

(No Model.)

J. W. HOLADAY.
FURNACE.

No. 535,137.

Patented Mar. 5, 1895.

Fig. 1.

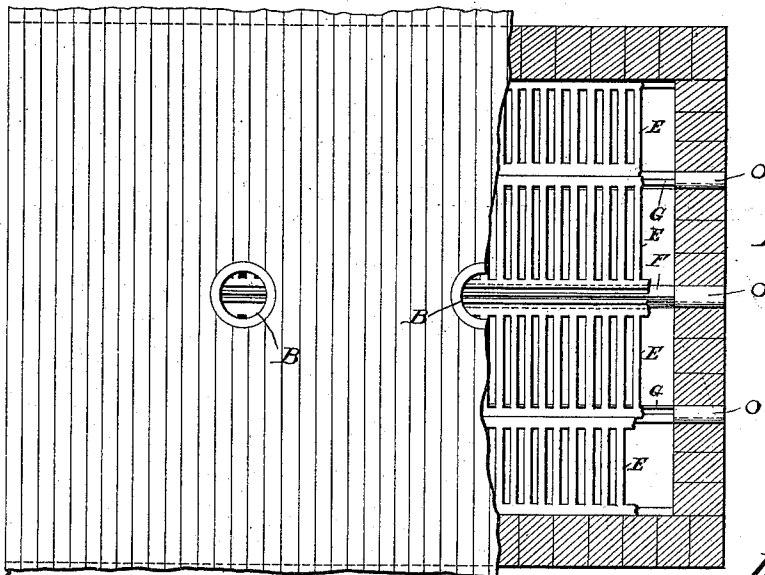
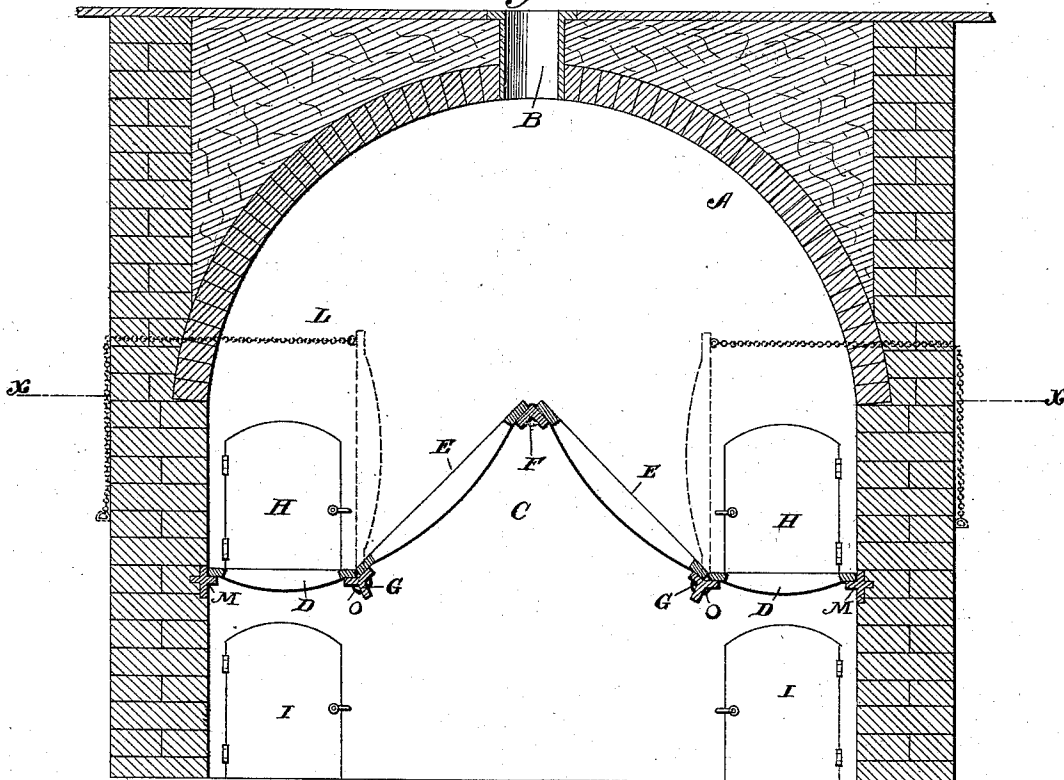


Fig. 2.

Attest.

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UNITED STATES PATENT OFFICE.

JOHN W. HOLADAY, OF RIDGWAY, PENNSYLVANIA.

FURNACE.

SPECIFICATION forming part of Letters Patent No. 535,137, dated March 5, 1895.

Application filed October 29, 1894. Serial No. 527,102. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. HOLADAY, a citizen of the United States, residing at Ridgway, in the county of Elk and State of Pennsylvania, have invented certain new and useful Improvements in Furnaces; 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.

My invention consists in the following construction and combination of furnace peculiarly adapted for the purpose of burning spent tan bark, the details of which will be first fully described and the features of novelty contained therein then set forth in the claim.

In the drawings: Figure 1 represents a transverse section of furnace to which I have applied my improvements, and Fig. 2 a top plan view thereof the upper portion being broken away.

A represents preferably masonry work forming the walls and arch of my improved furnace. It is so arranged that the floor level is disposed across the top of furnace, with one or more feed holes made vertically through the apex of the arch down into furnace below. The masonry work of the side walls extends preferably up to the floor level, while the space within the brick arch has preferably an earth or other filling.

M represents angle-irons let into the side walls of the furnace for the purpose of supporting the outer edges of the horizontal grates D.

G are two angle-iron bars parallel and on the same level with bars M and adapted to support the inner edges of grates D and the outer edges of grates E.

F is a centrally arranged supporting angle-

iron parallel with the others, before referred to, and located centrally of and above the other angle-irons. It supports the inner ends of the inclined grate bars E at their apex, the lower ends of said grate bars being supported by bars G, and also abut against the inner sides of the grates D.

The angle-bars F and G may be adapted to be reversed or turned upon the pivots O, whereby additional bearing surfaces may be presented, or the tendency of the bars to warp may be corrected. The upper bar F is preferably of L-form in cross section, and has two bearing surfaces, while the bars G have preferably triangular radial webs which provide three bearing surfaces.

If desired the chains L, or other equivalent means, permit the inclined grates E to be swung back and upward in order to provide ingress for the workmen for making repairs and the like.

H are the furnace doors opposite the grates D, and I the ash pit doors.

I claim—

The combination of a furnace provided with feed-openings and doors, horizontal grate sections arranged next to opposite side walls, inclined grate sections resting against the horizontal sections and extending inwardly and upwardly to an apex, pivotal angle-bars supporting the contacting edges or sides of the inclined and horizontal grates, and a pivoted angle-bar supporting the inclined grates at their apex.

In testimony whereof I have hereunto subscribed my name in the presence of two witnesses.

JOHN W. HOLADAY.

Witnesses:

JNO. G. WHITMORE,
FRANK. E. BIBLE.