

E. E. NORQUIST.
STOCK AND POULTRY DRINKING FOUNTAIN.
APPLICATION FILED JULY 23, 1907.

899,128.

Patented Sept. 22, 1908.

Fig. 1.

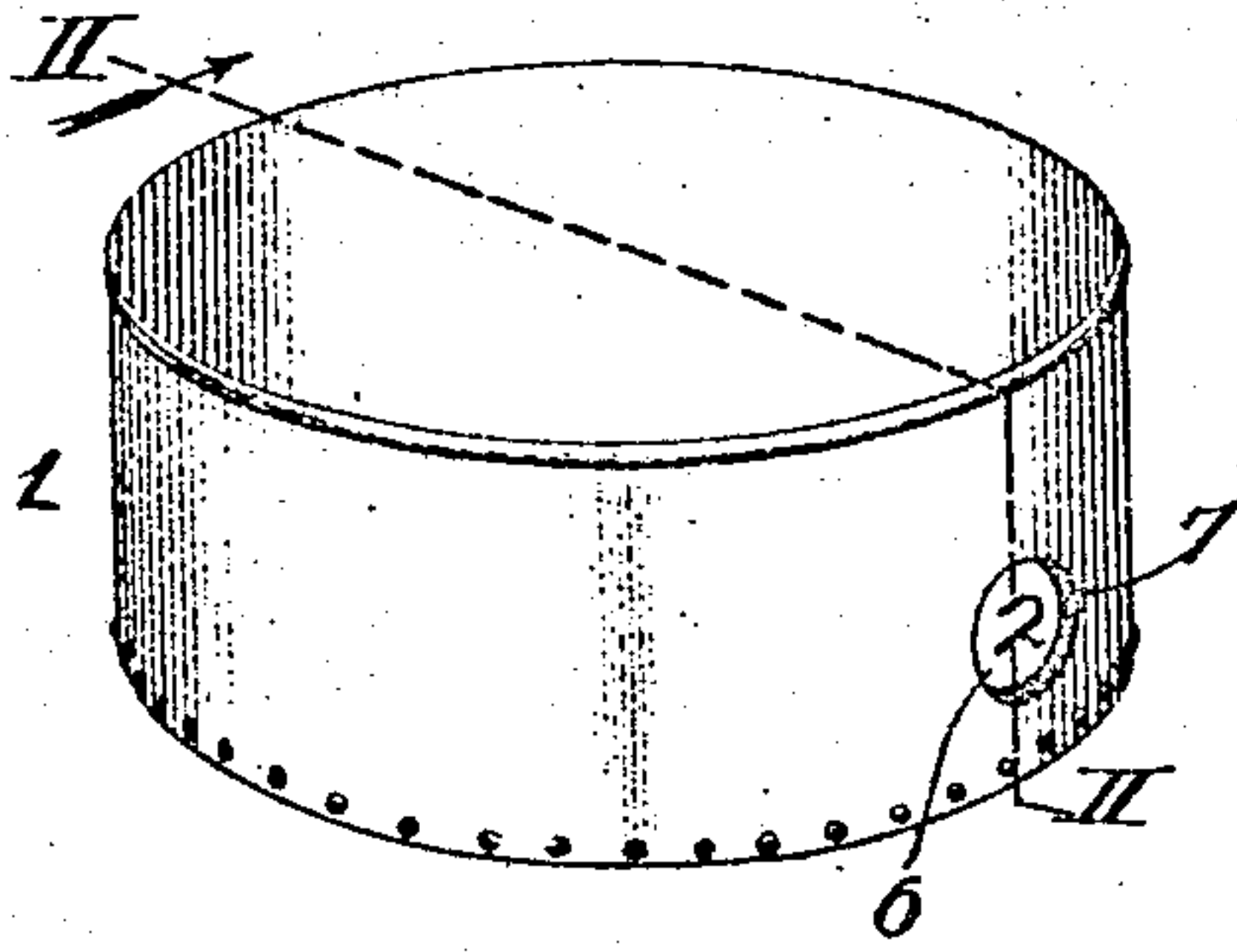


Fig. 3.

