

No. 815,351.

PATENTED MAR. 20, 1906.

W. I. KAISER.
STOPPER.

APPLICATION FILED MAY 16, 1905.

Fig. 1.

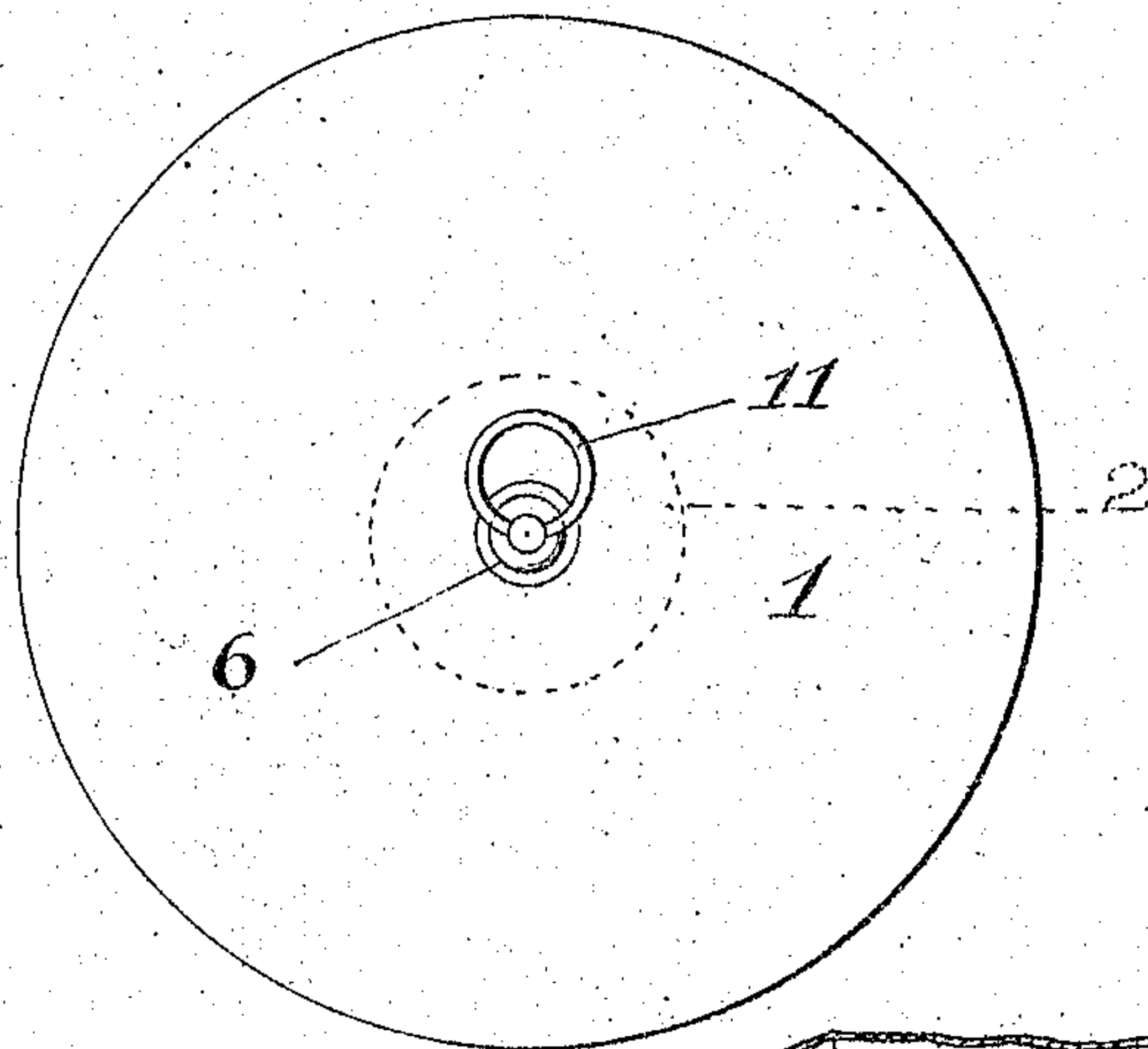


Fig. 2.

