

(No Model.)

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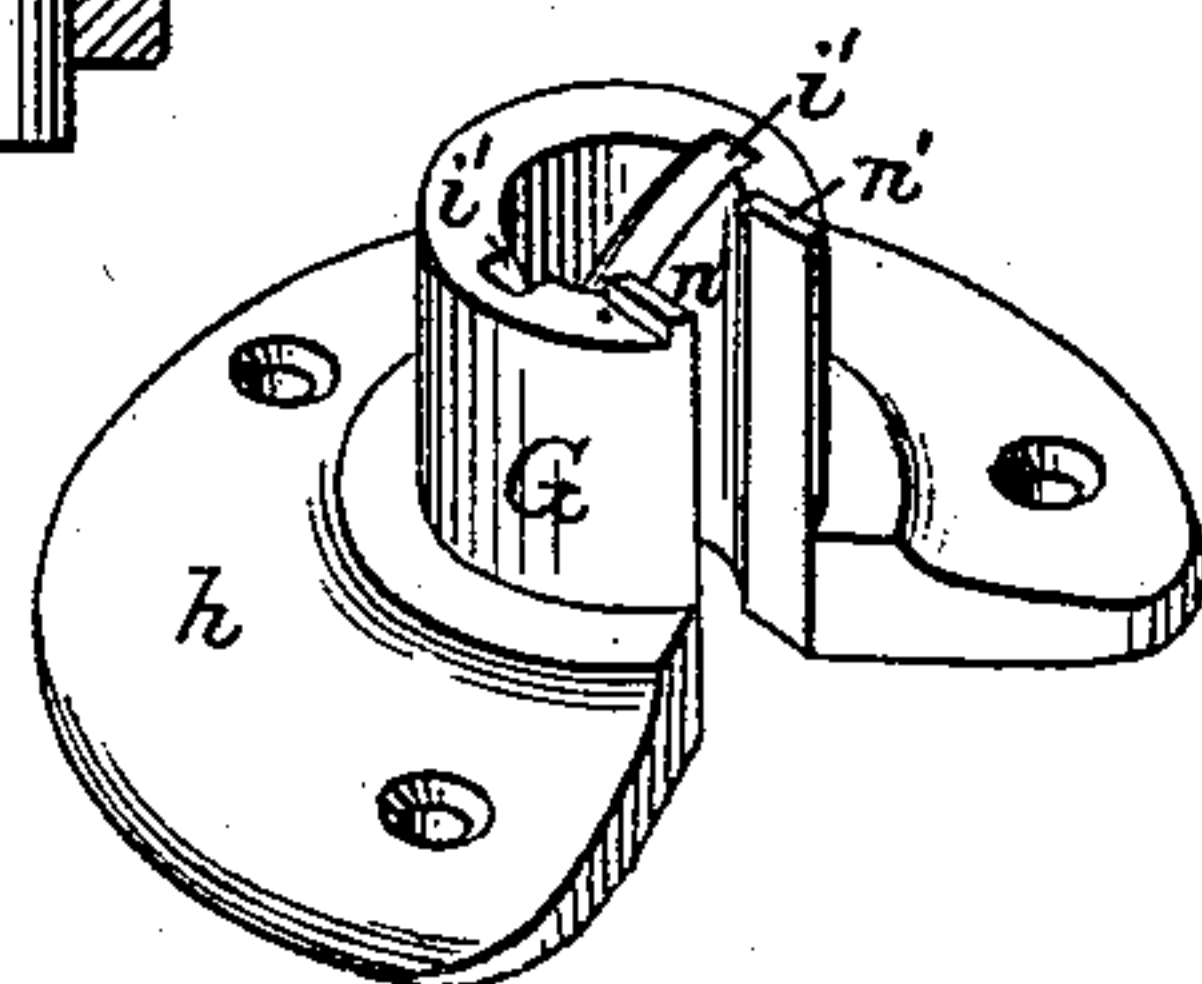
