US00D813809S

(12) United States Design Patent

Beer et al.

(10) Patent No.: US D813,809 S
(45) Date of Patent: ** Mar. 27, 2018

(54) **TRANSFORMER**

(71) Applicant: **Siemens Aktiengesellschaft**, München (DE)

(72) Inventors: **Andreas Beer**, Grasbrunn (DE); **Grzegorz Dudkiewicz**, München (DE); **Florian Lohse**, München (DE)

(73) Assignee: **SIEMENS AKTIENGESELLSCHAFT**, München (DE)

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

(21) Appl. No.: **29/581,771**

(22) Filed: **Oct. 21, 2016**

(30) **Foreign Application Priority Data**

Apr. 22, 2016 (EM) 001448708-0001

(51) **LOC (11) Cl.** **13-02**

(52) **U.S. Cl.**
USPC **D13/110**

(58) **Field of Classification Search**
USPC D13/101–110, 116, 118, 123, 133–135, D13/146–151, 153–156, 159, 161, 173, D13/184, 199; D14/356, 432
CPC H01F 19/04; H01F 27/00; H02M 7/00; H02M 7/02; H02M 7/04; H02M 7/06; H02M 3/28; H02M 3/325; H02M 3/335; H02M 3/33523; H02M 3/3376; H02M 3/3378; H02M 7/10; Y10T 29/49071; Y10T 307/406
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

1,720,413 A * 7/1929 Greenwood H01H 33/66 200/289
4,005,297 A * 1/1977 Cleaveland F28D 15/02 165/104.26
4,692,577 A * 9/1987 Swanson ..... H01H 39/006 200/82 B
D567,755 S * 4/2008 Heinzig D13/110
D567,757 S * 4/2008 Hammer D13/110
8,278,582 B2 * 10/2012 Tu H01H 33/6606 200/289
9,384,923 B1 * 7/2016 Matuszak H01H 9/52
9,767,978 B1 * 9/2017 Brandt H01H 71/0235
9,793,701 B2 * 10/2017 Springborn H01C 7/12
2003/0006334 A1 * 1/2003 Hoffmann H01F 41/02 242/437
2009/0255905 A1 * 10/2009 Lee H01H 33/6606 218/139

(Continued)

OTHER PUBLICATIONS

Ung Dung Cau Tao, posted at Youtube.com, posted on Sep. 13, 2013. online, site visited Oct. 24, 2017. Available from Internet: https://www.youtube.com/watch?v=tNyZ55tVKS0.*

(Continued)

Primary Examiner — Mary Ann Calabrese
Assistant Examiner — Catherine Ho
(74) *Attorney, Agent, or Firm* — Henry M. Feiereisen

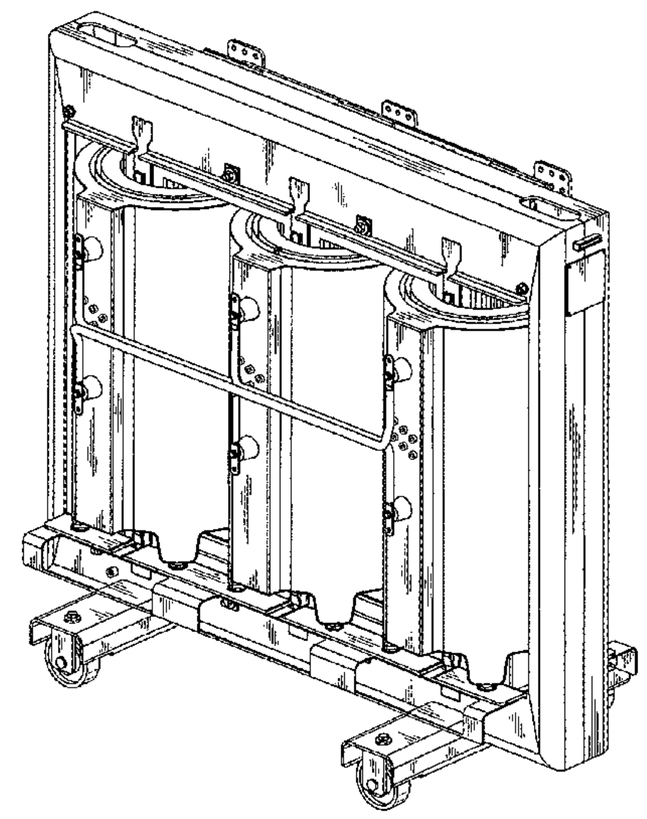
(57) **CLAIM**

The ornamental design for the transformer, as shown and described.

