

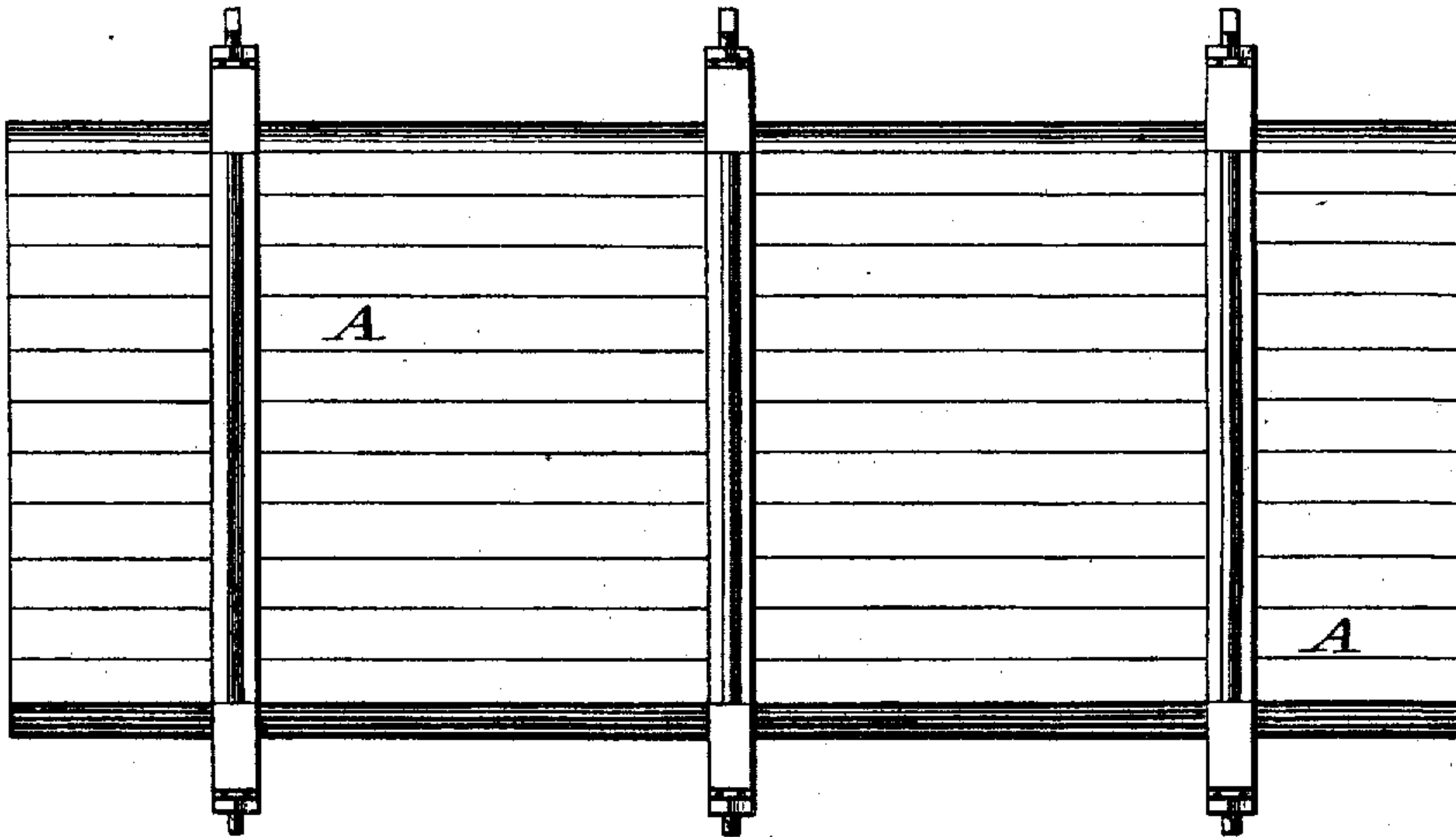
(No Model.)

