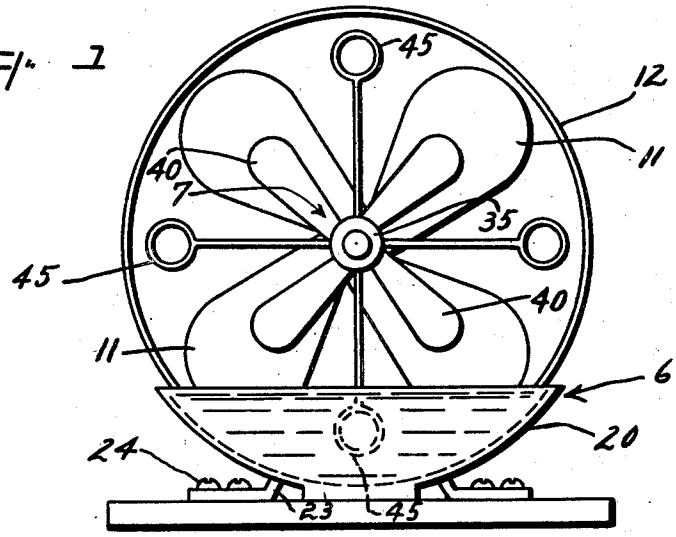
Dec. 17, 1946. E. R. HOLMAN 2,412,732

BUBBLE BLOWING DEVICE

Filed Oct. 29, 1945

Fig. 1



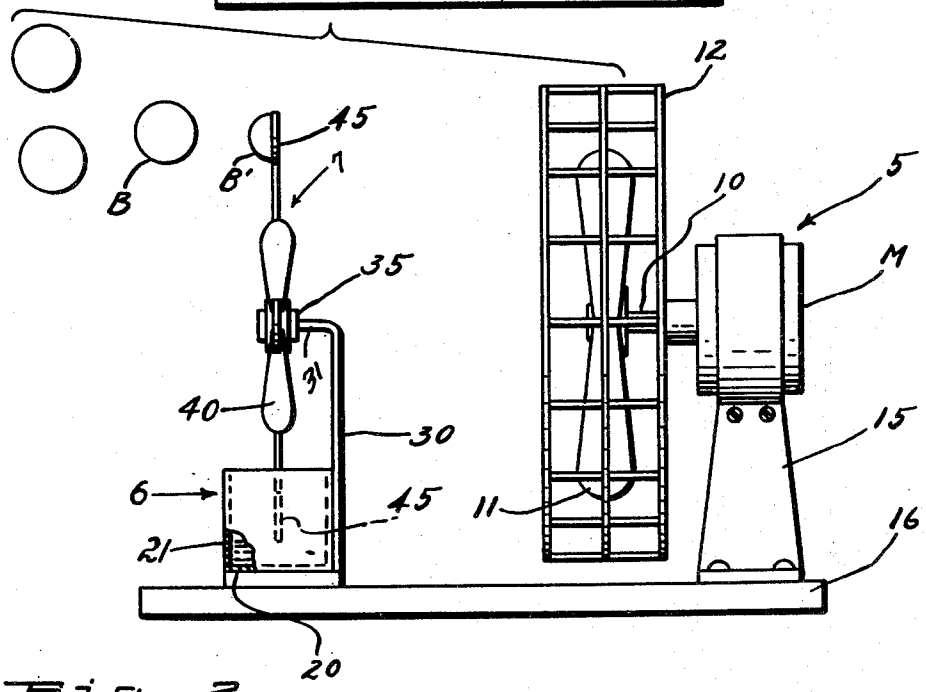


Fig. 2

Inventor
Emmette R. Holman

By Mason & Graham
Attys.

Patented Dec. 17, 1946

2,412,732

UNITED STATES PATENT OFFICE

2,412,732

BUBBLE BLOWING DEVICE

Emmette R. Holman, Pasadena, Calif., assignor to Turco Products, Inc., Los Angeles, Calif., a corporation of California

Application October 29, 1945, Serial No. 625,191

4 Claims. (Cl. 46—8)

1

This invention has to do with bubble blowing devices, having as an object the provision of a machine which is capable of automatically creating bubbles from soapy or film-forming solutions.

Another object of the invention is the provision of a machine of this character wherein a common source of air under presure is utilized both to move dipping elements into and out of a film-forming solution as well as for blowing bubbles from the dipping elements as they are moved out of the solution.

