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(12) **United States Design Patent**
Woods

(10) **Patent No.:** **US D733,009 S**
(45) **Date of Patent:** **** Jun. 30, 2015**

(54) **CRANK ARM AND CHAINRING ASSEMBLY FOR A BICYCLE**

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(72) Inventor: **Julian E. Woods**, Castro Valley, CA (US)

(**) Term: **14 Years**

(21) Appl. No.: **29/472,025**

(22) Filed: **Nov. 7, 2013**

Related U.S. Application Data

(63) Continuation-in-part of application No. 13/099,301, filed on May 2, 2011, now Pat. No. 8,602,434.

(51) **LOC (10) Cl.** **12-11**

(52) **U.S. Cl.**
USPC **D12/123**

(58) **Field of Classification Search**
USPC D12/180, 123; 188/218 XL, 73.44, 188/73.31, 18 A, 218 R, 264 A, 17; D8/42, D8/356; D15/5; D21/561; D23/354; 74/577 R, 594.2; 477/96; 474/152, 78, 474/101, 160, 94, 112; 475/213
CPC B62M 9/105; B62M 9/10; B62M 25/08; B62M 9/12; B62M 9/122
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,711,635 A * 12/1987 Arnce 474/152
4,768,998 A * 9/1988 Hirose et al. 474/152
5,213,550 A * 5/1993 Wu 474/160
D396,436 S * 7/1998 Liska D12/123
D453,214 S * 1/2002 Komatsubara et al. D23/354
D473,902 S * 4/2003 Panno D21/561

D527,738 S * 9/2006 Pearson, Sr. D15/5
D534,416 S * 1/2007 Kelleghan D8/356
D627,615 S * 11/2010 Kushner et al. D8/42
2002/0128098 A1 * 9/2002 Mott et al. 474/94
2006/0211529 A1 * 9/2006 Vergara 474/152
2009/0260476 A1 * 10/2009 Jordan et al. 74/577 R
2010/0317479 A1 * 12/2010 Delale 475/213

* cited by examiner

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(57) **CLAIM**

I claim the ornamental design for a crank arm and chainring assembly for a bicycle, as shown and described.

DESCRIPTION

FIG. 1 is an exploded left and top perspective view of a crank arm and chainring assembly for a bicycle showing my new design.

FIG. 2 is an exploded left and top perspective view of a crank arm and chainring assembly for a bicycle.

FIG. 3 is a front side view of FIG. 1.

FIG. 4 is a back side view of FIG. 1.

FIG. 5 is a right side view of FIG. 1.

FIG. 6 is a left side view of FIG. 1.

FIG. 7 is a left and top perspective view of a crank arm and chainring assembly for a bicycle.

FIG. 8 is a left and bottom perspective view of a crank arm chainring assembly for a bicycle.

FIG. 9 is a front side view of FIG. 7.

FIG. 10 is a back side view of FIG. 7.

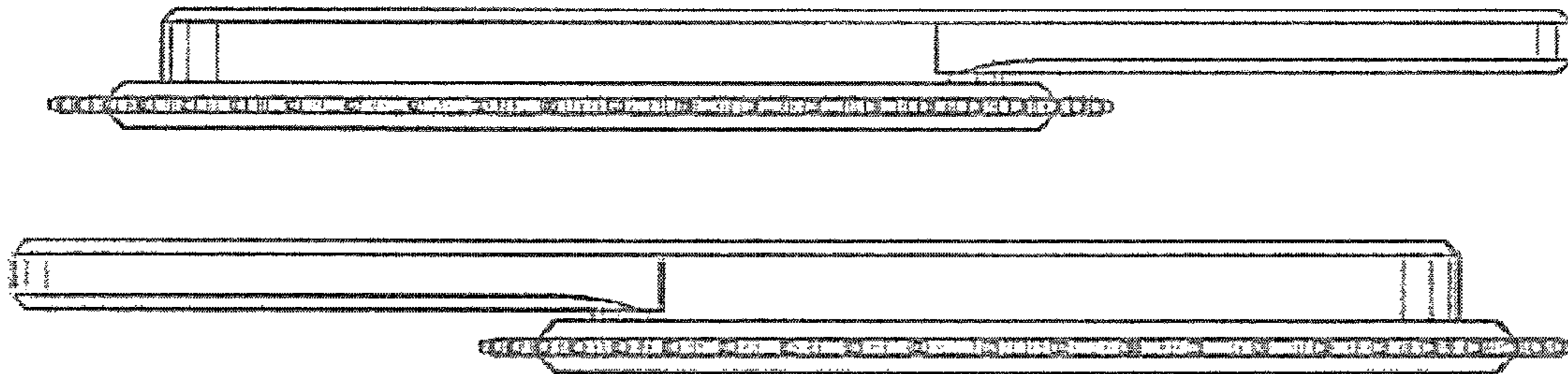
FIG. 11 is a right side view of FIG. 7.

