

US00D552137S

(12) **United States Design Patent** (10) **Patent No.:** **US D552,137 S**
Sim (45) **Date of Patent:** **** Oct. 2, 2007**

(54) **BALL BEARING SWIVEL**

(75) Inventor: **Woo-Kyung Sim**, Paju (KR)

(73) Assignee: **Centro Corporation**, Koyang,
Kyungki-Do (KR)

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

(21) Appl. No.: **29/243,117**

(22) Filed: **Nov. 18, 2005**

(30) **Foreign Application Priority Data**

Aug. 10, 2005 (KR) 30-2005-0026838

(51) **LOC (8) Cl.** **15-09**

(52) **U.S. Cl.** **D15/143**

(58) **Field of Classification Search** D8/355,
D8/367; D15/143; 174/185; 277/29, 351,
277/423, 549; 403/60, 78, 82, 164, 165
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,307,888 A * 3/1967 Dumpis 403/164
4,552,481 A * 11/1985 Bluett 403/165
5,028,117 A * 7/1991 Muhlenkamp-Becker ... 385/117
D346,423 S * 4/1994 Kitagawa D8/367
5,749,812 A * 5/1998 Feciura et al. 482/82
6,357,954 B1 * 3/2002 Timoney 403/78
D456,827 S * 5/2002 Butts D15/143

6,461,071 B1 * 10/2002 Kanemura 403/78
6,491,329 B1 * 12/2002 Smith 403/165
2004/0018042 A1 * 1/2004 Smith 403/78
2007/0031183 A1 * 2/2007 Sim 403/78

* cited by examiner

Primary Examiner—Antoine D. Davis

Assistant Examiner—Patricia Palasik

(74) *Attorney, Agent, or Firm*—Sheridan Ross, P.C.

(57) **CLAIM**

The ornamental design for a ball bearing swivel, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a ball bearing swivel showing my new design;

FIG. 2 is a front elevational view thereof;

FIG. 3 is a rear elevational view thereof;

FIG. 4 is a left side elevational view thereof;

FIG. 5 is a right side elevational view thereof;

FIG. 6 is a top plan view thereof; and,

FIG. 7 is a bottom plan view thereof.

The surface(s) or portion(s) of the article not shown in the drawing or described in the specification form(s) no part of the claimed design.

