



US00D664871S

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

(10) **Patent No.:** **US D664,871 S**
(45) **Date of Patent:** **** Aug. 7, 2012**

(54) **POOL HOPPER FOR COMBINED WEIGHING INSTRUMENT**

DESCRIPTION

(75) Inventor: **Takayuki Nagai**, Akashi (JP)
(73) Assignee: **Yamato Scale Co., Ltd.**, Akashi-shi (JP)
(**) Term: **14 Years**
(21) Appl. No.: **29/390,893**
(22) Filed: **Apr. 29, 2011**

FIG. 1 is a front view of a design for a pool hopper for a combined weighing instrument according to the present invention.

FIG. 2 is a rear view of the pool hopper of FIG. 1.

FIG. 3 is a top view of the pool hopper of FIG. 1.

FIG. 4 is a bottom view of the pool hopper of FIG. 1.

FIG. 5 is a left side view of the pool hopper of FIG. 1.

FIG. 6 is right side view of the pool hopper of FIG. 1.

FIG. 7 is a front perspective view of the pool hopper of FIG. 1.

FIG. 8 is a rear perspective view of the pool hopper of FIG. 1.

FIG. 9 is a front perspective view of the pool hopper of FIG. 1, showing a gate of the pool hopper in an open state.

FIG. 10 is a rear perspective view of the pool hopper of FIG. 1, showing the gate of the pool hopper in an open state; and, FIG. 11 is a front view of the pool hopper of FIG. 1, shown positioned in a combined weighing instrument, which is illustrated in broken lines.

The dashed lines in FIG. 11 illustrate a combined weighing instrument which includes a plurality of measuring portions, each for holding a respective load of bulk material, and which discharges the material from a subset of the measuring portions with loads that have been measured to have a combined weight that is within an allowable range of a combined target weight. The material to be measured is put in an input port of a pool hopper of the claimed design in a state in which a gate of the pool hopper is closed, by a radiation trough of a combined weighing instrument, whereby the pool hopper can temporarily retain the material to be measured. Further, if a drive apparatus of the combined weighing instrument oscillates upward an oscillating arm of the pool hopper, a gate of the pool hopper is opened, whereby the present article can discharge the retained material to be measured from a discharge port to a measuring portion. The broken lines form no part of the claimed design.

(30) **Foreign Application Priority Data**

Oct. 30, 2010 (JP) 2010-026202

(51) **LOC (9) Cl.** **10-04**

(52) **U.S. Cl.** **D10/94**

(58) **Field of Classification Search** D10/87,
D10/88, 89, 90, 93, 94; 53/53; 73/146; 141/1,
141/83; 177/1, 25.11, 25.12, 25.13, 25.14,
177/25.18, 34, 50, 105, 123, 134, 185, 187,
177/210 FP; 198/484.1, 533, 566, 601, 803.11;
194/202, 204; 209/586; 222/1, 56, 504;
310/20; 324/225; 453/17, 32; 700/219,
700/305; 702/41, 88, 123, 173; 708/300;
714/805

See application file for complete search history.

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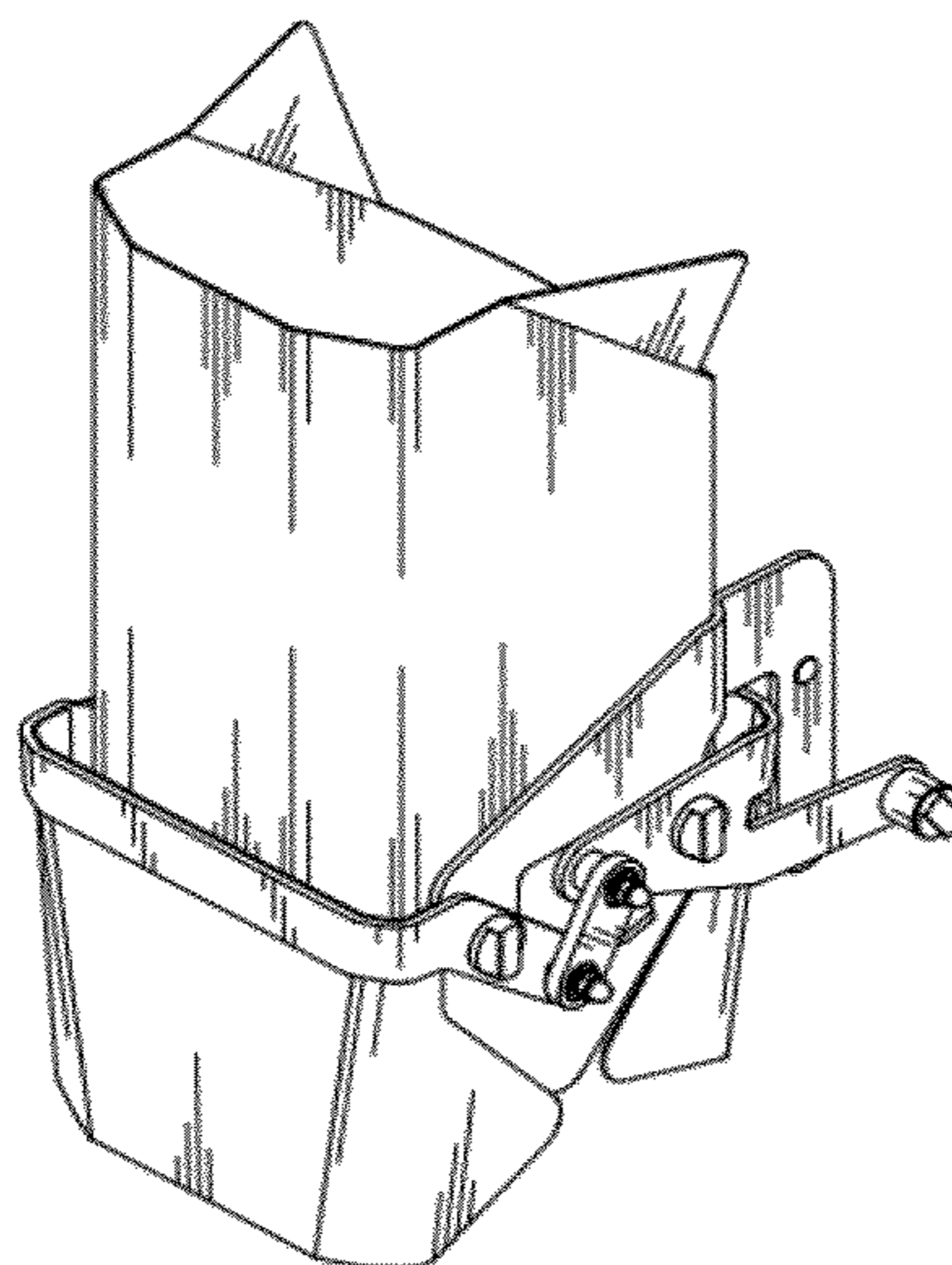
Primary Examiner — Antoine D Davis

(74) *Attorney, Agent, or Firm* — Alleman Hall McCoy Russell & Tuttle LLP

(57) **CLAIM**

The ornamental design for a pool hopper for combined weighing instrument, as shown and described.

