

[54] DRILLING, TAPPING AND MILLING MACHINE

[75] Inventors: Kazuo Itoh, Aichi; Yasuyo Isaji; Noboru Hirose, both of Nagoya; Takashi Nozu, Motosu, all of Japan

[73] Assignee: Brother Kogyo Kabushiki Kaisha, Nagoya, Japan

[**] Term: 14 Years

[21] Appl. No.: 126,944

[22] Filed: Nov. 30, 1987

[30] Foreign Application Priority Data

Jun. 10, 1987 [JP] Japan 62-23660
[52] U.S. Cl. D15/122
[58] Field of Search D15/122, 127, 132, 130-131; 29/33 R, 26 R, 35.5-36, 40, 29, 565

[56] References Cited

U.S. PATENT DOCUMENTS

D. 244,445 5/1977 Lohneis et al. D15/122
D. 266,520 10/1982 Engel D15/122

D. 266,851 11/1982 Wada et al. D15/127
D. 277,679 2/1985 Kitamura D15/131
D. 286,294 10/1986 Itoh D15/131

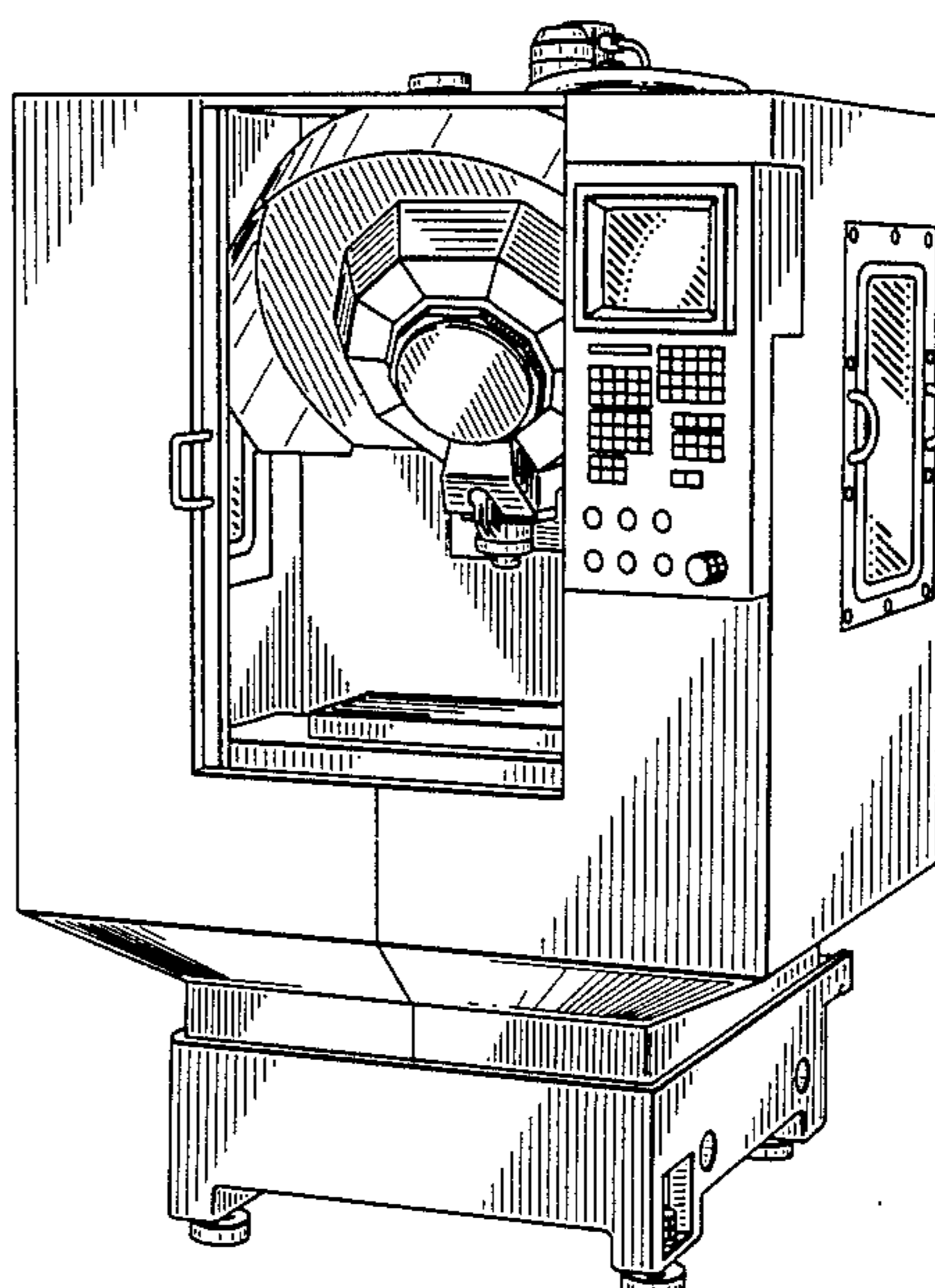
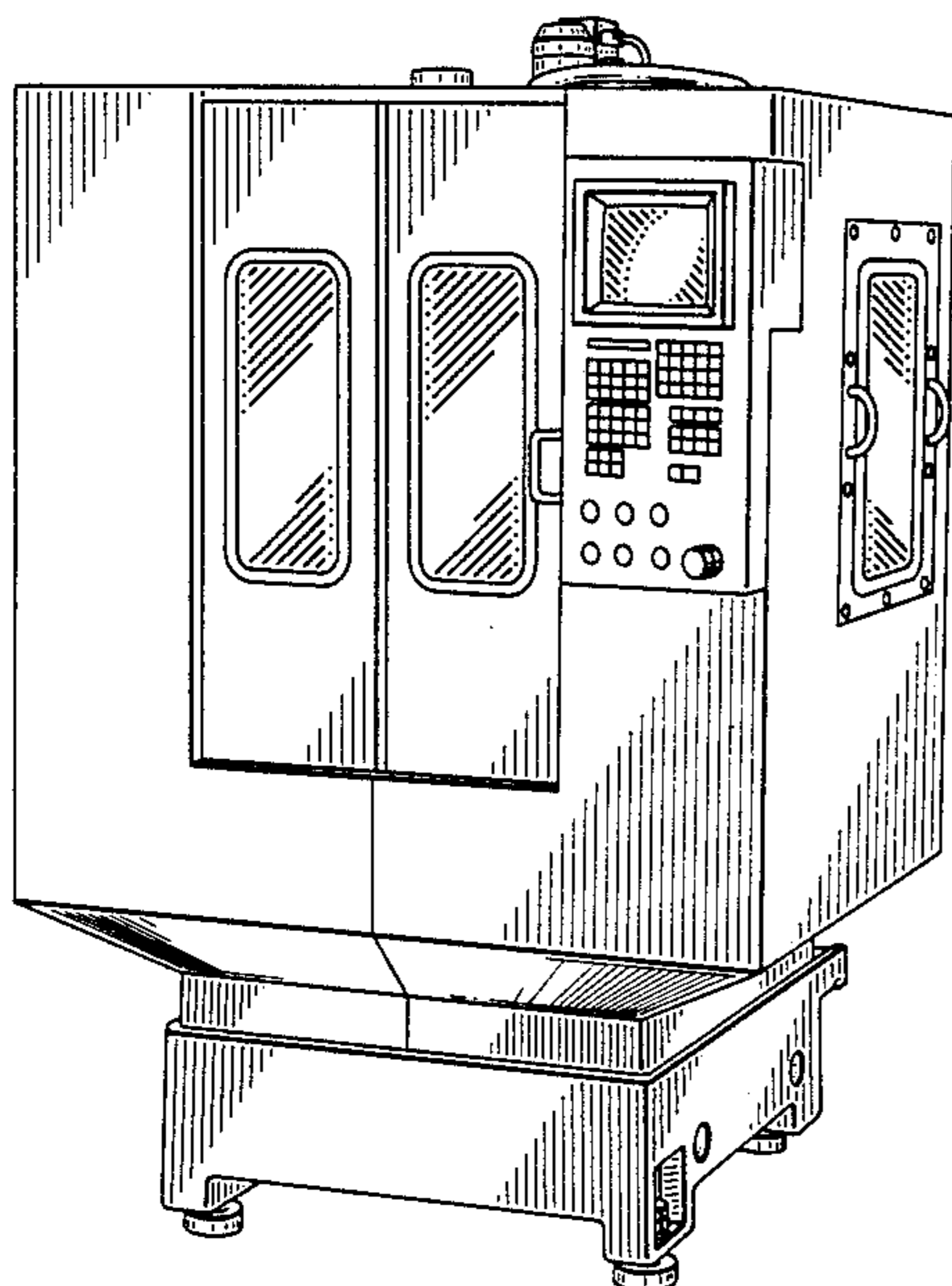
Primary Examiner—Bruce W. Dunkins
Assistant Examiner—R. Takemoto
Attorney, Agent, or Firm—Moonray Kojima