1 Claim, 6 Drawing Sheets

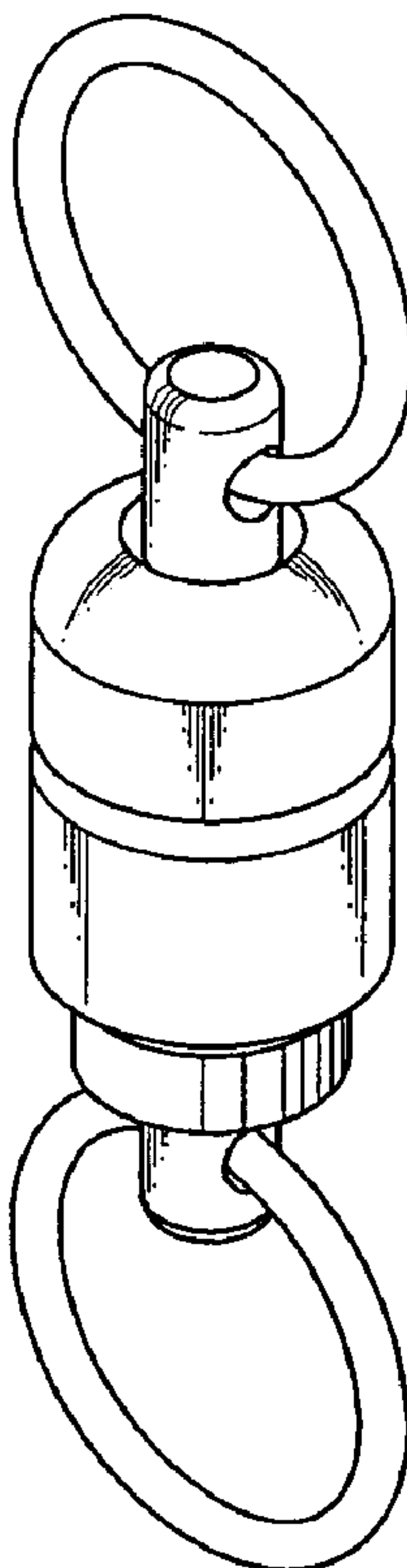


Fig. 1

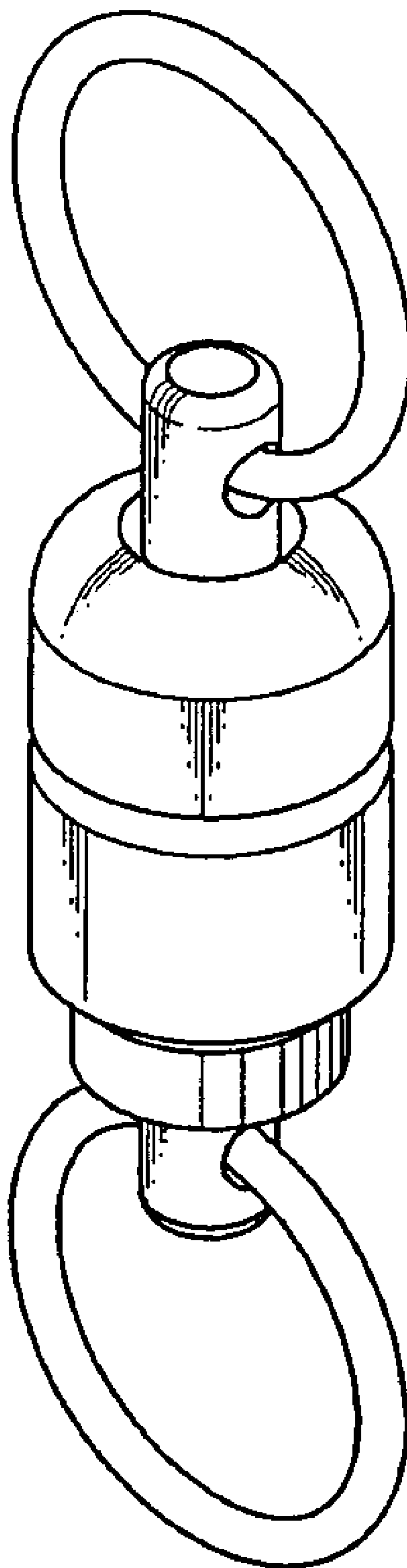


Fig. 2

