No. 673,762. Patented May 7, 1901.

J. N. CRABB.

BASIN STOPPER.

(Application filed July 11, 1899.)

(No Model.)

Fig. 1.

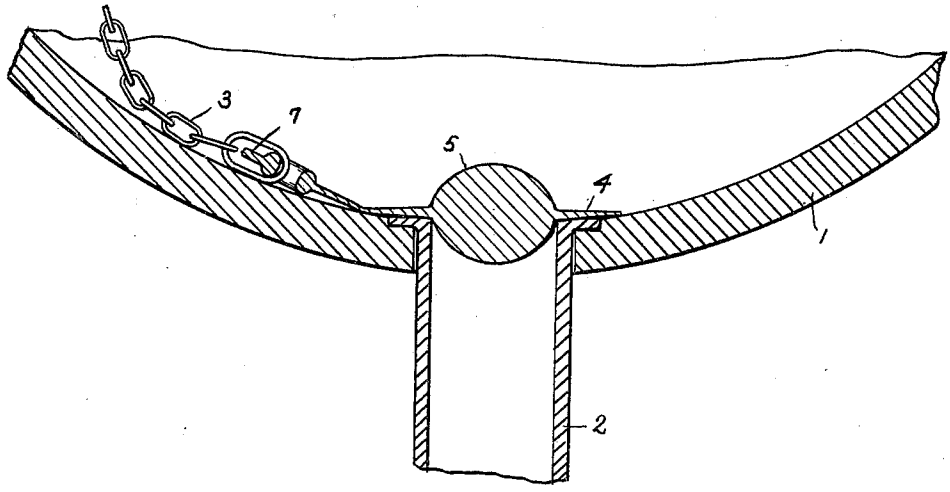
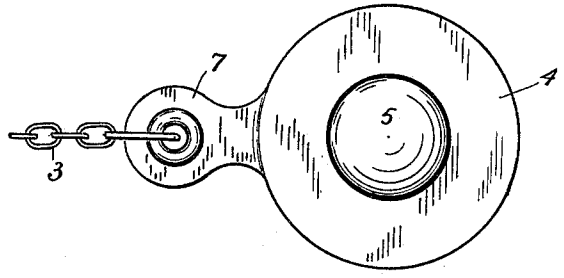


Fig. 2.



WITNESSES:

R. D. Hawkins

M. C. Buck.

INVENTOR.

James N. Crabb.

BY

W. H. Lockwood.

His ATTORNEY.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JAMES N. CRABB, OF INDIANAPOLIS, INDIANA, ASSIGNOR OF THREE-FOURTHS TO WILLIAM T. NOBLE, WILLIAM T. BARNES, AND EDWARD W. STUCKY, OF SAME PLACE.

BASIN-STOPPER.

SPECIFICATION forming part of Letters Patent No. 673,762, dated May 7, 1901.

Application filed July 11, 1899. Serial No. 723,512. (No model.)

To all whom it may concern:

Be it known that I, JAMES N. CRABB, of Indianapolis, county of Marion, and State of Indiana, have invented a certain new and useful Basin-Stopper; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which like letters refer to like parts.

This invention relates to a reversible loosely-fitting stopper for washbasins, bath-tubs, and vessels having outlets therefrom adapted to be closed by stoppers.

The object of the invention is to provide a stopper of the kind that will by gravity seek its seat when placed in a basin, which is at the same time reversible, and therefore it is immaterial how the stopper is placed in the basin or which side is up or down.

The full nature of my invention will be understood from the accompanying drawings, and the description and claims following, of one form of device embodying said invention.

In the drawings, Figure 1 is a central vertical section of the lower part of a washbasin, the outlet therefrom, and the stopper, which is in place, and a portion of the chain to which it is attached. Fig. 2 is a plan view of the stopper and a portion of the chain.

In detail there is herein shown the lower part of a washbasin 1, with an outlet-pipe 2 leading centrally from the lower portion thereof. The chain 3 shown is expected to be attached at its upper end to the washstand or other stationary object, as usual, said attachment not being deemed necessary here to be shown. The foregoing parts are old.

Turning now to the stopper, it consists of a flexible or resilient disk of a diameter considerably greater than that of the passage-way through the outlet. It is centrally provided on each side with the centering device or extension 5, preferably spherical, with its horizontal diameter when in place less than the diameter of the outlet. The two oppositely-placed centering devices or extensions therefore practically form a ball or sphere, with the disk centrally encircling the same. All of these parts of the stopper are preferably made of rubber integral with each other, as shown; but this is not necessary and I do not wish to limit myself to this manner of constructing the stopper.

The chain for removing the stopper is attached to the edge or periphery of the disk by any suitable means, the means here shown being an ear 7, flexibly connected with the edge or periphery of the disk. It is preferably made of rubber, integral with said disk, but thinner at the point of attachment than the disk, in order that the flexion when the chain is lifted will not take place in the disk proper, but outside of it in the ear, and preferably near the attachment of the ear to the disk. In this way the disk on the side to which the ear is attached will not be lifted in the slightest degree off its seat when in use, as shown in Fig. 1, and therefore the disk will fit tightly in place and prevent the escape of water or other fluid at that point.

In operation this stopper, at least when the centering portion thereof is made of metal, need only be thrown in the basin of water, where the basin is spherical, and it will at once seek its seat, and when made of rubber it need not be accurately located nor need any attention be given as to which side is up or down. Gravity and the flow of water will tend to carry it to its seat, while gravity and the weight of water will hold it in place in its seat and make the joint water-tight.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A stopper for washbasins, bath-tubs, &c., comprising a flexible disk, a centering device located on each side of said disk, and means for attaching a chain to the periphery of said flexible disk.

2. A stopper for washbasins, bath-tubs, &c., comprising a flexible disk, a centering device or extension centrally located on each side thereof, and an ear integrally connected with the edge or periphery of said disk for the attachment of a chain.

3. A stopper for washbasins, bath-tubs, &c., comprising a flexible disk, a centering device or extension centrally located on each side thereof, and an ear connected with the

edge or periphery of said disk for the attachment of a chain, the ear, disk and centering device or extension being made integrally of rubber with a crease at the junction of the ear with the disk to locate the point of flexion of said ear.

In witness whereof I have hereunto affixed my signature in the presence of the witnesses herein named.

JAMES N. CRABB.

Witnesses:
V. H. LOCKWOOD,
M. C. BUCK.