

No. 759,135.

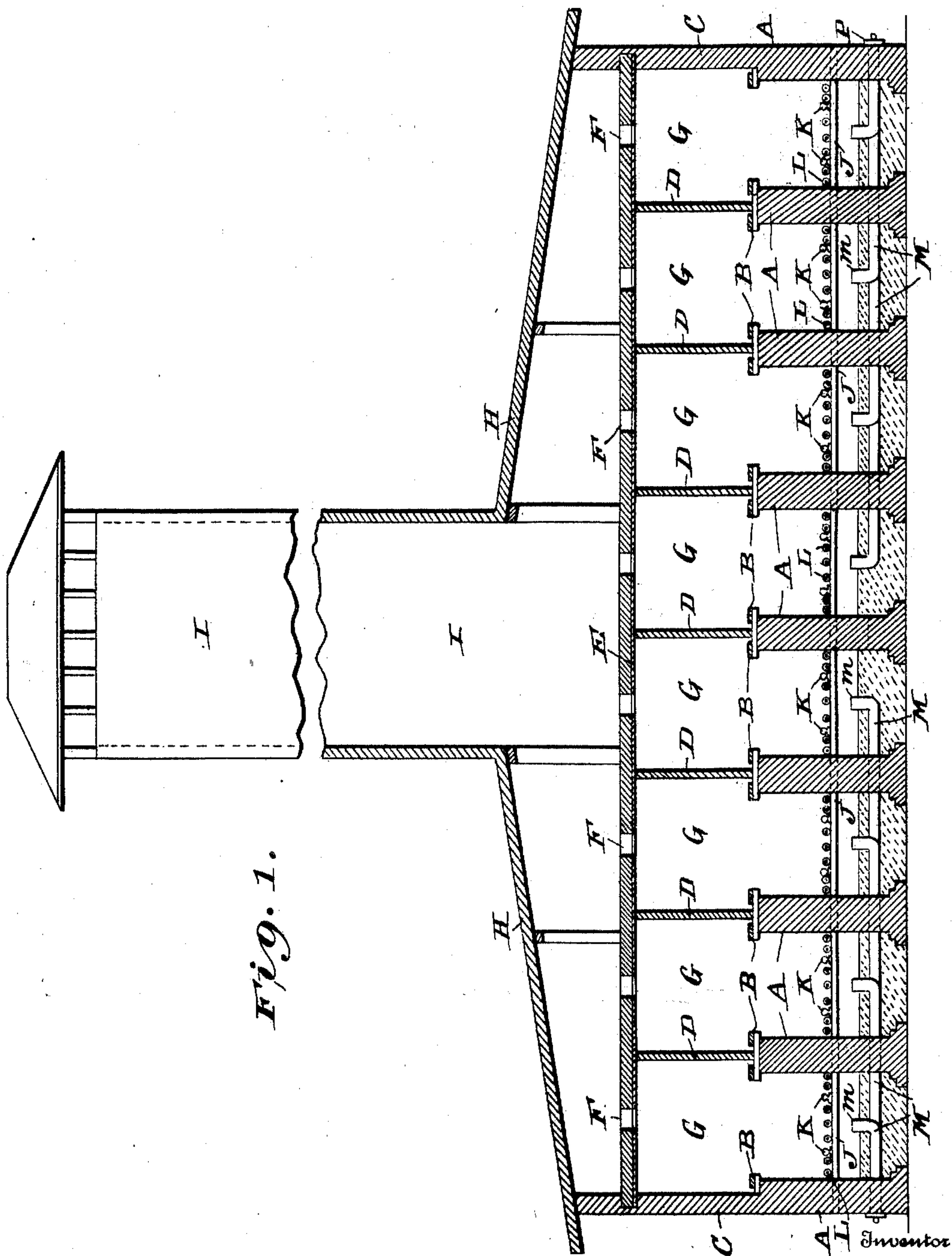
PATENTED MAY 3, 1904.

A. A. SCOTT.
DRYING HOUSE.

APPLICATION FILED APR. 2, 1903.

NO MODEL.

3 SHEETS—SHEET 1.



Witnesses

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W. Randolph, Jr.

