

US00D445405S

(12) **United States Design Patent**
Schneider et al.

(10) **Patent No.: US D445,405 S**
(45) **Date of Patent: ** Jul. 24, 2001**

(54) **ELECTRONIC CONTROL APPARATUS**

89/03085 4/1989 (WO) .

(75) Inventors: **Frank Schneider**, Pforzheim; **Tino Zink**, Neulingen; **Klaus Limberg**, Pforzheim, all of (DE)

* cited by examiner

Primary Examiner—Adir Aronovich

(74) *Attorney, Agent, or Firm*—Foley & Lardner

(73) Assignee: **Grässlin KG**, St. Georgen (DE)

(57) **CLAIM**

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

The ornamental design for an electronic control apparatus, as shown and described.

(21) Appl. No.: **29/120,298**

DESCRIPTION

(22) Filed: **Mar. 17, 2000**

Related U.S. Application Data

(60) Division of application No. 29/094,872, filed on Oct. 13, 1998, which is a continuation-in-part of application No. 29/087,450, filed on May 4, 1998.

(51) **LOC (7) Cl.** **13-03**

(52) **U.S. Cl.** **D13/162**

(58) **Field of Search** D10/49, 50, 51,
D10/52; D13/162, 164; 165/217, 238; 236/46 R

(56) References Cited

U.S. PATENT DOCUMENTS

D. 242,230	11/1976	Manecke et al		D10/50
D. 260,004	7/1981	Ohhasi et al.		D10/50
D. 325,902	5/1992	Hudson et al.		D13/184
D. 355,136 *	2/1995	Highman et al.		D10/50
4,316,256	2/1982	Hendricks et al.		236/46 R
4,388,692 *	6/1983	Jones et al.		236/46 R
4,431,134 *	2/1984	Hendricks et al.		236/46 R
4,819,714	4/1989	Otsuka et al.		165/217
4,948,044 *	8/1990	Cacciatore		236/46 R

FOREIGN PATENT DOCUMENTS

296 00 654 U	4/1996	(DE) .
195 11 352	10/1996	(DE) .
296 22 062 U	4/1997	(DE) .
196 15 840	10/1997	(DE) .
434 926	7/1991	(EP) .
0 720 077	7/1996	(EP) .

FIG. 1 is a perspective view of an electronic control apparatus showing our new design;
FIG. 2 is a left side elevation view thereof;
FIG. 3 is a top plan view thereof;
FIG. 4 is a front elevation view thereof;
FIG. 5 is a bottom plan view thereof;
FIG. 6 is a right side elevation view thereof;
FIG. 7 is a back elevation view thereof;
FIG. 8 is a perspective view of a second embodiment of the electronic control apparatus;
FIG. 9 is a bottom plan view thereof;
FIG. 10 is a top plan view thereof, wherein the left, front, right and back views are the same as those shown in FIGS. 2, 4, 6 and 7, respectively;
FIG. 11 is a perspective view of a third embodiment of the electronic control apparatus;
FIG. 12 is a left side elevation view thereof;
FIG. 13 is a top plan view thereof;
FIG. 14 is a front elevation view thereof;
FIG. 15 is a bottom plan view thereof;
FIG. 16 is a right side elevation view thereof;
FIG. 17 is a back elevation view thereof;
FIG. 18 is a perspective view of a fourth embodiment of the electronic control apparatus;
FIG. 19 is a left side elevation view thereof;
FIG. 20 is a top plan view thereof;
FIG. 21 is a bottom plan view thereof; and,
FIG. 22 is a right side elevation view thereof, wherein in the front and back views are the same as those shown in FIGS. 14 and 17, respectively.

