J. POWELL. WASTEWAY VALVE.

No. 408,321.

Patented Aug. 6, 1889.



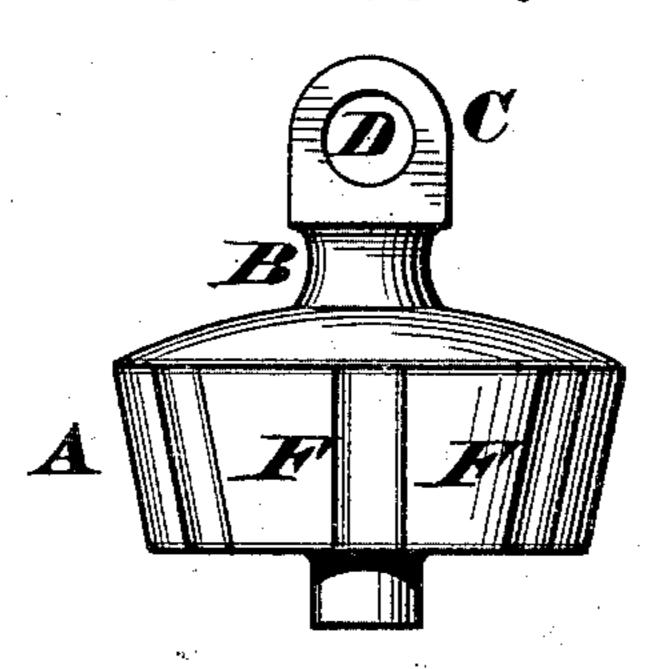


FIG.2.

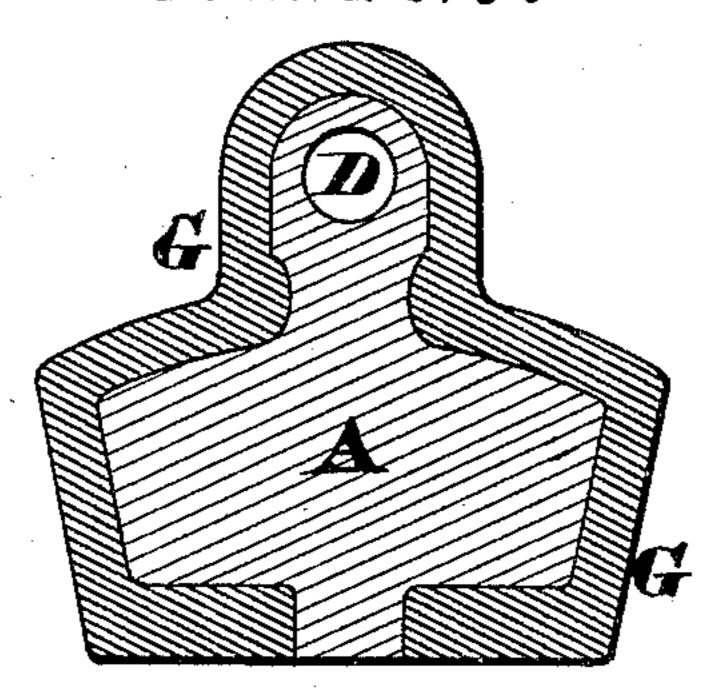
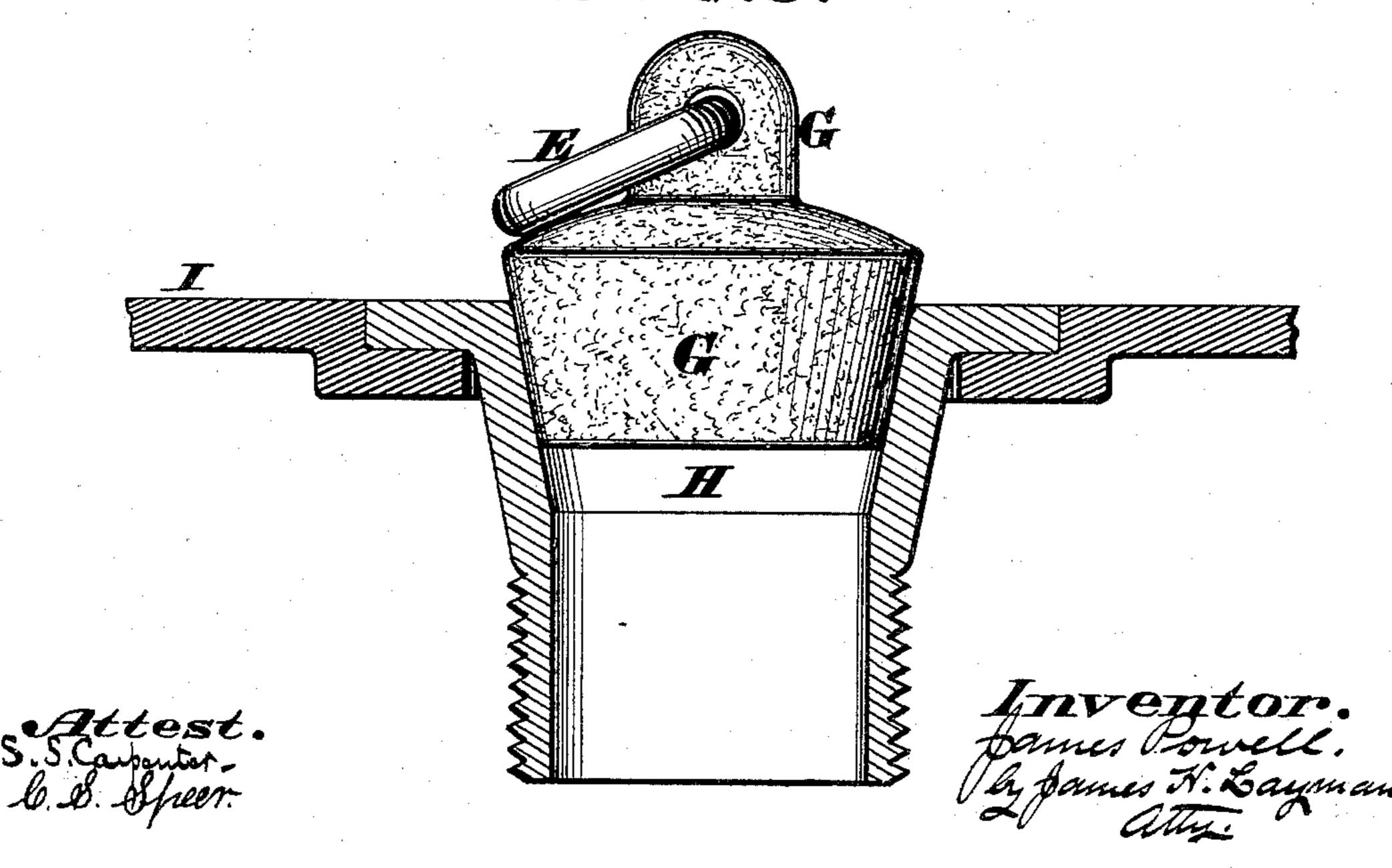


