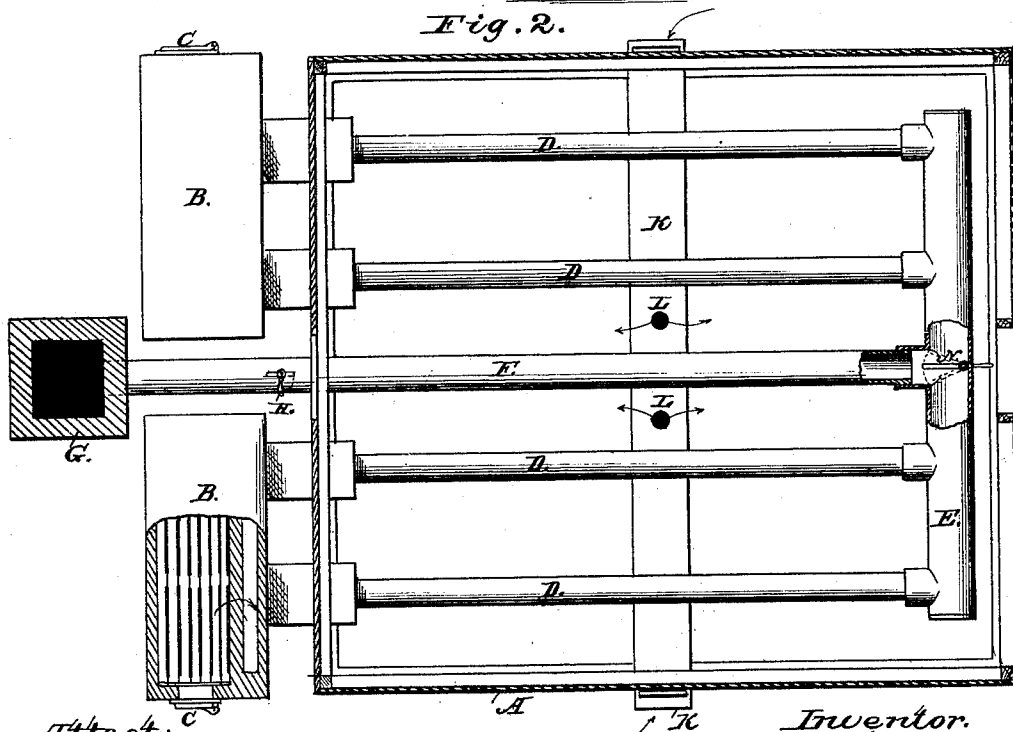
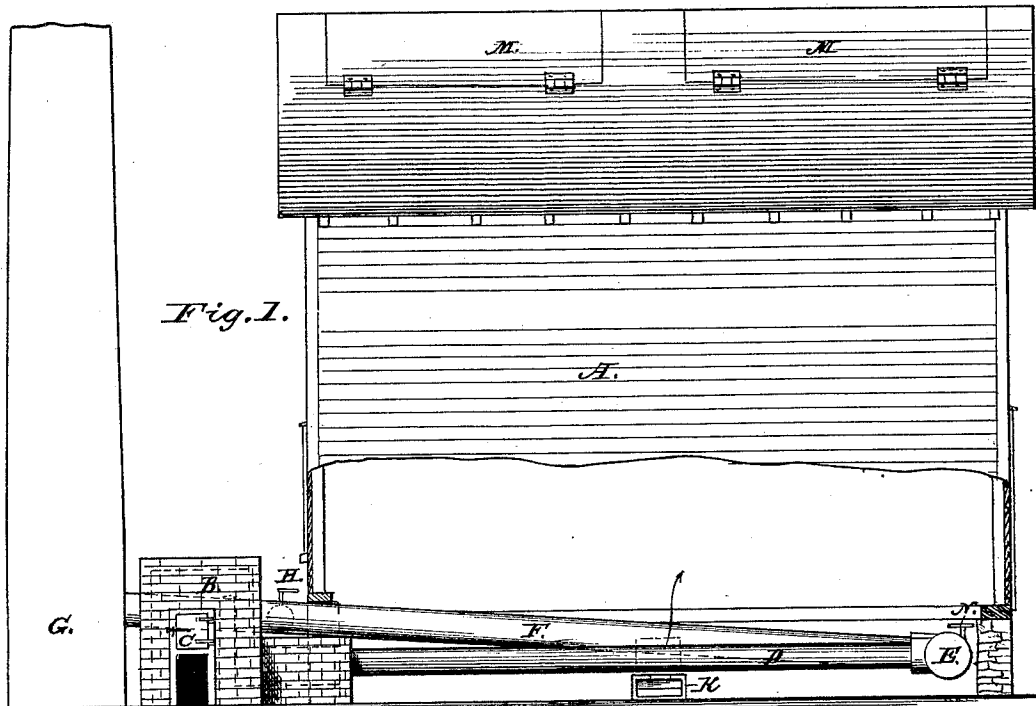


