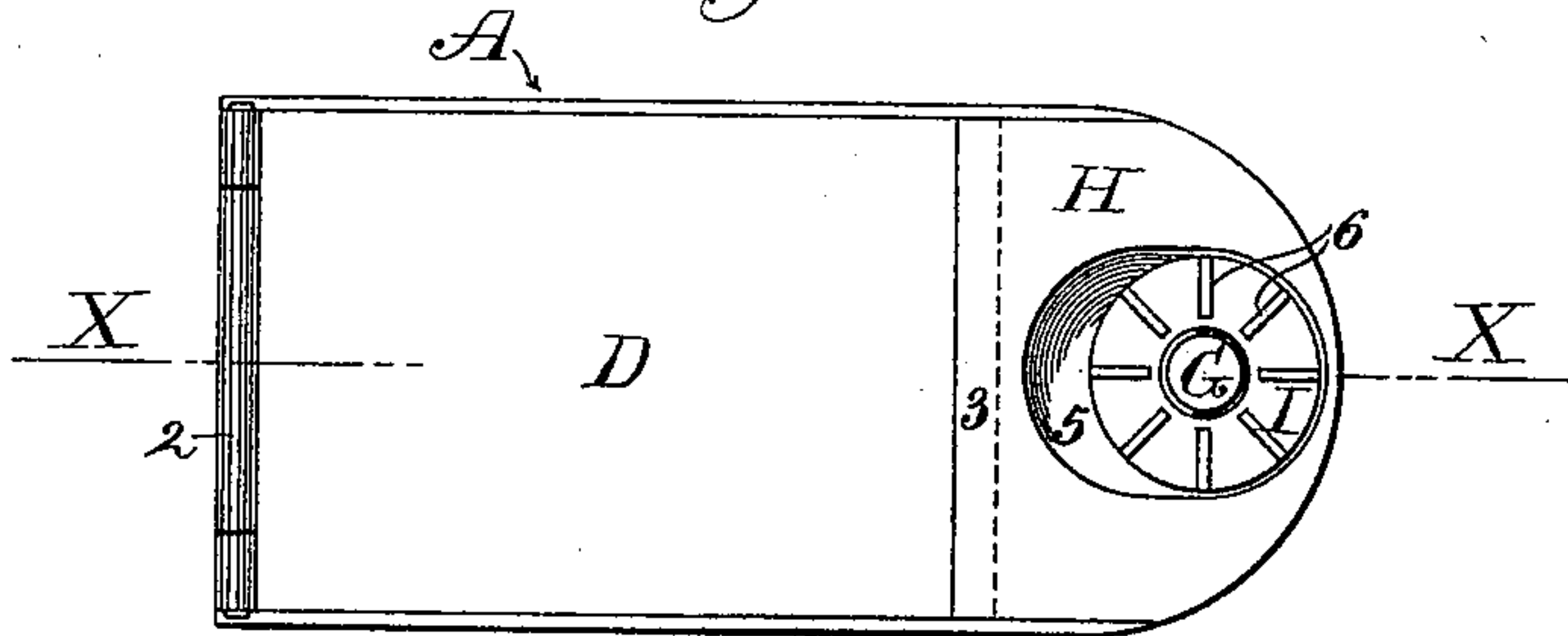


Fig. 3.

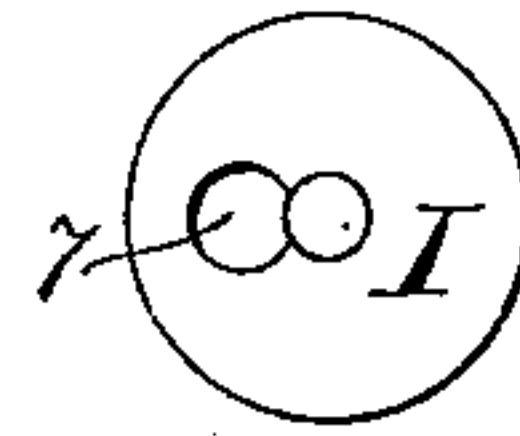


Fig. 2.

