

No. 814,962.

PATENTED MAR. 13, 1906.

J. A. IRVING.

TOY TOP.

APPLICATION FILED JUNE 8, 1905.

FIG. I.

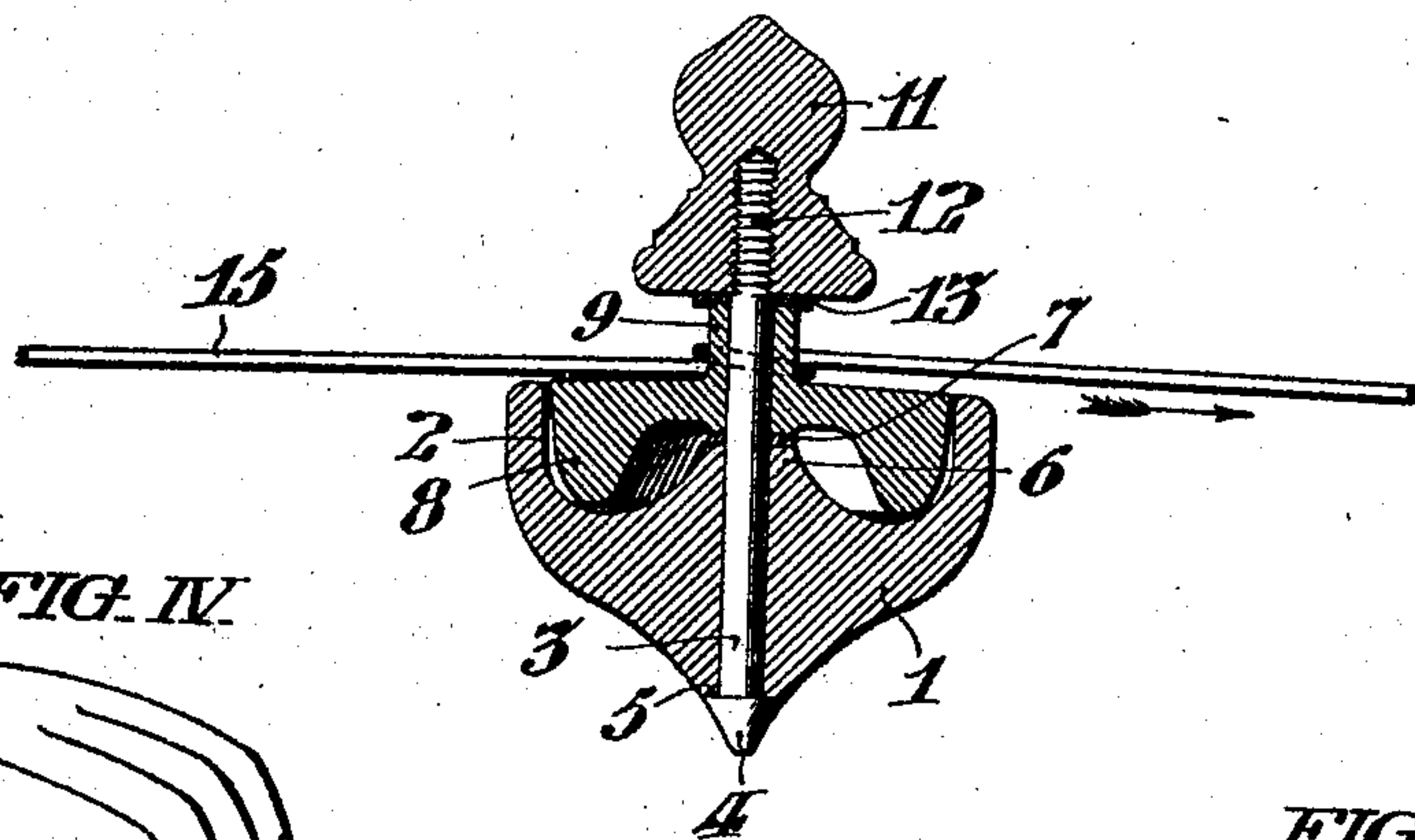


FIG. IV.