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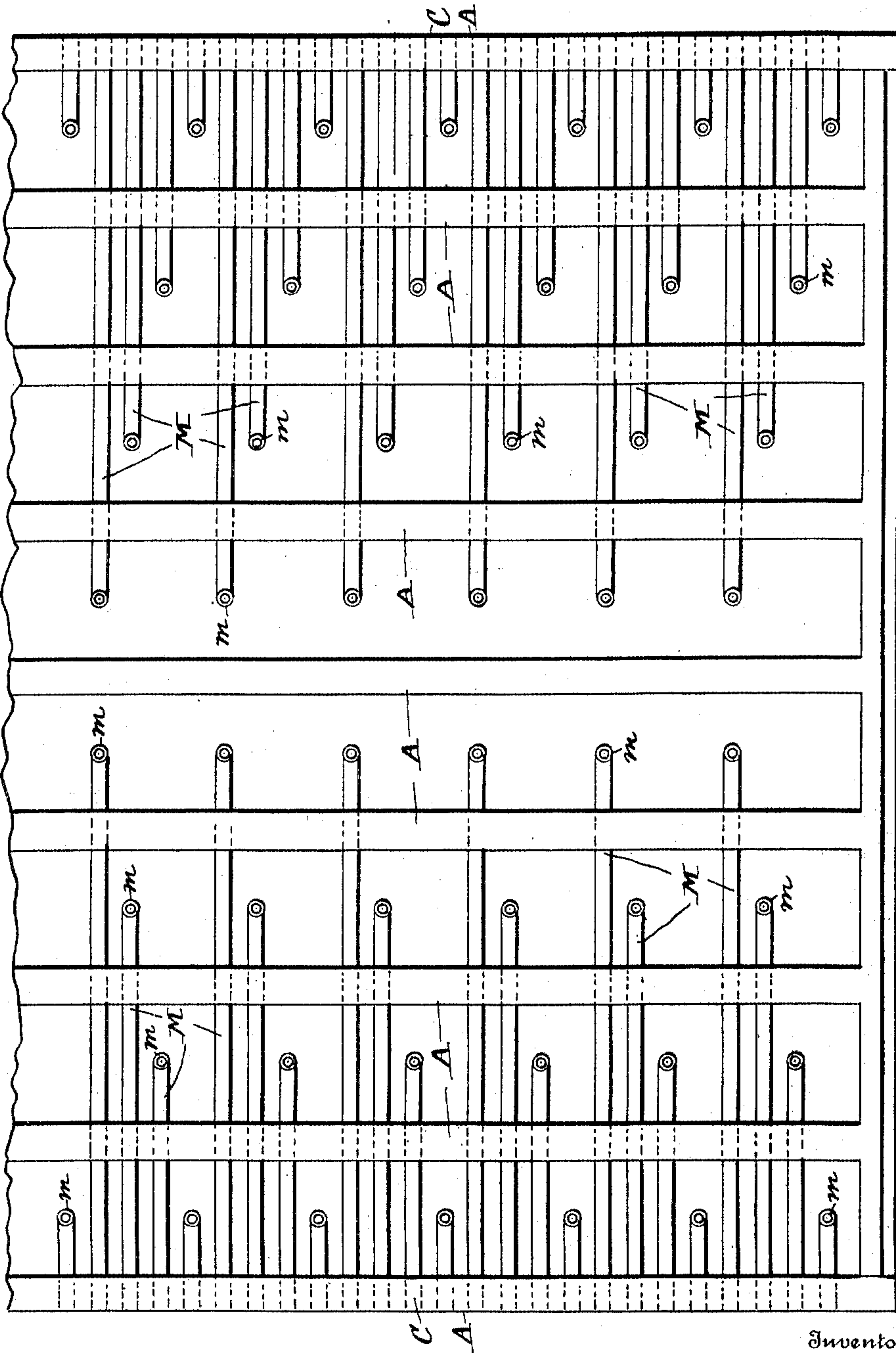
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3 SHEETS—SHEET 2.

Fig. 2.