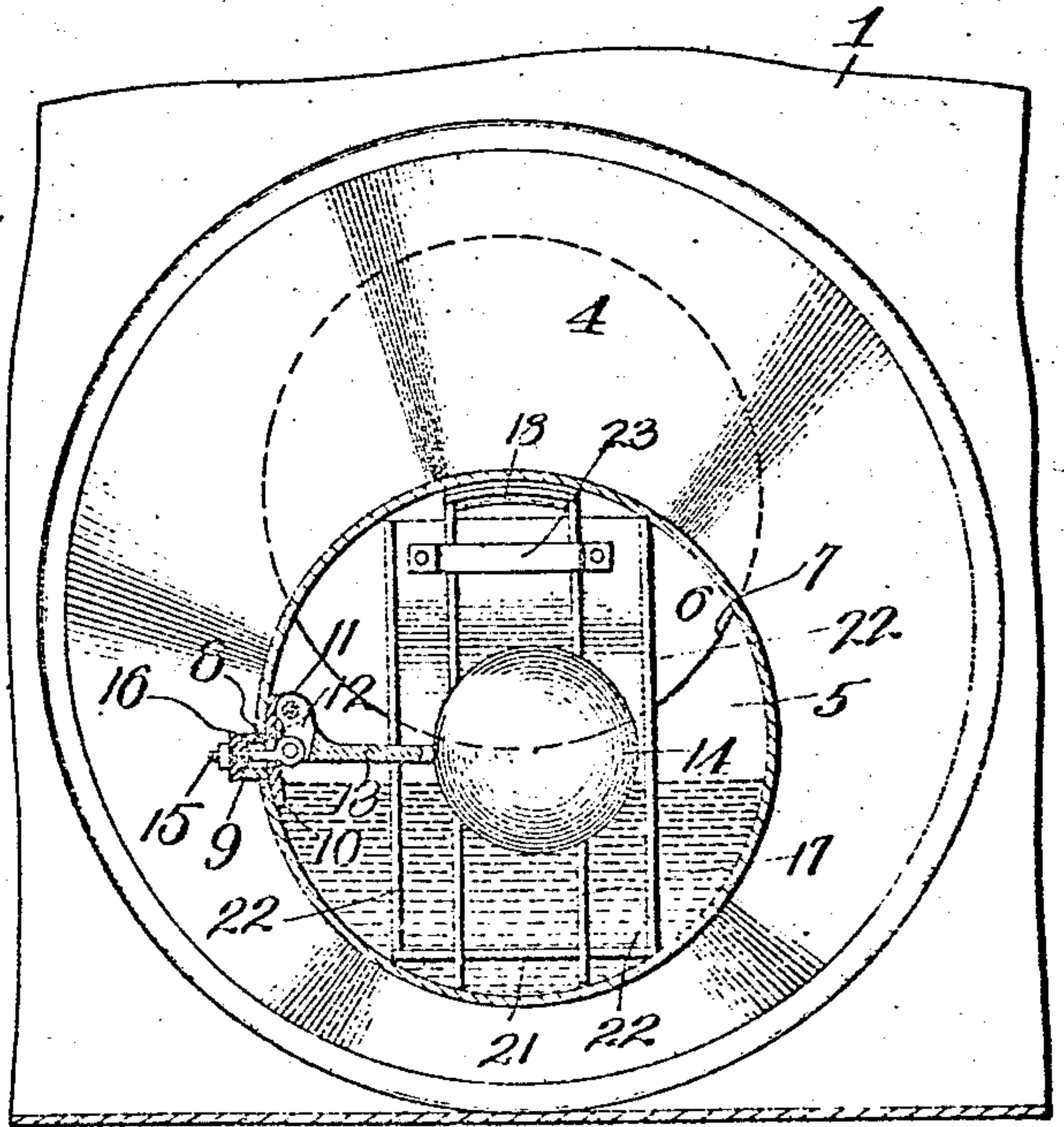


Fig. 4.

