

P. H. DECKER.

Bed-Pipes for Lead-Corroding Houses.

No. 158,405.

Patented Jan. 5, 1875.

Fig. 1

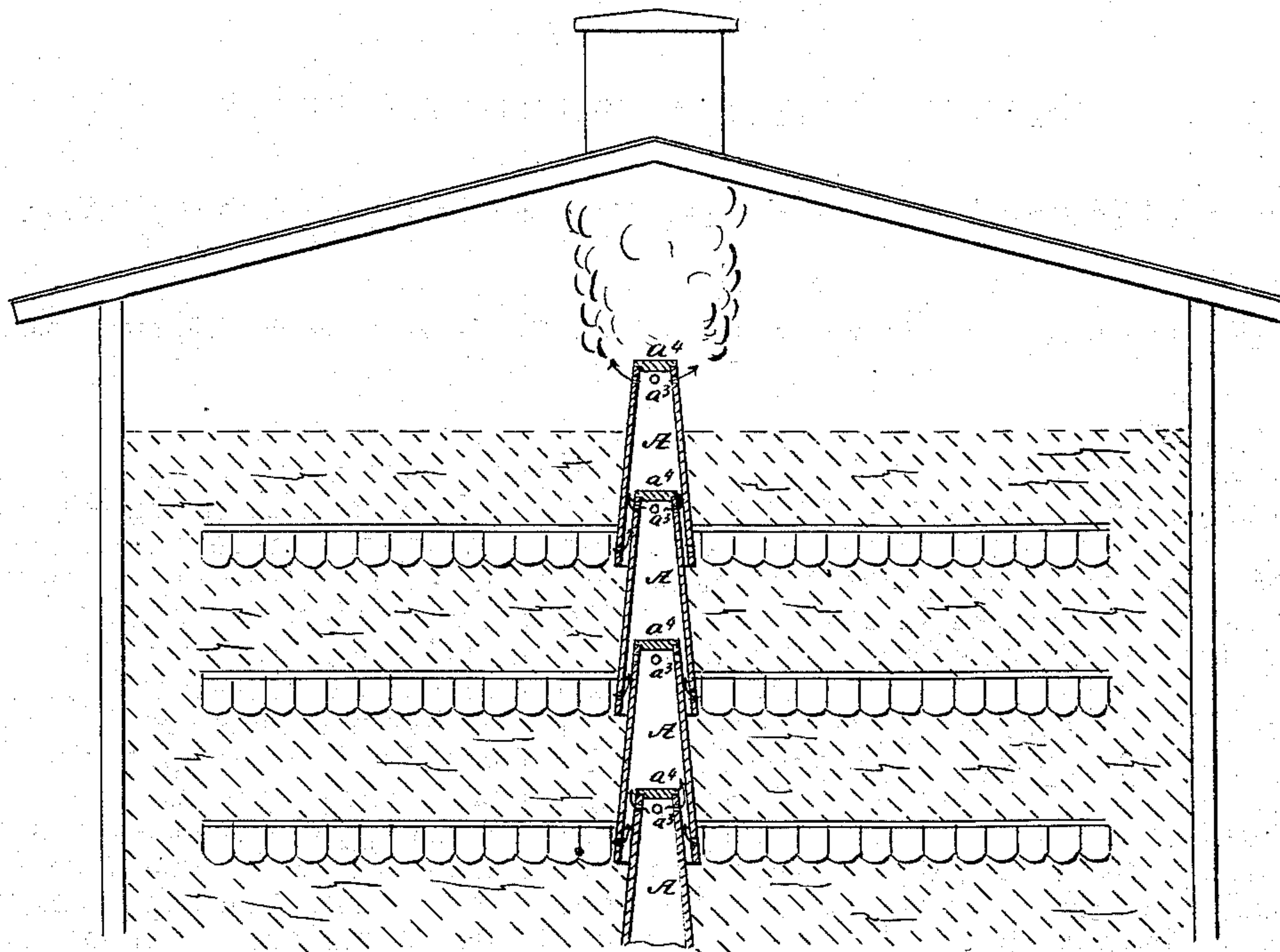


Fig. 2.

