No. 722,289. PATENTED MAR. 10, 1903.

D. B. DONNELLY.

REFUSE BURNER.

APPLICATION FILED JUNE 28, 1902.

NO MODEL.

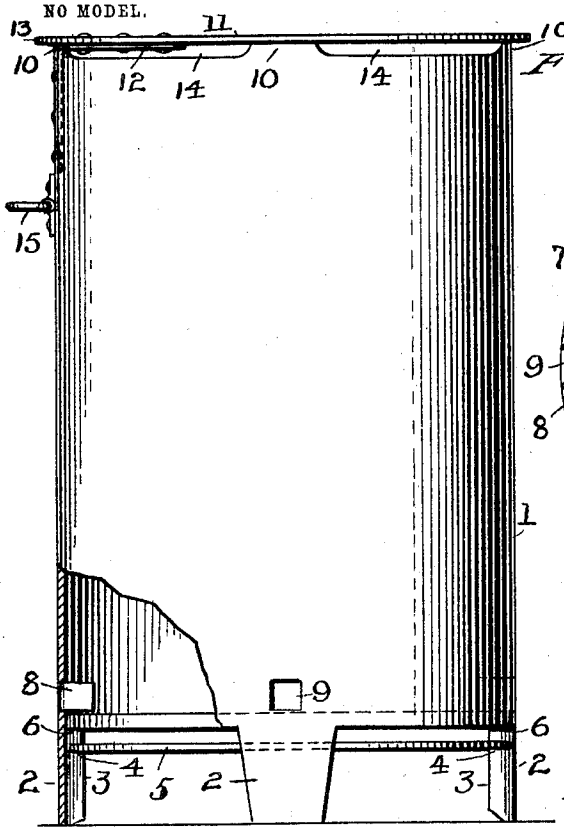
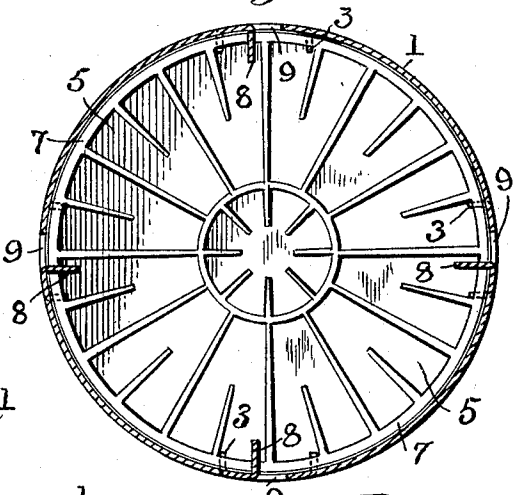


Fig. 1

Fig. 2.



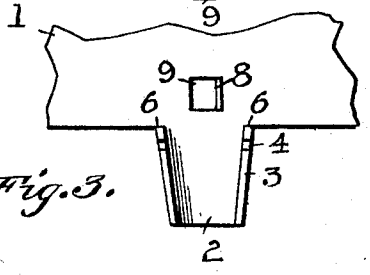
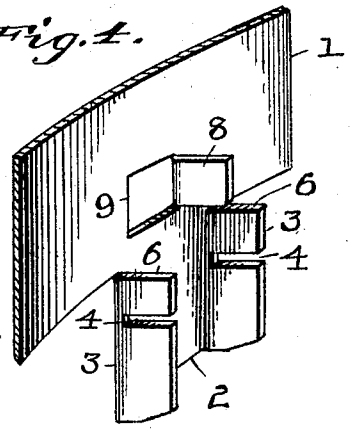


Fig. 3.

Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

DANIEL BARR DONNELLY, OF PITTSBURG, PENNSYLVANIA.

REFUSE-BURNER.

SPECIFICATION forming part of Letters Patent No. 722,289, dated March 10, 1903.

Application filed June 28, 1902. Serial No. 113,645. (No model.)

To all whom it may concern:

Be it known that I, DANIEL BARR DONNELLY, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Refuse-Burners; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to refuse-burners.

In the natural-gas regions the disposition of light refuse—such as waste-paper, &c.—is a matter of considerable concern; and the object of the present invention is the provision of a light, simple, and inexpensive refuse burner or furnace which will be of value more particularly in situations—such, for instance, as in the natural-gas regions—where an ordinary furnace or burner is not available, although its use is not necessarily thus restricted.

