

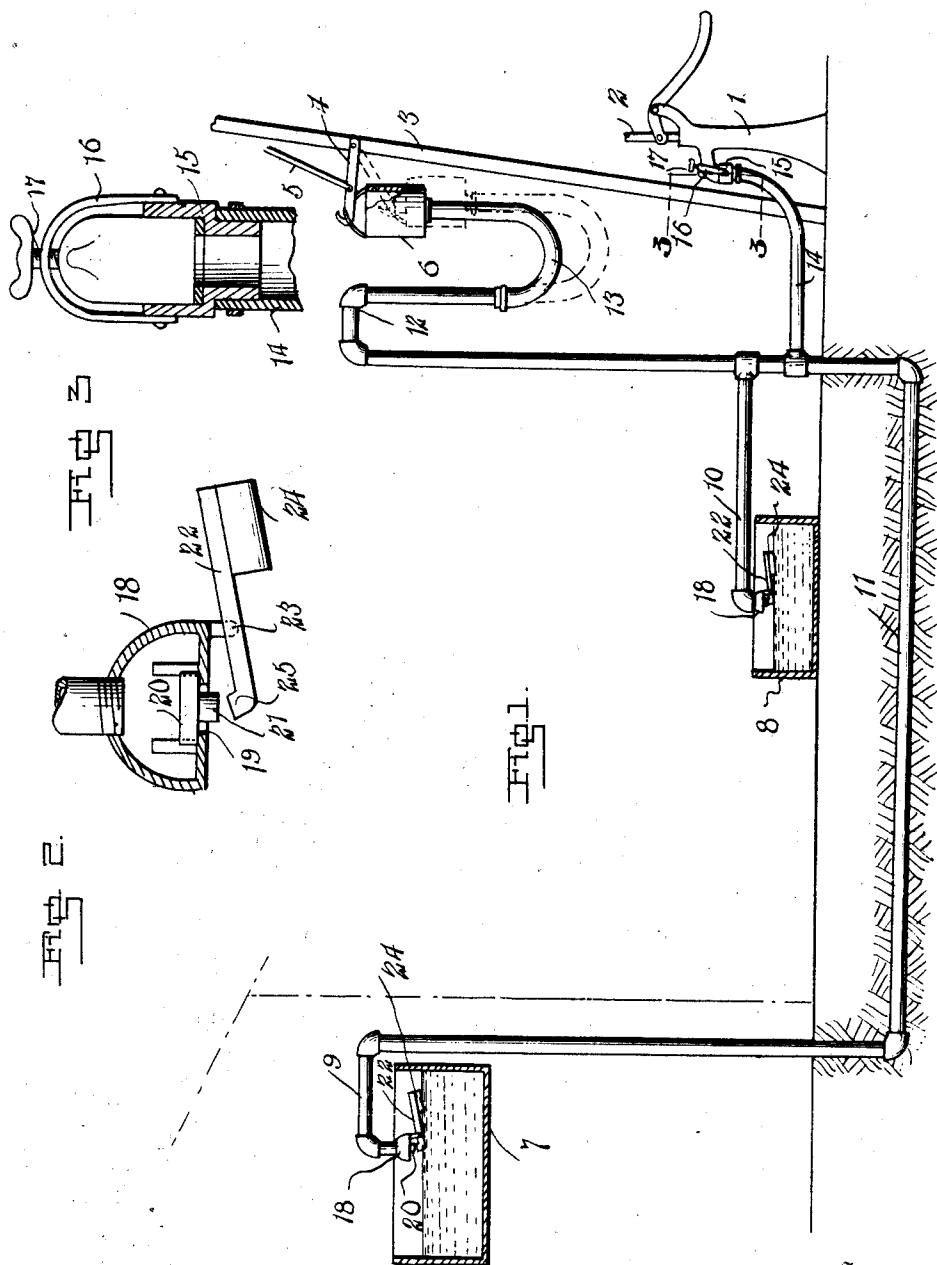
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WINDMILL REGULATOR

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WINDMILL REGULATOR.

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The present invention is directed to improvements in windmill regulators.

The primary object of the invention is to provide a device of this character so constructed that the windmill will be automatically thrown out of operation when a tank is filled and will automatically throw the windmill into operation when the water is drawn from the tank.

Another object of the invention is to provide a device of this character wherein a supply of water will be maintained in a service tank for a dwelling and a water trough for stock.

Another object of the invention is to provide a device of this kind which is simple in construction, efficient in operation, and one which can be installed at a minimum cost.

