

(No Model.)

L. REED.
WOOD STEAMING APPARATUS.

No. 308,701.

Patented Dec. 2, 1884.

Fig. 1.

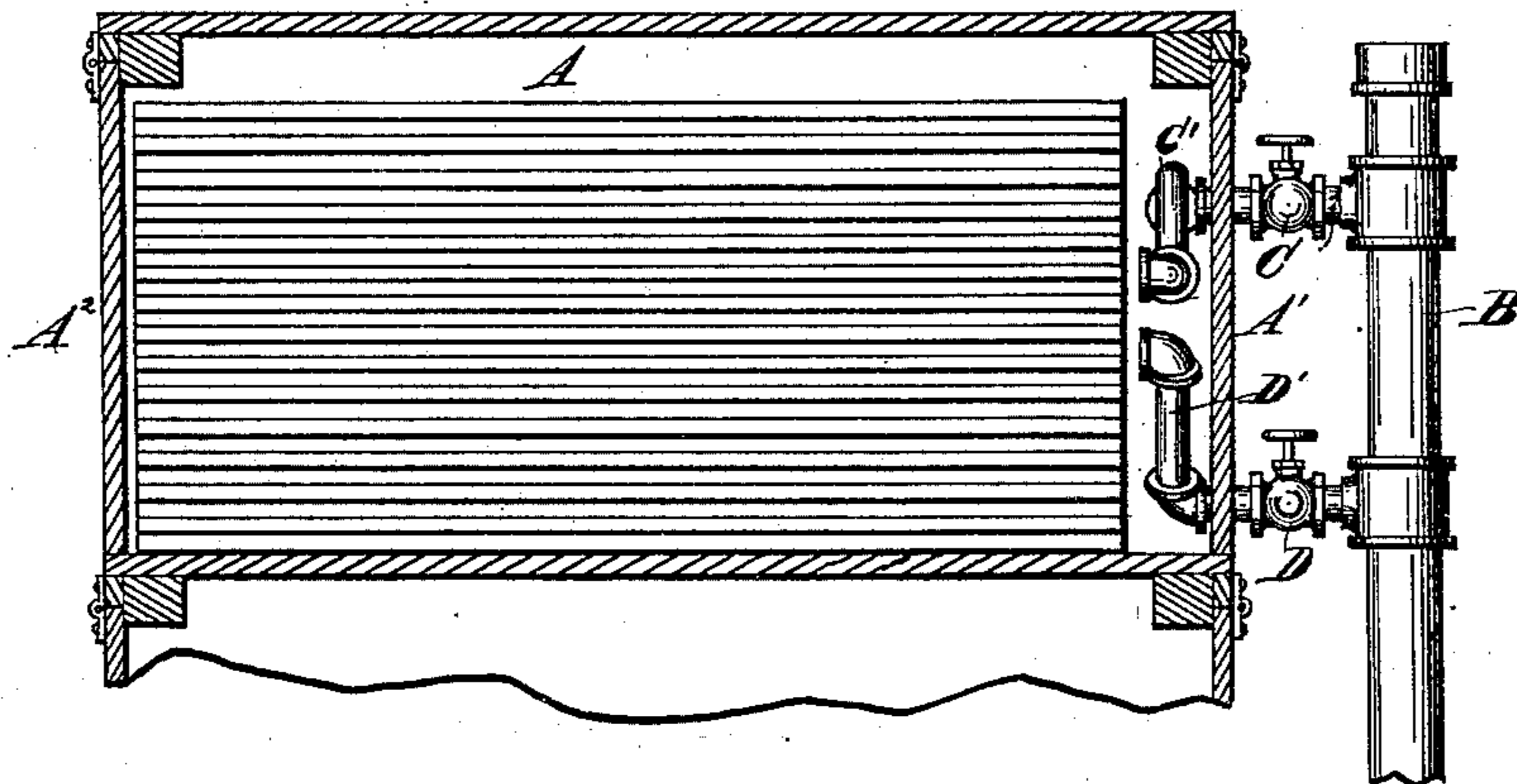


Fig. 2.

