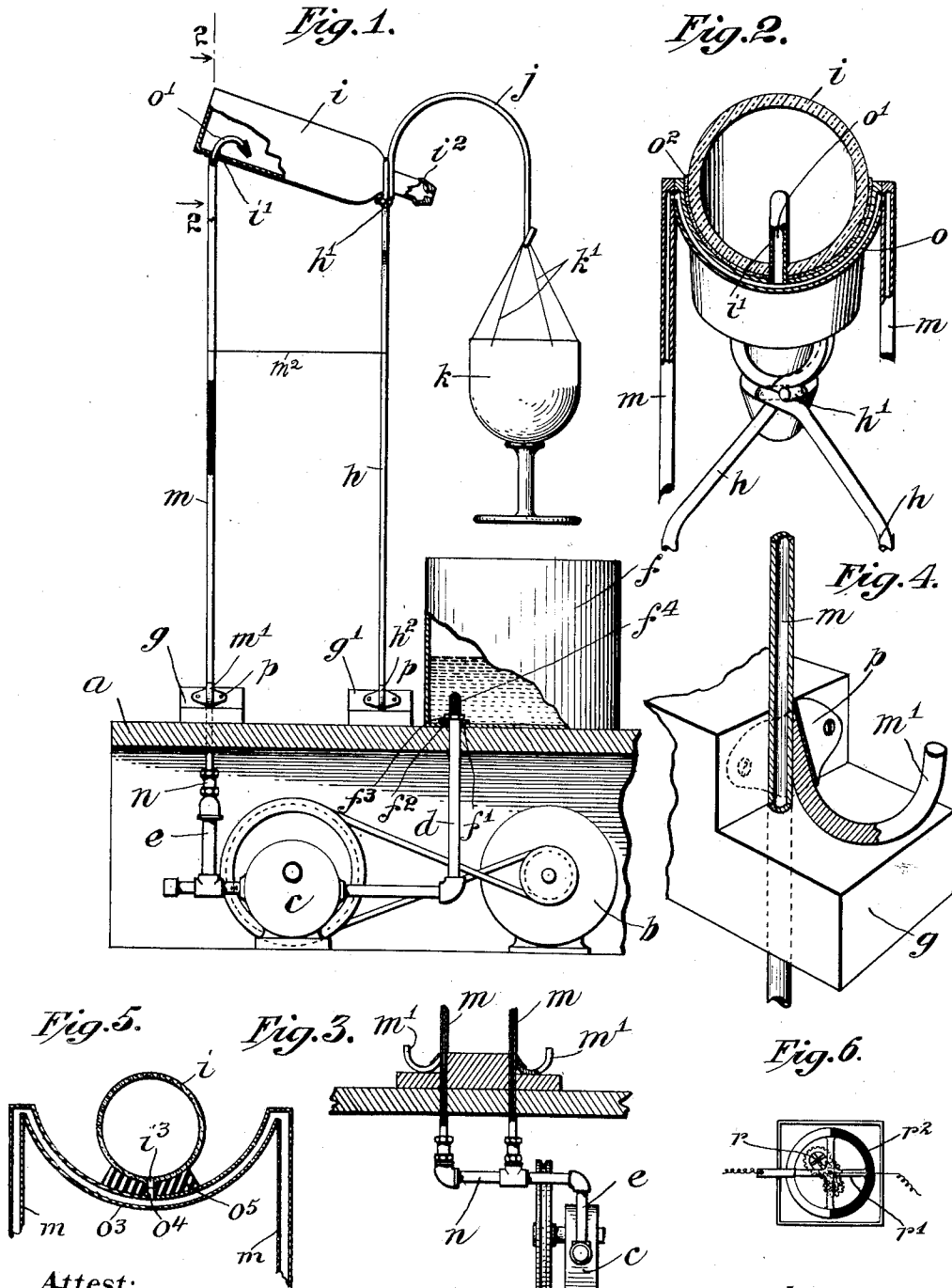


C. W. NICHOLS.
ADVERTISING DEVICE.
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1,041,149.

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Attest:
E. W. Nichols
Eugene Wening.

