

US00D957784S

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

(10) **Patent No.:** **US D957,784 S**
(45) **Date of Patent:** **** Jul. 12, 2022**

(54) **CONVEYOR IDLER SUPPORT STRUCTURE**

(71) Applicant: **NHI Mechanical Motion, LLC**,
Claremont, NH (US)

(72) Inventors: **Kevin J. Guay**, West Lebanon, NH
(US); **Alexander J. Moskalenko**,
Springfield, NH (US); **Zachary P.
Kerin**, White River Junction, VT (US)

(73) Assignee: **NHI Mechanical Motion, LLC**,
Claremont, NH (US)

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

(21) Appl. No.: **29/735,922**

(22) Filed: **May 26, 2020**

(51) **LOC (13) Cl.** **12-05**

(52) **U.S. Cl.**
USPC **D34/29**

(58) **Field of Classification Search**
USPC D34/29, 35
CPC .. B65G 17/08; B65G 17/086; B65G 2207/12;
B65G 2201/02
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

- 1,793,346 A 2/1931 Wego
- 3,252,556 A * 5/1966 Isacson B65G 39/12
193/35 R
- 3,406,438 A 10/1968 Reilly
- 4,277,114 A 7/1981 Lindegger
- 4,919,253 A 4/1990 Morrison
- 5,022,132 A 6/1991 Valster
- 5,028,054 A 7/1991 Peach
- 5,044,490 A 9/1991 East
- 5,197,592 A 3/1993 East
- 5,373,935 A 12/1994 Anderson
- 5,383,549 A 1/1995 Mayer

- D401,717 S * 11/1998 Grueber D34/29
- 5,954,186 A 9/1999 Stroobandt
- D423,178 S * 4/2000 Specht D34/29
- 6,082,528 A 7/2000 Habberley
- 6,349,819 B1 2/2002 Nohl
- 6,547,054 B2 4/2003 Gamache
- 6,634,490 B2 10/2003 Fischer
- 6,641,512 B2 11/2003 Bryant, Jr.
- 7,028,825 B2 4/2006 Scott
- 8,146,733 B2 4/2012 Fox
- 9,056,727 B2 6/2015 White
- 9,133,940 B1 9/2015 Taylor
- D750,864 S * 3/2016 Roessler D34/29
- 9,359,144 B2 6/2016 White
- D772,517 S * 11/2016 Schiltz D34/29
- 10,088,053 B1 10/2018 Hartney

(Continued)

FOREIGN PATENT DOCUMENTS

- CN 102976055 A 3/2013
- CN 105460544 A 4/2016

(Continued)