Another object is the provision of a simple and effective device of this character which is useful in providing attractive window displays as well as for providing entertainment.

Still further objects will appear from the following description of a presently preferred embodiment of the invention wherein I refer to the accompanying drawing, in which:

Fig. 1 is a front elevation; and

Fig. 2 is a side elevation with some parts being shown in section.

Referring now to the drawing, I show my device as consisting generally of an electric fan 5, a solution trough 6 and a dipping element 7. While the specific construction of those elements illustrated in the drawing is now preferred, it is within the purview of the invention, as defined by the accompanying claims, to use modifications of the specific structures shown.

The fan element is conventional, comprising a motor M driving a shaft 10 which carries conventional fan blades 11 surrounded by a guard 12. The motor is mounted in a support 15 extending upright from the base 16. It will be understood, of course, that other specific means for playing a suitable stream of air onto the dipping element may be used in lieu of the fan shown.

The trough element 6 has a bottom wall 20 curved about a radius and side walls 21, being open at its top. The trough is mounted upon legs 23 secured to the base as by screws 24.

Secured to a side wall of the trough as by spot welding or otherwise, there is a post 30 whose upper end is bent at right angles to provide a horizontal spindle 31 upon which a hub 35 is rotatably mounted. Secured at their inner ends to the hub and projecting radially therefrom, there are four symmetrically arranged vanes 40 which present angular air foil surfaces to cause the hub to rotate when an air stream from the fan is played thereon.

Also secured at their inner ends to the hub and projecting radially therefrom between vanes

2

40, there are four symmetrically arranged elements which I shall call "dippers," each preferably made of a metallic rod or wire having a loop 45 at its outer end. It will be obvious, of course, that any suitable number of dippers and vanes may be used. The trough is maintained filled or substantially filled with a solution suitable for creating bubbles; for instance, a soapy film-forming solution comprised of 8% by weight of a soap or synthetic wetting agent, 1% by weight of a thickening agent such as gum traganth, 5% by weight of glycerin, remainder water, will suffice. A suitable dye may be added to render the bubbles more attractive.

In operation, with the trough filled with the solution, the fan is placed in operation, which functions to cause the vanes 40 to rotate the hub and, as the hub rotates, its carried dippers are successively rotated into position dipping in the solution in the trough, causing a film of the solution to adhere to and close the loop of the dipper. As the dippers are rotated out of the trough, they move into the path of the air stream which, blowing through the loops, causes the carried film to be blown into bubbles. In Fig. 2 bubbles B are shown as completely formed and blown from the dipper and a bubble B' is shown in course of being blown.

I claim:

1. A bubble device comprising a trough adapted to contain a soapy film-forming liquid, a plurality of looped dippers, and means for moving the dippers through the liquid in the trough and into position exterior of the trough where an air stream may be played thereupon.

2. A bubble device comprising a trough adapted to contain a soapy film-forming liquid, a hub, means mounting the hub in position spaced above the trough for rotation about a horizontal axis, a plurality of dippers carried by and projecting laterally from the hub, each of said dippers having a film-receiving loop at its outer end and each dipper being of such length that the loops will be moved into and out of liquid in the trough as the hub rotates, and means associated with the hub for rotating the latter in response to air under pressure.

3. A bubble device comprising a trough adapted to contain a soapy film-forming liquid, a hub, means mounting the hub in position spaced above the trough for rotation about a horizontal axis, a plurality of dippers carried by and projecting laterally from the hub, each of said dippers having a film-receiving loop at its outer end and each dipper being of such length that the loops will

be moved into and out of liquid in the trough as the hub rotates, a plurality of vanes carried by and projecting radially from the hub and means for directing an air stream onto said vanes and loops whereby to rotate the hub and blow bubbles from the film carried by the loops as the latter move out of the trough.

4. A device of the class described comprising, in combination, a base, a trough on the base and adapted to contain a soapy film-forming liquid, a hub, means supporting the hub above the trough for rotation about an axis parallel with the base, radial vanes on the hub, radial dippers on the hub each having a loop on its outer end and each being of a length to cause passage of the loops through the liquid in the trough upon rotation of the hub, and a blower mounted on the base and disposed to play a stream of air on the vanes and loops.

EMMETTE R. HOLMAN.