



US00D553971S

(12) **United States Design Patent**  
**Krueger**

(10) **Patent No.:** **US D553,971 S**

(45) **Date of Patent:** **\*\* Oct. 30, 2007**

(54) **PIPE AND TUBE SUPPORT**

(75) Inventor: **Carey Krueger**, Newton, NJ (US)

(73) Assignee: **Behringer Corporation**, Branchville, NJ (US)

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

(21) Appl. No.: **29/222,603**

(22) Filed: **Jan. 31, 2005**

(51) **LOC (8) Cl.** ..... **08-08**

(52) **U.S. Cl.** ..... **D8/396**

(58) **Field of Classification Search** ..... D8/354–356,  
D8/371, 394–396, 376, 382; 24/16 R, 279;  
248/49, 62, 74.1–74.4, 73

See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

92,299 A	7/1869	Fry
485,033 A	10/1892	Hanna
720,296 A	2/1903	Straub
784,979 A	3/1905	Bruce
801,409 A	10/1905	Smith

(Continued)

**FOREIGN PATENT DOCUMENTS**

DE	28 54 924	6/1980
DE	31 46 297	6/1983
DE	32 33 838	3/1984
DE	34 39 418	5/1986
DE	35 06 251	8/1986
DE	298 14 418	10/1998
DE	198 11 889	9/1999
EP	0 225 516	2/1986
EP	0 225 516	6/1987
EP	0 567 821	11/1993
EP	0 602 456 B1	6/1994
EP	0 622 575 B1	11/1994
EP	0 567 821	2/1996
EP	0 622 575 B1	5/1996

EP	0 602 456 B1	3/1997
FR	2 572 488	10/1984
FR	2 572 488	5/1986
FR	2 631 678	5/1989
FR	2 631 678	11/1989
GB	2 037 921 A	10/1979
GB	2 037 921 A	7/1980
GB	2 124 289 A	6/1982
GB	2 124 289 A	2/1984
JP	4-81562	3/1992
JP	04-081562	3/1992
WO	WO 2005/072393	8/2005
WO	WO2005/072393	10/2006

**OTHER PUBLICATIONS**

PMB Valve Solutions, “Pipe & Tubing Hangers—For Clean Work Areas and Clean Rooms”, pp. 1–9, Irwin, PA, Nov. 2004 (as per last modified date on PBM Index of Products at <http://www.pbmvalve.com/products/hangers/pdf/>).  
“Grinnell Pipe Hangers Catalog PH-90”, pp. 1–175, Grinnell Corporation, 1990.  
“Pipe Hanger and Supports—Materials, Design and Manufacture” MSS SP-58–1993, Standard Practice.

(Continued)

*Primary Examiner*—Louis S. Zarfes

*Assistant Examiner*—John Windmuller

(74) *Attorney, Agent, or Firm*—McCarter & English, LLP

(57)