FIG.3.



United States Patent Office.

JAMES POWELL, OF CINCINNATI, OHIO.

WASTEWAY-VALVE.

SPECIFICATION forming part of Letters Patent No. 408,321, dated August 6, 1889.

Application filed March 27, 1888. Serial No. 268,646. (No model.)

To all whom it may concern:

Be it known that I, James Powell, a citizen of the United States of America, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Wasteway-Valves, of which the following is a specification, reference being had therein to the accompanying

drawings.

My invention comprises a loaded or nonfloating valve or stopper to be applied to the wasteway of a wash-basin, bath-tub, or sink, which device is so constructed as to obviate the only difficulty incidental to the use of 15 the valve seen in Reissued Letters Patent No. 7,162 and No. 7,163, granted to Joshua R. Gibson and myself June 6, 1876. In each of these patents the stopper or plug is composed of india-rubber having a small shank or stem 20 inserted within it, which shank is provided with the lifting ring or pull, and is comparatively light with reference to the body proper of the device. Consequently the stopper is quite buoyant, and when accidentally struck 25 it is readily loosened from the socket and floats around within the basin or tub, thereby occasioning considerable waste of water before it can be again reinserted in the socket; but the present stopper, valve, or plug is composed of a thin envelope of india-rubber, or equivalent material or materials, surrounding a core of metal or other comparatively heavy substance, in order that the weight of the core will prevent the valve floating. Furthermore, it is preferred to completely embed the core, together with its neck and head, within the yielding envelope, in order that the basin may not be injured by the accidental dropping of the stopper therein, as 40 hereinafter more fully described.

In the annexed drawings, Figure 1 is a side elevation of the core of my improved valve, stopper, or plug. Fig. 2 shows said core completely surrounded with the india-rubber envelope, the latter being sectioned. Fig. 3 shows the non-floating valve seated within the wasteway-socket of a basin, sink, or other

water-receptacle.

A represents the valve-core, which is pref-

erably composed of some cheap metal—such 50 as lead—although the invention is not confined to any special material or composition of materials, provided they are sufficiently heavy to answer my purpose. This core usually takes the shape of a conical frustum 55 having at top a short neck B, surmounted by a head C, the latter being provided with an eye D to admit the ring or other pull E. The sides of the core are fluted or grooved vertically, as at F, to prevent circumferential 60 shifting of the india-rubber envelope G, which constitutes but a small portion of the stopper when compared with said core. This thin rubber envelope is vulcanized directly upon the core and preferably surrounds the same 65 on all sides, so as to completely conceal the metallic part of the stopper.

H is the customary wasteway-socket of a wash-basin, bath-tub, or other similar water-

receptacle I.

From the above description it is evident that when the valve or stopper is seated within the socket H and the receptacle I filled with water there will be no danger of the stopper floating, because the core is sufficiently heavy 75 to more than overcome the buoyancy of the slight rubber envelope surrounding said core. Furthermore, it is apparent this envelope serves as a cushion that prevents the basin being injured when the stopper is accident-80 ally dropped therein.

I claim as an improvement on the patents

herein mentioned—

1. A non-floating valve or stopper for the wasteways of basins, &c., which valve consists of a light envelope of india-rubber or equivalent material surrounding a relatively heavier core, the latter being provided with a lifting device, substantially as herein described.

2. A non-floating valve or stopper for the wasteways of basins, &c., which valve consists of a light envelope of india-rubber or equivalent material surrounding the body, neck, and perforated head of a relatively 95 heavier core, the latter having a pull or ring attached to it, substantially as herein described.

3. The combination, in a non-floating valve of the class specified, of the heavy core A, having a head C, eye D, and flutes E, said core and head being surrounded by a relatively-lighter envelope G of india-rubber or equivalent material, all as herein described, and for the purpose stated.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES POWELL.

Witnesses:

JAMES H. LAYMAN,

SAML. S. CARPENTER.