



US00D348431S

United States Patent [19]

[11] Patent Number: **Des. 348,431**

Hoffman et al.

[45] Date of Patent: **** Jul. 5, 1994**

[54] **DEAD FRONT ELECTRICAL CONNECTOR FOR RECHARGING ELECTRIC VEHICLES**

[75] Inventors: **Ernest G. Hoffman**, Middlefield;
Jerome E. Zimmermann,
Southington, both of Conn.

[73] Assignee: **Hubbell Incorporated**, Orange, Conn.

[**] Term: **14 Years**

[21] Appl. No.: **5,496**

[22] Filed: **Feb. 3, 1993**

[52] U.S. Cl. **D13/133**

[58] Field of Search 439/131, 136, 261, 266,
439/310, 345, 350, 481, 483, 490, 923; D13/133,
146, 147

[56] **References Cited**

U.S. PATENT DOCUMENTS

3,950,059	4/1976	Anhalt et al.	439/261
3,952,239	4/1976	Owings et al.	439/481 X
4,158,802	6/1979	Rose, II	302/2
4,217,019	8/1980	Cameron	439/138
4,431,241	2/1984	Hazelhurt	339/43
4,624,472	11/1986	Stuart et al.	439/310 X
4,718,862	1/1988	Beeman	439/481 X
4,843,477	6/1989	Mizutani et al.	358/248
5,104,331	4/1992	Goble	439/490 X
5,157,319	10/1992	Klontz et al.	320/2

FOREIGN PATENT DOCUMENTS

49625	4/1982	European Pat. Off.	439/350
1926582	11/1970	Fed. Rep. of Germany	439/345
208053	12/1967	U.S.S.R.	439/345

OTHER PUBLICATIONS

"Infrastructure-EV Charging Meter," Green Car Journal, Nov. 1992, p. 124.

Primary Examiner—Wallace R. Burke
Assistant Examiner—Joel Sincavage
Attorney, Agent, or Firm—Jerry M. Presson; David L. Tarnoff

[57] **CLAIM**

The ornamental design for dead front electrical connector for recharging electric vehicles, as shown and described.

DESCRIPTION

FIG. 1 is a rear perspective view of a dead front electrical connector for recharging electric vehicles showing our new design;

FIG. 2 is a right side elevational view of the electrical connector shown in FIG. 1;

FIG. 3 is a front elevational view of the electrical connector shown in FIGS. 1-2;

FIG. 4 is a rear elevational view of the electrical connector shown in FIGS. 1-3;

FIG. 5 is a top plan view of the electrical connector shown in FIGS. 1-4;

FIG. 6 is a bottom plan view of the electrical connector shown in FIGS. 1-5;

FIG. 7 is a rear perspective view of an electrical connector showing a second embodiment of our new design;

FIG. 8 is a right side elevational view of the electrical connector shown in FIG. 7;

FIG. 9 is a front elevational view of the electrical connector shown in FIGS. 7 and 8;

FIG. 10 is a rear elevational view of the electrical connector shown in FIGS. 7-9;

FIG. 11 is a top plan view of the electrical connector shown in FIGS. 7-10; and,

FIG. 12 is a bottom plan view of the electrical connector shown in FIGS. 7-11.

