Feb. 4, 1941. W. F. LUTZKE 2,230,382

RUBBISH BURNER

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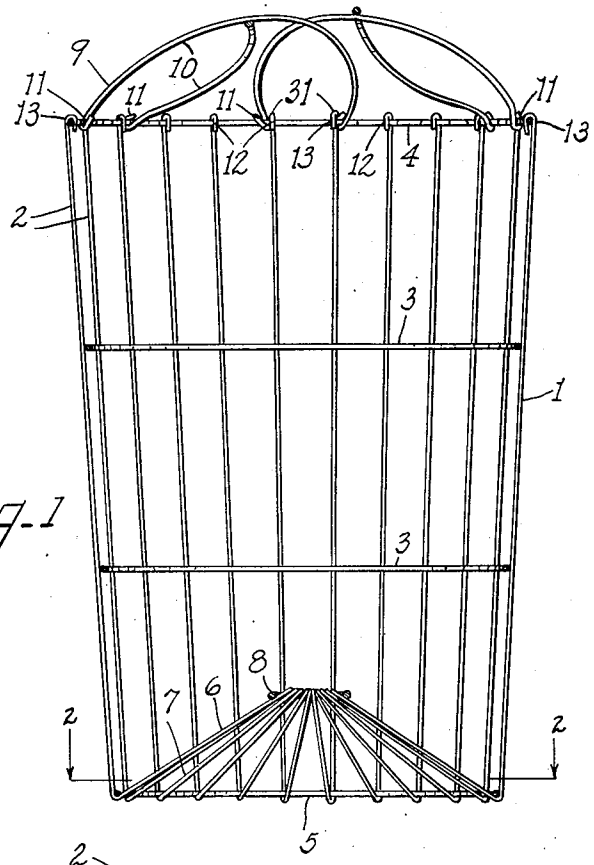


Fig. 1

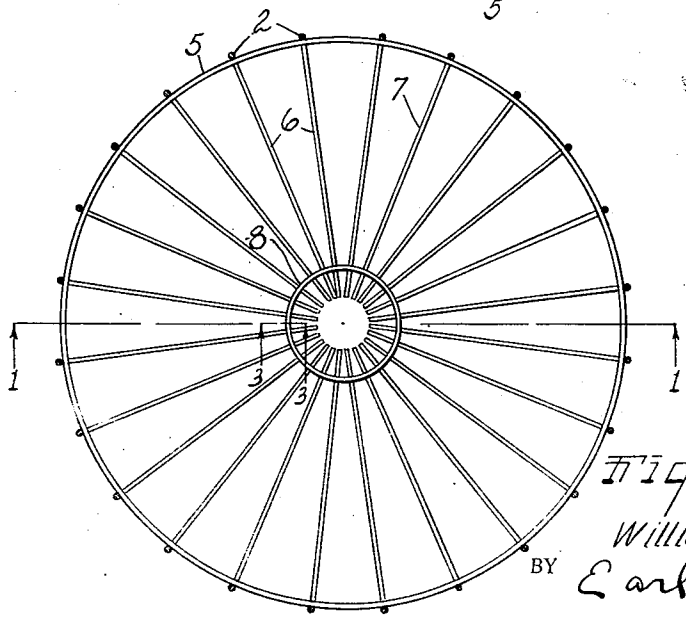


Fig. 2

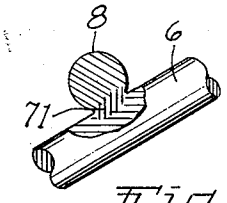


Fig. 3

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RUBBISH BURNER

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6 Claims. (Cl. 220—19)

This invention relates to improvements in rubbish burners.

The main objects of this invention are:

First, to provide a rubbish burner of novel design.

Second, to provide a rubbish burner or incinerator which is economical to manufacture and is very strong and rigid in construction.

Third, to provide a rubbish burner or incinerator of the type described having a novel bottom which not only adds greatly to the strength and rigidity of the structure but also promotes improved burning of the contents thereof.

Fourth, to provide an article of the type described having an improved bottom which greatly increases the strength and rigidity of the article and which permits nesting of a number of the articles without danger of damaging the same in shipment.

Objects relating to details and economies of the invention will appear from the description to follow. The invention is defined in the claims.

A structure embodying the features of the invention is illustrated in the accompanying drawing, wherein:

Fig. 1 is a view in vertical section of the rubbish burner or incinerator of the invention, the section being on line 1—1 of Fig. 2.

Fig. 2 is a view partially in horizontal section on line 2—2 of Fig. 1.

Fig. 3 is an enlarged fragmentary view in section on line 3—3 of Fig. 2, illustrating a detail of the construction.

The present invention relates to a rubbish burner or incinerator having novel provisions for rigidifying the same as well as promoting better burning of the contents thereof and permitting a number of the structures to be nested for crating and shipment without damage such as frequently occurs in articles of this type.

Referring to the drawing, the reference numeral 1 in general indicates a burner which consists of a plurality of side elements or slats 2 arranged in the form of a frustum of a cone although, if desired, the article may be made in cylindrical or other form. Slats 2 are secured as by welding to a pair of intermediate internal hoops 3 thus providing a mesh-like side wall, and have the uppermost ends thereof bent or crimped at 31 around a top hoop 4.

