

US00D819186S

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

(10) **Patent No.:** **US D819,186 S**  
(45) **Date of Patent:** **\*\* May 29, 2018**

(54) **CONNECTOR FOR DOUBLE PIPE HEAT EXCHANGER**

(71) Applicant: **HS R & A Co., Ltd.**, Yangsan-si (KR)

(72) Inventors: **Sungryong Huh**, Busanjin-gu (KR);  
**Jaehyeok Choi**, Yangsan-si (KR);  
**Deokhyun Lim**, Yangsan-si (KR);  
**Youngjun Kim**, Yangsan-si (KR);  
**Baesun Yoo**, Asan-si (KR)

(73) Assignee: **HS R & A Co., Ltd.**, Yangsan-si,  
Gyeongsangnam-do (KR)

(\*\*) Term: **15 Years**

(21) Appl. No.: **29/571,375**

(22) Filed: **Jul. 18, 2016**

(30) **Foreign Application Priority Data**

Dec. 12, 2011 (KR) ..... 10-2011-0132543

(51) **LOC (11) Cl.** ..... **23-01**

(52) **U.S. Cl.**  
USPC ..... **D23/262**

(58) **Field of Classification Search**

USPC ..... D23/259, 262-266, 258, 268, 386;  
D13/133; 251/142, 149, 149.8, 147, 148;  
D8/349, 382, 394-397; 285/179, 179.1,  
285/180-182, 132.2, 132.15, 124.2,  
285/135.4; 165/154-155, 164, 181;  
138/111-112, 114  
CPC . F16L 55/18; F16L 17/00; F16L 23/00; F16L  
21/02; F16L 21/06; F16L 9/18; F16L  
9/20; F16L 39/005; F16J 15/22; F16J  
1/005; F28D 7/103; F28D 7/106; F28F  
1/24; F28F 1/03

See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

2,761,425 A 9/1956 Bertsch et al.  
2,884,478 A \* 4/1959 Becker ..... H01R 4/186  
174/94 R  
D298,739 S \* 11/1988 Richards, Jr. .... D22/110

(Continued)

**FOREIGN PATENT DOCUMENTS**

DE 102007054732 7/2008  
DE 102007042841 3/2009

(Continued)

**OTHER PUBLICATIONS**

Auclair, English translation of European Patent No. 2199721; Jun. 2010.

(Continued)

*Primary Examiner* — Eric L Goodman

*Assistant Examiner* — Amy C Wierenga

(74) *Attorney, Agent, or Firm* — Klarquist Sparkman,  
LLP

(57) **CLAIM**

The ornamental design for a connector for double pipe heat exchanger, as shown and described.

**DESCRIPTION**

FIG. 1 is a perspective view of the connector for double pipe heat exchanger.

FIG. 2 is a top plan view thereof.

FIG. 3 is a bottom plan view thereof.

FIG. 4 is a left side elevation view thereof.

