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(12) **United States Design Patent** (10) **Patent No.:** **US D489,967 S**  
**Funk** (45) **Date of Patent:** **\*\* May 18, 2004**

(54) **TUBE CONNECTOR**

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(\*\*) Term: **14 Years**  
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(51) **LOC (7) Cl.** ..... **08-08**  
(52) **U.S. Cl.** ..... **D8/382**  
(58) **Field of Search** ..... D8/382; 403/403,  
403/205, 170–171

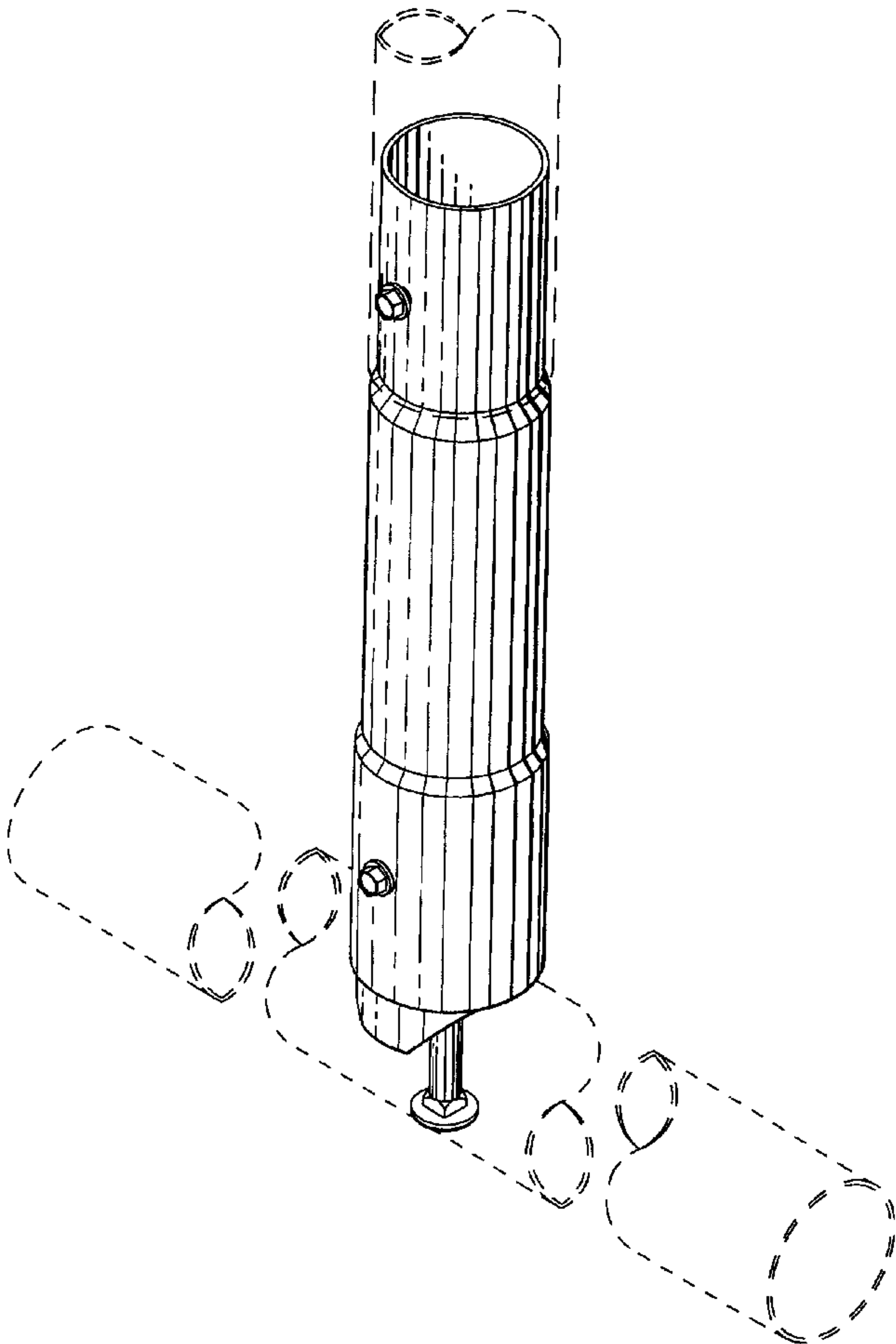
(57) **CLAIM**  
The ornamental design for a tube connector, as shown and described.

