



US00D658211S

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

(10) **Patent No.:** **US D658,211 S**

(45) **Date of Patent:** **** Apr. 24, 2012**

(54) **HYDRAULIC EXCAVATOR**

(75) Inventors: **Kazuhiko Hiraoka**, Kodaira (JP);
Tamio Kobayashi, Kasama (JP);
Hiroyuki Isobe, Tsuchiura (JP);
Tsuyoshi Shimizu, Kasumigaura (JP)

(73) Assignee: **Hitachi Construction Machinery Co., Ltd.**, Tokyo (JP)

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

(21) Appl. No.: **29/402,238**

(22) Filed: **Sep. 22, 2011**

(30) **Foreign Application Priority Data**

Apr. 8, 2011 (JP) 2011-008089

(51) **LOC (9) Cl.** **12-09**

(52) **U.S. Cl.** **D15/25**

(58) **Field of Classification Search** D15/10,
D15/22-26; 37/403, 411, 443; 414/685,
414/686, 688, 722-724; 180/89.13

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,397,481 A * 8/1983 Dion et al. 280/781
D271,396 S * 11/1983 Inui D15/24
5,544,435 A * 8/1996 Somero 37/405
5,590,482 A * 1/1997 Peterson et al. 37/403
D391,272 S * 2/1998 Jin et al. D15/25
D409,629 S * 5/1999 Miyaoka et al. D15/25
D437,602 S * 2/2001 Hiraoka et al. D15/25

D460,975 S * 7/2002 Yanagida et al. D15/25
D462,973 S * 9/2002 Tamaru et al. D15/25
D462,974 S * 9/2002 Yanagida et al. D15/25
D534,552 S * 1/2007 Yanagida D15/25

FOREIGN PATENT DOCUMENTS

JP D 1371360 10/2009
KR D 30-0410389 S 3/2006

* cited by examiner

Primary Examiner — Mark Goodwin

(74) *Attorney, Agent, or Firm* — Antonelli, Terry, Stout & Kraus, LLP.

(57) **CLAIM**

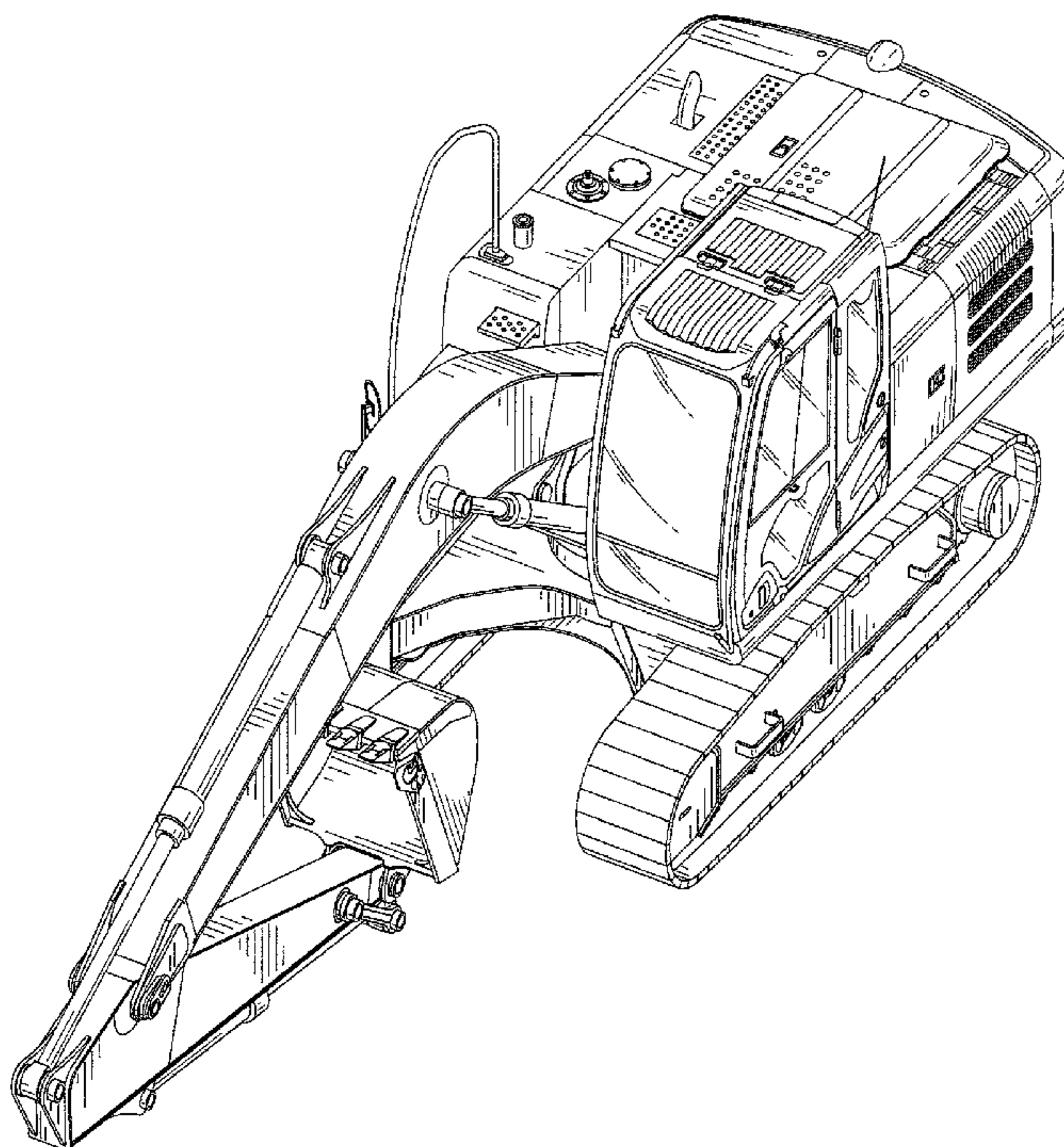
We claim the ornamental design for a hydraulic excavator, as shown and described.

