

No. 683,350.

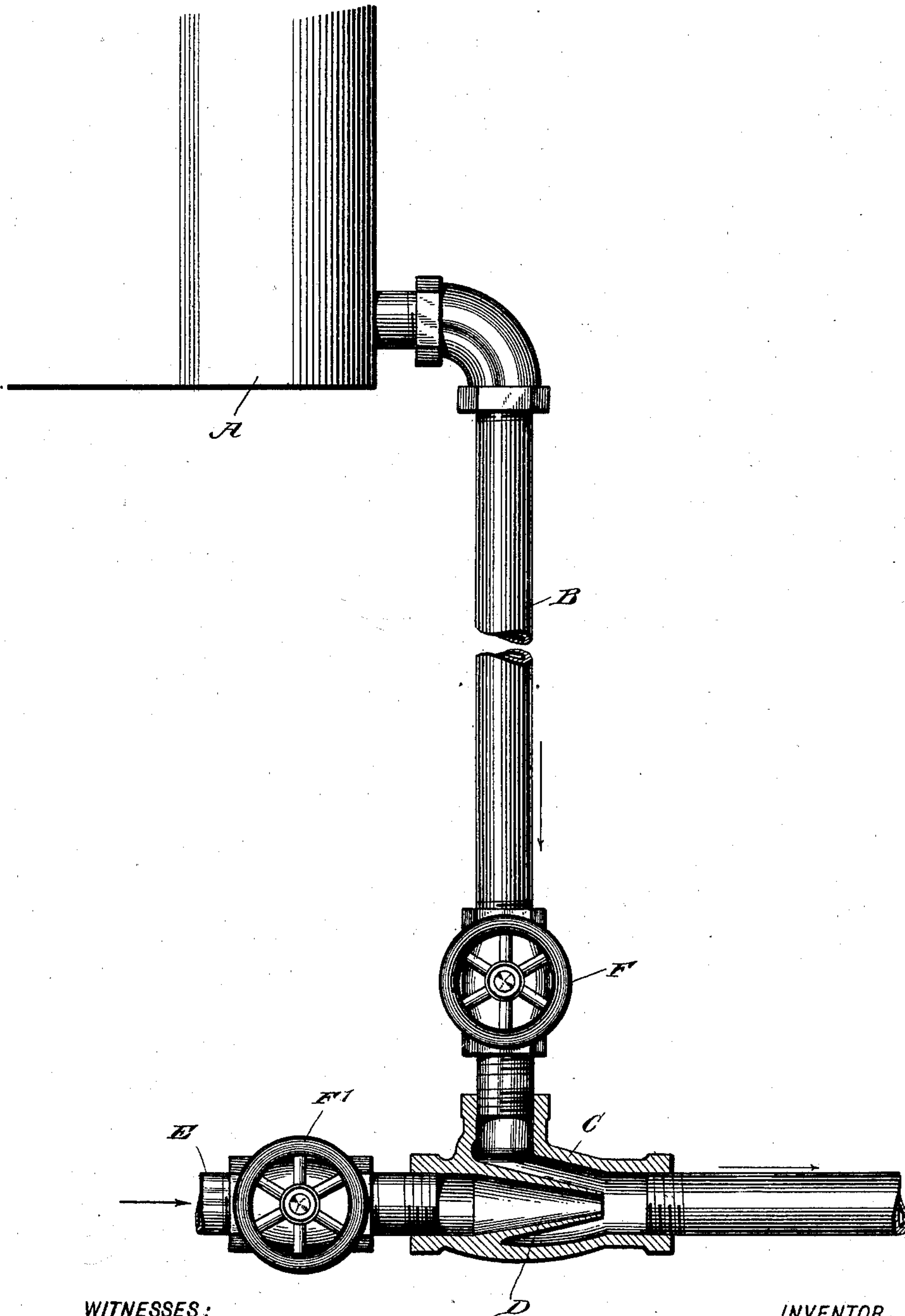
Patented Sept. 24, 1901.

W. M. STONE.

METHOD OF DISPOSING OF THE SPENT LIQUORS IN WOOD PULP MAKING.

(Application filed Dec. 1, 1900.)

(No Model.)



WITNESSES:

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UNITED STATES PATENT OFFICE.

WILLIAM MAYO STONE, OF KEESEVILLE, NEW YORK.

METHOD OF DISPOSING OF THE SPENT LIQUOR IN WOOD-PULP MAKING.

SPECIFICATION forming part of Letters Patent No. 683,350, dated September 24, 1901.

Application filed December 1, 1900. Serial No. 38,359. (No specimens.)

To all whom it may concern:

Be it known that I, WILLIAM MAYO STONE, a citizen of the United States, and a resident of Keeseville, in the county of Essex and State of New York, have invented a new and Improved Method of Disposing of the Spent Liquors in Wood-Pulp Making, of which the following is a full, clear, and exact description.

The invention relates to the manufacture of wood-pulp by the well-known sulfite process; and the object of the invention is to provide a new and improved method for removing and disposing in a very simple and economical manner of the spent liquors incident to making wood-pulp by the sulfite process.

The method involves the following steps: first, drawing the spent liquor into a separate receptacle having a discharge-nozzle, and, second, forcing a current of air or steam into and through said receptacle in contact with the liquor filling the same, whereby the liquor is completely atomized and dissipated in the air.

In the accompanying drawing I illustrate in side elevation, parts being in section, the attachment of the tank or vat, which is a necessary element in carrying out my invention.

In detail I proceed as follows: The spent liquor is drawn from the vat A, in which the wood-pulp is made, by a pipe B to a spraying device C, having a spraying-nozzle D, con-

nected by a pipe E with a steam or air supply. The spent liquor passing by gravity into the spraying device C is instantly divided into minute particles by the action of air and steam issuing under pressure by the spraying-nozzle, and the divided liquor and the air or steam then pass into the atmosphere and evaporate. By thus spraying the spent liquor it is dissipated and disposed of in a very simple and economical manner. Suitable valves F F' are arranged in the pipes B and E for controlling the flow of the liquor to the spraying device and the steam or air employed for spraying the spent liquor.

From the above it is apparent that the air or steam requires to be at high pressure in order to effect the atomization.

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

The described method of dissipating the spent liquor of a pulp-digester, consisting in drawing off the liquor therefrom and forcing a fluid such as air under high pressure in contact with the liquor, whereby the latter is atomized, as described.

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

WILLIAM MAYO STONE.

Witnesses:

GEORGE W. THOMPSON,
MATHEW A. THOMAS.