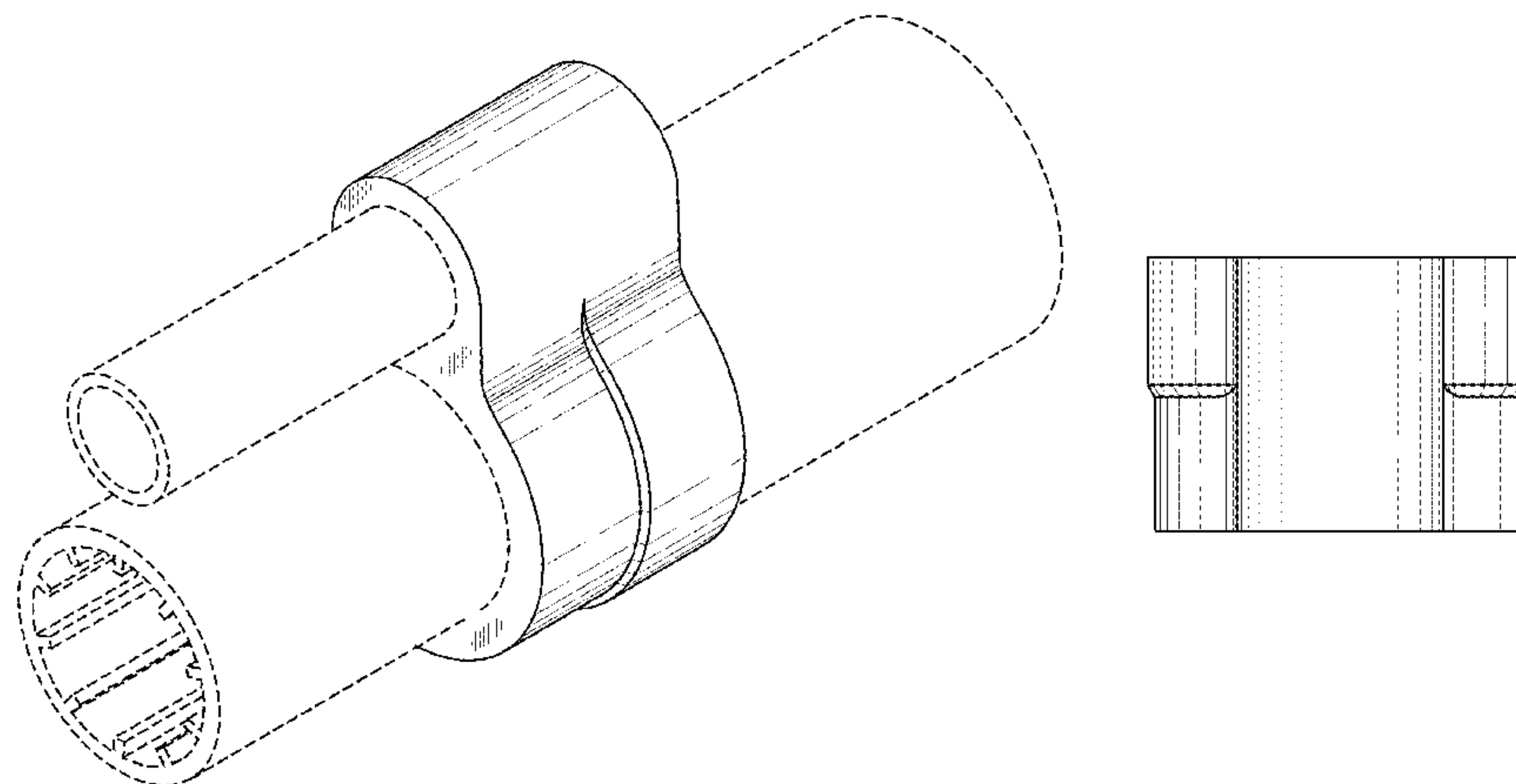
FIG. 5 is a right side elevation view thereof.