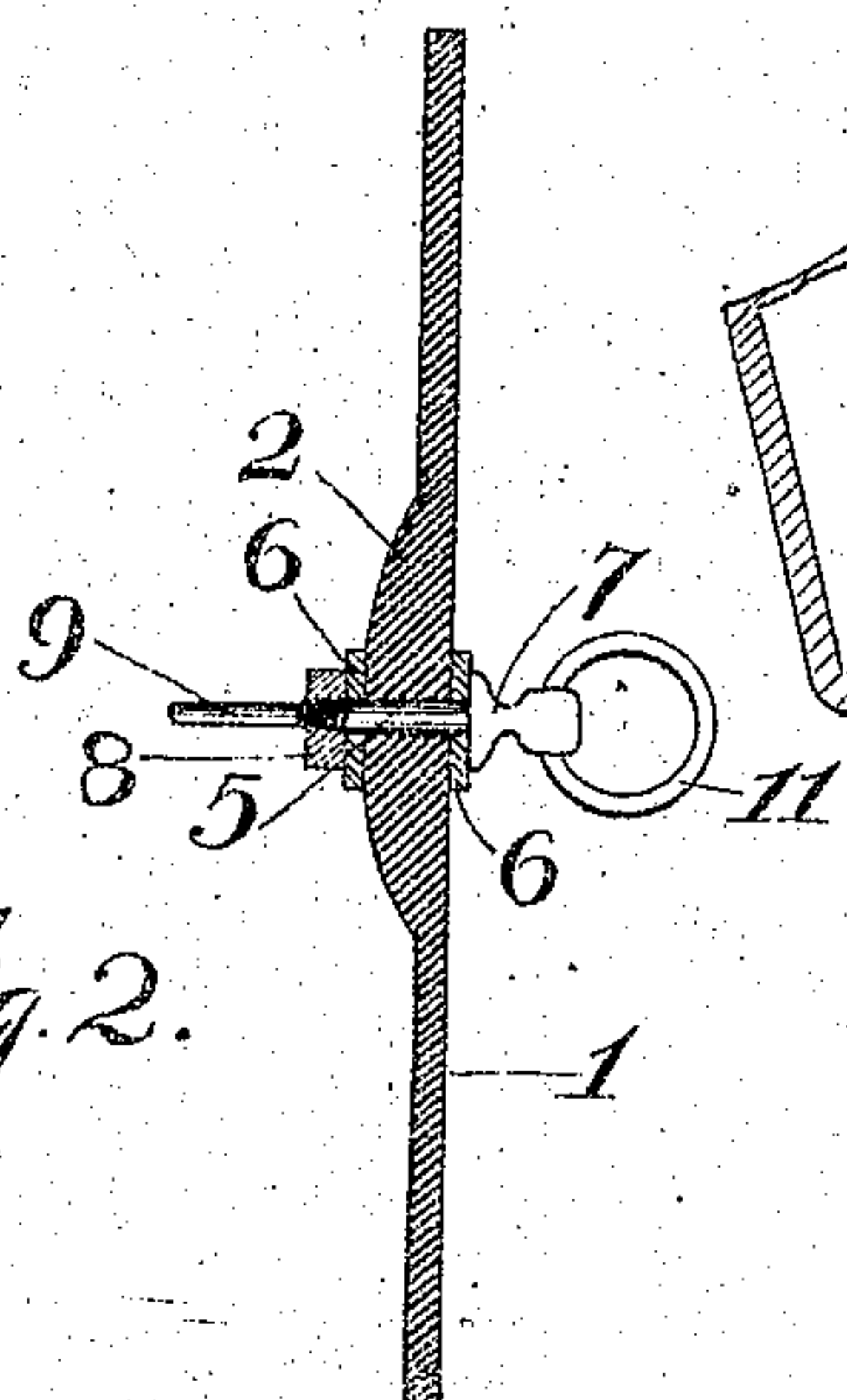


Fig. 3.

