

J. W. ELLIOT.
Fire Pot and Grate.

No. 206,709.

Patented Aug. 6, 1878.

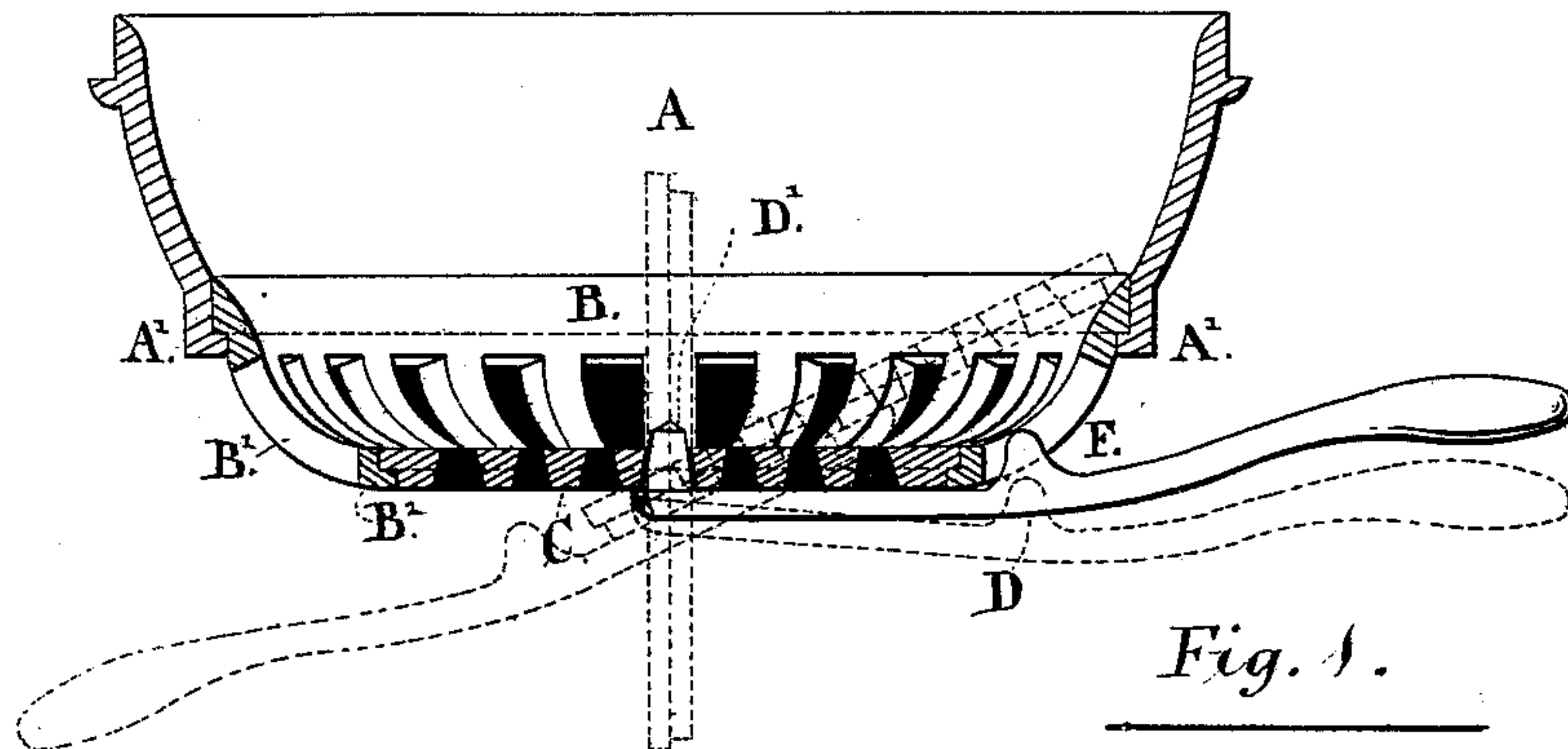


Fig. 1.

