



US00D410677S

# United States Patent [19]

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Matsumoto et al.

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- [54] **AUTOMATIC LABEL APPLYING APPARATUS FOR TEST TUBES**
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- [73] Assignee: **Techno Medica Co., Ltd.**, Kanagawa, Japan
- [\*\*] Term: **14 Years**
- [21] Appl. No.: **29/059,705**
- [22] Filed: **Aug. 21, 1996**
- [51] **LOC (6) Cl.** ..... **18-02**
- [52] **U.S. Cl.** ..... **D18/53; D18/50; D18/99**
- [58] **Field of Search** ..... **D18/53, 99, 50; 156/384, DIG. 47, 542, DIG. 26, 556, 569, 387, 272; D24/232; 141/1**

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## [57] CLAIM

The ornamental design for an automatic label applying apparatus for test tubes, as shown.

## DESCRIPTION

The present design relates to an automatic label applying

apparatus to be suitably used for test tubes and blood sample tubes containing blood, body fluid or some other fluid constituting the object of a screening operation, the label to be applied typically carrying data on the fluid to be screened in the form of characters and a bar code. The automatic label applying apparatus comprises two label applying units, and at least one assembly of a device for supplying a label for instructions and an auxiliary label and a collector unit. Each label applying unit includes at least a test tube containing section for containing test tubes of a same type to be applied with respective labels, a collection means for collecting the test tubes from the test tube containing section, a transfer means for transferring the collected test tubes to a label applying station, a printing/application means for printing characters and/or bar codes on the labels and applying the printed labels to the respective test tubes, and a delivery means for delivering the test tubes with applied labels to the collector unit of the respective assembly.

FIG. 1 is a top plan view of an embodiment of the automatic label applying apparatus for test tubes of the present invention;

FIG. 2 is a front elevation view of the automatic label applying apparatus for test tubes depicted in FIG. 1;

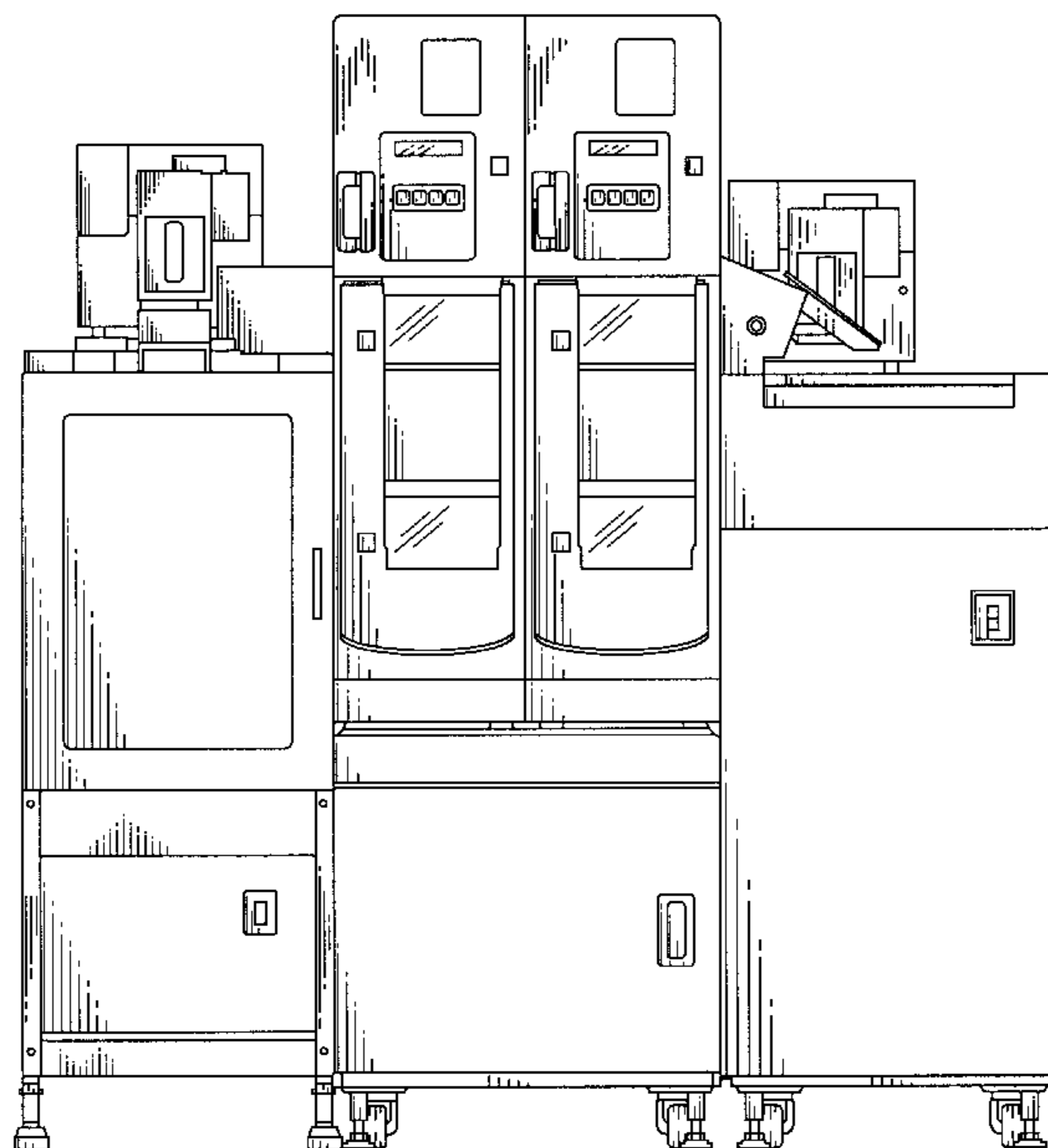
FIG. 3 is a right side elevation view of the automatic label applying apparatus for test tubes depicted in FIG. 1;

