

No. 763,280.

PATENTED JUNE 21, 1904.

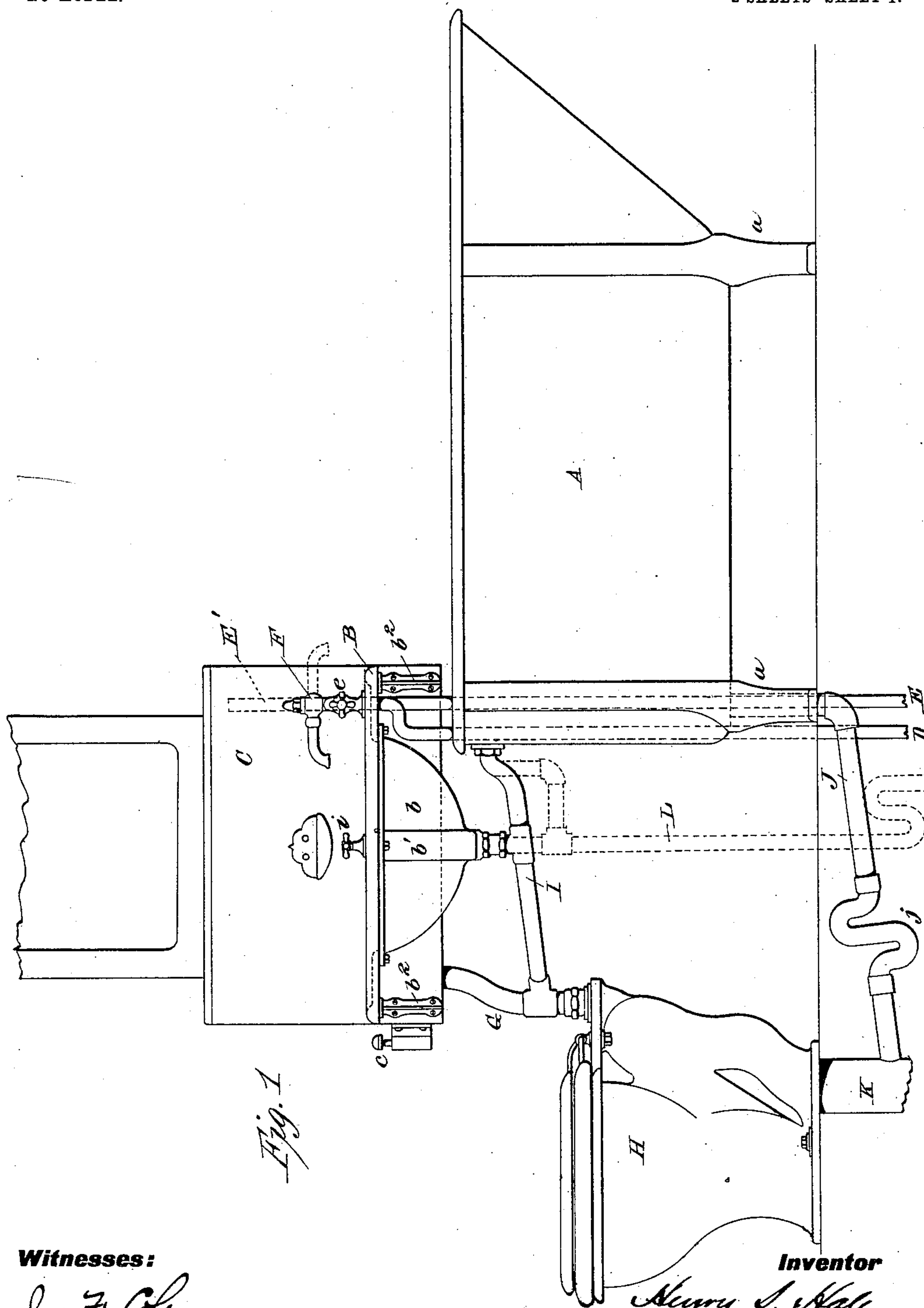
H. S. HALE.