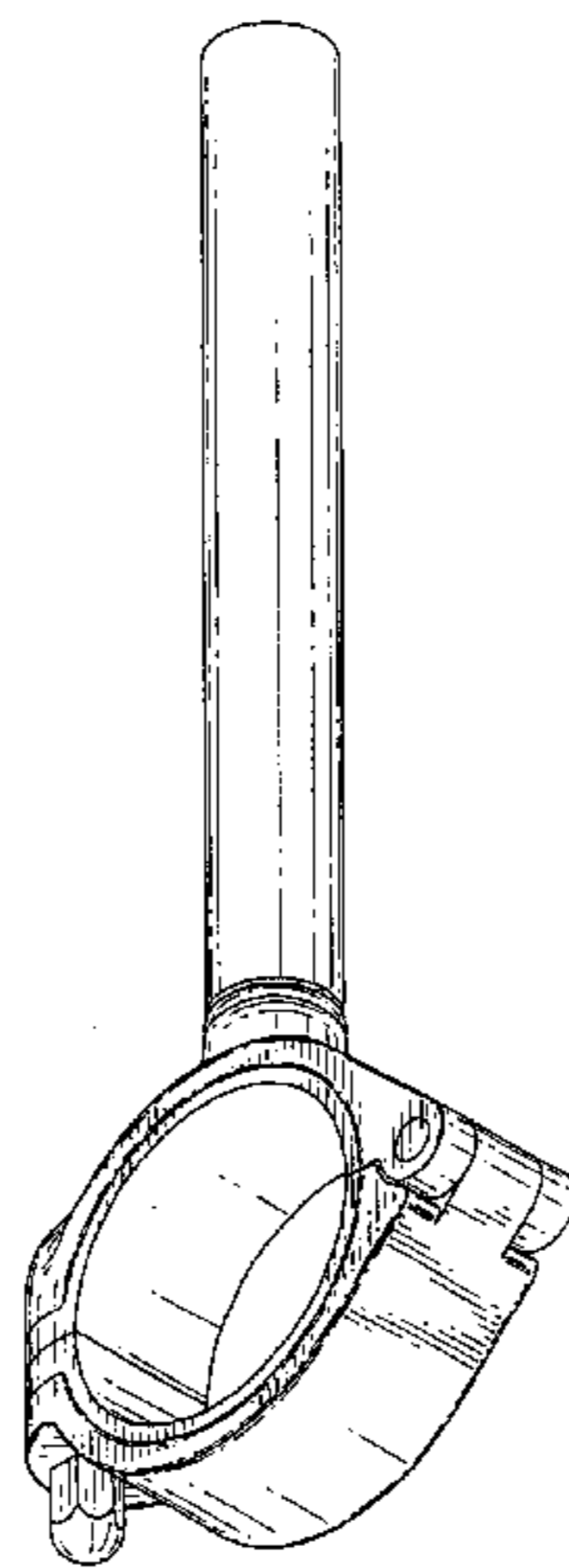
**CLAIM**

The ornamental design for a pipe and tube support, as shown and described.

**DESCRIPTION**

FIG. 1 is a front perspective view of a pipe and tube support showing my new design;  
FIG. 2 is a front elevational view thereof;  
FIG. 3 is a right side elevational view thereof;  
FIG. 4 is a left side elevational view thereof;  
FIG. 5 is a bottom plan view thereof; and,  
FIG. 6 is a top plan view thereof.

**1 Claim, 3 Drawing Sheets**



# US D553,971 S

## U.S. PATENT DOCUMENTS

824,544 A 6/1906 Hossege  
 936,438 A 10/1909 Fitzgerald  
 1,025,243 A 5/1912 Carpenter et al.  
 1,158,633 A 11/1915 Carpenter et al.  
 1,596,944 A 8/1926 Philbrook  
 1,604,590 A 10/1926 McNutty  
 1,612,959 A 1/1927 Zifferer  
 1,772,062 A 8/1930 Zifferer  
 1,773,838 A 8/1930 Zifferer  
 1,898,898 A 2/1933 Rowley  
 1,966,899 A 7/1934 McCabe  
 2,111,357 A 3/1938 Cornell, Jr.  
 2,229,129 A 1/1941 Reigelman  
 2,279,090 A 4/1942 Markey  
 2,355,742 A 8/1944 Morehouse  
 2,362,124 A 11/1944 Ellinwood  
 2,370,748 A 3/1945 O'Donnell  
 2,395,745 A 2/1946 King  
 2,404,531 A 7/1946 Robertson  
 2,417,741 A 3/1947 Dillon  
 2,442,833 A 6/1948 Watkins  
 2,469,949 A 5/1949 Cantrell  
 2,539,783 A 1/1951 Kirk, Jr.  
 2,854,924 A 10/1958 Ault  
 2,908,061 A 10/1959 Adams  
 2,937,226 A 5/1960 Kaminski, Jr. et al.  
 D188,377 S \* 7/1960 Martin ..... D13/152  
 3,156,489 A 11/1964 Deringer  
 3,244,388 A 4/1966 Coffinan  
 3,268,761 A 8/1966 Walton et al.  
 3,273,837 A \* 9/1966 Willert et al. .... 248/59  
 3,292,221 A \* 12/1966 Baugh ..... 403/212  
 3,330,617 A 7/1967 Zimmermann  
 3,334,938 A \* 8/1967 Sentz ..... 292/257  
 3,376,003 A 4/1968 Zimmermann  
 3,382,630 A 5/1968 Chivers ..... 52/208  
 3,523,668 A \* 8/1970 Logsdon ..... 248/59  
 3,530,899 A 9/1970 Breeding  
 3,559,910 A 2/1971 Babb  
 3,565,375 A 2/1971 Babb  
 3,575,214 A 4/1971 Bindel  
 3,582,029 A 6/1971 Moesta  
 3,606,218 A 9/1971 Enlund  
 3,633,947 A 1/1972 Nelson  
 3,800,370 A \* 4/1974 Courtright ..... 294/1.1  
 3,848,839 A 11/1974 Tillman  
 3,851,979 A 12/1974 Becker  
 3,888,439 A 6/1975 Tuttle  
 3,914,100 A 10/1975 Guskea  
 4,004,766 A 1/1977 Long  
 4,043,333 A 8/1977 Munsch  
 4,219,051 A 8/1980 D'Haeyer  
 4,270,250 A 6/1981 Schon  
 4,388,749 A 6/1983 Sassak  
 4,397,437 A 8/1983 Madej  
 4,411,460 A 10/1983 Beal  
 4,415,188 A 11/1983 Ginter, Jr.  
 4,442,990 A 4/1984 Krueger ..... 248/62  
 4,444,370 A 4/1984 Krueger  
 4,478,381 A 10/1984 Pittion et al.  
 4,506,418 A 3/1985 Viola  
 4,552,390 A 11/1985 Calmettes  
 D283,486 S 4/1986 Fogel et al.  
 4,653,542 A 3/1987 Tascher  
 4,699,177 A 10/1987 Thomas  
 4,728,071 A 3/1988 Salacuse  
 4,784,363 A 11/1988 Brown et al.  
 4,912,287 A 3/1990 Ono et al.  
 D307,541 S 5/1990 Tres  
 5,048,776 A 9/1991 Weiss

