



US00D411173S

**United States Patent** [19]  
**Chau et al.**

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[54] **ELECTRICAL CONNECTOR HOUSING**

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[73] Assignee: **Elcon Products International**, Fremont, Calif.

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

[21] Appl. No.: **29/087,058**

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[51] **LOC (6) Cl.** ..... **13-03**

[52] **U.S. Cl.** ..... **D13/147**

[58] **Field of Search** ..... D13/146, 147;  
439/637, 701

[56] **References Cited**

**U.S. PATENT DOCUMENTS**

- D. 290,249 6/1987 Knickerbocker et al. .
- D. 301,870 6/1989 Shibano .
- D. 302,422 7/1989 Justiano et al. .
- D. 314,752 2/1991 Maejima et al. .
- D. 326,644 6/1992 Moriai et al. .... D13/147
- D. 330,540 10/1992 Tanaka .
- D. 331,039 11/1992 Watanabe .
- D. 368,071 3/1996 Eaton .
- D. 372,220 7/1996 Matthews .
- 3,054,078 9/1962 Baschkin .
- 3,456,231 7/1969 Paullus et al. .
- 3,471,822 10/1969 Van Baelen .
- 3,560,911 2/1971 Zimmerman, Jr. et al. .
- 3,587,029 6/1971 Knowles .
- 3,697,933 10/1972 Black et al. .
- 3,808,578 4/1974 Hansen .
- 4,090,764 5/1978 Malsby et al. .
- 4,379,611 4/1983 Foege et al. .
- 4,439,000 3/1984 Kaufman et al. .... 439/637
- 4,451,107 5/1984 Dola et al. .
- 4,514,784 4/1985 Williams et al. .
- 4,550,959 11/1985 Grabbe et al. .
- 4,616,893 10/1986 Feldman .
- 4,728,163 3/1988 Kittinger et al. .
- 4,749,357 6/1988 Foley .
- 4,824,380 4/1989 Matthews .

(List continued on next page.)

**FOREIGN PATENT DOCUMENTS**

0 549 960 A2 12/1992 European Pat. Off. .

**OTHER PUBLICATIONS**

Molex Incorporated, *Edge Card Connector for .050" (1.27 mm) Center Ribbon Cable*, "6874 Series, .100" (2.54 mm) Center", p. 12B, Catalog 980, 2<sup>nd</sup> ed. (1991).

Molex Incorporated, *Dual Row Shrouded Headers*, "8724 Right Angle Pin," p. 76A, Catalog 980, 2<sup>nd</sup> ed. (1991).

Molex Incorporated, *Dual Row Shrouded Headers*, "8723 Straight Pin," p. 75 A, Catalog 980, 2<sup>nd</sup> ed. (1991).

Quickie™ IDC system connector on p. 222 of *Dupont Connector Systems Catalog 86A*, revd. May 14, 1986.

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*Attorney, Agent, or Firm*—Burns, Doane, Swecker & Mathis LLP

[57] **CLAIM**

The ornamental design for an electrical connector housing, as shown and described.

**DESCRIPTION**

FIG. 1 is a perspective view as seen from the front and upper right of a first embodiment of an electrical connector housing showing our new design;

FIG. 2 is a right side elevational view thereof;

FIG. 3 is a front elevational view thereof;

FIG. 4 is a left side elevational view thereof;

FIG. 5 is a rear elevational view thereof;

FIG. 6 is a top plan view thereof;

FIG. 7 is a bottom plan view thereof;

FIG. 8 is a perspective view as seen from the front and upper right of a second embodiment of the electrical connector housing;

FIG. 9 is a right side elevational view thereof;

FIG. 10 is a front elevational view thereof;

FIG. 11 is a left side elevational view thereof;

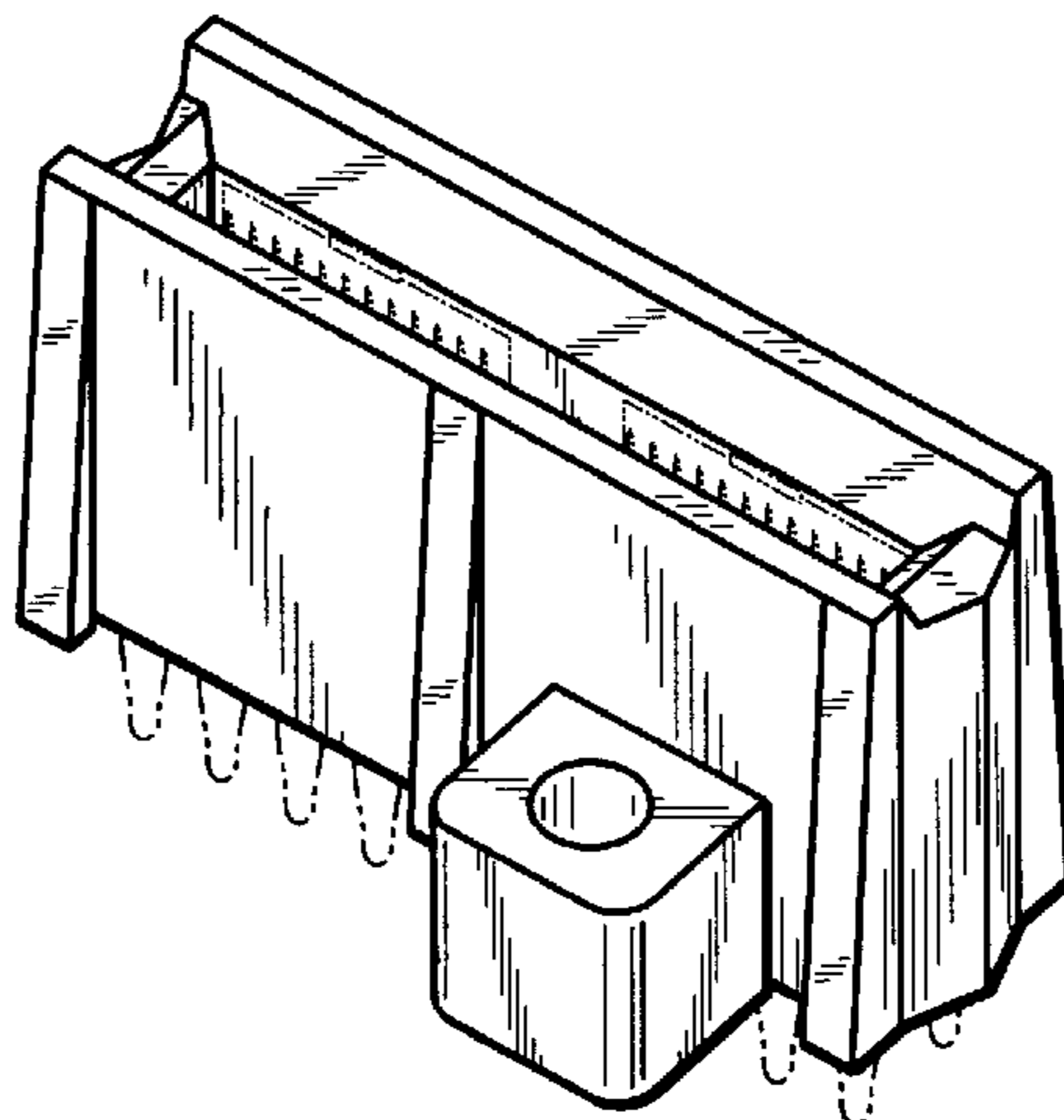
FIG. 12 is a rear elevational view thereof;

FIG. 13 is a top plan view thereof; and,

FIG. 14 is a bottom plan view thereof.

