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Xue et al.

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(54) **EXCAVATOR**

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

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(51) **LOC (13) Cl.** **15-03**

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

(58) **Field of Classification Search**
USPC D15/10, 22-26, 28, 30; 180/89.1, 89.12, 180/89.13, 900, 9.1, 9.2, 9.62; 37/379; 414/694, 699, 722-724, 660, 685, 698, 414/719, 743

CPC E02F 3/32; E02F 3/76; E02F 3/40; E02F 3/325; E02F 3/352; E02F 3/384; E02F 3/425; E02F 3/437; E02F 3/627; E02F 3/964; E02F 9/163; E02F 9/0858; E02F 9/0875; E02F 9/2045; E02F 9/006; E02F 9/0808; E02F 9/0833; E02F 9/2004; E02F 9/207; E02F 9/2091; E02F 9/2246; E02F 9/2292; E02F 9/0086; E02F 9/18; F01N 13/001; F01N 2590/08

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D437,602 S * 2/2001 Hiraoka D15/25
D460,975 S * 7/2002 Yanagida D15/25

D534,552 S * 1/2007 Yanagida D15/25
D538,304 S * 3/2007 Uemura D15/25
D590,847 S * 4/2009 Yonekura D15/25
D658,211 S * 4/2012 Hiraoka D15/25
D663,324 S * 7/2012 Fuchita D15/25
D663,751 S * 7/2012 Yogita D15/25
D677,703 S * 3/2013 Hiraoka D15/25
D678,354 S * 3/2013 Hiraoka D15/25
D692,924 S * 11/2013 Hatanaka D15/24
D707,261 S * 6/2014 Caboret D15/24
D711,927 S * 8/2014 Yoshita D15/24
D716,845 S * 11/2014 Hayami D15/25
D842,344 S * 3/2019 Okuyama D15/23
D854,054 S * 7/2019 Hirasawa D15/22
D855,082 S * 7/2019 Okuyama D15/25
D870,159 S * 12/2019 Jilbert D15/22
D875,143 S * 2/2020 Hagura D15/24
D895,687 S * 9/2020 Phadatare D15/22
D905,762 S * 12/2020 Phadatare D15/22
D915,470 S * 4/2021 Ninomiya D15/25

* cited by examiner

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(57) **CLAIM**

The ornamental design for an excavator, as shown and described.

DESCRIPTION

FIG. 1 is a right side view of the excavator, showing our new design;

FIG. 2 is a left side view thereof;

FIG. 3 is front view thereof;

FIG. 4 is a rear view thereof;

FIG. 5 is a top view thereof;

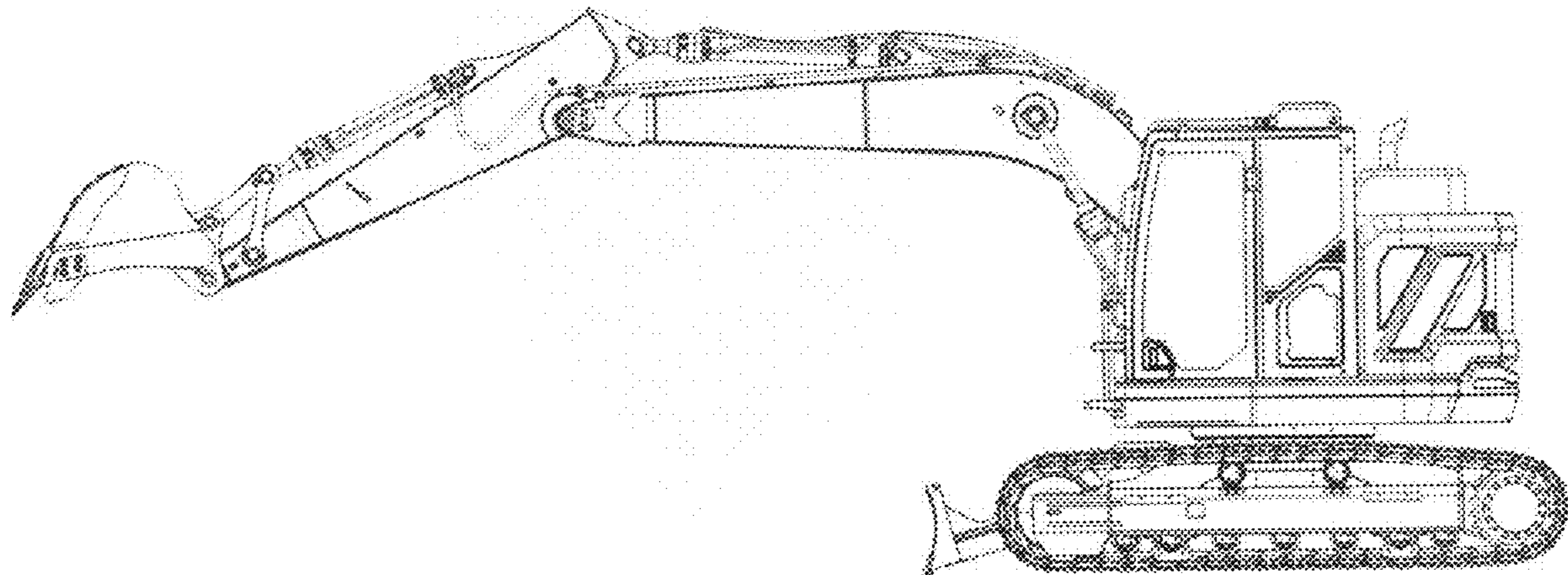
FIG. 6 is a left front perspective view thereof;