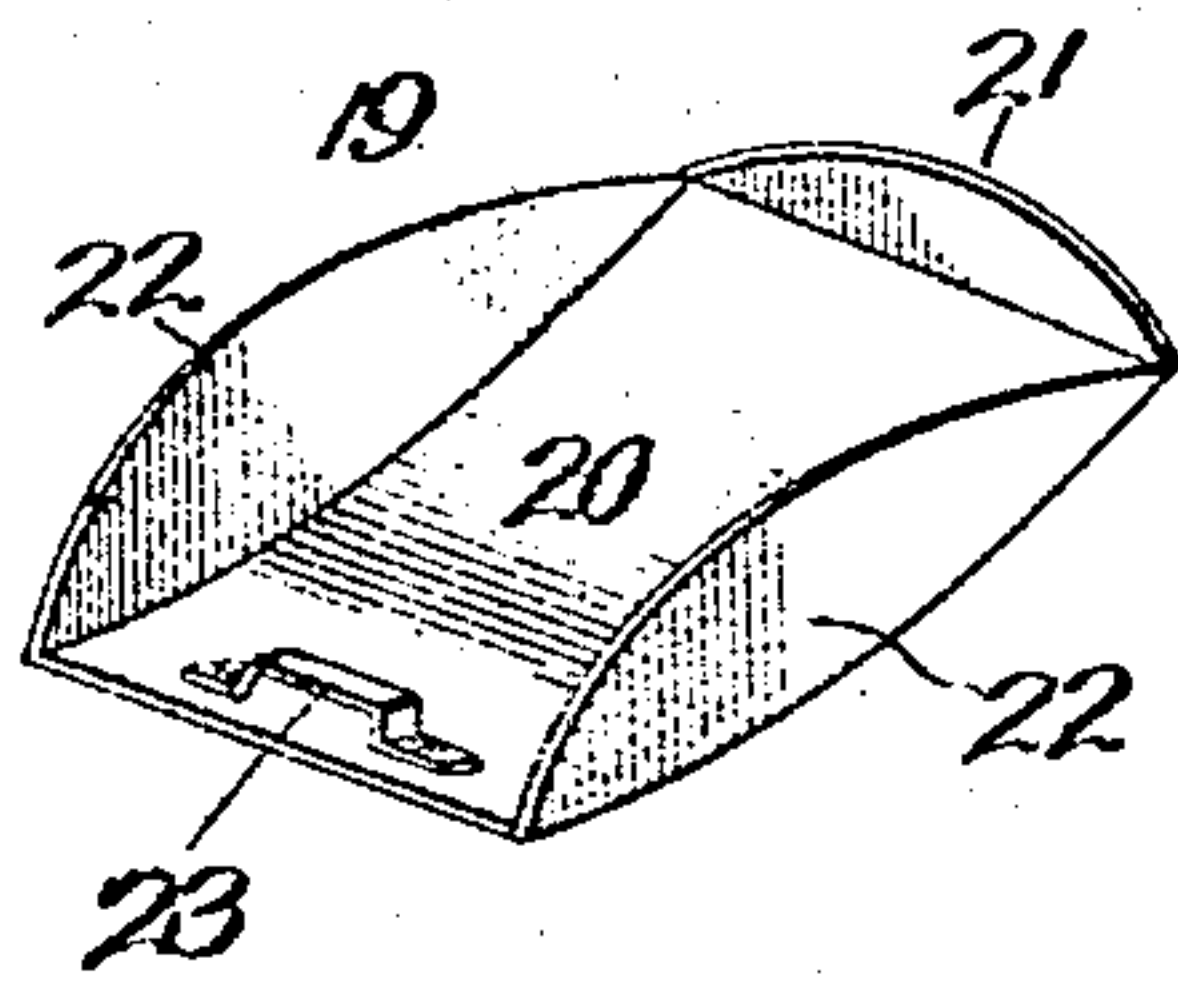