Inventor:
by *Charles W. Nichols*
Frank P. Wentworth
his Atty.

UNITED STATES PATENT OFFICE.

CHARLES W. NICHOLS, OF RAHWAY, NEW JERSEY.

ADVERTISING DEVICE.

1,041,149.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, CHARLES W. NICHOLS, a citizen of the United States, residing at Rahway, in the county of Union and State of New Jersey, have invented certain new and useful Improvements in Advertising Devices, of which the following is a specification, reference being had therein to the accompanying drawings, which form a part thereof.

My invention relates to advertising devices, and more particularly to a hydraulic device which will deliver a stream of fluid apparently unlimited in quantity from a receptacle of limited capacity, while concealing the mode of delivering the fluid to said receptacle.

The main object of my invention is to provide a device of this character embodying therein a delivery receptacle and a receiving tank with concealed means for establishing and maintaining a circulation of the fluid through said delivery receptacle to said receiving tank and from said tank back to said delivery receptacle, thereby maintaining a continuous circulation with a limited supply of circulating fluid and permitting the interruption of the flow to more completely mystify the observer.

A further object is to provide a device of this character embodying therein a plurality of apparently solid rods and a rest carried by said rods upon which said delivery receptacle reposes, said rest and at least one of the supporting rods carrying the same being hollow or tubular and being in communication with one lead of a fluid circulating pump, the other lead of which is in communication with the receiving tank.

A still further object is to provide a device of the character immediately above referred to wherein the delivery receptacle and the rest therefor will be so constructed as to permit the delivery of fluid to said receptacle by means of a concealed union and in a manner to prevent the splashing or spraying of the fluid as it enters said receptacle.

A still further object is to provide a device of this character wherein the stream of fluid as it leaves the discharge end of the delivery receptacle may be intercepted, or the circulating pump may be stopped without exposing the character of the device or the source of the running fluid.

A still further object is to provide a de-

vice of this character with a delivery receptacle, the supporting means for which, or a portion thereof, forms a part of the circulating system, said supports being so constructed and arranged as to permit the convenient mounting and removal of the delivery receptacle.

A still further object is to provide a device of this character wherein the union between the delivery receptacle and its support will be concealed by a resilient pad apparently designed to prevent breaking of the delivery receptacle.

A still further object is to provide a device of this character wherein the fluid when it leaves the delivery receptacle will be conveyed to the receiving tank in a manner to show convincingly that there is no direct connection between these two receptacles.

A still further object is to provide a device of this character wherein the fluid may be circulated intermittently so as to disclose to the observer the absence of any direct connection between the outlet of the delivery receptacle and the receiving tank. And a still further object is to provide a device of this character which may be inexpensively produced, which will be mystifying as to its exact mode of operation, and the parts of which will be so associated as to make it practically impossible to accurately determine by what means the fluid is discharged into the delivery receptacle.

The invention consists primarily in an advertising device comprising in combination a delivery receptacle, having an inlet opening adjacent to one end thereof and an outlet opening adjacent to the other end thereof, similar standards for supporting said receptacle in a position inclined from said inlet toward said outlet, a rest for the inlet end of said receptacle carried by the standards adjacent to the inlet end of said receptacle, one of said standards and said rest having a continuous duct formed therein, means establishing communication between said duct and said receptacle, a receiving tank, and a power actuated circulating pump, the leads of which are respectively in communication with said receiving tank and said duct whereby a continuous circulation of fluid may be maintained through said delivery receptacle and said receiving tank; and in such other novel features of construction and combination of parts as are hereinafter set forth and described and

more particularly pointed out in the claims hereto appended.

Referring to the drawings:—Figure 1 is a side elevation of a device embodying my invention, portions thereof being broken away to disclose the interior construction thereof; Fig. 2 is a section on the line 2—2 of Fig. 1; Fig. 3 is a detail view of the pipe system by means of which the desired volume of fluid is delivered to said delivery receptacle; Fig. 4 is a detail view of the lower end of one standard; Fig. 5 is a view of a modified form of union between the pipe delivering fluid to the delivery receptacle and said receptacle; and Fig. 6 is a detail view of means for intermittently controlling the flow of electric current to the motor to cause an intermittent flow of the fluid in the device.