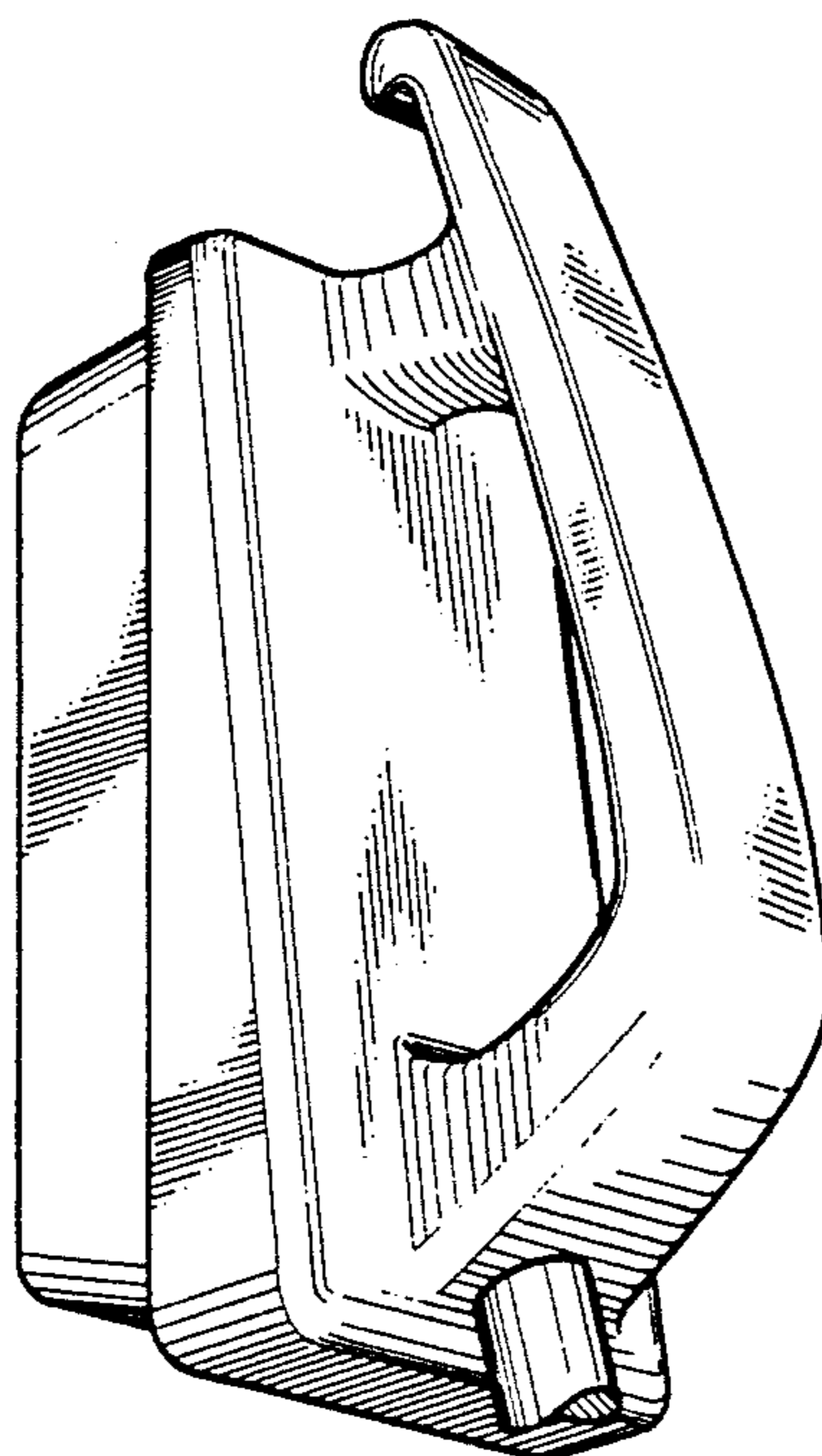


FIG. 1

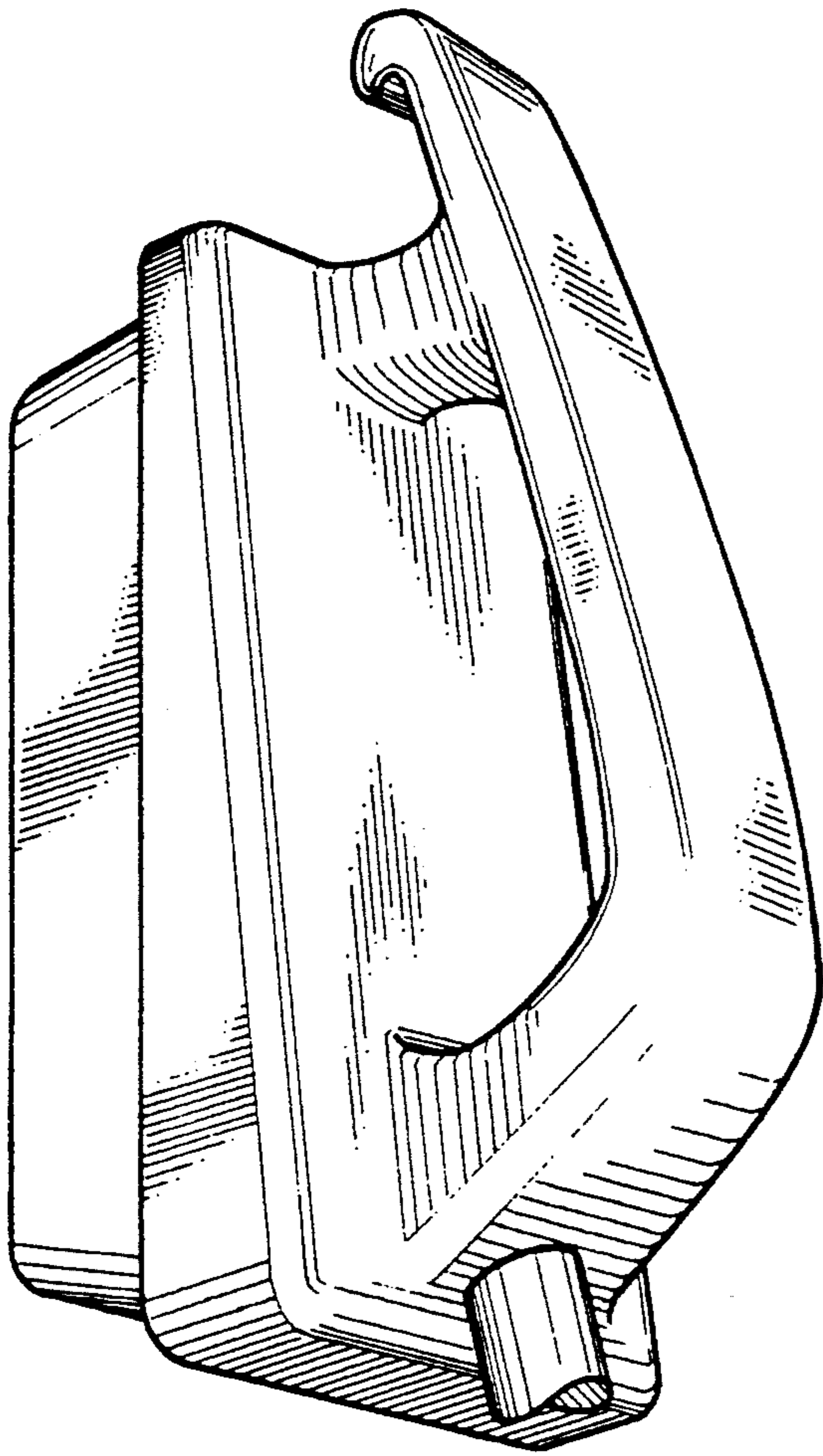