5,154,382 A 10/1992 Hoshino  
 5,165,453 A 11/1992 Walker  
 5,192,039 A 3/1993 Williams  
 5,215,281 A 6/1993 Sherman  
 D339,737 S 9/1993 Hostetler  
 5,269,486 A 12/1993 Hufford  
 D344,672 S 3/1994 Current  
 5,305,978 A 4/1994 Current  
 5,404,914 A 4/1995 Ziu  
 5,518,351 A 5/1996 Peil  
 5,553,975 A 9/1996 Elkins  
 D376,974 S 12/1996 Chen  
 5,617,820 A 4/1997 Beardmore  
 5,639,993 A 6/1997 Ideno et al.  
 D382,195 S 8/1997 Ekern  
 5,743,302 A 4/1998 McNeely  
 5,779,283 A 7/1998 Kimura  
 D396,801 S 8/1998 Petty  
 5,816,736 A 10/1998 Kroulik  
 5,832,164 A 11/1998 Miekis  
 5,845,037 A 12/1998 Miekis  
 5,873,522 A 2/1999 Roberts  
 5,885,034 A 3/1999 Fergusson  
 5,906,341 A 5/1999 Brown ..... 248/9  
 D422,204 S 4/2000 Holloway  
 6,102,341 A 8/2000 Ball  
 6,126,119 A 10/2000 Giangrasso  
 6,145,896 A 11/2000 Vitel  
 6,161,589 A 12/2000 Bolotte et al.  
 D438,783 S 3/2001 Elliott  
 6,234,277 B1 5/2001 Kaczmarek  
 D448,657 S \* 10/2001 Calvert ..... D8/396  
 6,536,717 B2 3/2003 Parker  
 6,669,150 B2 12/2003 Benoit  
 6,685,144 B1 2/2004 Wochnick  
 6,691,742 B1 2/2004 Cooper  
 6,761,189 B2 7/2004 Berninger et al.  
 6,799,607 B1 10/2004 Friedline et al.  
 D499,957 S 12/2004 Friedline et al.  
 6,848,464 B2 2/2005 Ransom  
 D516,415 S 3/2006 Friedline et al.  
 D516,416 S 3/2006 Friedline et al.  
 D516,903 S 3/2006 Friedline et al.  
 2002/0007538 A1 1/2002 Bourgerie ..... 24/517  
 2002/0088905 A1 7/2002 Hansen  
 2002/0153459 A1 10/2002 Maurice  
 2002/0158171 A1 10/2002 Karlinger  
 2005/0022891 A1 2/2005 Friedline  
 2005/0205722 A1 9/2005 Krueger  
 2006/0090805 A1 5/2006 Friedline  
 2006/0090806 A1 5/2006 Friedline  
 2006/0090807 A1 5/2006 Friedline

## OTHER PUBLICATIONS

“Pipe-Hangers and Supports-Selection and Application” MSS SP-69-2002, Standard Practice.

