

E. STIMSON.
Grates.

No. 158,393.

Patented Jan. 5, 1875.

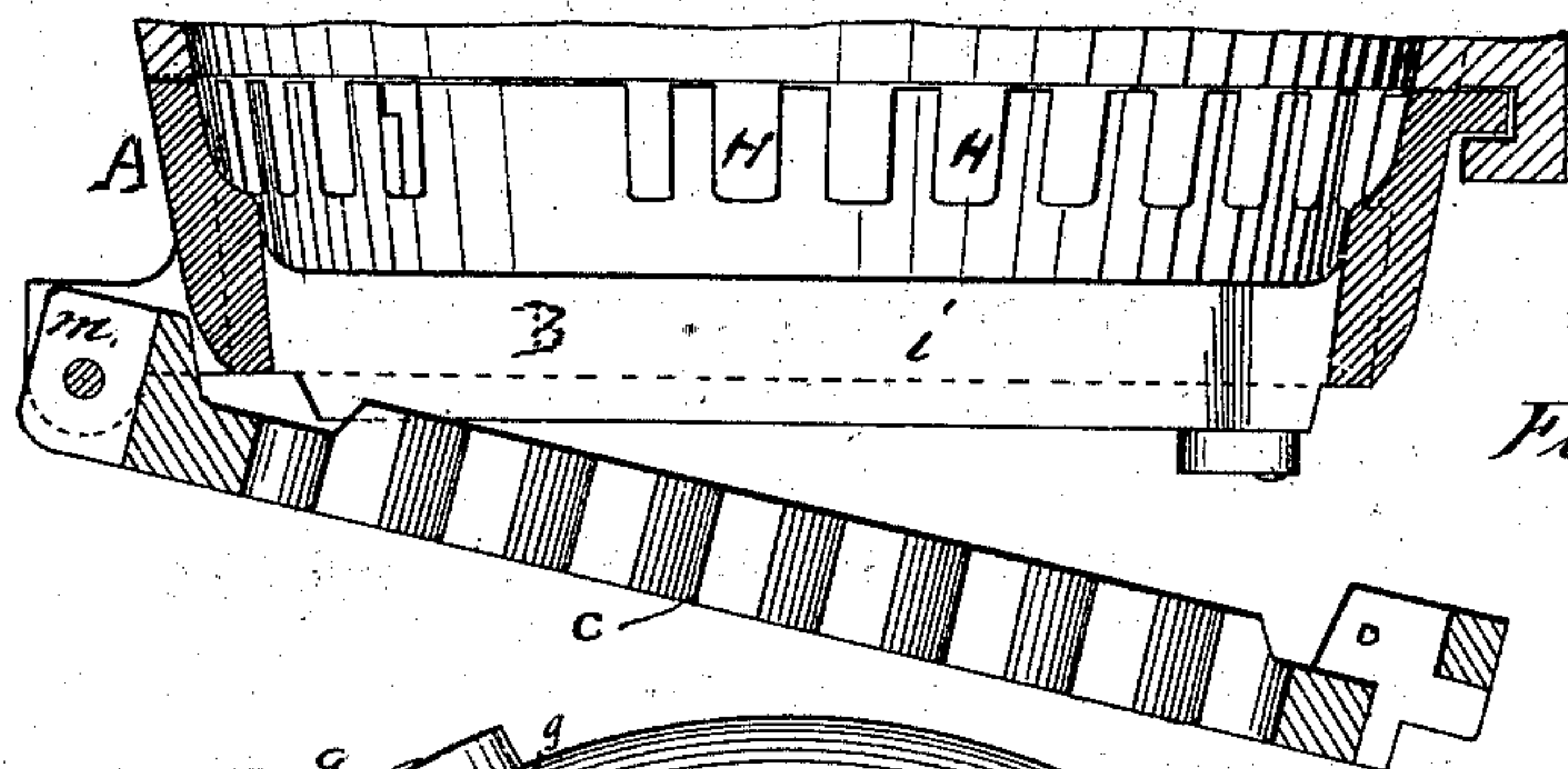


Fig. 3.

