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(12) **United States Design Patent**  
**Zeng**

(10) **Patent No.:** **US D729,478 S**  
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(54) **TRANSFORMABLE SPIN BUCKET**

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(\*\*) Term: **14 Years**

(21) Appl. No.: **29/479,608**

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(30) **Foreign Application Priority Data**

Jul. 18, 2013 (CN) ..... 2013 3 0337161

(51) **LOC (10) CL.** ..... **07-07**

(52) **U.S. CL.**  
USPC ..... **D32/53**

(58) **Field of Classification Search**  
USPC ..... D32/53-54; 15/119.1, 120.1, 260-264;  
220/570, 904

See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

D407,878	S	*	4/1999	Carlson	.....	D32/53
D518,262	S	*	3/2006	Jurgens	.....	D32/53
D632,446	S	*	2/2011	Tseng	.....	D32/53
D645,628	S	*	9/2011	Tseng	.....	D32/53
D647,268	S	*	10/2011	Chen	.....	D32/53
8,156,607	B2	*	4/2012	Chiang	.....	15/260

8,239,997	B2	*	8/2012	Lin	.....	15/260
8,291,544	B2	*	10/2012	Chen et al.	.....	15/260
8,327,502	B2	*	12/2012	Tsai	.....	15/260
8,407,849	B2	*	4/2013	Chen	.....	15/260
D693,080	S	*	11/2013	Shao	.....	D32/53
D707,003	S	*	6/2014	Dingert	.....	D32/53

**FOREIGN PATENT DOCUMENTS**

CN	201438956	4/2010
CN	202235237	5/2012
KR	30-0646573	6/2012

\* cited by examiner

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(57) **CLAIM**

The ornamental design for a transformable spin bucket, as shown and described.

**DESCRIPTION**

FIG. 1 is a front view of the new design for a transformable spin bucket;

FIG. 2 is a rear view thereof;

FIG. 3 is a left side view thereof;

FIG. 4 is a right side view thereof;

FIG. 5 is a top view thereof;

FIG. 6 is a bottom view thereof;

FIG. 7 is a prospective view thereof;

FIG. 8 is a front view thereof in a closed position;

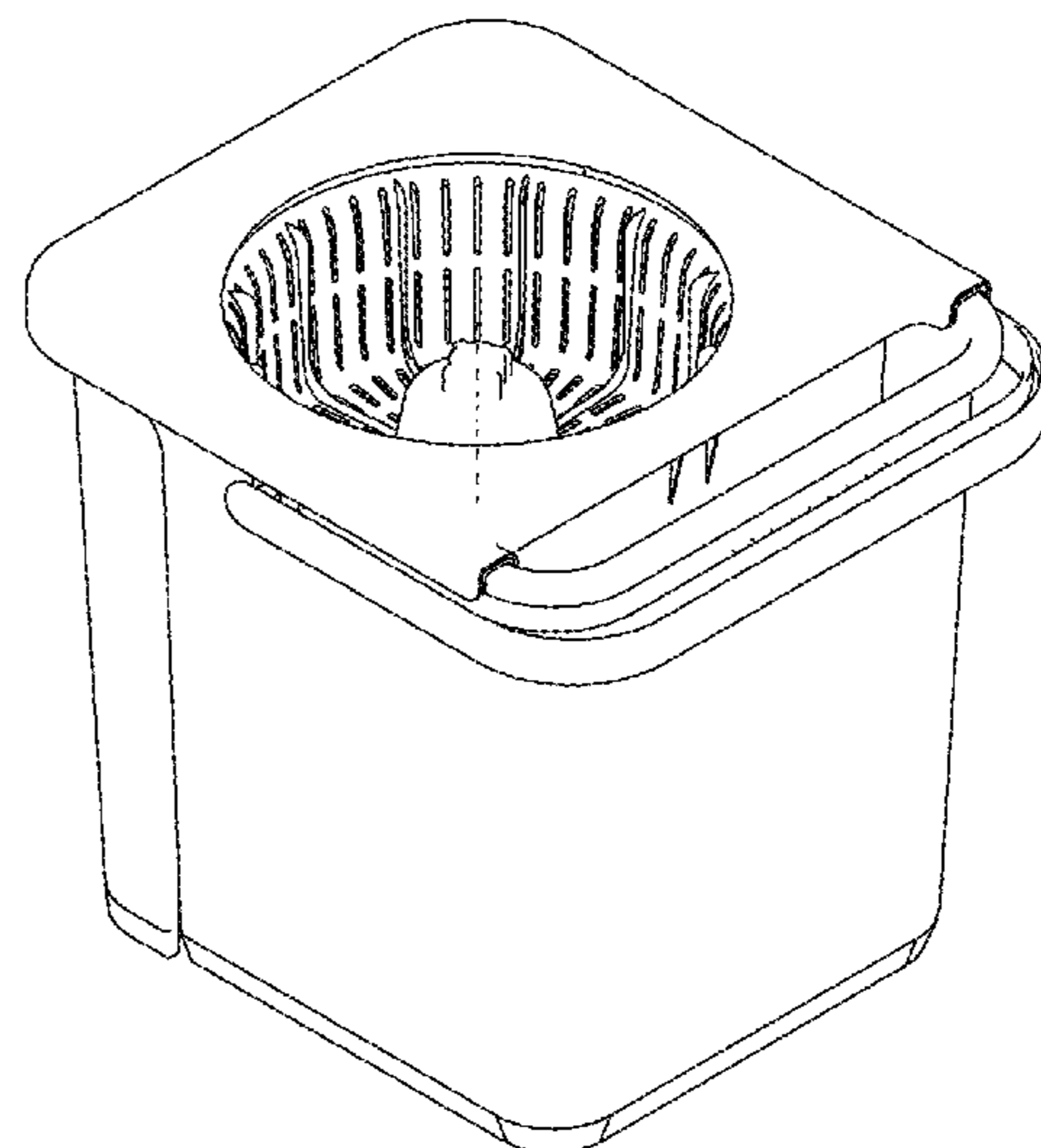
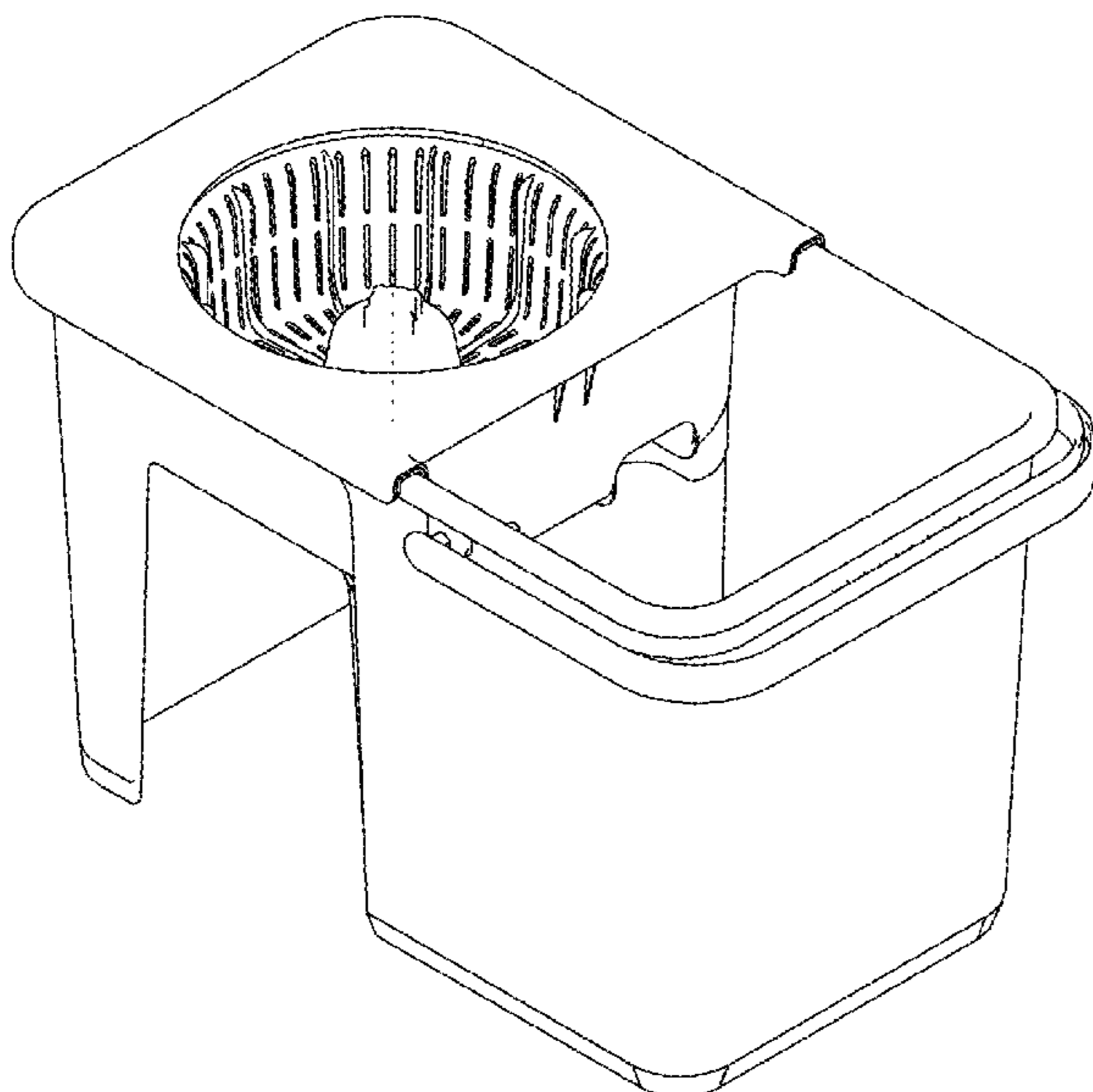
FIG. 9 is a rear view thereof in a closed position;

