

D. C. BREED.
Fire-Pots and Grates for Coal-Stoves.

No. 156,762.

Patented Nov. 10, 1874.

Fig. 1

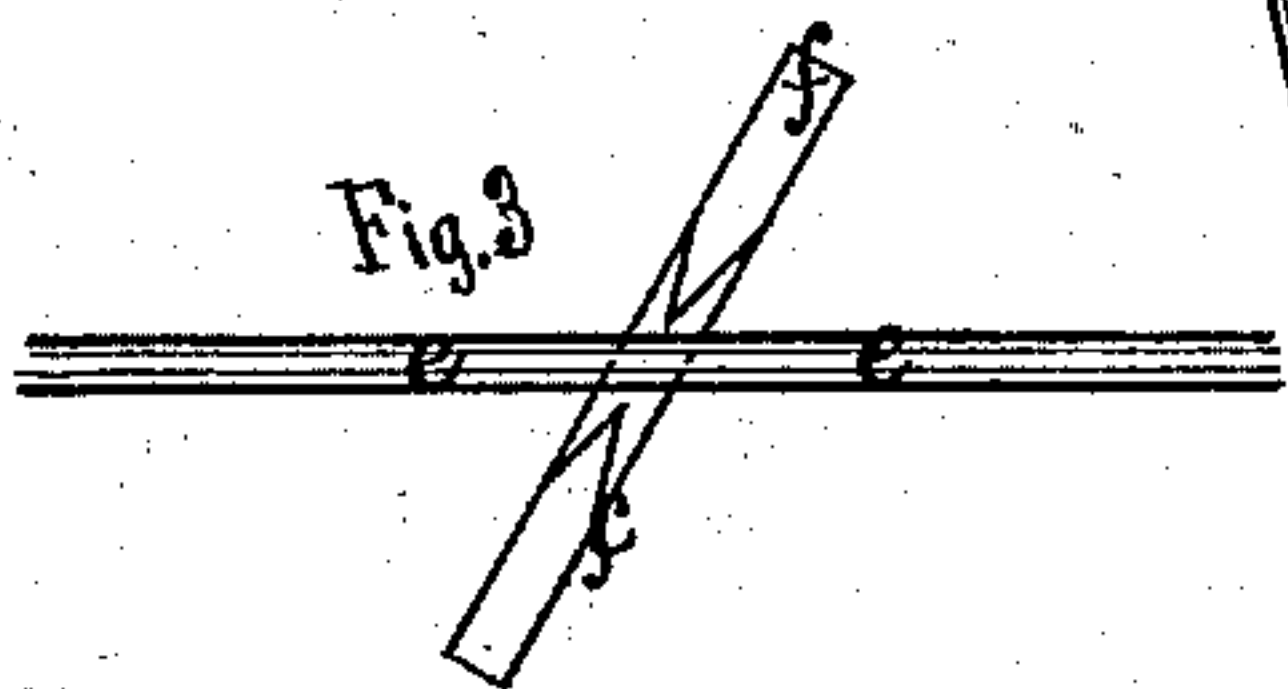
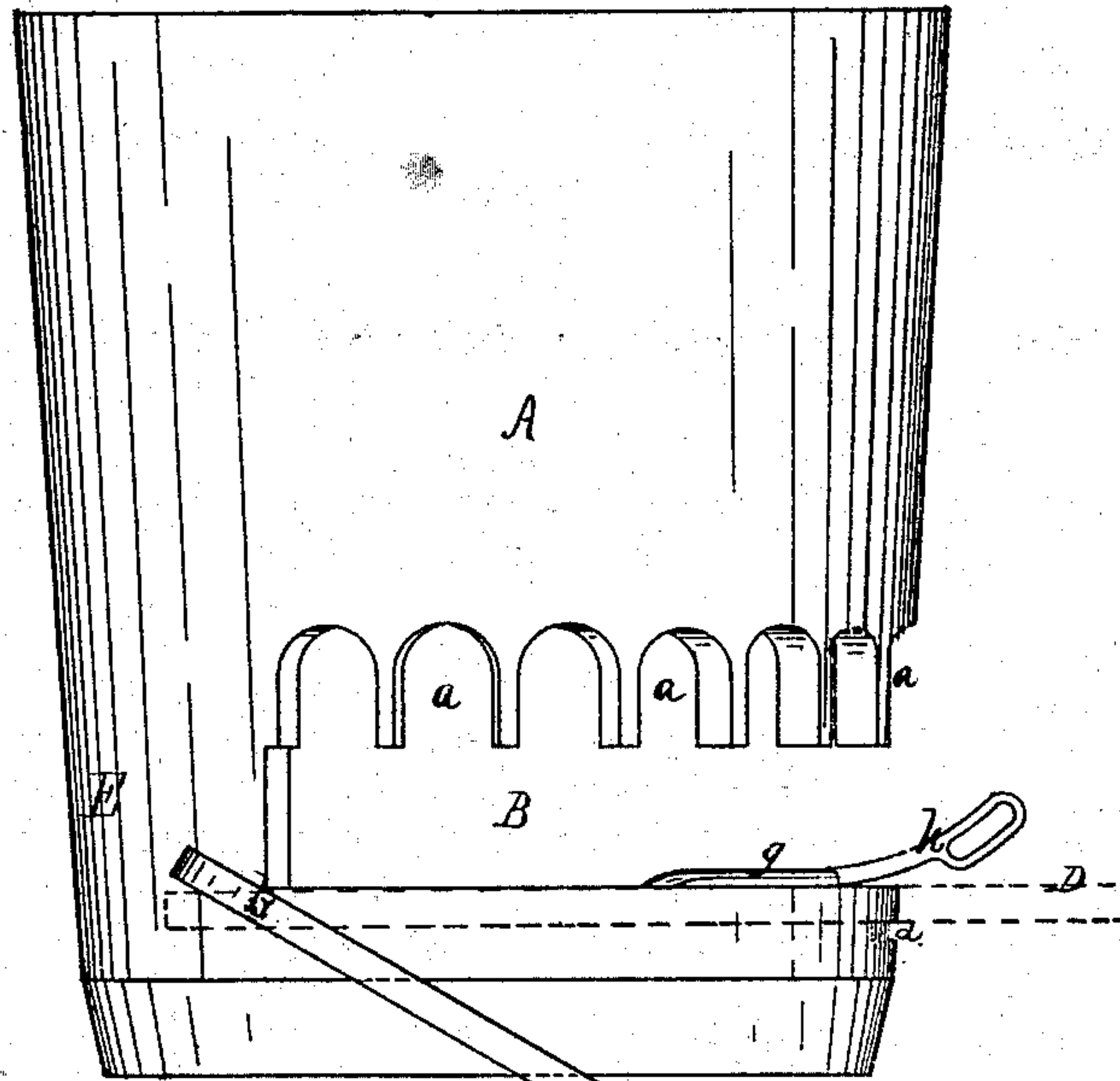
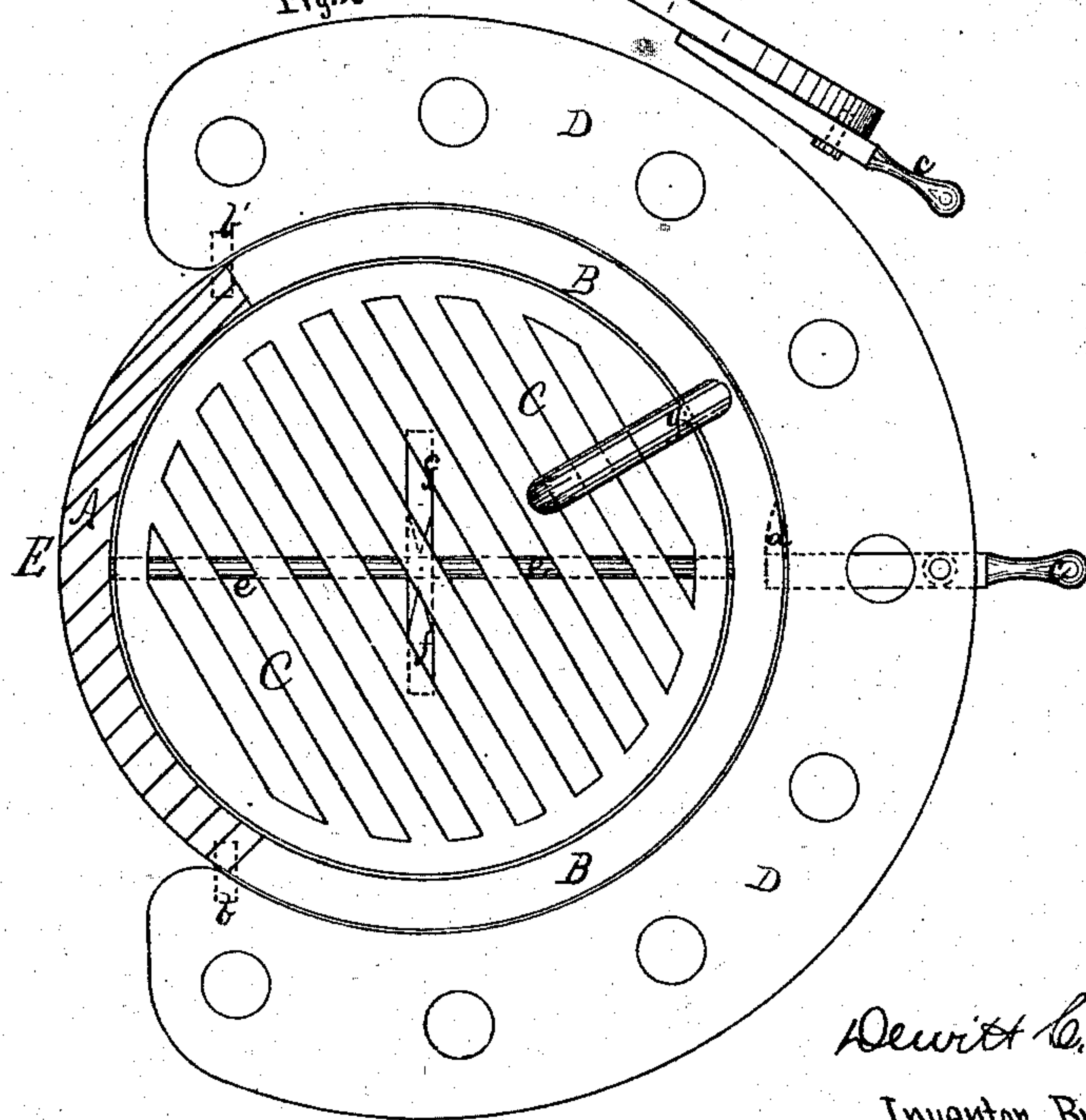