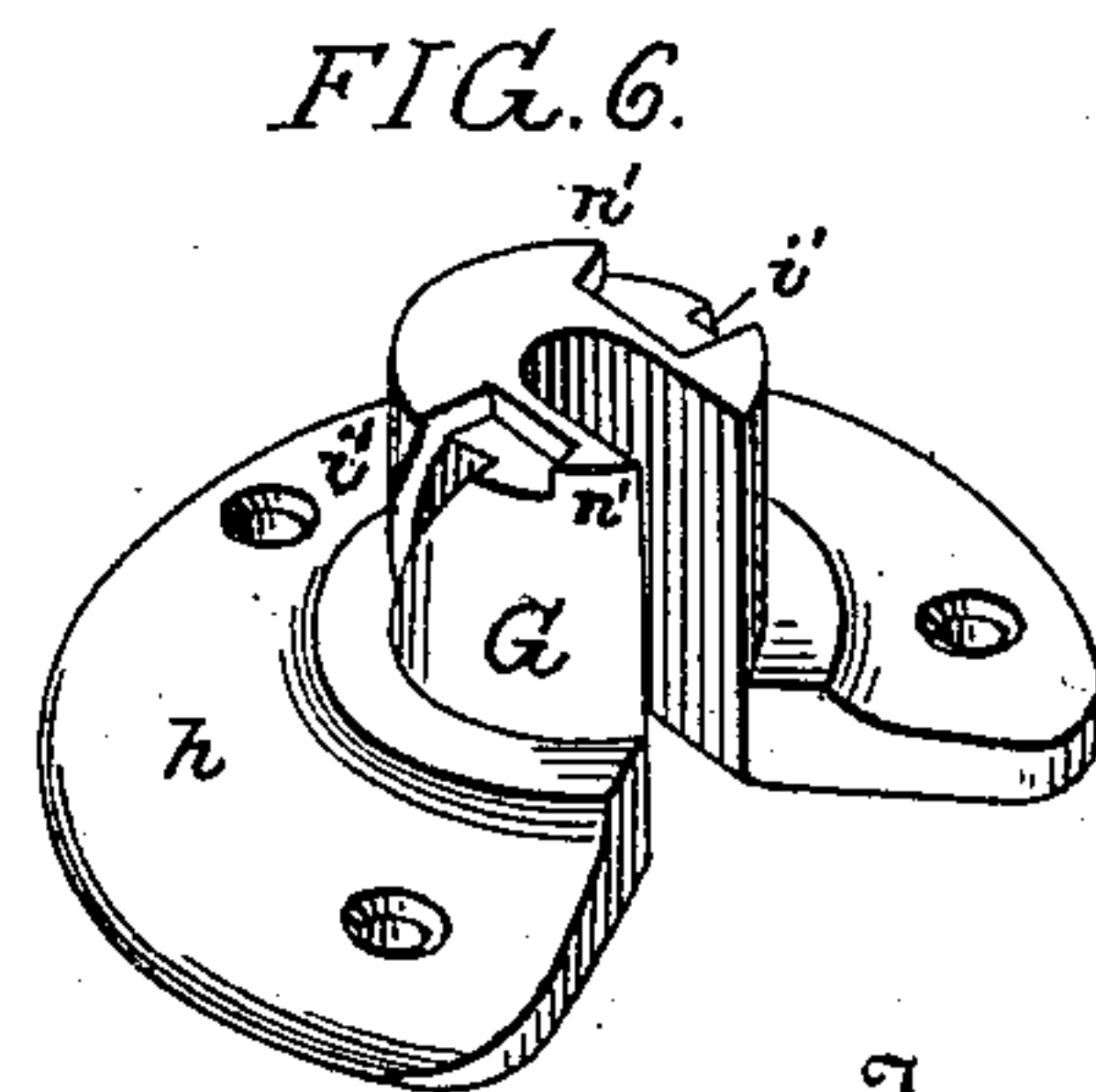
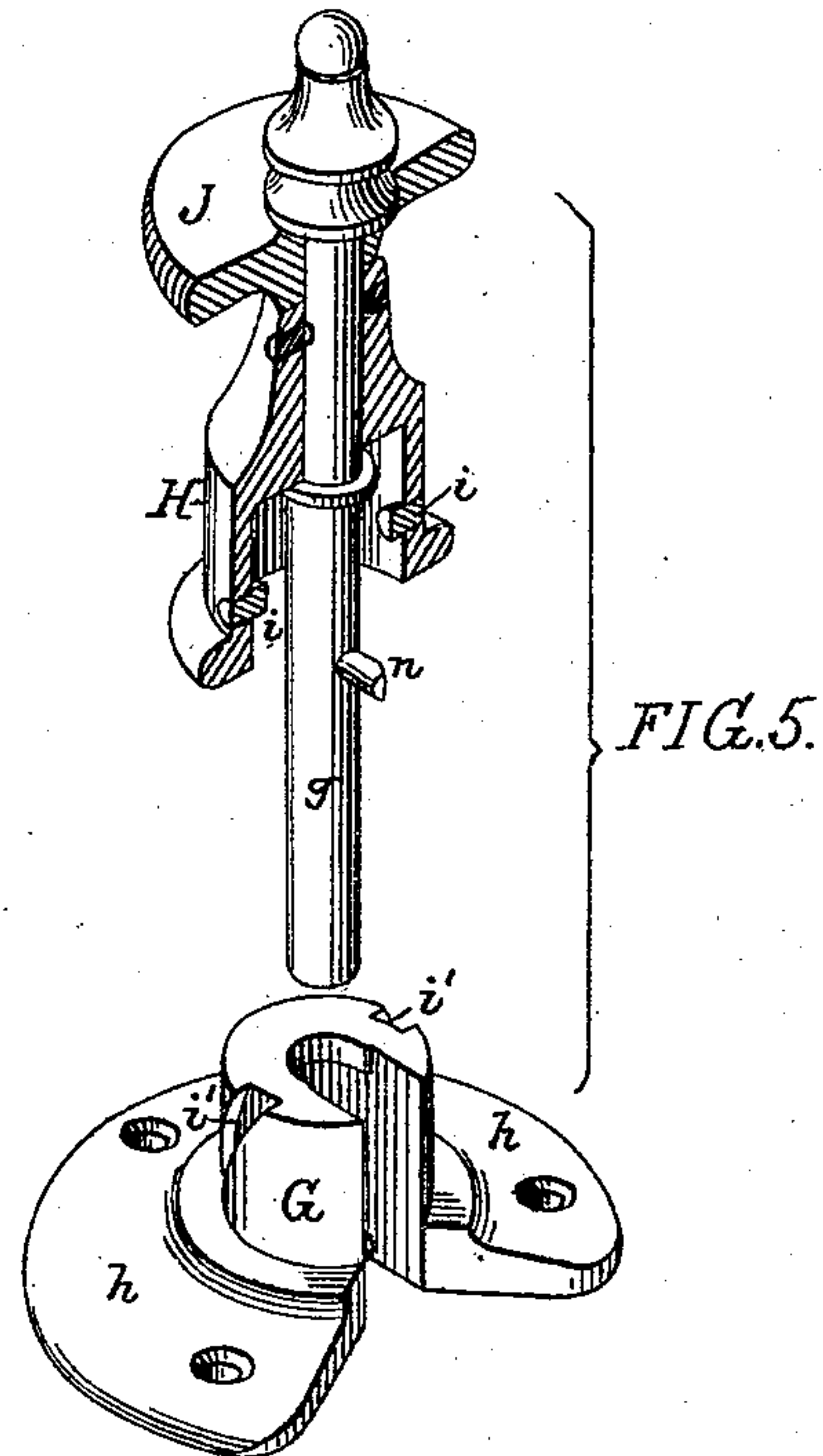
