W. H. CLARKSON.

Fruit-Driers.

No. 156,911. Patented Nov. 17, 1874.

FIG. I.

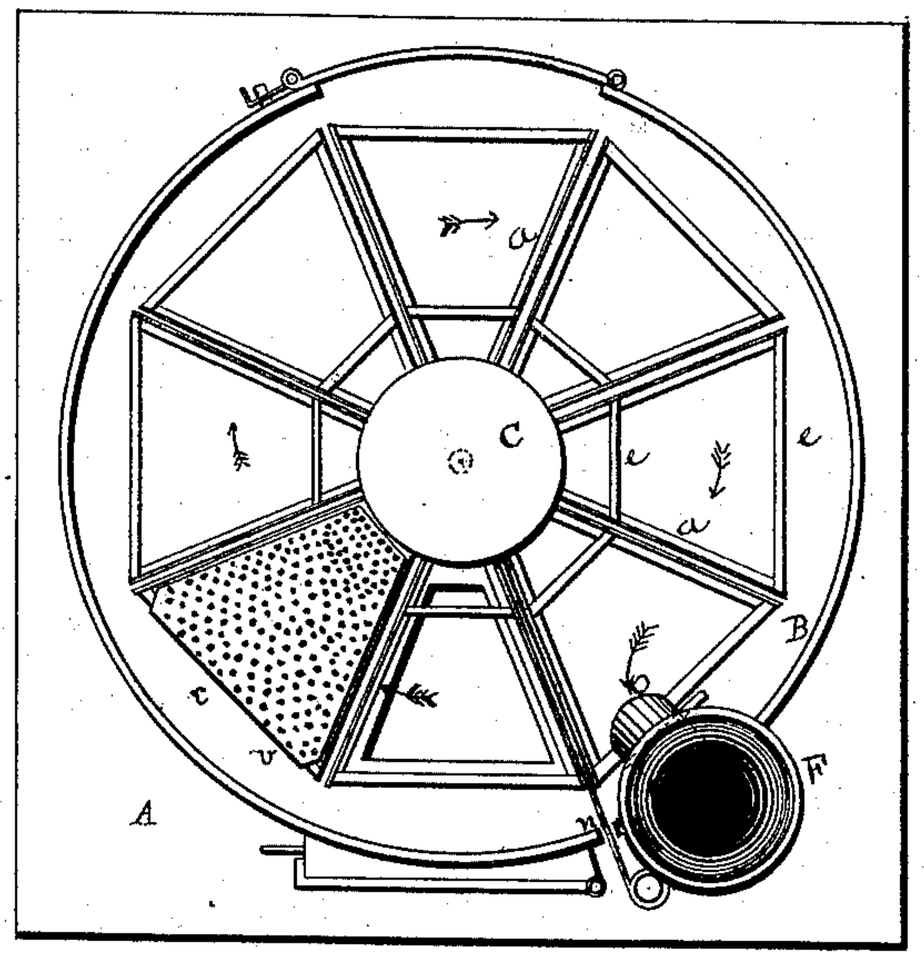


FIG. II.

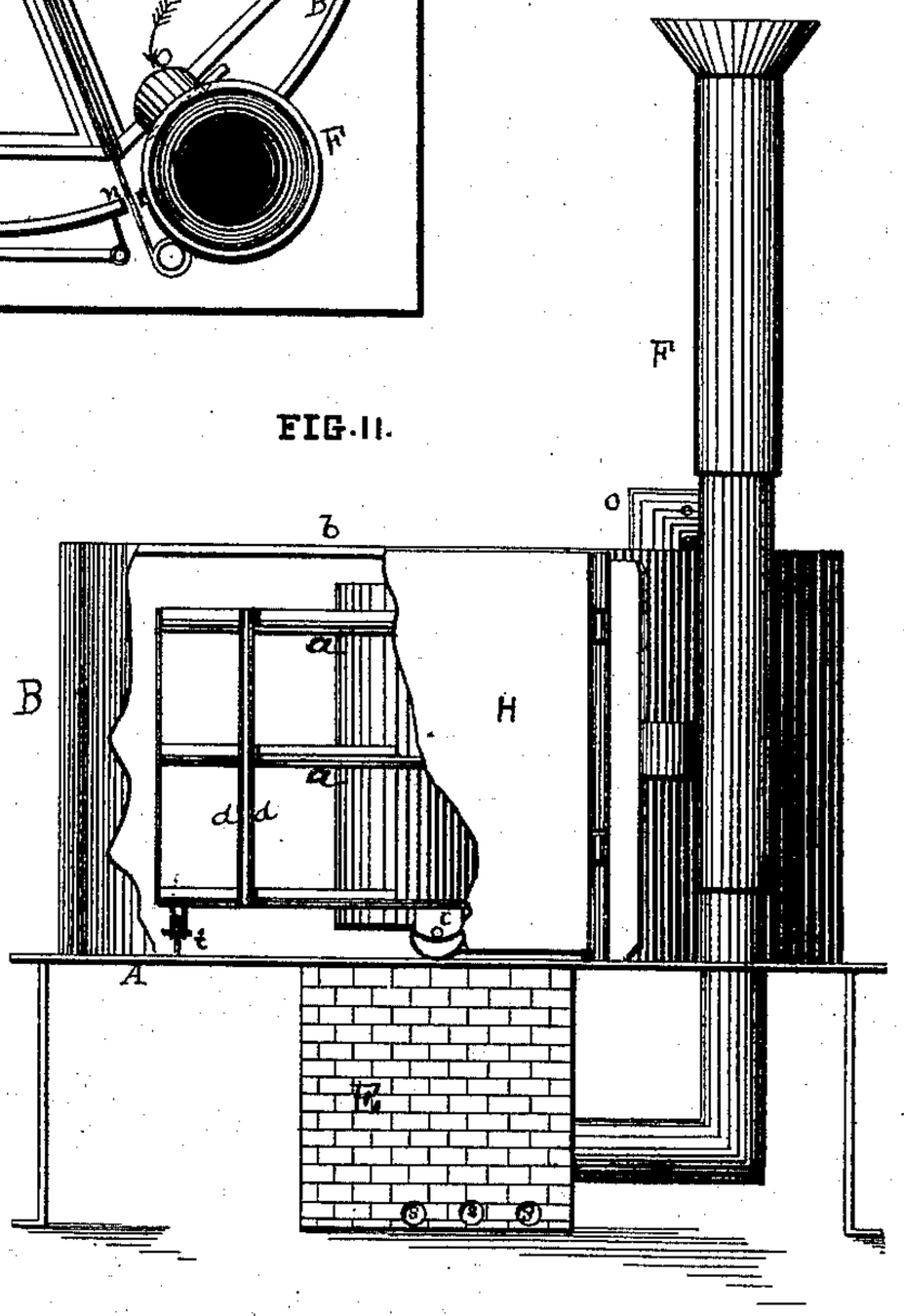
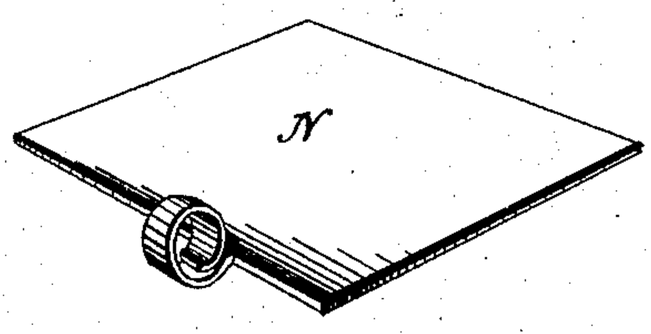