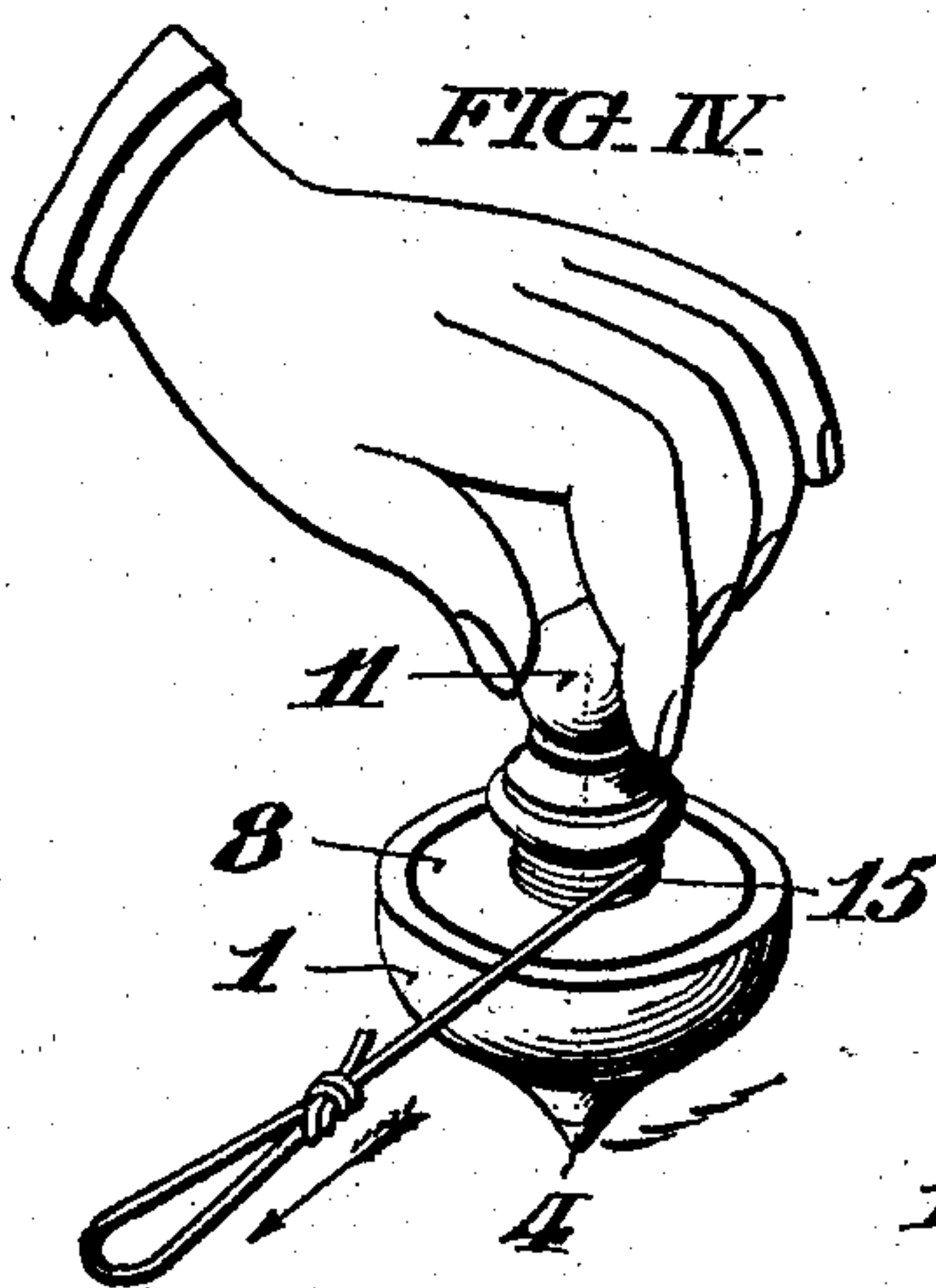


FIG. II.

