

(No Model.)

D. R. CLARK.

STOVE PIPE.

No. 318,167.

Patented May 19, 1885.

Fig. 1.

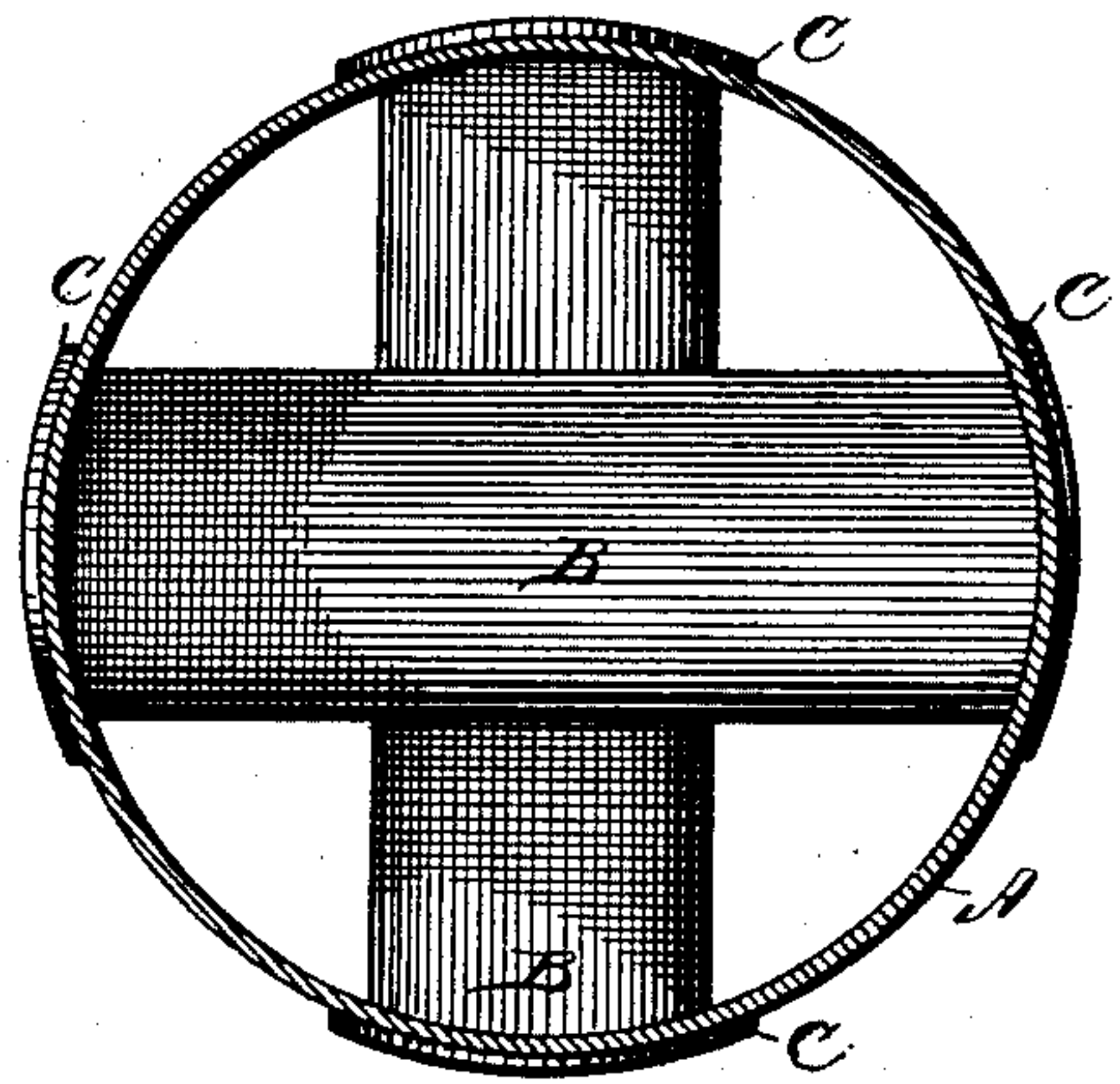
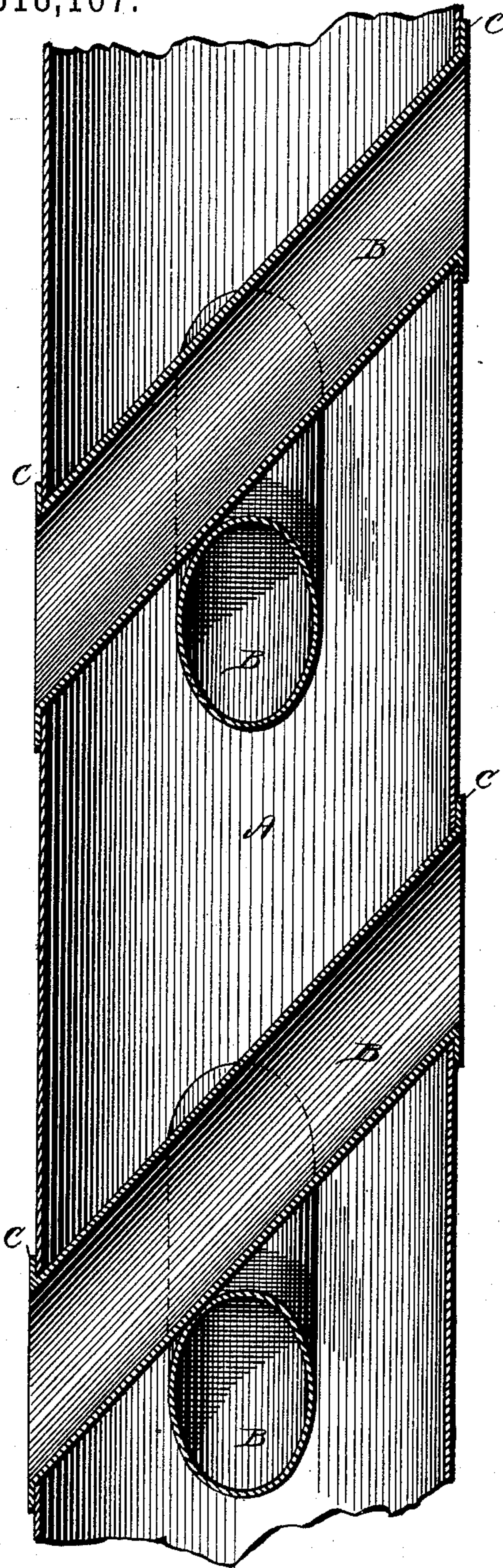