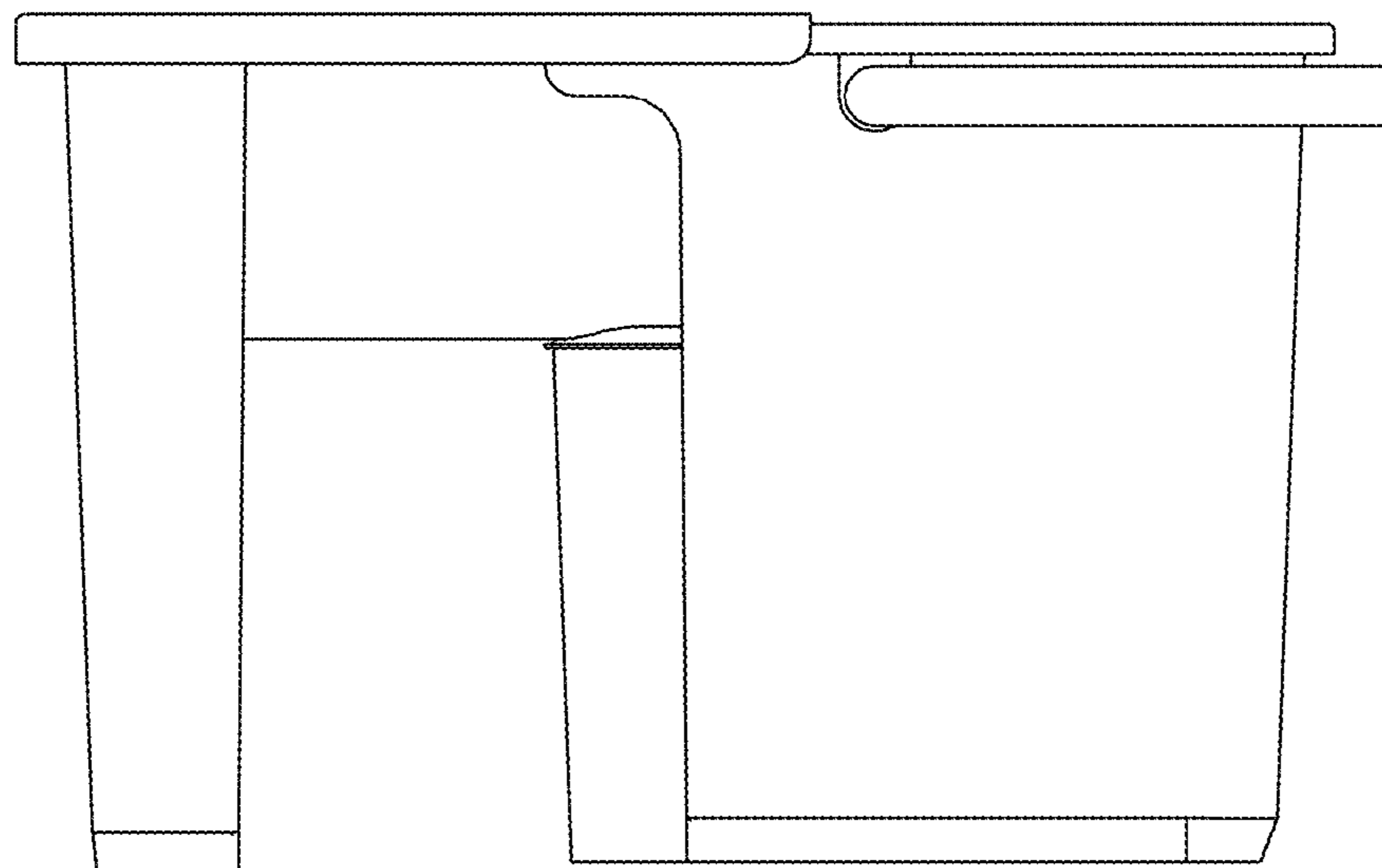
FIG. 10 is a top view thereof in a closed position;