Primary Examiner — Cynthia Ramirez

(74) *Attorney, Agent, or Firm* — Loginov & Associates,
PLLC; William A. Loginov

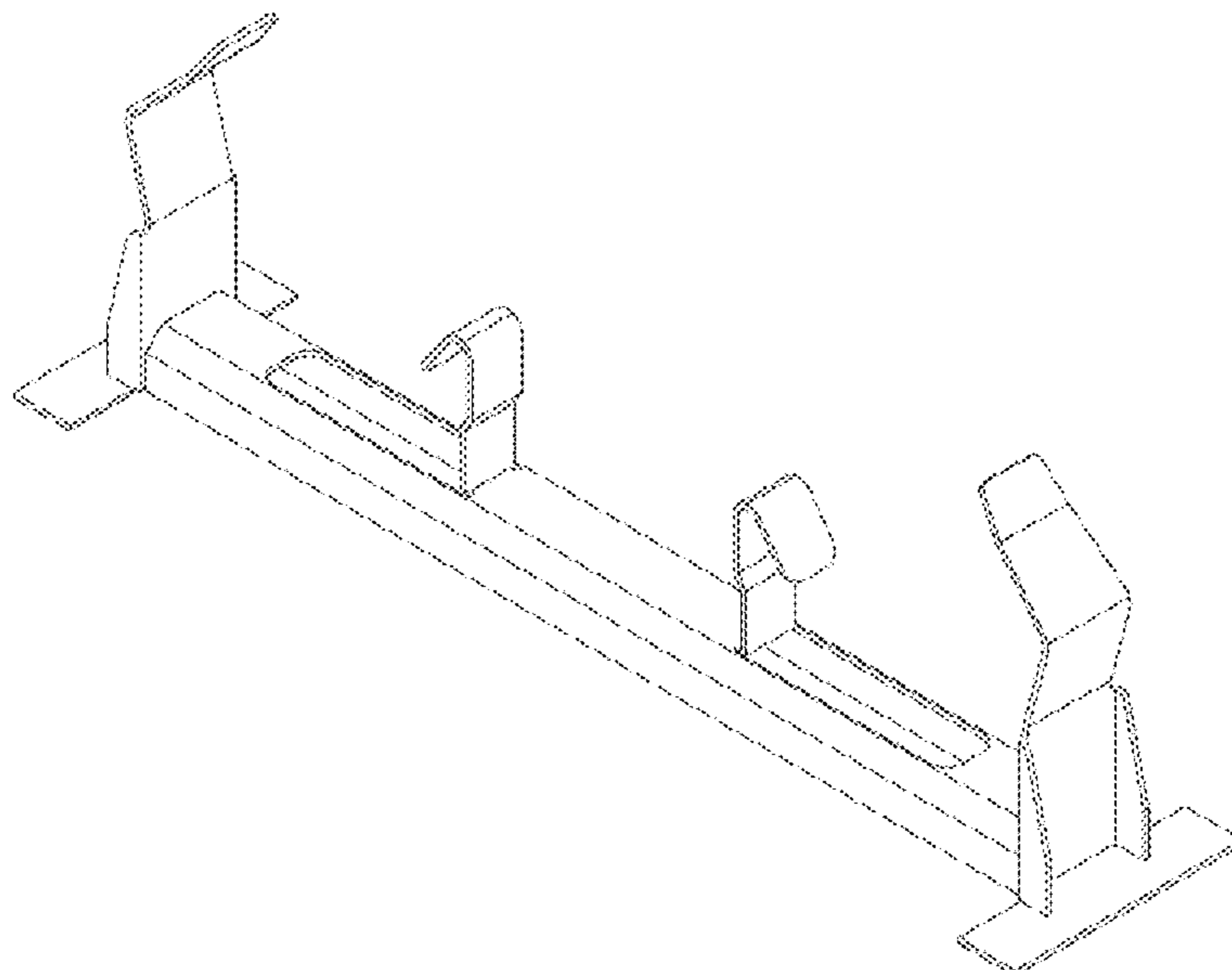
(57) **CLAIM**

The ornamental design for a conveyor idler support structure, substantially as shown.

DESCRIPTION

FIG. 1 is a perspective view of a conveyor idler support structure showing our new design;
FIG. 2 is a front view thereof;
FIG. 3 is a rear view thereof;
FIG. 4 is an enlarged right side view thereof;
FIG. 5 is an enlarged left side view thereof;
FIG. 6 is a top view thereof; and,
FIG. 7 is a bottom view thereof.

1 Claim, 2 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D880,097 S * 3/2020 Wolf D34/29
D880,098 S * 3/2020 Harrison D34/29
10,981,727 B1 4/2021 Guay
D924,529 S * 7/2021 Simmendinger D34/29
D924,530 S * 7/2021 Simmendinger D34/29
D924,531 S * 7/2021 Simmendinger D34/29
D932,129 S * 9/2021 Wolf D34/29
2003/0015394 A1 1/2003 Nimmo
2004/0079621 A1 4/2004 Mott
2014/0202823 A1 7/2014 White

