

(No Model.)

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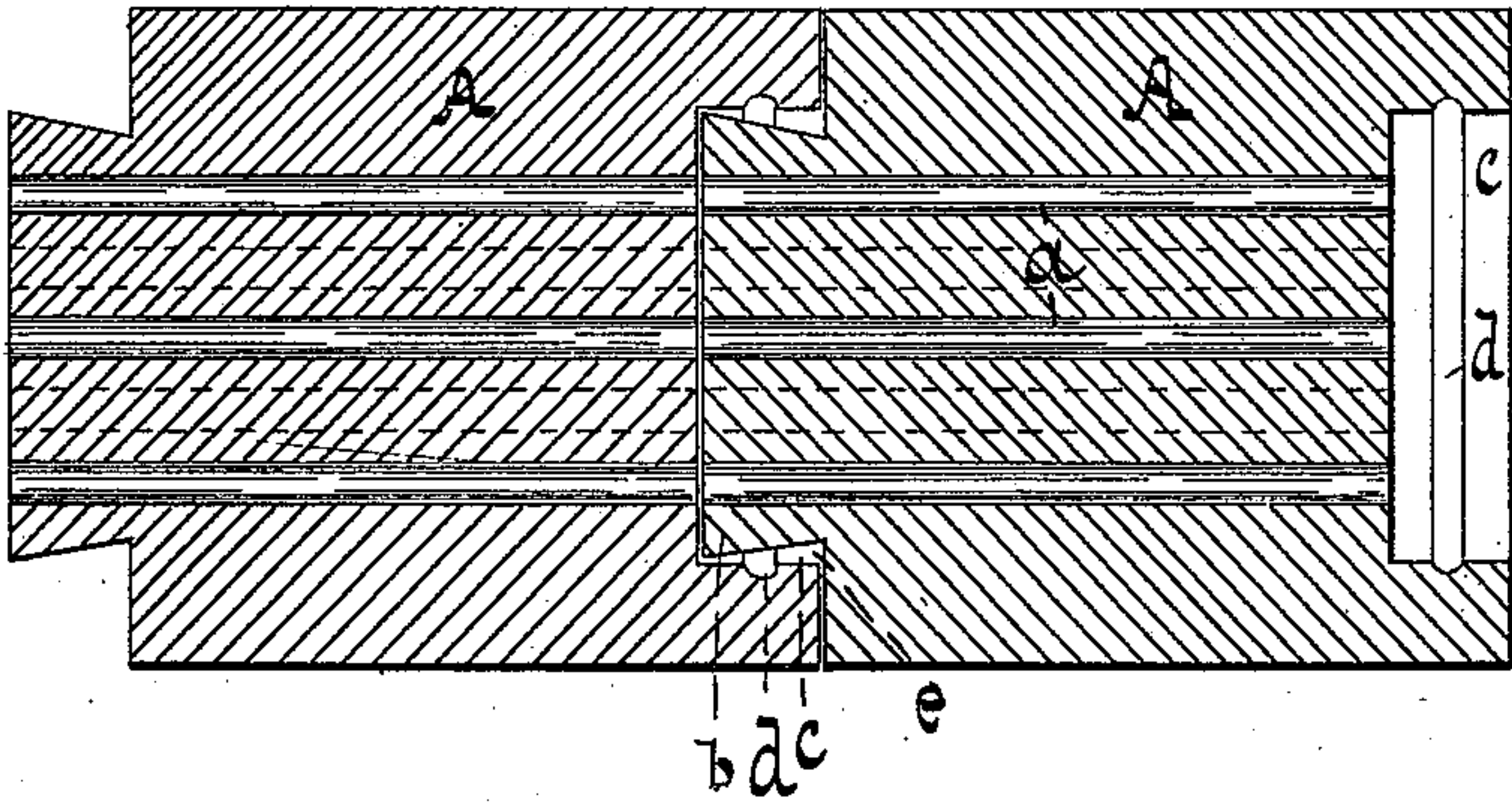
E. C. LINDEMANN.

UNDERGROUND CONDUIT FOR ELECTRIC WIRES.