1 Claim, 10 Drawing Sheets

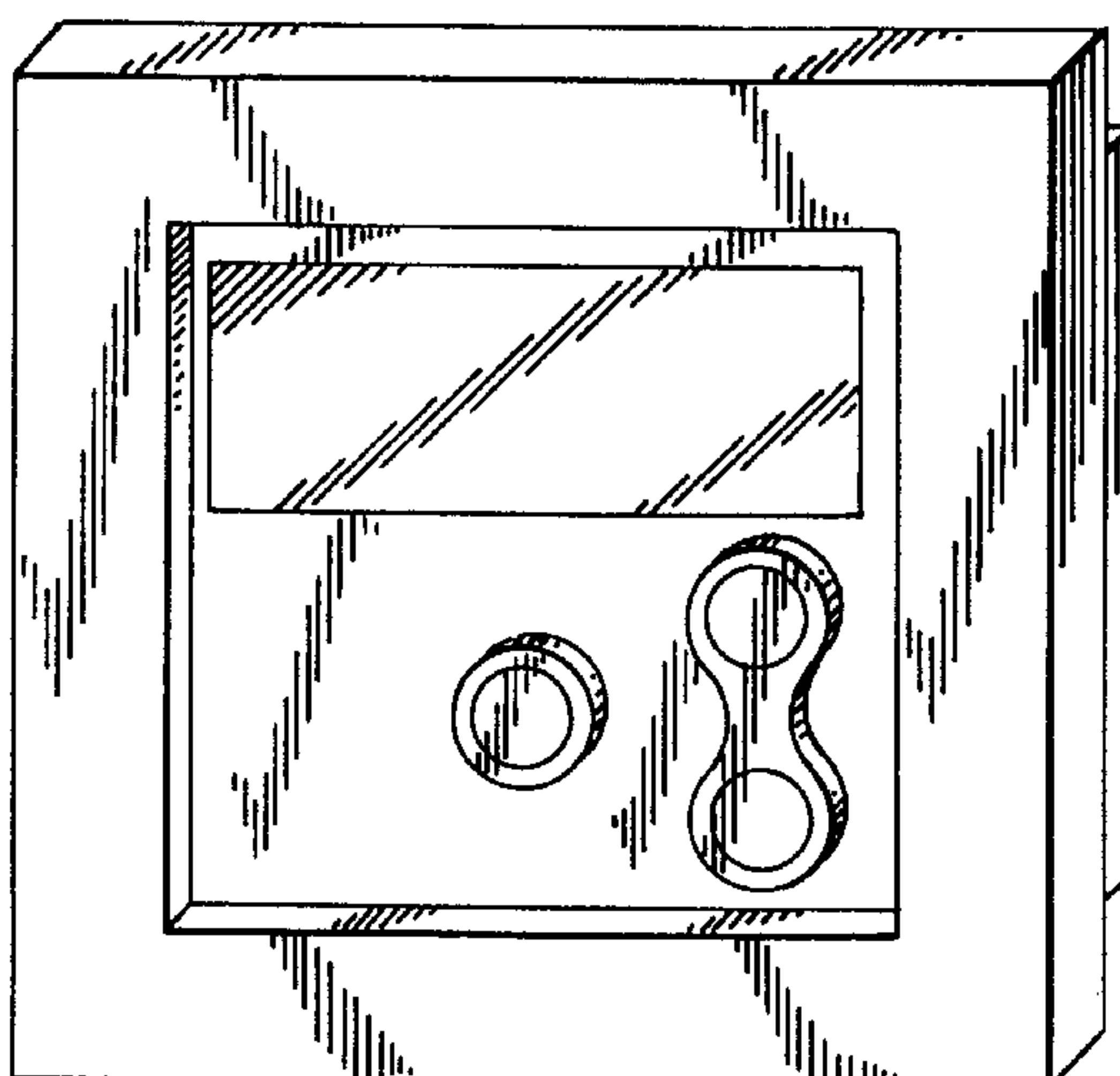


FIG. 1

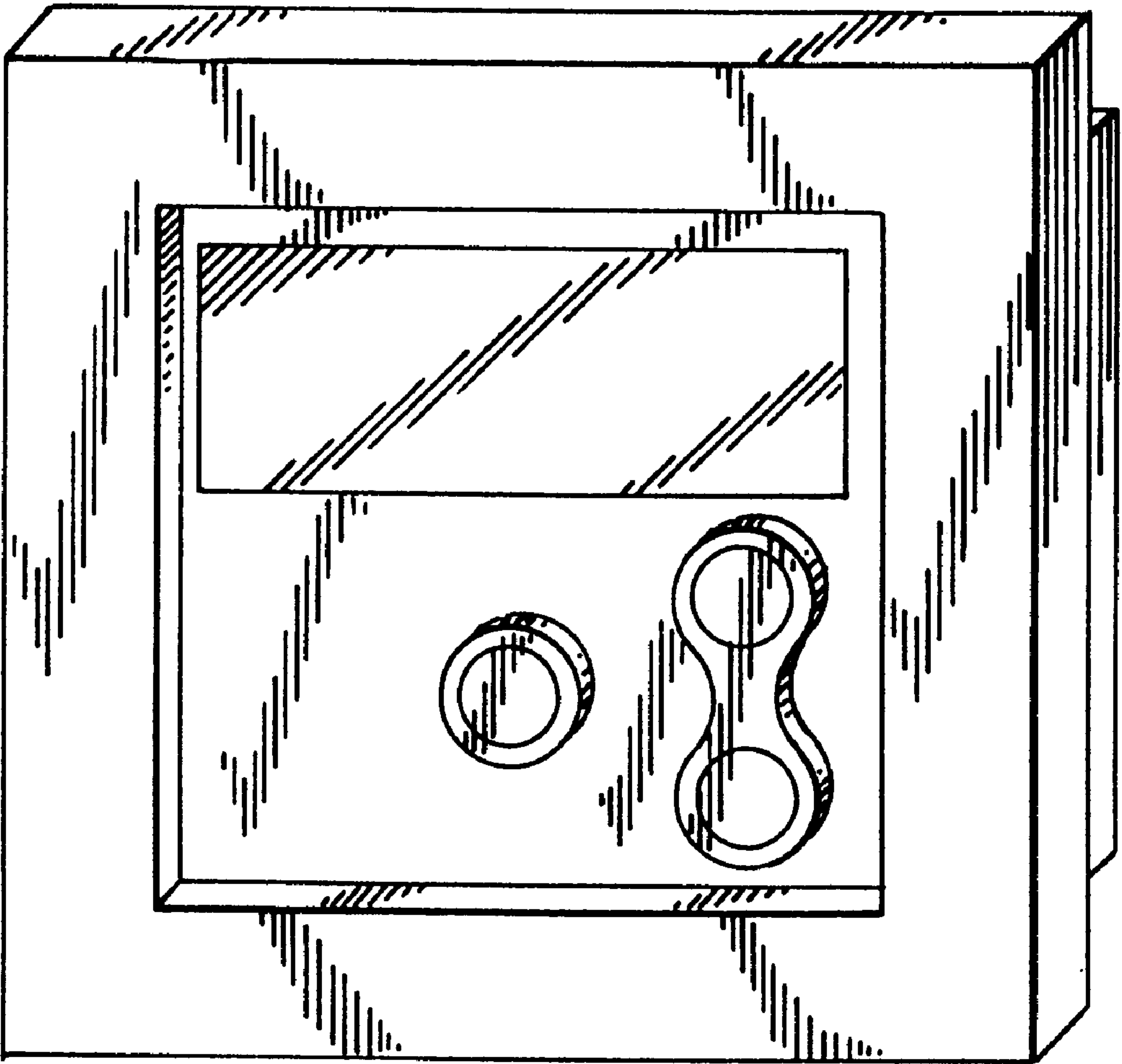


FIG. 2

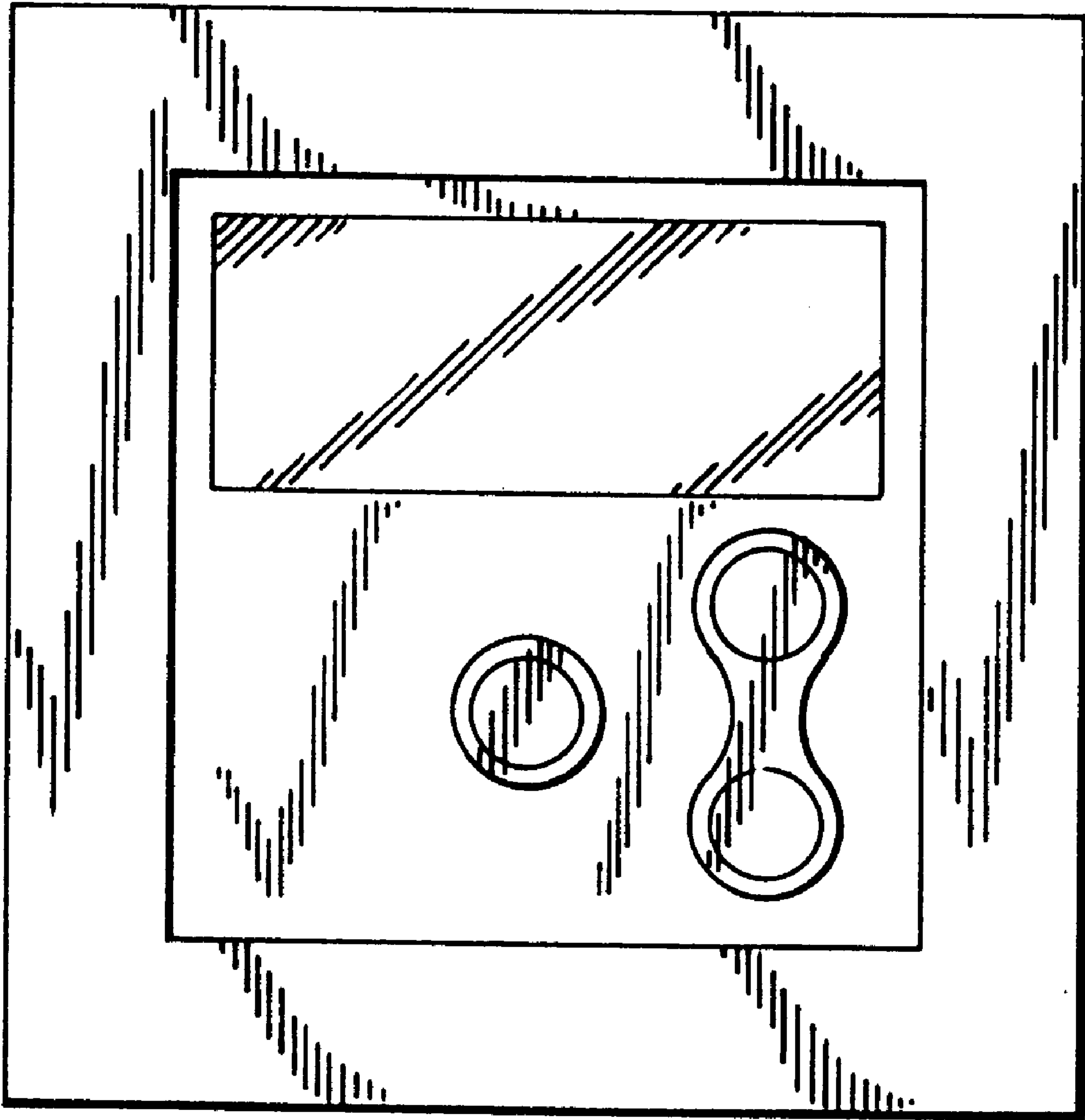


FIG. 4

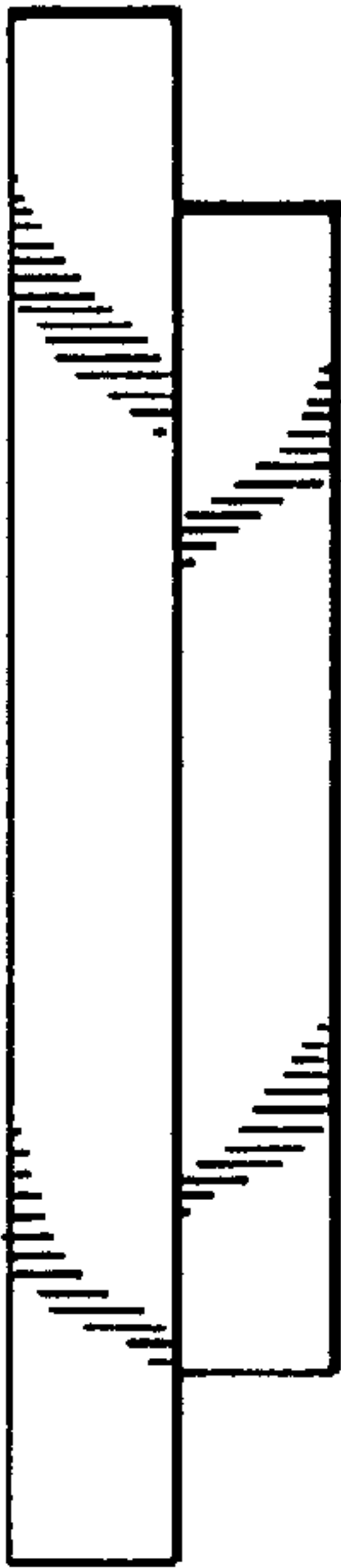


FIG. 3



FIG. 6



FIG. 7

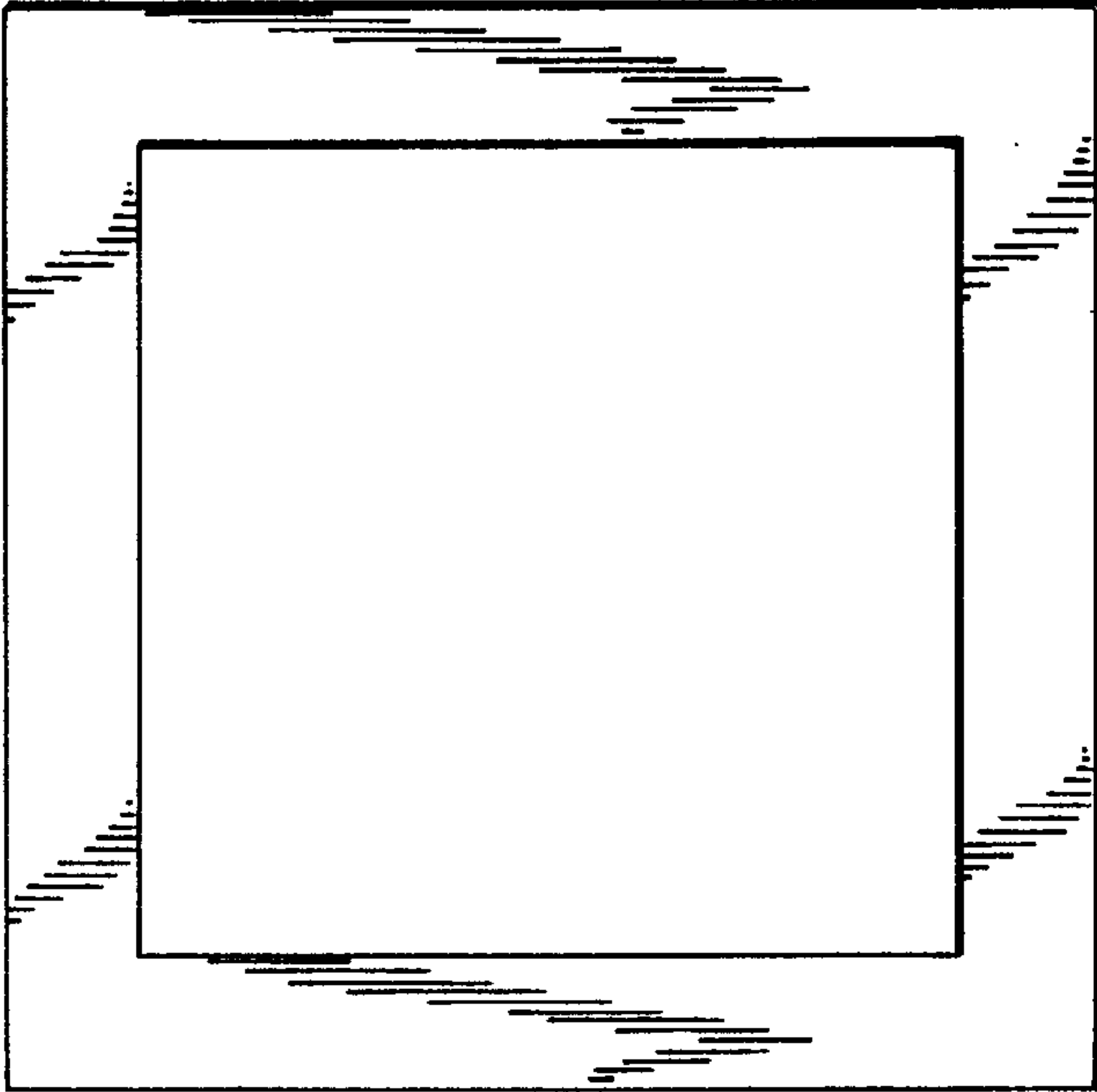


FIG. 5

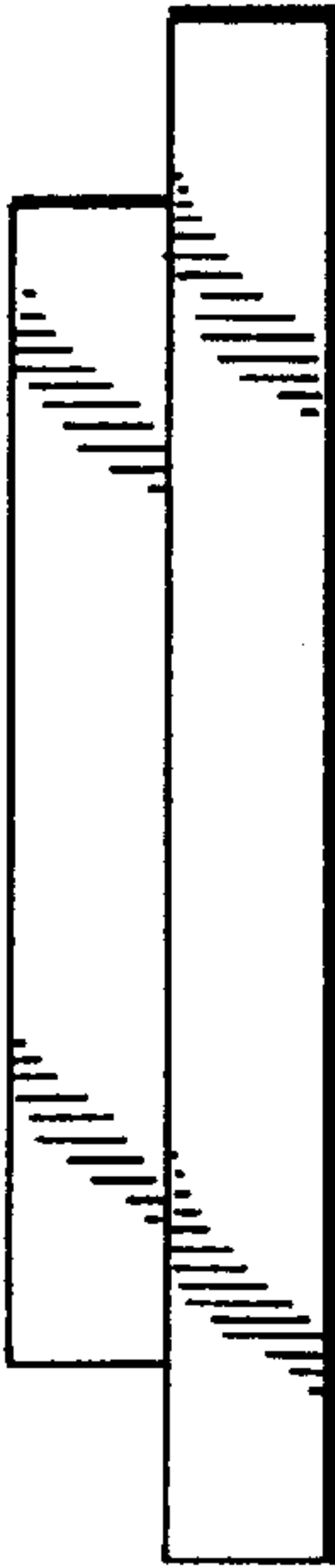


FIG. 8

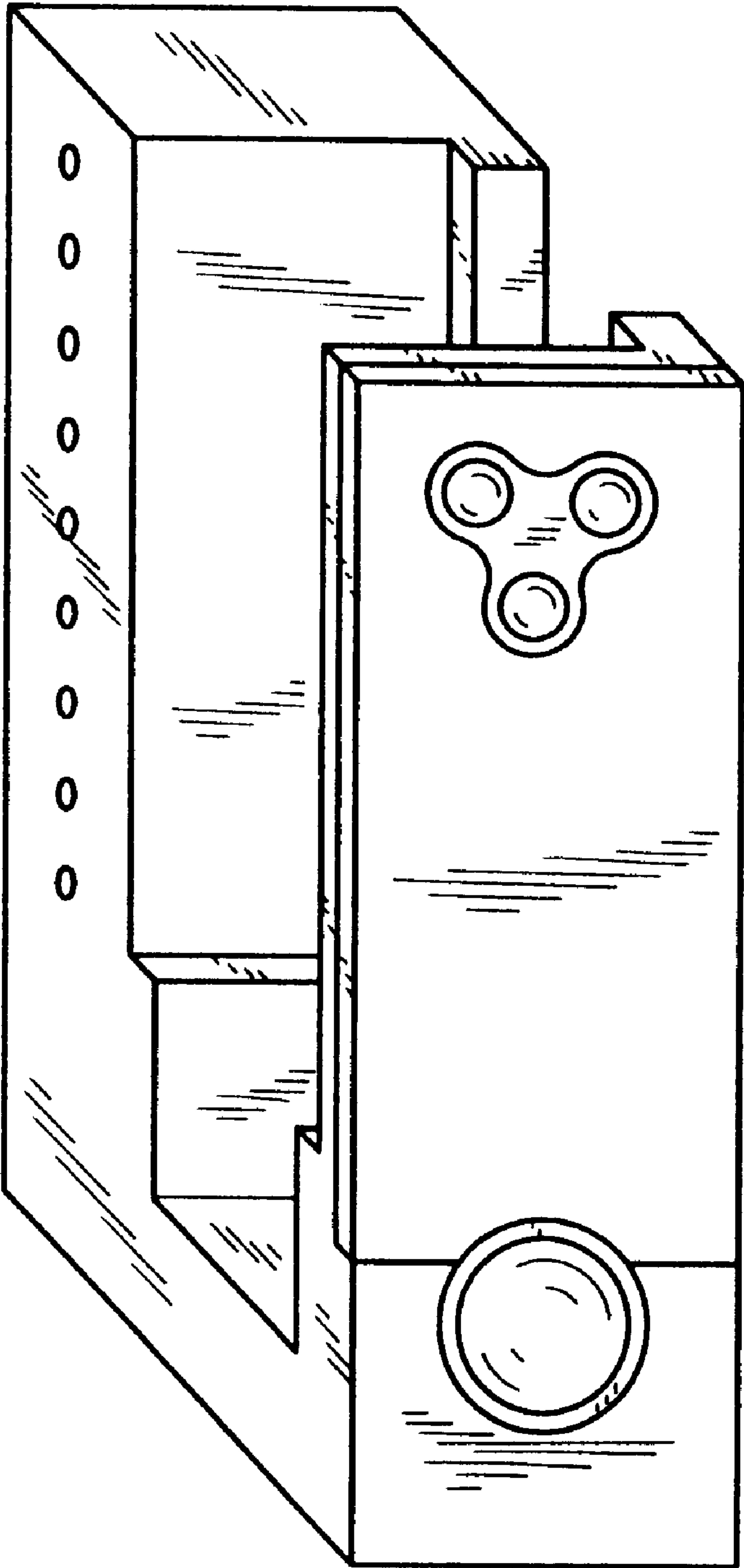


FIG. 9

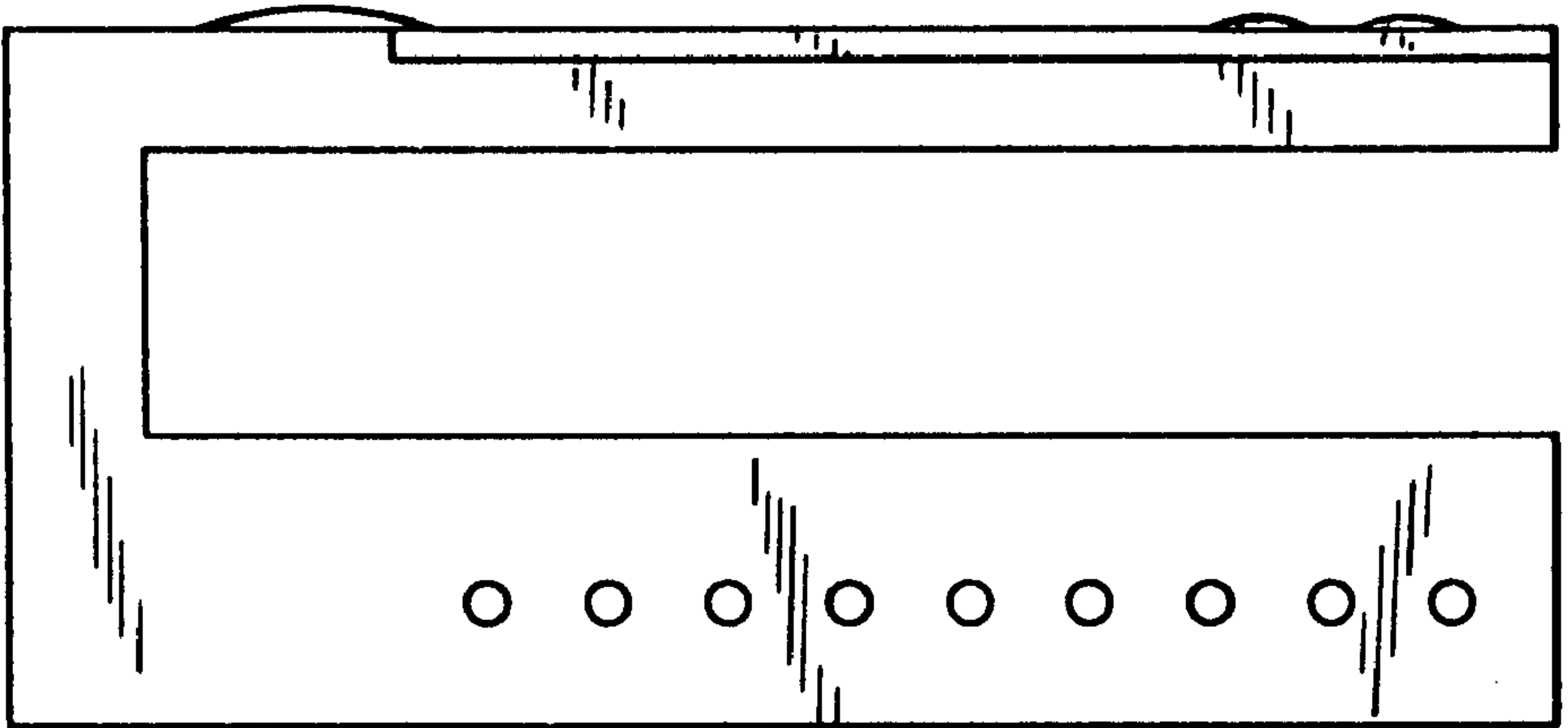


FIG. 10

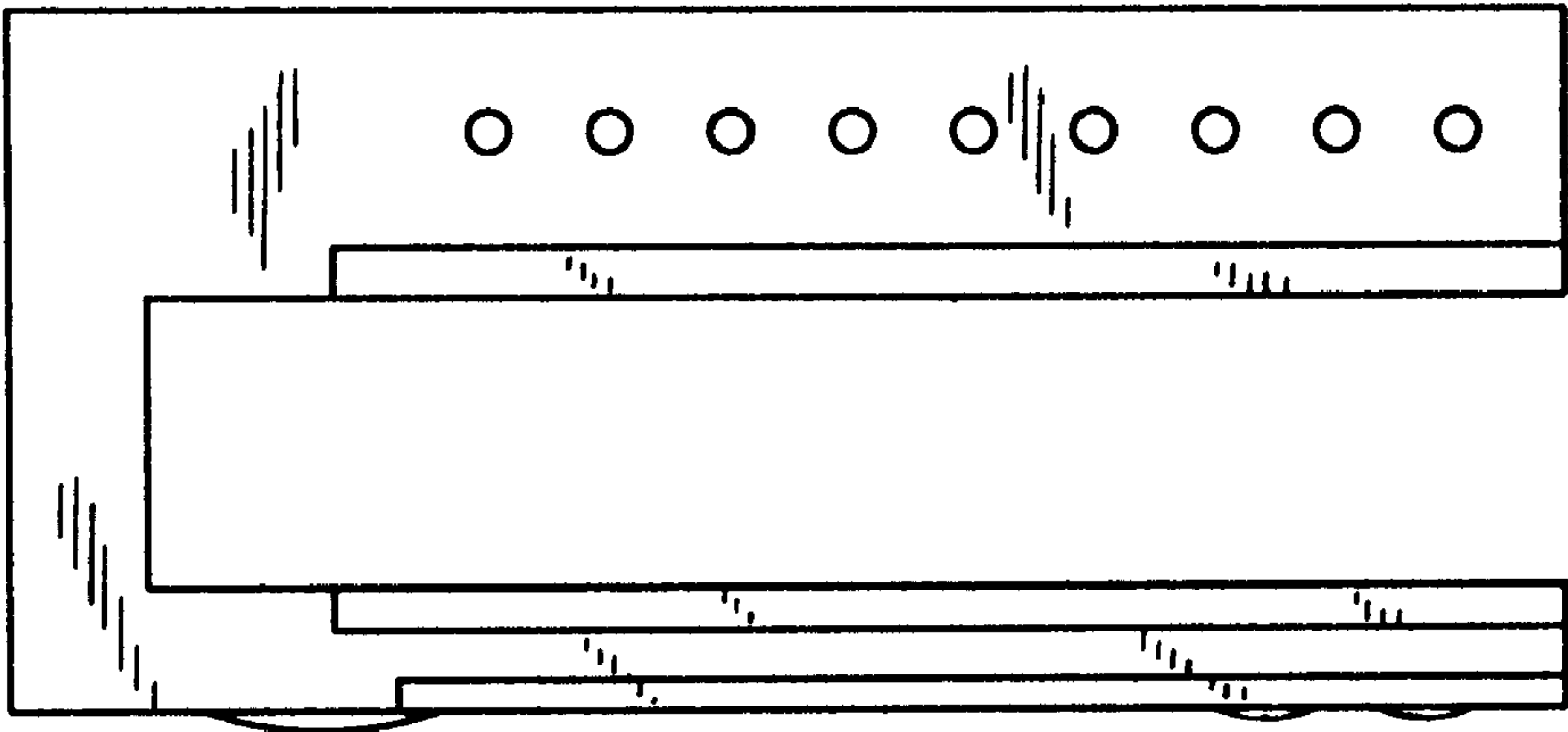


FIG. 11

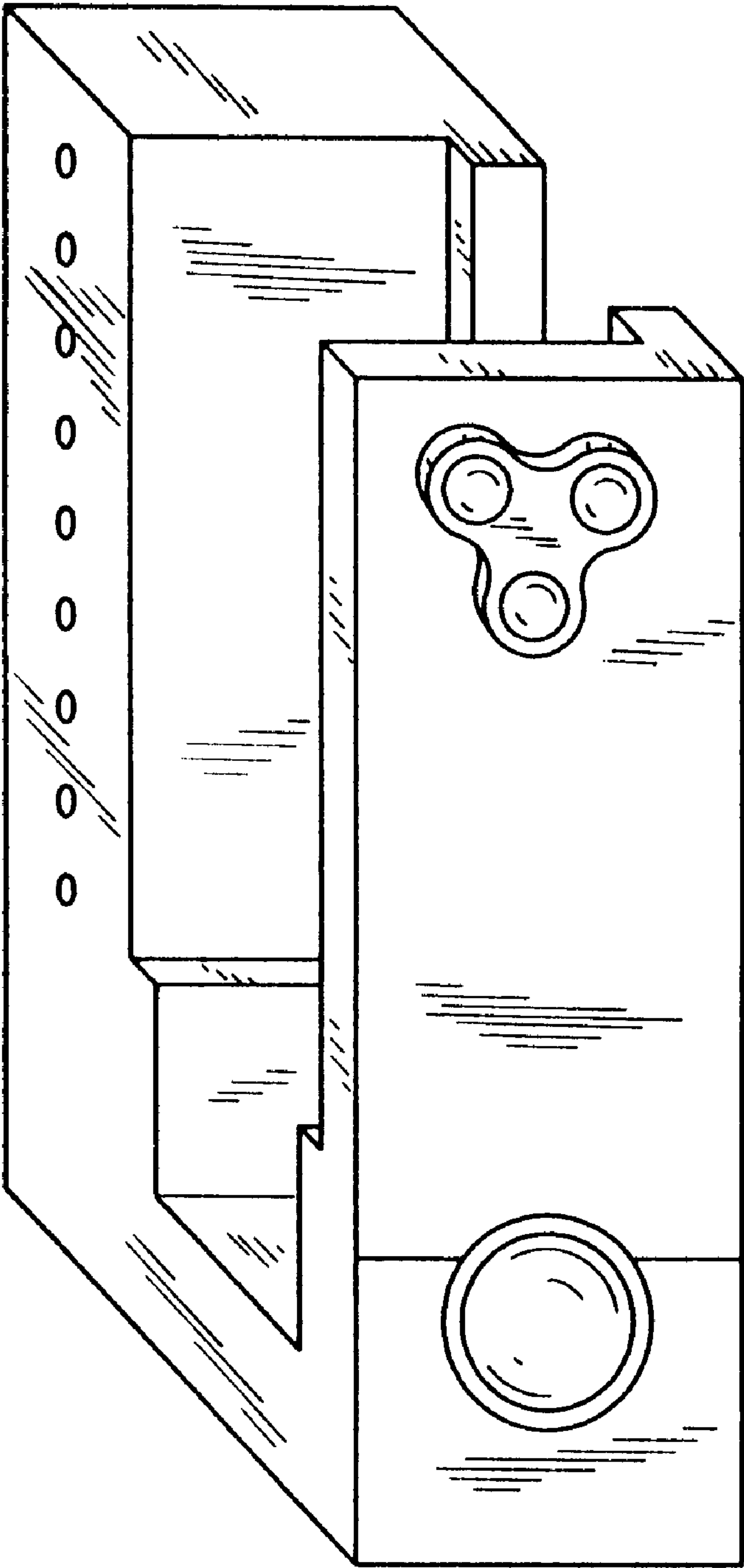


FIG.12

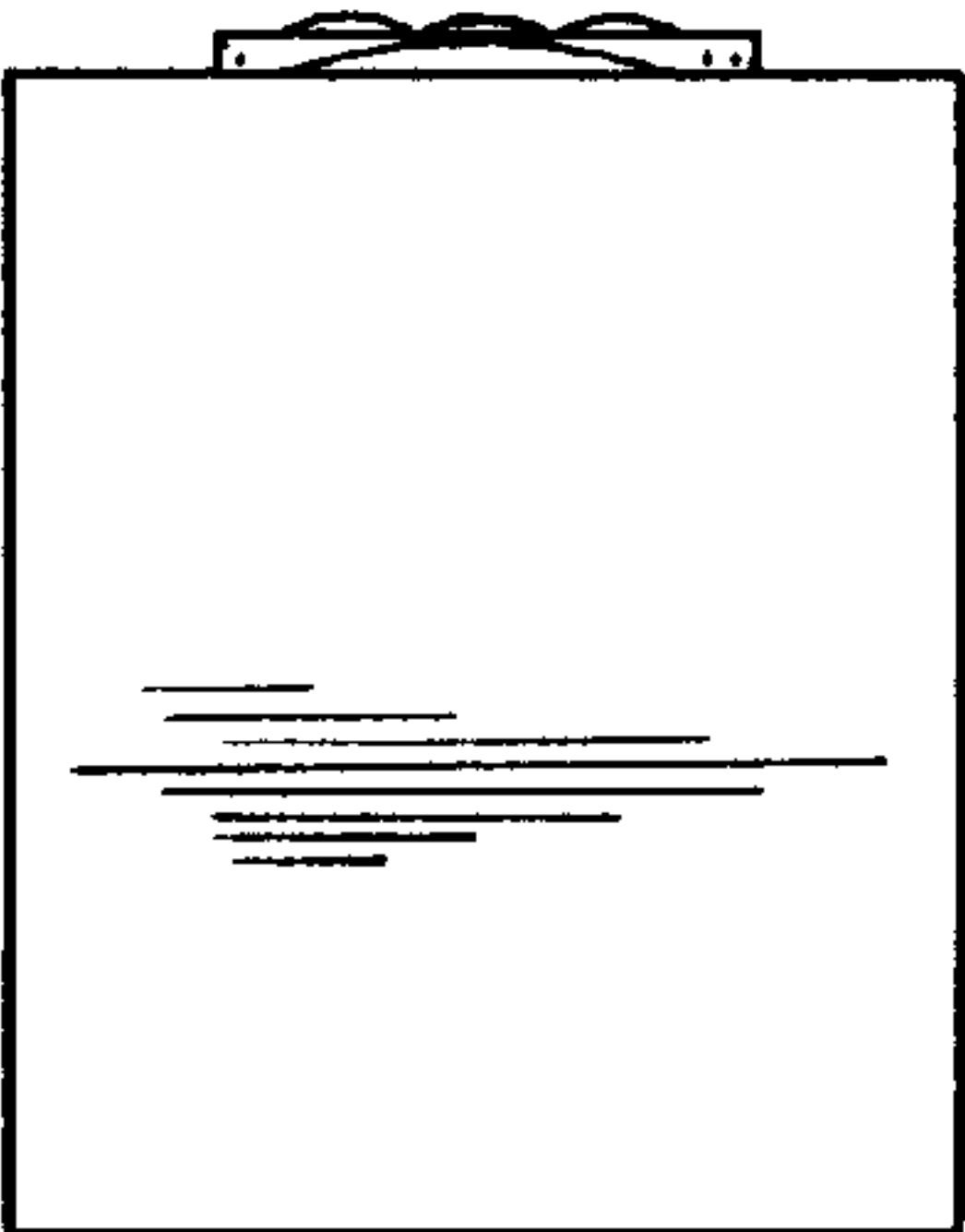


FIG.14

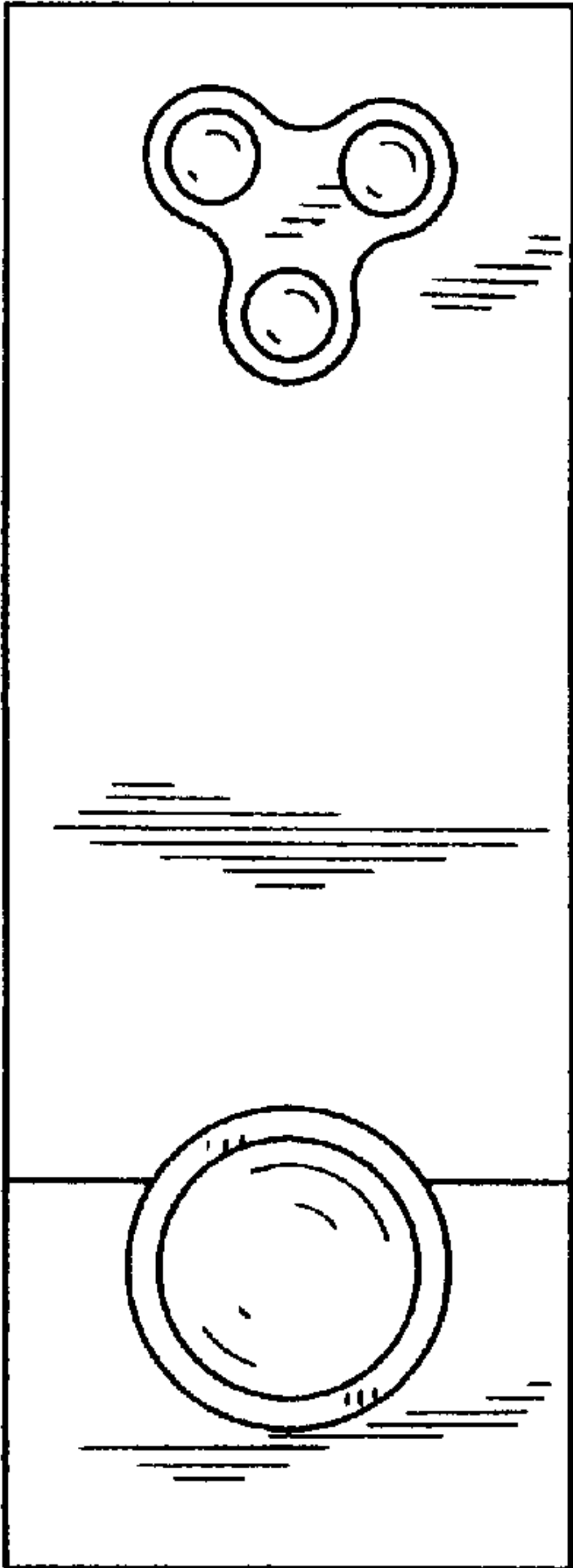


FIG.16

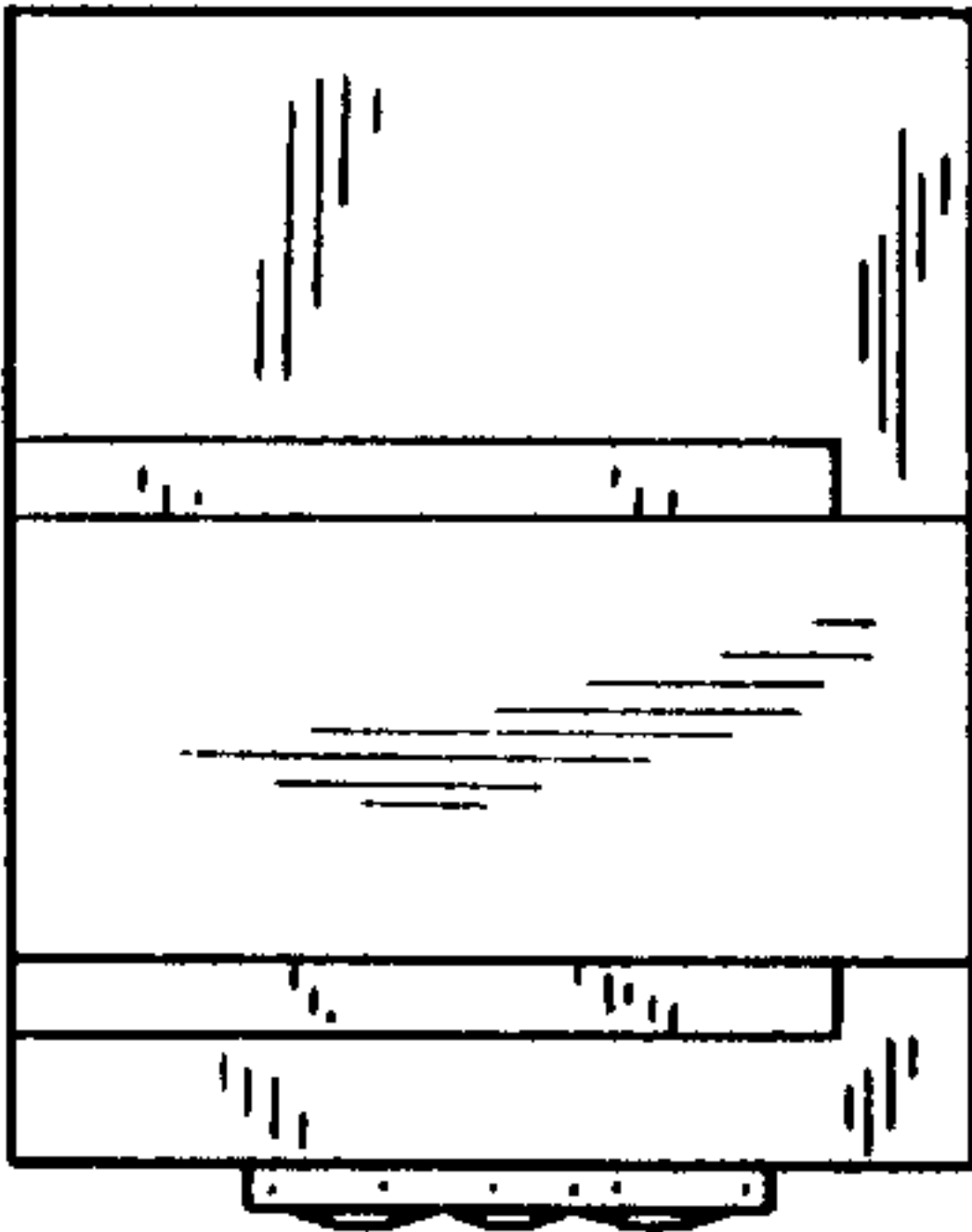


FIG.13

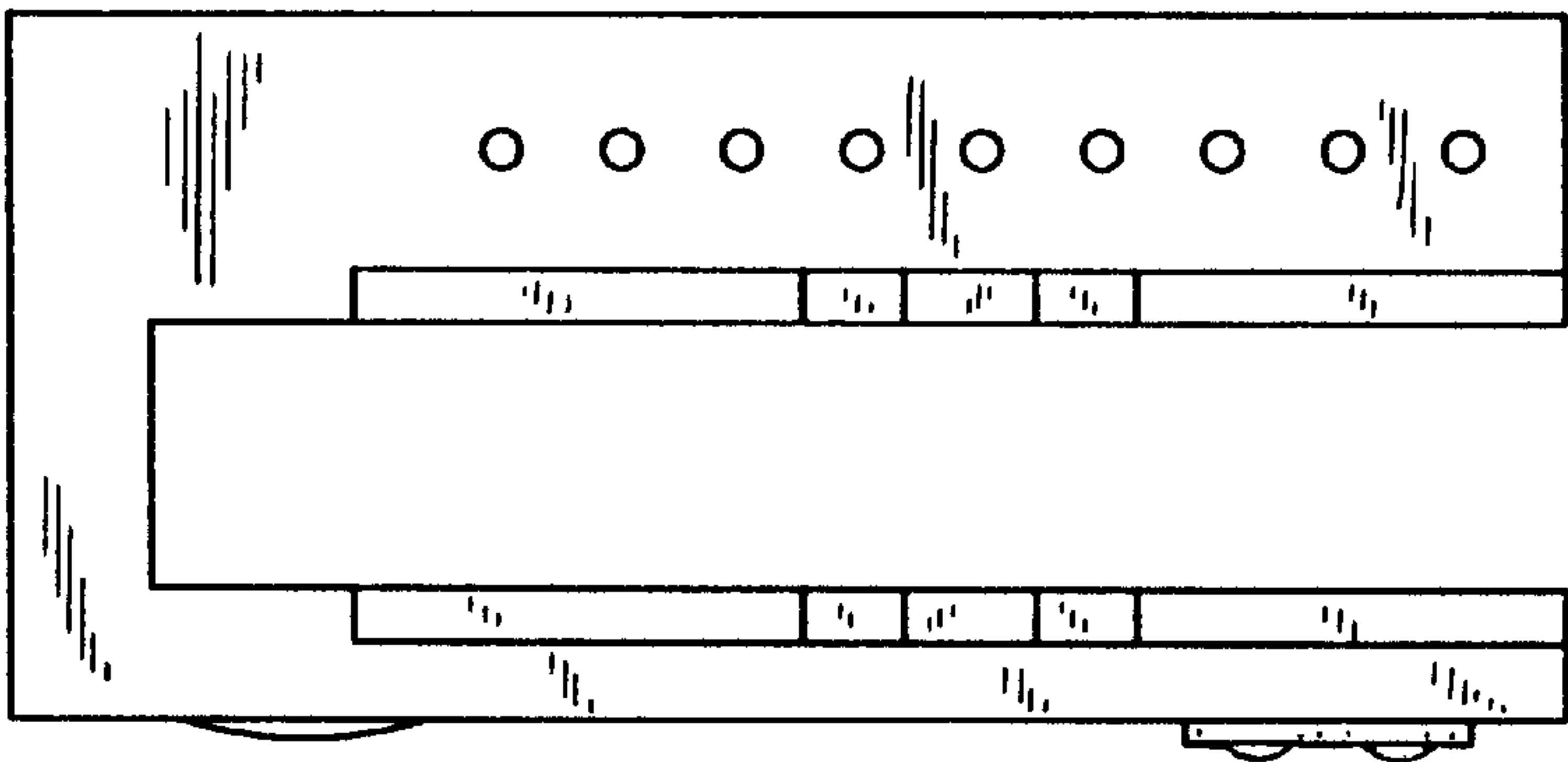


FIG.15

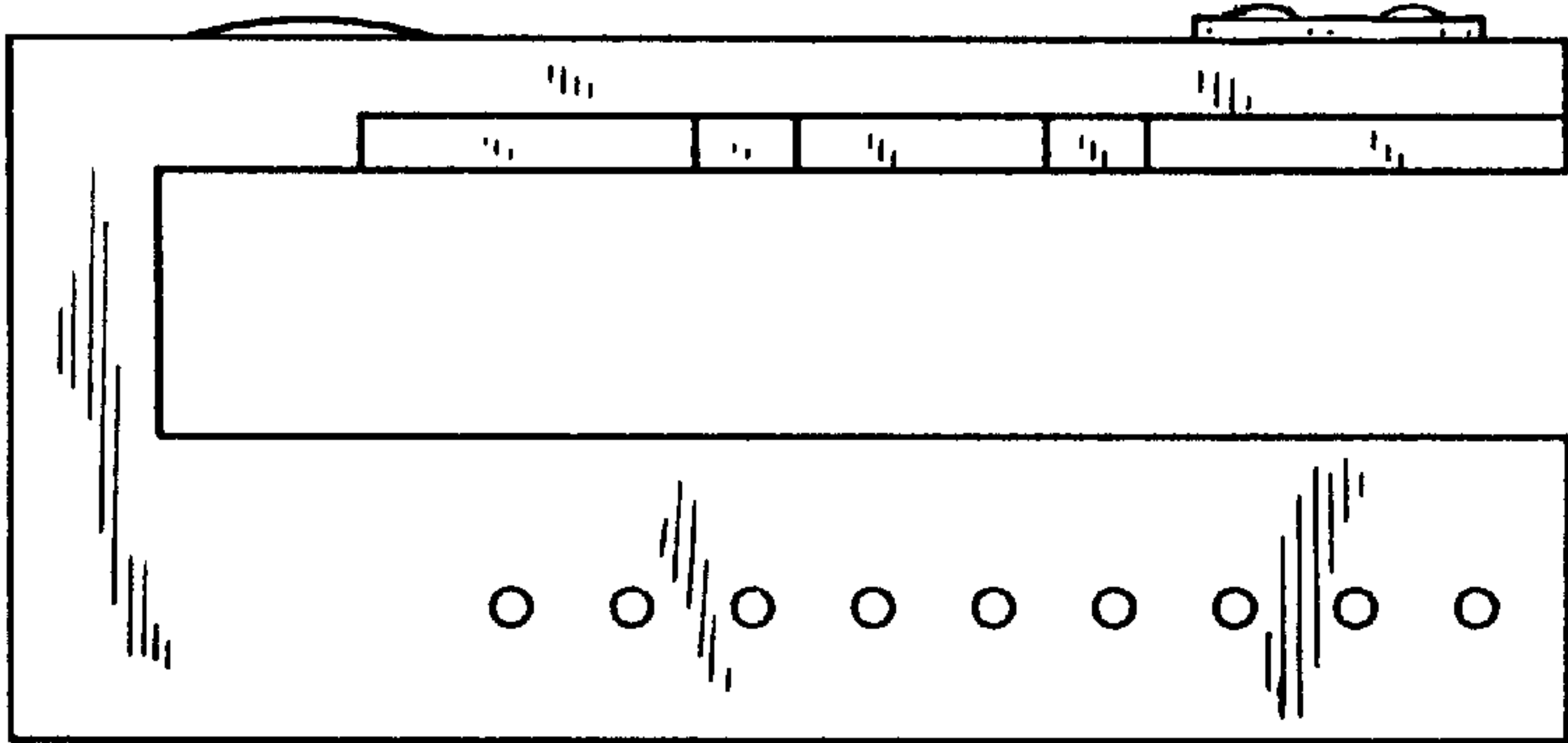


FIG.17

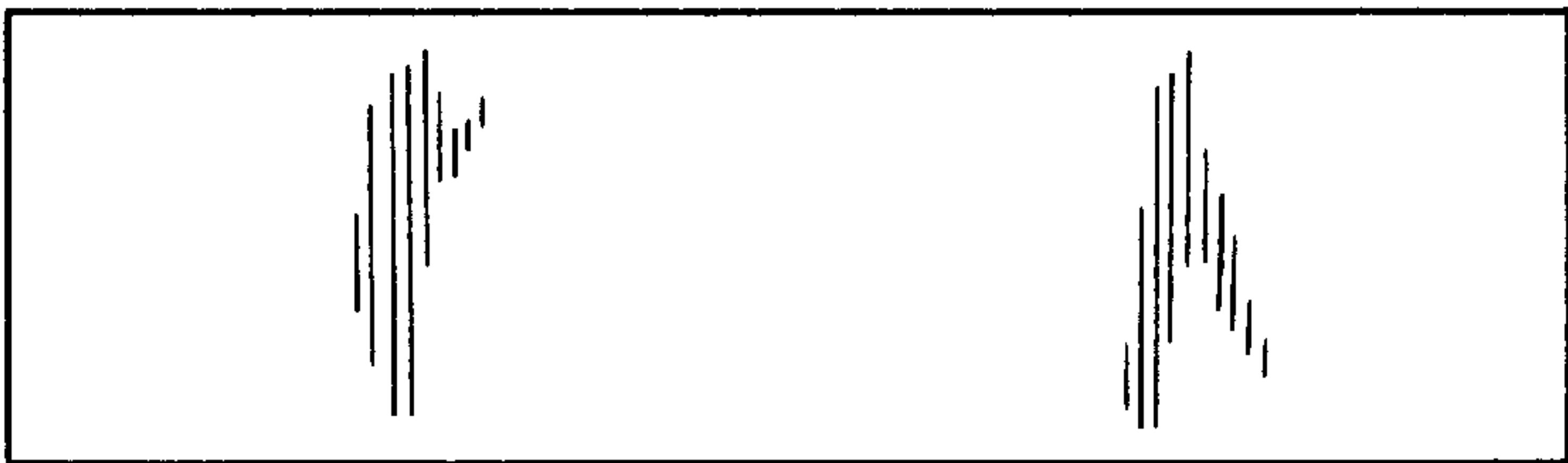


FIG. 18

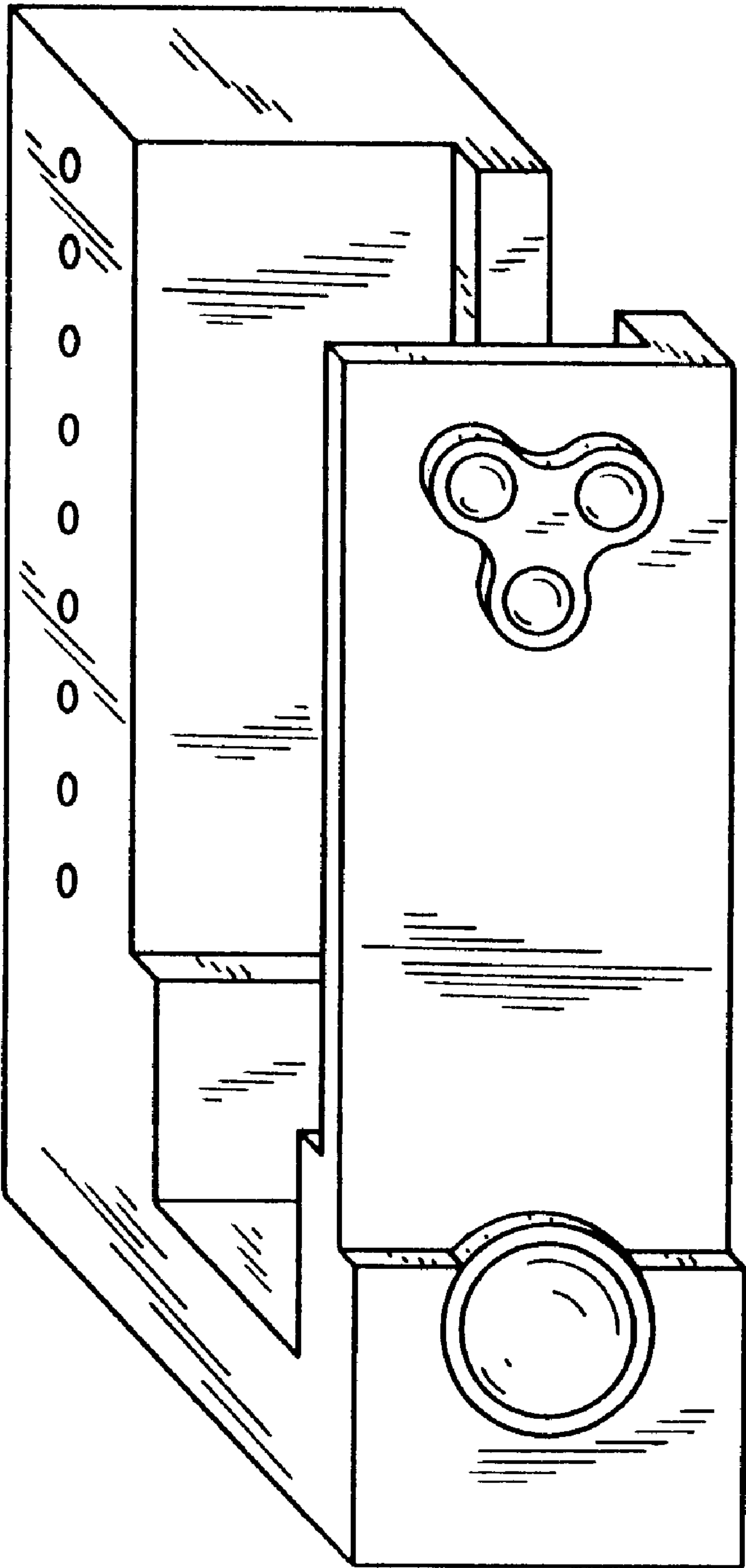


FIG. 20

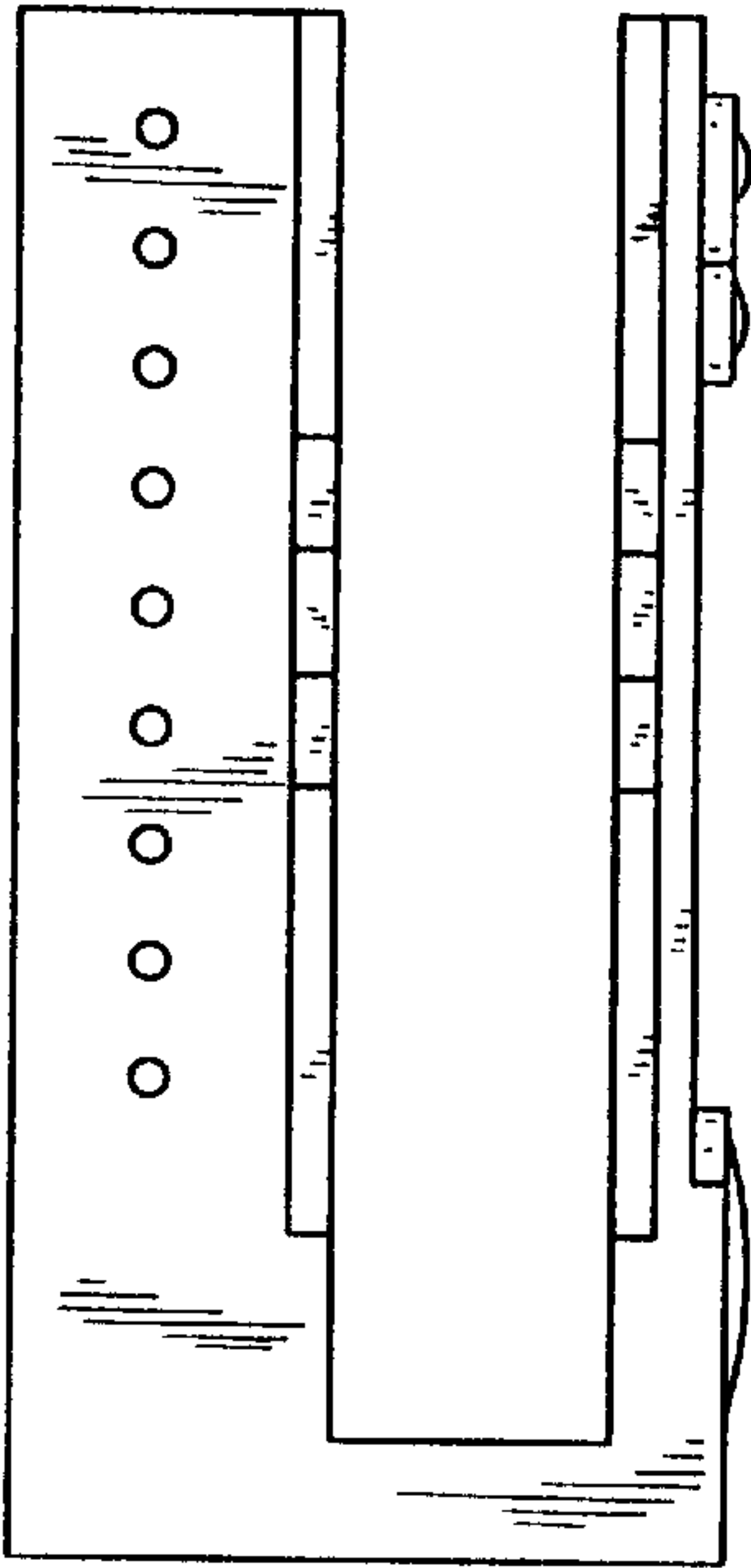


