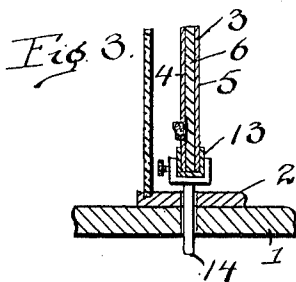
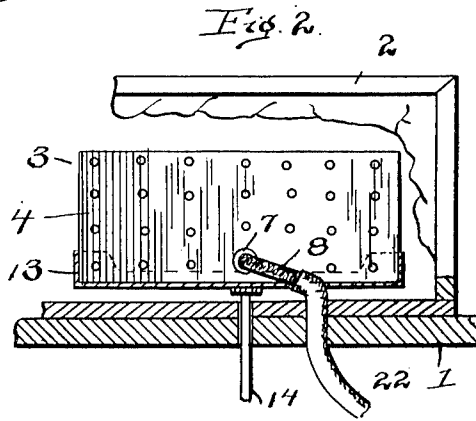
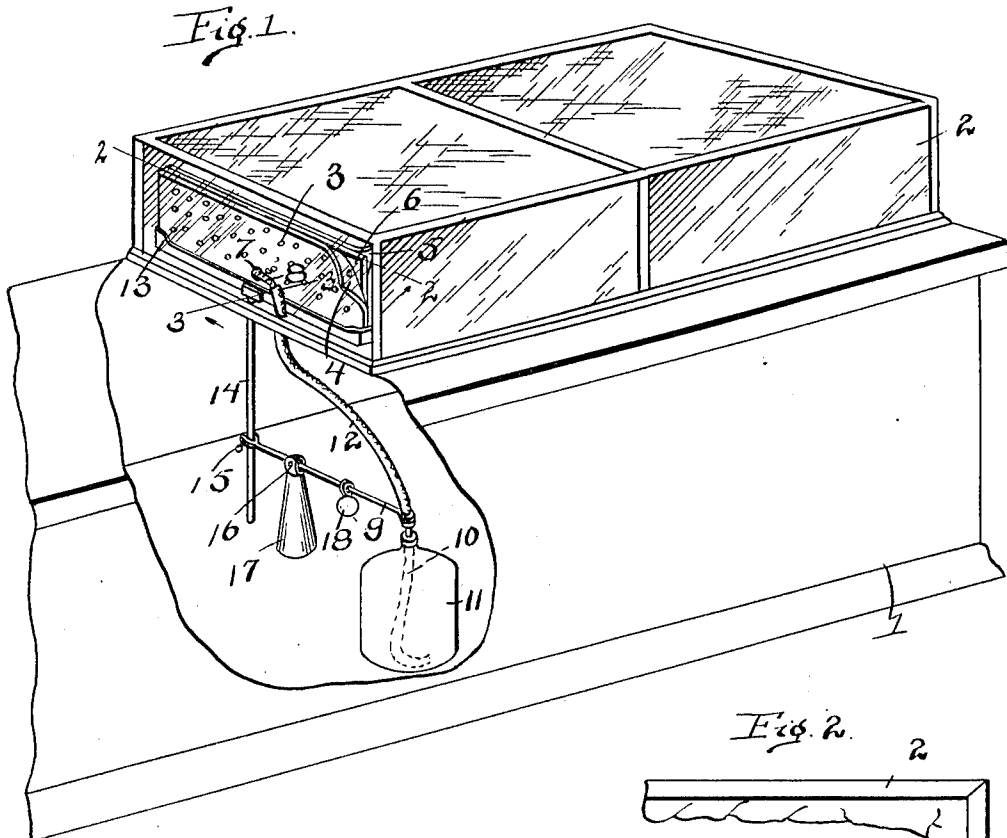


R. A. WILSON.  
 HUMIDOR,  
 APPLICATION FILED MAY 9, 1911.

1,012,494.

Patented Dec. 19, 1911.

3 SHEETS—SHEET 1.



Witnesses

*R. S. Hogner.*  
*W. F. Kitchin*

Inventor

*Roland A. Wilson*  
 By *Mason F. Lawrence.*  
 his Attorneys

Fig. 4.

