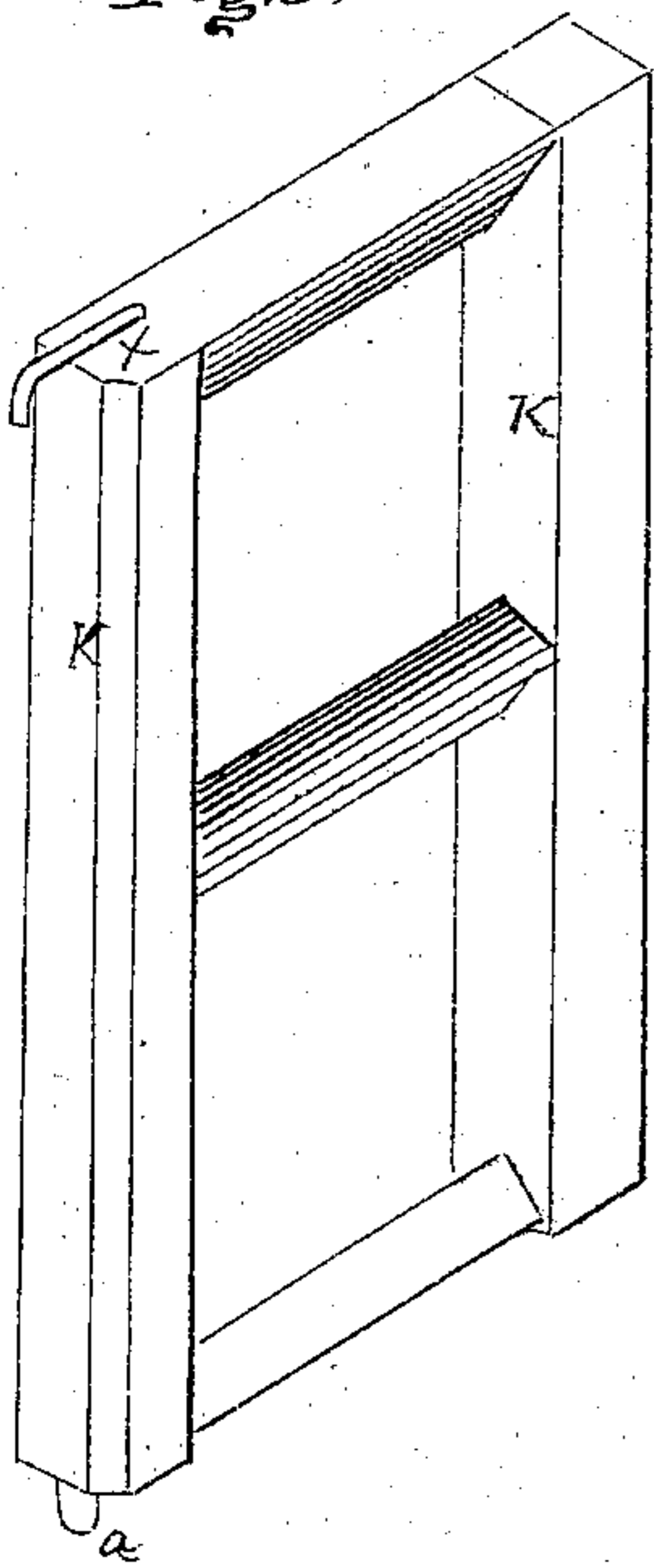


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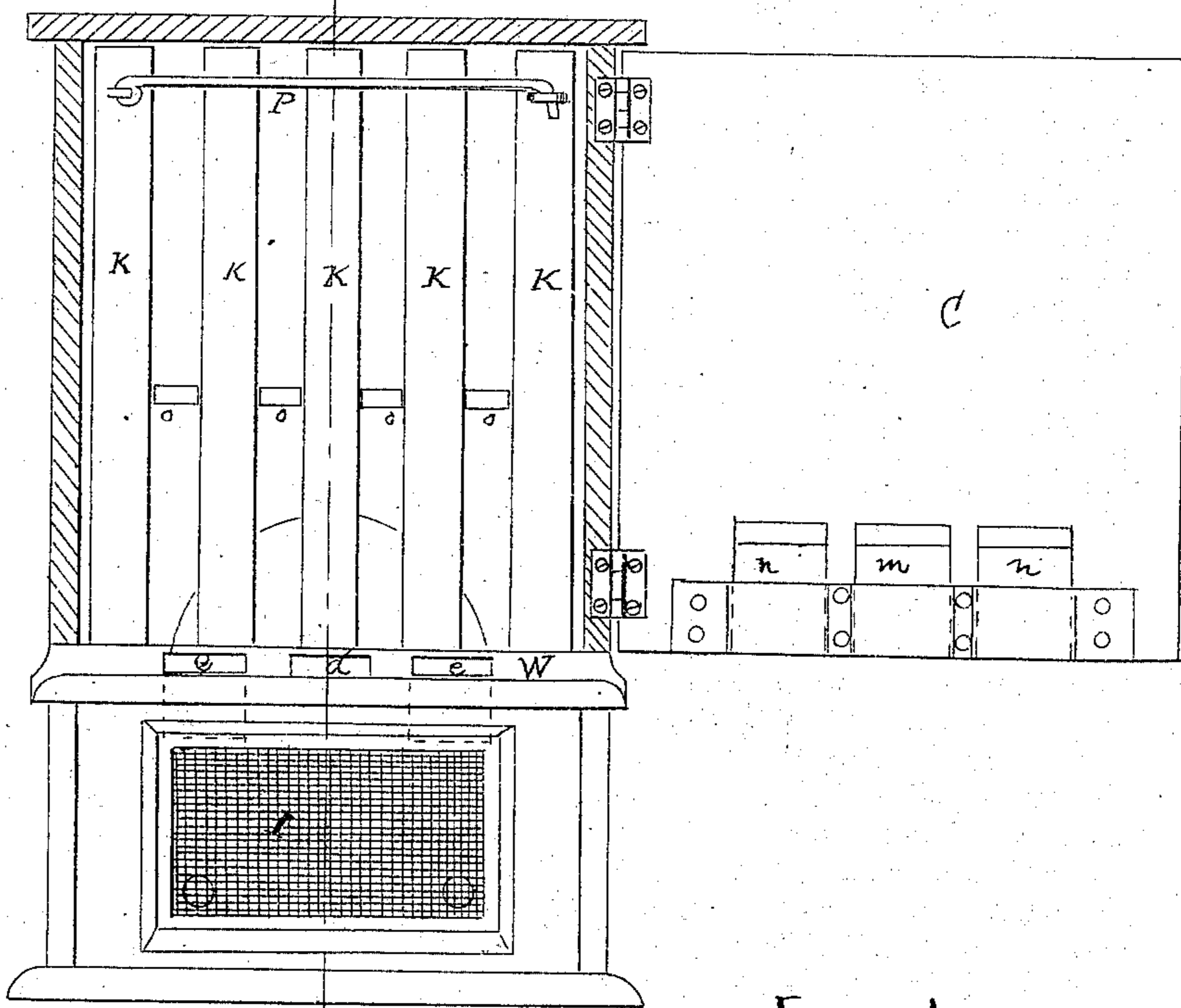
Bee Hive.

Fig. 3.



Witnesses.

Charles C. Marr



Inventor.

N. L. Mitchell
per
Alexander Thomson
att.

UNITED STATES PATENT OFFICE.

N. C. MITCHELL, OF CALEDONIA, OHIO.

IMPROVEMENT IN BEE-HIVES.

Specification forming part of Letters Patent No. 74,709, dated February 18, 1868.