FIG. 19



FIG. 21

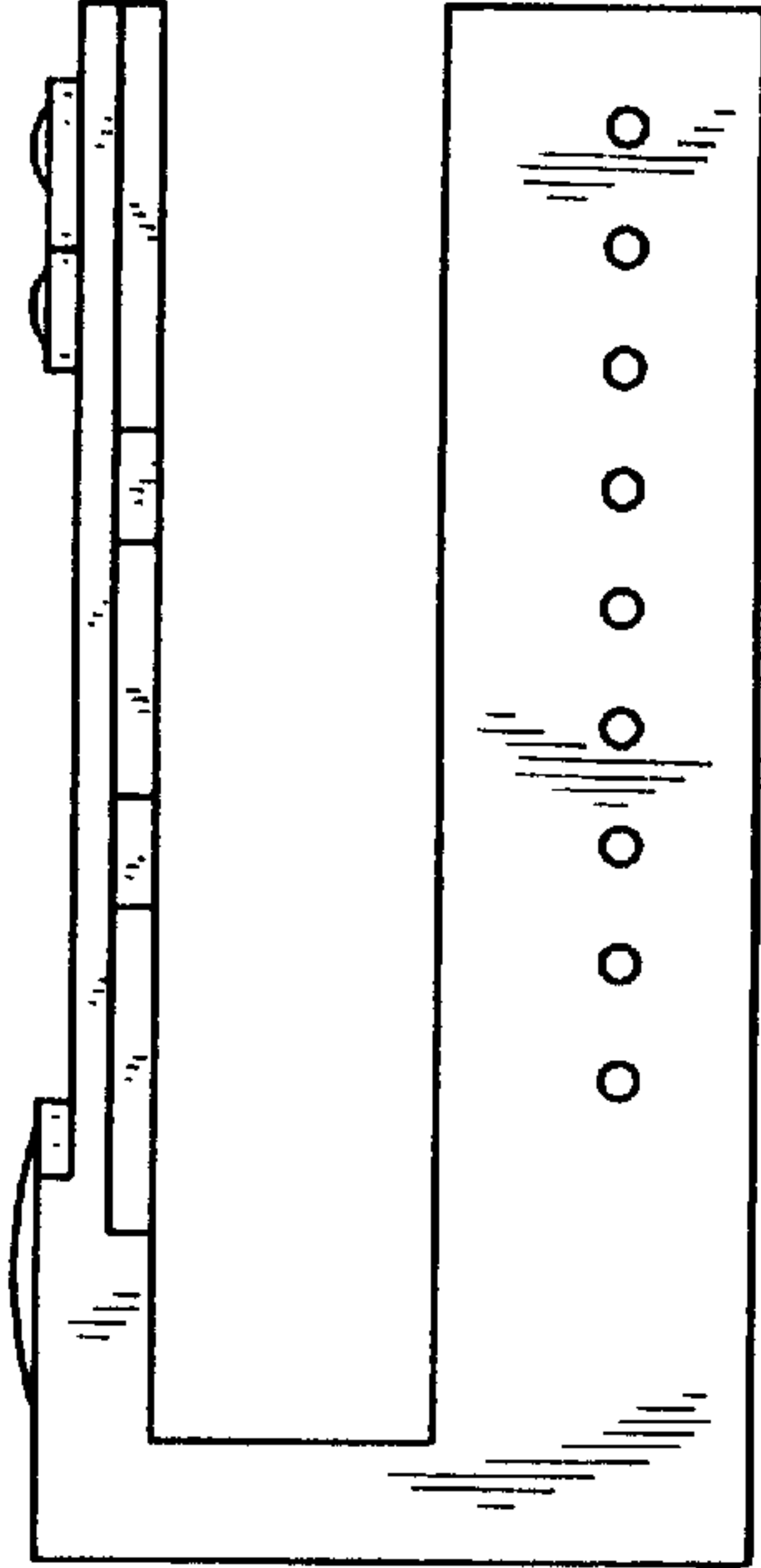
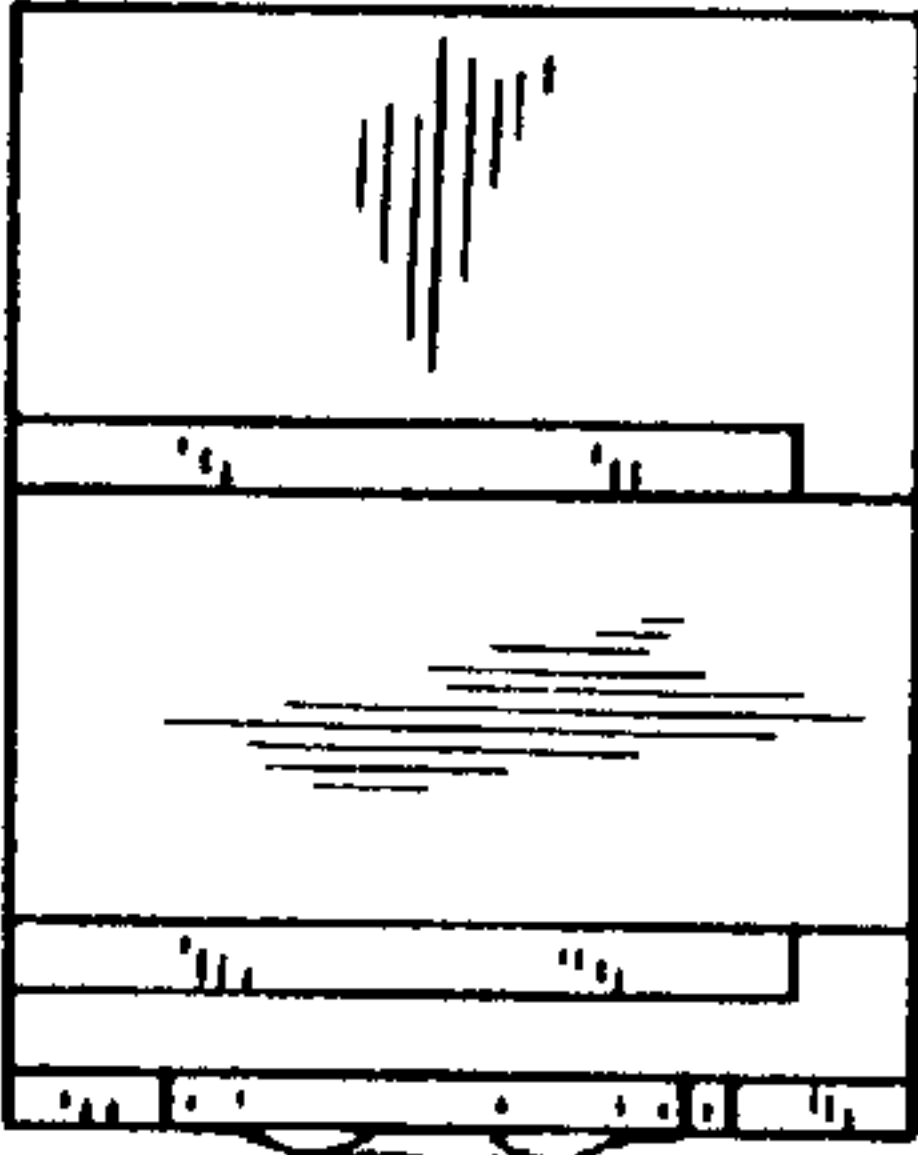


FIG. 22



UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : Des 445,405 S
DATED : July 24, 2001
INVENTOR(S) : Schneider et al.

Page 1 of 5

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

Title page,

Showing the illustrative figure, should be deleted, and substitute therefor the title page as shown on the attached page.

Drawings,

Please replace Figure 1-7 on sheets 1 of 10, 2 of 10, and 3 of 10 with Figures 1-7 enclosed herewith.

Signed and Sealed this

Eighteenth Day of June, 2002

Attest:

A handwritten signature in black ink, appearing to read "James E. Rogan", with a long horizontal flourish extending from the bottom of the signature.

Attesting Officer

JAMES E. ROGAN
Director of the United States Patent and Trademark Office

(12) **United States Design Patent**
Schneider et al.

(10) Patent No.: **US D445,405 S**