Like letters refer to like parts throughout the several views.

In the embodiment of my invention shown in the drawings, *a* denotes a foundation in which is concealed an electric motor or other source of power *b*; a high speed rotary pump *c* and the leads *d* and *e* of said pump. Mounted upon said foundation is a receiving tank *f* having an outlet *f'* through which passes the lead *d*, a water-tight joint being formed by means of the gasket *f²* and the nut *f³*. A filter screen *f⁴* is provided to prevent the passage of solids to the pump.

Mounted upon the foundation *a* is a plurality of blocks *g g'*, stepped at the ends as shown particularly in Fig. 4, said blocks being similar in every respect so far as a superficial examination thereof can disclose. One of these blocks as *g'* is adjacent to the receptacle *f*.

Carried by the block *g'* is a plurality of oppositely disposed standards *h* within the length of which is formed a loop *h'* adapted to receive and retain the neck of a bottle *i* constituting the delivery receptacle. The end of one of these standards is extended as at *j* to form a support for a pendant receptacle *k* of a capacity less than that of the receiving tank *f*, this receptacle *k* intercepting the stream of fluid and causing it to pass in an irregular manner to the receiving tank *f*. The receptacle *k* is supported by means of small or invisible wires *k'* so as to make it apparent that no fluid can be delivered upwardly from said receptacle *k*. The receptacle *k* is sustained directly above the tank *f* so that this tank will receive the overflow from said receptacle *k*.

The lower ends of the supports or standards *h* are curved outwardly as at *h²* with the lower end exposed so as to indicate that the supports are solid rods. Passing through the block *g* is a plurality of hollow standards *m*, the lower ends of which are connected by means of a multiple pipe fitting *n* with the lead *e* of the pump *c*. The tops

of these standards are closed as shown in Fig. 2 and extending from one to the other, in the preferred form of the invention, is a curved rest *o*, the ends of which are closed and brazed to the standards *m*. The rest *o* is also hollow and the duct therein communicates at each side thereof with the standards *m*. Both the standards *h* and *m* are of the same configuration and are apparently merely thin supporting rods, their cross-section being so small as to make it appear that it would be impossible to use them as a conduit for conveying fluid to the delivery receptacle *i*.

To compensate for the small interior diameter of the standards *m* it is necessary to use a high speed pump, and I am enabled to secure the desired volume in the flow of the fluid by utilizing both standards in the manner described.

Leading from the rest *o*, in the preferred form of the invention is a nipple *o'* which is projected in a curve so as to lead the stream of fluid passing therethrough downwardly against the bottom of the delivery receptacle *i* in a manner to prevent the spraying of the fluid as it leaves said receptacle. This nipple projects through an opening *i'* in the receptacle *i* and to conceal the said opening as well as the nipple leading from the rest *o*, I cover the entire rest with a resilient body *o²* which has the appearance of serving merely as a cushion for the said receptacle.

To increase the similarity between the standards *h* and *m*, I braze to the latter adjacent the block *g*, a short curved solid section *m'*, similar in all respects to the curved lower ends of the standards *h*, the portion of the standards *m* and *h* adjacent to these inclosing portions being inclosed by a metallic sheathing *p* of a width sufficient to conceal the joint between the standards *m* and the curved sections *m'* thereof.

To permit the adjustment and removal of the receptacle *i* the standards *m* and *h* are made of a length to lend them sufficient flexibility to permit the reduced forward end of the receptacle, after the union has been made with the nipple *o'*, to be drawn backwardly and inserted through the loop *h'*, a thin strand of wire *m²* being used to hold these standards in the proper position after the receptacle is in place. This strand will also serve to prevent any such movement of the receptacle as would tend to disclose the nipple *o'*. The volume of fluid passing through the receptacle in order to simulate fluid flowing from a bottle, must be considerable, and to cause the water to back up about the outlet opening of said receptacle, I constrict said opening, as indicated at *i²* so as to reduce the capacity thereof in a manner to retard slightly the flow of water or fluid and thus choke the outlet in a manner to prevent

the fluid being sprayed from the nipple through said opening.