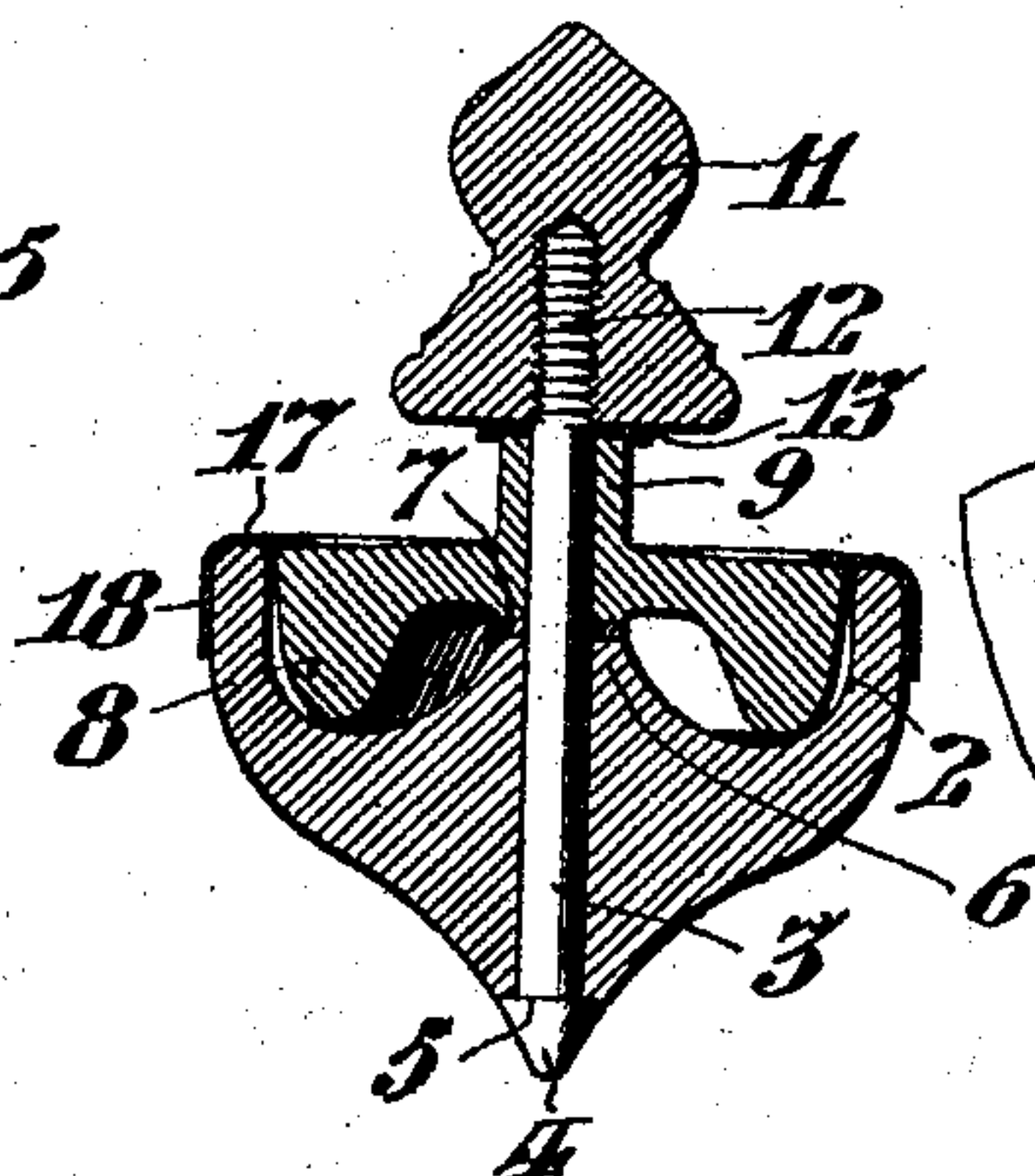


FIG. V.