FIG. 11 is a bottom view thereof in a closed position; and,

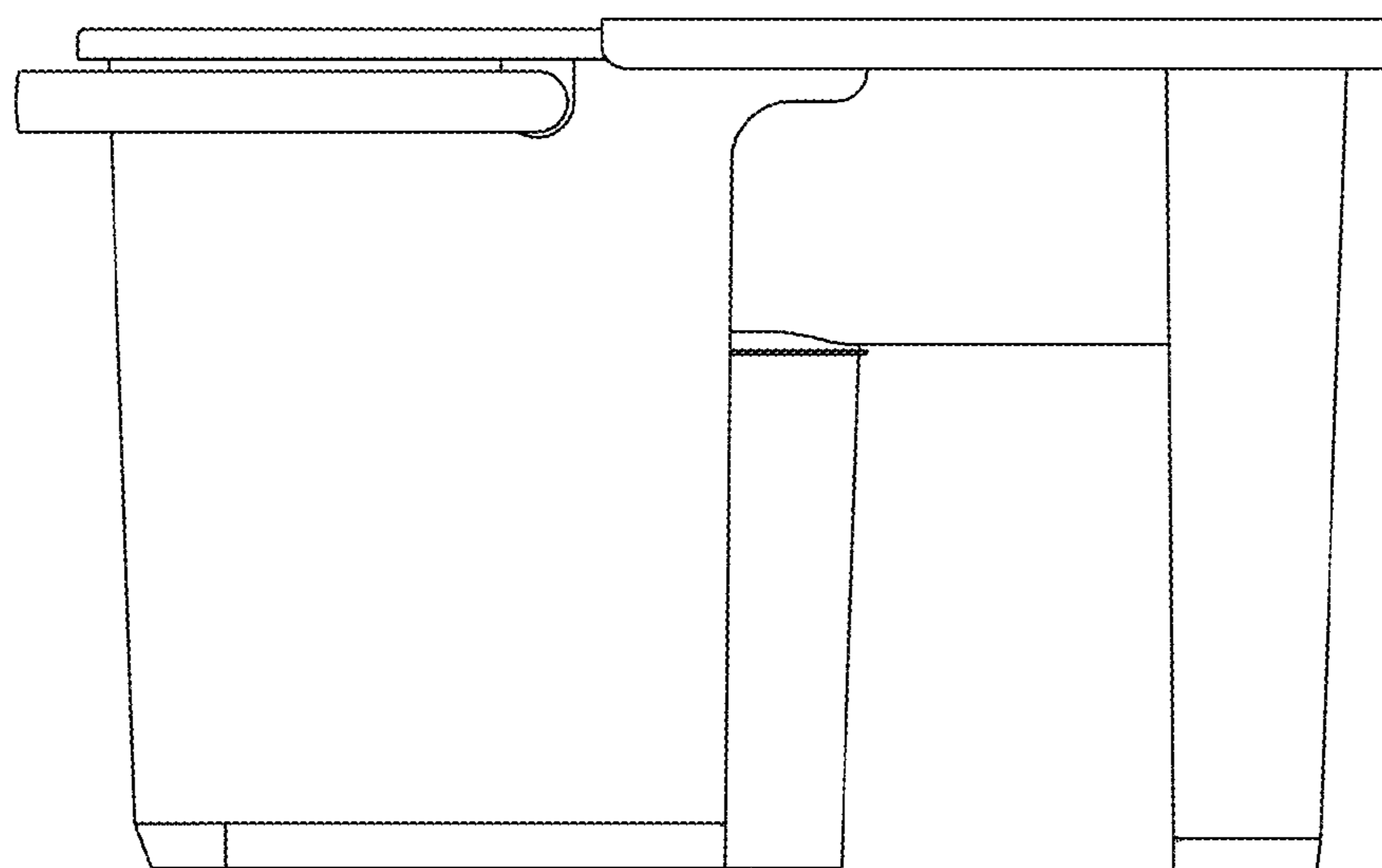
FIG. 12 is a prospective view thereof in a closed position.