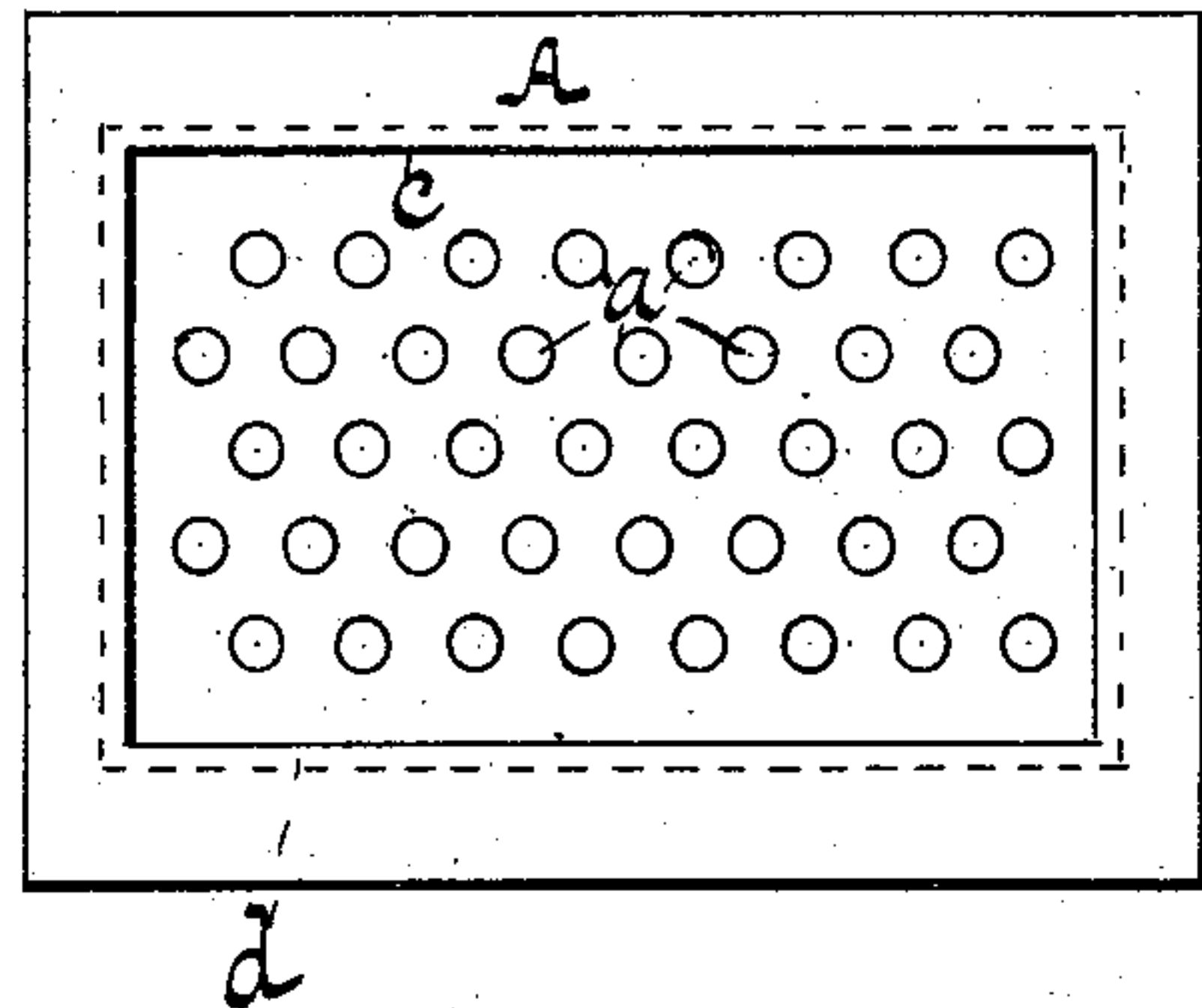
No. 376,893.

Patented Jan. 24, 1888.