FIG. 6 is a front elevation view thereof; and,

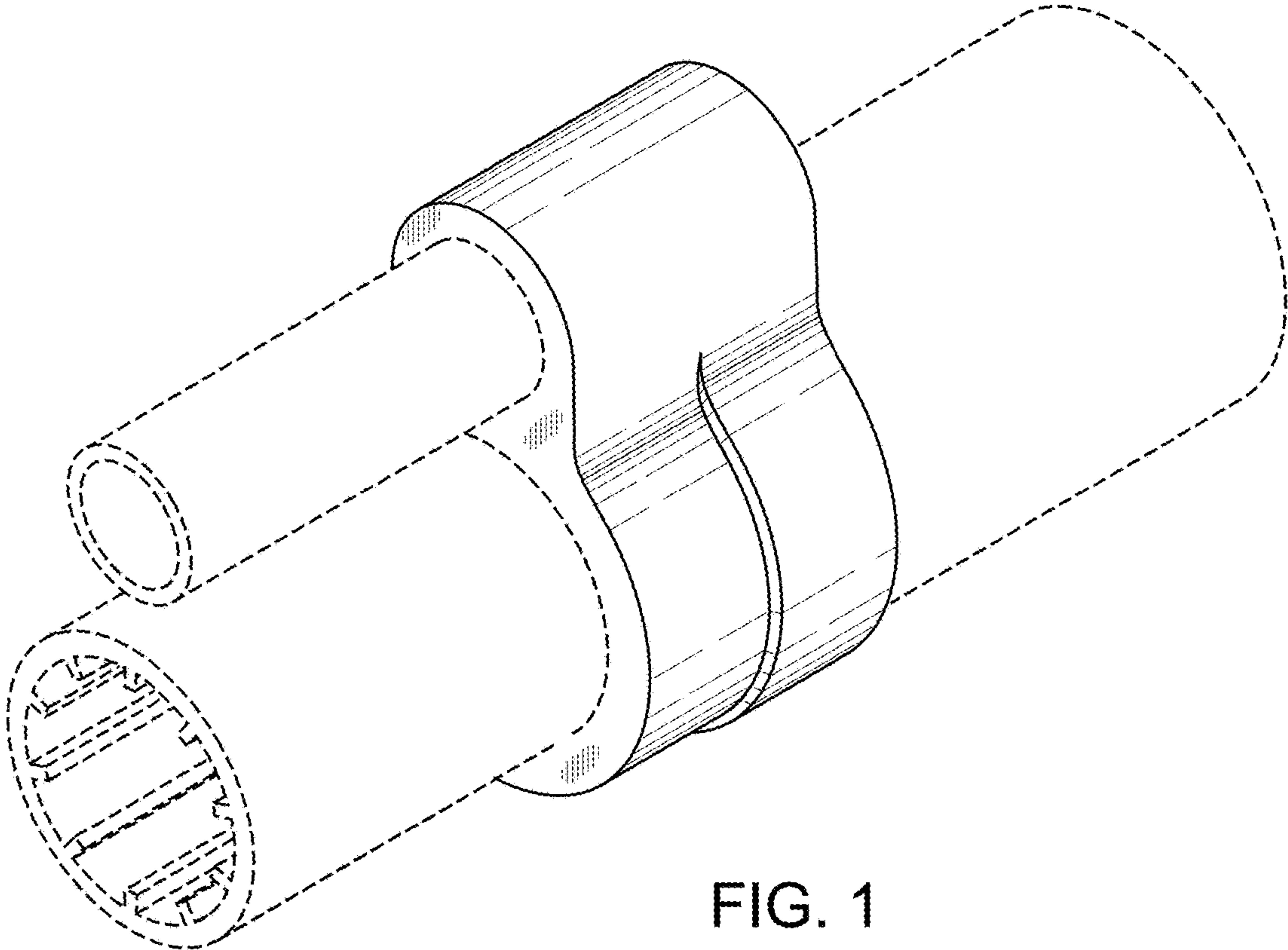
FIG. 7 is a rear elevation view thereof.

The broken lines shown depict portions of the interior of the connector for double pipe heat exchanger that form no part of the claim. The broken line showings of the pipes connected to the connector for double pipe heat exchanger illustrate environment only that form no part of the claim.

