

(No Model.)

2 Sheets—Sheet 1.

W. J. COPP.
FIRE PLACE GRATE.

No. 362,063.

Patented May 3, 1887.

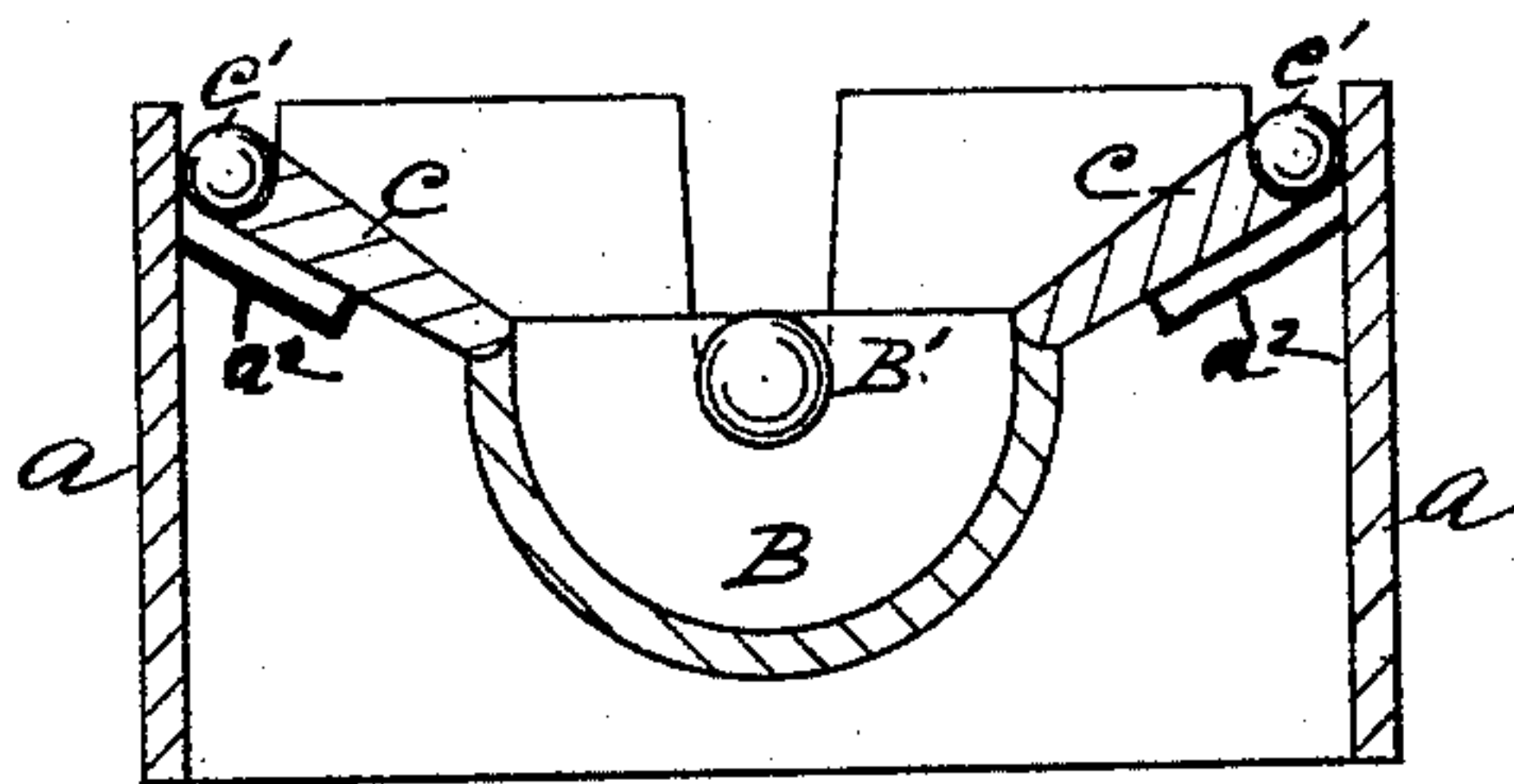


Fig. 1.

