A. WOLF. HOP DRYING BOX.

(Application filed Oct. 18, 1900.)

(No Model.) WITNESSES: INVENTOR ATTORNEYS

UNITED STATES PATENT OFFICE.

ADOLF WOLF, OF SILVERTON, OREGON.

HOP-DRYING BOX.

SPECIFICATION forming part of Letters Patent No. 667,478, dated February 5, 1901.

Application filed October 18, 1900. Serial No. 33,485. (No model.)

To all whom it may concern:

Be it known that I, ADOLF WOLF, a citizen of the United States, and a resident of Silverton, in the county of Marion and State of Oregon, have invented a new and Improved Hop-Drying Box, of which the following is a full,

clear, and exact description.

My invention relates to boxes for holding loose material, such as hops, in the process of drying the same, and has for its object to provide a construction which permits the box to be readily turned upside down without discharging the contents thereof and while leaving the top open for a thorough evaporation and escape of steam. For this purpose I provide the box with a removable top and a removable bottom, constructed and secured in a novel manner, as will be fully described hereinafter, and particularly pointed out in the appended claim.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in both the figures.

Figure 1 is a perspective view of a drying-box constructed according to my invention with the top raised off the body, and Fig. 2 is a cross-sectional elevation on line 2 2 of Fig. 1.

The improved drying-box has the shape of a rectangular prism, and comprises a skeleton frame for each of its walls. The frame comprises horizontal top and bottom bars A for the sides, upright end bars A', a central bar A², diagonal braces A³, extending from

bar A², diagonal braces A³, extending from the top bar A to the end bars A', and longitudinal seating-bars A⁴, secured to the bars A upon the inside thereof and at a distance from the top or bottom surfaces of said bars.

It will be seen by reference to Fig. 2 that the upright end or corner bars A' are about twice as thick as the other frame-bars. The seating-bars A' might be formed integral with the bars A. The ends of the frame comprise

45 top and bottom bars B set on the corner-bars A' and provided with seating strips or bars B', which may be integral with the bars B, and with diagonal braces B², connecting said bars B. The parts so far described are rigidly connected and form a rectangular box-

body, open at the bottom and at the top.
The top and bottom are constructed alike,

and each of them consists of a rectangular skeleton frame having side bars C and end bars C', these being adapted to fit between 55 the bars A B and to become seated on the bars or strips A⁴B', so that the outer surfaces of the top or bottom will be substantially flush with those of the box-body.

The top and bottom are provided with a 60 longitudinal central bar C², and a ventilating-covering D of sackcloth or other open-meshed or pervious material is secured to the top and bottom frame upon the outside, and passes in contact with the inner face of the central 65 bar C², so that said ventilating covering forms two inclined inwardly-converging portions, thus increasing the surface. A similar ventilating-covering D' is placed around the boxbody.

To removably secure the top and bottom to the box-body, I provide the side bars C of the top and bottom and the side bars A of the box-body with apertures C³ and A⁵, respectively, adapted to register and to receive slid-75 able connecting-pins E. To render the outer ends of these pins readily accessible, I prefer to provide the bars A with recesses A⁶.

In operation the box, closed at the bottom and open at the top, is filled with the material 80 to be dried, as hops, and is then placed (open at the top) in the drying-kiln. The heat will drive out the moisture, which escapes as steam or vapor partly through the covering D', but mostly through the open top of the box. The 85 heating medium has good access to the hops or other material through the ventilating-coverings D and D'. After the drying has progressed for a certain time the top is put on the open box-body, and the pins E are inserted 90 in the apertures A⁵ and C³ to securely connect the top with the box-body. Then the box (which is now closed) is turned upside down, and the bottom (which is now at the top) is removed after withdrawing the pins E, 95 which hold it to the box-body. The box is therefore again open at the top, and evaporation and drying are now continued, the heating agent passing through the material in the opposite direction to that during the first 100 stage, so that a quick and thorough drying is obtained. I find that by the use of the abovedescribed improved box in the manner set forth I can effect a saving of one-third of the

time required for drying hops according to the ordinary procedure. My invention therefore accomplishes a saving of time, labor, fuel, and money.

Various modifications may be made without departing from the nature of my inven-

tion as defined in the claim.

Having thus described my invention, I claim as new and desire to secure by Letters to Patent—

A drier-box comprising a reversible body open at the top and at the bottom and having ventilated sides and ends, a ventilated top and bottom adapted for separable attach-

ment to said body, the top as well as the bottom comprising a skeleton frame with a central bar, and an apertured covering secured on the outside of the frame and passing on the inside of said central bars to form inwardly-converging inclined surfaces.

In testimony whereof I have signed my name to this specification in the presence of

two subscribing witnesses.

ADOLF WOLF.

Witnesses:
Louis J. Adams,
Maurice Van Valkenburg.