FIG. 7 is a left rear perspective view thereof;

FIG. 8 is a right front perspective view thereof; and,

FIG. 9 is a right rear perspective view thereof.

1 Claim, 5 Drawing Sheets



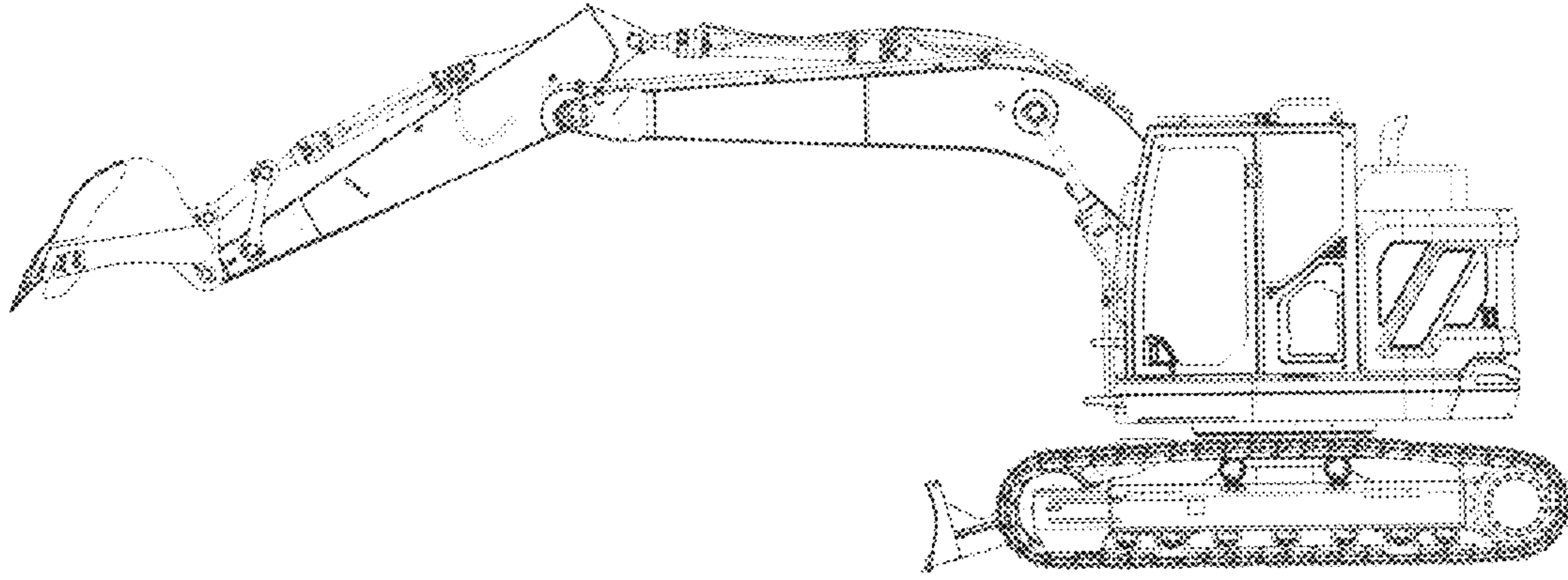


FIG. 1

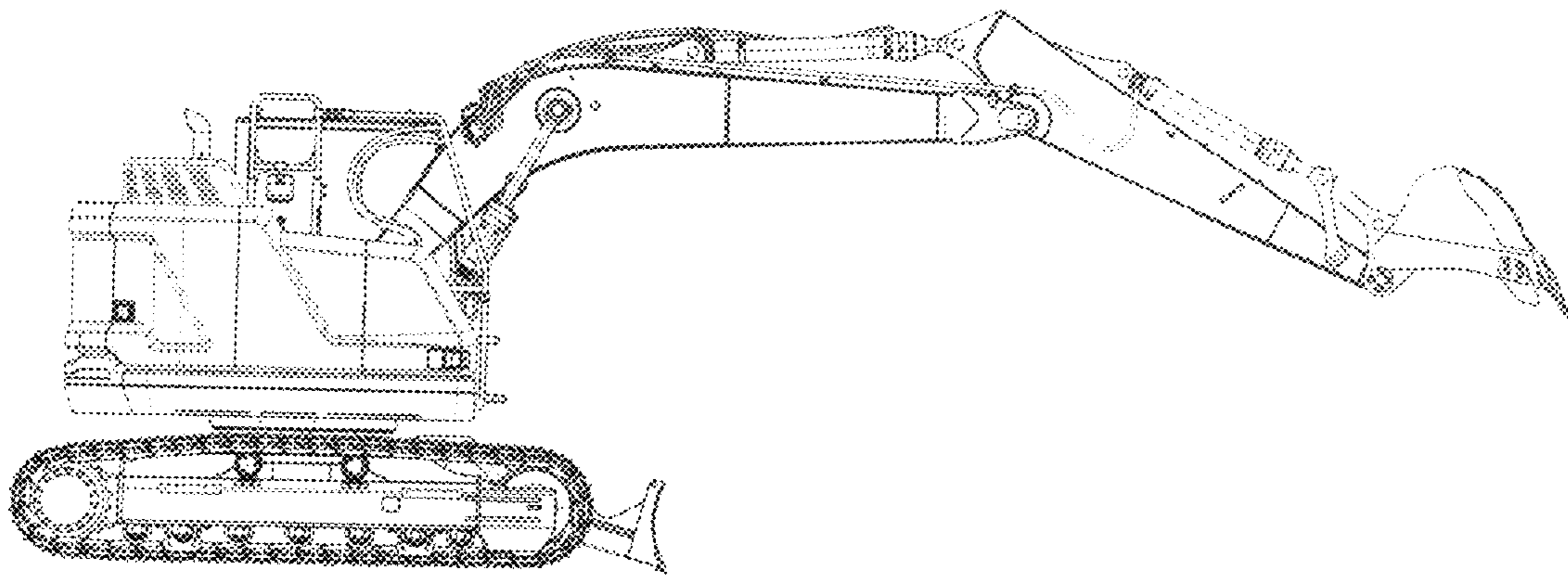


