

US00D499484S

(12) **United States Design Patent** (10) **Patent No.:** **US D499,484 S**  
**Blanco** (45) **Date of Patent:** **\*\* Dec. 7, 2004**

(54) **TROCAR SEAL-VALVE**  
 (75) **Inventor:** **Ernesto E. Blanco**, Belmont, MA (US)  
 (73) **Assignee:** **Erblan Surgical, Inc.**, Belmont, MA (US)  
 (\*\*) **Term:** **14 Years**

5,545,150 A 8/1996 Danks et al.  
 5,569,160 A 10/1996 Sauer et al.  
 5,607,440 A 3/1997 Danks et al.  
 5,609,604 A 3/1997 Schwemberger et al.  
 5,620,456 A 4/1997 Sauer et al.  
 5,624,459 A 4/1997 Kortenbach et al.  
 5,658,236 A 8/1997 Sauer et al.

(List continued on next page.)

(21) **Appl. No.:** **29/187,967**  
 (22) **Filed:** **Aug. 12, 2003**  
 (51) **LOC (7) Cl.** ..... **24-04**  
 (52) **U.S. Cl.** ..... **D24/129**  
 (58) **Field of Search** ..... D24/129, 146;  
 604/9, 212, 236, 245, 246, 256, 335, 167.01,  
 167.02, 167.03, 167.06; 137/317; 600/566,  
 567

**FOREIGN PATENT DOCUMENTS**

WO WO 00/54648 9/2000  
 WO WO 00/78387 12/2000  
 WO WO 02/28295 4/2002

*Primary Examiner*—Louis S. Zarfaz  
*Assistant Examiner*—Sally Shih  
 (74) *Attorney, Agent, or Firm*—Oblon, Spivak, McClelland,  
 Maier & Neustadt, P.C.

(56) **References Cited**  
**U.S. PATENT DOCUMENTS**

4,535,773 A 8/1985 Yoon  
 5,009,643 A 4/1991 Reich et al.  
 5,030,206 A 7/1991 Lander  
 5,066,288 A 11/1991 Deniega et al.  
 5,104,382 A 4/1992 Brinkerhoff et al.  
 5,114,407 A 5/1992 Burbank  
 5,116,353 A 5/1992 Green  
 5,147,316 A 9/1992 Castillenti  
 5,152,754 A 10/1992 Plyley et al.  
 5,215,526 A 6/1993 Deniega et al.  
 5,224,952 A 7/1993 Deniega et al.  
 5,246,425 A 9/1993 Hunsberger et al.  
 5,248,298 A 9/1993 Bedi et al.  
 5,256,149 A 10/1993 Banik et al.  
 5,267,965 A 12/1993 Deniega  
 5,279,567 A 1/1994 Ciaglia et al.  
 5,314,417 A 5/1994 Stephens et al.  
 5,320,610 A 6/1994 Yoon  
 5,364,372 A 11/1994 Danks et al.  
 5,387,197 A 2/1995 Smith et al.  
 5,399,167 A 3/1995 Deniega  
 5,431,676 A 7/1995 Dubrul et al.  
 5,522,833 A 6/1996 Stephens et al.

