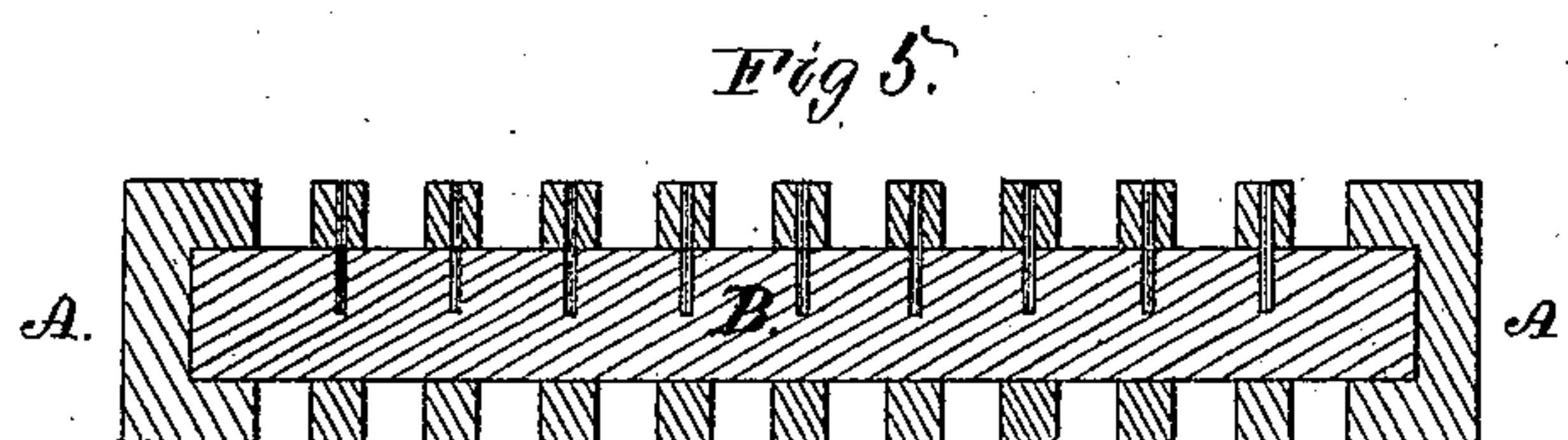
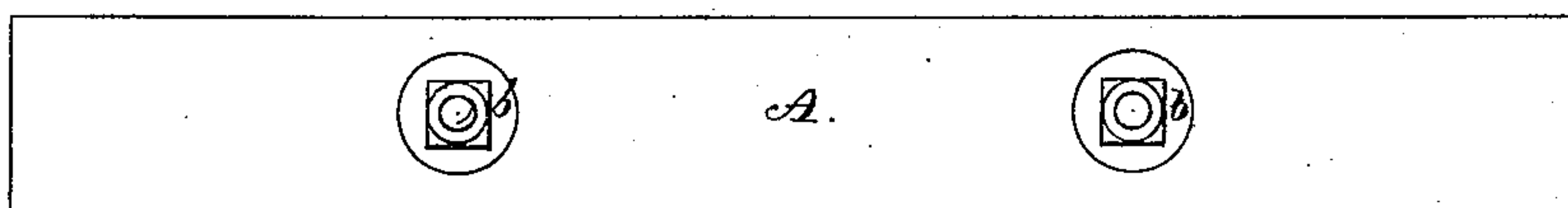
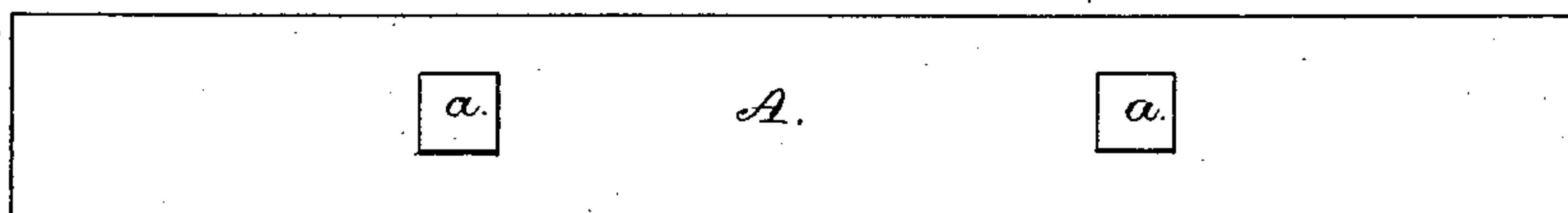
