

(No Model.)

J. S. LESTER.

DRIER.

No. 322,302.

Patented July 14, 1885.

Fig. 1.

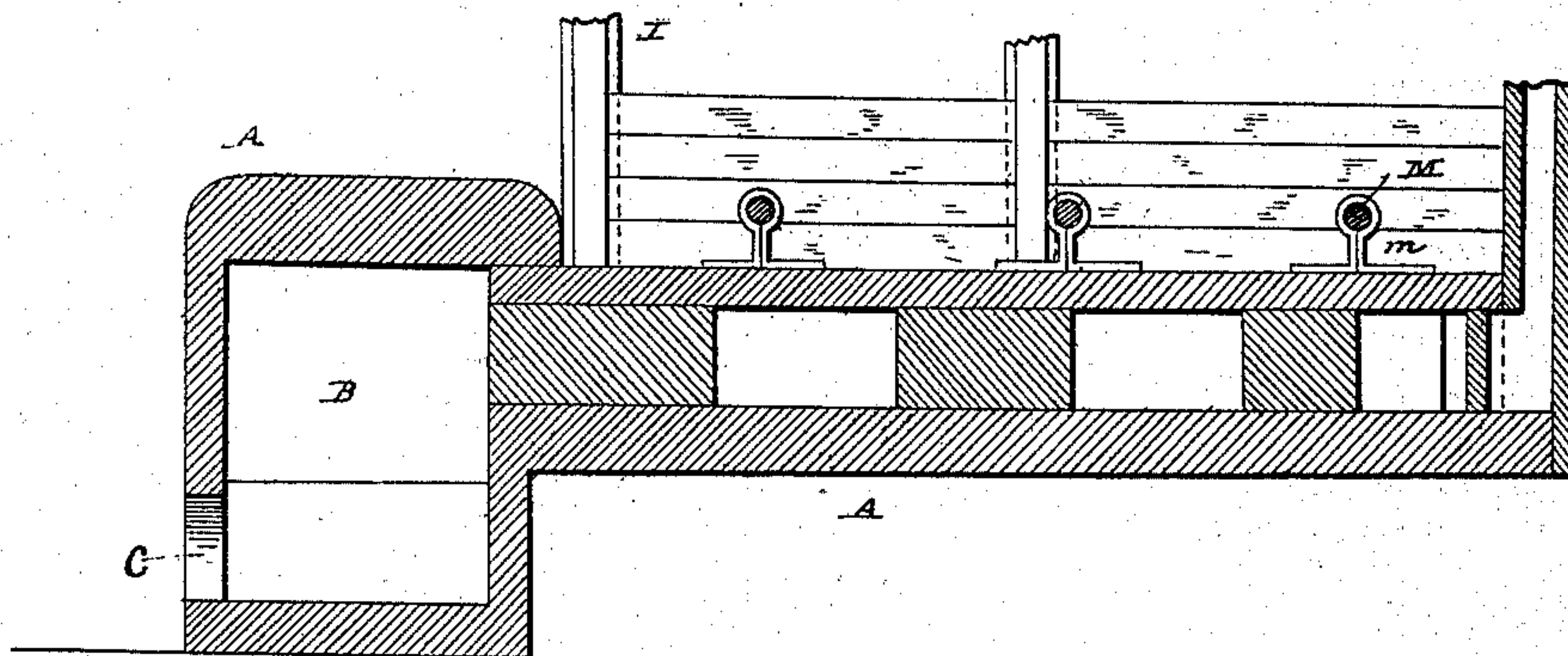


Fig. 2.

