

(No Model.)

E. T. YOUNG.  
PUZZLE.

No. 598,889.

Patented Feb. 8, 1898.

Fig. 4.

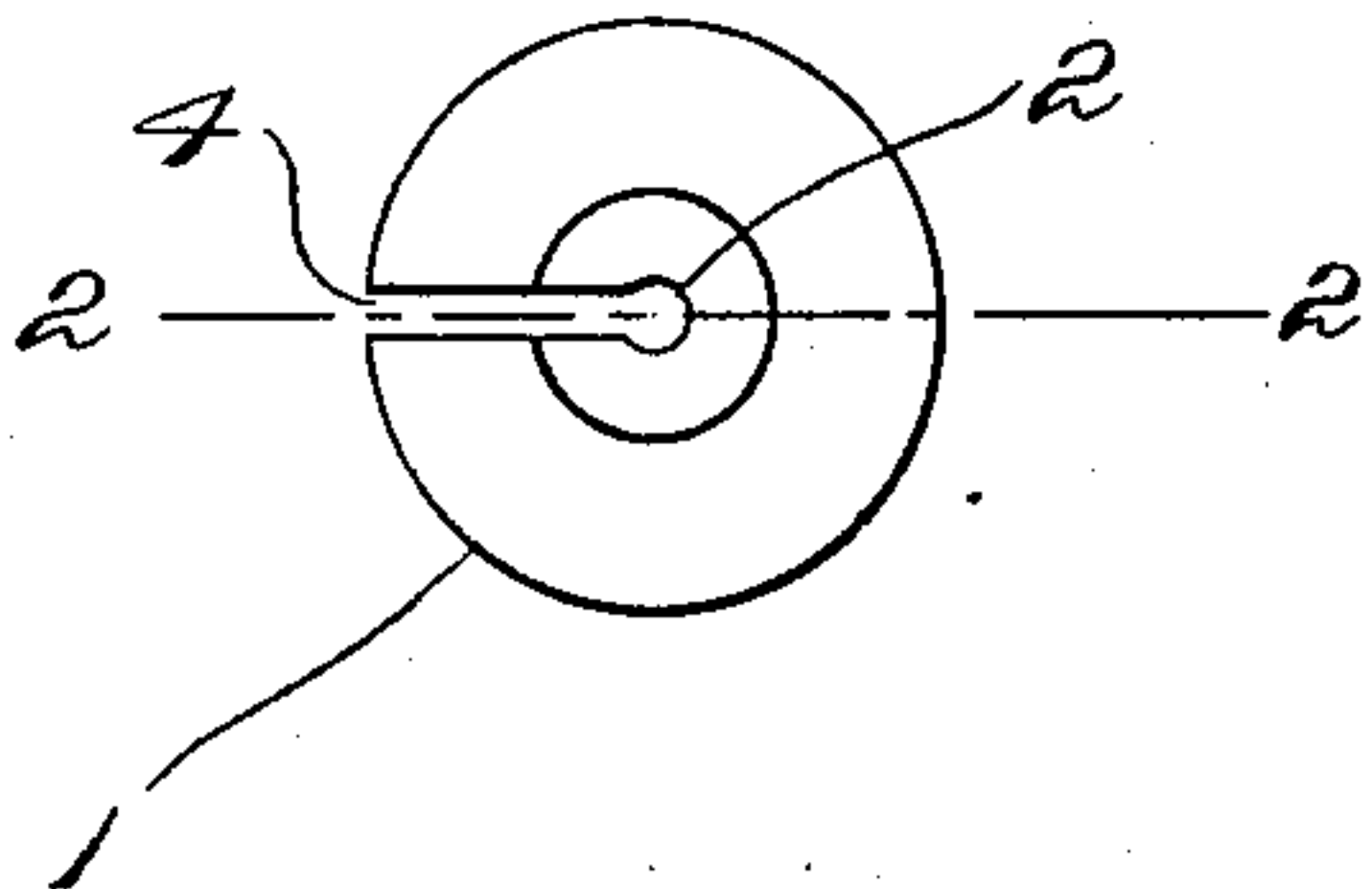


Fig. 6.

