F. H. SMITH. APPARATUS FOR PRODUCING ARTIFICIAL WATER FALLS. No. 456,680. APatented July 28, 1891. WITNESSES: Frank Hamilton Smith by George & Duckley his action.

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

UNITED STATES PATENT OFFICE.

FRANK HAMILTON SMITH, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO WILLIAM H. POWER, OF DETROIT, MICHIGAN.

APPARATUS FOR PRODUCING ARTIFICIAL WATER-FALLS.

SPECIFICATION forming part of Letters Patent No. 456,680, dated July 28, 1891.

Application filed November 30, 1888. Renewed July 29, 1889. Again renewed February 27, 1890. Again renewed January 5, 1891. Serial No. 376,712. (No model.)

To all whom it may concern:

Be it known that I, FRANK HAMILTON SMITH, a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have invented a new and Improved Apparatus for Producing Artificial Water-Falls, of which the following is a description, reference being had to the annexed drawings, making part hereof.

The nature of my invention will appear from the following specification and claims.

In the drawings, Figure 1 is a perspective view of the device, showing the water-supply hose broken off; Fig. 2, a cross-sectional view 15 on the line X Y of Fig. 1.

A is the main reservoir and spreader; B, the water-inlet pipe; C, the water-supply hose; D D, end plates to prevent the water from overflowing laterally; E, a supplemental reservoir and spreader to receive the water as it falls from spreader A, thus forming a cataract. These spreaders may be multiplied, as desired, to form a succession of falls, cascades, or cataracts.

F represents the falling water.

In practice I use galvanized sheet-iron to construct my apparatus, and it may be coated with any desired coloring-matter. I design it for use in theaters to produce the effect of falls, cascades, and cataracts. The inlet-pipe

B should be so inclined as to be out of sight from the auditorium when the apparatus is set up. It will be seen that the reservoir and spreader A consists of a split tube, with an under projecting lip A' and spreader E, of a 35 lower lip projecting farther forward than lip A', each lip having a proper incline to permit the water to flow over it and fall from its edge.

What I claim as new is-

1. The combination of split tube A, provided with a lower lip A', side plates D D, and water-inlet pipe B, all arranged and operating substantially as described.

2. The combination of split tube A, provided with a lower lip A', side plates D D, and water-inlet pipe B, and lower lip E, projecting, as described, with its side plates D D, all arranged and operating substantially as described.

3. The combination of reservoir A, provided with a lower lip A', side plates D D, and water-inlet pipe B, all arranged and operating substantially as described.

In witness that the above is my invention 55 I have hereunto set my hand.

FRANK HAMILTON SMITH.

Witnesses:

GEORGE E. BUCKLEY, H. V. BUCKLEY.