

(No Model.)

2 Sheets—Sheet 1.

J. CONLEY.
BRICK KILN.

No. 513,035.

Patented Jan. 16, 1894.

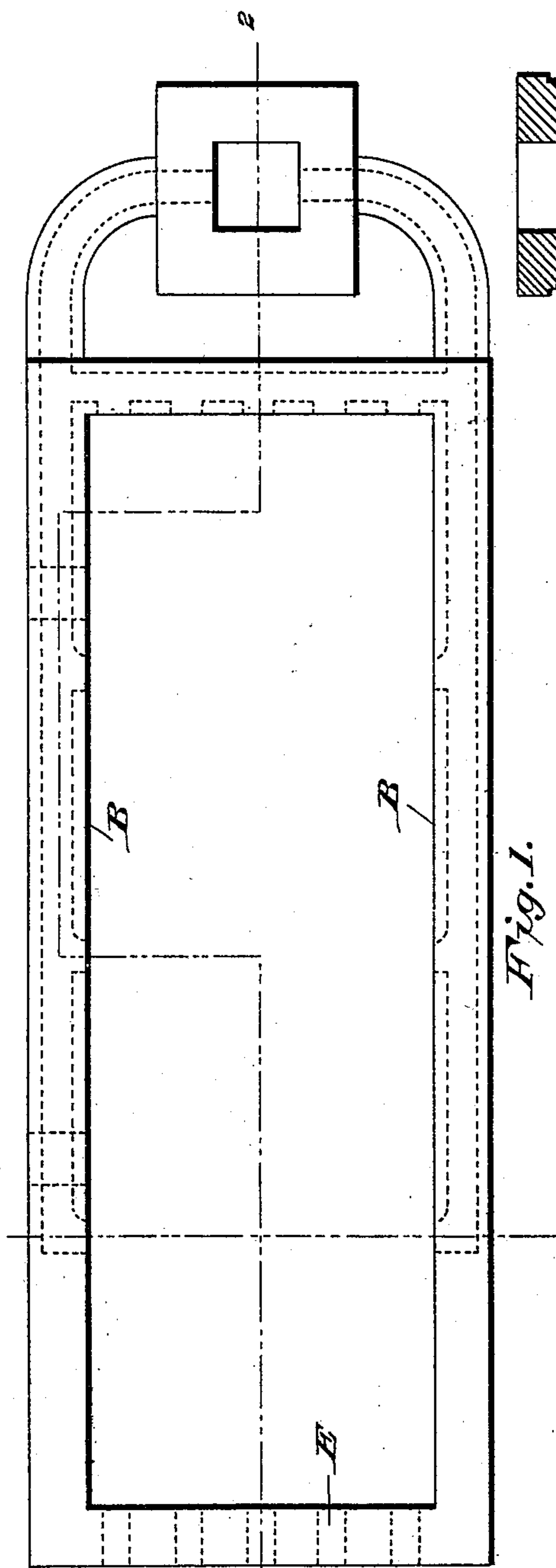


Fig. 1.