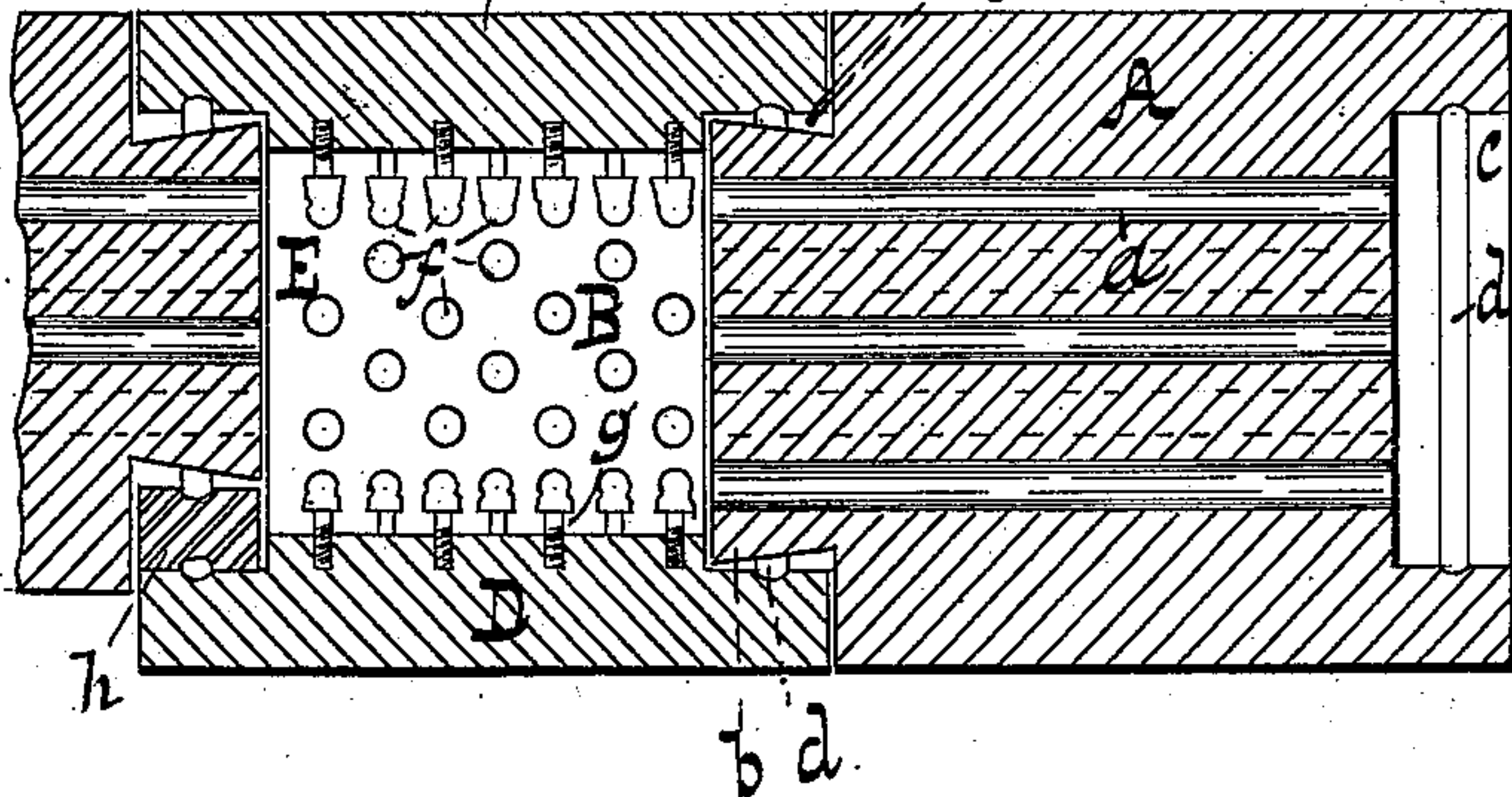
- FIG I -



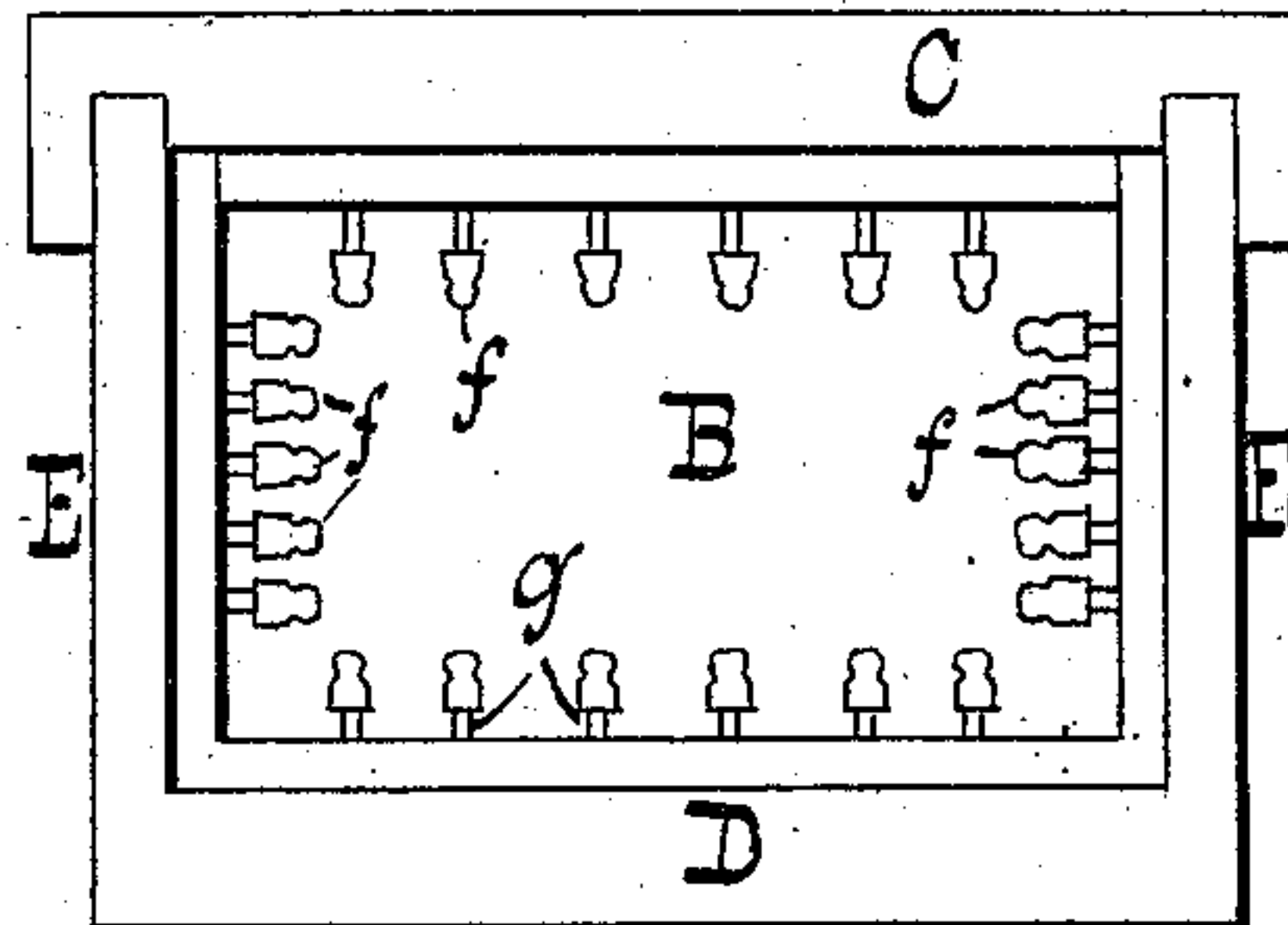
- FIG II -



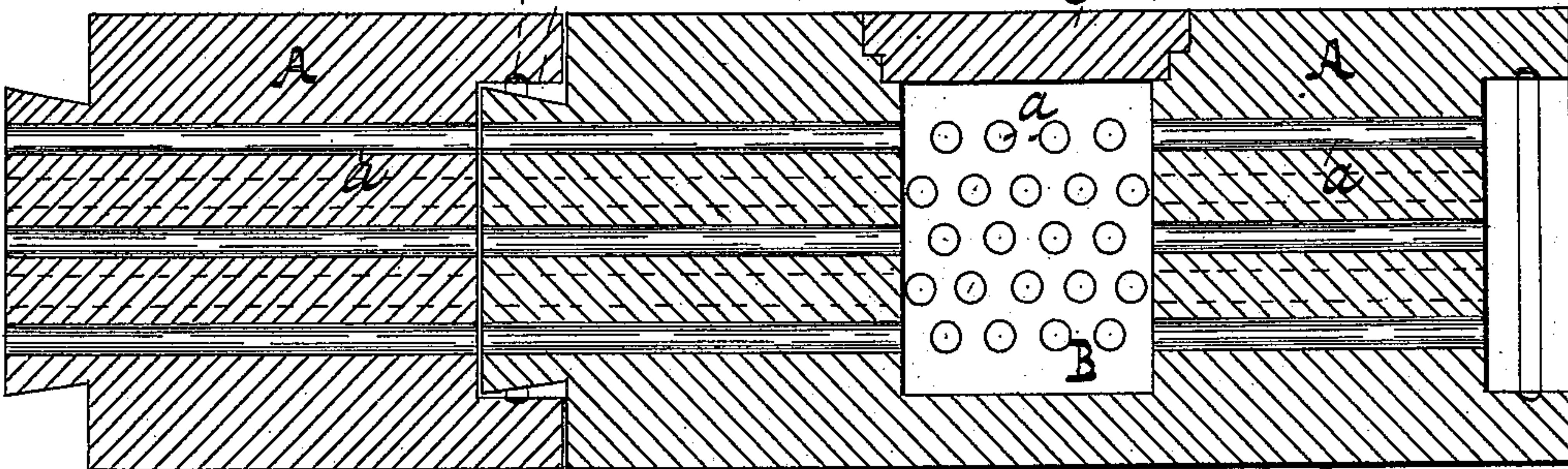
