

No. 698,497.

Patented Apr. 29, 1902.

T. HILL.
ASH OR REFUSE CAN.
(Application filed Jan. 30, 1901.)

(No Model.)

Fig. 1.

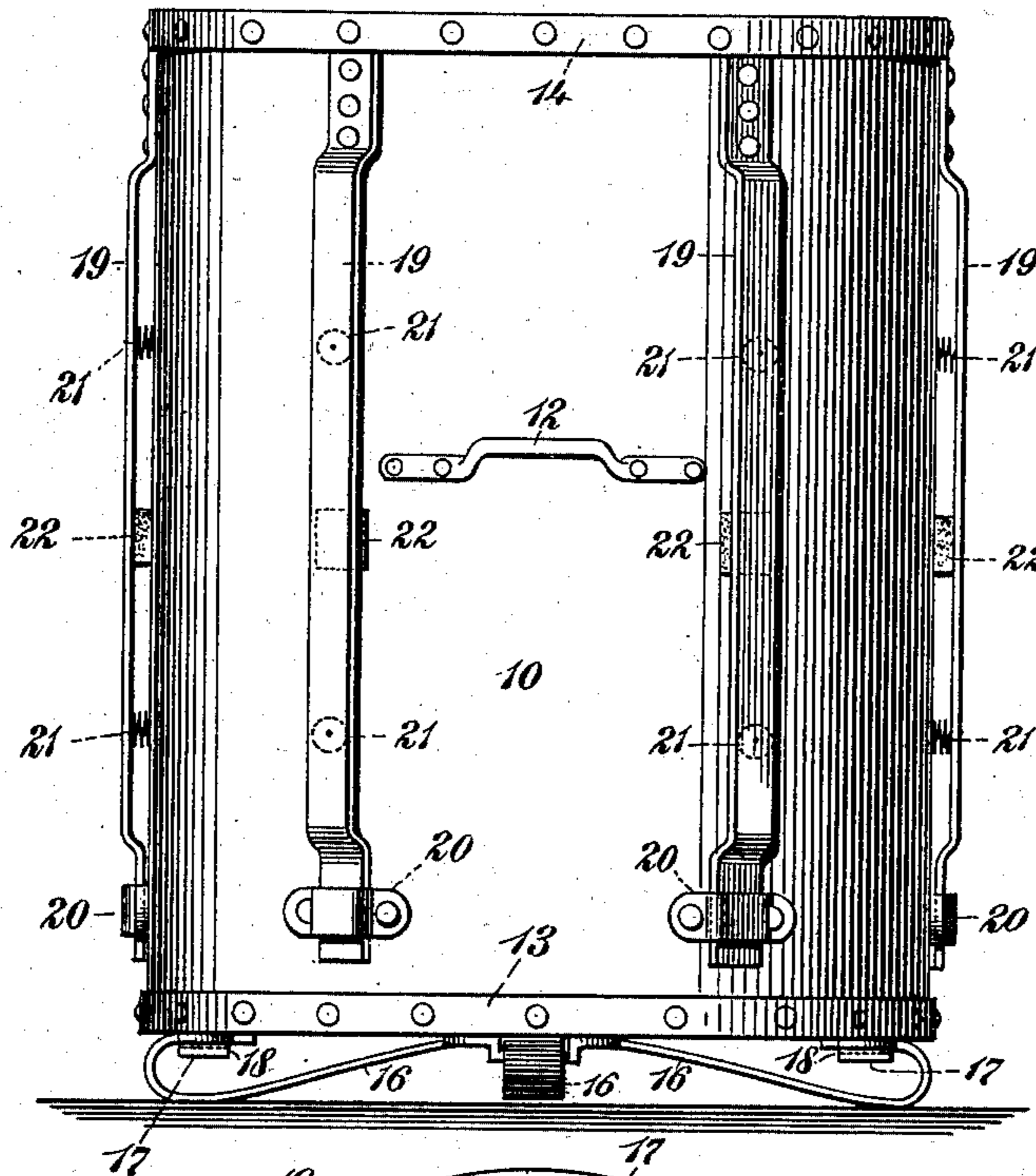


Fig. 2.