1 Claim, 6 Drawing Sheets



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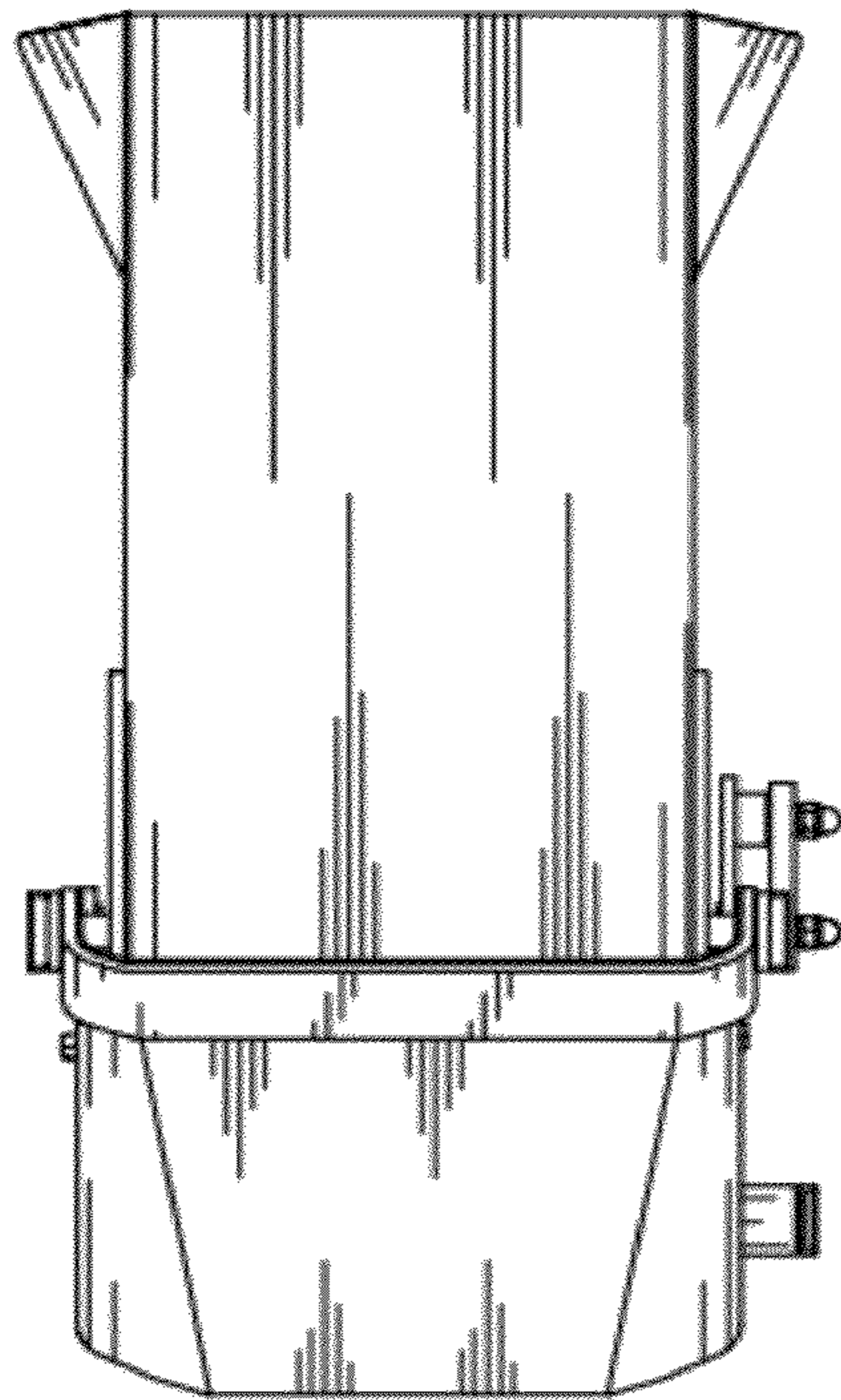


