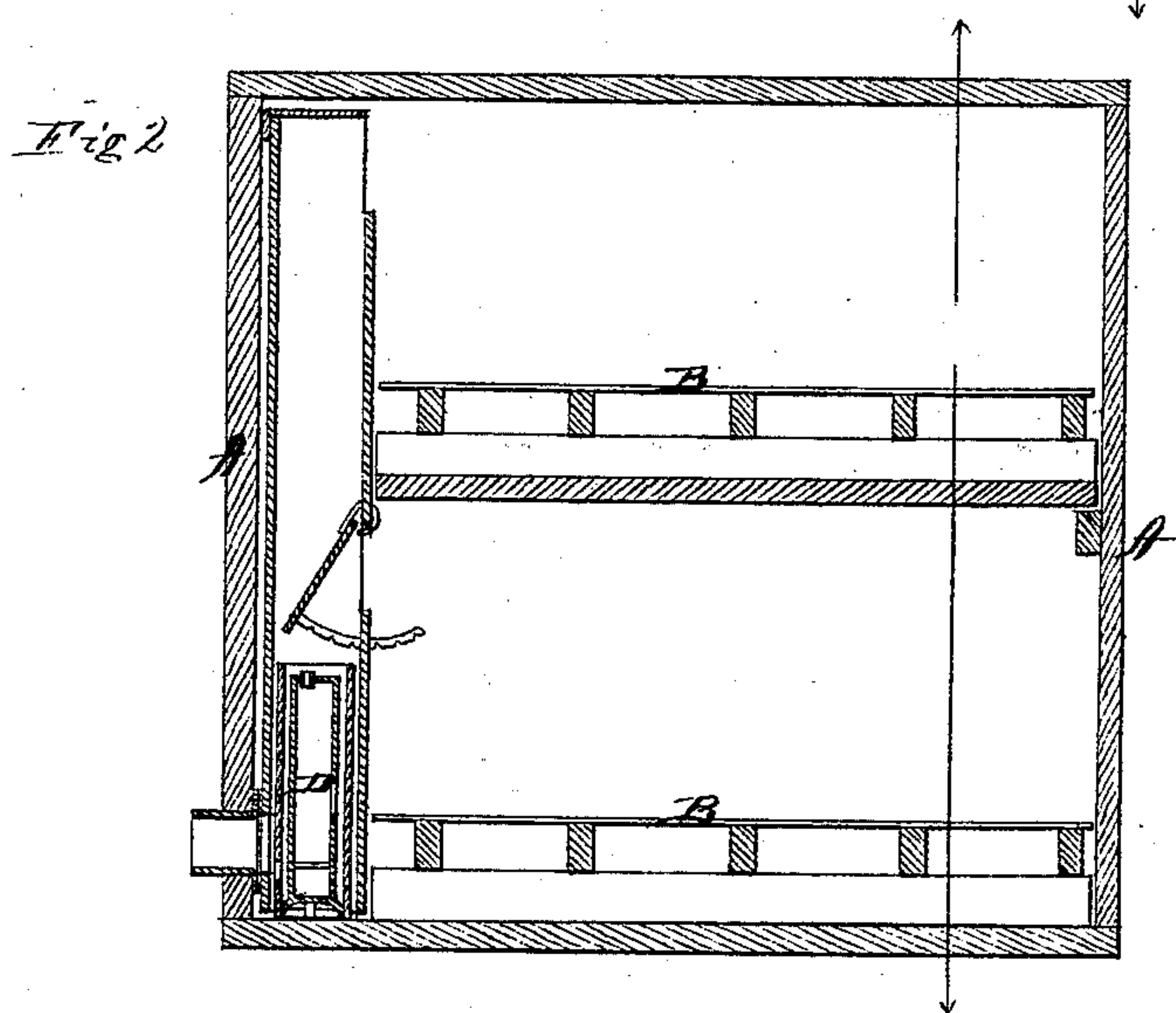
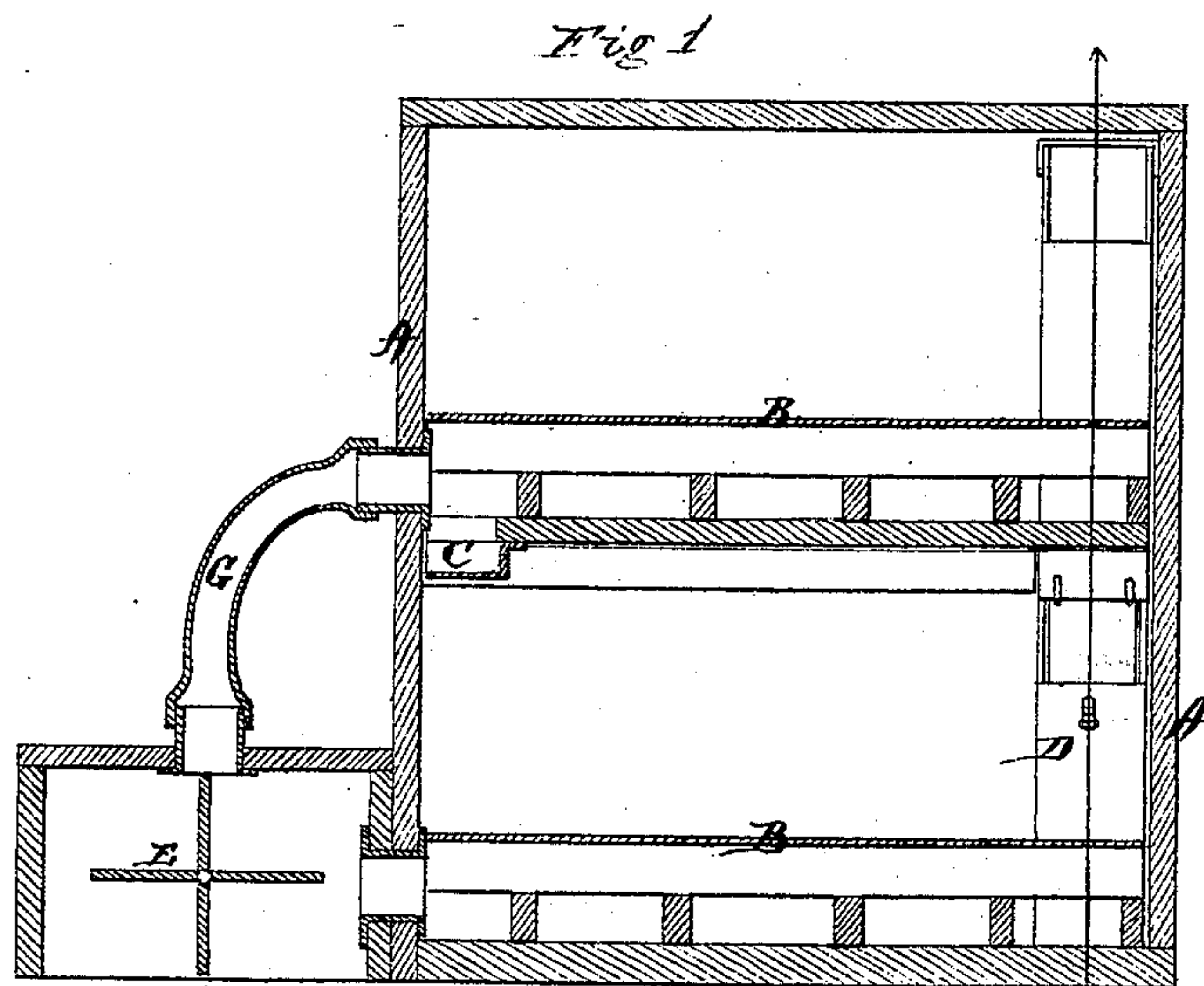