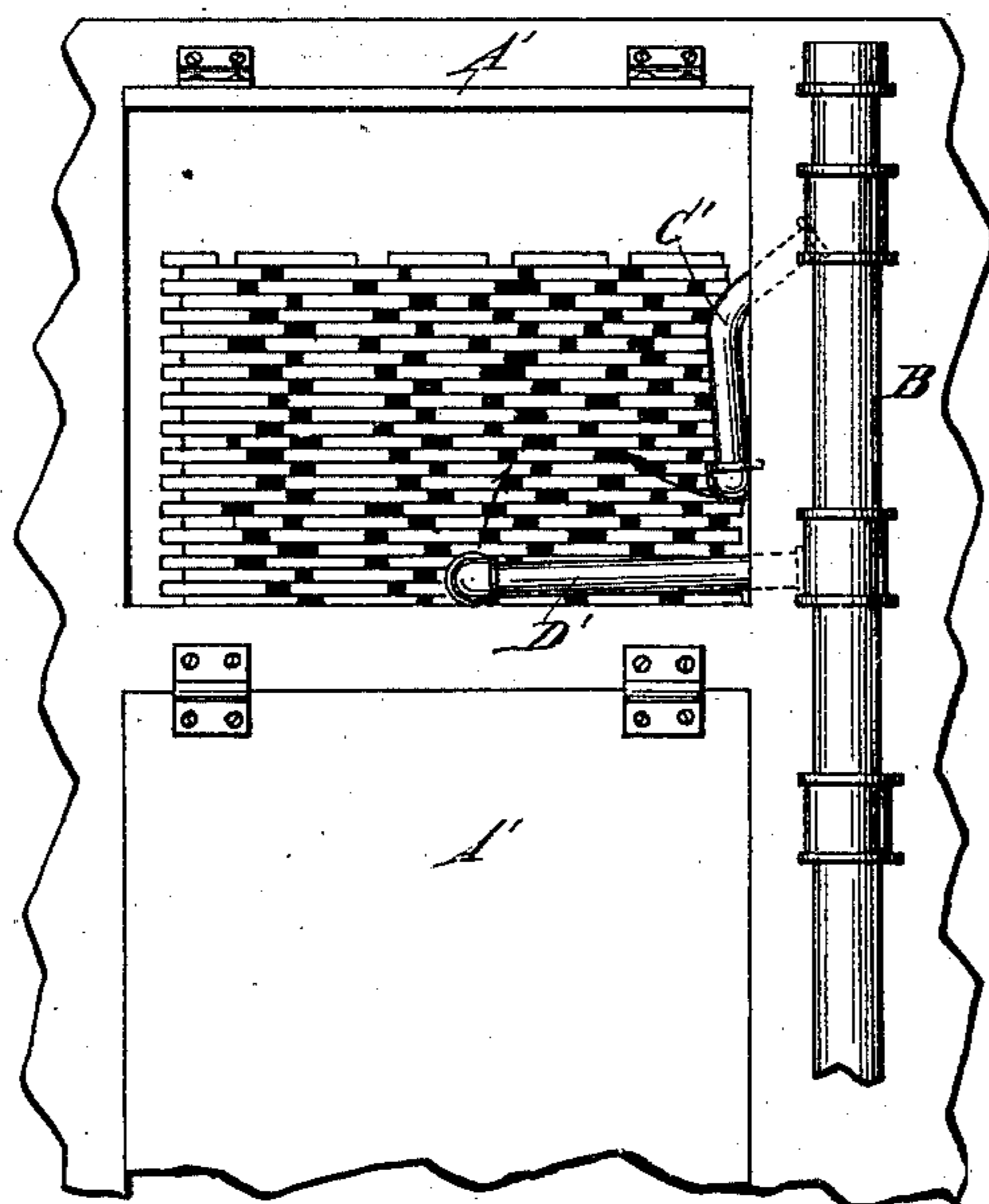
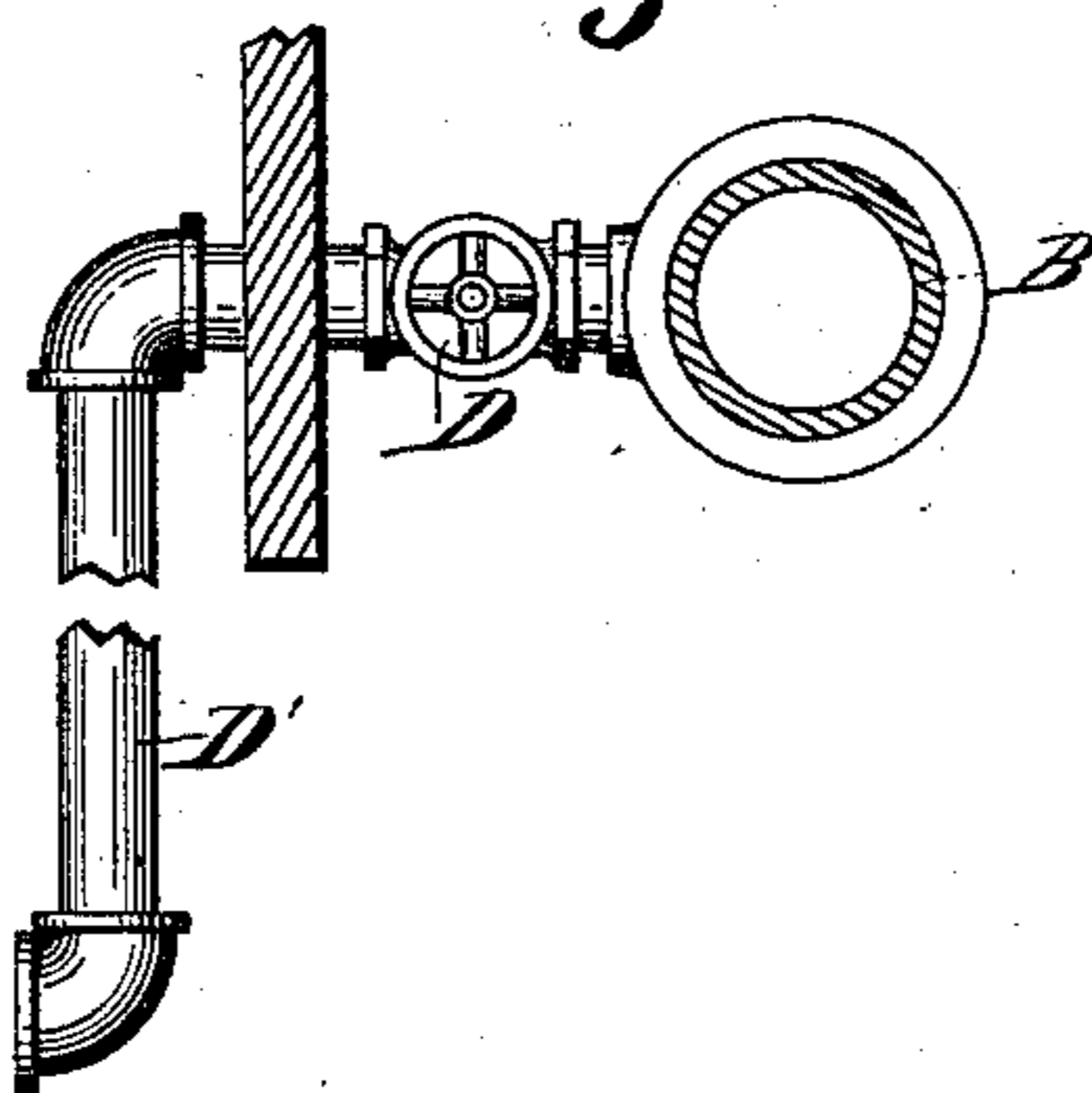


