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United States Patent [19]

Ishii et al.

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[45] **Date of Patent: ** Jan. 21, 1992**

[54] **HANDLING ARM FOR BOATS FOR THERMAL TREATMENT OF SEMICONDUCTOR WAFERS**

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[73] Assignee: **Tel Sagami Limited**, Kanagawa, Japan

[**] Term: **14 Years**

[21] Appl. No.: **301,992**

[22] Filed: **Jan. 25, 1989**

[30] **Foreign Application Priority Data**

Jul. 25, 1988 [JP] Japan 63-29834

[52] **U.S. Cl.** **D15/199**

[58] **Field of Search** D15/144, 199; 219/390, 219/411; 414/222, 225, 226, 443; 432/6, 153, 33, 239, 253, 258, 260, 261

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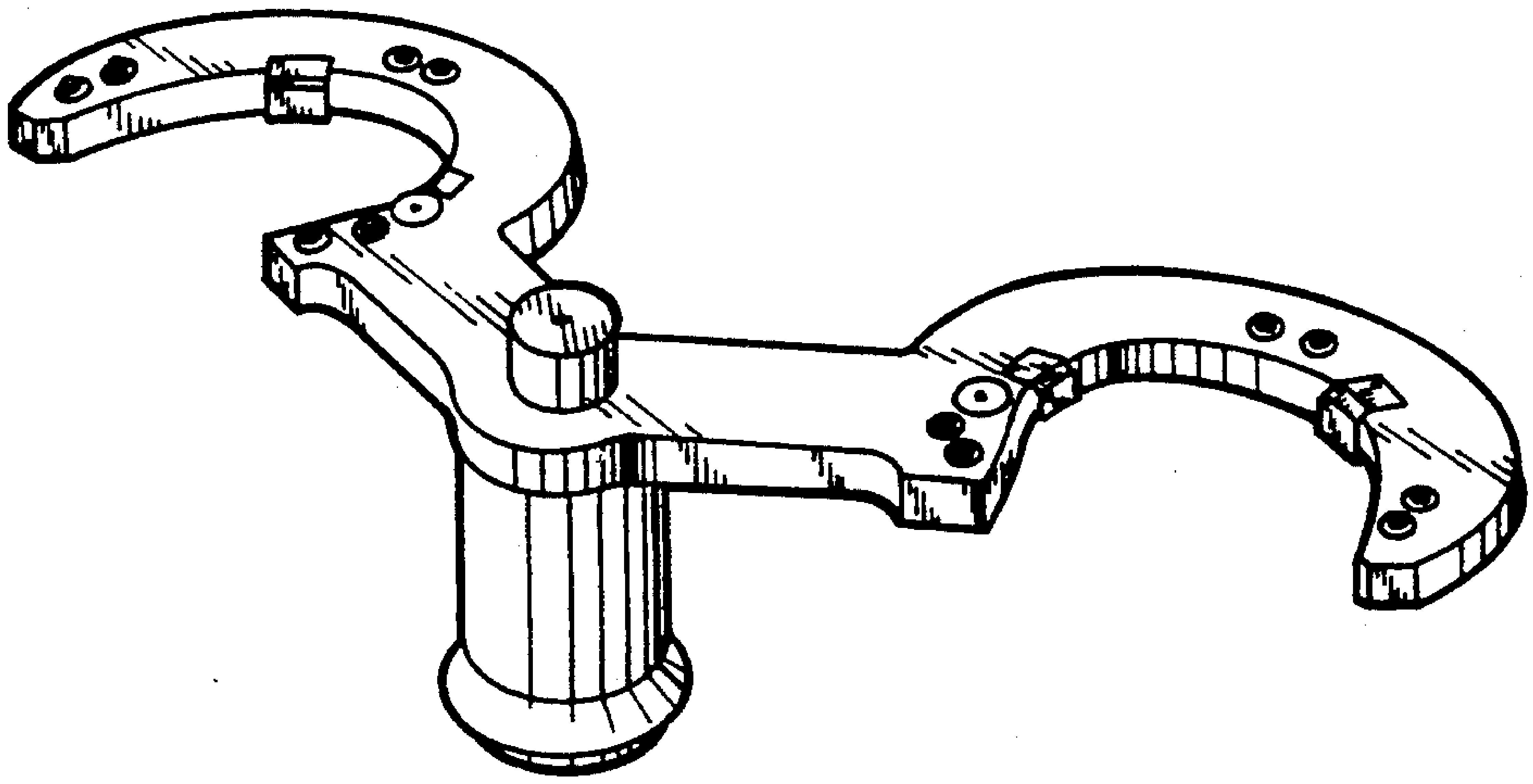
[57] **CLAIM**

The ornamental design for a handling arm for boats for thermal treatment of semiconductor wafers, as shown and described.