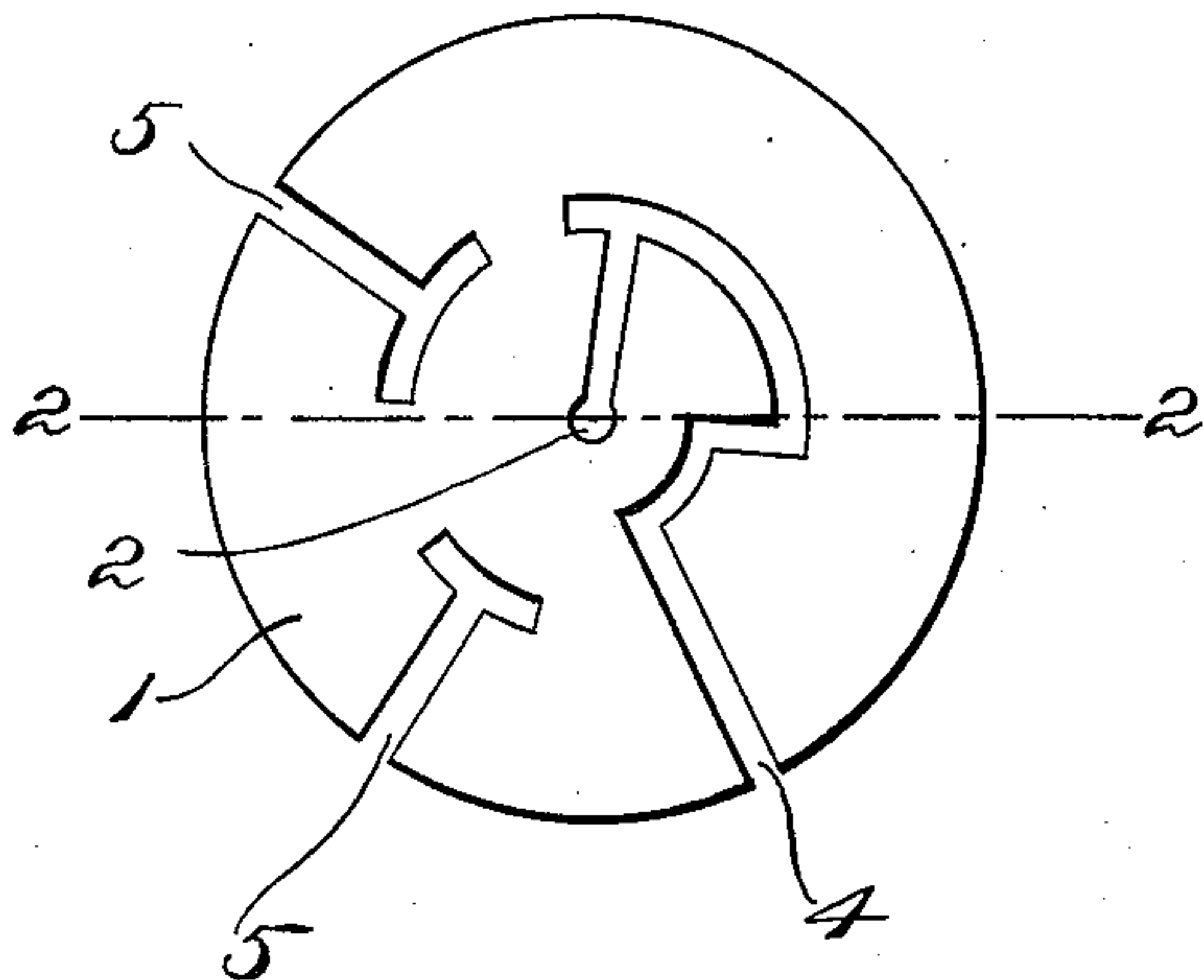


Fig. 5.