FIG. 12 is a left side view of FIG. 7.

FIG. 13 is a top view of FIG. 7; and,

FIG. 14 is a bottom view of FIG. 7.

1 Claim, 8 Drawing Sheets



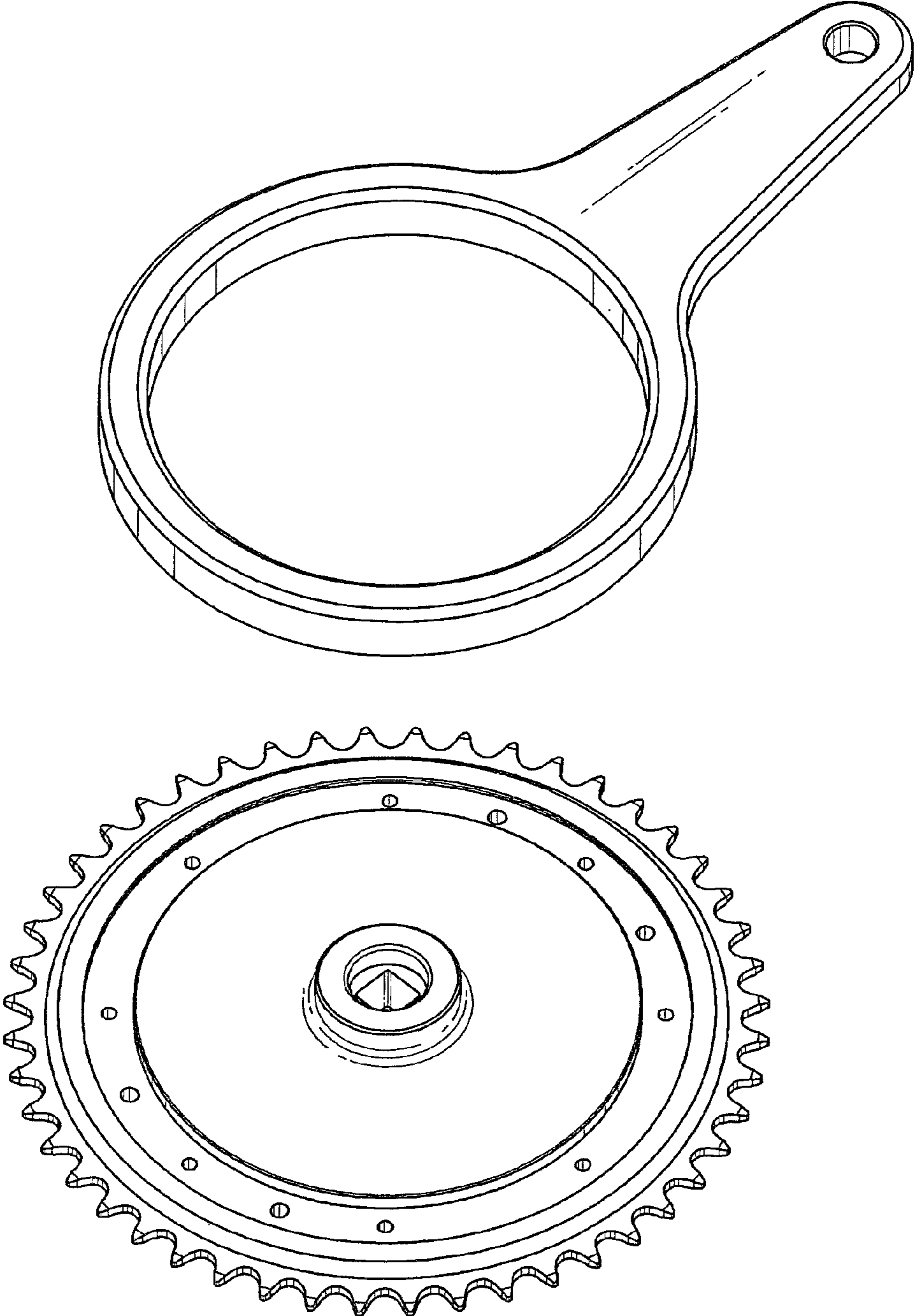


FIG. 1

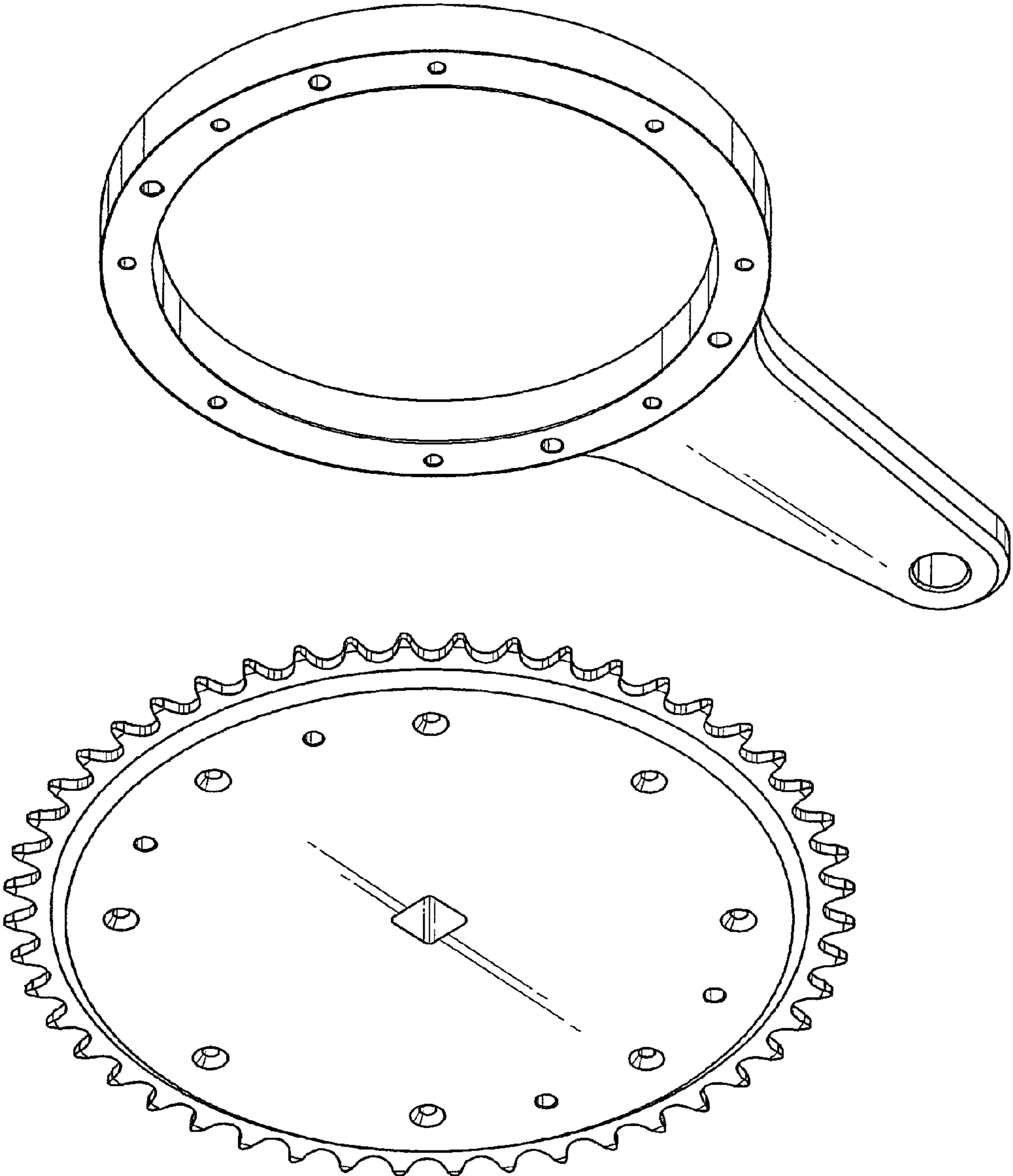


