



US00D550593S

(12) **United States Design Patent** (10) **Patent No.:** **US D550,593 S**
Hanamura (45) **Date of Patent:** **** Sep. 11, 2007**

(54) **BICYCLE CRANK**

(57) **CLAIM**

(75) Inventor: **Junichi Hanamura**, Osaka (JP)

The ornamental design for a bicycle crank, as shown and described.

(73) Assignee: **Shimano Inc.**, Osaka (JP)

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

DESCRIPTION

(21) Appl. No.: **29/236,227**

FIG. 1 is a perspective view of the bicycle crank in accordance with my new design;

(22) Filed: **Aug. 15, 2005**

FIG. 2 is an enlarged, partial perspective view of the bicycle crank in accordance with my new design of FIG. 1;

(30) **Foreign Application Priority Data**

FIG. 3 is an outside elevational view of the bicycle crank in accordance with my new design of FIGS. 1 and 2;

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FIG. 4 is an enlarged, partial outside elevational view of the bicycle crank in accordance with my new design of FIGS. 1-3;

(51) **LOC (8) Cl.** **12-11**

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

(58) **Field of Classification Search** D12/111,
D12/123; 474/152, 160, 144, 151; 74/594.1,
74/594.2, 594.3, 594.4; 280/259, 260
See application file for complete search history.

FIG. 5 is a first side elevational view of the bicycle crank in accordance with my new design of FIGS. 1-4;

FIG. 6 is a second side elevational view of the bicycle crank in accordance with my new design of FIGS. 1-5;

(56) **References Cited**

U.S. PATENT DOCUMENTS

FIG. 7 is a top plan view of the bicycle crank in accordance with my new design of FIGS. 1-6;

D365,049 S * 12/1995 Kuylman D12/123

D484,831 S 1/2004 Chiang

6,845,687 B2 * 1/2005 Yamanaka 74/594.1

D522,413 S * 6/2006 Okada D12/123

2003/0073531 A1 4/2003 Tseng

FIG. 8 is an enlarged, partial top plan view of the bicycle crank in accordance with my new design of FIGS. 1-7; and,

FIG. 9 is a bottom plan view of the bicycle crank in accordance with my new design of FIGS. 1-8.

OTHER PUBLICATIONS

BikeSolutions, The Product Managers Specification Guide, 2003/4, 3 pages, vol. No.: 1 OEM Edition.

The broken line showing of environment (the remaining structure of the bicycle crank) in the Figures is for illustrative purposes only and forms no part of the claimed design. The inside of the bicycle crank that faces the bicycle does not form part of the claimed design.