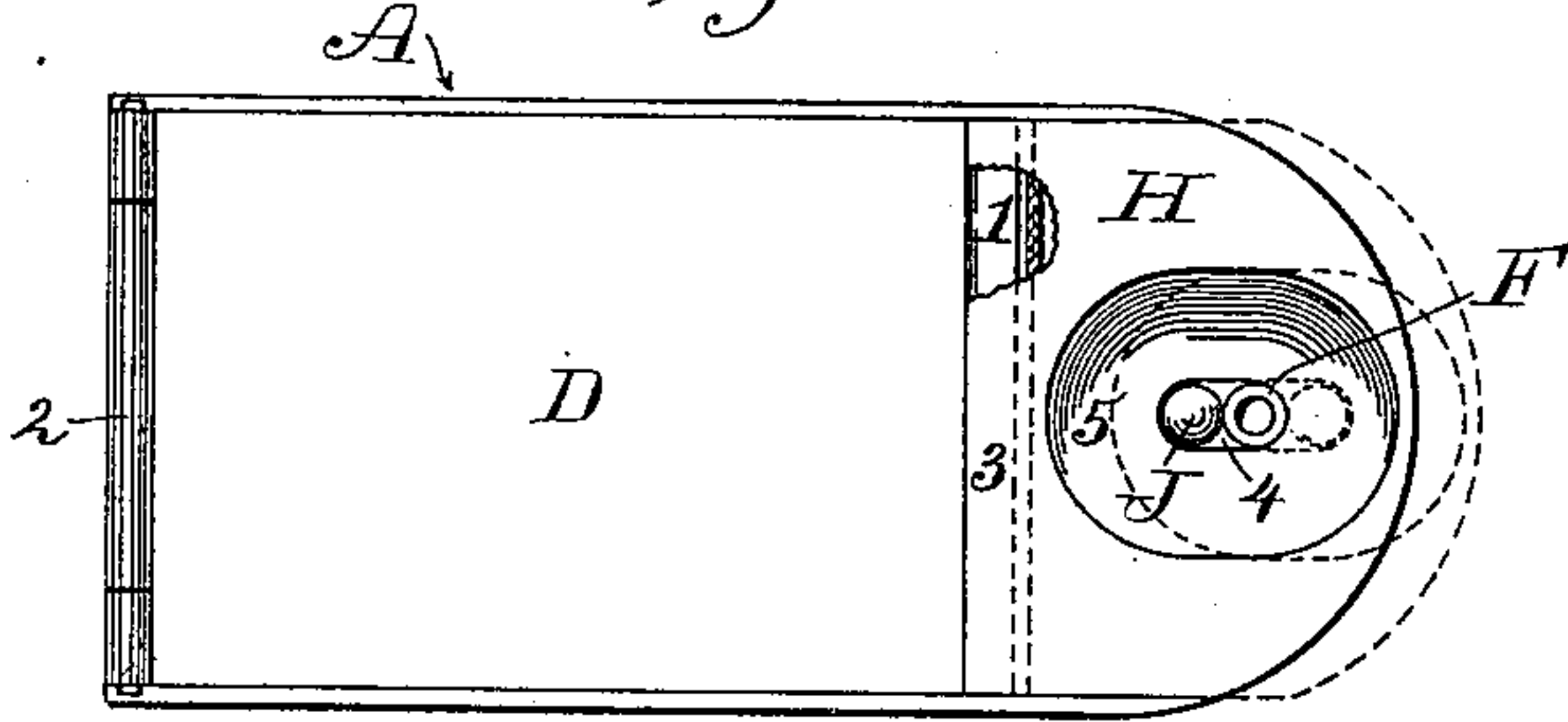


Fig. 4.

