



US00D486914S

(12) **United States Design Patent**  
**Schulter et al.**

(10) **Patent No.:** **US D486,914 S**

(45) **Date of Patent:** **\*\* Feb. 17, 2004**

- (54) **DENTAL IMPLANT ABUTMENT**
- (75) Inventors: **Carl W. Schulter**, Memphis, TN (US);  
**Gary Qi**, Memphis, TN (US); **Andrew J. Schulter**, Germantown, TN (US)
- (73) Assignee: **Cagenix, Inc.**, Memphis, TN (US)
- (\*\*) Term: **14 Years**
- (21) Appl. No.: **29/177,948**
- (22) Filed: **Mar. 18, 2003**
- (51) **LOC (7) Cl.** ..... **24-03**
- (52) **U.S. Cl.** ..... **D24/156**
- (58) **Field of Search** ..... D24/156; 433/172-174,  
433/180-181

6,039,568 A	3/2000	Hinds	433/175
6,120,292 A	9/2000	Buser et al.	433/173
6,120,293 A	9/2000	Lazzara et al.	433/173
6,129,548 A	10/2000	Lazzara et al.	433/172
6,155,828 A	12/2000	Lazzara et al.	433/173
6,174,166 B1	1/2001	Jorneus	433/172
6,227,856 B1	5/2001	Beaty et al.	433/172
6,244,867 B1	6/2001	Aravena et al.	433/172
6,250,922 B1	6/2001	Bassett et al.	433/172
6,287,117 B1	9/2001	Niznick	433/173
6,358,050 B1	3/2002	Bergstrom et al.	433/173
D455,833 S	4/2002	Daftary	D24/155
6,386,876 B1	5/2002	Lee	433/173
6,394,806 B1	5/2002	Kumar	433/173
6,431,866 B2	8/2002	Hurson	433/172
6,431,867 B1	8/2002	Gittelsohn et al.	433/173
6,474,991 B1	11/2002	Hansson	433/173
D470,939 S	2/2003	Daftary	D24/156

**OTHER PUBLICATIONS**

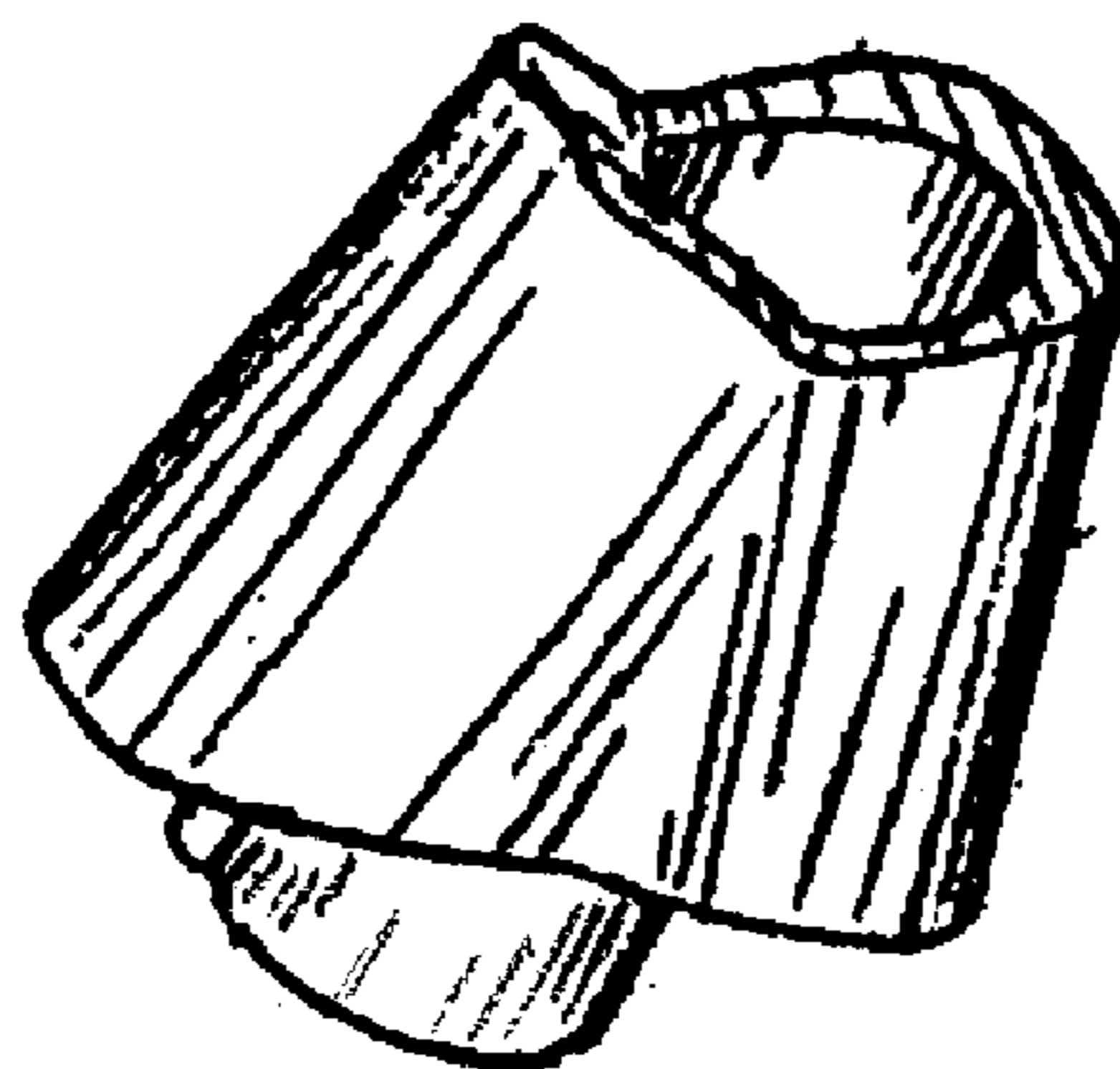
- (56) **References Cited**
- U.S. PATENT DOCUMENTS**
- 4,850,873 A 7/1989 Lazzara et al. .... 433/220
- 4,960,381 A 10/1990 Niznick ..... 433/174
- 4,988,298 A 1/1991 Lazzara et al. .... 433/173
- 5,030,095 A 7/1991 Niznick ..... 433/173
- 5,061,181 A 10/1991 Niznick ..... 433/174
- 5,071,350 A 12/1991 Niznick ..... 433/173
- 5,281,140 A 1/1994 Niznick ..... 433/172
- 5,338,196 A 8/1994 Beaty et al. .... 433/172
- 5,433,606 A 7/1995 Niznick et al. .... 433/173
- 5,527,182 A 6/1996 Willoughby ..... 433/172
- 5,547,377 A 8/1996 Daftary ..... 433/172
- 5,622,500 A 4/1997 Niznick ..... 433/173
- 5,662,473 A 9/1997 Rassoli et al. .... 433/172
- 5,725,375 A 3/1998 Rogers ..... 433/172
- 5,772,437 A 6/1998 Rangert et al. .... 433/174
- 5,779,480 A 7/1998 Groll et al. .... 433/173
- 5,810,592 A 9/1998 Daftary ..... 433/173
- D401,694 S 11/1998 Daftary ..... D24/155
- 5,829,977 A 11/1998 Rogers ..... 433/172
- 5,873,722 A 2/1999 Lazzara et al. .... 433/173
- 5,899,697 A 5/1999 Lazzara et al. .... 433/173
- 5,947,733 A 9/1999 Sutter et al. .... 433/173
- 5,967,781 A 10/1999 Gittleman ..... 433/172
- 5,984,680 A 11/1999 Rogers ..... 433/173
- 6,012,923 A 1/2000 Bassett et al. .... 433/172