W. L. PHILLIPS.

Malt Drier.

No. 104,347.

Patented June 14, 1870.



Witnesses

Harry King
C. L. Sweet

Inventor

William L. Phillips.
per
Alexander Mason

Atty:

United States Patent Office.

WILLIAM L. PHILLIPS, OF NORMAL, ILLINOIS.

Letters Patent No. 104,347, dated June 14, 1870.

IMPROVEMENT IN MALT-DRIERS.

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, WILLIAM L. PHILLIPS, of Normal, in the county of McLean and in the State of Illinois, have invented certain new and useful Improvements in Malt-Drier; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a "kiln for drying malt," by the use of warm or heated air being forced downward through the malt, and drawn out of the kiln.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a longitudinal vertical section, and

Figure 2 is a transverse vertical section of the same.

A represents a malt-kiln, constructed in the usual way, with the perforated floors B B laid upon wooden or iron supports.

Beneath each floor that is used for drying, say, one foot from the bottom of the supports, I cell over, so as to make an air-chamber, tight on all sides and bottom.

From this chamber, let down into the room, is a box, C, for the reception of air from said chamber.

The dry-room is made tight, and air is let into the same through an air-warmer, D, of any description.

The heated air is discharged into the dry-room, and caused to go down through the malt into the air-chamber under the floor, and fall from thence into the box C.

From this box the air is drawn by means of a fan or pump, E, connected with said box by a duct, G. When more than one floor is used for drying, each chamber is connected with the fan.

Having thus fully described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

1. The method herein described of drying malt by heated air, being caused to go down through the malt, and be drawn out by a fan, pump, or other suitable means, substantially as herein set forth.

2. The floors of a malt-drier, when constructed as described with an air-chamber, substantially as and for the purposes herein set forth.

3. The fan or pump E, when used for drying malt or other articles, substantially as described.

4. The use of the box or chamber C in a dry-room, for exhausting the air, substantially as described.

In testimony that I claim the foregoing, I have hereunto set my hand and seal this 4th day of April, 1870.

Witnesses: WILLIAM L. PHILLIPS. [L.S.]

H. C. HARTWICK,
WM. H. CONDON.