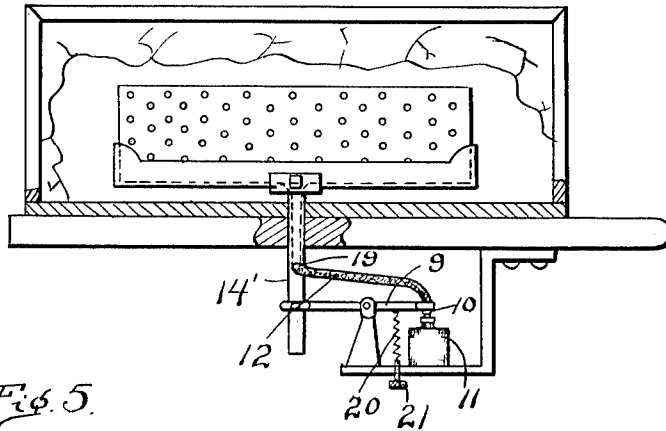


Fig. 5.

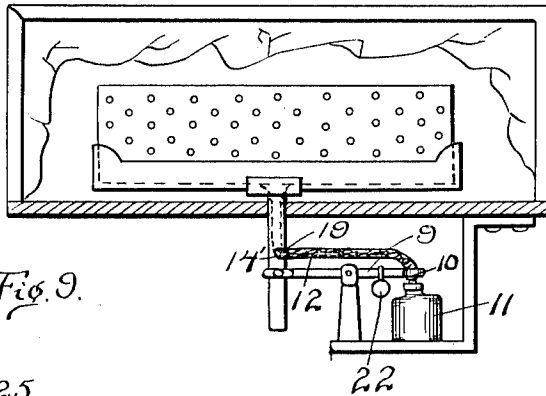


Fig. 9.

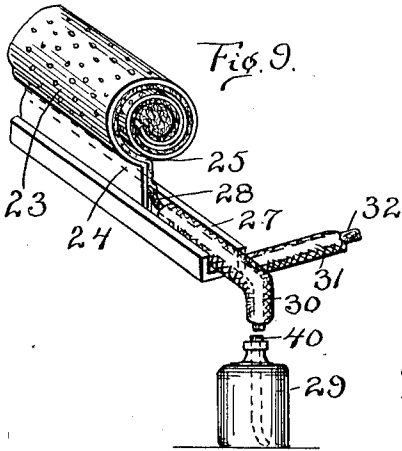
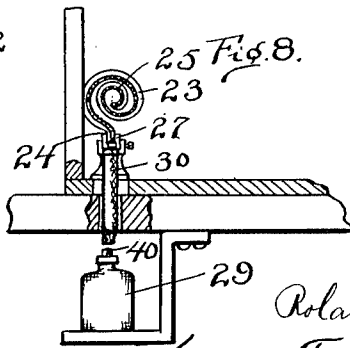


Fig. 8.



Witnesses

*H. Helen Fowler.*  
*W. Kitchin.*

Inventor

*Roland A. Wilson*

By *Mason Smick Lawrence.*  
 his Attorneys

R. A. WILSON.  
 HUMIDOR.  
 APPLICATION FILED MAY 9, 1911.

1,012,494.

Patented Dec. 19, 1911.  
 3 SHEETS—SHEET 3.

Fig. 6.