AltatecBiotechnologies, "The Camlog Abutments".  
 "Aesthetic Soft Tissue Integration and Optimized Emer-  
 gence Profile: Provisionalization and Customized Impres-  
 sion Coping", Practical Periodontics & Aesthetic Denistry  
 1999; 11(3); 305-314.  
 "Anterior Implant-Supported Reconstructions: A Surgical  
 Challenge", Practical Periodontics & Aesthetic Denistry  
 1999; 11(5); 551-558.  
 "Recession of the soft tissue margin at oral implants",  
 Bengazi, et al., Clinical Oral Implants Research, 7: 303-310.  
 Managing the Soft Tissue Margin: The Key to Implant  
 Aesthetics, Lazzara, Practical Periodontics and Aesthetic  
 Denistry, vol. 5, Jun./Jul. 1993 (8 pages).

*Primary Examiner*—Antoine Duval Davis  
 (74) *Attorney, Agent, or Firm*—Butler, Snow, O'Mara,  
 Stevens & Cannada, PLLC.

(57) **CLAIM**  
 The ornamental design for a dental implant abutment, as  
 shown and described.

**DESCRIPTION**  
 The related applications include "Unitary Dental Implant",  
 Ser. No. 29/177,938; "Dental Implant Fixture", Ser. No.  
 29/177,946; "Dental Implant Fixture", Ser. No. 29/177,947;



“Dental Implant Fixture”, Ser. No.29/177,944; “Dental Implant Fixture”, Ser. No.29/177,939; “Dental Implant Fixture”, Ser. No. 29/177,945; “Dental Implant Abutment”, Ser. No. 29/177,950; “Dental Implant Abutment”, Ser. No. 29/177,925; “Dental Implant Abutment”, Ser. No. 29/177,949; “Dental Implant Abutment”, Ser. No. 29/177,926; and “Dental Implant Abutment”, Ser. No. 29/178,012, all of which are filed contemporaneously herewith.

FIG. 1 is a top perspective view of a first embodiment of the dental implant abutment according to the present invention; FIG. 2 is a top view of the first embodiment of the dental implant abutment;

FIG. 3 is a left side view of the first embodiment of the dental implant abutment;

FIG. 4 is a front view of the first embodiment of the dental implant abutment;

FIG. 5 is a right side view of the first embodiment of the dental implant abutment;

FIG. 6 is a rear view of the first embodiment of the dental implant abutment;

FIG. 7 is a bottom view of the first embodiment of the dental implant abutment;

FIG. 8 is a top perspective view of a second embodiment of the dental implant abutment;

FIG. 9 is a top view of the second embodiment of the dental implant abutment;

FIG. 10 is a left side view of the second embodiment of the dental implant abutment;

FIG. 11 is a front view of the second embodiment of the dental implant abutment;

FIG. 12 is a right side view of the second embodiment of the dental implant abutment;

FIG. 13 is a rear view of the second embodiment of the dental implant abutment;

FIG. 14 is a bottom view of the second embodiment of the dental implant abutment;

FIG. 15 is a top perspective view of a third embodiment of the dental implant abutment;

FIG. 16 is a top view of the third embodiment of the dental implant abutment;

FIG. 17 is a left side view of the third embodiment of the dental implant abutment;

FIG. 18 is a front view of the third embodiment of the dental implant abutment;

FIG. 19 is a right side view of the third embodiment of the dental implant abutment;

FIG. 20 is a rear view of the third embodiment of the dental implant abutment; and,

FIG. 21 is a bottom view of the third embodiment of the dental implant abutment.

FIGS. 1–7 illustrate a first embodiment of a dental implant abutment. The environment is shown in broken lines and forms no part of the design.

FIGS. 8–14 illustrate a second embodiment of the dental implant abutment. The environment is shown in broken lines and forms no part of the design. Elements of the abutment that form no part of the design of the second embodiment are shown in dashed lines.

FIGS. 15–21 illustrate a third embodiment of the dental implant abutment. The environment is shown in broken lines and forms no part of the design. Elements of the abutment that form no part of the design of the third embodiment are shown in dashed lines.

The three embodiments of the dental implant abutment illustrated in FIGS. 1–21 are preferred for use on one side of the mouth. Three further embodiments of the dental implant abutment that are preferred for use on the other side of the mouth are mirror images of the three embodiments illustrated in FIGS. 1–21. These three additional embodiments are also intended to fall within the scope of the claim. However, since they are mirror images, they are not separately illustrated.