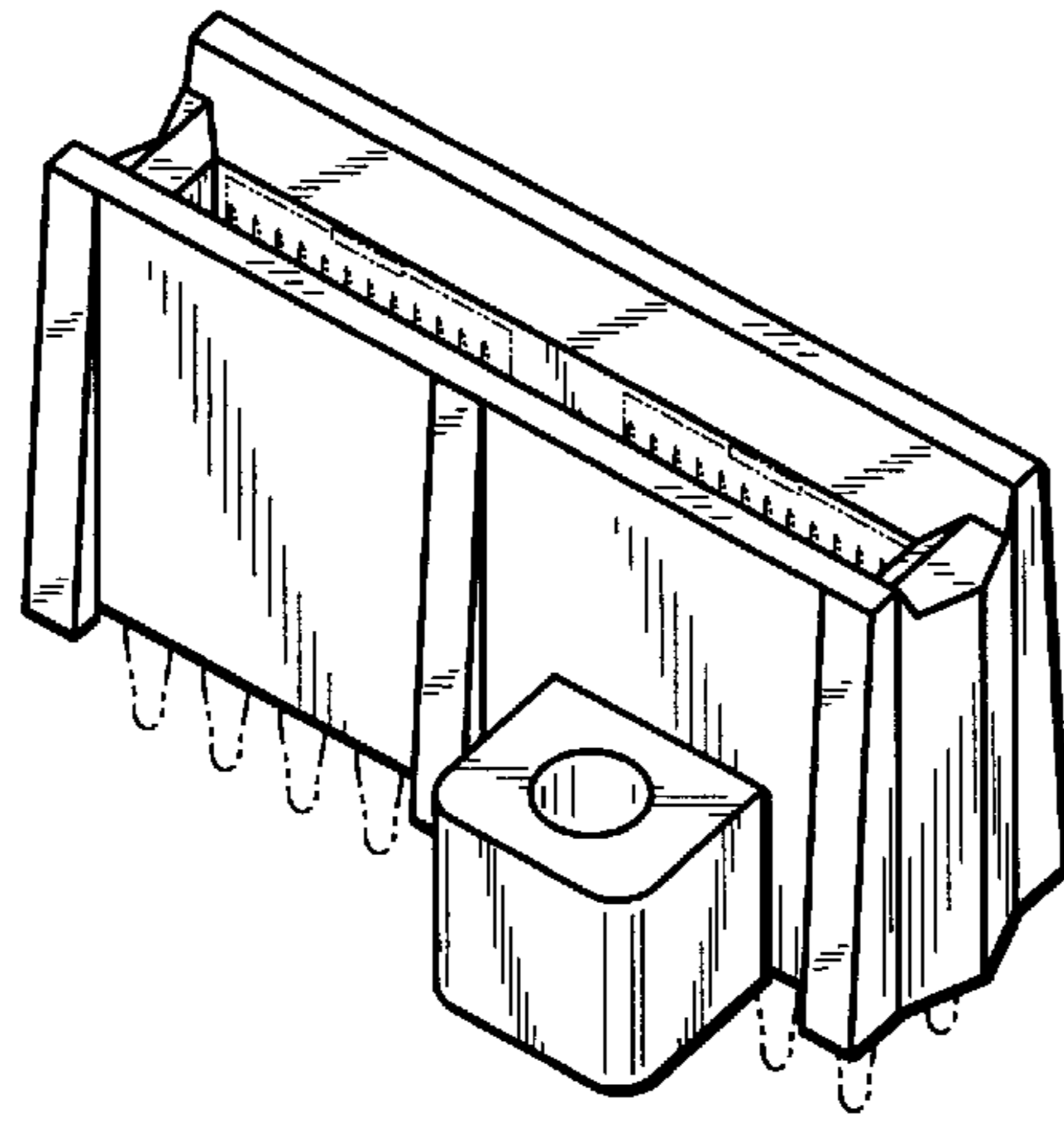
The broken line showing throughout the drawing views is included for the purpose of illustrating environmental structure only and forms no part of the claimed design.