(45) Date of Patent: **** Jul. 24, 2001**

(54) **ELECTRONIC CONTROL APPARATUS**

(75) Inventors: **Frank Schnelder**, Pforzheim; **Tino Zink**, Neulingen; **Klaus Limberg**, Pforzheim, all of (DE)

(73) Assignee: **Grässlin KG**, St. Georgen (DE)

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

(21) Appl. No.: **29/120,298**

(22) Filed: **Mar. 17, 2000**

Related U.S. Application Data

(60) Division of application No. 29/094,872, filed on Oct. 13, 1998, which is a continuation-in-part of application No. 29/087,450, filed on May 4, 1998.

(51) **LOC (7) Cl.** **13-03**

(52) **U.S. Cl.** **D13/162**

(58) **Field of Search** **D10/49, 50, 51, D10/52; D13/162, 164; 165/217, 238; 236/46 R**

(56) **References Cited**

U.S. PATENT DOCUMENTS

D. 242,230	11/1976	Manecke et al.	D10/50
D. 260,004	7/1981	Ohhasi et al.	D10/50
D. 325,902	5/1992	Hudson et al.	D13/184
D. 355,136 *	2/1995	Highman et al.	D10/50
4,316,256	2/1982	Hendricks et al.	236/46 R
4,388,692 *	6/1983	Jones et al.	236/46 R
4,431,134 *	2/1984	Hendricks et al.	236/46 R
4,819,714	4/1989	Otsuka et al.	165/217
4,948,044 *	8/1990	Cacciatore	236/46 R

FOREIGN PATENT DOCUMENTS

296 00 654 U	4/1996	(DE) .
195 11 352	10/1996	(DE) .
296 22 062 U	4/1997	(DE) .
196 15 840	10/1997	(DE) .
434 926	7/1991	(EP) .
0 720 077	7/1996	(EP) .

89/03085 4/1989 (WO) .

* cited by examiner

Primary Examiner—Adir Aronovich

(74) *Attorney, Agent, or Firm*—Foley & Lardner

(57) **CLAIM**

The ornamental design for an electronic control apparatus, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of an electronic control apparatus showing our new design;
FIG. 2 is a left side elevation view thereof;
FIG. 3 is a top plan view thereof;
FIG. 4 is a front elevation view thereof;
FIG. 5 is a bottom plan view thereof;
FIG. 6 is a right side elevation view thereof;
FIG. 7 is a back elevation view thereof;
FIG. 8 is a perspective view of a second embodiment of the electronic control apparatus;
FIG. 9 is a bottom plan view thereof;
FIG. 10 is a top plan view thereof, wherein the left, front, right and back views are the same as those shown in FIGS. 2, 4, 6 and 7, respectively;
FIG. 11 is a perspective view of a third embodiment of the electronic control apparatus;
FIG. 12 is a left side elevation view thereof;
FIG. 13 is a top plan view thereof;
FIG. 14 is a front elevation view thereof;
FIG. 15 is a bottom plan view thereof;
FIG. 16 is a right side elevation view thereof;
FIG. 17 is a back elevation view thereof;
FIG. 18 is a perspective view of a fourth embodiment of the electronic control apparatus;
FIG. 19 is a left side elevation view thereof;
FIG. 20 is a top plan view thereof;
FIG. 21 is a bottom plan view thereof; and,
FIG. 22 is a right side elevation view thereof, wherein in the front and back views are the same as those shown in FIGS. 14 and 17, respectively.

