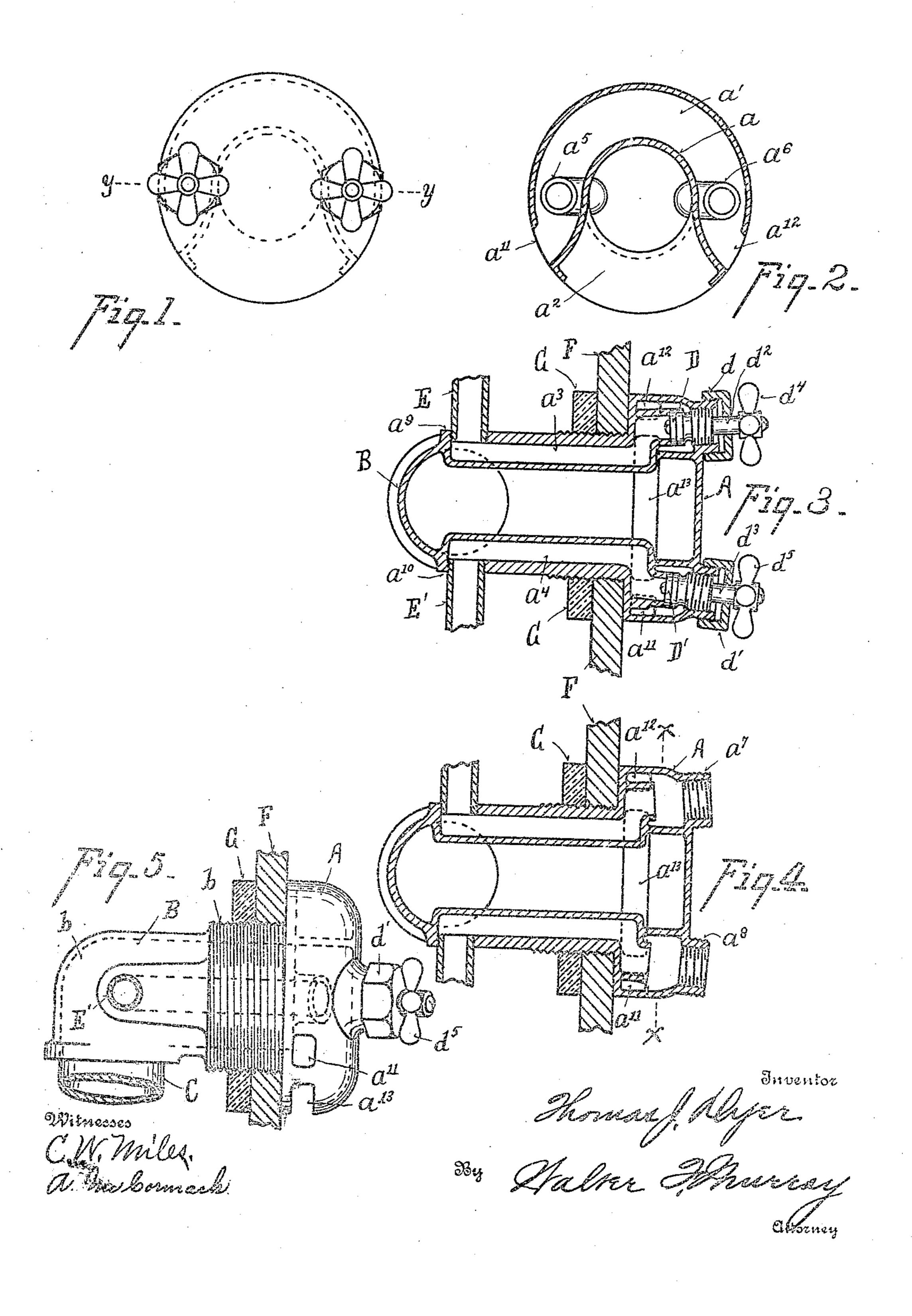
T. J. DYER.

COMBINED FAUCET AND OVERFLOW.

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## UNITED STATES PATENT OFFICE.

THOMAS J. DYER, OF CINCINNATI, OHIO.

## COMBINED FAUCET AND OVERFLOW.

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To all whom it may concern:

Be it known that I, Thomas J. Dyer, a citizen of the United States of America, and resident of Cincinnati, county of Hamilton, 5 State of Ohio, have invented certain new and useful Improvements in a Combined Faucet and Overflow, of which the following is a specification.