FIG. 2

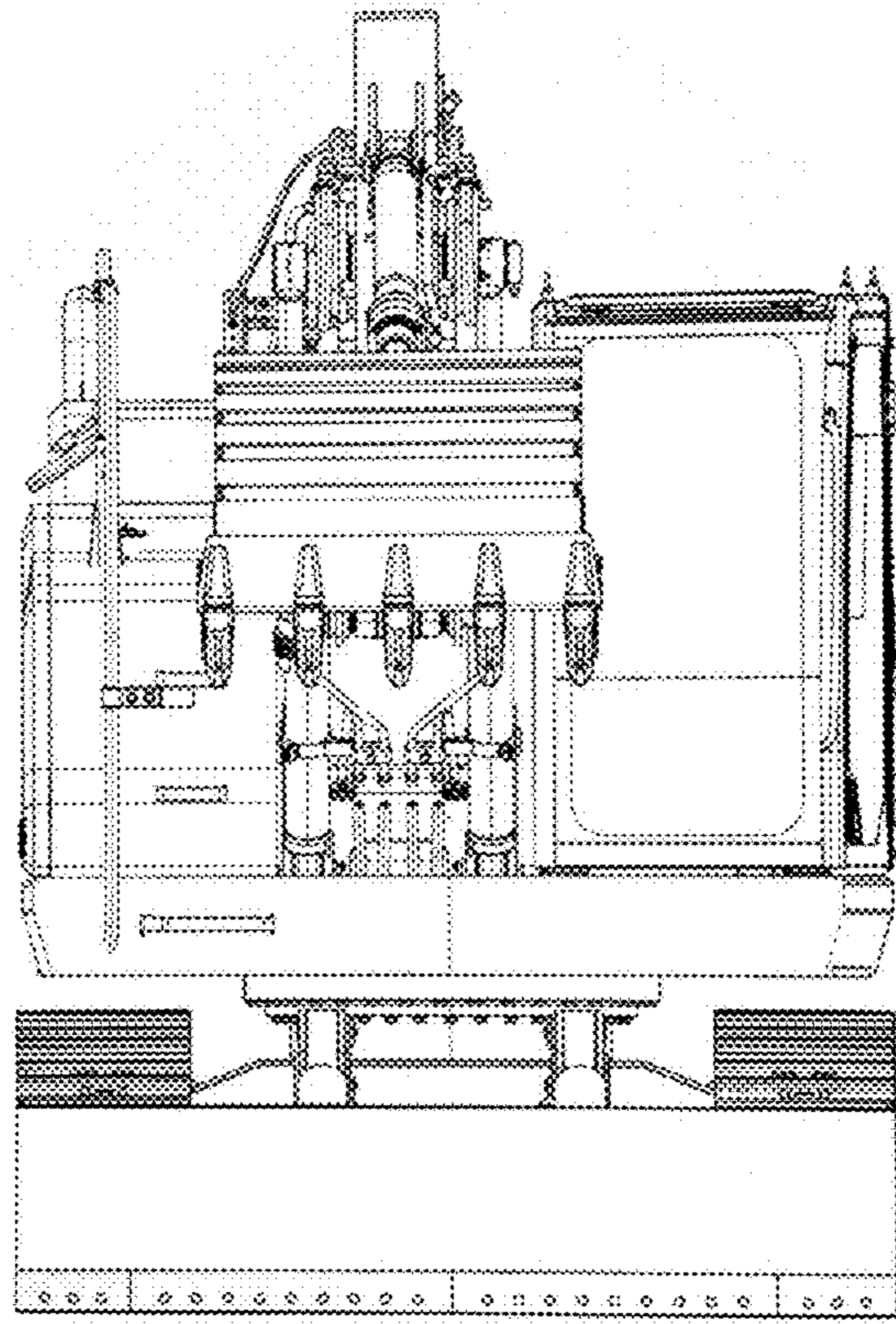


FIG. 3

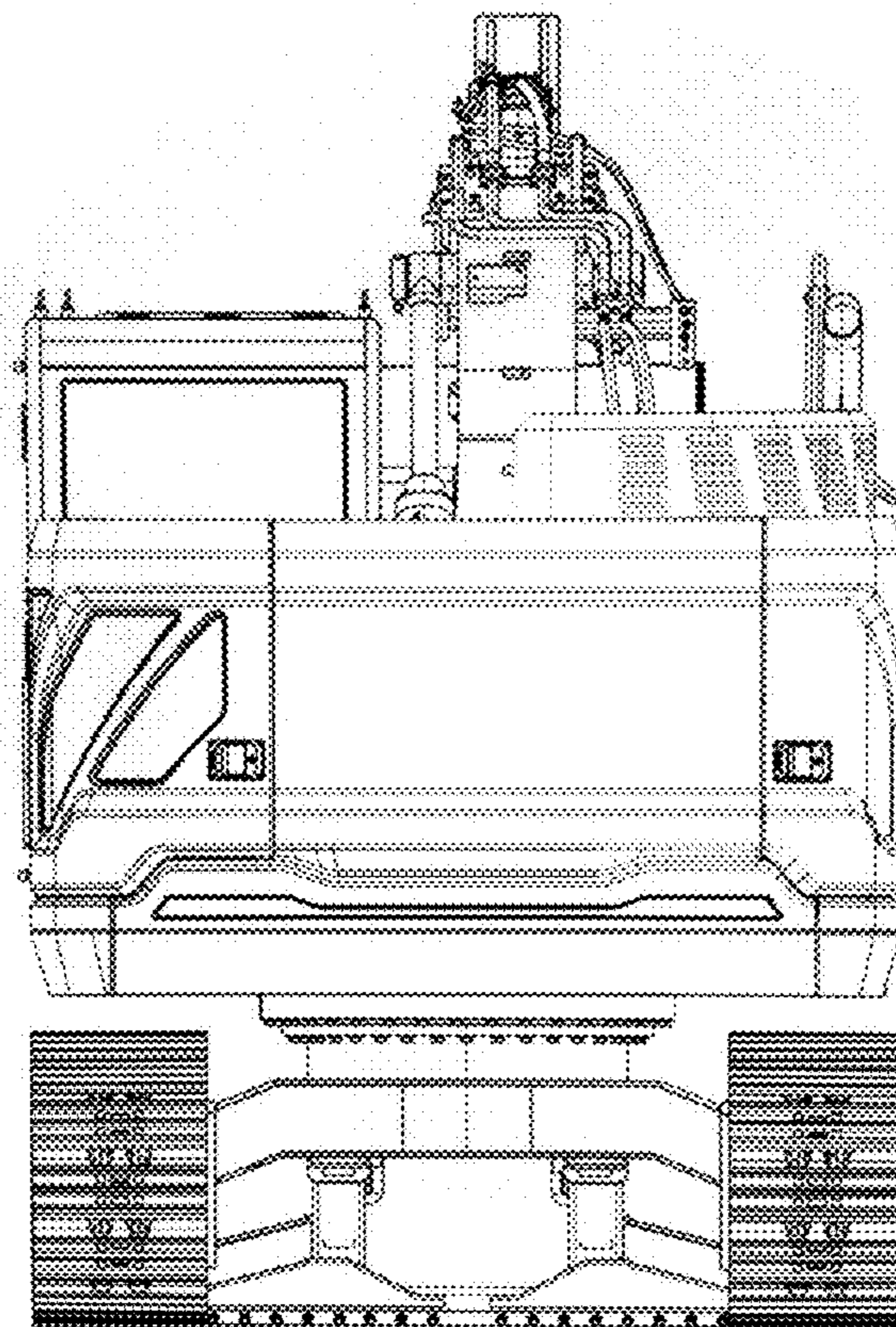