* cited by examiner

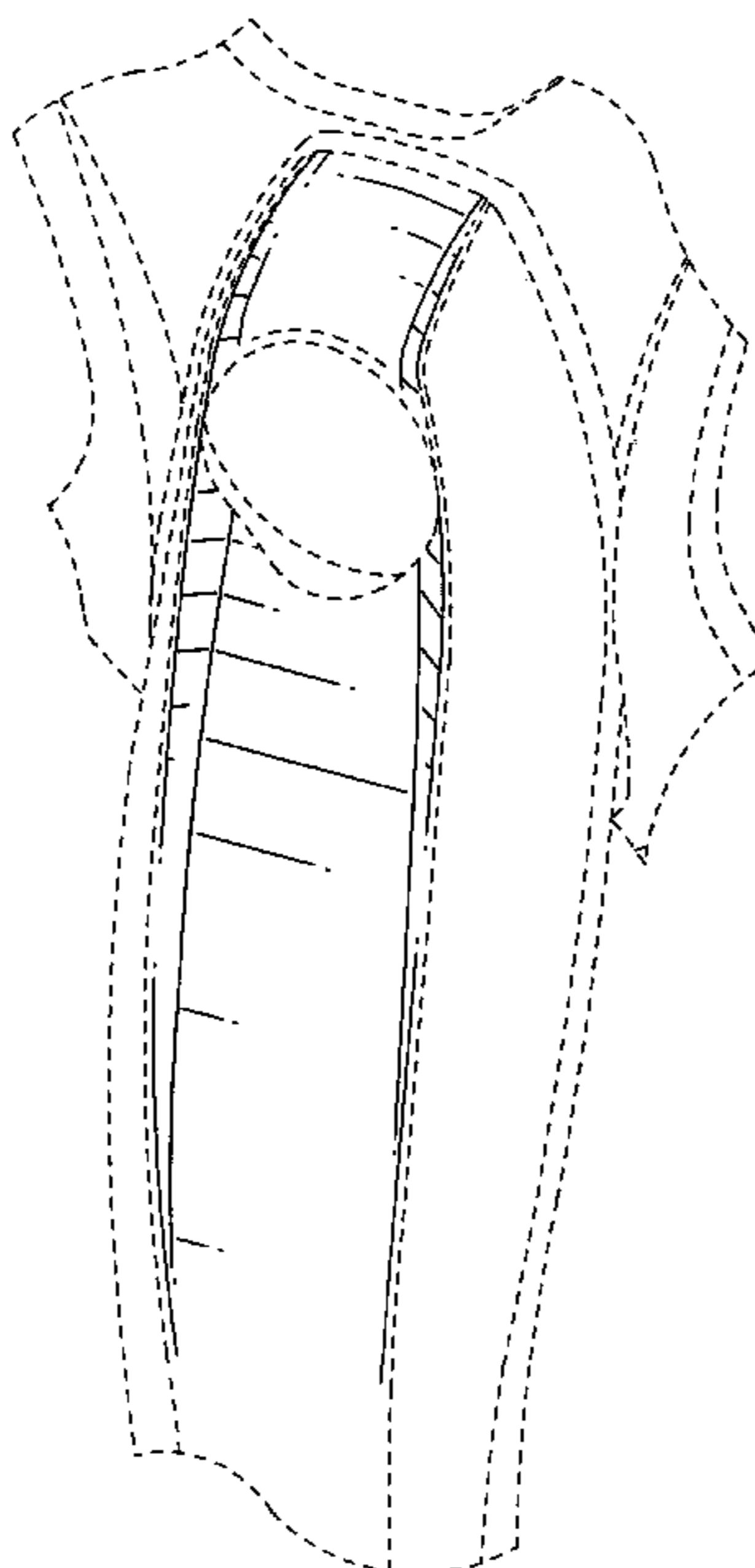
The broken lines immediately adjacent the shaded areas represent boundaries and form no part of the claimed design.

