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# United States Patent [19]

Yoshihara

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[54] FLOW RATE ADJUSTING PLATE FOR A ROTARY NOZZLE TYPE MOLTEN METAL POURING UNIT

|           |        |             |          |
|-----------|--------|-------------|----------|
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### FOREIGN PATENT DOCUMENTS

[73] Assignees: NKK Corportion; Tokyo Yogyo Kabushiki Kaisha, both of Tokyo; Nippon Rotary Nozzle Co., Ltd.; Kokan Kikai Kogyo Kabushiki Kaisha, both of Kawasaki, all of Japan

|          |        |       |   |
|----------|--------|-------|---|
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| 1-28342  | 4/1992 | Japan | . |
| 411298   | 4/1992 | Japan | . |

[\*\*] Term: 14 Years

Primary Examiner—Louis S. Zarfes  
Assistant Examiner—Eric Watterson  
Attorney, Agent, or Firm—Ladas & Parry

[21] Appl. No.: 46,888

[22] Filed: Nov. 20, 1995

### [57] CLAIM

### Related U.S. Application Data

The ornamental design for flow rate adjusting plate for a rotary nozzle type molten metal pouring unit, as shown.

[62] Division of Ser. No. 32,456, Dec. 12, 1994, Pat. No. Des. 371,825, which is a continuation of Ser. No. 846,393, Mar. 4, 1992, abandoned.

### DESCRIPTION

### [30] Foreign Application Priority Data

FIG. 1 is a front view of a flow rate adjusting plate showing my new design;

|              |      |       |          |
|--------------|------|-------|----------|
| Sep. 5, 1991 | [JP] | Japan | 3-026602 |
| Sep. 5, 1991 | [JP] | Japan | 3-026603 |

FIG. 2 is a left side view thereof;

FIG. 3 is a right side view thereof;

FIG. 4 is a rear view thereof;

FIG. 5 is a top view thereof; and,

FIG. 6 is a bottom view thereof.

[51] LOC (6) Cl. 23-01

[52] U.S. Cl. D23/237

[58] Field of Search D23/233-237, D23/244-249; 137/40, 41, 43, 44, 45, 46

The characteristic feature of my design is the octagonal body shape wherein two opposite sides of the octagon are of curvilinear form and merge into adjacent linear sides of the octagon to form parabolas and wherein two circular holes are provided which are essentially coaxial with the curvilinear sides, the holes being generally aligned with the axes at which the parabolas merge with the remaining straight sides which bracket the aforementioned holes, the holes being spaced from the associated parabolas by distances no less than the diameters of the holes.