**1 Claim, 3 Drawing Sheets**







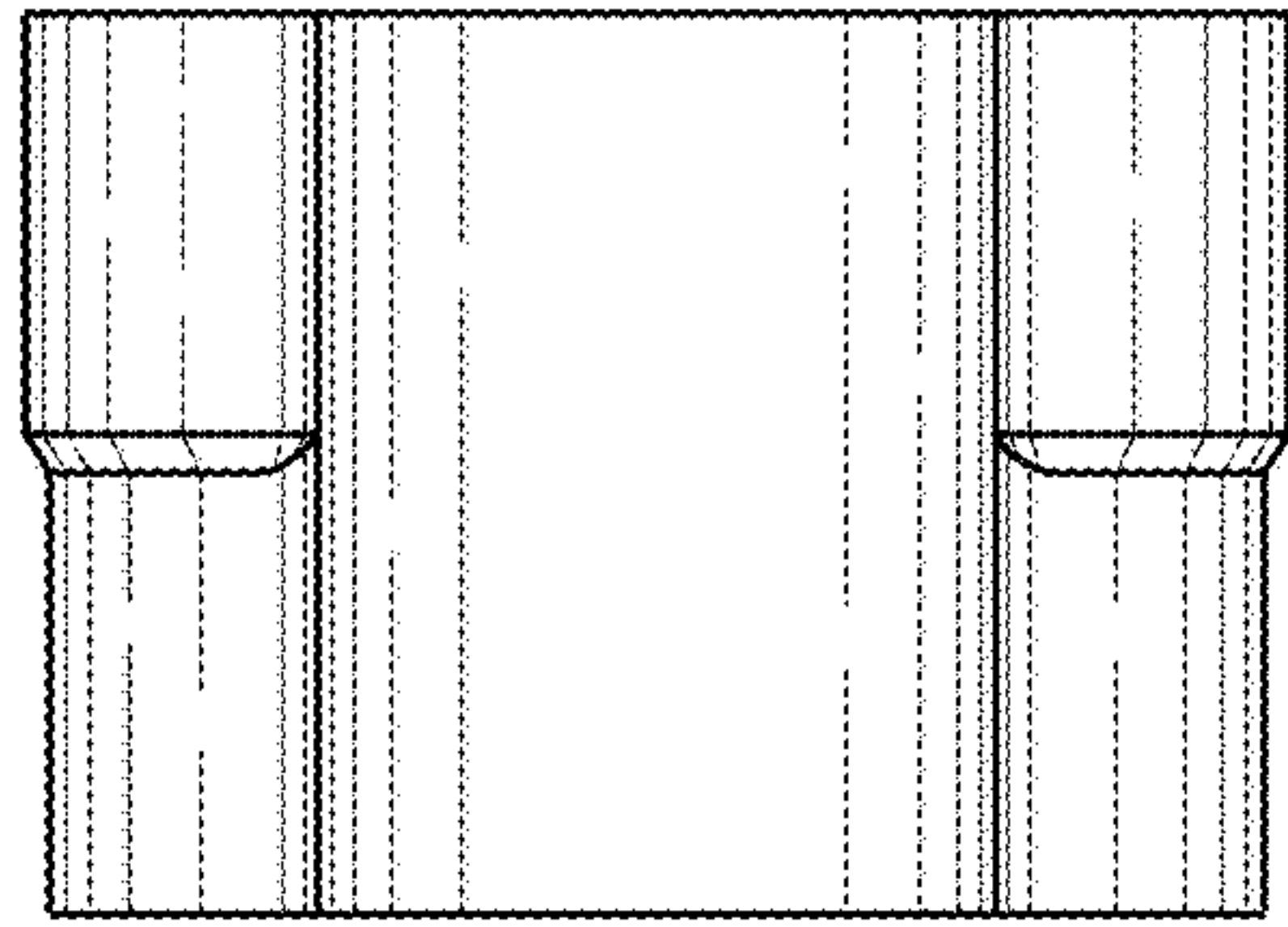