FIG. 1

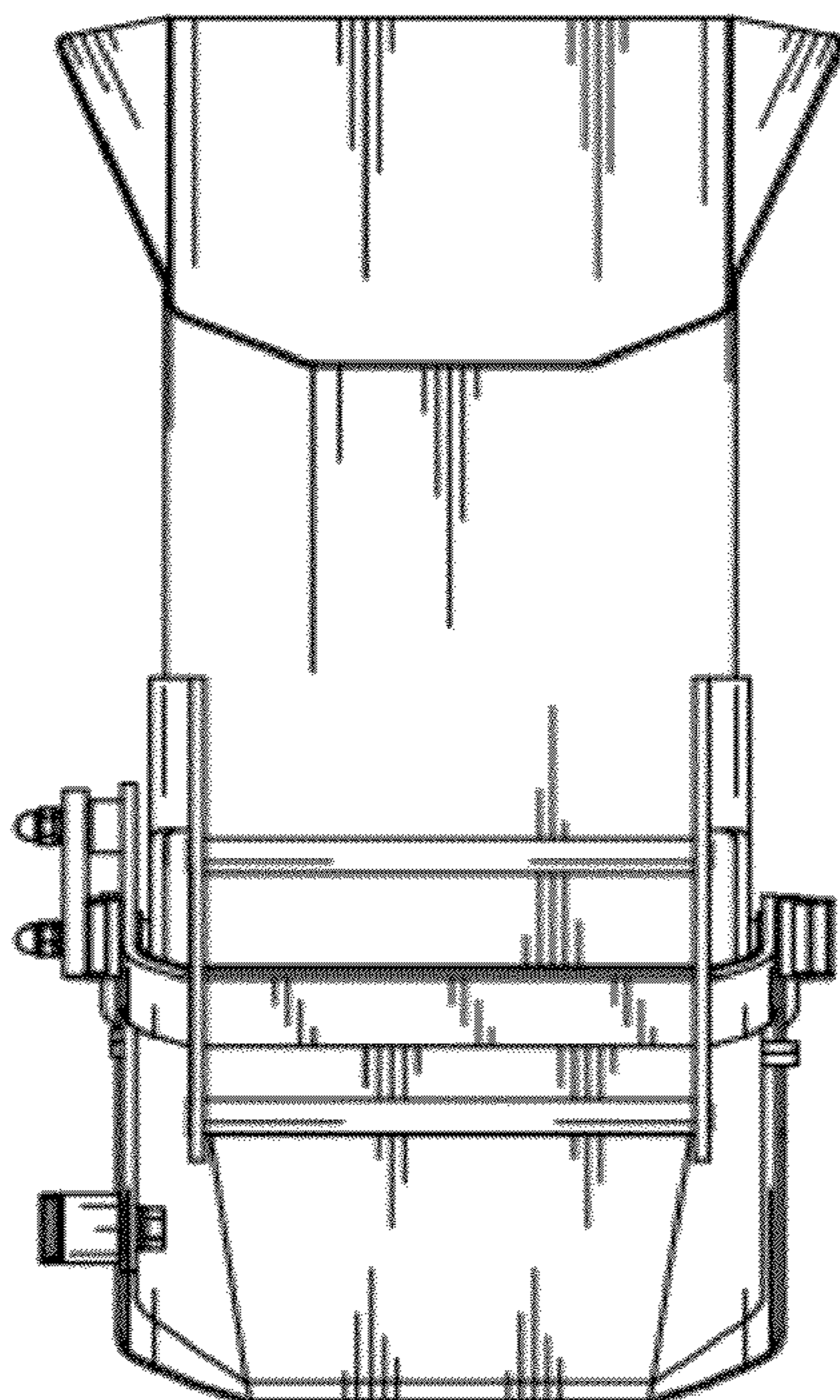


FIG. 2

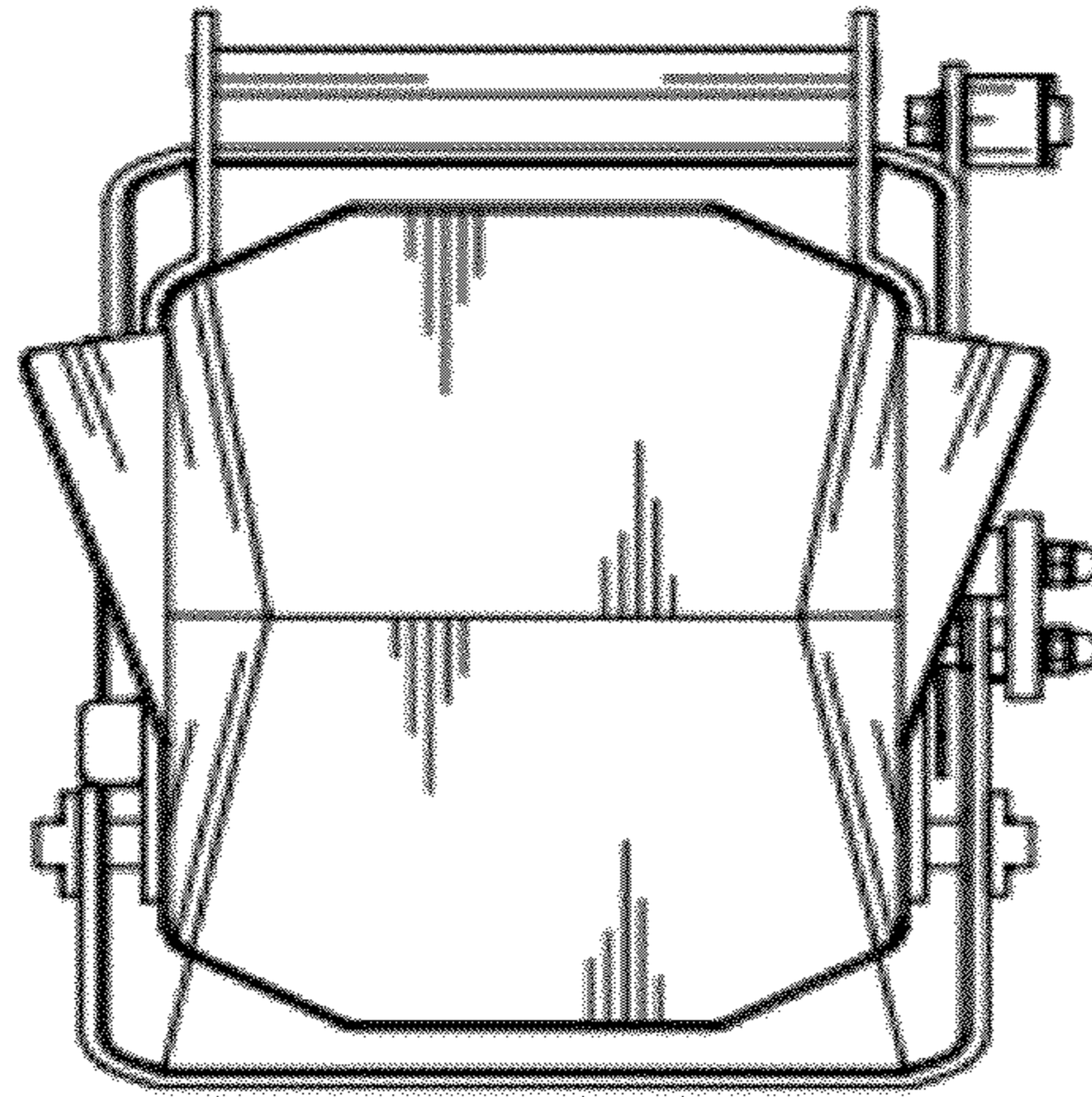


FIG. 3

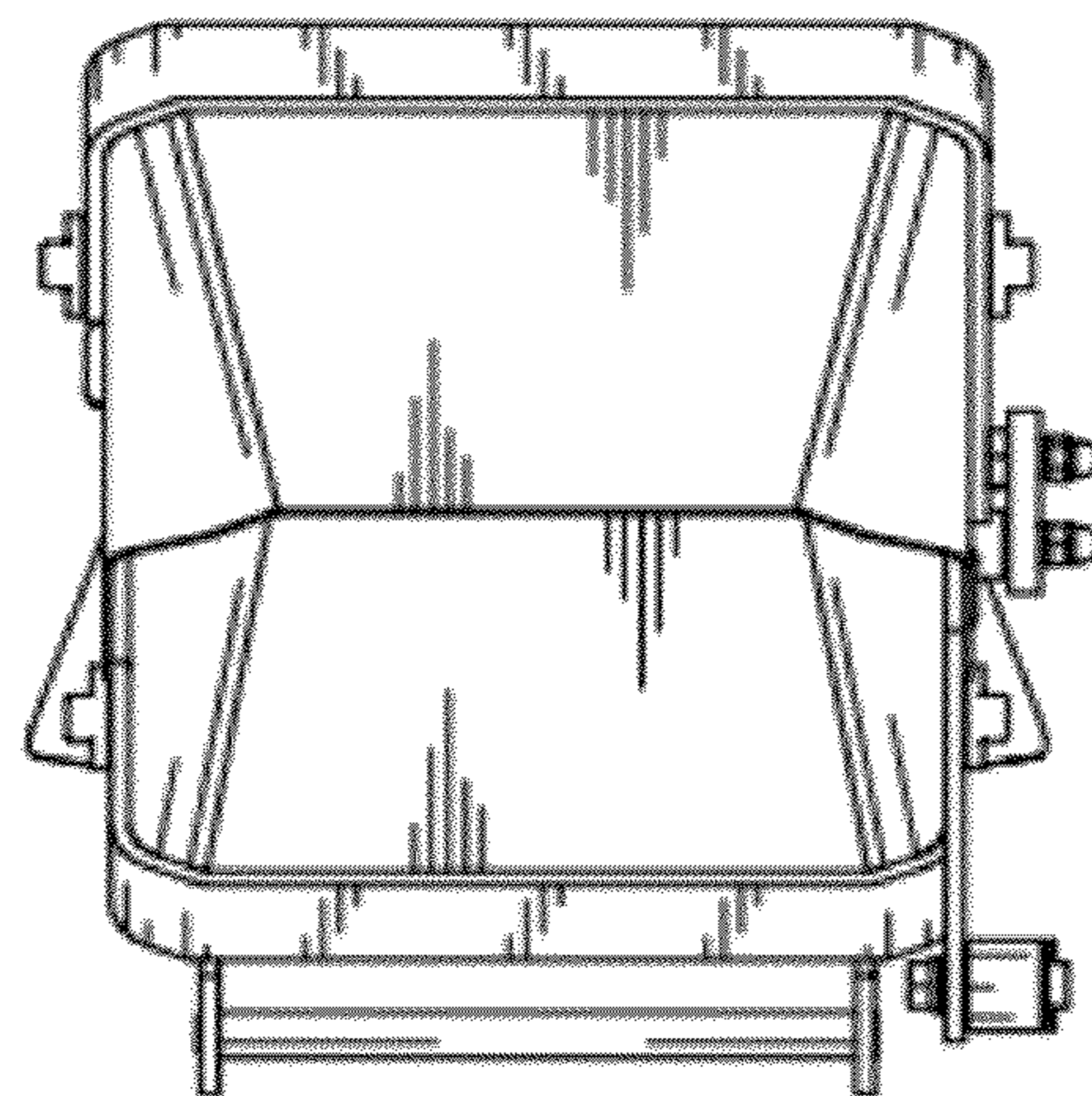


FIG. 4

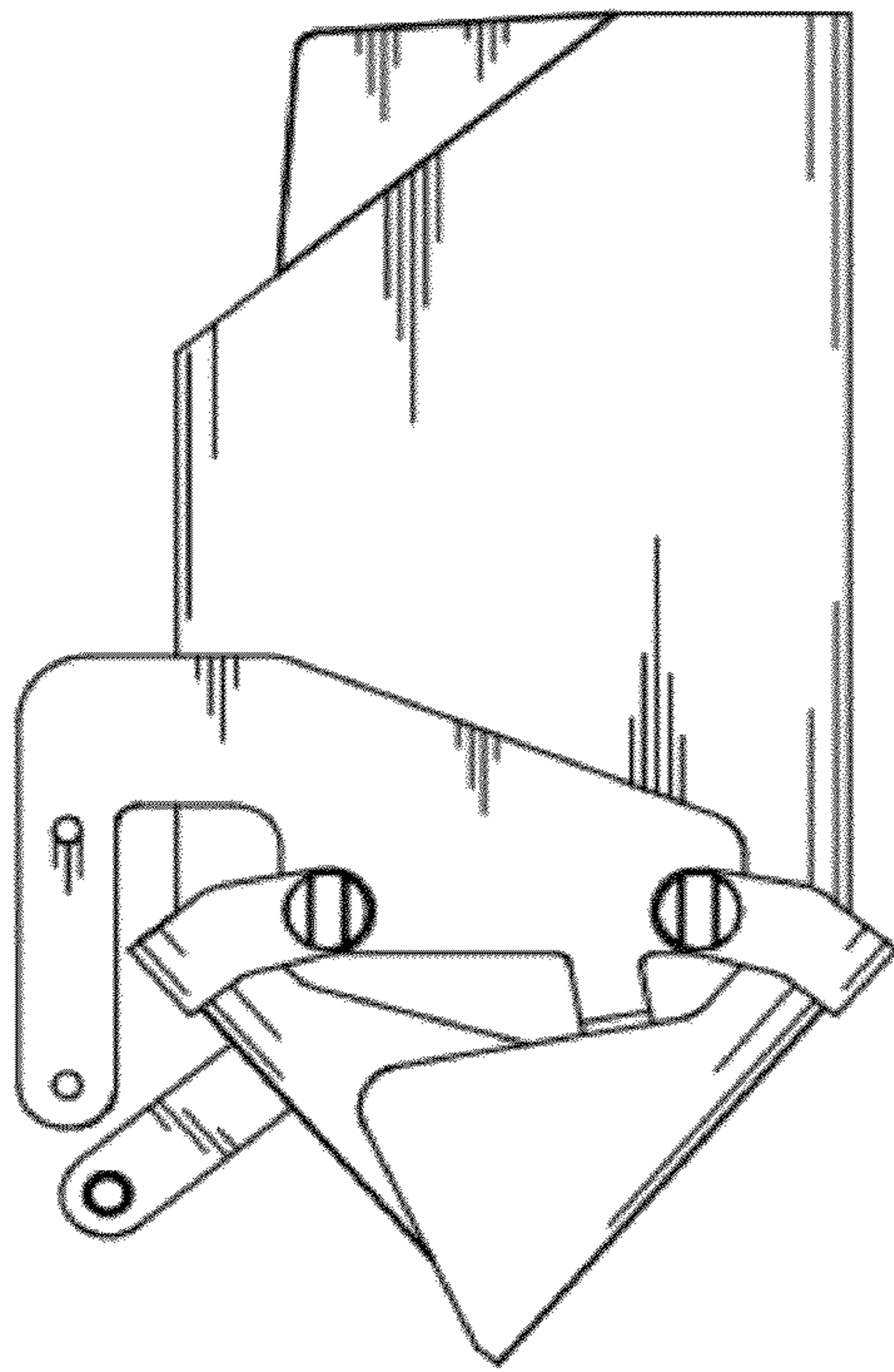


