US00D420101S

United States Patent [19]

Hiramatsu et al.

[11] **Patent Number: Des. 420,101**

[45] **Date of Patent: ** Feb. 1, 2000**

[54] **END PLATE FOR A MANIFOLD FOR SOLENOID-OPERATED DIRECTIONAL CONTROL VALVE**

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[73] Assignee: **SMC Corporation**, Tokyo, Japan

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

[21] Appl. No.: **29/094,751**

[22] Filed: **Oct. 9, 1998**

[30] **Foreign Application Priority Data**

Apr. 13, 1998 [JP] Japan 10-10526

[51] **LOC (7) Cl.** **23-01**

[52] **U.S. Cl.** **D23/233**

[58] **Field of Search** D23/233–237, D23/245–248; 137/596.13, 596.16, 625.64, 884

[56] **References Cited**

U.S. PATENT DOCUMENTS

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OTHER PUBLICATIONS

The design of the present application was displayed at IFPEX '97 Exhibition—Oct. 21–24, 1997.
IFPEX '97 Catalogue, issued on Oct. 13, 1997.

Primary Examiner—Robin V. Taylor
Attorney, Agent, or Firm—Oblon, Spivak, McClelland, Maier & Neustadt, P.C.

[57] **CLAIM**

The ornamental design for end plate for a manifold for solenoid-operated directional control valve, as shown and described.

DESCRIPTION

FIG. **1** is a top, front and left side perspective view of end plate for manifold for solenoid-operated directional control valve embodying our new design;
FIG. **2** is a bottom, rear and right side perspective view thereof;
FIG. **3** is a front elevational view thereof;
FIG. **4** is a rear elevational view thereof;
FIG. **5** is a top plan view thereof;
FIG. **6** is a bottom plan view thereof;
FIG. **7** is a left side elevational view thereof;
FIG. **8** is a right side elevational view thereof;
FIG. **9** is a top, front and left side perspective view thereof when used with a connector for electric current;
FIG. **10** is a top, front and left side perspective view thereof when used with a socket for electric current;
FIG. **11** is a top, front and left side perspective view thereof when used with an induction hole member for an electric current wire;
FIG. **12** is a top, front and left side perspective view thereof when used with a manifold and manifold block;
FIG. **13** is a top, front and left side perspective view thereof when used with a socket for electric current, a manifold and a manifold block; and,
FIG. **14** is a top, front and left side perspective view thereof when used with an induction hole member, a manifold and a manifold block.
The connector shown in FIGS. **9** and **12**, the socket for electric current shown in FIGS. **10** and **13**, the induction hole member for an electric current wire shown in FIGS. **11** and **14**, and the manifold and manifold block shown in FIGS. **12–14** are shown in broken lines for illustrative purposes only and form no part of the claimed design.