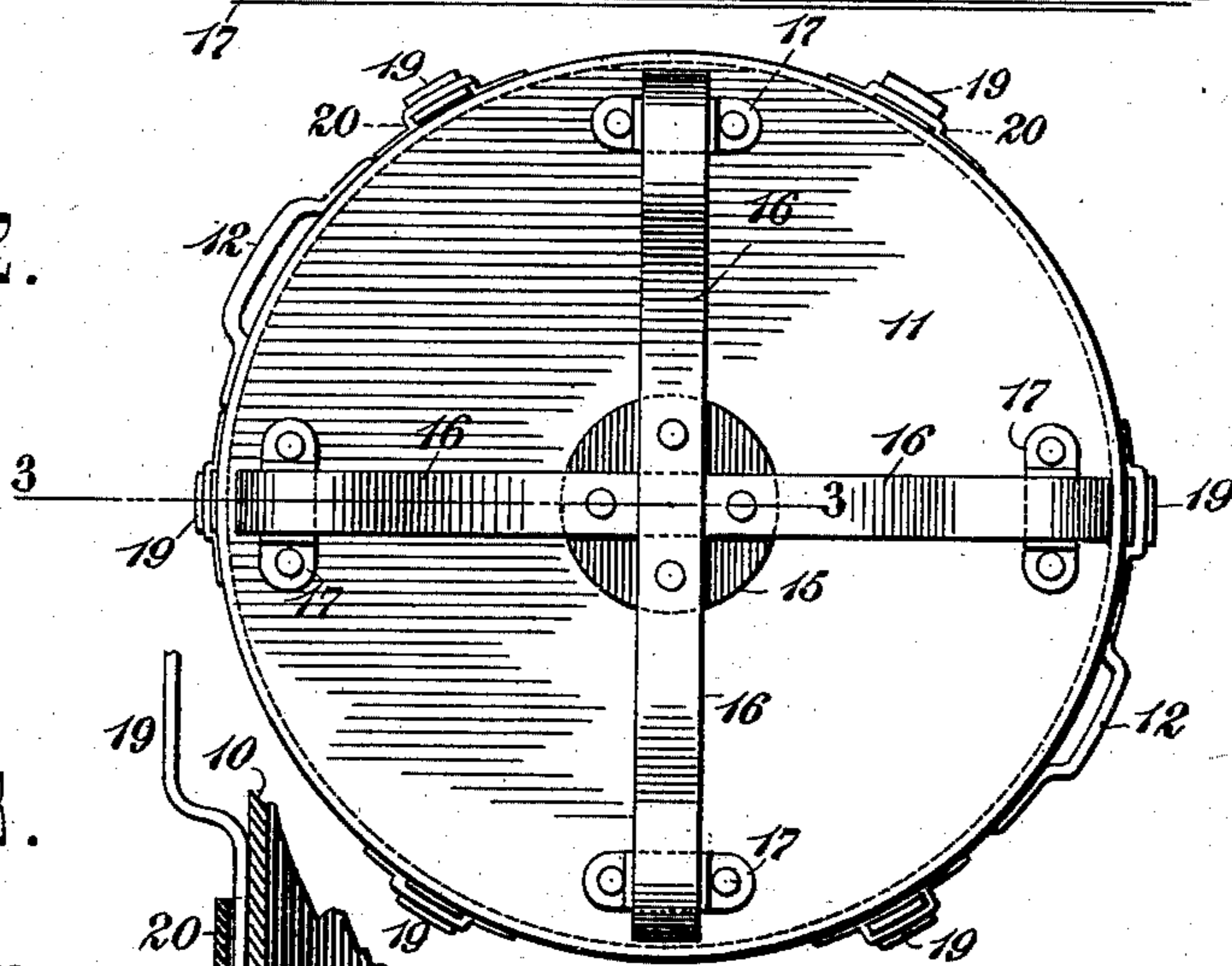


Fig. 3.