### [56] References Cited

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1 Claim, 2 Drawing Sheets

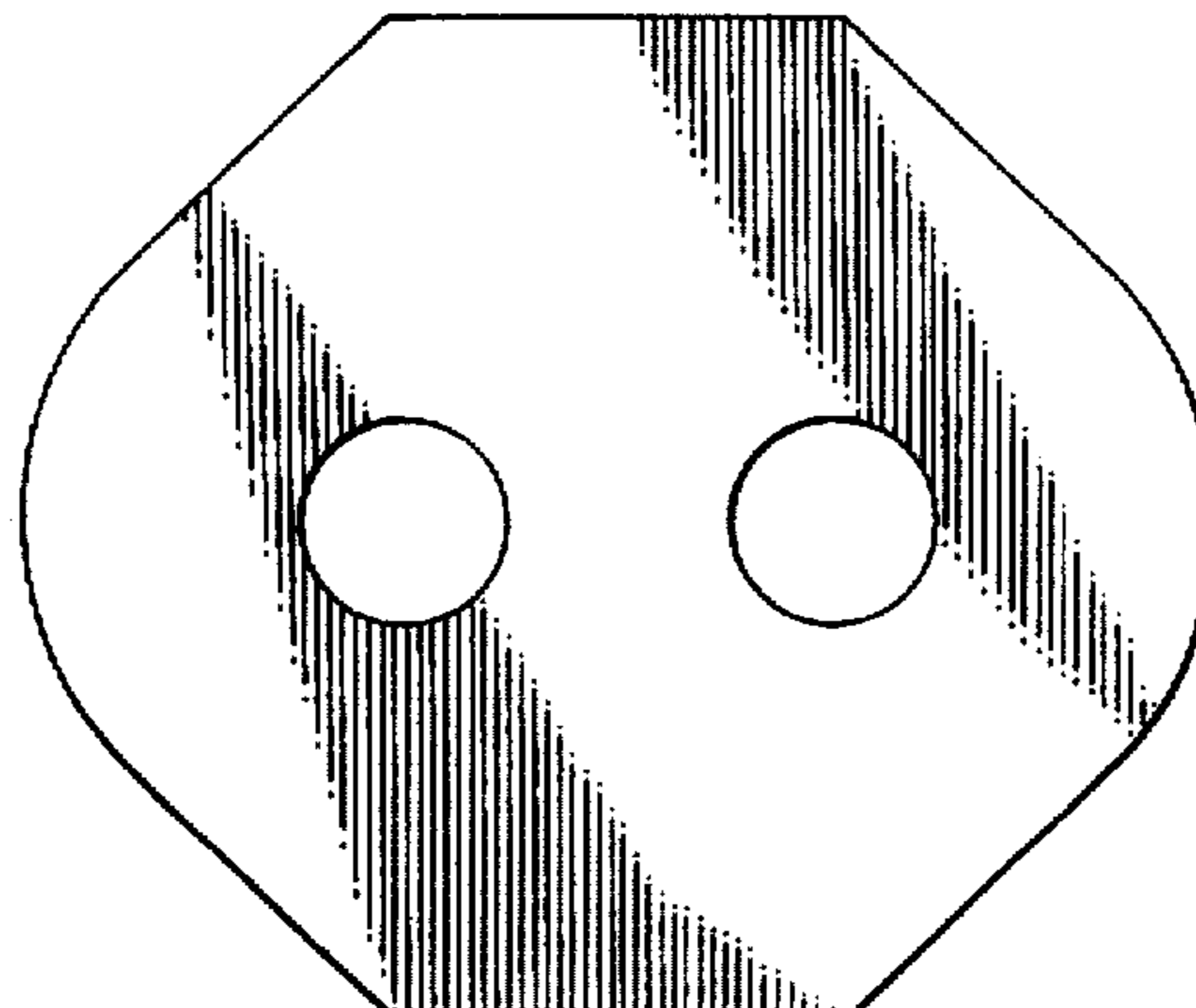
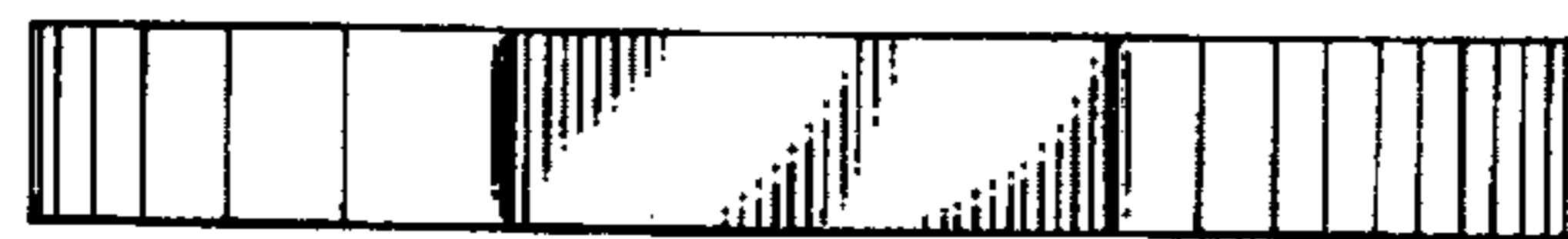