FIG. 5

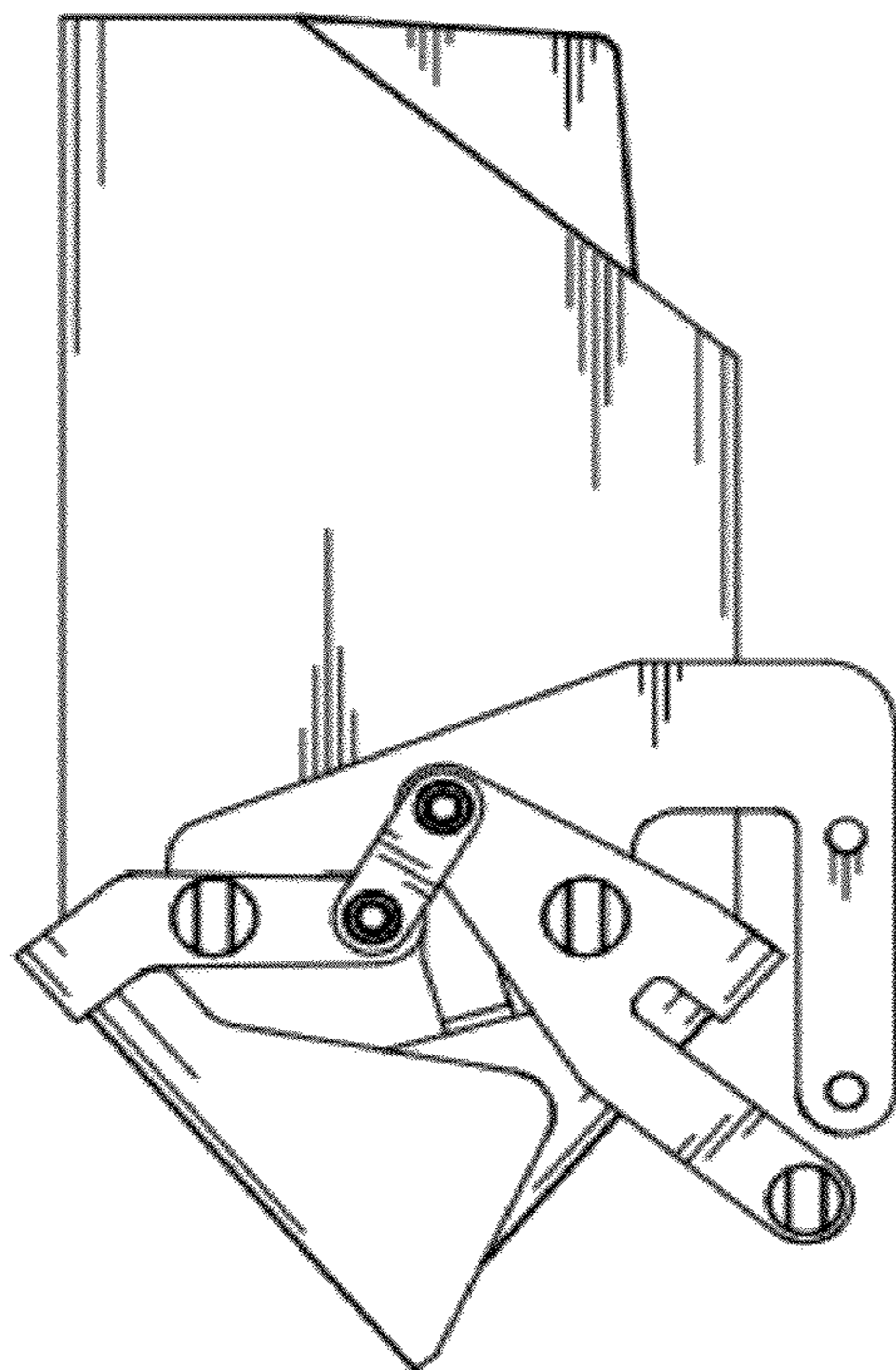


FIG. 6

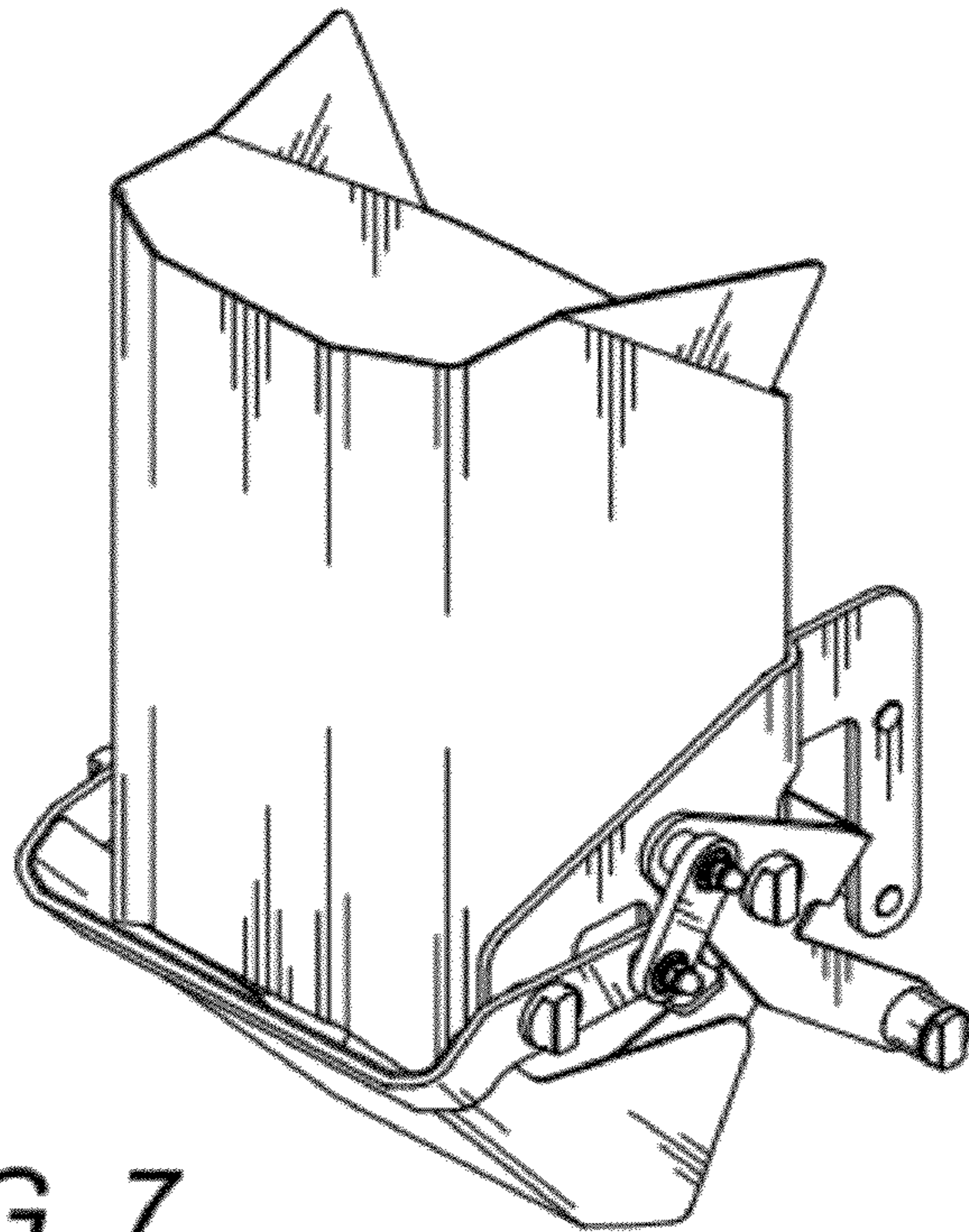


FIG. 7

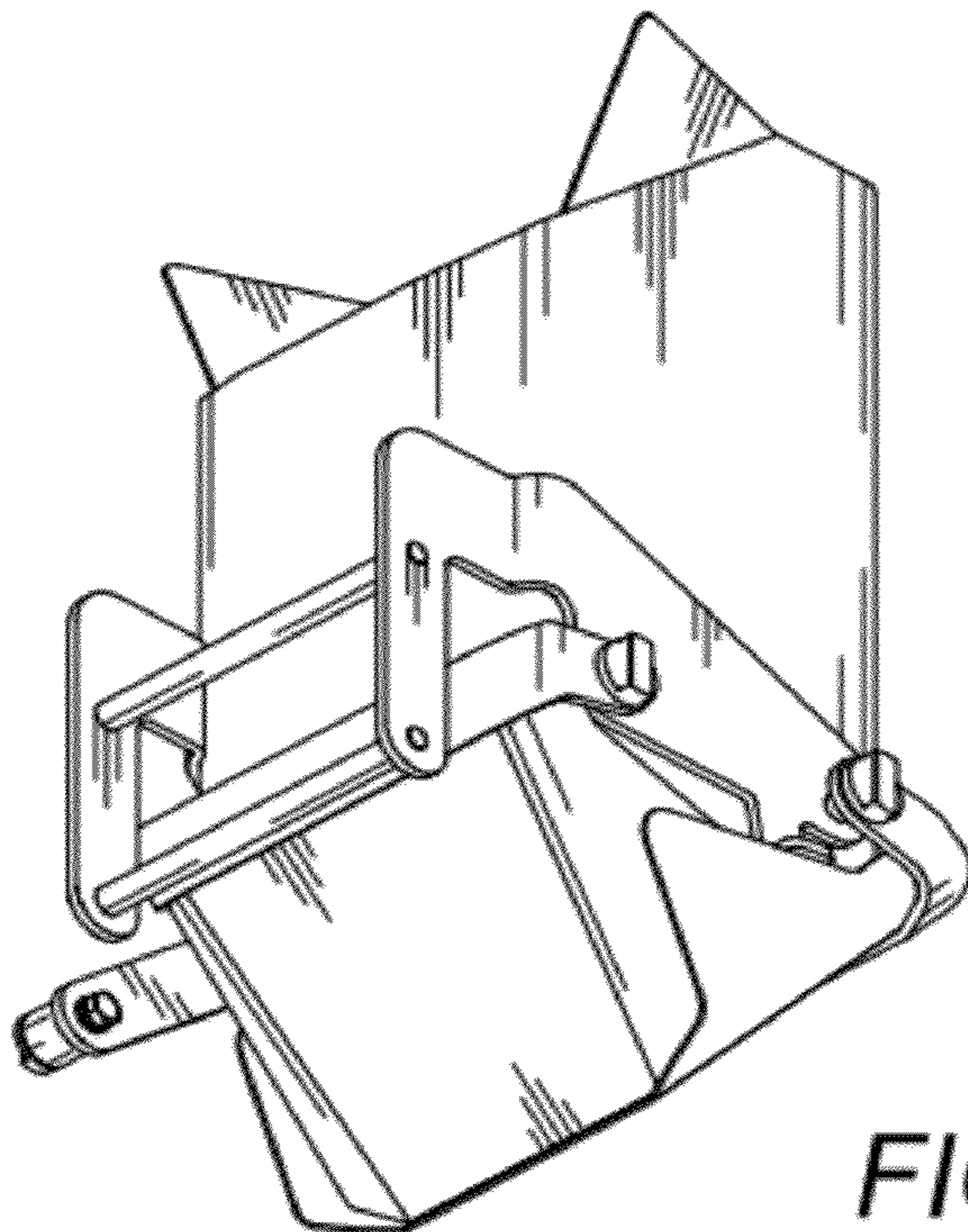


FIG. 8

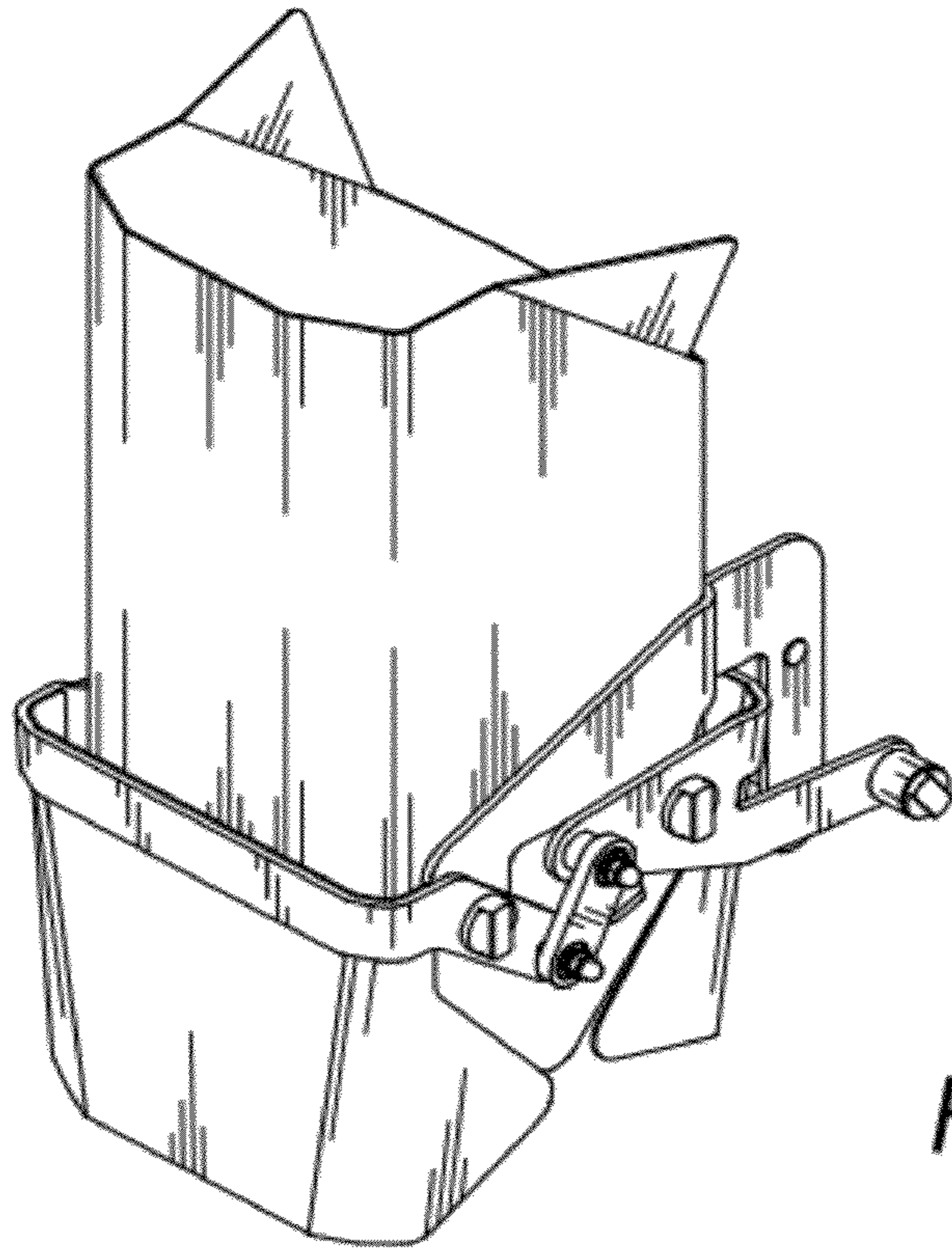