COMBINATION TOILET APPARATUS.

APPLICATION FILED FEB. 12, 1902.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses:

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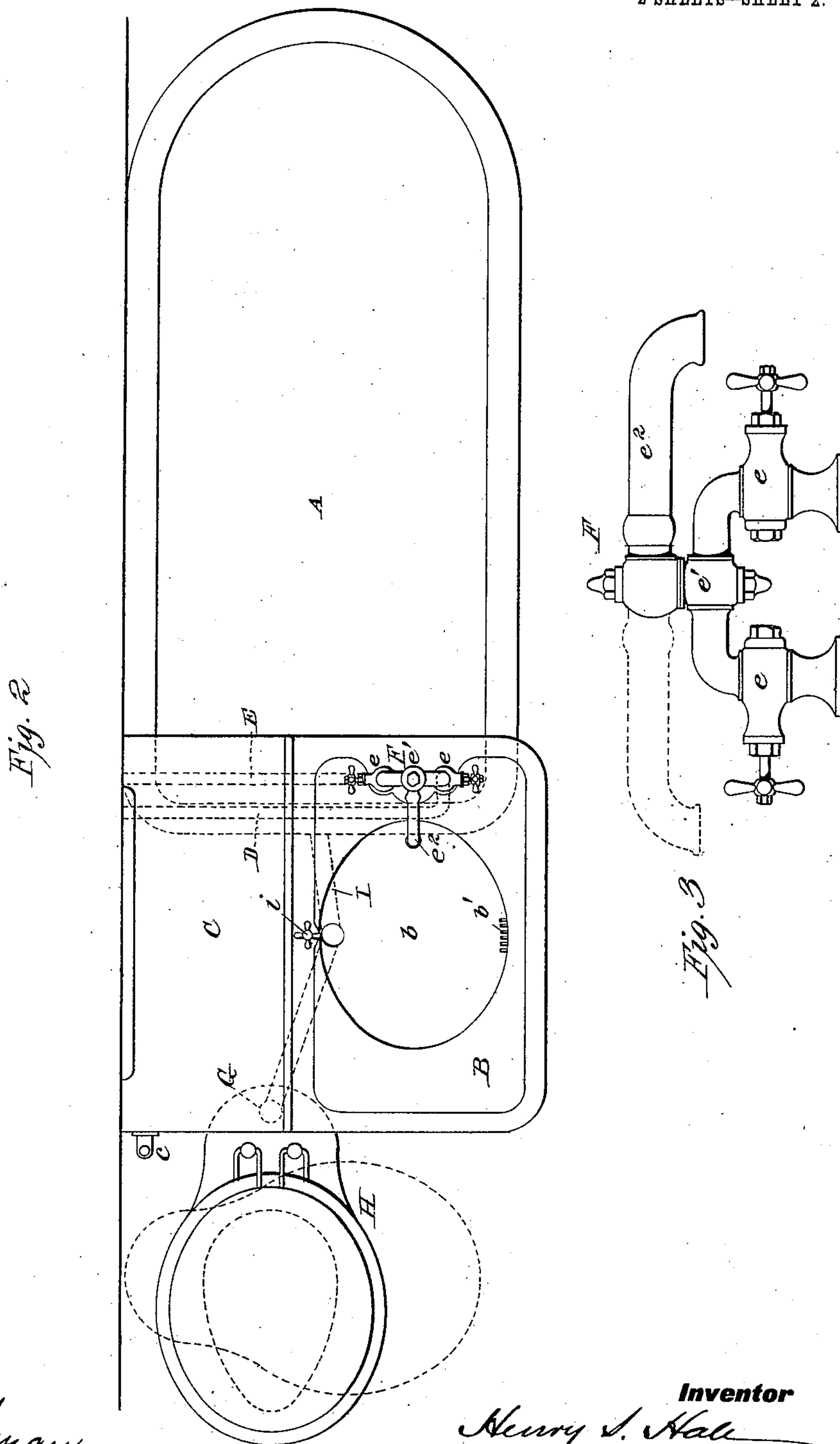
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UNITED STATES PATENT OFFICE.