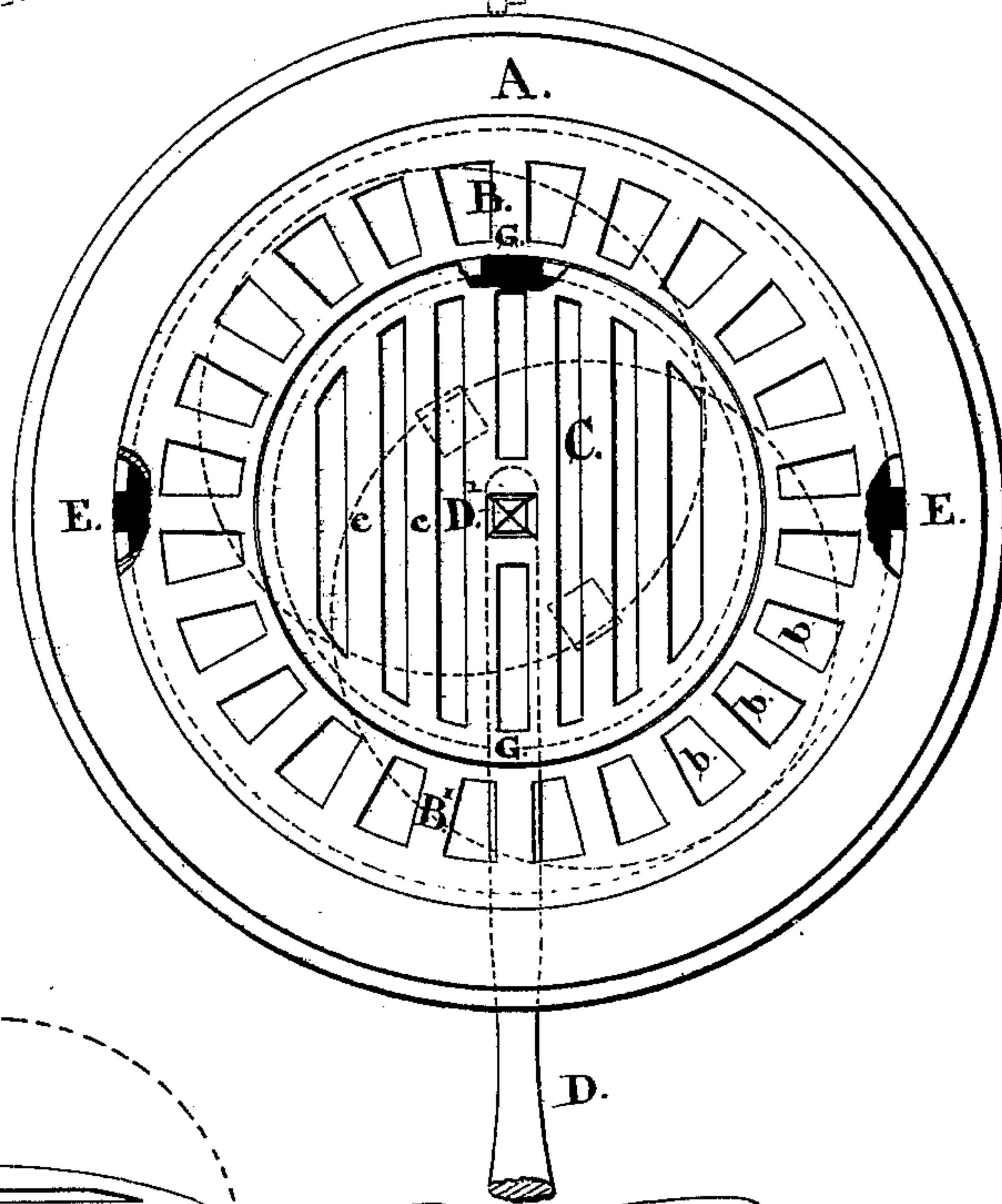


Fig. 2.