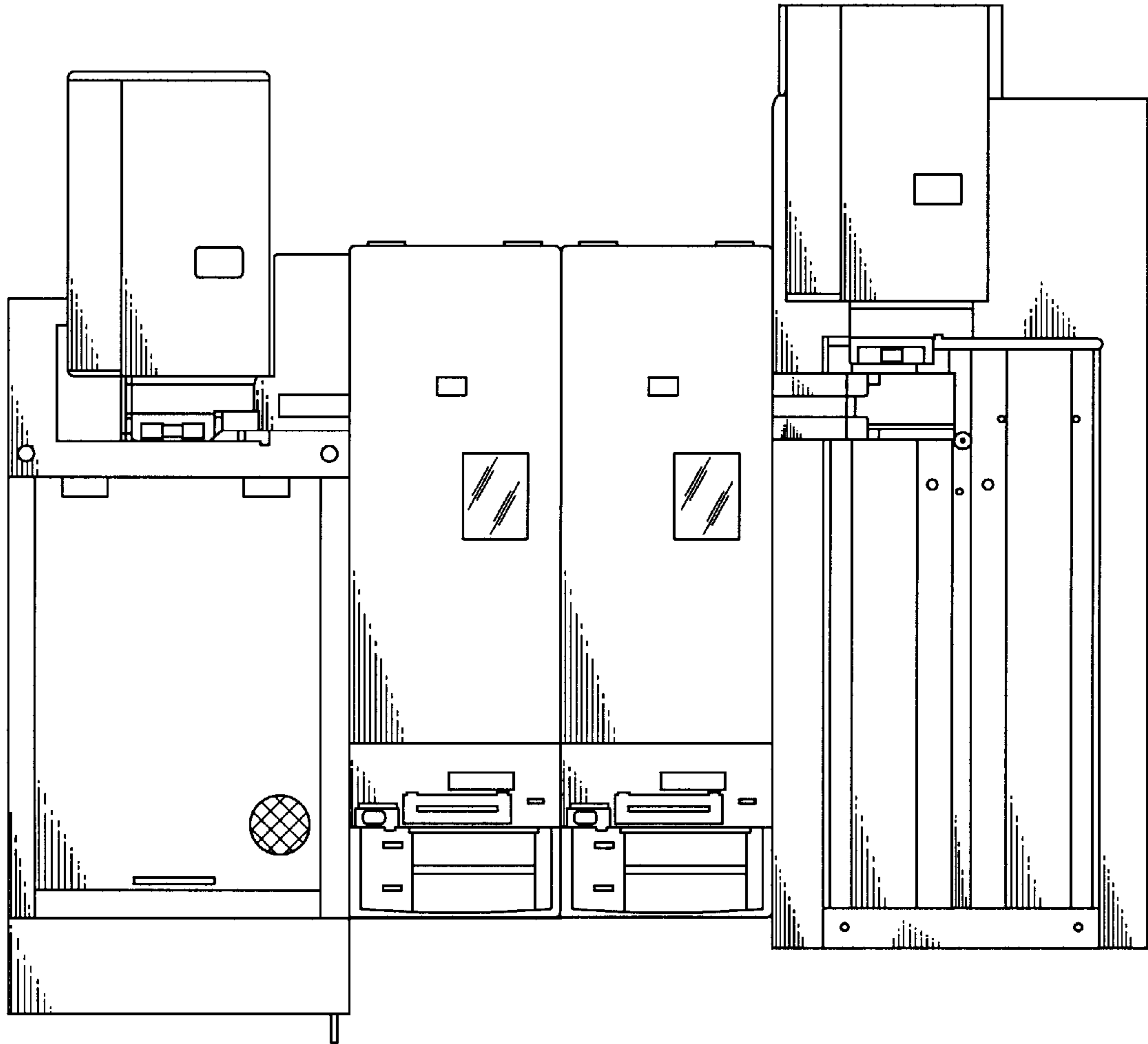
FIG. 4 is a left side elevation view of the automatic label applying apparatus for test tubes depicted in FIG. 1;