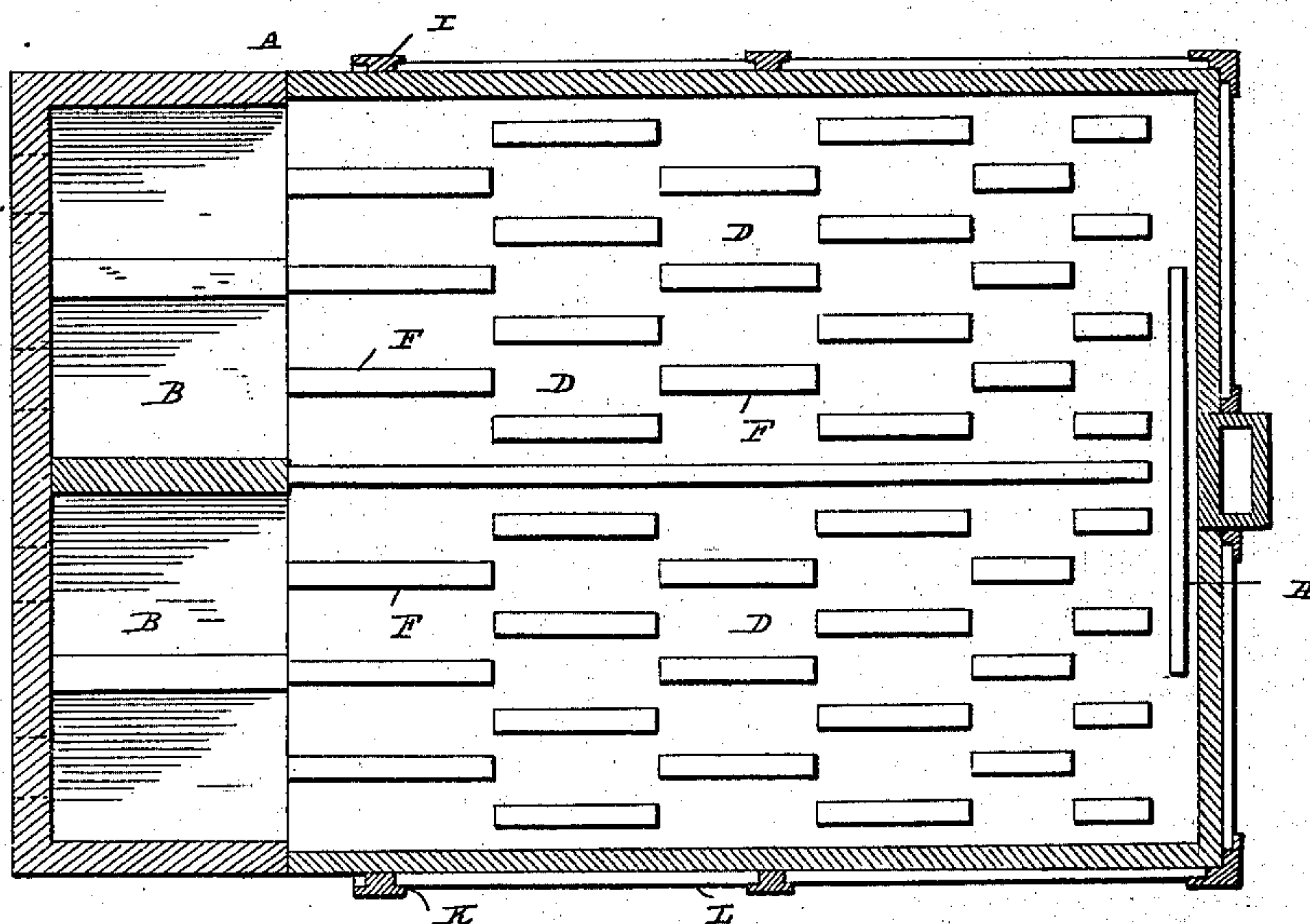
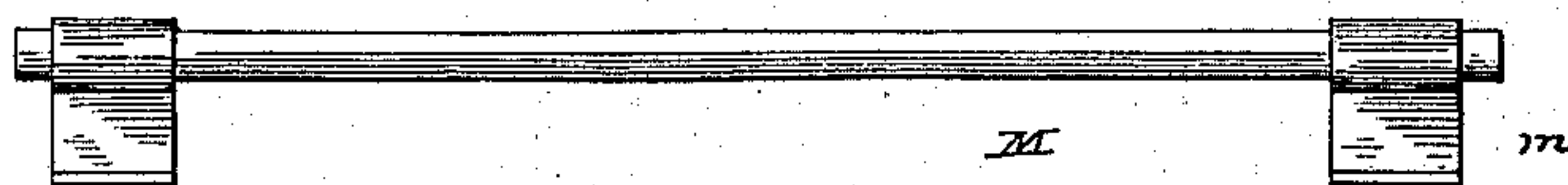


