



US00D486912S

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

(10) **Patent No.:** **US D486,912 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.: **29/177,926**
- (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,
433/180-182

| | | | |
|--------------|---------|-------------------|---------|
| 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

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

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.

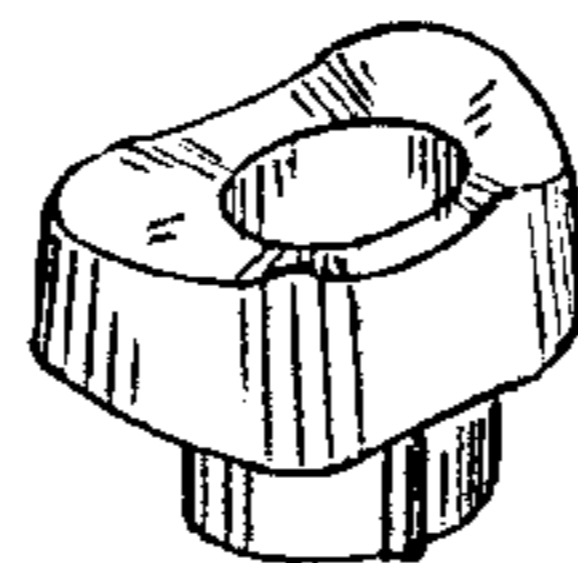
DESCRIPTION

The related applications include “Unitary Dental Implant”, U.S. patent application Ser. No. 29/177,938; “Dental Implant Fixture”, U.S. patent application Ser. No. 29/177,

(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 | 433/174 |
| 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 |



946; "Dental Implant Fixture", U.S. patent application Ser. No. 29/177,947; "Dental Implant Fixture", 29/177,944; "Dental Implant Fixture", U.S. patent application Ser. No. 29/177,939; "Dental Implant Fixture", U.S. patent application Ser. No. 29/177,945; "Dental Implant Abutment", U.S. patent application Ser. No. 29/177,950; "Dental Implant Abutment", U.S. patent application Ser. No. 29/177,925; "Dental Implant Abutment", U.S. patent application Ser. No. 29/177,949; "Dental Implant Abutment", U.S. patent application Ser. No. 29/177,948; and "Dental Implant Abutment", U.S. patent application 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