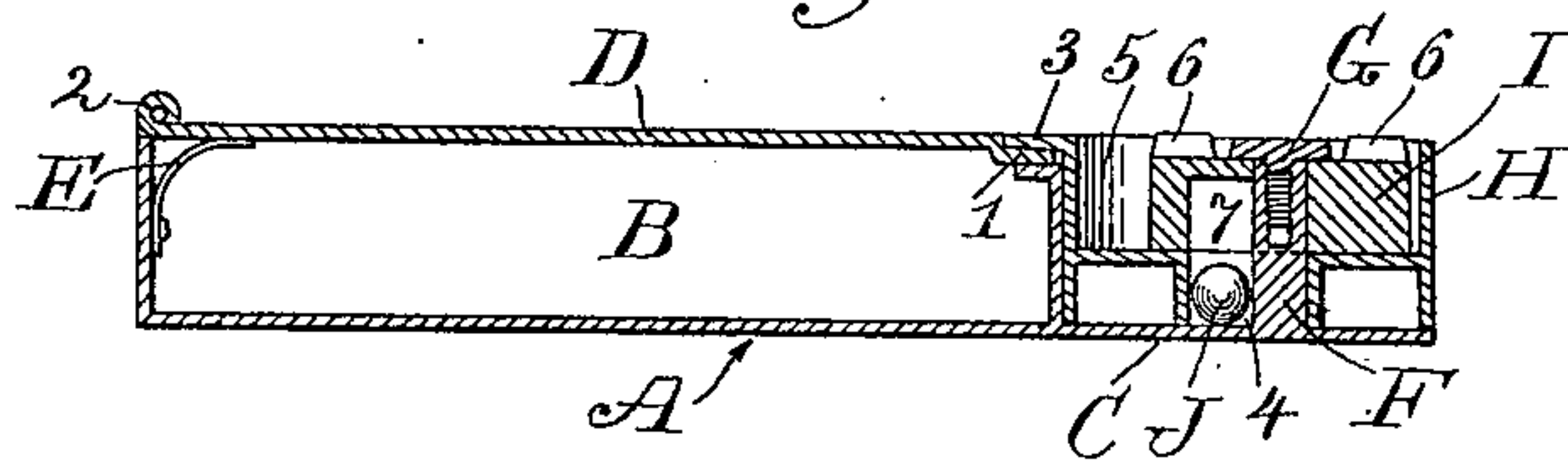
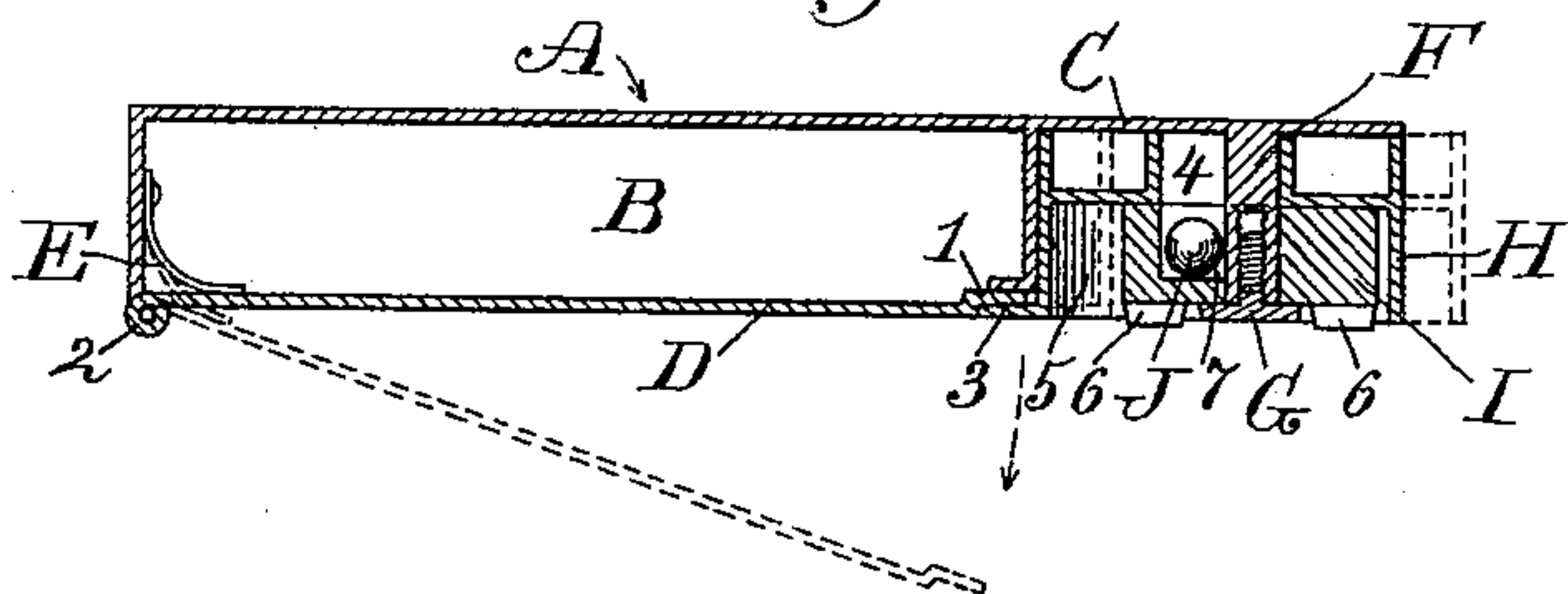


