W. J. MINKIEWITZ.

MOISTENING DEVICE.

APPLICATION FILED NOV. 1, 1909.

956,129. Patented Apr. 26, 1910.

3 SHEETS—SHEET 1.

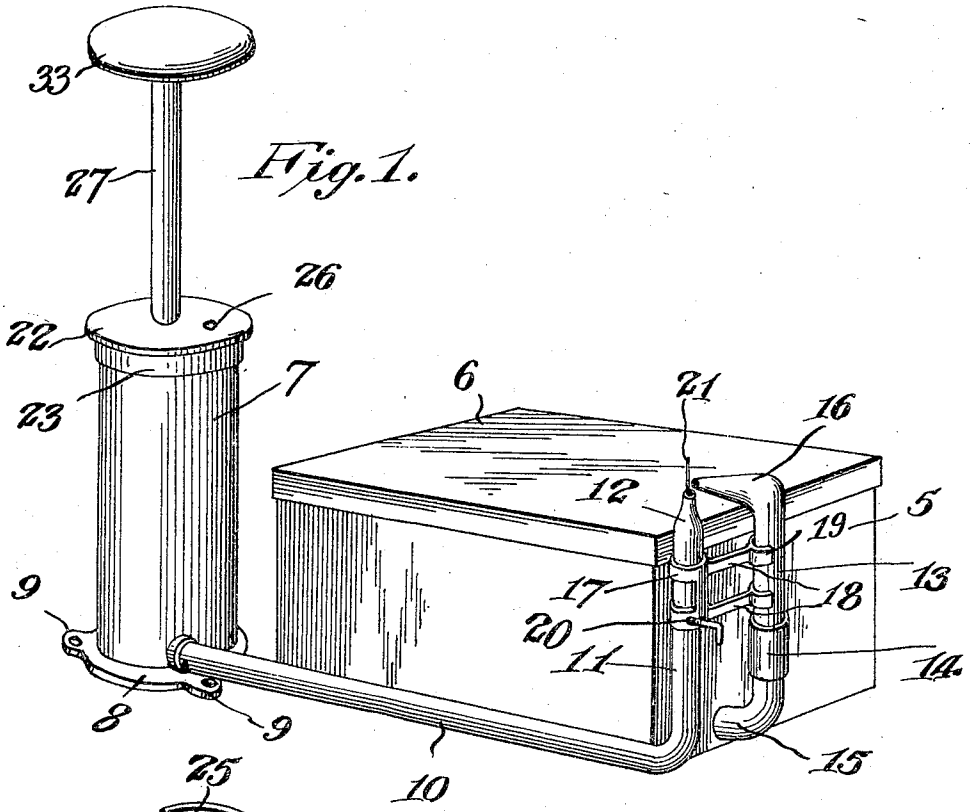

Fig. 1.

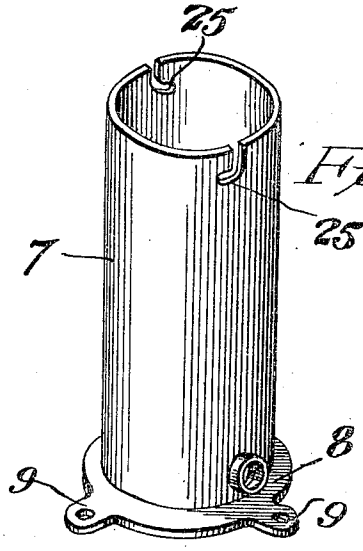

Fig. 5.

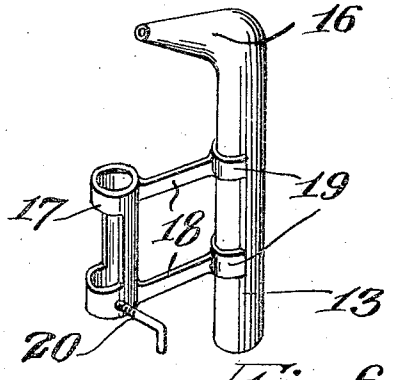

Fig. 6.

Witnesses

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2 SHEETS—SHEET 2.