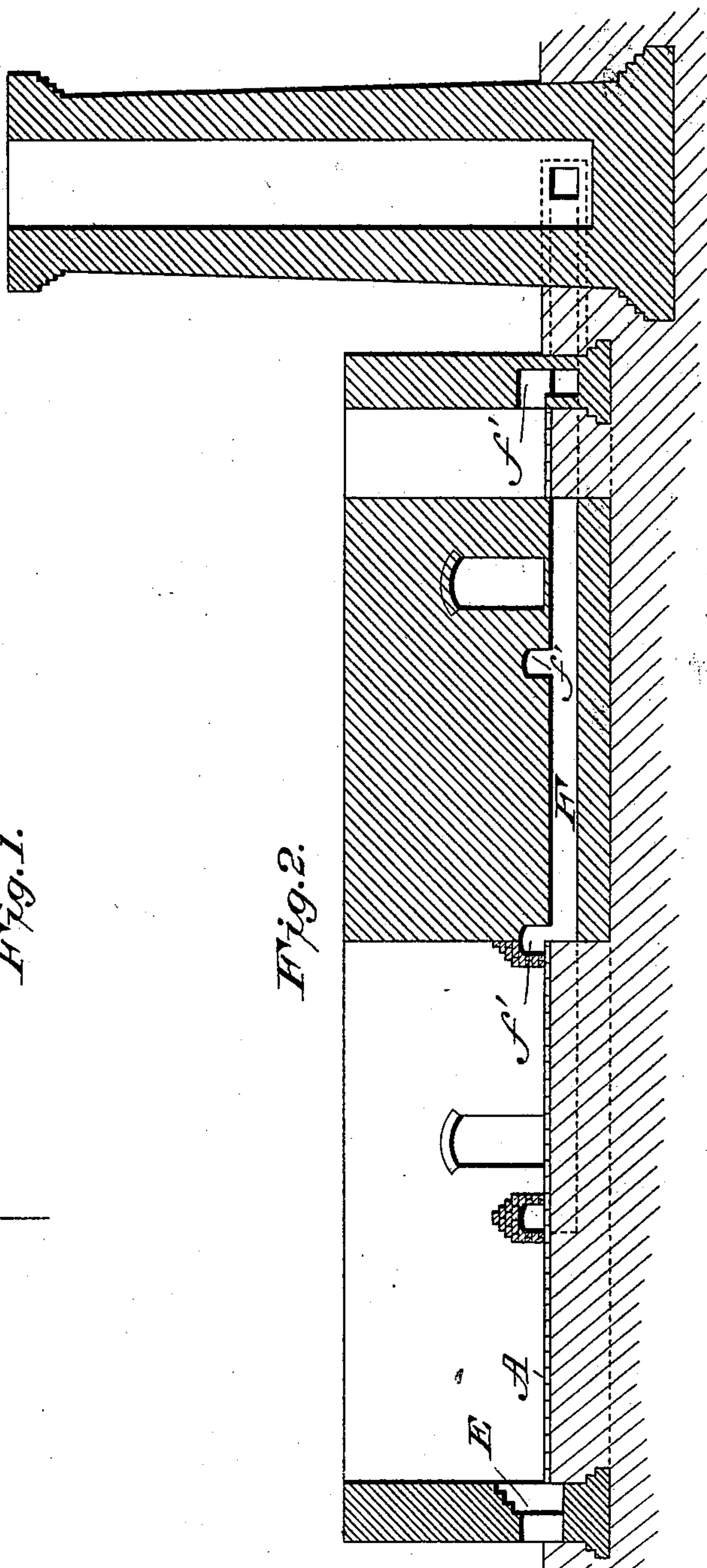


Fig. 2.

Witnesses

L. S. Elliott.

J. M. Johnson

Joseph Conley.
Inventor

by [Signature]

Attorney

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Fig. 3.