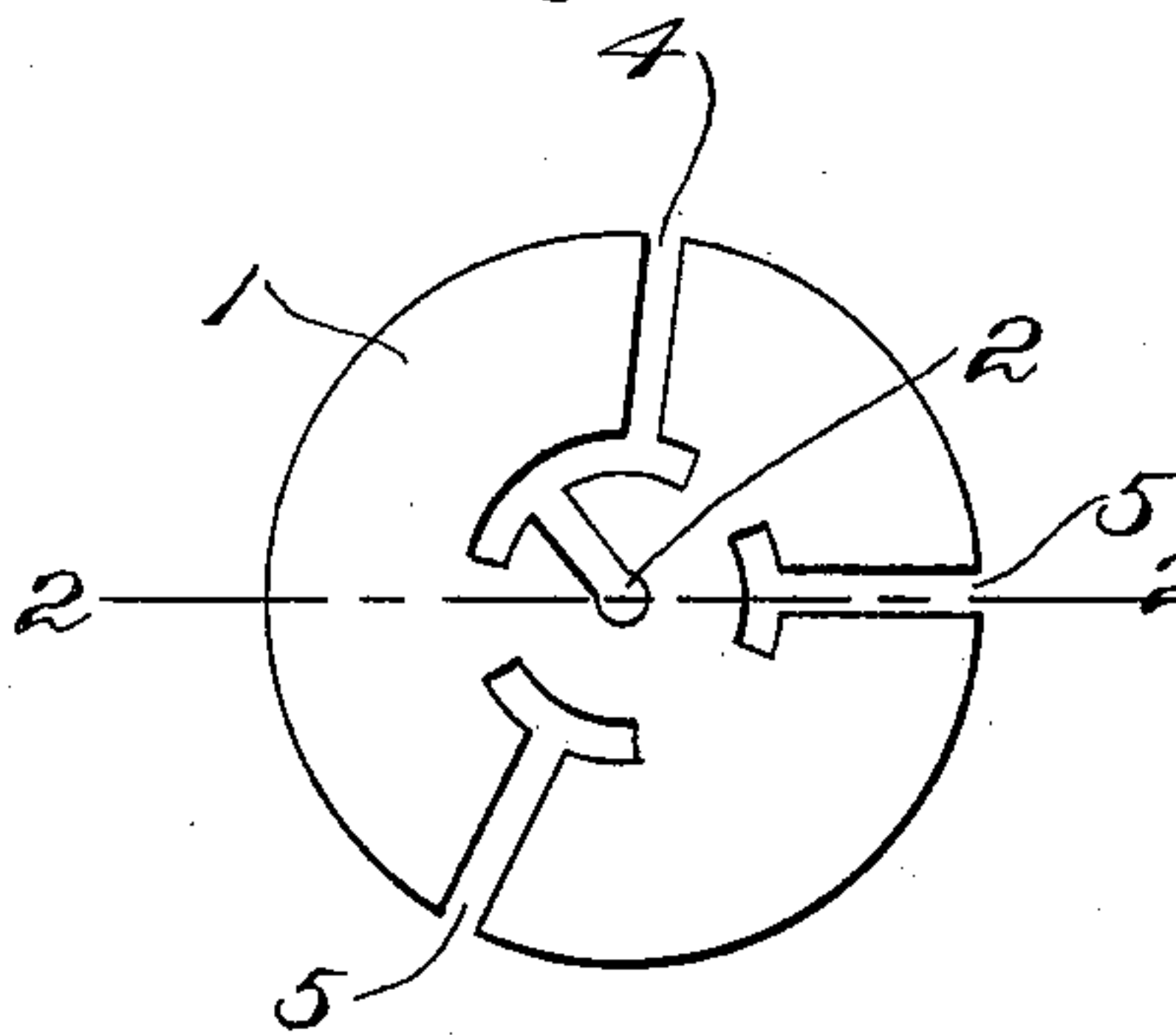


Fig. 7.