FIG. 4

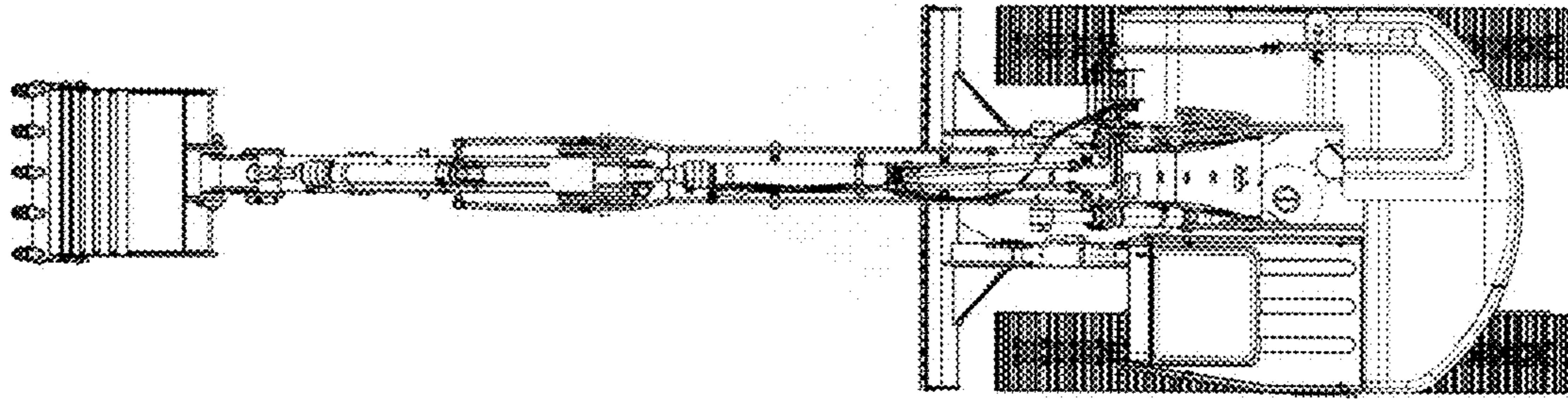


FIG. 5