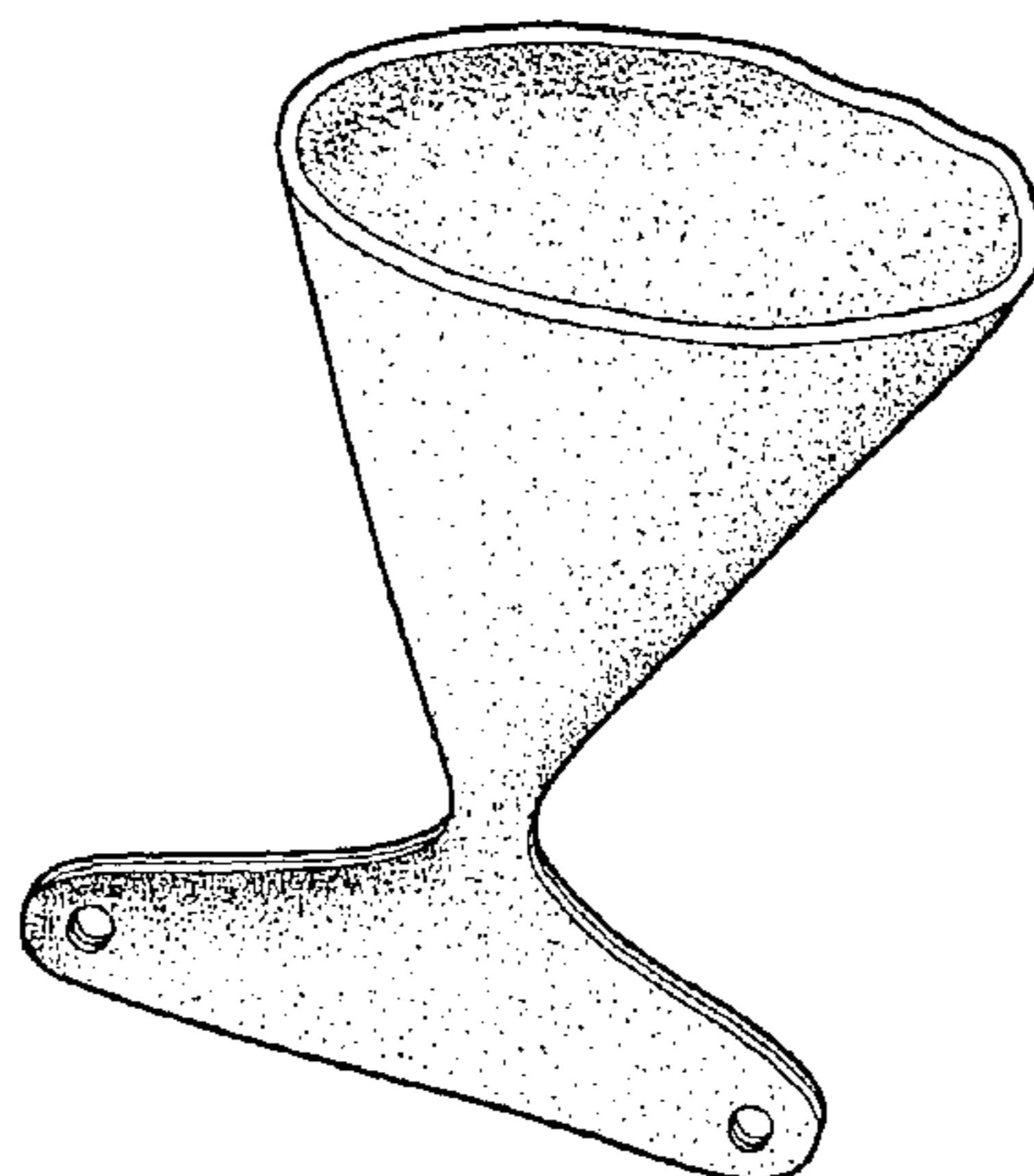
(57) **CLAIM**

The ornamental design for a trocar seal-valve, as shown and described.

**DESCRIPTION**

FIG. 1 is a top, front and right side perspective view of the trocar seal-valve, showing my design;  
 FIG. 2 is a front elevational view thereof;  
 FIG. 3 is a right side elevational view thereof, the left side elevational view being a mirror image of the side view shown;  
 FIG. 4 is a top plan view thereof;  
 FIG. 5 is a bottom plan view thereof;  
 FIG. 6 is a front elevation view thereof shown when mounted in a trocar for use;  
 FIG. 7 is a right side elevational view thereof, the left side elevational view being a mirror image of the side view shown;  
 FIG. 8 is a top plan view thereof; and,  
 FIG. 9 is a bottom plan view thereof.  
 The phantom line showing in the figures is for illustrative purposes only and forms no part of the claimed design.