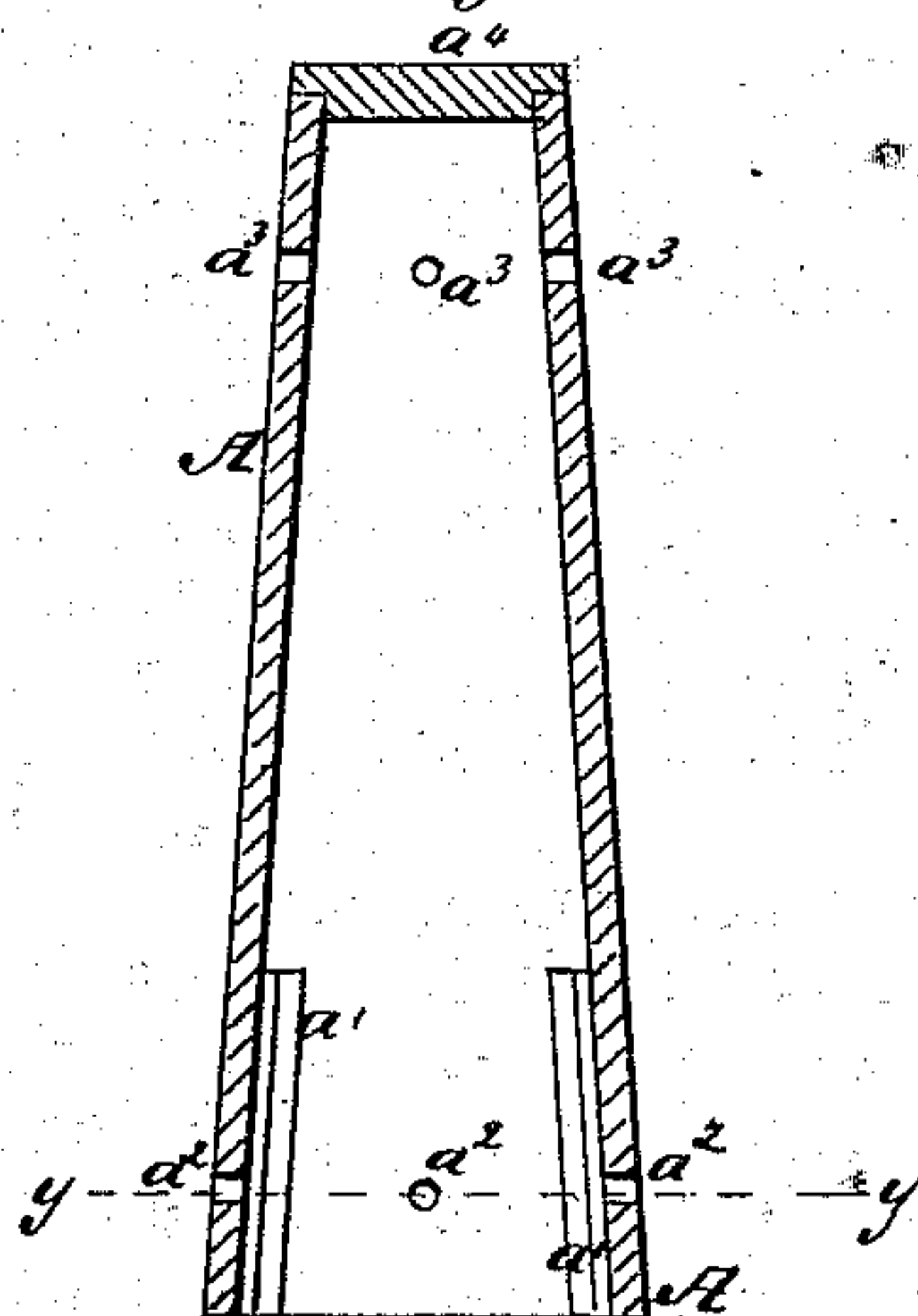
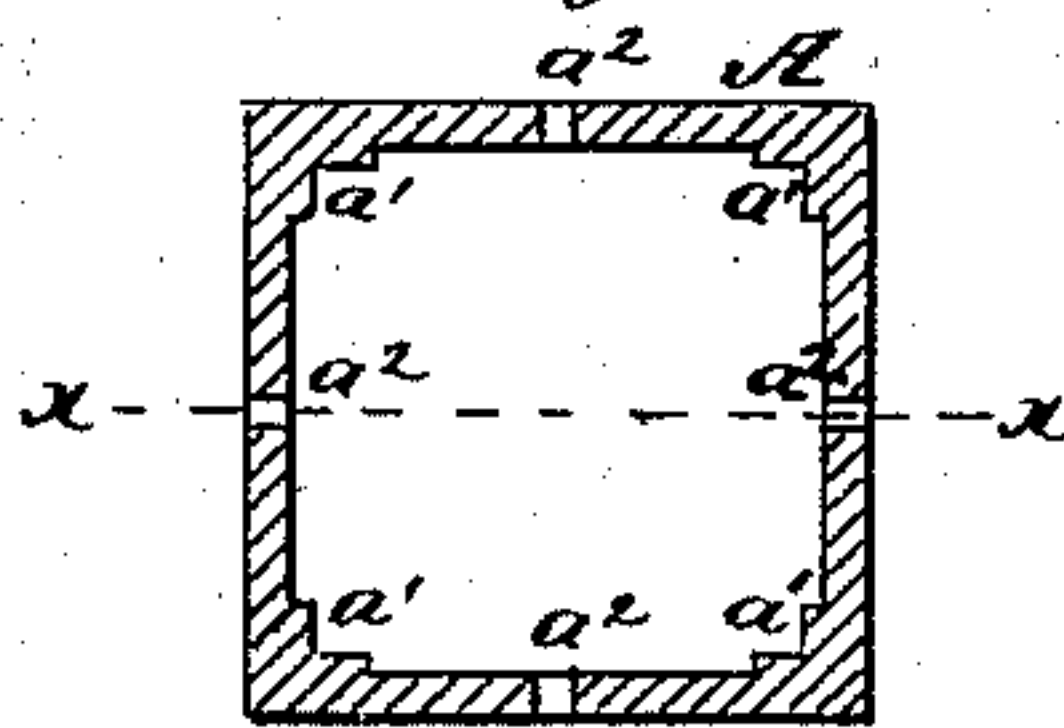