FIG. 2

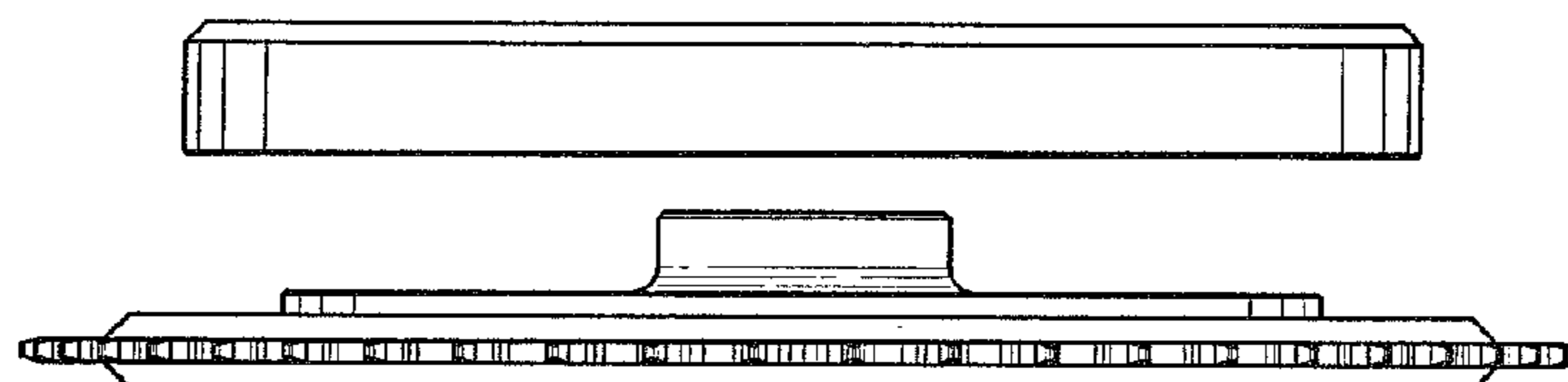


FIG. 3

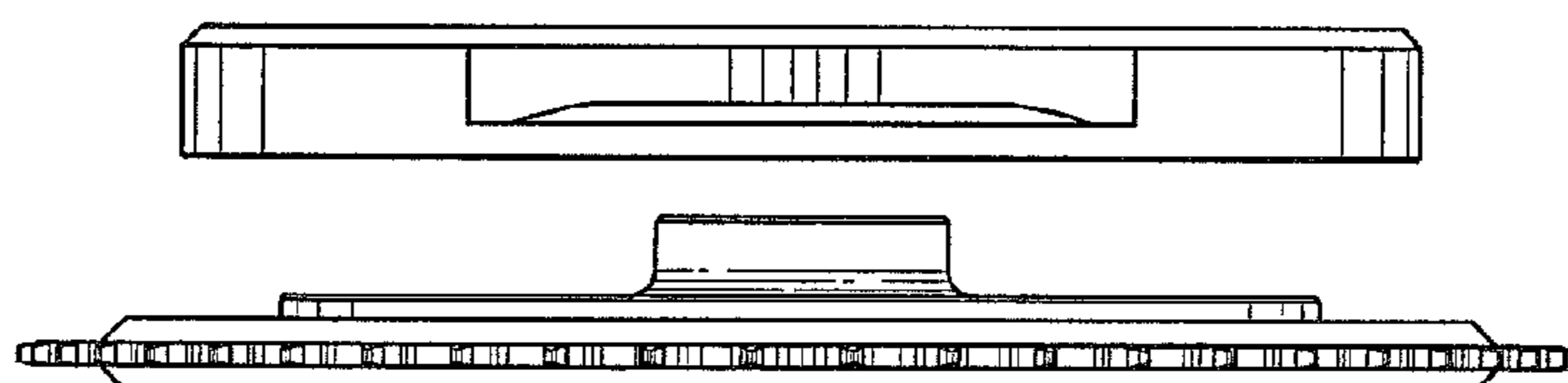