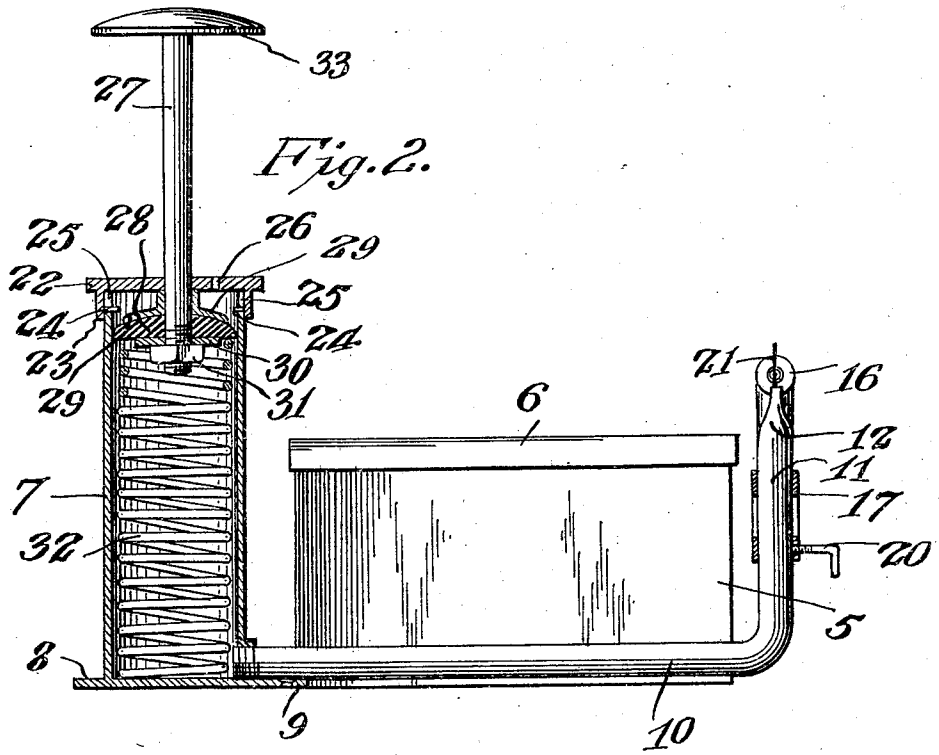

Fig. 2.

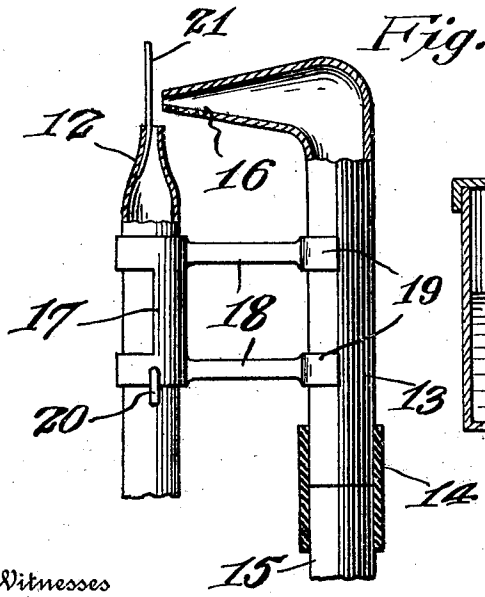

Fig. 4.

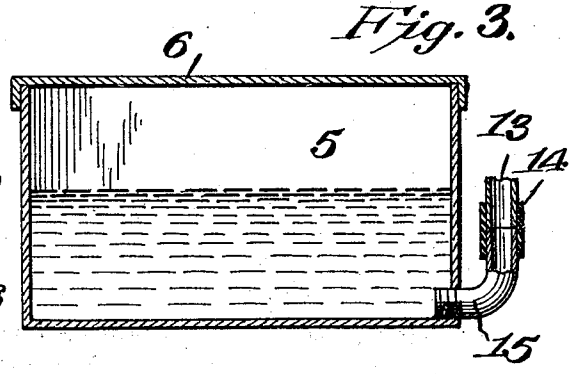

Fig. 3.

Witnesses

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UNITED STATES PATENT OFFICE.

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MOISTENING DEVICE.

956,129. Specification of Letters Patent. Patented Apr. 26, 1910.

Application filed November 1, 1909. Serial No. 525,751.

To all whom it may concern:

Be it known that I, WILLIAM J. MINKIEWITZ, a citizen of the United States, residing at Anamoose, in the county of McHenry and State of North Dakota, have invented certain new and useful Improvements in Moistening Devices, of which the following is a specification, reference being had to the accompanying drawings.