Under most conditions of use it is desirable, in order to more thoroughly mystify the observer, to interrupt the flow of fluid occasionally in a manner to make it apparent that the circulation of fluid through the bottle *i* is not through the outlet opening thereof. While the receptacle interposed between the delivery receptacle and the tank *f* will serve this purpose, under some conditions it is not desirable to use this receptacle, and even when it is used it is sometimes desirable to have an intermittent flow to attract and increase the speculation of the onlooker as to the exact mode of operation of the device, thus increasing its effective value as an advertising device.

Any desired means for causing this intermittent flow may be utilized, such as a clock work mechanism controlled switch *r* as shown in Fig. 6 of the drawings which consist of a rotary contact member *r'* actuated by the clock work mechanism, and an elongated segmental stationary contact *r''* of a length determined by the desired duration of the actuation of the pump in causing the fluid to intermittently flow.

In the modification shown in Fig. 5, I employ a form of rest for the receptacle *i* and a union, or means of communication, between said seat or rest and said receptacle. In this form I provide a curved hollow seat *o'*, the radius of the curve of which is much greater than that of the receptacle *i*. This seat has centrally thereof a short nipple *o''*, surrounding which is a rubber cushion *o'''* of short length with an opening having a close fit upon said nipple. This cushion is of a thickness greater than the height of the nipple, of a width approximating that of the rest *o'* and of a length sufficient to accommodate the receptacle *i*. When this form of connection is used, the receptacle *i* is provided with a nipple *i'* adapted to enter the opening in the cushion *o'''* and abut against the discharge end of the nipple *o''*.

While the modification has the advantage that it holds the receptacle away from the standards *m* sufficiently to eliminate any idea of any connection between the two, it has the disadvantage that it projects the stream of fluid upwardly instead of toward the outlet of the receptacle.

The operation of the herein described device is substantially as follows:—The device is set up, preferably in a place where it will be inaccessible to the observer, and the tank *f* supplied with the fluid to be circulated. The electric current is then permitted to flow to the motor *b* which in turn actuates the pump *c* which draws the fluid from the tank *f* and forces it through the fitting *n* to the standards *m* through which it flows to the rest *o*, the two streams passing through

the standards *m* meeting at the discharge nipple *o'* or *o''*. In the preferred form of the invention, the direction given to the fluid will project it downwardly against the bottom of the delivery receptacle *i* to minimize splashing, or a possible splashing, within said receptacle. After delivery to the receptacle *i* the fluid will flow down the bottom thereof until it approaches the outlet opening *i''* where the constriction of said opening will retard the flow in a manner to cause the fluid to back up in the receptacle to an extent to exclude any spray from said outlet and cause the fluid to flow therefrom in a solid stream. As the fluid leaves said receptacle, it will drop into the receptacle *k* interposed between it and the tank *f* and will be returned to said tank as this interposed receptacle overflows.

When it is desired to show an intermittent stream, the clock work mechanism *r* is set in motion and the circuit to the motor alternately opened and closed through the revolving switch of said mechanism in a manner to cause the pump to operate intermittently for a predetermined interval as determined by said clock work mechanism.

The delicacy of the standards *m* compared with the volume of fluid passing from the outlet *i''* creates the impression that a sufficient volume of fluid could not be conveyed through said standards to cause a flow of the volume passing from said outlet. At the same time the curved portions brazed to the standards *m* create the impression that said standards are composed of solid rods, thus increasing the mystification of the observer.

The clearance below the discharge outlet *i''* permits the operator to interrupt the circulating fluid at any time and also permits the motor to be shut down without exposing the mode of operation of, or tending in any way to minimize the attractiveness or novelty of, the device.

It is not my intention to limit the invention to the precise details of construction shown in the accompanying drawings, it being apparent that such may be modified without departing from the spirit and scope of the invention.

I believe it to be broadly new to provide a device of this character which is capable of use, with an intermittent flow of fluid therethrough without exposing the source of the fluid supply, and I intend to claim such broadly.