Primary Examiner—Alan P. Douglas

Assistant Examiner—Linda Brooks

(74) *Attorney, Agent, or Firm*—Global IP Counselors, LLP

1 Claim, 7 Drawing Sheets



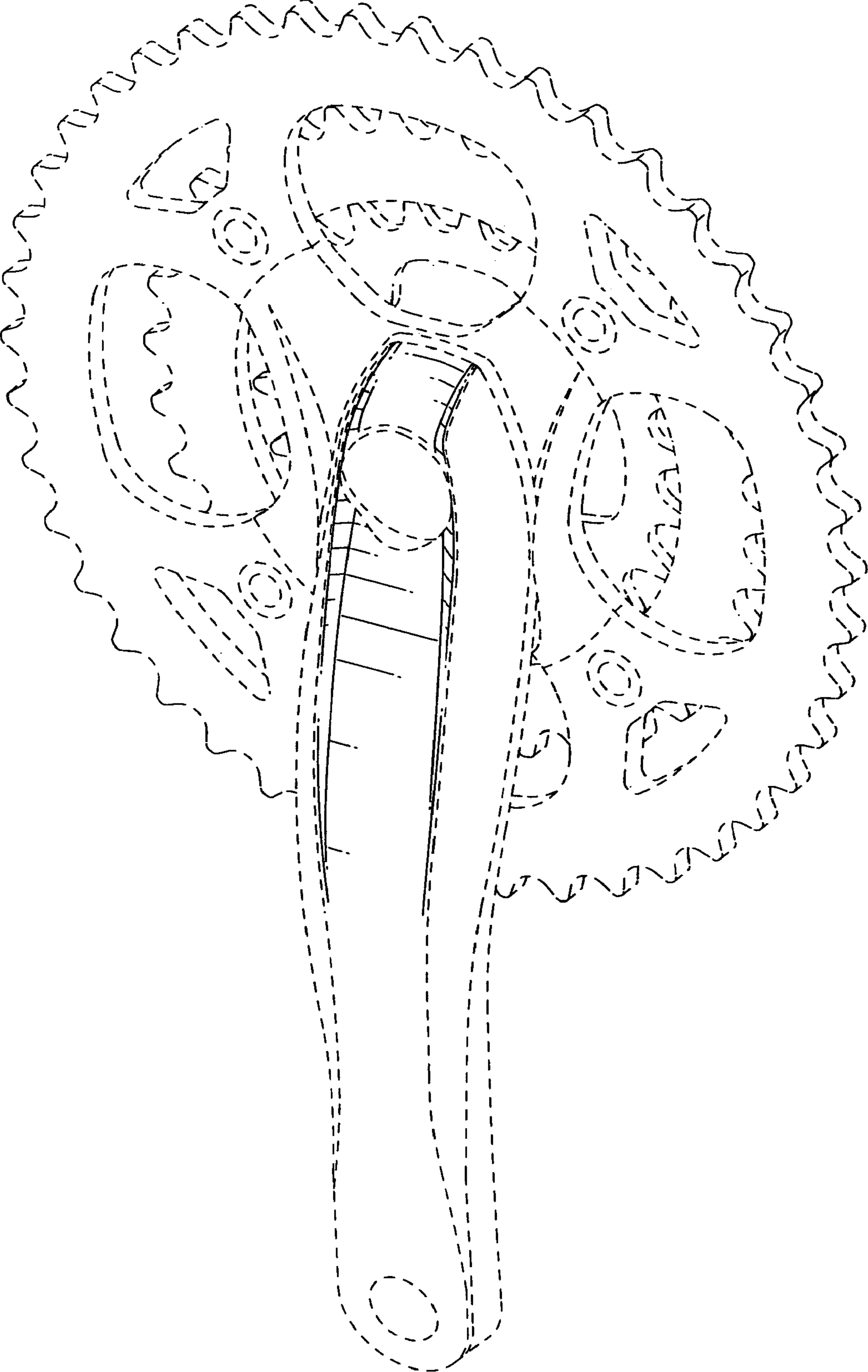


FIG. 1