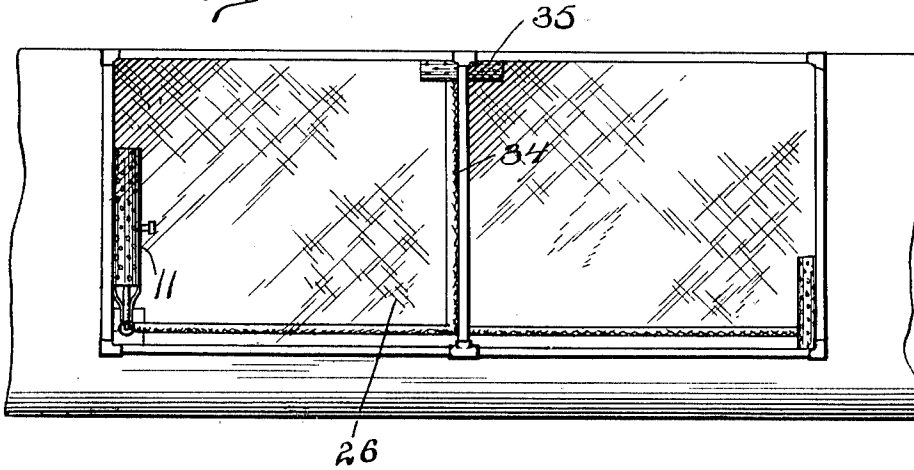


Fig. 7.

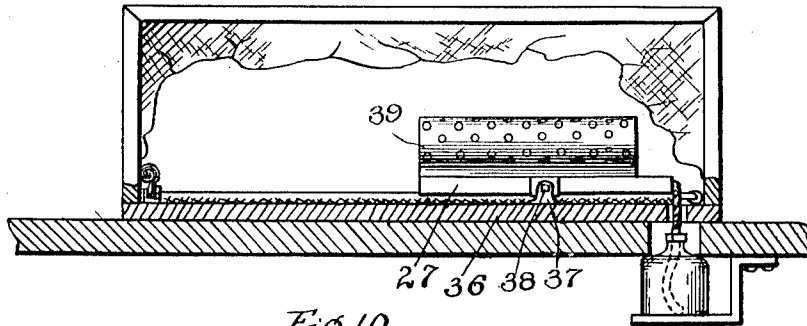


Fig. 10.

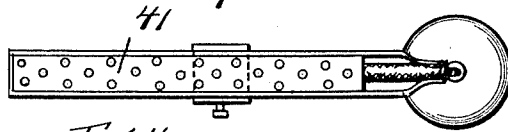
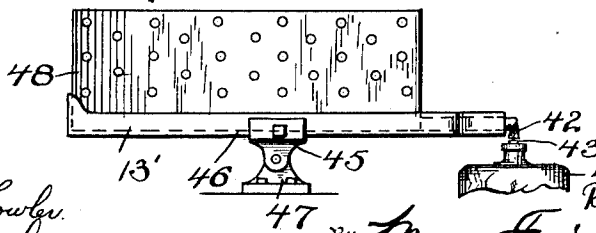


Fig. 11.



Inventor

Witnesses

*D. Helen Fowler.*  
*A. Kitchin*

*Roland A. Wilson*  
*James Smith Lawrence.*  
 his Attorneys

# UNITED STATES PATENT OFFICE.

ROLAND A. WILSON, OF TAMPA, FLORIDA.

## HUMIDOR.

1,012,494.

Specification of Letters Patent.

Patented Dec. 19, 1911.

Application filed May 9, 1911. Serial No. 626,092.

*To all whom it may concern:*

Be it known that I, ROLAND A. WILSON, a citizen of the United States, residing at Tampa, in the county of Hillsboro and State of Florida, have invented certain new and useful Improvements in Humidors; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in humidors, and has for an object the arrangement of improved means for applying any desired sized receptacle with a proper amount of moisture for maintaining the goods in the receptacle in the proper condition.

Another object of the invention is the arrangement in a humidor of an adjustable weight, and a moisture distributing member associated with means for permitting the moisture distributing means to overbalance the weight and break the connection of the moisture distributing means with a moisture supply.

A further object of the invention is the arrangement of a balancing structure formed at one end with a supporting member, and at the other end with means for accommodating an adjustable weight, the ends being connected by a wick which is surrounded by a tube or other protecting means, the wick being associated with a water supply near the adjustable weight, and with a moisture distributing or evaporation member at the opposite end, so that when the moisture distributing member decreases in weight by the evaporation of moisture therefrom the weight will cause the wick to be disconnected from the water supply when the moisture distributing member has received a predetermined amount of moisture, which moisture by its weight overcomes said adjustable weight.

