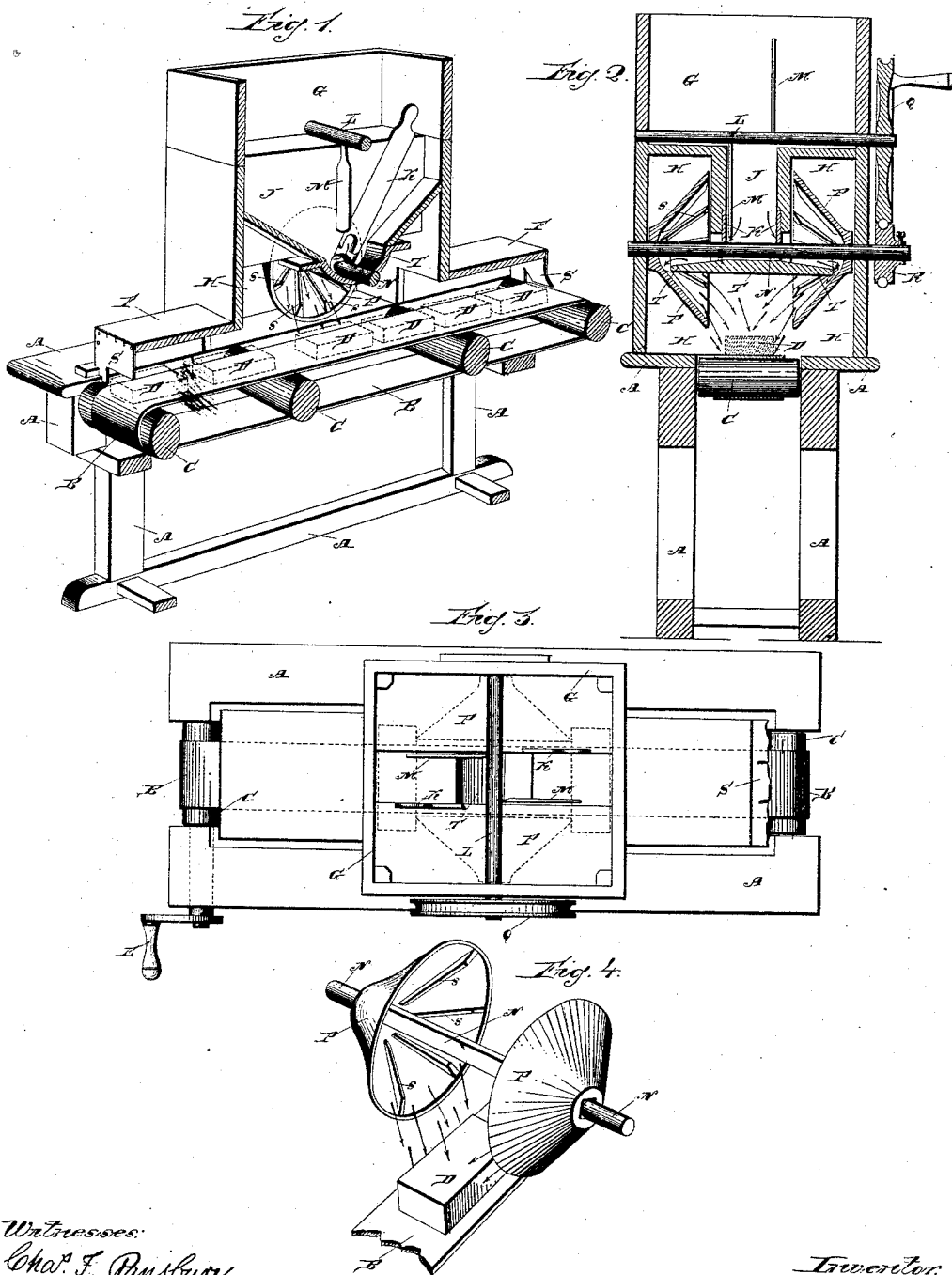


C. CHAMBERS, Jr.
Duster for Brick Machines.

No. 45,974.

Patented Jan. 24, 1865.



Witnesses:
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UNITED STATES PATENT OFFICE.