[57] CLAIM

The ornamental design for a drilling, tapping and milling machine, as shown and described.

DESCRIPTION

FIG. 1 is a front elevational view of a drilling tapping and milling machine showing our new design; FIG. 2 is a rear elevational view thereof; FIG. 3 is a left side elevational view thereof; FIG. 4 is a right side elevational view thereof; FIG. 5 is a top plan view thereof; FIG. 6 is a front, top and right side perspective view thereof; FIG. 7 is a perspective view thereof with the door in the open position; and FIG. 8 is a perspective view thereof with the door in the open position and the spindle head in the tool changing position.



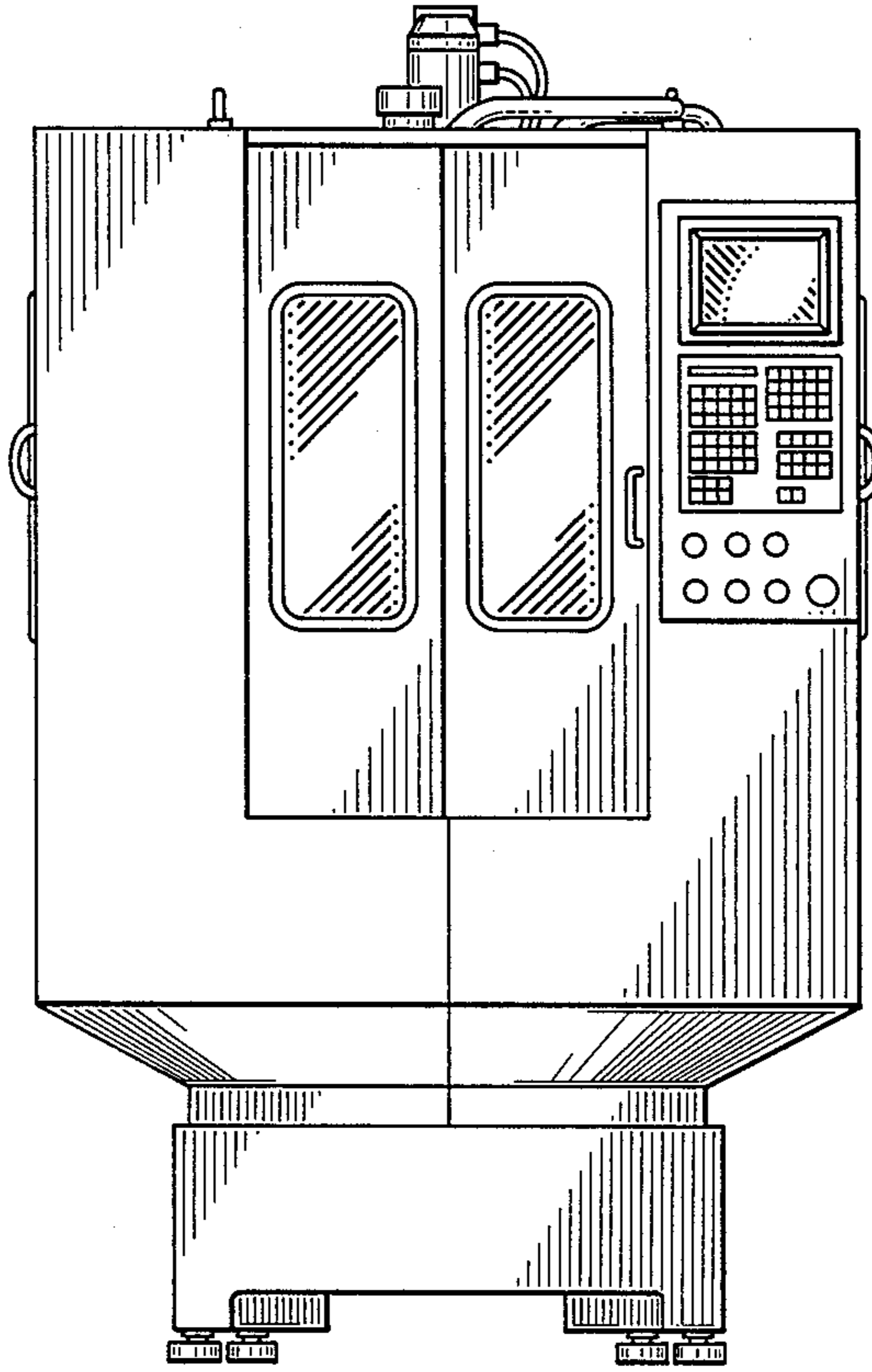


FIG. 1