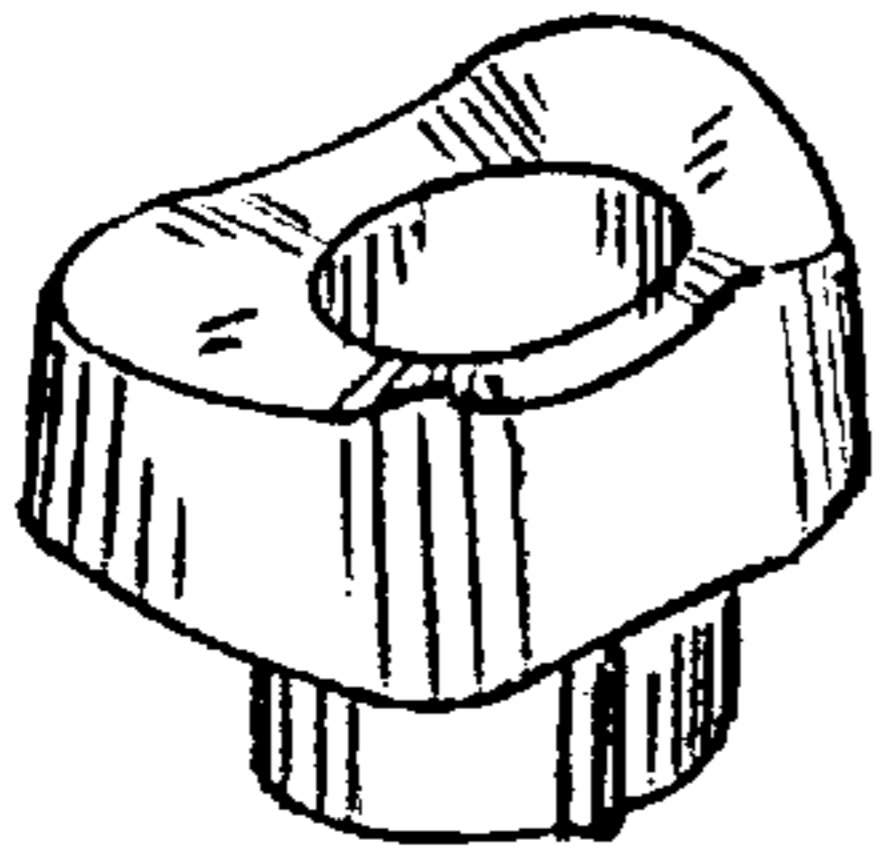


FIG. 1

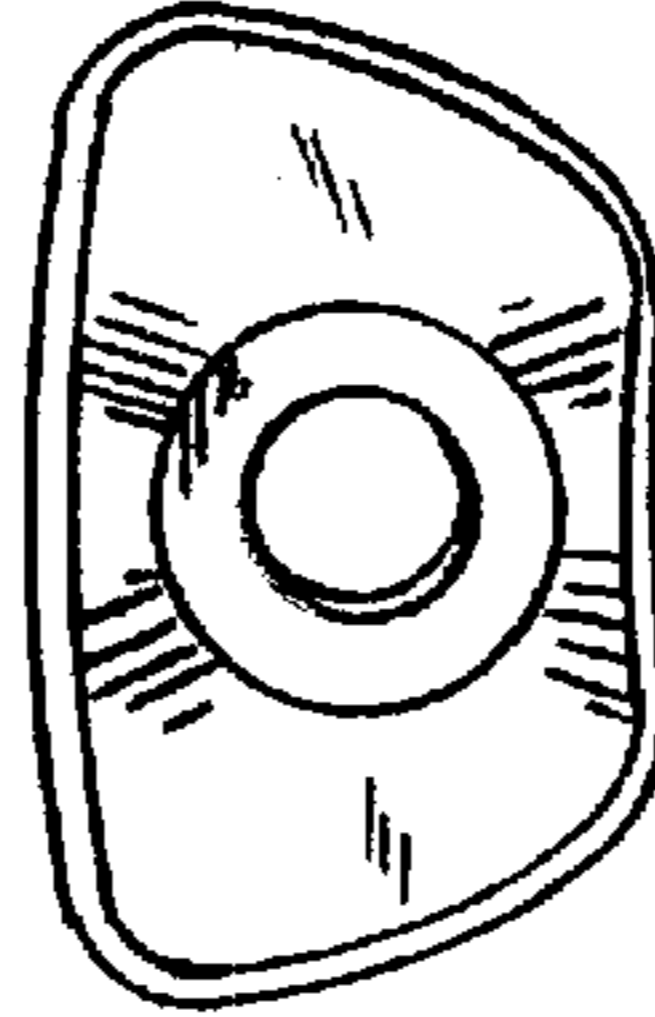


FIG. 2

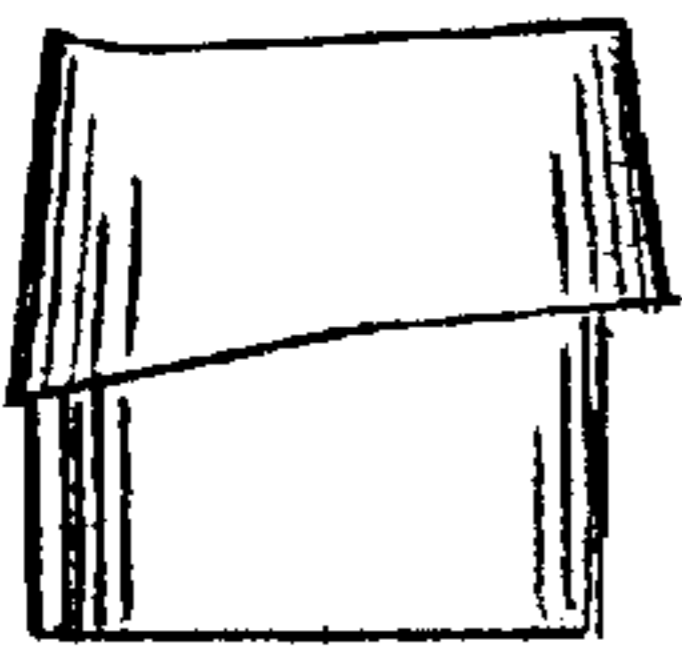


FIG. 5