DESCRIPTION

FIG. 1 is a front, top and left side perspective view of a hydraulic excavator showing our new design; FIG. 2 is a front elevational view thereof; FIG. 3 is a rear elevational view thereof; FIG. 4 is a left side elevational view thereof; FIG. 5 is a right side elevational view thereof; FIG. 6 is a top plan view thereof; FIG. 7 is a bottom plan view thereof; FIG. 8 is an enlarged view of grill portion thereof of the part partitioned by A-A and B-B in FIG. 2; and, FIG. 9 is a cross-sectional view of grill portion thereof taken along line C-C in FIG. 8.

Each approximate hexagon showing in FIG. 8 is opening. Each grill portion's openings pattern unit is same way as shown in FIG. 8 and FIG. 9.

1 Claim, 7 Drawing Sheets



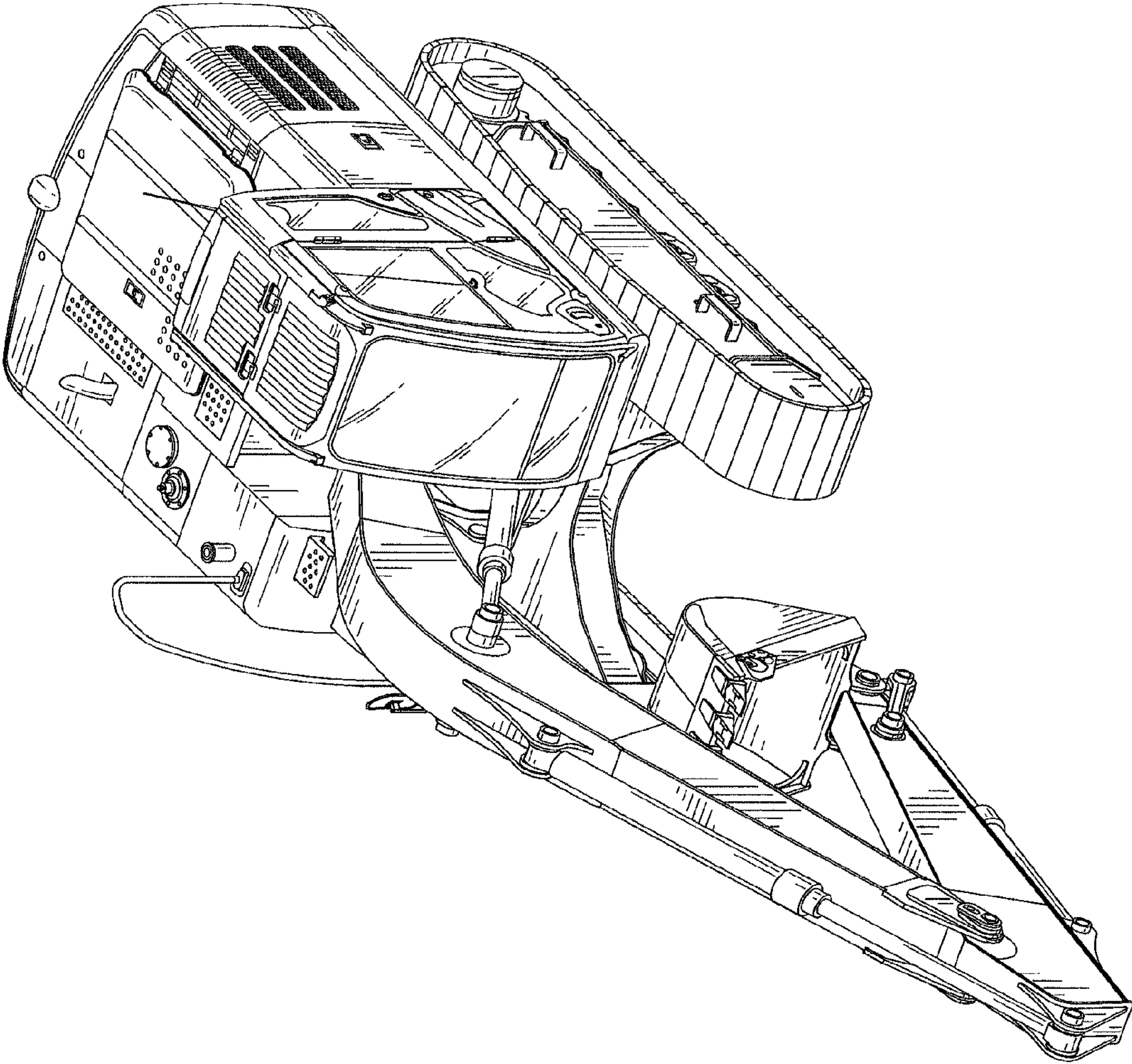


FIG. 1

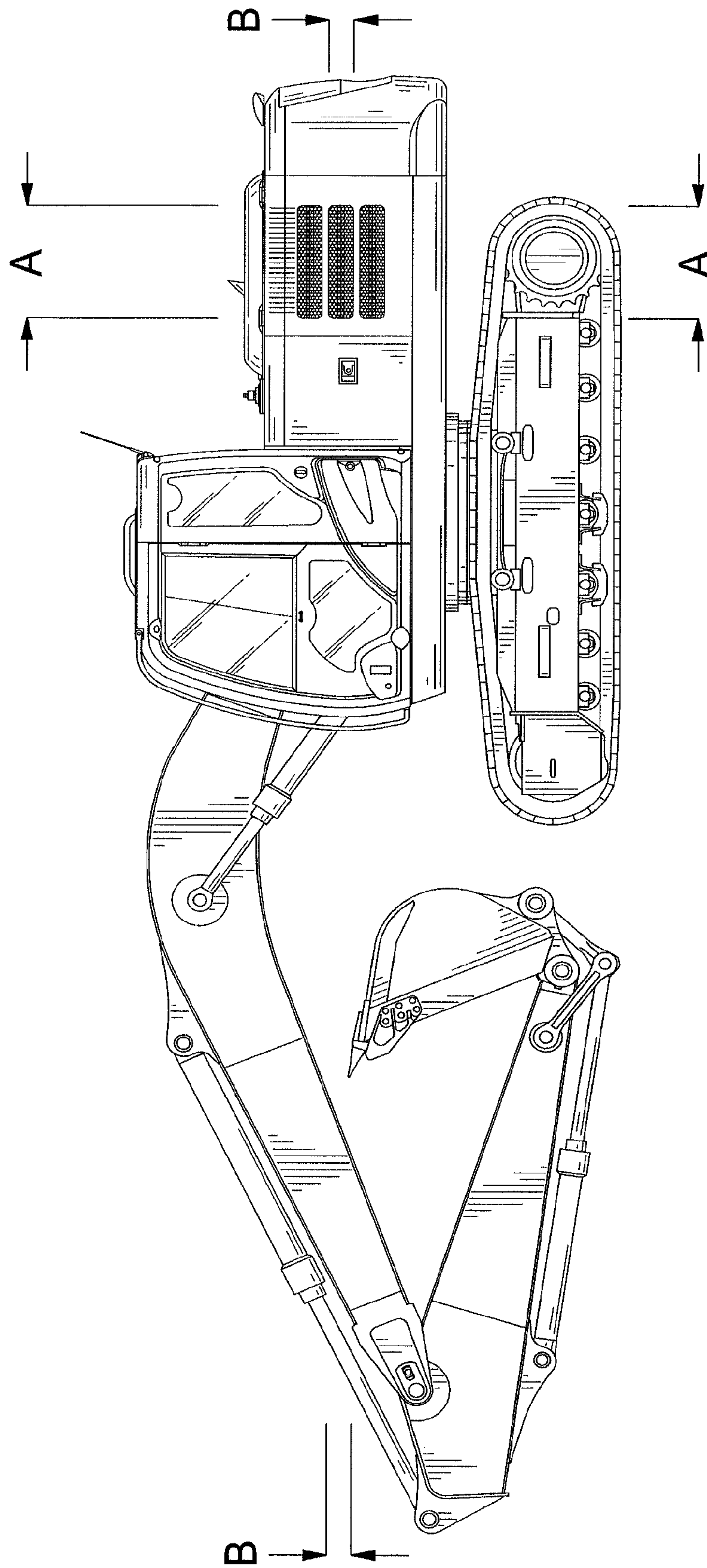