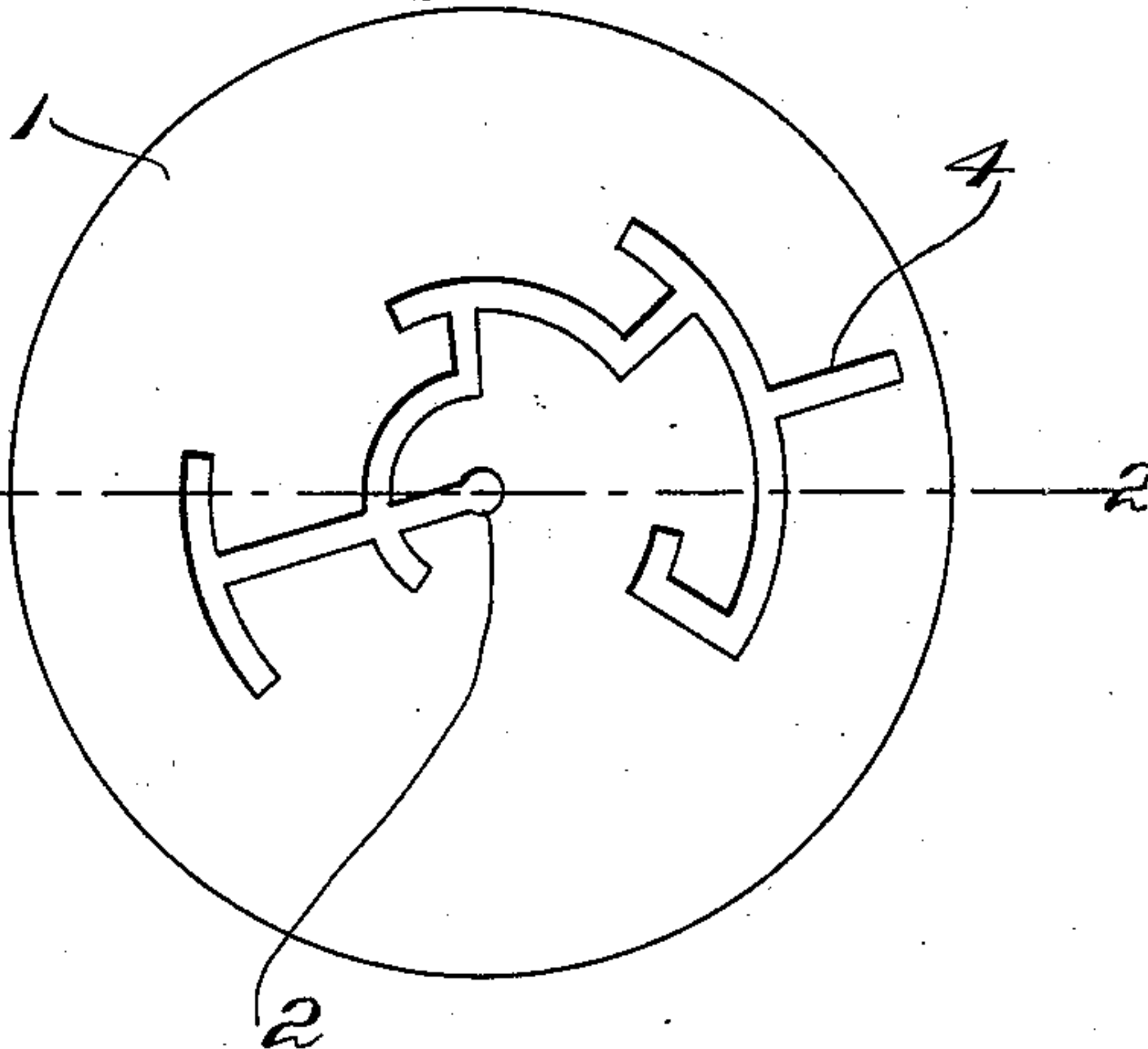


Fig. 1.

