

(No Model.)

W. BAILEY.
Grain Bin.

No. 235,724.

Patented Dec. 21, 1880.

Fig. 1.

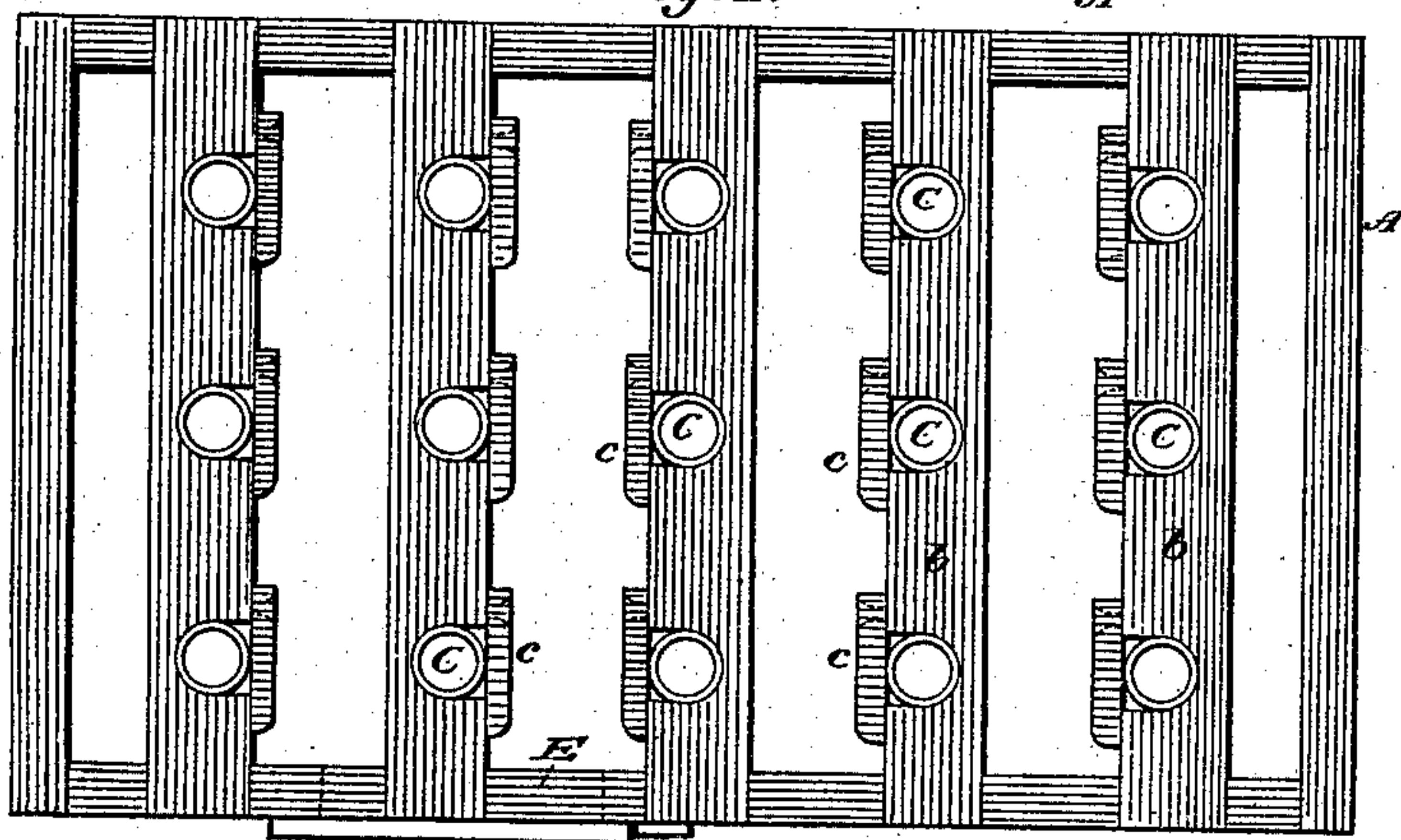


Fig. 2.