1 Claim, 5 Drawing Sheets

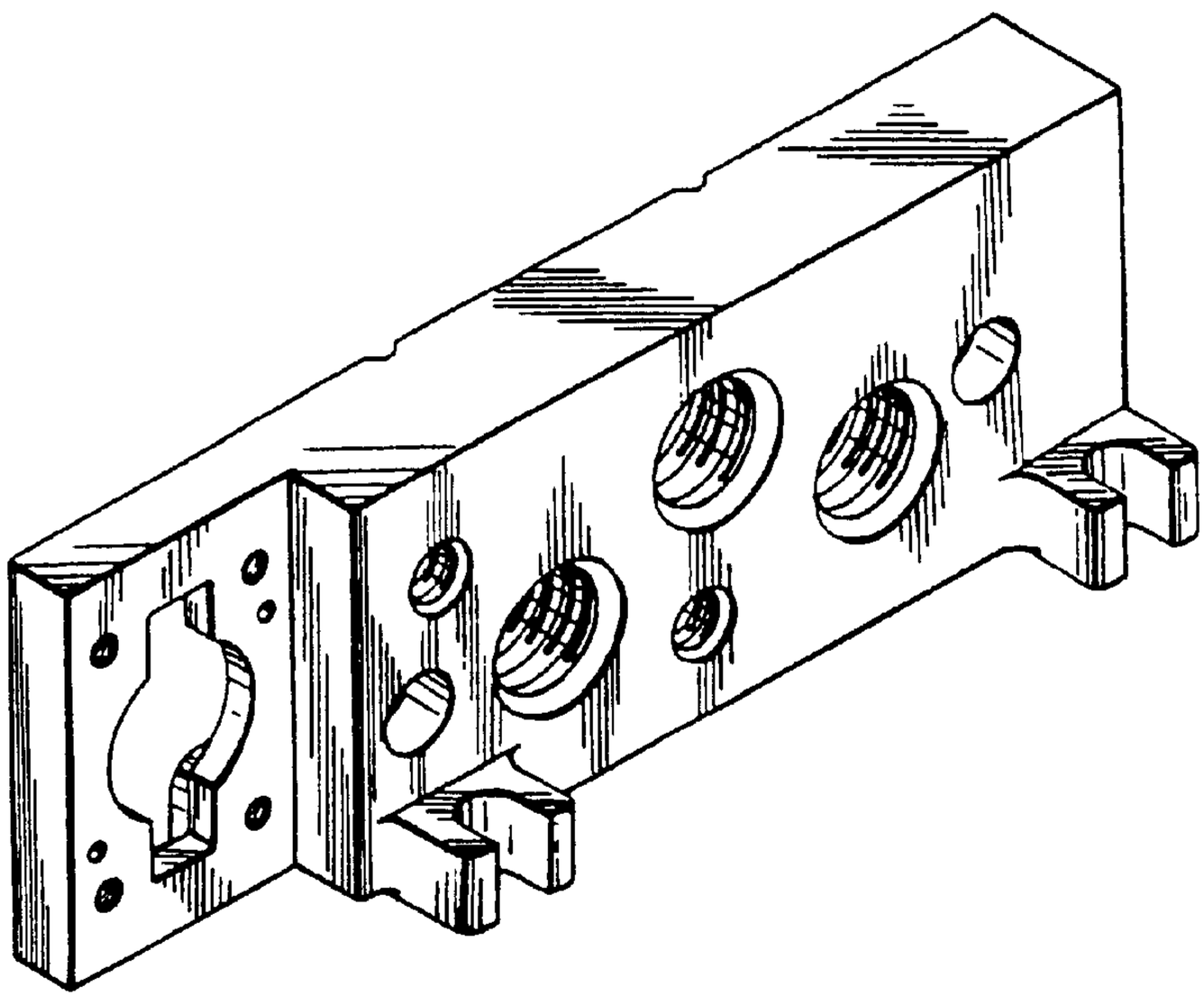


FIG. 7

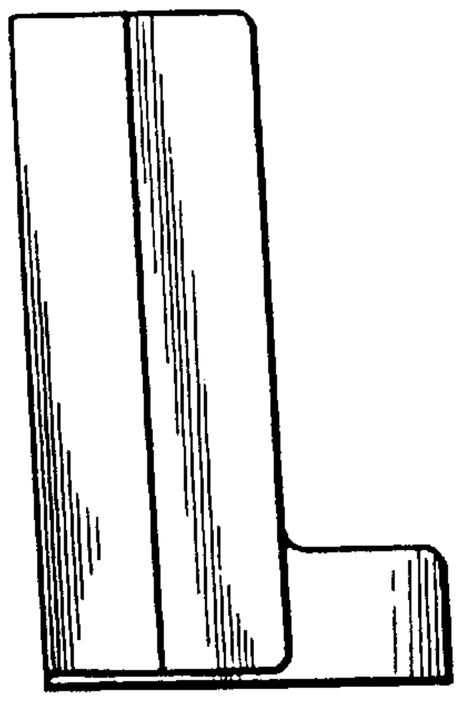


FIG. 8