FIG. 2

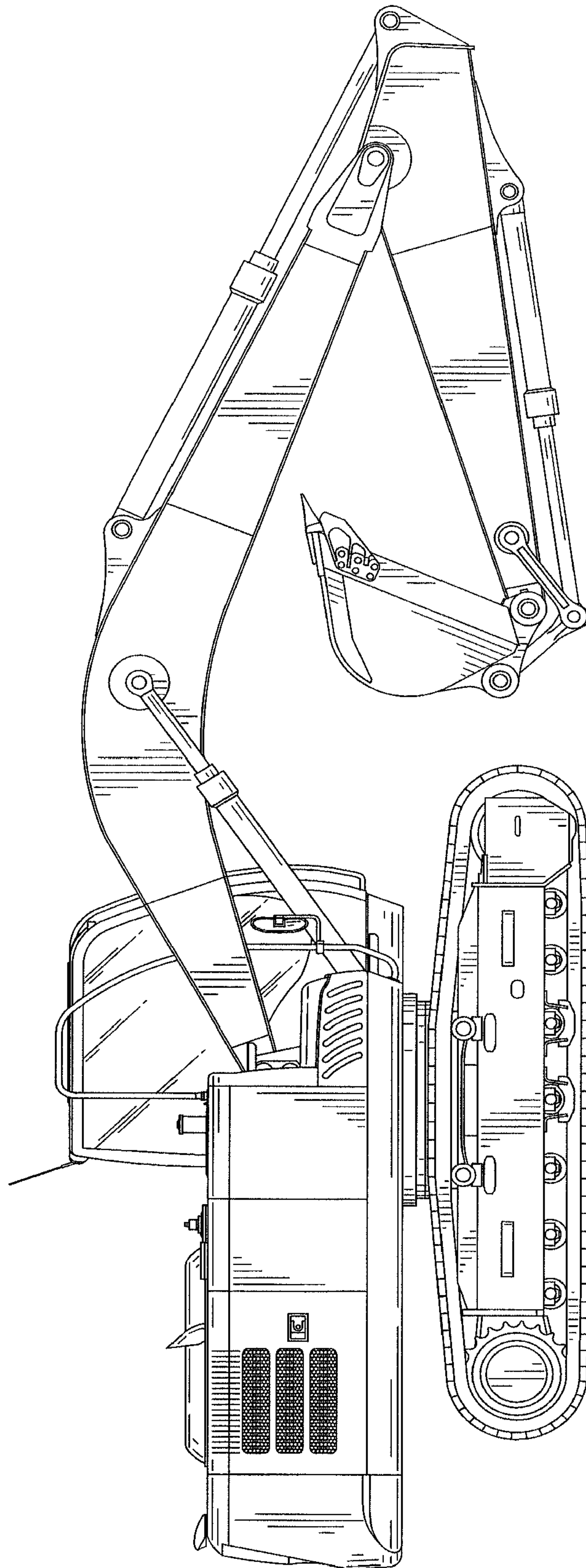


FIG. 3

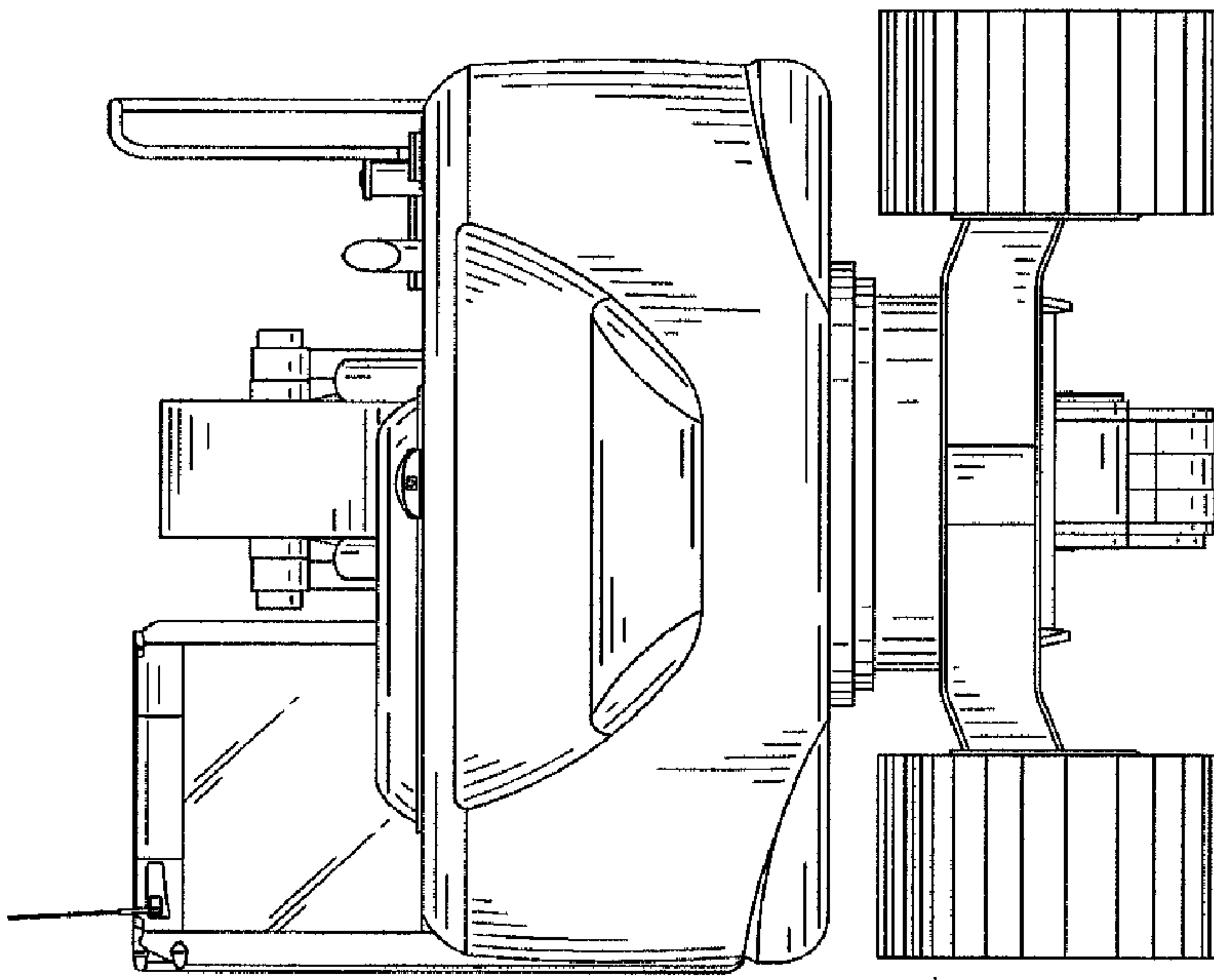


FIG. 5

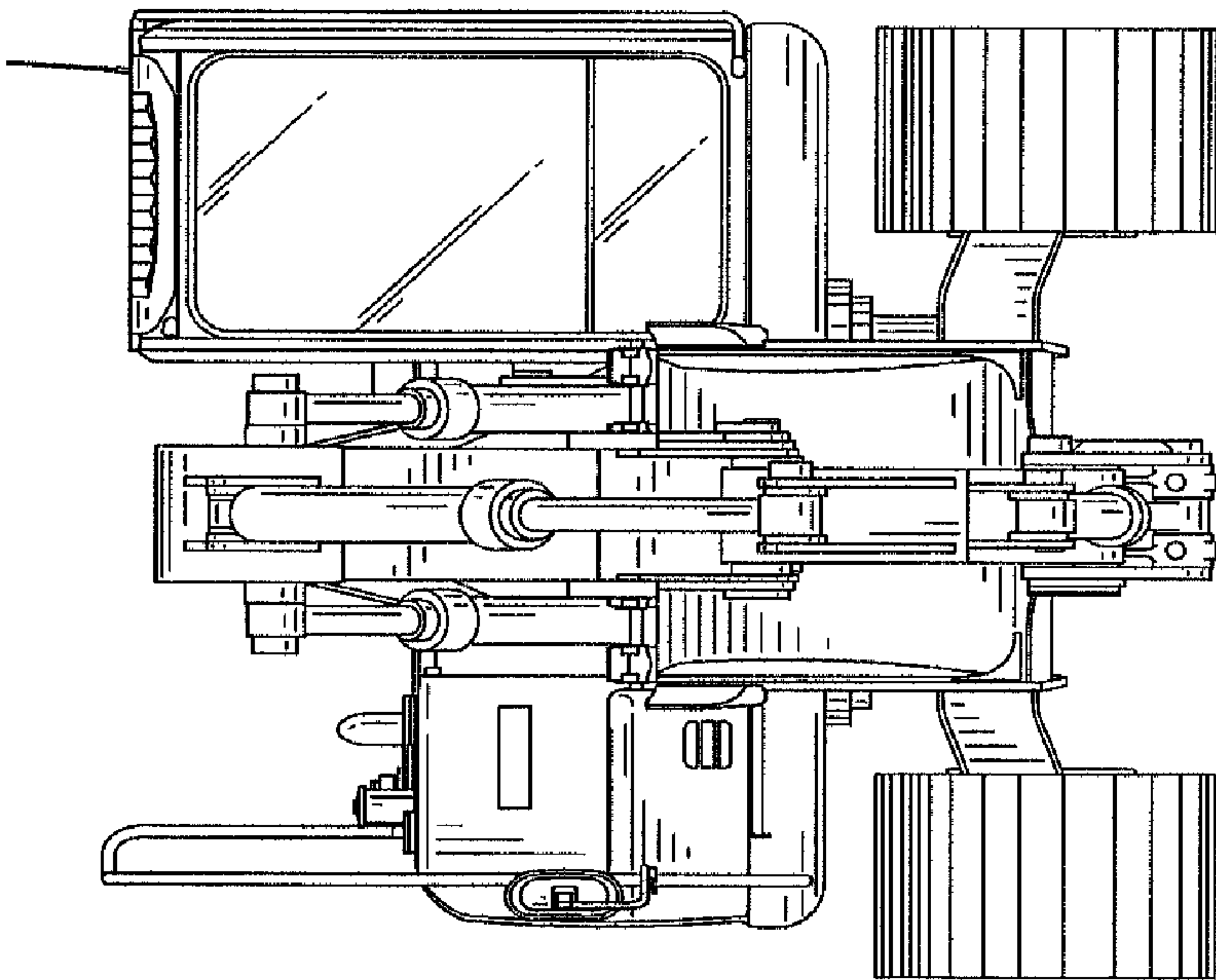