FIG. 2

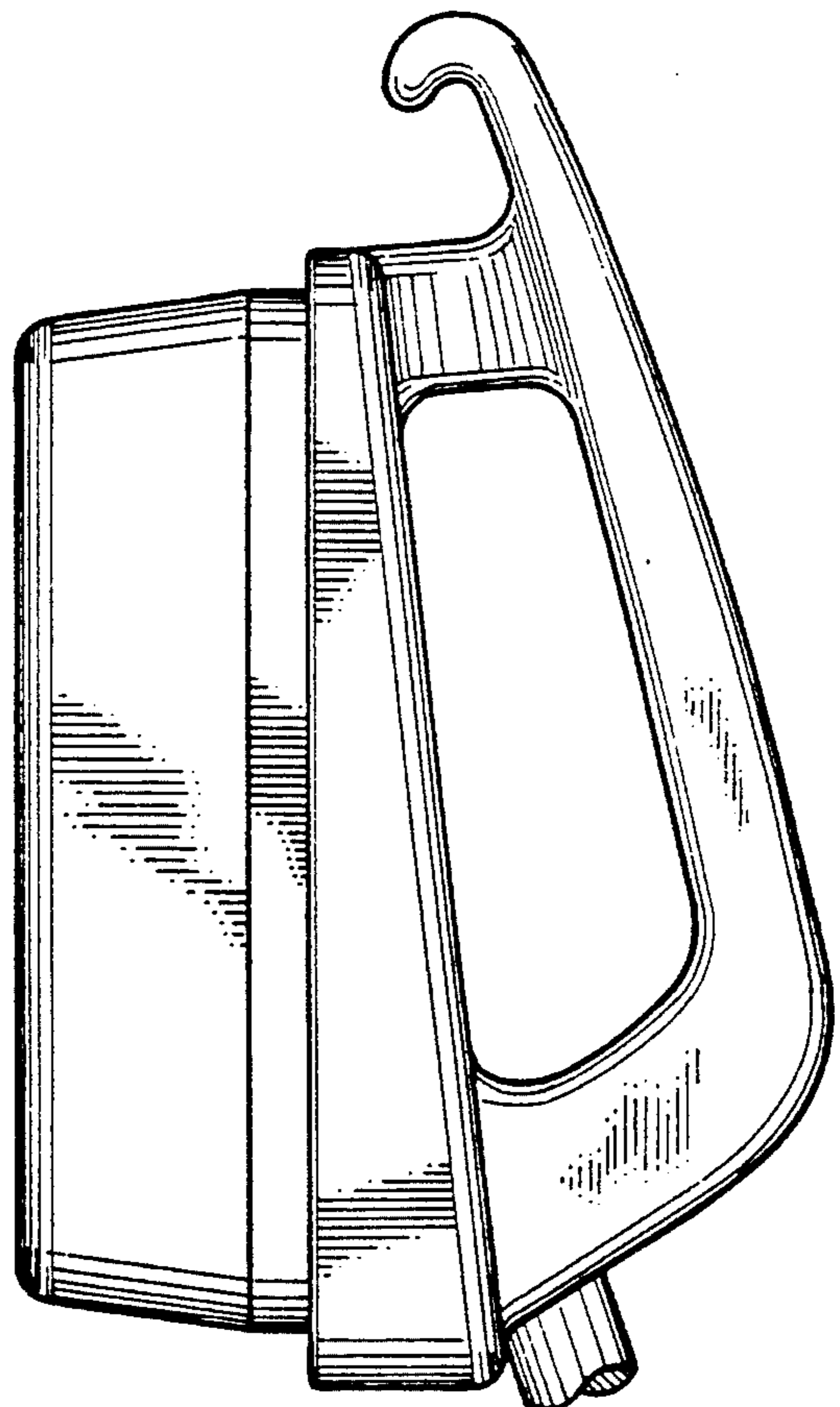


FIG. 3

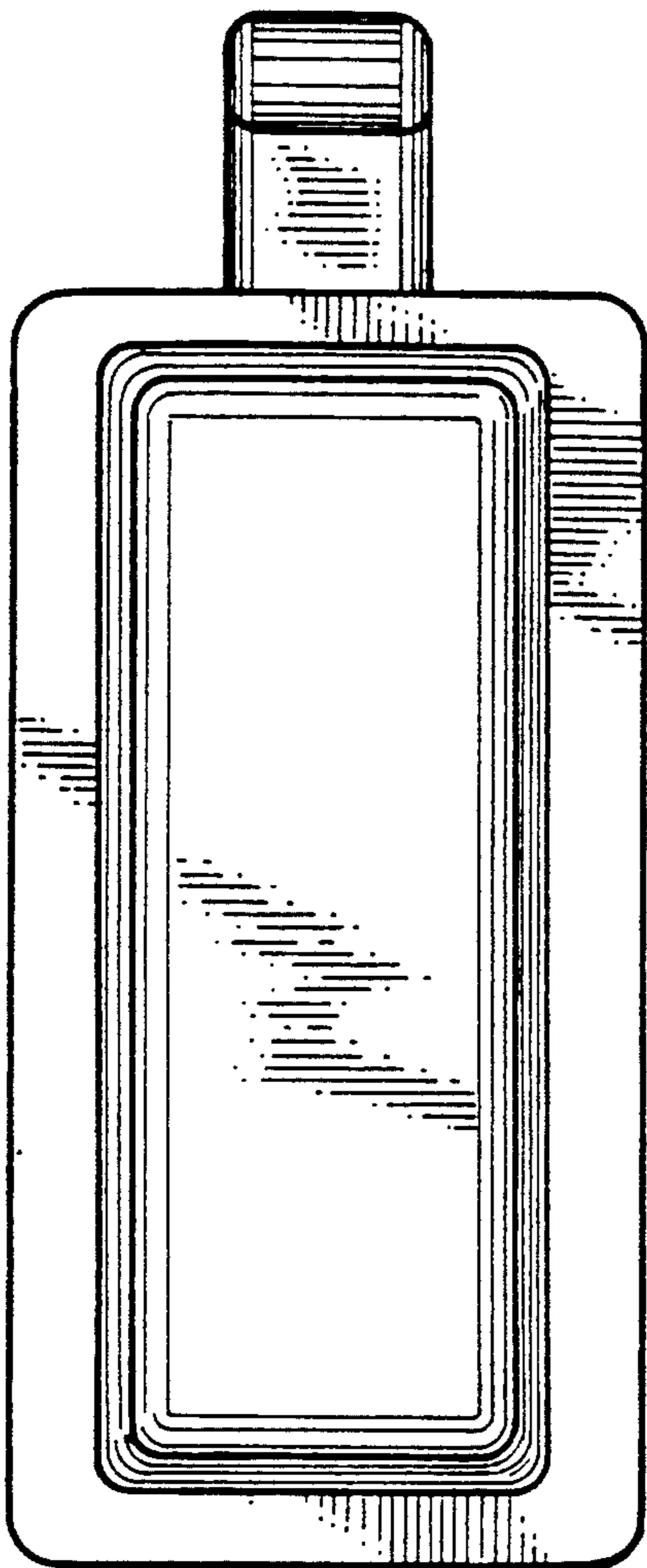