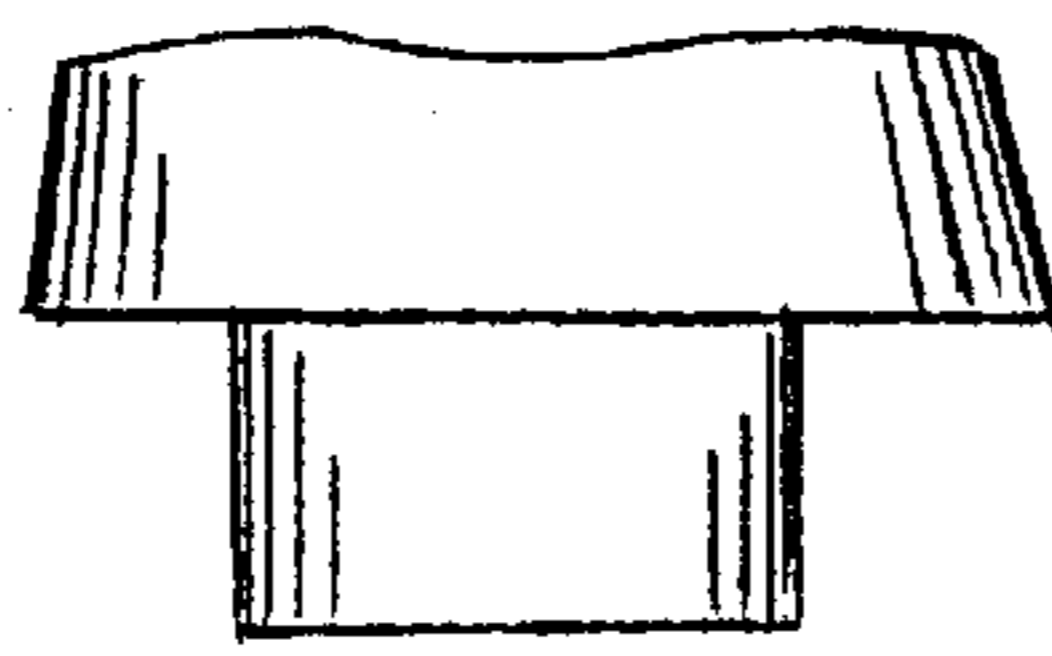


FIG. 4

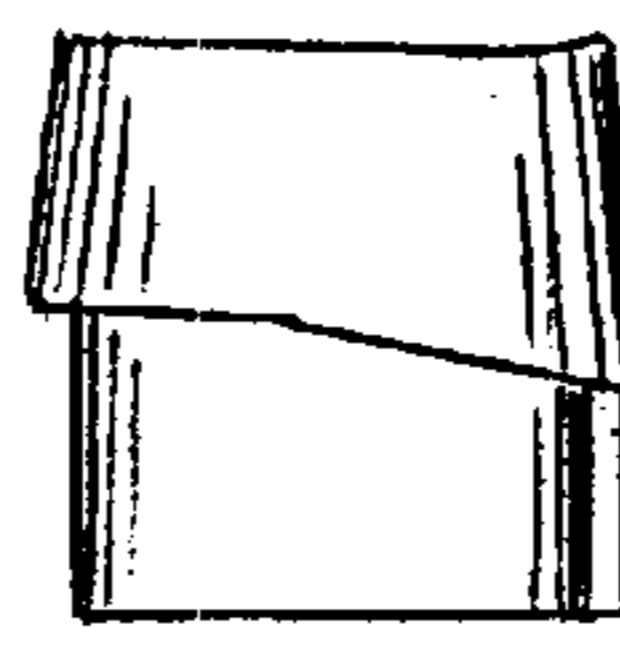


FIG. 3

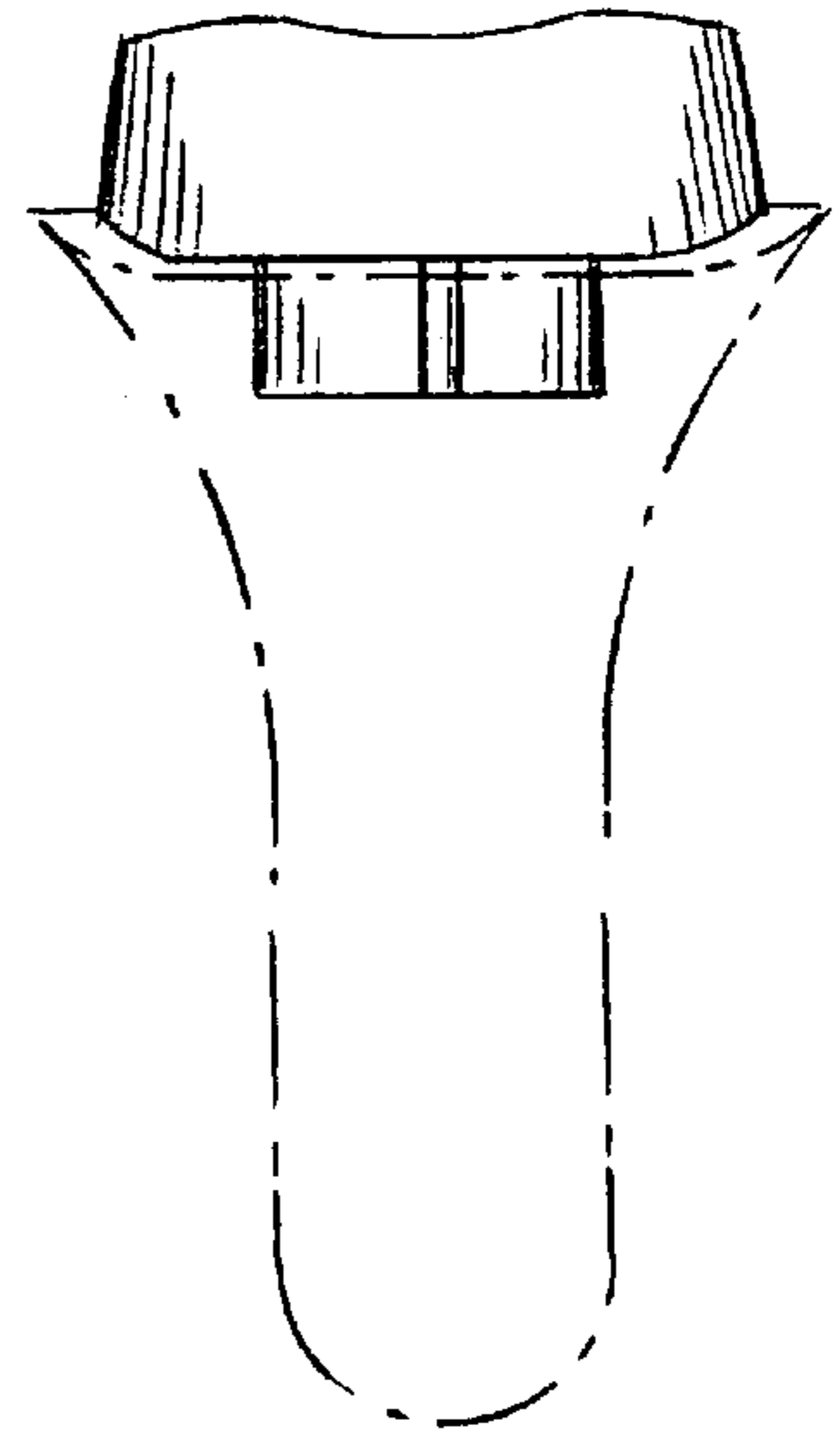


FIG. 6