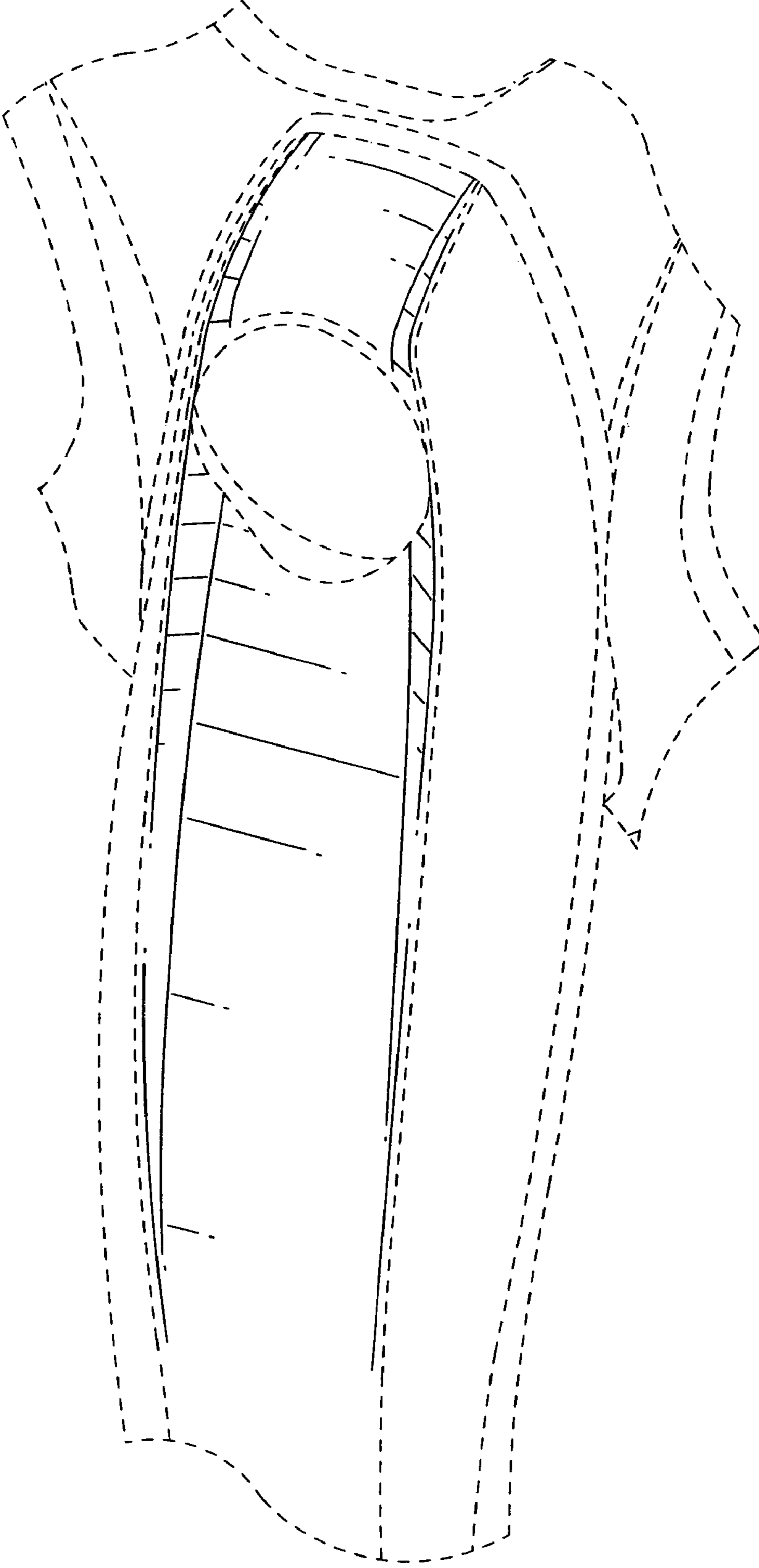


FIG. 2

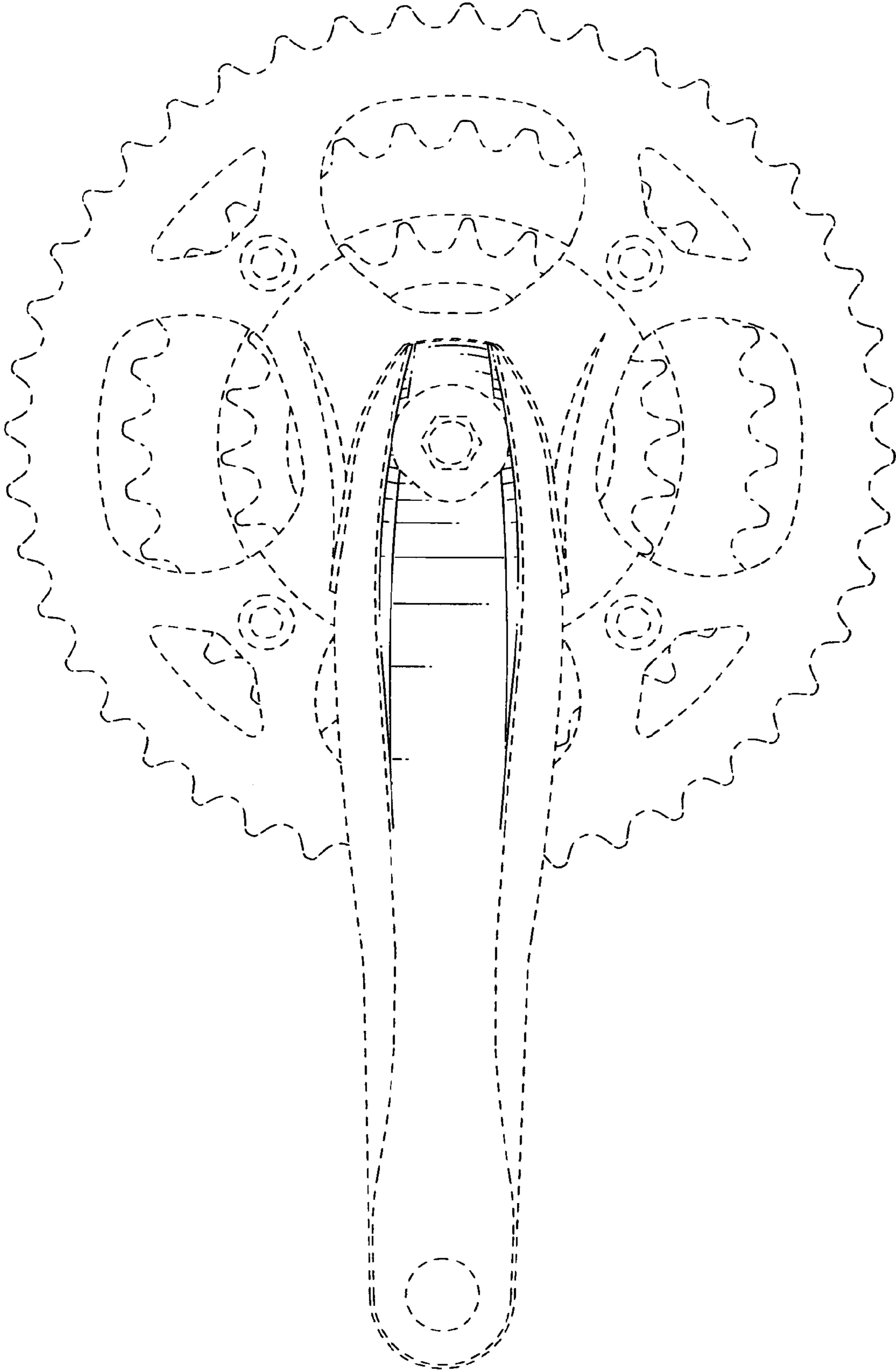


FIG. 3