FIG. 4

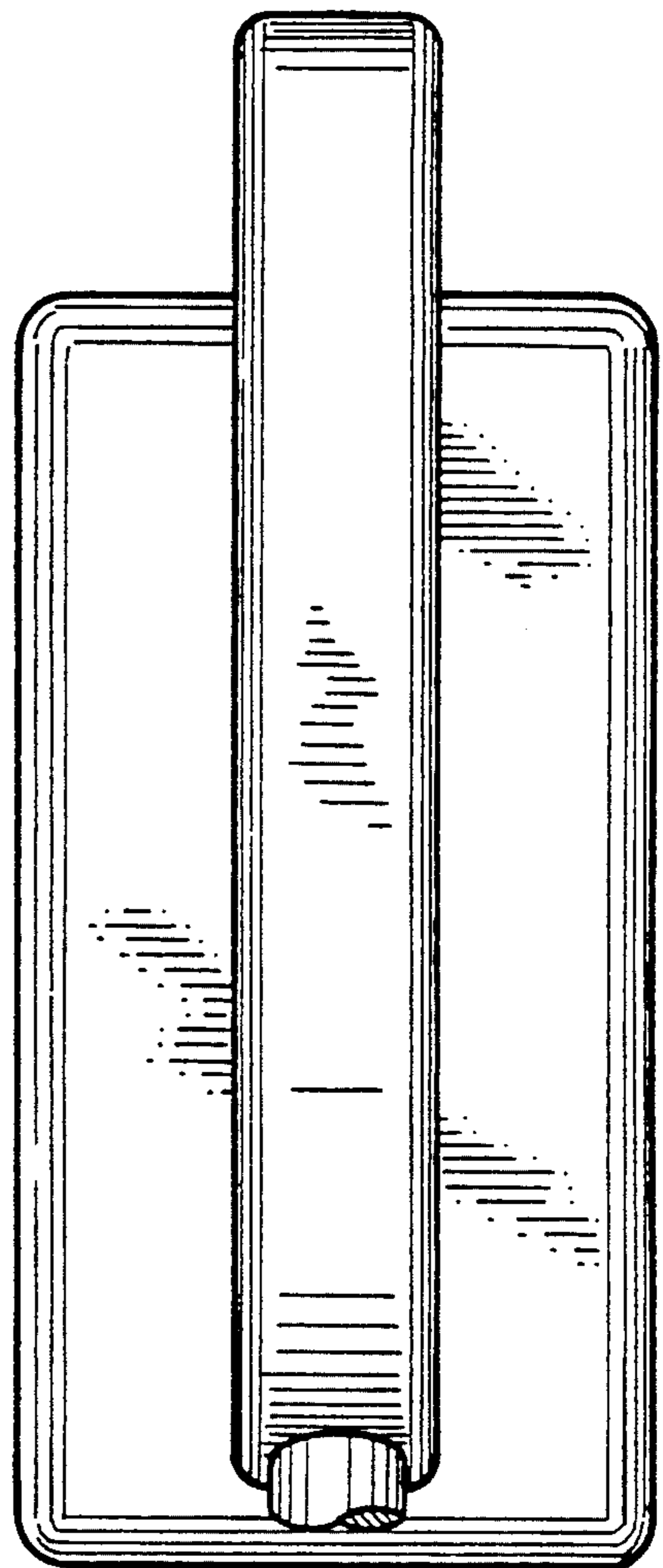


FIG. 5