**1 Claim, 2 Drawing Sheets**

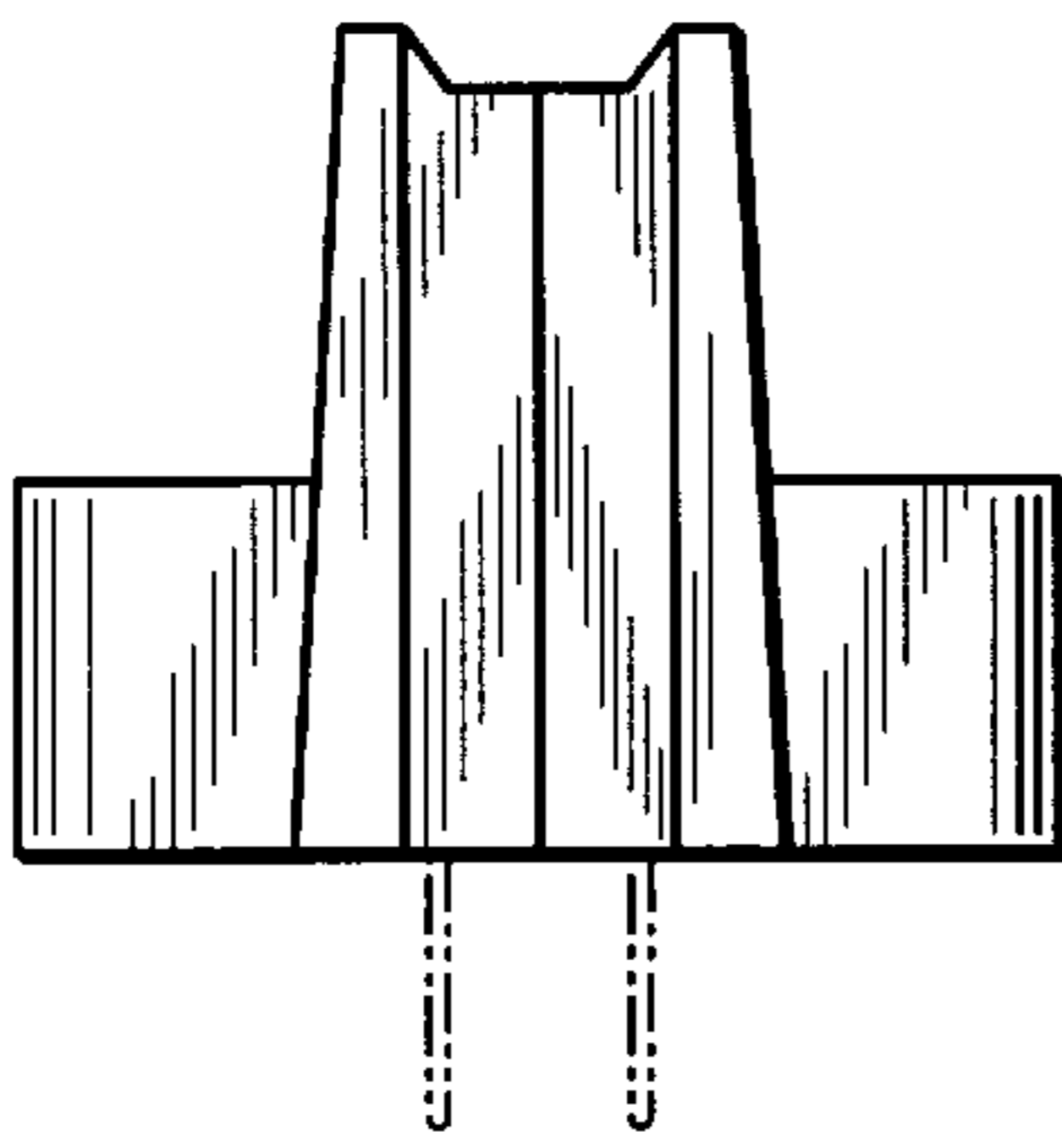


## U.S. PATENT DOCUMENTS

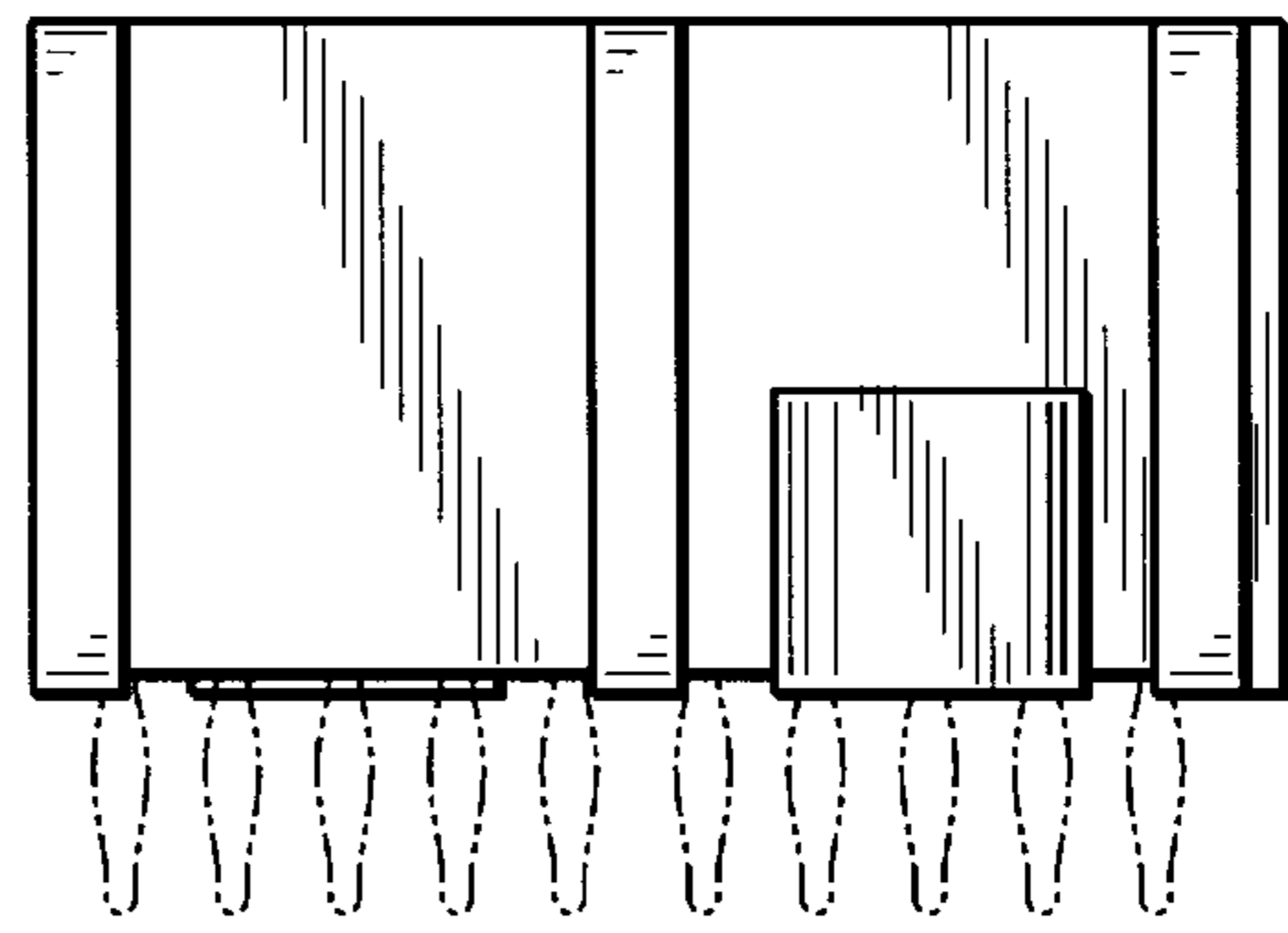
4,846,737	7/1989	Jorroch et al. .	5,156,552	10/1992	Zaderej et al. .
4,854,899	8/1989	Matthews .	5,181,853	1/1993	Van Brunt, Jr. et al. .
4,867,713	9/1989	Ozu et al. .	5,211,589	5/1993	McCardell .
4,871,320	10/1989	Mouissie .	5,217,386	6/1993	Ohsumi et al. .
4,946,392	8/1990	Kobler et al. .	5,236,375	8/1993	Kachlic .
4,969,824	11/1990	Casciotti .	5,261,840	11/1993	Benz .
4,983,127	1/1991	Kawai et al. .	5,306,160	4/1994	Roberts .
4,993,972	2/1991	Lin ..... 439/637	5,306,182	4/1994	Fukushima et al. .
4,998,887	3/1991	Kaufman et al. .... 439/701 X	5,342,226	8/1994	Hayes et al. .
5,013,263	5/1991	Gordon et al. .	5,376,012	12/1994	Clark .
5,024,609	6/1991	Piorunneck .	5,431,576	7/1995	Matthew .
5,055,055	10/1991	Bakker .	5,547,400	8/1996	Wright .
5,088,942	2/1992	Welsh et al. .	5,575,690	11/1996	Eaton .
5,108,313	4/1992	Adams ..... 439/701 X	5,584,728	12/1996	Cheng ..... 439/637
5,145,413	9/1992	Okamoto et al. .	5,810,623	9/1998	Regnier et al. .... 439/637
5,147,226	9/1992	Kile .	5,813,883	9/1998	Lin ..... 439/637