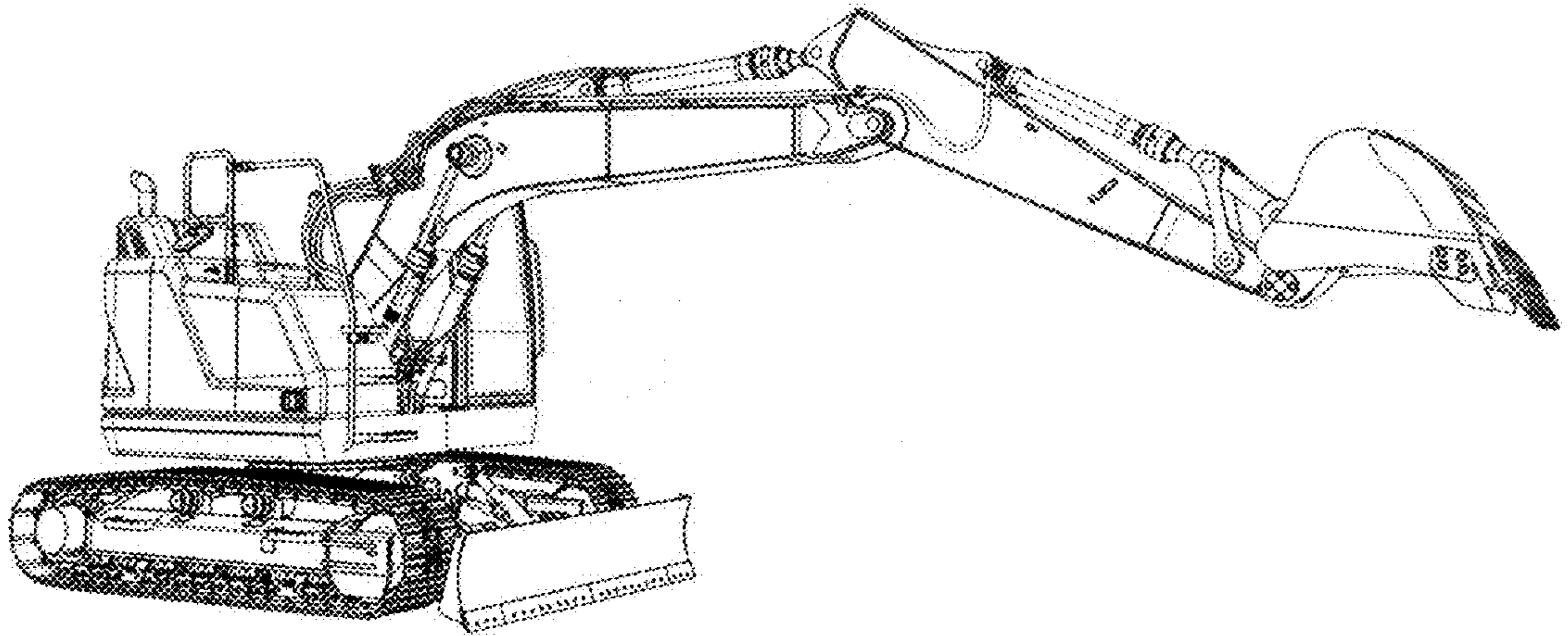


FIG. 6

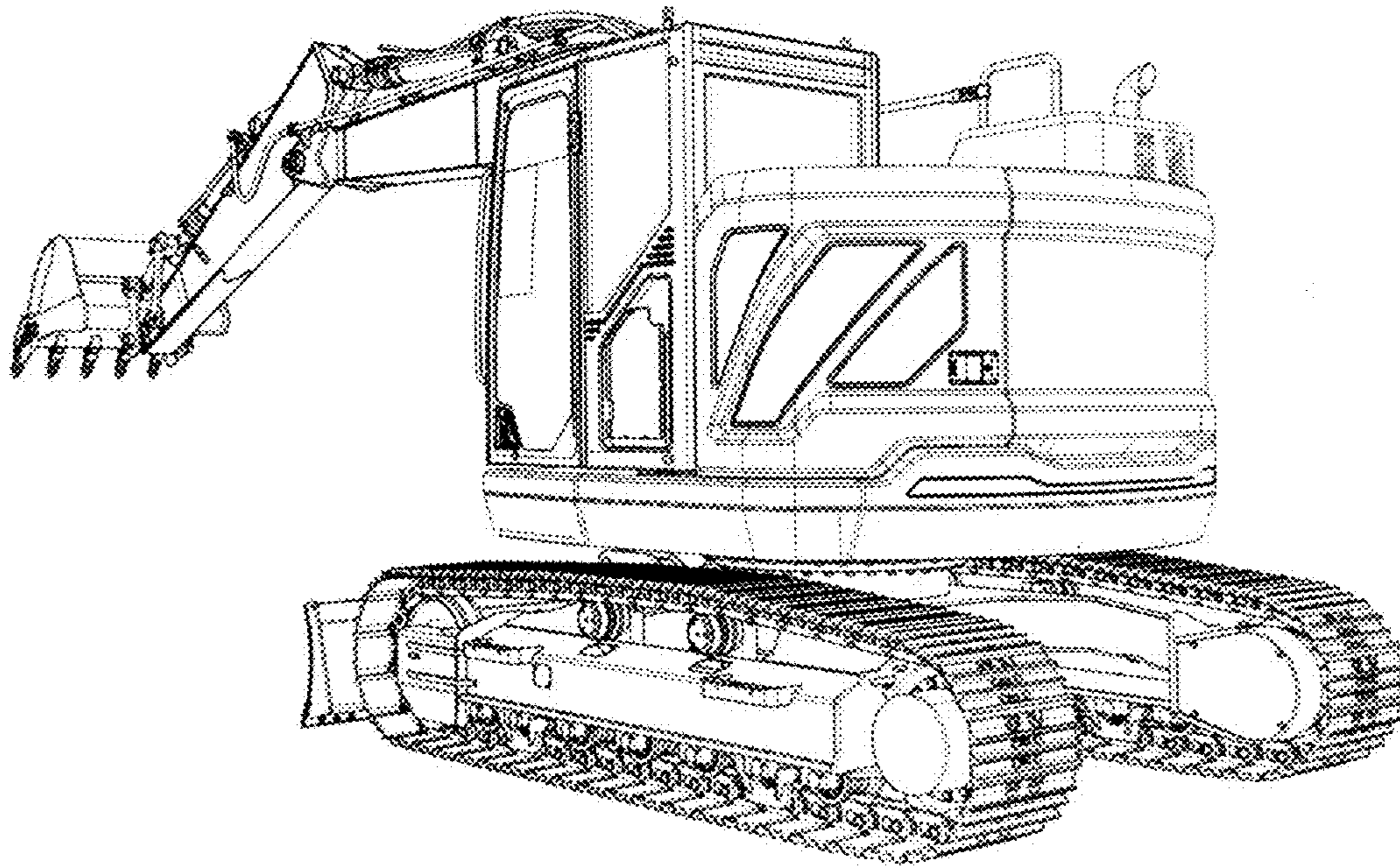


FIG. 7