This invention has relation to certain new and useful improvements in moistening devices and refers more particularly to a device of this character which is adapted to be used in moistening the tips of the fingers whereby the counting of currency may be facilitated.

The primary object of the invention resides in the provision of a spraying or moistening device whereby the volume of the spray may be regulated as desired.

A further object is to provide a very simply constructed moistener whereby the water will be drawn from a reservoir and expelled from the spraying nozzle through air suction.

With these and other objects in view, the invention consists of the novel construction, combination and arrangement of parts hereinafter fully described and claimed and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a moistener constructed in accordance with the present invention; Fig. 2 is a side elevation thereof, the air cylinder being shown in section; Fig. 3 is a detail section of the water reservoir; Fig. 4 is an enlarged detail section of the spraying nozzle and the end of the water tube; Fig. 5 is a detail perspective view of the air cylinder, the tube being removed; and Fig. 6 is a detail perspective view of the spraying pipe showing the means for adjusting the same upon the air tube.

In large banking institutions, to facilitate the counting of paper currency, means are provided, usually consisting of a saturated sponge, whereby the clerks may dampen or moisten their fingers to prevent the possibility of the bills adhering to each other owing to the texture of the paper which is used in their production. In this manner the possibility of mistakes is avoided.

It is the purpose and aim of the present invention to provide a moistening device which is of very simple construction and may be instantaneously operated to moisten or spray the tips of the fingers used in the counting of bills. To this end I provide a water reservoir 5 which as shown is preferably of rectangular form although it will be understood that it may also be of many other forms as may be found desirable. This reservoir is provided with a removable cover 6. Arranged in close proximity to the reservoir there is a vertically disposed cylinder 7 which is formed at its base with a circumscribing flange 8 provided with a plurality of ears 9 which are adapted to receive fastening screws to secure the cylinder rigidly in position. Any number of these ears may be provided. Communicating with the interior of the cylinder at its lower end is an air pipe 10 which extends in longitudinal parallel relation to the reservoir and has its outer end vertically extended as shown at 11. The extremity of this vertical portion 11 projects slightly above the top of the reservoir and is of contracted diameter as shown at 12, the purpose of which will hereinafter appear.

A spray pipe 13 is disposed in vertical parallel relation to the end portion of the pipe 10 and is coupled at its lower end by means of a sleeve 14 preferably formed of rubber, to the upper end of an elbow 15 which extends into the reservoir 5. The upper end of the spray pipe 13 is laterally projected and conically formed to provide a spraying nozzle 16. The end of this nozzle is disposed proximal to the contracted extremity 12 of the pipe 10 and slightly above the same. The spray pipe 13 and the vertically disposed portion 11 of the pipe 10 are adjustably connected to each other. This connection comprises a tubular sleeve 17 through which the pipe 11 is disposed. Arms 18 are integrally formed with the sleeve 17 and terminate in the U-shaped members 19 which are disposed upon and secured to the spray pipe 13. Thus it will be seen that the spray pipe 13 may be vertically adjusted upon the end of the elbow 15 to position the end of the nozzle 16 with relation to the contracted extremity 12 of the air pipe. After so adjusting the spray pipe, it may be rigidly secured in position by means of a securing screw 20 which extends through the lower end of the sleeve 17 and binds upon the air pipe. A short vertical wire 21 protrudes above the open end of the air pipe and above the spray

nozzle 16. As the water is drawn from the spray nozzle by the air current, it engages with the wire 21 and is sprayed in minute particles upon the fingers of the operator held above the wire.

The upper end of the cylinder 7 is provided with a removable closure 22. This closure is formed with an annular depending flange 23 and is provided at diametrically opposite points with the inwardly extending pins or studs 24. These studs are adapted to be disposed in the bayonet slots 25 which as shown in Fig. 5 extend in opposite directions. It will thus be noted that when the pins are positioned in the lower horizontal portions of these slots the closure will be securely locked in position upon the upper end of the cylinder. An opening 26 is formed through the closure 22 to permit of the free entrance and exhaust of air into the cylinder 7. A plunger rod 27 is freely movable through the closure and upon its lower end a resilient head 28 is secured. As clearly shown in Fig. 2 this head is disposed between a concavo-convex plate 29 rigidly carried by the plunger rod and the washer plate 30 which is disposed upon the underside of the head and held upon the lower end of the rod by means of a clamping nut 31. The frictional engagement of this nut with the washer 30 rigidly secures the resilient head 28 between the same and the concavo-convex plate 29. A spiral spring 32 is arranged in the cylinder 7 beneath the plunger head and normally positions the same in the upper end of the cylinder. The upper end of the rod 27 is provided with a circular depression knob or plate 33.