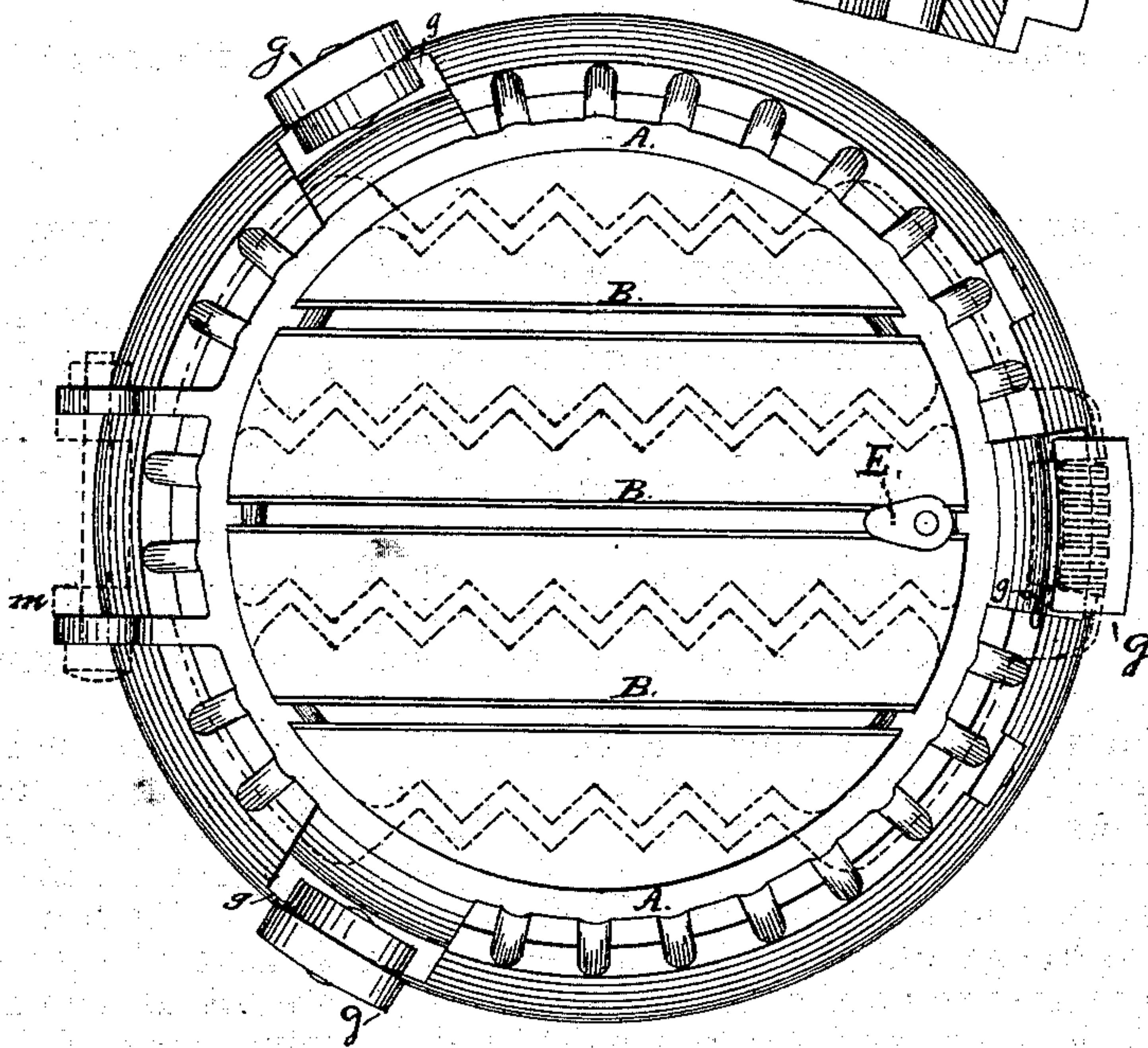


Fig. 2.

