

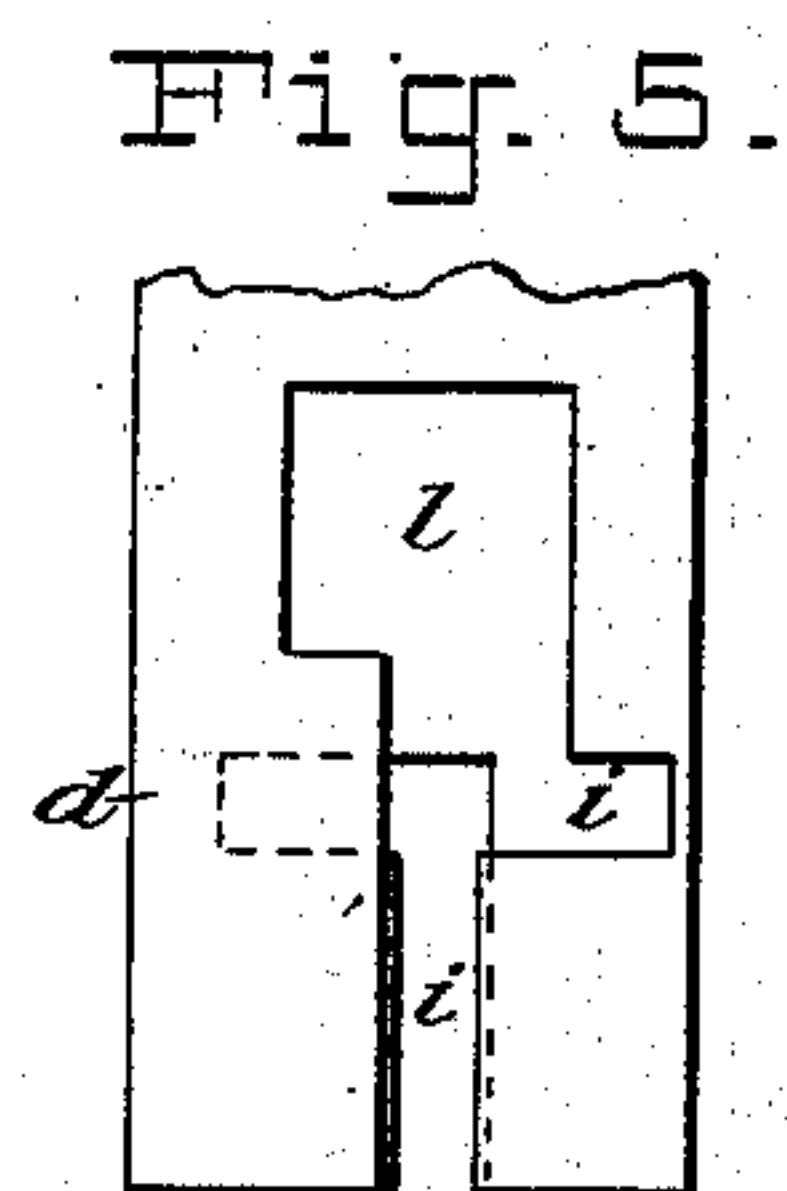