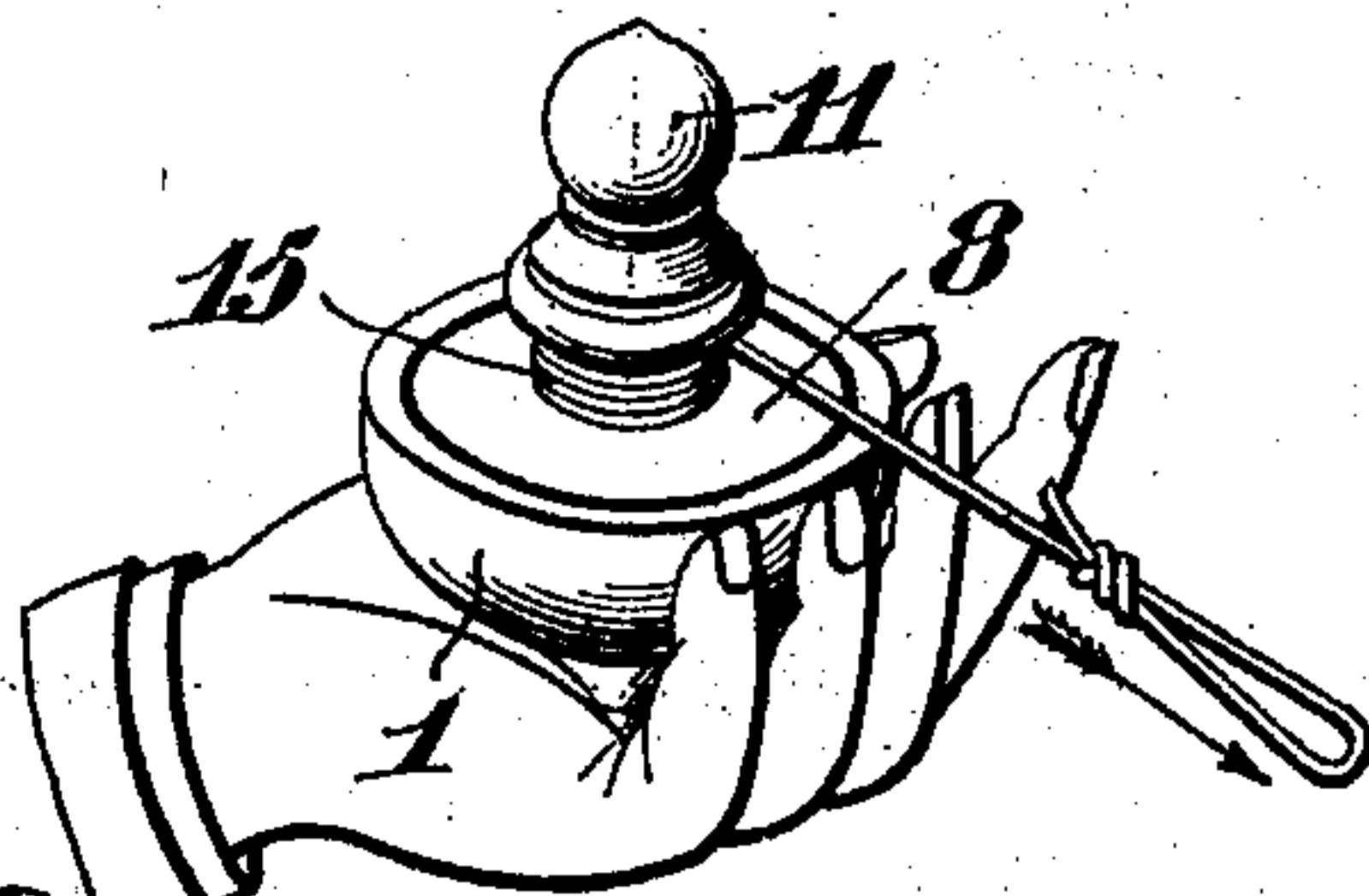
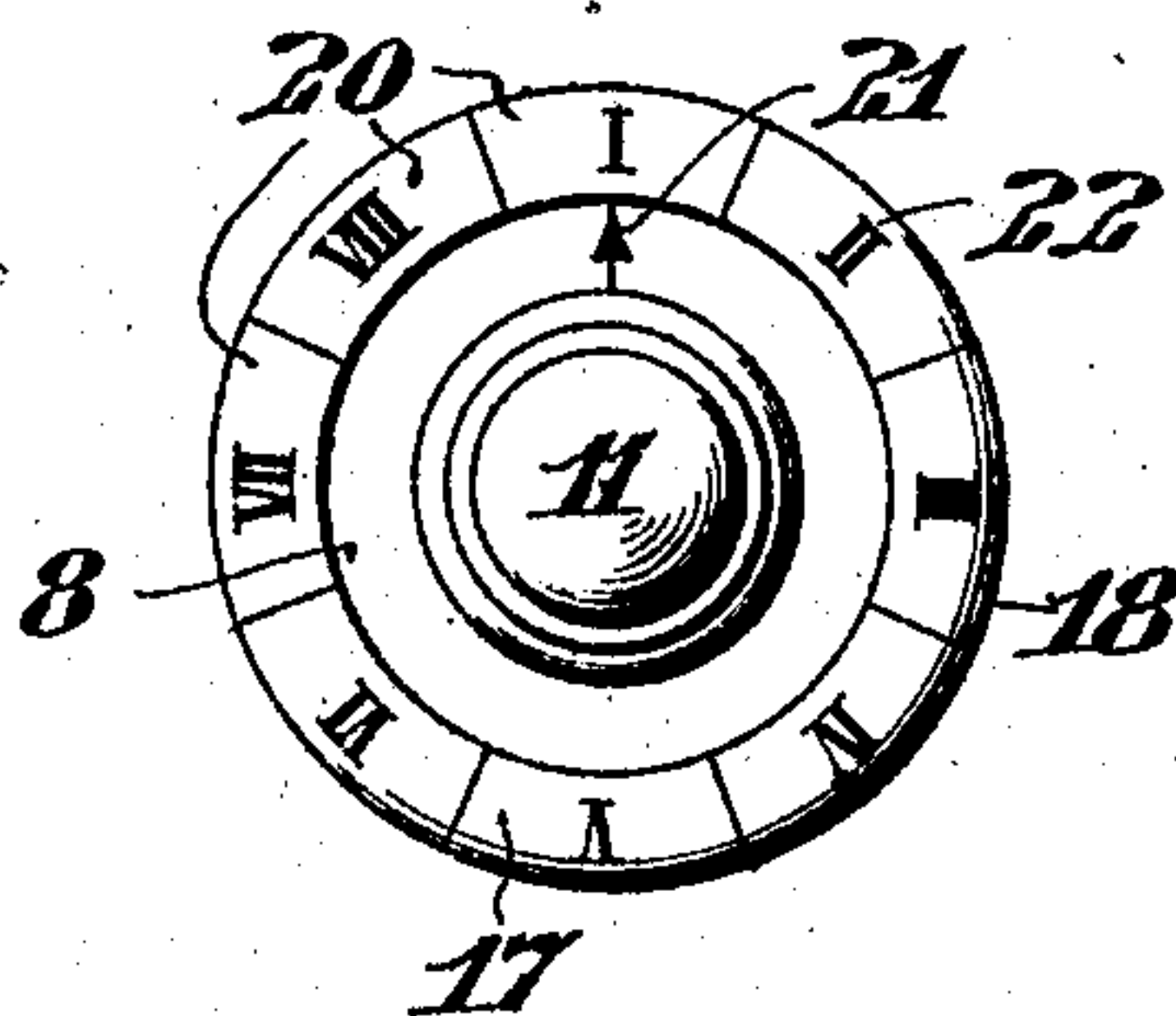