With these and other objects in view the invention comprises certain novel constructions, combinations, and arrangement of parts as will be hereinafter more fully described and claimed.

In the accompanying drawings: Figure 1 is a perspective view of an embodiment of the invention, shown applied to a show case. Fig. 2 is a fragmentary sectional view on line 2—2 of Fig. 1. Fig. 3 is a fragmentary sectional view on line 3—3 of Fig. 1. Fig. 4

is a side view of a slightly modified form of the invention disclosed in Fig. 1, certain parts being broken away to better illustrate the construction. Fig. 5 is a view similar to Fig. 4 except that the same shows a counterbalancing weight. Fig. 6 is a top plan view of a show case and a further slightly modified form of the invention to that disclosed in Fig. 4. Fig. 7 is an enlarged end view of the structure shown in Fig. 6, certain parts being broken away. Fig. 8 is a fragmentary end view of the moisture distributing mechanism shown in Fig. 7. Fig. 9 is an enlarged detail fragmentary perspective view of the structure shown in Fig. 8. Fig. 10 is a top plan view of a further slightly modified form of the invention. Fig. 11 is a side view of the structure shown in Fig. 10.

In constructing a humidor embodying the invention it is aimed to provide means for supplying moisture in a proper quantity to any desired receptacle for keeping the articles in the receptacle, as for instance tobacco, in a proper moist condition. The principal aim is to provide means for supplying sufficient moisture but not too much, and to automatically maintain the correct amount of moisture in the air of the receptacle. In accomplishing this result a moisture distributing or evaporation member is provided which is supported by a suitable bracket or housing. The supporting bracket or housing is rigidly secured to a vertically reciprocating shaft normally supported by a pivotally mounted arm, which arm carries an adjustable weight designed to elevate the reciprocating shaft and the evaporation member when the evaporation member contains a less supply of moisture than desired. A wick is connected with the evaporation member and with the pivotally mounted arm and arranged to contact with a moisture supply so that when the weight holds the pivotally mounted arm in its lowered position the wick will contact with the supply, whereby moisture may pass by capillary attraction to the evaporation member. The passage of the moisture in this way will continue until the evaporation member increases in weight and overcomes the adjustable weight, whereupon the contact of the wick with the supply will be broken, and will remain broken until a sufficient quantity of the moisture in the evaporation member has evaporated, which, of course, reduces the weight of the evaporation mem-

ber and permits the adjustable weight to again cause the wick to contact with the moisture supply.

In order that the invention may be more clearly understood an embodiment of the same is shown in the accompanying drawings in which—

1 indicates a counter of any desired kind on which is mounted a show case 2. Arranged in show case 2 is an evaporation member 3 formed preferably by perforated metallic side members 4 and 5 which have arranged therebetween a moisture receiving and distributing member 6 formed of blotting paper or fibrous material of any kind which receives by capillary attraction moisture, and which permits the same to be evaporated therefrom. Suitable clamps may be provided for clamping the side members 4 and 5 together, and consequently clamping the moisture receiving member 6 properly in place. Member 4 is provided with an aperture 7 through which wick 8 passes in order that the same may engage properly the moisture receiving member or pad 6. Wick 8 is secured to pad 6 in any desired way, or if desired may be simply held against the same so as to provide a good contact. Wick 8 extends from pad 6 downward and a short distance past the outer end of arm 9 so as to contact with the end of wick 10 which projects a short distance from a water or other liquid containing receptacle 11. A tube of rubber or other material 12 surrounds wick 8 for substantially its entire length, that is, the tube extends from the outer end of arm 9 to the aperture 7 in side member 4 in order that none of the moisture in the wick may escape therefrom, except when absorbed by pad 6. The evaporation member 3 as a whole rests in a supporting bracket 13 which has rigidly secured thereto a shaft 14 and which is supported by said shaft. A suitable aperture is provided in the bottom of show case 2 and the top of counter 1 for permitting shaft 14 to project therethrough. Shaft 14 extends down any desired distance and has pivotally connected thereto by a bolt or rivet 15 arm 9, which arm is also pivotally mounted at 16 on a supporting base 17. Arranged on arm 9 is an adjustable weight 18 which may be moved toward or from the pivotal point 16 for determining the amount of moisture that it is designed that pad 6 shall maintain. After weight 18 has been adjusted the same will hold the lower end of wick 8 in contact with the upper end of wick 10 until pad 6 has been supplied with sufficient moisture to overcome weight 18 and the outer end of arm 9 as well as part of tube 12 and wick 8. When pad 6 attains a predetermined weight the same will cause shaft 14 to move down, and consequently the outer end of arm 9 will move upward, where-

