To all whom it may concern:

Be it known that I, SAMUEL B. BARTLETT, a citizen of the United States, residing at Carthage, in the county of Moore and State of North Carolina, have invented new and useful Improvements in Tobacco-Drying Furnaces, of which the following is a specification.

This invention has for its object, the provision of a furnace designed for use in connection with the process of curing tobacco, the construction being such as to provide for the circulation of heat in a manner to preserve the good qualities of the tobacco.

It is a well-known fact that cold air is injurious to the curing process, as the sudden atmospheric change causes sweet. In curing tobacco, it is necessary to regulate the products of combustion, and to do this with cold air causes the green leaves to sweat. This causes the juice of the leaf to ferment and when the fermentation has been expelled by the way of gas, it leaves the tobacco a bad color, light in weight, and providing a bad grade of tobacco.

It is therefore the object of the present invention to construct a furnace designed to circulate the products of combustion with hot air, thereby eliminating the above objections and preserving the good qualities of the tobacco. The nature and advantages of the invention will be better understood when the following detailed description is read in connection with the accompanying drawings, the invention residing in the construction, combination and arrangement of parts as claimed.

In the drawings forming part of this application, like numerals of reference indicate similar parts in the several views, and wherein:

Figure 1 is a view showing the furnace in side elevation, and its relative position with relation to the barn.
Figure 2 is a top plan view of the furnace.
Figure 3 is a longitudinal sectional view taken on line 3-3 of Figure 2.
Figure 4 is a sectional view taken on line 4-4 of Figure 2.

Referring to the drawings in detail, A indicates a barn in which the tobacco is arranged for curing, and B indicates generally the furnace forming the subject matter of the invention.

The furnace may be of any suitable cross sectional configuration, and may also vary in size without departing from the spirit of the invention, and any suitable material may be employed in its construction. However, the furnace is preferably constructed of brick, and of the cross sectional configuration shown in Figure 4. The furnace is built upon the ground with a portion 10 projecting within the barn A, and a portion 11 projecting exteriorly of the barn. In the bottom 12 is formed a channel or passageway 13 which opens exteriorly of the barn at one side of the furnace as at 14. The portion 15 of the passageway 13 is arranged at right angles to the latter as shown and constitutes the inlet for the cold air from the atmosphere. Projecting from the opposite end of the passageway 13 is a coupling 15 from which a plurality of pipes 16 radiate in different directions, and to convey the hot air to different parts of the barn for the purpose above mentioned. Embedded in the opposed sides of the furnace are channel-like members 17 which are of lengths to project within the barn, as well as beyond the latter, and these channel-like members are provided with inlet and outlet openings 18 and 19 respectively. Leading from the outlet openings are suitable couplings 20 from which project pipes 21. Cold air is admitted to the channel-like members through the inlet openings 18, the air being heated prior to its introduction into the pipes 21, and this hot air is conveyed by the pipes to the different parts of the barn for the purpose above mentioned. Embedded in the top of the furnace is an additional channel-like member which has a cold air inlet opening 23, and a hot air outlet 24, while projecting from the said outlet 24 is a coupling 25 with which is associated a plurality of pipes 26. The channel-like members both in the sides and top of the furnace serve to reinforce the structure in its entirety. Manifestly, I have devised a construction by means of which the heat in the barn is circulated by means of hot air so that the color and other good qualities of the tobacco are preserved during the curing process.

While it is believed that from the foregoing description, the nature and advantages of the invention will be readily apparent, I desire to have it understood that I do not limit myself to what is herein shown.
and described, and that such changes may be resorted to when desired as fall within the scope of what is claimed.

What I claim is:

1. A furnace of the character described, comprising a bottom and a body portion, said bottom having a passageway opening at one end and one side of the furnace, channel-like members supported by the body portion each of said channel-like members having inlet and outlet openings, coupling members associated with the outlet openings, and pipes projecting from each coupling as and for the purpose specified.

2. The combination with an enclosure, of a furnace including a portion arranged within the enclosure and a portion arranged exteriorly thereof, said furnace having a plurality of passages provided in the bottom, sides and top thereof, each of said passages having an inlet opening communicating with the atmosphere, and an outlet opening arranged within said enclosure, a coupling member associated with each outlet opening, and pipes branching from said coupling for the top and bottom passages to various parts of the enclosure as and for the purpose specified.

In testimony whereof I affix my signature.

SAMUEL B. BARTLETT.