Fig. 5.



Witnesses:

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UNITED STATES PATENT OFFICE.

HESDEN PRIOR KING, OF GLENS FALLS, NEW YORK.

PUZZLE-BOX.

SPECIFICATION forming part of Letters Patent No. 627,507, dated June 27, 1899.

Application filed January 20, 1898. Serial No. 667,259. (No model.)

To all whom it may concern:

Be it known that I, HESDEN PRIOR KING, of Glens Falls, in the county of Warren and State of New York, have invented certain new and useful Improvements in Puzzle-Boxes, of which the following is a specification.

The object of my invention is to provide means for amusement and study for people with minds inclined to investigation of things that appear to be filled with mystery, but which when solved are extremely simple. I attain this object by the means herein described, and represented in the accompanying drawings, which form part of this specification and is herein referred to.

In said drawings, Figure 1 is a plan view of my puzzle-box when closed; Fig. 2, a plan view of the same with the revoluble disk removed therefrom; Fig. 3, an inverted plan view of the revoluble disk detached from the box; Fig. 4, a longitudinal section of Fig. 1 at the line X X, and Fig. 5 a like section with the box in an inverted position.

As represented in the drawings, A designates my puzzle-box, which may be made of any suitable material, but preferably of aluminium, although papier-mâché or wood may be used for the purpose. Said box is preferably divided into two separate compartments B and C, the first of which may be utilized for containing tobacco, snuff, or other article and the other containing a member that is longitudinally movable in respect to the body of the box A for the purpose of securing and releasing the hinged cover of said box. A cover D is hinged, as at 2, to the box and arranged to allow its free end to swing upward to open the compartment B and downward to close said compartment, and preferably a spring E is arranged to throw up the free end of the cover; but when preferred an ordinary spring-hinge may be used for the cover and the same effect produced. The free end of the cover D is usually provided with an offset lip 1, as shown in Fig. 4; but when preferred said lip may be dispensed with by substituting any engaging mechanism that is suitable for the purpose. A stud F is erected in the compartment C and is usually tapped to receive a screw G, for a purpose hereinafter explained, and said stud may be integral with the box, as shown in Fig. 4, or it may be secured to

the bottom of the box to extend upward in the compartment C. The end of the compartment C is left open, and a movable piece H is fitted to slide longitudinally in the compartment C and is provided with a lip 3, that engages with the free end of the cover D and retains the latter in a closed position. The movable piece H is provided with a longitudinally-slotted opening 4, through which the stud F will pass loosely, so as to not interfere with a free movement of the movable piece. The upper face of the movable piece H is preferably provided with a recess 5 for containing a revoluble disk I, that is pivoted to rotate on the stud F. The upper face of the disk I is provided with a series of wings 6 or other suitable means by which said disk can be manually rotated, and the lower face of said disk is provided with a pocket 7, for a purpose hereinafter explained.