Fig. 2



Witnesses.

J. R. Drake.

C. H. Woodward.

11

Dewitt C. Breed.

Inventor By

Burke Fraser
& Asgood
attys
Buffalo
N.Y.

UNITED STATES PATENT OFFICE

DEWITT CLINTON BREED, OF MEDINA, ASSIGNOR TO JOHN S. PERRY, OF
ALBANY, NEW YORK.

IMPROVEMENT IN FIRE-POTS AND GRATES FOR COAL-STOVES.

Specification forming part of Letters Patent No. **156,762**, dated November 10, 1874; application filed
September 21, 1874.

To all whom it may concern:

Be it known that I, DEWITT CLINTON BREED, of Medina, in the county of Orleans and State of New York, have invented certain new and useful Improvements in Fire-Pots and Grates for Coal-Stoves, of which the following is a specification:

My invention relates to coal-burning stoves, more particularly to that class in which a round fire-pot is used; and consists in forming an opening in the front and sides of the fire-pot above the grate near the bottom, for the purpose of raking out the cinders, clinkers, slate, &c.; also, in a device for dumping them down into the ash-pit.

In the drawings, Figure 1 is an elevation of the fire-pot, showing the opening, &c. Fig. 2 is a plan, showing the grate and outside shelf or rim. Fig. 3 shows the manner of dumping the grate.

A represents the fire-pot, having a portion of its front and sides cut away, forming an opening, B, the bottom part being on a line with the top of the grate C. This opening B is more particularly to allow the fire to be readily reached with a poker, &c., to remove clinkers, slate, &c. The top of the opening B in the fire-pot will be formed into points, leaving small openings *a a*, as shown. This is to aid in holding the coal and prevent its falling down too fast. D is a rim or semi-circular shelf, of metal, fitting nearly around the outside of the bottom of the fire-pot, and pivoted thereto at *b b'*, so that when raised up its top will come flush with the top of the grate C, as shown in dotted lines in Fig. 1. This is to receive the clinkers, &c., as they are raked out; by dropping it down, the contents fall into the ash-pit below. To hold it in position when up it is provided with a catch, *c*, or its equivalent, whose end fits into a small slot, *d*, in the fire-pot.

The advantages of this invention are many: It will enable all clinkers, &c., to be removed without dumping the whole fire. It also allows the fire to be kindled much more readily, and the grate to be shaken from above, and

thus prevents any ashes from escaping, as the doors to the ash-pit can be kept closed, access to which is had through a door or its equivalent in the shell of the stove.

The grate D is made in the usual form, except that it is supported on a rod, *e*, which runs across beneath, and is supported at either end in the sides of the fire-pot A. This rod is secured to the center of the under side of the grate by a cleat, *f*, having a long angular-sided opening, (see Fig. 3,) which allows the grate to be turned for nearly half a revolution before dropping down.

To prevent the grate turning over I attach to its upper side a small lug, *g*, which catches on the lower edge of the opening B, as shown. This lug *g* will be supplied with a square socket in its end, into which a shaker, *h*, will be placed. When turned around until the lug *g* is just above and in line with the rod *e*, the grate can be easily turned over to dump the fire.

If found practicable, I propose forming a hinge in the back of the fire-pot at E, so that the whole part below the opening B can be lowered down, and thus dump the fire more readily. It will also enable the opening B to be nearly closed, so that no waste of coal, &c., will ensue when the fire is first kindled. When the coal is well ignited there will be no more danger of its dropping out.

What I claim is—

1. The horizontal opening B in the fire-pot A, as described, in combination with the pivoted shelf D, arranged and operating, in respect to each other, substantially as described.

2. The combination of the movable semicircular rim or shelf D, pivoted at its ends, with the catch *c* and slot *d* for holding it in place, substantially as herein described.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

D. C. BREED.

Witnesses:

J. R. DRAKE,
C. N. WOODWARD.