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ASH OR REFUSE CAN.

SPECIFICATION forming part of Letters Patent No. 698,497, dated April 29, 1902.

Application filed January 30, 1901. Serial No. 45,275. (No model.)

To all whom it may concern:

Be it known that I, THOMAS HILL, a citizen of the United States, and a resident of Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Ash or Refuse Cans, of which the following is a specification.

The invention relates to improvements in ash and refuse cans and the like; and it consists in the novel construction, arrangement, and combinations of parts hereinafter described, and particularly pointed out in the claims.

The object of the invention is to provide means for adding to the longevity of the cans employed for holding ashes and refuse. It is well known that cans of this character, owing to the rough way in which they are handled, become rapidly mashed in, broken, and destroyed, and various means have heretofore been devised with a view of preserving the life of the cans, but without, so far as I am aware, any thoroughly efficient results. In accordance with my invention I provide the bottom structure of the can with a spring-support capable of resisting concussive force, and upon the sides of the can I provide metallic springs fastened at one end and free to slide at the other end and capable of protecting the sides of the body of the can, the whole being constructed and arranged as hereinafter more fully explained.

Referring to the accompanying drawings, forming a part of this application, Figure 1 is a side elevation of a can constructed in accordance with and embodying the invention. Fig. 2 is a bottom view of same, and Fig. 3 is an enlarged vertical sectional view of a portion of same on the dotted line 3 3 of Fig. 2.

In the drawings, 10 designates the body of the can, and 11 the bottom thereof, the said body 10 being, as usual, supplied with suitable handles 12. The body 10 and bottom 11 are of sheet metal, and the bottom 11 is formed with the annular edge flange 13, which incloses the lower edges of the body 10 and is riveted thereto, as shown. The upper edge of the body 10 is formed with the strengthening-band 14.

Centrally upon the lower surface of the bottom 11 of the can is applied the disk 15, and upon this disk 15 are rigidly secured the inner

portions or ends of the radial leaf-springs 16, whose outer portions extend downward from the bottom of the can and then turn inward below said bottom and pass through the guides 16, which are secured to the bottom 11 and contain the guiding-openings 18, through which the inner ends of the springs 17 may slide. I illustrate four of the springs 16; but this number may be increased, if desired, it only being necessary that a sufficient number of the springs 16 be employed to properly afford a spring-support for the can. In the present instance I form the four springs 16 out of two strips of metal, as will be understood by reference to Fig. 2, and I very much prefer this construction on account of its durability, simplicity, and efficiency; but I do not of course limit the invention in every instance to the making of four springs out of two strips of metal. When the four springs 16 are made out of two strips of metal, the said strips will cross each other, as shown in Fig. 2, and constitute a very firm and durable structure, being much more durable than if the four springs 16 were each in separate pieces of metal. The guides 17 are secured by rivets to the bottom 11, and they may be formed of castings or otherwise, as desired. The outer downwardly-extending portions of the springs 16 effectually support the can and prevent the contact of the bottom 11 with the ground. The springs 16 will be of sufficient strength to effectually support the weight of the can when the latter is filled, but at the same time the springs 16 should be capable of yielding sufficiently to relieve the can from the effects of the usual concussive force created by the contact of the can with the ground when the can is handled in the ordinary rough way. I am enabled to employ springs of the proper character to effect the purposes of my invention by reason of the fact that said springs are fastened at one end and permitted to slide at the other end, in view of which construction I am enabled to employ very durable springs and springs which will neutralize the concussive action due to the dropping of the can upon the ground and save the can from injury. The springs 16 while applied to the bottom 11 of the can and more directly preserving said bottom from injury also in large measure aid in protecting the entire can from dam-

age, since by reason of the fact that the springs 16 neutralize the concussive action due to the dropping of the cans the entire can-body is saved from undue strain.