FIG. 2

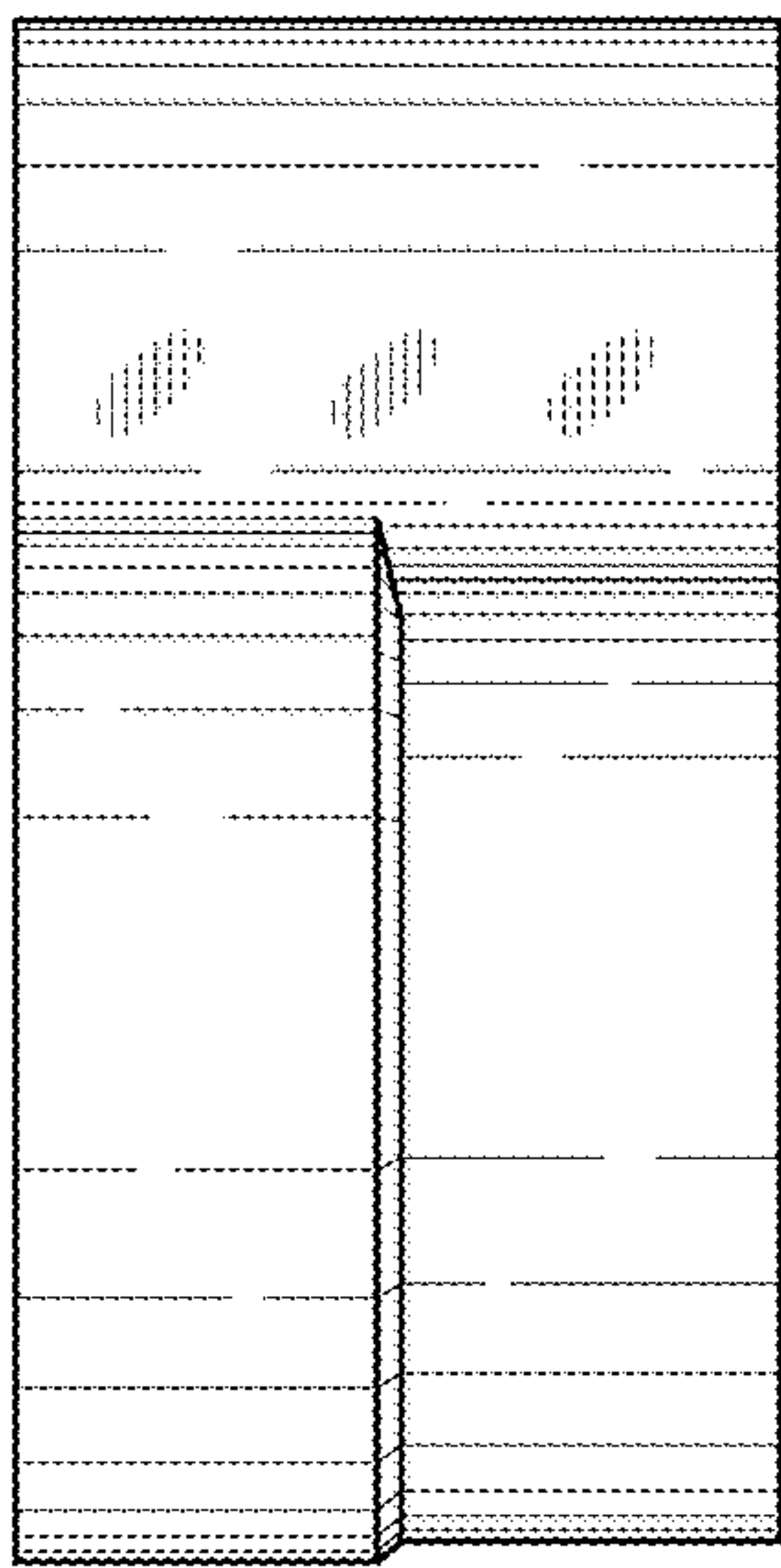


FIG. 4