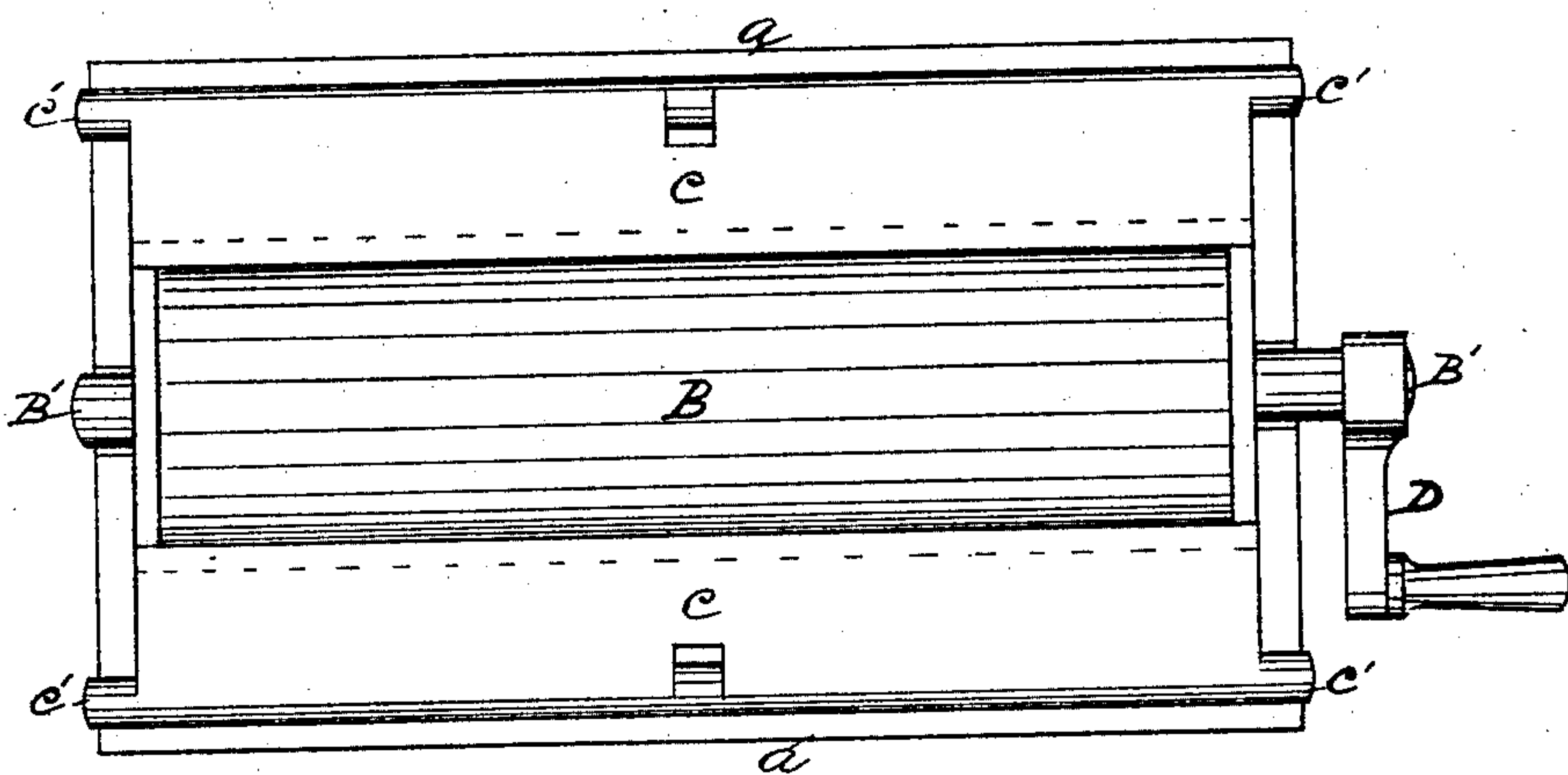


Fig. 2.

Witnesses.

A. Matheson
J. Blois Smith

Inventor.

William J. Copp.
by his attorney
John H. Hendry.

(No Model.)

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Fig. 3.

