

A. L. PENNOCK.

Domestic Boiler.

No. 102,312.

Patented April 26, 1870.

Fig: 1.

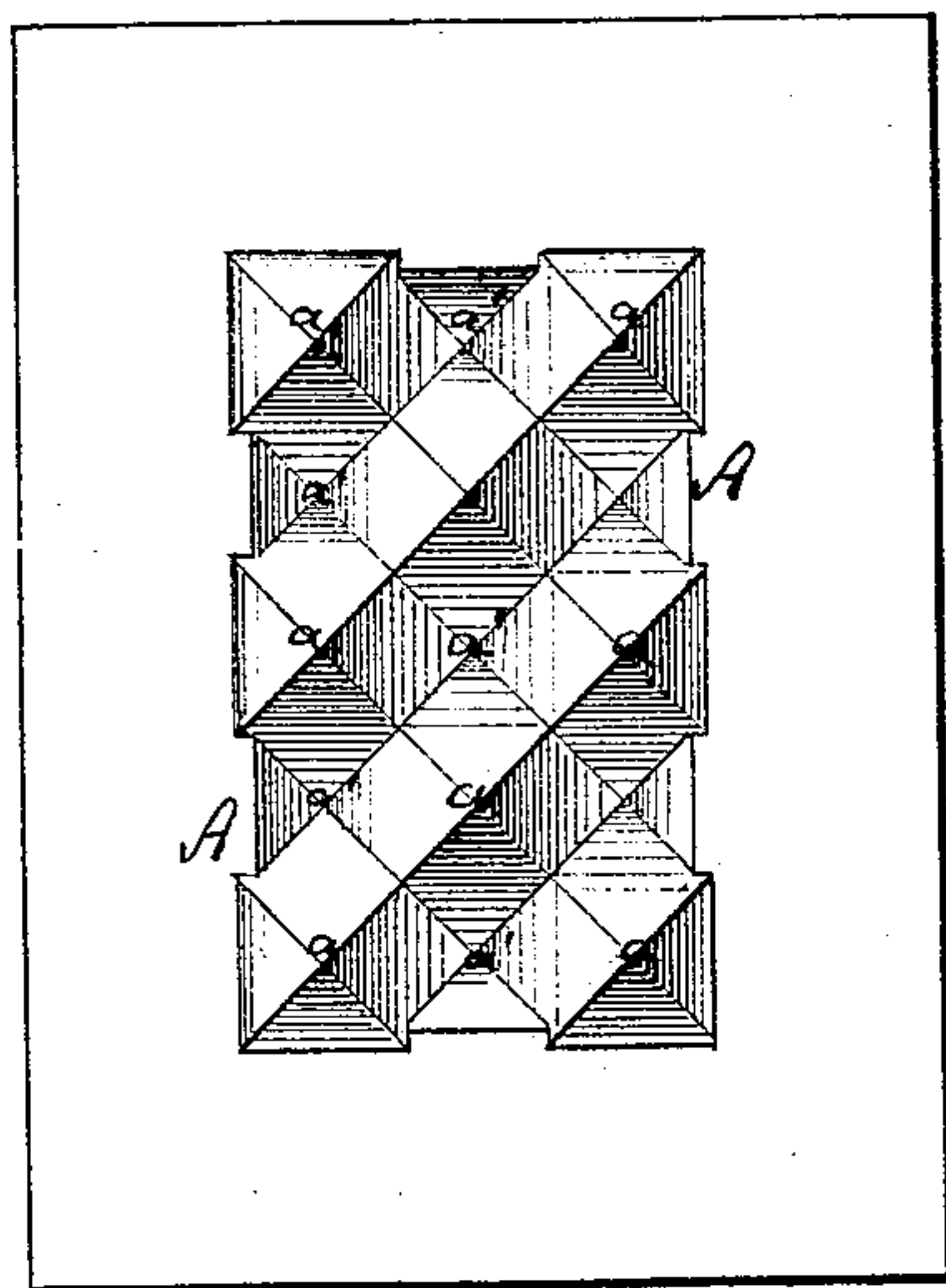
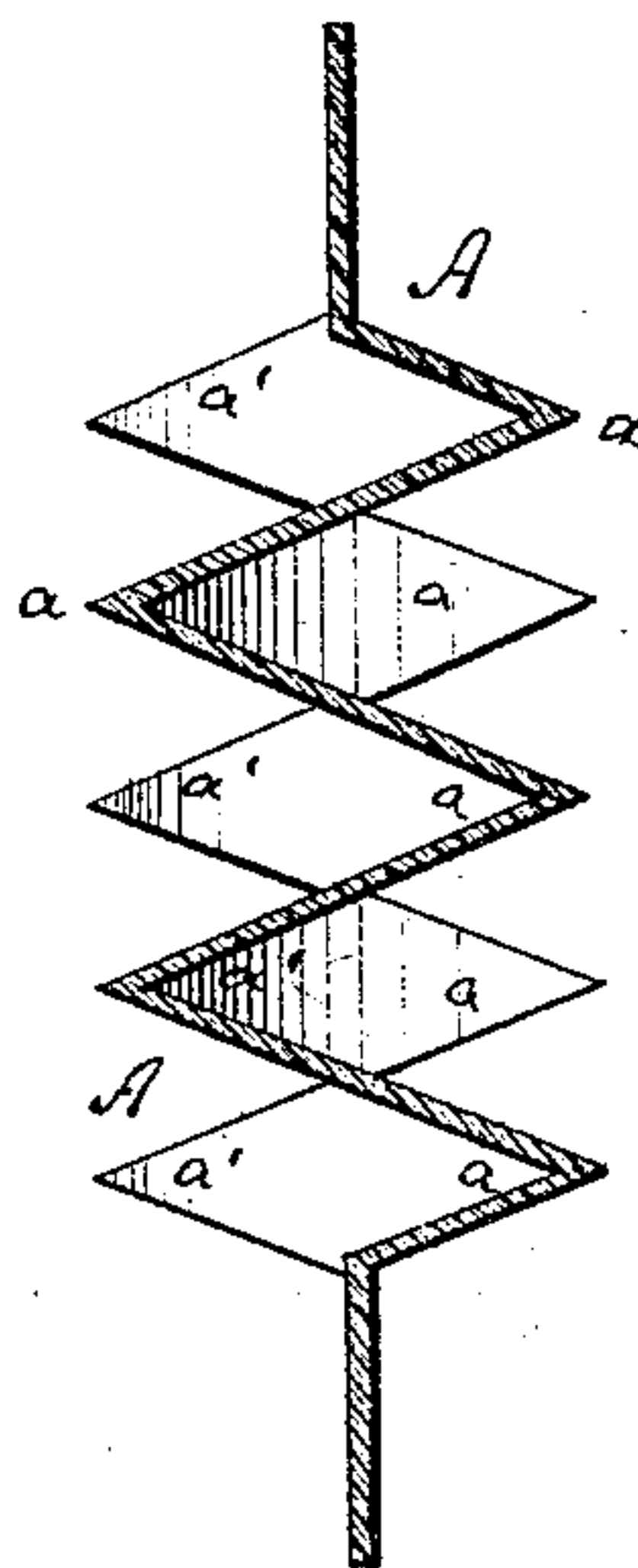