FIG. 1

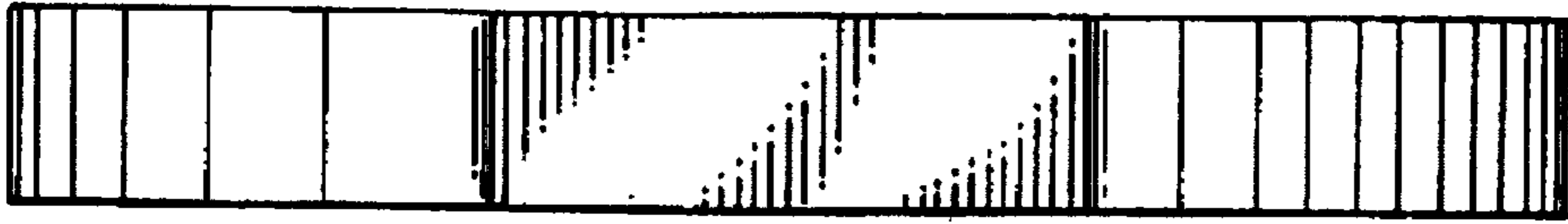


FIG. 2

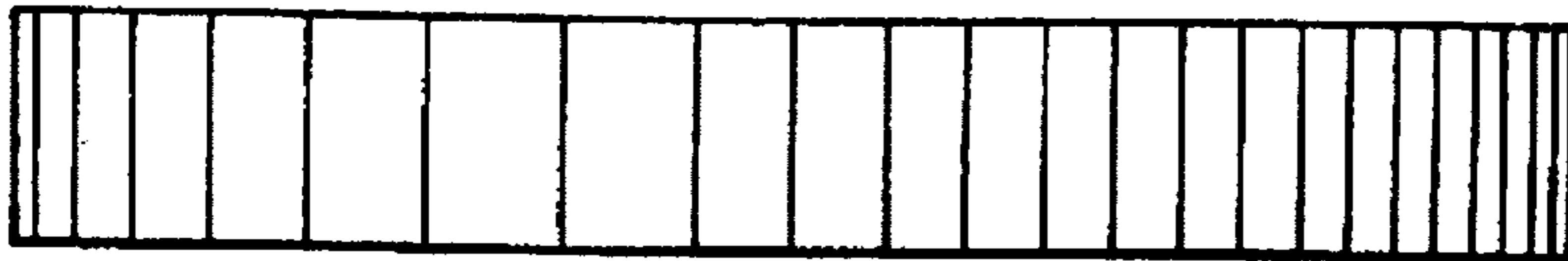


FIG. 5

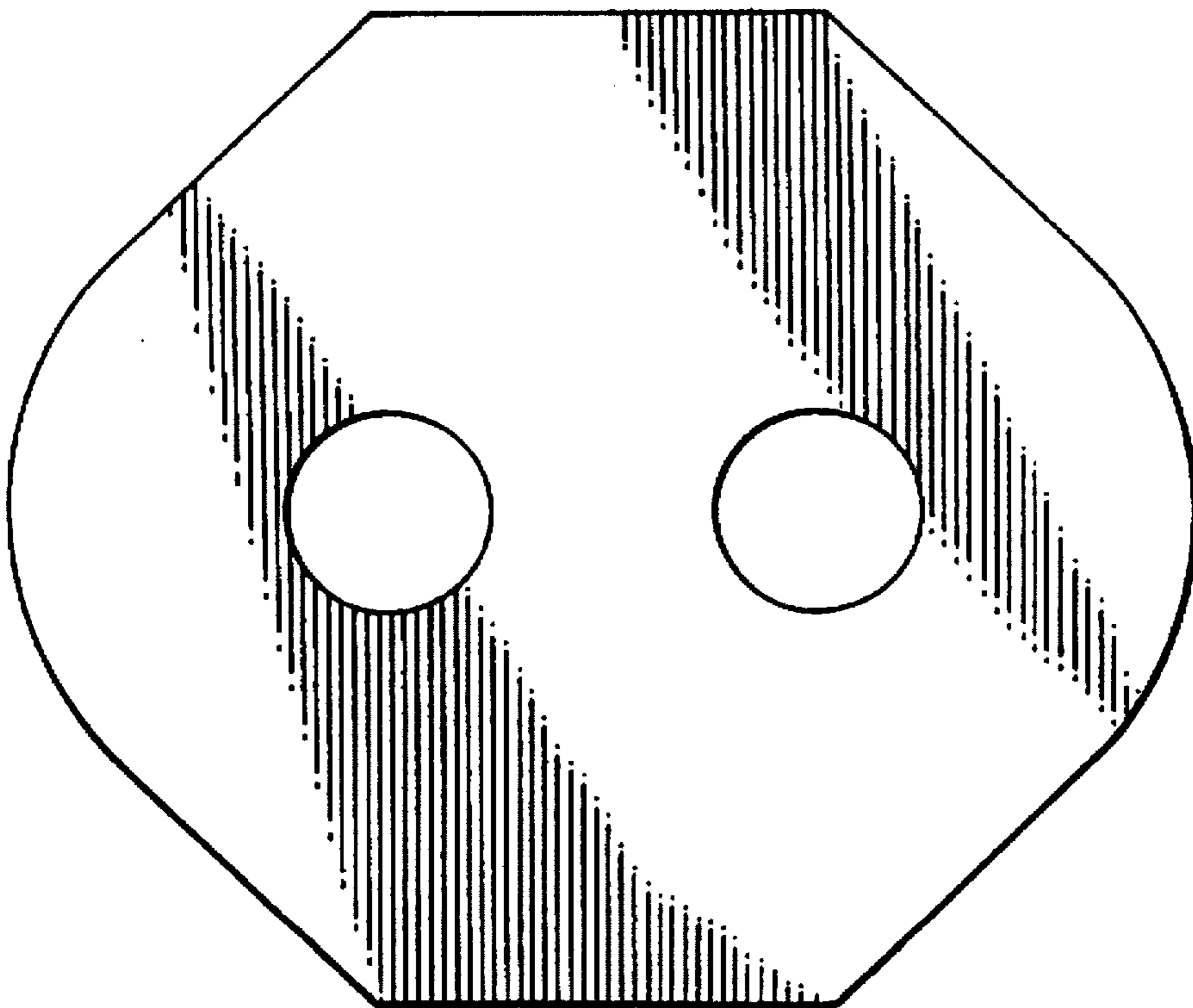