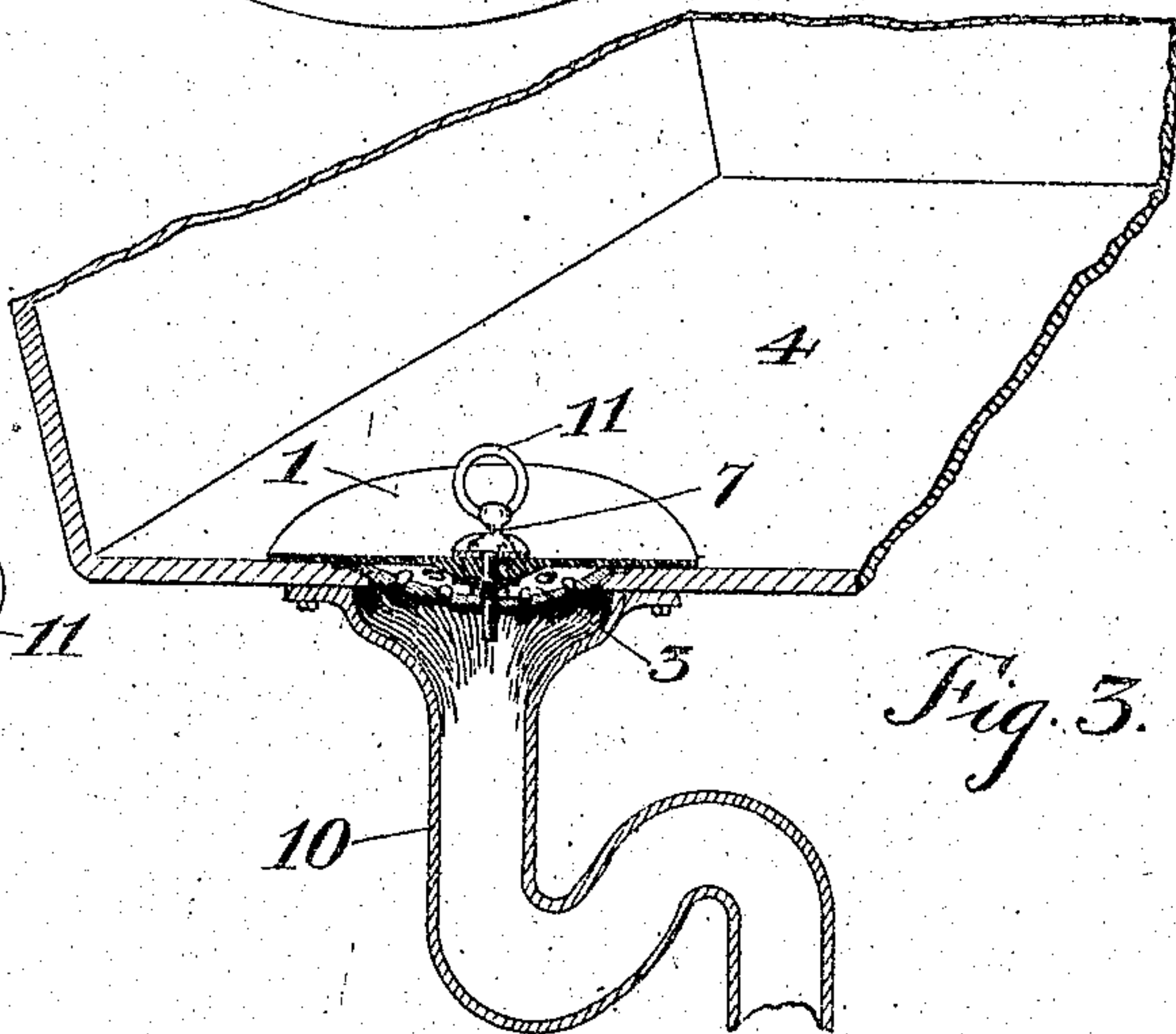