- FIG III -



- FIG IV -



- FIG V -



- WITNESSES -

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Ernest Charles Lindemann.  
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(No Model.)

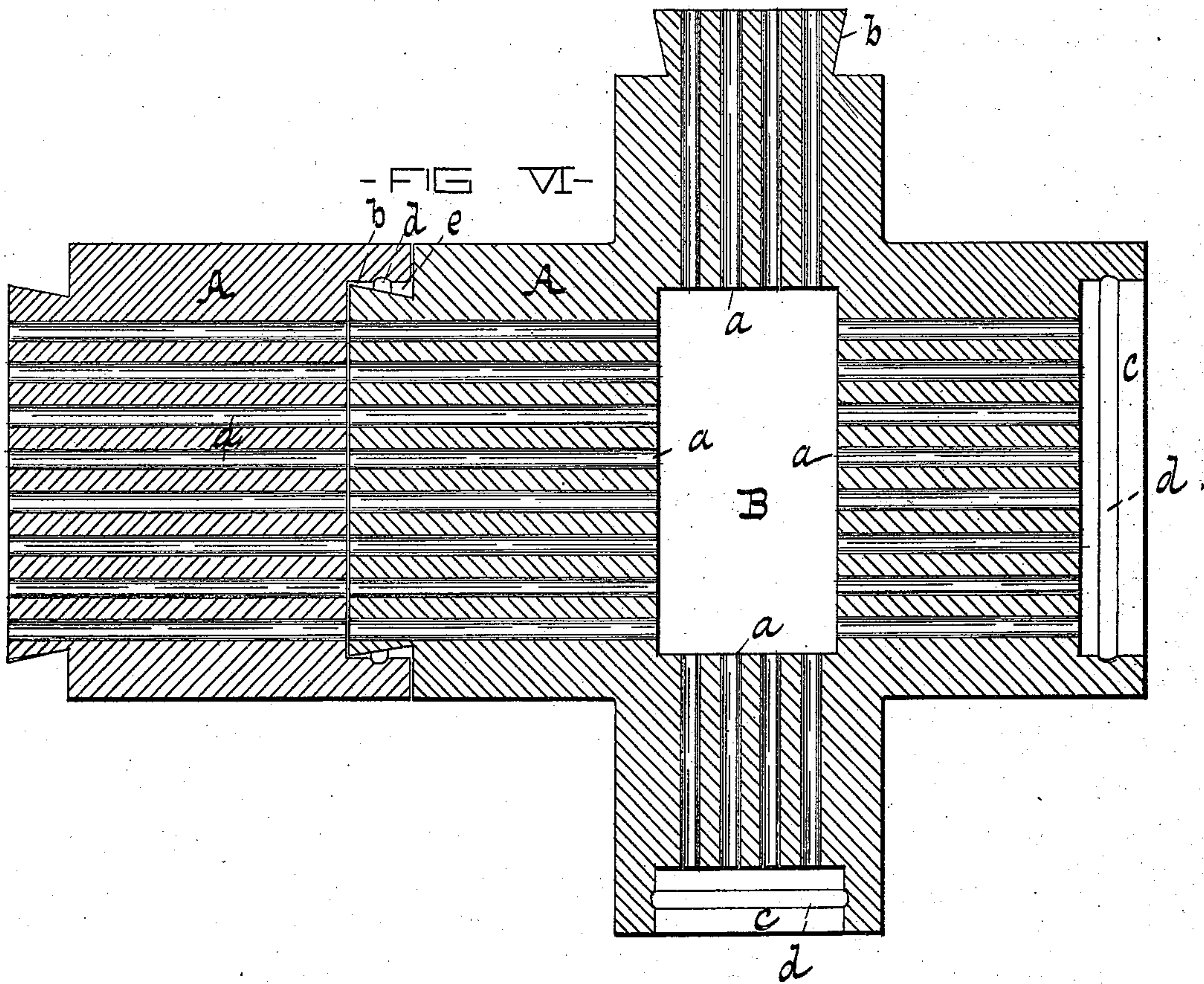
2 Sheets—Sheet 2.