by the contact of wicks 8 and 10 will be broken so that no additional moisture may be supplied to pad 6. The device will remain in this position until pad 6 has lost sufficient of the moisture contained therein to permit the same to be overbalanced by weight 18 and associated parts, whereupon the wick 8 will contact with wick 10, and the pad 6 will be again supplied by capillary attraction with moisture.

In Fig. 4 will be seen a slightly modified form of the invention to that shown in Fig. 1 in which the tube 12 is carried up through hollow rod or tube 14' through a suitable aperture 19 formed in tube 14'. In addition to this arrangement a spring 20 is provided which normally acts on arm 9 so as to cause wick 10 in the receptacle 11 to contact with the wick extending through tube 12. However, whenever a predetermined quantity of moisture has been absorbed by member 3 the weight thereof will overcome the action of spring 20. Spring 20 is preferably connected with an adjusting screw 21 so as to vary the tension of the spring for regulating the quantity of moisture to be distributed. The remaining features of this form of the invention are identical with those disclosed in Fig. 1, and will therefore need no additional description.

In Fig. 5 will be seen a slightly modified form of the invention to that disclosed in Fig. 4, in which a weight 22 is provided instead of spring 20, the remaining structures being the same. By the use of weight 22 there will be no necessity for adjusting screw 21 and spring 20.

In Figs. 6 to 9 inclusive is shown a further slightly modified form of the invention, in which the moisture distributor 23 automatically counterbalances, or rather overbalances the wick when a predetermined amount of moisture has been absorbed by said distributor. The distributor 23 is made from a strip of sheet metal 24 having any desired number of perforations therein, and a strip of sheet material 25 formed of blotting paper or other fibrous material which will absorb moisture and distribute the same to the air. These two layers 24 and 25 are wound in a spiral, as more fully shown in Figs. 8 and 9, so as to give as large a surface to the air as possible, but to occupy a minimum space in a show case, as for instance show case 26. The moisture distributor 23 is clamped in a holder 27 by any desired means, as for instance a set screw, and is arranged so that the wick 28 is in contact with sheet 25. From a point near sheet 25 to a point near the water receptacle 29 a surrounding tube, preferably of rubber, 30, is provided so that no moisture will escape except at proper points. When it is desired to distribute moisture from receptacle 29 to a second or third moisture distributor 130

an auxiliary tube 31 is provided having wick 32 which is connected with wick 28 in any desired manner so as to receive moisture therefrom. Tube 31 extends to a stationary moisture distributing member 33. A branch tube 34 is provided which extends to a stationary moisture distributing member 35. It will, of course, be understood that in the pipes 31 and 34 are arranged wicks for supplying by capillary attraction moisture from wick 28 to the distributors 33 and 35. The moisture distributor 23 is mounted upon a holder 27 which holder is clamped to a bearing 36 by any desired means, as for instance set screws. Bearing 36 may be slid or moved longitudinally of holder 27 so as to change the point of balance as occasion may require. Bearing member 36 is supported upon bracket 37 by a suitable journal 38 so that bearing 36, holder 27, and associated parts are pivotally mounted and arranged in such a manner that when a predetermined amount of moisture is contained in sheet 25 and 39 will move downward and wick 28 will be moved out of contact with wick 40. When the moisture evaporates to a certain extent the sheet 25 will become of less weight, and consequently wick 28 and associated parts will move down until the wick 28 is in contact with wick 40 for again supplying moisture to moisture distributing members 23, 33 and 35. It will be observed that there is only one distributing member which is pivotally mounted while all the distributing members are supplied with moisture. Any other desired number of evaporation or moisture distributing members may be supplied with moisture from the single pivotally mounted member as the moisture will not evaporate from the pivotally mounted member as long as an ample supply of moisture is provided in the other distributing members, so that it will be necessary for the air in the show case or other receptacle to contain a less quantity of moisture than desirable before pivotally mounted holder 27 will move so as to cause wick 28 to contact with wick 40. By the sliding adjustment of the pivotal support the amount of moisture maintained in the air may be regulated or controlled.