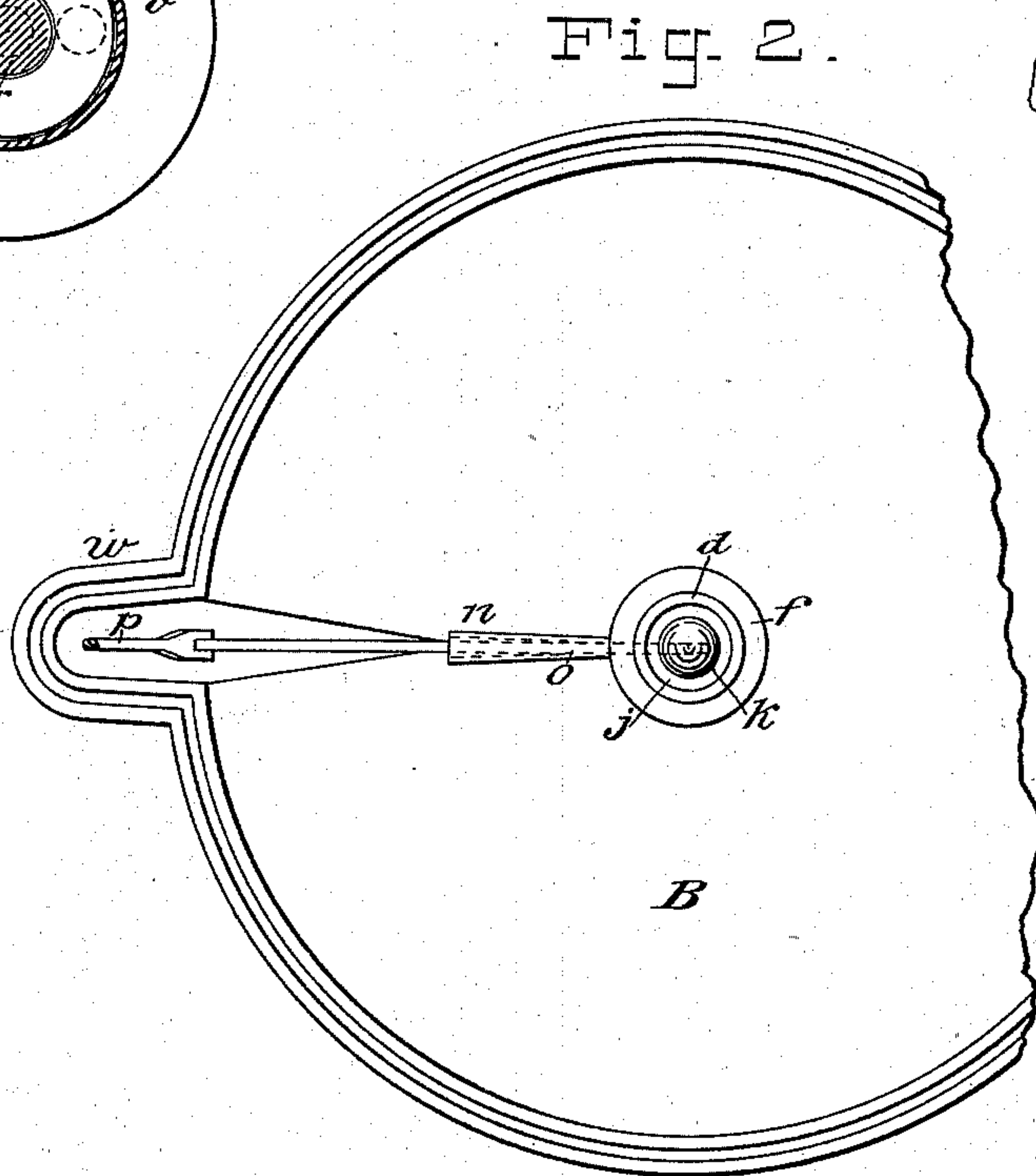
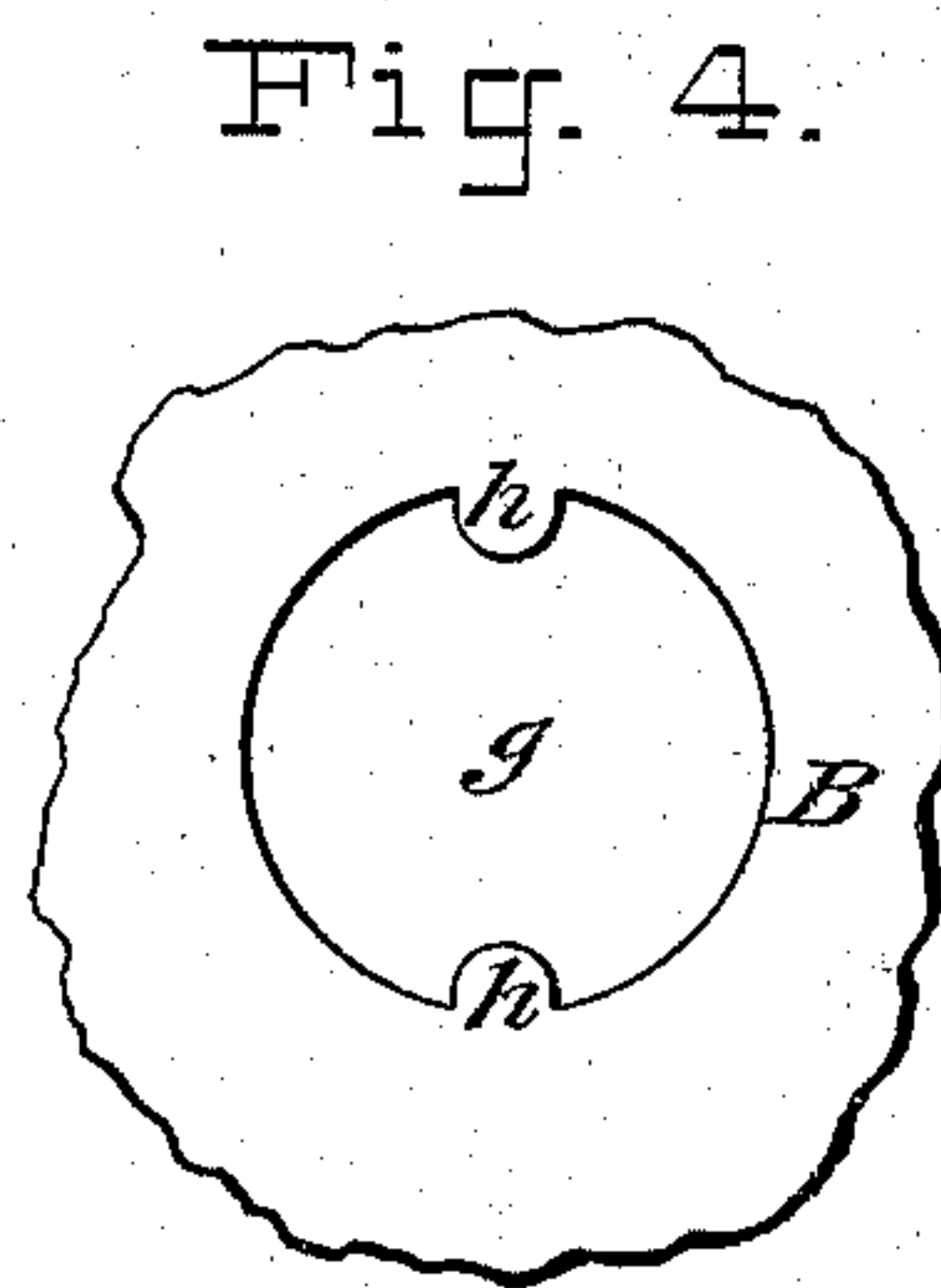
