

(No Model.)

G. W. WALKER.
GRATE.

No. 500,446.

Patented June 27, 1893.

Fig. 1.

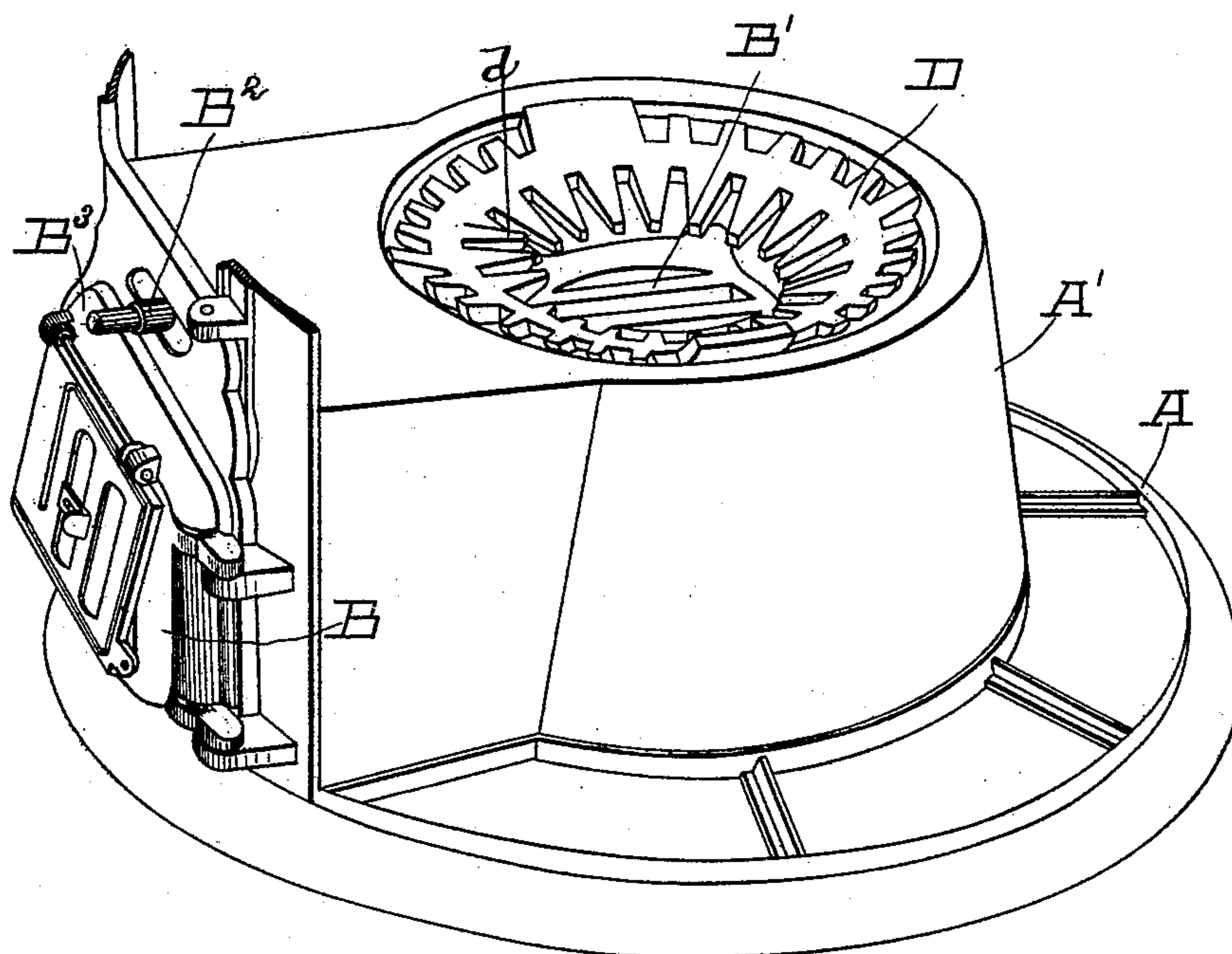
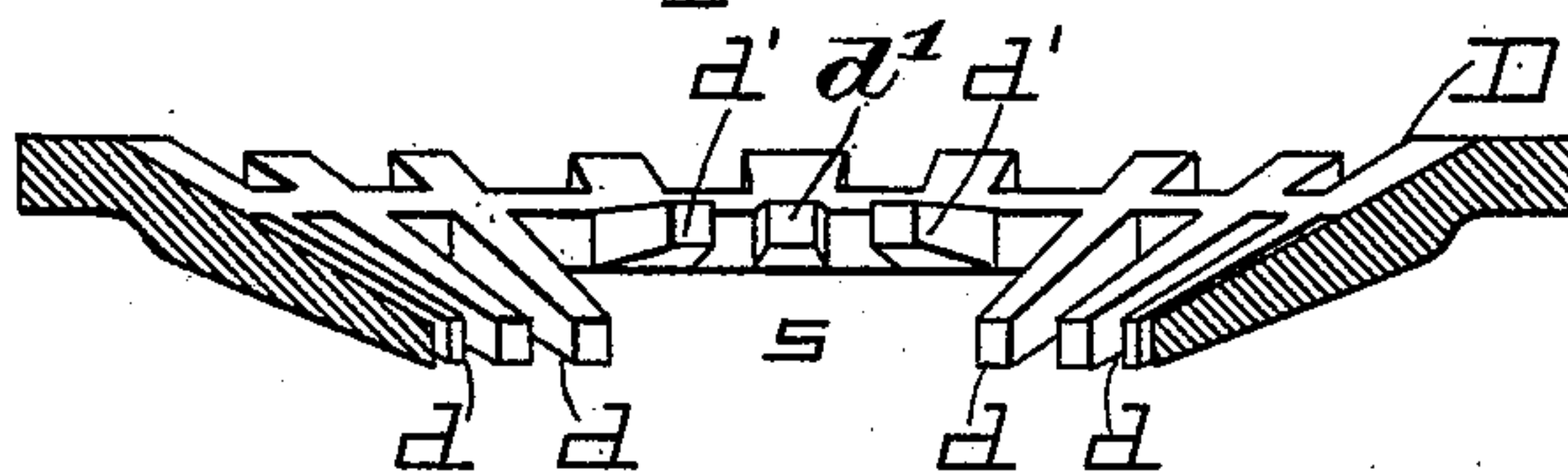