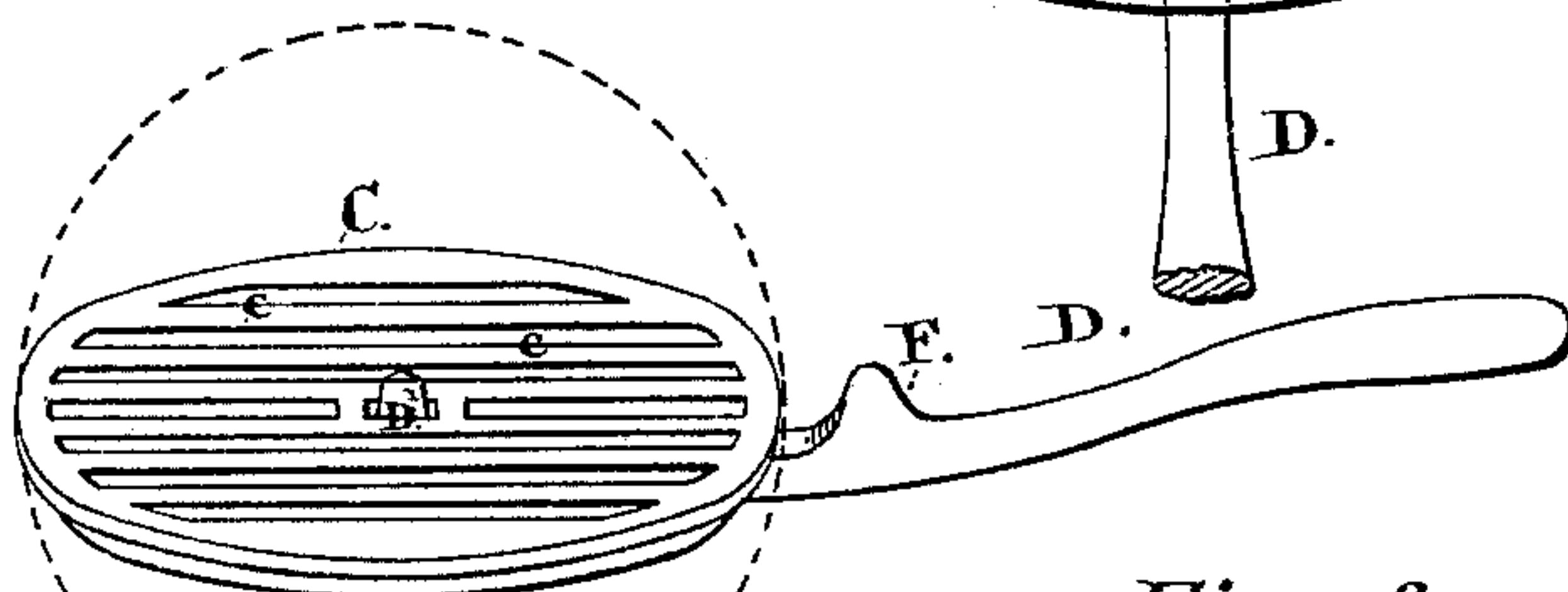


Fig. 3.

WITNESSES.

H. H. Waneu.
William Norman

INVENTOR.

J. W. Elliot
by Ridout, Bird & Co. Attys

UNITED STATES PATENT OFFICE.

JOHN W. ELLIOT, OF TORONTO, ONTARIO, CANADA.

IMPROVEMENT IN FIRE POT AND GRATE.

Specification forming part of Letters Patent No. **206,709**, dated August 6, 1878; application filed February 19, 1877.

To all whom it may concern:

Be it known that I, JOHN WHEELER ELLIOT, of the city of Toronto, in the county of York, in the Province of Ontario, Canada, surgeon dentist, have invented certain new and useful Improvements in Fire Pots and Grates for Coal-Burning Heating-Stoves, which improvements are fully set forth in the following specification, reference being had to the accompanying drawings, in which—

Figure 1 is a cross-section, and Fig. 2 a plan, of a fire pot and grate constructed according to my invention. Fig. 3 is a detail of the grate in perspective.

The fire-pot consists of an upper stationary section, A, in which a lower movable section, B, is supported by the circular lugs A' in such manner that the lower section, B, may be completely revolved on its center. This lower section curves inwardly toward the bottom, terminating in a grooved ring, B², which ring supports the grate C. The lower section, with the exception of a ring of suitable depth at the top and bottom, is built of radially-placed bars B¹, with spaces *b* between, through which the fire is exposed.

The lugs A extend, with the exception of two oppositely-placed notches, E E, around the whole circle of the section A. The object of the notches E E is to permit the removal of the lower section. This removal is accomplished by tipping the section B up at right angles to its usual position in line with the notches E E, the greater diameter at this point permitting the section to pass through.

The grate C is supported by an outer collar resting upon a step sunk in face of the ring B². The support for the grate is continuous, with the exception of two oppositely-placed notches, G G, through which the grate may be withdrawn by tipping, as shown by dotted lines in Fig. 1.

The bars of the grate are arranged in parallel lines, and a square-cornered socket is formed in the center, into which the tapered erect stud D' of the lifting and shaking lever D is arranged to fit. The lever D is provided with an upwardly-projecting piece, F, which piece is arranged to fit between the bars of the lower revolving section B of the fire-pot.

From the position of the lever D, as shown by full and dotted lines in Fig. 1, it will be

observed that the grate can be moved back and forth independently of the fire-pot or in unison with it simply by lowering to disconnect or raising the lever to connect with the lower section, B.

It will also be observed that the fire-pot can be revolved continuously in either direction independently of the grate.

A further advantage peculiar to my construction is that the grate may be lifted by the lever D and moved from its center toward the side of the pot in any direction, exposing a space through which clinkers, &c., may be withdrawn, as illustrated by dotted lines in Figs. 1 and 2. The grate may also be removed entirely from the grate by the lever D without it being necessary to touch the grate with the hands or any other instrument. The shaking-lever D being arranged to operate from the center of the grate, the resistance is equidistant all around.

In operation the ashes may be removed by agitating the grate only, the coal arching over the grate upon the lower portion of the fire-pot. When the ashes are removed the revolving grate is shaken. This operation causes the coal, fresh and bright, to fall down upon the grate.

I claim as my invention—

1. The stationary section A, provided with the circular lugs A' and notches E E, in combination with the movable section B, substantially as shown and described.

2. The compound grate B C, consisting of the sections B and C, arranged to revolve together as a single grate or independently of each other by the lever D, substantially in the manner and for the purpose specified.

3. In combination with a grate supported at its circumference and provided with a central angular socket, the lever D, provided with the tapering stud D', substantially as and for the purpose specified.

4. In combination with the grate C and movable fire-pot section B, the lever D, provided with the stud D' and upwardly-projecting piece F, arranged and operating substantially as and for the purpose specified.

J. W. ELLIOT.

Witnesses:

GEO. A. AIRD,
H. H. WARREN.