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(12) **United States Design Patent** (10) **Patent No.:** **US D768,743 S**
Yamamoto et al. (45) **Date of Patent:** **** Oct. 11, 2016**

(54) **CAGE OF THRUST ROLLER BEARING**
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5,626,426	A *	5/1997	Honda et al.	384/568
6,883,968	B2 *	4/2005	Fugel et al.	384/577
7,114,854	B2 *	10/2006	Hayashi et al.	384/623
7,488,114	B2 *	2/2009	Ince	384/572
7,722,257	B2 *	5/2010	Tabata et al.	384/571
7,896,558	B2 *	3/2011	Obayashi et al.	384/623
8,480,307	B2 *	7/2013	Hofmann et al.	384/568
8,596,873	B2 *	12/2013	Hofmann et al.	384/523
8,876,400	B2 *	11/2014	Kanou et al.	384/622

(**) Term: **14 Years**
(21) Appl. No.: **29/520,103**

* cited by examiner
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(57) **CLAIM**
The ornamental design for a cage of thrust roller bearing, as shown and described.

(30) **Foreign Application Priority Data**
Sep. 16, 2014 (JP) 2014-020433
(51) **LOC (10) Cl.** **15-09**
(52) **U.S. Cl.**
USPC **D15/143**
(58) **Field of Classification Search**
USPC D15/143, 199
See application file for complete search history.

DESCRIPTION

(56) **References Cited**
U.S. PATENT DOCUMENTS
3,256,585 A * 6/1966 Ripple 29/898.067
3,785,710 A * 1/1974 Alling 384/623
3,913,994 A * 10/1975 Alling et al. 384/623
3,994,546 A * 11/1976 Alling 384/623
4,042,285 A * 8/1977 Dorsch 384/621
4,122,589 A * 10/1978 Grimm et al. 29/898.067
5,255,985 A * 10/1993 Alling 384/575

FIG. 1 is a front view of a cage of thrust roller bearing showing our new design;
FIG. 2 is a rear view thereof;
FIG. 3 is a top plan view thereof;
FIG. 4 is a bottom plan view thereof;
FIG. 5 is a right side view thereof;
FIG. 6 is a left side view thereof;
FIG. 7 is a perspective view thereof;
FIG. 8 is an enlarged detail view of a portion thereof as indicated in FIG. 7, showing pocket holes and protrusions thereof; and,
FIG. 9 is an enlarged detail view of a portion thereof as indicated in FIG. 2, showing pocket holes and protrusions thereof.
The dashed broken lines merely show the perimeters of the enlarged detail views and form no part of the claimed design.

