

W. B. ALLEN.  
Stove-Pipe.

No. 214,803.

Patented April 29, 1879.

Fig. 1.

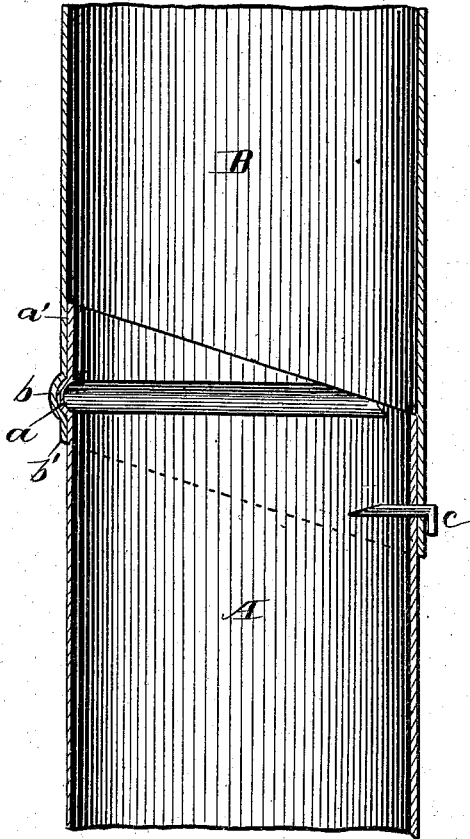


Fig. 3.

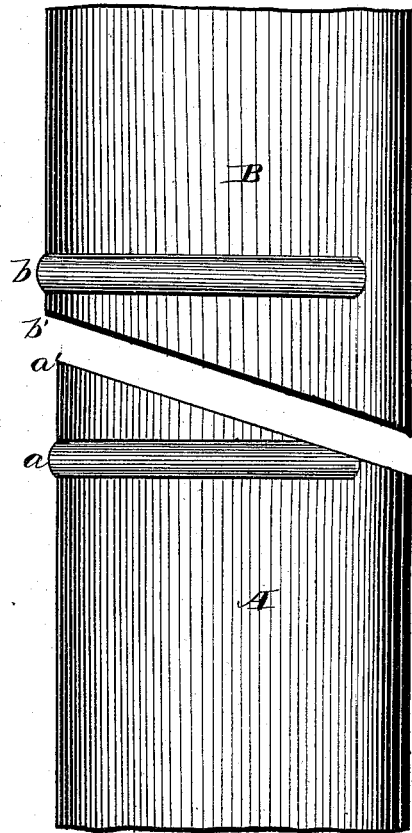
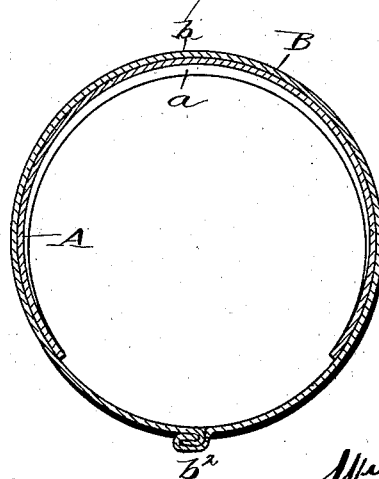


Fig. 2.



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WILLIAM B. ALLEN, OF ORLEANS, NEW YORK.

## IMPROVEMENT IN STOVE-PIPES.

Specification forming part of Letters Patent No. **214,803**, dated April 29, 1879; application filed February 25, 1879.

*To all whom it may concern:*

Be it known that I, WILLIAM B. ALLEN, of Orleans, in the county of Ontario 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to stove-pipes, the objects being, severally, to permit the connecting sections to be readily and easily engaged or disengaged; to cause the connected pipe to be strong and fixed in its position without support from guides or similar devices; to permit accurate measurement of exact number and length of sections for any certain distance; and, finally, to accomplish the foregoing in a simple and economical manner.

To this end the invention consists, first, in the combination of two stove-pipe sections whose meeting ends, cut transversely in a diagonal plane, are united by a rib-and-groove joint, which latter is formed at right angles to the longitudinal axis of the pipe, said joint having its transverse central line opposite the pipe-seam, and extending on both sides of the pipe partly around to said seam; second, in the combination of two stove-pipe sections united by a rib-and-groove joint, which latter is formed at right angles to the longitudinal axis of the pipe, said sections having their joining ends cut transversely in a diagonal plane, the long point of the inner section being adapted to first enter the outer section at the shortest point of the latter; third, in the combination of two stove-pipe sections having their joining ends cut transversely in a diagonal plane, the long point of the inner section being adapted to first enter the outer section at the short point of the latter, together with a device fastening the two sections together, and passing through said long point of the outer section and said short point of the inner section.

Referring to the drawings, Figure 1 is a longitudinal central sectional view, representing the invention. Fig. 2 is a transverse section

of the same. Fig. 3 shows the meeting ends of two sections as the latter are disconnected.

The drawings as above simply represent a portion of any two connecting sections in a stove-pipe.

The rib *a*, formed right angularly on the meeting end of the inner fitting section, *A*, interlocks with a corresponding groove, *b*, formed in like manner on the outer fitting section, *B*, the joining of the two sections being by inserting the long point or portion *a'* of the inner section within the outer section at the short point or portion *b'* of the latter; and in order to permit of this ready joining of the same, the meeting ends of the sections are cut transversely in a diagonal plane. In order, however, to cause the pipe, as the same is connected in sections, to be firm and secure in position, the rib-and-groove joint is formed, extending mainly about that portion of the pipe circumference which is without seam. The central transverse line of this joint is opposite the usual seam *b<sup>2</sup>* of the pipe, and from this point the joint extends around both sides of the pipe till within proper distance from the seam, approximately as shown in the drawings. It is not necessary that the sections, when used in a horizontal pipe, should be further connected together than by this joint; and even in instance of a vertical pipe additional fastening is not required. But to provide means for extreme cases, I employ a pin, *c*, or other equivalent device, which passes through suitable holes *d* in the seams of the two sections, thus serving as an independent fastening in addition to the rib-and-joint interlocking connection.

A pipe whose sections are thus made and united is very strong. It does not require guides or analogous supports to maintain its place, and also it permits of the accurate knowledge of the number and length of sections necessary to build a pipe any certain distance.

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

1. The combination of two stove-pipe sections whose meeting ends, cut transversely in a diagonal plane, are united by a rib-and-

groove joint, which latter is formed at right angles to the longitudinal axis of the pipe, said joint having its transverse central line opposite the pipe-seam, and extending on both sides of the pipe partly around to said seam, substantially as set forth.

2. The combination of two stove-pipe sections united by a rib-and-groove joint, which latter is formed at right angles to the longitudinal axis of the pipe, said sections having their joining ends cut transversely in a diagonal plane, the long point of the inner section being adapted to first enter the outer section at the shortest point of the latter, substantially as set forth.

3. The combination of two stove-pipe sec-

tions having their joining ends cut transversely in a diagonal plane, the long point of the inner section being adapted to first enter the outer section at the short point of the latter, together with a device fastening the two sections together, and passing through said long point of the outer section and said short point of the inner section, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 20th day of February, 1879.

WILLIAM B. ALLEN. [L. S.]

In presence of—

PLINY T. SEXTON,  
G. R. STETSON.