

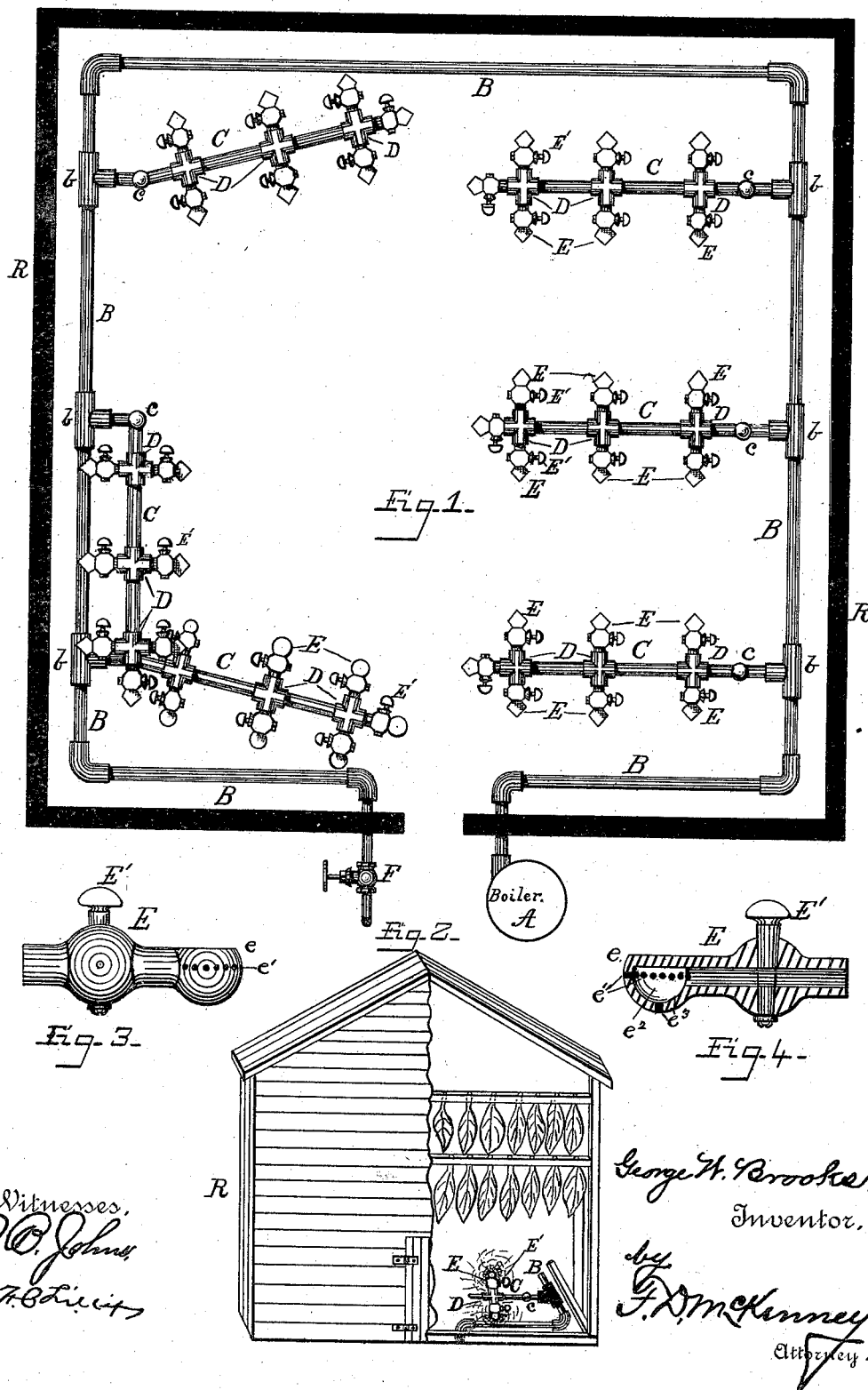
(No Model.)

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APPARATUS FOR TREATING LEAF TOBACCO.

No. 385,038.

Patented June 26, 1888.



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# UNITED STATES PATENT OFFICE.

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## APPARATUS FOR TREATING LEAF-TOBACCO.

SPECIFICATION forming part of Letters Patent No. 385,038, dated June 26, 1888.

Application filed April 4, 1888. Serial No. 269,526. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE WASHINGTON BROOKS, a citizen of the United States, residing at Mebane, in the county of Alamance and State of North Carolina, have invented certain new and useful Improvements in Apparatus for Treating Leaf-Tobacco; 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 apparatus for treating leaf-tobacco, particularly to that class of devices employed for subjecting the tobacco-leaf in a closed room to the action of steam; and my said invention consists of certain details of construction and arrangement of the parts composing the same, as and for the purposes as will presently appear and form the subject-matter of the appended claims.

