(No Model.) 2 Sheets—Sheet 1.

W. F. COULTER.

FURNACE FOR CURING TOBACCO.

No. 301,864. Patented July 15, 1884.

Fig. 1.

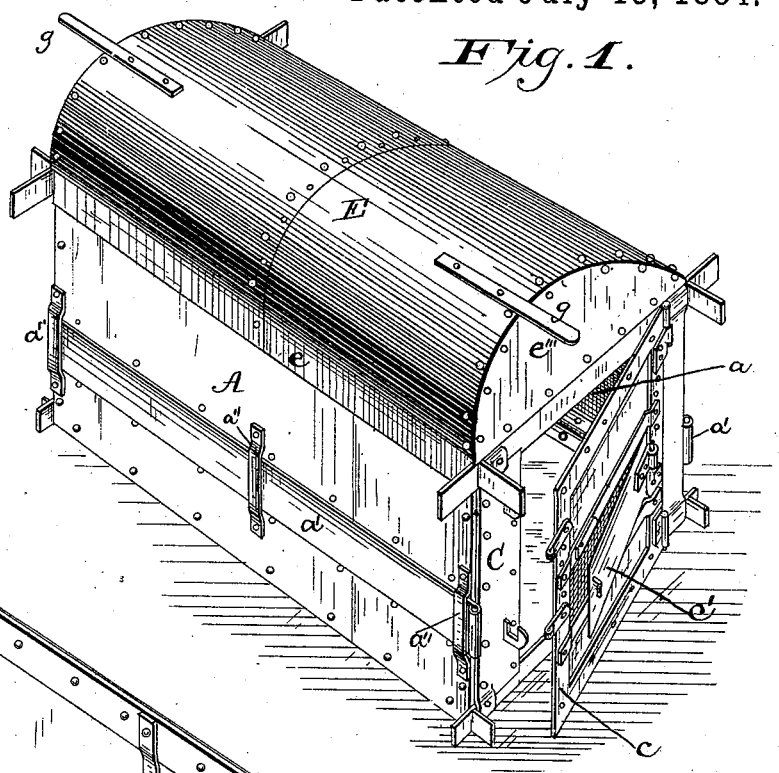
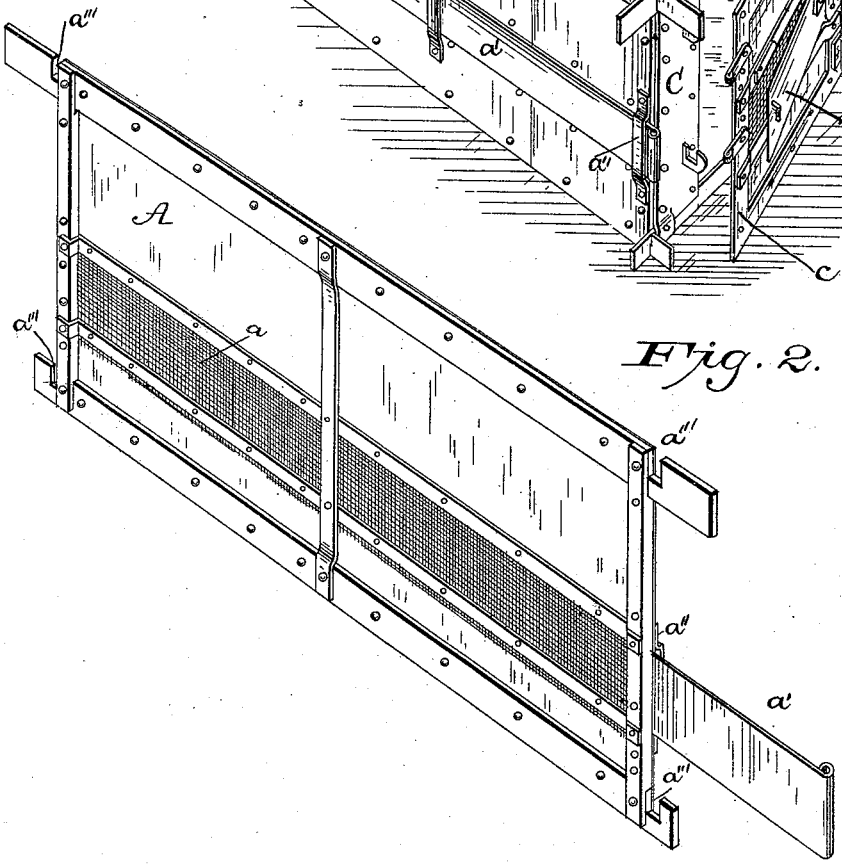


Fig. 2.