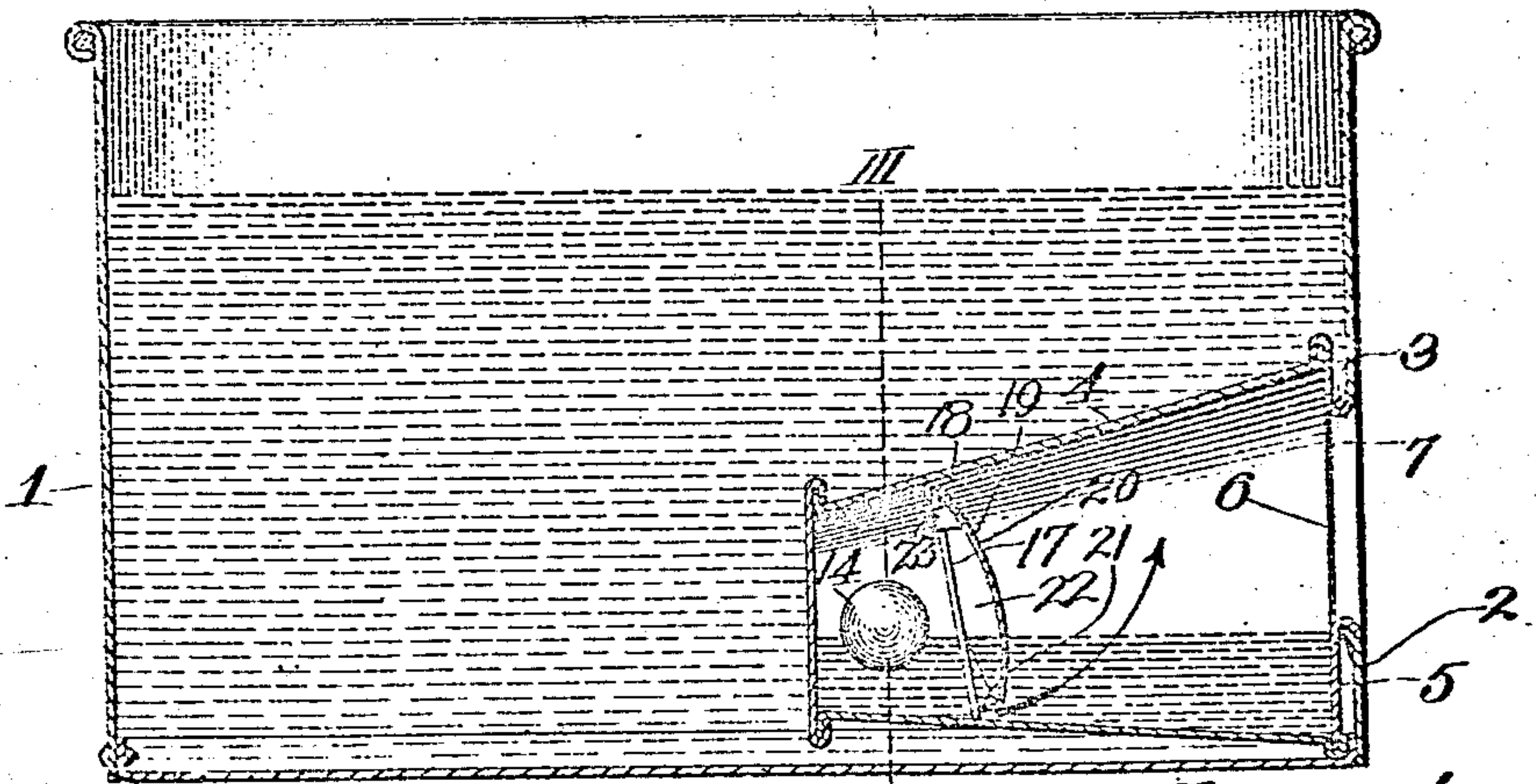