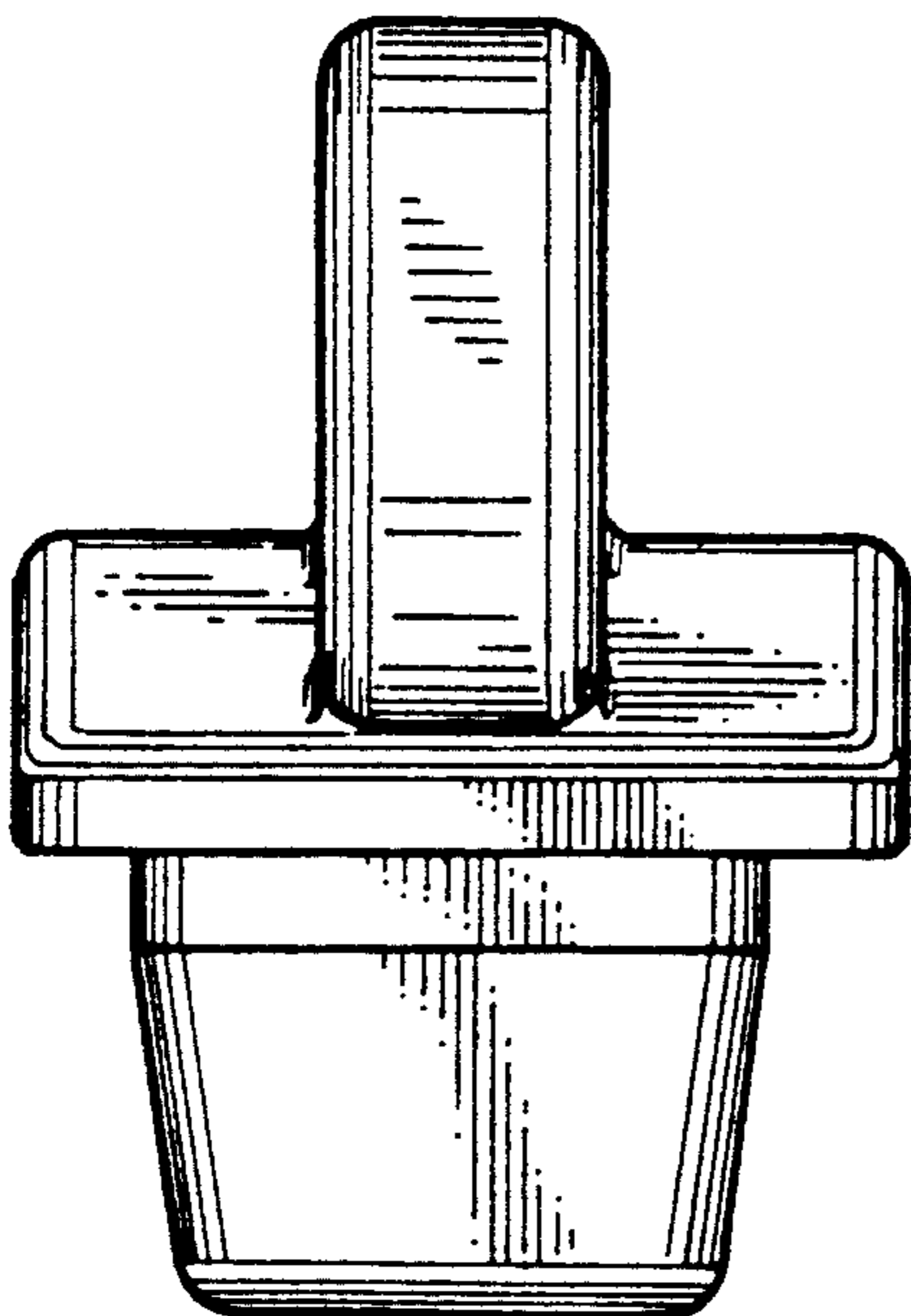


FIG. 6

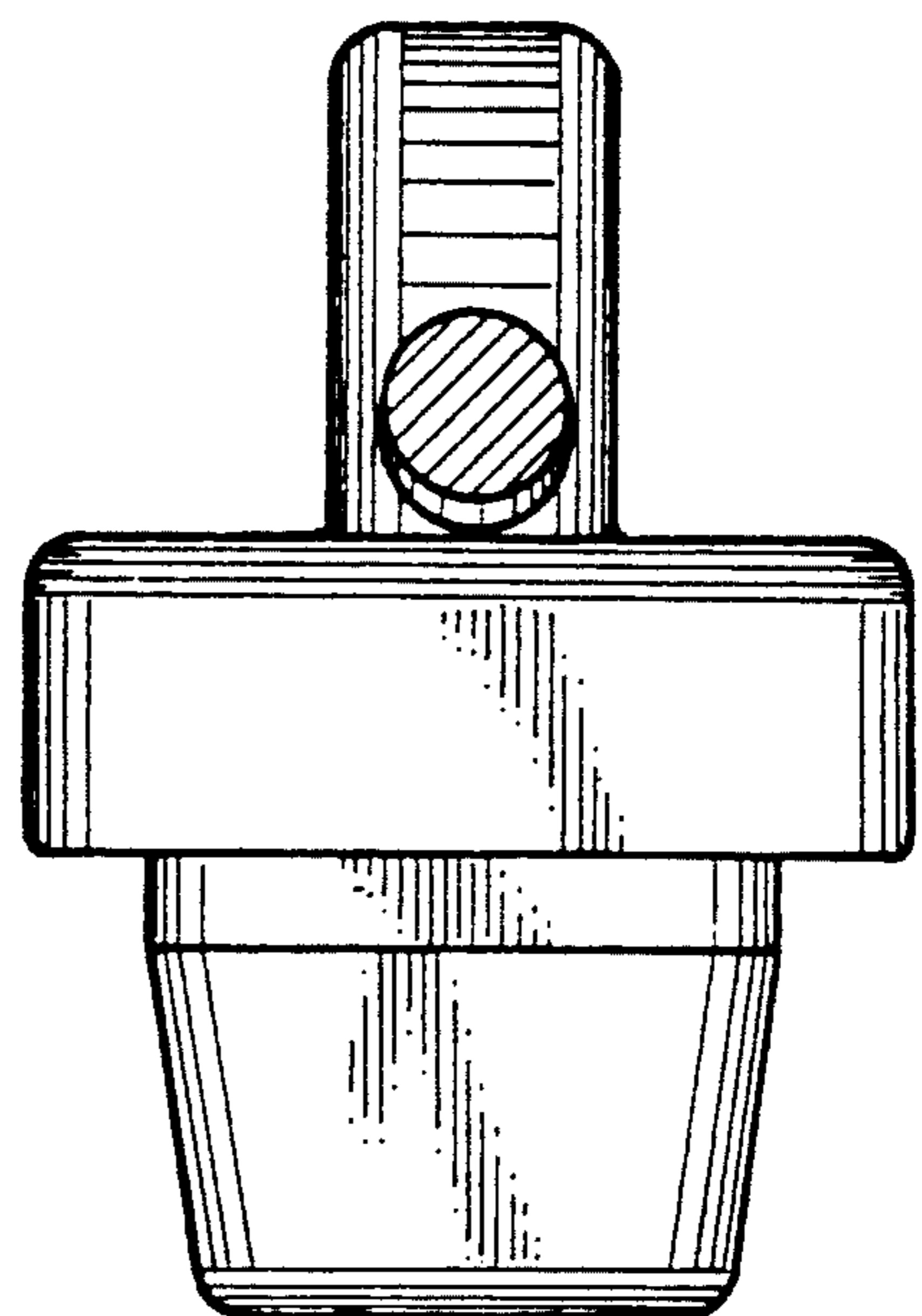