In Figs. 10 and 11 will be seen a further slightly modified form of the invention in which the moisture distributing member 41 is overbalanced when a predetermined supply of moisture has been provided therefor. The moisture distributing member 41 is preferably constructed similar to the moisture distributing member shown in Fig. 1, and will therefore need no additional description. Connected with moisture distributing member 41 is a wick 42 which is arranged to contact with wick 43 in receptacle 44. Holder or support 13' has clamped thereto a bearing member 45 by any desired

means, as for instance a set screw 46. By this structure the bearing member 45 may be adjusted along support 13'. Bearing member 45 is pivotally mounted upon a bracket 47 so that whenever moisture distributing member 41 has received a predetermined amount of moisture end 48 will move downward for breaking the contact of wicks 42 and 43. It will be observed that in this structure, as well as the structure shown in Fig. 7, means are provided whereby the moisture distributing member is automatically operated by being overbalanced upon the supplying of a certain quantity of moisture thereto.

What I claim is:

1. In a humidior, a goods receptacle, a moisture receptacle, an evaporation member arranged within the goods receptacle, a wick projecting from said evaporation member, a wick projecting from said moisture receptacle and into contact with the wick projecting from the evaporation member, and means for automatically breaking the contact of said wicks when said evaporation member has received a predetermined amount of moisture. 80
2. In a humidior, a goods receptacle, a moisture receptacle, a fibrous evaporation sheet arranged in said goods receptacle, means for conducting moisture from the moisture receptacle to the evaporation sheet by capillary attraction and means for breaking the continuity of the moisture conducting means when said evaporation sheet has received a predetermined amount of moisture. 85
3. In a humidior, a goods receptacle, a moisture receptacle, a wick projecting from said moisture receptacle, an evaporation member arranged in said goods receptacle, a wick extending from said evaporation member and arranged to contact with the wick extending from said moisture receptacle, and means engaging the wick extending from said evaporation member and operated by the weight of said evaporation member for causing said wicks to be separated when said evaporation member has received a predetermined amount of moisture. 90
4. In a humidior, a goods receptacle, an evaporation member located in said goods receptacle, a movable member arranged to support said evaporation member, a moisture receptacle, a wick for carrying moisture from said moisture receptacle to said evaporation member, and a pivotally mounted arm associated with the movable member for supporting one end of said wick and arranged to break the contact of said wick with said moisture receptacle when said movable member has been moved to its lowered position by said evaporation member. 105
5. In a humidior, a goods receptacle, an evaporation member arranged therein, a 115

120  
125  
130

wick projecting from said evaporation member, a moisture containing receptacle adapted to contact with said wick and supply moisture thereto, a movable shaft for supporting said evaporation member, and a pivotally mounted arm engaging said shaft and said wick for separating said wick from said moisture receptacle when said shaft has been moved in a downward direction by the evaporation member after the same has accumulated a certain amount of moisture.

6. In a humidior, a goods receptacle, an evaporation member arranged therein, a wick connected with said evaporation member and extending therefrom, a tube surrounding said wick for preventing moisture from escaping therefrom except at the ends thereof, a moisture receptacle arranged to contact with said wick at the end opposite to that engaging the evaporation member, an arm engaging said tube at one end and designed to move the same out of contact with said moisture receptacle when the arm is moved in one direction, means for connecting said evaporation member and said arm, whereby the weight of said evaporation member will move said arm when the evaporation member has attained a certain amount of moisture.

