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

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(54) **FLOW SENSOR**

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(73) Assignee: **Yamatake Corporation**, Tokyo (JP)

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

(21) Appl. No.: **29/385,347**

(22) Filed: **Feb. 11, 2011**

Related U.S. Application Data

(63) Continuation of application No. 29/360,854, filed on Apr. 30, 2010, now abandoned, which is a continuation of application No. 29/333,018, filed on Mar. 2, 2009, now abandoned, which is a continuation of application No. 29/303,487, filed on Feb. 11, 2008, now abandoned.

(30) **Foreign Application Priority Data**

Nov. 30, 2007 (JP) 2007-032952

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

(52) **U.S. Cl.** **D10/96**

(58) **Field of Classification Search** D10/96;
73/202.5, 204.11–204.27, 273, 274, 861.03
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

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(57) **CLAIM**

The ornamental design for a flow sensor, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of the flow sensor;
FIG. 2 is a front elevational view of the flow sensor;
FIG. 3 is a top plan view of the flow sensor;
FIG. 4 is a bottom plan view of the flow sensor;
FIG. 5 is a right side elevational view of the flow sensor; and,
FIG. 6 is a perspective view of the flow sensor in its environment of use. In this figure, elements which are not a part of the claim are illustrated in dotted lines.

Rear elevational and left-side elevational views are omitted; owing to the symmetry of the design, these views would be identical to the front and right-side views, respectively.

The design relates to a flow sensor combining a flow passage, through which fluid flows (a sensing passage) and a sensor for measuring the flow rate of a fluid in the passage. The uppermost layer is transparent and includes lead in and lead out holes for the fluid. The second layer is provided with a oval slot along the longitudinal center line which joins the lead in and lead out holes and serves as a fluid flow path onto a flow rate measuring part. Symmetric cutouts in the first and second layer expose a wiring pattern on the third layer which connects to the sensor, the third layer forming a plate-like sensor chip having the flow rate measuring part at its center. The flow rate measuring part and the fluid flow path can be observed easily because of the transparency of the first layer.