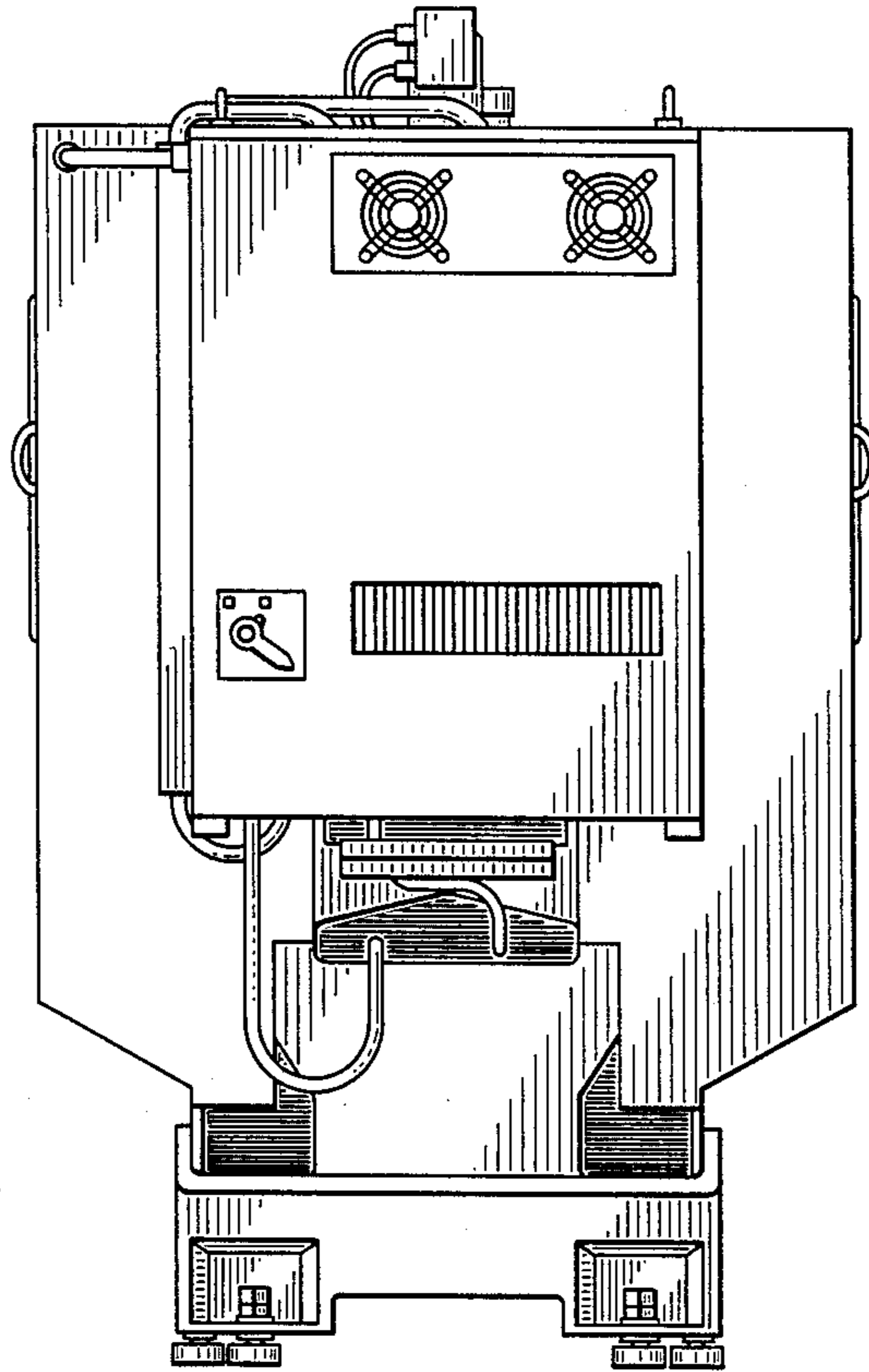


FIG. 2

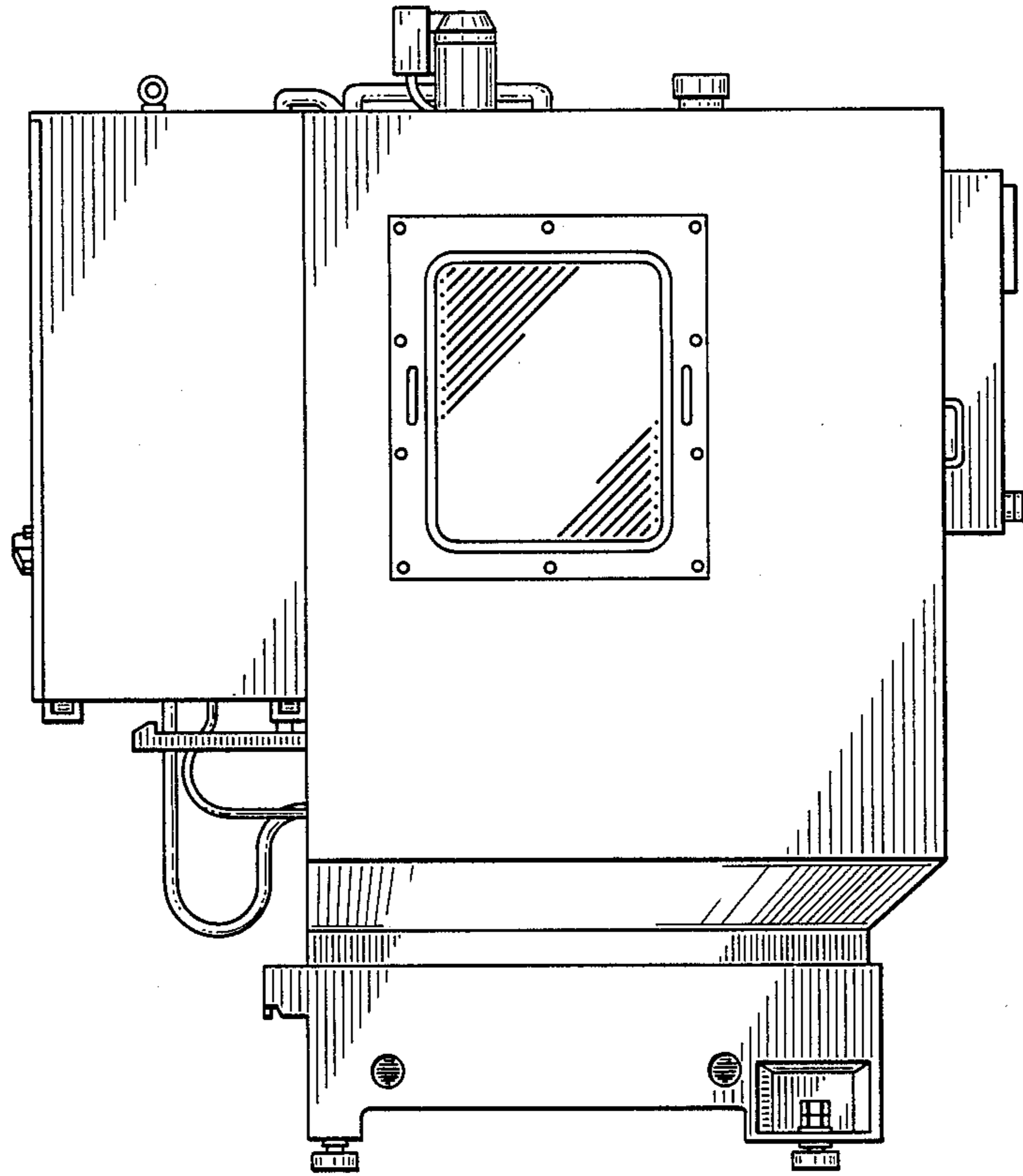


FIG. 3

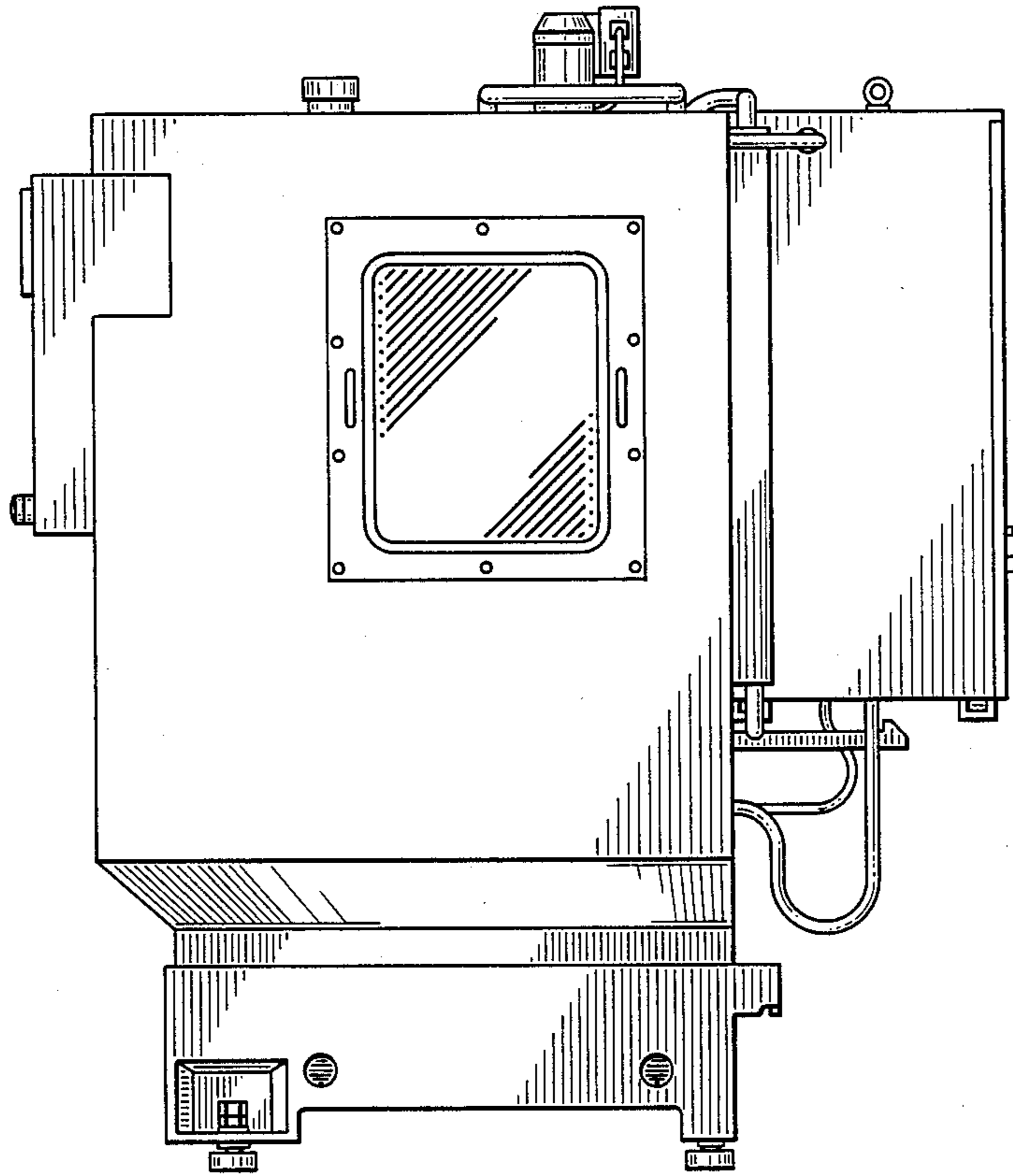


FIG. 4

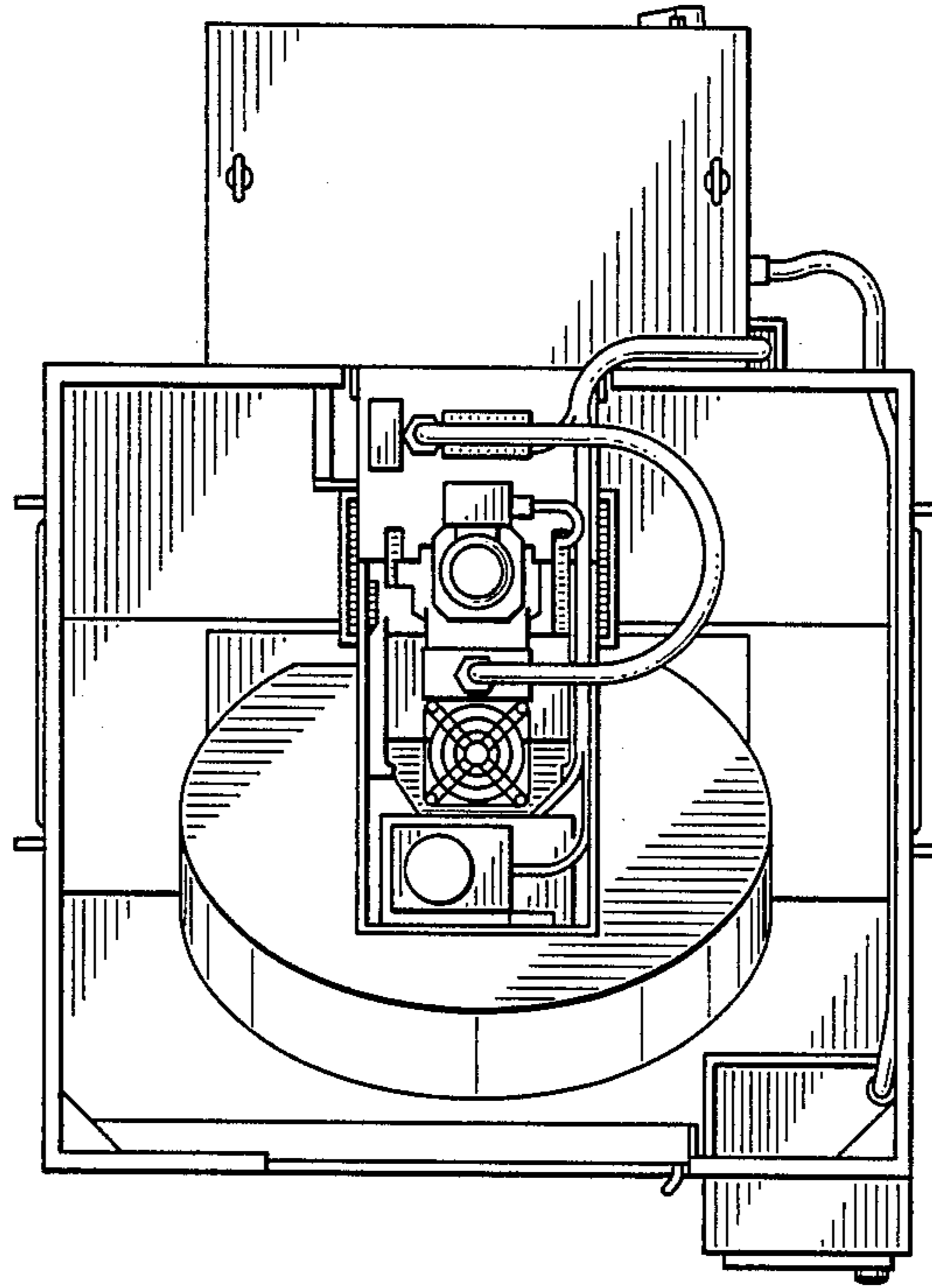