1 Claim, 10 Drawing Sheets

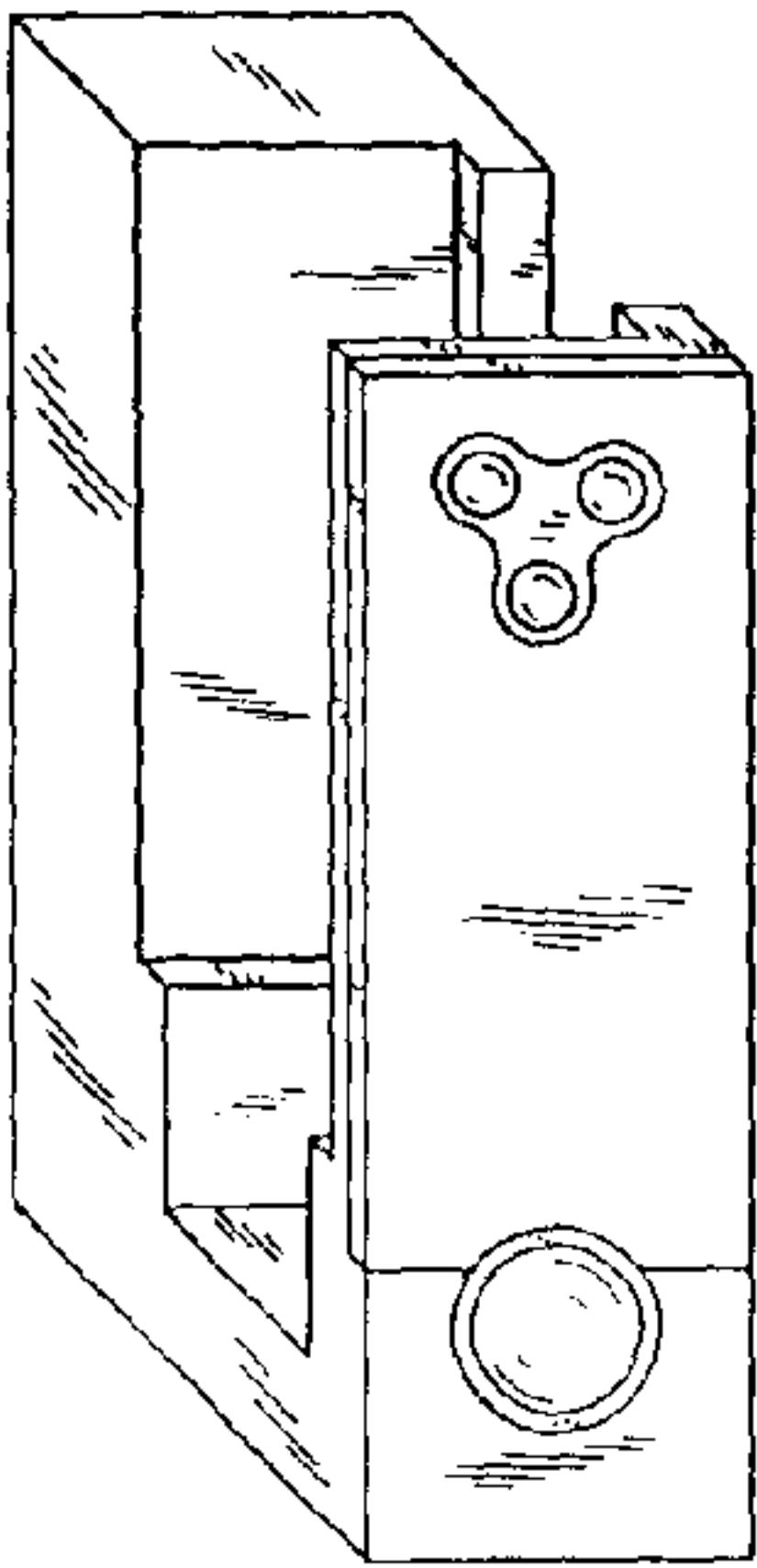


FIG. 1

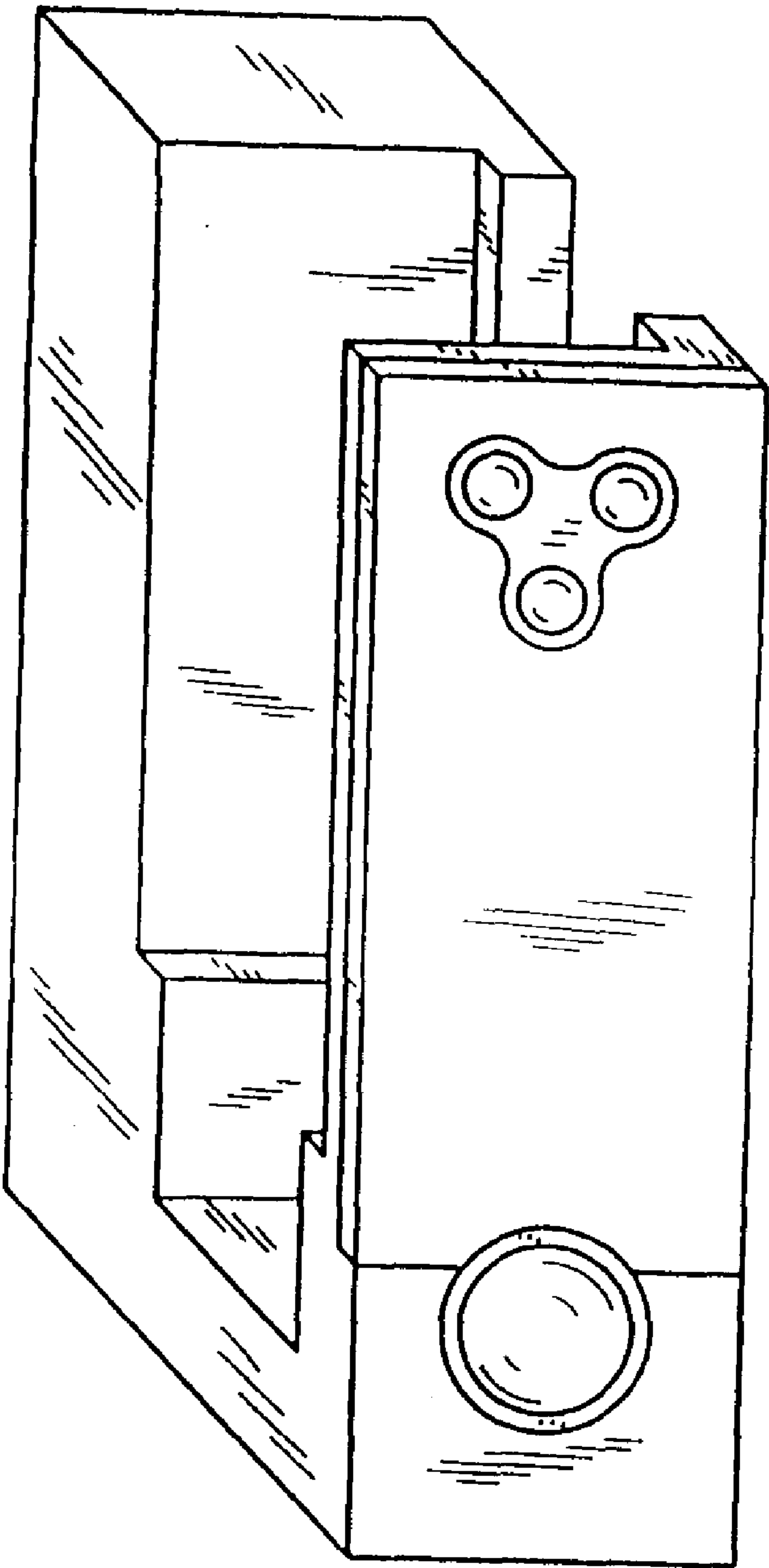


FIG.6

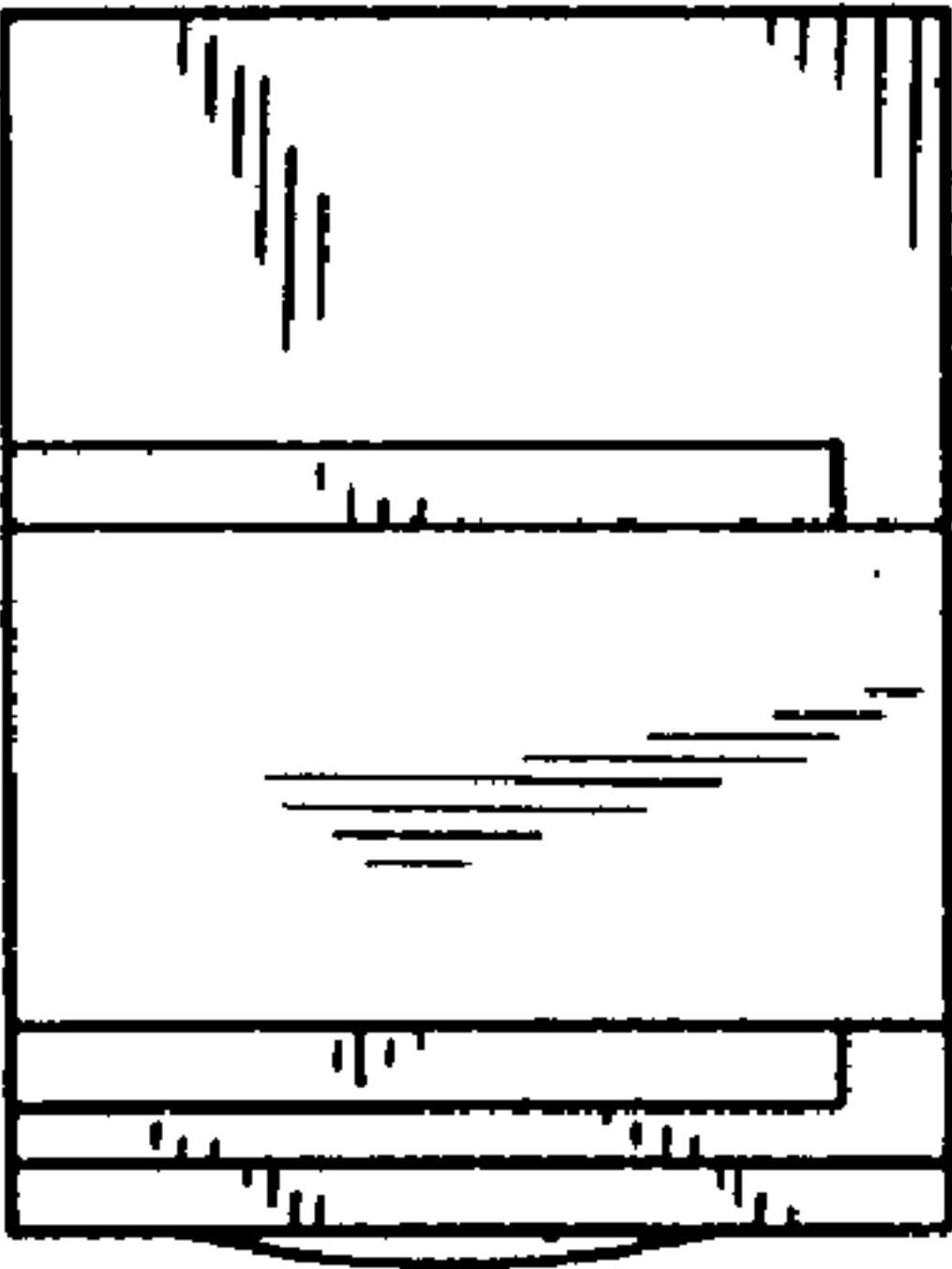


FIG.4