FIG. 7

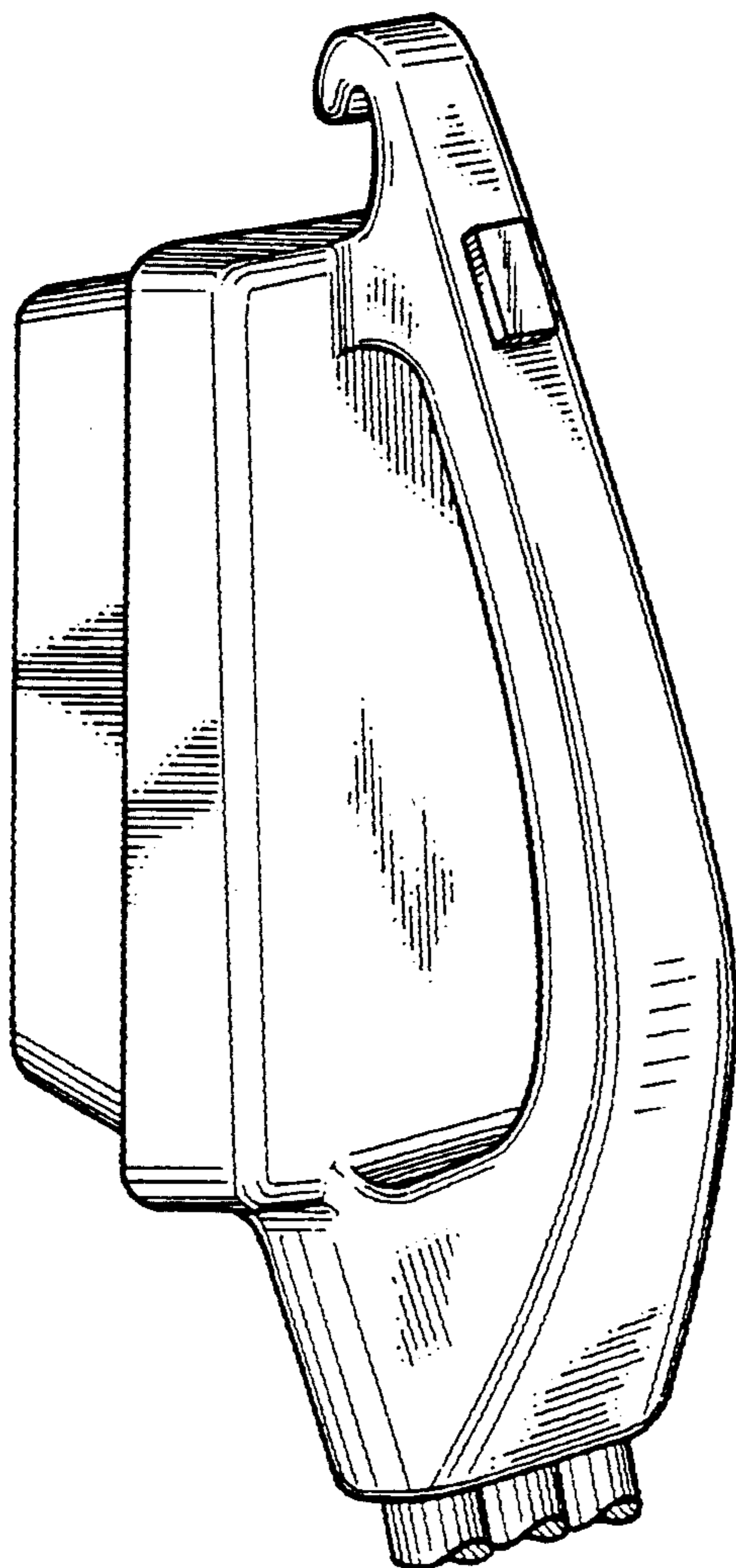


FIG. 8

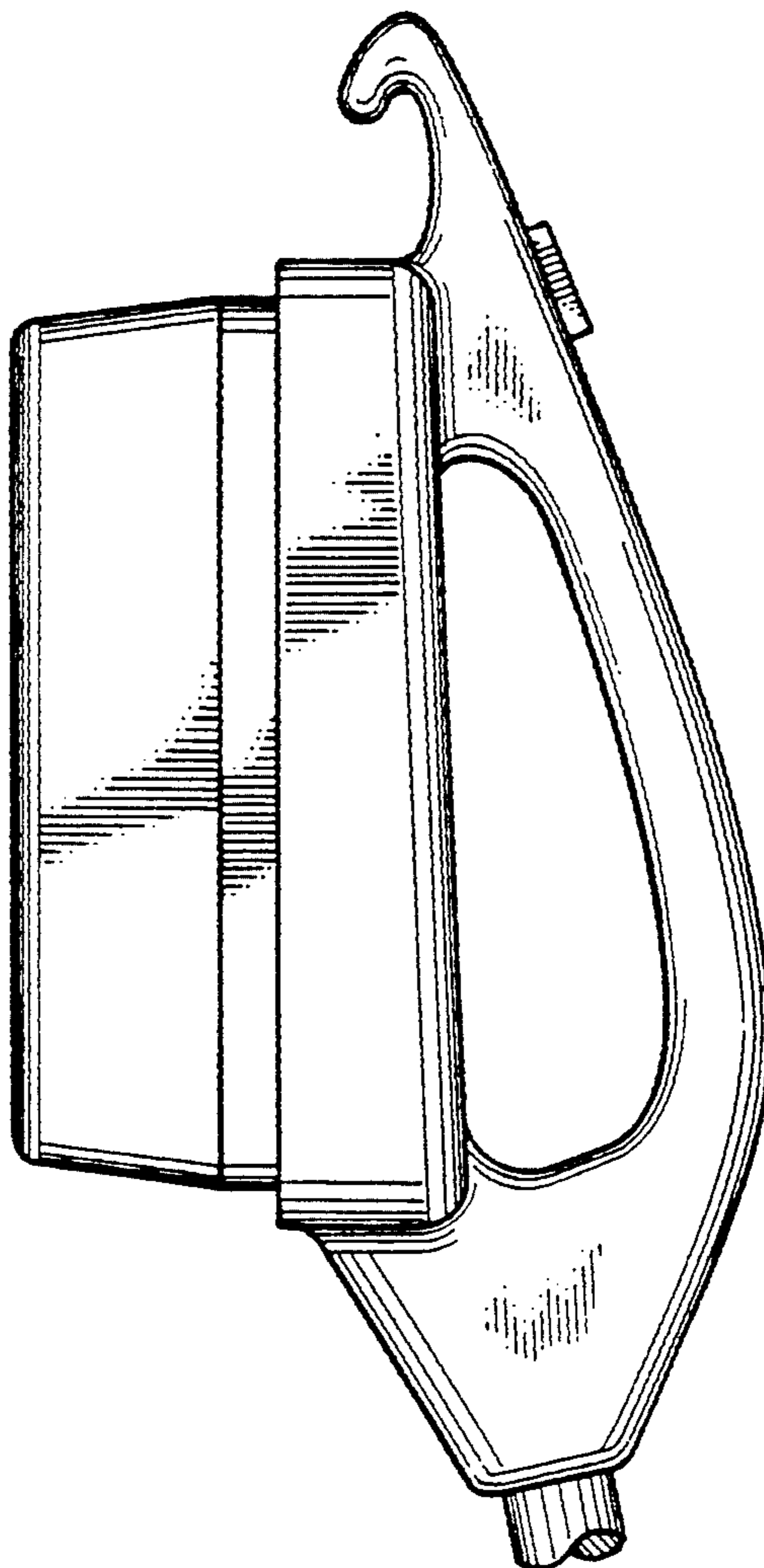


