

(No Model.)

S. COLLINS.
TOBACCO DRIER.

No. 321,797.

Patented July 7, 1885.

Fig. 1.

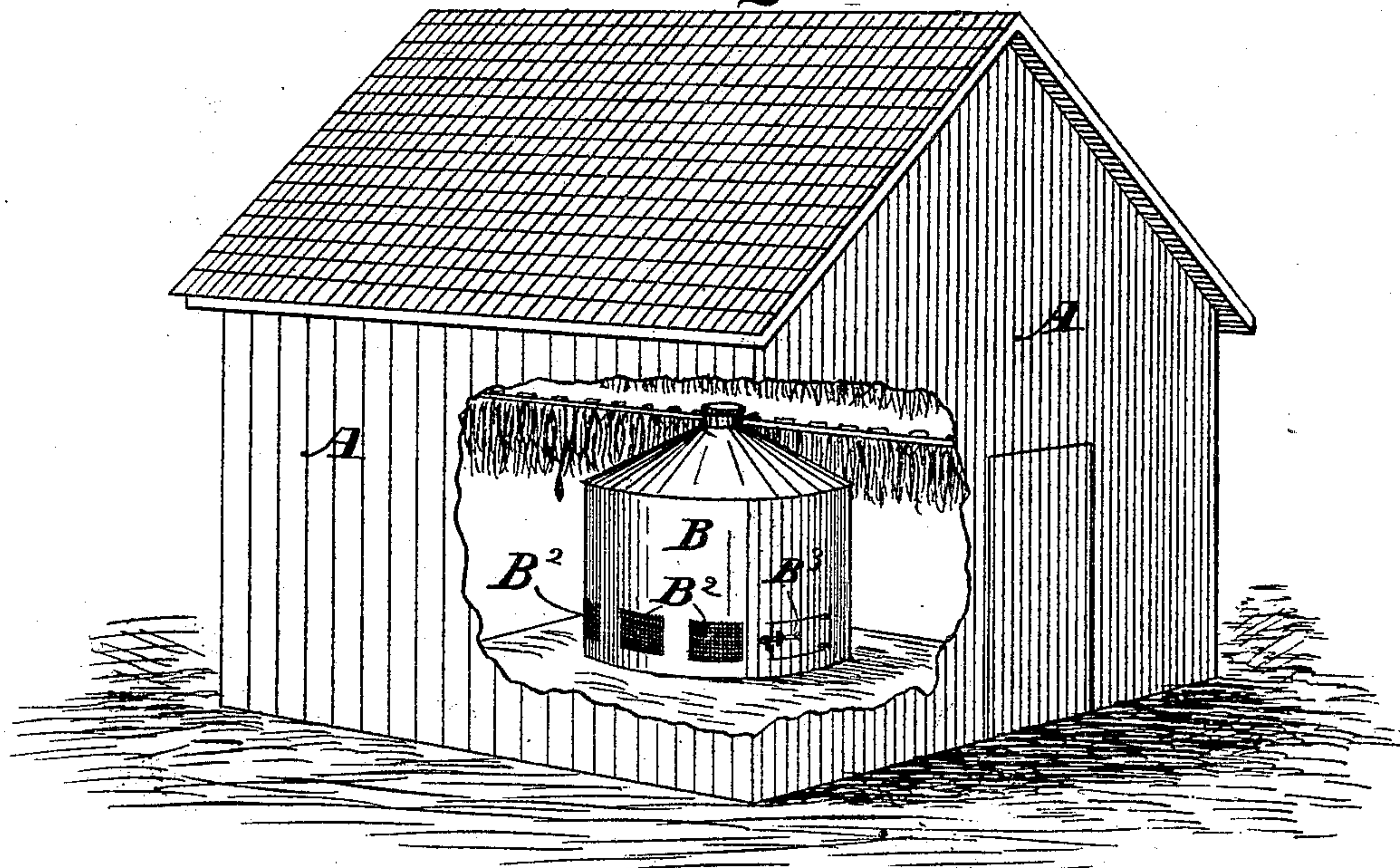
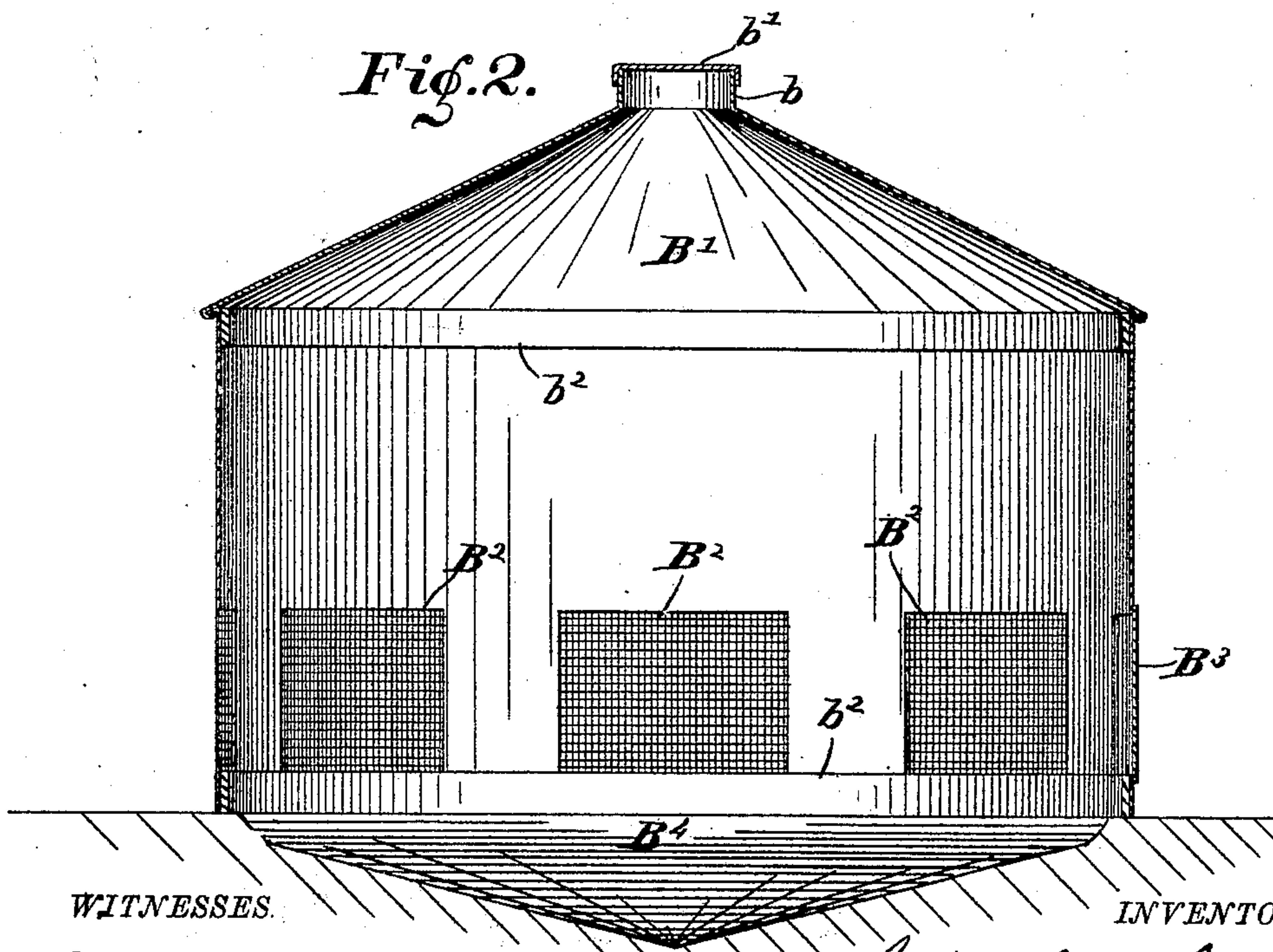