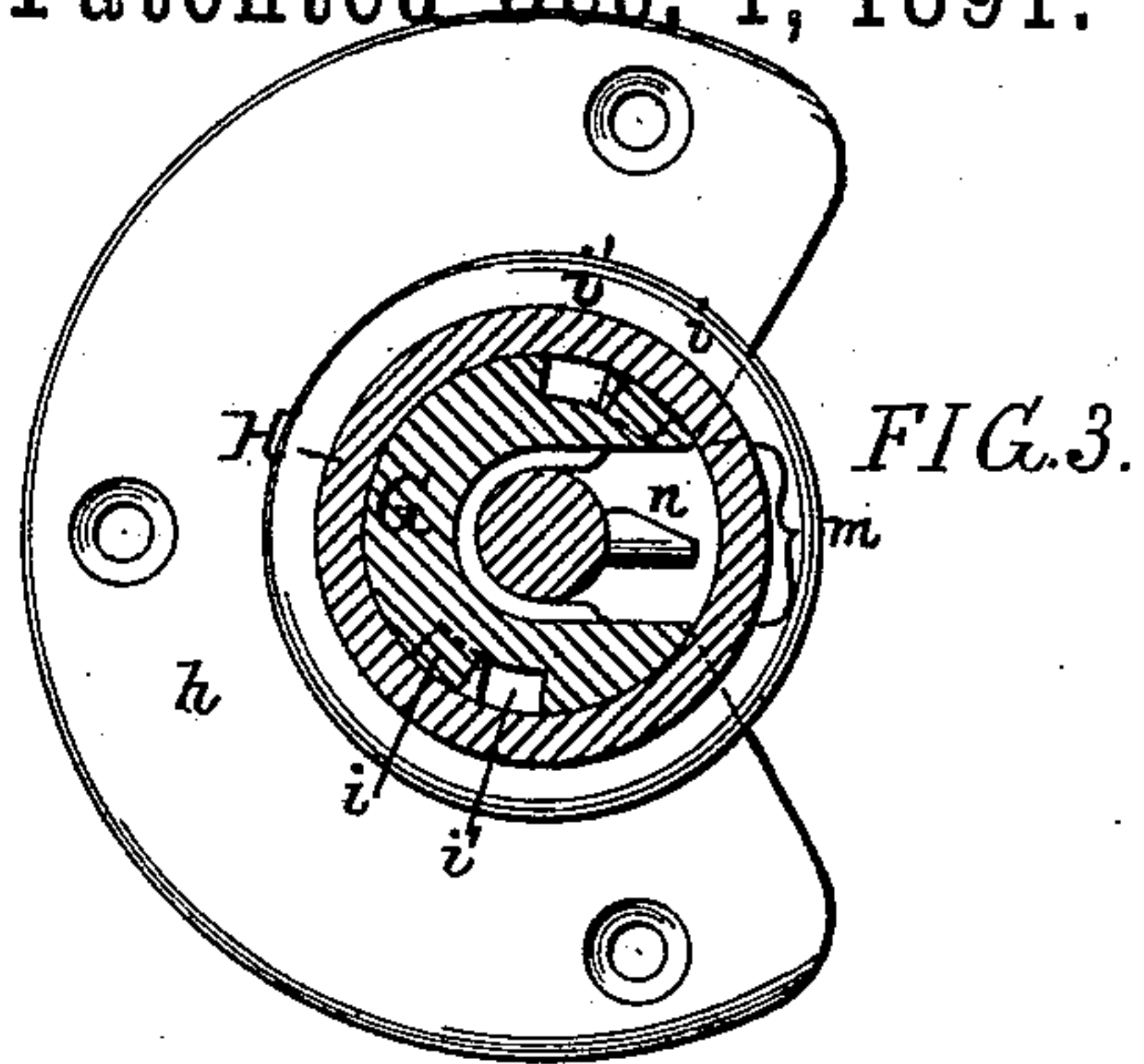
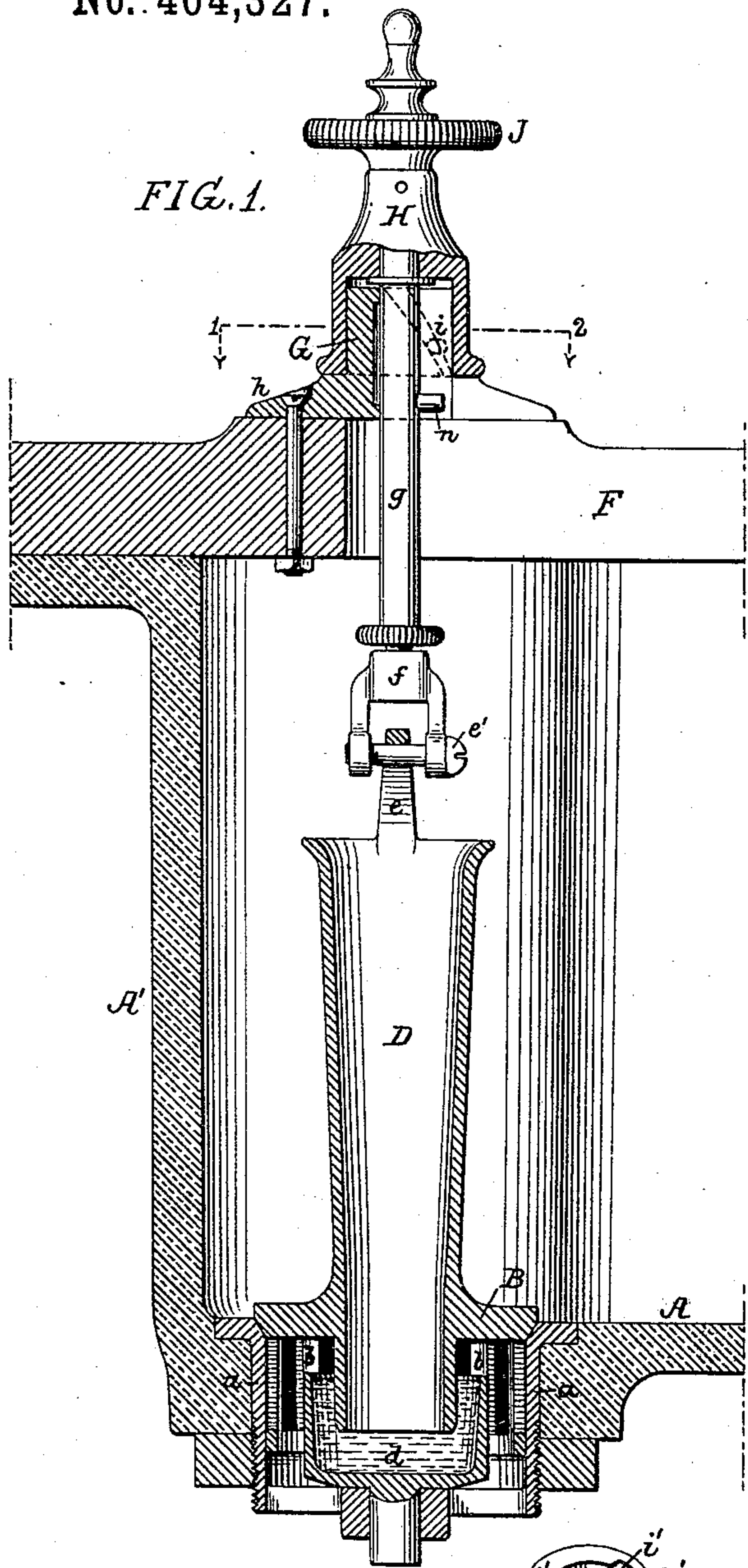
T. KENNEDY, Dec'd.