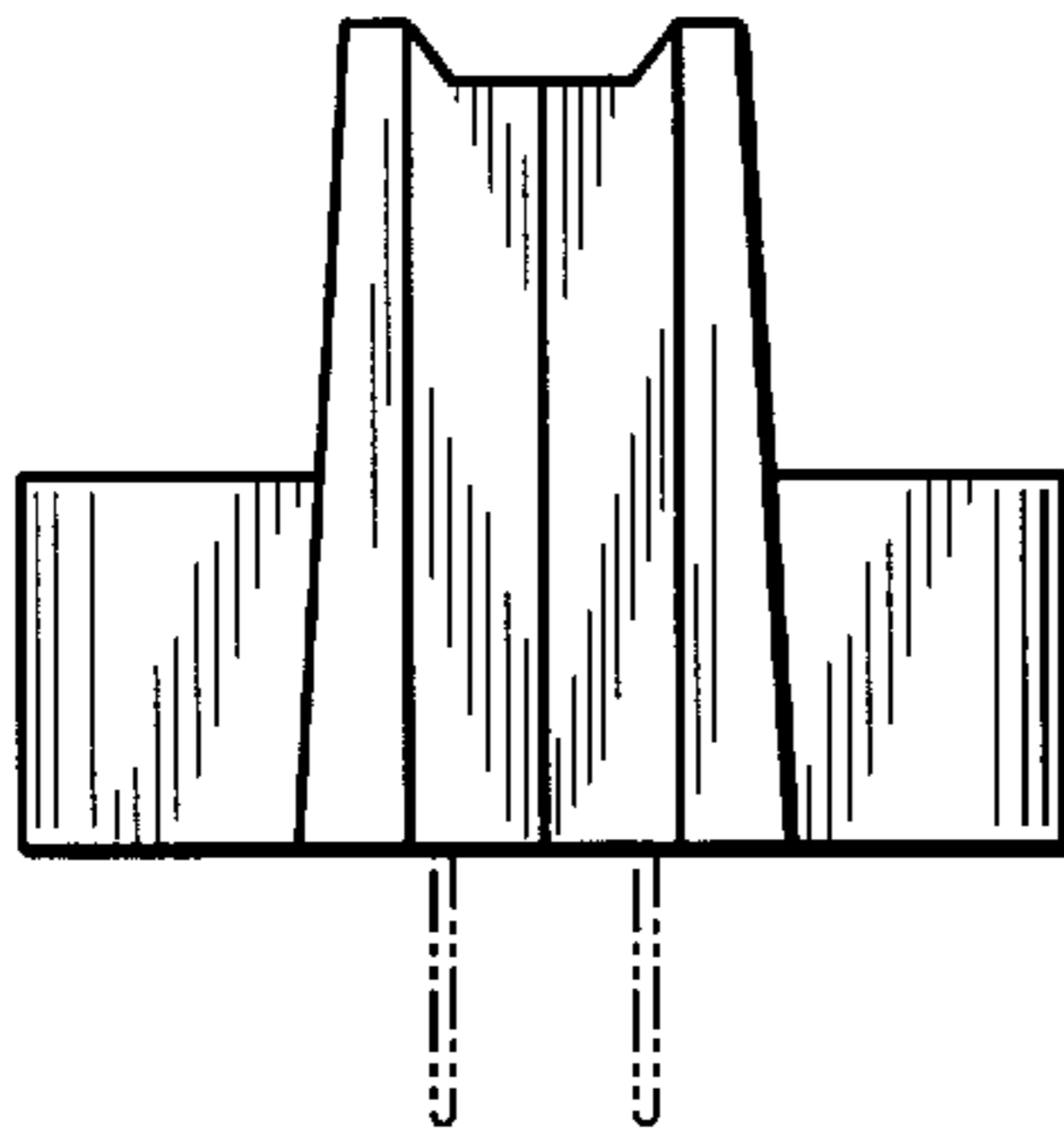
**FIG.\_1**



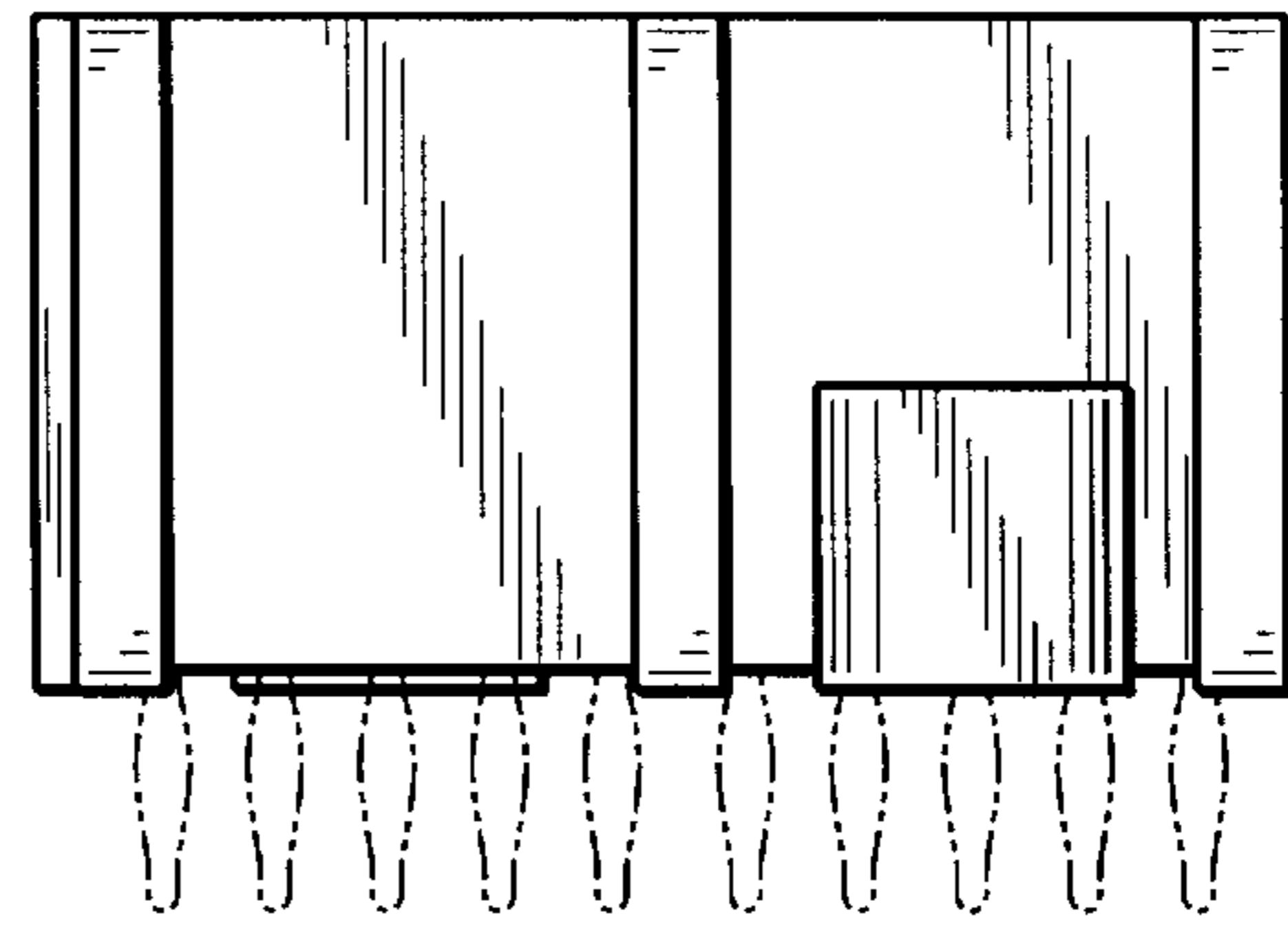
**FIG.