Fig. 2.



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UNITED STATES PATENT OFFICE.

EMANUEL E. NORQUIST, OF KANSAS CITY, MISSOURI.

STOCK AND POULTRY DRINKING-FOUNTAIN.

No. 899,128.

Specification of Letters Patent.

Patented Sept. 22, 1908.

Application filed July 23, 1907. Serial No. 385,185.

To all whom it may concern:

Be it known that I, EMANUEL E. NORQUIST, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Stock and Poultry Drinking-Fountains, of which the following is a specification.

This invention relates to stock and poultry drinking fountains of that class in which the passage of the water from the large chamber into the small chamber is regulated automatically by a float-controlled valve, and my object is to produce a device of this character which operates efficiently and reliably and which is of simple, strong, durable and cheap construction.

To this end the invention consists in certain novel and peculiar features of construction and organization as hereinafter described and claimed; and in order that it may be fully understood reference is to be had to the accompanying drawing, in which:

Figure 1, is a perspective view of a device embodying my invention. Fig. 2, is an enlarged vertical section taken on the line II—II of Fig. 1. Fig. 3, is a section on the line III—III of Fig. 2, but on a larger scale. Fig. 4, is an enlarged perspective view of a scoop forming part of the device.

In the said drawing 1 indicates a tank of cylindrical or other form and provided with an opening 2, the wall of the tank around said opening being preferably bent inward to produce the frustum-shaped flange 3.

4 indicates a tapering bucket arranged upon its side and radially of and within the tank and with its larger or open end in line with and contiguous to the opening 2 of the tank, and secured upon said end as shown or in any other suitable manner is a cap 5 provided vertically above its center with an opening 6, the cap around said opening being bent to form an outwardly-flaring annular flange 7 which projects through opening 2 and fits tightly against the inner edge and outer side of flange 3 so as to unite the bucket to the tank with a water-tight relation, the bucket vertically below opening 6 preferably resting on the bottom of the tank.

In one side and near its inner end by preference, the bucket is provided with an opening 8 and projecting through the same is the tubular portion 9 of a cast-metal plate 10

riveted or otherwise secured to the bucket, 55 the said tubular portion of the casting establishing communication between the tank or large chamber and the bucket or small chamber in order that water may flow from the former into the latter. The casting is provided with an ear 11 and pivoted to the same 60 is the arm 12 of a rod 13 equipped with a float 14 within the bucket, and pivotally connected to the rod 13 is a bolt 15 which extends outwardly through the tubular portion of the 65 casting and is equipped with a valve 16 which is held in engagement with the outer end of the said tubular portion when the water in the bucket stands at about the level 70 shown in Fig. 2. As the water level in said bucket is lowered by small stock such as pigs, or by poultry, or evaporation, the float descends correspondingly and in such descent unseats valve 16 to permit water to flow 75 from the tank or large chamber into the bucket or small chamber until the water in the latter again attains a predetermined level, when it causes the float to seat the valve and thus close communication between the tank and bucket. 80

In practice the flange 3 of the tank originally stands inward at about a right-angle to the wall and flange 7 outward with respect to the bucket, this being desirable in order that an unskilled person may quickly and easily 85 place the bucket in the tank with its flange 7 projecting through opening 2, said person then hammering flange 3 downward to the frustum-shape described and the flange 7 upward to the flaring shape described in order 90 to establish an interlocked and water-tight relation between the tank and bucket.

By constructing the tank and bucket as described, a series of tanks without the buckets, can be nested together and shipped at 95 less cost than would be possible if such nesting was not resorted to.

To protect the float from injury or derangement should a small pig or fowl get into the bucket, I provide a partition between 100 the float and the cap, constructed as follows, 17 indicates an inverted U-shaped frame hinged at its upper end to a hinge-plate 18 secured to the upper portion of the bucket and of such length as to rest upon the lower 105 portion of the bucket outward of the vertical plane of the hinge so as to leave the frame free to swing upward and outward but inca-

pable of swinging to or inward of the vertical plane of the hinge. 19 indicates a scoop comprising a concave bottom 20, an end wall 21, side walls 22 and a loop or handle 23.

5 This scoop forms a detachable part of the partition, that is to say the frame normally extends through the loop or handle 23 so as to hold the scoop in substantially the position shown in Fig. 2. When it is desired to
10 clean the bucket of matter foreign to the water, which settles onto the lower part of the bucket—it being understood that the downward and outward inclination of the lower portion of the bucket causes most of
15 the foreign matter to gravitate outward—the scoop is grasped and swung upward as indicated by the arrow, Fig. 2, and then is slid off the free end of the hinge frame and manipulated like an ordinary scoop to gather up
20 the mud or other settling and remove it from the bucket. The frame is again swung upward when it is desired to restore the scoop to its position.

