

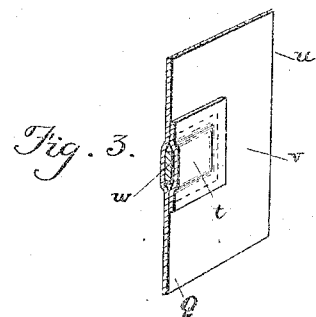
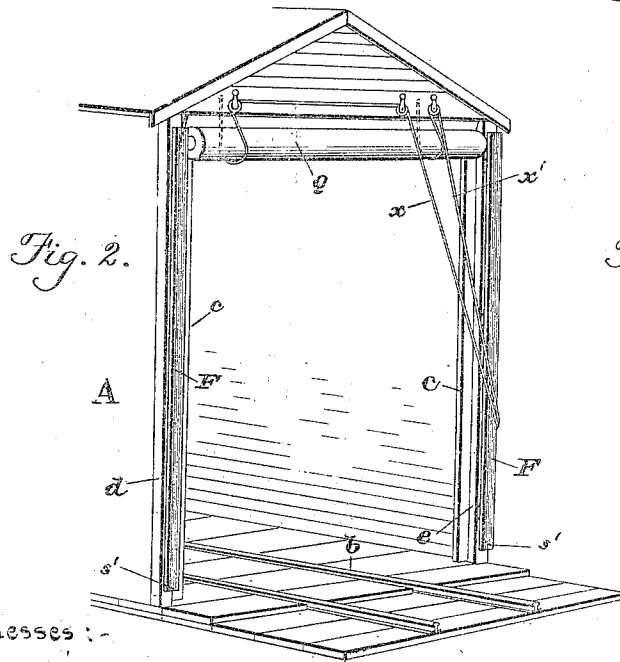
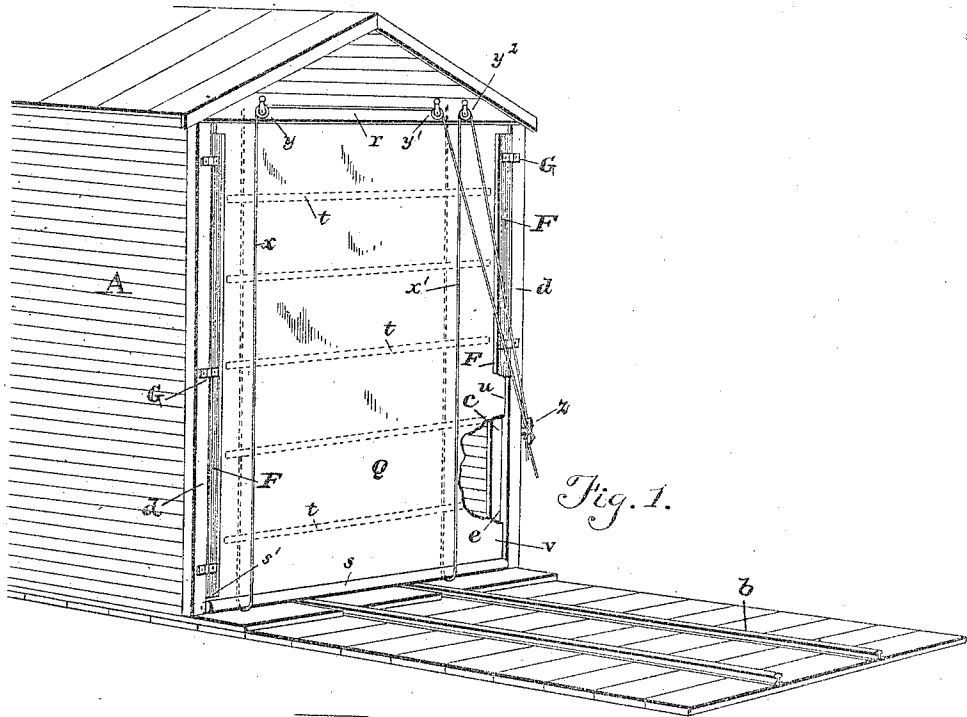
No. 626,475.

Patented June 6, 1899.

R. B. ANDREWS.
DOOR OR CLOSURE FOR DRY KILNS.

(Application filed Dec. 29, 1897.)

(No Model.)



Witnesses :-

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UNITED STATES PATENT OFFICE.

RODERICK B. ANDREWS, OF BALTIMORE, MARYLAND.

DOOR OR CLOSURE FOR DRY-KILNS.

SPECIFICATION forming part of Letters Patent No. 623,475, dated June 6, 1899.

Application filed December 29, 1897. Serial No. 664,213. (No model.)

To all whom it may concern:

Be it known that I, RODERICK B. ANDREWS, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Doors or Closures for Dry-Kilns, of which the following is a specification.

This invention relates to an improved door or closure for dry-kilns.

The object of the invention is to provide a dry-kiln with a flexible door of improved construction that will open by raising from the bottom.

Heretofore dry-kilns have had wooden doors that opened by raising or sliding in guides. These doors are usually very heavy, and from differences of temperature and humidity often become warped and stick fast in their guides and require several men to raise them. In consequence of shrinkage and warping they also open their seams and do not fit tight at the top, allowing the escape of heat, and, besides, require ropes, pulleys, weights, and complicated adjustment that make them expensive and troublesome to handle. My improvement overcomes all these objections and provides a closure that is effective, simple, durable, easily handled, and inexpensive to construct.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective end view of a dry-kiln, showing my improved door in the closed position. Fig. 2 is a perspective end view showing the door raised. Fig. 3 is a small portion of the door in section.

