(No Model.)

J. A. KERNODLE.

TOBACCO CURING FLUE.

No. 365,008. Patented June 14, 1887.

Fig. 1.

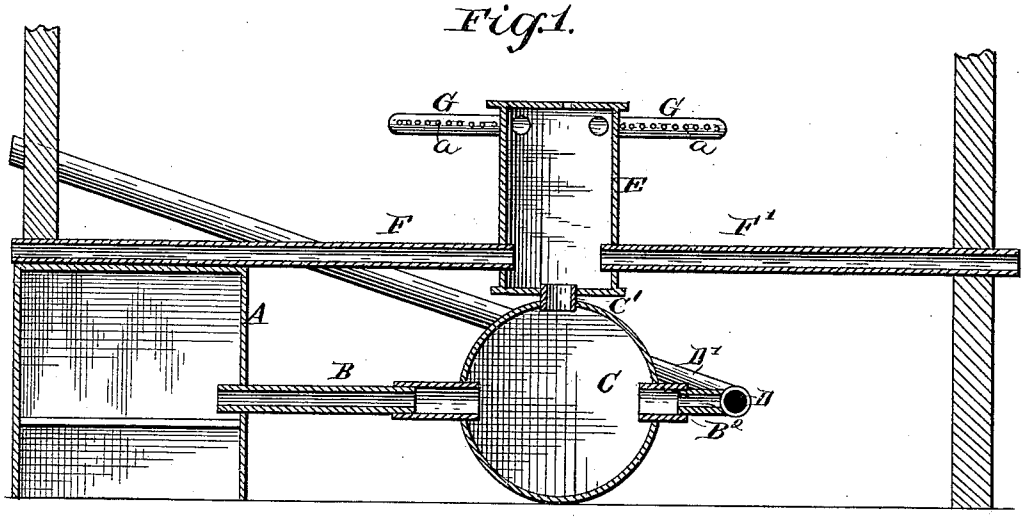
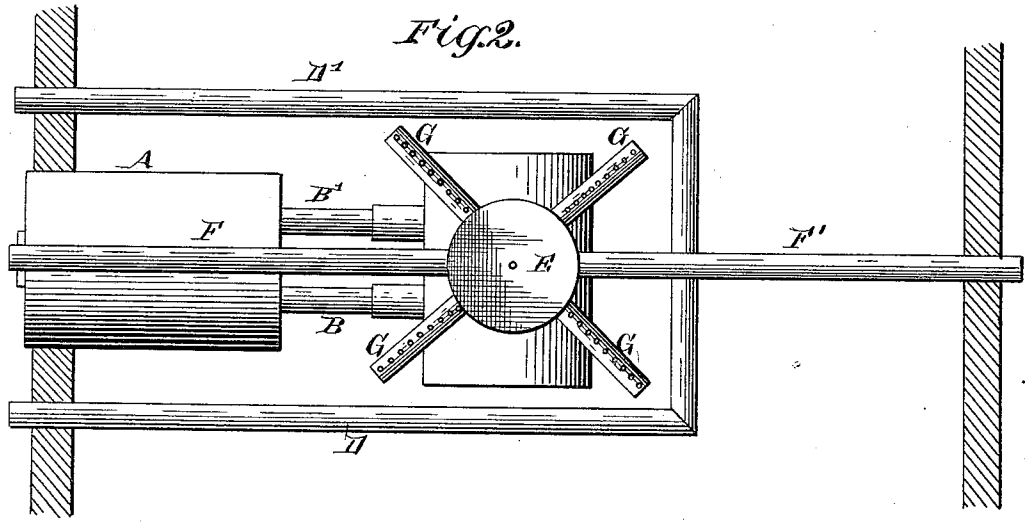


Fig. 2.



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UNITED STATES PATENT OFFICE.

JAMES ALFRED KERNODLE, OF GREENSBOROUGH, NORTH CAROLINA, ASSIGNOR OF ONE-HALF TO JOHN W. GERINGER, OF SAME PLACE.

TOBACCO-CURING FLUE.

SPECIFICATION forming part of Letters Patent No. 365,008, dated June 14, 1887.

Application filed May 14, 1886. Serial No. 202,175. (No model.)

To all whom it may concern:

Be it known that I, JAMES ALFRED KERNODLE, of Greensborough, in the county of Guilford and State of North Carolina, have invented certain new and useful Improvements in Tobacco-Curing Flues; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in that class of tobacco-curing apparatus in which a heat-radiating stove or furnace having heat-distributing pipes is provided for the equal distribution of heat to all parts of the tobacco-curing house or barn; and my improvements consist, essentially, of a furnace provided with a series of pipes connecting with a central horizontal drum and smoke-exit pipes, and cold-air pipes communicating with a central vertical drum arranged directly above the said horizontal drum and communicating therewith, whereby pure cold air is conducted into the curing-house, properly heated, and distributed to all parts of the same, as will be hereinafter fully described, and pointed out in the claim.

In the drawings, Figure 1 represents a side elevation of my improved apparatus, and Fig. 2 a top plan view thereof.

Similar letters of reference indicate like parts in both figures.

Referring to the drawings, A represents a suitable stove or furnace, having the one ends of the pipes B B′ projecting into the rear of the same directly above the fire-box, while the opposite ends of said pipes project into the central horizontal drum, C, as shown. A pipe, B^2, projects outwardly from the rear of the said drum C and connects with the cross-pipe D, from each end of which a pipe, D′, projects to the outer part of the curing-house or into a suitable flue to carry off the products of combustion. Located directly above and resting upon the horizontal drum C, and connected to the same by a short pipe, C′, is a central vertical drum, E, having two cold-air pipes, F F′, projecting into the lower part of the same, as shown in Fig. 1. At the upper portion of the vertical drum E is provided a series of radially-arranged pipes G, the inner ends of which project into the upper part of the said drum, while their outer ends are closed, preferably. These pipes G are provided with a series of perforations, *a*, upon their tops and sides, as shown.

The construction of my invention being substantially as above described, it will be observed that in the operation of the same the furnace is fed with suitable fuel—wood, preferably, being used—the heat and smoke from which pass through the pipes B B′ into the horizontal drum C, the heat rising in the same, while the smoke and products of combustion pass out through the pipes B^2, D, and D′ into a suitable flue or the outer atmosphere. Cold air is thus drawn into the vertical drum E through the cold-air pipes F F′, and is thoroughly heated therein by the action of the heat rising from the lower drum, C, and is then distributed through the perforations in the radially-arranged pipes G to all parts of the tobacco-curing barn or house. It will thus be seen that pure heated air only is distributed within the curing house or barn, the smoke and products of combustion passing off through a suitable exit to the open air.

Having thus described my invention, I claim as new and useful—

In a tobacco-curing apparatus, the furnace A, having rear projecting horizontal pipes, B and B′, connecting with a horizontal drum, C, the vertical drum E, provided with four radial perforated arms, G, and centrally connected with drum C by short pipe C′, in combination with the pipes F F′ and D D′, all arranged and operated substantially as shown and described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

JAMES ALFRED KERNODLE.

Witnesses:
J. N. NELSON,
WILL. U. STEINER.