**1 Claim, 3 Drawing Sheets**



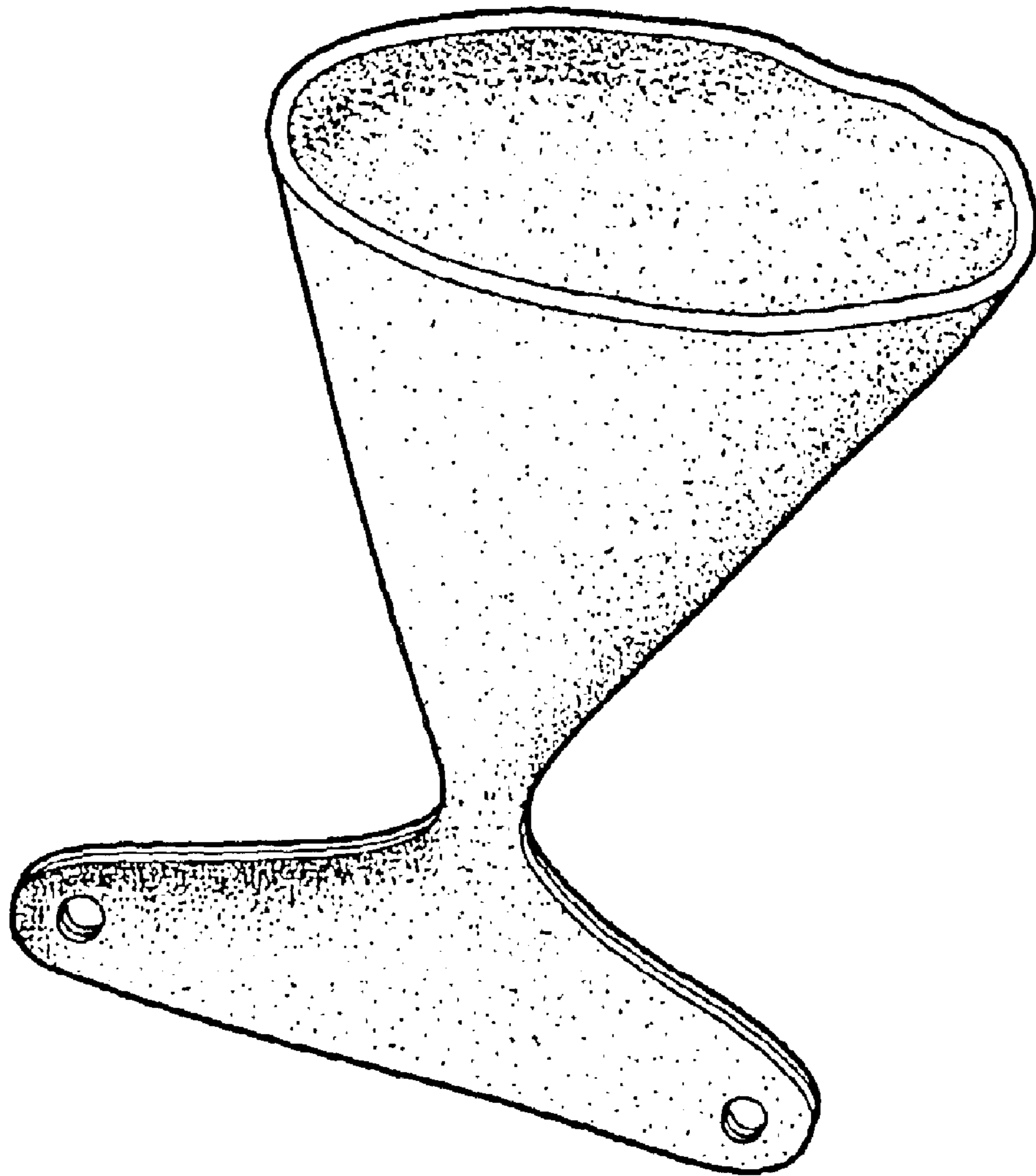
# US D499,484 S

Page 2

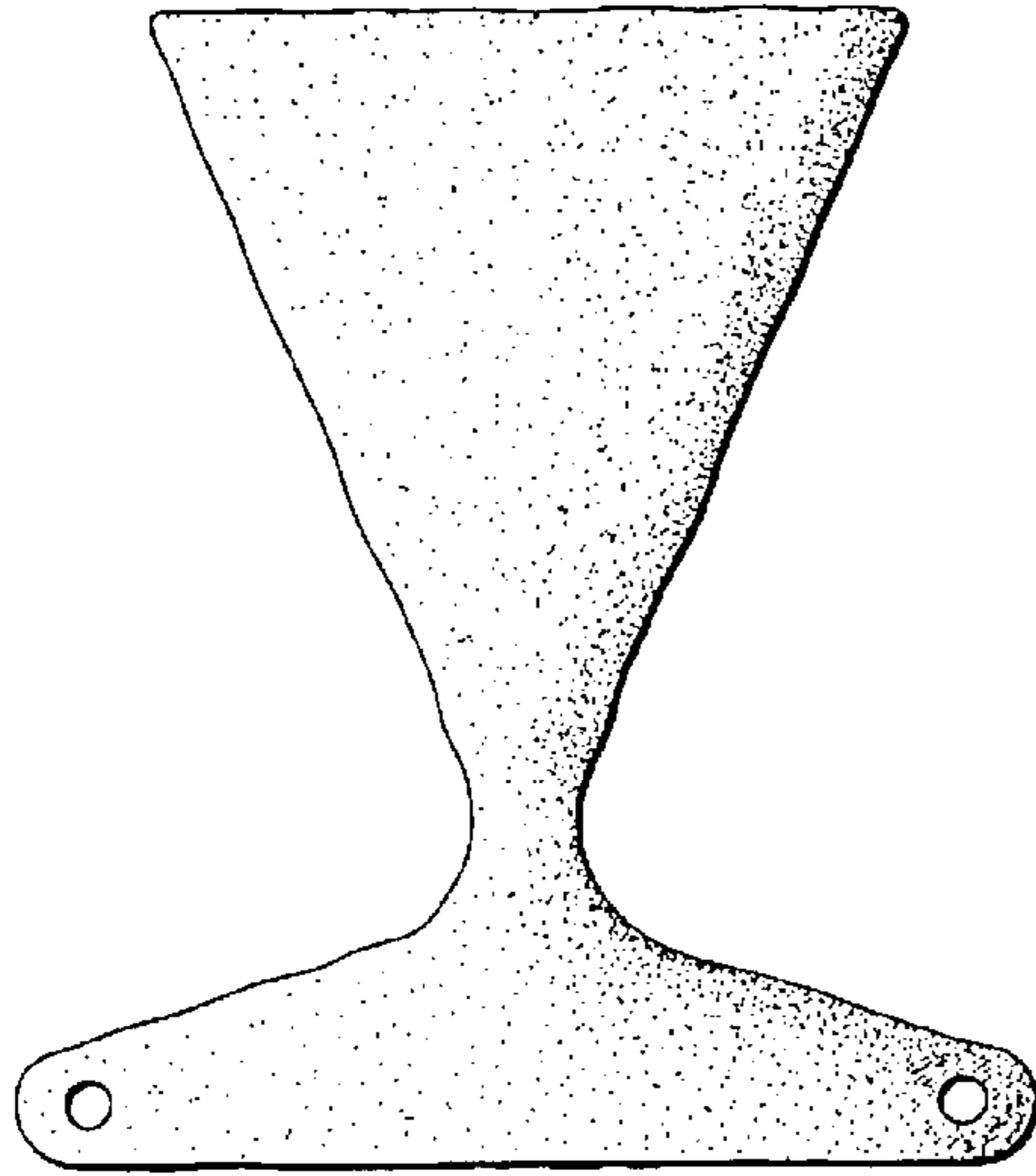
U.S. PATENT DOCUMENTS					
5,669,885	A	9/1997 Smith	6,276,661	B1 *	8/2001 Laird ..... 251/61.1
5,674,237	A	10/1997 Ott	6,497,716	B1	12/2002 Green et al.
5,676,682	A	10/1997 Yoon	D483,869	S *	12/2003 Tran et al. .... D24/129
5,690,663	A	11/1997 Stephens	6,702,787	B2 *	3/2004 Racenet ..... 604/256
5,690,664	A	11/1997 Sauer et al.	2001/0039430	A1	11/2001 Dubrul et al.
5,697,913	A	12/1997 Sierocuk et al.	2001/0041872	A1 *	11/2001 Paul, Jr. .... 604/167.04
5,709,671	A	1/1998 Stephens et al.	2001/0041907	A1	11/2001 Hill
5,772,660	A	6/1998 Young et al.	2002/0004646	A1	1/2002 Manhes
5,776,112	A	7/1998 Stephens et al.	2002/0007153	A1	1/2002 Wells et al.
5,797,943	A	8/1998 Danks et al.	2002/0013552	A1 *	1/2002 Dennis ..... 604/167.03
5,807,338	A	9/1998 Smith et al.	2002/0013597	A1	1/2002 McFarlane
5,824,002	A	10/1998 Gentelia et al.	2002/0019609	A1	2/2002 McFarlane
5,860,996	A	1/1999 Urban et al.	2002/0019639	A1	2/2002 Dorn