1 Claim, 5 Drawing Sheets

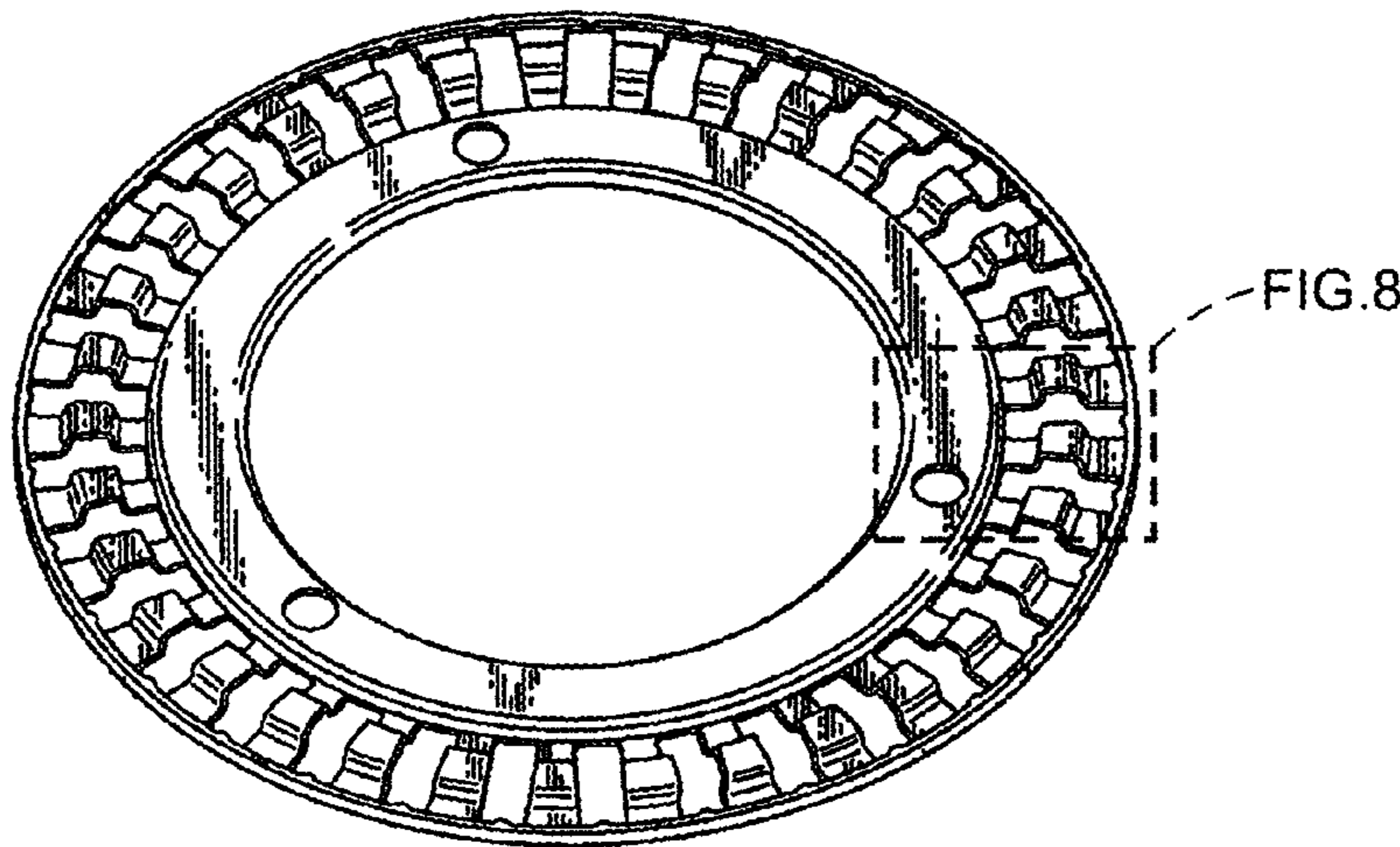


FIG. 1