**DESCRIPTION**

FIG. 1 is a isometric view of my new tube connector showing the new design;  
FIG. 2 is a exploded view of FIG. 1 with a small portion cut away for clarity;  
FIG. 3 is a enlarged front end elevation view of FIG. 1;  
FIG. 4 is a enlarged rear end elevation view of FIG. 1;  
FIG. 5 is a enlarged right side elevation view of FIG. 1 the left side elevation view being a mirror image thereof;  
FIG. 6 is a enlarged top end view of FIG. 1; and,  
FIG. 7 is a enlarged bottom end view of FIG. 1.  
Broken lines throughout the views show the environment in which the design is used and form no part of the claimed design.

(56) **References Cited**  
**U.S. PATENT DOCUMENTS**  
4,793,637 A \* 12/1988 Laipply et al. .... 285/39  
5,141,264 A \* 8/1992 Usui ..... 285/319  
6,053,639 A \* 4/2000 Chen ..... 385/53  
6,511,003 B2 \* 1/2003 Dallmeyer et al. .... 239/585.1  
**FOREIGN PATENT DOCUMENTS**  
JP 11264492 A \* 9/1999 ..... F16L/41/02  
\* cited by examiner

**1 Claim, 6 Drawing Sheets**



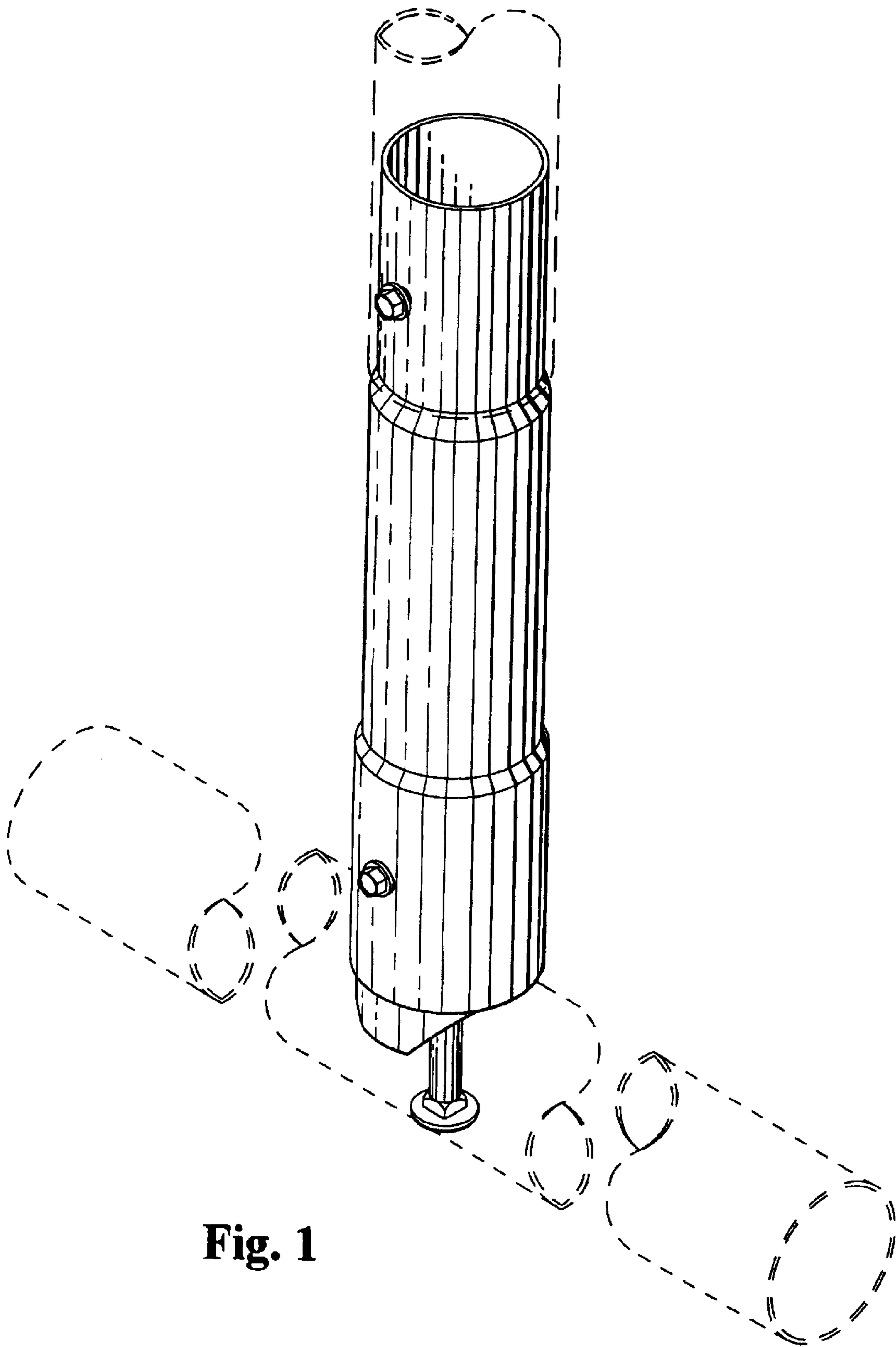


Fig. 1

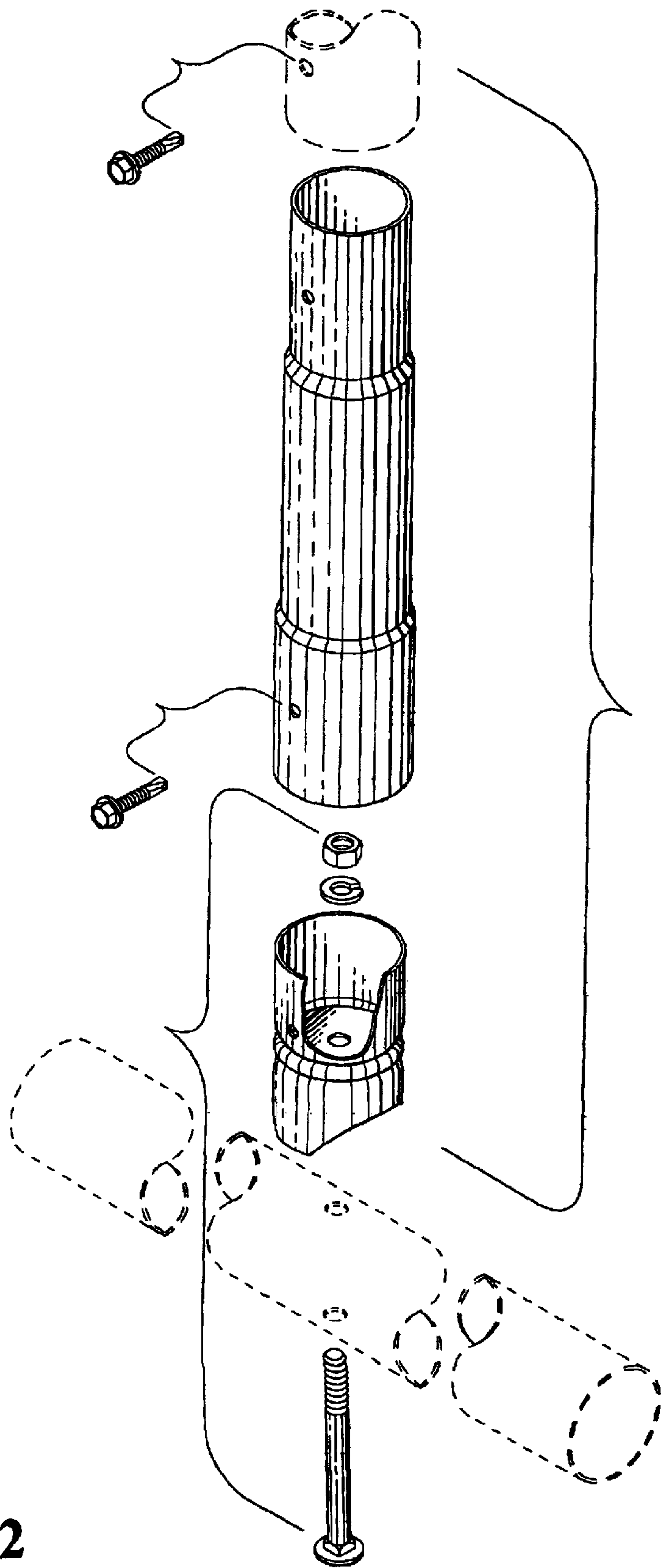