Having described my invention, what I claim as new and desire to have protected by Letters Patent is:—

1. An advertising device, embodying therein in combination a delivery receptacle of limited capacity having an inlet opening, and an outlet opening at one end thereof, similar standards for supporting said receptacle adjacent to the opposite ends there-

of in a position inclined from said inlet toward said outlet, a rest carried by said standards adjacent the inlet opening of said receptacle, one of said standards and said
 5 rest having a continuous duct therein, means establishing communication between said duct and said receptacle, a receiving tank spaced away from the outlet opening of said delivery receptacle, and a power actuated
 10 circulating pump, the leads of which are respectively in communication with said receiving tank and said duct, whereby a continuous circulation of fluid may be maintained through said delivery receptacle and
 15 said receiving tank.

2. An advertising device embodying therein in combination a delivery receptacle of limited capacity having an inlet opening, and an outlet opening at one end thereof,
 20 similar standards for supporting said receptacle adjacent to the opposite ends thereof in a position inclined from said inlet toward said outlet, a rest carried by said standards adjacent the inlet opening of said receptacle,
 25 one of said standards and said rest having a continuous duct therein, means establishing communication between said duct and said receptacle, a receiving tank spaced away from the outlet opening of said delivery
 30 receptacle, a power actuated circulating pump, the leads of which are respectively in communication with said receiving tank and said duct, whereby a continuous circulation of fluid may be maintained through
 35 said delivery receptacle and said receiving tank, and a receptacle interposed between the outlet of said delivery receptacle and said tank and having communication with neither.

3. An advertising device, embodying therein in combination a delivery receptacle of limited capacity having an inlet opening, and an outlet opening at one end thereof,
 45 similar standards for supporting said receptacle adjacent to the opposite ends thereof in a position inclined from said inlet toward said outlet, a rest carried by said standards adjacent the inlet opening of said
 50 receptacle, one of said standards and said rest having a continuous duct therein, means establishing communication between said duct and said receptacle comprising a nipple projecting through said inlet opening
 55 and projected downwardly against the bottom of said receptacle, whereby the splashing of the fluid is minimized, a receiving tank spaced away from the outlet opening of said delivery receptacle, and a power actuated
 60 circulating pump, the leads of which are respectively in communication with said receiving tank and said duct, whereby a continuous circulation of fluid may be maintained through said delivery receptacle and
 65 said receiving tank.

4. An advertising device, embodying

therein in combination a delivery receptacle having an inlet opening therein and an outlet opening adjacent to the end thereof, a plurality of pairs of oppositely disposed
 70 similar standards adapted to support said receptacle in a position inclined from said inlet toward said outlet, a rest carried by each pair of said standards adapted to engage said receptacle at divergent points,
 75 one pair of said standards and the rest carried thereby having therein a continuous duct, means establishing communication between said duct and said receptacle, a receiving tank spaced away from the outlet opening of said delivery receptacle, and a
 80 power actuated circulating pump, the leads of which are respectively in communication with said receiving tank and said duct, whereby a continuous circulation of fluid may be maintained through said delivery
 85 receptacle and said receiving tank.

5. An advertising device, embodying therein in combination, a delivery receptacle having an inlet opening therein, and an outlet opening adjacent to the end thereof, a
 90 plurality of pairs of oppositely disposed similar standards adapted to support said receptacle in a position inclined from said inlet toward said outlet, a rest carried by each pair of said standards adapted to en-
 95 gage said receptacle at divergent points, one pair of said standards and the rest carried thereby having therein a continuous duct, means establishing communication between said duct and said receptacle comprising a
 100 nipple projecting through said inlet opening and projected downwardly against the bottom of said receptacle, whereby the splashing of the fluid is minimized, a receiving tank spaced away from the outlet opening
 105 of said delivery receptacle, and a power actuated circulating pump, the leads of which are respectively in communication with said receiving tank and said duct, whereby a continuous circulation of fluid
 110 may be maintained through said delivery receptacle and said receiving tank.