FIG. 9

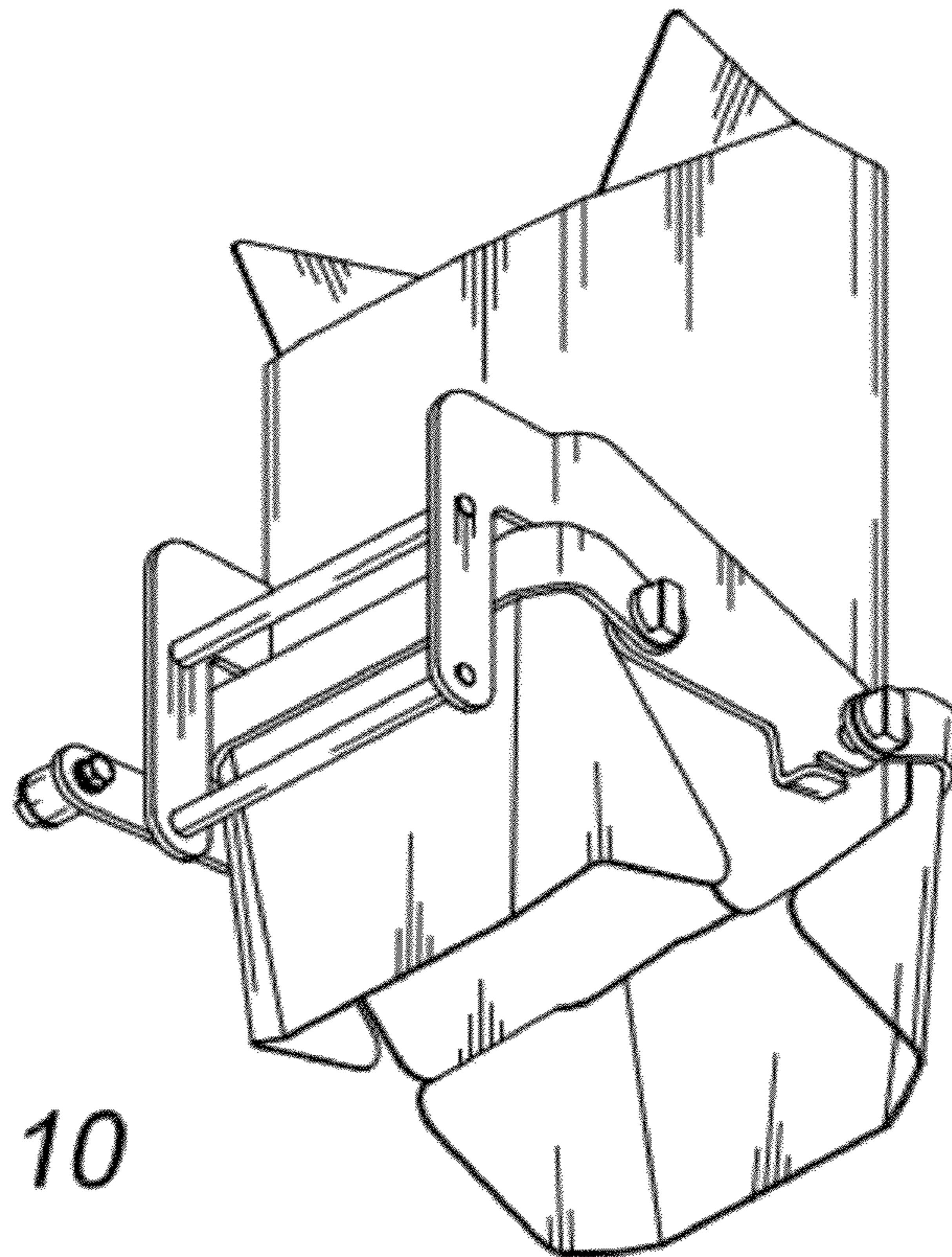


FIG. 10

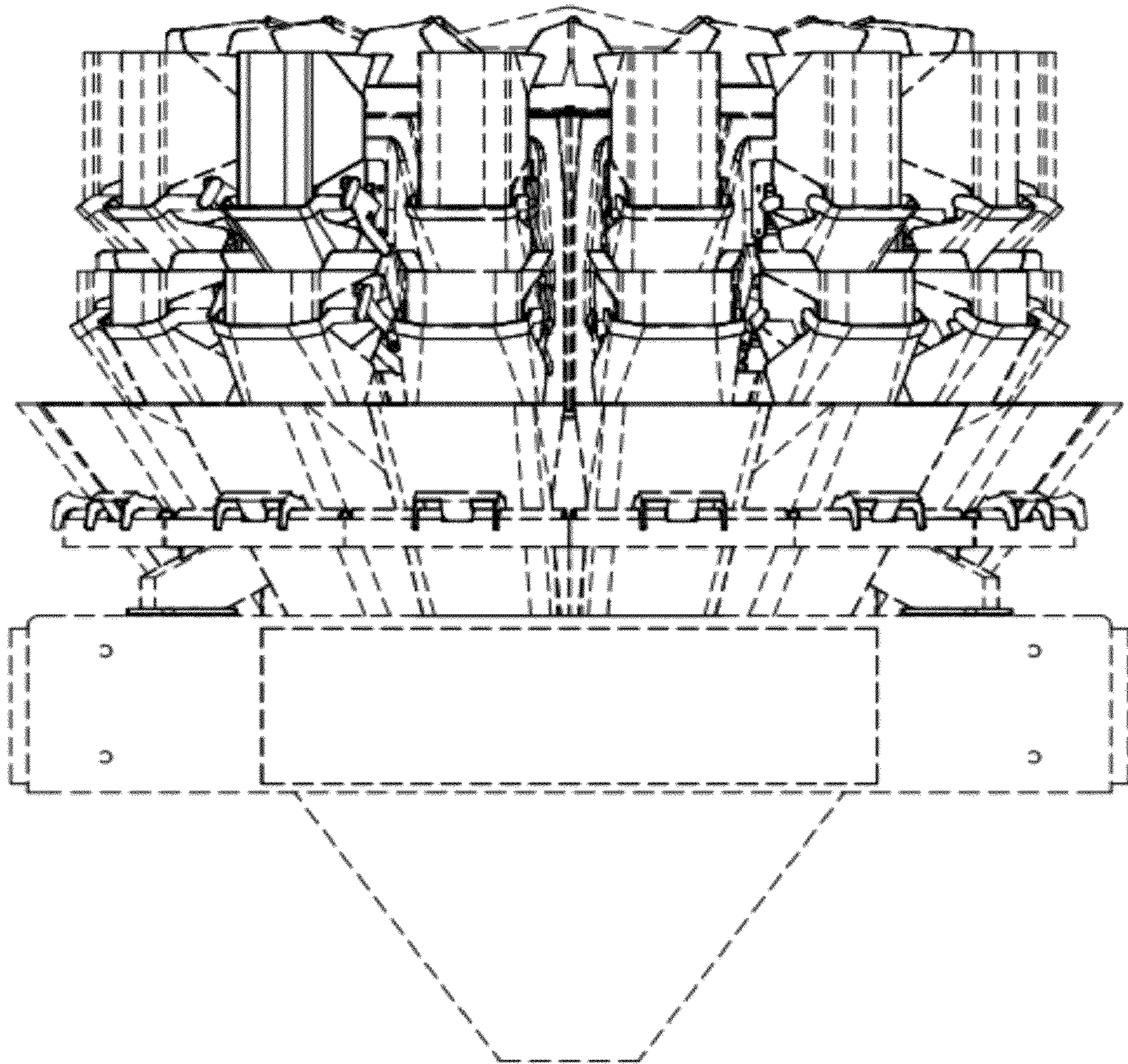


FIG. 11

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : D664,871 S