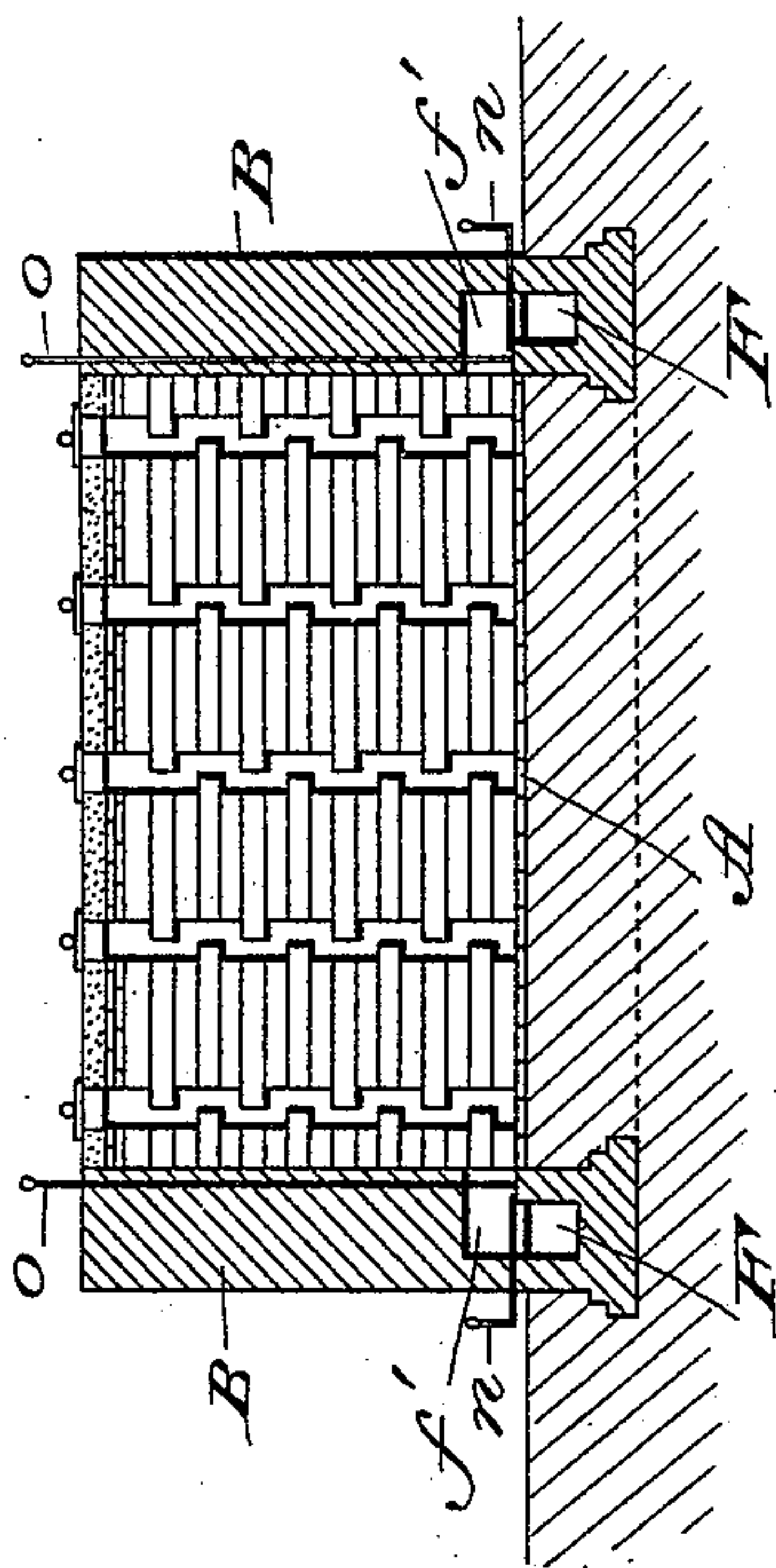
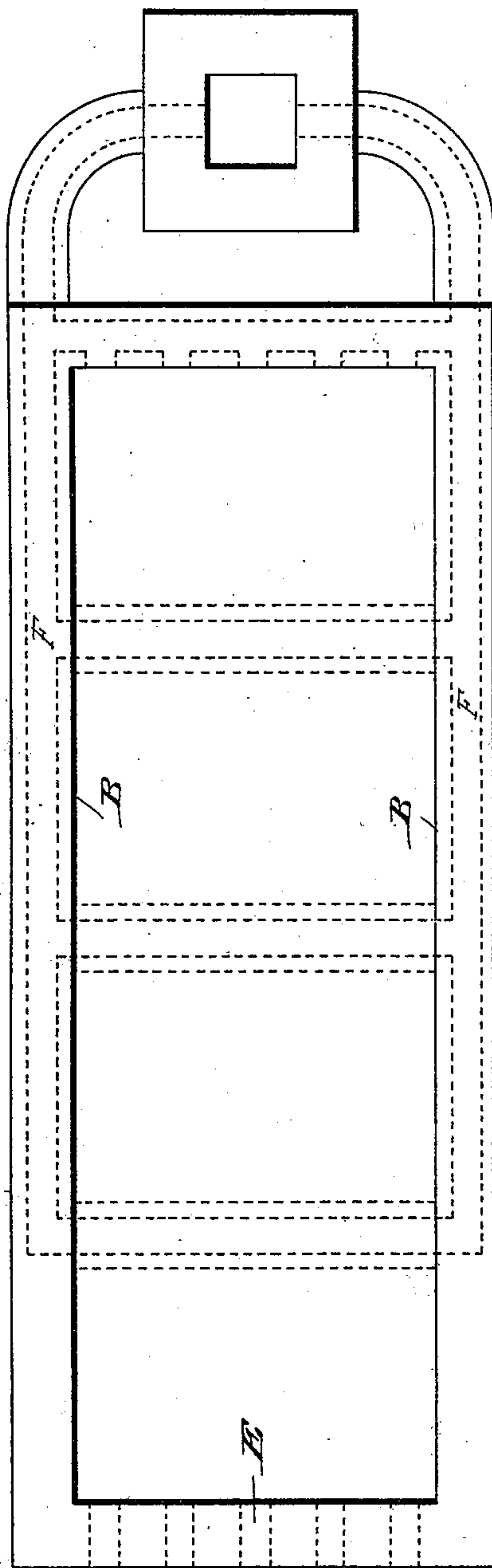


