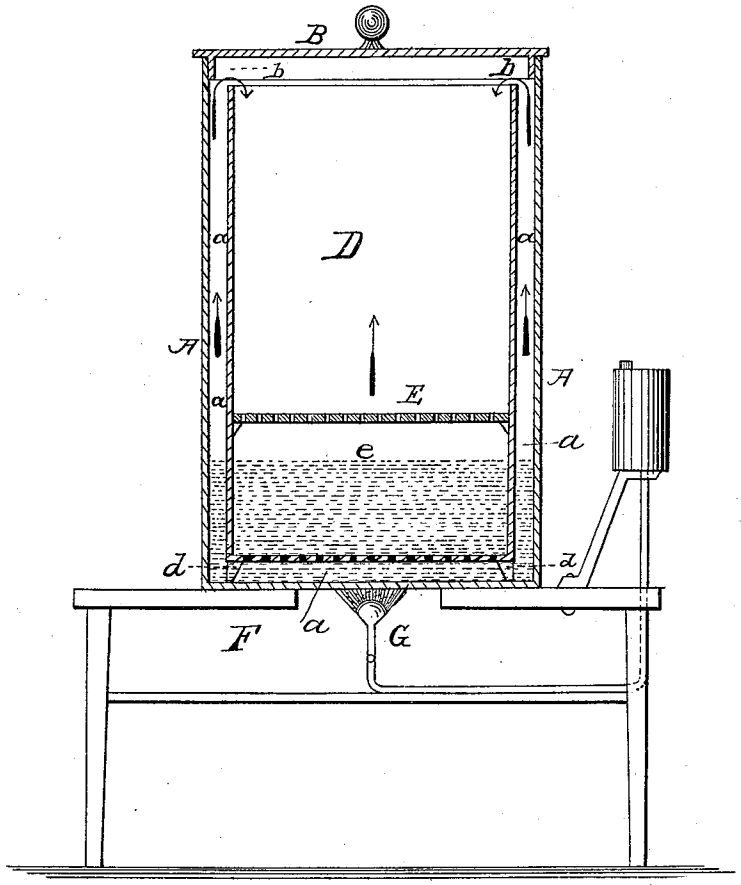
(No Model.)

W. FOSS.

APPARATUS FOR SWEATING TOBACCO.

No. 258,739. Patented May 30, 1882.



Witnesses;
Chas. C. Gill
Herman Gustow

Inventor;
William Foss,
By his Attys.
Cox and Fox.

N. PETERS. Photo-Lithographer. Washington, D. C.

UNITED STATES PATENT OFFICE.

WILLIAM FOSS, OF MANSFIELD, OHIO.

APPARATUS FOR SWEATING TOBACCO.

SPECIFICATION forming part of Letters Patent No. 258,739, dated May 30, 1882.

Application filed August 12, 1881. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM FOSS, of Mansfield, in the county of Richland and State of Ohio, have invented a new and useful Improvement in Apparatus for Sweating Tobacco, of which the following is a specification, reference being had to the accompanying drawing.

The invention relates to an improvement in apparatus for sweating tobacco; and it consists in a covered outer casing and an inner casing, between which is a water-space having a communication at the top with the interior of the inner casing, the latter having at a suitable elevation a series of bars upon which the tobacco to be treated is placed.

The details of construction will be understood from the description hereinafter presented, reference being had to the accompanying drawing, in which is represented a central vertical longitudinal section of an apparatus embodying the elements of the invention.

A indicates the outer casing of the apparatus, which is in the present instance in the form of a cylinder, and is supplied with a cover, B.

D indicates the inner casing, which is also cylindrical in form, and is placed within the cylinder A, being sufficiently smaller than the same to form the water-space *a* around its sides. The upper edges of the inner casing do not quite reach the under surface of the cover B, whereby a space, *b*, is formed through which the steam may pass from the space *a* into the casing D and downward into the tobacco, as hereinafter set forth. Within the casing D, and at a proper point above its bottom, is secured the grating or perforated floor E, upon which the tobacco to be treated is placed. The floor E may be of any suitable construction which will permit the passage of the steam through it, and has between it and the bottom of the casing a water-space, *c*. In the present instance the apparatus above described is mounted upon a table and the water within it is heated by a lamp, G; but I do not limit myself to the use of the table and lamp, since the same effect may be accomplished by placing the apparatus on a stove or otherwise heating it.

In the operation of the apparatus the water is placed in the water-spaces *a* and *c* up to within a suitable distance of the floor E. The tobacco, either in leaf or otherwise, is then placed on the grate E, the lid B closed, and heat applied. I place such a quantity of water within the apparatus as when heated will generate a quantity of steam proportionate only to the capacity of the tobacco for absorbing it—that is to say that when the apparatus is in operation the steam generated by the water is absorbed by the tobacco, no outlet being provided in the casing through which the steam can escape. The water-space *a* has no connection with the water-space *c*. Thus two independent bodies of steam are produced. The water in the space *c*, having a larger heating-surface, will be more quickly affected by the fire than that in the space *a*.

In practice the steam generated by the water in the space *a* ascends, fills the space *b*, and enters the casing D, where it meets the body of steam issuing from the water in the space *c*, and then enters the tobacco. The major part of the steam from the space *c* enters the tobacco from below, and that of the steam from the space *a* enters the tobacco from above, the balance of the steam entering the tobacco at the sides. The result of the steam acting on the tobacco in this manner is to thoroughly remove all gummy matter from the leaves, and to give them a uniform color throughout without affecting their texture or flavor. I allow the tobacco to remain in the apparatus about eight hours, more or less, according to whether it is desired to give the leaves a dark or light color. Another effect of the peculiar construction of my apparatus in separating the water-spaces is to avoid the discoloration of the leaves in contact with the perforated bottom or plate E.

What I claim as my invention, and desire to secure by Letters Patent, is—

The apparatus herein described for sweating tobacco, which consists of the covered casing A and uncovered casing D, the latter being supplied with the grate E and water-space *c*, and being placed within the casing A, the water-space *a* and steam-passage *b* being formed between the two casings, the steam-passage *b* leading from the space *a* directly into the uncovered casing D, the two water-spaces mentioned being independent of each other, substantially as set forth.

In testimony that I claim the foregoing improvement in apparatus for sweating tobacco, as above described, I have hereunto set my hand this 28th day of June, 1881.

WILLIAM FOSS.

Witnesses:
NORMAN M. WOLFE,
JNO. Y. GLESSNER.