“CADDY SUPERFIX 454” flier, Erico International Corporation, 2005.

R&R custom Aluminum Connecting Rods for “any” application-<http://web.archive.org/web/20030423120916/http://www.rrconnectingrods.com/> (Apr. 2003).

“Victaulic-Mechanical Piping Systems General Catalog”, The Victaulic System, pp. 8-9, 11-17, 39,45, 53, 56,87, Victaulic Company of America, 1988.

“Save and vibration-absorbing: Steel tube-clamp. Space-saving system. Can be welded afterwards. Allows vibration-free laying and mounting tubes.”, RSB Tube Clamps Fastening Systems, 2000.

“An American National Standard—Bioprocessing Equipment—ASME BPE—2002 (Revision of ASME BPE—1997)”, pp. iii–88 (2002).

“Behringer—The Best Solution for Processing Piping Installations”, Jan. 2004.

“USS Support—For Suspension and Support of Stainless Steel, Plastic and Glass Pipe and Tubing”, Bulletin SPHS, Universal Suspension Systems, Inc., 1983.

“Copper Tubing Hangers”, ANVIL International, Inc., pp. PH-16 through PH-18, PH-22 through PH-24.

Tri-Clover, Bulletin WPS-91.

International Preliminary Report on Patentability for PCT/US05/02634.