FIG. 4

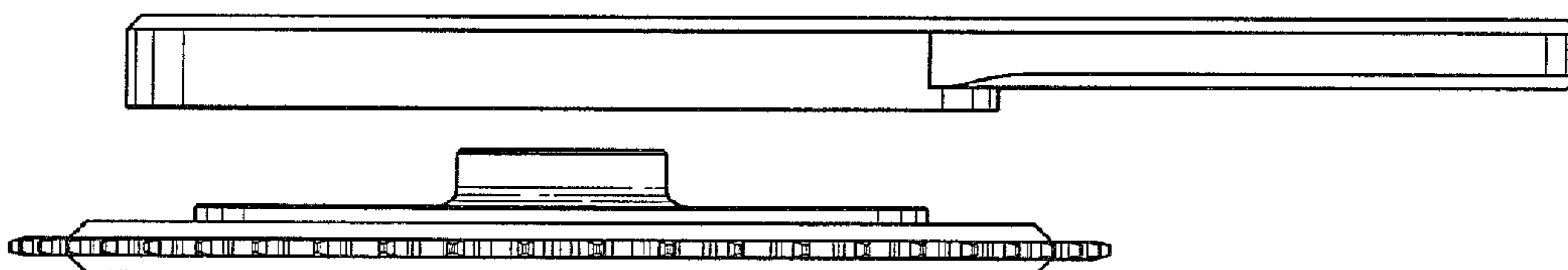


FIG. 5

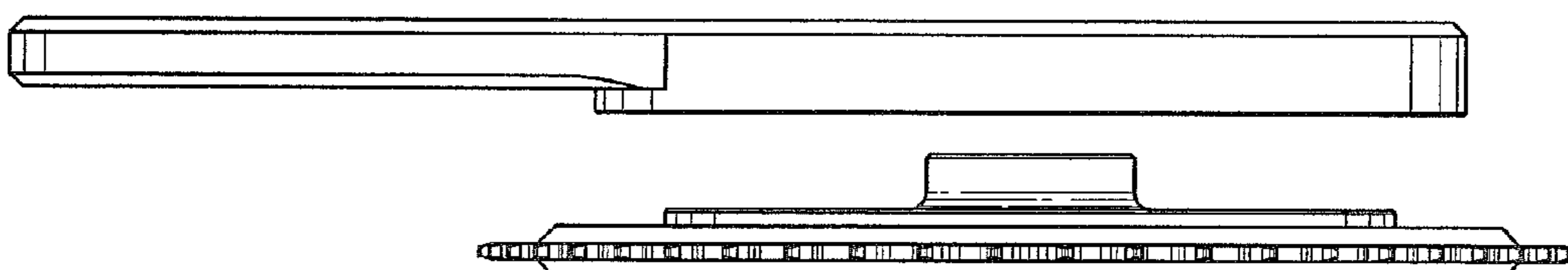