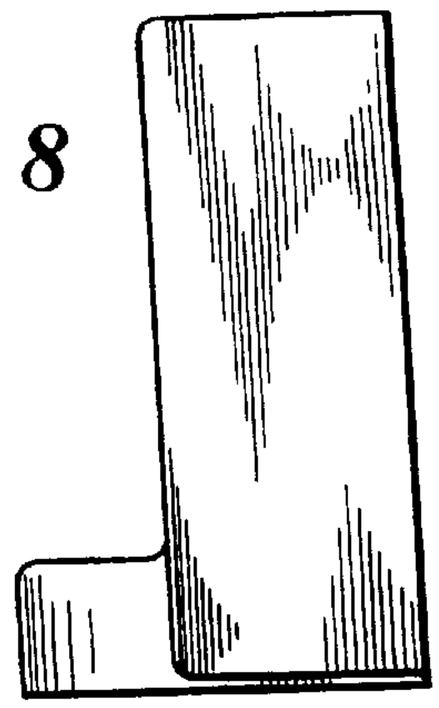


FIG. 1

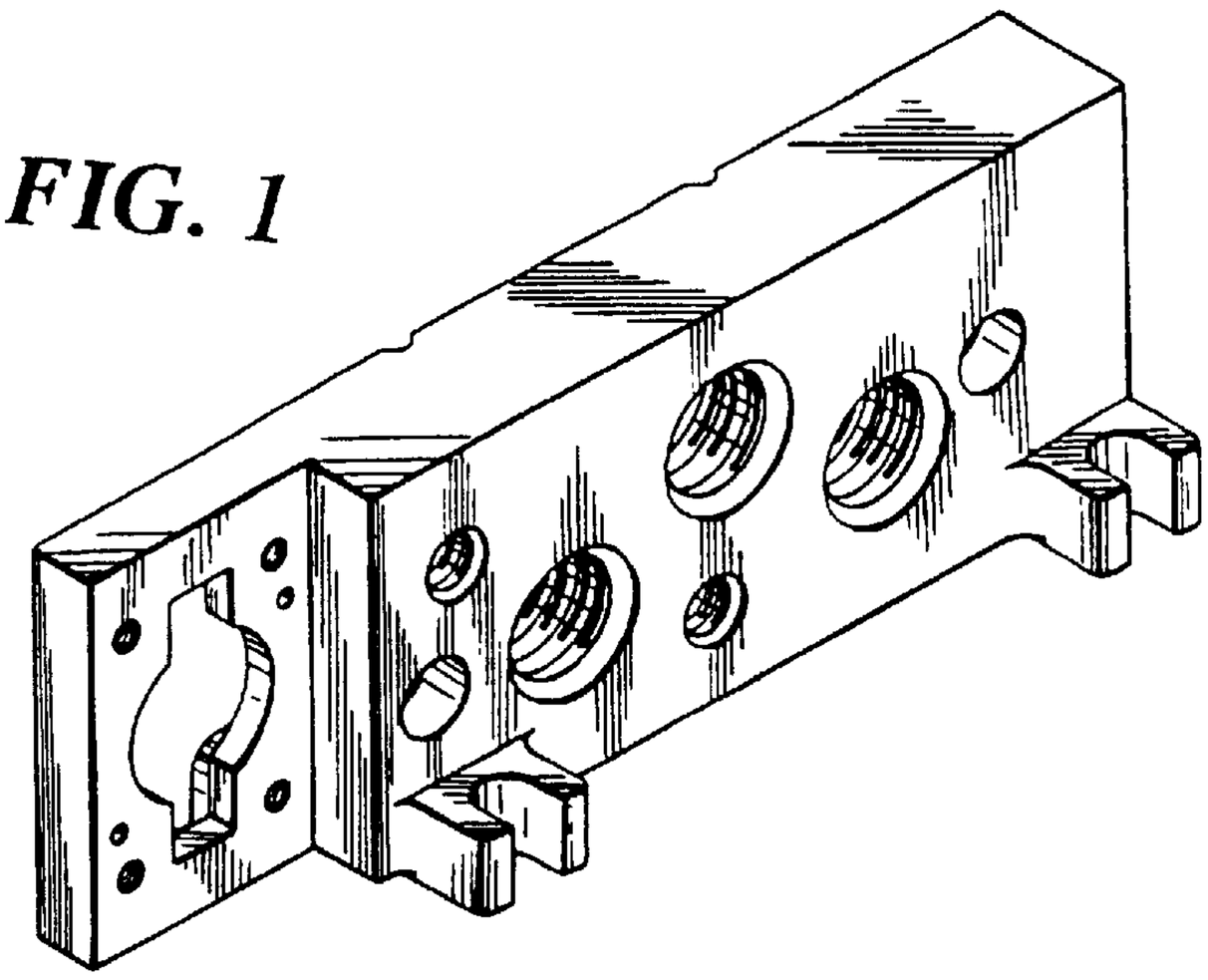
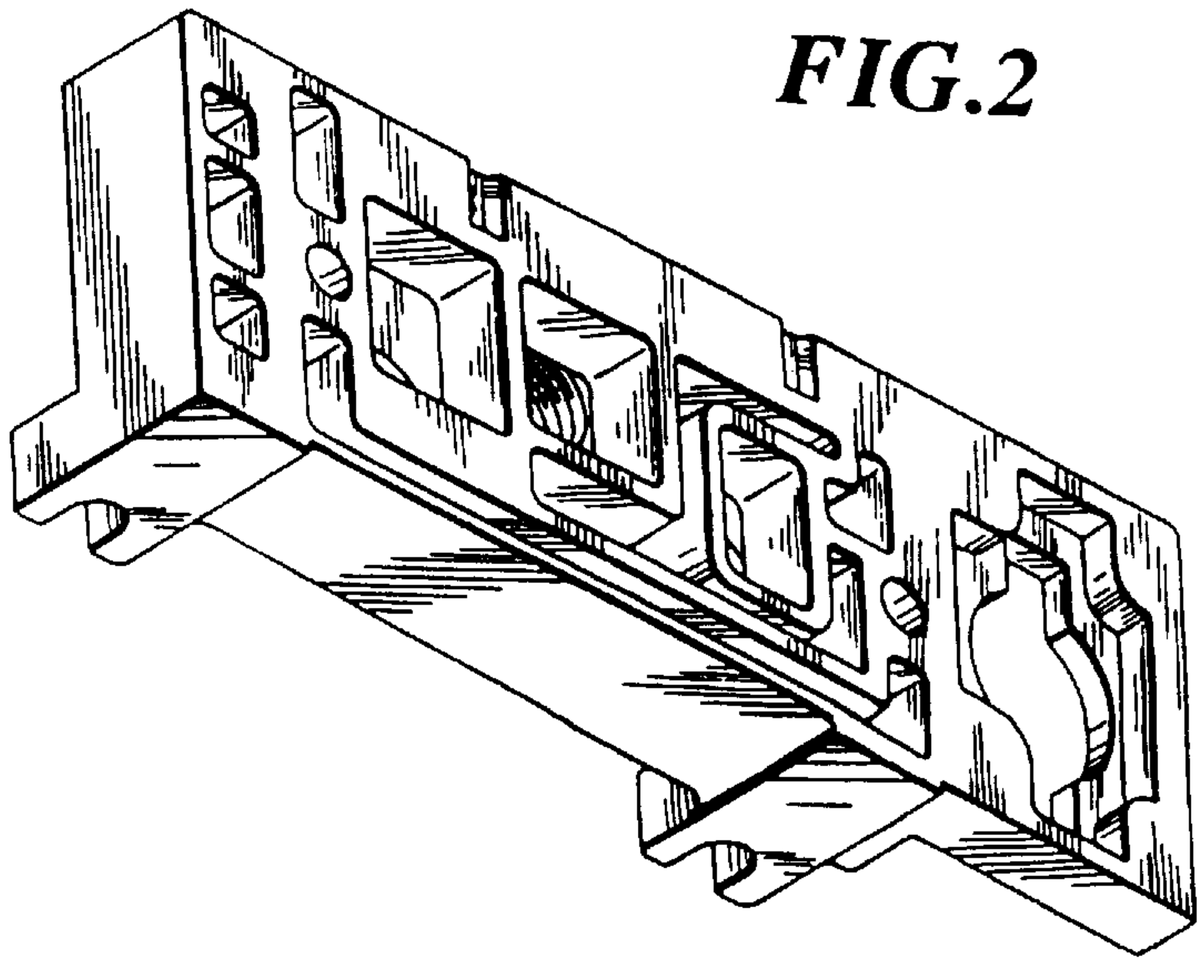