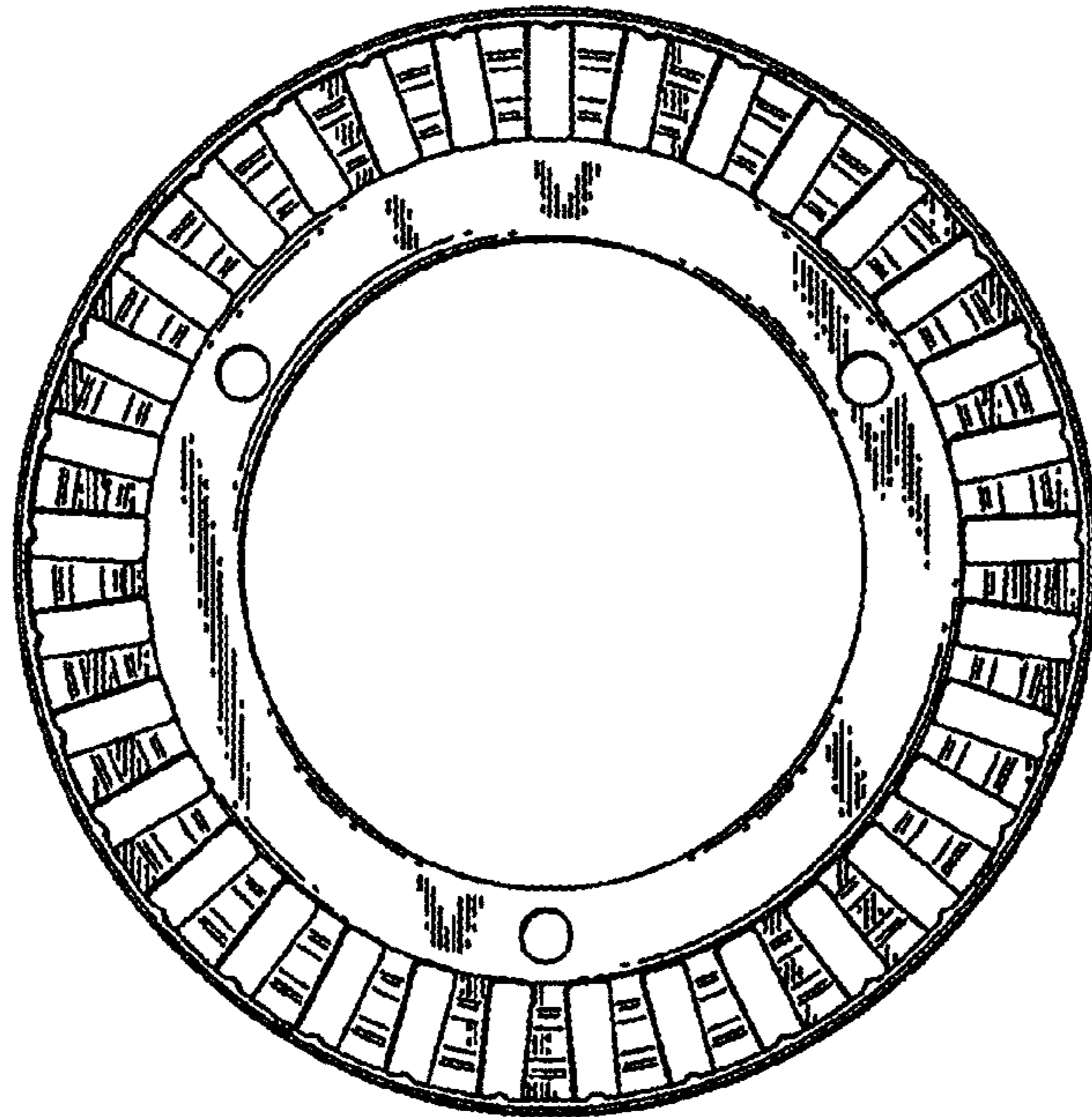


FIG. 2

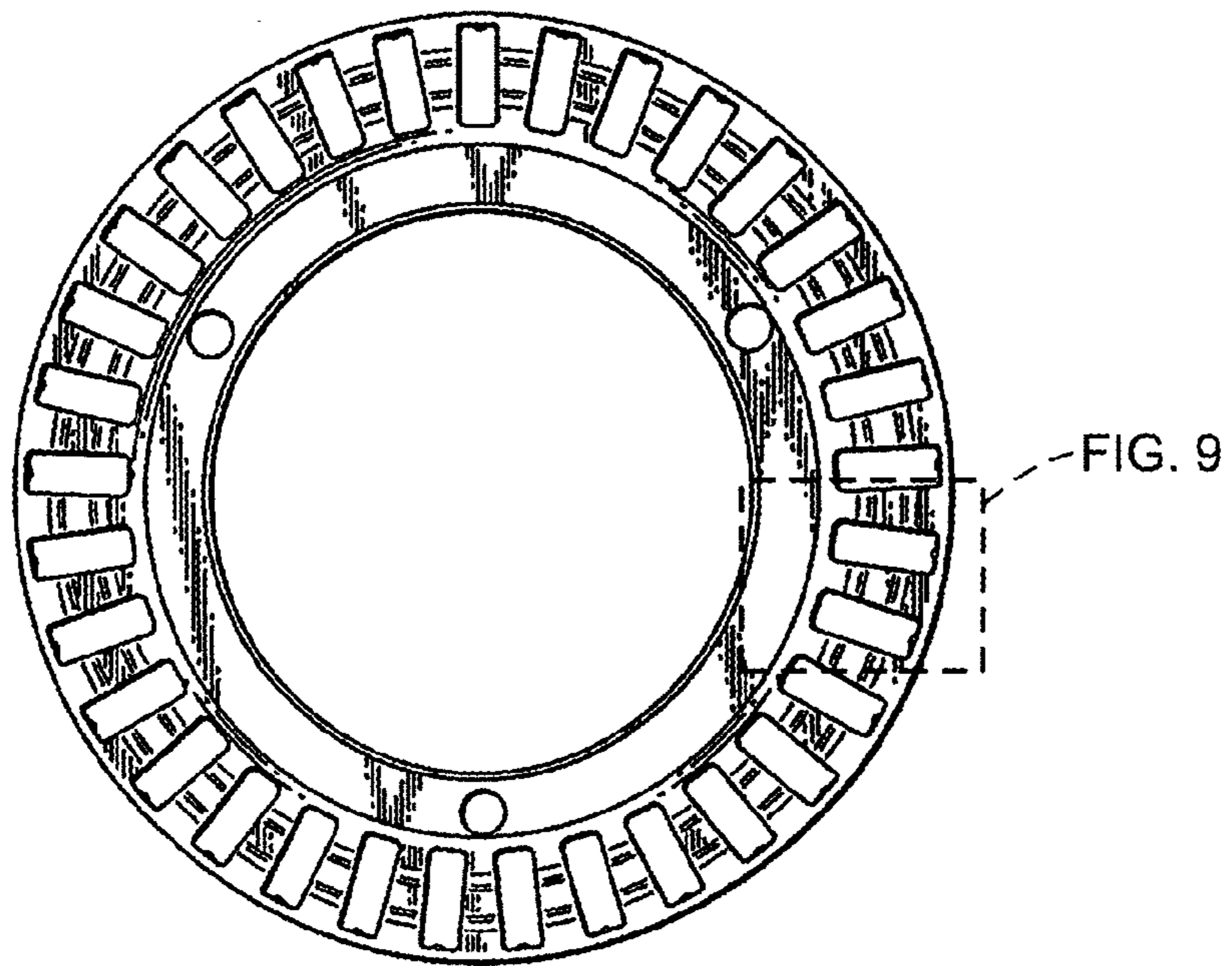