\* cited by examiner

FIG. 1

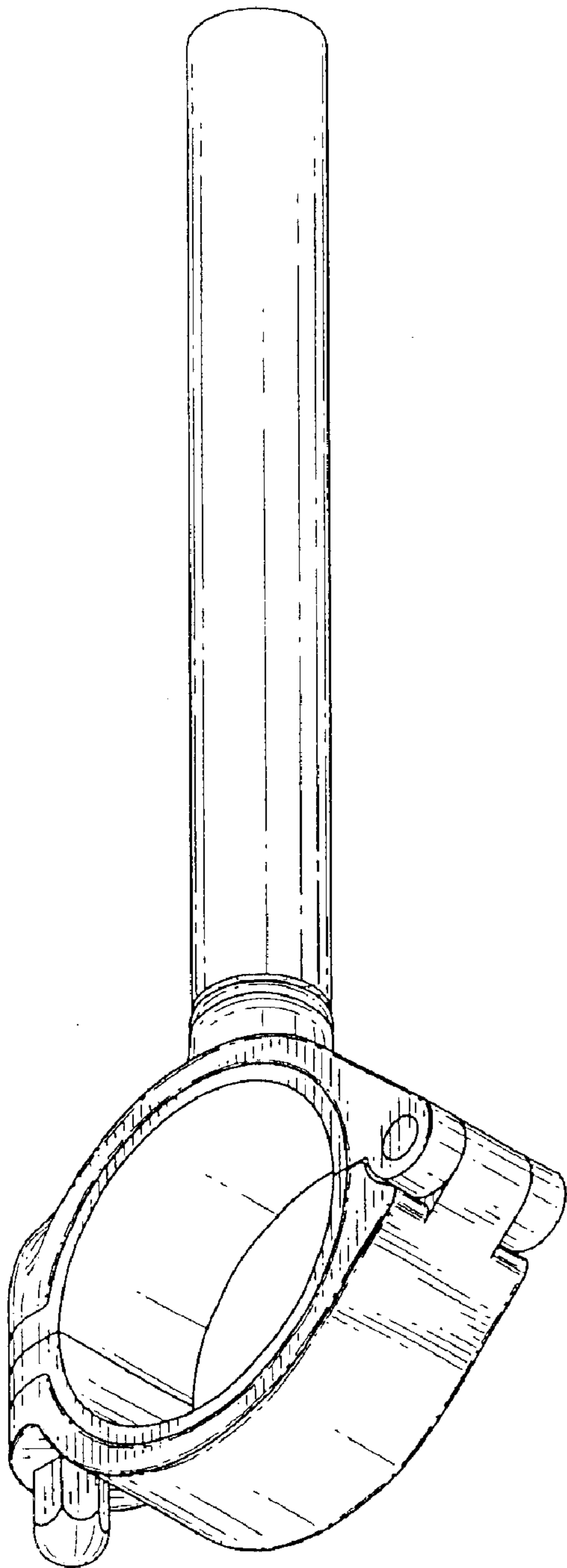


FIG. 2

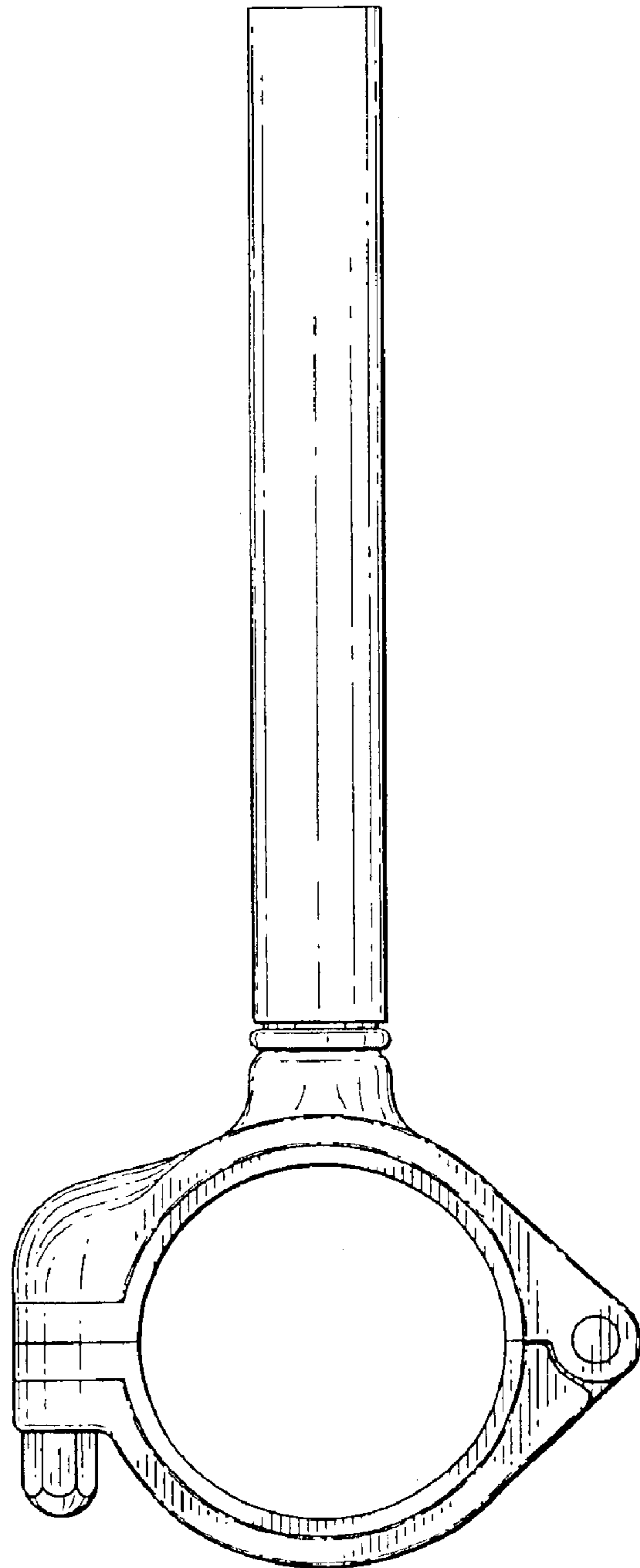


FIG. 3