\_2**



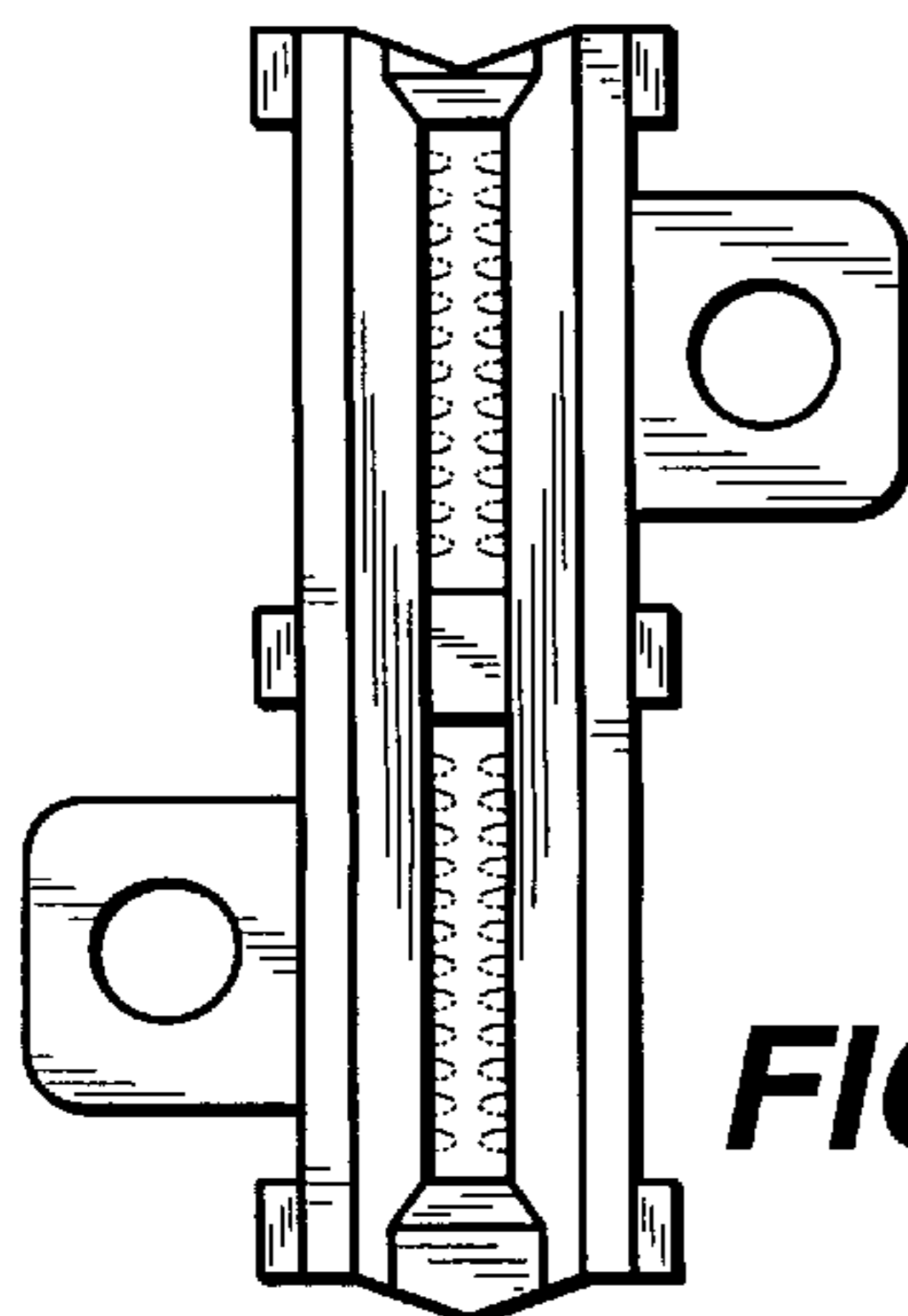
**FIG.\_3**



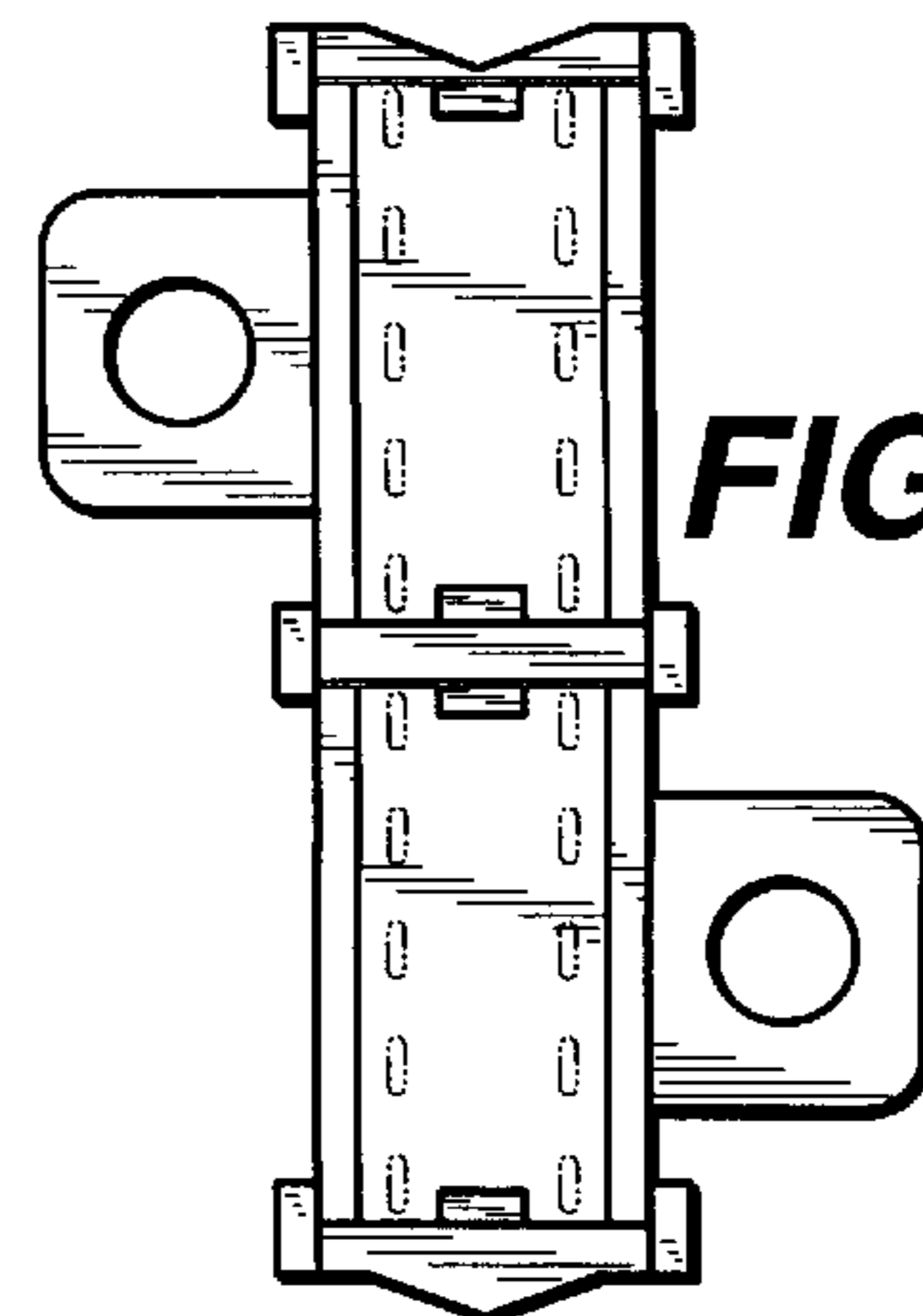
**FIG.\_4**



**FIG.