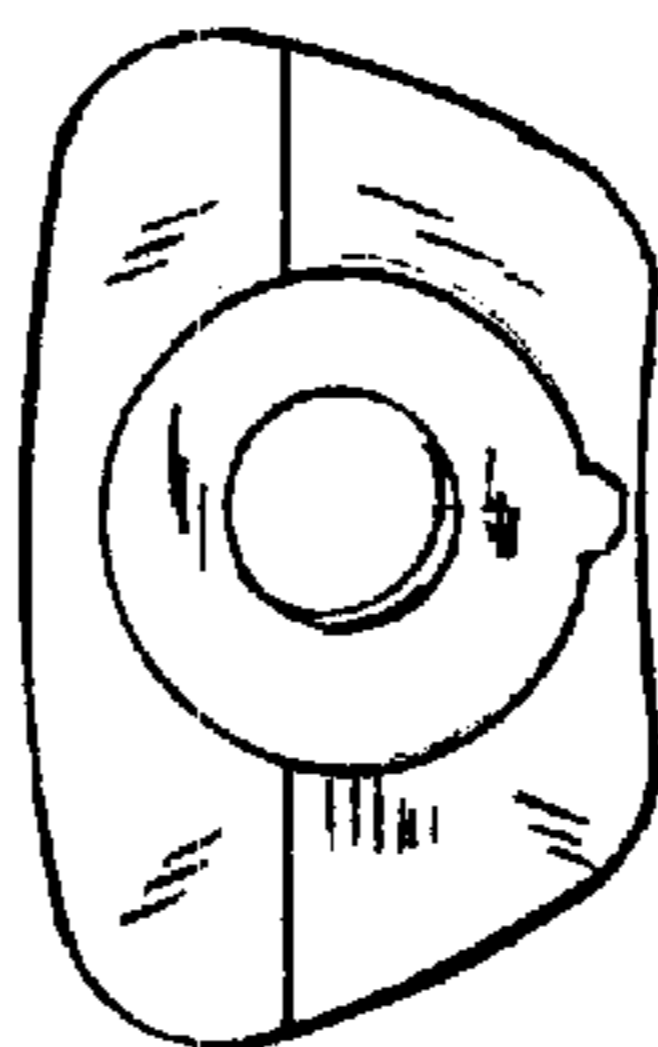


FIG. 7

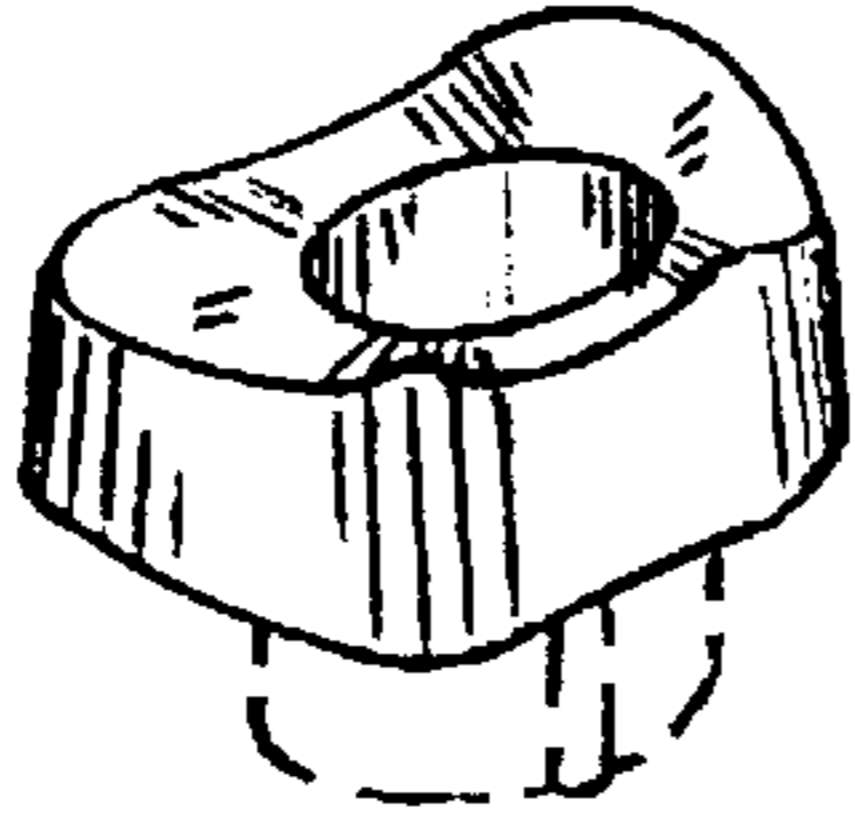


FIG. 8

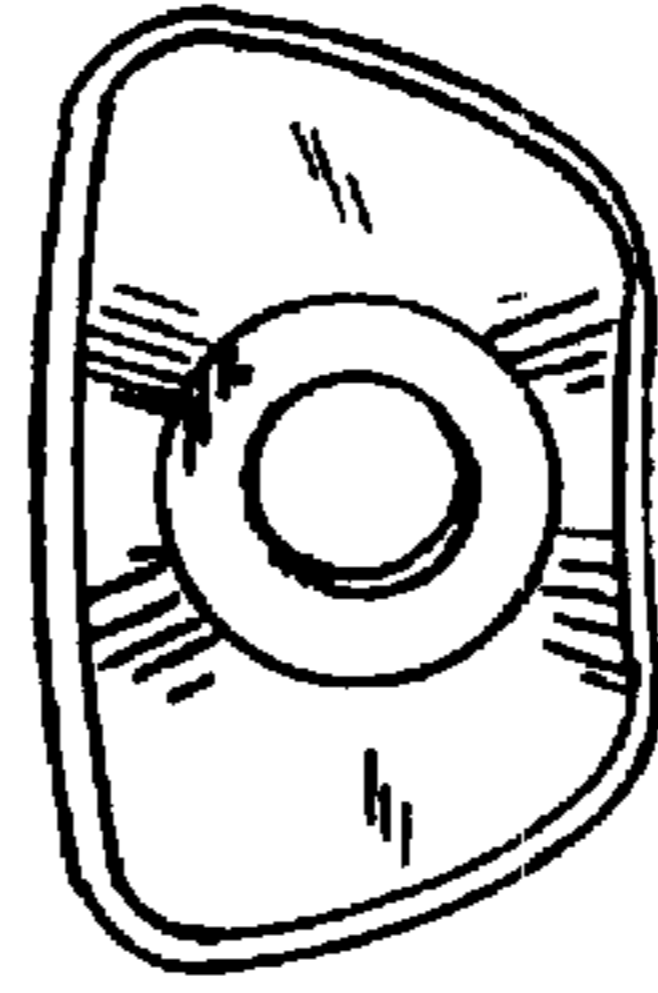


FIG. 9