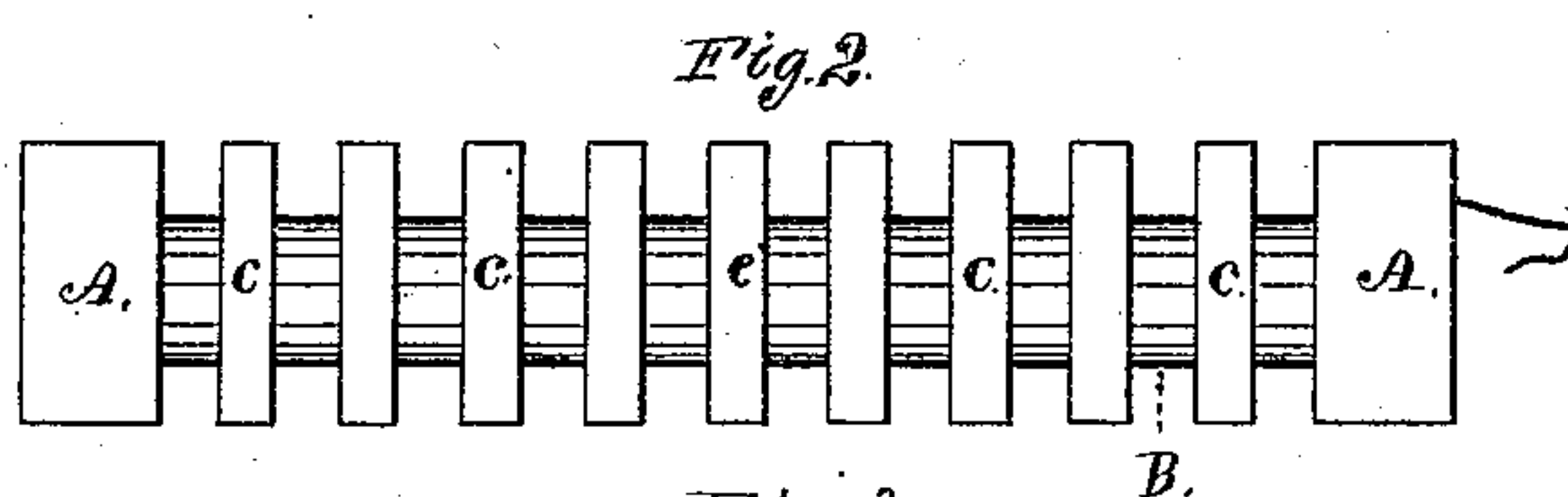
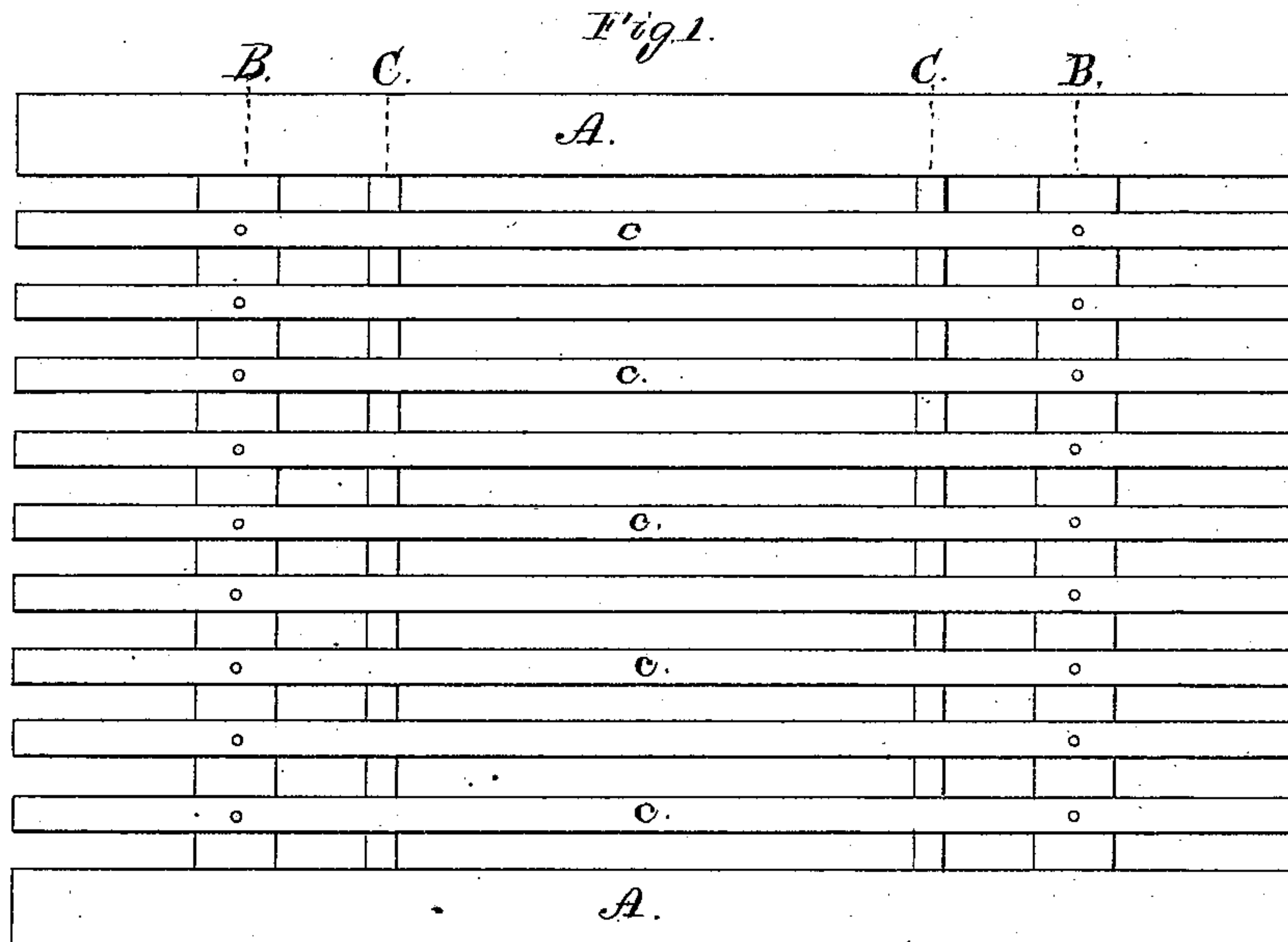