The door may be applied to a dry-kiln of any form or preferred construction. The form of dry-kiln shown in the drawings is that of an ordinary wooden house A, into one end of which are track-rails *b* for trucks to run on carrying piled lumber. A vertical jamb-strip *c* is at each side of the entrance. This jamb-strip sets inward from a vertical facing-strip *d*, and therewith forms a rabbet *e*.

The door *Q* is made of canvas or any suitable flexible material, and is in the fashion of a "drop-curtain," secured by its upper end to the end of the dry-kiln house or over the entrance. The top of this canvas may be secured under the horizontal bar *r* over the entrance. The bottom of the canvas door has a

pocket or hem *s* all the way across, containing a bar or roller. The ends of this bar extend to the vertical edges of the canvas door. A series of horizontal pockets *t* are formed on the canvas door. These pockets, however, do not extend the entire width of the canvas, but stop short of its vertical edges *u*. A vertical margin *v* is thus left at each edge, said margin extending the entire height of the canvas door up and down past the ends of all the pockets *t*. A thin bar *w* is placed in each of said pockets (see Fig. 3) to stiffen the canvas door in the crosswise direction, but allow it to remain flexible in the vertical direction and capable of rolling up, as shown in Fig. 2.

When the canvas or flexible door is closed, each vertical marginal edge *v* is clamped by a movable pressure-strip *F*, which when closed takes position in the rabbet *e* and presses the said canvas edge against the jamb-strip *c*, and thereby makes a tight joint. These vertical pressure-strips may be held in place against the marginal canvas edges in any preferred way. One way is to attach them by suitable hinges *G*, so as to permit them to swing open or closed, and when closed to hold them closed. The hinges may be spring-hinges of any well-known type that will create a closing pressure on the strip *F* sufficient to hold it closed.

The canvas door is opened by raising from the bottom to the top. In the present instance this is done by means of cords. Two cords *x x'* have one of their ends attached to the cross-bar *r* on the inner side of the entrance, then extend down and under the roller-bar in the bottom hem *s*, and then upward on the outer side of the canvas door to pulleys *y, y'*, and *y''*, respectively, secured over the entrance. The two cords *x x'* extend from the said pulleys downward, and the ends of the cords may be fastened to a suitable device *z*. It will now be seen that when the canvas door *Q* is raised, as in Fig. 2, the two hinged strips *F* will be open. When the canvas door is lowered, its vertical margins *v* will be in contact with the jamb-strips *c* in the rabbet *e*. The hinged strips *F* will then be closed against said canvas margins *v* and press them against the jamb-strips, and thereby make close joints. At the same time the roller-bar in the bottom hem *s* will lie close to the floor on the track-

rails, and as the lower end *s'* of the hinged strips *F* do not extend fully down to the floor they will take over or above the ends of the roller-bar and thereby hold it down close to the floor. Thus the canvas door *Q* serves to tightly close the entrance to the dry-kiln.

The peculiar construction here shown for opening the canvas door by raising from the bottom may be changed or modified. It is not essential that it roll up by a roller placed at the bottom.

The material for the door may be made tight—i. e., waterproof and steam-proof—by oiling, painting, or other known process.

If a truck in a dry-kiln standing on the inclined track should start forward and push against this canvas door, the same would yield, the truck would run out, and the canvas door would swing up and allow the lumber-truck to pass and no damage to the door would ensue, as sometimes happens in the use of wooden and other rigid doors for driers.

Having thus described my invention, what I claim is—

1. A closure for the entrance to dry-kilns, having in combination an outer vertical facing-strip, *d*, at each side of the entrance; a vertical jamb-strip, *c*, also at each side, said jamb-strip and facing-strip together forming a rabbet extending to the floor of the kiln; a flexible curtain secured at the top of the entrance and the suspended end of the curtain carrying a roller, the marginal edge of the curtain and the end of the roller having po-

sition in the rabbet; and a vertical pressure-strip, *F*, hinged to each facing-strip and adapted to swing around and press the margin of the curtain against the jamb-strip and its outer surface becoming flush with the surface of the facing-strip, the lower end, *s'*, of said pressure-strip being shorter than said rabbet and leaving a space between it and the floor whereby the said lower end of the pressure-strip takes over the roller on the curtain and prevents said roller from being drawn up, as set forth.

2. The combination in a dry-kiln entrance, of a facing-strip at each side of the entrance; a jamb-strip forming with the facing-strip a rabbet; a canvas or flexible door which raises and lowers with its vertical marginal edges moving in said rabbet, and said door provided with horizontal cross-pockets, *t*, whose length is less than the width of the canvas door—thereby forming a vertical margin, *v*, extending past the ends of all the pockets the entire height of the door; a cross-bar, *w*, in each of said cross-pockets; and vertical pressure-strips which, when the canvas door is closed, have position in the rabbet and clamp the said vertical margins, *v*, without clamping the said cross-bars, as set forth.

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

RODERICK B. ANDREWS.

Witnesses:

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