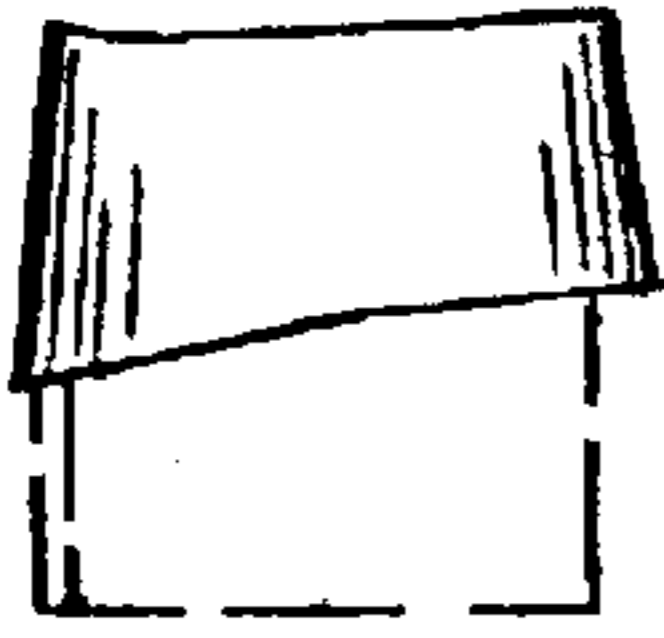


FIG. 12

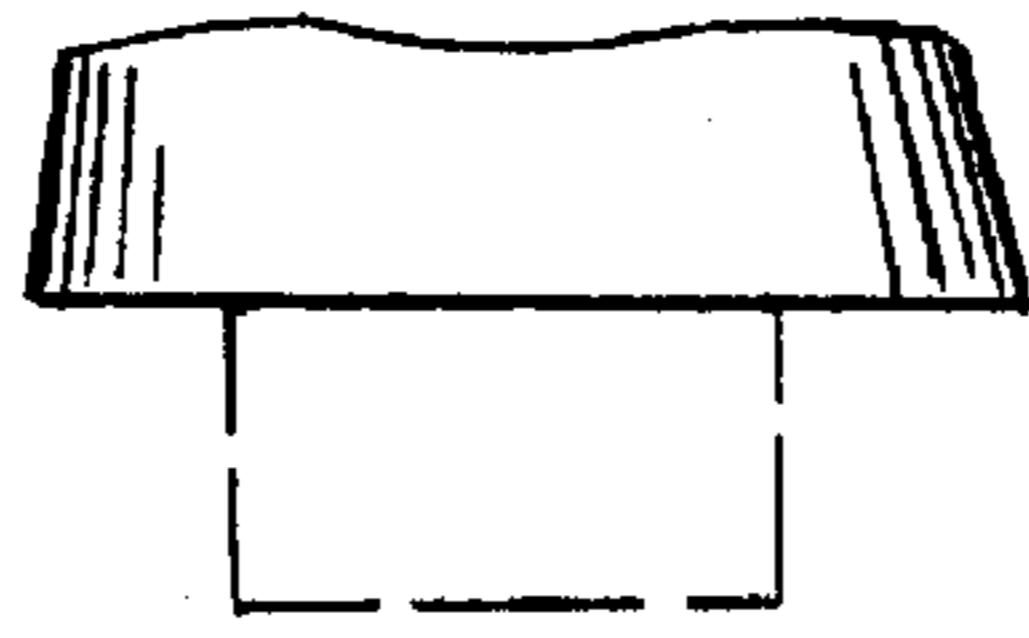


FIG. 11

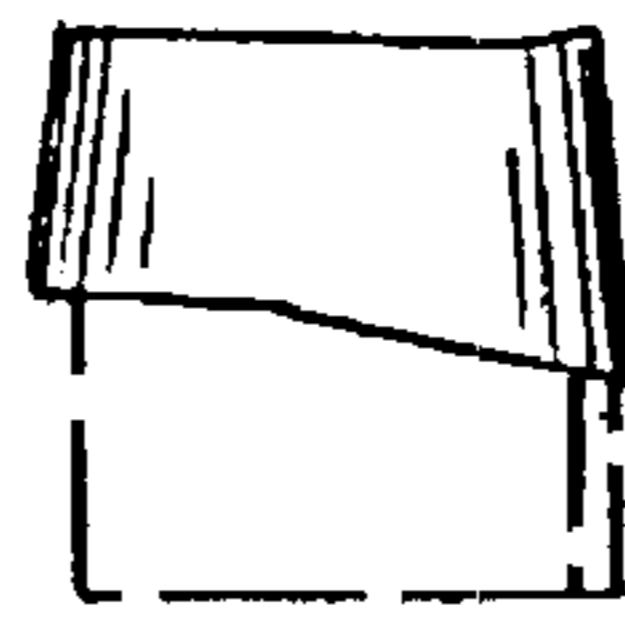


FIG. 10

