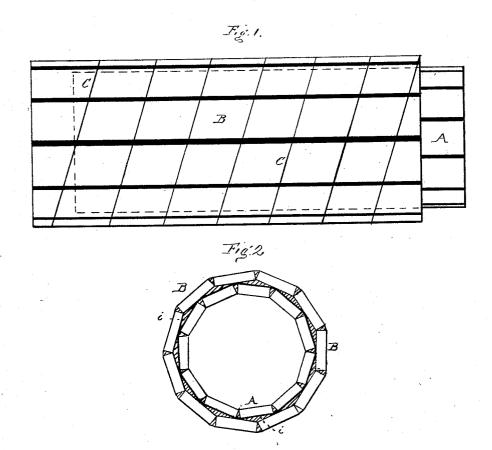
H. M. STOW. Sewer-Pipes.

No.149,080.

Patented March 31, 1874.



Witnesses. Jo In Gours Coen N. Brooks Menry Wester

UNITED STATES PATENT OFFICE.

HENRY M. STOW, OF SAN FRANCISCO, CALIFORNIA.

IMPROVEMENT IN SEWER-PIPES.

Specification forming part of Letters Patent No. 149,080, dated March 31, 1874; application filed December 16, 1873.

To all whom it may concern:

Be it known that I, HENRY M. STOW, of San Francisco, in the county of San Francisco and State of California, have invented certain Improvements in Sewer-Pipes, of which the following is a specification:

This invention relates to improvements in

sewer-pipes made principally of wood.

In the annexed drawings, Figure 1 represents a side view of a section of pipe made according to my invention, and Fig. 2 a crosssection of the same.

The invention consists in making a pipe of wooden staves put together in the form of two concentric cylinders, with pitched paper interposed between them, the staves being so arranged as to break joints, and the whole firmly bound together by strong wire or strap-iron wound spirally around the outer cylinder.

A is the inner cylinder; B, the outer one; C, the wrapping wire, and i the paper be-

tween the two cylinders.

In putting the staves together, I interpose pitch between them in all the joints, and this obviates the necessity of jointing the staves. Between the inner and outer cylinders I interpose one or more layers of coarse, thick paper, or other fibrous or textile material, well saturated with pitch, and the pipe may also be coated inside and outside with pitch, if desired. I prefer to use asphalt pitch applied hot, but any other suitable pitch or cement which is

insoluble in water will answer the purpose. The staves of the inner and outer cylinders are all of the same length; but they are so put together that the inner cylinder will protrude from the outer cylinder a short distance at one end, as shown at d, Fig. 1, and form an annular rabbet at the other end, for the purpose of jointing the sections of pipe together. The outer cylinder may be wrapped with paper before winding it with wire or strap-iron, if deemed expedient; but I do not consider this essential. The pitched paper between the inner and outer cylinders may be omitted, and a coating of pitch only interposed; but I prefer to use the paper or its equivalent.

What I claim as my invention, and desire to

secure by Letters Patent, is-

1. A sewer-pipe consisting of two concentric stave cylinders, with pitched paper, or the equivalent thereof, between them, wrapped with wire or strap-iron, substantially as described.

2. A sewer-pipe consisting of two concentric stave cylinders, with joints pitched, constructed substantially as described, with or without paper interposed between the cylin-

HENRY M. STOW.

Witnesses:

J. J. Coombs, WILLIAM FITCH.