Fig. 2.



Witnesses:

Oscar F. Hill.

Louis M. Howell

Inventor,

George W. Walker

by Crosby & Gregory Attys.

UNITED STATES PATENT OFFICE.

GEORGE W. WALKER, OF MALDEN, MASSACHUSETTS.

GRATE.

SPECIFICATION forming part of Letters Patent No. 500,446, dated June 27, 1893.

Application filed July 15, 1891. Serial No. 399,599. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. WALKER, of Malden, county of Middlesex, State of Massachusetts, have invented an Improvement in
5 Grates, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

10 This invention has for its object to improve and simplify that part of the furnace known as the grate, in order that clinkers, &c., may be readily cleaned from the surface of the greater part of the grate.

15 My invention is intended as an improvement upon that class of rotary grates having inwardly directed fingers, the grate co-operating with a draw grate below it, the draw grate supporting the main body or central part of the products of combustion.

20 In accordance with my invention, some of the inwardly directed fingers are placed at a higher level than others, so that the said fingers constitute a shelf or rest, underneath which, from the outside of the furnace, may
25 be passed a slicer or poker to remove clinkers or coal upon the inwardly directed fingers at a lower level, a slide grate being located below the said fingers and forming the center of the grate.

30 Figure 1, in perspective, shows a sufficient portion of a furnace with my improved grate to enable my invention to be understood. Fig. 2, is a sectional detail of the grate.

Referring to the drawings, A represents the
35 base of the furnace; A' an ash pit; B a door; B' a central or slide grate, supported in usual manner, not herein shown, and B² a door co-operating with a space through which an ordinary poker or slicer may be passed.

40 The circular or annular grate D, has a series of inwardly directed fingers *d* of usual

construction, and the said grate has connected to and extended outwardly from it, the shaker rod B², the main or central body of the coal or other material being burned resting on the
45 slide grate, other portions of the fuel resting upon the fingers *d*, and also upon the supporting bridge or shelf designated by the letters *d'* which constitute my invention, the said shelf or bridge being represented as composed
50 of three like fingers, the gist of the invention being that they are elevated somewhat above the plane occupied by the fingers *d*, so as to leave a space S below them and below the fuel supported by them in order that a poker
55 or slicer bar may be inserted through the space covered by the door B², and enable the coal resting on the slide grate B', and upon the fingers *d* to be attacked, and any clinkers or other material detached. 60

It is obvious that the particular shape or width of the fingers constituting the shelf or bridge, is immaterial so long as the space S is left for the free passage of a poker or slicer bar. 65

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

The ash pit frame, combined with an annular grate having a series of inwardly projecting
70 downwardly inclined fingers, a series of fingers *d'* projecting inwardly and in a plane above the downwardly inclined fingers, and a slide grate below and forming the center of the annular grate, substantially as described. 75

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEO. W. WALKER.

Witnesses:

G. W. GREGORY,

FRANCES MAY NOBLE.