**1 Claim, 6 Drawing Sheets**

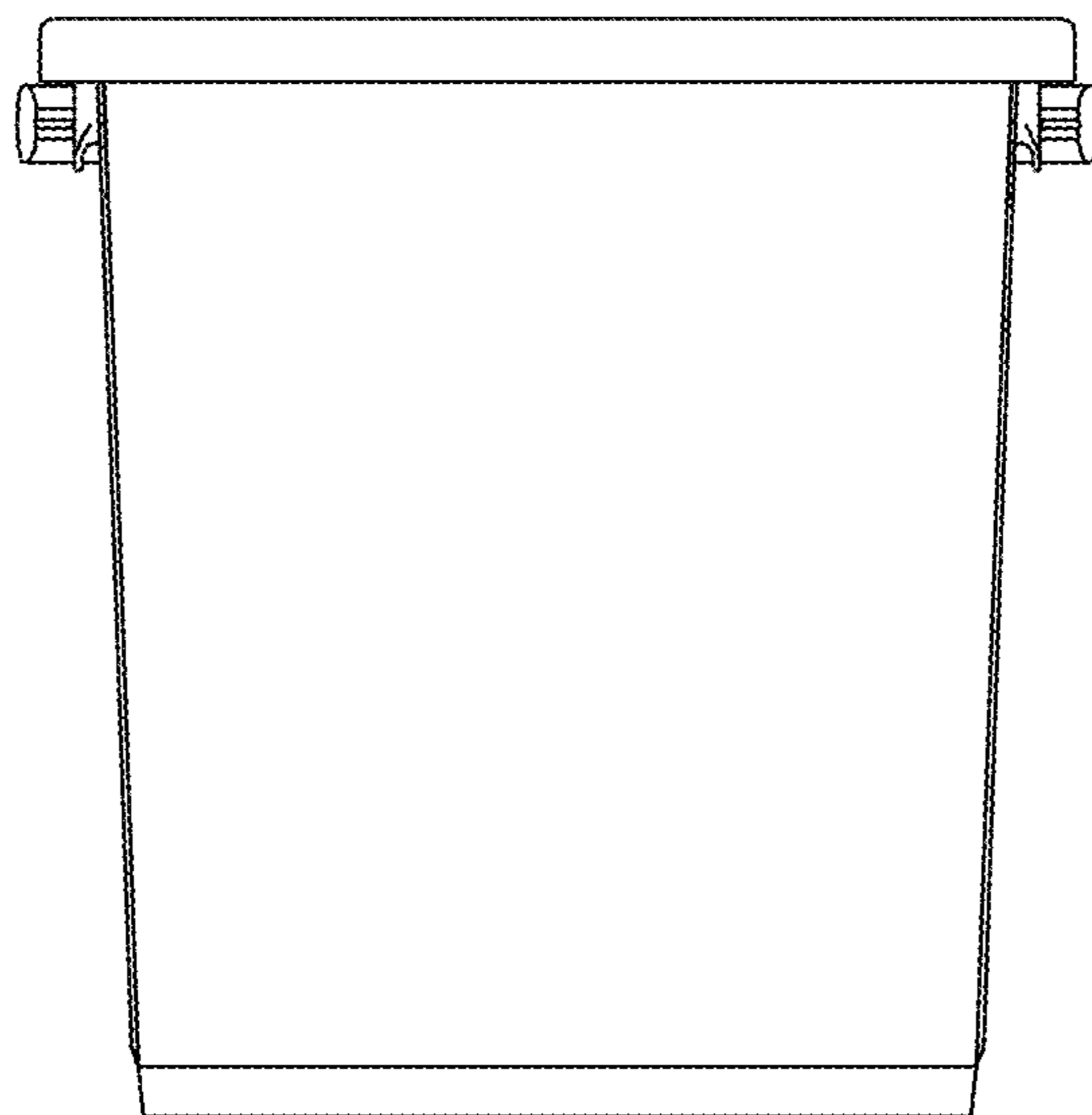




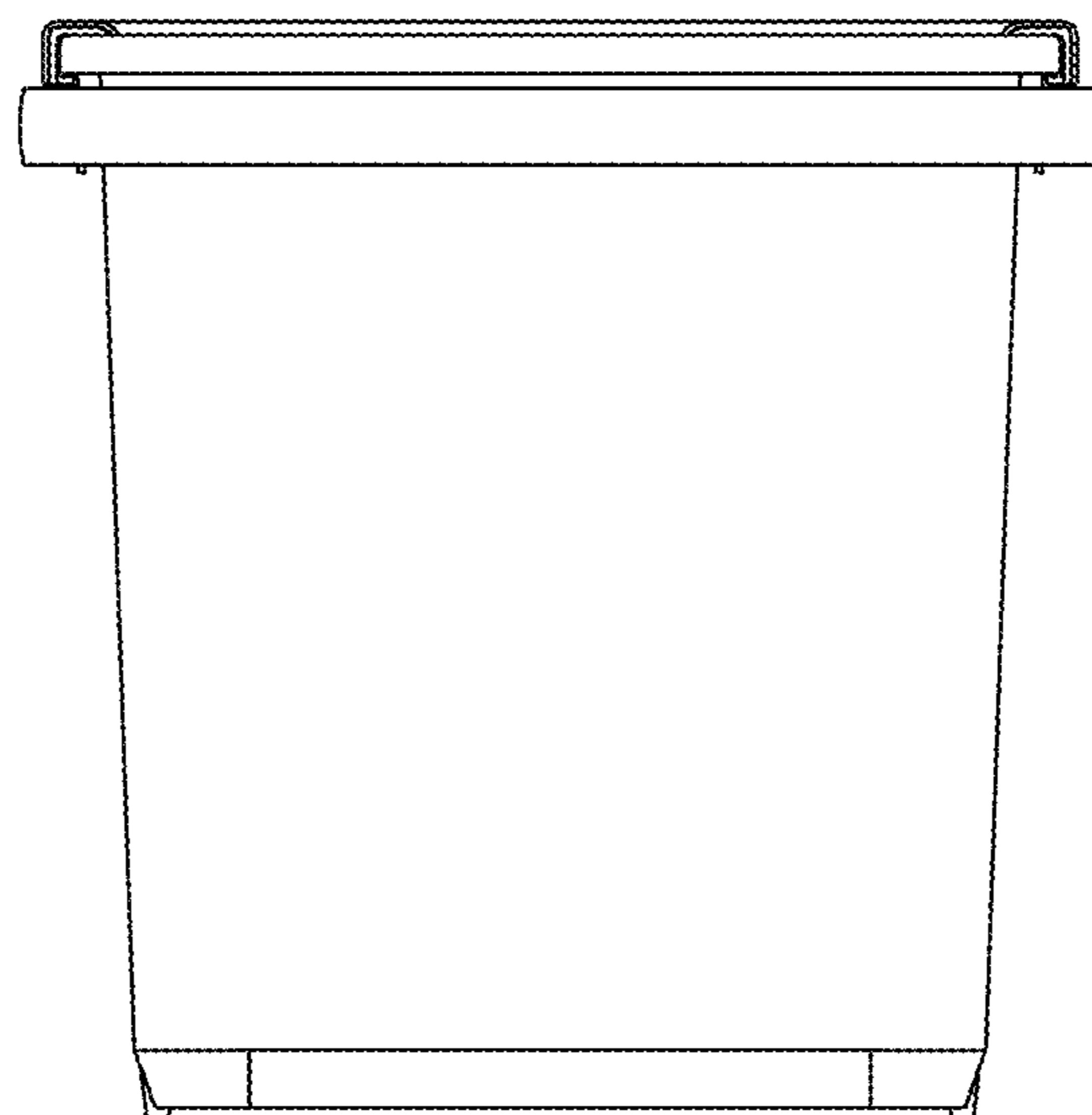