This device is designed as suggested by
25 the title, for watering stock and poultry, large stock such as horses, mules and cattle drinking from the tank direct and sheep, pigs and poultry from the bucket, the opening in the side of the tank being of such size
30 as to prevent anything larger than very small animals or poultry from getting into the bucket, the result being the water of the bucket is kept comparatively fresh and clean, and it will be further noted that the location
35 of the valve-controlled opening is such that dirt or other matter in the bucket cannot get into the tank and soil the water therein or clog the valve opening and prevent water passing from the tank into the bucket.

40 From the above description it will be apparent that I have produced a device of the character outlined which possesses the features of advantage enumerated, and I wish it to be understood that I reserve the right
45 to make such changes in the form, proportion, detail construction and organization of the parts as properly fall within the spirit and scope of the appended claims.

Having thus described the invention what
50 I claim as new and desire to secure by Letters Patent, is:—

1. A stock and poultry drinking fountain, comprising a tank having a drink opening in its side, a bucket within the tank and provided with a cap having an opening registering with said drink opening and bearing an interlocked relation with the latter, a tubular portion establishing communication between the tank and bucket and secured to
55 the latter, a rod suitably hinged in the bucket, a float attached to said rod, a valve for engagement with said tubular portion, and a connection between the valve and said rod to compel the former to engage the tubu-
60

lar portion or move therefrom accordingly as
65 the float rises or descends in the bucket.

2. A stock and poultry drinking fountain, comprising a tank having a drink opening in its side, a bucket within the tank and provided with a cap having an opening registering with the opening of the tank and bearing an interlocked relation with the latter, a tubular portion establishing communication between the tank and bucket and secured to
70 the latter, a rod suitably hinged in the bucket, a float attached to said rod, a valve for engagement with said tubular portion, a connection between the valve and said rod to compel the former to engage the tubular portion or move therefrom accordingly as
75 the float rises or descends in the bucket, and a partition within and hinged to the bucket and disposed between the float and cap.

3. A stock and poultry drinking fountain, comprising a tank having a drink opening in
85 its side, a bucket within the tank and provided with a cap having an opening registering with the opening of the tank and bearing an interlocked relation with the latter, a tubular portion establishing communication
90 between the tank and bucket and secured to the latter, a rod suitably hinged in the bucket, a float attached to said rod, a valve for engagement with said tubular portion, a connection between the valve and said rod
95 to compel the former to engage the tubular portion or move therefrom accordingly as the float rises or descends in the bucket, and a partition within and hinged to the bucket and disposed between the float and cap com-
100 prising a hinged frame, and a scoop detachably engaging the frame.

4. In a device of the character described, a tank having a drink opening and a frustum-shaped flange surrounding said opening and
105 projecting inward of the tank, and a bucket within the tank and having its lower portion inclined downward and outward and provided with a cap at its outer end having an opening and a flange surrounding said cap
110 opening and engaging the inner edge of the flange of the tank and flaring outward to also engage the outer side of such frustum-shaped flange.

5. In a device of the character described,
115 the combination of a tank provided with a drink opening in its side, a bucket in the tank provided with a valve-opening and with an opening communicating with said drink-opening, a valve, and a float within the
120 bucket and connected to the valve to cause the same to cover or uncover the said valve-opening of the bucket accordingly as the float rises or falls within the bucket.

6. In a device of the character described,
125 the combination of a tank provided with a drink opening in its side, a bucket in the tank provided with a valve-opening and with an

opening communicating with said drink-opening, a valve to control said opening, a float within the bucket, and a connection between the valve and the float whereby the latter when unresisted shall hold the valve unseated and when raised shall cut off the supply of water from the tank into the bucket before the level of the water in the

latter reaches the level of the said valve-opening.

In testimony whereof I affix my signature, 10
in the presence of two witnesses.

EMANUEL E. NORQUIST.

Witnesses:

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H. C. RODGERS.