FIG.3

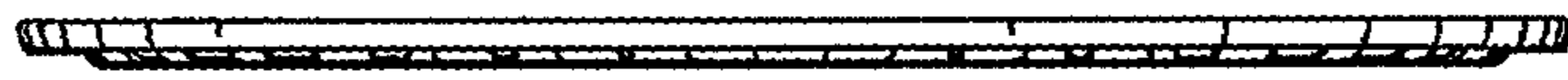


FIG.4

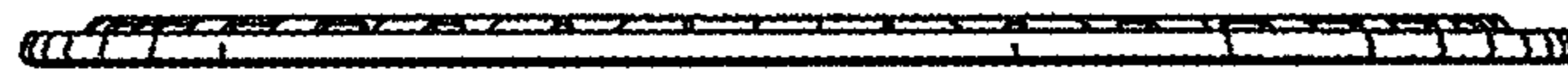


FIG.5



FIG. 6



FIG. 7

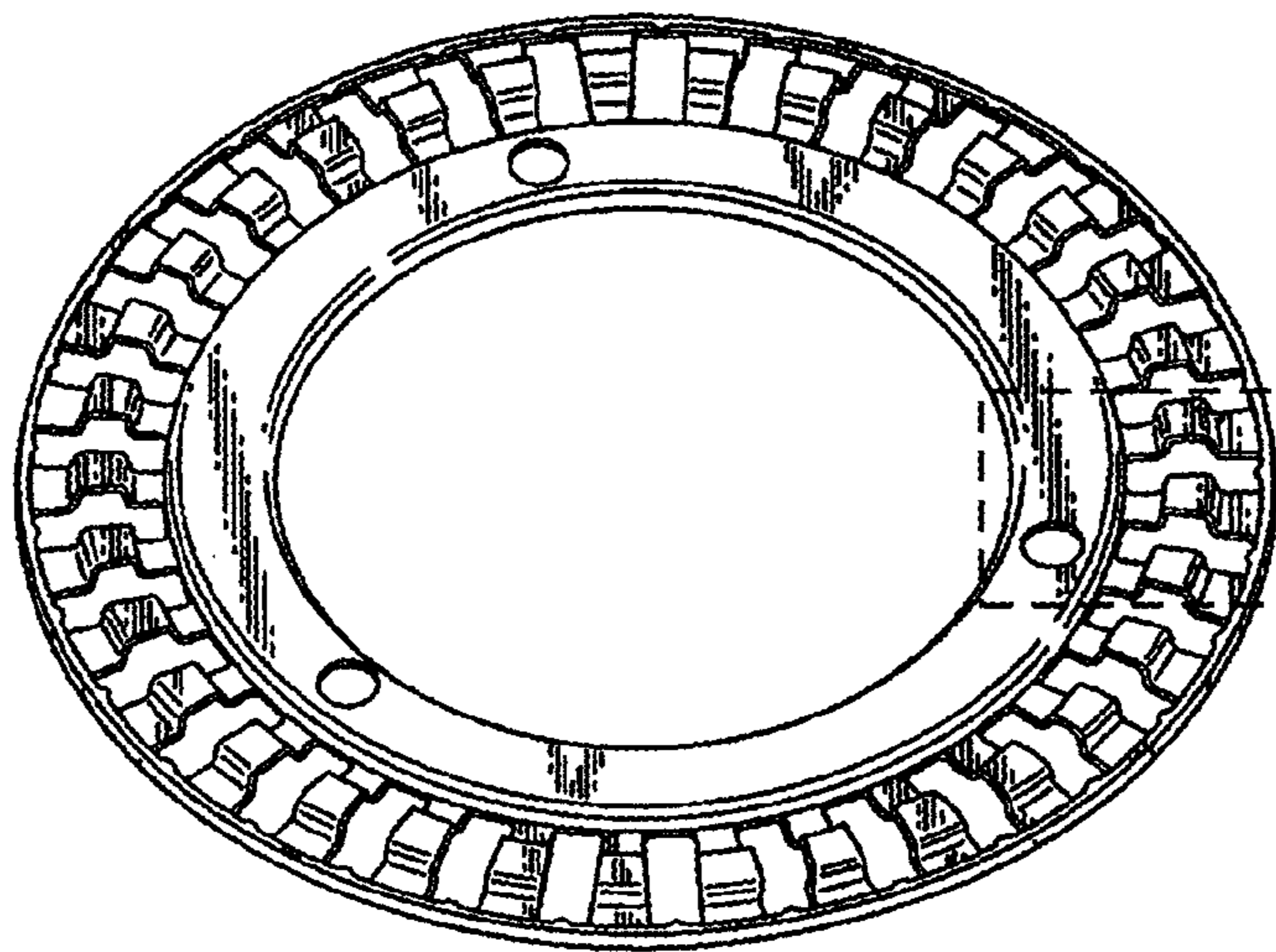