FOREIGN PATENT DOCUMENTS

EP 112026 A 6/1984
WO 2018067574 A1 4/2018

* cited by examiner

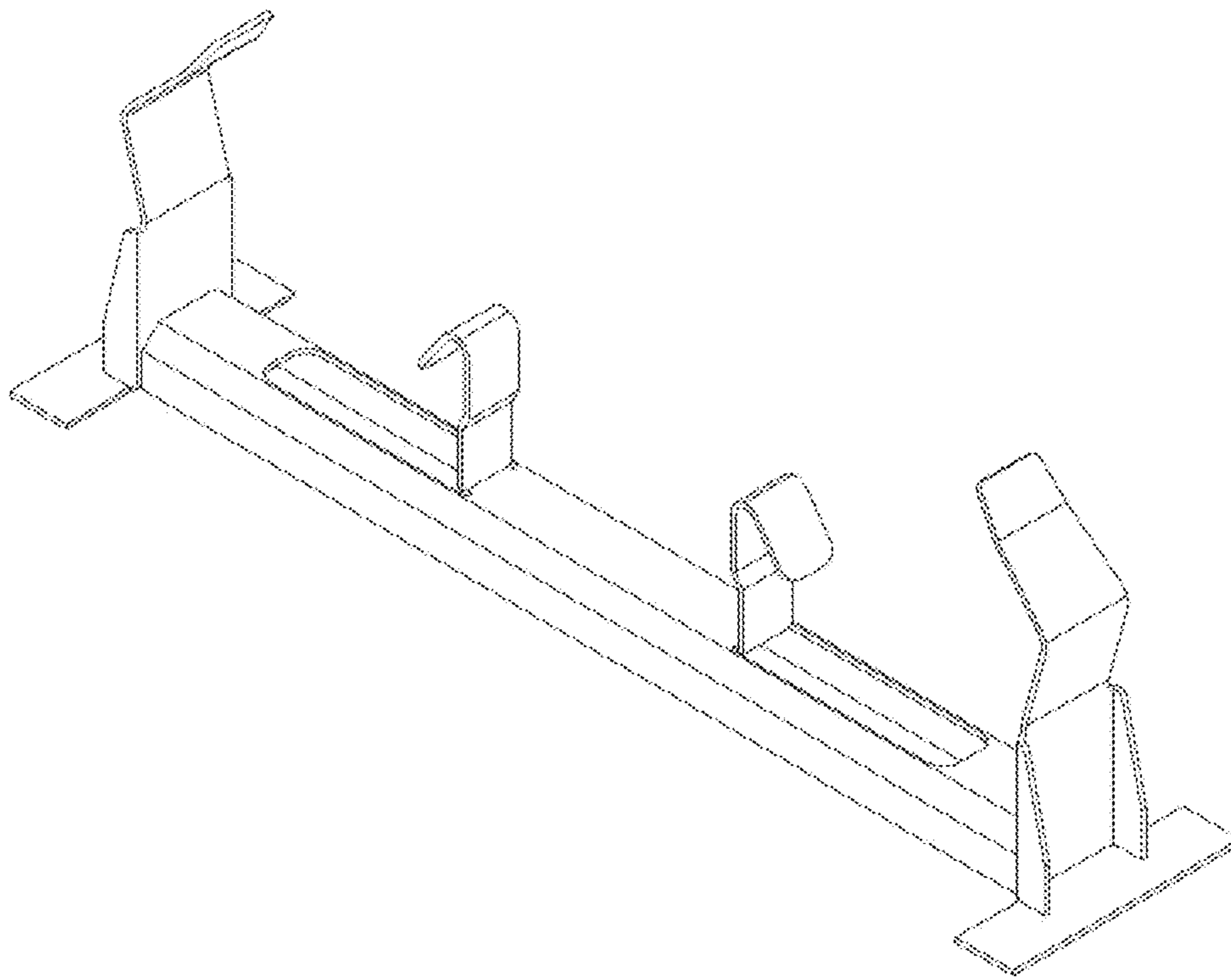


Fig. 1

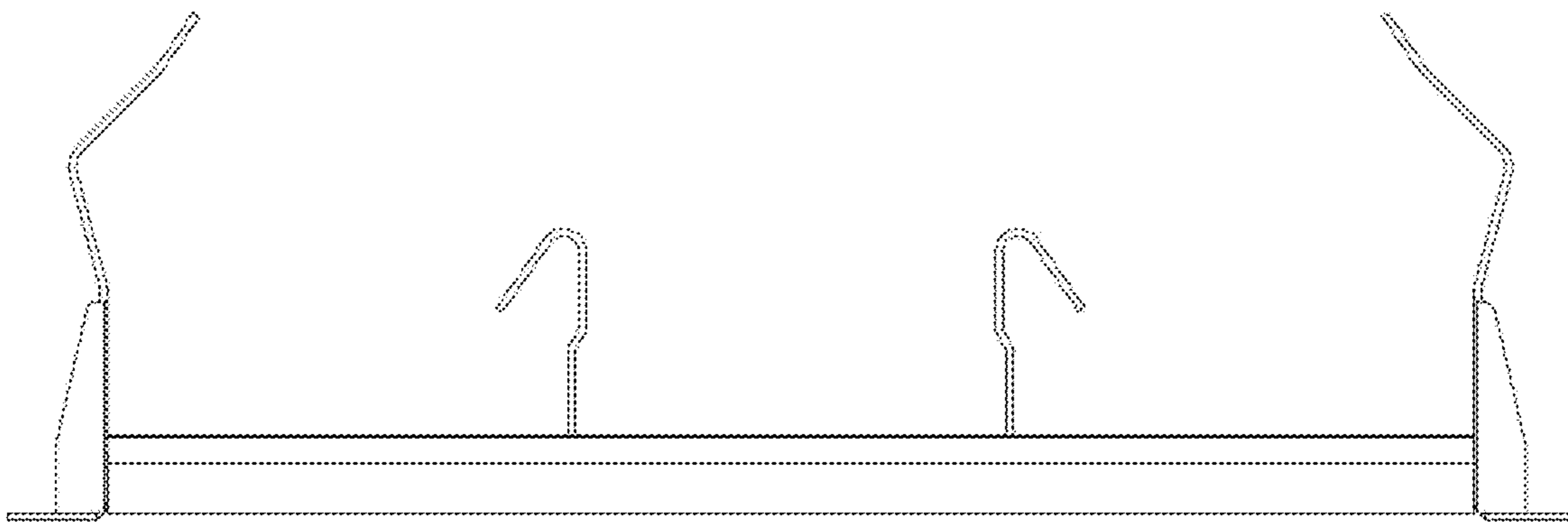