FIG.2



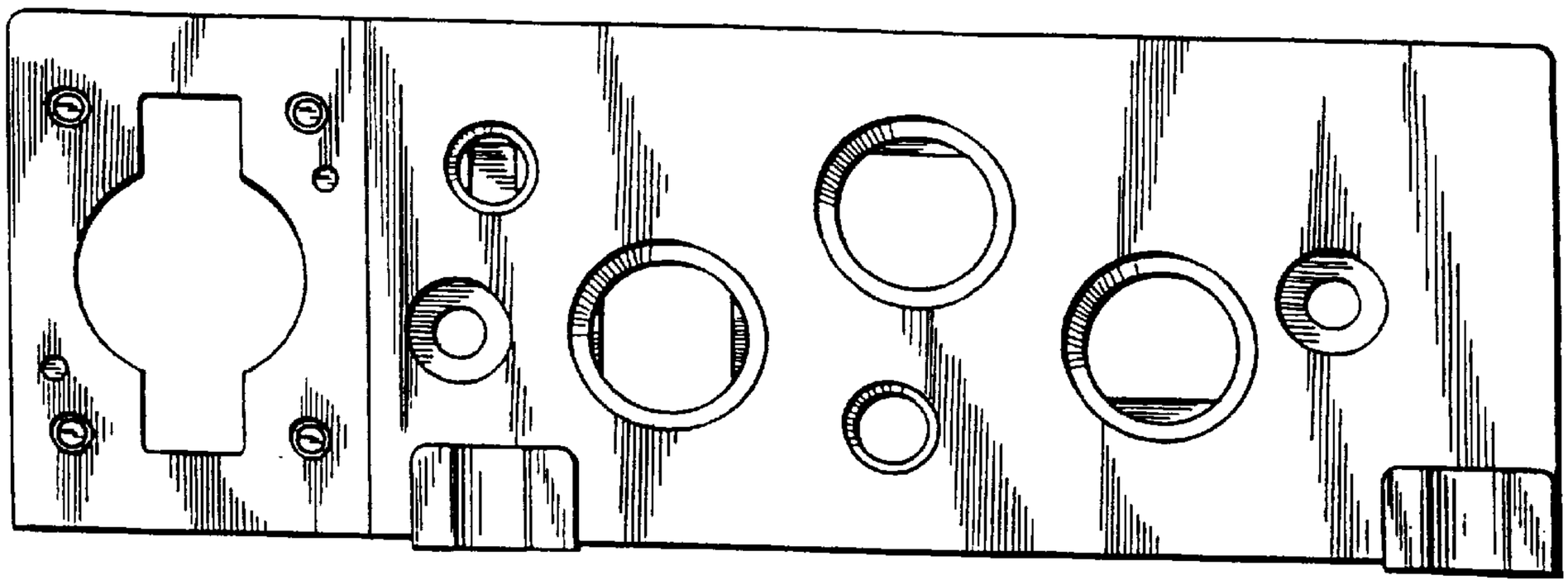


FIG.3

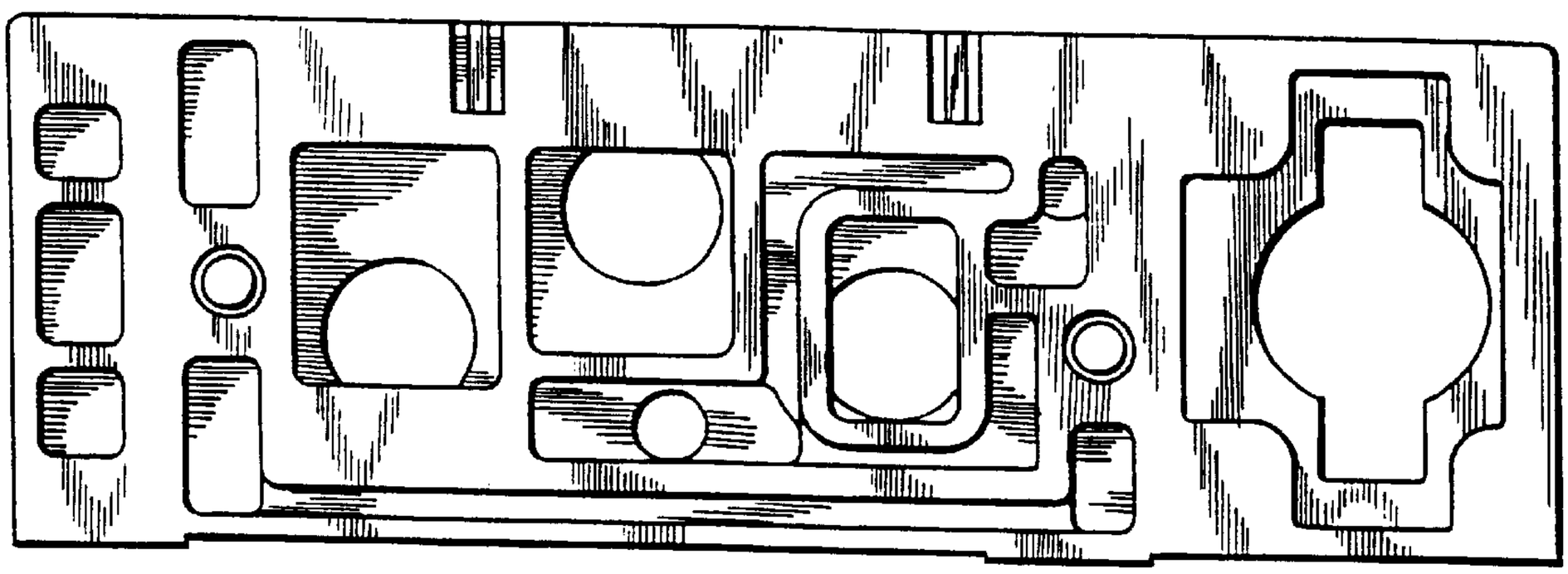