5,868,773	A	2/1999 Danks et al.	2002/0026207	A1	2/2002 Stellon et al.
5,879,332	A	3/1999 Schwemberger et al.	2002/0045846	A1	4/2002 Kaplon et al.
5,904,699	A	5/1999 Schwemberger et al.	2002/0077637	A1	6/2002 Vargas et al.
5,916,232	A	6/1999 Hart	2002/0133188	A1	9/2002 O'Heeron et al.
5,947,930	A	9/1999 Schwemberger et al.	2002/0143236	A1	10/2002 Sauer et al.
5,980,493	A	11/1999 Smith et al.	2002/0156432	A1	10/2002 Racenet et al.
5,984,941	A	11/1999 Wilson et al.	2002/0183775	A1	12/2002 Tsonton et al.
5,989,228	A	11/1999 Danks et al.	2002/0188247	A1	12/2002 Peery
5,997,510	A	12/1999 Schwemberger	2002/0198554	A1	12/2002 Whitman et al.
6,017,356	A	1/2000 Frederick et al.	2003/0004528	A1	1/2003 Ishikawa
6,030,402	A	2/2000 Thompson et al.	2003/0004529	A1	1/2003 Tsonton et al.
6,063,099	A	5/2000 Danks et al.	2003/0023257	A1	1/2003 Ishikawa et al
6,080,174	A	6/2000 Dubrul et al.	2003/0023259	A1	1/2003 Dubrul et al.
6,197,041	B1	3/2001 Shichman et al.	2003/0040711	A1 *	2/2003 Racenet et al. .... 604/167.06