\_5**



**FIG.\_6**



**FIG.\_7**

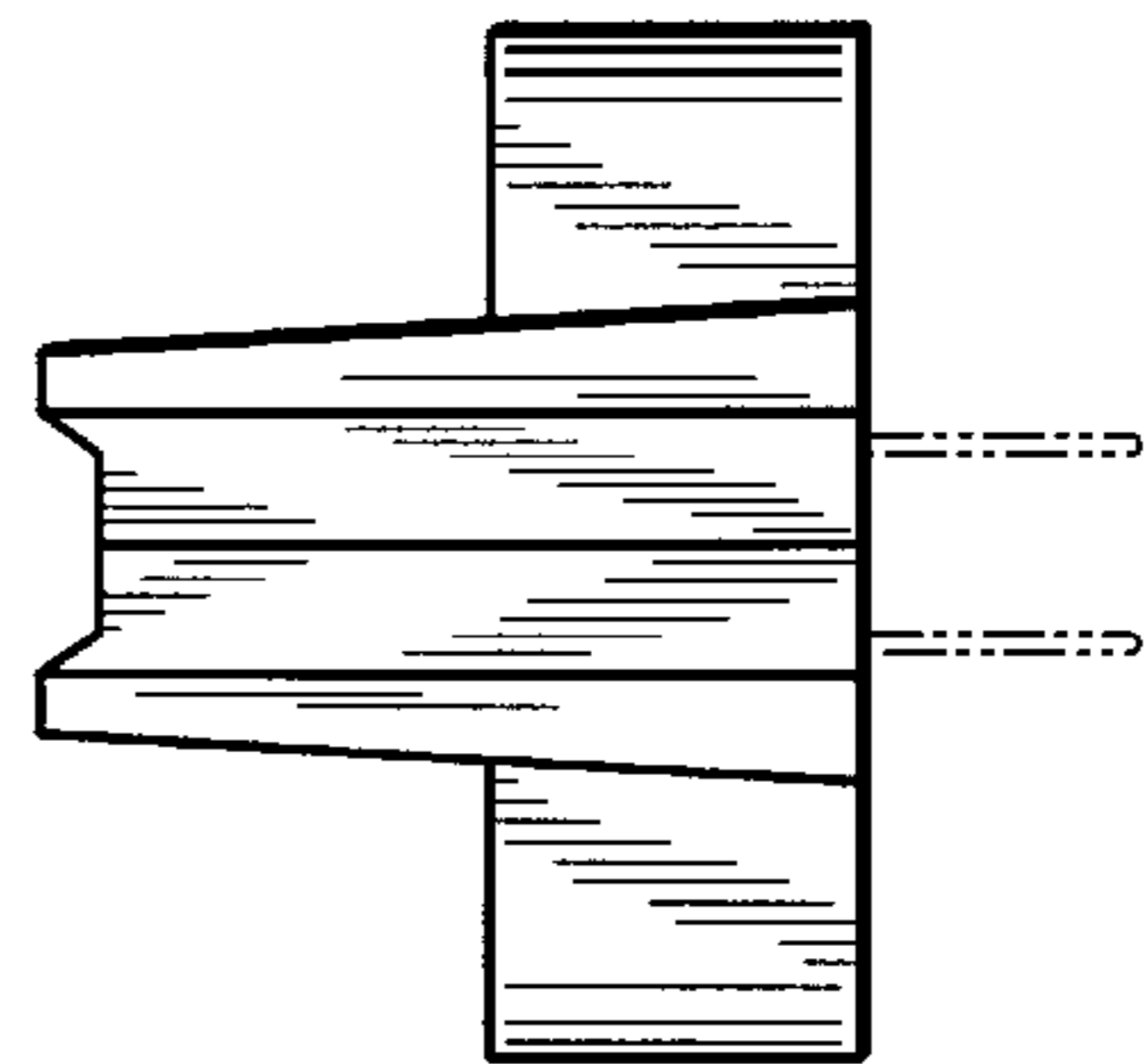
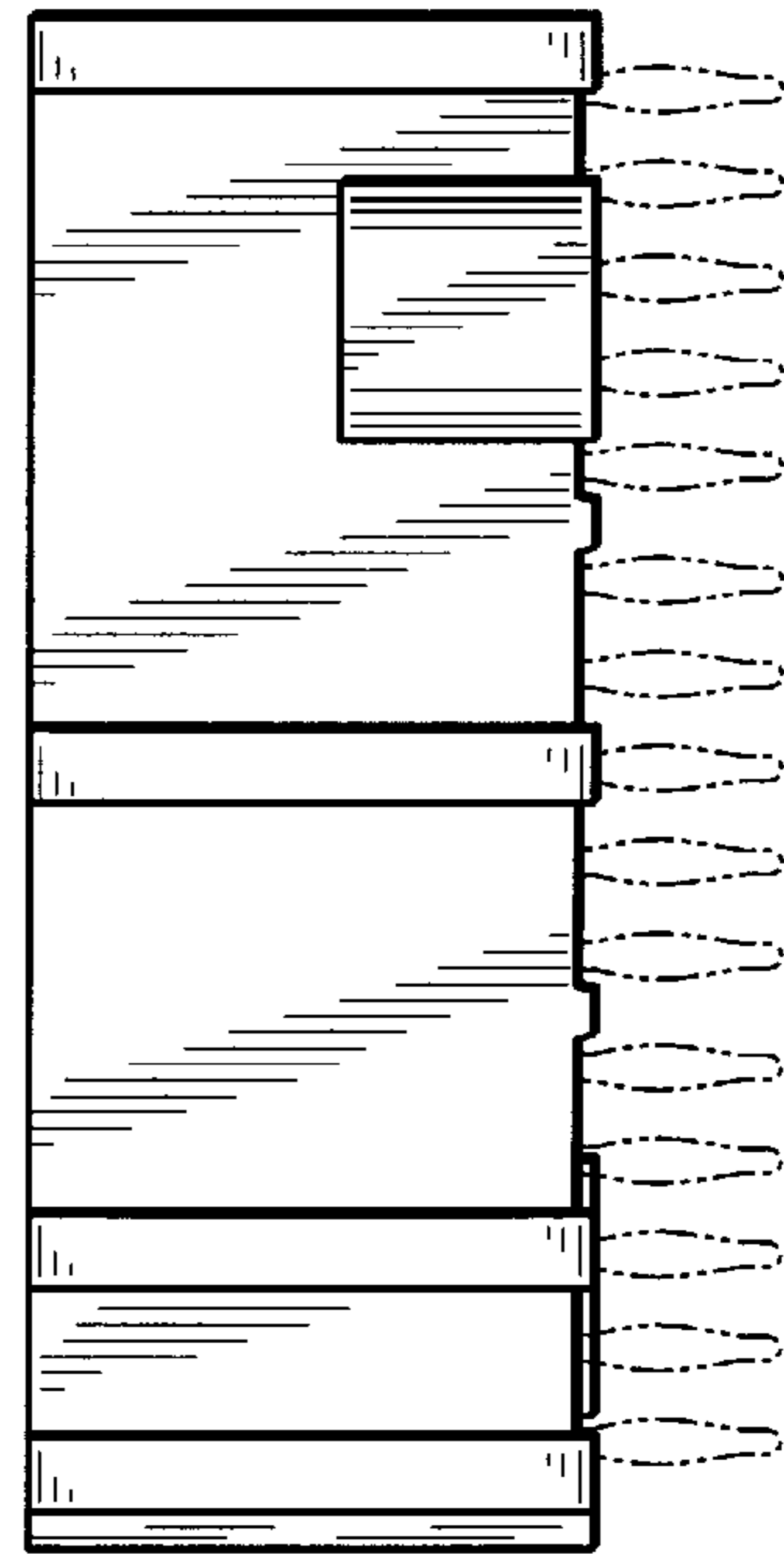