Witnesses:
F. Dumham.
C. L. Benjamin.

Inventor:
Wm. F. Coulter
By Chas. F. Benjamin
Att'y.

(No Model.) 2 Sheets—Sheet 2.

W. F. COULTER.

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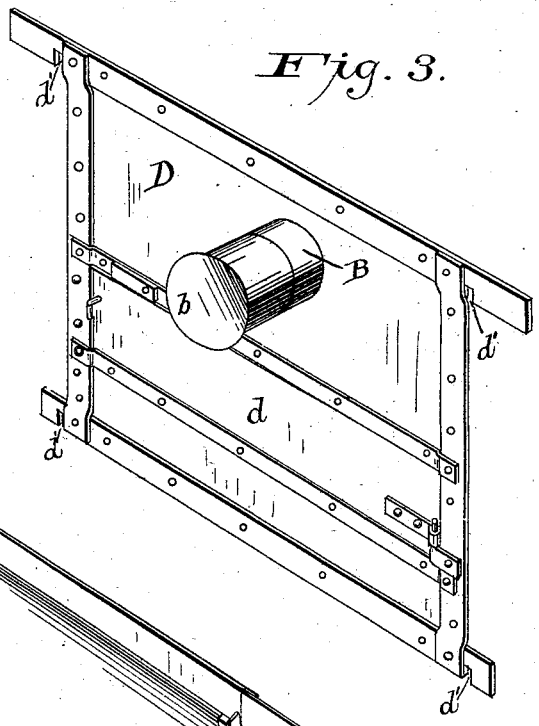
Fig. 3.



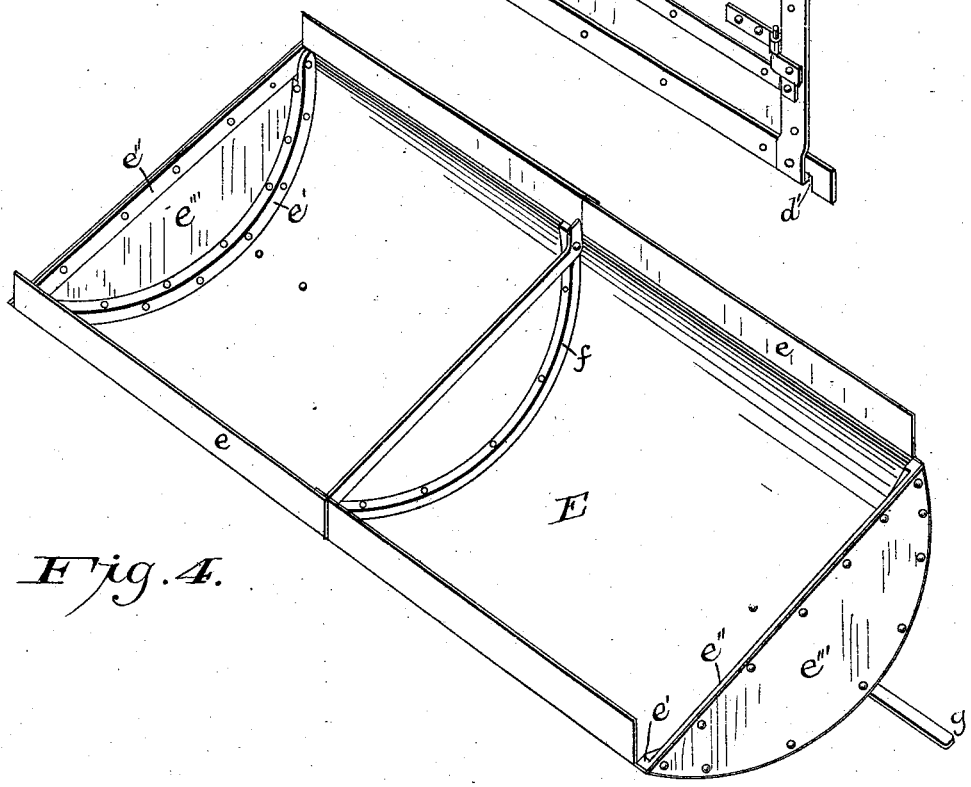


Fig. 4.

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UNITED STATES PATENT OFFICE.