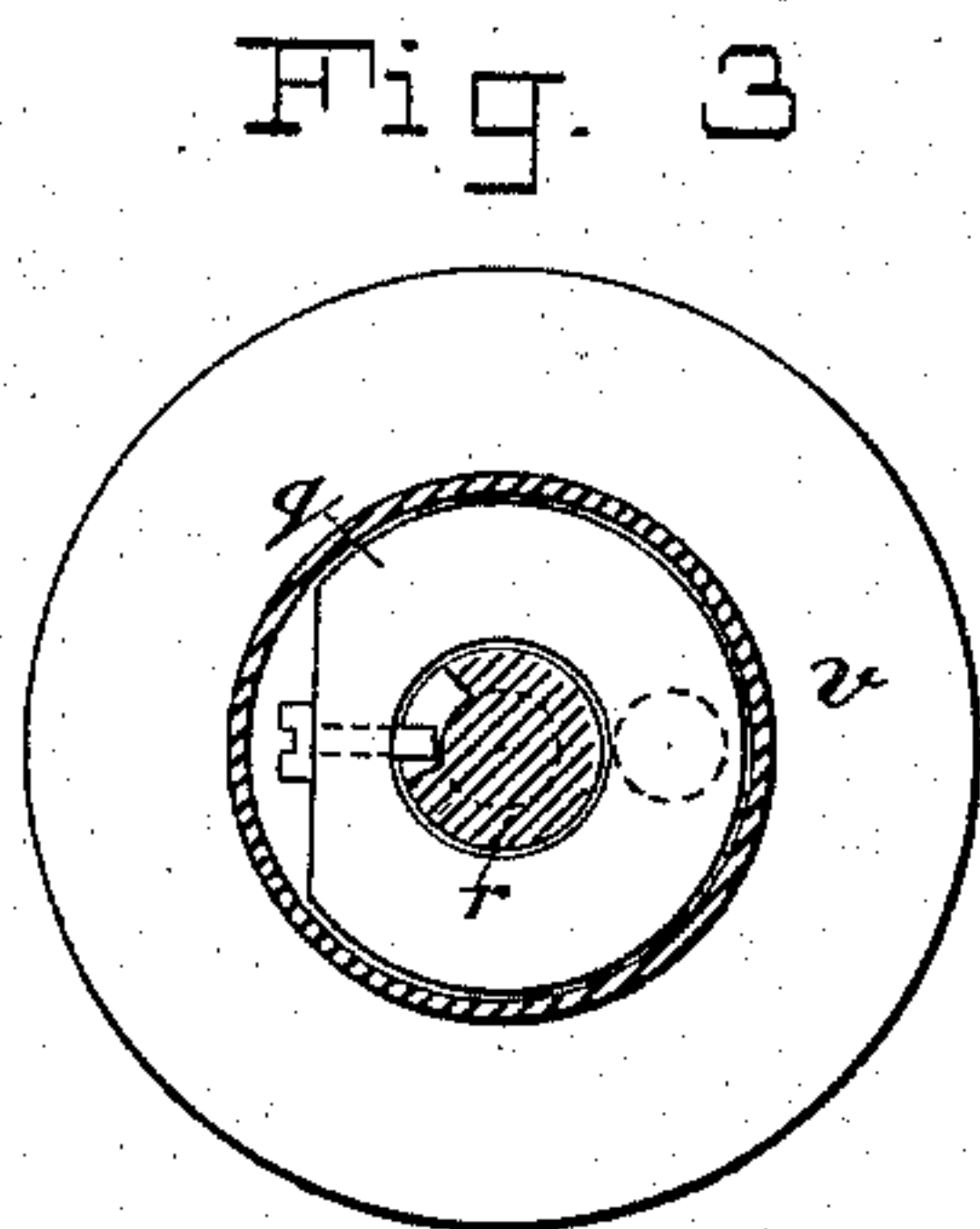