FIG. III.



WITNESSES:

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UNITED STATES PATENT OFFICE.

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TOY TOP.

No. 814,962.

Specification of Letters Patent.

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Application filed June 8, 1905. Serial No. 264,220.

To all whom it may concern:

Be it known that I, JAMES A. IRVING, of Philadelphia, in the State of Pennsylvania, have invented certain new and useful Improvements in Toy Tops, whereof the following is a specification, reference being had to the accompanying drawings.

My invention relates to toy tops of the kind comprising an outer casing in which is mounted a balance-wheel arranged to be rotated independently of the casing by means of a driving-cord.

As hereinafter described, my invention comprises a top having a cup-shaped casing open at one end and having a central shaft in rigid relation with said casing, upon which a balance-wheel is mounted to rotate, said wheel filling the open end of the casing and having a hub adapted to receive a driving-cord and said shaft being provided with a knob which retains the wheel in the casing independently of the latter.

My invention comprehends the various novel features of construction and arrangement hereinafter more definitely specified.

In the drawings, Figure I is a vertical sectional view of a top conveniently embodying my improvements. Fig. II is a sectional view similar to Fig. I, but showing a modified form of my invention. Fig. III is a plan view of the top shown in Fig. II. Fig. IV is a perspective view showing a convenient way of holding the top to spin it. Fig. V shows another way of holding the top to spin it.

In said figures, 1 is a cup-shaped casing, conveniently formed of wood, having the open-ended chamber 2 in the upper portion thereof and having the central shaft 3 permanently secured therein conveniently by frictional engagement with the resilient material of said casing. Said shaft 3 is provided with the pointed head 4, having the shoulder 5 engaging the casing 1 and supporting the latter in operative position. Said casing comprises the raised bearing 6 in concentric relation with said shaft 3 in said chamber 2, provided with the bearing-washer 7, supporting the balance-wheel 8. Said wheel 8 is provided with the hub 9 and is retained in proper position on said shaft by the knob 11, conveniently secured on said shaft by the screw-thread 12, the bearing-washer 13 being interposed between said hub and knob. It is to be understood that said knob may be otherwise secured on said shaft. For instance, the knob being of resilient mate-

rial, such as wood, said shaft may be driven into a cylindrical hole in it, primarily somewhat smaller than the shaft.

It may be observed that the construction above described is such that although the casing 1 is open at the upper end of the chamber 2 it is apparently closed by the presentation of the side of the wheel 8 flush with the upper edge of said casing, so that a driving-cord 15 may be directly engaged with the hub 9 on said wheel.