7. In a humidior, a goods receptacle, an evaporation member arranged in the goods receptacle, a wick connected with said evaporation member, a moisture receptacle arranged to engage one end of said wick for supplying moisture thereto, an arm engaging said wick at one end and designed to move the same out of engagement with said moisture receptacle when moved in one direction and into engagement with said moisture receptacle when moved in the opposite direction, means for connecting said arm with said evaporation member for moving said arm in one direction when a predetermined amount of moisture is contained in said evaporation member, and an adjustable weight supported by said arm for moving said arm in the opposite direction when said evaporation member does not contain the required amount of moisture.

8. In a humidior, a goods receptacle, an evaporation member arranged in said goods receptacle, a moisture receptacle arranged exteriorly of said goods receptacle, a wick extending from the interior to the exterior of said moisture receptacle, a second wick extending from said first mentioned wick to said evaporation member, pivotally mounted means for supporting said evaporation member and said second mentioned wick which is adapted to contact with the first mentioned wick, and an adjustable weight arranged on said last mentioned means for determining the amount of moisture to be maintained in said evaporation member, said weight being adapted to be overbal-

anced by the weight of said second mentioned wick and the evaporation member when the evaporation member has received a predetermined amount of moisture, whereby said wicks are separated.

9. In a humidior, a goods receptacle, a moisture receptacle, an evaporation member, a wick for connecting the evaporation member with the moisture receptacle, and a weighted pivotally mounted arm for supporting the evaporation member for causing the same to automatically disconnect said wick from the moisture receptacle when a predetermined amount of moisture has been received by the evaporation member.

10. In a humidior, a goods receptacle, a moisture receptacle, an evaporation member, a reciprocating tubular support for said evaporation member formed with an aperture near one end, a pivotally mounted arm for supporting said reciprocating member, a tube extending from said evaporation member through said tubular reciprocating member and extending out of the aperture therein, said tube being secured at one end to said evaporation member and at the other to one end of said arm, a wick extending entirely through said tube and projecting beyond the ends thereof, a moisture distributing member arranged to contact with the end of said wick near the end of said pivotally mounted arm, and an adjustable member associated with said arm for normally holding said arm in proximity to said moisture receptacle for causing the wick in said tube to engage the wick in said moisture receptacle.

11. In a humidior, a goods receptacle, a moisture receptacle, an evaporation member, a wick extending from said evaporation member to said moisture receptacle for conveying moisture from said moisture receptacle to said evaporation member, a reciprocating member for normally supporting said evaporation member, a pivotally mounted arm for supporting said reciprocating member, and an adjustable spring connected with said arm for normally holding the same in such a position as to cause said wick to contact with said moisture receptacle but permit said wick to be removed from contact with said moisture receptacle when a predetermined amount of moisture has been received by said evaporation member.

12. In a humidior, a goods receptacle, a moisture receptacle arranged exteriorly of the goods receptacle, an evaporation member arranged in said goods receptacle, a wick extending from said evaporation member, a weighted pivotally mounted arm supporting said evaporation member and said wick, and means for conveying moisture from said moisture receptacle to said wick during the time that the weighted arm is

not overbalanced by said evaporation member.

13. In a humidor, a goods receptacle, an evaporation member, a moisture receptacle, 5 a wick for conveying by capillary attraction moisture from said moisture receptacle to said evaporation member, and means for balancing said evaporation member in such a manner as to cause the same to move by 10 gravity for disconnecting said wick from said moisture receptacle when a predetermined amount of water has been received by said moisture distributing member.

14. In a humidor, a goods receptacle, a 15 moisture receptacle, an evaporation member, a wick for conveying moisture by capil-

lary attraction from said moisture receptacle to said evaporation member, and a pivotally mounted support connected with said evaporation member in such a manner as to 20 cause said evaporation member to automatically tilt for raising the end of said wick from out of contact with said moisture receptacle when the air in said goods 25 receptacle contains a predetermined amount of moisture.

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

ROLAND A. WILSON.

Witnesses:

T. M. SHACKLEFORD, JR.,

C. FRED THOMPSON.

---

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."

---