1 Claim, 3 Drawing Sheets

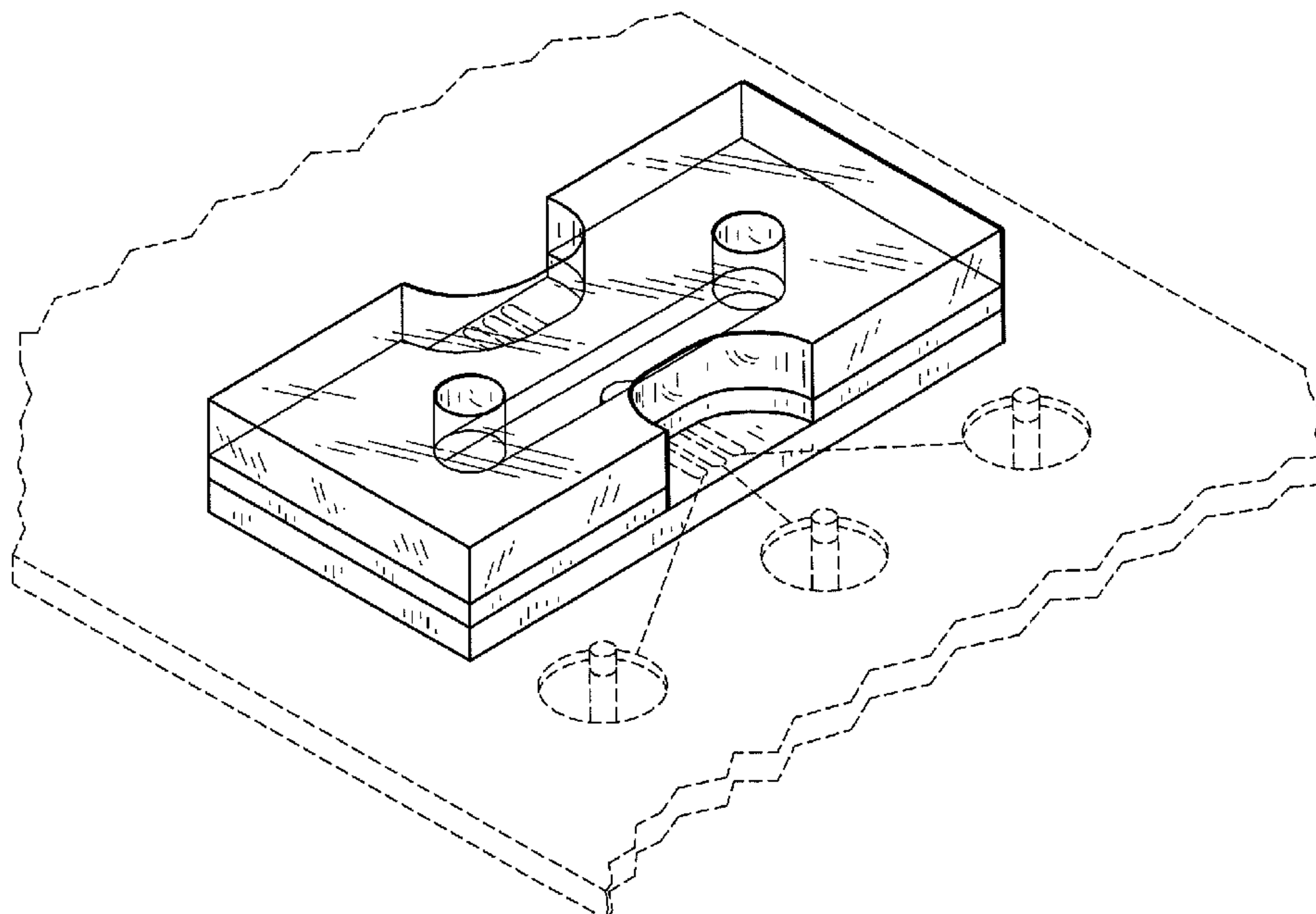


FIG. 1