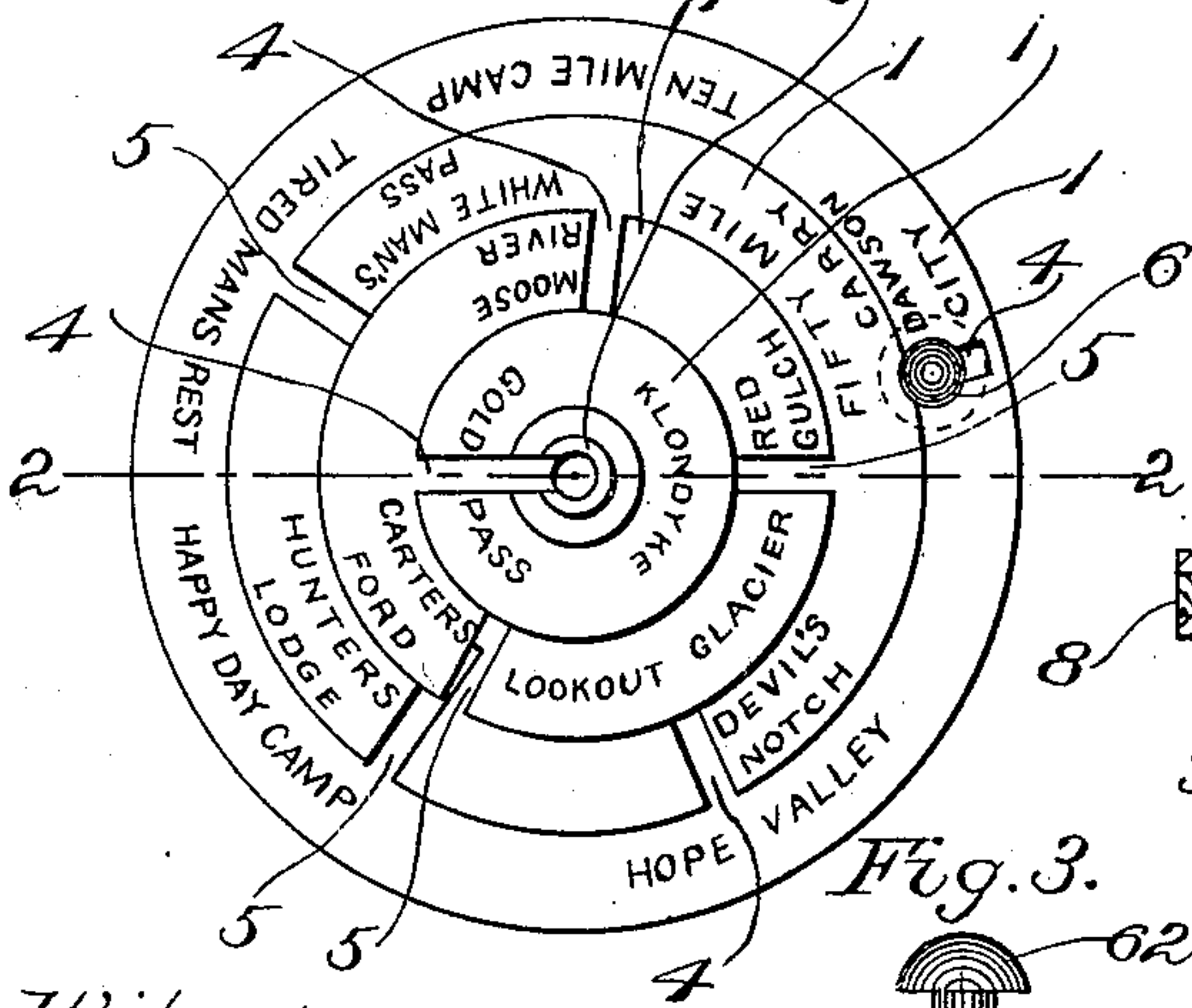


Fig. 2.

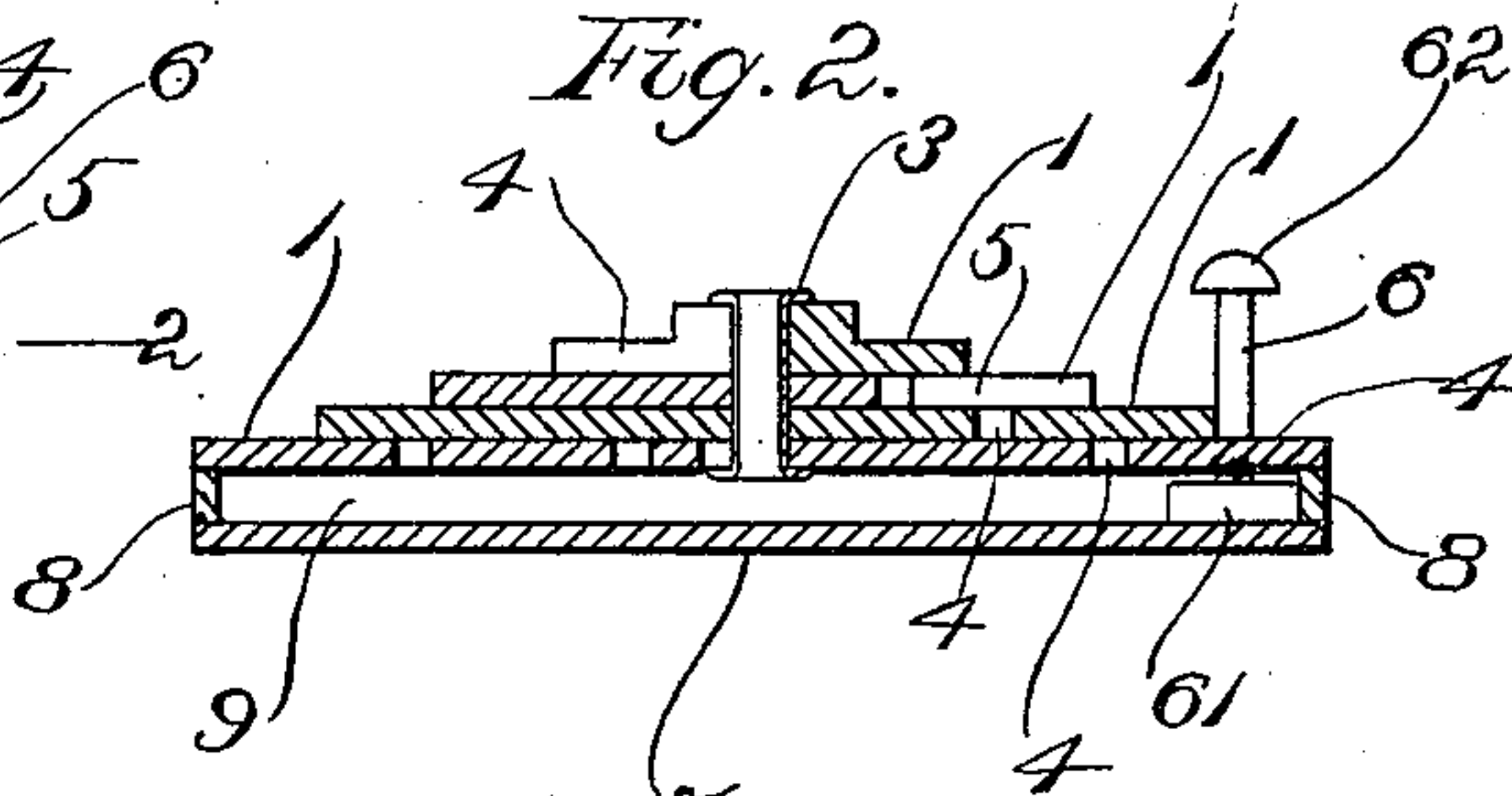


Fig. 3.