6. An advertising device, embodying therein in combination, a delivery receptacle having an inlet opening therein, and an out-
 115 let opening adjacent to the end thereof, a plurality of pairs of oppositely disposed similar standards adapted to support said receptacle in a position inclined from said inlet toward said outlet, a rest carried by each
 120 pair of said standards adapted to engage said receptacle at divergent points, one pair of said standards and the rest carried thereby having therein a continuous duct, means establishing communication between said
 125 duct and said receptacle comprising a nipple projecting through said inlet opening and projected downwardly against the bottom of said receptacle, whereby the splashing of the fluid is minimized, a receiving tank
 130

spaced away from the outlet opening of said delivery receptacle, a power actuated circulating pump, the leads of which are respectively in communication with said receiving tank and said duct, whereby a continuous circulation of fluid may be maintained through said delivery receptacle and said receiving tank, and a receptacle interposed between the outlet of said delivery receptacle and said tank and having communication with neither.

7. An advertising device, embodying therein in combination a delivery receptacle of limited capacity having an inlet opening, and an outlet opening at one end thereof, said receptacle adjacent to said outlet, being provided with means for retarding the flow at said outlet opening in a manner to choke said opening and prevent spray from passing therethrough, similar standards for supporting said receptacle adjacent to the opposite ends thereof in a position inclined from said inlet toward said outlet, a rest carried by said standards adjacent the inlet opening of said receptacle, one of said standards and said rest having a continuous duct therein, means establishing communication between said duct and said receptacle, a receiving tank spaced away from the outlet opening of said delivery receptacle, and a power actuated circulating pump, the leads of which are respectively in communication with said receiving tank and said duct, whereby a continuous circulation of fluid may be maintained through said delivery receptacle and said receiving tank.

8. An advertising device, embodying therein in combination a delivery receptacle having an inlet opening and an outlet opening adjacent to the ends thereof respectively, a plurality of pairs of oppositely disposed similar standards adapted to support said receptacle in a position inclined from said inlet toward said outlet, a rest carried by each pair of said standards adapted to engage said receptacle at divergent points, one pair of said standards and the rest carried thereby having therein a continuous duct, and the other pair of standards being of solid stock, the upper ends of all of said standards being solid and exposed, the lower ends of said solid standards being curved outwardly and supported by a sheathing, and said hollow standards having a similarly curved portion secured in relation thereto and covered by a similar sheathing, whereby it will appear that all of said standards are of solid stock, means establishing communication between said duct and said re-

ceptacle, a receiving tank spaced away from the outlet opening of said delivery receptacle, and a power actuated circulating pump, the leads of which are respectively in communication with said receiving tank and said duct, whereby a continuous circulation of fluid may be maintained through said delivery receptacle and said receiving tank.

9. An advertising device, embodying therein in combination a delivery receptacle having an inlet opening and an outlet opening spaced away from and below said inlet opening, a receiving tank, adjacent to said outlet opening and spaced away therefrom to an extent to leave an unobstructed field between the outlet opening of said delivery receptacle and said receiving tank, and means whereby fluid may be circulated from said receiving tank through said delivery receptacle and back to said receiving tank.

10. An advertising device, embodying therein in combination a delivery receptacle having an inlet opening and an outlet opening, a receiving tank, adjacent to said outlet opening and spaced away therefrom to an extent to leave an unobstructed field between said delivery receptacle and said receiving tank, means whereby fluid may be circulated from said receiving tank through said delivery receptacle and back to said receiving tank, and means whereby said circulating means may be caused to operate intermittently to interrupt said circulation, whereby the absence of any connection between said outlet opening and said receiving tank is made apparent.

11. An advertising device, embodying therein in combination a delivery receptacle having an inlet opening and an outlet opening, a receiving tank, adjacent to said outlet opening and spaced away therefrom to an extent to leave an unobstructed field between said delivery receptacle and said receiving tank, and means whereby fluid may be circulated from said receiving tank through said delivery receptacle and back to said receiving tank, comprising a circulating pump, an electric motor actuating the same, and mechanically actuated means for intermittently controlling the circuit to said motor.

In witness whereof, I have hereunto affixed my signature, in the presence of two subscribing witnesses, this 10th day of October, 1911.

CHARLES W. NICHOLS.

Witnesses:

EUGENE WENING,
CLARISSA FRANCK.