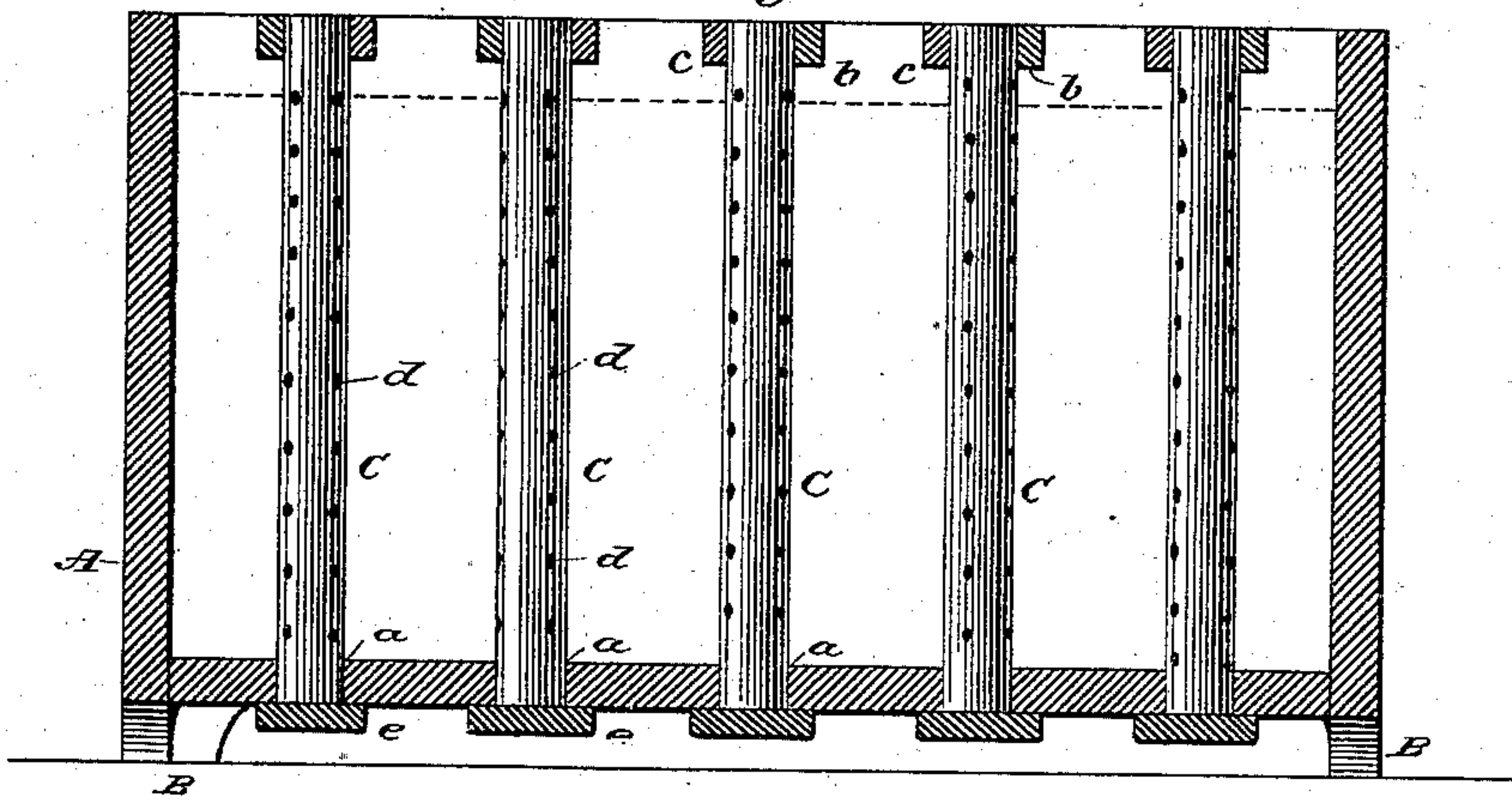
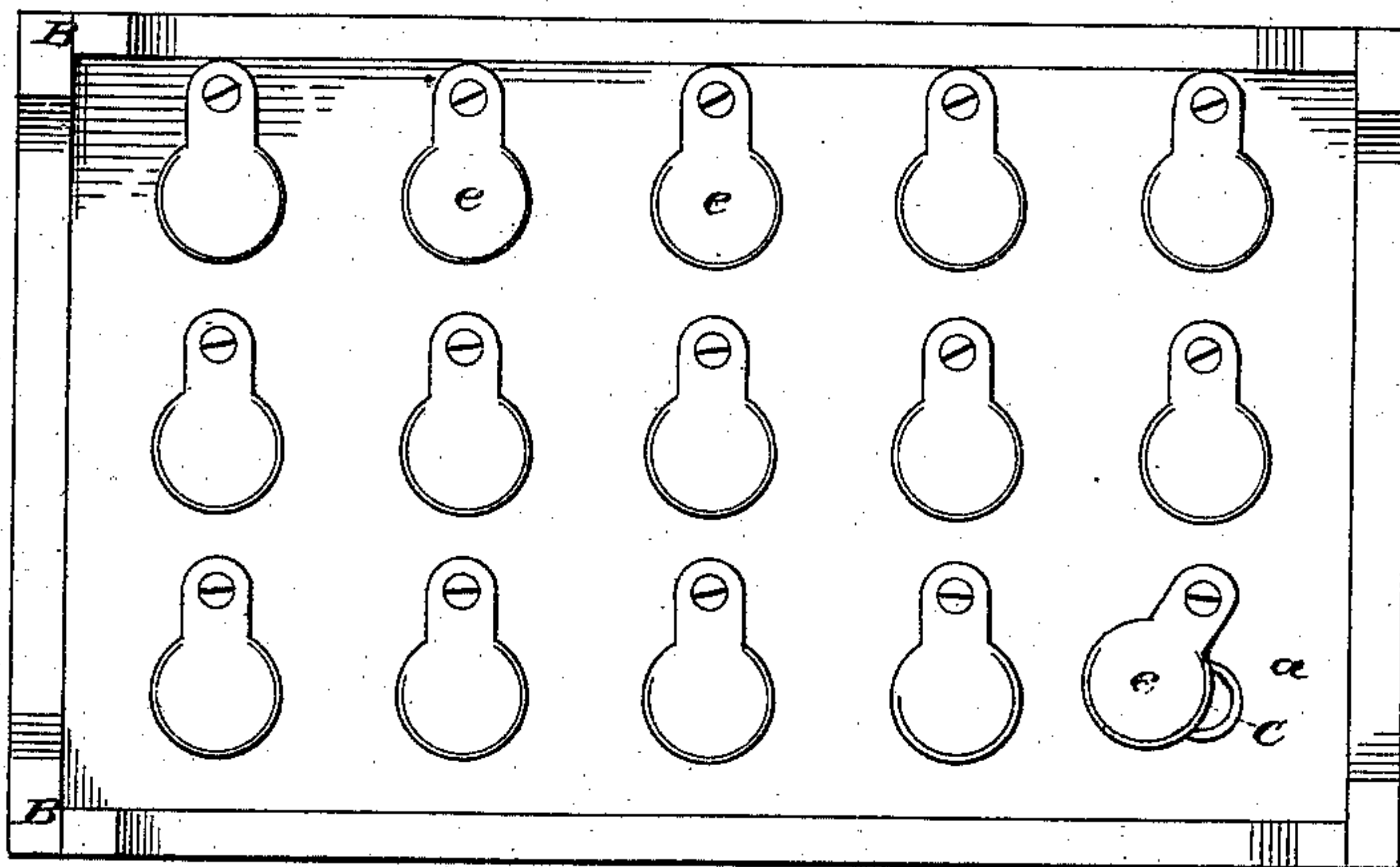