**1 Claim, 3 Drawing Sheets**

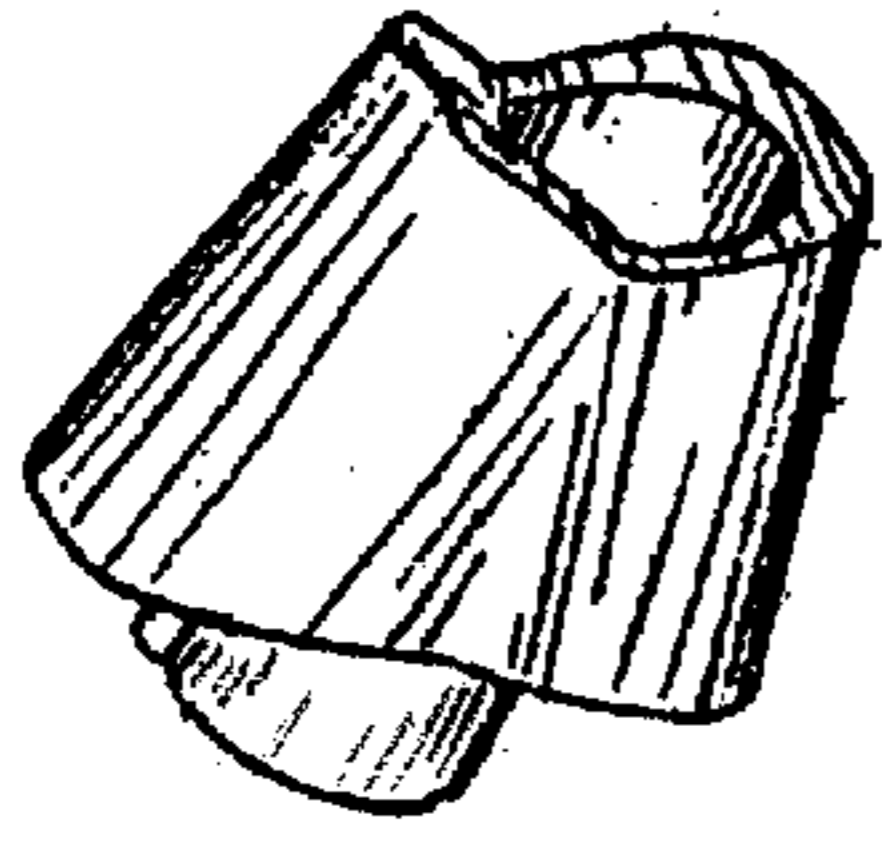


FIG. 1

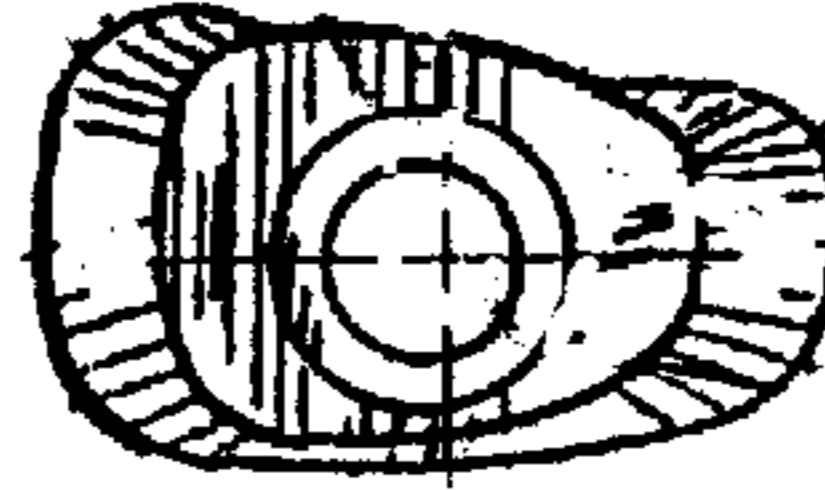


FIG. 2

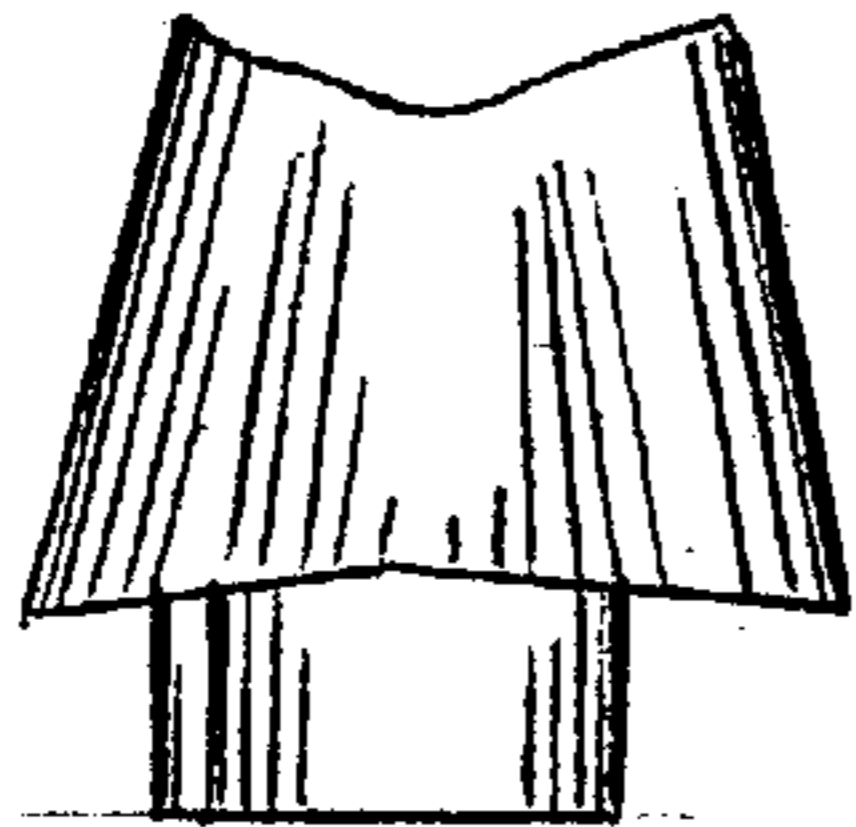


FIG. 3

