

J. M. SMITH.  
Tobacco-Driers.

No. 139,977.

Patented June 17, 1873.

Fig. 1.

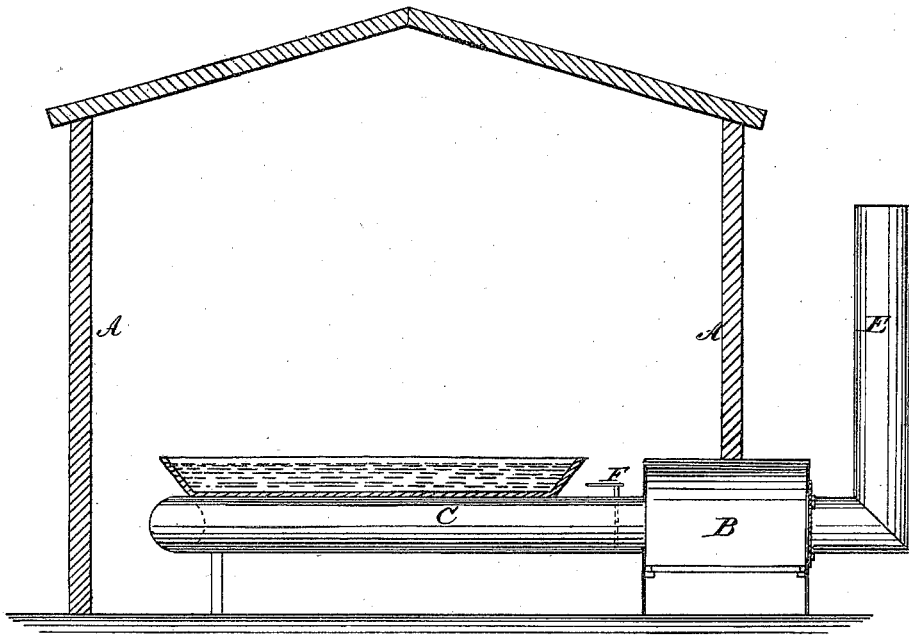
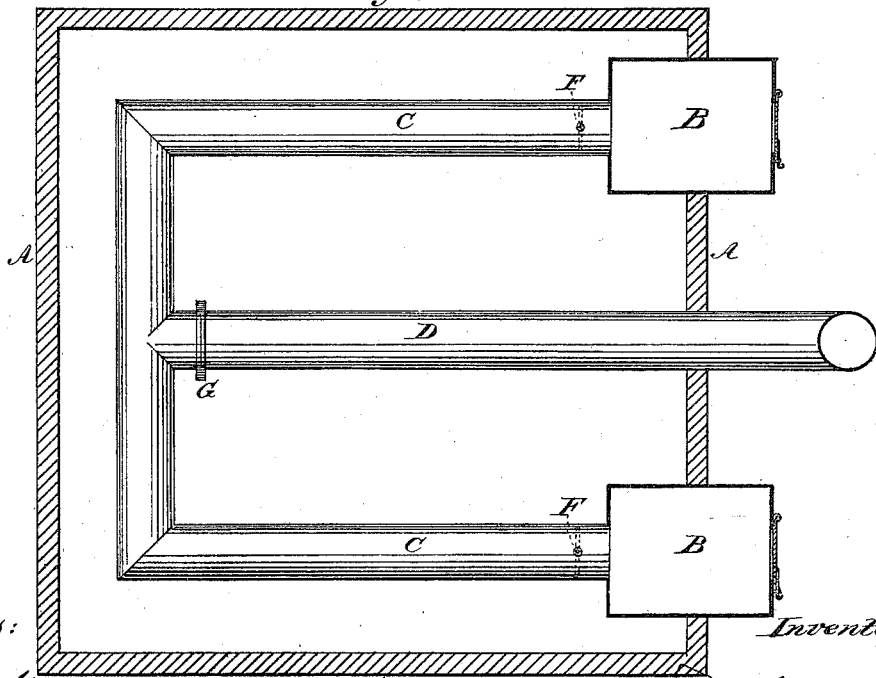


Fig. 2.



Witnesses:

J. C. Drecht,  
John W. Gardner.

Inventor.

James Morgan Smith,  
by his Attorney  
James H. Mandeville

# UNITED STATES PATENT OFFICE.

JAMES MORGAN SMITH, OF MILTON, NORTH CAROLINA.

## IMPROVEMENT IN TOBACCO-DRIERS.

Specification forming part of Letters Patent No. **139,977**, dated June 17, 1873; application filed November 21, 1872.

*To all whom it may concern:*

Be it known that I, JAMES MORGAN SMITH, of Milton, Caswell county, North Carolina, have invented a new Method of Curing Tobacco, of which the following is a full, clear, and exact description.

This invention consists in a process of curing tobacco in a building provided with furnaces, pipes, and evaporators, as are well known in the art, the pipes being readily detachable, and so disposed therein as to economize heat, the process consisting in thoroughly smoking the tobacco by means of detaching the pipes, and then drying the tobacco by joining the pipes, the evaporators at this time being filled with water, when the tobacco is cured both in a smoked and moistened state.

It has been found that tobacco does not keep well in packages when cured only by the agency of heat; it must be smoked, like meat, so as to keep well in bulk. The old process of curing tobacco by building a fire under it was dangerous, owing to the danger of setting the building on fire; the process of curing it only by the agency of heat is objectionable, for the reason stated; but both thoroughly smoking and then drying it is a superior process, and one never before known or used.

In the drawing, Figure 1 shows a side elevation of the invention; and Fig. 2 a plan view of the same.

A represents the building, on one side of which is shown two furnaces, B B; in this instance each furnace built one-half within and the other half without the building. From each of these furnaces pipes C C extend all around, preferably parallel to the sides of the building, with a detachable return pipe, D, arranged in its center. Draft is regulated through the pipes by the dampers F F, and the products of combustion are carried off into the smoke-stack E, which is placed in the center of one side of the building, midway between the two furnaces. Smoke and heat are thus carried all around the building, the smoke being brought back and finally discharged on

the same side of the building where it started. In Fig. 1 there is shown a trough upon the top of the pipe C, which may be made a part of the pipe or not, so that it may be filled with water, in order that steam may assist in the yellowing process. The return-pipe is also jointed at G to the pipes C, so that it may be disconnected from them at pleasure; during the yellowing process they are separated, but during the curing process they are joined together.

Practice has shown that wood does not give that yellow color to the tobacco so much sought after by consumers, and that it is better obtained by the use of coal, which of course is dirty, and requires much hard labor to handle.

This invention has for its object to economize the heat and fuel, and to prevent any danger from fire; to throw steam and smoke, in quantities, into the building during yellowing process; and then to cure the tobacco with the greatest heat from the least fuel.

The evaporating-pans are shown in the drawing as placed upon the pipes. As the tobacco is yellowed at a temperature of from 80° to 110° it may be found preferable to arrange the pans above the pipes, so that the required amount of steam may be obtained by the water dripping down upon the pipes, which would not require a high temperature of heat.

I claim—

The process of curing tobacco yellow, so that it will keep well in bulk by thoroughly smoking and then drying it, by means of detachable heating-pipes, substantially as herein described.

In testimony whereof I have hereunto subscribed my name to the foregoing specification, in the presence of two attesting witnesses, this 12th day of November, 1872.

JAMES MORGAN SMITH.

Witnesses:

GEO. W. THOMPSON,  
A. M. LEWIS.