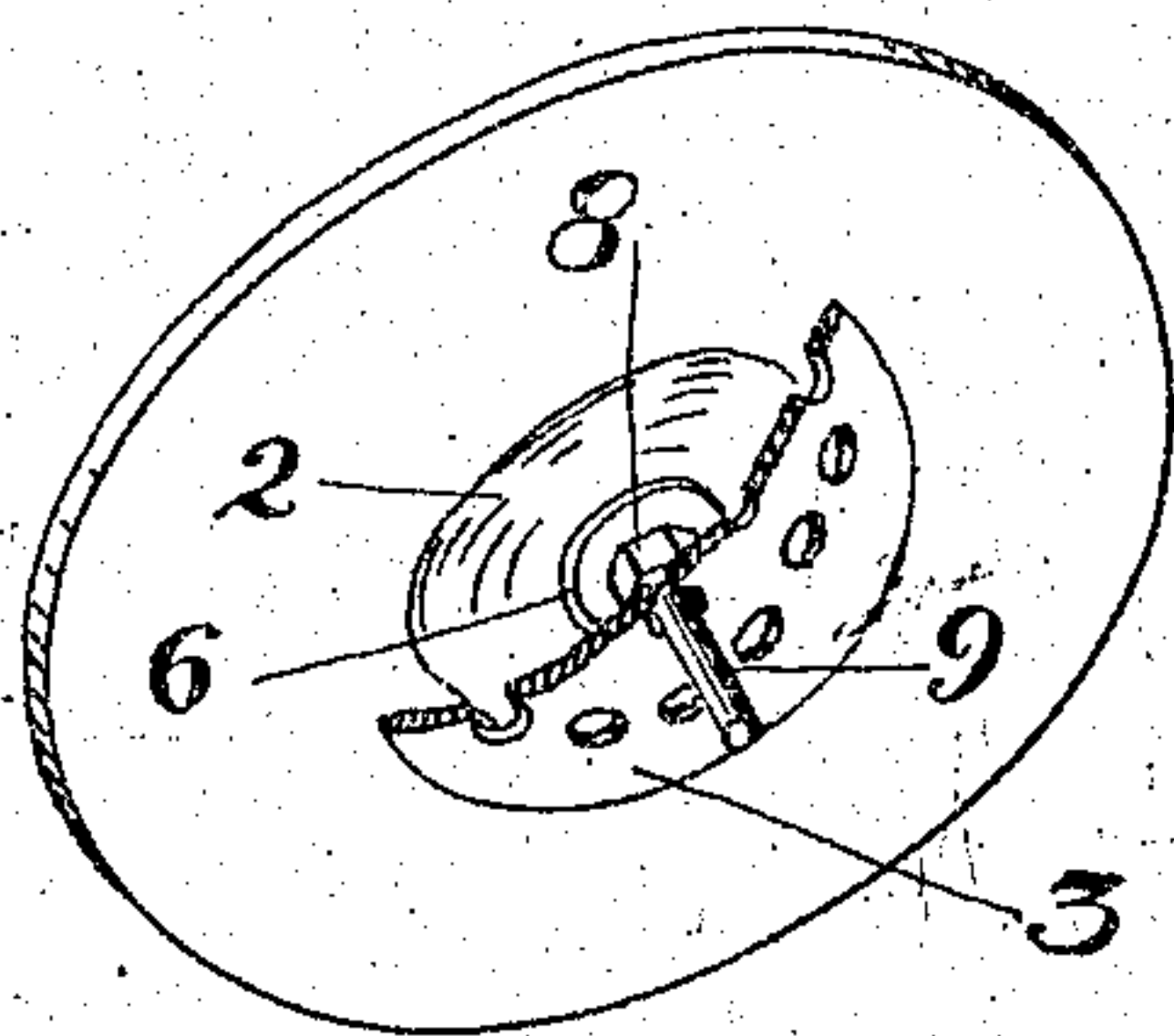