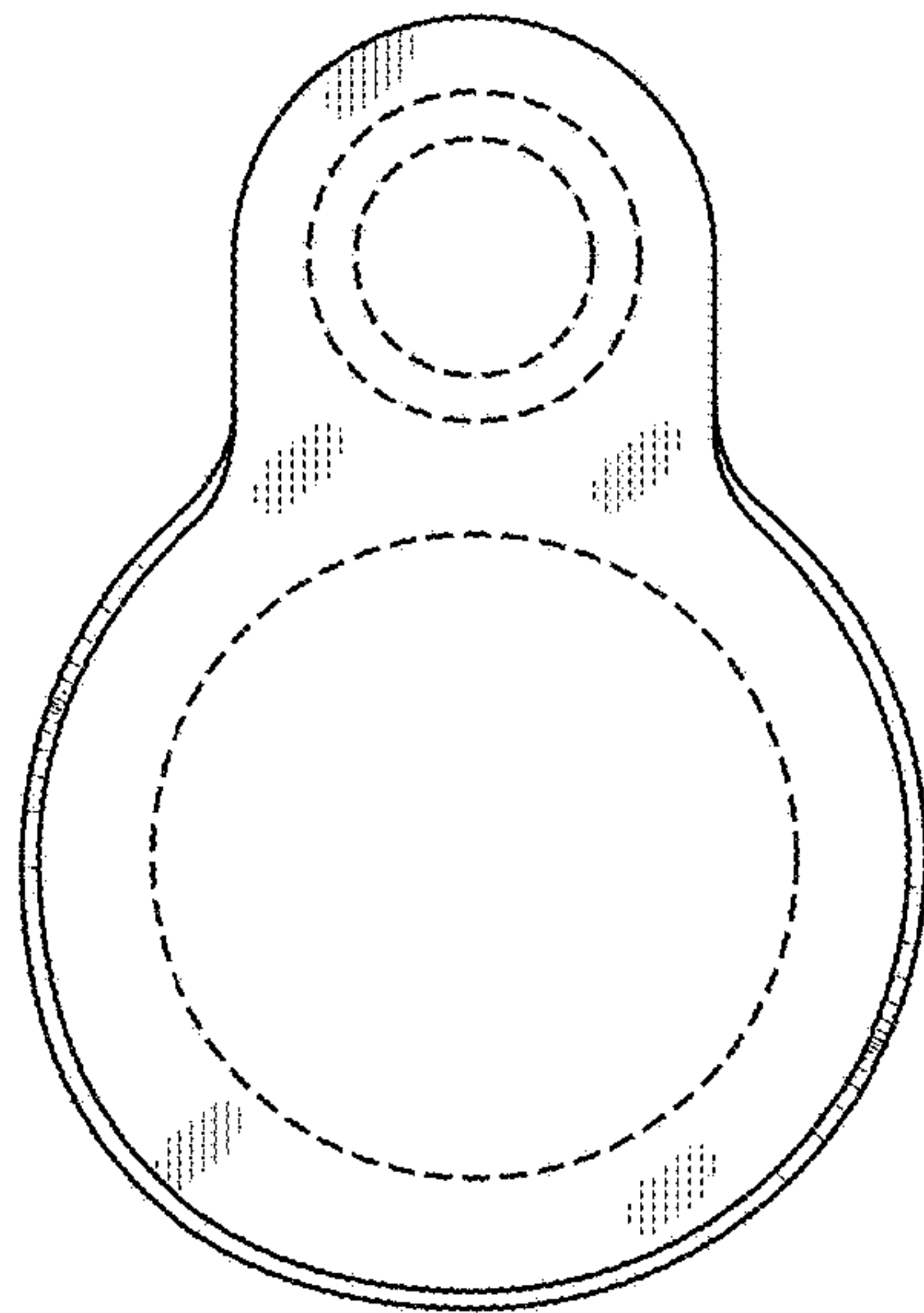


FIG. 6