Fig. 2

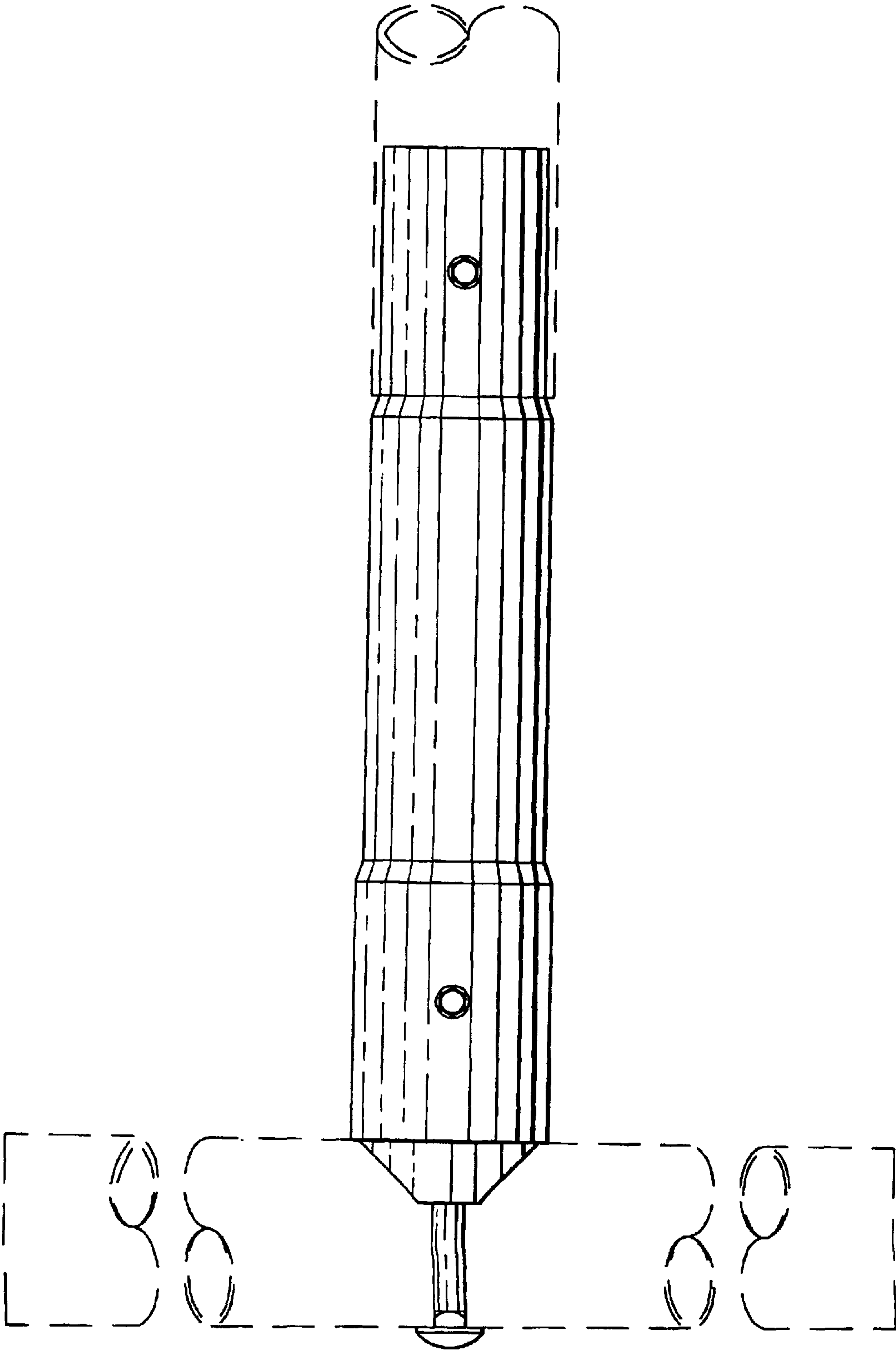


Fig. 3

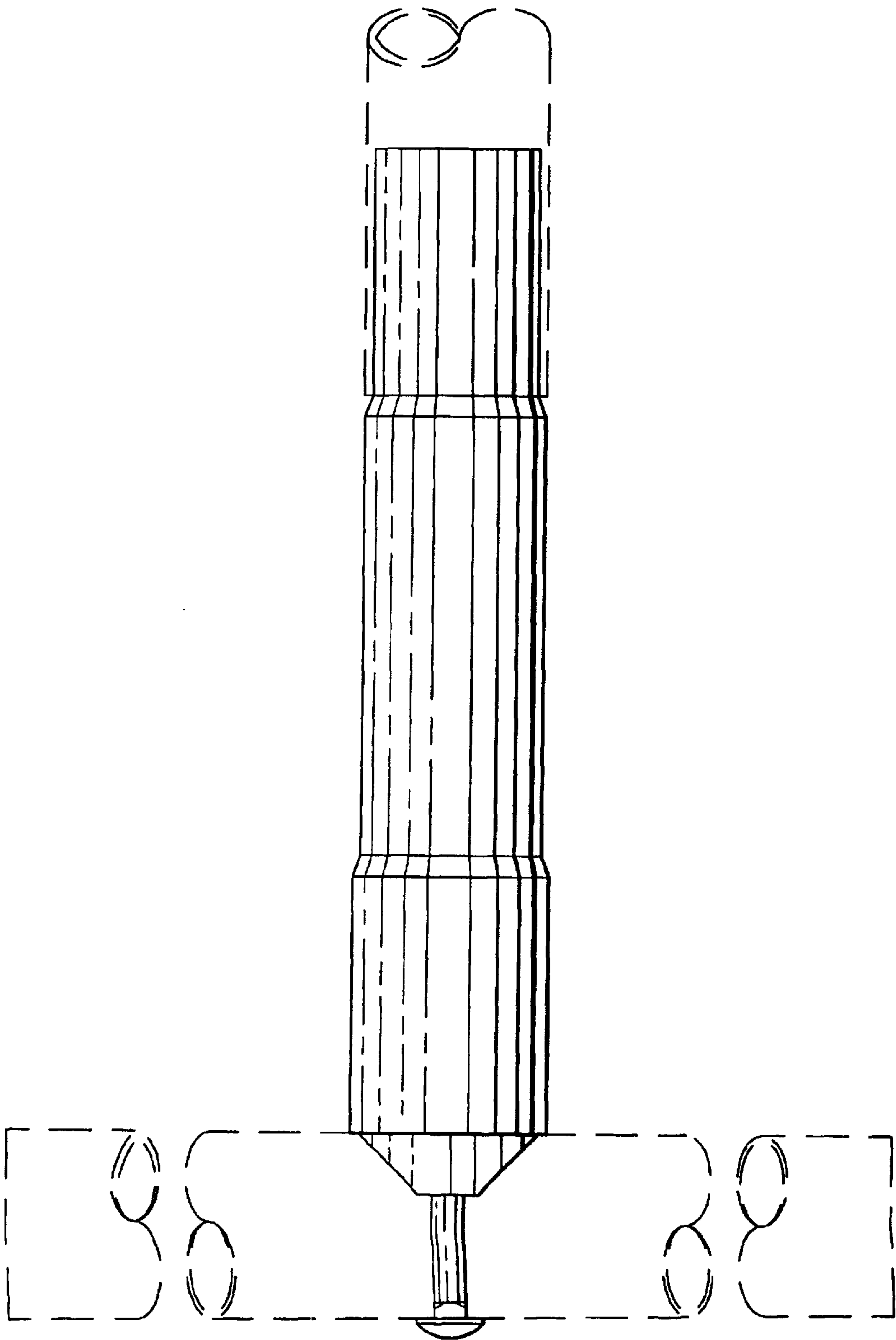


Fig. 4

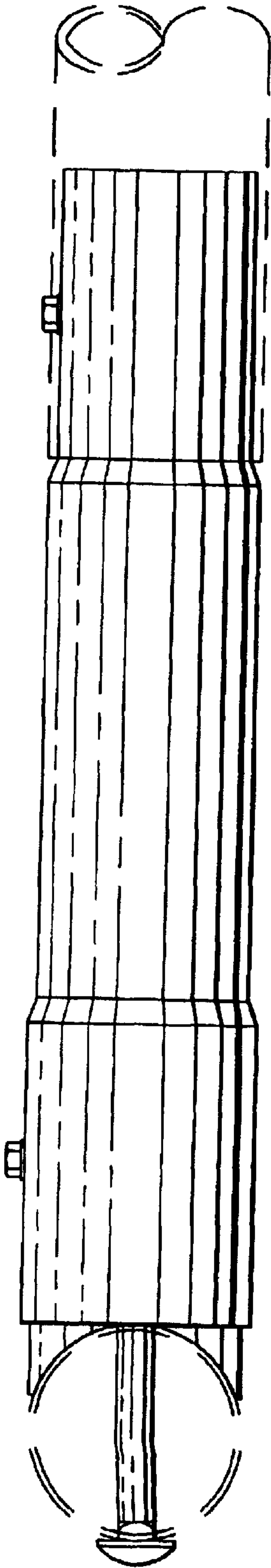


Fig. 5

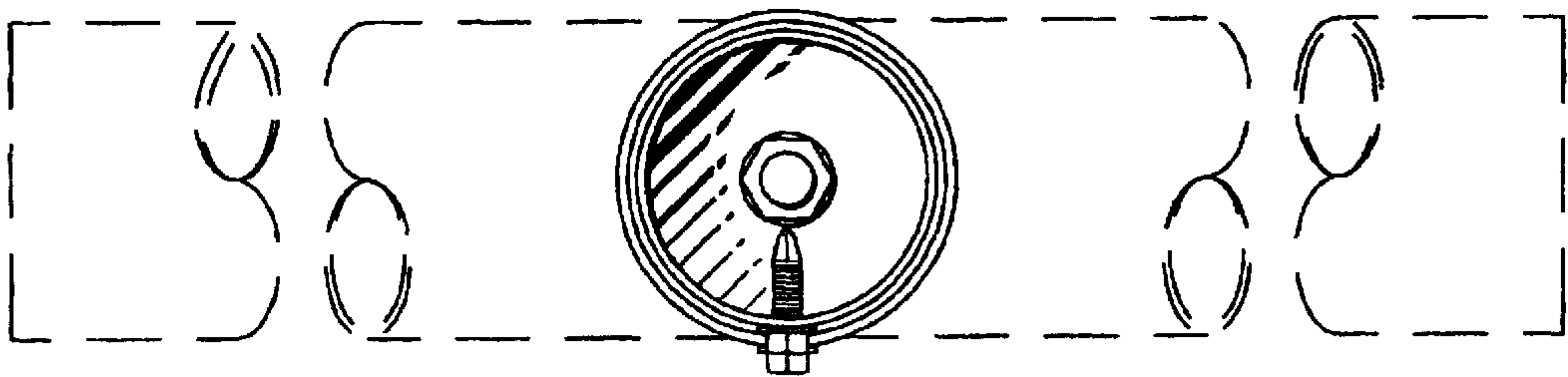


Fig. 6

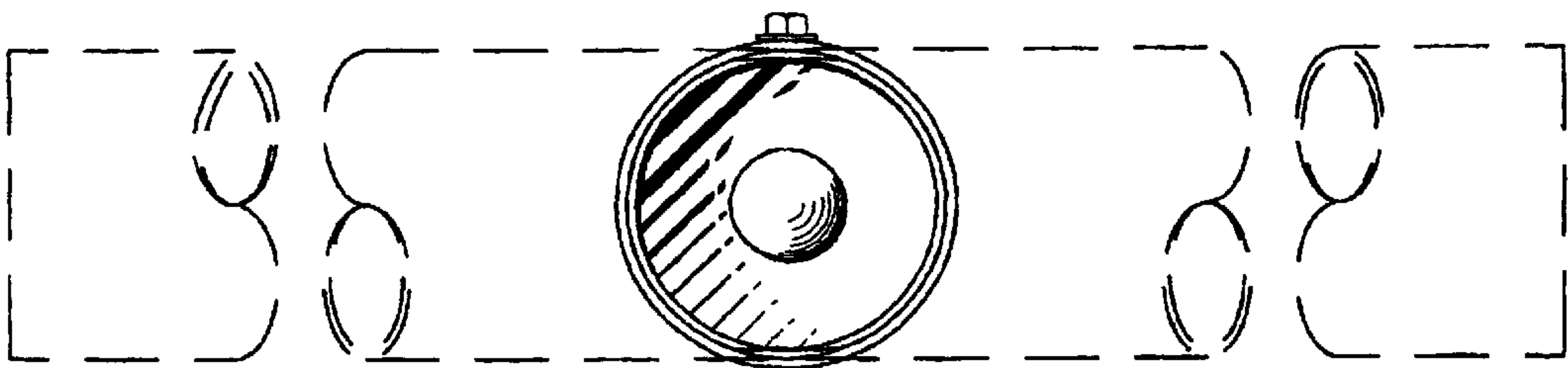


Fig. 7