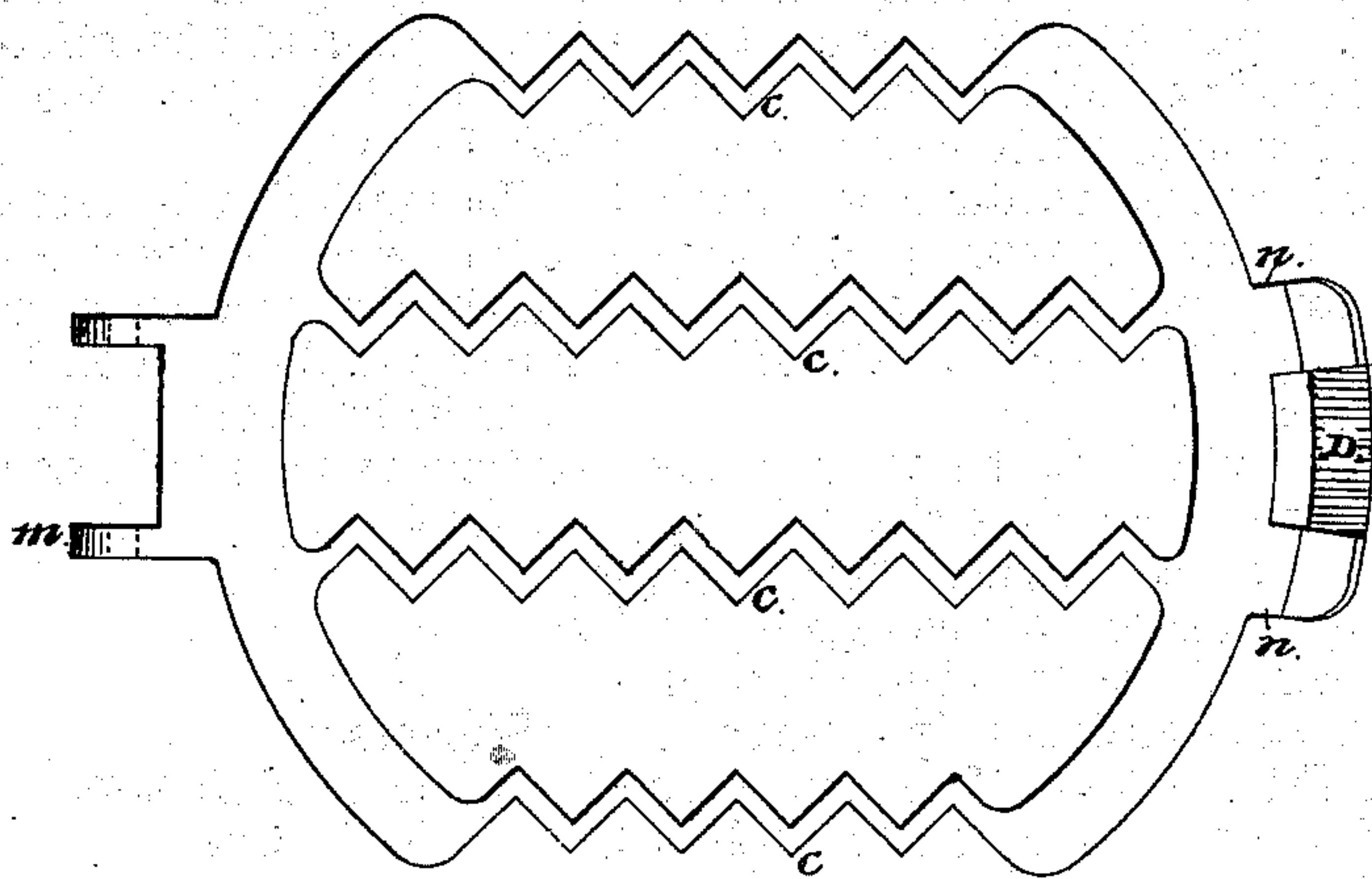


Fig. 1.

Witnesses,
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UNITED STATES PATENT OFFICE.

ENOS STIMSON, OF MONTPELIER, VERMONT, ASSIGNOR TO THOMAS J. DEAVITT, OF SAME PLACE.

IMPROVEMENT IN GRATES.

Specification forming part of Letters Patent No. 158,393, dated January 5, 1875; application filed May 24, 1872.

To all whom it may concern:

Be it known that I, ENOS STIMSON, of Montpelier, in the county of Washington and State of Vermont, have invented new and Improved Grate for Coal-Stoves and Furnaces, of which the following is a specification:

The accompanying drawings are made a part of this specification:

Figures 1 and 2 are views of horizontal sections as designed for a common parlor-stove grate. Fig. 1 shows the lower section detached. Fig. 2 shows the sections united. Fig. 3 is a side view, as seen when the under section is in position to remove clinkers.

Similar letters of reference indicate corresponding parts.

The nature of my invention consists in making a grate, so arranged that it may be cleared of the coarser refuse while the fire is in full blast without the ordinary difficulty incident to dumping and separating the refuse from the coal and rekindling the fire, which is accomplished by dropping alternate bars of which the grate is composed, thus opening a space sufficient for the removal of the large cinders, refuse, &c., while the remaining stationary bars support the main body of the coal and protect the fire.

To enable those skilled in the art to make and use my invention I will describe it.

A represents a rim supporting the bars B, forming the upper section of the grate, arranged to turn beneath the fire-pot, to which is hinged the movable alternate grate-bars C C, as shown in Fig. 3, at *m*. The bars B in the upper section are placed one-half their

width below the lower edge of the rim A, as shown at *i*, Fig. 3. The serrated bars C in the under section are half their width above the segments by which they are connected. On the under section is a raised mortised projection, D, fitting into the upper section, as shown at *n n* in Fig. 1, and forming a socket for the handle, by which the grate is shaken, and the under section is lowered and raised. E represents a button or catch, by which the ends of the movable grate-bars C are held in place.

I do not limit or confine myself to any particular method of hinging and dropping a portion of the bars composing the grate, as I am well aware that it may be done in many ways without departing from my invention.

The grating of the rim and its attachment to the fire-pot, as shown in the drawing accompanying this specification, have been used by others, and I therefore disclaim them; but

What I do claim, and wish to secure by Letters Patent, is—

The movable alternate grate-bars C C, hinged at their ends to the supporting-rim A, and provided with a latch or catch for holding the moving ends of such bars C C, or allowing them to be dropped, in combination with the stationary bars B B, as and for the purposes set forth.

ENOS STIMSON.

Witnesses:

A. A. STIMSON,
J. C. ENMY.