**FIG. 1**



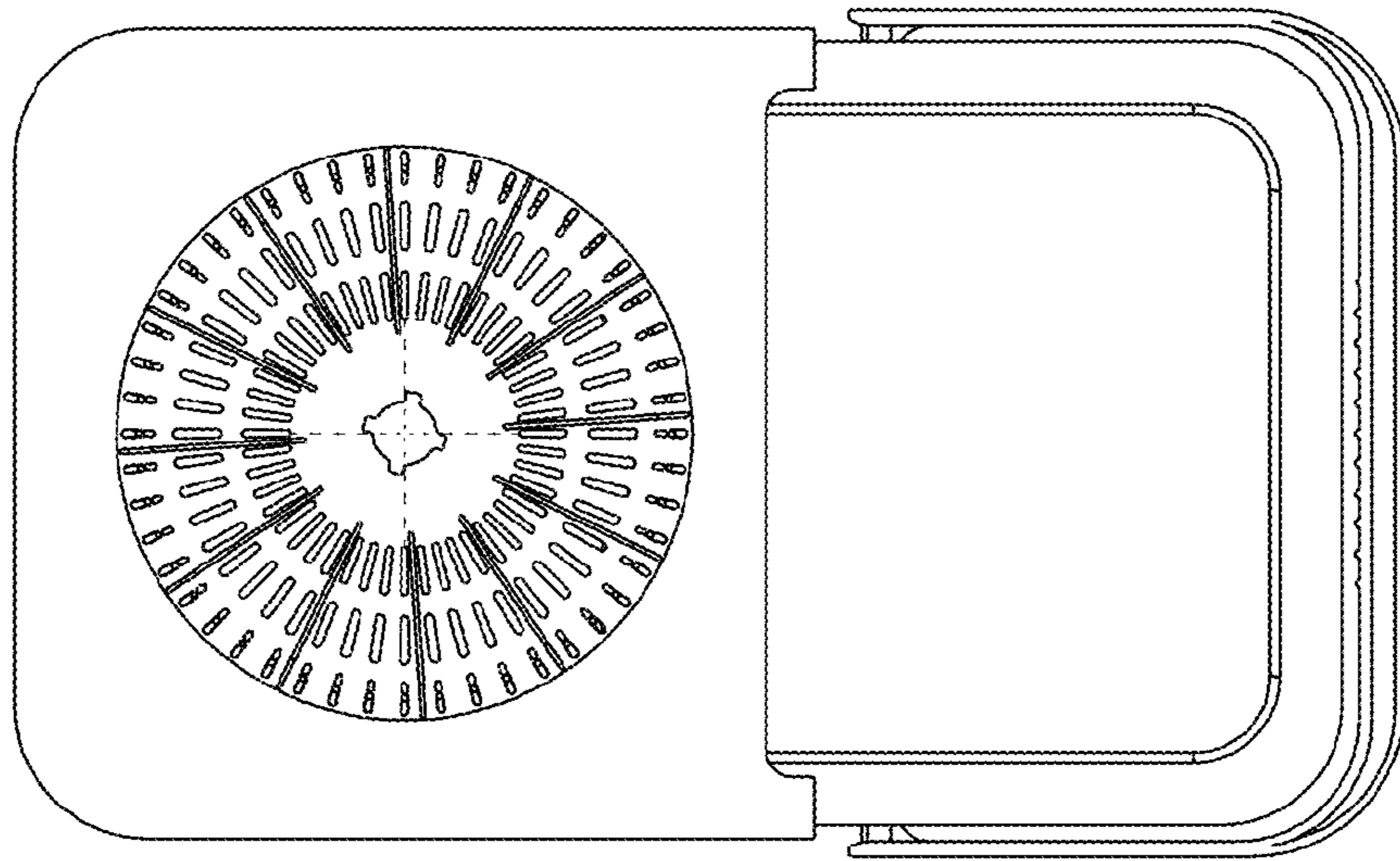
**FIG. 2**



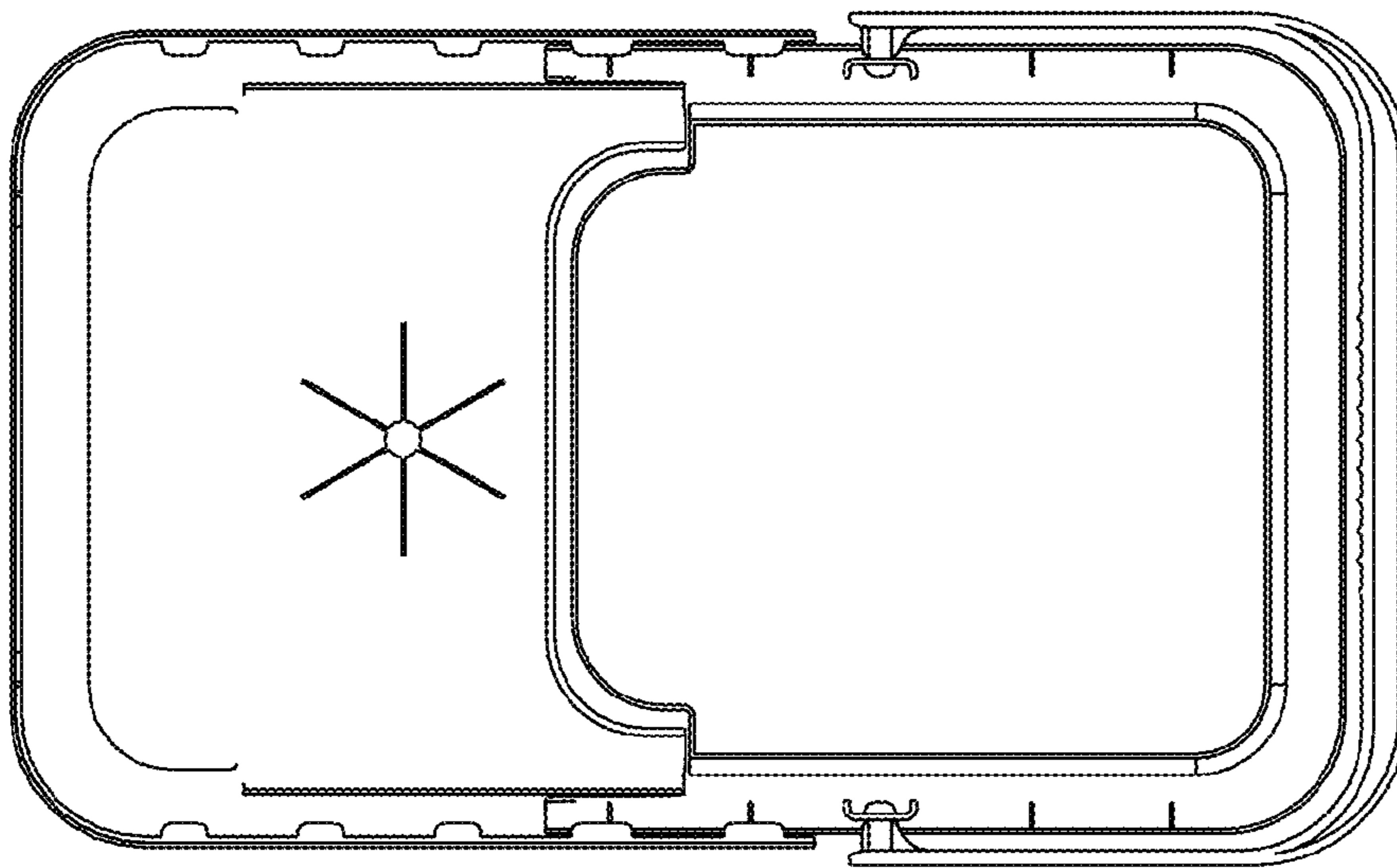
*FIG. 3*