J. FARLEY, Administrator.

WASH BASIN OR LIKE STRUCTURE.

No. 464,327.

Patented Dec. 1, 1891.



Witnesses

William D. Bonner
John E. Parker

Inventor

Thomas Kennedy

By his Attorneys

Hawson & Sons

(No Model.)

2 Sheets—Sheet 2.

T. KENNEDY, Dec'd.

J. FARLEY, Administrator.

WASH BASIN OR LIKE STRUCTURE.

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Patented Dec. 1, 1891.

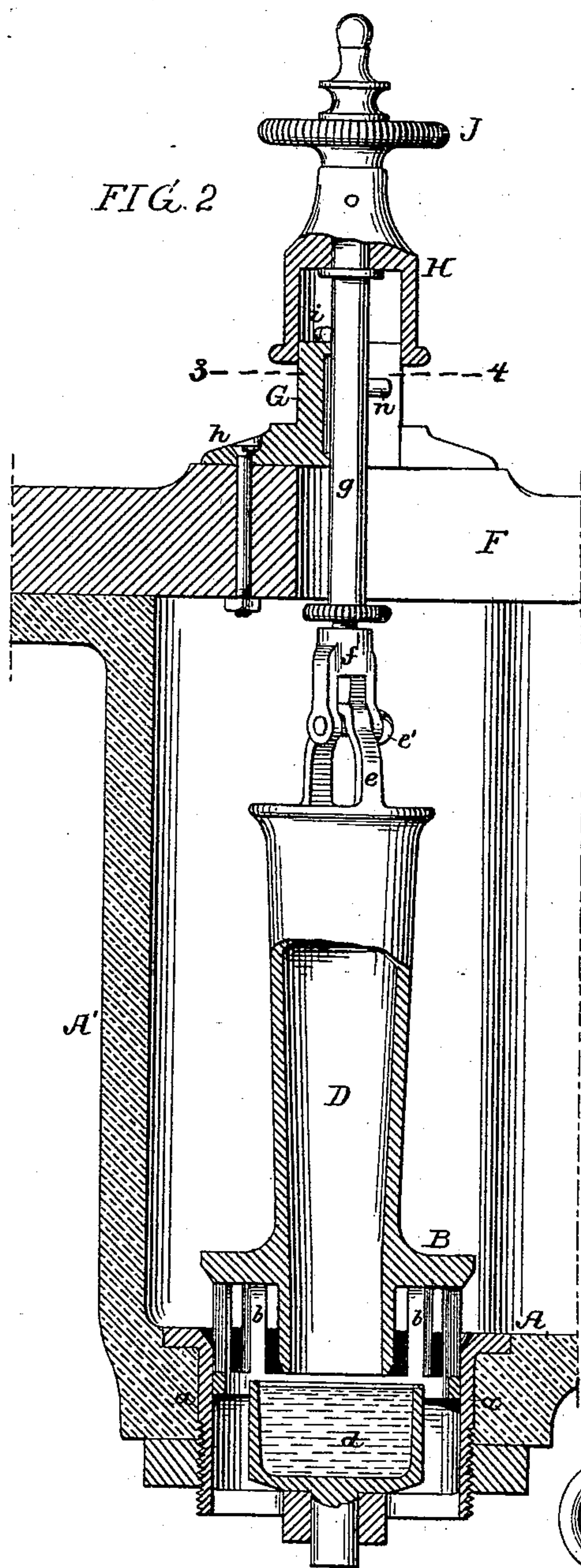


FIG. 10.