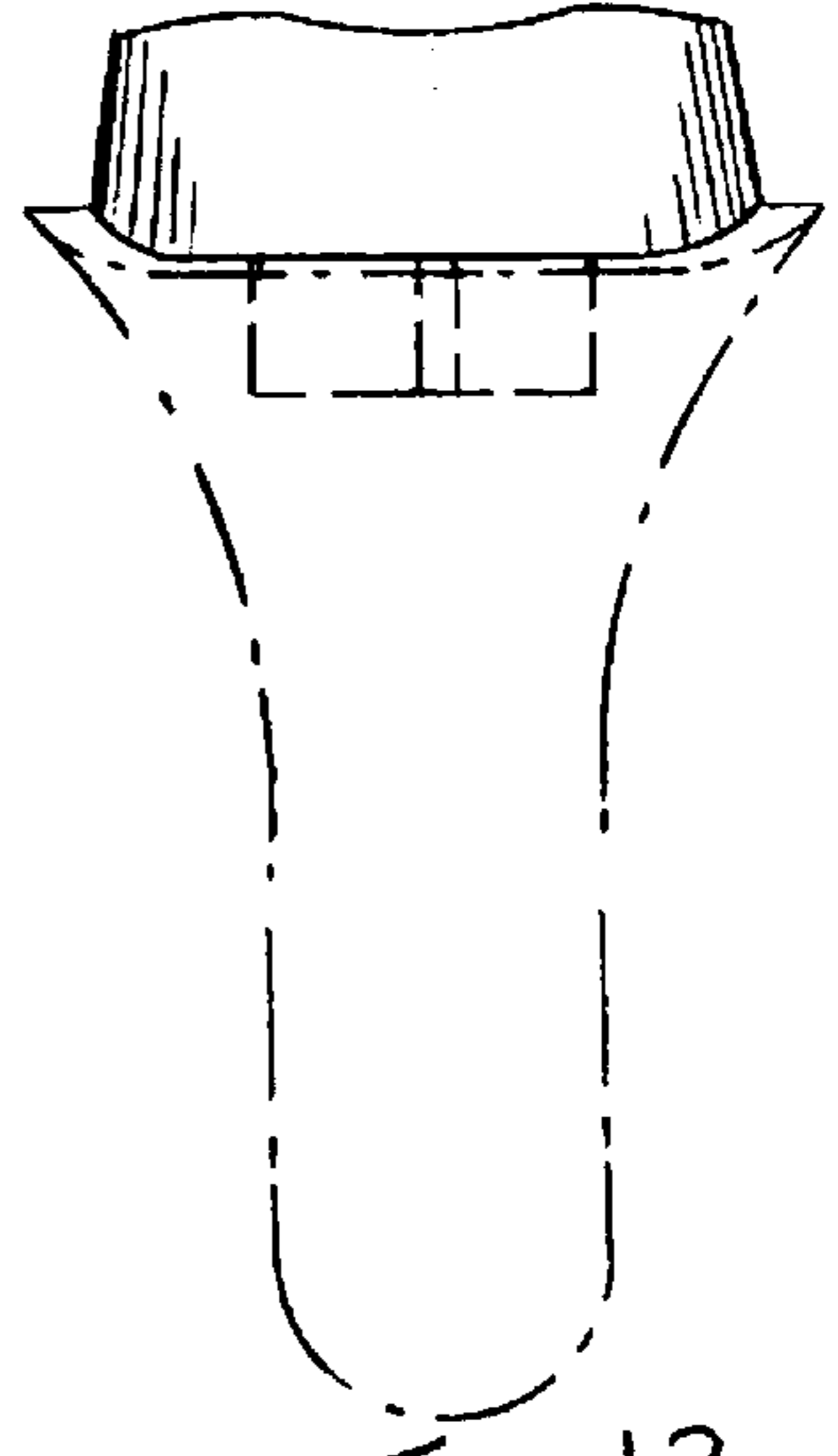


FIG. 13

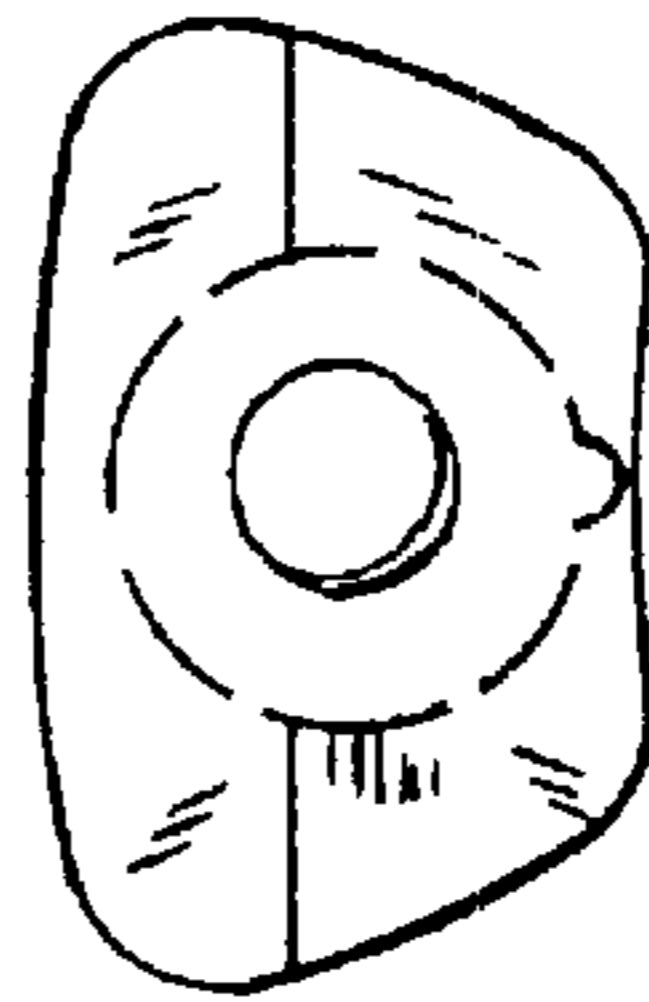


FIG. 14

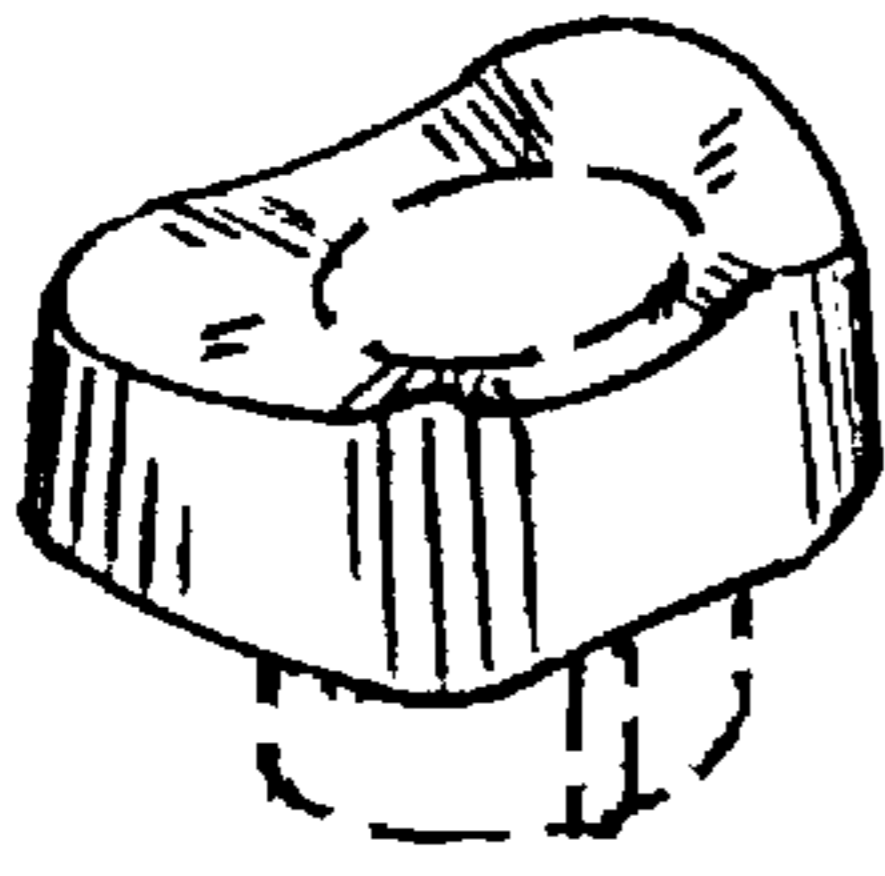


FIG. 15