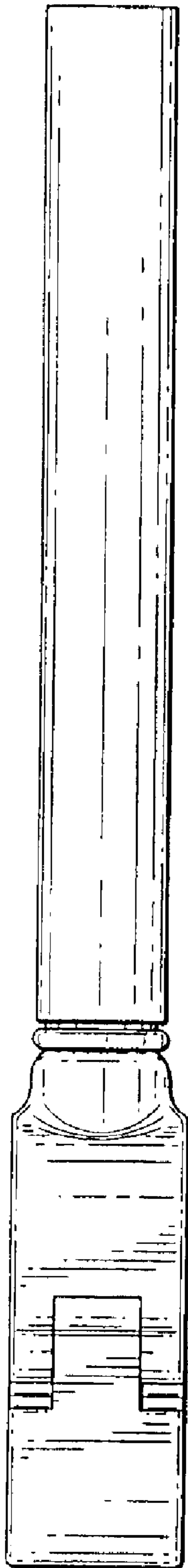
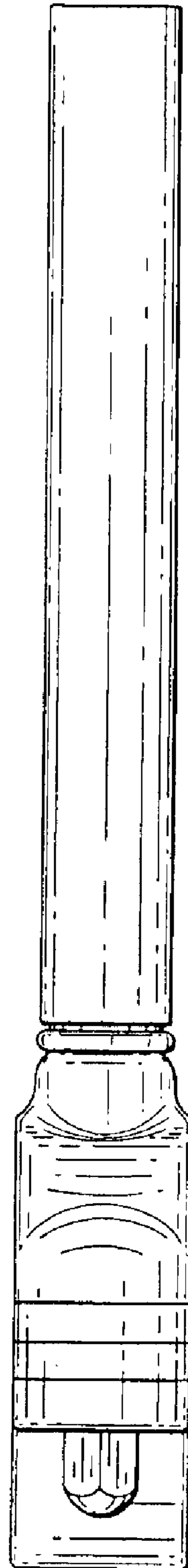
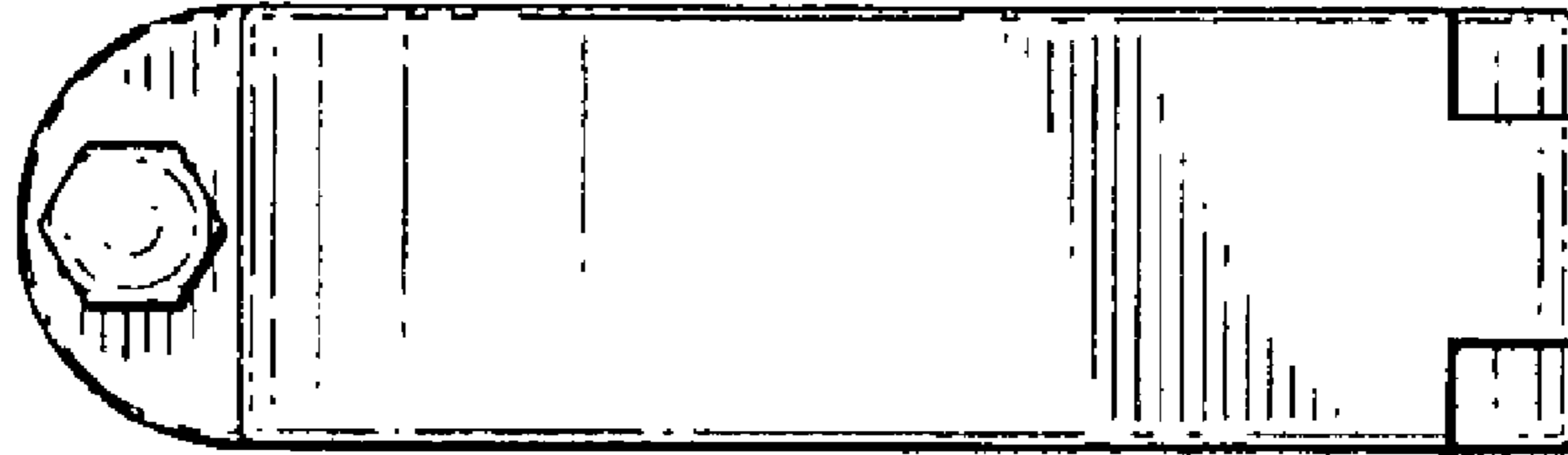


FIG. 4



*FIG. 5*



*FIG. 6*