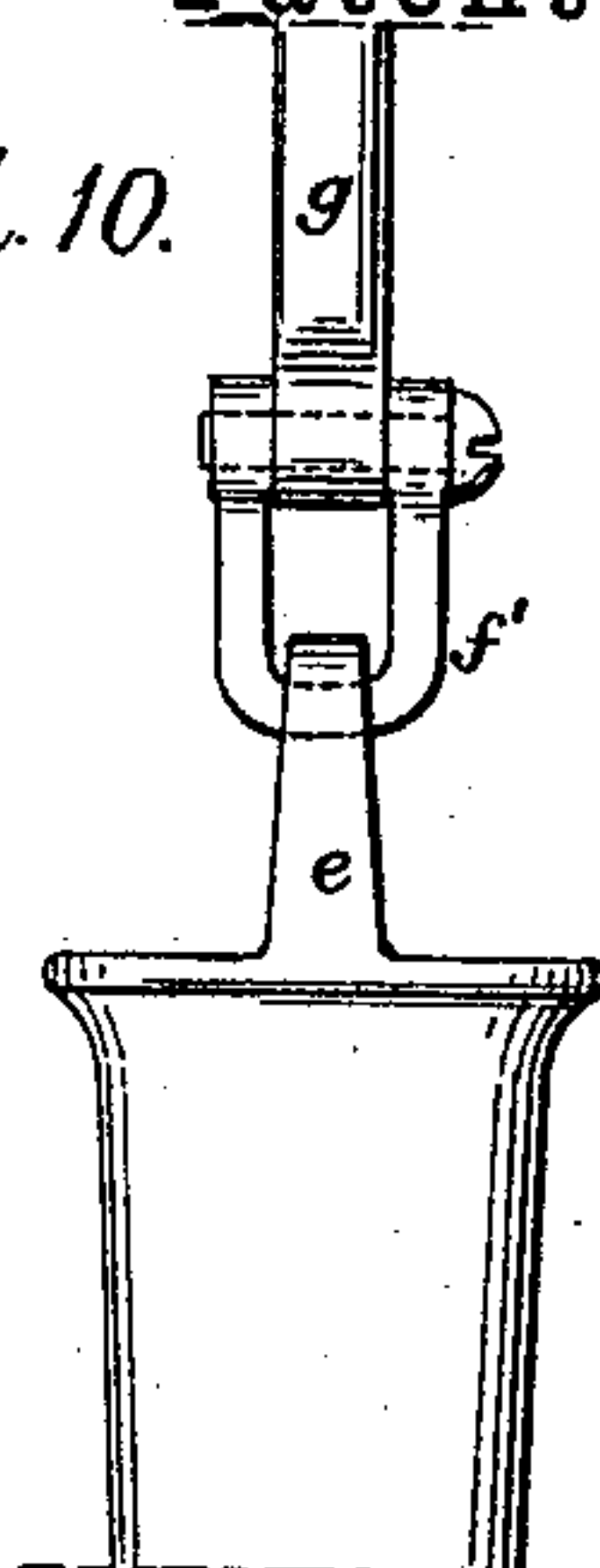


FIG. 11.

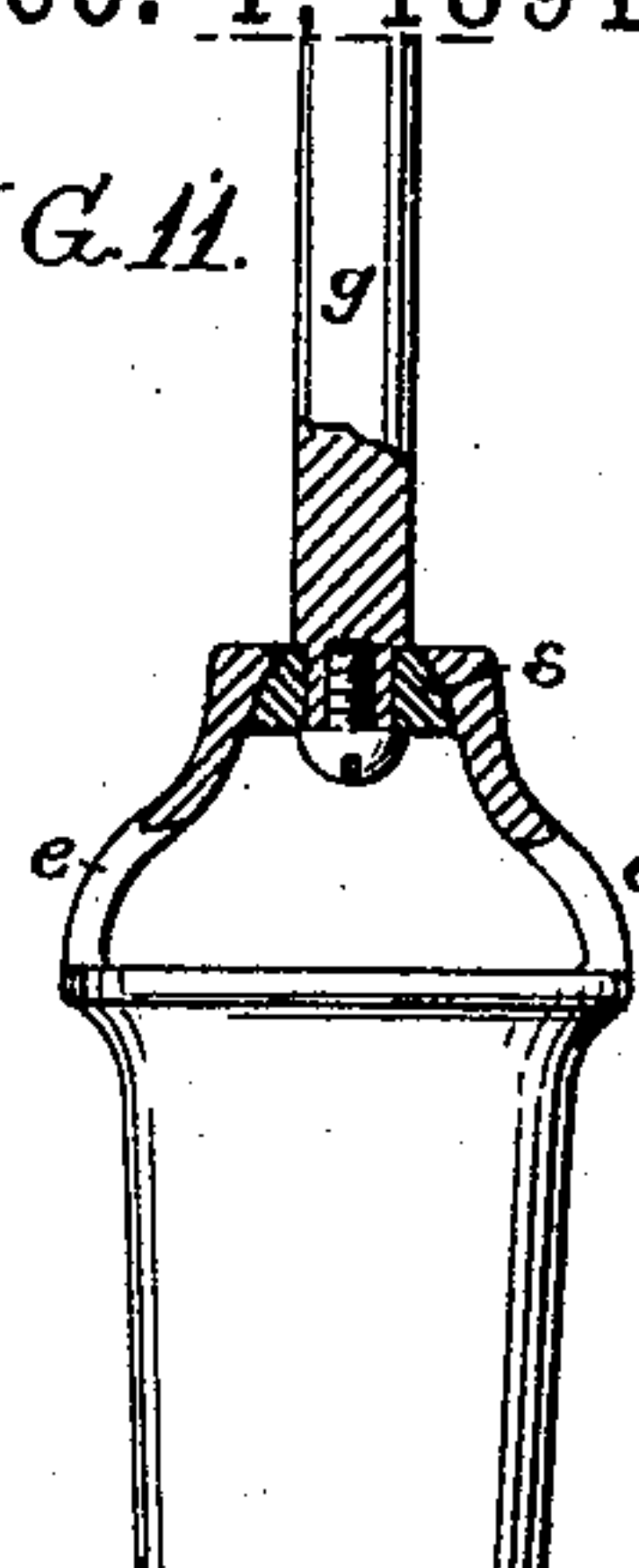


FIG. 4.

