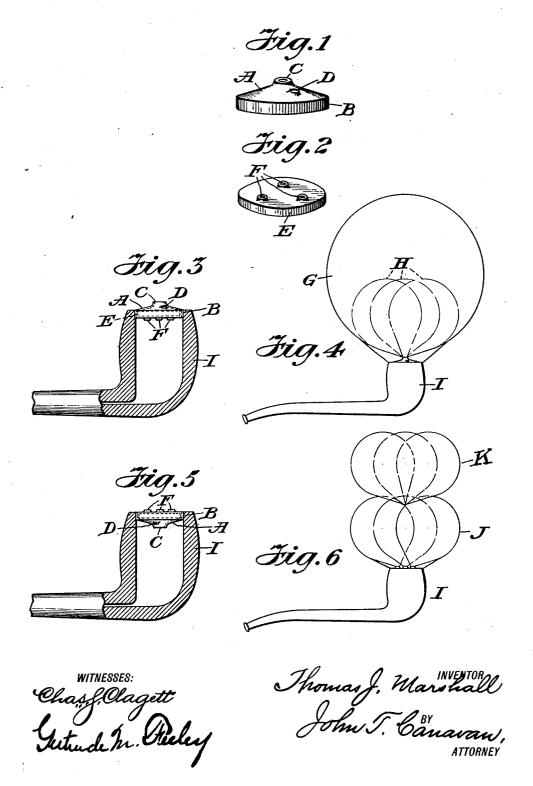
T. J. MARSHALL. SOAP BUBBLE BLOWER. APPLICATION FILED JUNE 10, 1911.

1,020,708.

Patented Mar. 19, 1912.



UNITED STATES PATENT OFFICE.

THOMAS J. MARSHALL, OF NEW YORK, N. Y.

SOAP-BUBBLE BLOWER.

1,020,708.

Specification of Letters Patent.

Patented Mar. 19, 1912.

Application filed June 10, 1911. Serial No. 632,357.

To all whom it may concern:

Be it known that I, THOMAS J. MARSHALL, of the city of New York, county of New York, and State of New York, have invented 5 a new and Improved Soap-Bubble Blower; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being 10 had to the accompanying drawings, form-

ing part of this specification.

The invention consists of an outer shell or wall, surrounding a hollow interior and having two members, one a cone-shaped 15 member provided with a cylindrical flange on its edge, and the other member diskshaped adapted to fit into the flange of the conical member, the conical member being provided with an orifice in the apex and 20 another intermediate the base and apex, the disk member being provided with a plurality of orifices.

In the accompanying drawings, Figure 1 is a view from the side and slightly above, 25 of the conical member with cylindrical flange. Fig. 2 is a view from the side and slightly above, of the disk member. Fig. 3 is a side view of the complete device with its parts put together and inserted in the 30 bowl of an ordinary tobacco pipe, which is shown in section, the conical end portion being uppermost. In Fig. 4 is shown the formation of bubbles resulting from blowing soapy water through the pipe with the 35 device thus placed as shown in Fig. 3. Fig. 5 shows the device inserted in a pipe-bowl with the flat end portion uppermost. Fig. 6 shows the formation of bubbles produced by blowing soapy water through the pipe 40 with the device placed in the pipe as shown in Fig. 5.

Similar letters refer to similar parts

throughout the several views.

In Fig. 1, the conical member is shown 45 at A, with a lipped orifice C at its apex, and a lipped orifice D on its surface between the apex and base of the cone. The cylindrical flange B is adapted to fit into an ordinary tobacco pipe. The member A B is

composed of a thin shell of material having 50 the interior hollow.

In Fig. 2, the disk member is shown at E, with lipped orifices at F. This end portion E may be a solid disk or may be hollow of a dish shape with raised edge. It is 55 adapted to be attached to the combined parts A and B by being thrust within B, where it is held frictionally.

In Fig. 3 the complete device with all its parts together is shown in position for use 60 in a pipe-bowl I, with the conical end part

uppermost.

In Fig. 4 is shown the formation of bubbles resulting from blowing soapy water through the pipe containing the device in- 65 serted in its bowl as shown in Fig. 3. A number of small bubbles, H, are blown from the orifice C and a larger bubble G from the orifice D enveloping the other bubbles.

In Fig. 5 the complete device is shown 70 in position for use in a pipe-bowl, with the

flat end portion E uppermost.

In Fig. 6 is shown the formation of bubbles resulting from blowing soapy water through the pipe containing the device in- 75 serted in its bowl, as shown in Fig. 5. A cluster of bubbles of substantially the same size, J, are blown. This cluster may be displaced by another as shown here at K. Several such clusters may be produced, re- 80 maining in existence at once.

What I claim is:

A soap bubble blower consisting of a hollow shell composed of two members, one a cone-shaped member provided with a cylin- 85 drical flange on its edge, and the other member disk-shaped and adapted to fit into the flange of the conical member, the conical member being provided with an orifice in the apex and another orifice intermediate 90 the base, and the apex, the disk member being provided with a plurality of orifices.
Dated New York city, N. Y., December

24th, 1910.

THOMAS J. MARSHALL.

Witnesses:

GEORGE DOAN RUSSELL, A. Munro Younger.