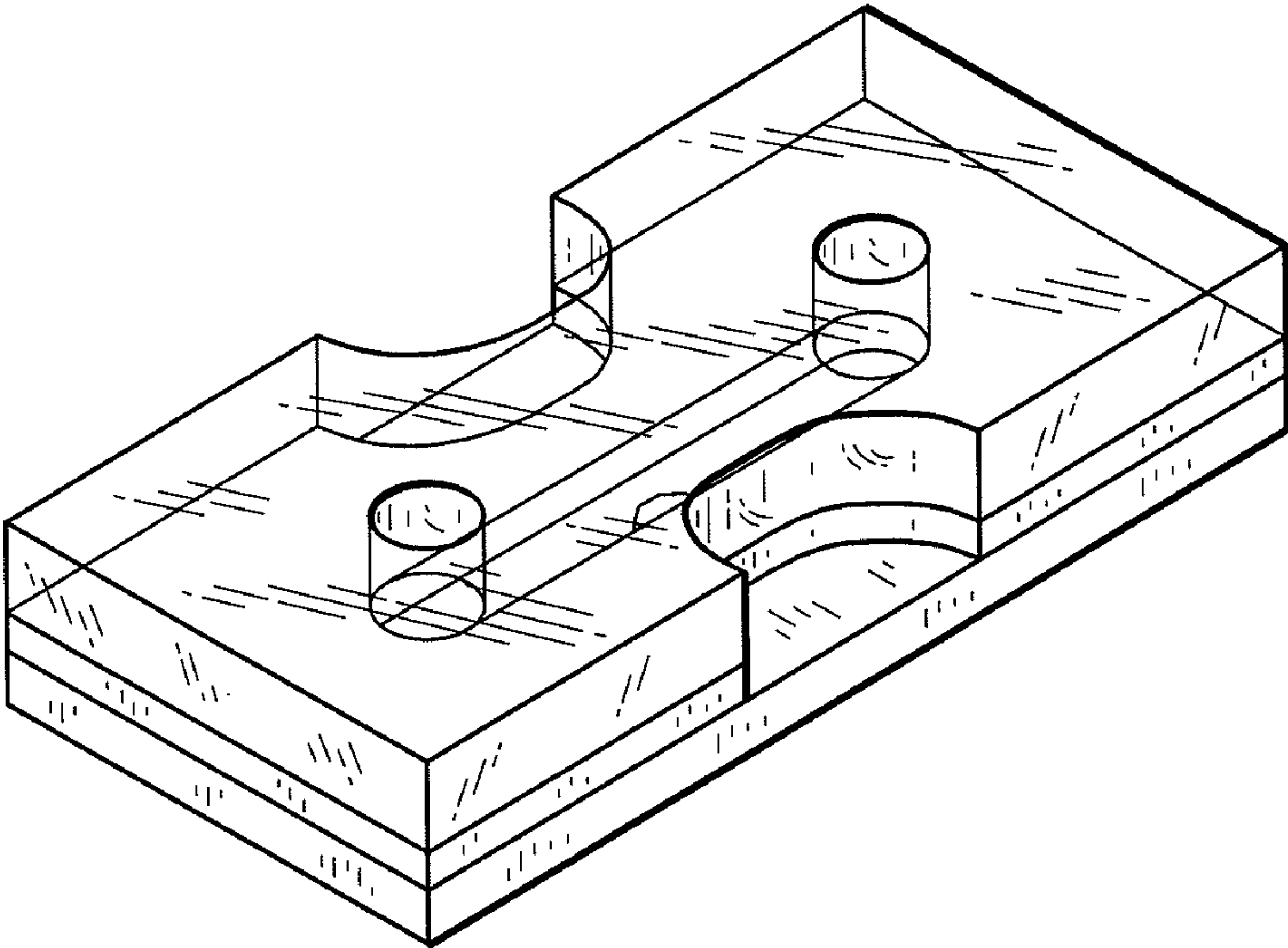


FIG. 2

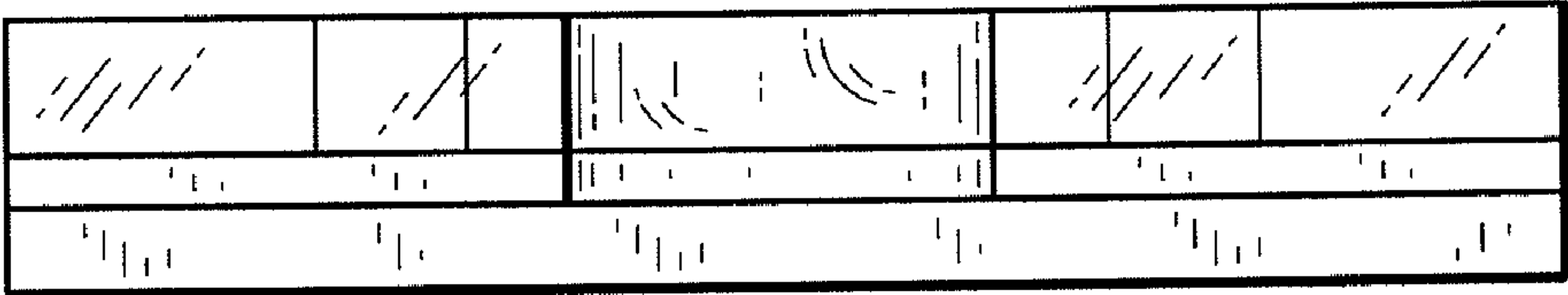