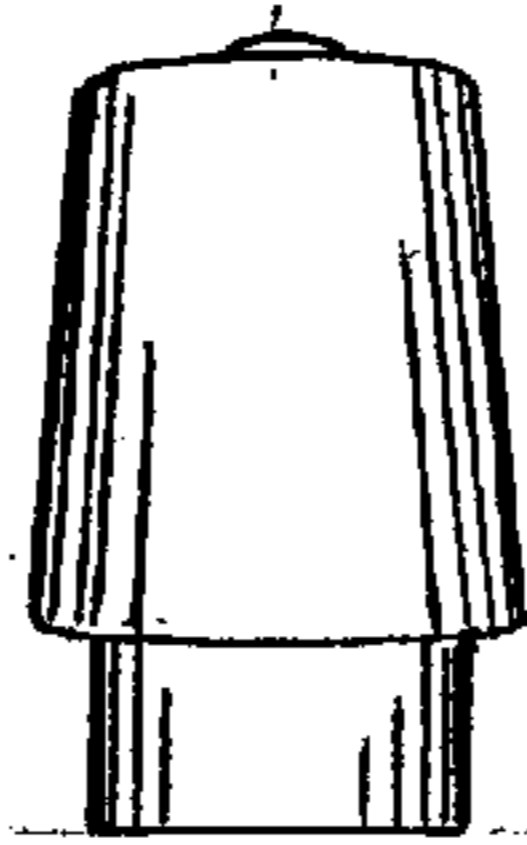


FIG. 4

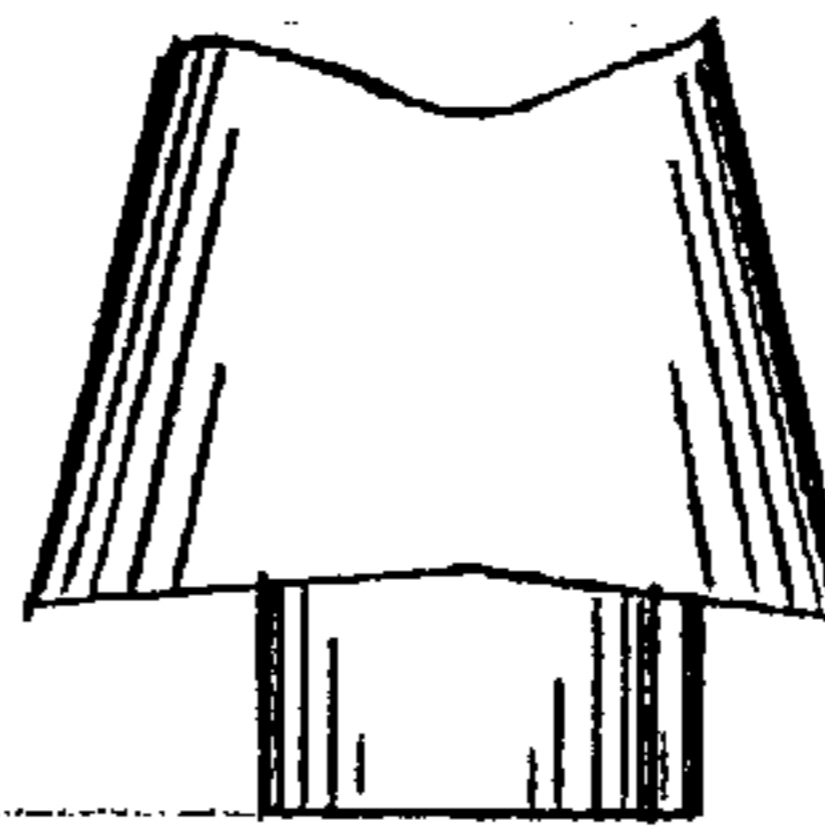


FIG. 5

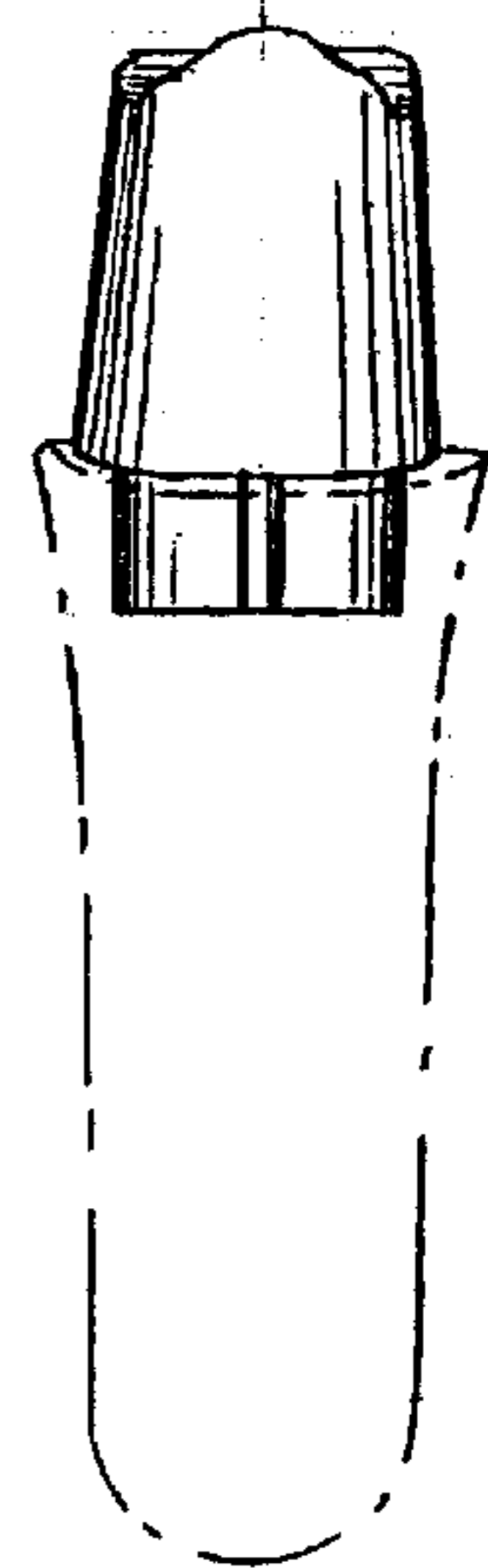


FIG. 6

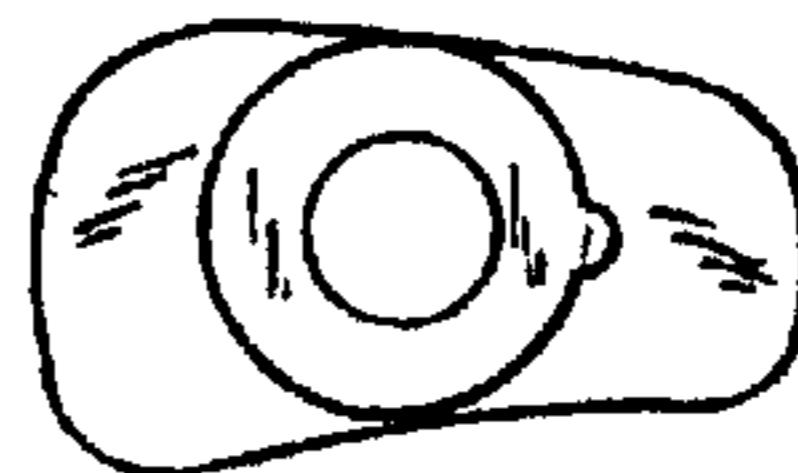


