No. 711,238. Patented Oct. 14, 1902.

J. TOTHAM.

WASHBASIN.

(Application filed Dec. 12, 1901.)

(No Model.)

Fig. 1

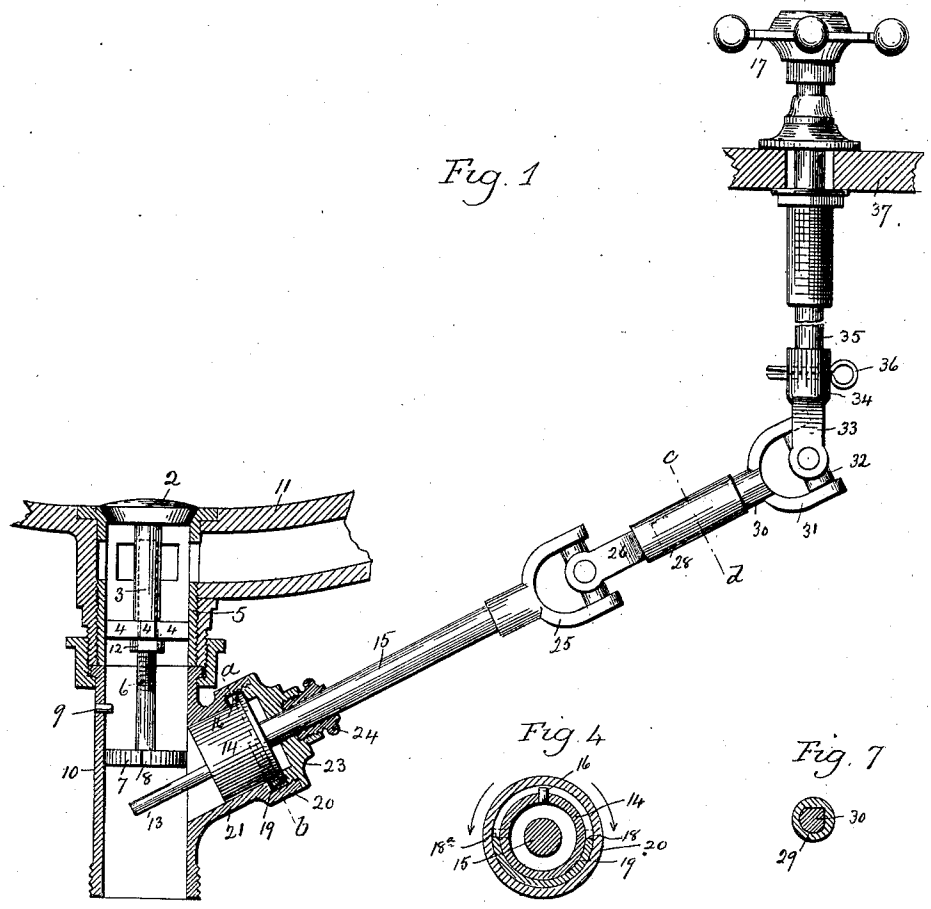


Fig. 4

Fig. 7

Fig. 2

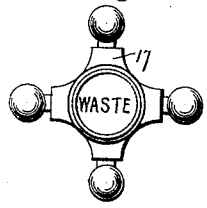


Fig. 3

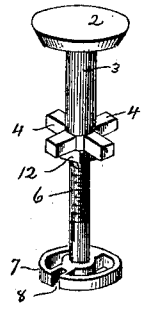


Fig. 5

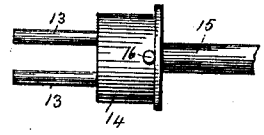
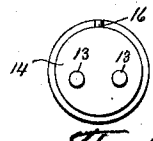


Fig. 6



Witnesses.
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C. L. Reed.

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UNITED STATES PATENT OFFICE.

JAMES TOTHAM, OF NEW HAVEN, CONNECTICUT, ASSIGNOR TO THE PECK BROS. & CO., OF NEW HAVEN, CONNECTICUT, A CORPORATION.

WASHBASIN.

SPECIFICATION forming part of Letters Patent No. 711,238, dated October 14, 1902.

Application filed December 12, 1901. Serial No. 85,593. (No model.)

To all whom it may concern:

Be it known that I, JAMES TOTHAM, of New Haven, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Washbasins; and I do hereby declare the following, when taken in connection with the accompanying drawings and the figures of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a broken view, partly in section and partly in elevation, of one form which my improved washbasin may assume; Fig. 2, a detached plan view of the handle; Fig. 3, a detached perspective view of the waste-plug; Fig. 4, a cross-sectional view on the line *a b* of Fig. 1, showing the means for limiting the oscillation of the eccentric to a quarter-turn in either direction; Fig. 5, a broken plan view of the eccentric; Fig. 6, an end view thereof; Fig. 7, a view in transverse section on the line *c d* of Fig. 1, showing the non-rotatable extensible connection between the two gimbal-joints.

My invention relates to an improvement in washbasins, and more particularly to connections for operating the waste-plugs thereof, the object being to provide simple, convenient, and effective means for the purpose named.

With these ends in view my invention consists in a washbasin having certain details of construction and combinations of parts, as will be hereinafter described, and pointed out in the claims.