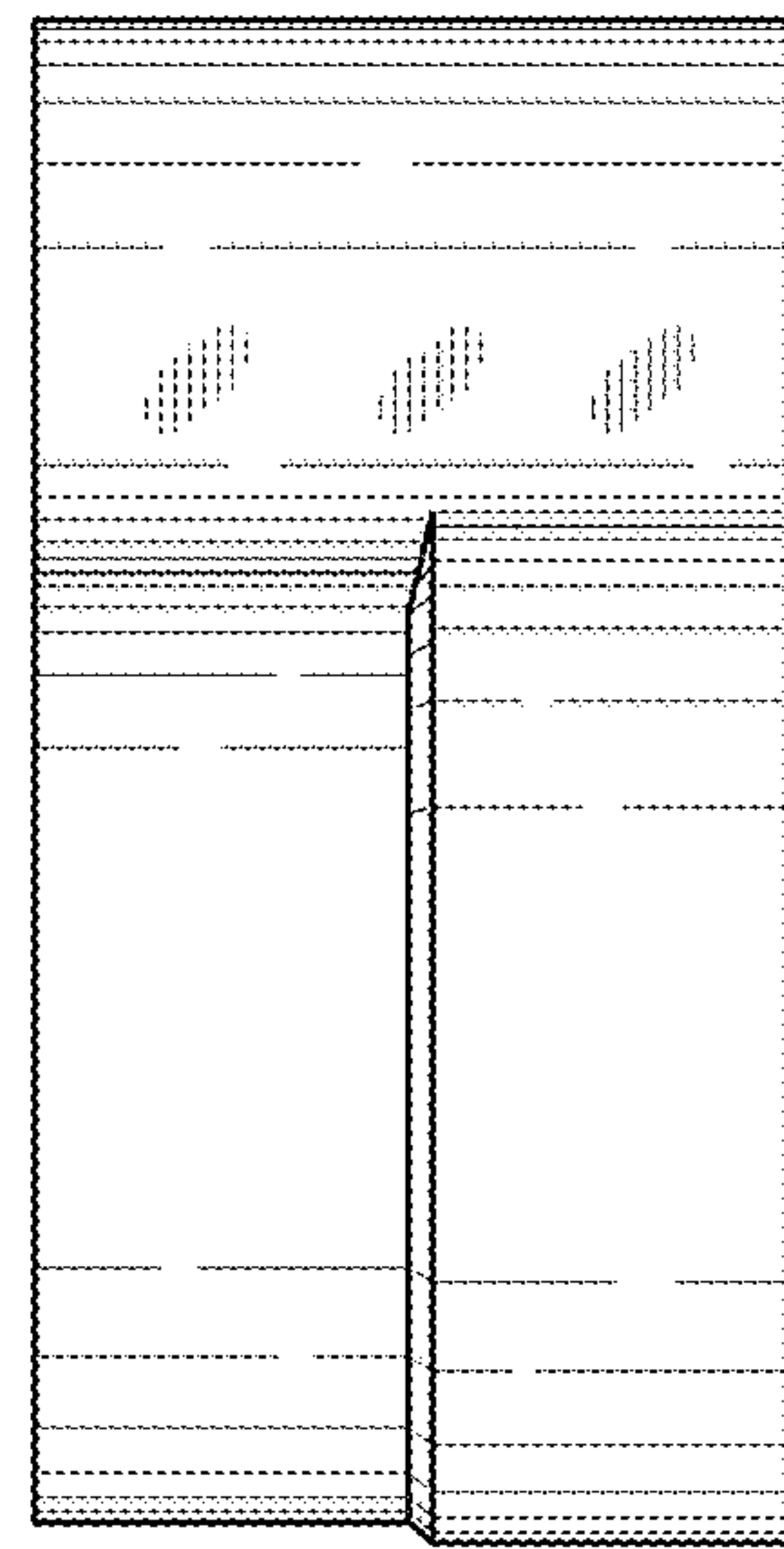


FIG. 5

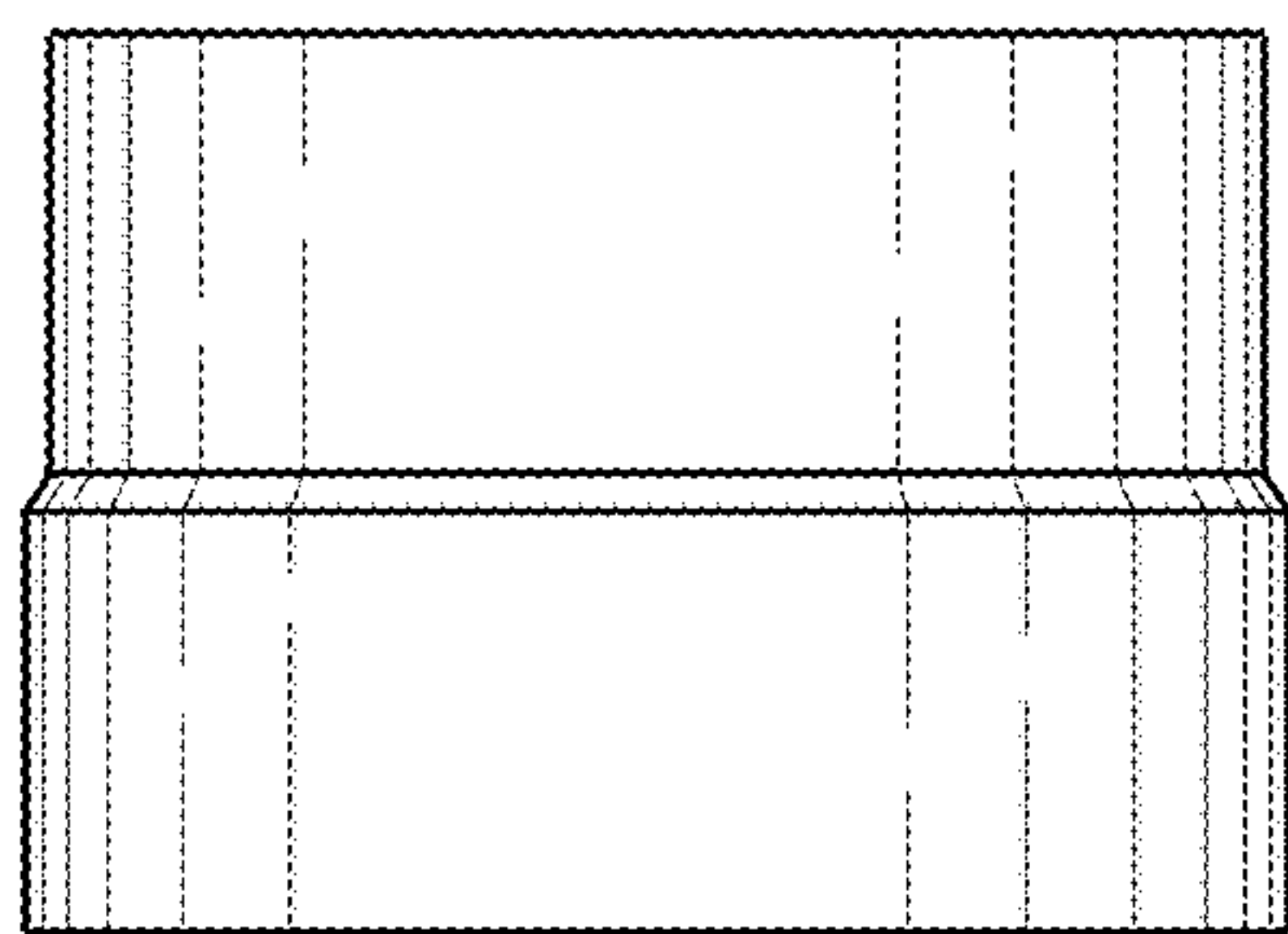