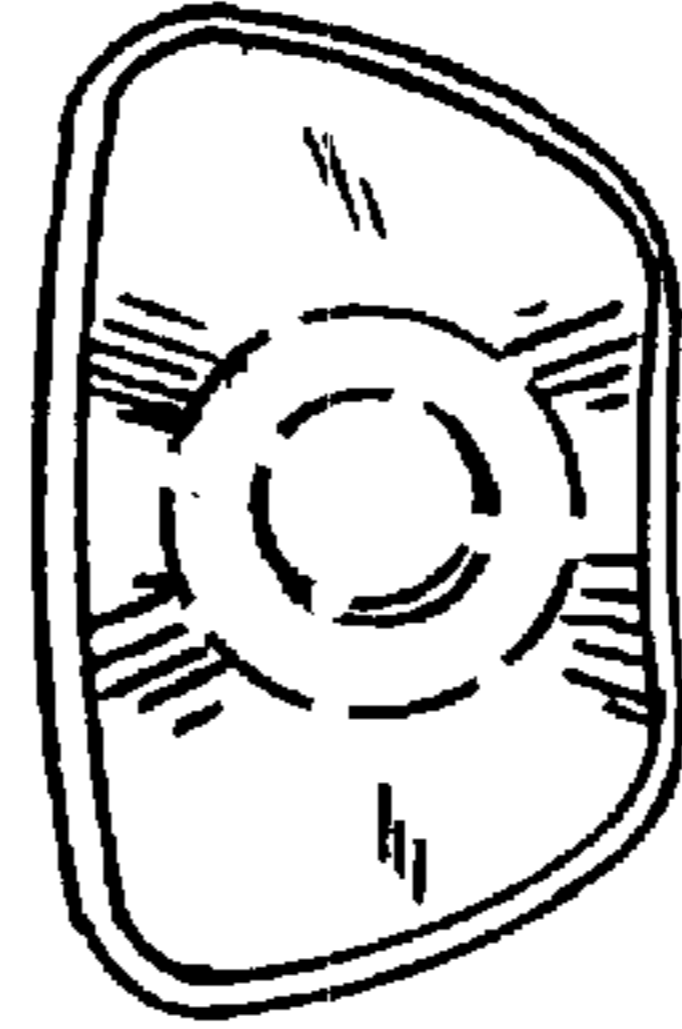


FIG. 16

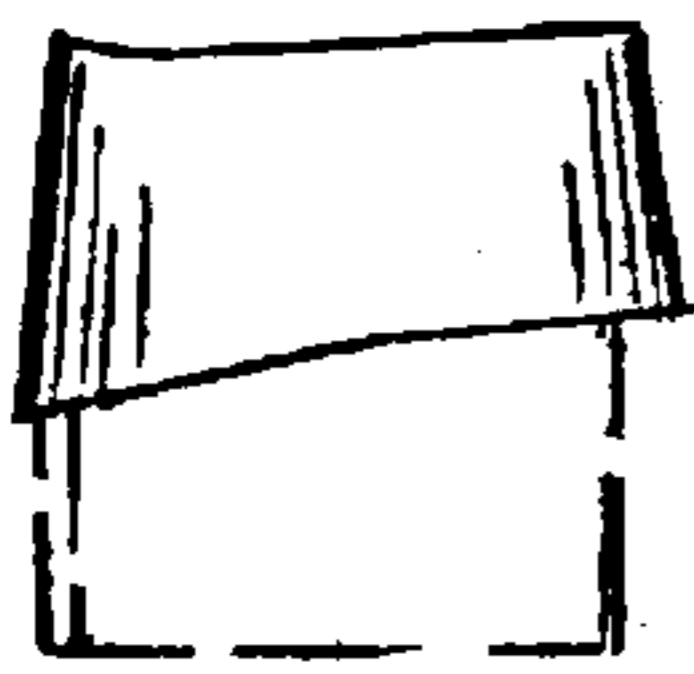


FIG. 17

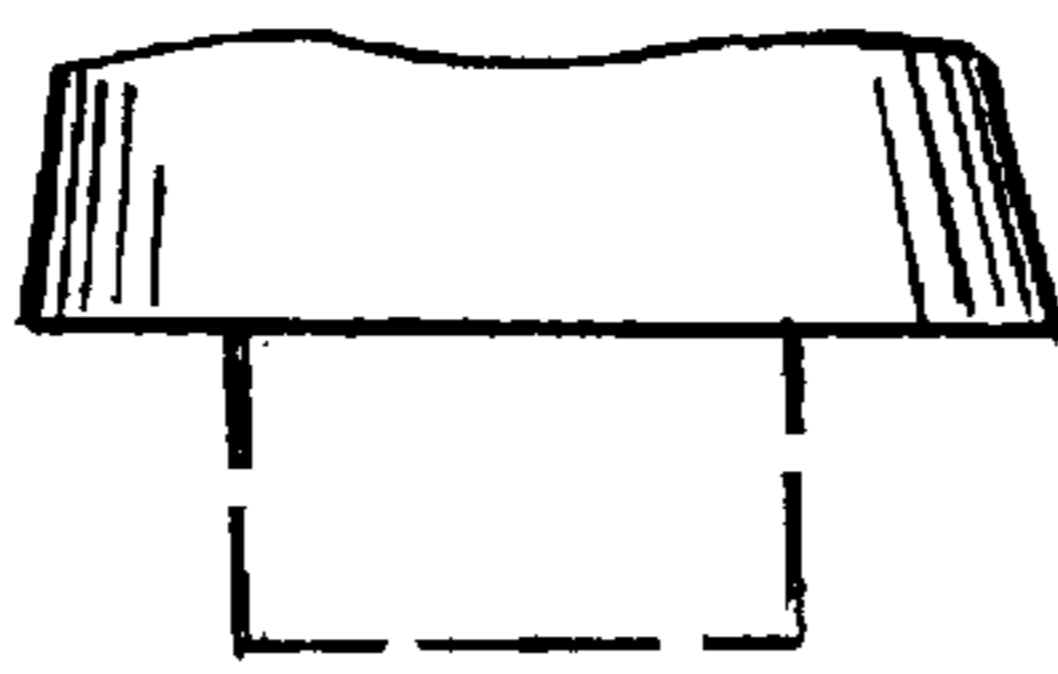


FIG. 18