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## UNDERGROUND CONDUIT FOR ELECTRIC WIRES.

No. 376,893.

Patented Jan. 24, 1888.



- WITNESSES -

Dan'l Fisher

Frank Hodges

-INVENTOR-

Ernest Charles Lindemann

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# UNITED STATES PATENT OFFICE.

ERNEST CHARLES LINDEMANN, OF BALTIMORE, MARYLAND.

## UNDERGROUND CONDUIT FOR ELECTRIC WIRES.

SPECIFICATION forming part of Letters Patent No. 376,893, dated January 24, 1888.

Application filed November 2, 1887. Serial No. 254,045. (No model.)

*To all whom it may concern:*

Be it known that I, ERNEST CHARLES LINDEMANN, of the city of Baltimore and State of Maryland, have invented certain Improvements in Underground Conduits for Electric and other Wires, of which the following is a specification.

In the description of the said invention which follows, reference is made to the accompanying drawings, forming a part hereof, and in which—

Figure I is a longitudinal side section of the conduit, and Fig. II an end view of the same. Fig. III is a side section of a part of the conduit, in which is situated a chamber provided with devices hereinafter described, to which certain of the wires may be secured and insulated. Fig. IV is an end view of the said chamber. Fig. V is a longitudinal side section of a part of a conduit containing branches for wires, and Fig. VI is a sectional plan of Fig. V.

Similar letters of reference indicate similar parts in all the figures.

In the said drawings, A A are conduit-blocks, formed of concrete of non-conducting character, having holes *a* therein for electric or other wires. These blocks are adapted to be connected to each other; and with this view one end of each block has a dovetailed projection, *b*, while the other end is recessed, which recess *c* is parallel in width and height and provided with a groove, *d*, which extends entirely around it, as shown.

In connecting two blocks of the conduit together some plastic material is employed, which fills up the space *e* between the dovetailed projection and the inner face of the recess *c*. The groove *d* being filled with cement, it becomes impossible after the cement hardens to separate the sections without fracturing them.

Referring to Figs. III and IV, it will be seen that the chamber B is provided with insulating-glasses *f*, which are placed over wooden pins or stems *g*, screwed into the threaded holes in the removable top C, the bottom D, and the sides E of the chamber B. As these chambers are quite limited in size, it is impossible to drive the pins or stems *g* into their holes. Consequently they cannot be perfectly secured except by having the holes threaded, as described.

In many cases it is necessary to unite a block containing a number of wires to one having a less number, which is done through the medium of test-boxes. I therefore make the sections with the reduced number of holes of a less depth than the others, and fill the space between the reduced projection and the inner face of the recess with a liner-block, *h*, having grooves therein, as shown in Fig. III. By this means I am enabled to economize in material.

Figs. V and VI show a crossing or a block having branches, and it will be seen that these branches terminate in a similar manner to the main blocks as regards the projections and recesses.

I claim as my invention—

In combination with a conduit-block having a recess at one end, with an internal groove, as shown, a similar block with a dovetailed projection of a reduced size, and a grooved liner-block adapted to reduce the size of the recess, substantially as and for the purpose specified.

ERNEST CHARLES LINDEMANN.

Witnesses:

WM. T. HOWARD,  
DANL. FISHER.