At the bottom of the article I dispose a lowermost hoop or ring 5 inwardly of slats 2, the lowermost ends 6 of the slats being bent around and welded to the hoop 5, then directed inwardly and upwardly to form the conical bottom which is generally designated 7. The extremities of the ends 6 are welded at 71 to a small locking ring 8, which may be disposed either above or below the said extremities, and are held thereby in assembled relation.

It will be appreciated that the rings or hoops 3, 4, and 5 are graduated in diameter if a frustoconically shaped article is desired, or are otherwise properly related in size to produce the desired configuration of the article. The upper ends of the slats 2 are turned inwardly forming eyes 12 embracing the top hoop 4. This provides rounded surfaces.

At the uppermost end of the burner I provide a closure generally designated 9 and consisting of a plurality of loops 10 of semi-circular shape, each of which has the ends 11 thereof pivoted to ring 4. These loops are arranged so that each thereof has one end overlapping one adjacent loop and the opposite end underlapping the other adjacent loop with the result that a shutter-like action characterizes the loops when they are opened and closed. The ends of the respective loops are spaced circumferentially of ring 4 by the points of securement 13 of the slats 2 to the ring. The closure 9 may be manipulated to expose any desired portion of the mouth of the container for filling or emptying the same.

The bottom is exceedingly strong and rigid due to the upward disposition of the ends 6 of the slats 2 and the welding thereof to bottom ring 5. In this connection, it is pointed out that the disposition of the said ring 5 inside the slats contributes to the strength of the bottom and also facilitates the process of forming the same. Furthermore, it is possible to get a very sharp bend by merely bending the longitudinal slats 2 around the ring 5 and the resultant structure has a maximum diameter at the bottom because the wires are bent in from the maximum diameter of the lowermost hoop.

The bottom construction of the invention will not sag and, in fact, will support the weight of an individual standing on the same on the inside of the burner 1. This constitutes a great advance over hitherto known burners which have been characterized by flat bottoms subject to sagging and which invariably wear out first at this point.

The conically shaped bottom 7 promotes optimum burning of the contents of the incinerator or burner, first, because the ash and refuse tend to fall to the outside and out through the larger meshes at the side of the burner instead of accumulating in the center thereof, and second, be-

cause the raised bottom permits the air to circulate in and under the rubbish while burning and facilitates a proper upward draft through the relatively high air space at the center of the rubbish.

As pointed out above, the disposition of the ring or hoop 5 inside the burner gives the same a neat appearance; at the same time this renders it much more economical to manufacture the conical strengthening bottom than in the case where the hoops are disposed externally.

Rubbish burners according to my invention may be shipped in nested groups of six or more without the necessity of crating the same for shipment, which has heretofore existed. Previously when a group of such articles were nested for shipment the lowermost thereof was invariably damaged due to dropping of the bundle; however, the reinforced construction of this invention obviates this difficulty.

I have illustrated and descried my improvements in an embodiment which is very practical. I have not attempted to illustrate or describe other embodiments or adaptations as it is believed this disclosure will enable those skilled in the art to embody or adapt my improvements as may be desired.

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

1. A rubbish burner comprising a plurality of vertically spaced wire rings and a plurality of longitudinal wire slats spaced circumferentially and externally of said rings and welded thereto, the ends of said slats being bent sharply around the lowermost of said rings and to converge upwardly and internally of the burner to provide a conical bottom therefor, and a wire locking ring welded to said ends at the extremities thereof.

2. A rubbish burner comprising a plurality of vertically spaced annular elements and a plurality of longitudinal slats spaced around said elements and welded thereto, the ends of said slats being bent sharply around the lowermost of said elements and converged upwardly and internally of the burner to provide a bottom therefor, and a locking element secured to said ends.

3. A wire rubbish burner comprising a plurality of longitudinal slats disposed in annularly spaced arrangement, a plurality of hoops welded to said slats to secure the same in said arrangement, the lowermost of said hoops being disposed internally of said slats with the ends of the slats bent sharply adjacent said lowermost hoop and extending upwardly and inwardly relative to the burner whereby to form a braced bottom for the burner.

4. A wire rubbish burner comprising a plurality of longitudinal slats disposed in annularly spaced arrangement, a plurality of hoops welded to said slats to secure the same in said arrangement, the lowermost ends of the slats being bent sharply adjacent said lowermost hoop and extending upwardly and inwardly relative to the burner whereby to form a braced bottom for the burner.

5. A rubbish burner comprising a mesh-like enclosing side wall and a bottom bracing hoop secured to said wall internally thereof, the lowermost extremity of said side wall being bent around said hoop and extending upwardly and inwardly relative thereto to form a braced bottom for the burner.

6. A rubbish burner formed entirely of wire stock, comprising a plurality of longitudinally disposed wire slats arranged in annularly spaced relation, and a plurality of vertically spaced wire hoops welded to said slats to secure the same in said arrangement, the lowermost of said hoops being disposed internally of the slats with the lowermost ends of the latter bent inwardly and upwardly to form a braced bottom for the burner.

WILLIAM F. LUTZKE.