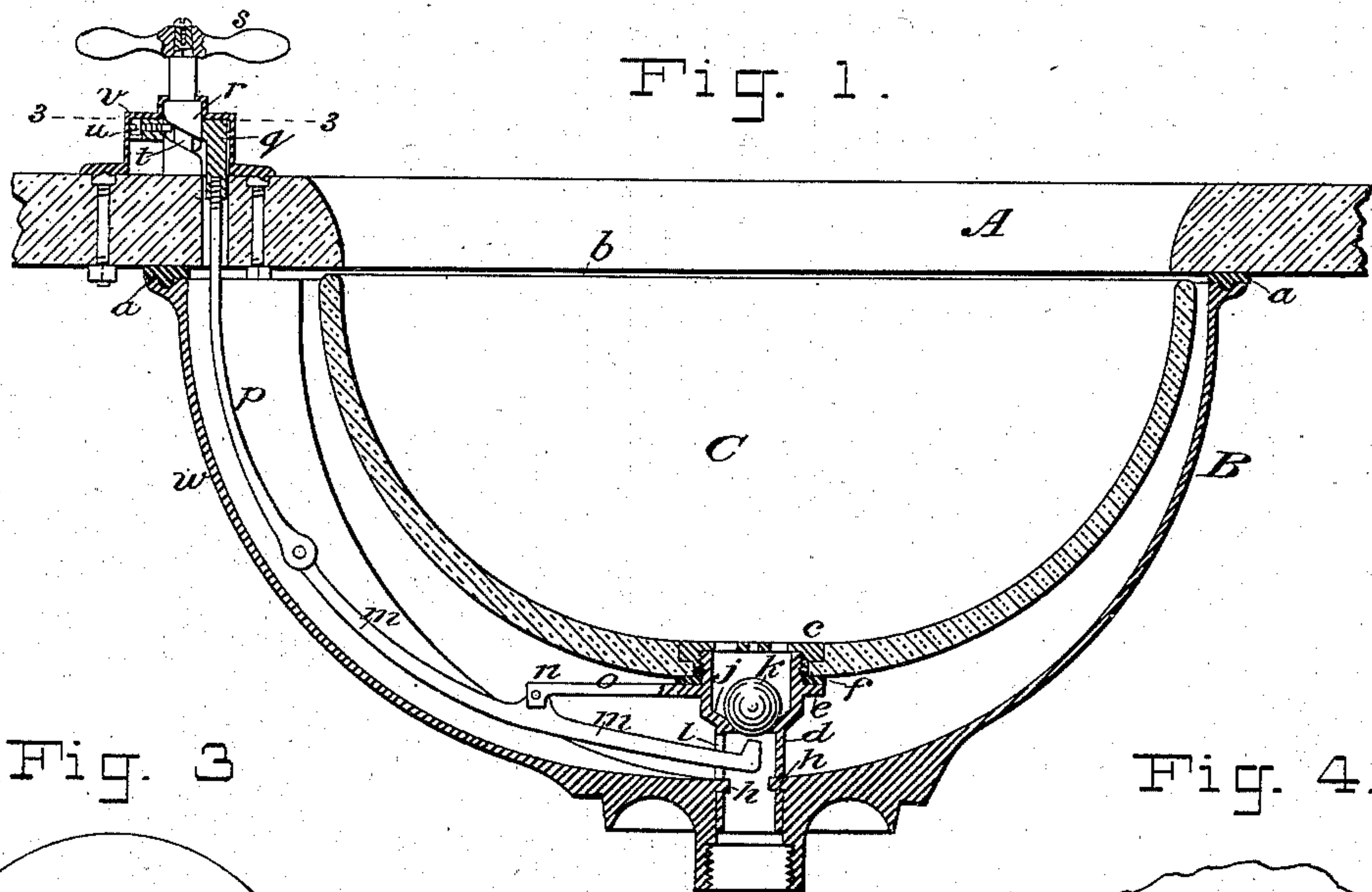
(No Model.)