Fig. 2.

WITNESSES
Amos S. Seiden.
Clarence Moore.

INVENTOR
Daniel R. Clark
Franklin H. Stough
his Attorney

UNITED STATES PATENT OFFICE.

DANIEL ROGERS CLARK, OF ROCHESTER, NEW YORK.

STOVE-PIPE.

SPECIFICATION forming part of Letters Patent No. 318,167, dated May 19, 1885.

Application filed February 13, 1885. (No model.)

To all whom it may concern:

Be it known that I, DANIEL R. CLARK, a citizen of the United States, residing at Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Stove-Pipes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

With the use of stove-pipes heretofore constructed a very large amount of heat is carried up the chimney, and thus wasted.

The object of my invention is to provide an ordinary stove-pipe with a means of breaking the current of heated air in the interior of the pipe, and by thus preventing its escape up the chimney to effect a saving in fuel. I at the same time provide the pipe with a greater heating-surface and create a free circulation of air and even distribution of heat throughout the apartment. I accomplish these objects in the manner hereinafter specified, reference being had to the accompanying drawings and letters of reference marked thereon, which form a part of this specification.

Like letters refer to similar parts throughout the several views.

In the drawings, Figure 1 is a vertical section of my invention, and Fig. 2 a horizontal section of the same.

A represents a stove-pipe, provided at intervals with tubes B B extending through the same at an angle, the tubes having their entrances upon opposite sides of the pipe. The tubes B B may be of sheet metal and secured in place either by riveting or lapping the edges of the ends of the tubes down upon the outer surface of the pipe, as shown at C in the drawings.

The number of tubes placed within a single length of pipe, and the diameter of the same may be varied, so as to conform to the size of

the pipe used. I have found that good results are obtained by the use of four tubes, each two inches in diameter, in a single length of stove-pipe having a diameter of six inches. The tubes should be arranged so as to extend across the interior of the pipe at an angle.

The heat within the pipe coming into contact with the tubes extending across the interior of the same is arrested in its progress. The air within the tubes being thus heated at once escapes into the room, and is replaced by a current of cooler air, which enters the lower end of the tube, and thus a continuous and free circulation of air is maintained throughout the apartment.

I am aware that heating-drums have heretofore been constructed which have been provided with pipes extending through the same, for the purpose of affording a greater heating-surface. My invention is different in its construction, and has a different object in view, my object being to provide a stove-pipe with tubes arranged within the pipe in such a manner as to permit the air when heated to escape into the apartment, its place being supplied by a current of cooler air from the outside, thus creating a free circulation of heated air in the apartment.

Having thus described my invention and set forth its merits, what I claim to be new, and desire to secure by Letters Patent, is—

The within-described stove-pipe A, provided with inclined air-tubes B B, arranged so as to cross one another upon the interior of the pipe, substantially as and for the purpose specified.

In testimony whereof I affix my signature in presence of two witnesses.

DANIEL ROGERS CLARK.

Witnesses:

RICHARD BROWN,
GEORGE HALFORD CLARK.