FIG. 5 is a bottom plan view of the automatic label applying apparatus for test tubes depicted in FIG. 1; and,

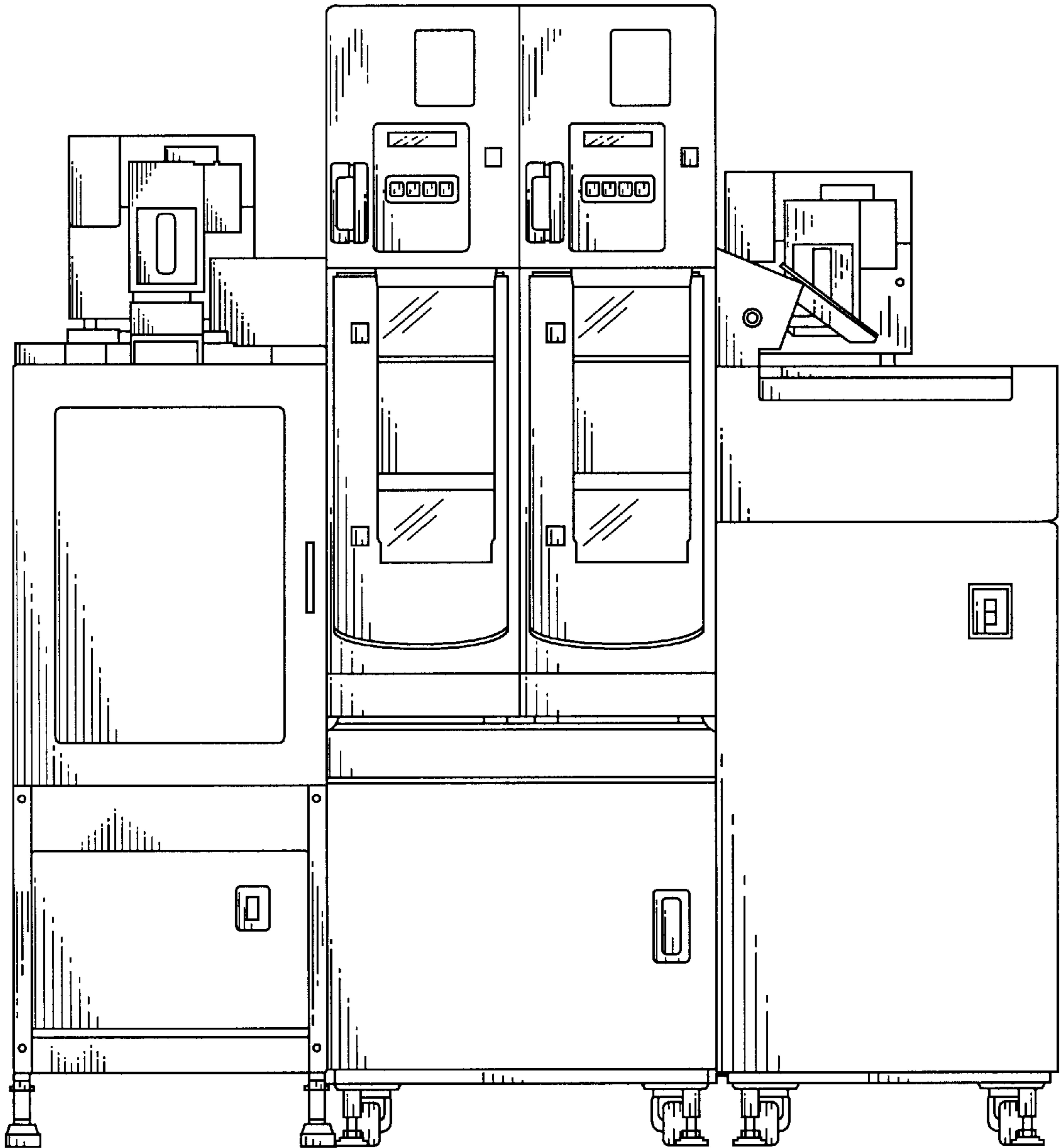
FIG. 6 is a rear view of the automatic label applying apparatus for test tubes depicted in FIG. 1.