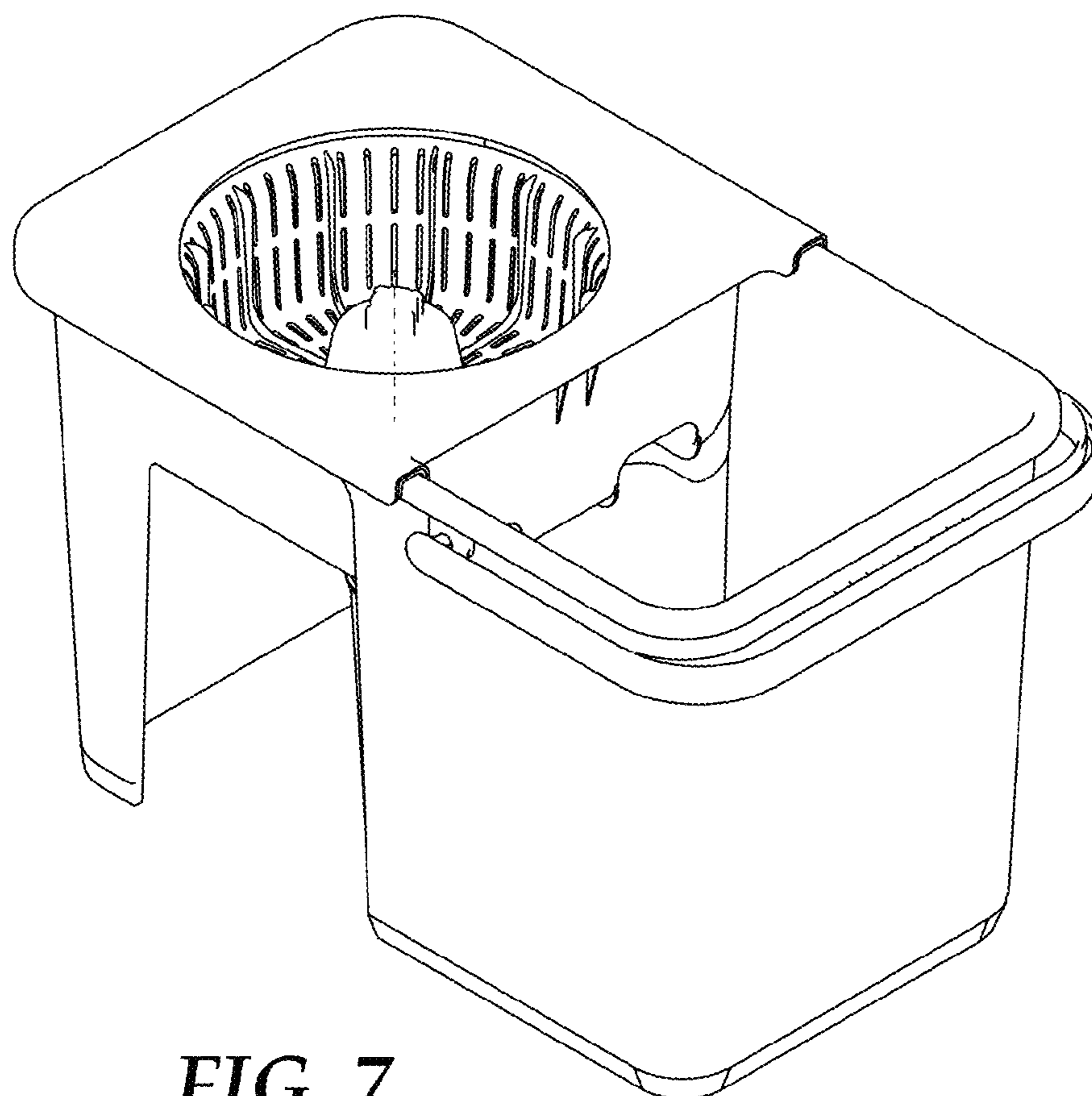
*FIG. 4*



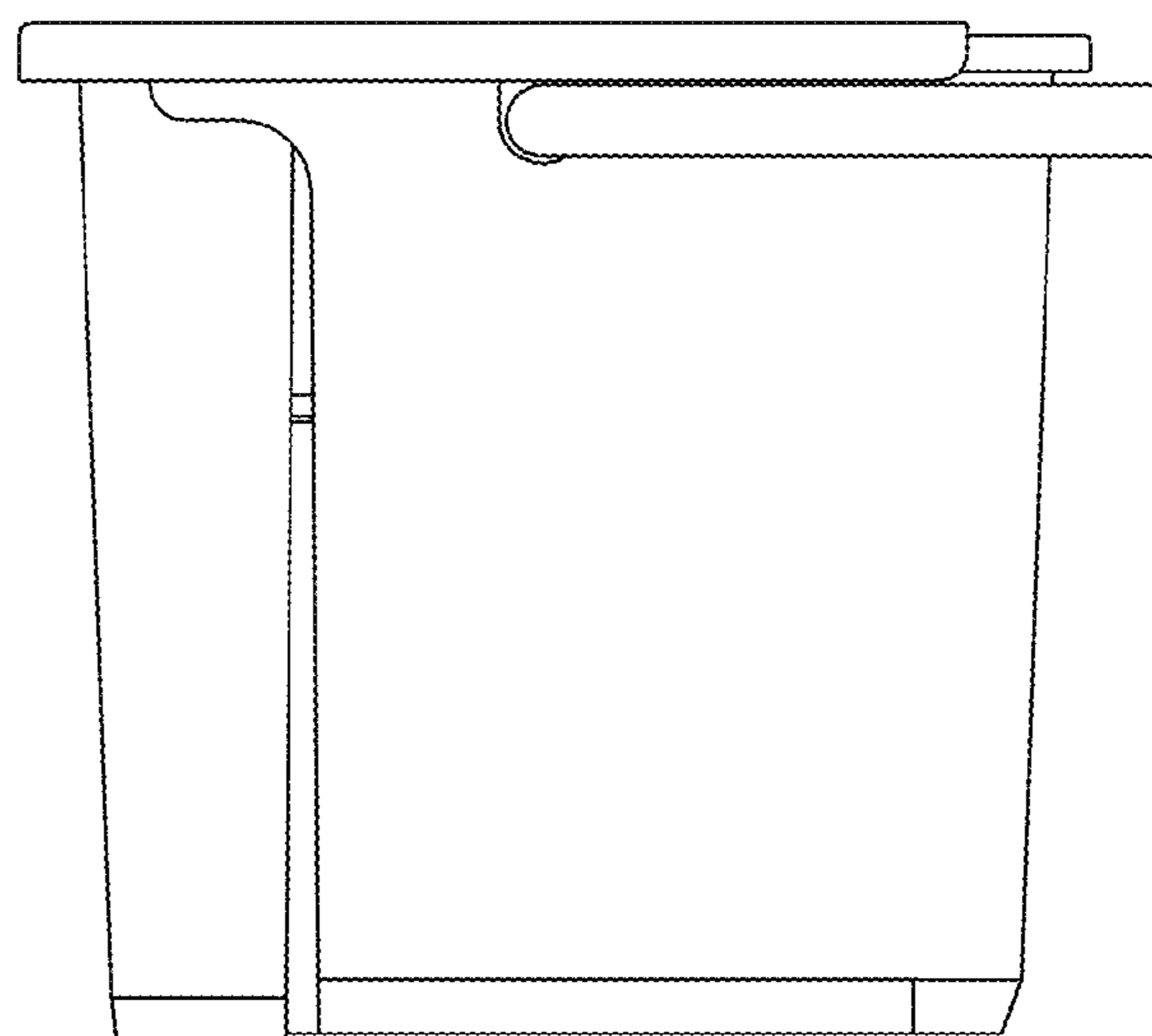
*FIG. 5*