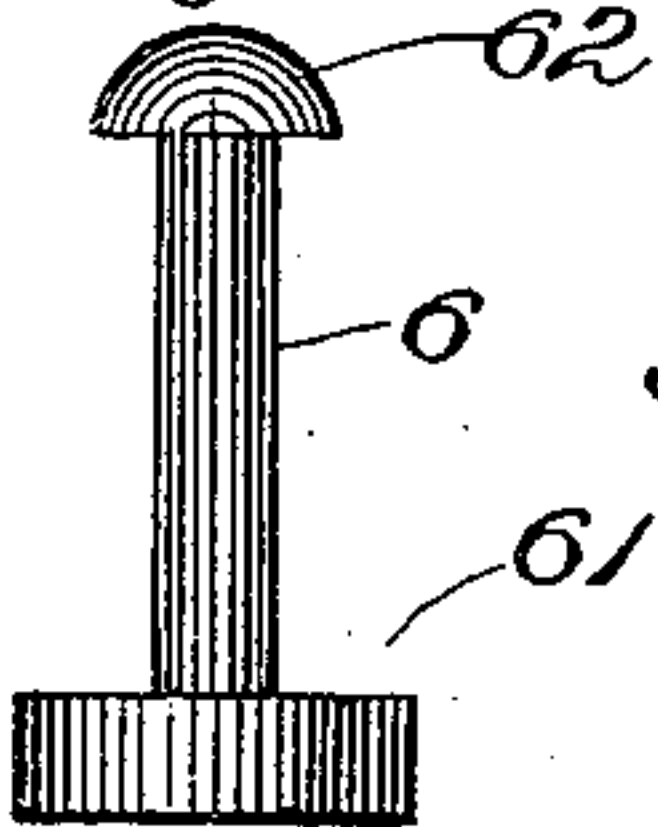
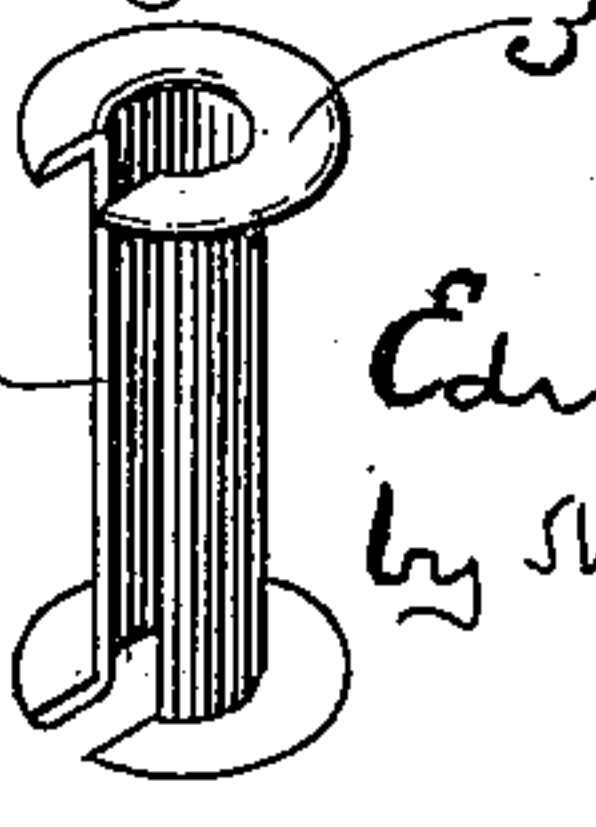


Fig. 8.



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# UNITED STATES PATENT OFFICE.

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## PUZZLE.

SPECIFICATION forming part of Letters Patent No. 598,889, dated February 8, 1898.

Application filed October 28, 1897. Serial No. 656,683. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD T. YOUNG, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Puzzles, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention consists in a puzzle of novel character and construction, which first will be described fully with reference to the accompanying drawings, in which latter I have illustrated one embodiment of my invention, and afterward the distinguishing and characteristic features thereof will be particularly pointed out and distinctly defined in the claims at the close of this specification.

Figure 1 of the drawings shows in plan a puzzle embodying my invention. Fig. 2 is a view thereof in vertical section on the dotted line 2 2 of Fig. 1. Fig. 3 is a view in elevation of the traveler detached. Figs. 4, 5, 6, and 7 are views in plan of the disks, to which reference is made hereinafter. Fig. 8 is a view of the hollow rivet detached.