Fig. 3.



WITNESSES:

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PETER H. DECKER, OF MORSSSTON, NEW YORK.

## IMPROVEMENT IN BED-PIPES FOR LEAD-CORRODING HOUSES.

Specification forming part of Letters Patent No. **158,405**, dated January 5, 1875; application filed December 12, 1874.

*To all whom it may concern:*

Be it known that I, PETER H. DECKER, of Morssston, Sullivan county, New York, have invented a new and useful Improvement in Ventilating or Bed Pipes for Lead-Corroding Houses, of which the following is a specification:

Figure 1 is a vertical section of a series of my improved ventilating or bed pipes, illustrating their use. Fig. 2 is a detail longitudinal section of one of the pipes, enlarged, taken through the line *x x*, Fig. 3; and Fig. 3 is a detail cross-section of the same, taken through the line *y y*, Fig. 2.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish improved ventilating or bed pipes for causing a uniform circulation and the same degree of heat through all the corroding-pots of all the tiers of the stack.

The invention consists in ventilating or bed pipes made tapering, and provided with blocks in the interior of their lower parts, with holes or openings in the lower and upper parts of their sides, and with caps at their upper ends, as hereinafter fully described.

A represents the pipes, one of which is used for each tier of pots, and which are made of such a length as to extend from the tier to which they belong, through the superimposed tan-bark, and through the next tier of pots, or, in the case of the last or top pipe, to project above the last tier of the tan-bark. The pipes A are made rectangular in their cross-section, as shown in Fig. 3, and slightly tapering, as seen in Figs. 1 and 2, so that the upper end of each lower pipe A may enter the

lower end of each upper pipe, as shown in Fig. 1. In the corners or angles of the lower part of each pipe A are secured angular blocks  $a^1$ , to receive the corners of the upper part of the next lower pipe, and thus keep the sides of the said upper part from coming in contact with the sides of said lower part, so that spaces or flues may be left for the passage of the vapor. In the lower part of the sides of each pipe A, and in line with the tier of pots to which said pipe belongs, are formed holes or openings  $a^2$ , to permit the vapor from said tier of pots to enter the said pipes and pass up through them. In the upper part of the sides of each pipe A are formed holes or openings  $a^3$ , just below the caps  $a^4$ , by which the upper end of each pipe is closed, so that the vapors may pass from each lower pipe into the pipe above it, and, in the case of the upper pipe, pass out into the corroding-house.

By this construction the passage of the vapors from the lower to the upper pipes induces a draft from each tier of pots, producing a uniform circulation and heat throughout the stack.

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

Ventilating or bed pipes A, made tapering, and provided with blocks  $a^1$  in the interior of their lower parts, with holes or openings in the lower and upper parts of their sides, and with caps at their upper ends, substantially as herein shown and described.

PETER H. DECKER.

Witnesses:

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