J. B. BAKER.  
Pipe.

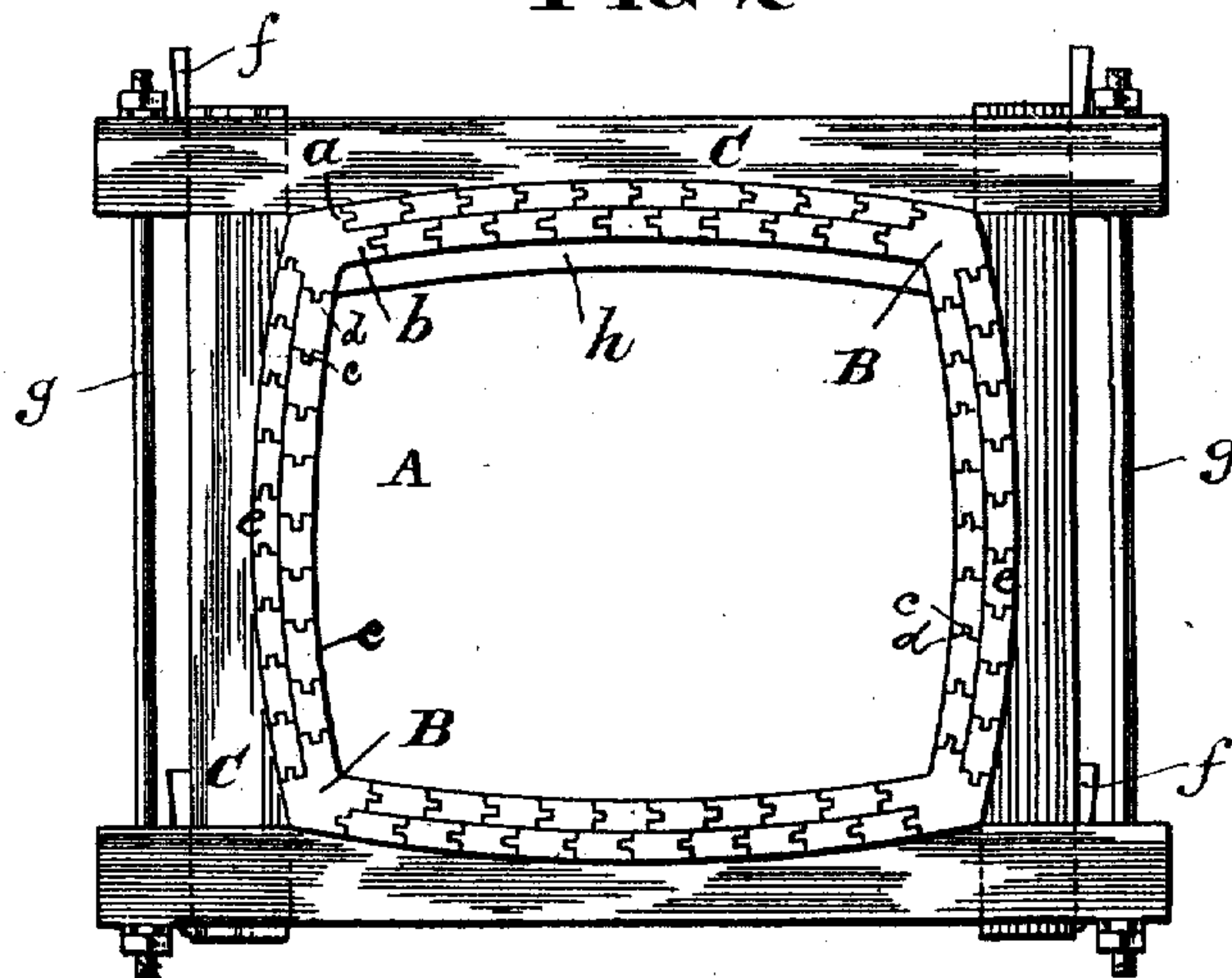
**No. 235,063.**

**Patented Dec. 7, 1880.**

**FIG 1**



**FIG 2**



## WITNESSES

Wilmer Bradford  
Edward Mc. Clain

# INVENTOR

Jefferson B. Baker  
By C W M Smith  
his Attorney.

