(No Model.)

A. HAARLANDER.

COMBINED SUPPLY, WASTE, AND OVERFLOW FOR BATH TUBS.

No. 418,643. Patented Dec. 31, 1889.

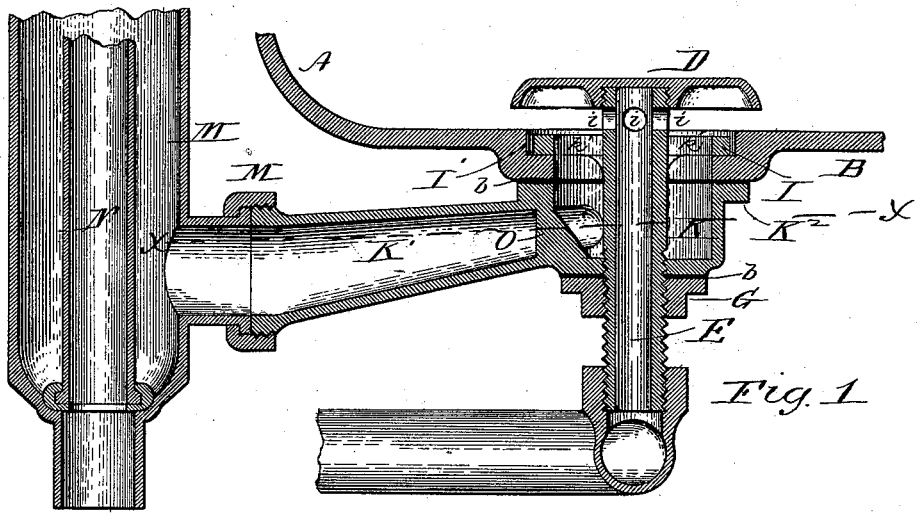

Fig. 1

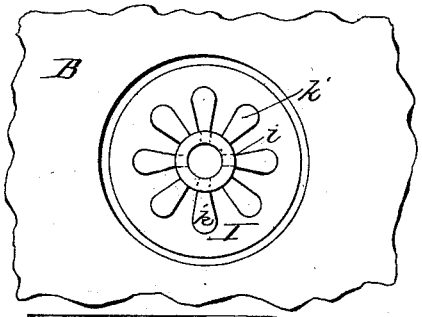

Fig. 2

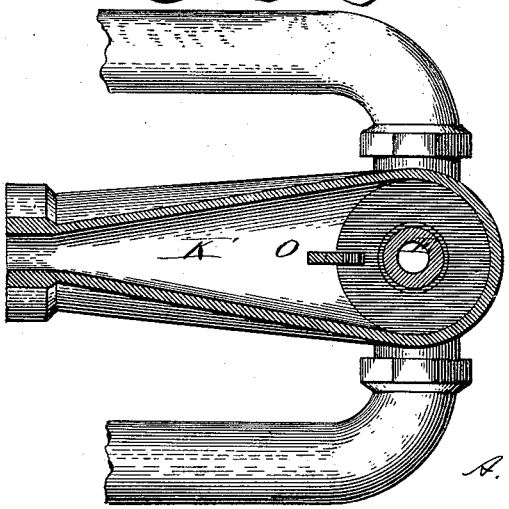

Fig. 3

A. Haarlander

WITNESSES—
Albert B. Blackwood
Herman S Joy

INVENTOR—
by Connady Bro
atty

UNITED STATES PATENT OFFICE.

AUGUST HAARLANDER, OF PITTSBURG, PENNSYLVANIA.

COMBINED SUPPLY, WASTE, AND OVERFLOW FOR BATH-TUBS.

SPECIFICATION forming part of Letters Patent No. 418,643, dated December 31, 1889.

Application filed March 25, 1889. Serial No. 304,625. (No model.)

To all whom it may concern:

Be it known that I, AUGUST HAARLANDER, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Combined Supply, Waste, and Overflow for Bath-Tubs; and I do hereby declare the following to be a full, clear, and exact description of the invention, reference being had to the accompanying drawings, which form part of this specification.

My invention has relation to certain improvements in combined overflow, supply, and waste for bath-tubs, basins, &c.; and it consists in the novel construction and combination of parts hereinafter described and claimed, special reference being had to, first, the novel means for securing the parts together constituting the supply and waste by means of a single hollow or tubular bolt which serves as the supply-pipe; second, the supply-tube provided with a perforated web which seats in a suitable recess in the bottom of the tub serving as a waste-strainer and in connection with a nut on the bottom of the threaded supply-tube as means for holding the parts together; third, certain structural details and features hereinafter specifically set forth, the whole forming a supply, waste, and overflow of a substantial character susceptible of being easily constructed and put together at comparatively low cost and possessing all the requisites of a thoroughly reliable tub attachment.

In the accompanying drawings, Figure 1 is a vertical section of the combined supply, waste, and overflow, shown in position as applied to a tub. Fig. 2 is a plan view of the supply-tube with spreading cap removed. Fig. 3 is a horizontal section on the line *x x* of Fig. 1.

A designates the side or end wall, and B the bottom, of the tub.

E is the supply-tube, provided near its upper end with the web I, which seats in a suitable recess I′ in the bottom of the tub, and is provided with strainer-holes *k′ k′*, which communicate with the interior casing K, constituting the body of the waste. The upper end of the supply-pipe E, which is threaded, as shown, has screwed thereon the flanged cap or disk D, which prevents the upward discharge of the water flowing horizontally through the small openings *i i* of the pipe E. The lower half of the supply-pipe E is also threaded and the lower end coupled to a T-joint, to the lateral branches of which the hot and cold water pipes are respectively joined, bringing hot and cold water to the same point of discharge. The waste box or casing K is formed with a flange K^2, which abuts against the bottom of the tub and has a flat base, against which seats the nut G, screwed on the tube E. This nut, in conjunction with the web I, firmly binds the parts together, rubber gaskets *b b* being placed above the casing K and above the nut G to produce water-tight joints. The waste K is a casting, and is formed with an outlet branch K′, leading toward the stand-pipe M, to which it is coupled by a suitable union M′. Inside of the stand-pipe is the overflow tube or valve N, of the usual form and arrangement. The outlet branch K′ slopes or inclines downwardly toward the stand-pipe and is enlarged in its vertical diameter in the same direction, so as to obtain ample discharge capacity. Between the side walls of the branch K′ at its junction with the casing K a vertical web O is formed to strengthen the parts and prevent the breaking of the flat surface of the waste and branch by the powerful strain of the nut E. The supply and waste may be operated separately or simultaneously, as when cleaning the tub.

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

1. In combination with the bath tub or basin A, having the flanged socket *b*, the combined waste and overflow comprising the waste-casing K, having the outlet branch K′ and formed with a central orifice in its base, the threaded supply-pipe E, having perforations *i* for the passage of the supply, and the perforated web I, seating in the flanged socket I′, and the nut G, secured upon the pipe E and abutting against the base of the casing K, said web and nut serving to secure said supply-pipe in position, substantially as described.

2. The waste-casing K, cast with the outlet branch K′ and the vertical strengthening-web O, in combination with the threaded supply-tube E, passing through the casing K, the web I, formed on or secured to said supply-tube, and the nut G, secured on said tube below the casing, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand this 14th day of March, 1889.

AUGUST HAARLANDER.

Witnesses:
CHAS. F. ARROTH,
A. B. DAVIS.