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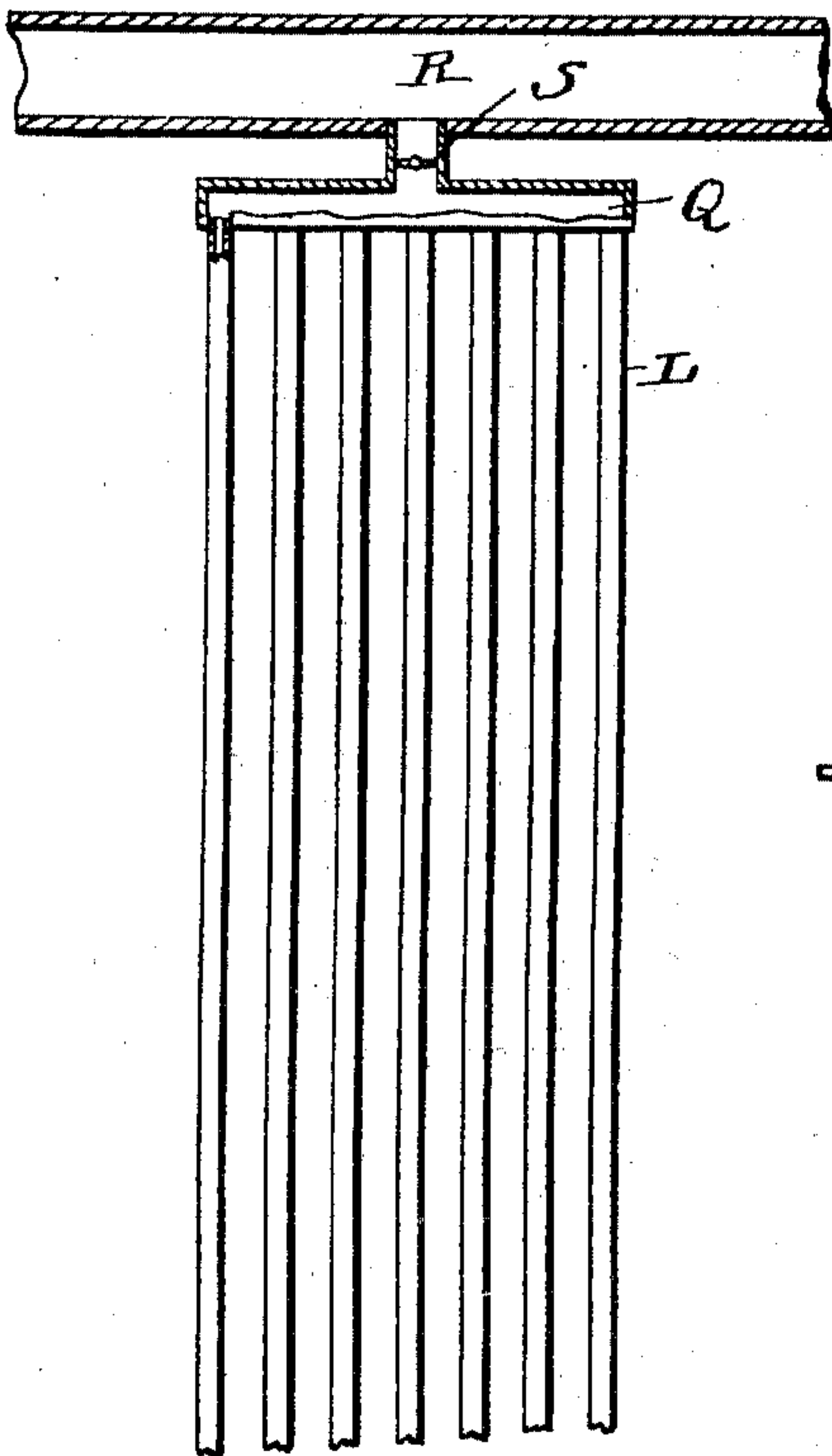


Fig. 5.