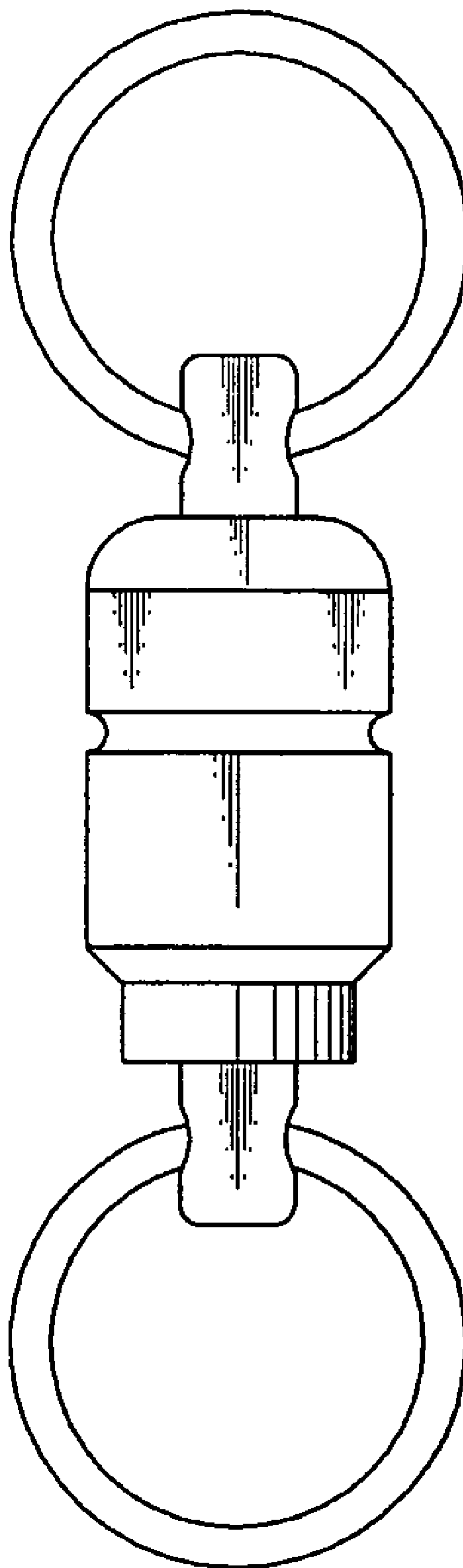


Fig. 3

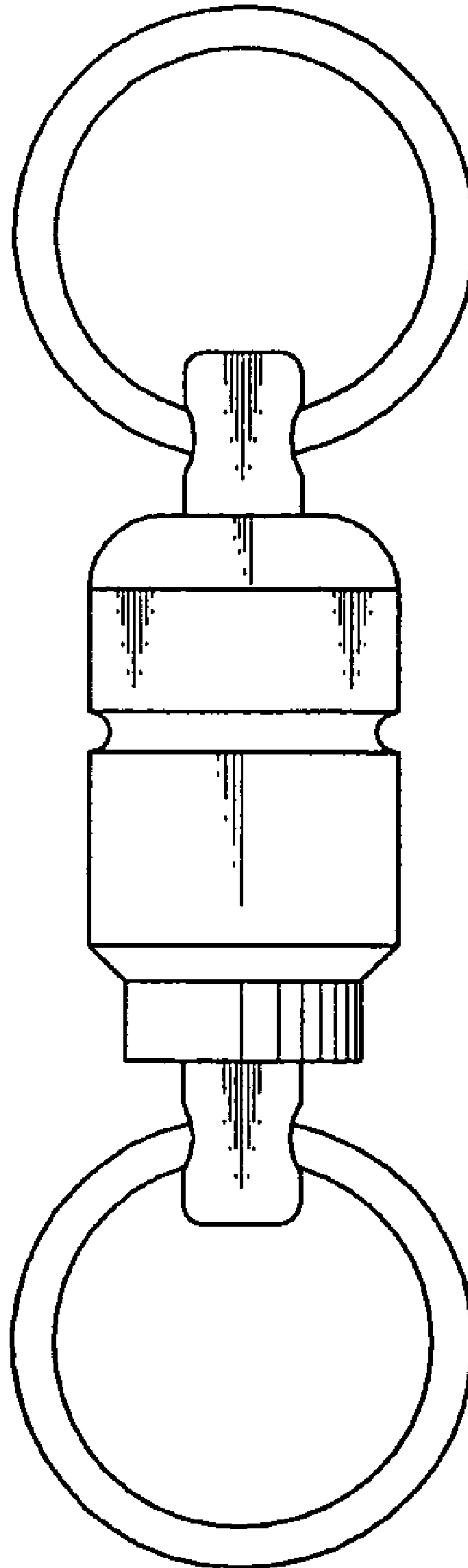


Fig. 4

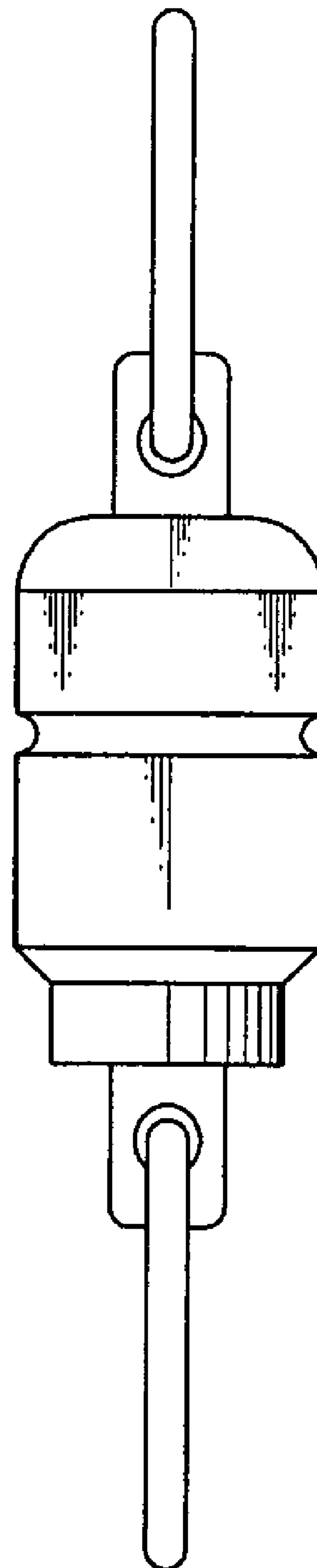