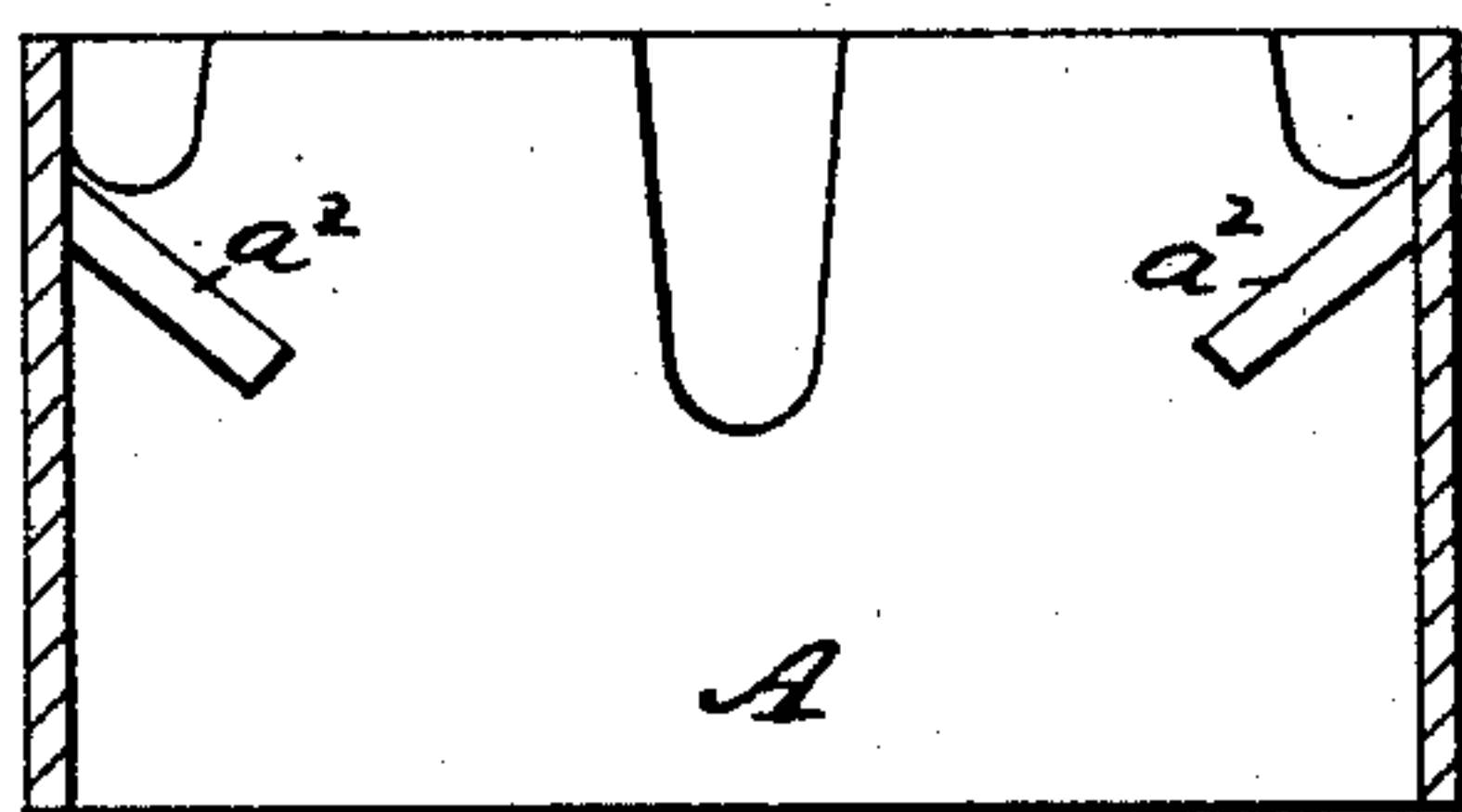


Fig. 4.