CYRUS CHAMBERS, JR., OF PHILADELPHIA, PENNSYLVANIA.

DUSTER FOR BRICK-MACHINES.

Specification forming part of Letters Patent No. 45,974, dated January 24, 1865.

To all whom it may concern:

Be it known that I, CYRUS CHAMBERS, Jr., of the city of Philadelphia, in the State of Pennsylvania, have invented a new and Improved Duster for Brick-Machines; and I do hereby declare the following to be a full and correct description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a central longitudinal vertical section of the duster with bricks passing through it on an endless apron. Fig. 2 is a vertical transverse section of the same through the cone shaft. Fig. 3 is a plan or top view of the same. Fig. 4 is a perspective view of the hollow cones with a brick passing between them.

The same part is marked by the same letter of reference wherever it occurs.

My invention relates to that class of brick-machines in which the bricks are received from the machine and borne off on an endless apron, from which they are removed to the floors or sheds for drying.

It consists in placing over such an endless apron or conveyer a box or chamber, in which sand or dust is kept constantly in suspension, so that the bricks, as they pass through said chamber, become thoroughly covered on every side with the suspended sand or dust. This coating renders them much nicer to handle, prevents their adhering together in the barrows or the hack, and improves their color when burned.

To enable others to make and use my dusting-machine, I will proceed to describe its construction and operation, referring to the drawings, in which—

A marks the frame, with the endless apron B and the rollers C on which it moves. This endless apron receives the bricks from the machine and carries them to the point where the off-bearers remove them and deposit them in the hacks. It may be of an indefinite length. At any point that may be preferred in the length of this apron the dusting-machine may be placed. It consists of a box or chamber surmounted by a reservoir or hopper, from which dust or sand is constantly supplied, and by means of two hollow cones kept constantly in suspension in the chamber and thrown upon every side of the bricks as they pass through it.

In entering the chamber and leaving it the bricks D D pass under the curtains S and through the end boxes, F F, which project from either end of the main chamber H and are lower and smaller than that chamber. Above the chamber H is the reservoir or hopper G, in which the sand or dust is deposited, and from which it is supplied to the chamber below. In descending it passes through the narrow portion J of the hopper, which has an inclined bottom, which directs the sand onto the cone-shaft N.

The feed is regulated by means of the slides K, and the dust is kept from clogging by the stirring-arms M, attached to the stirrer-shaft L, which keep the materials in the hopper in constant agitation.

The position and construction of the hollow cones P is clearly shown in Figs. 2 and 4. They are attached to and revolve with the shaft N, which has the friction-wheel R on its outer end, receiving motion from the wheel Q on the end of stirrer-shaft L. The bases of the cones are open toward the middle of the chamber H, and their interior surfaces are slatted or corrugated, as shown.

The concave or trough T conducts the sand or dust toward the interior apex of the cones, whence it is directed downward upon the top, sides, and ends of the bricks as they pass through the chamber H. The slats s on the interior of the cones, striking the particles as they descend, scatter them in all directions, and keep the interior of chamber H constantly filled with sand or dust in suspension in the air, so that the adhesive surface of the green brick becomes thoroughly coated with them as it passes through the chamber. The curtains S prevent the escape of dust without impeding the passage of the bricks. The surplus dust or sand that is not carried out by the bricks or apron is caught on an inclined table or board under the belt and conveyed to a receptacle below, from whence it is again fed to the hopper.

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

1. Applying sand or dust to the surface of undried bricks in a chamber in which those materials, or either of them, are kept in suspension by mechanical means.

2. Passing bricks as they come from a brick-machine through a box or chamber in which sand or dust is kept in suspension by mechanical means, substantially in the manner and for the purpose described.

3. The use, in a dusting apparatus, of the cones P, constructed and operating substantially as described, for giving direction to cur-

rents of sand or dust, for the purpose specified.

The above specification of my said invention signed and witnessed, at Philadelphia, this 3d day of December, A. D. 1864.

CYRUS CHAMBERS, JR.

Witnesses:

THORWALD CH. DAMBORG,
JOHN T. CHAMBERS.