The object of my invention is to combine in one casting the hot and cold water channels and the overflow, for a bath-tub or basin.

This object is attained by the means described in the specification and illustrated in the accompanying drawings, in which,

faucet and overflow embodying my invention. Fig. 2 is a sectional view of the same taken upon line x—x of Fig. 4.— Fig. 3 is a horizontal sectional view taken upon line y—y of Fig. 1. Fig. 4 is a similar view, but showing the hot and cold water valves removed. Fig. 5 is a side elevation of the

same. Referring to the parts: The casting con-25 sists of a hollow head, A, and an enlarged cylindrical pipe, B. Head, A, is divided by an internal diaphragm, a, into a fresh water chamber, a', and an overflow or waste water chamber, a<sup>2</sup>. Overflow chamber, a<sup>2</sup>, is in 30 communication with the center of stem, B, which is turned into an elbow, b, upon its end and is screw-threaded to receive a waste pipe, C. Upon each side of the interior of stem, B, are formed hot and cold water channels, 35  $a^3$ , and  $a^4$ , which communicate with the fresh water chamber, a', the openings at which the channels join the fresh water chamber being surrounded by valve seats, a<sup>5</sup>, and a<sup>6</sup>. Op-

posite the valve seats,  $a^5$ , and  $a^6$ , head, A, has circular openings surrounded by annular flanges,  $a^7$ , and  $a^8$ , which form a casing for hot and cold water faucets of valves, D and D'. The flanges,  $a^7$ , and  $a^8$ , are externally screw-threaded to receive flanged nuts, d,

and d', through which the stems,  $d^2$  and  $d^3$ , of the valves project, the outer ends of the stems receiving the handles,  $d^4$ , and  $d^5$ , for turning on and off the hot and cold water. The inner ends of channels,  $a^3$ , and  $a^4$ , termi-

nate in annular flanges,  $a^0$ , and  $a^{10}$ , which receive hot and cold water pipes, E, and E'. The fresh water chamber, a', has openings,  $a^{11}$ , and  $a^{12}$ , for the exit of the fresh water.

Chamber,  $a^2$ , has an opening,  $a^{13}$ , in the head, A, for the entrance of the overflow into it. 55 For attaching the casting to the bath-tub or basin, F, the stem, B, has an exteriorly screw-threaded portion, b', adjacent to the head, A, which after the stem, B, has been inserted through the hole in the wall of the 60 bath-tub, F, receives a lock-nut, G.

In use it is seen that when either of the valves, D, or D', is raised from its seat, fresh water will be let into the tub through the openings,  $a^{11}$ , and  $a^{12}$ , of the casting, that when 65 the water in the tub or basin has reached the point at which the casting is located, the overflow will enter the head through the opening,  $a^{13}$ , and be discharged into the waste pipe, C. It is seen that the diaphragm, 70 a, keeps the overflow water entirely separate from the fresh or inflowing water in chamber, a'. It is seen, likewise, that my combined faucet and overflow takes up comparatively little space, and presents a neat appearance. 75 It may be, moreover, produced at less expense than the overflows and faucets which are not combined in a single casting.

What I claim is:

1. In a combined faucet and overflow the 80 combination of a casting containing a hollow head divided into a fresh water chamber and an overflow chamber, the head having ports leading into the fresh water chamber and the overflow chamber, a discharge channel in the casting leading into the overflow chamber and a fresh water channel in the casting leading into the fresh water chamber, and a valve for controlling the opening of the fresh water channel.

2. In a combined faucet and overflow the combination of a casting consisting of a hollow head containing a fresh water chamber and an overflow chamber, the head flaving ports leading into the fresh water chamber and the overflow chamber, a channel in the casting leading from the overflow chamber, hot and cold water channels in the casting leading into the fresh water chamber and hot and cold wa er valves for controlling the 100 opening and closing of the hot and cold water channels.

3. In a combined faucet and overflow a casting consisting of a pipe with hollow head at one end, the head divided by an internal 105 diaphragm into a fresh water chamber and

an overflow chamber, ports in the head opening into the fresh water chamber and the overflow chamber, the overflow chamber communicating with the pipe, separate hot and cold water channels upon the interior of the pipe communicating with the fresh water chamber and valves in the head for regulating

the opening and closing of the hot and cold water channels.

THOMAS J. DYER.

Witnesses:
Walter F. Murray,
Agnes McCormack.