1 Claim, 6 Drawing Sheets

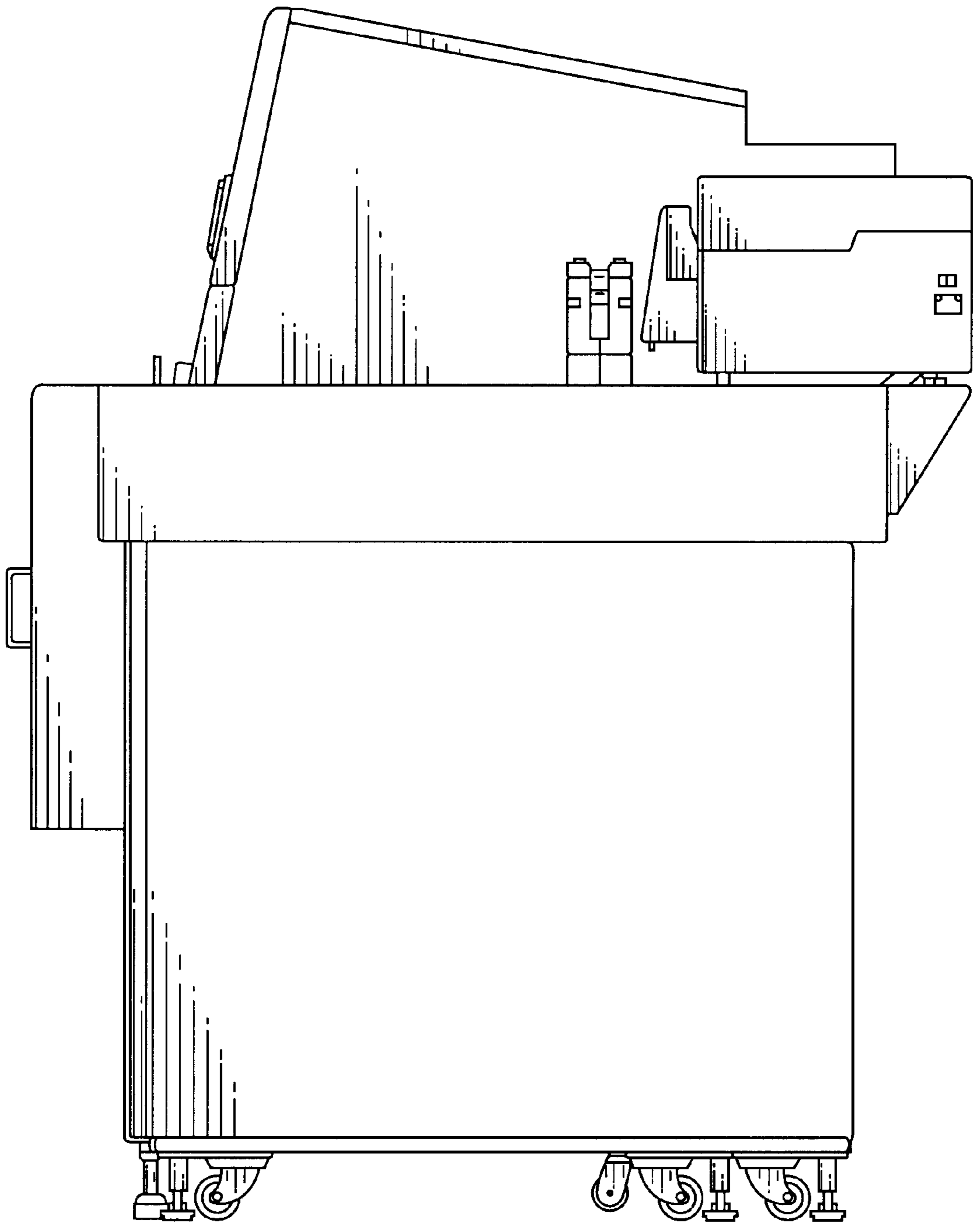