FIG.4

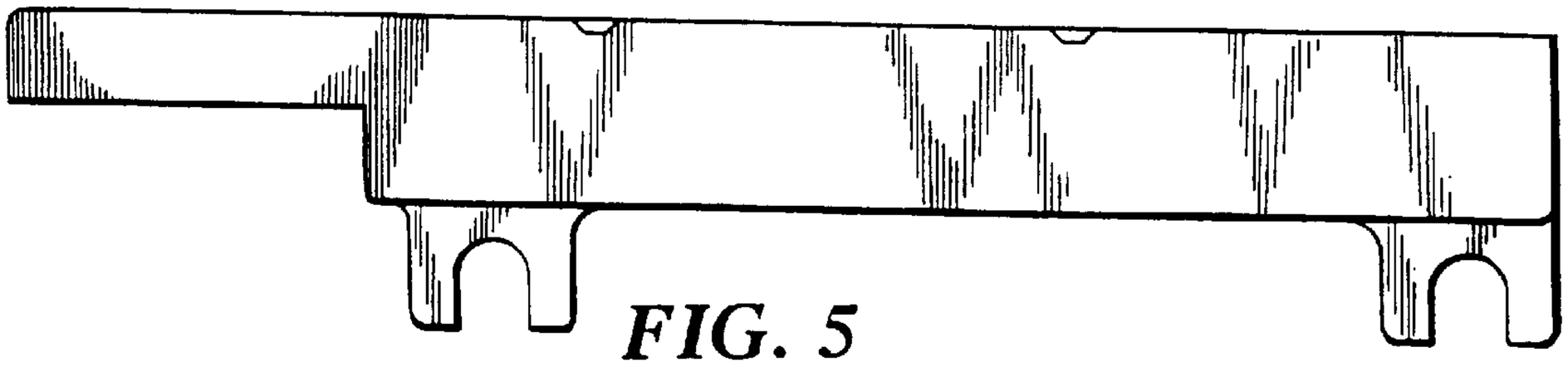


FIG. 5

FIG. 6

FIG. 9