\* cited by examiner

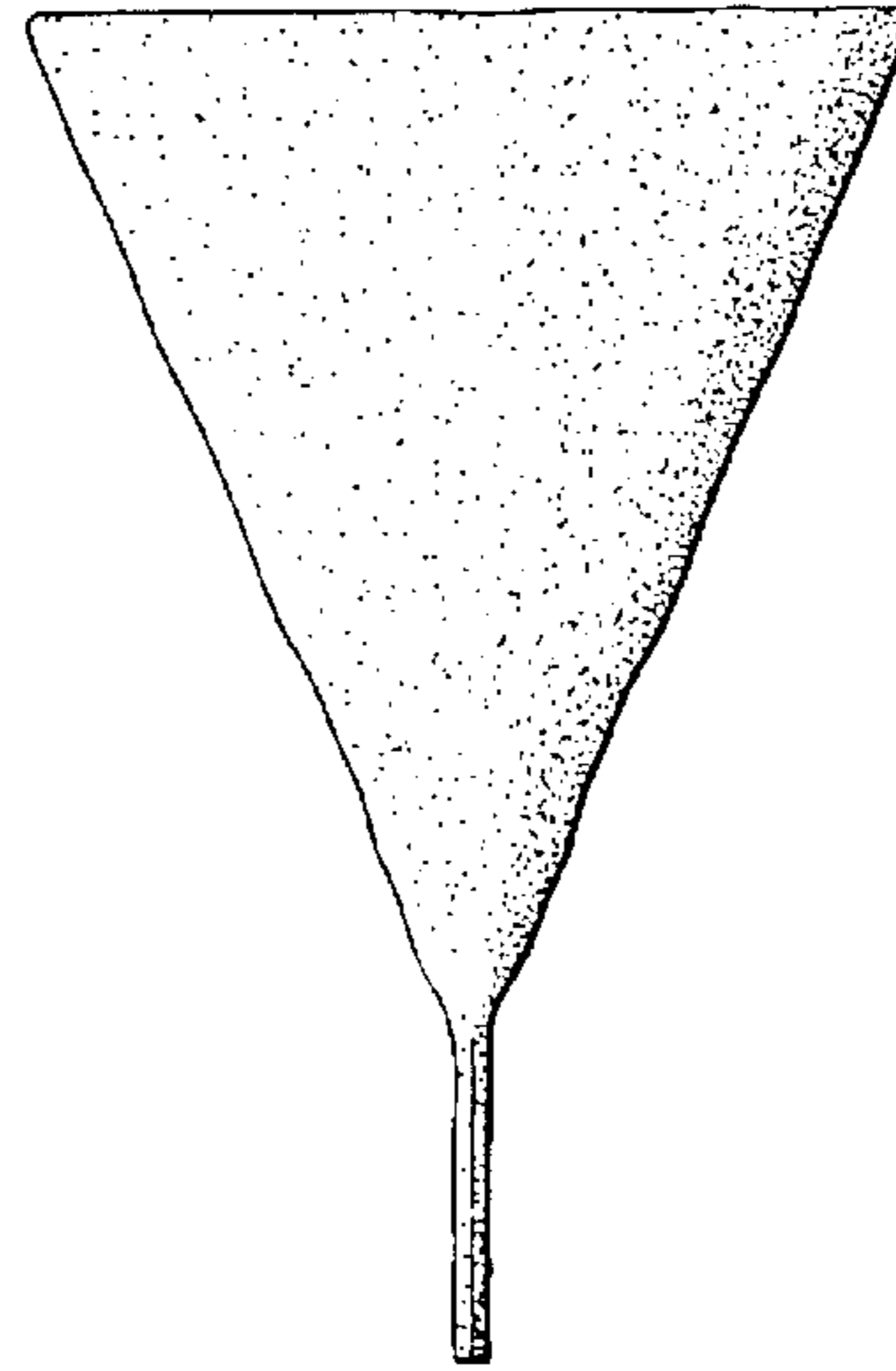
*FIG. 1*