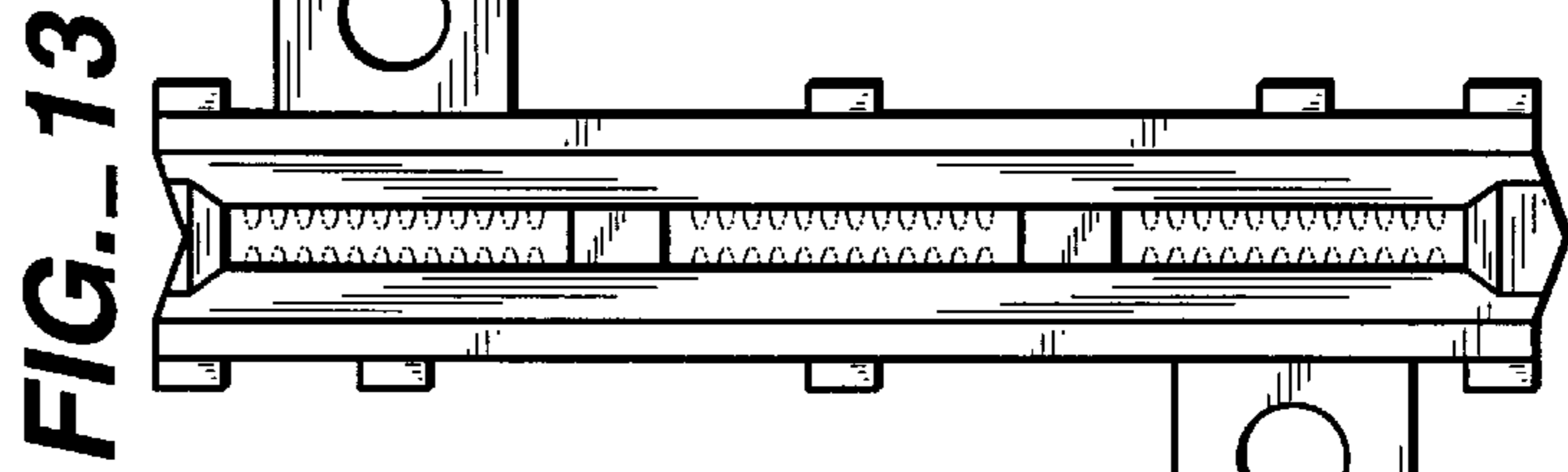
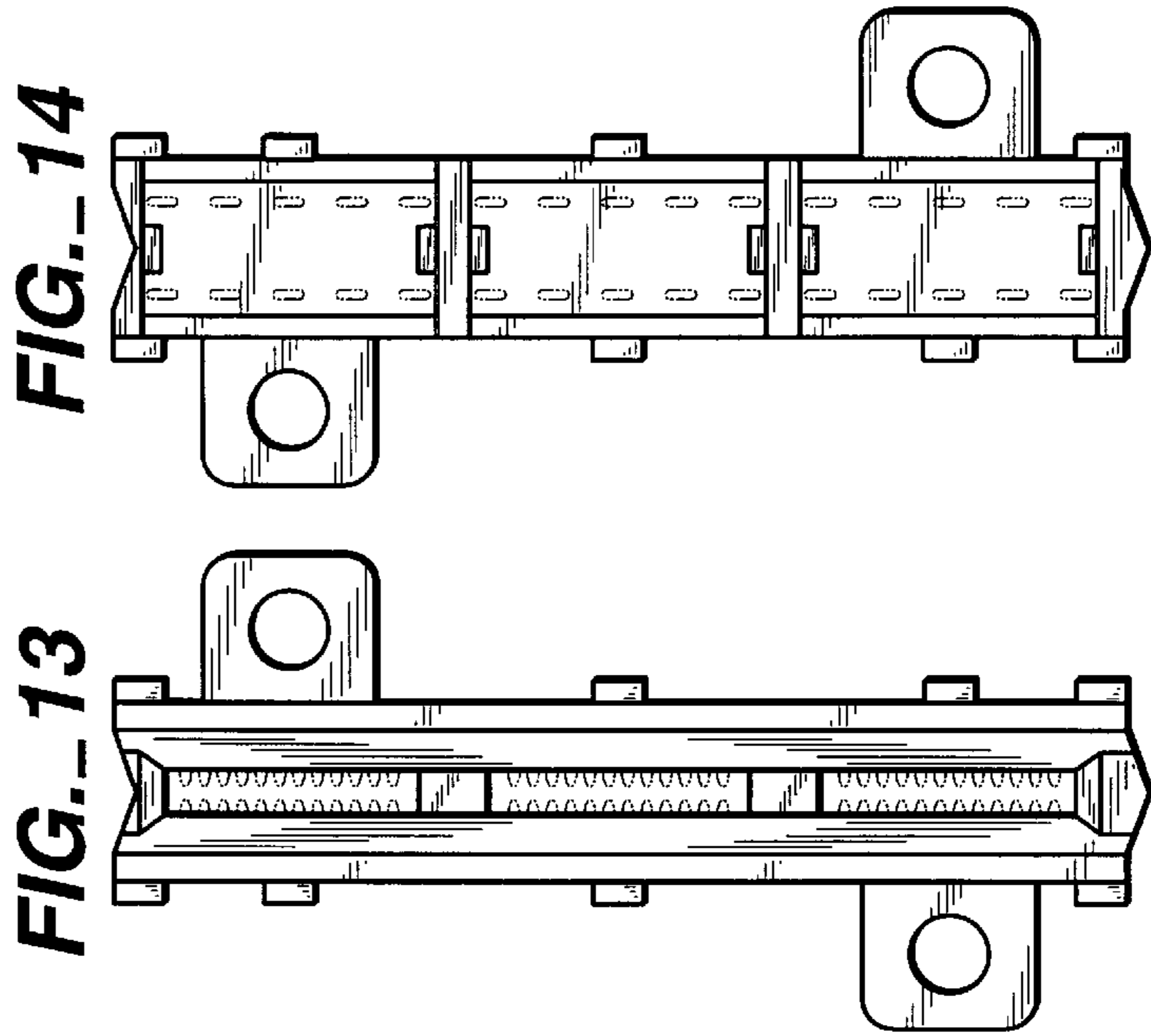
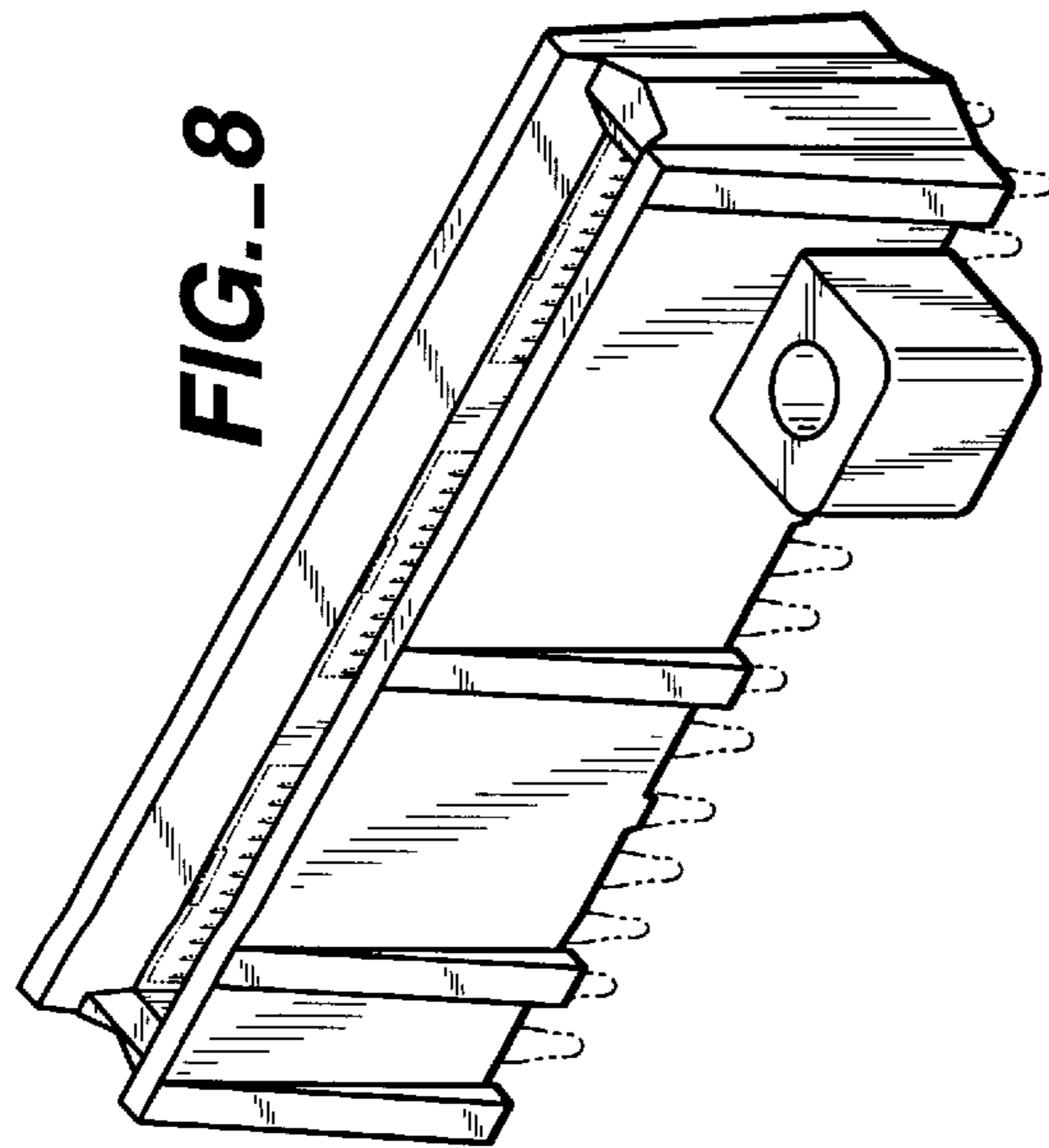