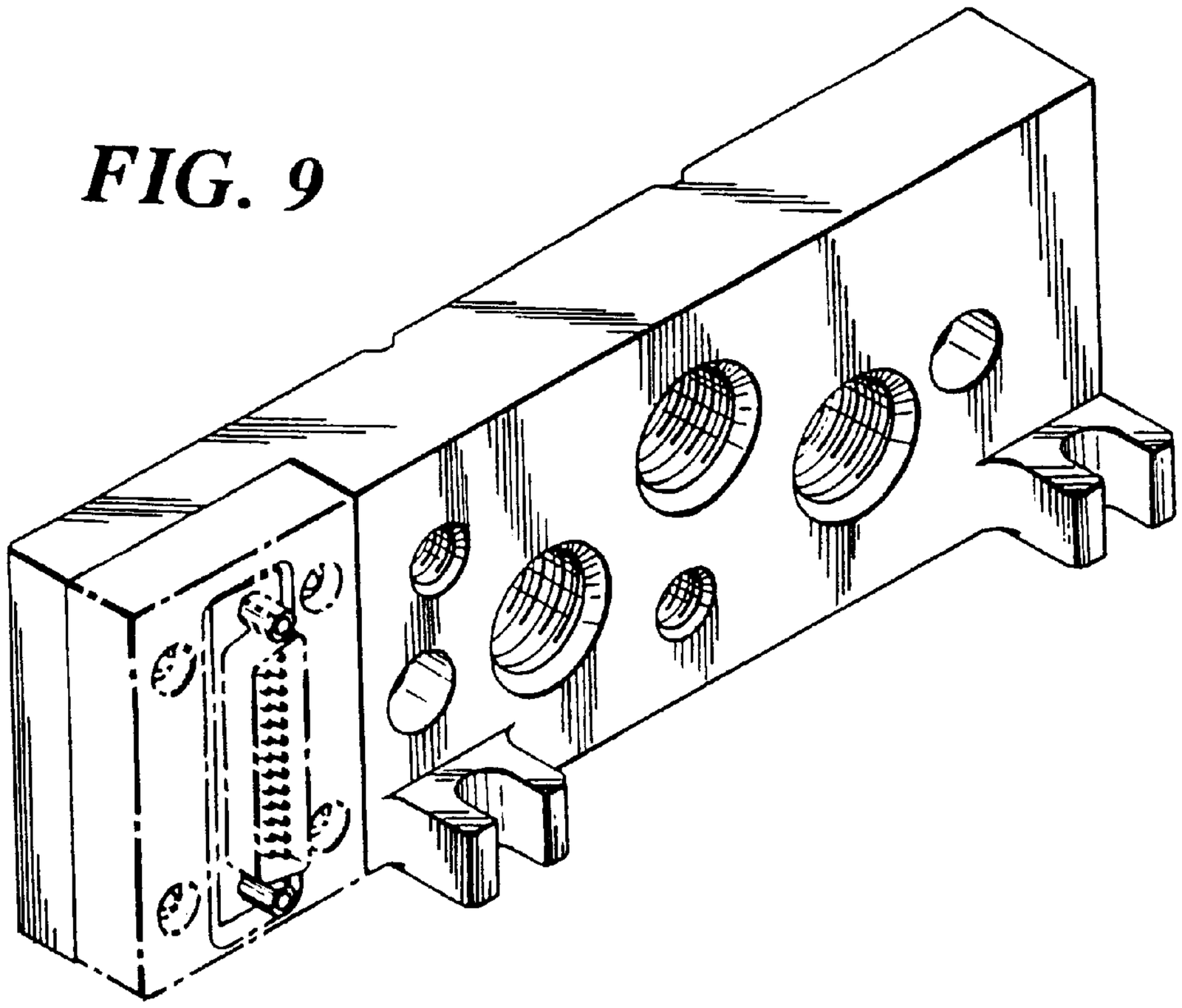


FIG. 10

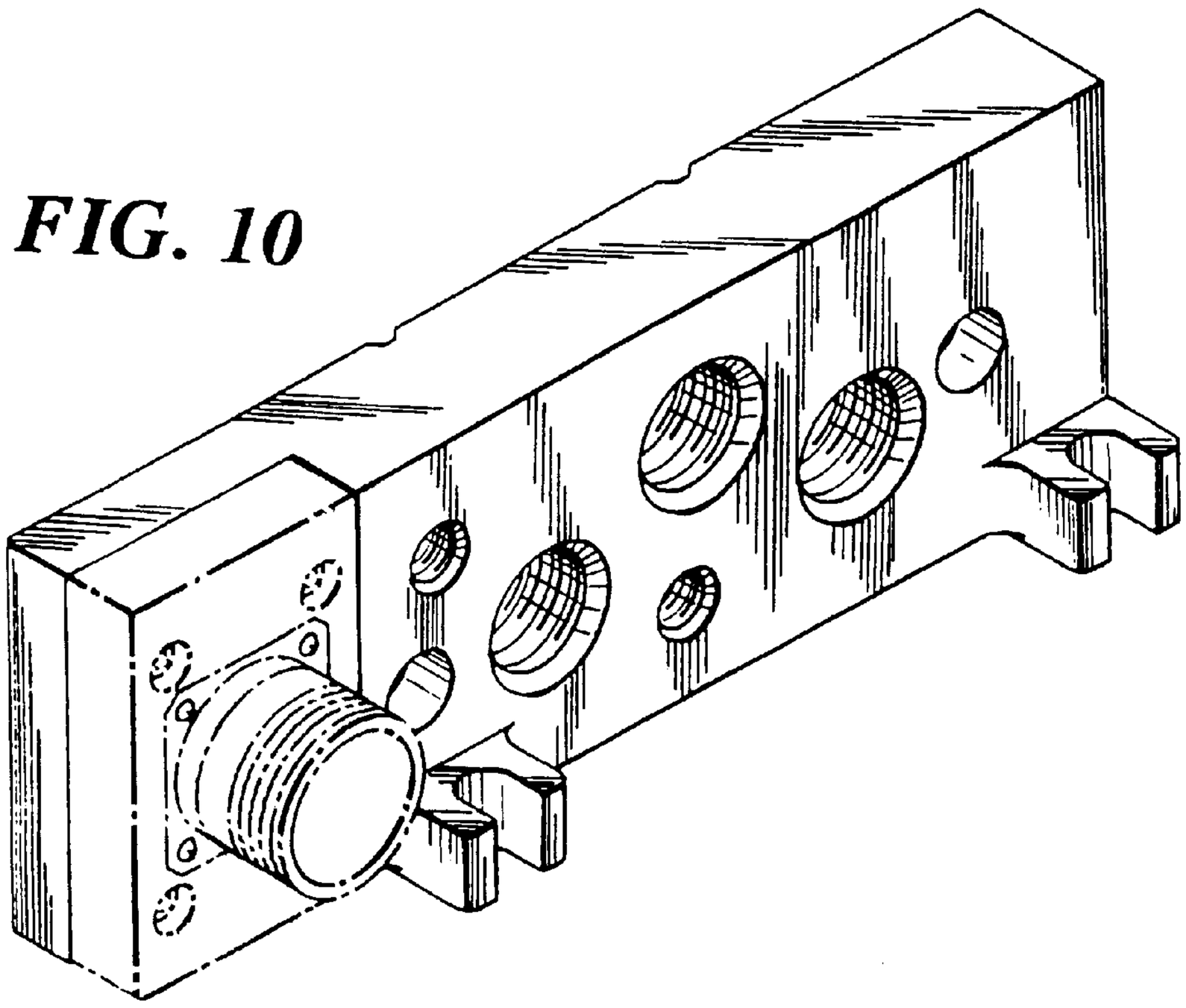