As shown in Fig. I, the top may be spun by a single bight or loop of the cord 15 around said hub 9, the cord being drawn in the direction of the arrow indicated on said figure and the top-casing 1 being held stationary either by grasping the knob 11, as indicated in Fig. IV, or by grasping the casing 1, as indicated in Fig. V. However, the most convenient way in which to spin said top is that indicated in Fig. IV, wherein the cord is tightly wrapped for a considerable portion of its length on the hub 9.

In the form of my invention shown in Figs. II and III the upper edge of the casing 1 is provided with an overhanging flange 17, conveniently formed as part of a sheet-metal annulus having a cylindrical flange 18, which may be tightly forced upon the exterior of said casing 1. As shown in Fig. III, the flange 17 may be provided with the circular scale of numbered sections 20 and the wheel 8 may be provided with the index-point 21, so that the top may be employed as a counter in a game, the several sections being given different values by numerals 22 or otherwise.

I do not desire to limit myself to the precise details of construction and arrangement of the parts herein set forth, as it is obvious that various modifications may be made therein without departing from the essential features of my invention.

I claim—

1. In a toy top, the combination with an outer casing, open at one end; of a shaft fixed in said casing and extending through both ends thereof; a balance-wheel arranged to rotate on said shaft within said casing at the open end thereof; and, means carried by said shaft independently of said casing retaining said wheel in said casing, substantially as set forth.

2. In a toy top, the combination with an outer casing, open at one end; of a shaft fixed in said casing and extending through both ends thereof; a balance-wheel arranged to

rotate on said shaft within said casing at the open end thereof; and, a knob carried by said shaft independently of said casing retaining said wheel in said casing, substantially as set forth.

3. In a toy top, the combination with an outer casing, open at one end; of a shaft fixed in said casing and extending through both ends thereof; a head on said shaft arranged to support the top in operative position; a balance-wheel arranged to rotate on said shaft within said casing at the open end thereof; and, means carried by said shaft independently of said casing retaining said wheel in said casing, substantially as set forth.

4. In a toy top, the combination with an outer casing, open at one end; of a shaft fixed in said casing and extending through both ends thereof; a conical head on said shaft having shoulders supporting said casing in operative position; a balance-wheel arranged to rotate on said shaft within said casing at the open end thereof; and, means carried by said shaft independently of said casing retaining said wheel in said casing, substantially as set forth.

5. In a toy top, the combination with an outer casing, open at one end; of a balance-wheel arranged to rotate within said casing independently thereof; a shaft fixed in said casing and extending through said wheel exterior to said casing; means on said shaft retaining said wheel in said casing; a bearing-washer between said casing and said wheel; and, a bearing-washer between said wheel and the wheel-retaining means, substantially as set forth.

6. In a toy top, the combination with an outer casing, open at one end; of a balance-wheel arranged to rotate within said casing independently thereof; a shaft fixed in said casing and extending through said wheel exterior to said casing; means on said shaft retaining said wheel in said casing; a flange on said casing overhanging the upper edge of said wheel; a scale on said flange; and, an in-

dex on said wheel arranged to register with different sections of said scale, substantially as set forth.

7. In a toy top, the combination with an outer casing; of a balance-wheel arranged to rotate within said casing independently thereof; a shaft fixed in said casing and extending through said wheel exterior to said casing; means on said shaft retaining said wheel in said casing; a flange on said casing overhanging the upper edge of said wheel; a scale on said flange comprising a series of sections; means on said flange indicating different values for the respective sections; and, an index on said wheel arranged to register with different sections of said scale, substantially as set forth.

8. In a toy top, the combination with an outer casing of resilient material open at one end; of a shaft fixed in said casing; a balance-wheel arranged to rotate on said shaft within said casing at the open end thereof; means carried by said shaft independently of said casing retaining said wheel in said casing; and a primarily separate annulus comprising a flange overhanging the upper edge of said wheel, substantially as set forth.

9. In a toy top, the combination with an outer casing of resilient material open at one end; of a shaft fixed in said casing; a balance-wheel arranged to rotate on said shaft within said casing at the open end thereof; means carried by said shaft independently of said casing retaining said wheel in said casing; a primarily separate annulus of metal having a cylindrical flange embracing said casing; and a flange overhanging said wheel, substantially as set forth.

In testimony whereof I have hereunto signed my name, at Philadelphia, Pennsylvania, this 7th day of June, 1905.

JAMES A. IRVING.

Witnesses:

ARTHUR E. PAIGE,
CLIFTON C. HALLOWELL.