DESCRIPTION

FIG. **1** is a top, front and right side perspective view of a handling arm for boats for thermal treatment of semiconductor wafers showing our new design;
FIG. **2** is a front elevational view;
FIG. **3** is a left side elevational view;
FIG. **4** is a top plan view;
FIG. **5** is a bottom plan view; and
FIG. **6** is a rear elevational view thereof.



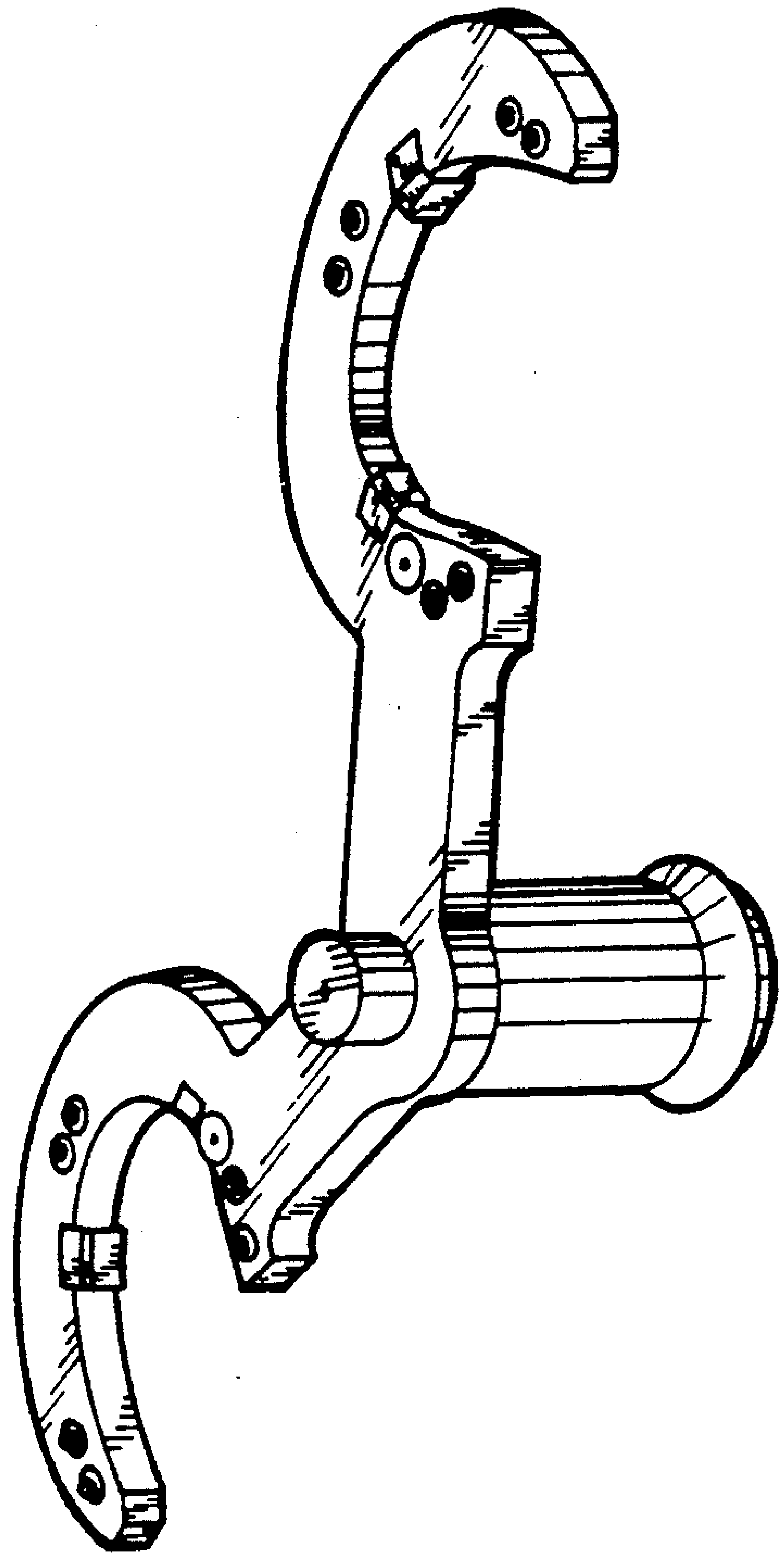


FIG. 1

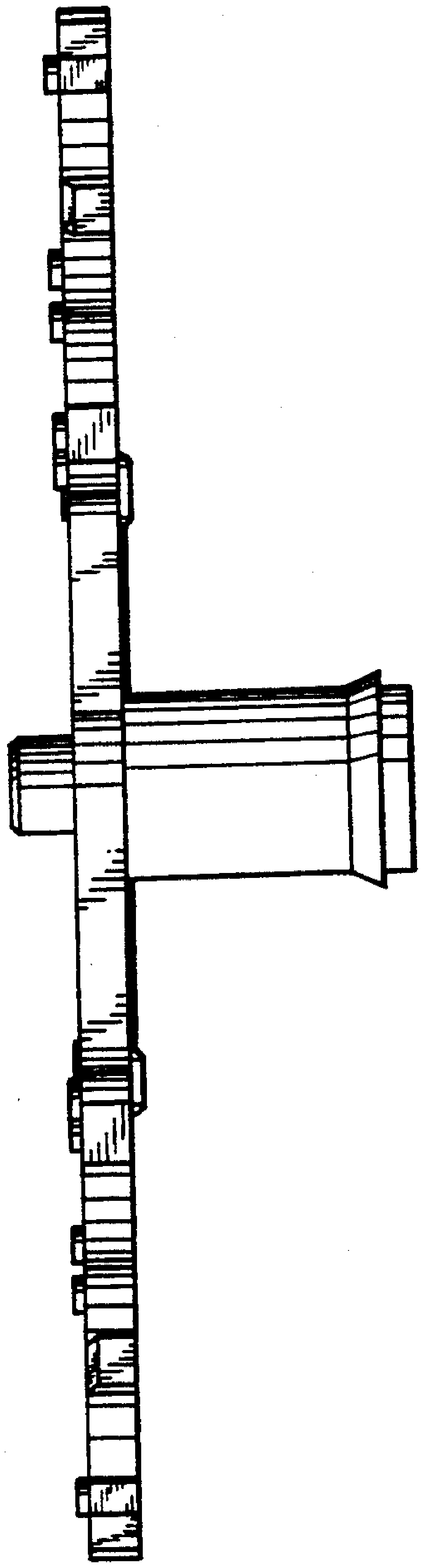


FIG. 2