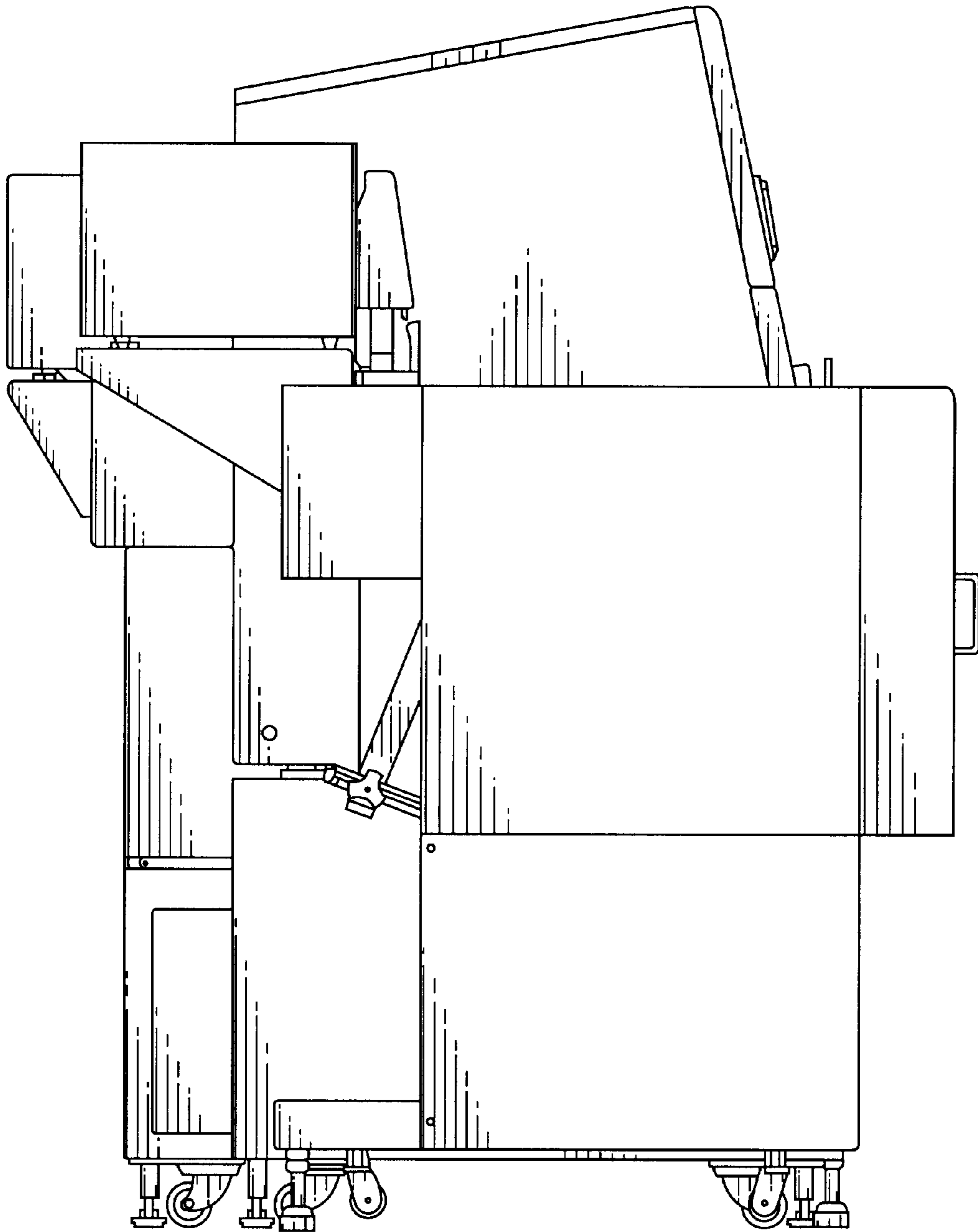
**FIG. 1**