FIG. 7

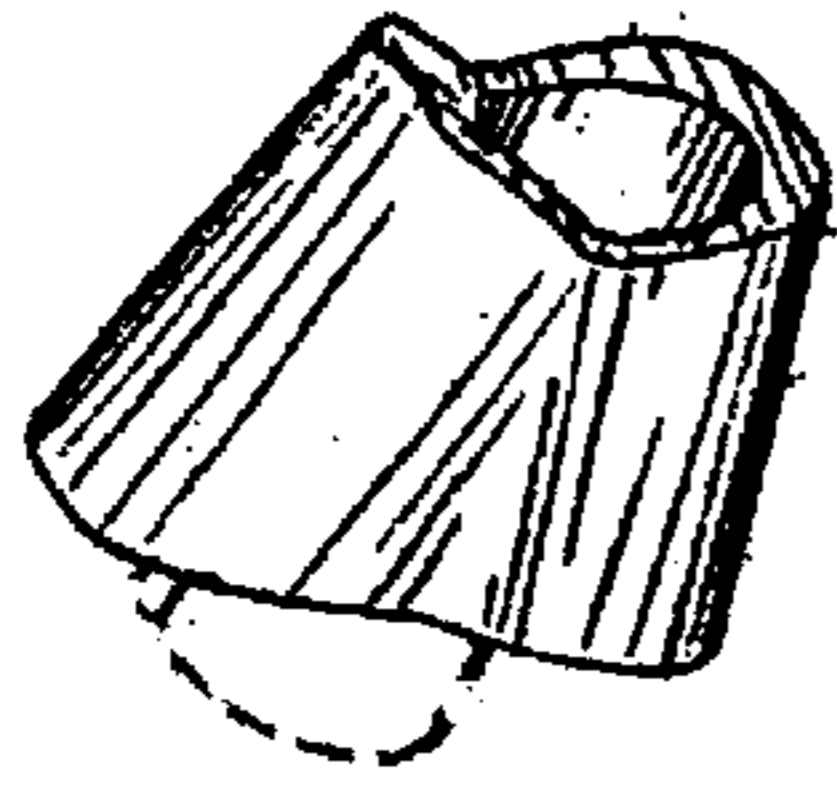


FIG. 8

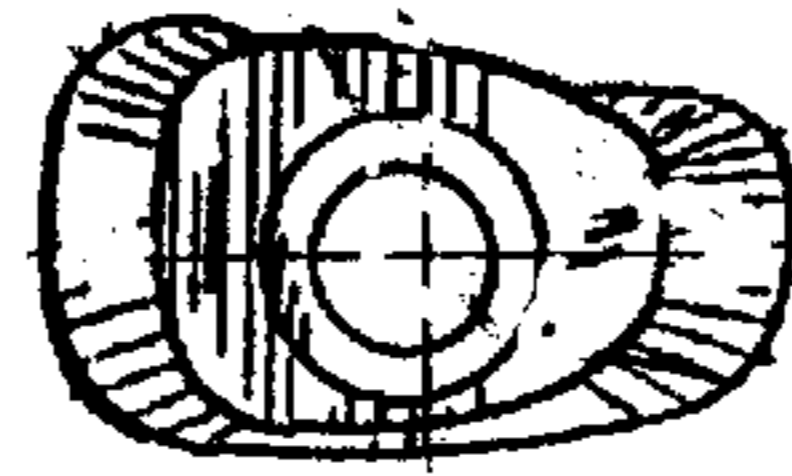


FIG. 9

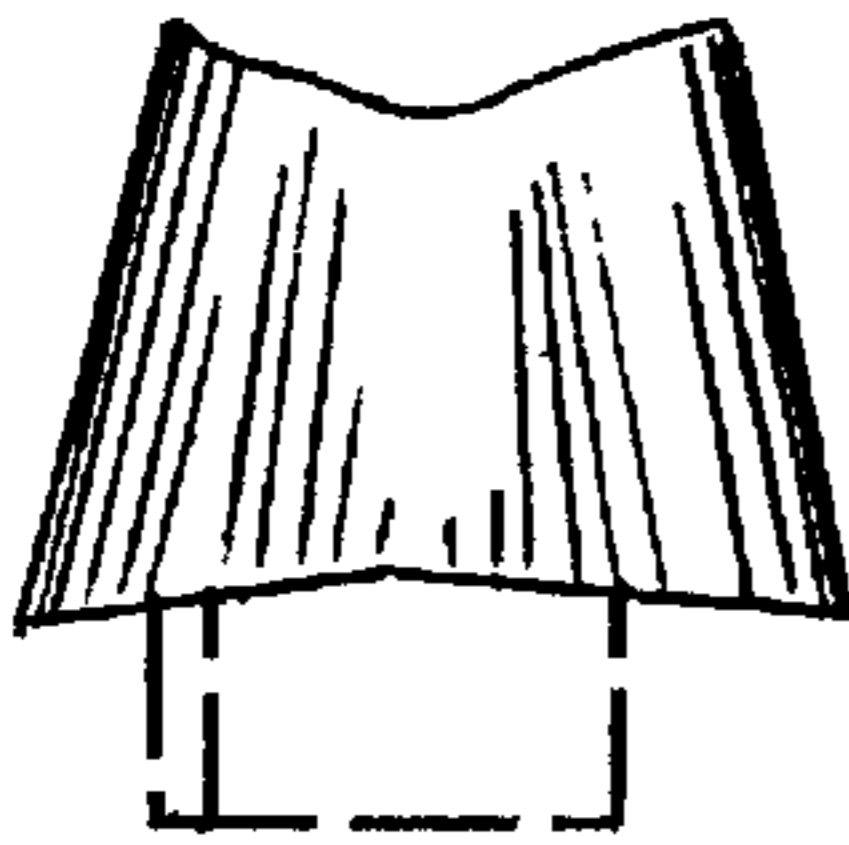


FIG. 12