C. E. ROBINSON.

LAVATORY BASIN.

No. 249,549.

Patented Nov. 15, 1881.



WITNESSES:

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CHARLES E. ROBINSON, OF BROOKLYN, NEW YORK.

LAVATORY-BASIN.

SPECIFICATION forming part of Letters Patent No. 249,549, dated November 15, 1881.

Application filed March 31, 1881 (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. ROBINSON, a citizen of the United States, residing in Brooklyn, in the county of Kings and State of New York, have invented certain Improvements in Lavatory-Basins, of which the following is a specification.

My invention relates to stationary lavatories or wash-basins, and has for its objects to improve the present construction and connections of the several parts, and to provide a simple and effective waste or outflow valve which can be controlled from above the basin, thereby obviating the necessity of inserting a plug by hand and removing it by pulling a chain, as in the present construction.

In the accompanying drawings, Figure 1 is a vertical mid-section of a lavatory provided with my invention. Fig. 2 is a plan of the same with the bowl proper and slab removed. Fig. 3 is a fragmentary horizontal section, taken on line 3 3 and enlarged; and Figs. 4 and 5 are enlarged fragmentary detail views, which will be referred to more particularly hereinafter.

I have shown my improvements as applied to what is known as the "Wellington overflow-basin;" but they are not of necessity confined to this form of basin. One portion of the invention relates to the mode of fixing the bowl or basin proper in place, and another portion to mechanism for stopping the waste-outlet from the bowl.

Let A represent the usual marble or metal slab; B, the outer bowl-like trunk, secured by means of a packing-ring, *a*, to the under side of the slab, and C the bowl proper, a space, *b*, being left between the upper margin of the bowl C and the slab, to permit the water from the bowl to overflow into the trunk B. Generally speaking, this construction is, so far, the same as that shown in the patents of D. Wellington, Nos. 102,737 and 199,765. In these patents, however, the bowl is supported in the trunk, either wholly or partially, by suspension from its upper edge.

In my herein-described construction I provide the bowl with a tubular support at its bottom only, leaving the upper edge free for the overflow, which is entirely unobstructed. Into the bottom of the bowl C, which is generally made from some ceramic material, I fix or set

a metal bush, *c*, provided, by preference, with the usual strainer, to prevent obstructing substances from getting into the waste-pipe. This bush has a female screw, which engages a male screw on a tubular stem, *d*, as shown. This stem has a flange, *e*, which, when the stem is screwed into the bush, clamps a packing-ring, *f*, against the bowl around the bush. This makes a water-tight joint at the bottom of the bowl, and serves also to securely fix the stem *d* to the bowl.

Referring to Fig. 4, which is an enlarged plan view of the aperture *g* in the bottom of the trunk B, *h h* are lugs or projections at the margin of said aperture, which lugs serve to engage angular slots *i i* (see Fig. 5) in the stem *d*, and form what is usually called a "bayonet-joint." The enlarged view of the stem in Fig. 5 shows this arrangement very clearly. When the stem has been inserted in the aperture *g* as far as the lugs *h* will permit, the bowl and stem are turned on their common axis until the said lugs engage the lateral branches of the slots *i*, when the parts will be firmly joined together, and the stem can only be released from its socket by turning backward. The margins of the lateral branches of the slots *i* may be slightly beveled or inclined, so as to cause the lugs to draw the stem downward as it is turned, and the stem may have a collar or flange to be drawn down to and firmly seated on the trunk; or the stem may be screwed into the trunk, but the mode shown is the cheaper.