Fig. 2

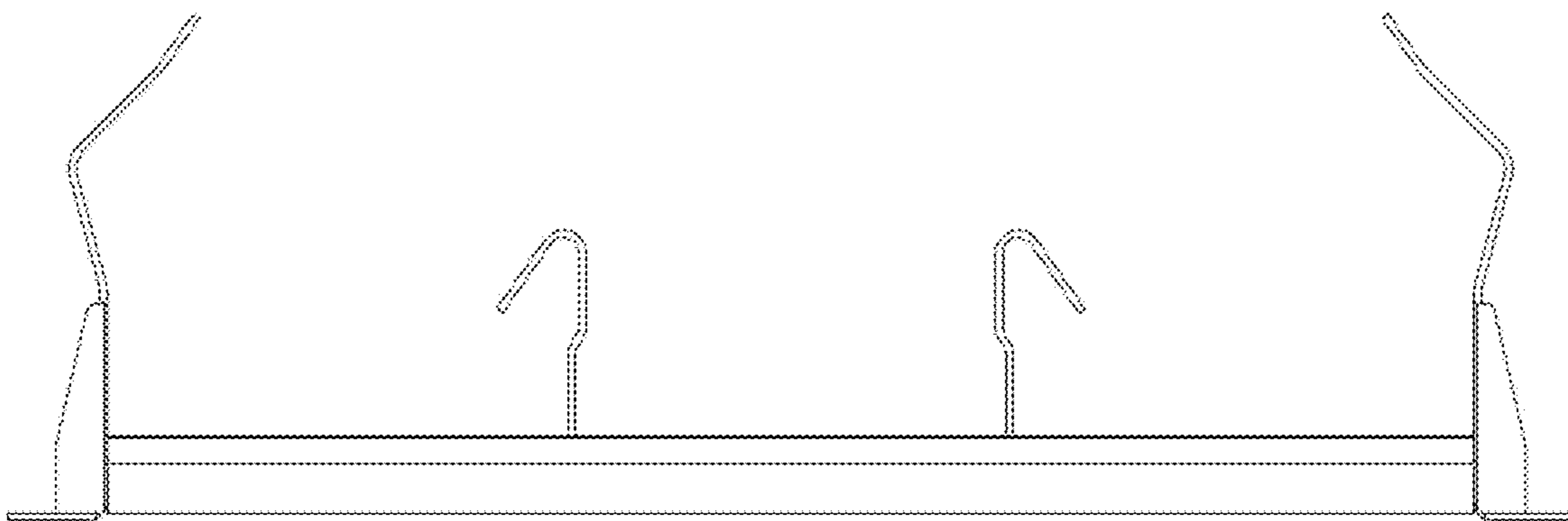


Fig. 3

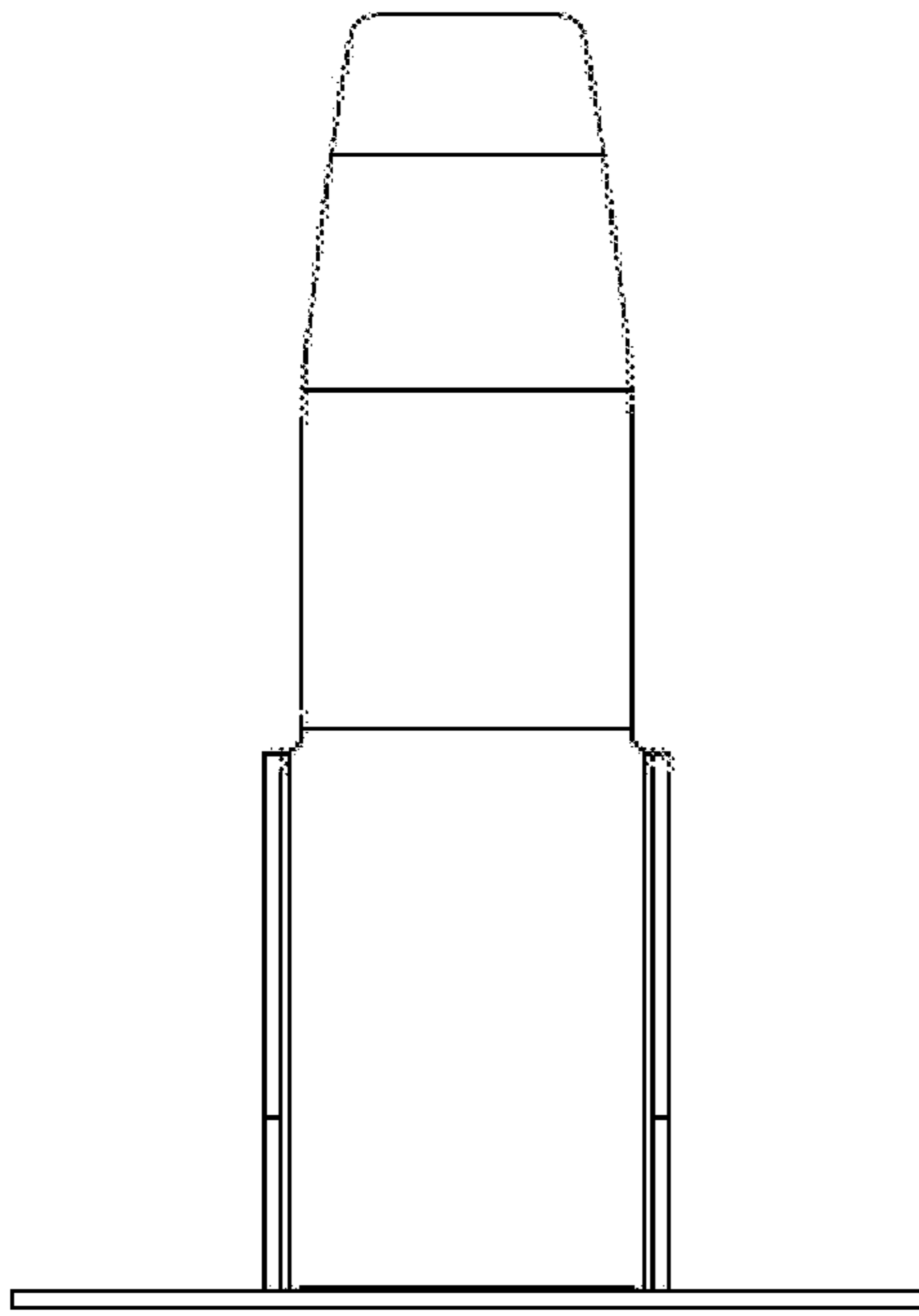