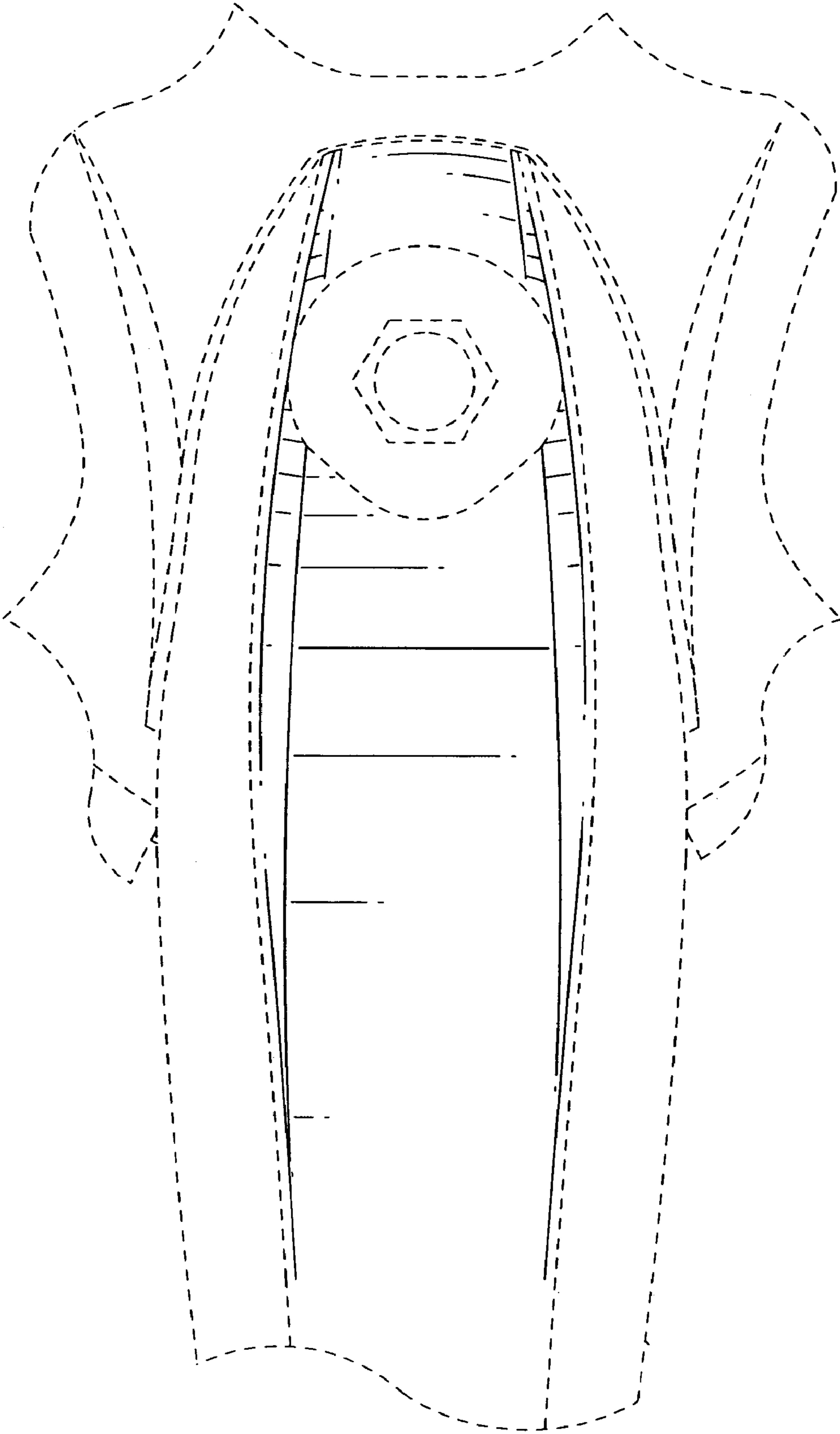


FIG. 4

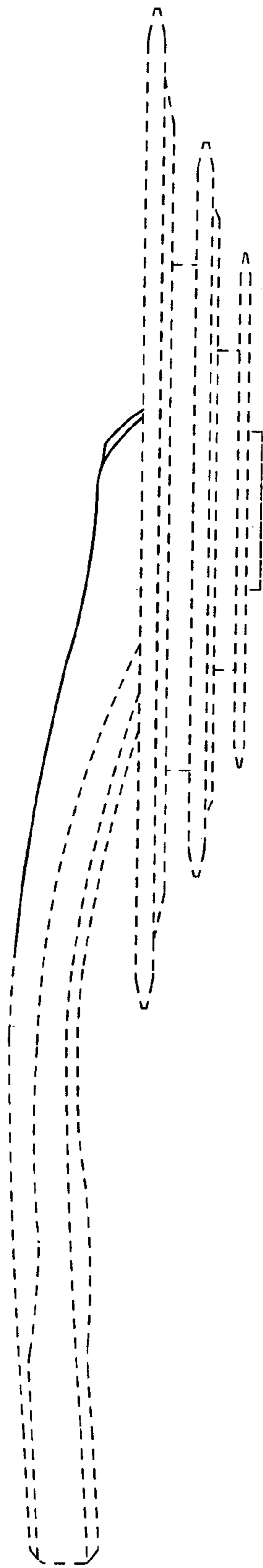


FIG. 5