The present invention is designed for the speedy and satisfactory consumption of light refuse and is intended to be of such form that it will be readily portable.

The details of the invention are set forth fully hereinafter and the novel features recited in the appended claims.

Figure 1 is an elevation of the burner, partly broken away. Fig. 2 is a section on line 2 2 of Fig. 1. Fig. 3 is a rear view of one of the legs. Fig. 4 is a perspective of one of the legs.

The shell or casing of the burner or furnace is preferably of cylindrical form and of sheet metal, stovepipe-iron being well adapted for this purpose. The legs 2 are in the same piece with the shell 1 and are formed by cutting out the lower portion of the sheet metal, and these legs are strengthened by bending the inturned flanges 3 thereon, which extend the entire height of the legs and are provided with the notches or slits 4, all of which are in the same horizontal plane. A sheet-metal disk 5 is received in the notches 4, and thus supported by the legs. On the upper ends 6 of the flanges 3 rests a circular grate 7, of any preferred construction, which is held against displacement by the strips 8, projecting inwardly from the inner wall of the shell 1, which are formed by cutting openings 9 in the shell and bending inwardly the portion of the shell throughout. The upper margin or end of the shell is provided with raised portions or projections 10, and the cover 11 rests thereon, said cover being connected to the shell by a suitable hinge 12 and being of greater diameter than the shell, so that it will overhang the sides of the shell, as at 13, the object of which is to provide a deflector, so that the products of combustion—such as sparks, charred pieces of material, &c.—escaping through the slots or openings 14 will not float away and endanger surrounding property. A suitable handle 15 is provided on the shell for carrying the furnace about from place to place.

It will be understood that the bottom or disk 5 is located a suitable distance below the grate and provides ample draft-space through which air may enter to pass up through the grate, while any one of the openings 9 can be used for the ignition of the material to be consumed within the furnace, and the slots 14 provide for the escape of the smoke and also constitute an outlet for the air, and thus a perfect draft is had.

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

1. In a refuse-burner, the combination with a tubular shell, having legs extending below its lower edge, of a grate supported inside of said shell at or near the line of its lower edge, and a bottom supported by said legs below the lower edge of said shell, whereby openings are provided for the admission of air between said bottom and the lower edge of said shell.

2. In a refuse-burner, the combination with a tubular sheet-metal shell having legs integral therewith and extending below its lower edge, said legs having their edges bent inwardly and provided with notches, of a grate supported inside of said shell near its lower edge, and a bottom having its edge received in said notches, below the lower edge of said shell.

3. In a refuse-burner, the combination with a tubular sheet-metal shell having legs inte-

gral therewith and extending below its lower edge, said legs having their side edges turned inwardly and provided with notches, of a grate resting on the upper ends of said inwardly-bent edges, and a bottom having its edge received in said notches below the lower edge of said shell.

4. In a refuse-burner, the combination with a shell or casing and legs formed of sheet metal, said legs having their side edges turned or bent inwardly, of a grate supported by said inturned portions of the legs, and members projecting inwardly from the shell or casing above the grate adapted to prevent upward displacement thereof.

5. In a refuse-burner, the combination with a shell or casing, of a grate supported therein and members projecting inwardly from the shell or casing above the grate and adapted to prevent displacement thereof, said members being formed by cutting or slitting the shell or casing and bending inwardly the cut portions of the shell or casing.

6. In a refuse-burner, the combination with a shell or casing and legs of sheet metal, said legs having their side edges bent inwardly and provided with notches, of a bottom received in said notches, a grate resting on the upper ends of said inwardly-bent side edges and projections above the grate which are struck inwardly from the walls of the shell or casing.

7. In a refuse-burner, the combination with a shell or casing having upwardly-extending portions at its top and provided with intermediate downwardly-cut-out slots, constituting outlets, of a lid resting on the upwardly-extending portions and overhanging the sides of the shell.

8. In a refuse-burner, the combination with a body provided with inwardly-extending flanges 3 formed with notches 4, and with the inwardly-extending strips 8 above said flanges, of a bottom supported within said notches, and a grate supported between said flanges and strips.

In testimony whereof I affix my signature in presence of two witnesses.

DANIEL BARR DONNELLY.

Witnesses:

CHERRIE P. BRASHEAR,

EDITH F. GARWOOD.