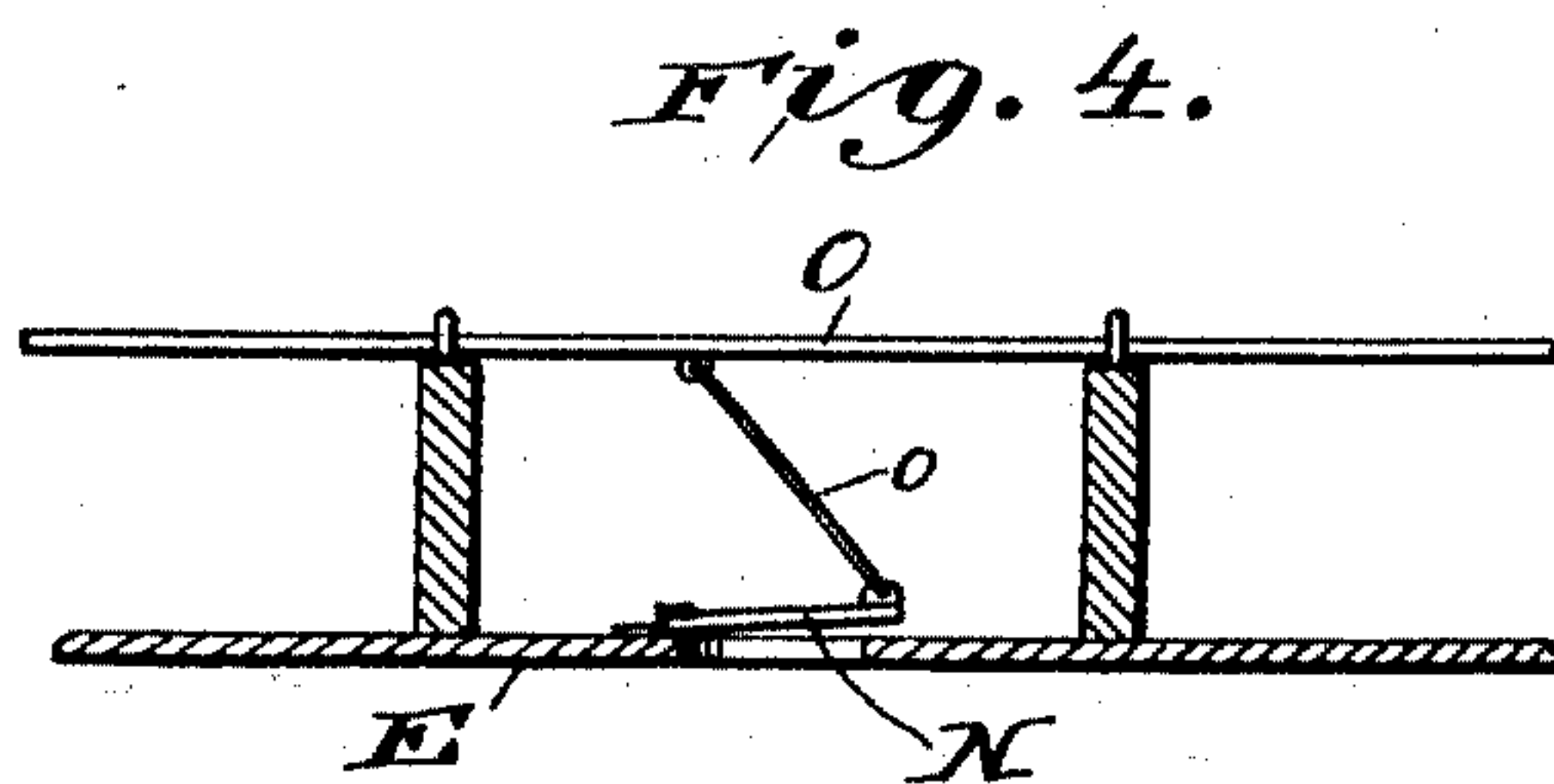


Fig. 4.