FIG. III.



WITNESSES.

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INVENTOR.

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UNITED STATES PATENT OFFICE.

WILLIAM H. CLARKSON, OF BRIDGEVILLE, DELAWARE.

IMPROVEMENT IN FRUIT-DRIERS.

Specification forming part of Letters Patent No. **156,911**, dated November 17, 1874; application filed September 16, 1874.

To all whom it may concern:

Be it known that I, WILLIAM H. CLARKSON, of Bridgeville, in the county of Sussex and State of Delaware, have invented a new and Improved Apparatus for Drying Fruits, &c.; and I hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a horizontal section. Fig. 2 is a side elevation, with the outer cylinder partially broken away; Fig. 3, a detail referred to.

The object of my invention is to secure a fruit-drying apparatus of cheap construction, and of complete and easy operation; and it consists in the combination and arrangement of the several parts hereinafter explained.

In order that those skilled in art may make and use my invention, I will proceed to describe the manner in which I have carried it out.

In the said drawings, A is a table, made of any suitable material, but preferably of sheet metal, on which rests a cylinder, B, having a closed top, *b*. Revolving on a pivot, centrally to the table A and cylinder B, is an internal drum, C. Radiating from this drum, from top to bottom, is a series of pairs of arms, *a a*, which have upright braces *d d* and cross-braces *e e*, thereby making the pairs of arms in a vertical line into one independent frame for shelves, and leaving a slight space between each independent frame. Along lower brace *e*, from point to point, are secured rollers or wheels *i i*, which support the outer edges of the frames, and run on the table A. Located beneath the table is a drum or box, E, which surrounds a stove, (not shown in the drawing,) and which opens through the table into the cylinder B. The stove has its draft through a pipe, F, which passes up on the outside of the cylinder B, and has an elbow, *o*, extending into the top of the cylinder.

Alongside of the door H is a narrow slot, *n*, from the top to the bottom of the cylinder, cut in its side or periphery, said slot being about the size of an end view of the space between the frames extending out from the drum C. A diaphragm, N, Fig. 3, slides through the slot *n* between the sets of shelves or frames, and retains the drum from rotating, and at the same time produces an effect in circulation more fully hereinafter described. Perforated shelves *r r* are provided to slide in upon the supports *e e* and arms *a a*, to hold the material to be dried. Around the lower edge of the drum E, surrounding the stove, are a number of openings, *s s s*, to allow the cold air to enter around the stove proper, so as to produce a draft through the cylinder B to the elbow *o*, in order to dry the fruit and carry off any moisture.

By the insertion of the diaphragm, Fig. 4, the heated air passes from the stove through the opening in the table into the cylinder B, and then has to make the entire circuit of the fruit-shelves in the cylinder before it reaches the opening in the stove-pipe elbow O to escape.

There may be one or more doors in the cylinder in order to remove and replace fruit upon the movable shelves, and as it is necessary to remove the fruit the drum and supports can be revolved until opposite any particular door, and the fruit removed.

It is evident that my invention is equally applicable to the drying of vegetables, meats, fish, and other articles.

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

The stationary cylinder B, having an air-tight top, *b*, and provided with the vertical slot *n*, in combination with the drum C, the arms *a a*, secured in position by the braces *e* and *d*, and resting on the friction-rollers *i i*, and the diaphragm N, all constructed and arranged substantially as and for the purpose set forth.

WILLIAM HENRY CLARKSON.

Witnesses:

F. M. CLARKSON,

IRA M. BROWN.