The above-described mode of attaching the bowl to the trunk leaves the space between the bowl and trunk wholly unobstructed, gives a firm support to the bowl, and permits the bowl to be readily removed and replaced when this is necessary.

Within the hollow stem *d* is a valve-seat, *j*, adapted to receive a valve, *k*, which rests normally in said seat and closes the valve aperture or opening through the stem to the waste-pipe; and in the wall of the stem is an aperture, *l*, through which the overflow-water passes. This aperture also serves to permit the passage of a lever, *m*, for lifting the valve from its seat.

The lever *m* is fulcrumed at *n* to some fixed point, preferably to an arm *o*, which branches from the stem *d*, and its free end is turned up, so as to take under the valve. Its other end

is coupled to a rod, *p*, the upper end of said rod being attached to a ring, *q*, which encircles a stem, *r*, capable of being turned within said ring by means of a suitable handle, *s*. The
 5 stem *r* has a spiral groove, *t*, cut or formed round it, and with this groove engages the tip of a pin or screw, *u*, in the ring *q*. An inclosing-case, *v*, which is secured to the slab, forms housings and bearings for the ring *q* and the
 10 stem *r*.

The operation of the above-described mechanism is as follows: When the handle *s* is turned it rotates the stem *r*, to which it is attached. The spiral groove *t* on said stem acts
 15 to drive down the ring *q*, and this, acting through rod *p* and lever *m*, lifts the valve *k* from its seat and allows the waste water to flow off. A reversal of the operation allows the valve to again assume its normal position
 20 on the valve-seat. Thus it will be seen that I avoid the annoyances of the ordinary chain and plug or stopper and provide for an effectual automatic closure of the waste-outlet.

I have said that the normal condition of the
 25 valve is on its seat and the waste-outlet closed; but it is obvious that the valve may be left raised from its seat for any length of time, and this may be desirable where the water is to be left running for a time.

30 To make room for the lever and rod for operating the valve I have shown a lateral enlargement or extension, *w*, of the trunk *B*; but this is a matter of little importance. In adapting my valve and its operating mechanism to
 35 bowls not employing a trunk, *B*, the said lever and rod may be arranged in the conduit which extends from the overflow-opening down to the waste-pipe.

Having thus described my invention, I
 40 claim—

1. An overflow-basin comprising a trunk secured to the slab and a bowl proper mounted therein on a stem which connects the two at their bottoms, whereby the space between the
 45 trunk and bowl is left entirely unobstructed, substantially as and for the purposes set forth.

2. The combination, with the trunk of an overflow-basin, of the bowl proper mounted in

the trunk on a tubular stem, which is socketed in the waste-outlet of the trunk, substantially
 50 as and for the purposes set forth.

3. The combination, with the trunk of an overflow-basin, of the bowl proper mounted in the trunk on a tubular stem, which connects the waste-outlet of the bowl with the waste-
 55 outlet of the trunk, the said stem provided with a suitable valve-seat, a valve resting in or on said seat, and a mechanism, substantially as described, arranged in the space between the bowl and the trunk, for lifting the
 60 valve from its seat, substantially as set forth.

4. The combination, with the bowl, of the valve arranged to close its waste-outlet, the lever *m*, rod *p*, ring *q*, spirally-grooved stem
 65 *r*, and casing *v*, all arranged to operate substantially as and for the purposes set forth.

5. The combination, with the trunk having an outlet, *b*, provided with lugs or projections
 70 *h*, of the bowl provided with a tubular stem, *d*, having angular slots *i*, to engage the projections *h* on the trunk, substantially as and for the purposes set forth.

6. The combination of the bowl *C*, the screw-threaded bush *c*, the tubular screw-threaded stem *d*, provided with a flange, *e*, slots *i*, a
 75 valve-seat, *j*, and an aperture, *l*, for the overflow-water, the packing-ring or washer, *f*, the trunk *B*, provided with lugs *h*, to engage the slots *i* in the stem *d*, the valve *k*, and the lever
 80 *m*, actuated from above the slab, to which the trunk is secured, all arranged substantially as and for the purposes set forth.

7. The combination, with the bowl *C*, of the valve *k*, arranged to normally close the waste-outlet, the trunk *B*, provided with an extension or enlargement to receive the mechanism
 85 for lifting the valve, and the said valve-lifting mechanism, all arranged substantially as set forth.

In witness whereof I have hereunto signed
 90 my name in the presence of two subscribing witnesses.

CHARLES E. ROBINSON.

Witnesses:

HENRY CONNETT,

ARTHUR C. FRASER.