In carrying out my invention I employ a waste-plug 2, located at the upper end of a stem 3, formed at its lower end with four integral radial guiding-arms 4, which engage with the inner periphery of the bushing 5 and guide the plug as it moves up and down. The stem 3 is bored out and internally threaded for the reception of an externally-threaded stem 6, carrying at its lower end a disk-like skeleton operating-head 7, formed with a slot 8, and coacting with a locking-pin 9, mounted in the waste-pipe head 10, in preventing the plug 3 from being removed from the washbasin 11. A jam-nut 12, mounted upon the externally-threaded stem 6 in position to be impinged against the lower faces of the guiding-arms 4, secures the said stem 6 in any desired relation to the stem 3. By loosening the said nut the operating-head 7 may be raised or lowered with respect to the plug 2, as the necessity of any particular case may demand. When the plug and head are introduced into place, they are turned until the slot 8 in the head is brought into registration with the locking-pin 9, whereby the head is permitted to pass the pin. The plug and head are now turned to carry the said slot out of line with the said pin, which then prevents their removal until they are again rotated until the said slot is again brought into registration with the pin. The said operating-head 7 is engaged for being raised so as to lift the plug away from its seat by one or the other of two long operating-pins 13, mounted in a hub 14, secured to the lower end of the lower spindle 15. To limit the hub to a quarter-turn in either direction, whereby its movement is made oscillatory instead of rotatory, I provide it with a stop-pin 16, so located that when the hub is in its intermediate position the plug 2 will be closed, and the word "Waste" in the operating-handle 17 will stand square with the front of the bowl. This pin coacts at the limit of a quarter-turn in either direction with stop-shoulders 18 18^a, formed, as shown, by the ends of a semicircular ring 19, located within the internally-threaded flange 20 of the upwardly-inclined bearing-sleeve 21 of the waste-pipe head 10, the said sleeve forming a bearing for the hub 14 before mentioned. At its outer end the hub is furnished with a flange 22, which bears upon the ring 20 and which is in turn engaged by a threaded cap 23, employed to close the bearing-sleeve 21, mounted upon the spindle 15 and carrying a stuffing-box 24. Normally—that is to say, when the plug 2 is closed or resting on its seat—the pin 16 occupies the intermediate position in which it is shown in Fig. 4, where it is represented as being located centrally between the said shoulders 18 18^a. When the spindle 15 is turned a quarter-turn in either direction, the plug will be lifted into its open position, after which the spindle will be brought to a stop by the engagement of

the pin with one or the other of the two shoulders, which thus prevent the spindle from being rotated more than a quarter-turn in either direction. This prevents the word "Waste" on the handle 17 from getting out of a position in which it may be readily read. The handle 17 aforesaid is connected with the lower spindle 15, already described, by two gimbal-joints. The lower gimbal-joint comprises a lower fork 25, rigidly secured to the upper end of the spindle 15, and an upper fork 26, connected with the fork 25 by means of a four-armed coupling-piece 27. The said fork 26 is provided with a tubular stem 28, having a longitudinal chamber 29 of an irregular cross-section for the reception of the correspondingly-shaped stem 30 of the lower fork 31 of the upper gimbal-joint, which also comprises a four-armed coupling-piece 32 and an upper fork 33, having a short hollow hub 34, receiving the lower end of the upper spindle 35, with which it is detachably connected by means of a cotter-pin 36. The stem 30 of the fork 31 is free to slide back and forth, but not to turn in the chamber 29 of the stem 28 of the fork 26, whereby the connections between the handle and plug are made self-adjustable to any basin. It will be understood, of course, that when the device is being put in the upper spindle 35 is passed down through the slab 37 into the hub 34 and then connected therewith by means of the cotter-pin 36.

It is apparent that in carrying out my invention some changes from the construction herein shown and described may be made. I would therefore have it understood that I do not limit myself thereto, but hold myself at liberty to make such departures therefrom as fairly fall within the spirit and scope of my invention.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination with a washbasin, of a waste-plug, an operating-head therefor, a waste-pipe head formed with an inclined bearing-sleeve, a hub located in the said sleeve, two operating-pins carried by the hub and coacting with the said operating-head to lift the plug, a stop pin or projection carried by the hub, and two stop-shoulders located within the said sleeve for coaction with the said pin or projection which prevents the hub from more than a quarter-turn in either direction, whereby the pins are alternately brought into operation for lifting the plug above its seat.

2. The combination with a washbasin, of a waste-plug, an operating-head therefor, a waste-pipe head formed with an inclined bearing-sleeve, a hub located in the said sleeve, two operating-pins carried by the hub and coacting with the said operating-head to lift the plug, a stop-pin mounted in the hub, and a segmental ring located within the said sleeve and forming at its ends stop-shoulders for coaction with the stop-pin which prevents the hub from more than a quarter-turn in either direction.

3. The combination with a washbasin, of a waste-plug, an eccentric for operating the plug, an upwardly-inclined spindle connected with the said eccentric, a handle, a vertically-arranged spindle for the said handle, and two gimbal-joints interposed between and connecting the adjacent ends of the two spindles, the lower fork of the lower gimbal-joint being rigidly connected with the inclined spindle and the upper fork of the upper gimbal-joint being rigidly connected with the vertical spindle, and the intermediate forks of the two joints having self-adjusting non-rotatable, extensible conection with each other, whereby the parts connecting the handle and eccentric accommodate themselves to variations in the distance between the eccentric and the handle.

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

JAMES TOTHAM.

Witnesses:
ROY FERRES,
P. A. CONNOLLY.