Fig. 5

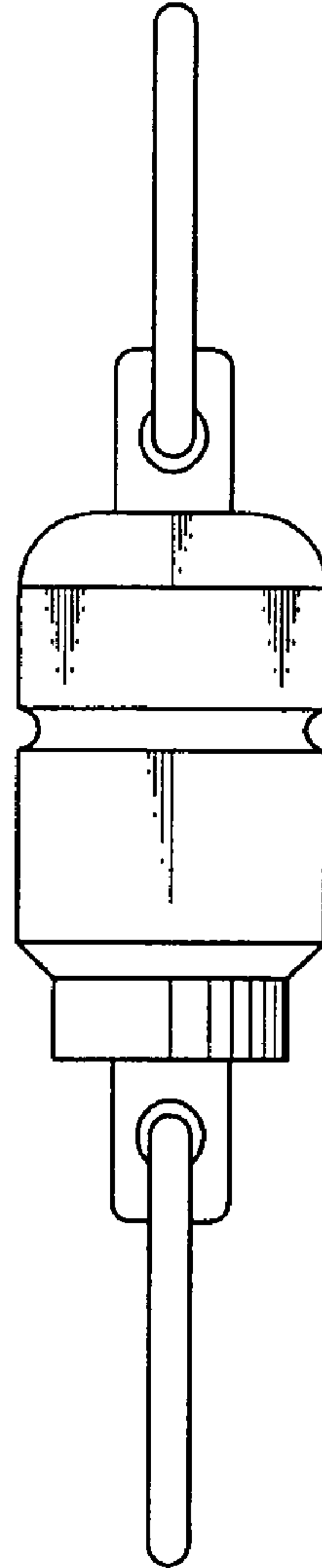


Fig. 6

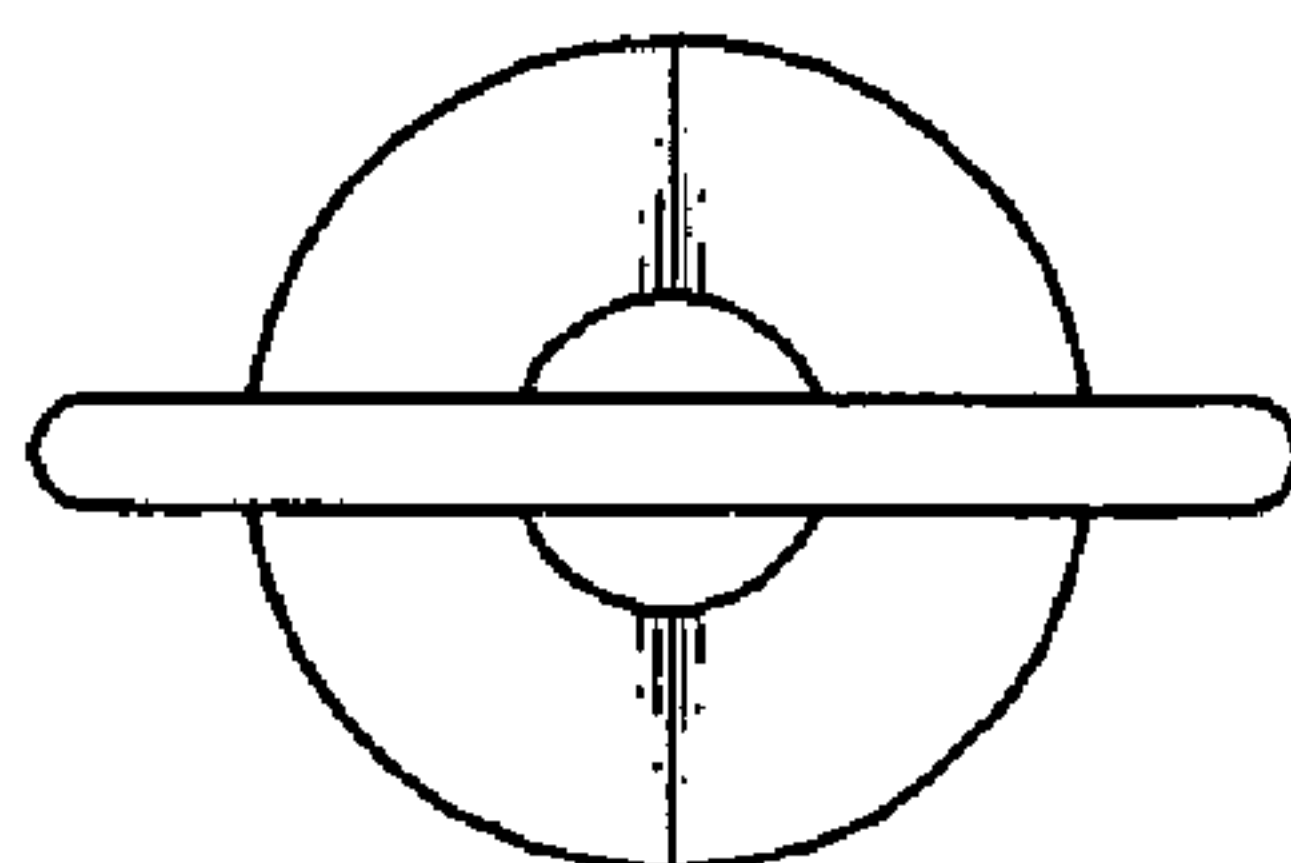


Fig. 7

