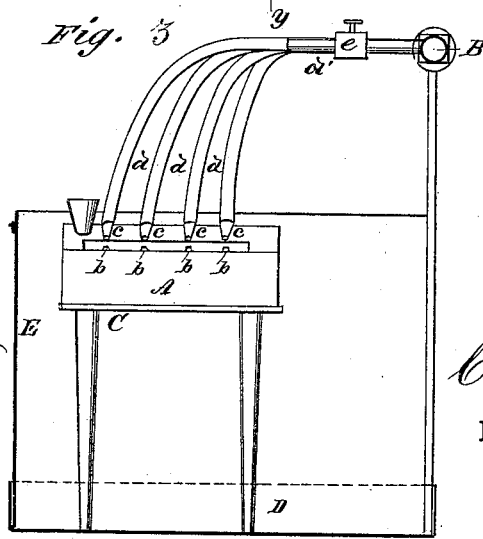
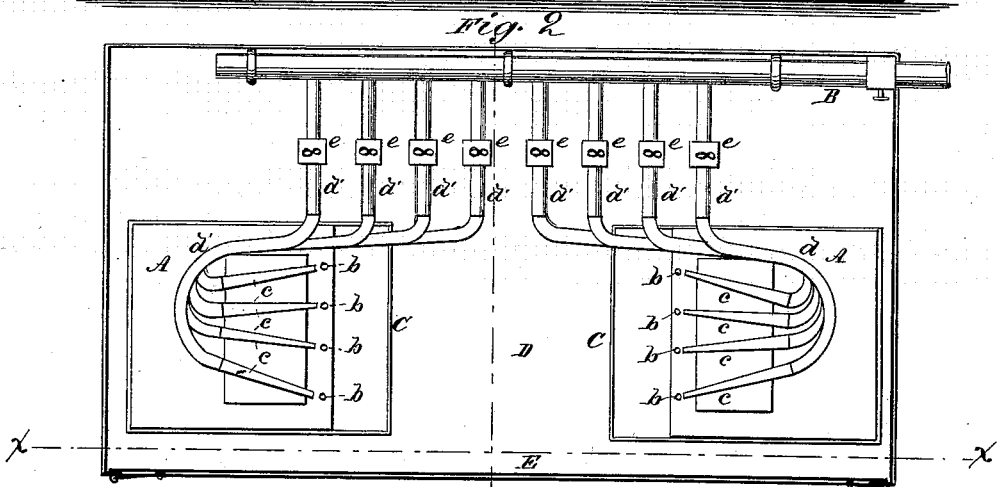
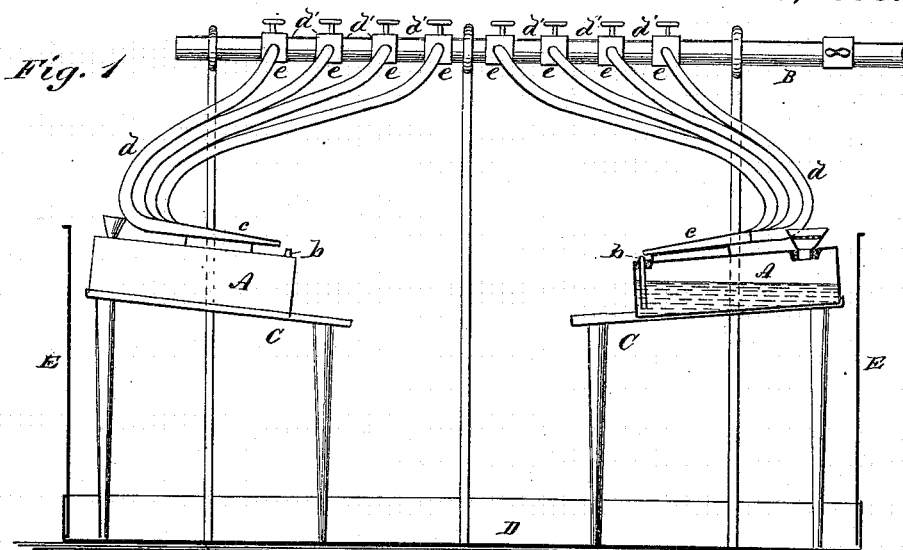


C. S. PHILIPS.
Apparatus for Spraying Tobacco.

No. 201,196.

Patented March 12, 1878.



WITNESSES:
C. Neveu
Edgar Tate

INVENTOR:
C. S. Philips.
BY *Munn & Co.*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

CHARLES S. PHILIPS, OF NEW YORK, N. Y.

IMPROVEMENT IN APPARATUS FOR SPRAYING TOBACCO.

Specification forming part of Letters Patent No. 201,196, dated March 12, 1878; application filed November 26, 1877.

To all whom it may concern:

Be it known that I, CHARLES S. PHILIPS, of the city, county, and State of New York, have invented a new and Improved Apparatus for Spraying Leaf-Tobacco, of which the following is a specification:

Figure 1 is a front elevation of my improved spraying apparatus, taken in section on line *x x* in Fig. 2. Fig. 2 is a plan view. Fig. 3 is a vertical transverse section on line *y y* in Fig. 2.

Similar letters of reference indicate corresponding parts.

My invention relates to apparatus for spraying or "casing" leaf-tobacco.

The invention will first be described in connection with the drawings, and then pointed out in the claims.

Referring to the drawings, A A are reservoirs, having arranged along one end several tubes, *b*, which extend nearly to the bottom of the reservoir, and project a short distance above the top of the reservoir. To the top of the reservoir a number of steam-nozzles, *c*, are attached, having their smaller ends in proximity to the upper ends of the tubes *b*, and their larger ends arranged convergingly, and connected, by means of flexible tubes *d*, with the branch pipes *d'*, that project from the main steam-pipe B.

The reservoirs A are placed upon inclined tables C, and are movable thereon in the direction of the length of the tables. The tables C are placed in a pan, D, which receives the moistening-liquid that may drip from the tobacco under treatment.

A guard or vertical wall, E, surrounds the tables upon one side and at the ends, which prevents the moistening-liquid from becoming scattered and lost, and from wetting the clothing of the operator.

Each branch pipe *d* is provided with a valve, *e*, by which the steam issuing from each individual nozzle is controlled.

The reservoirs A are filled through a funnel, *f*, containing a strainer, *g*, for excluding particles of leaf or dust that might otherwise enter the reservoir and clog the spraying-tubes. The steam issuing from the nozzles *c* draws the moistening-liquid from the reservoir and projects it against the leaves, which are held by the hand between the two sets of oppositely-disposed nozzles.

The amount of liquid drawn from the reservoir, and the force with which it is thrown against the leaves, are regulated by means of the valves *e*, and by varying the distance between the nozzles and the tobacco being sprayed.

The reservoirs are inclined, for the double purpose of causing the jets of spray to cross each other, and to insure the dipping of the tubes *b* in the liquid.

The advantages claimed for my improved apparatus over the means commonly employed for casing or moistening tobacco are, that the exact amount of moisture required to insure the fermentation of the leaf may be more rapidly and evenly applied, and the moisture may be applied to part or all of the leaf, as may be required.

I do not limit or confine myself to any particular number of tubes, nor to any special arrangement of pipes, as these may be varied without departing from my invention.

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

1. The oppositely-disposed reservoirs, having each a series of spray-tubes, as herein shown and described.

2. The pan D and guard E, in combination with the spraying apparatus, as herein shown and described.

CHARLES S. PHILIPS.

Witnesses:

C. SEDGWICK,
ALEX. F. ROBERTS.