FIG. 3

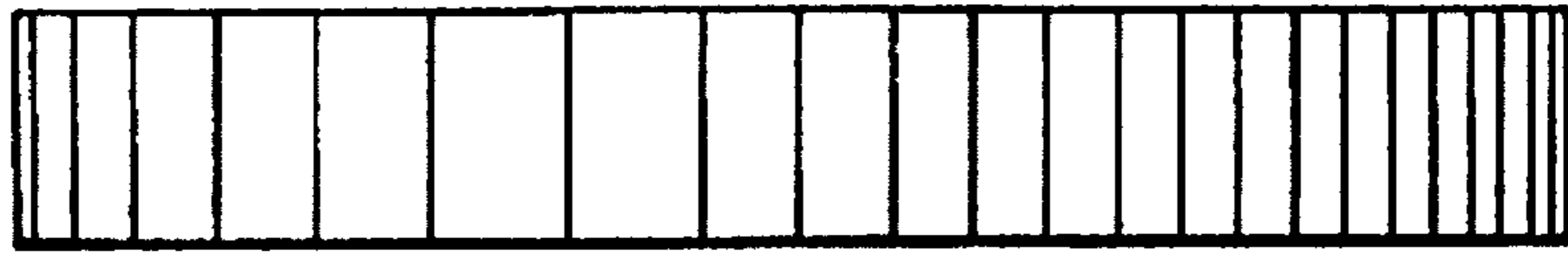


FIG. 4

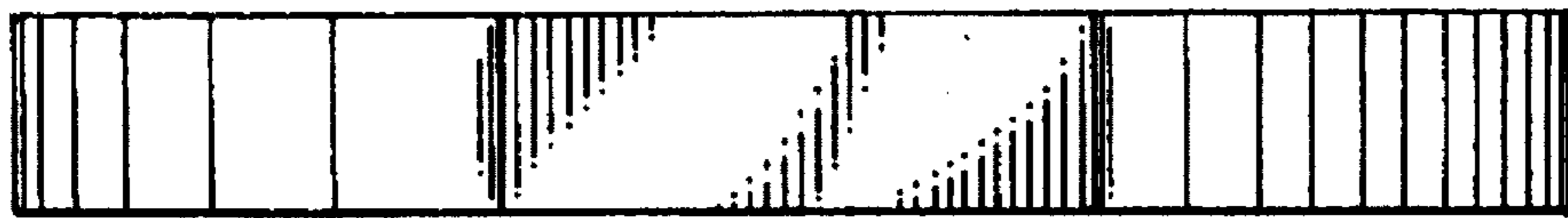


FIG. 6