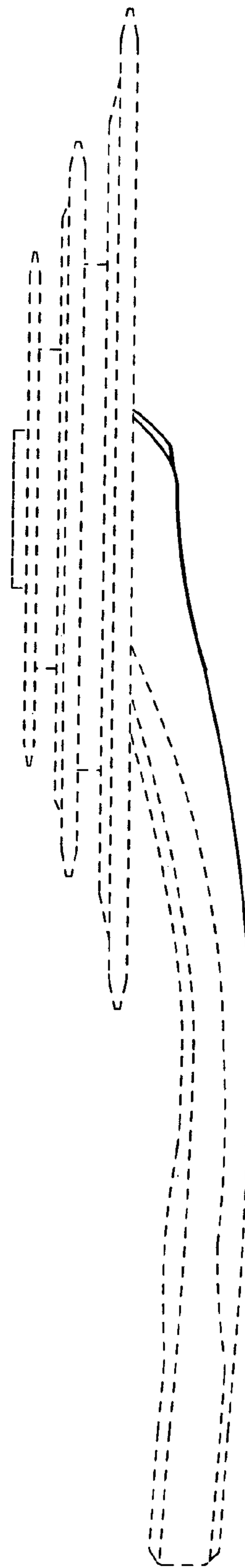


FIG. 6

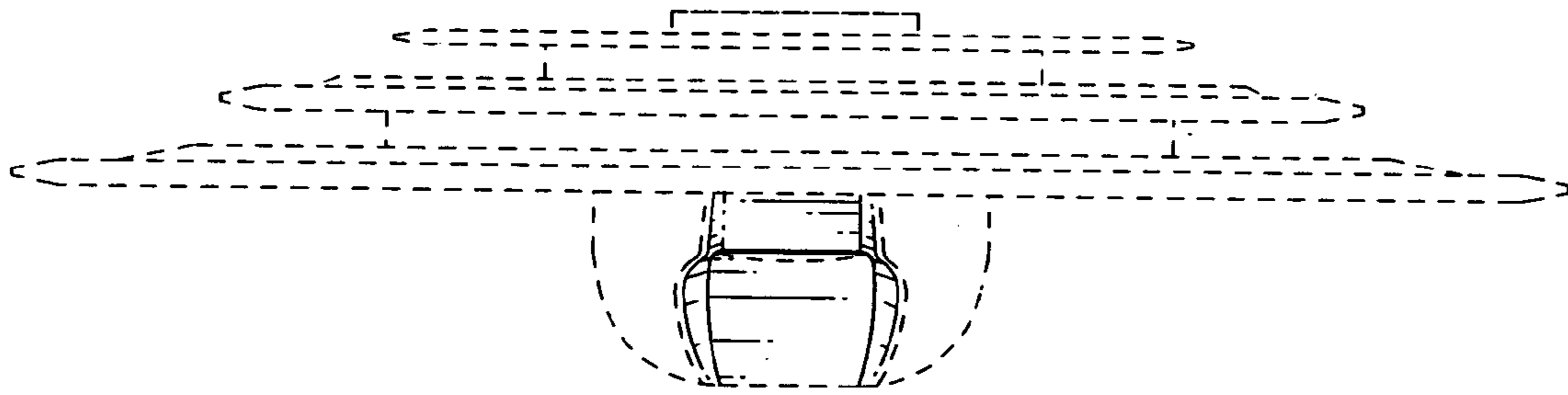


FIG. 7