Fig: 2.



Witnesses:

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ABRAHAM LIDDON PENNOCK, OF PHILADELPHIA, PENNSYLVANIA.

RADIATING OR BOILER PLATE.

Specification forming part of Letters Patent No. **102,312**, dated April 23, 1870.

To all whom it may concern:

Be it known that I, ABRAHAM LIDDON PENNOCK, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and Improved Radiating or Boiler Plate; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

Figure 1 represents a plan view of my improved boiler-plate. Fig. 2 is a longitudinal section of the same.

Similar letters of reference indicate corresponding parts.

This invention relates to new heating or radiating plate, which is so constructed as to contain almost the largest attainable heating-surface, without making it difficult to be cast.

The invention is applicable to steam-boilers as heating-surface, or to heaters for radiating purposes.

The invention consists in making the plate entirely of hollow pyramidal projections, which are arranged alternately on both sides of the plate, to occupy the entire surface of the same.

A in the drawings represents my improved radiating or heating plate. It is made of cast-

iron or other suitable material, and is made of hollow pyramidal projections *a a'*, which are arranged alternately on opposite sides of the plate. The pyramidal projections are set so close together, with an object of economizing space and enlarging the heating-surface, that each side of each one is continued to the opposite side of the plate to constitute a side of the opposite but contiguous pyramid. On the outer side of the plate the heating or radiating surface is formed by the outer sides of the outwardly, and by the inner faces of the inwardly-projecting pyramids. Each face of the plate A appears as though composed of alternate pyramidal projections *a* and depressions, the latter being the inner sides of the inwardly-projecting pyramids *a'*. This plate, it will be seen, is so formed that it can be drawn from a mold, and therefore conveniently cast.

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

The heating or radiating plate composed of alternate inwardly and outwardly projecting pyramids, as set forth.

ABRAHAM LIDDON PENNOCK.

Witnesses:

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