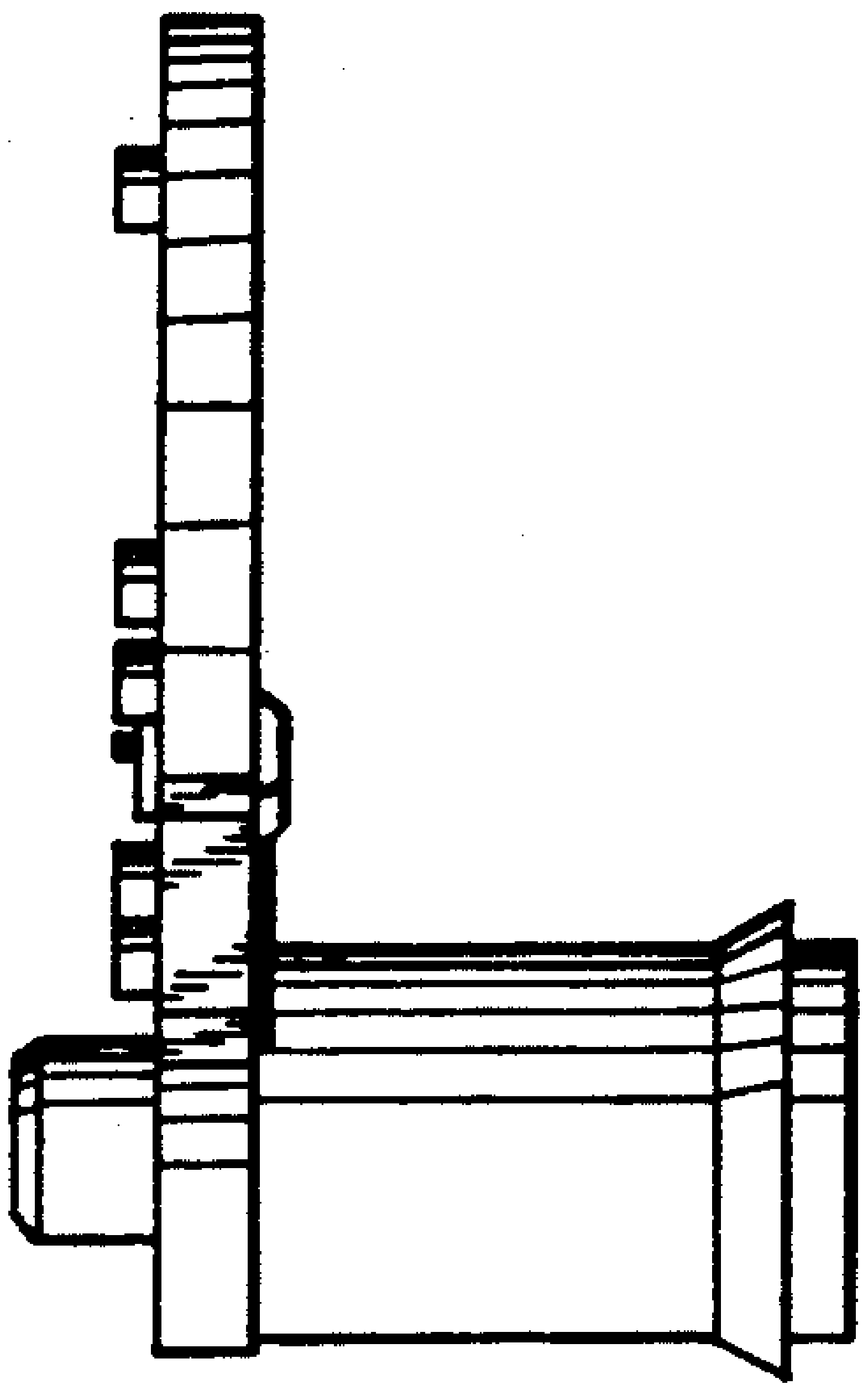


FIG. 3

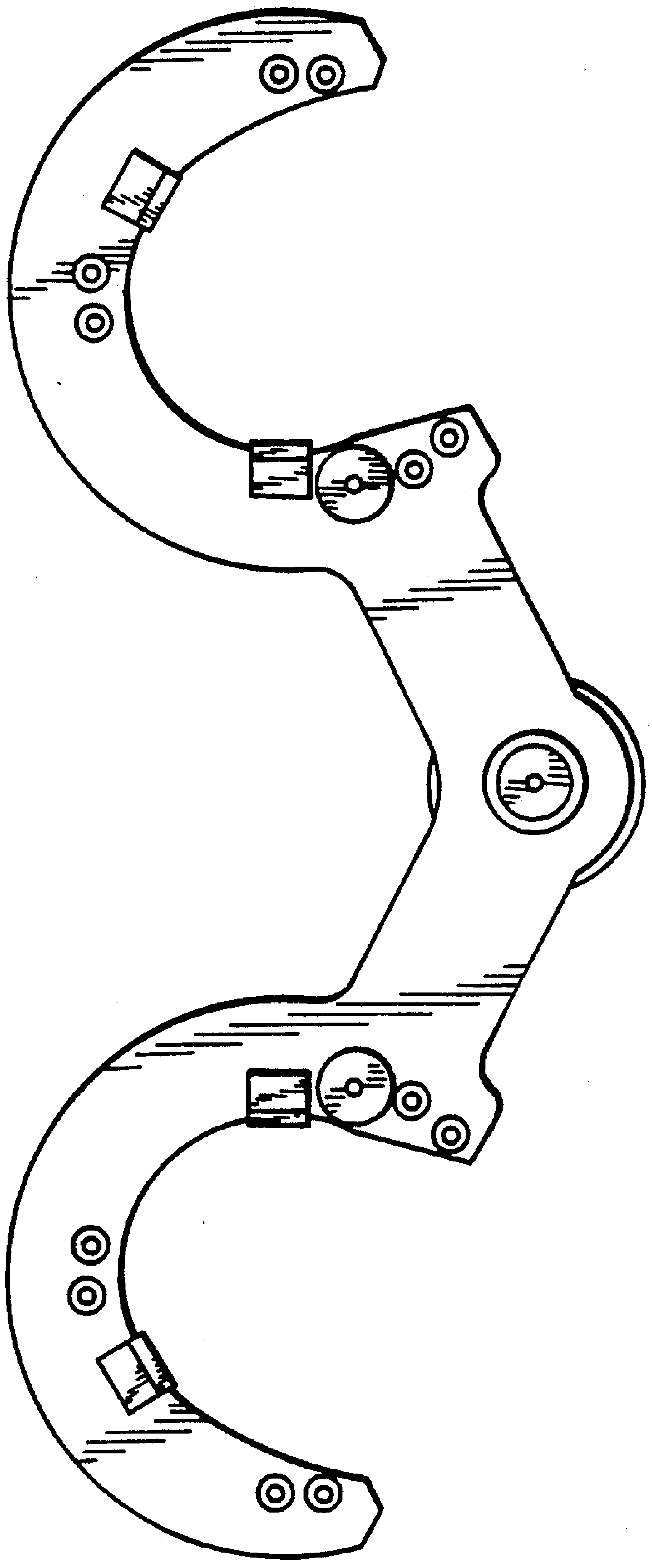


FIG. 4

FIG. 5

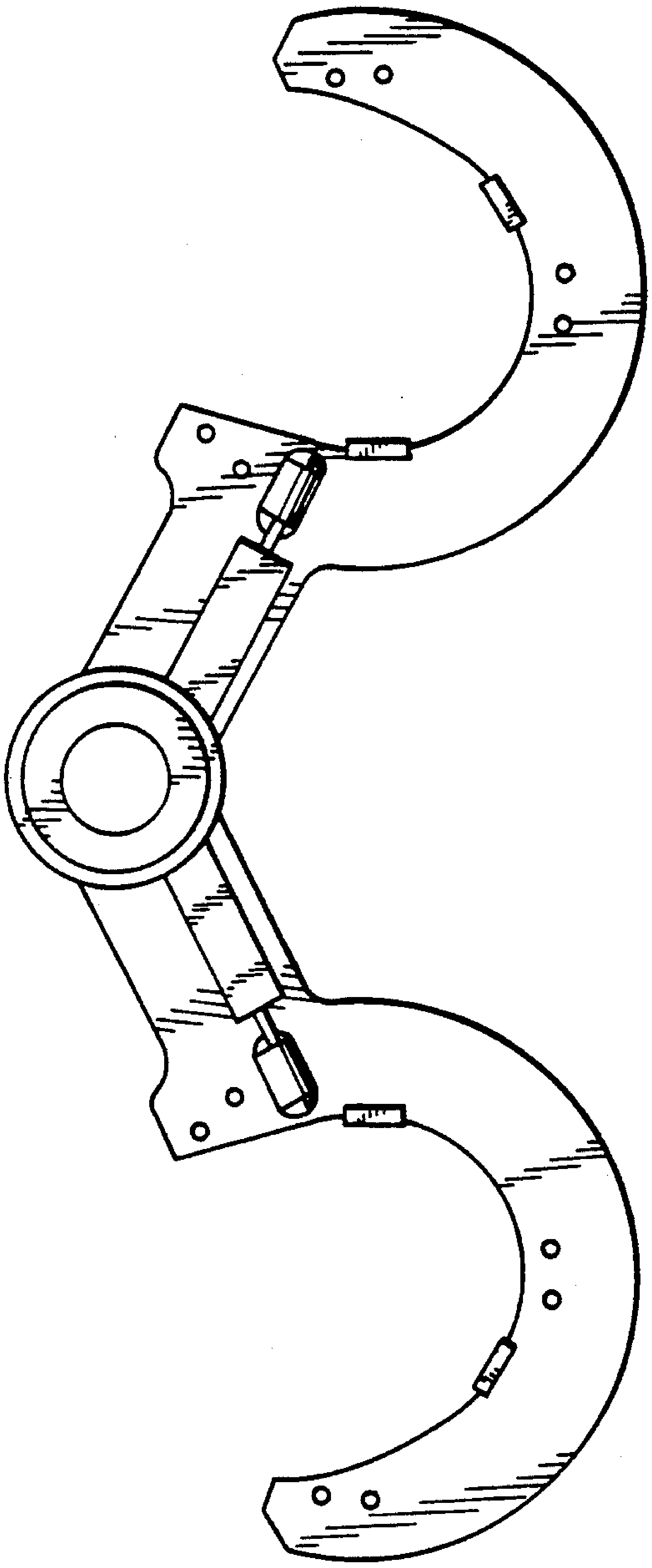


FIG. 6