FIG. 11

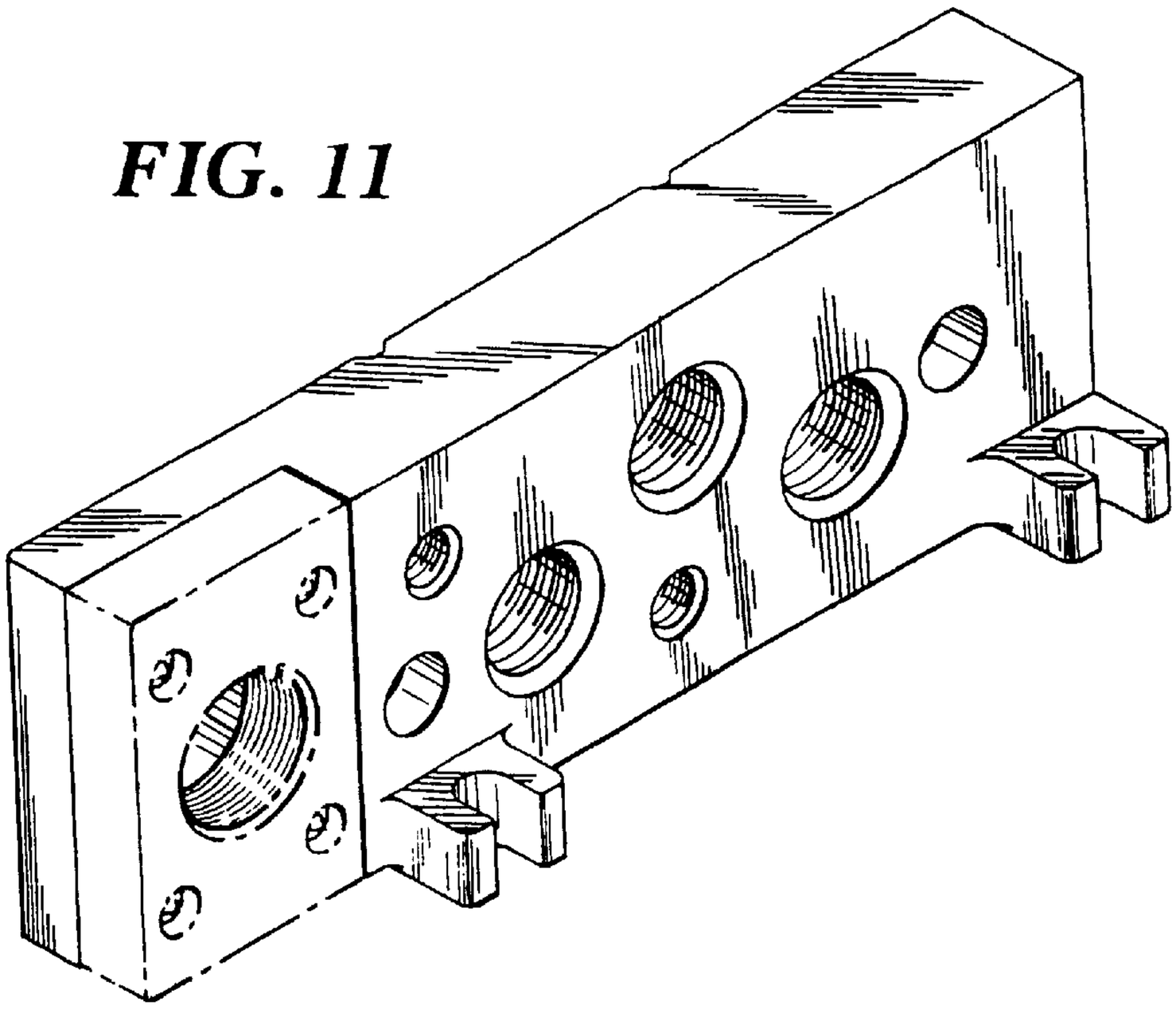


FIG. 12