FIG. 5

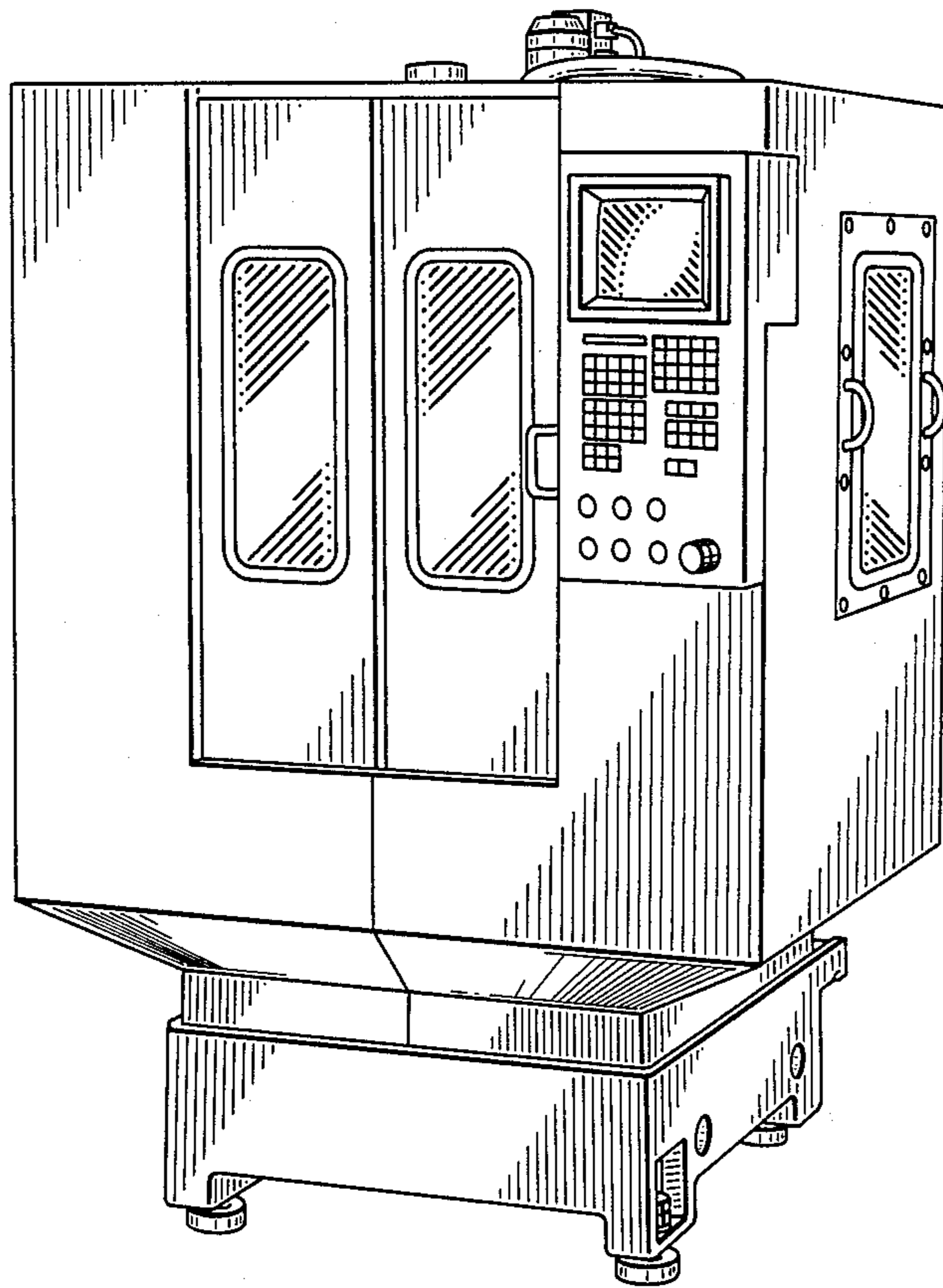


FIG. 6

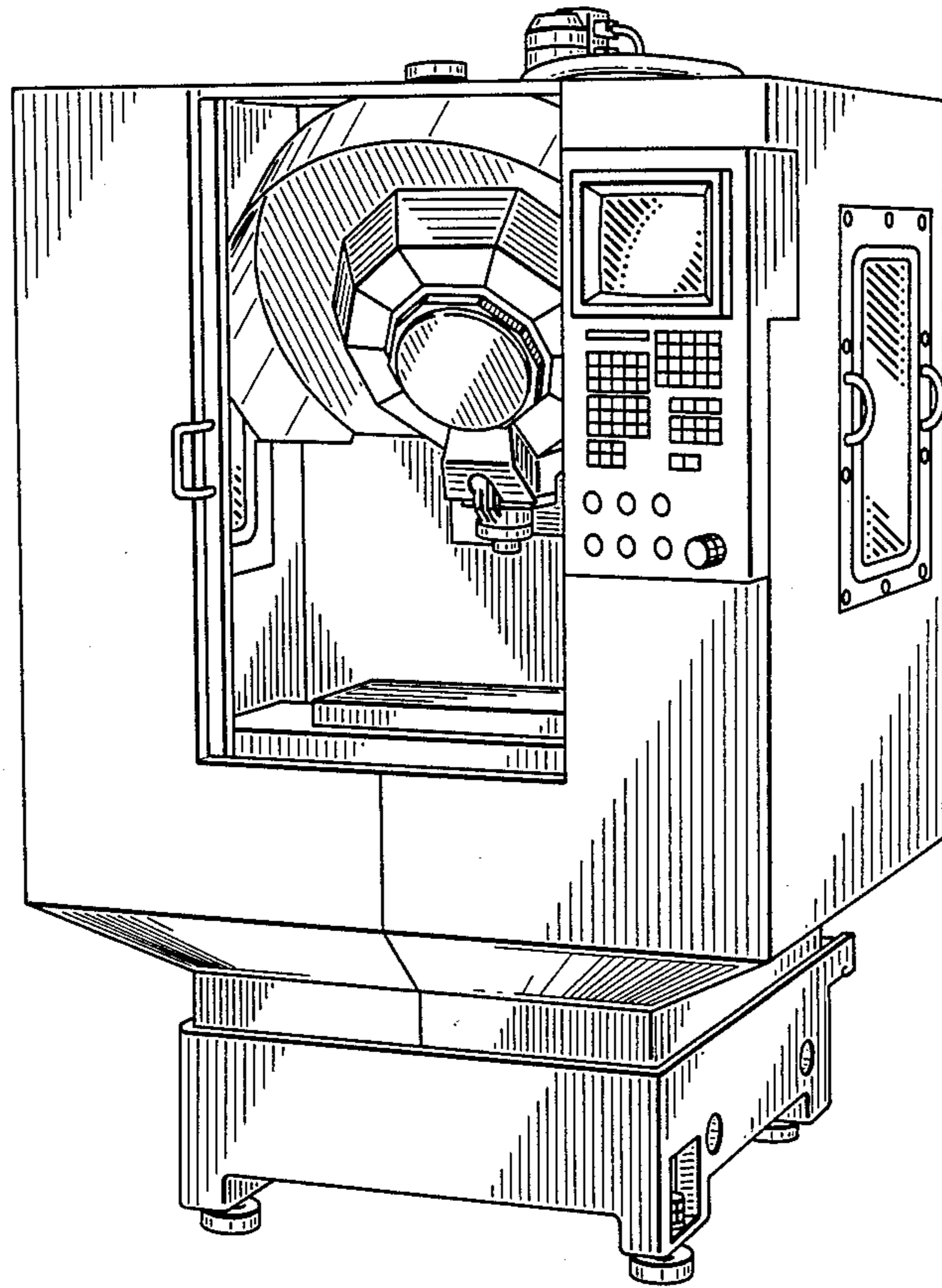


FIG. 7

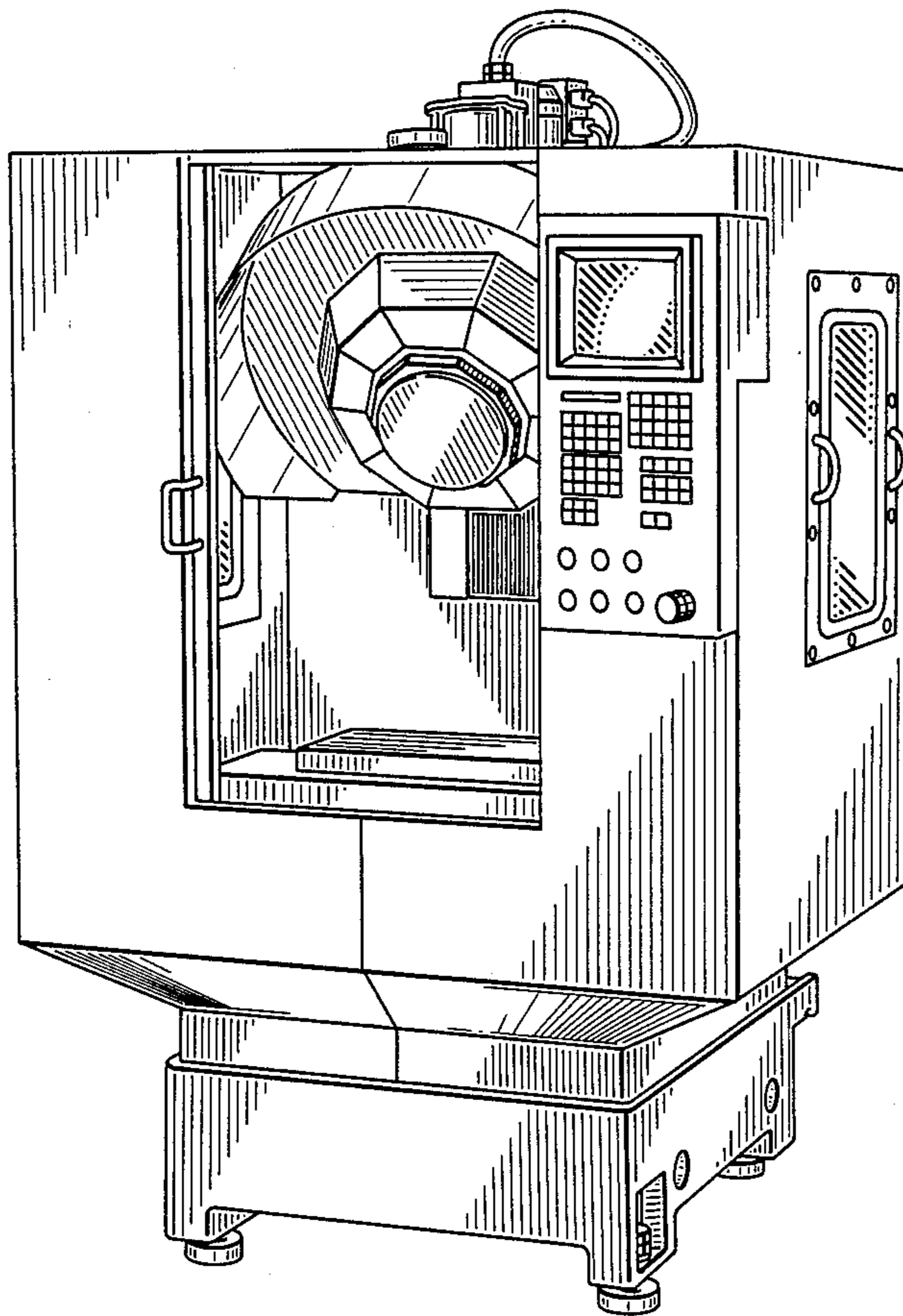


FIG. 8