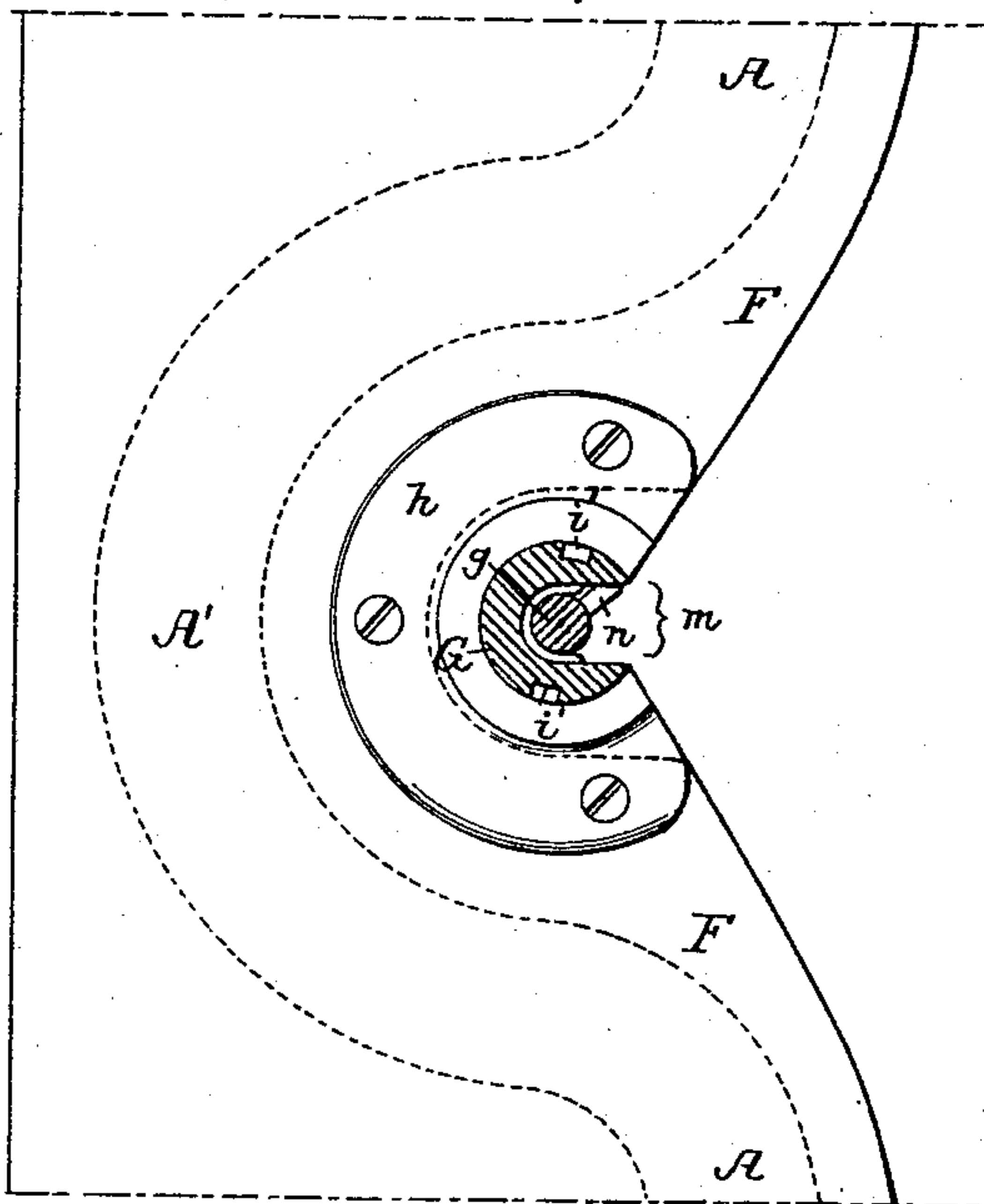


FIG. 8.