My puzzle consists, essentially, of a series of superimposed sheets or disks movable relatively to one another, each having a goal and a continuous passage-way leading to such goal, one or more of the said sheets or disks each having in addition one or more independent discontinuous passage-ways which terminate or end without reaching the said goal, and a traveler to enter the said passage-ways and move in the portions thereof in the various sheets or disks, which are caused to register with one another as the sheets or disks are changed in position. Each of the said sheets or disks has or may have indicia to assist or guide in making the movements of the sheets or disks and of the traveler. The construction and arrangement of the parts of the puzzle admit of being varied considerably. Preferably I arrange the said series of superimposed sheets or disks so as to be movable about a common center, and I form a hole in each at such center to form the goal, the passage-ways being constituted by slots.

In practice I have constituted the series of superimposed sheets or disks of a plurality of concentric disks of graduated diameter. I

have illustrated this form in the accompanying drawings. 1 1, &c., in the latter designated the said disks of graduated diameter, the topmost one being the smallest in diameter and the lowest one being the greatest in diameter. The concentric arrangement of the disks 1 1 is shown clearly in Figs. 1 and 2.

2 2, &c., designate the central holes of the respective disks.

3 designates a hollow rivet passing through the central holes 2 2 of all the disks 1 1 and serving to hold the latter together as assembled in Figs. 1 and 2, the respective disks being left free to be turned by hand independently of one another around their common center, the said hollow rivet serving as a pivot. The hollow rivet 3 is slotted vertically, as at 31, Fig. 8, to permit the stem of the traveler, which is described later on, to pass into the central hole of the rivet.

While I have shown in the drawings an assemblage of circular disks, I do not intend it to be understood that the term "disk" as used by me shall necessarily signify a truly circular form or outline, inasmuch as the form or outline of the parts 1 1, &c., may be considerably varied, more especially the lowest or largest part 1. The form or outline of the latter is not material so far as the working of the puzzle is concerned. The continuous passage-way which leads to the goal in the case of each of the disks 1 is designated 4, while the discontinuous passage-ways which end or terminate without reaching the said goal are designated 5 5.

With a view to adding to the clearness of the drawings as much as possible I have in Figs. 4, 5, 6, and 7 represented the respective disks 1 1, &c., in the same positions as those which they occupy in Figs. 1 and 2, the dotted line 2 2 in each of Figs. 4, 5, 6, and 7 corresponding with the dotted line 2 2 in Fig. 1 and with the plane of section in Fig. 2. Hence after reference to Figs. 4, 5, 6, and 7 it may be perceived which of the passage-ways in Figs. 1 and 2 are the continuous ones and which thereof are the discontinuous ones. In the case of the topmost or smallest disk 1 (shown separately in Fig. 4) there is but a single passage-way, and that is a continuous one leading directly to the central goal. Inasmuch as this disk is disclosed wholly to view



from above, or practically so, no discontinuous passage-ways are formed therein, and the continuous passage-way 4 thereof is radial and extends straight from its outer end to the goal. In the case of each of the intermediate disks, which are shown separately in Figs. 5 and 6, there are one continuous passage-way 4 and two discontinuous passage-ways 5 5. In the case of the bottom or largest sheet or disk (shown separately in Fig. 7) I have for the sake of simplicity illustrated but a single passage-way, that being a continuous passage-way with branches or ramifications, as described hereinafter. Each disk in turn covers the central portion of that next below and extends nearly to the periphery of the latter, leaving a margin of the latter exposed, as shown clearly in Figs. 1 and 2. The passage-ways 4 and 5 extend inwardly from the peripheries of the respective disks. The portions of such passage-ways which are exposed to view are or may be straight and radial, as in the drawings. The concealed portions of the passage-ways are in part curved and concentric with the goals and in part straight and radial, and such portions have branches or ramifications, as shown, after the fashion of a maze.

6 is a traveler which is intended to be moved into and along the various passage-ways and finally to be caused to enter the goal by passing into the central openings of the disks and hollow rivet 3. It is provided with a base, as at 61, beneath the bottom disk 1, and may, if desired, be provided with a head 62 at its top. The traveler being assumed to occupy a position in the outermost portion of the passage-way 4 in the bottom disk 1 where indicated in Figs. 1 and 2, the respective disks will be shifted relatively to one another, so as to permit the traveler to be entered into one or another of the respective passage-ways in the disk above the bottom one and to be moved along in the endeavor to carry it to the central point. The continued advance of the traveler toward the goal will be permitted only by bringing portions of the continuous passage-ways in the respective disks into register with one another vertically, which will be rendered difficult by the concealment of all except the extreme outer or entering portions of the various passage-ways. For the purpose of concealing the bottom disk I employ a cover therefor, as at 7, which is held at a proper distance from the bottom disk 1 by means of a spacing strip or ring 8 (see Fig. 2) to leave room or space 9 between the said bottom disk 1 and the cover 7 sufficient to permit the base 61 of the traveler 6 to move about freely therein.