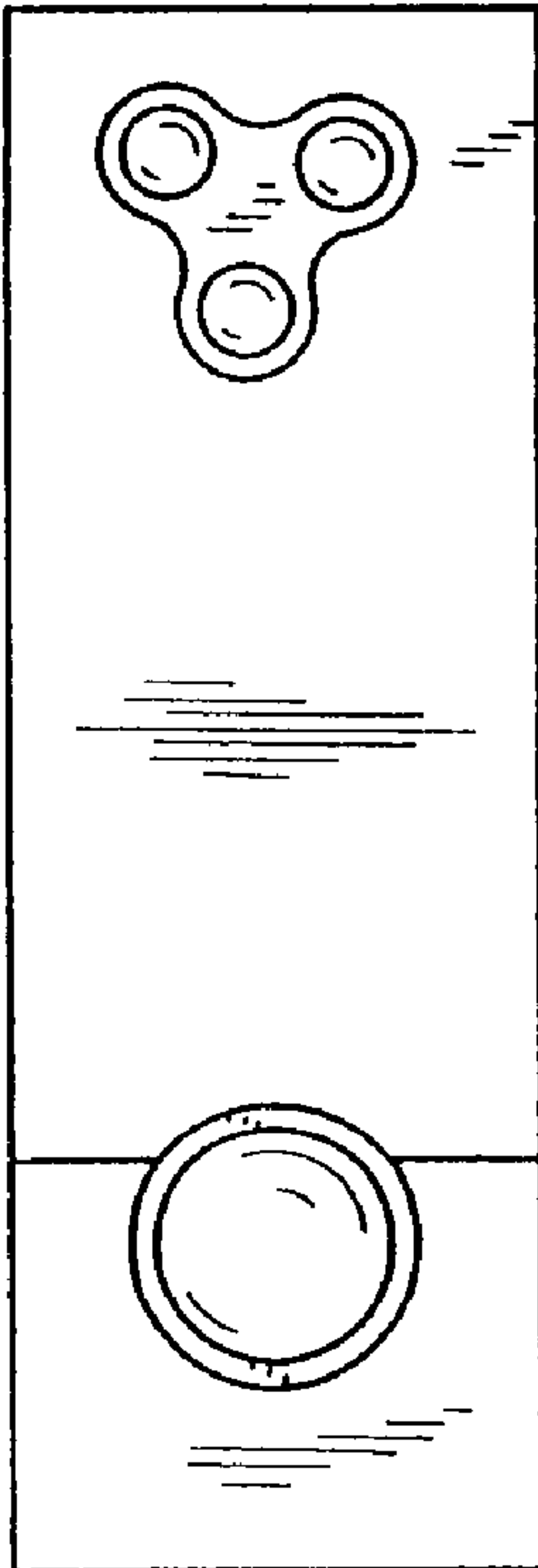


FIG.2

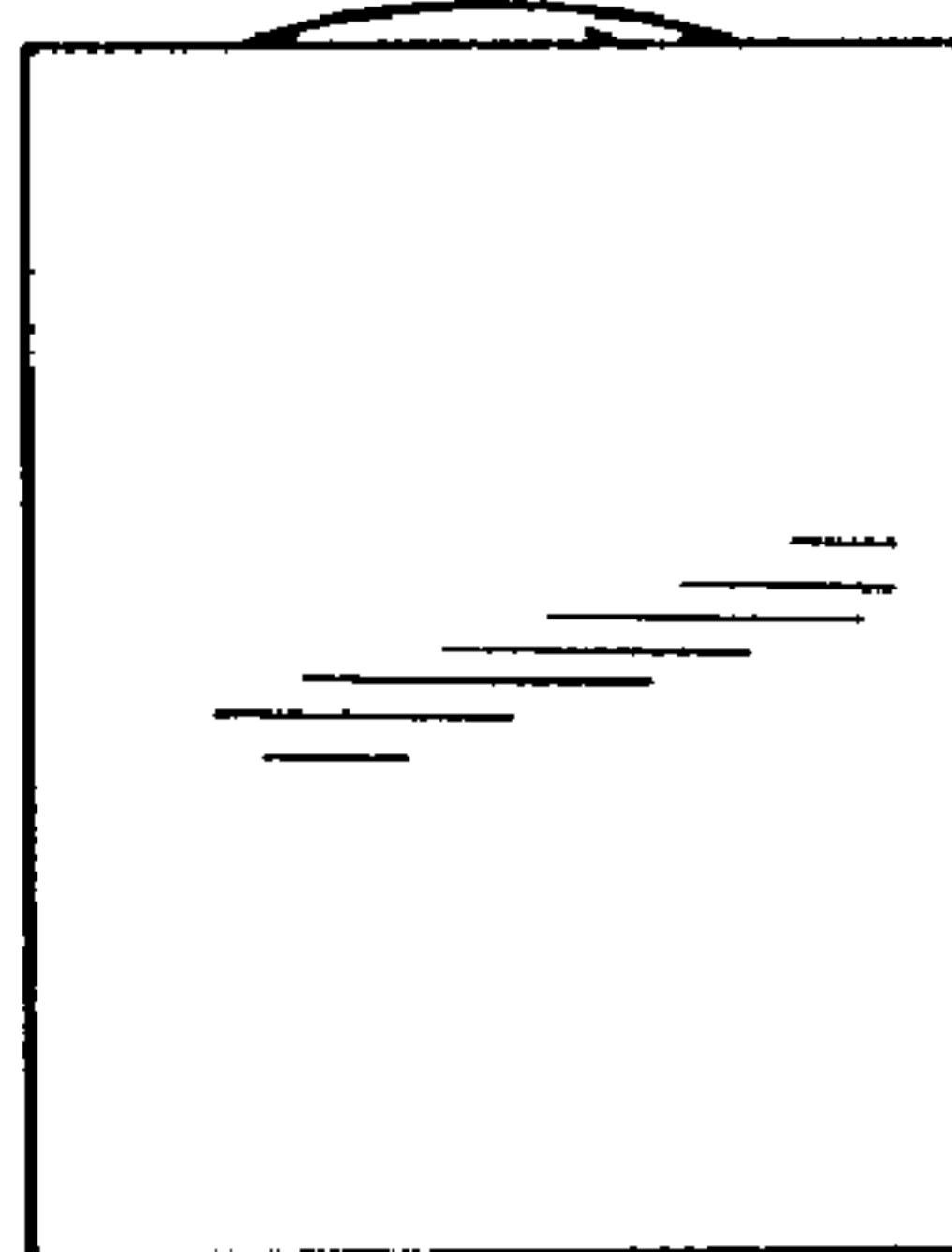


FIG. 3

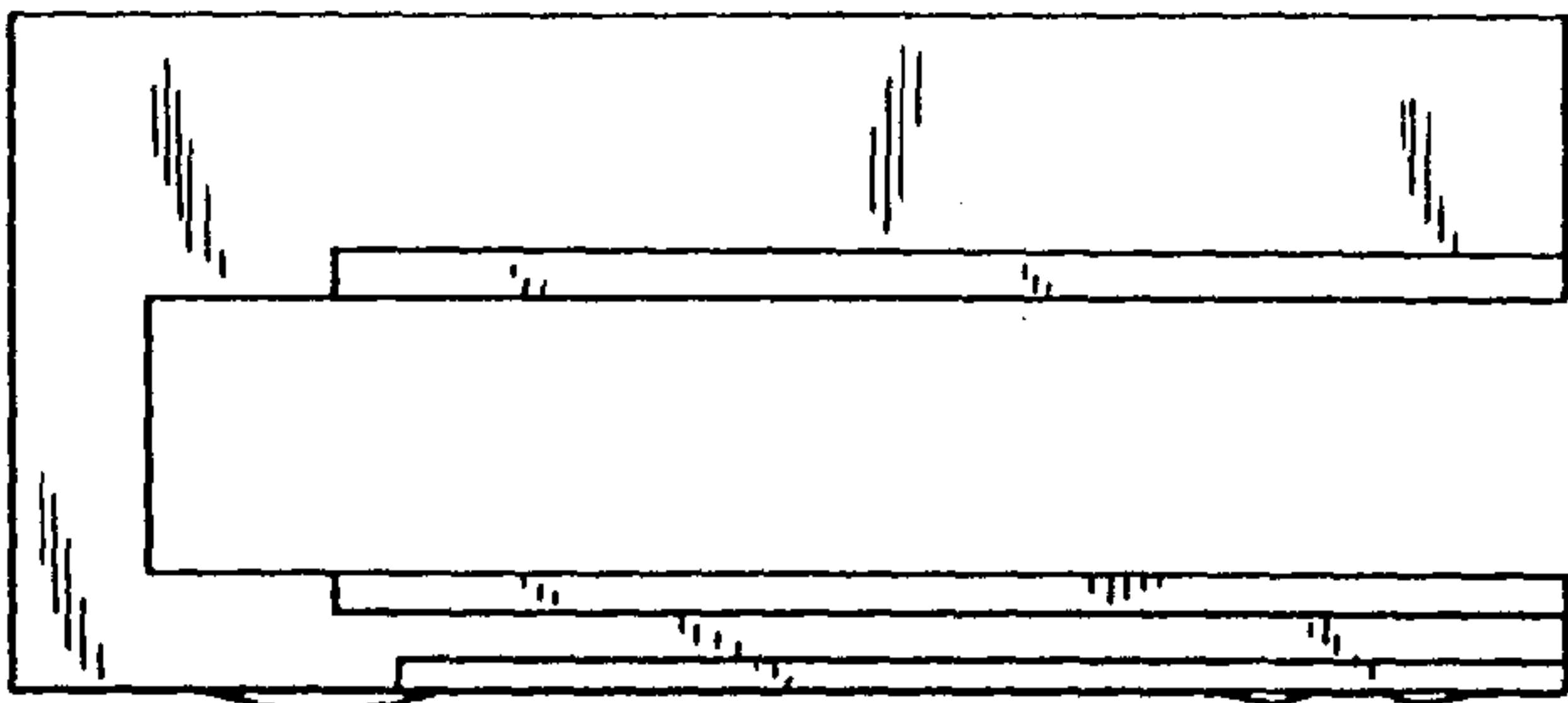


FIG. 5

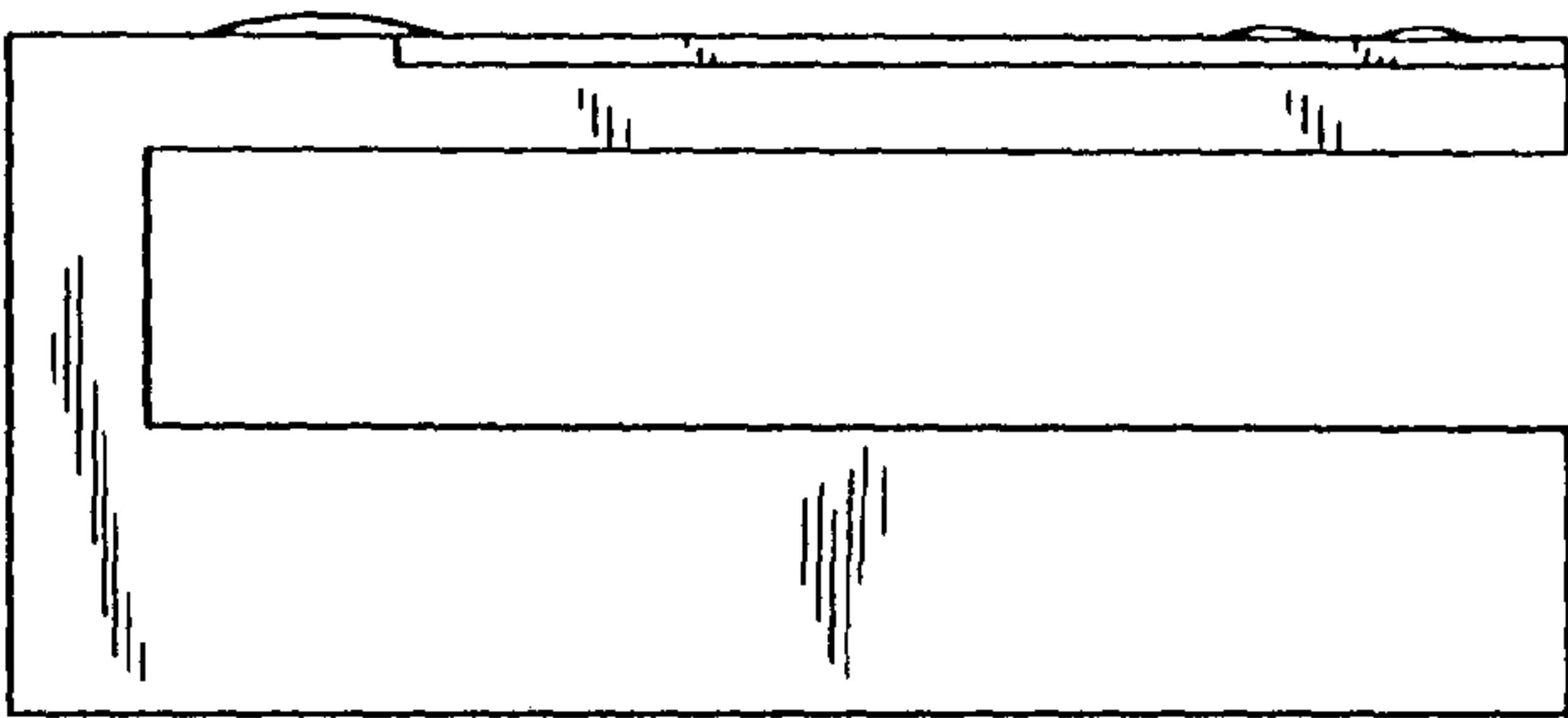


FIG. 7

