

United States Patent Office.

BENONI S. BROWN, OF CHICAGO, ILLINOIS.

Letters Patent No. 100,114, dated February 22, 1870.

IMPROVED CLOTHES-DRIER.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, BENONI S. BROWN, of Chicago, in the county of Cook, and State of Illinois, have invented a new and improved Clothes-Drier; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to which my invention appertains to make and use the same, reference being had to the accompanying drawings forming part of this specification, in which—

A A are the two standards or sides of the machine.

B is the bottom or floor.

C is the roof or covering.

D D, the pulleys on the inside end of a corresponding horizontal shaft. The upper part of the standards inside are also fitted with similar pulleys, revolving upon pins or fixed journals.

Around the aforesaid corresponding pulleys are fixed continuous ropes or belts, E E, to which are attached horizontal light rods or bars, F, at proper distances, so attached as to revolve or remain fixed, as desired, and the whole is so constructed that the aforesaid belts, when thus connected by the bars, make a continuous travel or movable apron that can be raised or lowered upon either side at pleasure, when in use. To the aforesaid shaft is attached a hand-crank with which to rotate the apron, if found more convenient at any time than by pulling upon the slats or belts direct.

The mode of its operation is to hang the articles to be dried upon the aforesaid bars, and when one is filled, to pass it up or down out of the way and fill the next, and so on until all the bars are hung full, or any less amount desired, and garments or other articles being thus hung up and down on the aforesaid bars, and the whole being inclosed tightly, and the door G being closed, it becomes, from its vertical height, a kind of flue in principle, with a draught like a chimney, and the apertures or holes H H H H in the bottom of the door admit the air from below, which, passing upward from rarification, carries the escaping moisture from the drying articles with it, and escapes at the open apertures at the top underneath the roof.

The plan and design of the whole device is to have it pretty tall whenever erected or used, in order to secure a good upward draught of air.

It can be constructed in connection with a house, when the same is built or afterward, in such case

being simply a tall space like a closet, reaching from a lower to an upper story, sufficiently high to afford the desired room and draught of air. Or it can be constructed independent of a building, as may be found desirable, and the traveling apron can be extended the whole or a part of the vertical length, as is found desirable.

If the articles dry faster in one portion of the device than another, their positions can be changed at pleasure, rotating the apron.

Such is the description and use of the device or invention, the object being to secure a compact and convenient inside drier for clothes or any other articles that it can advantageously be applied to, and at the same time protect them from dust, coal-soot, and the elements, and it also answers a double purpose, of airing as well as drying articles, the reliance for drying being mainly upon the draught created by such a vertical close enclosure, with inlets at or toward the bottom, and outlets at or toward the top. The draught also being capable of any desired increase, by the application of artificial heat, to accelerate the upward current of air.

Springs or weights can be applied to the revolving shaft, to keep the ropes or belts to a proper tension.

When the said flue is constructed in connection with brick or stone walls, it should be ceiled with boards or other non-conducting material, to avoid accumulation of dampness.

The principle of the device, to wit: hot or warm air ascending in vertical flues, is deemed especially applicable, under proper adaptations, to the drying and airing of grain, and may hereafter be made the subject of new claims for a patent.

What I claim as new, and wish to secure by Letters Patent as my invention, is as follows:

1. The combination of the upright flue and endless rack, substantially as described, for the purpose specified.

2. The arrangement of the upright flue or box A B C, with its endless rack E F, openings H, for the introduction of air, the adjustable cranks and pawl, and tightening spring, substantially as herein shown and described.

BENONI S. BROWN.

Witnesses:

D. I. POWERS,
JAS. I. PIMM.