Fig. 4.



Witnesses

L. S. Elliott.

A. W. Johnson

by

Joseph Conley

Inventor

Attorney

UNITED STATES PATENT OFFICE.

JOSEPH CONLEY, OF ST. JOSEPH, ASSIGNOR TO THE CONLEY & WOLFE
IMPROVED KILN COMPANY, OF TARKIO, MISSOURI.

BRICK-KILN.

SPECIFICATION forming part of Letters Patent No. 513,035, dated January 16, 1894.

Application filed February 4, 1893. Serial No. 460,974. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH CONLEY, a citizen of the United States of America, residing at St. Joseph, in the county of Buchanan and State of Missouri, have invented certain new and useful Improvements in Brick-Kilns; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in brick-kilns; and it consists in the special construction and arrangement of the flues, as will be hereinafter fully set forth, and particularly pointed out in the claim.

In the accompanying drawings, Figure 1 is a plan view of the kiln. Fig. 2 is a longitudinal sectional view on the line 2 2 of Fig. 1. Fig. 3 is a transverse section. Fig. 4 is a view showing a modification of the invention.

A designates the floor level of the kiln, B the walls, and E the furnaces, the ash-pits of which are below the floor level. The kiln is intended to be divided by temporary partitions and the side walls, beyond what forms the first section, are provided with underground longitudinal flues F, which communicate with the interior of the kiln by short flues *f'*, which enter the interior above the floor level.

In stacking the bricks within the kiln they are preferably arranged to provide transverse flues which connect at each end with the short flues *f'*; these transverse flues being built up of the green bricks. The short flues *f'* are provided with dampers *n* and *o*, the operating rods of which may extend through the side walls either horizontally or vertically, as shown in Fig. 3.

The modification shown in Fig. 4 merely consists in providing permanent transverse flues above the floor level, instead of temporary ones.

The rear end wall of the kiln below the floor level, or on a line with the longitudinal

flues F, is provided with a transverse flue which communicates with the interior of the kiln by short flues constructed similar to those designated by the letter *f'*. The flues are all connected to a chimney or stack preferably located at the opposite end of the kiln from the series of furnaces.

By the construction hereinbefore described I am enabled to build a permanent kiln cheaply, and as the permanent flues are built below the floor level they are not affected by the heat, and should it become necessary, after the kiln has been used, to rebuild the side walls it can readily be done without destroying the flues.

The operation of the kiln is similar to that described in the application filed by me October 6, 1892, and patented January 31, 1893, No. 491,037.

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

The combination in a rectangular down draft brick kiln having a greater length than breadth, of the permanent side walls, end walls and stack, the end wall farthest from the stack having a series of starting furnaces, the opposite end wall having a corresponding series of openings or short flues, the end and side walls having longitudinal flues formed in the same below the floor level of the kiln, said flues communicating with the draft stack, a plurality of short flues in the side walls which extend upwardly from the longitudinal flues and inwardly at right angles, said short flues being positioned opposite each other and opening into the kiln above the floor level, and dampers for cutting off communication between the short flues and interior of the kiln, substantially as shown, and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JOSEPH CONLEY.

Witnesses:

H. J. NELSON,
W. O. MILLER.