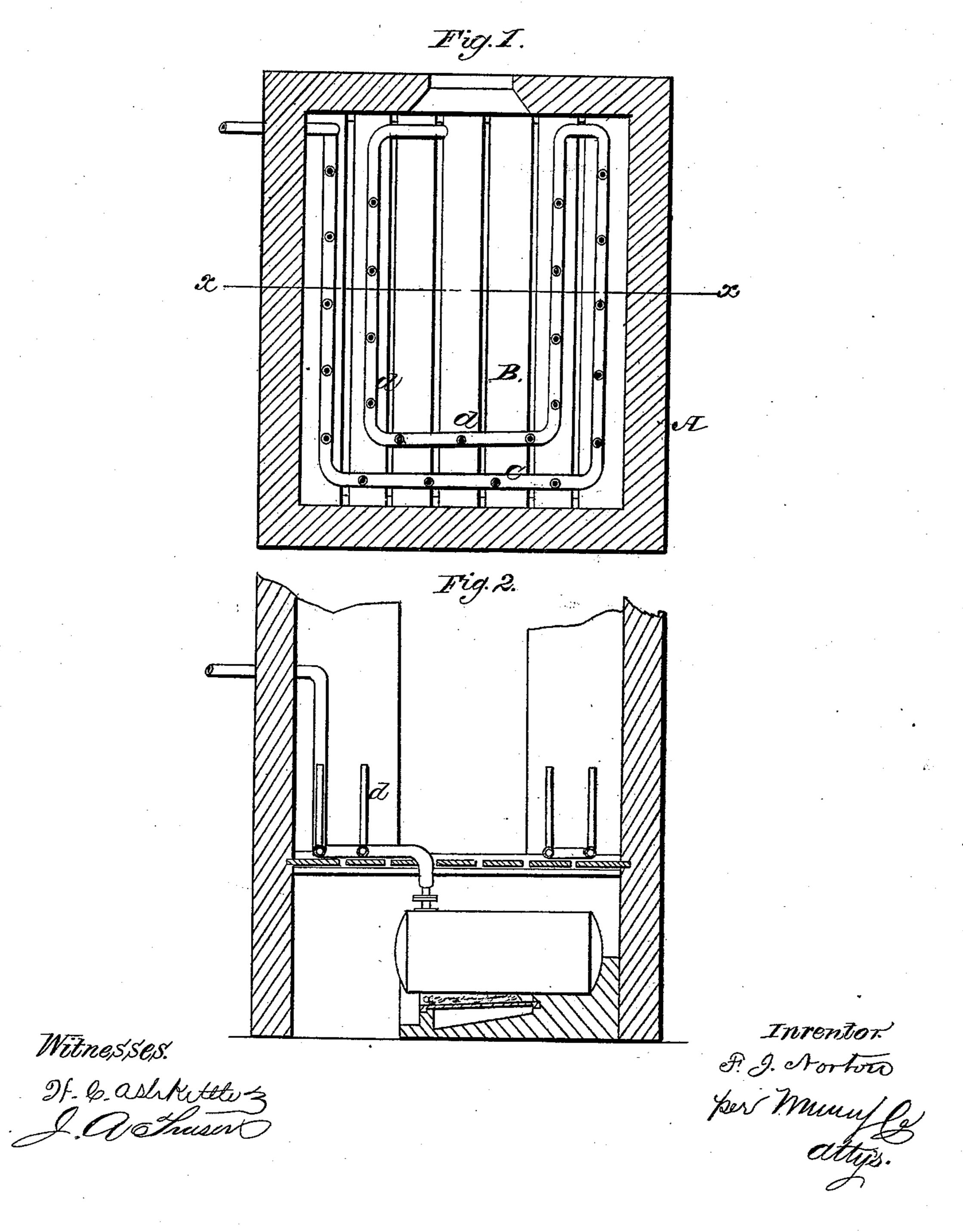
### F. I. NORTON.

Lumber Drier.

No. 77,205.

Patented April 28, 1868.



## Anited States Patent Pffice.

# F. I. NORTON, OF TREMONT, OHIO, ASSIGNOR TO HIMSELF AND WILLIAM H. CLOUD, OF SAME PLACE.

Letters Patent No. 77,205, dated April 28, 1868.

#### DRYING-APPARATUS.

The Schedule referred to in these Netters Patent and making part of the same.

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, F. I. Norton, of Tremont, in the county of Sandusky, and State of Ohio, have invented a new and useful Improvement in Drying Lumber, Timber and the Hubs of Vehicles; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

The nature of my invention relates to improvements in apparatus for drying lumber, and which is designed more especially for drying wagon-hubs, but is adapted for drying other articles, made of wood, that are perforated with holes, and it consists in an arrangement of steam-pipes, within a suitable building, whereby the steam is conveyed around the interior of said building, in any desired manner, on the floor of the same by pipes, the said conveying-pipes being provided with vertically-projecting pipes, having small orifices in their tops, through which a very small jet of steam is allowed to escape, the hubs or other article to be dried being set on the said vertical pipes, so that they discharge the steam into the holes through the same, as will be more fully described on reference to the accompanying drawings, in which—

Figure 1 represents a plan view of my improved drying-apparatus, and

Figure 2 represents a section of the same on the line x x of fig. 1.

Similar letters of reference indicate corresponding parts.

A represents the wall of the building; B the floor of the same, which is laid with openings between the planks, for the condensed steam to pass off through readily. C represents the coil of steam-pipe, for conveying the steam around the room, from which rise the perpendicular pipes d, which are plugged at their upper ends, and perforated with a small orifice to admit a small jet of steam. The holes or articles of wood having holes in them are set over the said pipes, so that the steam is discharged within the said holes, and first comes in contact with the wood in the central portions of the same, after which it rises and envelopes the hubs on all sides, whereby a very uniform drying-action is effected, which will prevent checking or cracking by reason of undue strains, as occurs when the steam or drying-medium is applied to the outside only, as will be readily understood.

The steam may be supplied from a boiler under the floor, or from any other convenient arrangement. Another advantage of discharging the steam directly against the surface of the wood is, that while it utilizes that which is discharged, it permits a circulation to be kept up through the pipes, maintaining the heat at a uniform temperature.

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

- 1. An apparatus, substantially as described, for discharging steam into the central openings of wagon-hub, and other similar perforated articles of wood, for drying the same, as and for the purpose described.
- 2. The combination of the steam-coil C and vertical ejecting-pipes d, substantially as and for the purpose described.
- 3. The combination, with a drying-chamber, A B, of the steam-pipes C d, substantially as and for the purpose described.

The above specification of my invention signed by me, this 21st day of February, 1868.

Witnesses:

F. I. NORTON.

WILLARD I. NORTON, GRANT FORGERSON,