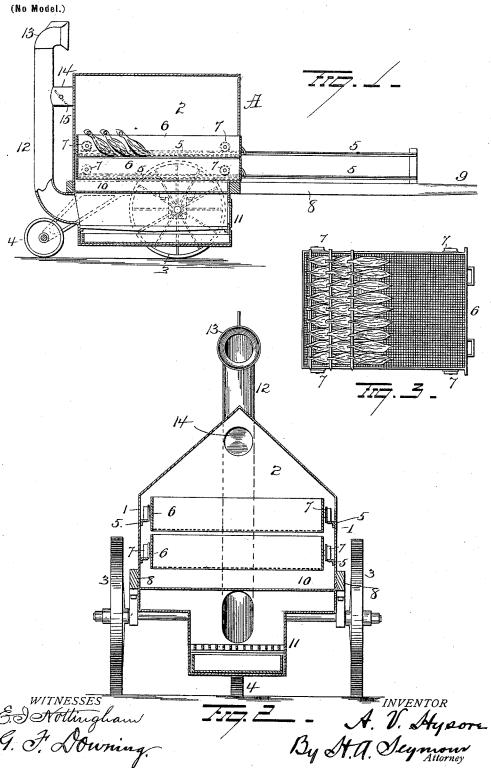
A. V. HYSORE. MOISTENING APPARATUS.

(Application filed Jan. 11, 1899.)



UNITED STATES PATENT OFFICE.

ALPHENAS V. HYSORE, OF PHILADELPHIA, PENNSYLVANIA.

MOISTENING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 649,605, dated May 15, 1900.

Application filed January 11, 1899. Serial No. 701,875. (No model.)

To all whom it may concern:

Be it known that I, Alphenas V. Hysore, a resident of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Moistening Apparatus; 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.

My invention relates to an improvement in moistening apparatus, and more particularly to such as is adapted for moistening leaf-to-

bacco.

It is the usual practice of tobacco-growers to string the plants on sticks and hang them in a smoke-house and then in a barn or other storehouse, where it is permitted to remain until time for shipment. The tobacco-leaves 20 become very dry and brittle while thus stored, and unless the atmosphere contains considerable moisture which can be absorbed by the leaves at the time for handling and shipping it is practically impossible to ship the to-25 bacco with any satisfactory assurance that the leaves will not become crumbled and rendered useless. For this reason tobacco-growers have been subjected to great inconvenience and loss, as they must confine shipments 30 of tobacco from their farms to the tobacco-curing establishments to seasons of the year when the atmosphere is charged with considerable moisture.

It is the object of my present invention to provide a portable apparatus for use on the farms of tobacco-growers whereby the leaf-tobacco can be sufficiently saturated with moisture, regardless of the atmospheric conditions, without any attempt at curing the tobacco to soften the leaves to such an extent as to insure their safe transit without liability to breaking or crumbling.

With this object in view the invention consists in certain novel features of construction and combinations and arrangements of parts, as hereinafter set forth, and pointed out in

the claims.

In the accompanying drawings, Figure 1 is a longitudinal sectional view of an apparatus 50 embodying my invention. Fig. 2 is a transverse section. Fig. 3 is a detail view.

 Λ represents a housing having an open bot-

tom, vertical parallel sides 1 1, and a roof 2, the two sides of which are pitched from a central point to the upper edges of the sides 1, 55 so as to be sloping downwardly to said sides for a purpose hereinafter explained. The housing A is mounted on wheels 3 and preferably provided also with a wheel 4. The housing is provided on the inner faces of its 60 sides with two or more pairs of tracks 5 for the reception of trays 6, and said tracks are extended inwardly beyond the housing, whereby to permit the trays to be conveniently run into and out of the housing. Rollers 7 are 65 preferably provided for the trays. Bars 8 are secured to the respective sides of the housing and extend rearwardly beyond the tracks to form handles 9. The tracks are connected with the bars 8 and constitute a part of the 70 framework of the apparatus. Each tray is made with a perforated or wire-gauze bottom, through which vapor can pass to the tobacco supported in said trays. In placing the tobacco in the trays the sticks on which the 75 plants are strung will be made to rest at their ends on the sides of the tray, so that the ends only of the plants will rest on the perforated bottom, as shown in Fig. 3, and thus the tobacco will be properly supported to permit 80 the penetration of moisture without danger while being placed in position of being broken.

Under the housing a pan 10 is located for the reception of water, and under said pan a small furnace 11 is supported in the frame-85 work. A stack 12 communicates with the combustion-chamber and projects above the top of the housing, where it is provided with a cowl 13. A pipe 14 connects the stack 12 with the housing, near the top thereof, for carrying off surplus vapor, and said pipe is provided with a valve 15.

It is not the intention to supply an amount of steam sufficient to cure the tobacco, and the apparatus is not adapted for any such 95 purpose. The sole object of the invention is to provide a portable device for moistening very dry tobacco and rendering it capable of being handled and shipped from the farm in dry weather. The furnace is therefore made 100 of a very limited capacity and may conveniently burn tobacco-stalks as fuel. A very gentle heat will be maintained in the furnace; just sufficient to vaporize the water in the pan

and cause it to rise in the form of a cloud and pass through the tobacco without imparting any appreciable amount of heat thereto, but simply moistening or softening the leaves to prevent them from crumbling. The surplus vapor will rise to the sloping roof, where it will become condensed and flow down to the sides and then flow down the sides and escape.

My improvements are very simple in construction and valuable in the hands of to-

bacco-growers.

Slight changes might be made in the details of construction of my invention without departing from the spirit thereof or limiting its 15 scope, and hence I do not wish to limit myself to the precise details herein set forth.

Having fully described my invention, what I claim as new, and desire to secure by Letters

Patent, is-

1. In an apparatus for moistening tobacco, the combination with a closed housing and bars by which said housing is supported, of an axle on which said bars are supported, wheels in which the ends of said axle are 25 mounted, tracks mounted on said bars and

entering the housing, a small furnace carried under the housing, a water-pan in the lower part of the housing and over the furnace, and trays having perforated bottoms, adapted to

30 travelon said tracks and to be disposed within

the housing over said pan.

2. In an apparatus for moistening tobacco, the combination with a frame comprising two bars constituting handles at one end and a housing supported by the other ends of said 35 bars, of wheels, an axle mounted in said wheels and supporting said bars, a furnace disposed under the housing and depending below the bars, a water-pan in the lower part of the housing over the furnace, tracks mount- 40 ed upon said bars and extending from the handle ends thereof, tracks in the housing alining with said first-mentioned tracks, trays adapted to be run on said tracks into and out of the housing, said trays having perforated 45 bottoms, a stack communicating at one end with the furnace, a pipe connecting said stack with the upper part of the housing and a valve in said pipe.

3. .The combination with a portable housing 50 having an open bottom, of tracks in said housing, said tracks extending beyond the housing, bars secured to the housing and terminating in handles, said bars connected with the free ends of the tracks, a tray to run on the 55 tracks and having a perforated bottom, a water-pan under the tracks and tray, a furnace under the pan and a stack communicating

with said furnace.

In testimony whereof I have signed this 60 specification in the presence of two subscribing witnesses.

ALPHENAS V. HYSORE.

Witnesses:

R. S. FERGUSON, GEO. E. TERRY.