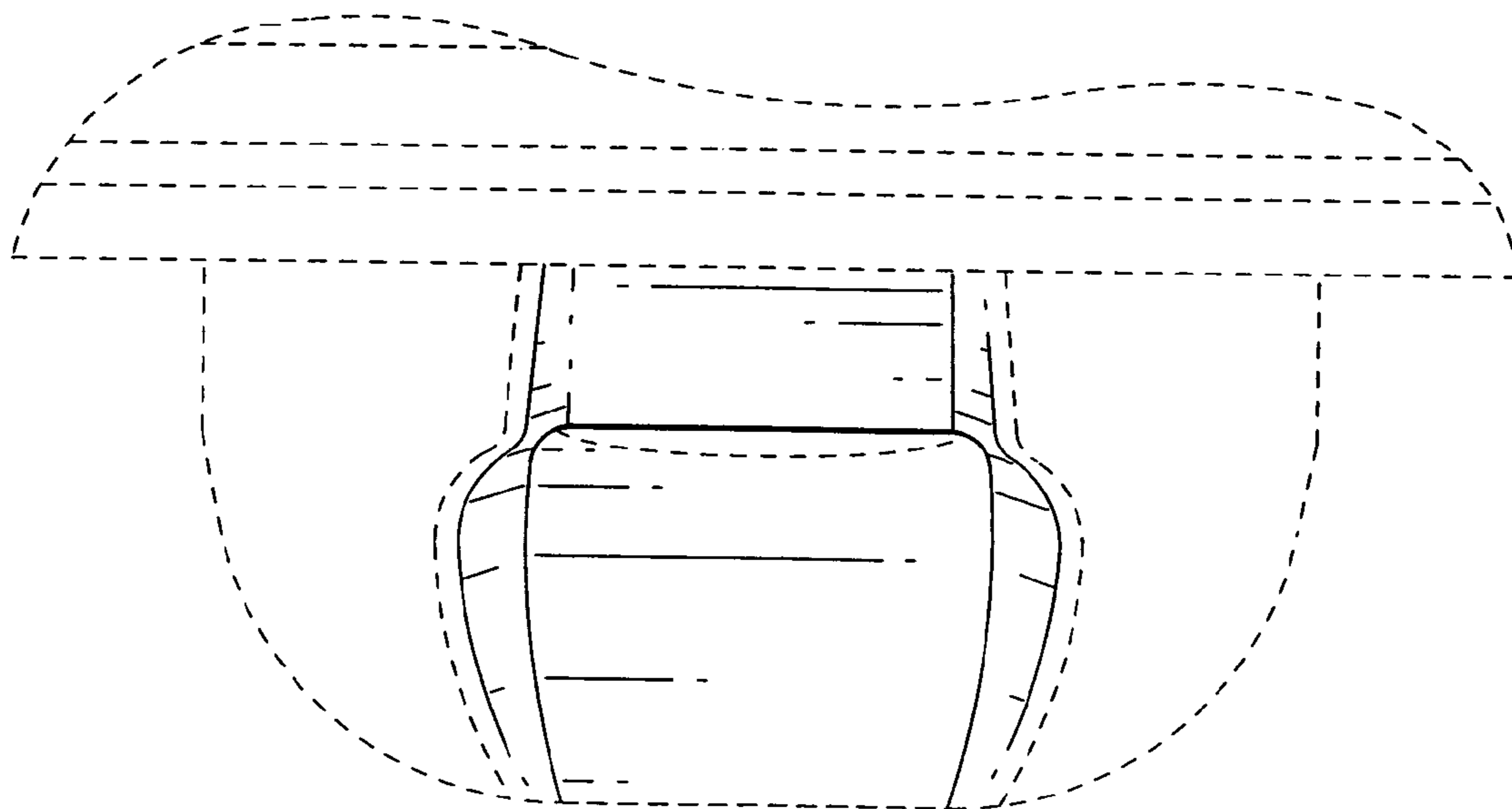


FIG. 8

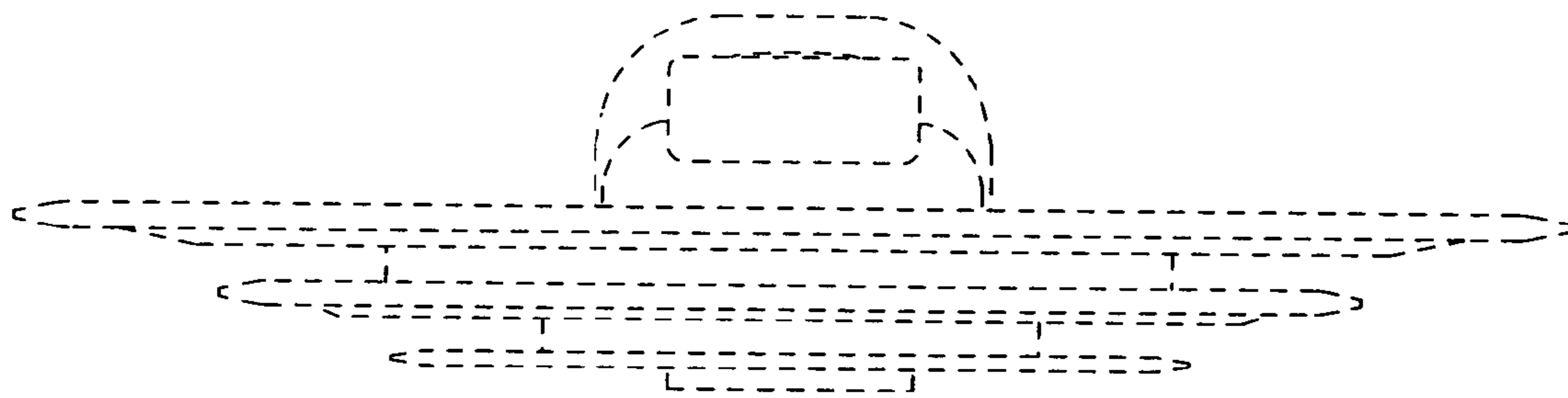


FIG. 9