

(No Model.)

H. McMAHAN.
FLUE OR CHIMNEY LINING.

No. 357,018.

Patented Feb. 1, 1887.

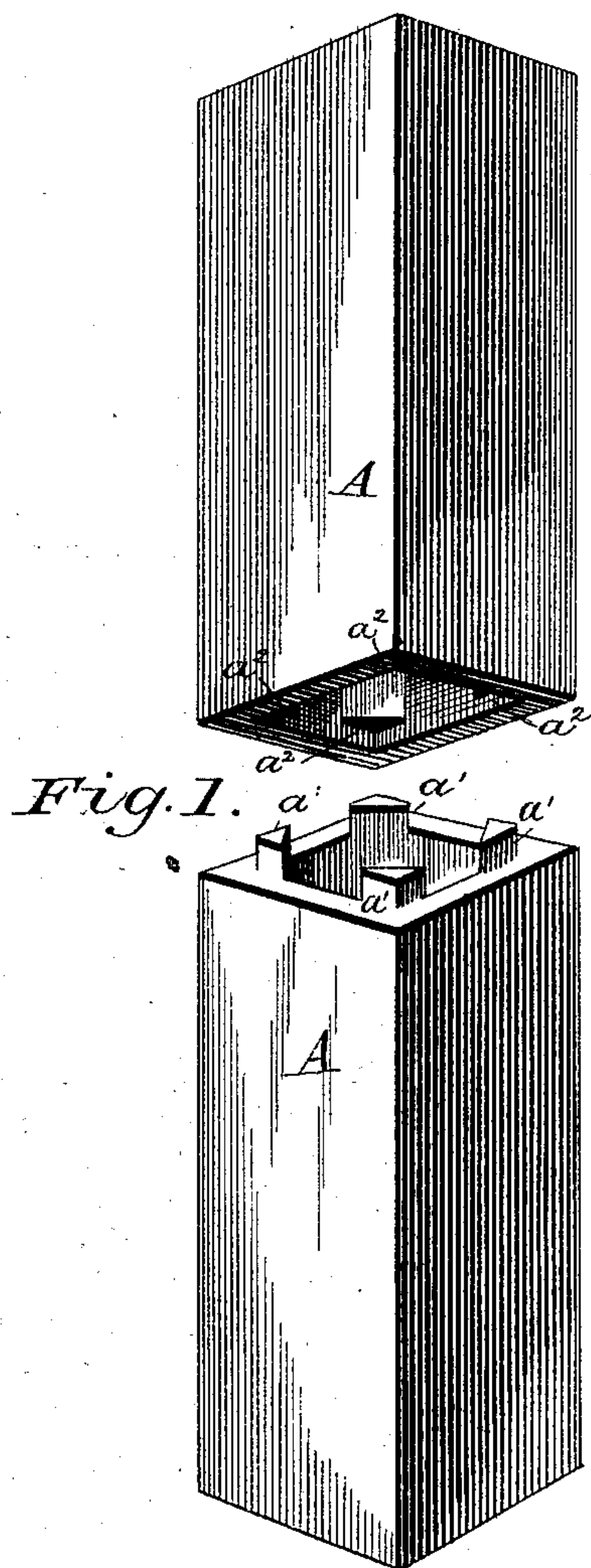


Fig. 2.

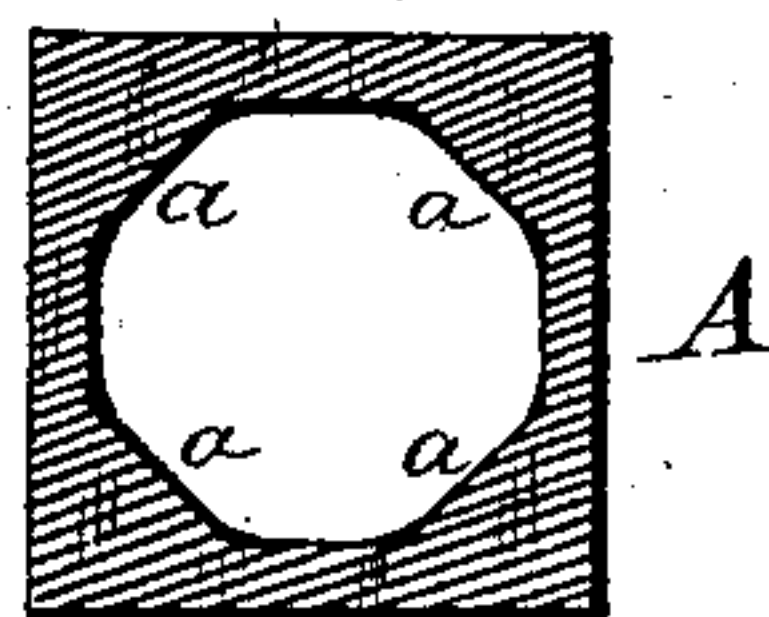
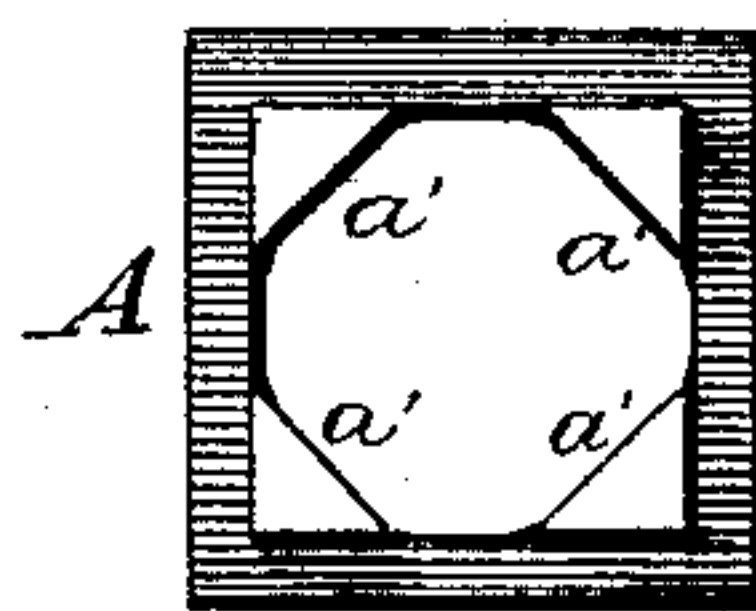