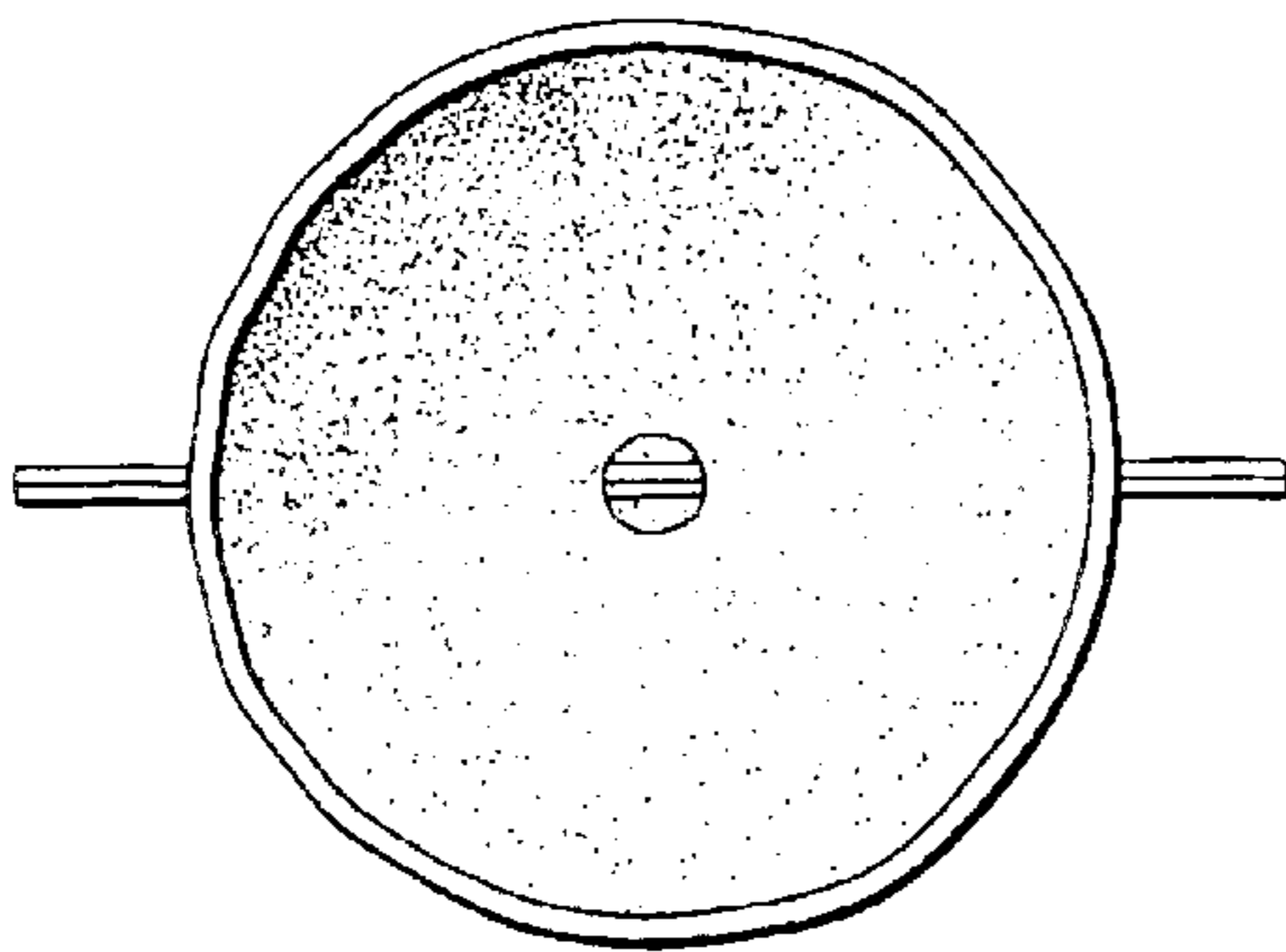
*FIG. 2*



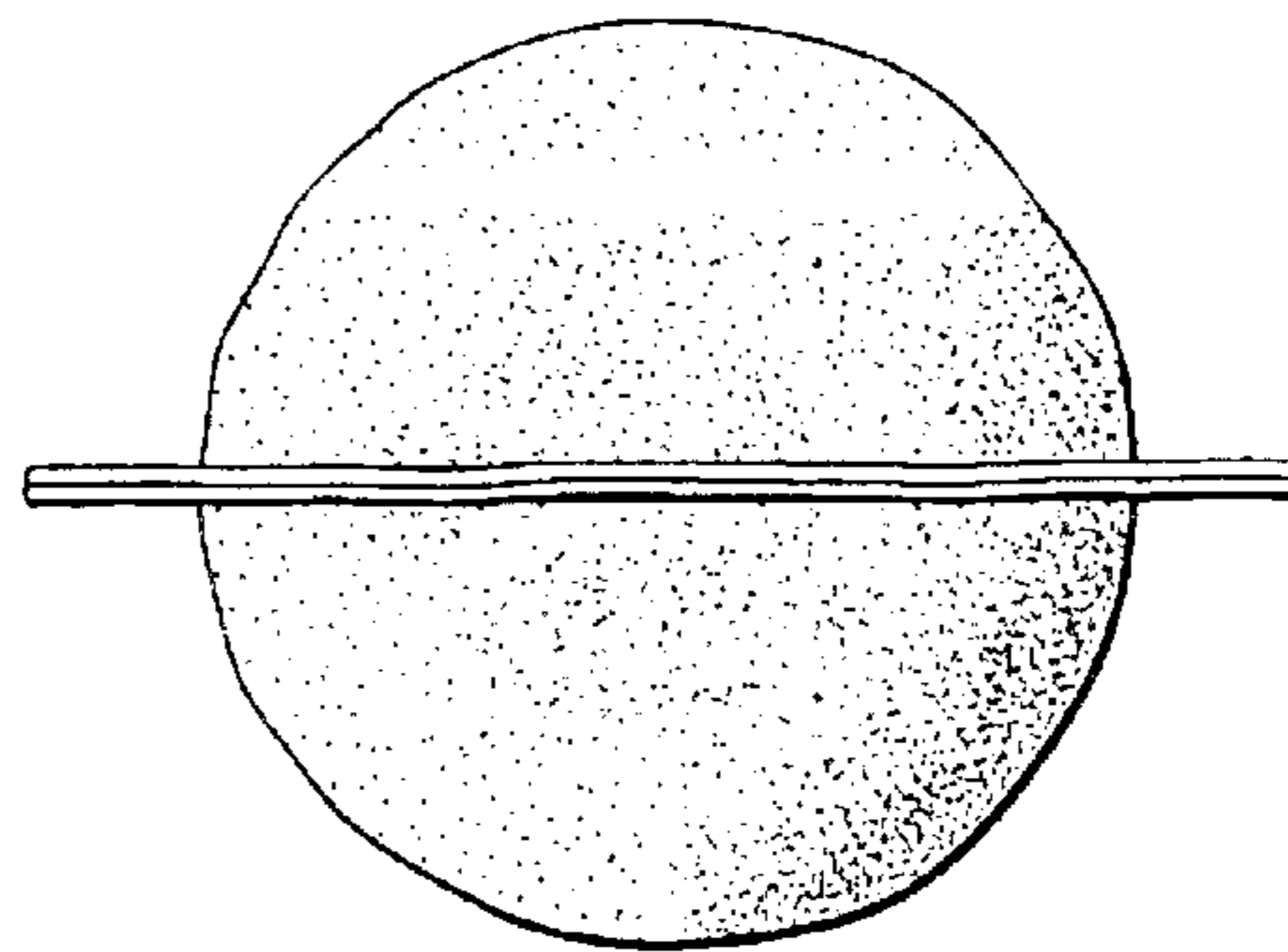
*FIG. 3*