FIG. 4

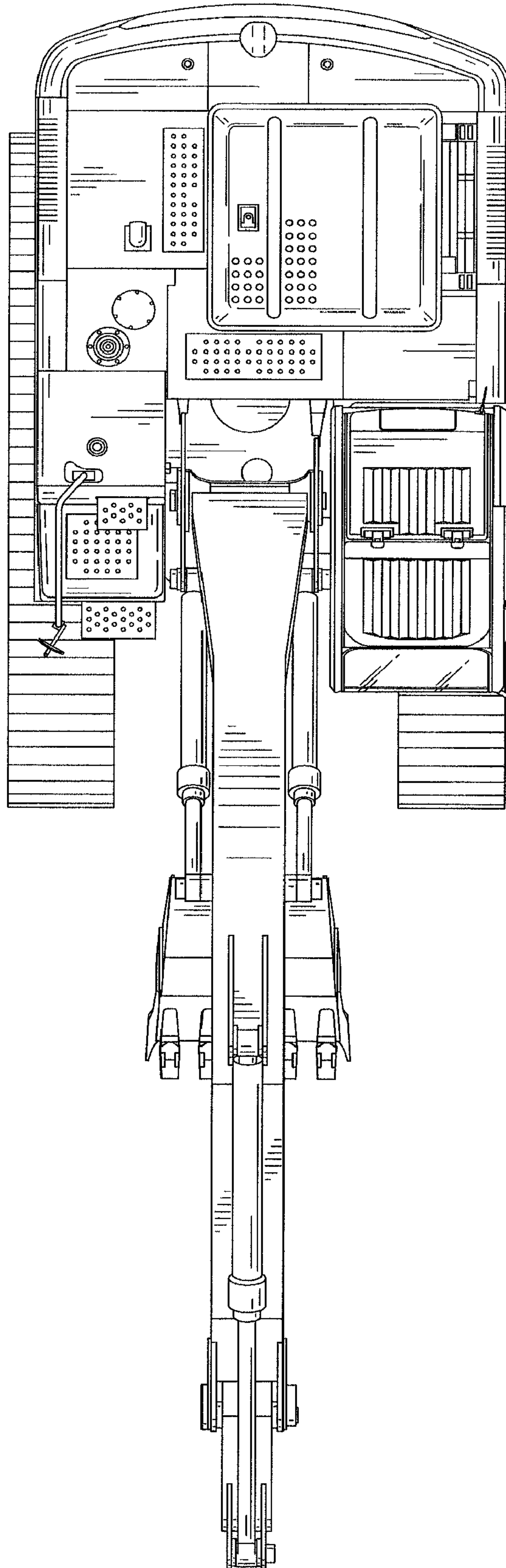


FIG. 6

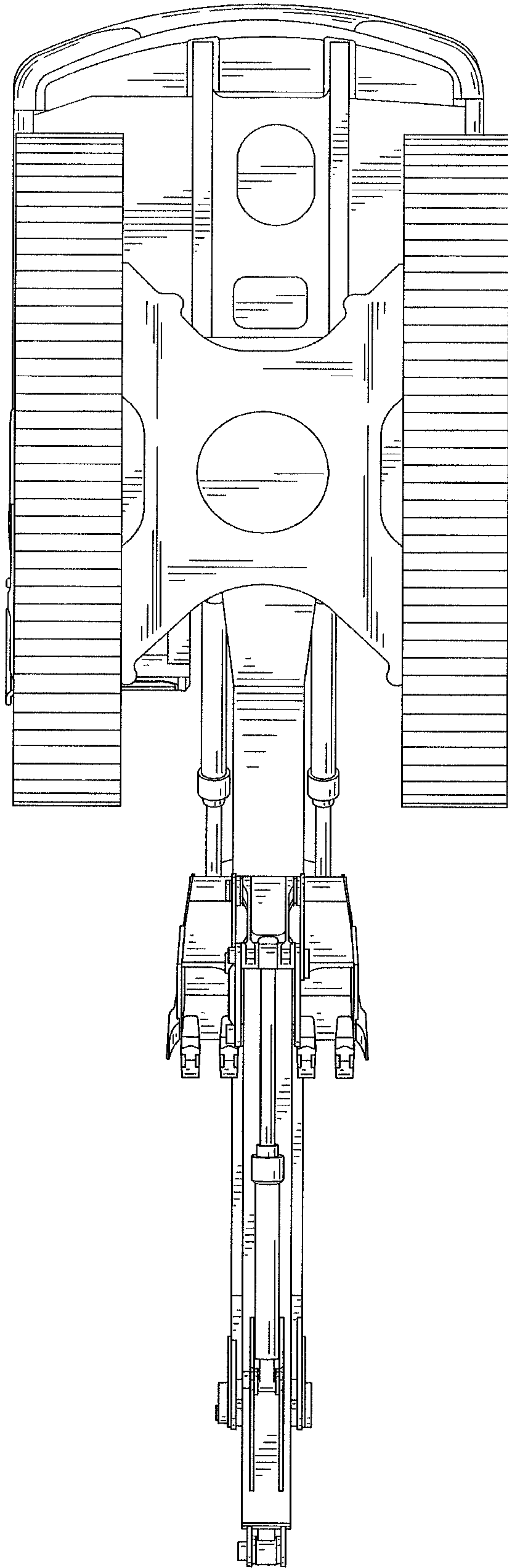


FIG. 7

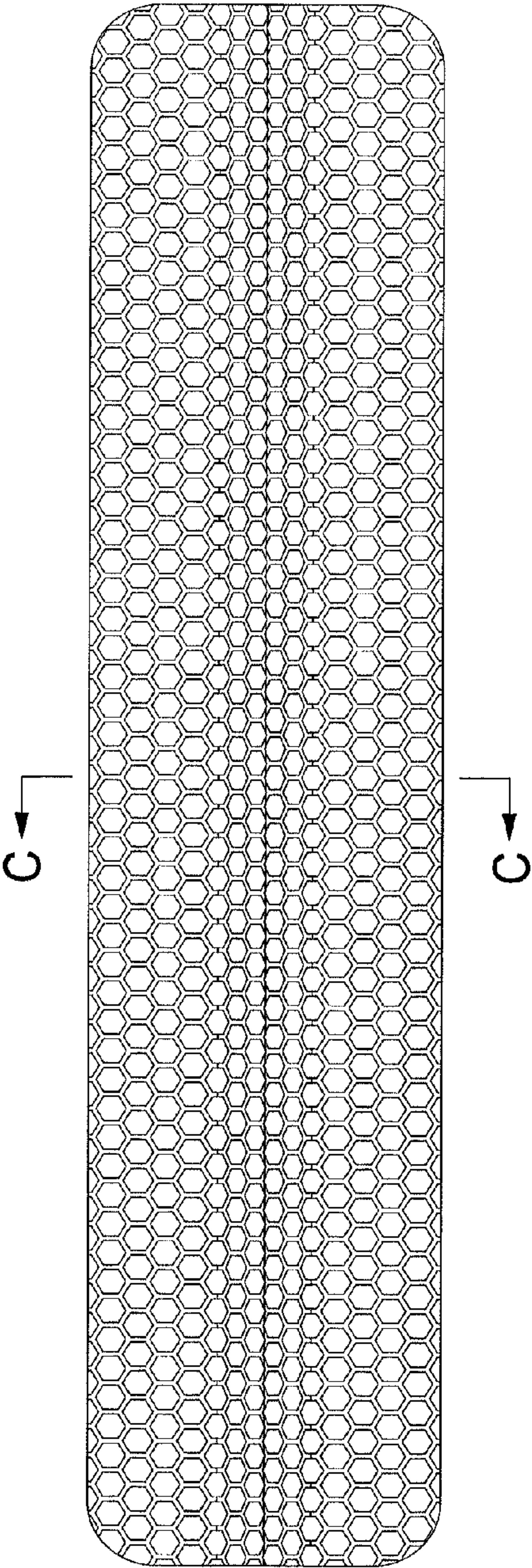


FIG. 8



FIG. 9