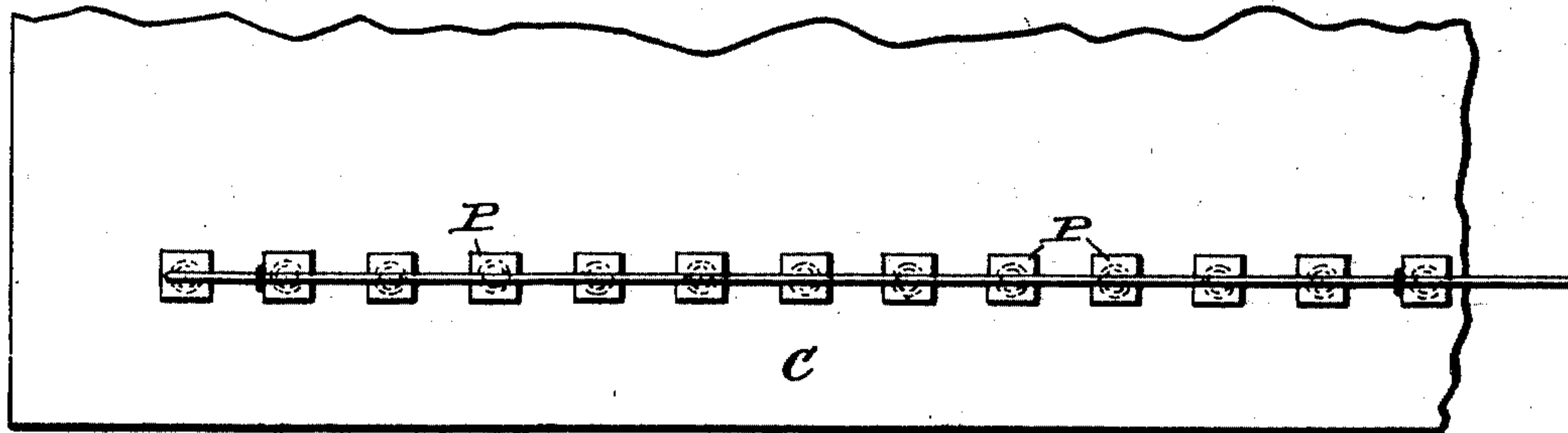


Fig. 3.

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UNITED STATES PATENT OFFICE.

ALEXANDER ANDERSON SCOTT, OF KNOXVILLE, TENNESSEE.

DRYING-HOUSE.

SPECIFICATION forming part of Letters Patent No. 759,135, dated May 3, 1904.

Application filed April 2, 1903. Serial No. 150,786. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER ANDERSON SCOTT, a citizen of the United States, residing at Knoxville, in the county of Knox and State of Tennessee, have invented certain new and useful Improvements in Drying-Houses, of which the following is a specification.

My invention relates to houses or sheds for drying brick and other products by artificial heat, and has for its object to provide a structure consisting of a number of parallel and independent compartments or tunnels with means for evenly distributing the cold air to the various compartments, heating it and distributing the air through each individual tunnel, and after passing through the drying products removing it to make room for freshly-heated air. This I accomplish by means of the structure hereinafter described, and illustrated in the drawings, in which—

Figure 1 is a view in vertical section of my drying-shed; Fig. 2, a fragmental ground plan view showing the arrangement of cold-air ducts; Fig. 3, a side view of the shed, showing the outer ends of the cold-air ducts and the valves for controlling the flow of air there-through; Fig. 4, a detail view of the top of one of the tunnels, showing the arrangement of dampers; and Fig. 5, a fragmental view showing the steam-conduit and the means for distributing the steam to the tunnels.

Referring to the drawings, in which similar reference characters indicate corresponding parts throughout the several views, A represents a number of supports or rests, made of masonry or other suitable material, erected on suitable foundations and having their tops provided with strips of boards B to act as racks to receive the articles to be dried. The two outer supports or rests are extended upward to form the side walls C of the shed, while the intermediate supports have partitions D erected thereon. E represents the ceiling resting on said partitions D and secured in side walls C.

F represents a series of openings in ceiling E over each tunnel or compartment G formed by rests A and partitions D.

H represents the roof, spaced apart from the ceiling E to form a passage to a stack or

stacks I, erected on said roof. The ends of said shed are closed by suitable walls having doors (not shown) admitting to each tunnel.