HENRY S. HALE, OF PHILADELPHIA, PENNSYLVANIA.

COMBINATION TOILET APPARATUS.

SPECIFICATION forming part of Letters Patent No. 763,280, dated June 21, 1904.

Application filed February 12, 1902. Serial No. 93,727. (No model.)

To all whom it may concern:

Be it known that I, HENRY S. HALE, a citizen of the United States, residing in the city of Philadelphia, county of Philadelphia, and State of Pennsylvania, have invented certain new and useful Improvements in Combination Toilet Apparatus, of which the following is a specification.

The invention relates to the combination of a bath-tub, a washbasin, and a water-closet, (or of the two devices first named only,) and has for its object to provide a compact structure answering essential requirements, which shall be extremely compact and shall therefore economize space consumed, and which shall be cheap of manufacture and installation, largely because of economy of piping and other devices commonly used in the plumbing art.

A further object is to provide a structure which because of its simplicity and by reason of the arrangement of the piping and other devices peculiar to this invention shall be capable of absolute cleanliness, the used water both from the basin and from tub escaping through the waste-pipe of the closet.

A further object is to provide a structure in which liability to leakage will be minimized, there being but few parts and little piping and but few joints.

In carrying out the invention I prefer to employ a bath-tub, a washbasin, and a water-closet, which may all be generally of standard or usual construction. These are placed in a novel juxtaposition, the water being supplied thereto by means of a pipe or pipes common to all three. I preferably arrange the basin adjacent to (or to some extent over) one end of the tub and the closet adjacent to such basin and either in line with the longitude of the tub or at right angles thereto or in such other near relation as may be convenient. The pipes containing hot and cold water I run to the washbasin, where a two-way faucet is employed so designed that when the cock or cocks are open water may be supplied either to the tub or to the basin. In addition I lead a branch of the cold-water pipe to the flushing tank or reservoir by means of which the closet is flushed. Where the invention is embodied in a tub and basin only, the piping described together with the exhaust for the tub and the basin or an exhaust common to both comprise all essential mechanism. Where in addition a closet is employed, the flushing-tank may connect with the closet by a single pipe and another pipe may be employed for overflow and exhaust from the basin and for overflow from the tub. A third pipe (in which may be arranged a trap of usual construction) may be employed for exhausting from the tub, and this pipe I connect with the waste-pipe running from the closet. The simple mechanism and plumbing connections thus described constitute the only provision necessary under my invention for complete operative use of the combined structure consisting of basin, tub, and water-closet.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is an elevation, Fig. 2 a plan view, and Fig. 3 an enlarged detail, illustrating a preferred construction of faucet for supplying water to both the tub and washbasin.

Referring to the drawings, in which similar letters of reference denote corresponding parts, A is a bath-tub, here shown as supported upon legs *a*. Adjacent to one end of the tub I employ a washstand having a top B and bowl or basin *b*, the latter being provided with the usual overflow-vent *b'*. The washstand is preferably supported by means of brackets *b''*, which may project from a wall or extend upwardly from the floor where the invention is not employed in connection with a water-closet. Where the latter device is used, such brackets may, as shown, be secured upon the side of a flushing tank or reservoir C, containing the usual balance-valve (not shown) operable by means of an external trigger or handle *c*.

D E designate, respectively, the hot and cold water pipes. These lead to the faucet F, passing through cocks *e* before joining that portion *e'* of the faucet which is common to both pipes. A branch E' is taken from the cold-water pipe E and leads to the interior of the flushing tank or reservoir C.

The faucet F is shown in detail in Fig. 3. In addition to the cocks *e* this comprises a

nozzle e^2 , which operates in a horizontal plane adapting it to be swung over the washbasin or over the tub. The discharge of all water through such nozzle being determinable by means of the cocks e , either hot or cold water or an admixture of both may be fed to either device.