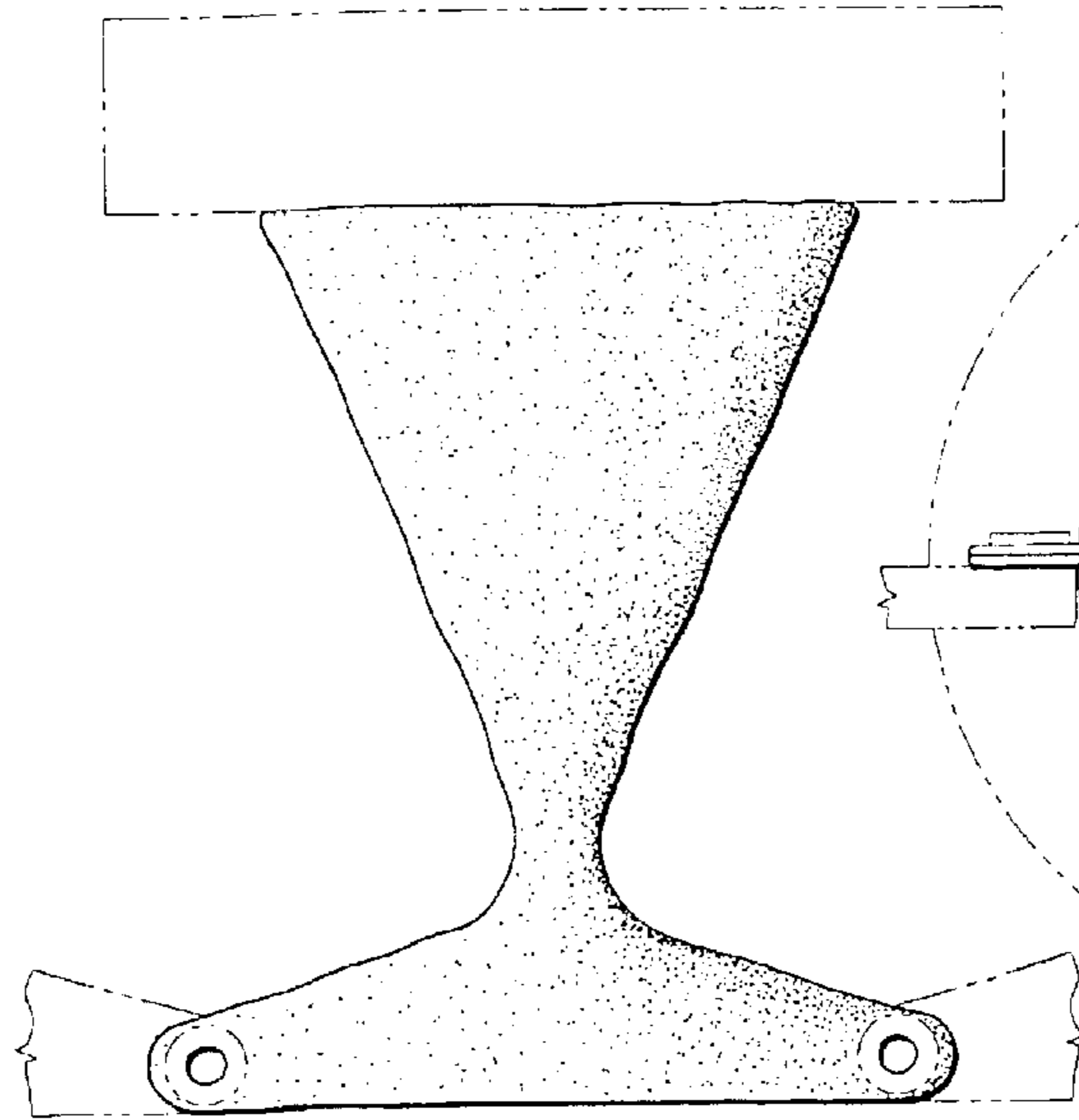
*FIG. 4*



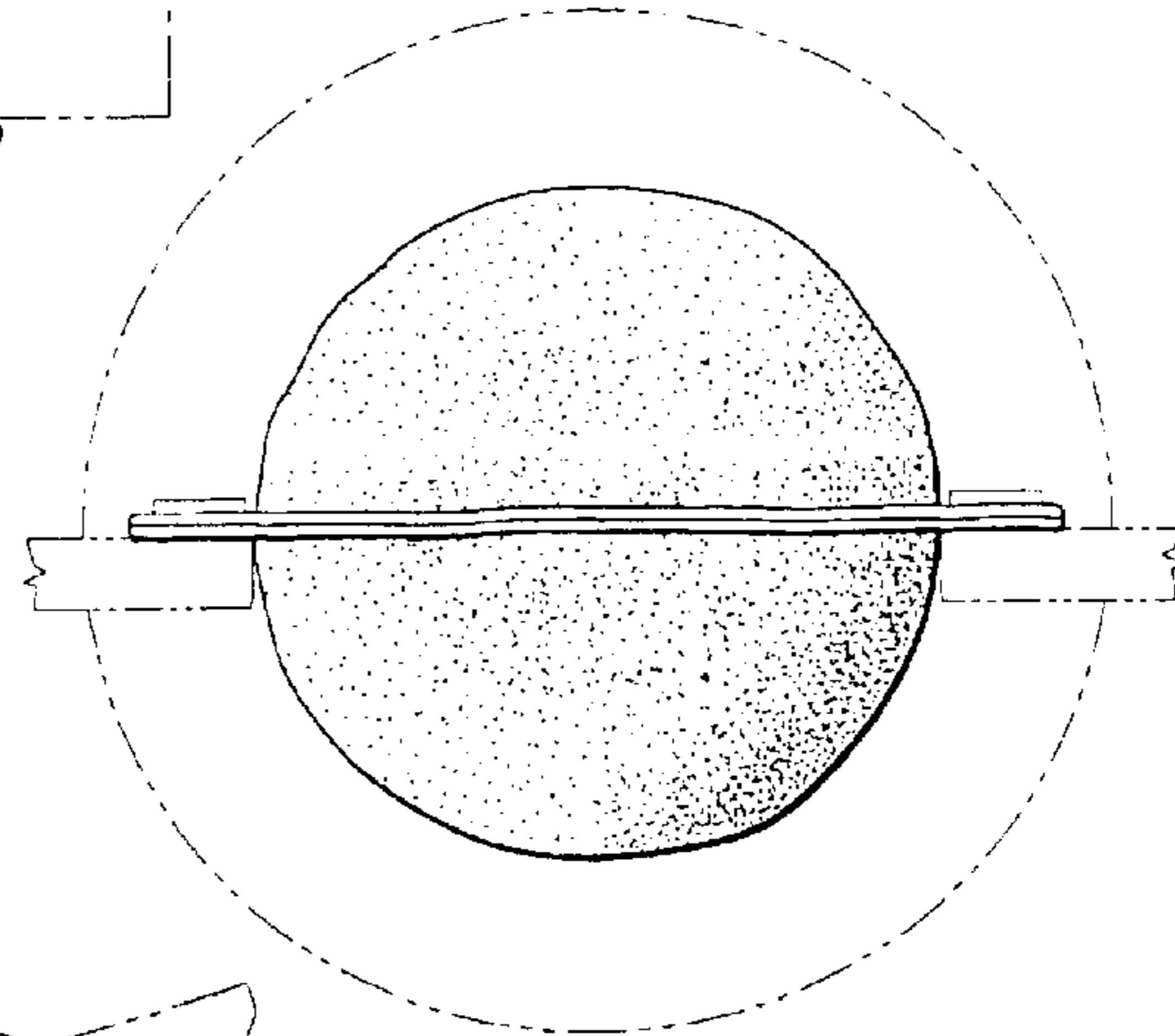
