

F. T. BOLTON & SARAH E. HURST.

FIRE-PROOF CHIMNEY.

No. 174,939.

Patented March 21, 1876.

Fig. 2.

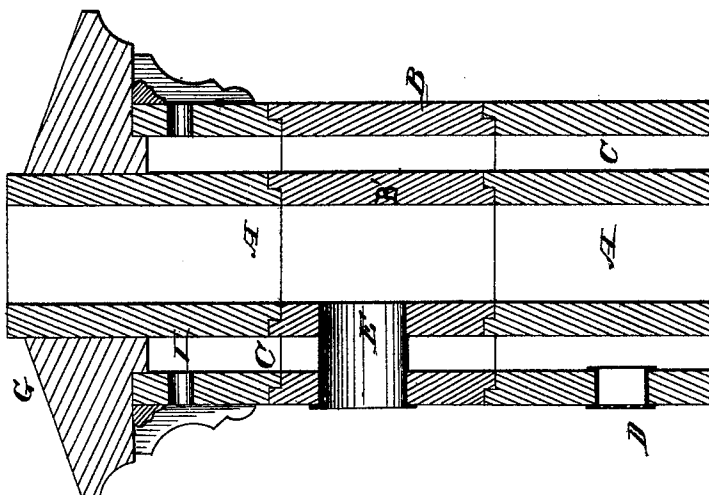
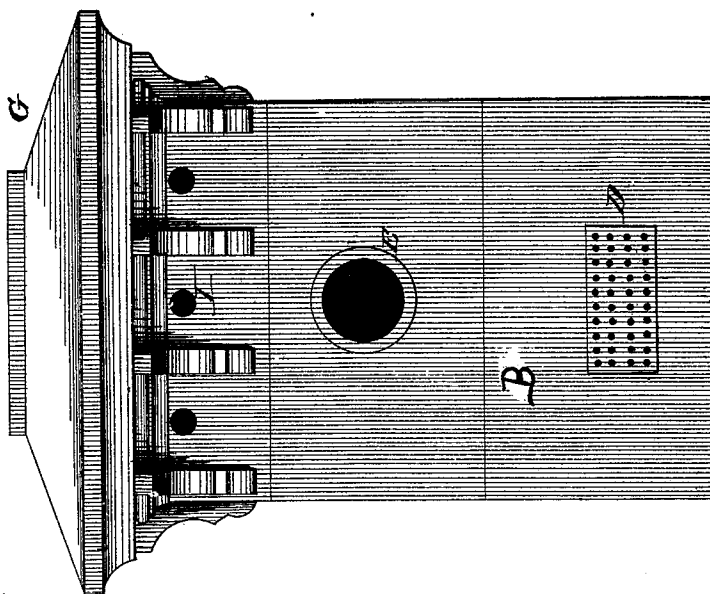


Fig. 1.



Witnesses

Henry Winter  
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# UNITED STATES PATENT OFFICE.

FRANCIS T. BOLTON AND SARAH E. HURST, OF TERRE HAUTE, INDIANA.

## IMPROVEMENT IN FIRE-PROOF CHIMNEYS.

Specification forming part of Letters Patent No. **174,939**, dated March 21, 1876; application filed February 18, 1876.

### *To all whom it may concern:*

Be it known that we, FRANCIS T. BOLTON and SARAH E. HURST, of Terre Haute, in the county of Vigo and State of Indiana, have invented certain new and useful Improvements in Chimneys or Flues; and do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon.

The nature of our invention consists in a fire-proof chimney or flue, made in sections, and of an interior and an exterior shell, forming an air-chamber between them, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which our invention appertains to make and use the same, we will now proceed to describe its construction and operation, referring to the annexed drawing, which forms a part of this specification, and in which—

Figure 1 is a side elevation of a chimney embodying our invention. Fig. 2 is a vertical section of the same.

Our fire-proof chimney is made of fire-clay, potter's clay, stone, cement, or other similar material, in an inside flue, A, and an outside flue, C, formed by casings B B'. Both of these are made in sections and closely jointed, and put up with cement; and they may be made of any suitable dimensions, and form an air-chamber, C, between them, to surround

the entire inner flue A, for the passage of cold air. This air-chamber prevents the heating of the outer flue. At the bottom of the chimney is a ventilator, D, which opens into the room, and above the same is inserted a stove-pipe thimble, E, of the same material as the chimney, said thimble entering the inner flue A, as shown. The top of the chimney is surrounded by a bracket, G, or other ornament, and in said top are outlets I I from the air-chamber C. The cold air may enter said chamber, by any suitable means, at the bottom.

In a fire-place for the use of wood, or a coal-grate, the chimney should commence just above the arch.

This chimney is cheaper than one built wholly of brick or stone, is more durable, and much safer as regards fire.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

The combination of the inner flue A, casings B B', air-chamber C between them, ventilator D, and stove-pipe thimble E, all constructed substantially as and for the purposes herein set forth.

FRANCIS T. BOLTON.  
SARAH E. HURST.

Witnesses:

HENRY WINTER,  
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