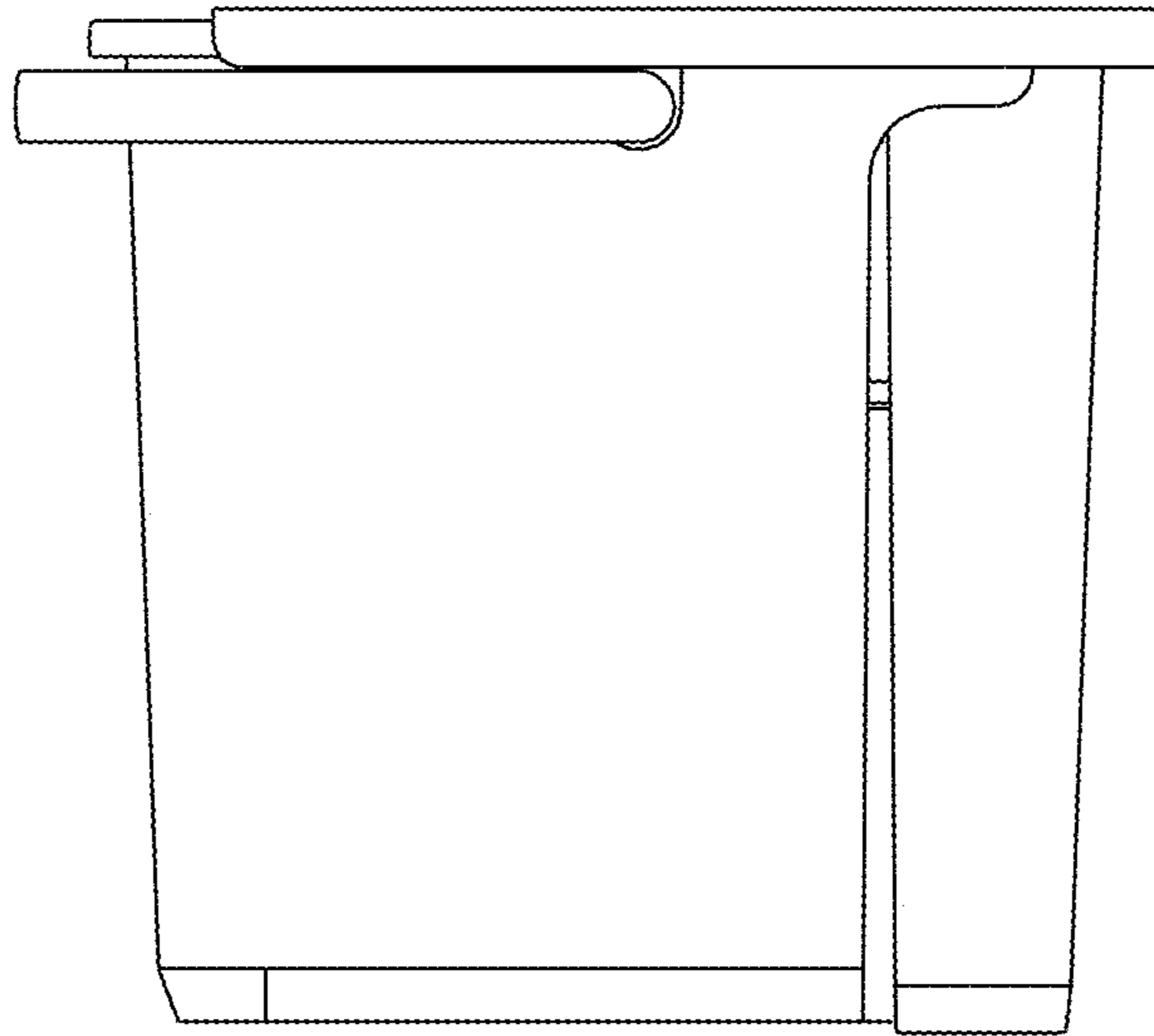
*FIG. 6*



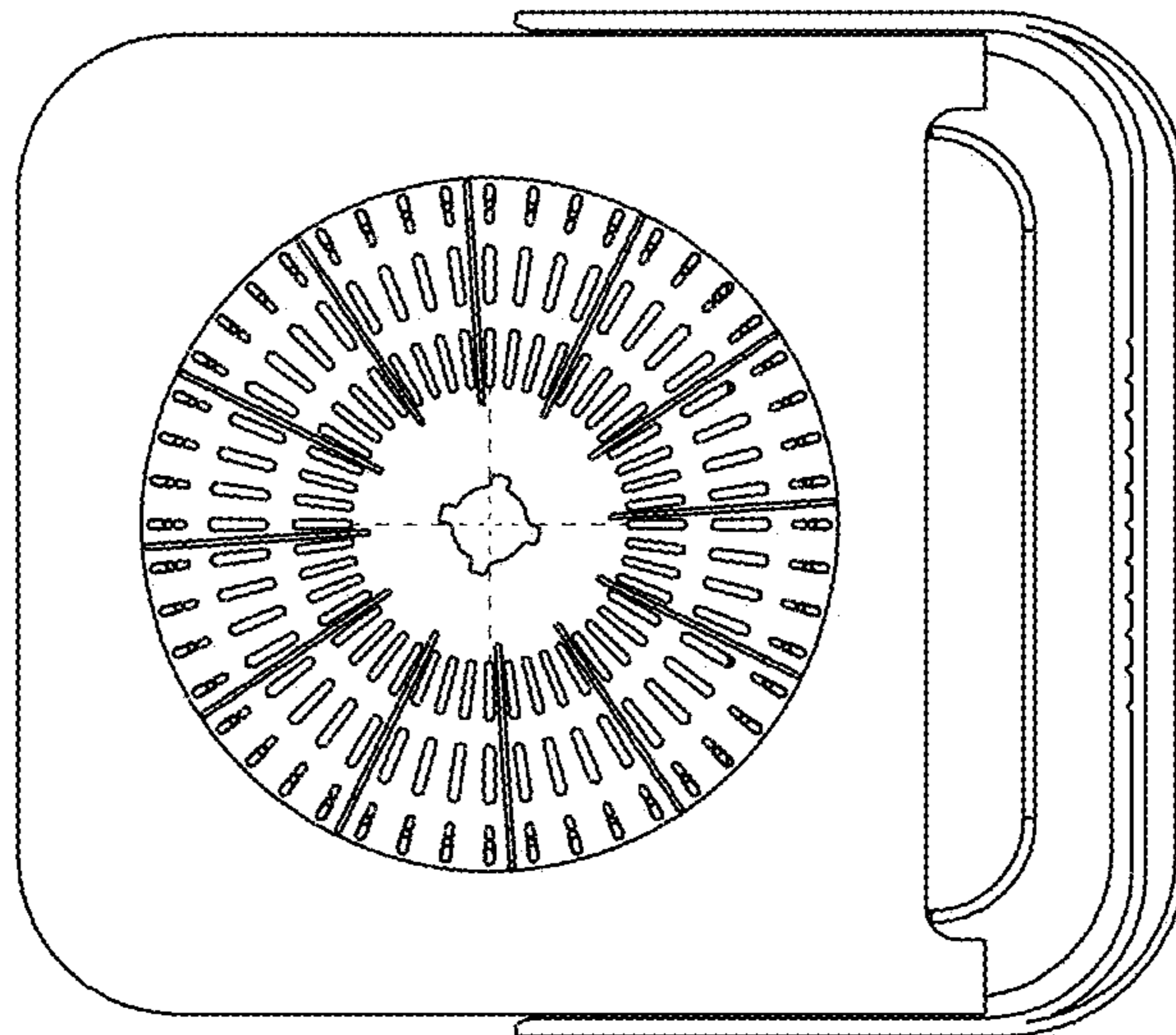
**FIG. 7**



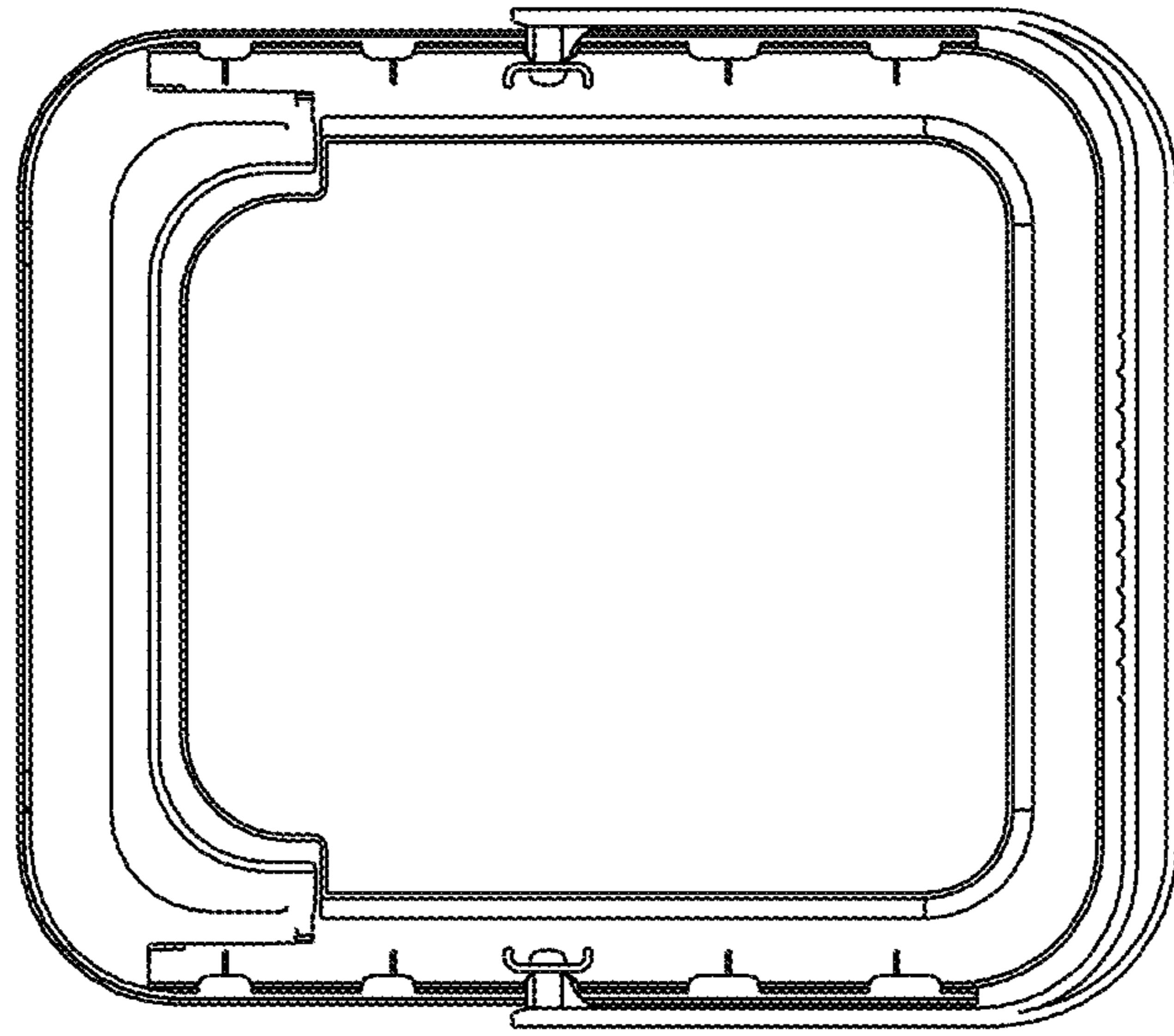