In the operation of the device, the reservoir 5 is filled with water which flows into the spray pipe 13. When it is desired to moisten the fingers, the plunger rod 27 is forced downwardly in the cylinder 7 and the air contained therein is expelled from the outer contracted extremity 12 of the pipe 10. The force of the expulsion of the air causes suction in the spray pipe 13 which draws the water through the same and sprays it from the end of the conical nozzle 16. The fingers of course are held adjacent to the end of the nozzle to receive the water spray. When a greater or less spray of the water from the nozzle is desired, the pipe 13 is vertically adjusted on the elbow 15 and secured in its adjusted position by the set screw 20. It will be obvious that the close disposition of the open ends of the air pipe and the spray nozzle will provide a greater volume of spray, and as the spray nozzle is moved upwardly this volume will gradually decrease.

From the foregoing it will be seen that I have provided a spraying or moistening device which is peculiarly adapted for use in banks and other institutions where paper currency is daily handled and counted by the employees. It may be instantaneously actuated to provide any desired quantity of moisture and it will be apparent that the device may be in constant operation for many days before the supply of water is entirely consumed and it is found necessary to replenish the reservoir.

A moisture as above set forth may be produced at a minimum cost, the parts being of very simple form and readily produced and arranged in assembled position. The water reservoir would preferably be constructed of aluminum, and the cylinder 7 of a light sheet metal which may be found suitable for the purpose desired. Thus the entire device is rendered easily transportable from place to place.

While I have shown and described what I believe to be the preferred embodiment of my invention, it will of course be understood that various minor changes may be resorted to without departing from the essential features or sacrificing any of the advantages of the invention.

Having thus described the invention, what is claimed is:

1. In a device of the character described, the combination of a water reservoir, an elbow pipe communicating therewith having its outer end vertically positioned, a spray pipe adjustably connected to said elbow, a resilient coupling sleeve between the elbow and spray pipe, the upper end of said pipe being disposed above the reservoir and laterally extended to provide a spray nozzle, a vertically positioned air cylinder arranged proximal to the reservoir, said cylinder having a removable closure, a plunger rod vertically movable through said closure, a plunger head secured on the lower end of said rod, a spiral spring positioned between said head and the base of the cylinder normally adapted to dispose said head in the upper end of the cylinder, an air pipe communicating with the cylinder at its lower end and extending in parallel longitudinal relation to the reservoir, the end of said pipe being disposed in vertical parallel relation to the spray pipe and having a contracted extremity disposed beneath and in juxtaposition to the outer end of the spray nozzle, a sleeve supported upon one side of the spray nozzle and rigidly carried thereby, said air pipe extending through the sleeve, and a set screw having threaded engagement through said sleeve adapted to bind upon the air pipe to secure the spray pipe in its adjusted position, substantially as and for the purpose set forth.

2. In a device of the character described, the combination of a water reservoir having a removable cover, an elbow pipe communicating with said reservoir at one end, the outer end of said pipe being vertically dis-

posed, a spray pipe arranged in vertical alinement with the outer end of the elbow and connected thereto by a resilient coupling sleeve, said sleeve being movably disposed upon the elbow, said spray pipe extending above the reservoir and having its extremity laterally disposed and conically formed to provide a spray nozzle, an air cylinder vertically arranged proximal to the reservoir and having a circumscribing flange at its base provided with integral radially extending ears, a plunger vertically movable in said cylinder, a spiral spring disposed between the plunger head and the base of the cylinder, said cylinder having a removable closure on its upper end, an air pipe communicating with said cylinder at its lower end, said pipe having a vertically disposed end portion, the extremity of said end portion being of contracted diameter and disposed immediately beneath and outwardly of the open end of said spray nozzle, a wire protruding above the end of said air pipe in juxtaposition to open the end of the nozzle, a sleeve disposed about said air pipe and carried by the spray pipe, said sleeve being connected thereto by spaced parallel arms, and a set screw having threaded engagement through said sleeve and adapted to bind upon the air pipe to secure the spray pipe in its adjusted position.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

WILLIAM J. MINKIEWITZ.

Witnesses:
E. M. VON WALD,
HORTENSE KIEKENAPP.