FIG. 9

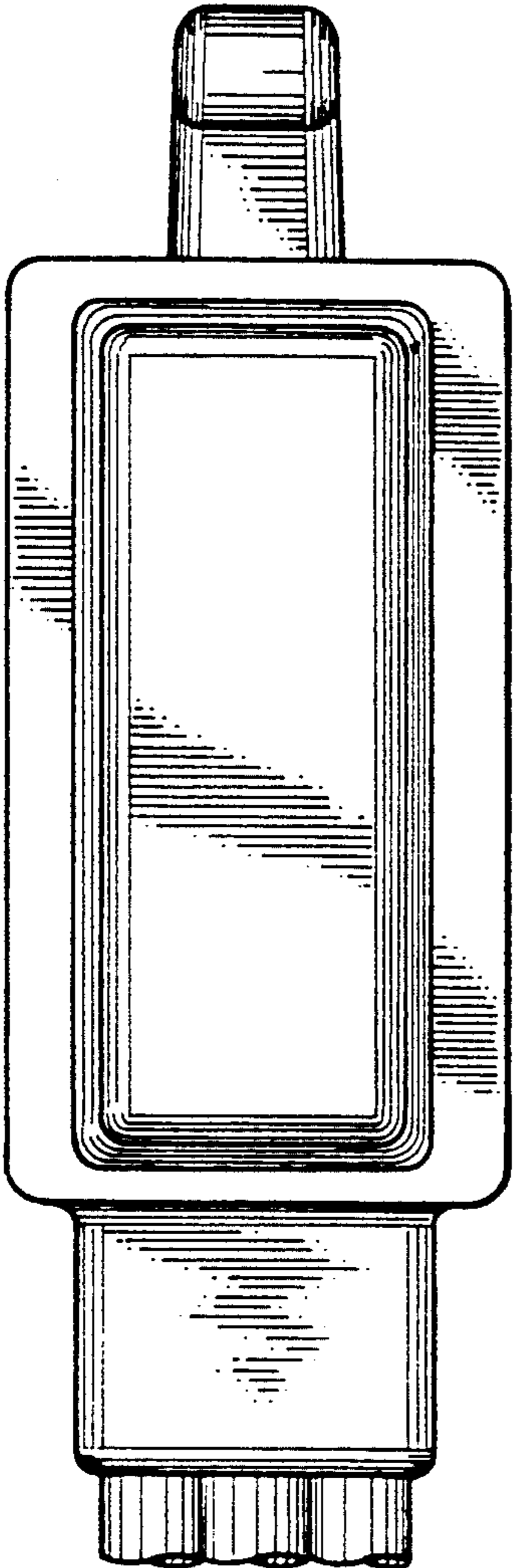


FIG. 10