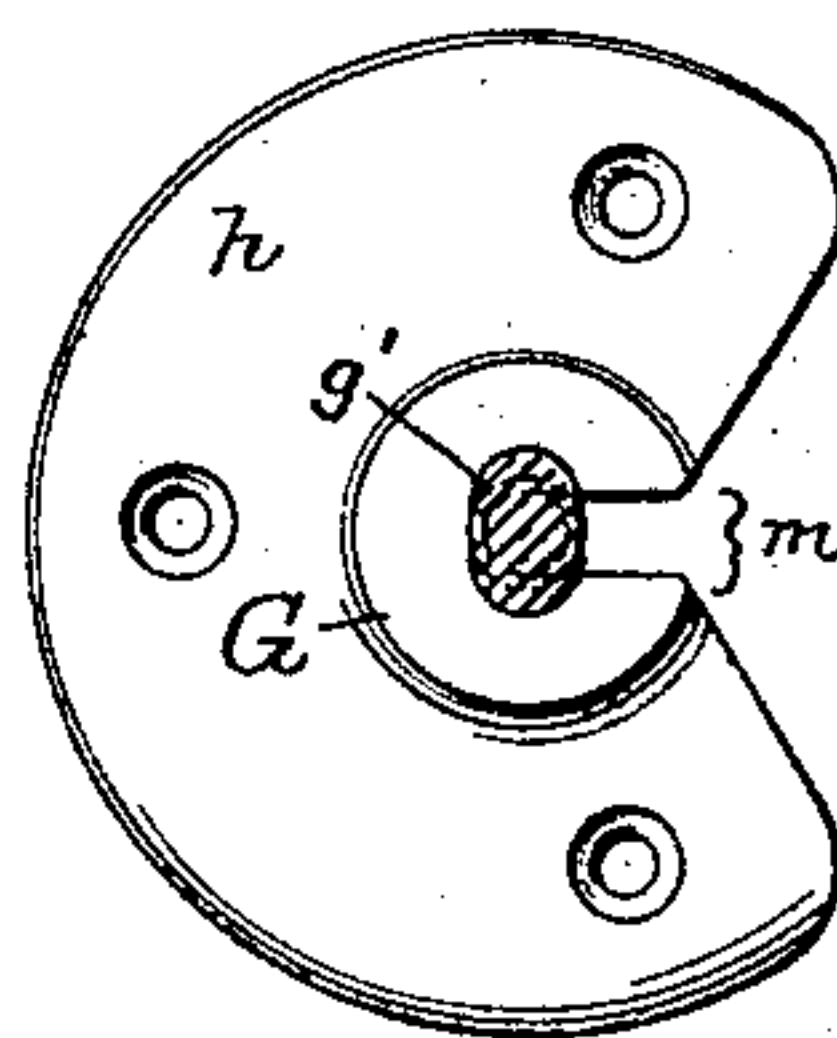
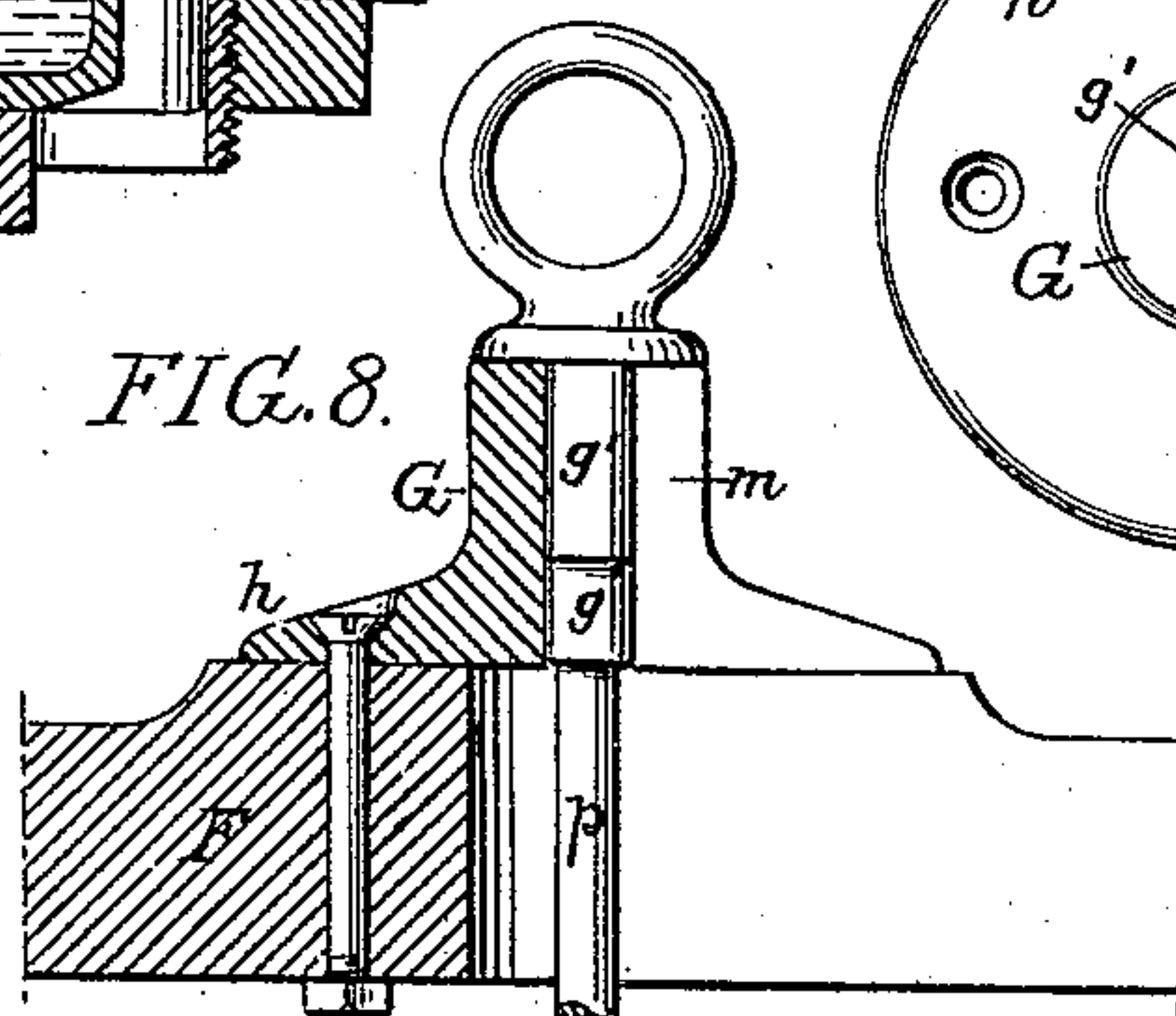


FIG. 9.

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UNITED STATES PATENT OFFICE.

THOMAS KENNEDY, OF PHILADELPHIA, PENNSYLVANIA; JAMES FARLEY
ADMINISTRATOR OF SAID THOMAS KENNEDY, DECEASED.

WASH-BASIN OR LIKE STRUCTURE.

SPECIFICATION forming part of Letters Patent No. 464,327, dated December 1, 1891.

Application filed July 11, 1887. Serial No. 243,917. (No model.)

To all whom it may concern:

Be it known that I, THOMAS KENNEDY, a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have invented certain Improvements in Wash-Basins or Like Structures, of which the following is a specification.

My invention consists of certain improvements in that class of wash-basins, bath-tubs, &c., in which the valve for controlling the discharge from the receptacle is secured to or forms part of an overflow-tube having an operating-stem projecting into a guide-bearing above the tube, one object of my invention being to permit the ready detaching of the tube-valve, as well as its operating stem, from the basin or tub when such removal is desired, and a further object being to provide simple and efficient means for operating said tube-valve.

In the accompanying drawings, Figure 1 is a longitudinal section of sufficient of a wash-basin and its overflow-tube valve and operating device therefor to illustrate my invention, the valve being closed. Fig. 2 is a similar view showing the valve open. Fig. 3 is a sectional plan view on the line 1 2, Fig. 1, and on a somewhat larger scale than said figure. Fig. 4 is a sectional plan view on the line 3 4, Fig. 2. Fig. 5 is a detached sectional perspective view of the tube-operating device. Figs. 6 to 9, inclusive, are views illustrating certain modified constructions of said operating device; and Figs. 10 and 11 are views illustrating modified ways of connecting the overflow-tube valve to the operating-stem.