To all whom it may concern :

Be it known that I, N. C. MITCHELL, of Caledonia, in the county of Marion and in the State of Ohio, have invented certain new and useful Improvements in Bee-Hives; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

In the annexed drawings, making part of this specification, A represents a box bee-hive, which is provided with a long bottom board, B, which serves not only as a bottom for the box, but also as a platform for and way upon which a moth-trap (which will be hereinafter described) rests and slides. This box A is provided on one side with a hinged door, C.

D represents a moth-trap, which consists of a long box divided into two compartments by means of a division-board, E.

Instead of closing the upper side of the rear compartment G of this box D, I cover it with gauze-wire or with a wire screen, with its meshes too close to admit of the passage of bees, but wide enough apart to allow the offal of the bees to pass through into chamber G.

The chamber G rests immediately under the box A, but sits upon its bottom board B.

L represents the back board of the box D, which lies close against and runs up nearly to the top of the back board of the hive or box A.

K K represent a series of independent and movable comb-frames. These frames are placed in a vertical manner upon the rear portion of the moth-box and over the chamber G, having pins which pass from their lower and inner corners into the upper side of the box D. Upon the upper edges of these frames are the crooked wires *x x*, whose ends pass into the upper edge of the back board L, so that they, in connection with the pins in the bottoms of the frames, form hinges upon which the frames turn, opening like the leaves of a book. The frames are held a suitable distance apart at their front edges by means of the pins *o o*, which pass horizontally through the front bars of the frames.

P represents a hooked bar, which has an eye in one end through which a staple passes to confine it to one of the outside frames. A staple is driven in the other outside frame,

and the hooked end of this rod catches into this staple, and serves to bind the frames together when in the hive. That portion of the moth-box which contains the chamber F lies without the hive A and upon the bottom board B. In the front end of the moth-box is a doorway, which is covered by a gauze-wire or wire screen I. Near the bottom of the dividing-board E are two or more holes, in which are inserted the tubes J J, through which moth and drone or robber bees may pass from the rear to the front compartment.

W represents a bar, which is secured upon top of the box D just beneath the door C, through which are three holes or apertures. One of these holes, *d*, leads into the hive, and through it the bees pass in their daily labors. The other two holes, *e e*, situated upon each side of the hole *d*, lead down into the compartment G. Tubes *y* are inserted in them, through which moth, drone-bees, and robbers are guided into the compartment.

Suitable slides are provided and connected to the door C for the purpose of closing the openings or apertures *d* and *e e*. The object of these openings is this: The bees passing in and out of the hive through opening *d* and keeping guard at this point deter the millers from entering it, and they (the millers) seeking ingress, enter the first openings which they arrive at. As the openings *e e* are near by and accessible, they enter them and pass down into the chamber G among the offal of the bees. This chamber being dark and the next chamber F being well lighted through and by means of the screen I, the millers, seeking the light, pass through the tubes J J into the chamber F, where they either die or may be destroyed.

Should millers at any time enter the opening *d*, they may be easily removed by drawing out the moth-box with the frames and opening the frames, so as to reach them.

Robber-bees may be caught by closing the center opening, as then they will enter the side openings *e e* and pass down into the moth-box.

Drones may also be caught by partially closing the opening *d* after they have passed out. They will also enter the moth-box.

When the frames are in the hive, there is

sufficient space left all around them between them and the sides of the hive for the bees to pass freely around in their work.

In taking honey from this hive, it is only necessary to remove the moth-box with the frames attached, unfasten the frames, and then lift any particular frame off of its hinges, and replace it by an empty frame.

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

1. Hinging the frames K K to the moth-box and over the screen in such a manner that the offal will pass into said box and the frames

may be drawn out of the hive, substantially as and for the purpose set forth.

2. The moth-box D, constructed in the manner described, with three openings, one for bees and two for millers, when used with the movable comb-frames and the hive A, as and for the purpose set forth.

In testimony that I claim the foregoing, I have hereunto set my hand and seal this 3d day of January, 1868.

N. C. MITCHELL.

Witnesses :

A. A. YEATMAN,
CHARLES BLUE.