Fig. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

HUGH McMAHAN, OF NEW CUMBERLAND, WEST VIRGINIA.

FLUE OR CHIMNEY-LINING.

SPECIFICATION forming part of Letters Patent No. 357,018, dated February 1, 1887.

Application filed September 10, 1886. Serial No. 213,270. (No model.)

To all whom it may concern:

Be it known that I, HUGH McMAHAN, of New Cumberland, in the county of Hancock and State of West Virginia, have invented a new and useful Improvement in Flues or Chimney-Linings, of which the following is a specification.

My invention relates to terra-cotta or earthenware flues and chimney-linings, and its object is to construct a flue or chimney-lining in which the sections cannot be displaced laterally at the joints, and which, while conforming to the rectangular shape of chimneys, shall approximate a round form on the inside and be much thicker and stronger at its angles than flues which are of uniform thickness.

To this end it consists in constructing the flue-sections of an angular cross-section and with its interior angles filled in or re-enforced, so as to approximate a round form, and having these filled-in or re-enforced portions extended beyond the length of the flue-section at one end to form tenons, and falling short of the length of the flue-section at the other end to form sockets to receive the tenons of the next flue-section, as hereinafter more fully described.

Figure 1 is a perspective view of two sections of the flue or chimney-lining separated at the joint. Fig. 2 is a cross-section, and Fig. 3 an end view, of one of the sections.

In the drawings, A A represent two of my improved flue-sections, which are all constructed alike. These flue-sections are square or rectangular on the outside and upon their inside have the right angles at the four corners filled up or re-enforced at $a a a a$, which causes the interior of the flue to approximate the round form, which is most desirable, and also greatly strengthens the flue-section. At one end of each flue-section these filled-in or re-enforced parts a are extended beyond the length of the flue-section, as at $a' a' a' a'$, to form tenons, and at the other end of each section these re-enforced parts a fall short of or

do not extend to the end of the flue-section, forming thereby sockets or seats $a^2 a^2 a^2 a^2$, to receive the tenons of the next adjacent flue-section. The advantages of this construction are that it not only gives a better contour for the interior of the flue and makes a stronger flue or lining, but the joint made by the sections is incapable of lateral separation or displacement, and if any of the tenons become accidentally broken off it does not leave an opening in the flue or lining to permit the escape of smoke or hot air.

I am aware of the Patent No. 212,072, and do not claim anything shown therein. My invention is distinctive in the following respects: First, the outer faces of the flue all coincide, forming a perfectly smooth exterior, with the ends of the sections abutting against each other, instead of telescoping into or being inserted the one into a bowl of the other; secondly, the lugs a' (and cavities a^2) are set back from the exterior planes and are on the inner surface and located in the thickened angles at the corners. This places the projecting lugs where they are not liable to be broken off in handling or transporting the same, and saves much loss.

Having thus described my invention, what I claim as new is—

The flue or pipe section A, having a rectangular outer surface in cross-section and an approximately round inner surface, with smooth exterior planes from end to end, and having lugs a' and corresponding cavities, a^2 , set back from the exterior planes and on the interior surface, whereby the flue sections are permitted to abut with coinciding planes without telescoping and without lateral displacement, and the lugs are protected against breakage, substantially as shown and described.

HUGH McMAHAN.

Witnesses:

SOLON C. KEMON,
CHAS. A. PETTIT.