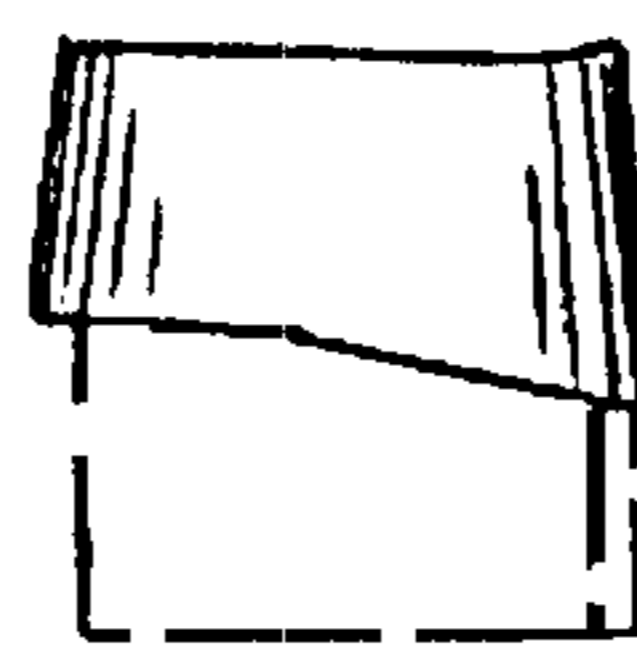


FIG. 19

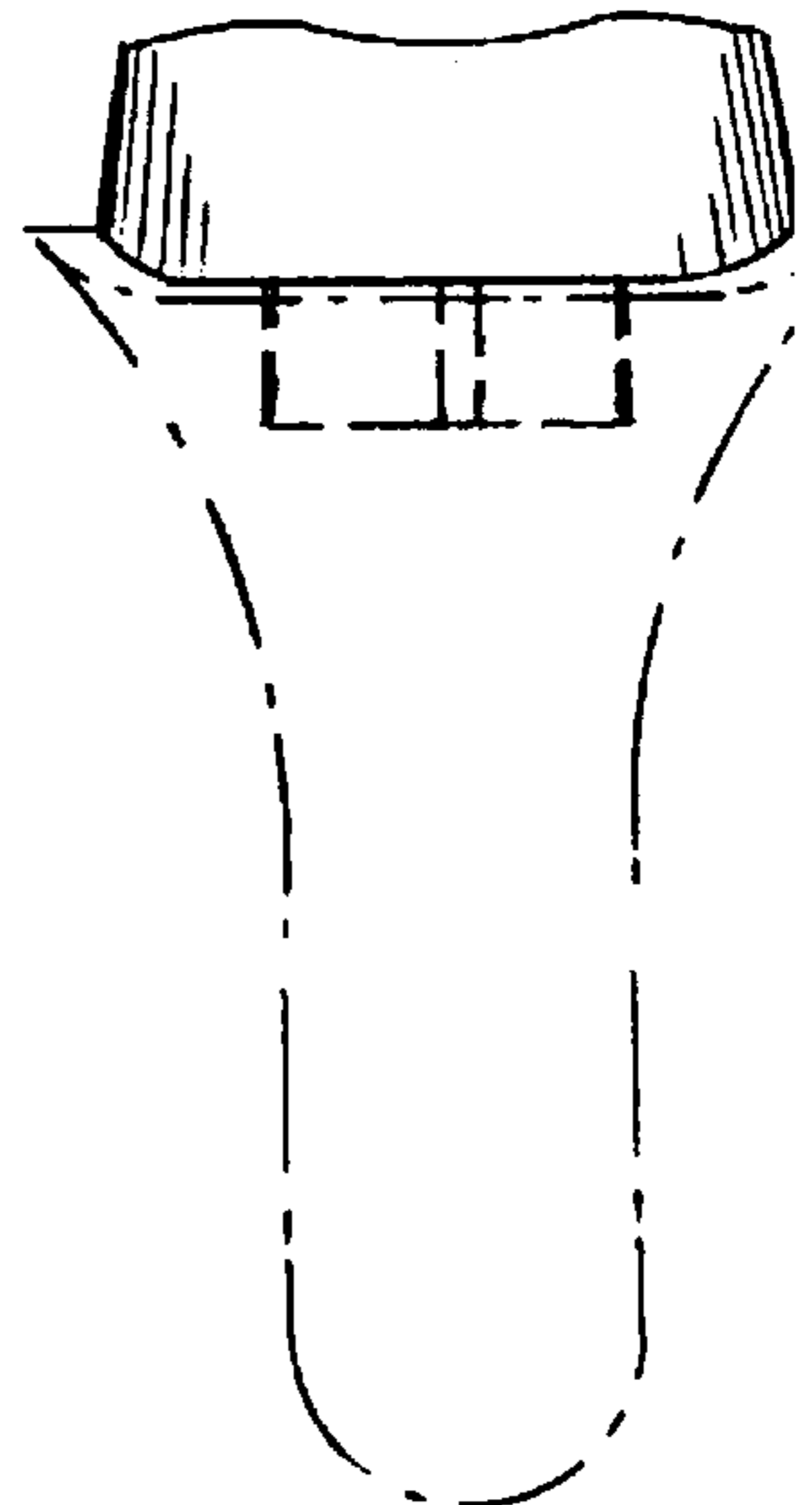


FIG. 20

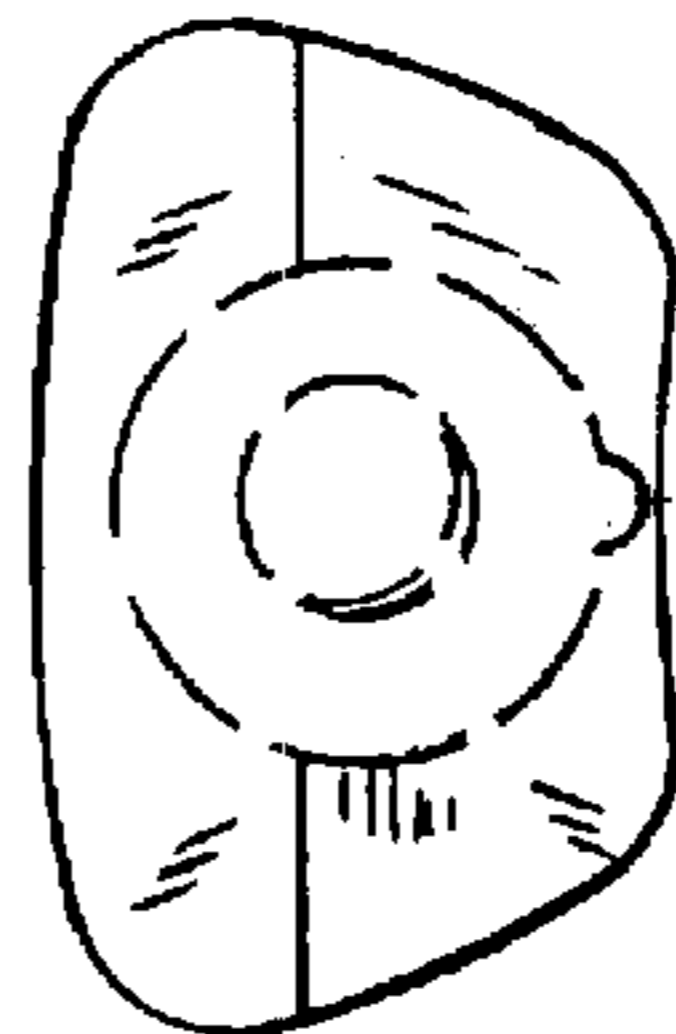


FIG. 21