5 Upon the sides of the can-body 10 I secure the metallic spring-bars 19, which, as shown in Fig. 1, are riveted to the can-body below the upper band 14, so as to be rigid at their upper ends. The lower ends of the springs 19
10 are free to slide against the body of the can and are freely held within guiding-loops 20, secured to the can-body 10 above the flange 13, connected with the bottom 11. The upper and lower ends of the springs 19 lie flat against
15 the can-body 10, while intermediate said ends the springs 19 project outward free from said can-body. The springs 19 are of metal and of durable character, but are sufficiently yielding to prevent any concussive force from
20 destroying the can-body, and under pressure, such as from a blow, the lower end of the springs 19 will slide within the guides 20, so that notwithstanding the durable character of the springs 19 the said springs will be en-
25 abled to protect the sides of the can from being mashed in. The springs 19 may be used alone for protecting the sides of the can-body, or they may be supplemented by auxiliary springs interposed between the inner side of
30 the springs 19 and the sides of the can-body, and as illustrating this feature of the invention I provide the auxiliary springs 21 and 22, the springs 21 being coiled springs, and the spring 22 being of rubber or other
35 cushioning material, although in practice the springs 22 may be of coiled wire corresponding with the springs 21. I illustrate the several forms of springs, so that it may be understood that the invention is not specifically
40 limited to any special form of spring. The auxiliary springs 21 and 22 will aid the springs 19 in protecting the sides of the can-body, and in instances in which the springs 19 should be unduly yielding in character the springs
45 21 and 22 will become of great advantage in aiding such springs 19 in neutralizing any concussive force and saving the can-body from damage. My preferred form of the invention involves, however, the employment of
50 springs 19 of sufficient strength and durability to protect the can-body without the employment of the auxiliary springs 21 and 22. Since the springs 19 are rigidly fastened at one end and held by guides at the other end,
55 they will not be liable to become loosened from the can nor to make a rattling noise when the can is moved. The springs 19 being of

metal will at all times be durable and not distort the appearance of the can nor present the objectionable characteristics due to the 60 employment of wooden frames surrounding the can-body, such wooden frames being liable to become water-soaked, foul, splintered, and broken and injure the hands of the person who may be required to handle the cans. 65 The springs 19 aid in preserving all parts of the can from injury, since by relieving any strain which may be exerted against the side of the can the other parts of the can are saved from undue shock. The highest degree of 70 protection is, however, attained when both the sides and bottom of the can are protected by the springs in the manner shown in the drawings.

I do not limit the invention to all of the details of construction shown and described, 75 since I may desire to vary some of these details within the scope of my invention.

What I claim as my invention, and desire to secure by Letters Patent, is— 80

1. The ash or refuse can having and carrying below its bottom the series of radial leaf-springs 16 securely fastened at their inner portions to the central portion of the bottom of the can so as to be carried thereby, com- 85 bined with the series of guides 17 also secured to the bottom of the can, said springs from their inner portions extending downward and outward and then upward and inward through said guides; substantially as shown 90 and for the purposes set forth.

2. An ash or refuse can having the bottom 11 provided with the annular flange 13 by which said bottom may be secured to the can-body, combined with the disk 15 secured 95 to the center of the said bottom, the guides 17 also secured to said bottom, and the springs 16 secured at one end to said disk 15 and at the other end being freely received within said guides 17, said springs 16 affording a support 100 for the can; substantially as set forth.

3. The ash or refuse can having upon its sides the series of metal springs 19 rigidly secured at one end, combined with the guides 20 also secured to the sides of the can and 105 adapted to receive the other end of said springs; substantially as shown and set forth.

Signed at New York, in the county of New York and State of New York, this 28th day of January, A. D. 1901.

THOMAS HILL.

Witnesses:

CHAS. C. GILL,
GUNDER GUNDERSON.