Fig. 3.



Attest:

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UNITED STATES PATENT OFFICE.

WILLIAM BAILEY, OF HARRISONVILLE, MISSOURI.

GRAIN-BIN.

SPECIFICATION forming part of Letters Patent No. 235,724, dated December 21, 1880.

Application filed August 23, 1880. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM BAILEY, of Harrisonville, in the county of Cass and State of Missouri, have invented a new and useful Improvement in Grain-Bins; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention relates to an improvement in bins for drying grain of the class wherein the drying is accomplished by forcing air through the grain contained in the bin.

My invention is designed to dry the grain without causing the air to come in contact therewith; and the invention consists in the peculiar manner of securing the perforated removable conducting-pipes in the bin, as fully hereinafter explained.

In the accompanying drawings, Figure 1 is a top view; Fig. 2, a section on *xx*; Fig. 3, a bottom view.

In these figures the side and end walls of the bin are represented at *A A*, and *B B* represent the feet which may support it, though this manner of supporting it is not essential.

In the bottom or floor of the bin, in perforations *a a*, extending entirely through said bottom, are stepped removable tubes or flues *C C*, extending in rows transversely across the bin a sufficient distance apart. The upper ends of the tubes are held by recessed cross-pieces *b b*, secured to the side walls of the bin, the tubes being thereby braced at top and bottom, in order that they may be perfectly rigid. Buttons, or some equivalent devices, *c c*, close the recesses and keep the tubes in place. The tubes are pierced with numerous small perforations, *d*, of such size that they will not admit a grain of wheat or corn.

On the bottom of the bin are pivoted valves

e e, which close the openings for the tubes, and may be operated independently. In the side of the bin is provided an opening, *E*, which may be furnished with a hinged or sliding door, by which the bin is filled.

In the operating of my device the bin is filled with grain, the valves at the bottom of the tubes opened, and air, supplied in any suitable manner, forced or drawn through the tubes. The passage of the current produces an exhaust, which draws the foul air and dampness in the grain surrounding the tubes out through the perforations. Any one or all of the tubes may be shut off by the valves at will. The valves are then closed, the conductors or passages taken out, and the grain removed from the bin.

The manifest advantages of my device lie in the simplicity of its construction and the cheapness with which it can be made. Combined with this simplicity are its efficiency for the purpose for which it is intended and other advantages that will be apparent to those skilled in the art.

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

In a grain-bin, a series of tubes having perforations, in combination with the recessed cross-pieces and the buttons, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM BAILEY.

Witnesses:

JOHN ANGLE,
S. M. DAVIS.