APPLICATION NO. : 29/390893
DATED : August 7, 2012
INVENTOR(S) : Takayuki Nagai

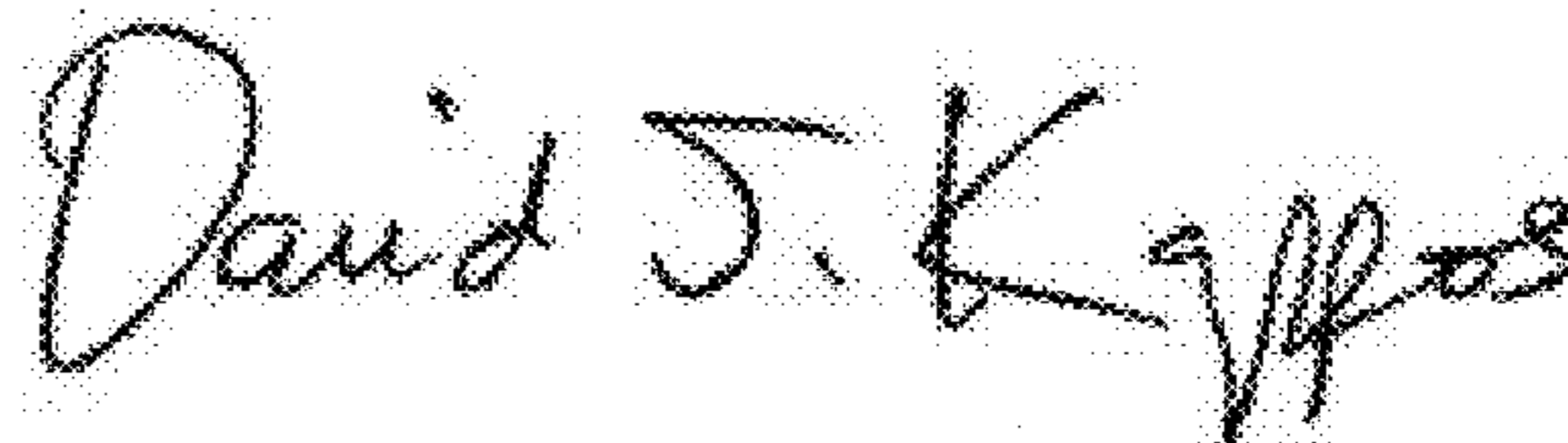
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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

On the Title page in the Description:

Of Fig. 10, delete “;and,” and insert a --.-- after “state”.

Signed and Sealed this
Thirtieth Day of October, 2012

A handwritten signature in black ink that reads "David J. Kappos". The signature is written in a cursive, slightly slanted style.

David J. Kappos
Director of the United States Patent and Trademark Office