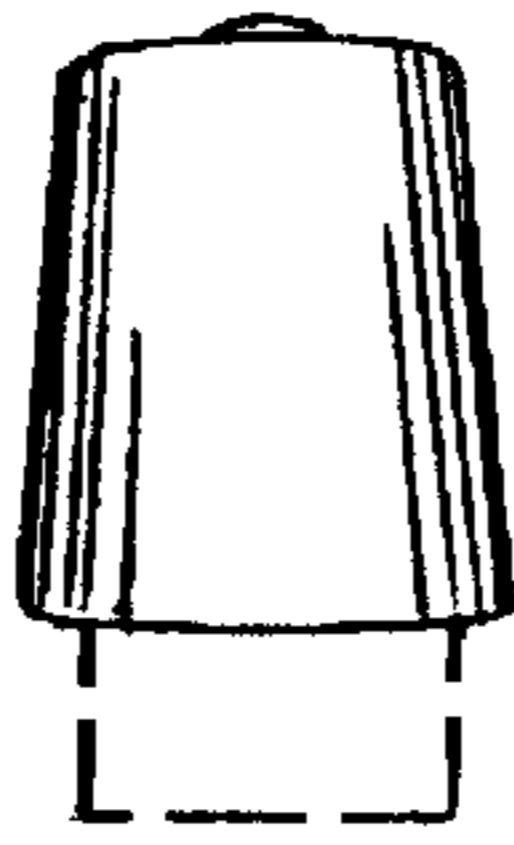


FIG. 11

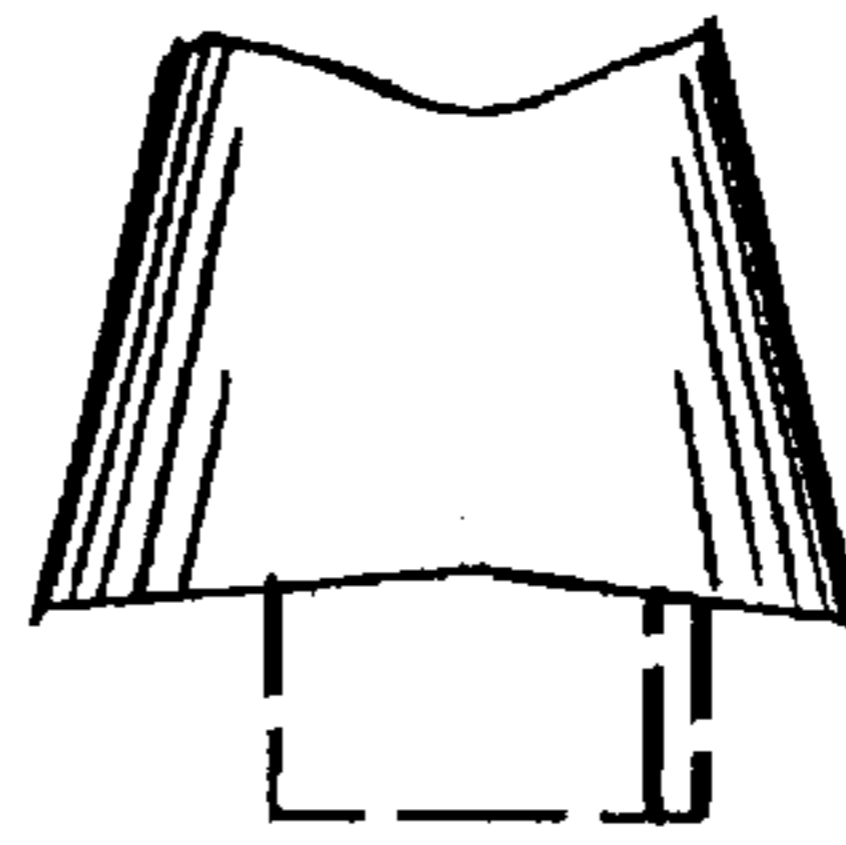


FIG. 10

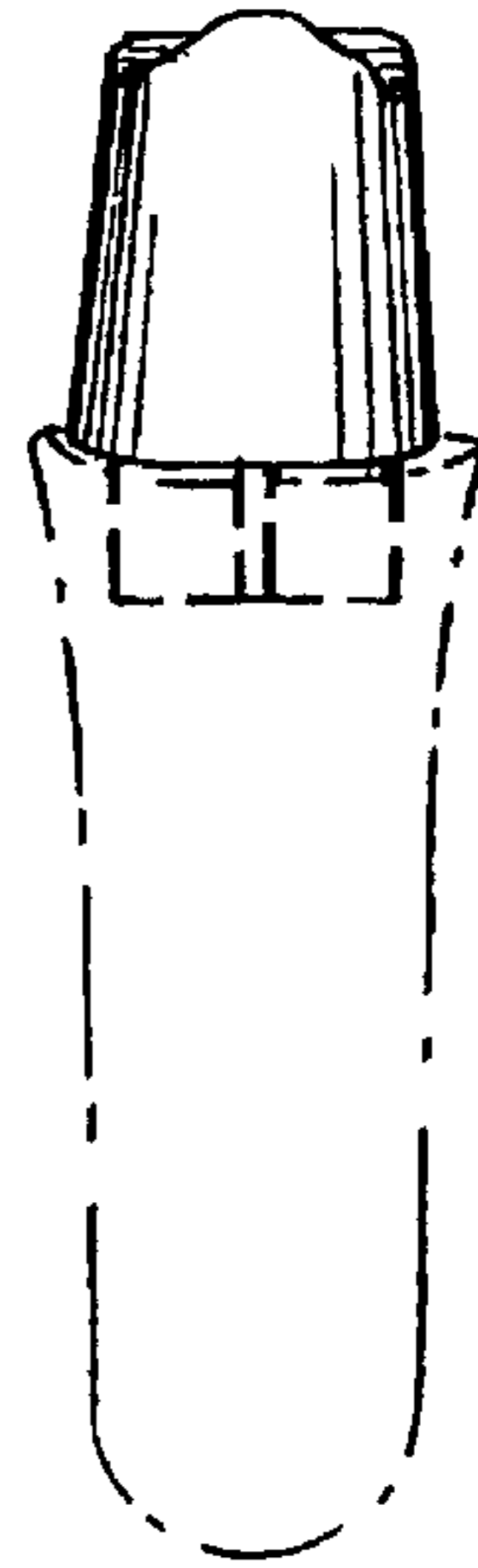


FIG. 13

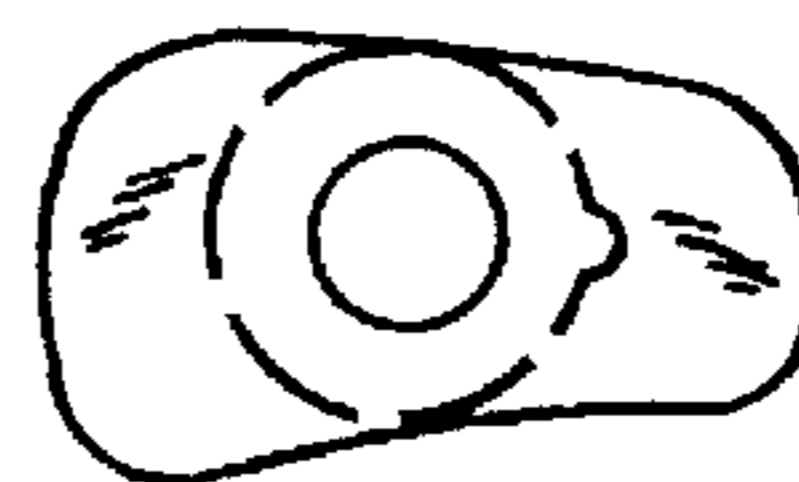