The water-closet may be of any desired construction; but I prefer to use that form which is adapted to be flushed by means, for instance, of a tank or reservoir C, such as that shown herein. I employ, therefore, a connecting flushing-pipe G, running from the under side of the tank C to the hopper of the water-closet H. Upon operating the trigger or other releasing device c the water contained within the tank C is discharged in considerable volume into such hopper, thereby flushing the same in the usual manner.

I designate an overflow-pipe communicating at one end with the interior of the tub A and at a point above which water should not rise and at the other end with the flushing-pipe G or, if desired, with the hopper H. Intermediate of its ends the pipe I is also connected with the waste and overflow ports of the basin b , the vent of such basin being operable by means of a plug and plug-actuating device z . Where no water-closet is employed in the combination apparatus, the waste and overflow from the tub may be provided for by a waste-pipe L, dotted lines in Fig. 1, and this, if desired, may also be utilized for drainage of water from the tub.

J designates an exhaust-pipe for the tub. As here shown, one end of this is connected with the bottom of said tub, the other end being connected with the waste-pipe K of the water-closet. Intermediate of its ends the exhaust-pipe J may be provided with a trap j . Said pipe and its trap are here shown as arranged beneath the flooring, the object being to conceal this portion of the piping. Such location is not essential, however, for either or both may be readily arranged above the flooring, if desired.

In Fig. 2 I have illustrated a form of the apparatus above described in which the closet-seat is a continuation of the composite structure, lying in the plane of the longitudinal center thereof. For the purpose of further economy of space, however—as, for instance, the structure is to be installed in a corner—such closet may be arranged at right angles to such longitudinal center, as illustrated in dotted lines in said figure, it being thereby made possible to utilize space otherwise necessarily to be allowed because of the size and degree of the outward projection of the washbasin and tub. Further, and because of the same considerations as to economy of space, I may, if desired, arrange the tub at an angle to the washstand, the closet bearing the relation to the latter shown both in full lines and in dotted lines in Fig. 2, and herein resides

an important feature of the invention—*i. e.*, the same or substantially the same system of piping which is herein shown and described may be employed in any correlative arrangement of the several instrumentalities, the only changes therein necessarily to be made in adapting it to the new relation being of an exceedingly simple nature readily performed.

I desire it also to be understood that in place of the stationary bath-tub A, I may employ a tub of the folding variety, the same being adapted when not in use to fold up close to the washbasin and piping construction above described and when in use to be extended to its full length. Such a tub being of well-known construction is not illustrated herein. In case of such substitution I may employ the same faucet and water-supplying arrangements generally which have heretofore been described, but due to the folding characteristic of the tub may employ a flexible connection between the overflow and the waste pipes (or either of them) and the interior of such tub.

I do not claim herein the combination, with a tub, of a basin, a flushing-tank and a water-closet in juxtaposition thereto, a common source of water-supply, and means for passing water from said tub, said basin, and said tank to said closet, inasmuch as this combination is subject-matter of my copending application, Serial No. 162,206, filed June 19, 1903.

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

1. In a toilet apparatus, the combination with a tub, basin and closet arranged in adjacency with each other, of a waste-pipe for the closet, an outlet-pipe for the tub communicating with the waste-pipe of the closet, an overflow-pipe for the tub leading to the upper portion of the closet, and an overflow-pipe for the basin communicating with the overflow-pipe for the tub.

2. In a toilet apparatus, the combination with a tub, basin and closet arranged in adjacency with each other, and a tank above the closet, of a waste-pipe for the closet, an outlet-pipe for the tub communicating with the waste-pipe of the closet, an overflow-pipe for the tub arranged at an incline and communicating with the upper portion of the closet, an overflow-pipe for the basin communicating with the said inclined pipe, and a discharge-pipe for the tank also connected with said inclined pipe, whereby the water from both overflow-pipes and the discharge-pipe of the tank are directed through said closet to thoroughly clean the same.

This specification signed and witnessed this 7th day of February, 1902.

HENRY S. HALE.

Witnesses:

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