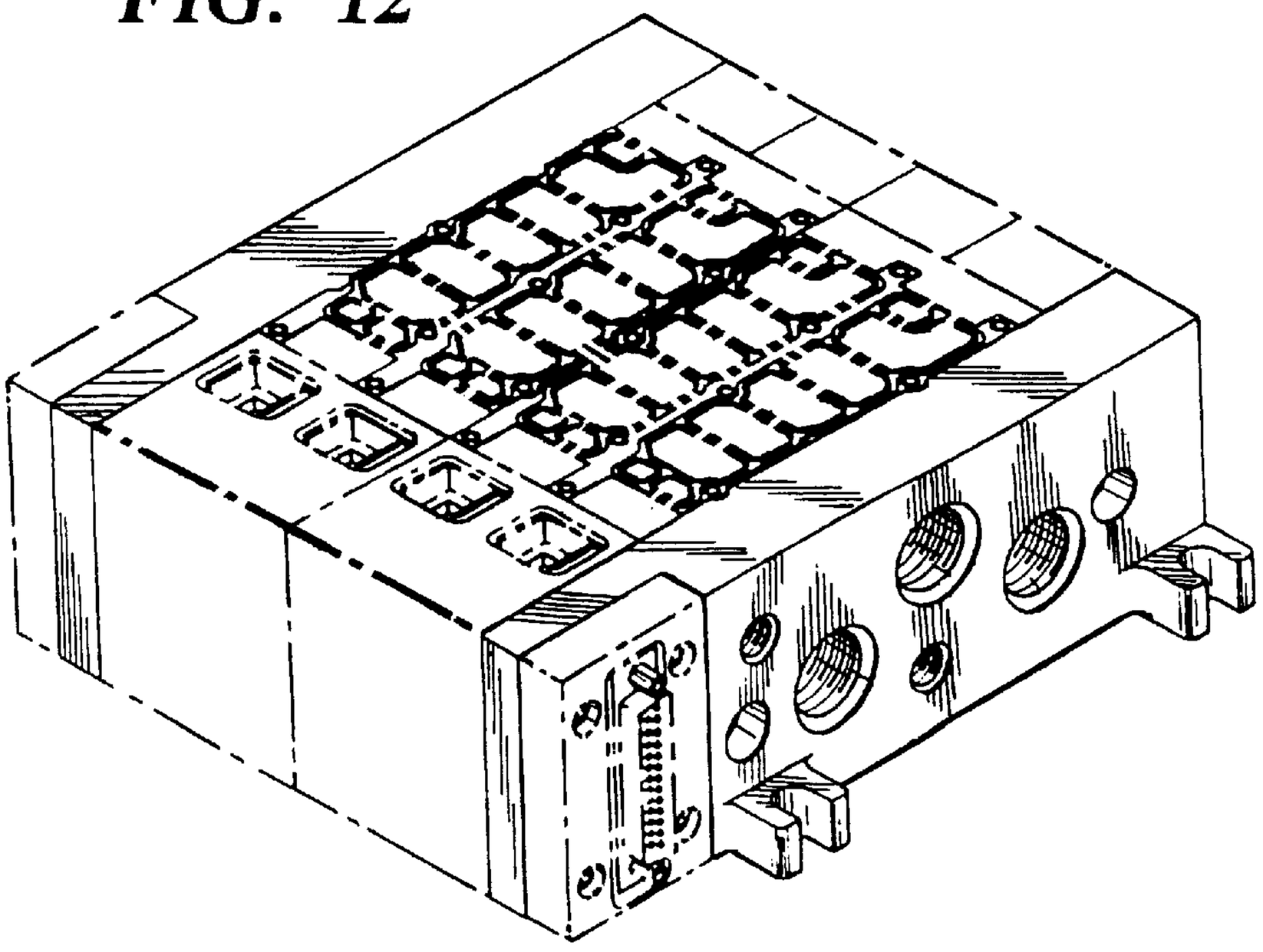


FIG. 13

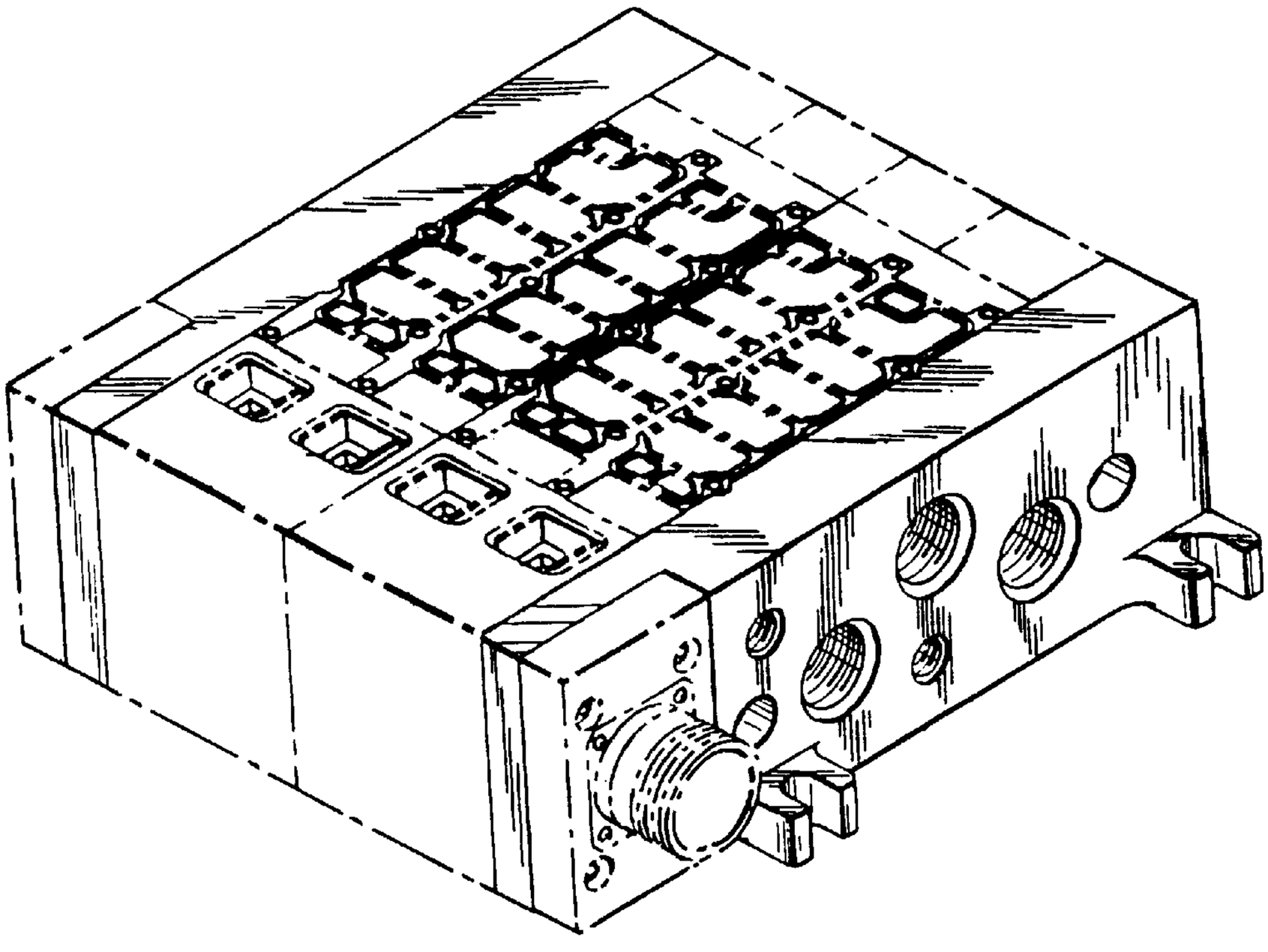


FIG. 14