Fig. 3.



WITNESSES

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JAMES S. LESTER, OF ATLANTA, GEORGIA, ASSIGNOR OF ONE-THIRD TO
JAMES F. NUTTING, OF SAME PLACE.

DRIER.

SPECIFICATION forming part of Letters Patent No. 322,302, dated July 14, 1885.

Application filed February 24, 1885. (No model.)

To all whom it may concern:

Be it known that I, JAMES S. LESTER, a citizen of the United States, residing at Atlanta, in the county of Fulton and State of Georgia, have invented certain new and useful Improvements in Dry-Houses, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain improvements in dry-houses for various purposes, such as drying or evaporating the moisture from green or fresh-made brick, tiling, sewer-pipe, and other articles of pottery-ware, to prepare the same for subsequent "firing" or burning in the kiln, or for drying or seasoning lumber. These objects I attain by the means illustrated in the accompanying drawings, in which—

Figure 1 represents a vertical sectional view of a dry-house constructed according to my invention; Fig. 2, a horizontal sectional view of the same; and Fig. 3, a detached view in side elevation, showing one of the supports for the material to be dried.

The letter A indicates the walls of the dry-house, which is constructed of masonry, brick-work, or other suitable material. At the forward or front end of said dry-house one or more combustion chambers or furnaces, B, are located, which are provided with draft-openings C, for the admission of air necessary to support the combustion of the fuel to be burned therein. From the said combustion chambers or furnaces, at a level above the draft-openings, extend the flues D, formed between the floor or lower wall and the top or upper wall of the dry-house. These flues are provided with longitudinal partitions, F, which diminish in length as they approach the rear or vicinity of the smoke-stack, as shown in the drawings. These partitions are not successively connected, but interrupt each other alternately, as shown in Fig. 2 of the drawings, so as to give the products of combustion a tortuous course through the flues, and equalize the heat throughout by giving a rapid passage to the same when escaping

from the combustion-chambers and gradually decreasing the rapidity of the passage toward the rear of the dry-house, as will be readily seen. At the rear of the flues, and just in front of the exit to the smoke-stack, is a transverse partition, H, which divides the outgoing products and conducts the same uniformly to the smoke-stack.

At each side of the structure are arranged the vertical posts I, having ways K, in which are adapted the adjustable side walls, L, which may consist of metallic or other suitable plates. These serve to form the drying-chamber above the top of the structure for the reception of the material to be dried.

The letter M indicates a series of adjustable supports for the material to be dried. These consist of the vertical standards *m*, which are adapted to set upon the top of the structure, and which may be moved from place to place thereon, and the transverse bars *n* supported by said standards.

It will be seen from the above description that the heat imparted to the articles to be dried will be uniform from the front to the rear of the structure, owing to the gradually-retarded passage of the escaping products of combustion, thus securing uniformity in the drying of said articles, while by reason of the adjustable walls of the superstructure and supports the house may be adapted to a variety of drying purposes.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

A dry-house having flues provided with longitudinal partitions of gradually-diminishing length, and placed alternately in the said flue, substantially as and for the purpose specified.

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

JAMES S. LESTER.

Witnesses:

GEO. A. GERSHON,
RALPH ROSENBAUM.