A represents part of a basin or bowl, which has at the rear an offset A', and in the bottom of this offset is a tube *a*, around the upper edge of which is formed a seat for the valve B, whereby the escape of water from the bowl is prevented. Forming part of the valve B and projecting above the same to the desired height is a tube D, which extends down through the valve and serves as an overflow-tube for the basin.

The valve B is in the present instance provided with a depending grating *b*, which fits snugly in the tube *a* and serves to guide the valve in its vertical movement, and the tube D projects some distance below the valve and

into a sealing-cup *d*, mounted on a cross-bar of the tube *a*, as set forth in my patent, No. 331,064, dated November 24, 1885. The upper end of the overflow-tube has a yoke *e*, which engages with a bolt *e'*, carried by a forked head *f* at the lower end of a stem *g*, the latter projecting up through a recess in a slab or rim-plate F, which surmounts the basin A, and through a bearing G, having a flange *h*, whereby it is secured to the upper side of said slab or rim-plate F. Secured to the stem *g* above the bearing G is a cap H, which fits down over the said bearing and is provided with inwardly-projecting lugs *i*, adapted to inclined ways *i'*, formed in said bearing, as shown in Figs. 1 and 3, and above the cap H is a milled wheel J, whereby the stem can be readily turned. On thus turning the stem the latter, owing to the engagement of the lugs *i* with the inclined ways *i'*, is compelled to rise, thus lifting the overflow-tube valve and permitting the escape of water from the basin, the cap H sliding on the bearing G during this lifting movement and serving to guide the stem, which is supported when at the limit of its upward movement by reason of the lugs *i*, which rest upon the top of the bearing G.

It is important that the operating-stem, as well as the overflow-tube valve, may be detached from the basin or tub, so that they can be readily cleansed, and so that in case of a basin or tub having a slab or rim-plate free access may be had to the under side of the same at the rear of the basin or tub for cleansing purposes. As the slab and bearing overlap the tube-valve, however, direct vertical removal of the same is impossible. Hence I recess the slab, as shown, and form in the front of the bearing G a slot *m*, through which the stem *g* can be readily withdrawn laterally when the same has been lifted to such an extent as to free the cap H from the control of the bearing G, the tube-valve and its operating device being then free to be withdrawn from the bowl. The lift of the stem due to the engagement of the lugs *i* and inclined ways *i'* is not enough to free the cap H from the influence of the bearing G. Hence there can be no accidental detaching of the stem from said bearing.

In order to prevent undue turning move-

ment of the cap H, such as would permit either of its lugs to drop into the slot *m*, I provide the stem *g* with a projecting pin *n*, which by contact with the bearing at one side of the slot serves to limit the turning movement of the stem.

Stop-shoulders *n'* for the lugs *i* may, if desired, be formed on the top of the bearing G, as shown in Fig. 6, the use of the pin *n* being dispensed with, and in some cases the lugs *i* may project directly from the stem *g* and the inclined ways may be formed on the inside of the bearing G, as shown in Fig. 7, instead of upon the outside of the same, as shown in Fig. 5, stop-shoulders *n'* in this case being formed on the top of the bearing to prevent the lugs from entering the slot *m*; or, if desired, the stem *g* may be lifted by a direct upward pull and supported in its elevated position in any suitable manner. For instance, the ways *i'* may be vertical, or I may adopt the construction shown in Figs. 8 and 9, in which a bearing G has an oblong opening for the reception of the enlarged upper end *g'* of the stem, the latter being lifted until the enlarged portion of the same is above the bearing and being then turned part way around, so that the lugs or shoulders formed by the enlargement will rest upon the top of the bearing and support the stem. The slot *m* in this case is of such width that while it will retain the enlarged portion *g'* of the stem it will readily permit the passage of the reduced portion *p* below the same, said reduced portion being preferably so located that a slight extra lift of the stem is required before said stem can be withdrawn.

The connection between the lower end of the stem *g* and the upper end of the overflow-tube D is preferably such as to permit slight vertical and lateral play of the tube independent of the stem, so that said tube will seat itself under all circumstances; but the form of the connection may be modified in various ways without departing from my invention. For instance, in Fig. 10 I have shown the yoke *e* at the upper end of the tube as

adapted to a pendent link *f'*, bolted to the lower end of the stem, while in the construction shown in Fig. 11 the yoke has a concave recess for the reception of a convex block *s*, secured to the lower end of the stem. In either case, however, the joint between the tube D and stem *g* possesses such flexibility that the lateral withdrawal of said stem from the bearing G is permitted without disturbing the vertical alignment of said tube D.

I am aware that removable overflow-valves have been combined with operating-stems which were not detachable from their bearings, and I am also aware that an overflow-valve has been combined with a bearing of such internal diameter that the valve could be withdrawn vertically through said bearing. Hence I do not broadly claim the removable tube-valve; but

I claim as my invention—

1. The combination of the basin or like receptacle, the tube-valve, the operating-stem, less in diameter than the valve, the bearing overlapping the tube-valve and slotted to permit the lateral removal of the stem, lugs carried by the stem and serving by resting upon the bearing to support said stem, and a projection engaging with the bearing to prevent the release of the stem therefrom until the latter has been raised above the supported position, all substantially as specified.

2. The combination of the basin or like receptacle, the tube-valve, the operating-stem, less in diameter than the valve, projecting lugs carried by said stem, and a bearing overlapping the valve, but slotted to permit the lateral removal of the stem and having inclined ways for the projecting lugs of the same, all substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

THOS. KENNEDY.

Witnesses:

WILLIAM D. CONNER,
HARRY SMITH.