Fig. 3.



WITNESSES
Jno. E. Wiles.
H. C. Mason.

Louis Reed
INVENTOR
By
H. C. Mason
Attorney

UNITED STATES PATENT OFFICE.

LOUIS REED, OF DETROIT, MICHIGAN.

WOOD-STEAMING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 308,701, dated December 2, 1884.

Application filed November 30, 1883. (No model.)

To all whom it may concern:

Be it known that I, LOUIS REED, of Detroit, in the county of Wayne and State of Michigan, have invented a new and useful Improvement in Wood-Steamng Apparatus, of which the following is a specification.

My invention relates especially to the steam-vats employed by coopers for steaming hoop-stuff and stave-bolts, &c. As the material is put into the vats or chambers where it is to be steamed it should be piled up in an orderly manner, with its ends toward the doors. It is very desirable that the entering currents or jets of steam should be directed against the ends of the pieces of wood, so that it may be forced through the piles in line with the pieces, and so more perfectly circulate in contact with every part of the wood, as well as to be forced into its pores by impinging against their ends. If the steam-pipe is introduced into the chamber midway between the ends thereof, the work is impaired and the operation much slower. If the doors are at one end only, these steaming vats or boxes being generally in rows side by side and in tiers of two chambers, the men in simultaneously filling some chambers and emptying others will be in one another's way. To avoid these difficulties I introduce the steam-pipes at one end, and so direct them as to discharge the steam directly against the ends of the pieces to be treated and in line with the boards or bolts; and in order that I may have a door at each end I place the vertical steam-pipes at one side of the end between the rows of boxes and connect them with the interior of the chambers by flexible goose-neck pipes, which may be turned to throw the steam against the ends of the wood when the steamer is in operation, or may be turned to one side to be out the way when the doors are open and the boxes are being filled.

In the annexed drawings, making part of this specification, Figure 1 is a vertical longitudinal section of the chamber, showing the pipes in elevation. Fig. 2 is a front view showing one of the tiers of chambers, and Fig. 3 a horizontal section and elevation of the main and branch steam-pipes.

The same letters are employed in all the figures in the indication of identical parts.

A is the chamber or box in which the stuff to be treated is placed, and to which access is given at each end by means of swinging or sliding doors A' A². These chambers are represented as arranged in tiers and in rows; but as they are all alike only one need be described.

B is a steam-pipe placed between the ends of the respective rows, and having branch pipes C D, with steam throttle-valves, by which the steam may be introduced into the chamber at the side of the door A'. These branch pipes, of which there may be as many as desired, though I have found two sufficient, connect with goose-neck pipes C' D', swiveling upon their joints in such manner that when the door is opened they may be swung out of the way, so as to give access to the interior; or they may be turned so as to direct the emergent jets of steam directly against the ends of the pieces to be treated. By this means I am able to combine the advantages of the end delivery of the steam and of having free access to the interior of the box from either end, which have not been attained in any wood-steaming apparatus with which I am acquainted.

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

The combination, in an apparatus for steaming wood, of the chamber or box A, with doors A' A² at each end, and adjustable flexible steam-pipes, the free ends of which may be shifted to give alternately free access to the interior of the chamber through the door A' and to direct the emergent jets of steam against the ends of the pieces to be treated, substantially as set forth.

In testimony whereof I have hereunto set my hand in presence of two attesting witnesses.

LOUIS REED.

In presence of—

R. MASON,
CHARLES K. LATHAM.