Fig. 4.



Witnesses

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STOPPER.

No. 815,351.

Specification of Letters Patent.

Patented March 20, 1906.

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To all whom it may concern:

Be it known that I, WILLIAM I. KAISER, a citizen of the United States of America, and a resident of the city of Seattle, in the county of King and State of Washington, have invented certain new and useful Improvements in Stoppers, of which the following is a specification.

My invention relates to improvements in stoppers for sinks; and the primary object thereof is to provide an improvement of this type which will be extremely simple of construction and comparatively inexpensive to manufacture, and by its construction, aside from serving as a stopper, can be employed to remove any temporary obstruction in the outlet-pipe.

With the above and other objects in view, described in the following, the invention consists of the parts, arrangement, and combination of parts referred to in the following, and succinctly pointed out in the appended claims.

In the accompanying drawings, in which like numerals of reference indicate like parts throughout the several views, Figure 1 is a view in top plan of my invention. Fig. 2 is a diametrical section thereof. Fig. 3 is a fragmentary view of a sink with my improvement shown in position over the outlet thereof; and Fig. 4 is a detail view in perspective, showing my improved stopper slightly elevated from the strainer of the outlet of the sink.

My invention is particularly designed to do away with pans, small tubs, and the like, as are ordinarily required in washing dishes, small articles of clothing, &c.; and it consists of a flexible body 1, illustrated as being circular in form and being formed on its under face with a centrally-disposed boss or thickened portion 2, which gives rigidity to the stopper, and, having its outer face convex, as shown in the drawings, will rest snugly in the concaved perforated strainer 3, which covers the outlet opening of the sink 4.

Reference-numeral 5 indicates a bolt which extends through the body 1 and the boss 2 thereof, and on this bolt are arranged washers 6, which bear on opposite sides of the stopper and are held thereagainst by the head 7 of the bolt and nut 8. The lower end of the bolt is unthreaded, this portion of the

bolt being indicated by reference-numeral 9 and adapted for insertion, preferably through the central opening or aperture of the strainer 3, whereby the proper seating of the stopper is assured. The stopper is preferably formed of vulcanized rubber, and when the same is properly seated and covered by the water the same will be tightly held over the strainer 3 by force of suction.

To remove any temporary obstructions from the outlet-pipe 10, the stopper is placed over the strainer 3, as heretofore stated, and sufficient water admitted into the sink to keep the stopper covered at all times. The central portion of the stopper is then alternately raised and lowered, this being done without lifting the edges of the stopper from the sink, and the force of suction resulting from this action will readily clear the pipe.

If desired, a chain or other flexible connection can be attached to ring 11 of bolt 5 to facilitate the removal of the stopper or in the operation thereof during the removal of obstructions in the outlet-pipe 10.

While I have referred to the stopper as being of circular form and have found the same to be efficient, I do not desire myself to be understood as limiting the invention to that form alone.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent of the United States of America, is—

1. A stopper of the type set forth consisting of a flexible body portion formed on one of its faces with a boss, and a bolt projecting through said boss, the portion of the bolt below said boss being unthreaded.

2. A stopper of the type set forth having a flexible body portion formed on one of its faces with a boss, a bolt projecting through said boss and being formed with a threaded portion, and a nut on said threaded portion, the portion of the bolt below said threaded portion being unthreaded, substantially as and for the purpose specified.

3. A device of the type set forth which serves as a combined stopper and means for removing obstructions from the outlet-pipe of a sink or the like, consisting of a disk having a flexible outer portion, in combination with a sink having an outlet, means connected to the central portion of the stopper for causing the same to be alternately raised and low-

ered, said stopper being arranged over the outlet of the sink and having its outer portion engaging the bottom of the sink about said outlet thereof, said outer portion of the
5 stopper being extended, whereby it will not be disengaged from the bottom of the sink while said central portion is being raised and lowered, and guide means depending from

the lower face of said stopper, for the purpose specified.

Signed at Seattle, Washington, this 2d day of May, 1905.

WILLIAM I. KAISER.

Witnesses:

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