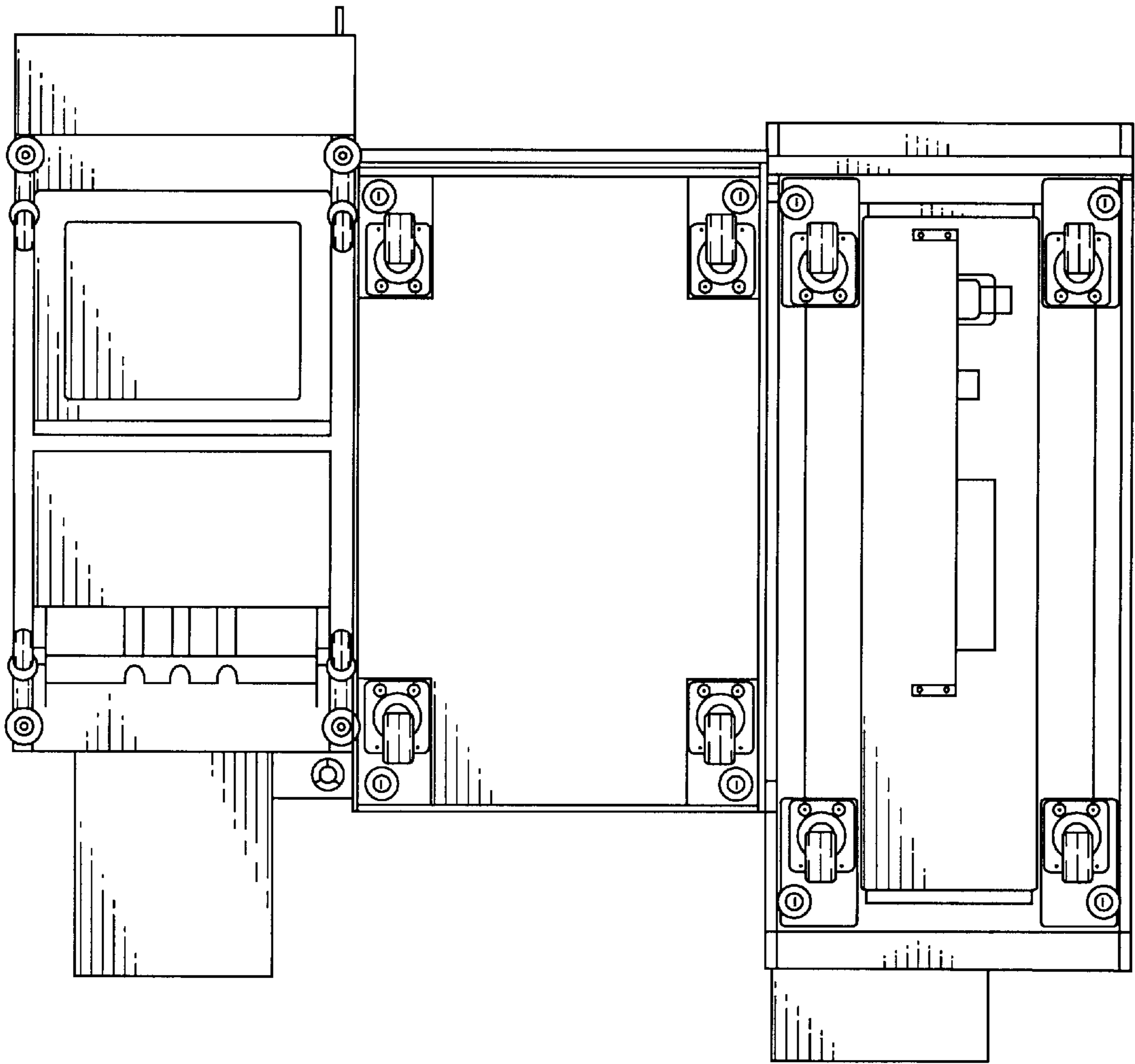
**FIG. 2**



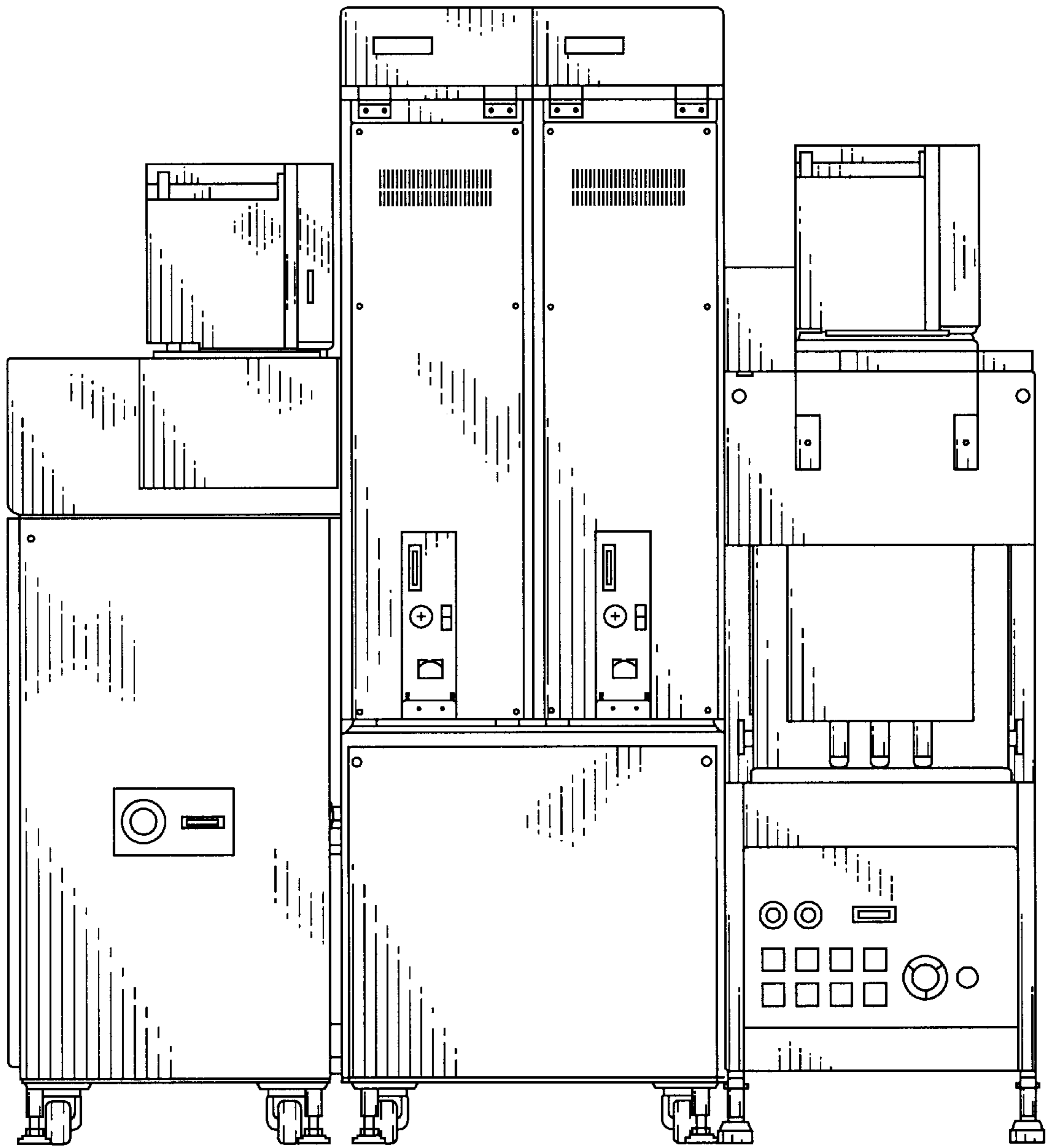
**FIG. 3**



**FIG. 4**



**FIG. 5**



**FIG. 6**