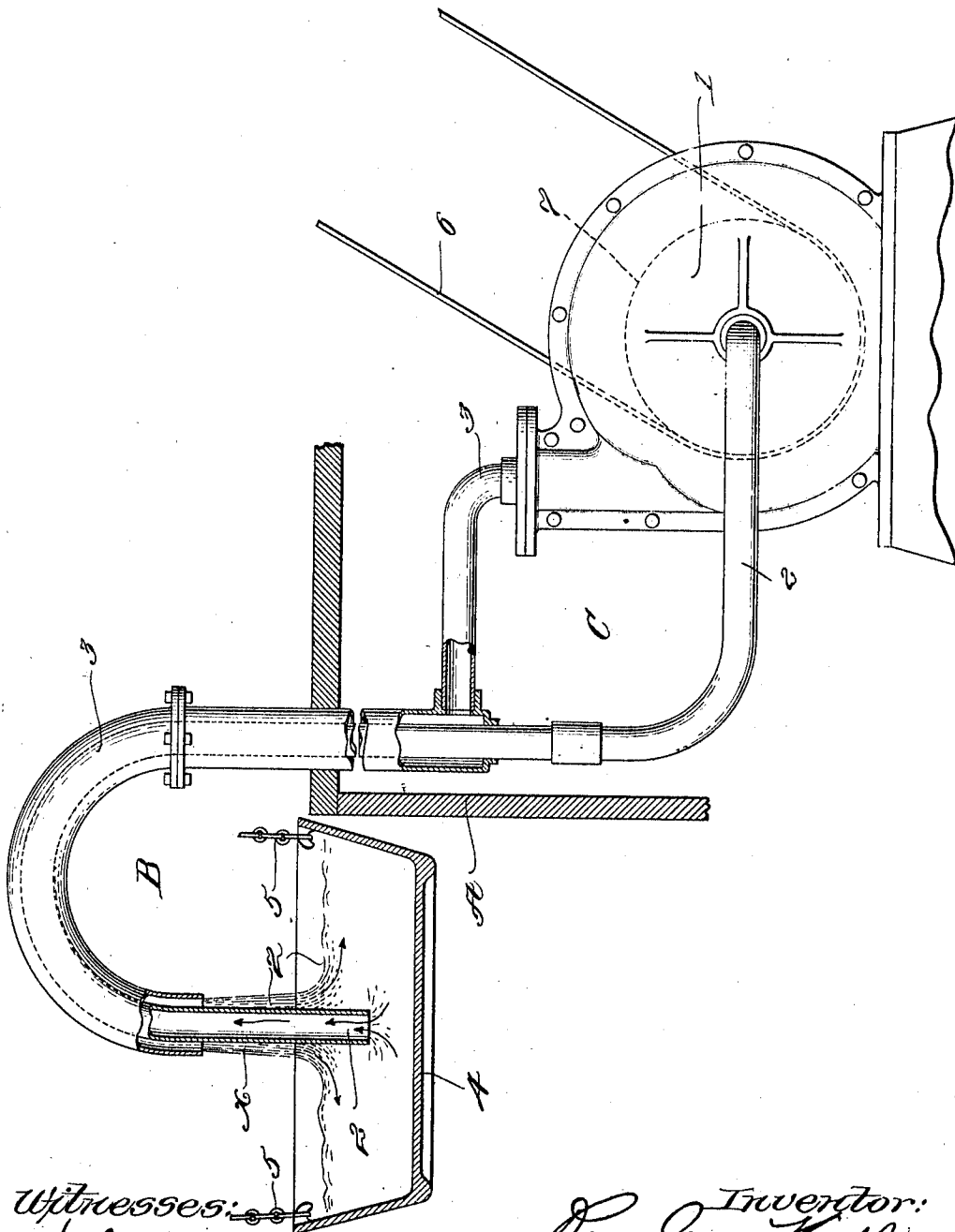


R. M. HILL.
 APPARATUS FOR PRODUCING ILLUSORY EFFECTS.
 APPLICATION FILED OCT. 15, 1910.

1,003,905.

Patented Sept. 19, 1911.



Witnesses:
 H. C. Bowser.
 L. B. Wernicke.

Inventor:
 Roy M. Hill,
 by Arthur F. Randall
 atty.

UNITED STATES PATENT OFFICE.

ROY M. HILL, OF SOMERVILLE, MASSACHUSETTS, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, OF ONE-EIGHTH TO ARTHUR F. RANDALL, OF SOMERVILLE, MASSACHUSETTS, AND ONE-EIGHTH TO JESSE A. HOLTON, OF BOSTON, MASSACHUSETTS.