FIG. 6

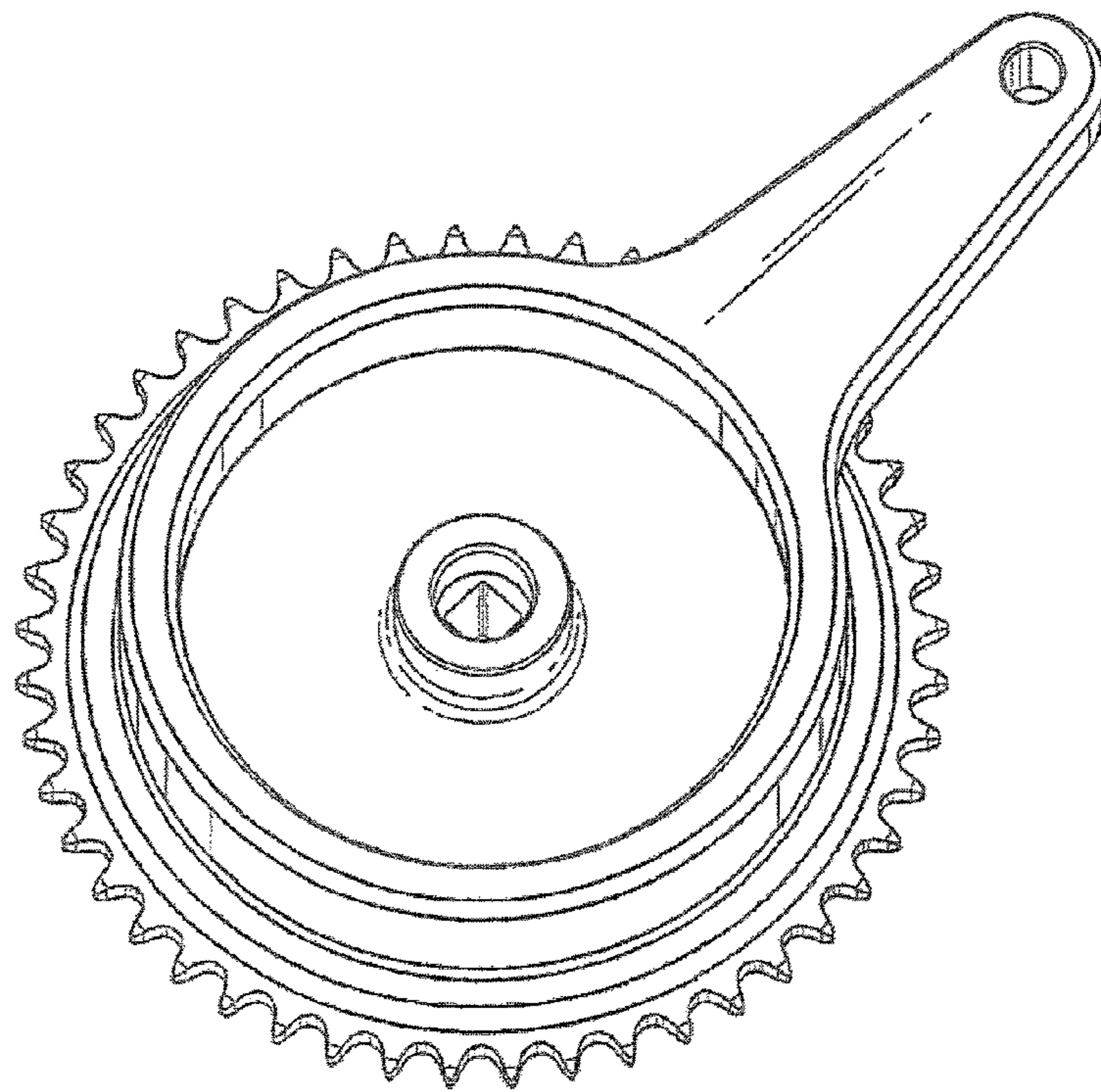


FIG. 7

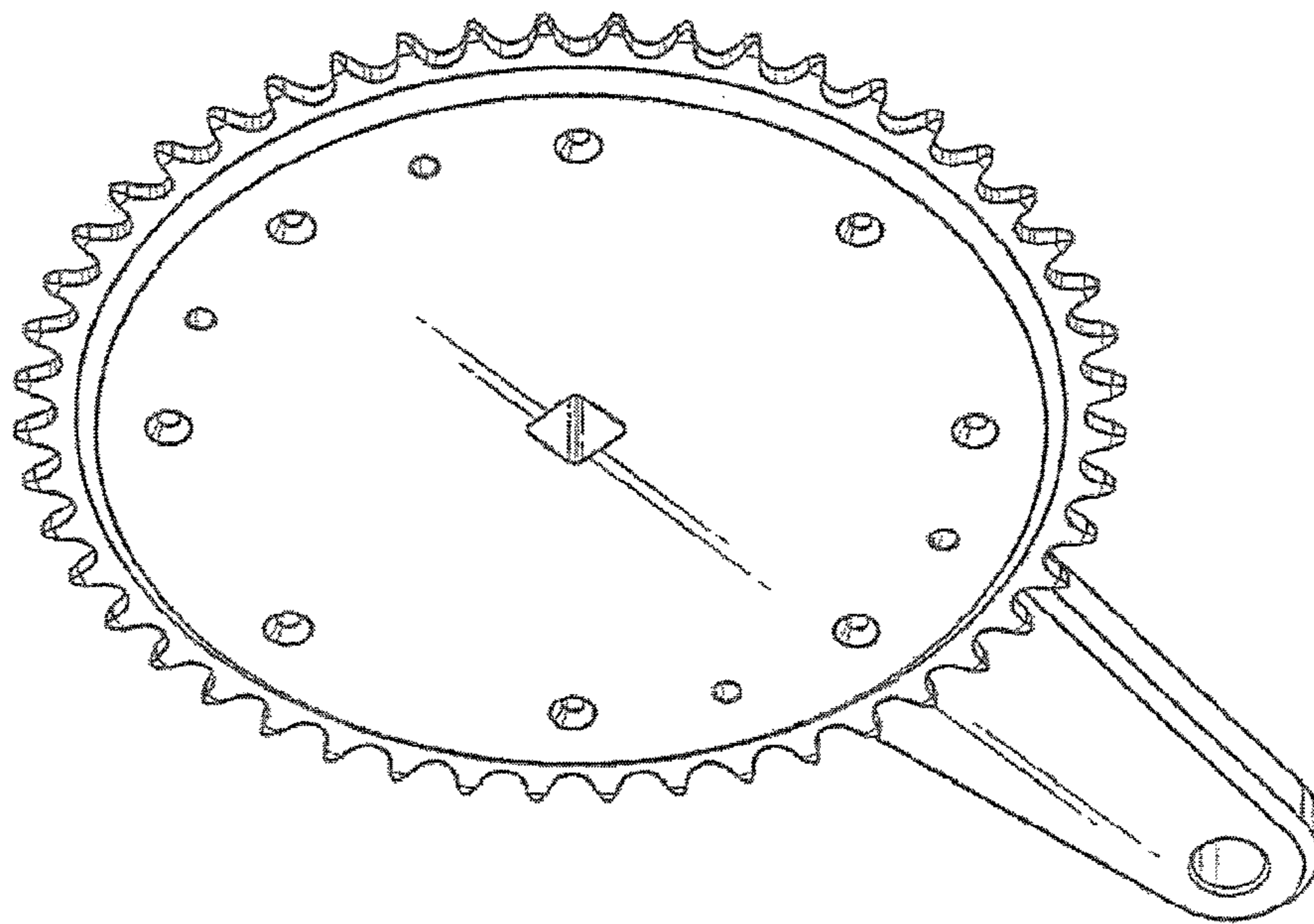


FIG. 8