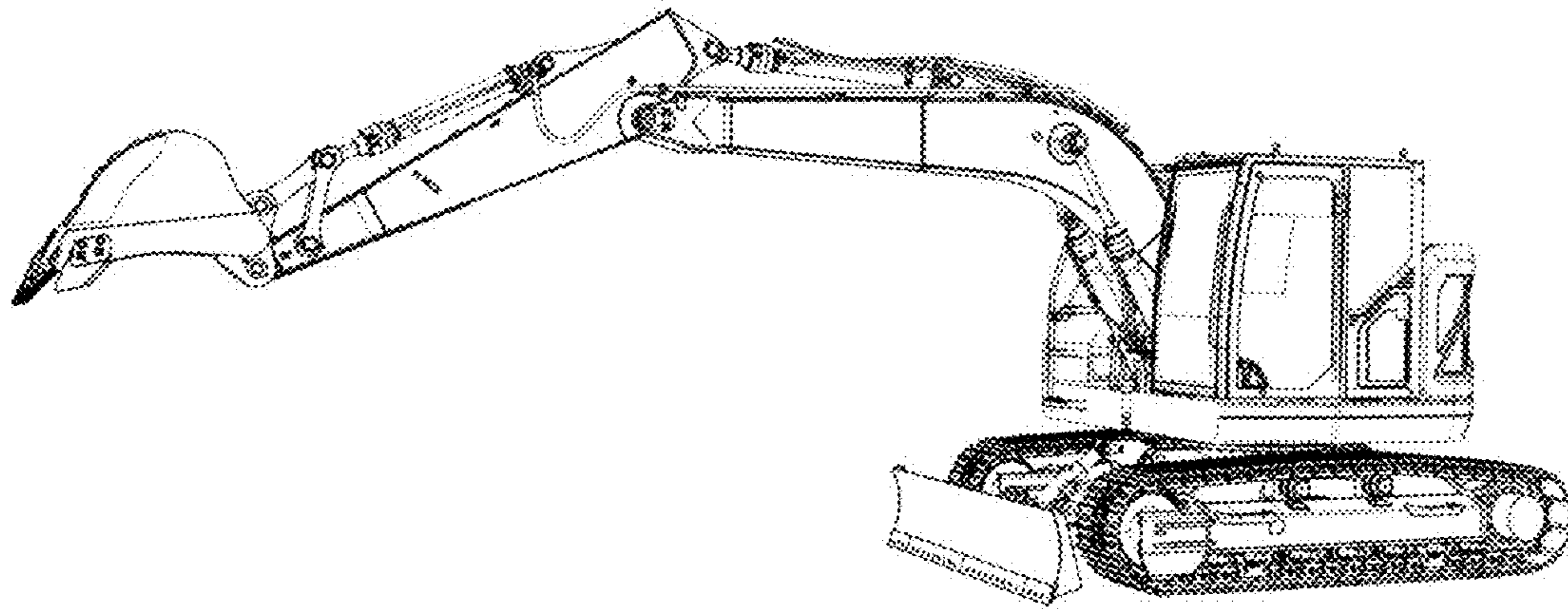


FIG. 8

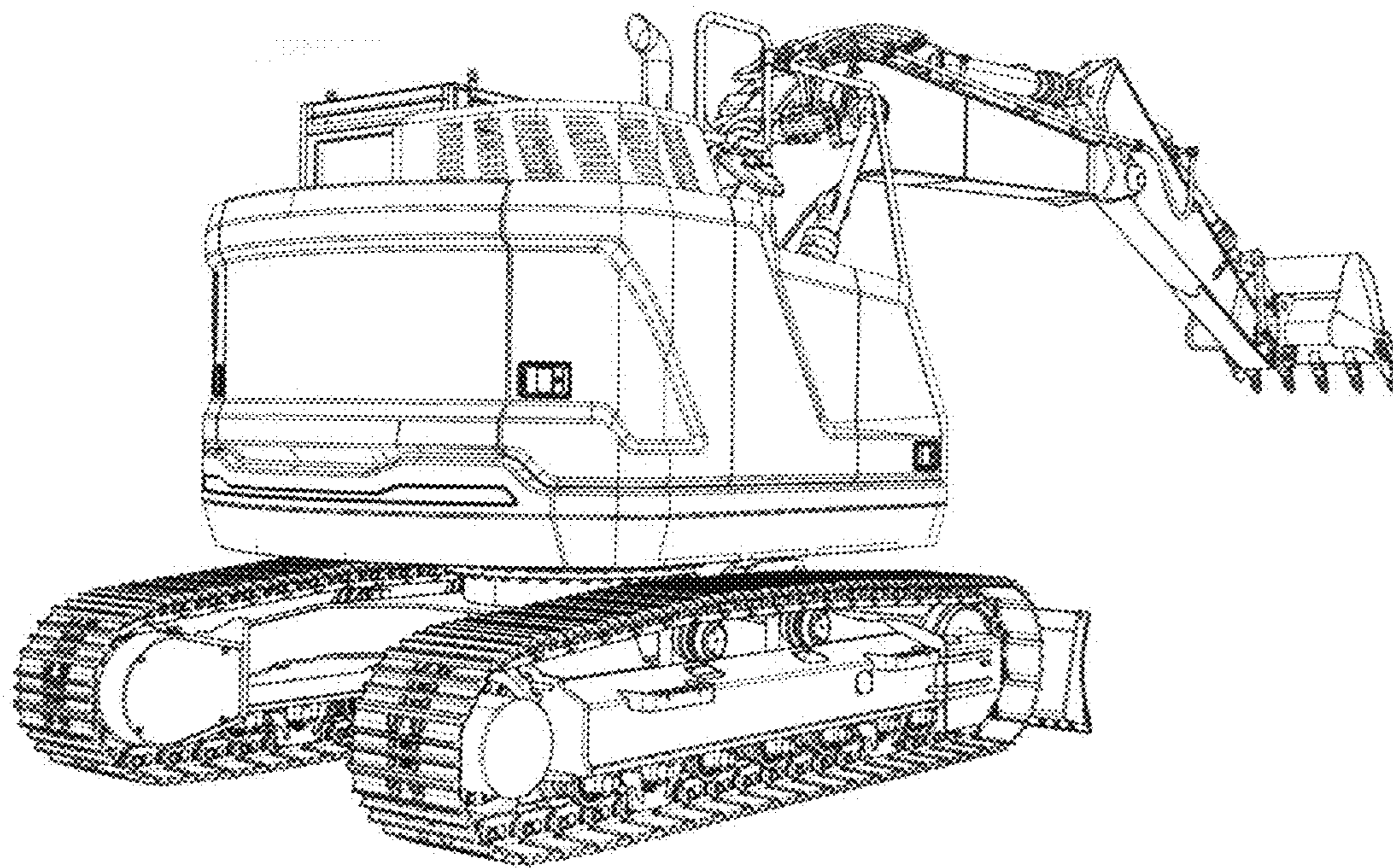


FIG. 9