

J. H. KEYSER & W. TURTON.

WASTE WAY PLUGS.

No. 190,768.

Patented May 15, 1877.

Fig. 1

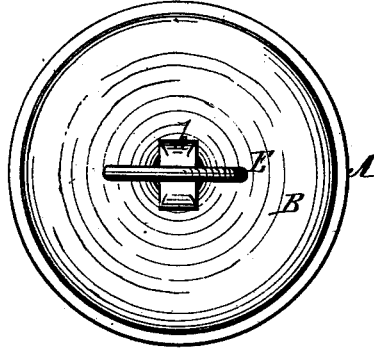


Fig. 2

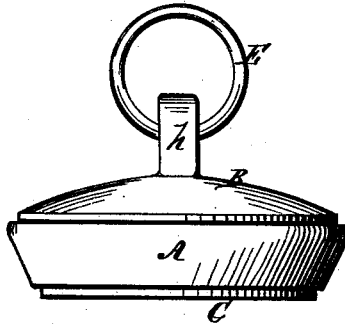
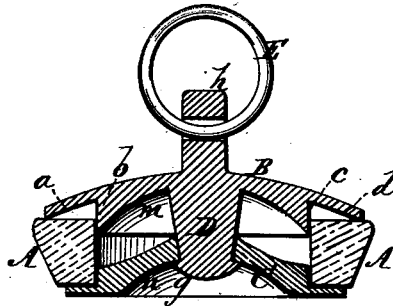


Fig. 3



Witnesses:
James Martin Jr.
Geo. D. Patten

Inventors:
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by
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UNITED STATES PATENT OFFICE.

JOHN H. KEYSER AND WILLIAM TURTON, OF NEW YORK, N. Y.

IMPROVEMENT IN WASTEWAY-PLUGS.

Specification forming part of Letters Patent No. 190,768, dated May 15, 1877; application filed December 7, 1876.

To all whom it may concern:

Be it known that we, JOHN H. KEYSER and WILLIAM TURTON, of the city, county, and State of New York, have invented a new and useful Improvement in Wasteway-Plugs; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a top view of our wasteway-plug. Fig. 2 is a side view of the same. Fig. 3 is a vertical central section of the same.

The object of our invention is to make a wasteway-plug which will be as durable and effective as those heretofore made, and which, at the same time, will not cost more than one-half as much.

The nature of our invention consists of a wasteway-plug made of cork and metal in the following manner: The cork is cut into a ring form, as at A, and clamped between two plates, B C, each of which plates has an angular shoulder, *a b c d*, formed around its outer edge, in such a manner that the two plates, when clamped together, afford a support at back, top, and bottom for the cork ring A, and thus the cork is prevented from materially losing its form when the plug is forced down into the plug-seat of a basin or other wasteway for the purpose of closing the same.

For the purpose of uniting the two plates firmly together upon the cork ring, the top plate B of the plug is provided with a central rivet-stem, D, and the plate C is slipped upon this stem, and the two plates are riveted together, as shown at *g*, after the cork ring has been placed between the shouldered portions thereof; and for the purpose of readily handling the plug, a ring, E, is connected to the plate B by means of a perforated lug, *h*.

We propose, as a substitute for the rivet, to use a screw-threaded pin and a nut for drawing the plates against the ring A.

By examining the drawings, it will be seen that the plates B and C are cut away or hollowed out, as at *m n*, between their shouldered portions *a* and their center. This is done in order to give lightness and save expense for metal.

It will further be seen that the two plates,

when clamped upon the cork ring, are separated for a considerable distance. This is due to the cork ring being in vertical section deeper than both shoulders of the plates together, and the object of doing this is, that the cork ring shall have a chance to yield inwardly to a slight degree when downward pressure is brought to bear upon the plug; and thus a very elastic water-tight plug is secured.

In the manufacture of wasteway-plugs great unnecessary expense has heretofore been incurred by the use of india-rubber, this material costing, in its best condition, from forty to fifty cents per pound, and, it being very compact and heavy, one pound of it will serve for only a few plugs of a given size; but by adopting cork as the sealing substance, and clamping and supporting it as herein described, much of this expense is saved, as cork is much cheaper than rubber, owing to its extreme lightness and consequent bulkiness, and the capability of making from one pound of it a great number of cork rings for a given-sized wasteway-plug.

We are aware that cork and india-rubber have been used for stopples, and therefore we do not claim cork or india-rubber as our invention; but

What we claim is the new article of manufacture, viz:

1. A wasteway-plug made of a cork ring, A, and shouldered plates B and C, all clamped together, substantially as and for the purpose described.

2. The plates B and C, constructed with shoulders *a b* and *c d*, and united together upon a yielding ring by a central rivet or its equivalent, substantially as described and shown.

3. The shouldered plates B and C, hollowed out as described, and clamped upon a yielding ring, which keeps them slightly separated on the inside of the ring, substantially as shown and described.

Witness our hand in the matter of our application for a patent for an improved wasteway-plug this 6th day of December, 1876.

JOHN H. KEYSER.
WILLIAM TURTON.

Witnesses:

JAMES GRAHAM,
WM. B. SARMO.