FIG. 3

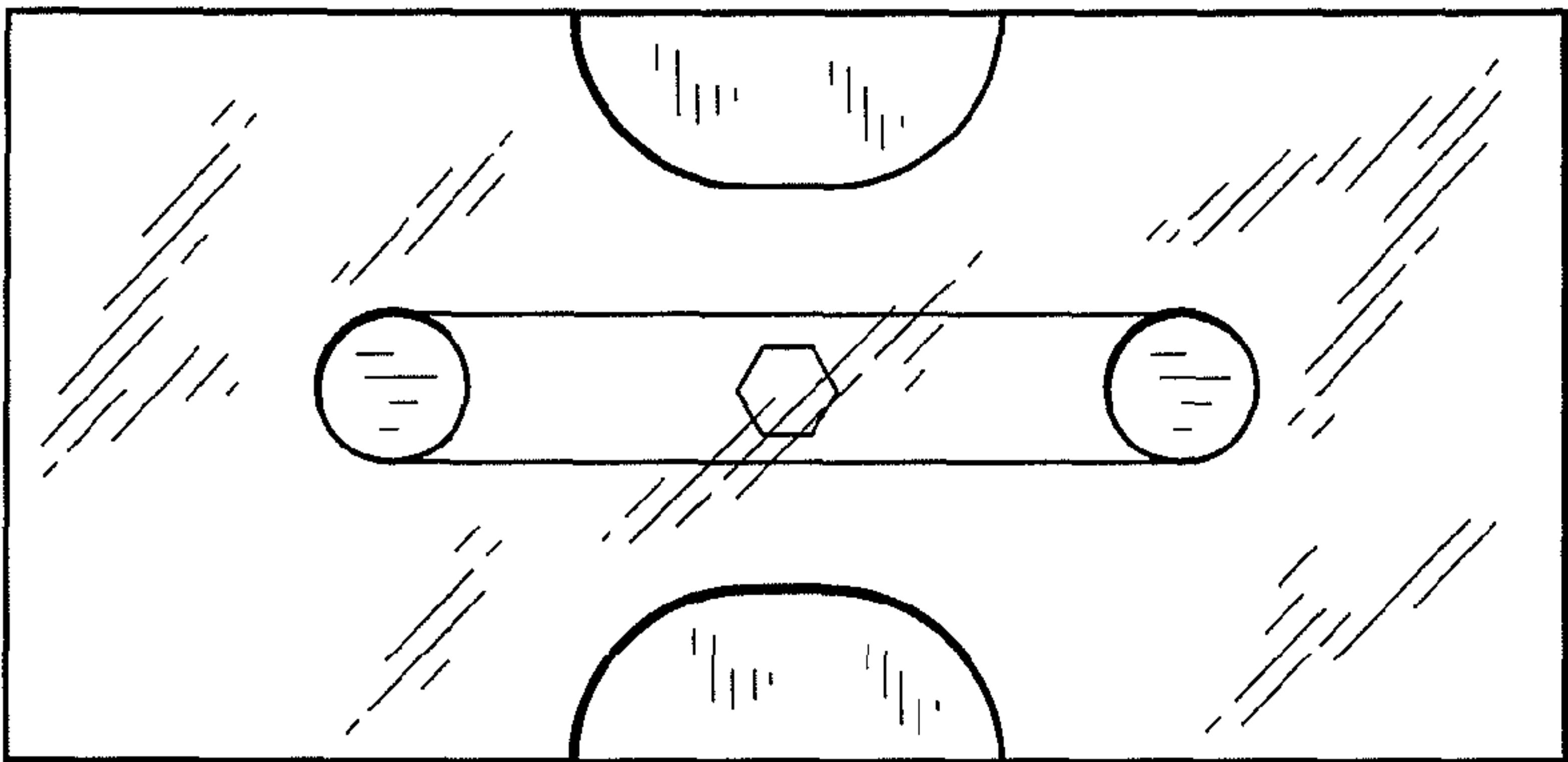


FIG. 4