# UNITED STATES PATENT OFFICE.

JEFFERSON B. BAKER, OF NEW ALMADEN, CALIFORNIA, ASSIGNOR OF TWO-THIRDS TO JAMES B. RANDAL AND GILES E. McDOUGALL, OF SAME PLACE, ONE-THIRD TO EACH.

## PIPE.

SPECIFICATION forming part of Letters Patent No. 235,063, dated December 7, 1880.

Application filed July 3, 1880. (No model.)

*To all whom it may concern:*

Be it known that I, JEFFERSON B. BAKER, of New Almaden, in the county of Santa Clara and State of California, have invented an Improved Pipe, of which the following is a specification.

My invention relates to certain improvements in the use of material and the construction of flues, tubes, or pipes for conveying steam, gases, acids, and fluids, and carrying and condensing vapors or volatile products of quicksilver or other metals, minerals, and substances, however the same may be produced; and the objects of my improvements are to provide a structure of wood, of any desired length and dimensions, having, as a conveyer for liquids, acids, and gases, all the advantages of a pipe or tube made of metal or other material in regard to solidity, simplicity, and resistance to inside or outside pressure, while it can readily be used for a condenser of quicksilver-vapors or other volatile products, its efficiency for cooling being increased by the well-known method of running water over the outer surface, all of which is accomplished at much less cost for the first installment and subsequent repairs than is possible in pipes manufactured in any other manner. The tube will also be found useful for sewer-pipe, as it is water and gas tight and perfectly smooth inside. Access can be readily had to the interior for any desired purpose by man-holes or otherwise, and any section can be cheaply repaired or replaced. For acids, gases, or fluids injurious to metals it has proved of great value. No iron, nails, or other metallic substances are employed in the flue itself, which can be tightened whenever required by the clamps on its exterior.

Referring to the accompanying drawings, Figure 1 is a side elevation, and Fig. 2 an end view, of my pipe.

Similar letters refer to similar parts throughout the views.

The pipe or flue A is constructed rectangular in form, with its four sides convex or bulging, the whole being supported and sustained by outside clamps and braces covering meet-

ing joints, as shown. It is made double or with two layers of tongued and grooved stuff or flooring, so arranged as to break joints longitudinally and transversely throughout the entire inner and outer circumference.

Each corner or angle B is of one piece, having two sides double rabbeted longitudinally, of which one edge is provided with a tongue, *a*, and the other with a groove, *b*, so as to receive the corresponding tongue and groove upon the edge of the strips adjoining at each side. The strips are also made with a tongue and groove, *c d*, as shown, and arranged so that the outside strips, *e*, will lap over and cover the inside joints.

In constructing my pipe I use the clamps C, of which the inner sides are made concave to correspond with the convex sides of the pipe. They are placed at a suitable distance apart with the keys and overhead timbers displaced, in which position the pipe may be constructed by first laying the bottom portion and then building up the sides, after which the roof or top portion is put in place by using the inner supporting-braces, *h*, having the same curvature as the roof and springing in the last strips in each layer in their order. Then the top or upper portion of the clamp or brace is joined with the uprights thereof, (after which the brace *h* can be removed, if desired,) and the keys *f* and the rods *g* are adjusted so as to rigidly clamp and hold firmly the whole structure against inside and outside pressure and leakage.

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

1. A pipe, flue, or tube to hold, convey, or condense liquids, gases, acids, and volatile substances, constructed of a double series of tongued-and-grooved strips of wood united so that all meeting joints are covered through every series or layer at any given point, substantially as herein specified.

2. In the construction of wooden pipes, flues, or tubes, the corners or angles B, formed of a single piece having double-rabbeted sides, substantially in the manner herein set forth.



3. The combination and arrangement of a wooden flue, pipe, or tube, A, composed of strips of wood united as described, and secured by clamp C, keys *f*, and rods *g*, operating in the manner substantially as herein set forth, and for the purposes specified.

5 In testimony that I claim the foregoing I

have hereunto set my hand and seal this 12th day of May, 1880.

JEFFERSON B. BAKER. [L. S.]

Witnesses:

R. BURNETT SMITH,  
ROB. B. BULMORE.