FIG. 9

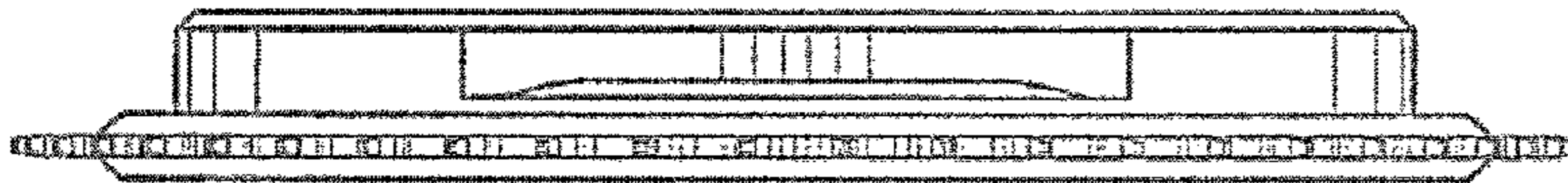


FIG. 10

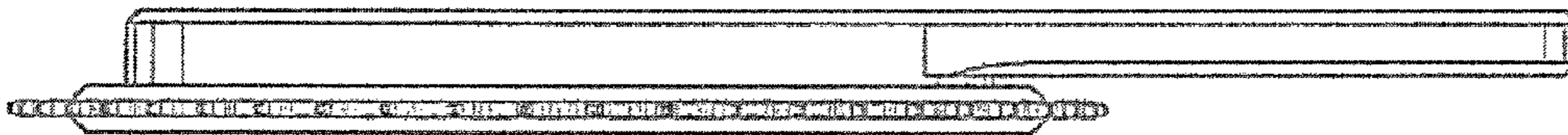


FIG. 11