In the accompanying drawing:

Figure 1 is an elevational view of the device.

Figure 2 is an enlarged sectional view through one of the valve casings.

Figure 3 is a detail sectional view through the pump coupling on line 3—3 of Figure 1.

Referring to the drawing, 1 designates a pump having the usual sucker rod 2 which is connected with a windmill in any approved manner and operated thereby. A part of the windmill frame is indicated by the numeral 3 and has pivotally connected thereto a lever 4, which has secured thereto the lower end of a wire 5 leading from the windmill controlling head, not shown, there being a bucket 6 suspended upon said lever, the purpose of which will be later explained.

A tank 7 is located in a dwelling while the tank 8 is located conveniently for containing a supply of water for stock, water from the pump 1 being supplied to the tanks 7 and 8 through branch pipes 9 and 10 which are in communication with a main supply pipe assembly 11. The pipe assembly has connected thereto adjacent the bucket 6 a siphon 12 which is connected with the bucket 6 by a rubber hose 13.

Connected with the pipe assembly 11 at a point below the branch 10 is a rubber hose 14 which has carried thereby a coupling 15 for engaging the spout of the pump 1, said coupling having a yoke 16 carried thereby for embracing the spout, said yoke having a set screw 17 thereon operating to hold the coupling firmly clamped upon the spout.

The branch pipes 9 and 10 extend over

the respective tanks 7 and 8 and are provided with casings 18 which are identical in construction and are provided with seats 19 and engaged with said seats are disk valves 20 having the bosses 21 depending therefrom. Levers 22 are pivotally connected, as at 23, to the casings, and have their outer ends provided with floats 24. The inner ends of the levers are provided with lugs 25 adapted to engage the bosses 20, as the water level in the tank recedes.

Briefly, the operation is as follows:

When the tanks 7 and 8 are nearly filled with water levers 22 will be in the positions as shown in Figure 1, and at which time the valves are seated, the water will then flow through the siphon 12 into the bucket. As the windmill continues to operate water will continue to flow into the bucket until the weight thereof is sufficient to move the bucket downwardly to the position as indicated in dotted lines in Figure 1, whereupon the lever 4 will be swung downwardly and will pull upon the wire 5, thus stopping the windmill and simultaneously the pump.

When the level of the water in the tank or tanks recedes the levers 22 will rock to cause the lugs to engage the bosses 20, thus opening the valve which creates a siphonic action in the siphon 12 to draw water from the bucket, thus reducing the weight thereof, whereupon the bucket will move upwardly until it assumes the full line position, thus placing the windmill again in operation. This operation is repeated until the tank, or tanks, is again filled.

Having thus described the invention, I claim:

1. In a windmill regulator, the combination of a pipe assembly, branch pipes leading from the assembly, tanks disposed adjacent the branch pipes, and having valve casings carried thereby, valves mounted in the casings, levers pivotally connected to the casings, and having floats carried thereby, a siphon connected with the pipe assembly, a bucket, a flexible connection between the bucket and siphon, a lever carried by the windmill and upon which the bucket is suspended, a hose connecting the windmill pump and pipe assembly, said levers having floats thereon for operating the valves of said casings when water recedes in the tanks to operate the siphon to draw water from the bucket, as and for the purpose set forth.

2. In a windmill regulator, the combination of a pipe assembly, a tank for receiving water from the assembly, a branch pipe leading from the pipe assembly to the tank and having a valve casing carried thereby, a valve in the casing, a float controlled lever carried by the casing for controlling the operation of the valve, a siphon connected with the pipe assembly, a bucket supported by the windmill, and having communication with the siphon, a connection between the pipe assembly and windmill pump, said valve being operable to create a suction within the siphon to control the operation of the bucket to regulate the operation of the windmill pump.

3. In a windmill regulator, the combination with a tank, of a pump operable by the windmill, a lever associated with the

windmill for controlling the movement thereof, a bucket supported upon the lever, a pipe assembly including a siphon, a hose connecting the siphon and bucket, a second hose having a coupling upon one end for connection with the pump and having its other end connected with the pipe assembly, a branch pipe leading from the pipe assembly to the tank and having a casing carried thereby, a valve in the casing, a float controlled lever carried by the casing for operating the valve when water is drawn from the tank to place the siphon in operation to draw water from the bucket to relieve the weight thereof to actuate the first named lever, as and for the purpose set forth.

In testimony whereof I affix my signature.

ROSCOE M. MOORE. [L. s.]