Fig. 2.



WITNESSES

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STEPHEN COLLINS, OF HUNTSVILLE, ALABAMA, ASSIGNOR OF TWO-THIRDS
TO JOHN SANDERS ELDER AND ABNER BONDURANTE MAXEY, BOTH OF
CLARKSVILLE, TENNESSEE.

TOBACCO-DRIER.

SPECIFICATION forming part of Letters Patent No. 321,797, dated July 7, 1885.

Application filed October 11, 1884. (No model.)

To all whom it may concern:

Be it known that I, STEPHEN COLLINS, of Huntsville, county of Madison, and State of Alabama, have invented certain new and useful Improvements in Furnaces for Curing Tobacco, of which the following is a specification.

As is well understood to those familiar with the art of curing tobacco, the ordinary process by open fires in the curing-house is accompanied by considerable danger on account of the liability of the sparks from said fires being carried up among the tobacco-leaves during the latter part of the process, when they are nearly dry, igniting the same, and thus causing the destruction of both the tobacco and the curing-house. Many of the attempts heretofore made to overcome this danger by the construction of furnaces have been productive of an apparatus either unsatisfactory in its operation or too expensive for common use. The object of my said invention is, therefore, to produce a safe, efficient, and cheap apparatus for curing tobacco by artificial heat, as will be presently more fully described.

Referring to the accompanying drawings, which are made a part hereof, and on which similar letters of reference indicate similar parts, Figure 1 is a perspective view of a curing-house, a portion of one wall being broken away to show the interior and my improved furnace therein; and Fig. 2 is a central vertical section through said furnace.

In said drawings the portions marked A represent the curing-house, and B the furnace, which forms the subject-matter of this application.

The curing-house A is not peculiar to this invention, but is of any ordinary construction and of the capacity desired. The tobacco is hung upon poles, which are arranged upon stringers in the usual manner.

The furnace B is preferably circular in form, and constructed of sheet-iron or similar material. It is of any suitable size, and has an inclosed conical-shaped top, B'. Said top is provided with a short piece of pipe, *b*, by which a smoke-pipe may be connected to the furnace, when desired, as will be presently more fully described. Ordinarily, it is kept closed by the cover *b'*. The walls are strengthened at top and bottom by rings *b*² of bar-iron, which ex-

tend around on the inside and are secured thereto. Openings B² are provided in said walls near their lower edges for the escape of the heat and smoke, and are covered with wire screens, which prevent any sparks or cinders from escaping therewith. These openings may be of such number as desired, but are preferably about six to each furnace, arranged around its sides, so that the heat will escape equally in all directions. A door, B³, is also provided for the usual purpose of doors in furnaces.

By constructing the furnace of a cylindrical form much less heavy iron is required to give it the required strength and durability, as will be readily understood, and a much cheaper and lighter furnace is therefore produced.

The manner of using my said invention may be briefly described as follows: The tobacco being arranged in the curing-house in the well-known manner, as before indicated, a fire pit or trench, B⁴, is dug in the earth floor of the house from the door of the furnace toward its rear side. This is of any suitable size for the purpose, and is preferably deeper in the middle than at its ends. This trench is formed, and the fuel may be arranged therein, before the main drum of the furnace is placed over it, and the labor of firing thus made lighter. The fuel being properly arranged the main drum B is placed in position and the fire started. Small lateral trenches may be formed from this one to the outside of the furnace to aid the draft, said small trenches to be closed when the fire gets sufficiently under way. The heat and smoke escape through the openings in the sides out among the tobacco, and act upon the same in the usual manner.

In some localities the tobacco produced is injured by the use of smoke in curing, and in such cases I attach a pipe to the top of the furnace, as before described, which carries the smoke outside of the building.

In large houses as many of these furnaces may be employed as seem necessary to properly do the work; but in such small ones as that shown one would be all that is necessary.

It will be understood, of course, that the fire may be built upon the top of the earth floor instead of in the trench, when desired, without departing from my invention.

I am aware that tobacco-driers have been heretofore constructed with inclosed top and openings around their sides. I am also aware that circular sheet-iron stoves have been heretofore made; but I am not aware that any furnace for curing tobacco of the construction herein described and claimed, or any stove adapted for this purpose, has heretofore been constructed.

10 Having thus fully described my said invention, what I claim as new, and desire to secure by Letters Patent, is—

15 A furnace for use in a tobacco-curing house, consisting of a cylindrical casing, B, having a conical inclosed top, B', said top being provided with means for connecting a smoke-pipe

thereto, when desired, and said casing being provided with a series of openings, B², in its sides near its bottom, which are covered with screens, and also provided with a door, B³, 20 rings b² b² being secured around the top and bottom of the interior of the casing, whereby said casing is strengthened and kept in perfect form, all substantially as set forth.

In witness whereof I have hereunto set my 25 hand and seal at Clarksville, Tennessee, this 6th day of October, 1884.

STEPHEN COLLINS. [L. S.]

In presence of—

WESLEY DRANE,
A. B. MAXEY.