Fig. 4

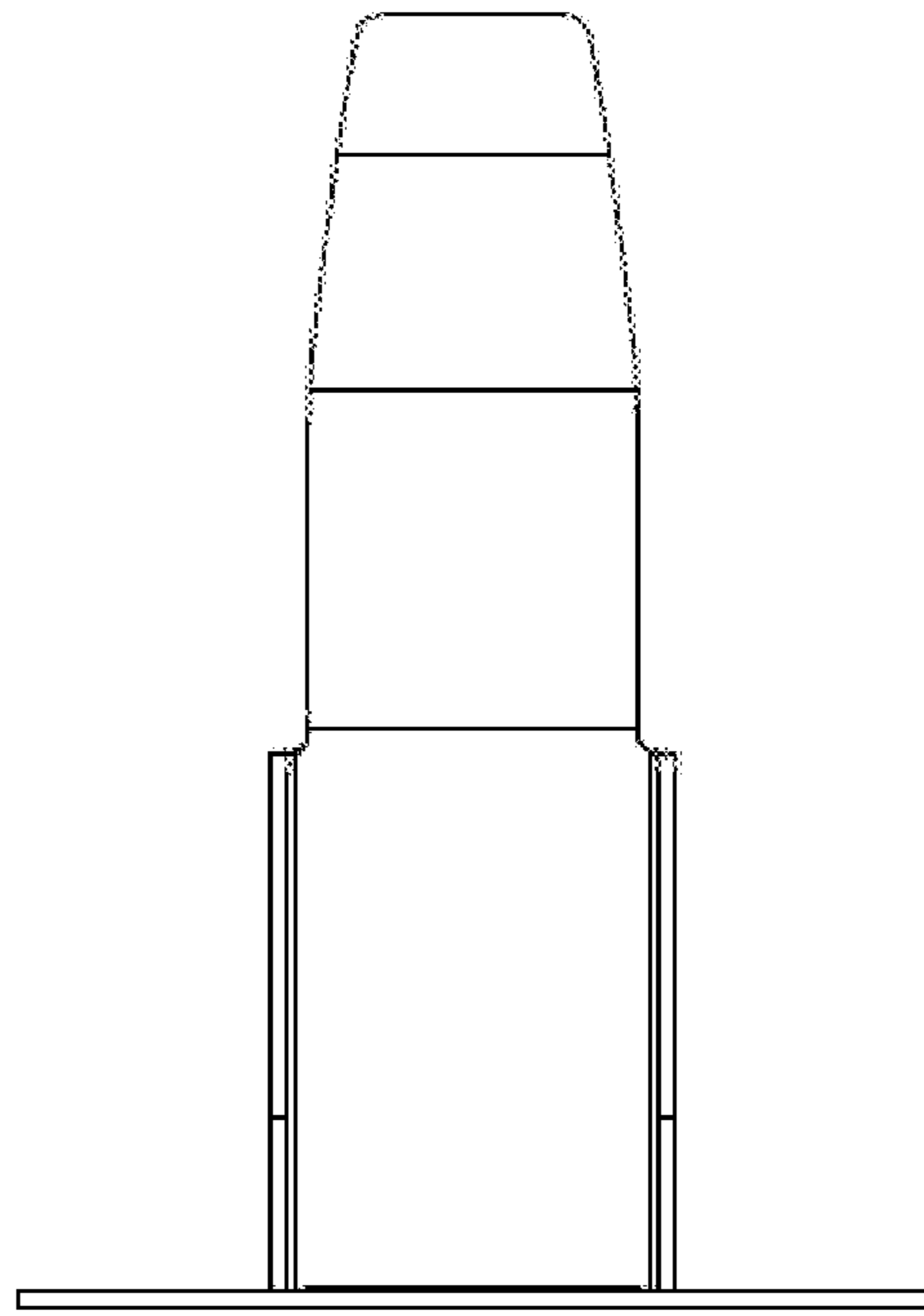


Fig. 5