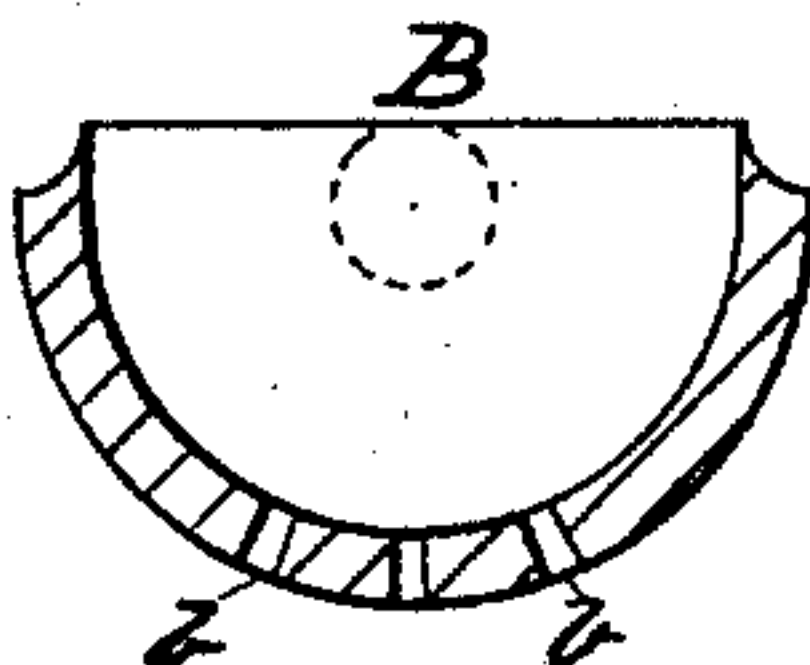
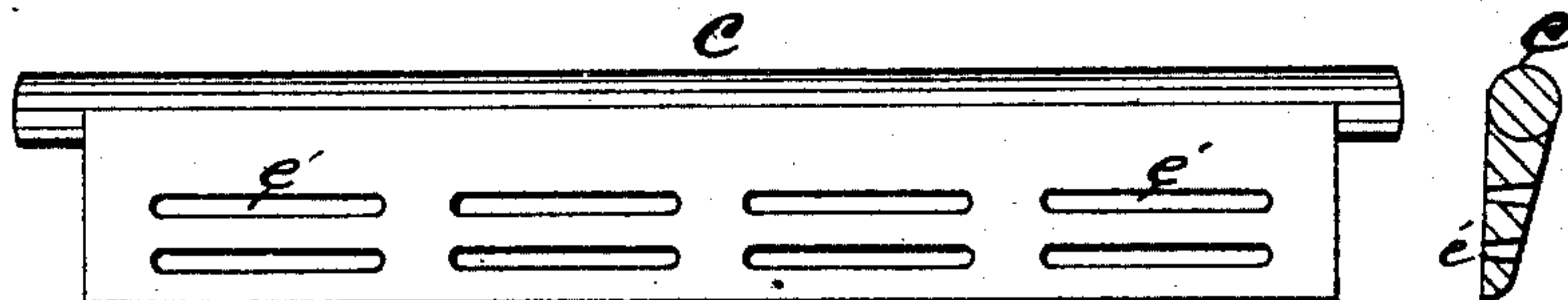


Fig. 5.



Witnesses.

J. D. Smith.
James Burgess

Inventor.

William J. Copp.
per his Attorney
John H. Henry.

UNITED STATES PATENT OFFICE.

WILLIAM J. COPP, OF HAMILTON, ONTARIO, CANADA.

FIRE-PLACE GRATE.

SPECIFICATION forming part of Letters Patent No. 362,063, dated May 3, 1887.

Application filed February 26, 1886. Serial No. 192,510. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. COPP, a citizen of Canada, residing at Hamilton, in the county of Wentworth, Province of Ontario, Dominion of Canada, have invented a new and useful Fire-Place Grate, of which the following is a specification.

Figure 1 is a sectional end elevation of an entire "fire-place grate." Fig. 2 is a plan of the same. Fig. 3 is a sectional end view of fire-box when grates are removed. Fig. 4 is a sectional end view of revolving section. Fig. 5 is a plan of a side grate.

Similar letters refer to similar parts throughout the several views.

The walls of the fire-box A have the roller-grate B, provided with a projecting journal, B', at each end, fitted in the center, so that it can be shaken or turned by the crank D to agitate the grates C or dump the contents into the ash-pit below.

The side grates or agitators, C C, are provided with journals, which rest in bearings in the fire-box, either in the center or ends, or both, as may be most convenient. These side grates slope in toward the top edge of the rolling grate B, so that all ashes falling on them can be readily shaken down into the grate B.

The roller-grate is shown in a square fire box or chamber; but it can be adapted to and used in any form or shape of fire-box. In oblong or circular fire-boxes the journals and bearings of the side grates or agitators can be arranged at any point in the fire-box and

shaken by the central roller-grate, B, and the side grates, C C, can be treated in like manner. The roller-grate B can be made semi-circular or angular, having bars running horizontally or transversely or with perforations or solid, and one or more of the side grates can be similarly grated, perforated, or left solid, as preferred.

a^2 , as shown in Fig. 3, are rests for the side grates when the revolving section is in motion.

b , in Fig. 4, are perforations, of any number or size, to suit different kinds of wood or coal. So, also, are the perforations e' , in Fig. 5, of any suitable size, shape, or number.

The side grates, C C, are kept from falling down when the revolving grate B is worked by means of stops or brackets cast to the inside of fire-box, either to the sides or ends. The roller-grate B may have perforations or bars.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination, with a fire-box, of the revolving concave section B, provided with a projecting journal, B', at each end, a crank, D, for turning the same, and the movable grates C C, provided with a journal at each end, and the rests a^2 , substantially as set forth.

WILLIAM J. COPP.

Witnesses:

WILLIAM ROBERTSON,
SAMUEL NADIN.