FIG. 14

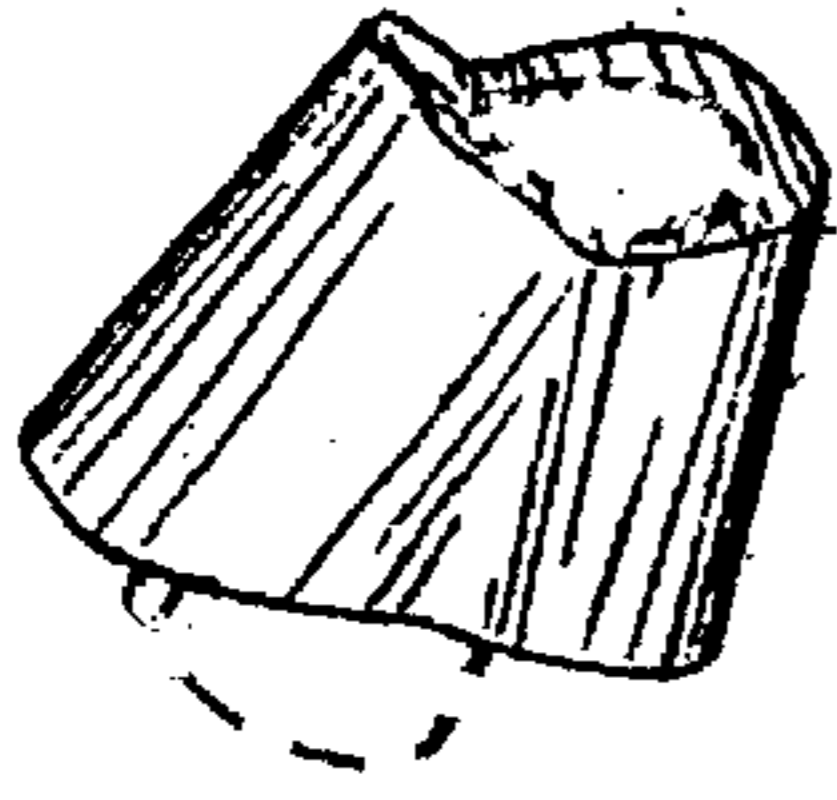


FIG. 15

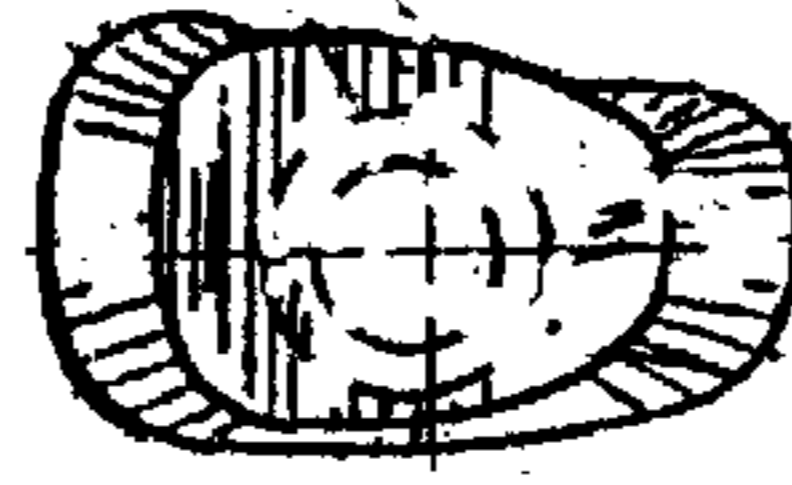


FIG. 16

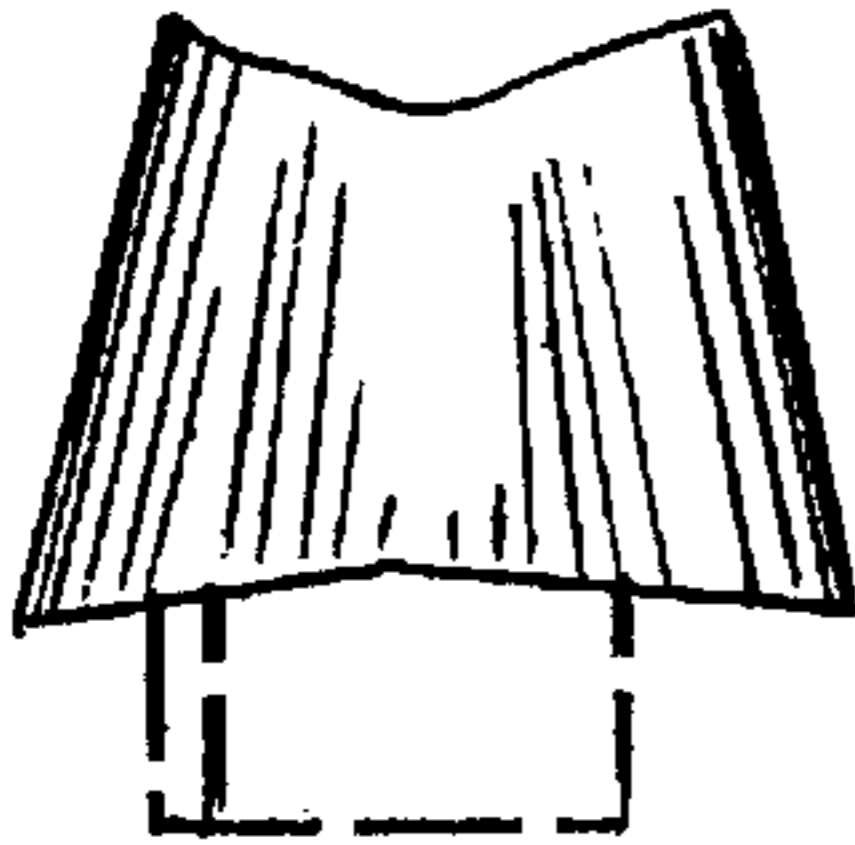


FIG. 19