The object of this invention is to provide an apparatus for the use of farmers and others who handle leaf-tobacco for the purposes of coloring green tobacco and of softening dry hard tobacco; and to this end I proceed as follows, reference being had to the accompanying drawings for a better understanding of the details of construction, and in which drawings—

Figure 1 is a plan view of my system of steam pipes and distributors, and Fig. 2 an elevation in partial section of a tobacco-curing house supplied with said system of steam conveying pipes and distributors constructed according to my invention. Figs. 3 and 4 represent details of one of the distributors on an enlarged scale.

The reference-letter A designates the steam-boiler, located outside of the building R; B B, the main line of pipe from said boiler, made in short sections united by T's b; C, the short branch pipes, of which any number may be used, also composed of a series of short sections united by double T's or crosses D and hinged to the main pipe at c; and E, the distributors, of which any number may be employed, projecting from the crosses D of the branch pipes C. After passing around the building, close to the wall thereof, as shown in Fig. 1, the main pipe B terminates at the exterior of the building at a point near where it

entered the same in a ball-valve, F, and each of the distributors E is also supplied with a cock or spigot, E', whereby the escape of steam from any one or all of said distributors may be stopped or regulated, as desired. These distributors are, as shown in Figs. 3 and 4, formed with a triangular or circular shaped nozzle, e, preferably made flat upon its upper surface, with hemispheroidal bottom.

Extending through the outer edge of the nozzle e is a series of fine perforations, e', and in the interior of said nozzle is formed a cup-shaped recess, e<sup>2</sup>, and through the bottom of said nozzle is pierced a hole, e<sup>3</sup>, Fig. 4.

The object of forming the distributors as here shown is to cause the steam to be minutely divided and to be ejected in a fine spray, and by reason of the chamber within the nozzle the condensed steam is collected and discharged downwardly through the bottom hole, e<sup>3</sup>, instead of being forced through the side perforations and scattered over the house.

All apparatus of which I have any knowledge heretofore employed for subjecting the tobacco-leaf to the action of steam for the purposes of curing or softening the same is of a stationary character. It is a fixture generally in the central portion of the room, on or near the floor. It is therefore frequently in the way, particularly when piling or handling the tobacco, at which times it is necessary either to remove the entire apparatus or to cut off the steam. In addition to this no special provision was made for directing the discharging steam to particular portions of the room, or of shutting it off at particular parts, or of regulating the flow thereof. A perforated pipe is used whose orifices for discharging the steam point in several directions, and thus is caused a commingling of steam and water, which is frequently very undesirable. No provision is made for the escape of water formed from the condensing steam save through the perforations opened for the steam itself.

The object, therefore, of this my invention is to overcome these objections and to supply an apparatus the parts of which will be adjustable and easily removable, and in which the flow of steam may be easily controlled and directed to various points in the room. This is accomplished by forming the main pipe in

sections, as hereinbefore shown, and arranging it along the sides of the room, and providing said main pipe with a series of short branch pipes, also made in sections for convenience in cleaning, removing, &c., which short branch pipes are hinged to said main pipe and are provided with a series of distributors, each supplied with a cock or spigot. When, therefore, it is desired to occupy the central portion of the room, the branch pipes may be folded back parallel with the main pipe, or elevated in a direction perpendicular thereto and rested against the walls of the room, thus leaving the entire floor-space free from incumbrance. By placing the branches at different angles the escaping steam may be directed to different portions of the room, and by turning off certain of the stop-cocks the supply of steam may be controlled as desired and directed at will.

Having thus described my invention, what I claim as new therein, and desire to secure by Letters Patent of the United States, is as follows, viz:

1. The combination, in an apparatus for treating leaf-tobacco, with a steam-boiler and a closed room, of a main line of pipe from said boiler extending around the room adja-

cent the walls thereof, made in sections, a series of branch pipes projecting laterally from and hinged or jointed to said main pipe, and a series of steam-distributors projecting laterally from said branches, substantially as described, for the purposes specified.

2. The combination, in an apparatus for treating leaf-tobacco, with the boiler A, of the main line of pipe B B, a series of short pipes, C, extending laterally from the main pipe B and having a hinged connection therewith, and a series of distributors, E, extending laterally from the branch pipes C and supplied with cocks or spigots E', substantially as described, for the purposes specified.

3. In an apparatus for treating leaf-tobacco, the distributors E, having cocks or spigots E', formed with a perforated nozzle, e, having an interior cup-shaped recess, e', and water-outlet e'', substantially as described, for the purposes specified.

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

GEORGE WASHINGTON BROOKS.

Witnesses:

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C. G. BROWN.