FIG. 8



FIG. 8

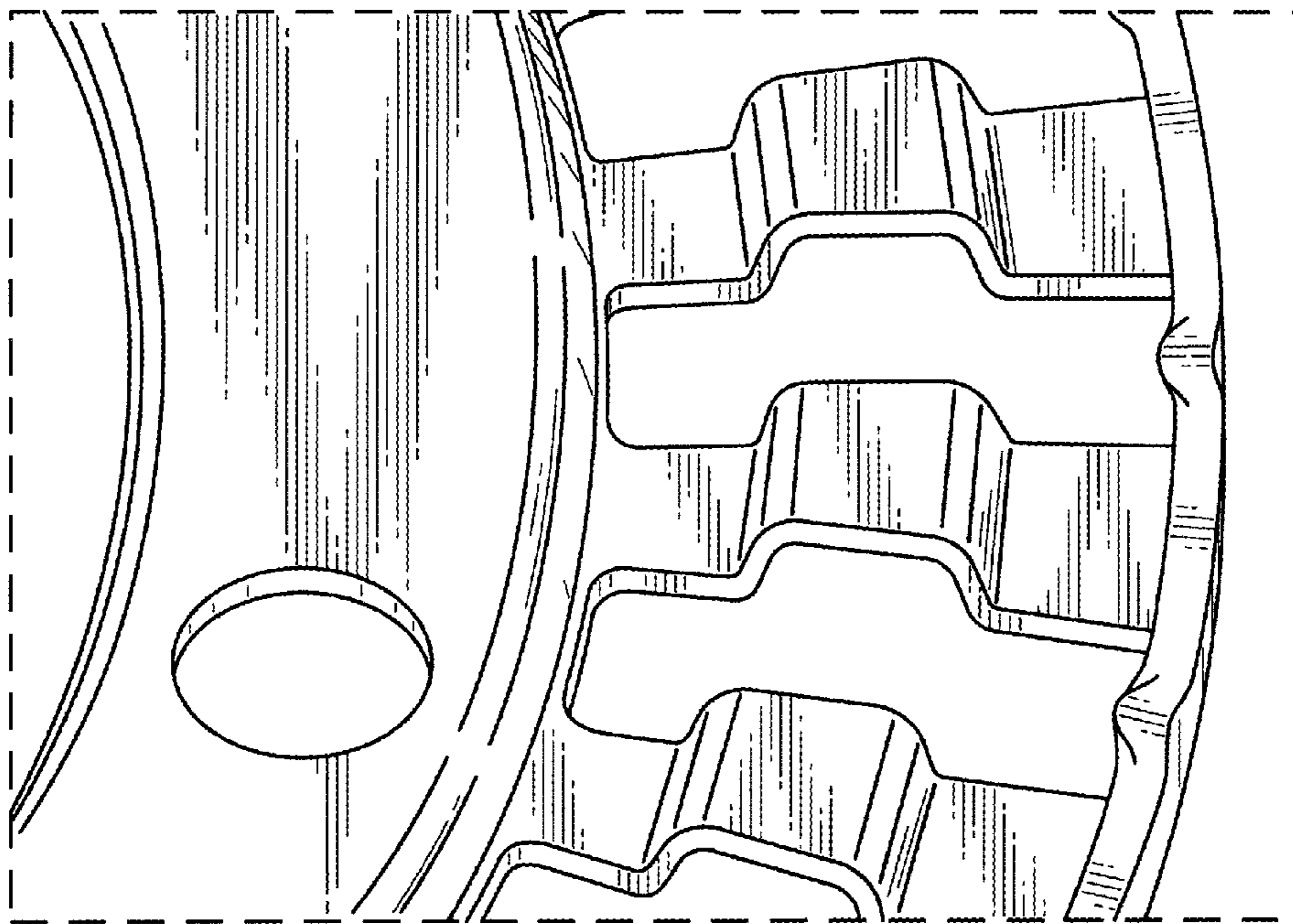


FIG. 9