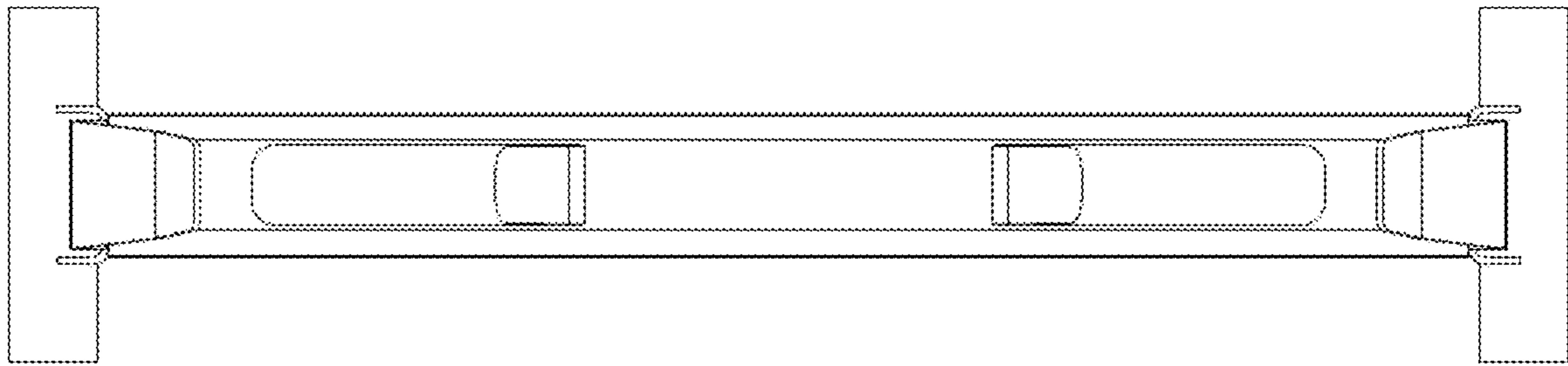


Fig. 6

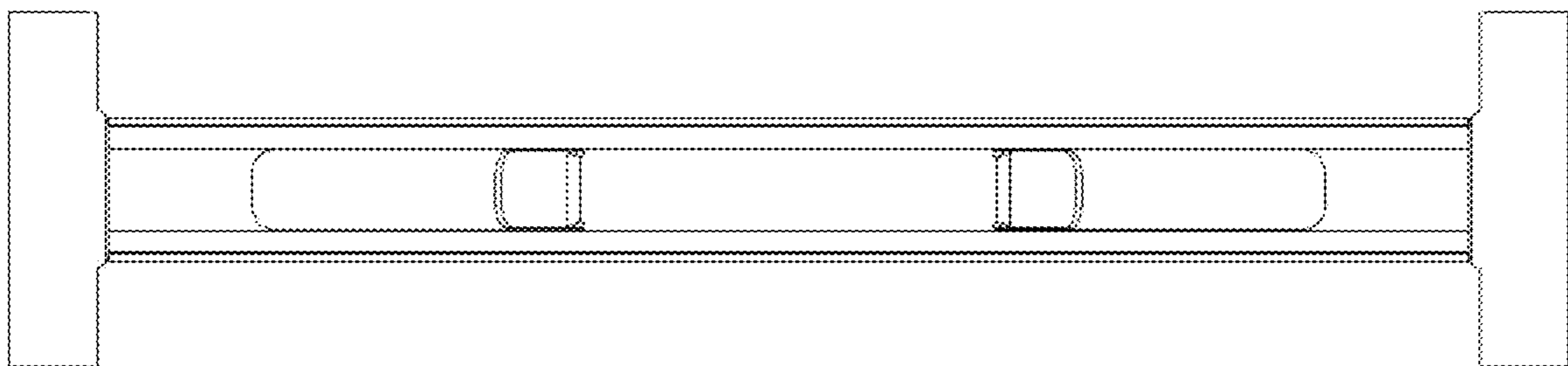


Fig. 7