**FIG. 8**



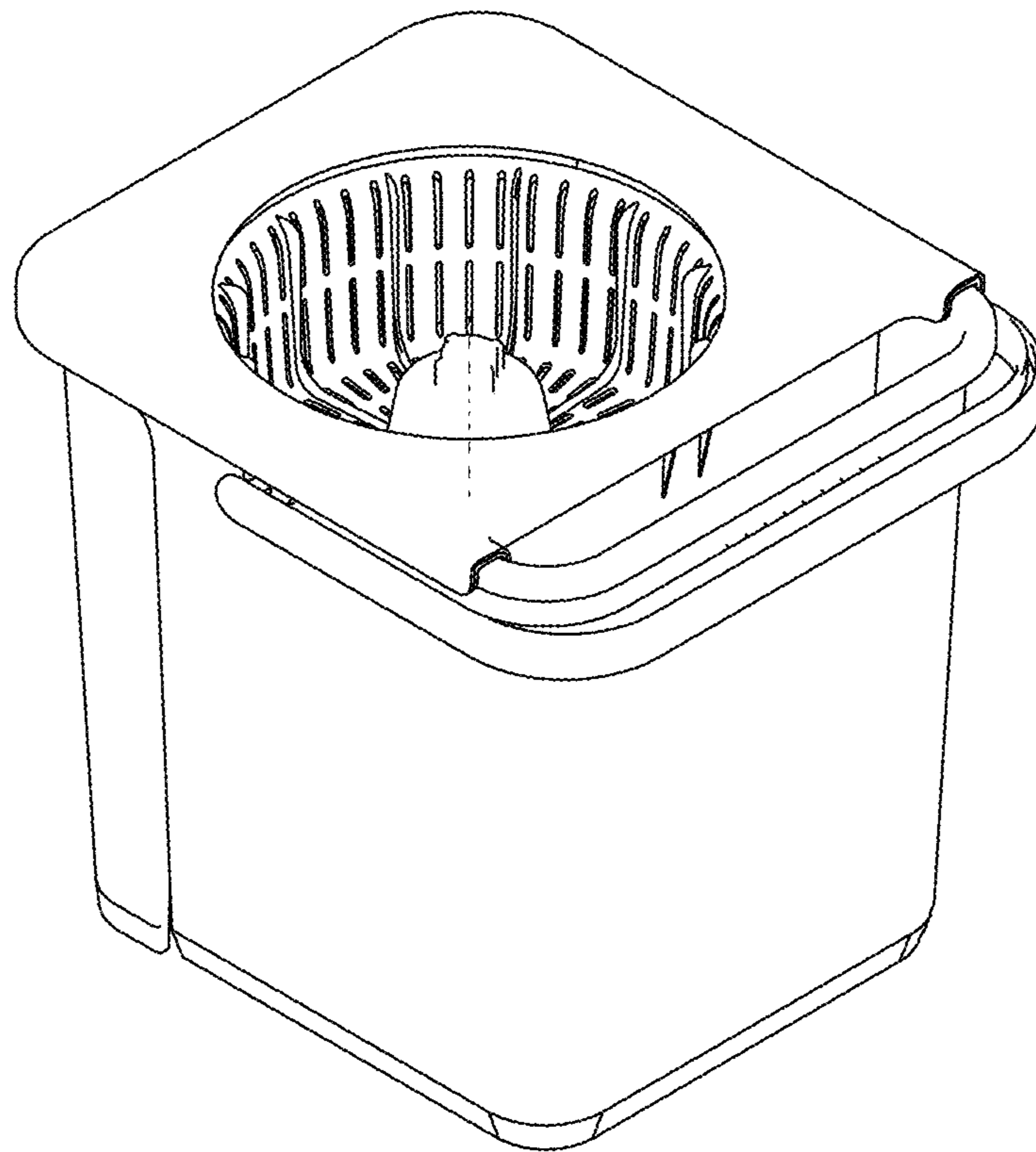
**FIG. 9**



**FIG. 10**



**FIG. 11**



**FIG. 12**