FIG. 3



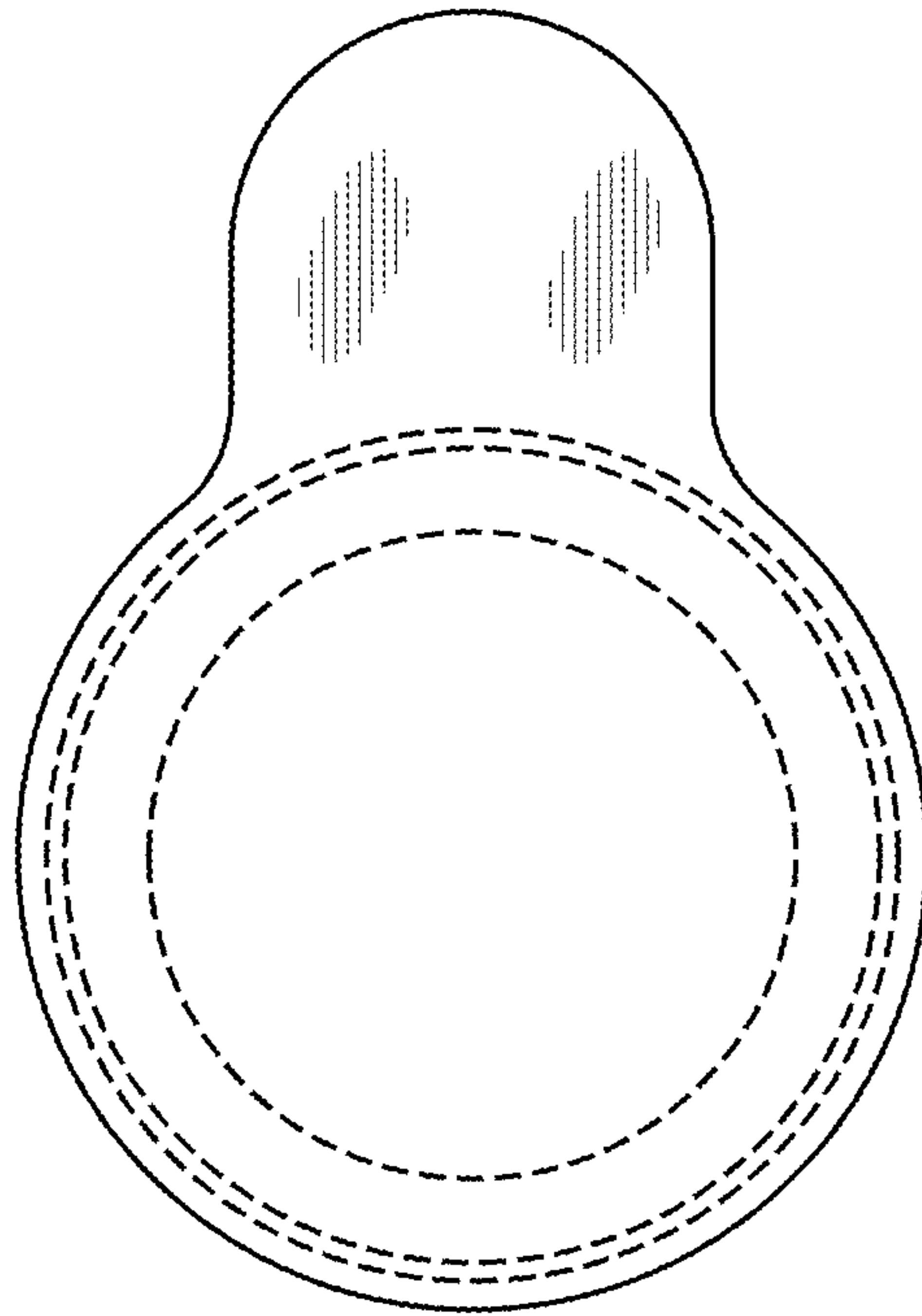


FIG. 7