G. W. DAY.

Lime-Supporting Tray for Gas-Purifying Boxes.

No. 164,078.

Patented June 8, 1875.



Witnesses.  
Geo Gray-  
H. L. Hale

George W. Day  
by his attorney  
J. P. Hale

# UNITED STATES PATENT OFFICE.

GEORGE W. DAY, OF HAVERHILL, MASSACHUSETTS, ASSIGNOR TO MANHATTAN LIME HURDLE COMPANY, OF SAME PLACE.

## IMPROVEMENT IN LIME-SUPPORTING TRAYS FOR GAS-PURIFYING BOXES.

Specification forming part of Letters Patent No. **164,078**, dated June 8, 1875; application filed February 19, 1875.

*To all whom it may concern:*

Be it known that I, GEORGE W. DAY, of Haverhill, in the county of Essex and State of Massachusetts, have invented a new and useful Improvement in Lime-Supporting Hurdles or Trays for Gas - Purifying Boxes; 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 which it pertains to make and use the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon, which form a part of this specification.

In the said drawing, Figure denotes a top view, Fig. 2 an end view, and Figs. 3 and 4 side views, of a hurdle or tray constructed in accordance with my invention. Fig. 5 is a central and vertical section taken longitudinally through one of the transverse bars of the frame.

My invention has reference to that class of devices used in gas - purifying boxes for supporting the lime employed in eliminating the impurities of the gas.

The object of my invention is to produce a simple, cheap, and effective device for such purpose; and consists in the novel construction and arrangement of parts, as hereinafter referred to and claimed.

In the drawings, A A denote two rectangular bars, which compose the sides of the frame, the same being connected by two cylindrical wooden bars or rods, B B. *c c* are a series of strips or slats, of a rectangular or other desired shape in cross-section, such strips extending longitudinally of the frame, and being of the same length as the side bars A A. Each of such slats has two cylindrical holes made transversely through it, in order to enable the slat to be slipped and located on the bars B B. The slats, when slipped on the said bars, are to be adjusted at a suitable distance apart to support the lime, and to form suitable openings to allow the gas to pass up through. These slats, so arranged, are to be rigidly secured to the bars B B by means of wooden pins driven down through the slats and into the bars. If desirable, the side bars may be secured to the bars B in like manner. C C are two metallic rods, each of which is pro-

vided, at one of its ends, with a rectangular or other proper-shaped head, *a*, its other end having a female screw cut upon it to receive a nut, *b*. These two rods are extended transversely through the frame or the bars A A and the series of slats, and between the transverse bars B B, the heads of the rods, as well as the nuts, being sunk in sockets in the side bars, so as not to project beyond the outer face of the latter. The object of these screw or adjusting rods is to stiffen the hurdle, and allow the bars A A to be tightened as circumstances may require.

In constructing my improved hurdle or tray the two cylindrical bars B B are to be secured to one of the side bars A. Next the series of slats are to be successively slipped upon the bars B B, and arranged at the desired distance apart, and, when located, the said slats are to be pinned to each of the bars B. The other side bar is next to be connected with the bars B B; and, finally, the screw-rods (in case such may be employed) are to be passed through the bars A A and the series of slats, and the nuts put in place upon the rods, and turned until the frame or tray has attained the requisite firmness; or, in case of shrinkage of the bars, the nuts may be adjusted to preserve the proper stiffness.

Having described my invention, what I claim is—

1. The improved lime-supporting hurdle or tray, as specified, the same consisting of the rectangular side bars A A, the cylindrical bars B B, and the series of slats *c c*, &c., the said bars B extending transversely through the bars A and the series of slats *c*, and the latter secured to the bars B, in manner as shown and described.

2. The combination, with the bars A A, bars B B, and the series of slats *c c*, constructed, arranged, and combined together as described, of the adjusting clamp-rods, as and for the purpose set forth.

In testimony that I claim the foregoing as my own invention, I affix my signature in presence of two witnesses.

GEO. W. DAY.

Witnesses:

F. P. HALE,  
F. C. HALE.