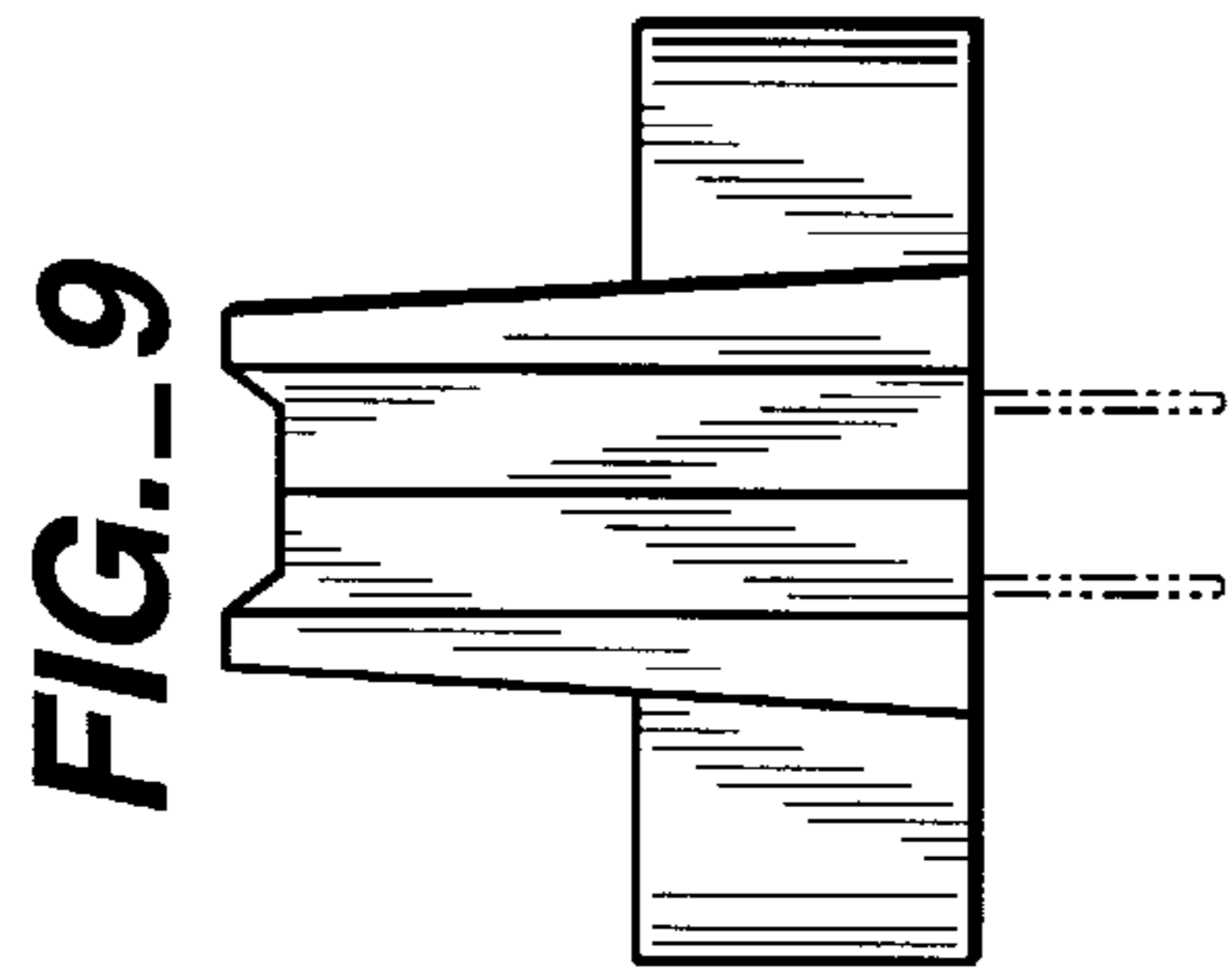
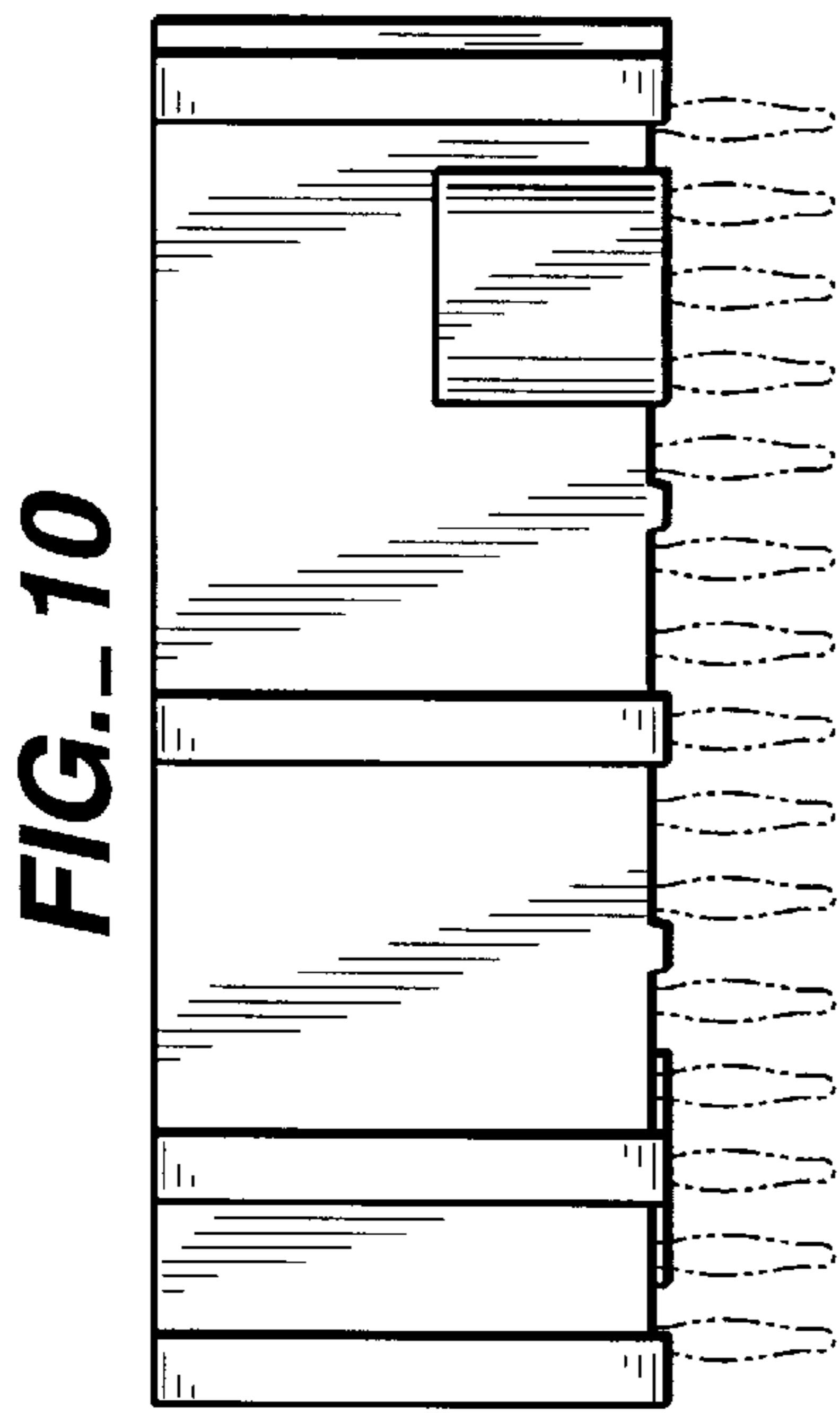


FIG. 12

FIG. 11