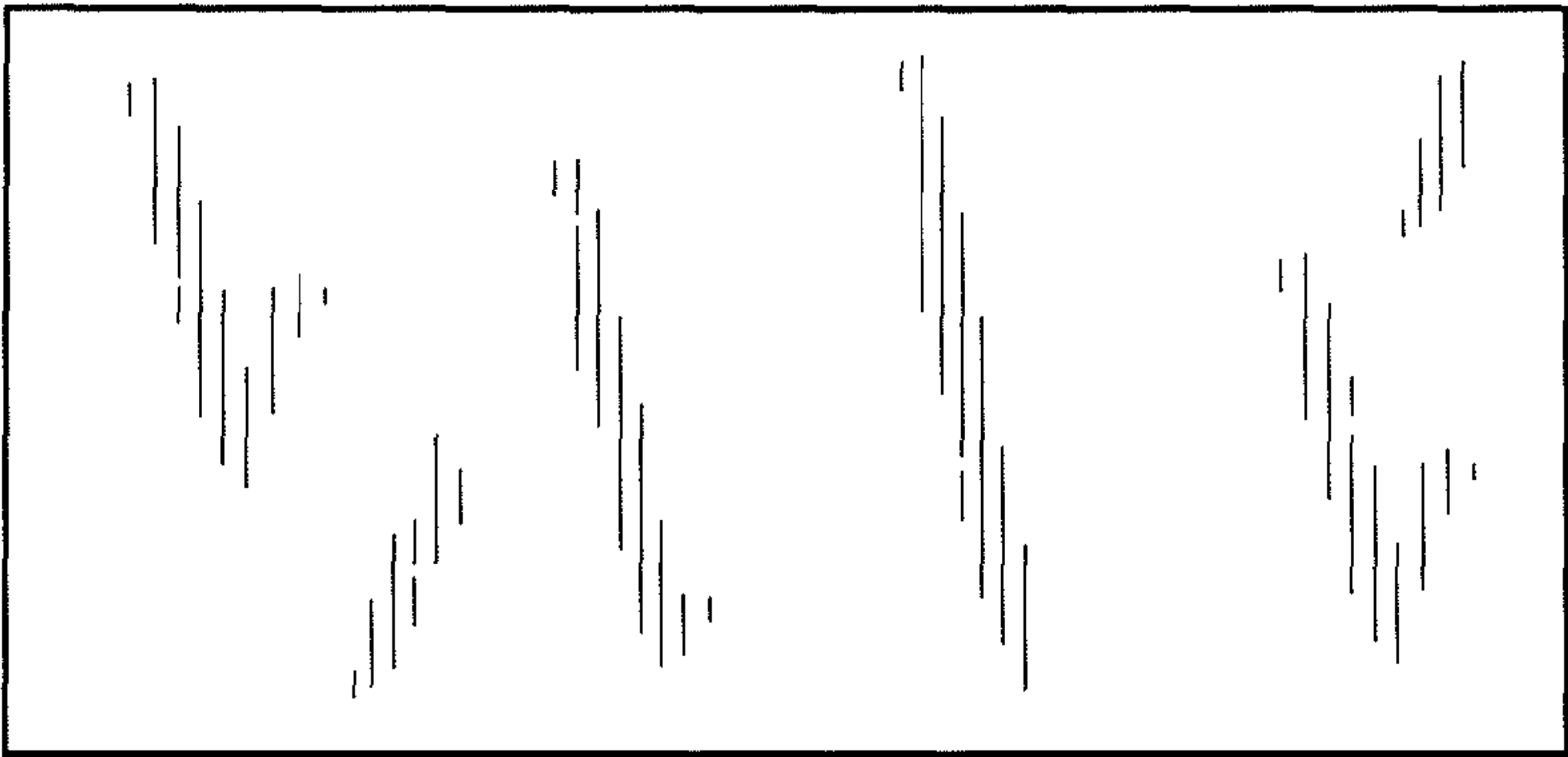


FIG. 5

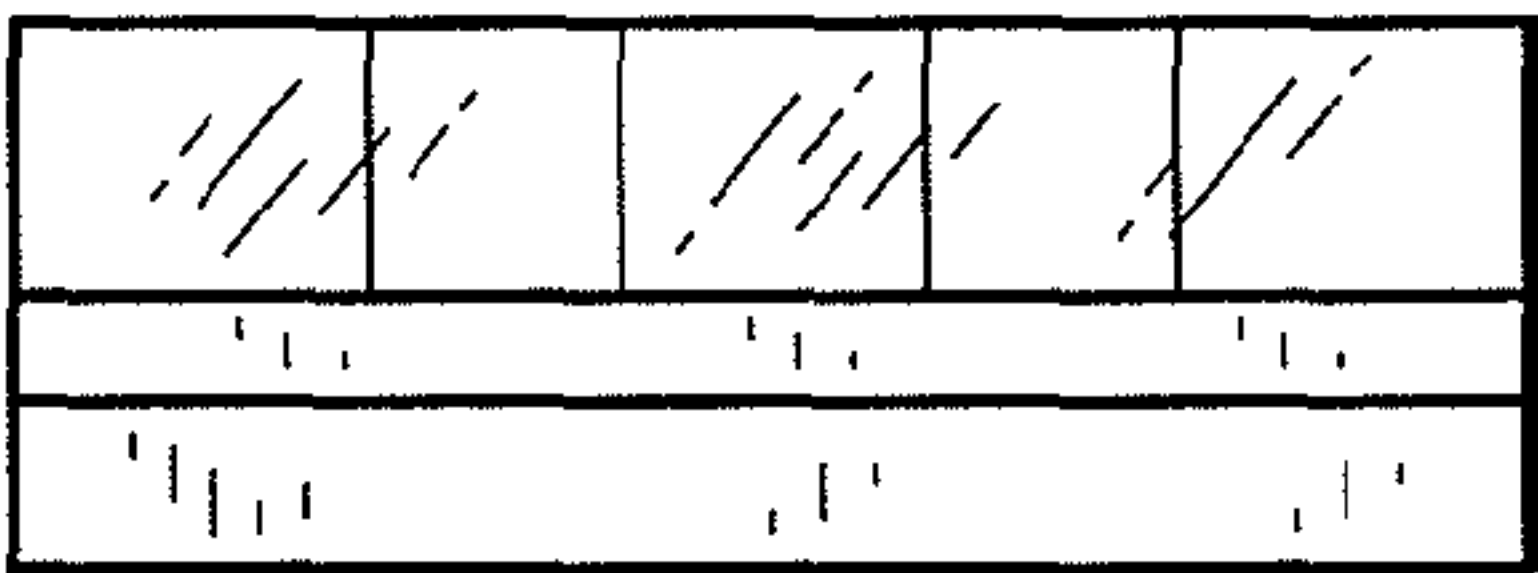


FIG. 6