J is a spherical body that is fitted to enter the pocket 7 when the box is held in an inverted position, as shown in Fig. 5, thereby leaving the movable piece H free to be moved longitudinally in either direction or to enter either end of the slotted opening 4, so as to lie between the stud F and the corresponding end of the slotted opening, according to the position of the movable piece H, and it should be understood that in order to allow the sphere J to pass from the slotted opening 4 into the pocket 7, or vice versa, the disk I must be revolved until the position of the pocket 7 exactly coincides with that of the slotted opening 4. Then if the sphere is in the slotted opening to lock the cover D, as shown in Fig. 4, by inverting the box, as shown in Fig. 5, the sphere J will fall into the pocket 7, thereby leaving the movable piece H free to be moved outward, as indicated by dotted lines in Fig. 5, to free the cover D, which will then swing downward, as indicated by dotted lines in Fig. 5, the initial downward movement of the cover being effected by the spring E, and it should be understood that the cover D can only be released and secured by manually moving the movable member H and that such movement can only be effected in the manner herein described. While the cover D is open and the movable piece H is moved outward, as indicated by dotted lines in Fig. 5, the disk I can

be turned to drop the sphere J into the slotted opening 4, so that the sphere will be between the stud F and the outer end of said opening, thereby preventing the movable
 5 piece H from being pushed inward to lock down the cover D, and it will then be as much of a puzzle to lock down the cover as it was to free it.

Instead of the wings 6 being formed on the
 10 disk I the upper face or the periphery of the latter may have a series of depressions to receive a finger for rotating the disk.

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

1. A puzzle-box comprising two separated compartments—the first being closed at its bottom and four sides and having a hinged cover whose free end is adapted to swing up-
 20 ward—to open said compartment—and downward to close over the said compartment, and the second being closed at its bottom and three sides, but open at its outer end, and containing a stationary stud which is erected
 25 on the upper face of said bottom; said stud being independent of the hinge-pin of the cover, a movable member fitted to slide in the second compartment independently of the hinged cover and having a slotted opening
 30 that allows said member to slide easily on the stationary stud, a body adapted to lie in the slotted opening, between the end of the latter and said stud—to prevent the movable member from sliding—the latter being adapted
 35 to engage the free end of the hinged cover and lock it in a closed position, and a revolu-

ble disk fitted to rotate on the stationary stud and having a pocket fitted to receive said body to effect a releasement of the movable member; the latter being only adapted to be
 40 operated manually to disengage it from the hinged cover, as and for the purpose specified.

2. In a puzzle-box, the combination, with a box comprising two separate compartments—the first being closed at its bottom and four
 45 sides and having a spring-actuated cover hinged to the wall of its outer end and forming a closure for the top of said compartment, and the second being closed at its bottom and two sides and having a stationary stud—that
 50 is independent of the hinge-pin of said cover—erected on the upper face of the bottom of said second compartment, a movable member provided with means for engaging the free end of said cover and having a slotted open-
 55 ing adapted to slide loosely on said stationary stud and allow the movable member to be disengaged from the cover, a body adapted to lie in said slotted opening so as to prevent the movable member from accidentally break-
 60 ing its engagement with the cover, and a revolvable disk fitted to rotate on the stationary stud and provided with a pocket adapted to receive said body to effect the releasement of the movable member from the cover; the lat-
 65 ter being disengaged from the movable member by a manual operation of said member, as herein specified.

II. PRIOR KING.

Witnesses:

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