FIG. 12

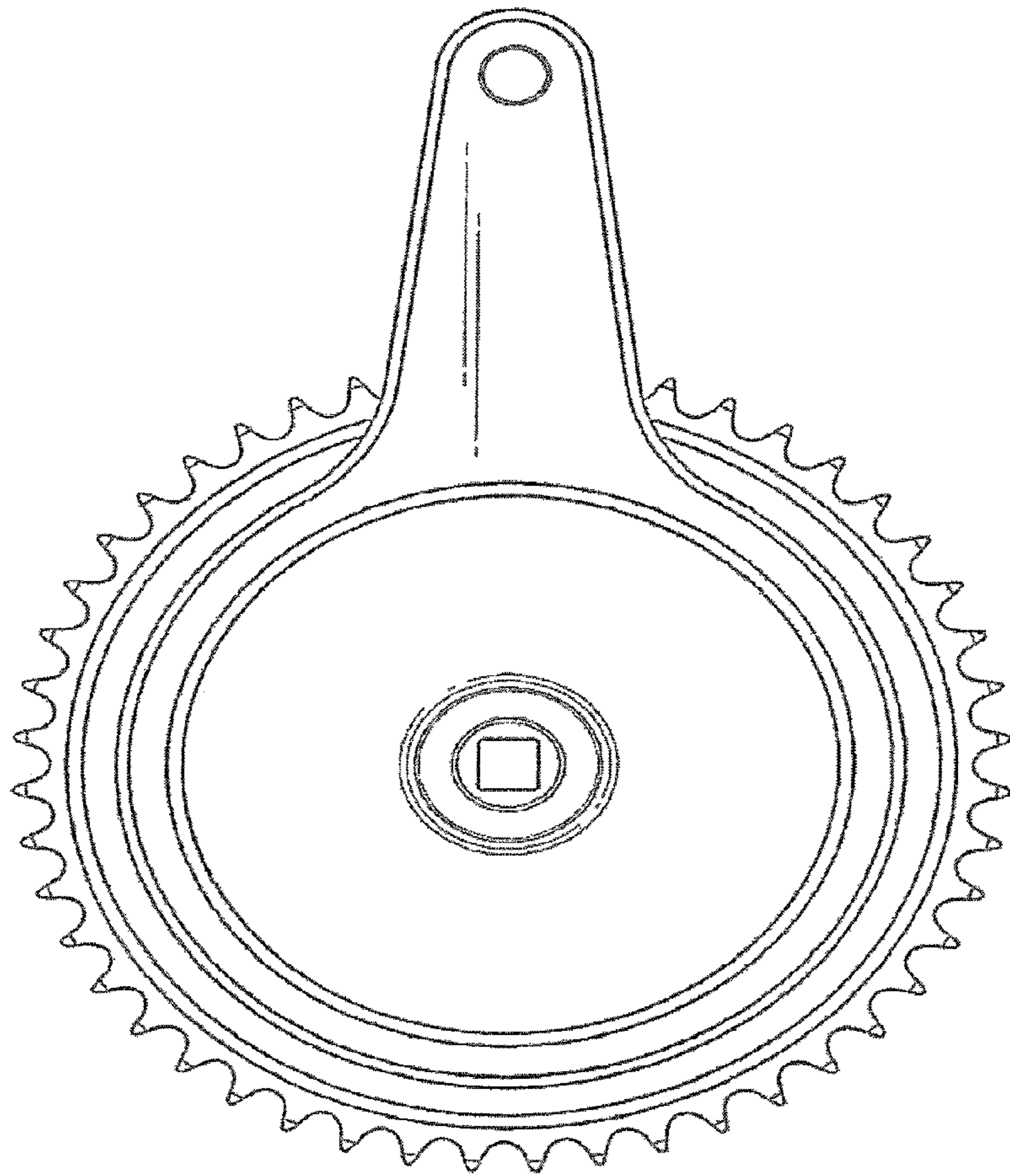


FIG. 13

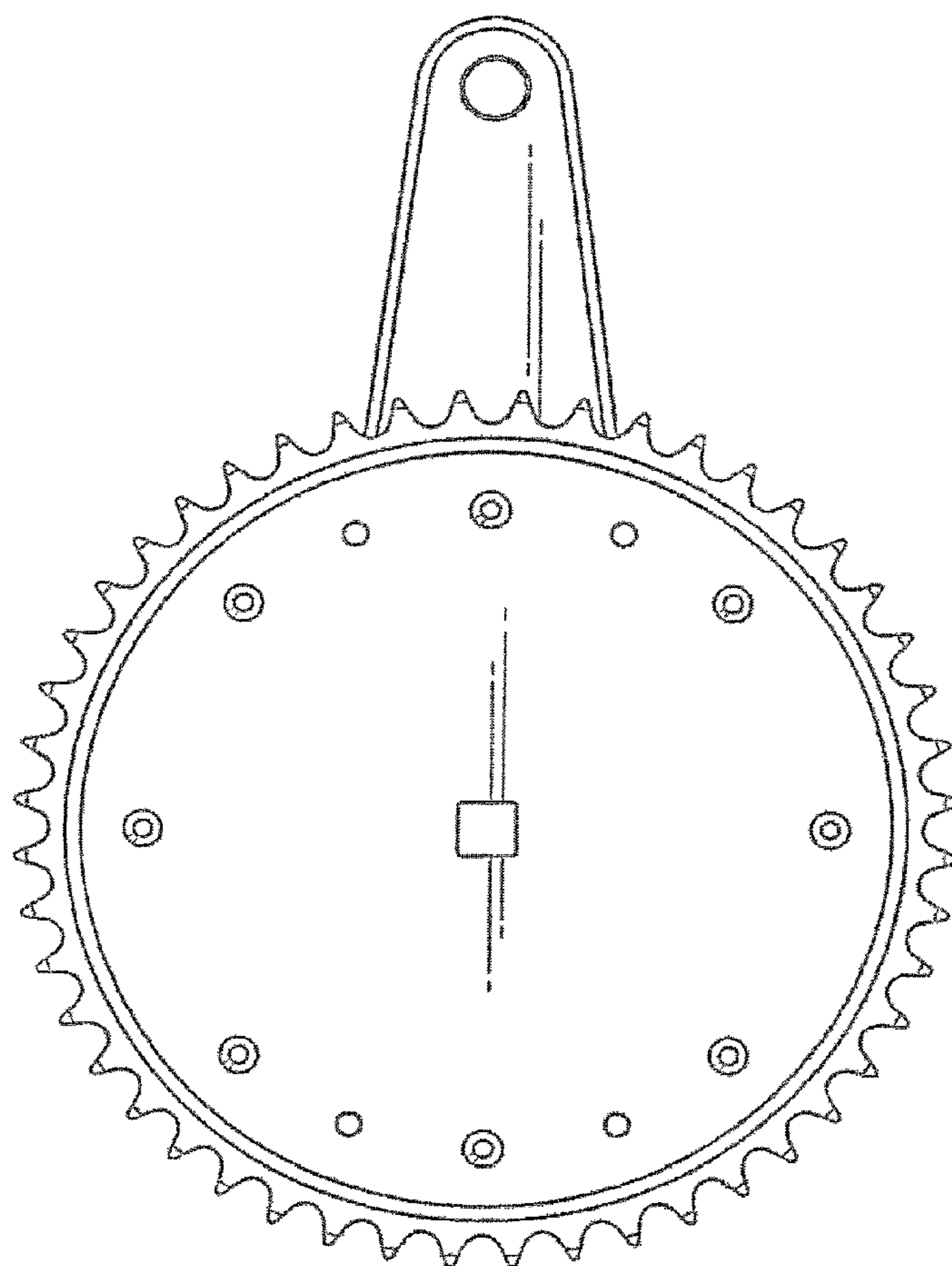


FIG. 14