In some cases, to add to the interest and to assist or guide in shifting the disks, I provide the sheets or disks 1 1 with characters or indicia. In the drawings these consist of words arranged on the visible portions of the respective disks and constituting or purporting to constitute geographical names pertaining

to points or places reached in proceeding to some imaginary destination and also points or places at which a traveler would be sidetracked in consequence of choosing the wrong path or road in endeavoring to attain the said destination.

I claim as my invention—

1. A puzzle comprising a series of superimposed sheets or disks movable relatively to one another, each having a goal and a continuous passage-way leading to such goal, one or more of such sheets or disks having one or more independent discontinuous passage-ways ending without reaching the said goal, and a traveler to enter the said passage-ways and move in the portions thereof in the various sheets or disks which are brought into register as the sheets or disks are changed in position.

2. A puzzle comprising a series of superimposed sheets or disks movable relatively to one another, each having a goal and a continuous passage-way leading to such goal, one or more of such sheets or disks having one or more independent discontinuous passage-ways ending without reaching the said goal, and a traveler to enter the said passage-ways and move in the portions thereof in the various sheets or disks which are brought into register as the sheets or disks are changed in position, each of the said sheets or disks having indicia to assist in making the movements of the sheets or disks and the traveler.

3. A puzzle comprising a series of superimposed sheets or disks movable about a common center and each having a hole at such center to form a goal, each of such sheets or disks having a continuous passage-way leading to such goal, one or more of such sheets or disks having one or more discontinuous independent passage-ways ending without reaching the said goal, and a traveler to enter the said passage-ways and move in the portions thereof in the various sheets or disks which are brought into register as the sheets or disks are changed in position.

4. A puzzle comprising a series of superimposed sheets or disks movable about a common center and each having a hole at such center to form a goal, each of such sheets or disks having a continuous passage-way leading to such goal, one or more of such sheets or disks having one or more discontinuous independent passage-ways ending without reaching the said goal, and a traveler to enter the said passage-ways and move in the portions thereof in the various sheets or disks which are brought into register as the sheets or disks are changed in position, each of the said sheets or disks having indicia to assist in making the movements of the sheets or disks and the traveler.

5. A puzzle comprising a plurality of concentric disks of graduated diameter, movable relatively to one another, each leaving exposed the peripheral portion of the next larger, each having a central hole to form a



goal and a continuous passage-way leading from the periphery thereof to the said goal, one or more of the disks having in addition one or more discontinuous or blind passage-ways also leading from the periphery thereof and ending without reaching the said goal, the inner portions of the various passage-ways being concealed by the overlying disks, and a traveler to enter the said passage-ways and move in the portions thereof in the various sheets or disks which are brought into register as the sheets or disks are changed in position.

6. A puzzle comprising a plurality of concentric disks of graduated diameter, movable relatively to one another, each leaving exposed the peripheral portion of the next larger, each having a central hole to form a goal and a continuous passage-way leading from the periphery thereof to the said goal, one or more of the disks having in addition one or more discontinuous or blind passage-ways also leading from the periphery thereof and ending without reaching the said goal, the inner portions of the various passage-ways being concealed by the overlying disks, and a traveler to enter the said passage-ways and move in the portions thereof in the various sheets or disks which are brought into register as the sheets or disks are changed in position, each of the said disks having on its visible portion indicia to assist in making the movements of the disks and the traveler.

7. A puzzle comprising a series of superimposed sheets or disks movable about a common center and each having a hole at such

center to form a goal, each of such sheets or disks having a continuous passage-way leading to such goal, one or more of such sheets or disks having one or more independent discontinuous passage-ways ending without reaching the said goal, a traveler to enter the said passage-ways and move in the portions thereof in the various sheets or disks which are brought into register as the sheets or disks are changed in position, and a casing secured to the bottom disk, concealing the latter and inclosing the lower end of the traveler.

8. A puzzle comprising a series of superimposed sheets or disks movable about a common center and each having a hole at such center to form a goal, each of such sheets or disks having a continuous passage-way leading to such goal, one or more of such sheets or disks having one or more independent discontinuous passage-ways ending without reaching the said goal, a traveler to enter the said passage-ways and move in the portions thereof in the various sheets or disks which are brought into register as the sheets or disks are changed in position, each of the said sheets or disks having visible indicia to assist in making the movements of the sheets or disks and the traveler, and a casing secured to the bottom disk, concealing the latter, and inclosing the lower end of the traveler.

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

EDWARD T. YOUNG.

Witnesses:

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