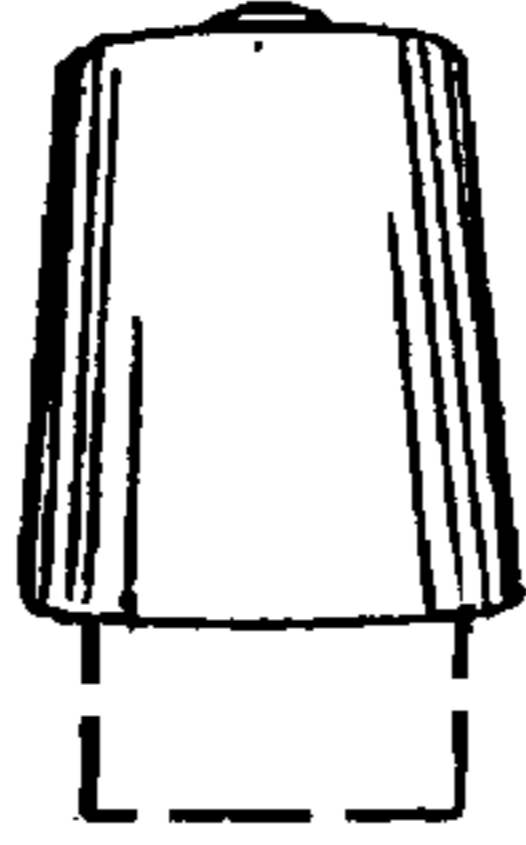


FIG. 18

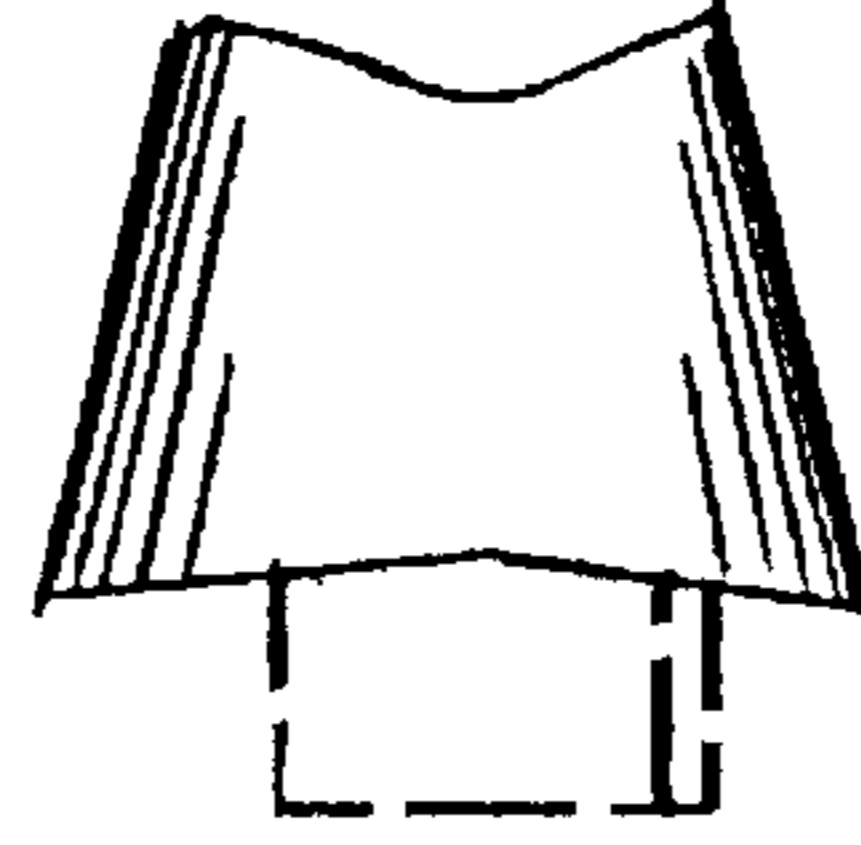


FIG. 17

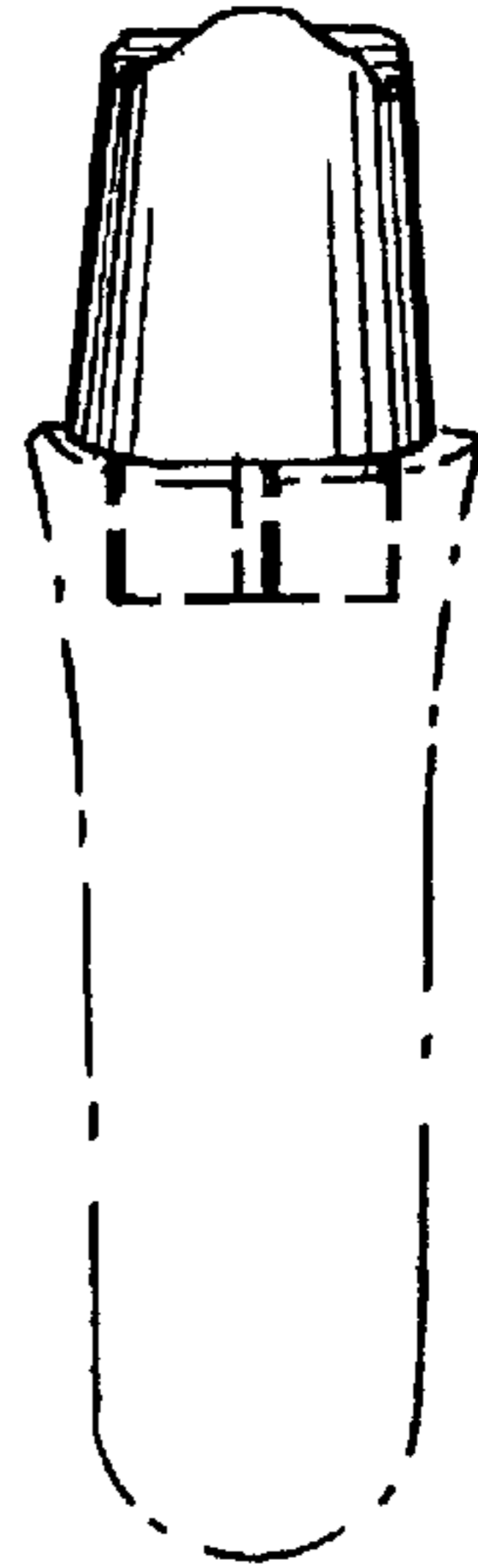


FIG. 20

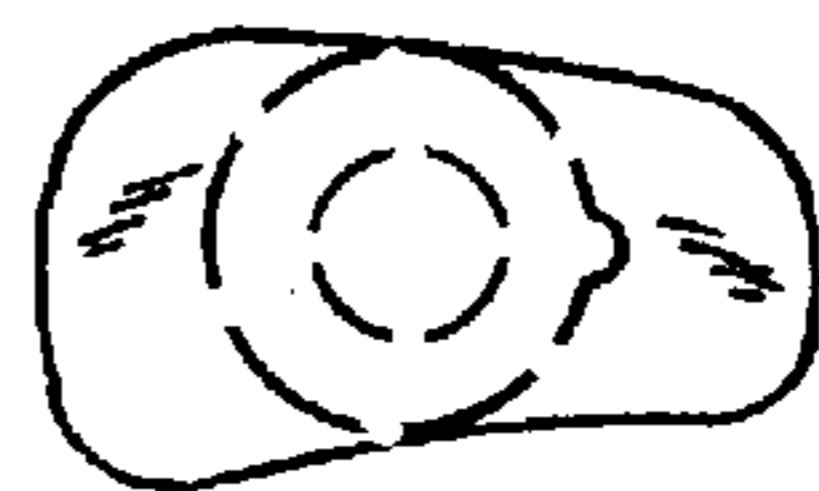


FIG. 21