WILLIAM FLEMING COULTER, OF CLARKSVILLE, TENNESSEE.

FURNACE FOR CURING TOBACCO.

SPECIFICATION forming part of Letters Patent No. 301,864, dated July 15, 1884.

Application filed December 5, 1883. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM F. COULTER, a citizen of the United States, residing at Clarksville, in the county of Montgomery and State of Tennessee, have invented certain new and useful Improvements in Furnaces for Curing Tobacco; and I do declare the following to be a full, clear, and exact description of the invention, such as 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 the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to devices for the curing of tobacco; and its objects are, first, to provide a simple and portable apparatus for the curing of tobacco by heat or smoke; secondly, to enable the curing to be effected by heat without smoke, when desired; and, thirdly, to protect drying-houses and the tobacco to be cured from injury by flames or sparks.

In the device to be hereinafter described the curing-fire is confined in a portable iron box-furnace, with suitable arrangements for draft and for the escape of smoke either into or outside of the drying-house.

This furnace, when in use, is to be erected upon the earthen or brick floor of an ordinary tobacco-barn or drying-house.

In the accompanying drawings, Figure 1 is a perspective of the furnace erected, taken from the direction of one of the front corners; Fig. 2, an interior perspective of one of the side walls of the furnace, with the slide partly closed; Fig. 3, an exterior perspective of the rear wall of the furnace, and Fig. 4 an interior perspective of the top of the furnace.

Like letters refer to like parts throughout the series of drawings.

A A are furnace side walls, consisting each of a frame of bar-iron filled in with sheet-iron. A wire-cloth panel, *a*, occupies the full length and about one-fourth of the width of the wall, to permit the escape of smoke into the drying-house to assist in the curing of such kinds of tobacco (as those of Tennessee and Lower Kentucky) as need the aid of smoke in curing; but when heat alone is needed (as in the case of tobacco of Upper Kentucky, Ohio, Missouri, Virginia, and Pennsylvania,) the slide *a'* is closed upon the wire-cloth panel and held in place by the guides *a''*. In that case the smoke is carried outside the drying-house by means of an ordinary pipe fitting upon the collar B, from which the cap *b* is removed, said cap being closely fitted upon the said collar whensoever the tobacco is to be smoke-cured. In the front wall, C, and the rear wall, D, the slides *a'* are replaced by swinging doors *c' d*, which differ only from the slides in the just indicated manner of opening and closing them. In the front wall, C, the wire-cloth panel is inserted, not in the wall directly, but in a large swinging door, *c*, which gives access to the interior of the furnace through a square aperture cut in the wall. Vertical slots *a'''* are cut downwardly in the top and bottom frame-bars of the walls A A, and similar slots, *d'*, are cut upwardly in the corresponding frame-bars of the end walls, C and D, and these slots, fitting one into another, enable the four walls to be dovetailed together, so as to form a level rim about the furnace, on which the oval top E may closely rest. The oval top or cover E consists of sheet metal, with flaps *e e* to close against the upper edges of the side walls of the furnace. At either end is a bow-shaped rib, *e'*, with a stringer, *e''*, attached at the outer side of the bow. The sheet-metal top is riveted to the upper surface of the bow, and a fan-piece of sheet metal, *e'''*, is riveted to the sides of the bow and stringer, thus closing in the end of the cover. The stringer of the center rib, *f*, is bent downward at both ends, so that the stringer may fit against the interior surfaces of the upper edges of the side walls of the furnace to aid in keeping the top or cover in place when fitted. Handles *g g* are attached to the cover, whereby to lift it conveniently.

The fire is kindled upon the dirt floor of the drying-house, or in a grate or pan set inside the furnace.

When not in use, the furnace may be taken apart and stowed away in a knockdown condition.

Having thus described my invention, what I claim to be new and useful, and desire to secure by Letters Patent, is the following:

A furnace for curing tobacco, consisting in

the combination of the walls A, having the panels *a*, slides *a'*, and guides *a''*, the wall C, having the doors *c* and *c'*, the wall D, having the door *d*, the cover E, having the flaps *e*, ribs *e'*, stringers *e''*, fan-pieces *e'''*, mid-rib *f*, and handles *g*, the slots *a'''* and *d'*, and the collar B, having the cap *b*, all substantially as herein described, and for the purposes set forth.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM FLEMING COULTER.

Witnesses:
R. D. MOSELY,
W. H. WRIGHT.