W. H. BOWDEN.

TOBACCO-DRYER.

No. 175,913.

Patented April 11, 1876.



Attest:
 H. R. Perine
 A. H. Norris

Inventor.
 William H. Bowden
 By James L. Norris atty

UNITED STATES PATENT OFFICE.

WILLIAM H. BOWDEN, OF DANVILLE, VIRGINIA.

IMPROVEMENT IN TOBACCO-DRIERS.

Specification forming part of Letters Patent No. **175,913**, dated April 11, 1876; application filed August 31, 1875.

To all whom it may concern:

Be it known that I, WILLIAM H. BOWDEN, of Danville, in the county of Pittsylvania and State of Virginia, have invented certain new and useful Improvements in Apparatus for Curing Tobacco, of which the following is a specification:

This invention relates to certain improvements in apparatus for treating and curing tobacco; and its object being to so construct and arrange the furnaces and flues of a curing-chamber that the whole will be under the control of the operator for the purpose of enabling him to adjust and regulate the heat, and thus prevent accidents from the overheating of the tobacco, or from fires to which such apparatus are extremely liable.

My invention consists in a system of flues extending from furnaces located in front of the curing-chamber and running backward into the same, the rear ends of said flues communicating with a cross flue, from which a return-flue leads to the front of the chamber between the furnaces, terminating in a vertical escape flue, as will be more fully hereinafter described.

In the drawing, Figure 1 represents a side elevation, partly in section, of my improved apparatus, and Fig. 2 a plan view of the same.

The letter A represents a curing chamber or barn constructed in the ordinary manner. At the front of said chamber are located two furnaces, B B, provided with suitable doors C C for the admission of fuel, with the usual inlets for draft. From each of said furnaces extend two flues, D D, backward into the chamber near the floor, connecting at their extremities with a cross-flue, E, from which extends a return-flue, F, which passes through the front of the chamber between the two furnaces, and communicates with a vertical chimney or flue, G, through which the smoke and products of combustion from the furnace finally escape. Said return-flue is provided with a damper, H, near its front end, by means of which the draft through the whole series may be controlled, said damper being under the direct control of the attendant or operator of the apparatus. Directly across the bottom of the curing-chamber, about midway between the front and the rear of the same, extends

a flue, K, provided with dampers or valves at each end, which flue communicates with the interior of the chamber through openings L L near its center. Said flue is for the purpose of admitting air to the chamber, the quantity being regulated by the dampers at each end.

At the top of the curing-chamber A is secured a hinged ventilator, M, which may be raised or opened to any desired extent, in order to allow the air as it enters the chamber from the air-flue K and becomes heated, to rapidly ascend through the tobacco, for the purpose of quickly drying the same in order to prevent splotching, scalding, or sponging.

At the center of the flue E, which crosses the chamber at its rear, is a damper, the object of which is to direct the heated products of combustion from the two furnaces into the return-flue F, and prevent the heat of one furnace from having any effect on the other.

By the construction and arrangement of the flues, in connection with the return-flue and its damper, the whole apparatus is brought under the control of the attendant or operator, so that he can regulate the heat with precision, and also have both the furnaces and the chimney or escape-flue under his immediate supervision, and by this means be able to carefully watch the whole and regulate the heat in the curing-chamber and prevent accidents from fire.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

In combination with the curing-chamber A and ventilator M on the top of the same, the air-flue K, leading from the open air into the said chamber, for the purpose of causing a rapid circulation of the air through the tobacco in order to quickly dry the same, and prevent splotching, scalding, or sponging, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand in the presence of the subscribing witnesses.

WILLIAM H. BOWDEN.

Witnesses:

WM. E. BOISSEAU,

HENRY E. BARKSDALE.