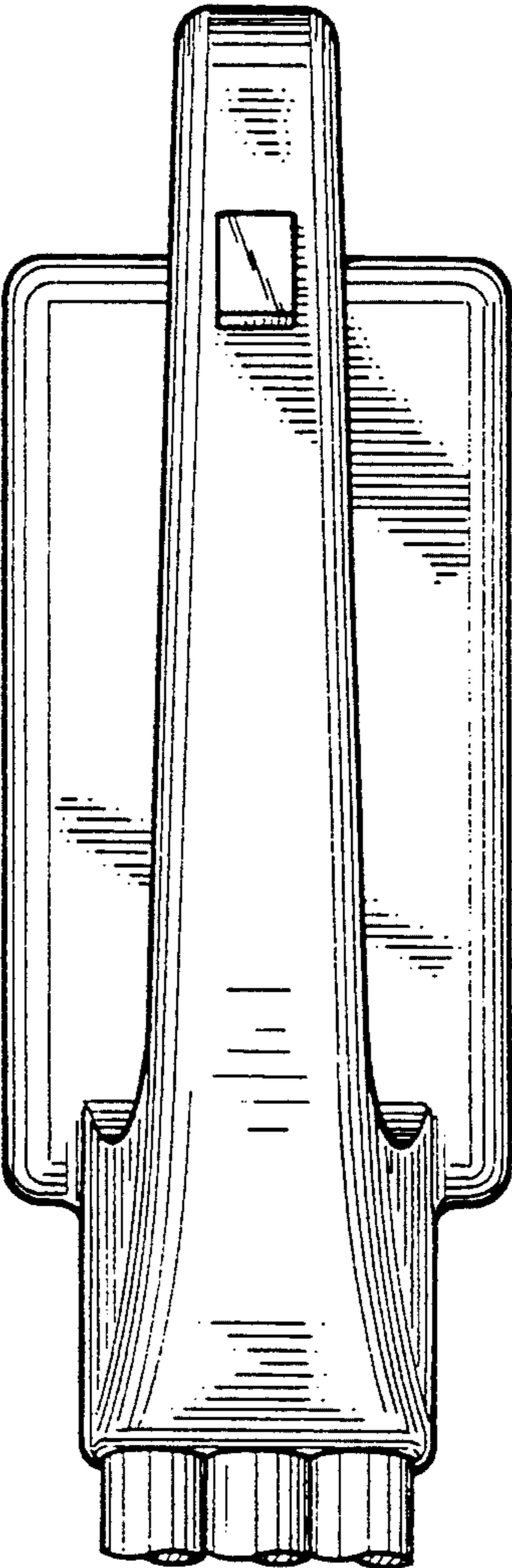


FIG. 11

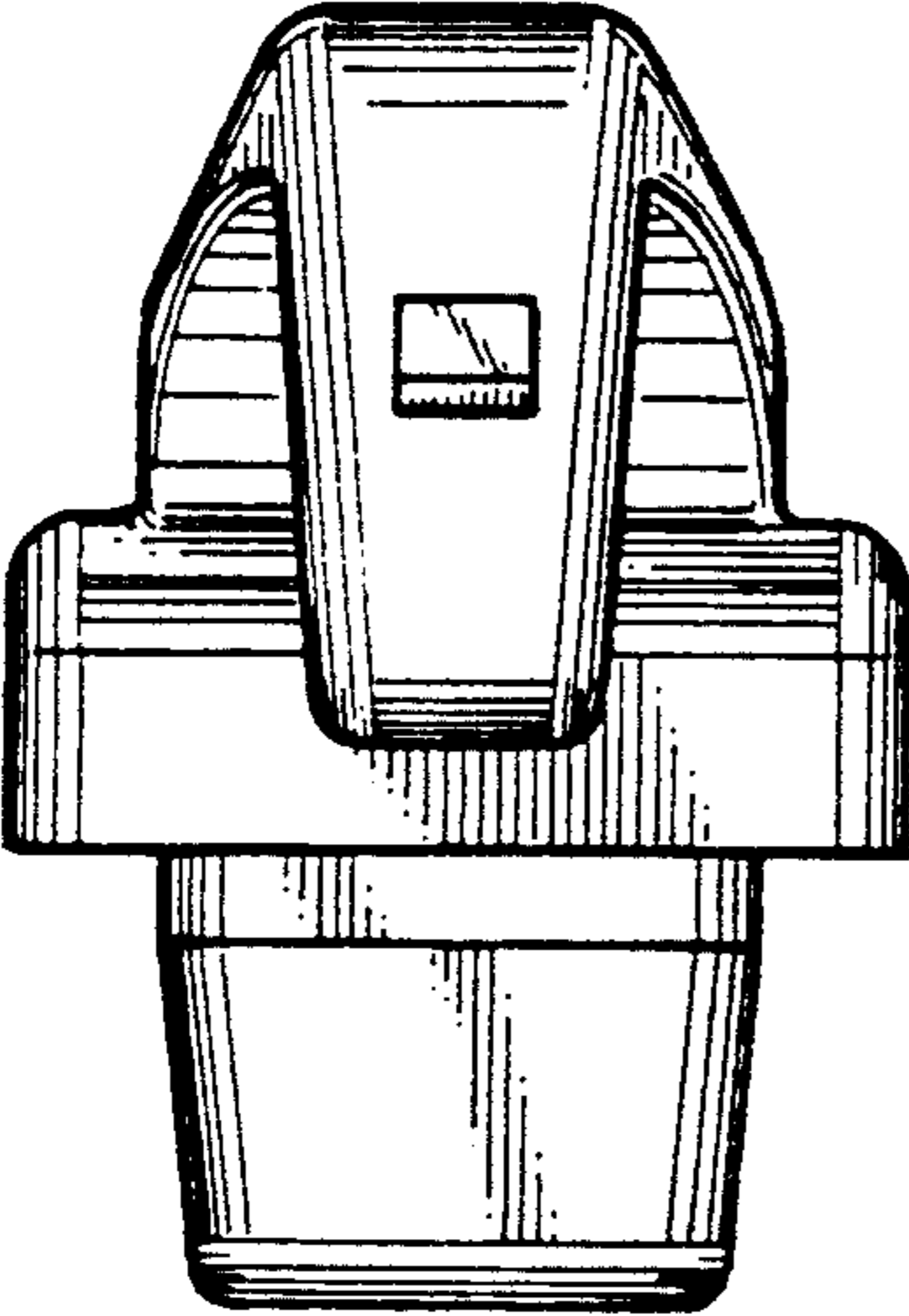


FIG. 12