*FIG. 5*



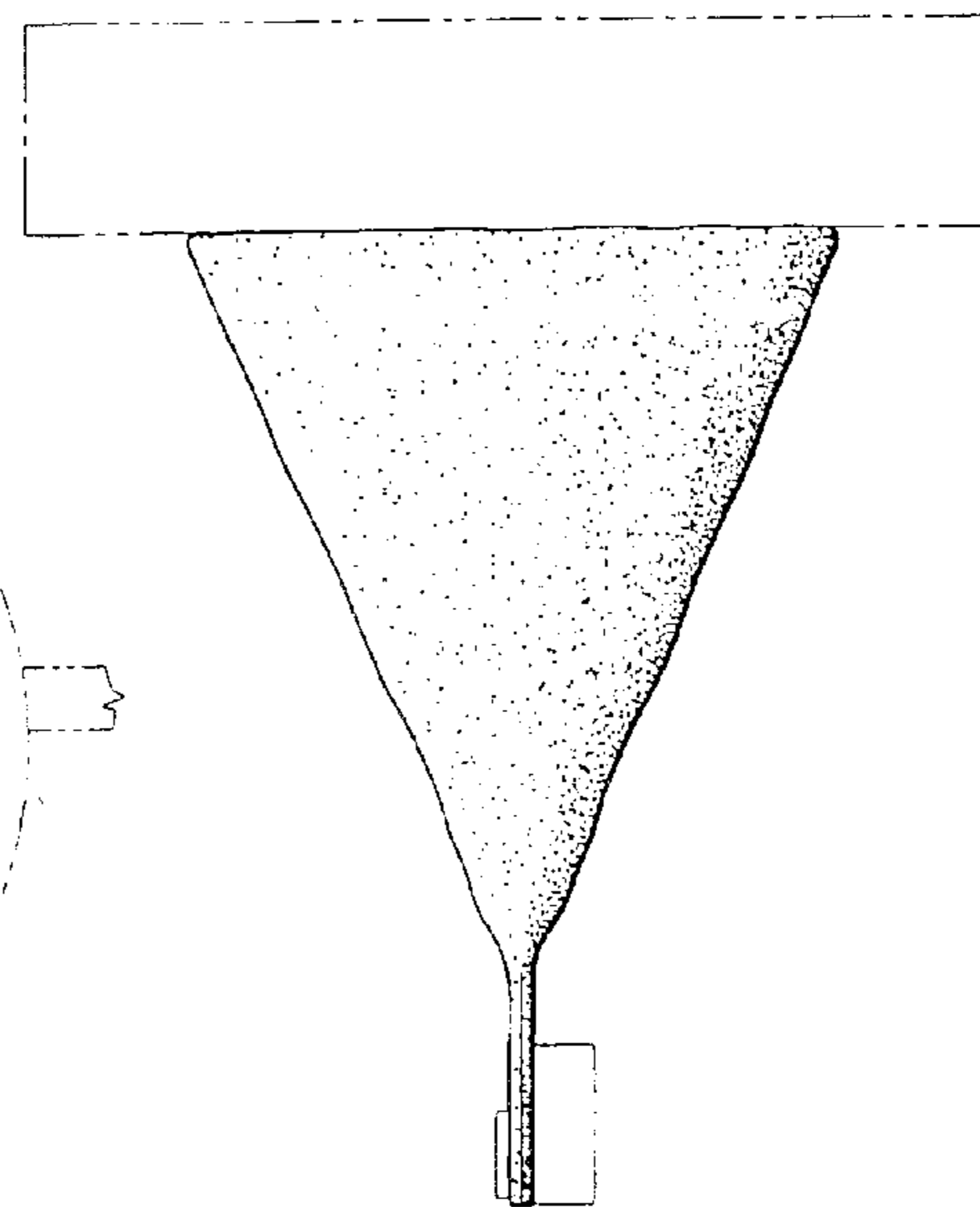
*FIG. 6*



*FIG. 9*



*FIG. 7*



*FIG. 8*