APPARATUS FOR PRODUCING ILLUSORY EFFECTS.

1,003,905.

Specification of Letters Patent. Patented Sept. 19, 1911.

Application filed October 15, 1910. Serial No. 587,190.

To all whom it may concern:

Be it known that I, ROY M. HILL, a citizen of the United States, and resident of Somerville, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Apparatus for Producing Illusory Effects, of which the following is a specification.

My invention relates to amusement apparatus and particularly to amusement apparatus for producing an illusory effect and its organization comprises a vessel, a supply pipe for the vessel, an exhaust pipe for the vessel, and means for circulating a liquid through said pipes and vessel, one of said pipes extending into the discharge end of the other so that the inner pipe is hidden by the discharge from the other pipe.

Referring to the accompanying drawing, which shows my invention, the apparatus is divided by the partition A into two sections B and C, the section B being the part visible to the observer and the section C being hidden from view by the partition to render the illusion more effective. A pump 1 of ordinary construction mounted on any suitable foundation has its inlet connected with an exhaust pipe or tube 2 and its outlet with a supply pipe or tube 3. A vessel 4 which is preferably of transparent material may be supported in any suitable manner as by a plurality of chains 5 hanging from a support above. The chains 5 support the vessel 4 so that the inlet end of exhaust pipe 2 is well within the vessel, preferably near the bottom of the latter. The supply pipe 3 incloses the exhaust pipe 2 for a part of its length near the vessel 4, but its discharge end is arranged some distance above the vessel 4 so that the contents of supply pipe 3 falls from the discharge end of the latter into vessel 4 in a cylindrical column, as indicated at *c*, surrounding and hiding from view the inlet end of pipe 2 which projects downwardly from pipe 3. That part of supply pipe 3 which surrounds exhaust pipe 2 is sufficiently large in diameter to maintain the capacity of said pipe the same throughout its length, the capacities of the two pipes 2 and 3 being alike.

The pump 1 maintains the same rate of flow of the liquid *z* through the pipes 2 and 3 and since these pipes are of the same ca-

capacity it follows that there will be no substantial variance in the volume of the contents of the vessel 4 at any time while the apparatus is in operation.

In the preferred form of my invention the apparatus, or that part of it which is unhidden by the partition A, is of glass or other transparent material, but my invention is not limited in this respect and said parts may be of any suitable material. In most cases the best results will be secured if an opaque or non-transparent liquid is employed which will hide the protruding inlet end of the exhaust pipe 2.

Pump 1 may be driven in any suitable manner as by a belt 6 engaging a pulley 7.

From the above description it will be seen that my improved amusement apparatus may be used to advantage to display oils and other liquids as well as for amusement purposes, and also for advertising purposes. Furthermore, the apparatus is of very simple and inexpensive construction.

What I claim is:

1. An apparatus of the character described comprising a vessel; a supply pipe discharging into said vessel having its discharge end arranged above and some distance away from said vessel; an exhaust pipe for said vessel extending upward into the discharge end of the supply pipe so that it is hidden by the discharge from the latter, and means for circulating a liquid through said pipes and vessel.

2. An apparatus of the character described comprising a vessel; a supply pipe discharging into said vessel; an exhaust pipe for said vessel having its inlet end arranged within the latter, said exhaust pipe being arranged within the supply pipe and projecting from the latter into the vessel so that it is hidden by the discharge from the supply pipe, and means to circulate a liquid through said pipes and vessel.

3. An apparatus of the character described comprising a vessel; a supply pipe discharging into said vessel and having its discharge end arranged above and some distance away from said vessel; an exhaust pipe for said vessel, said exhaust pipe leading upward from a point within said vessel into and through the supply pipe so that its protruding end is hidden by the discharge from the supply pipe, and means

for circulating a liquid through said pipes and vessel.

4. An apparatus of the character described comprising a vessel; a supply pipe discharging into said vessel; an exhaust
5 pipe for said vessel arranged within the supply pipe and projecting from the outlet end of the latter so as to be hidden by the discharge of said supply pipe, and a
10 pump for circulating a liquid through said

pipes and vessel, the inlet of said pump being connected with the exhaust pipe and the outlet of said pump being connected with the supply pipe.

In testimony whereof I have affixed my
signature, in presence of two witnesses.

ROY M. HILL.

Witnesses:

ARTHUR F. RANDALL,
JESSE A. HOLTON.