J represents beams, made of steel or other suitable material, erected into rests A and above the level of the ground. K represents rails secured to said beams, over which trucks carrying the articles to be dried are conveyed to the supports or rests A, or the trucks may be allowed to stand on said rails during the drying process, if desired. L represents steam-pipes laid on said beams J between and outside of said rails K to heat the air conveyed from the outside to said tunnels by means of ducts M. There is an equal number of said ducts M for each tunnel, the pipes extending from the outside walls to the respective tunnels and having upwardly-turned ends *m* to deliver the air to the space under beams J, from whence it passes over steam-pipes L, where it is heated, and then through the drying articles upward and through openings F to the passages between ceiling E and roof H to the stack I. In narrow tunnels it may be found desirable or necessary to omit the pipes at the side of the rails, which may be done without departing from the spirit of my invention.

N represents damper-plates pivotally mounted on ceiling E and operated by slidable rods O, connected with said plates by means of wires *o*. It is obvious that said rods should extend outside the walls of the tunnel to permit of operating them.

P represents valves slidably mounted over the outer openings of ducts M to regulate the amount of air passing through said ducts to the drying-tunnels.

Each set of steam-pipes L is connected with a header Q, which is tapped into a steam-conduit R, connected with a boiler. (Not shown.) By providing a valve S in each header the heat in each tunnel may be regulated to suit the products being treated or can be cut off entirely when it is desired to remove the dried products and introduce new ones.

Having thus described my invention, what I claim is—

1. In a drying-house, a multiplicity of parallel tunnels, separate cold-air ducts extending

inwardly from the sides of the house to the tunnels, the ends of said ducts inside of the tunnels turned up, said ducts being the same length for each tunnel and arranged alternately with the ducts leading to the other tunnels so that the air is evenly distributed among the several tunnels and throughout each tunnel separately, and means to heat the air, substantially as shown and described.

10 2. In a drying-house, a multiplicity of parallel tunnels, a series of cold-air ducts extending inwardly from the sides of the house to the separate tunnels at equal distances apart, the ends of said ducts inside of the tunnels turned
15 up, a steam-conduit arranged along the ends of the tunnels, a header tapped into said conduit opposite each tunnel, and steam-pipes tapped into said headers and running lengthwise of the tunnels above the opening to said
20 cold-air ducts, substantially as shown and described.

3. In a drying-house, tunnels formed by upright rests, partitions erected on said rests and a ceiling supported by said partitions,
25 horizontal beams built into said rests, tracks supported by said beams, a series of cold-air ducts leading from the outside of the house to each separate tunnel at equal distances apart, the ends of said ducts inside of the tunnel
30 turned up, a steam-conduit arranged along the ends of the tunnels, a header tapped into said conduit opposite each tunnel, and steam-pipes tapped into each header and supported by said beams, substantially as shown and de-
35 scribed.

4. In a drying-house, tunnels formed by upright rests, partitions erected on said rests and a ceiling supported by said partitions and having openings therein, a roof above said ceiling and spaced apart therefrom, a stack
40 rising from said roof, beams built into said rests, tracks secured to said beams, a steam-conduit, headers tapped into said conduit opposite to each tunnel, a number of pipes tapped into each header, and extending through the
45 tunnel, and separate cold-air ducts extending from the sides of the house inwardly to the tunnels, substantially as shown and described.

5. In a drying-house, tunnels formed by upright rests, partitions erected on said rests
50 and a ceiling supported by said partitions and having openings therein, a roof above said ceiling and spaced apart therefrom, a stack rising from said roof, beams built into said rests, tracks secured to said beams, a steam-
55 conduit, headers tapped into said conduit opposite to each tunnel, a number of pipes tapped into each header, and extending through the tunnel, and cold-air ducts extending crosswise of the space below the tracks, said ducts be-
60 ing arranged so that an equal number open into each tunnel and at equal distances from one another, substantially as shown and described.

In testimony whereof I hereto affix my signature in the presence of two witnesses.

ALEXANDER ANDERSON SCOTT.

Witnesses:

JOS. H. BLACKWOOD,
S. F. RANDOLPH, Jr.