DESCRIPTION

FIG. **1** is a front elevational view of a transformer showing our new design;
FIG. **2** is a rear elevational view thereof;
FIG. **3** is a top elevational view thereof;
FIG. **4** is a bottom elevational view thereof;
FIG. **5** is a right side elevational view thereof;
FIG. **6** is a left side elevational view thereof; and,
FIG. **7** is a front right side perspective view thereof.

1 Claim, 7 Drawing Sheets



(56) **References Cited**

U.S. PATENT DOCUMENTS

2015/0109087 A1* 4/2015 Golner H01F 27/323
336/198

OTHER PUBLICATIONS

Special Transformers for Industrial Applications, posted at Energy.siemens.com, posted on May 27, 2014. online, site visited Oct. 24, 2017. Available from internet: https://www.energy.siemens.com/hq/en/power-transmission/transformers/special-industry-transformers/.*

Dry Type Transformer, posted at Youtube.com, posted on Jun. 3, 2014. online, site visited Oct. 24, 2017. Available from Internet: https://www.youtube.com/watch?v=0BXs2yO3w44.*

* cited by examiner

FIG. 1

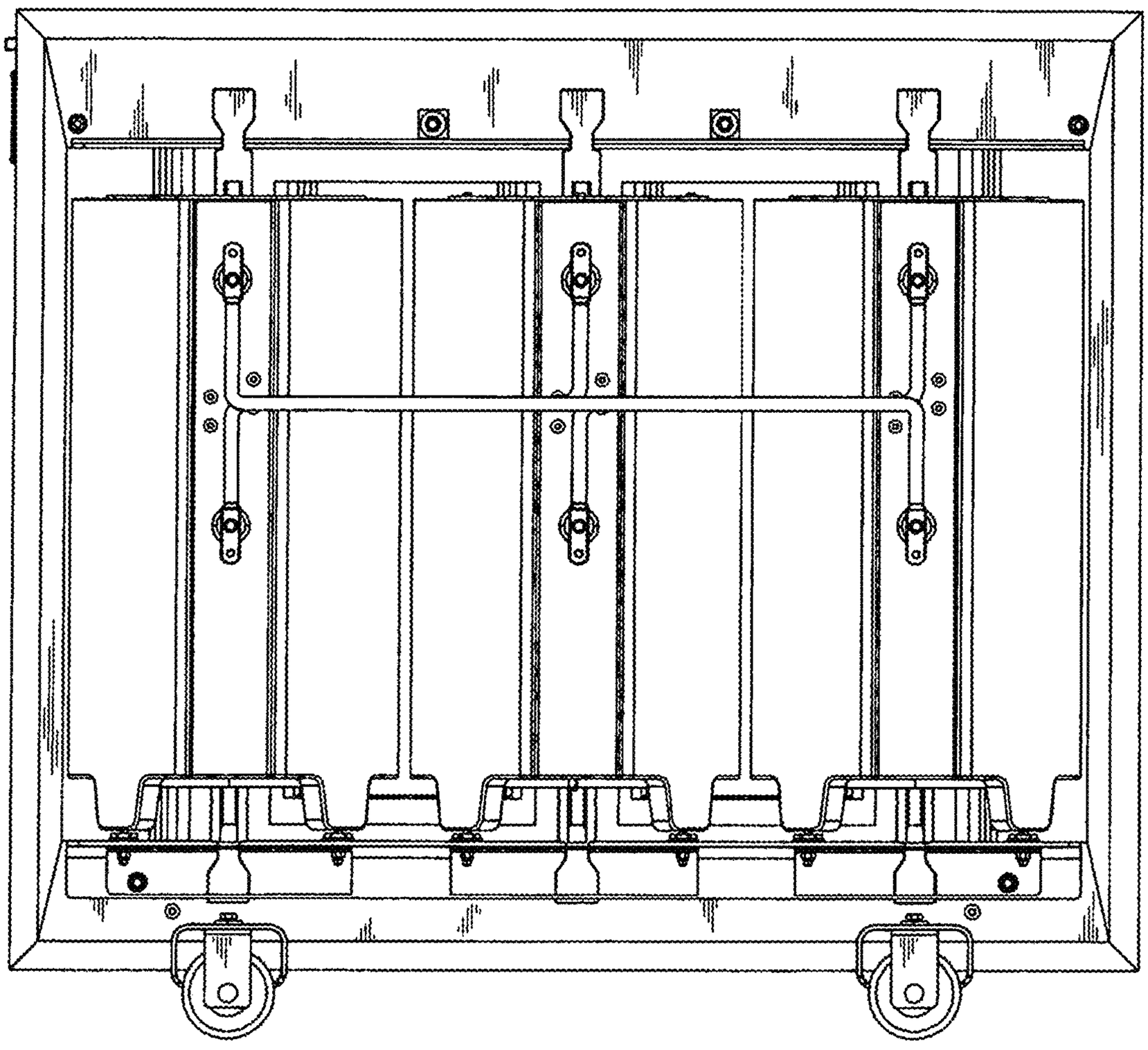


FIG. 2

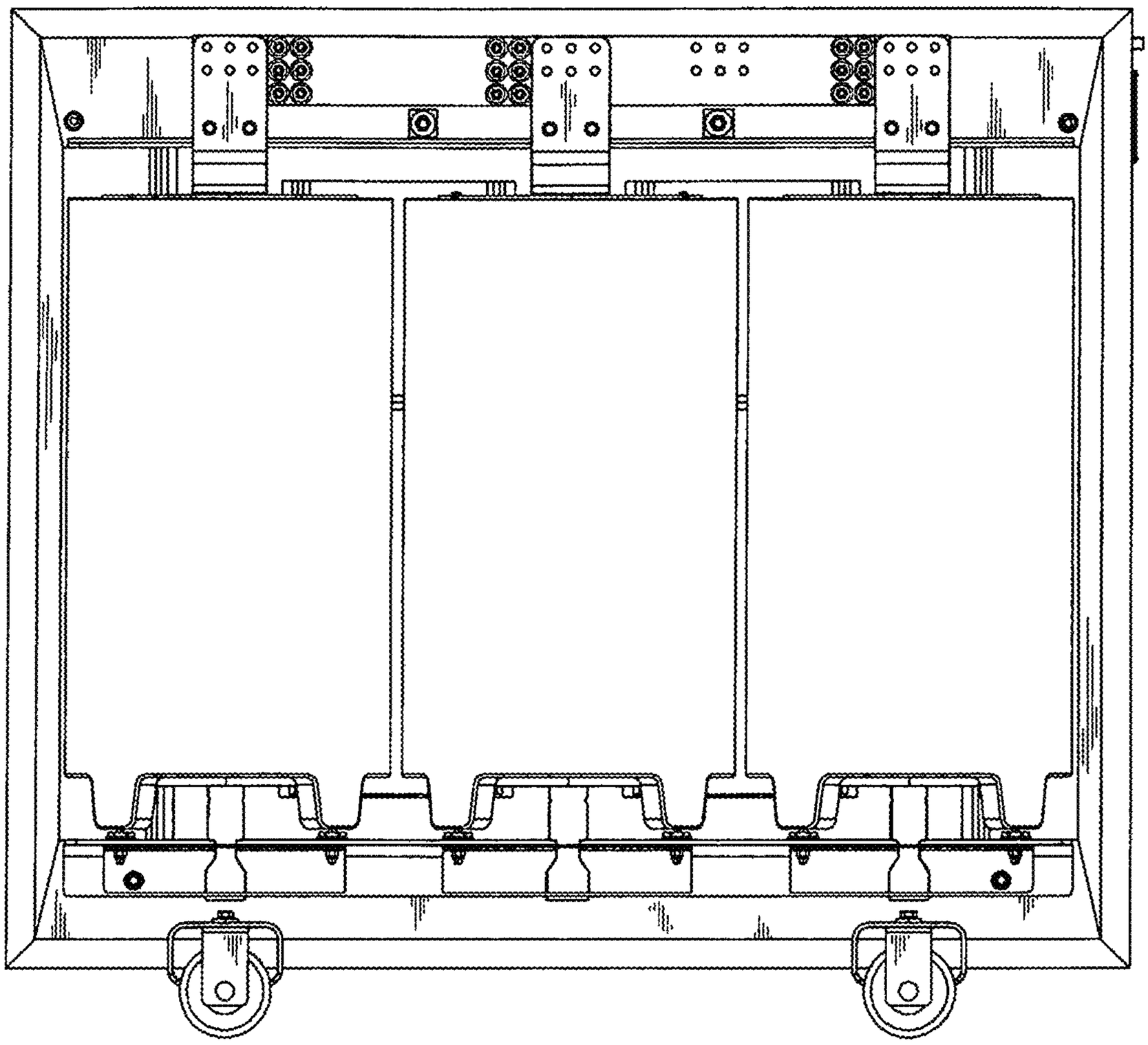


FIG. 3

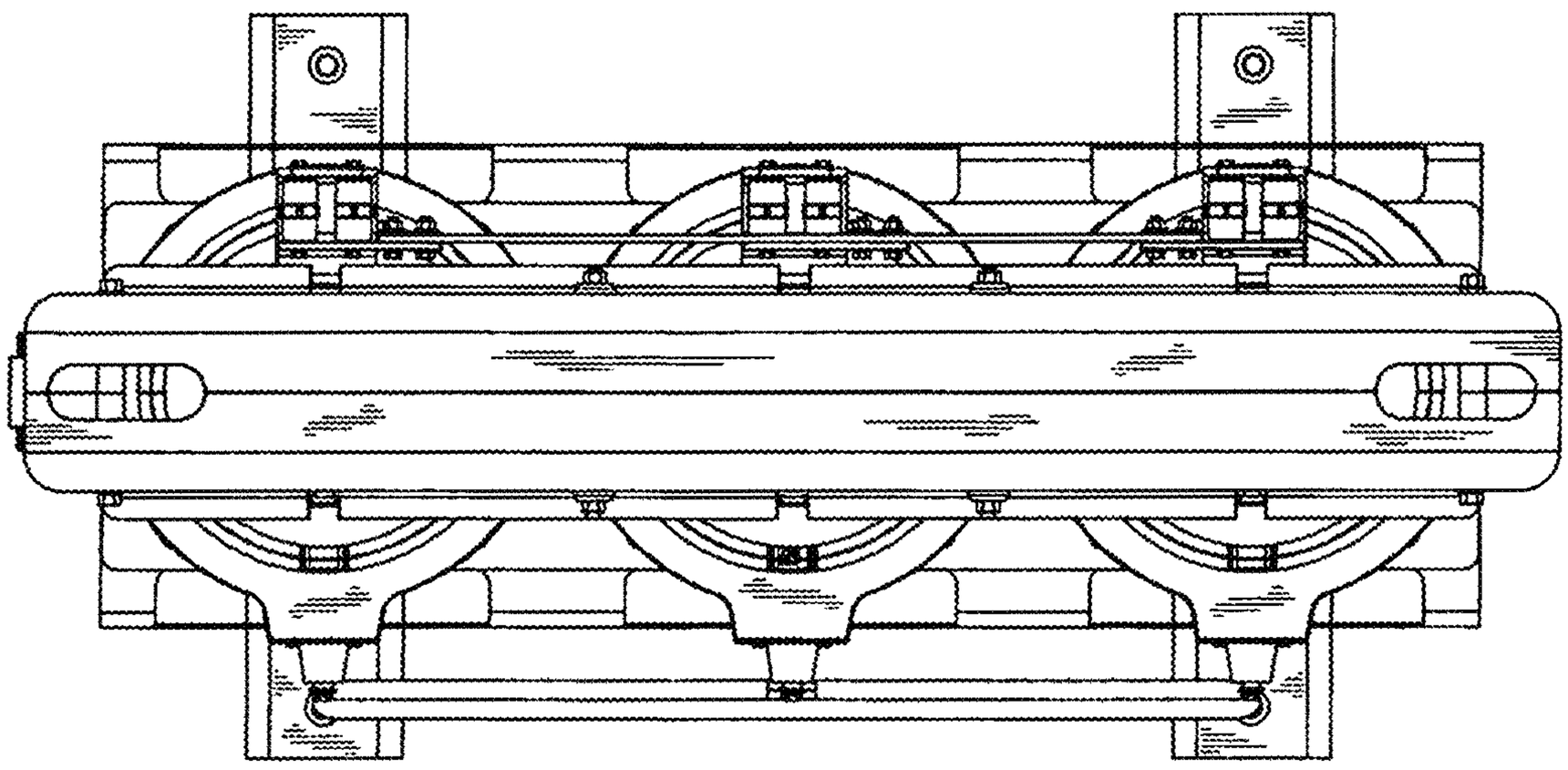


FIG. 4

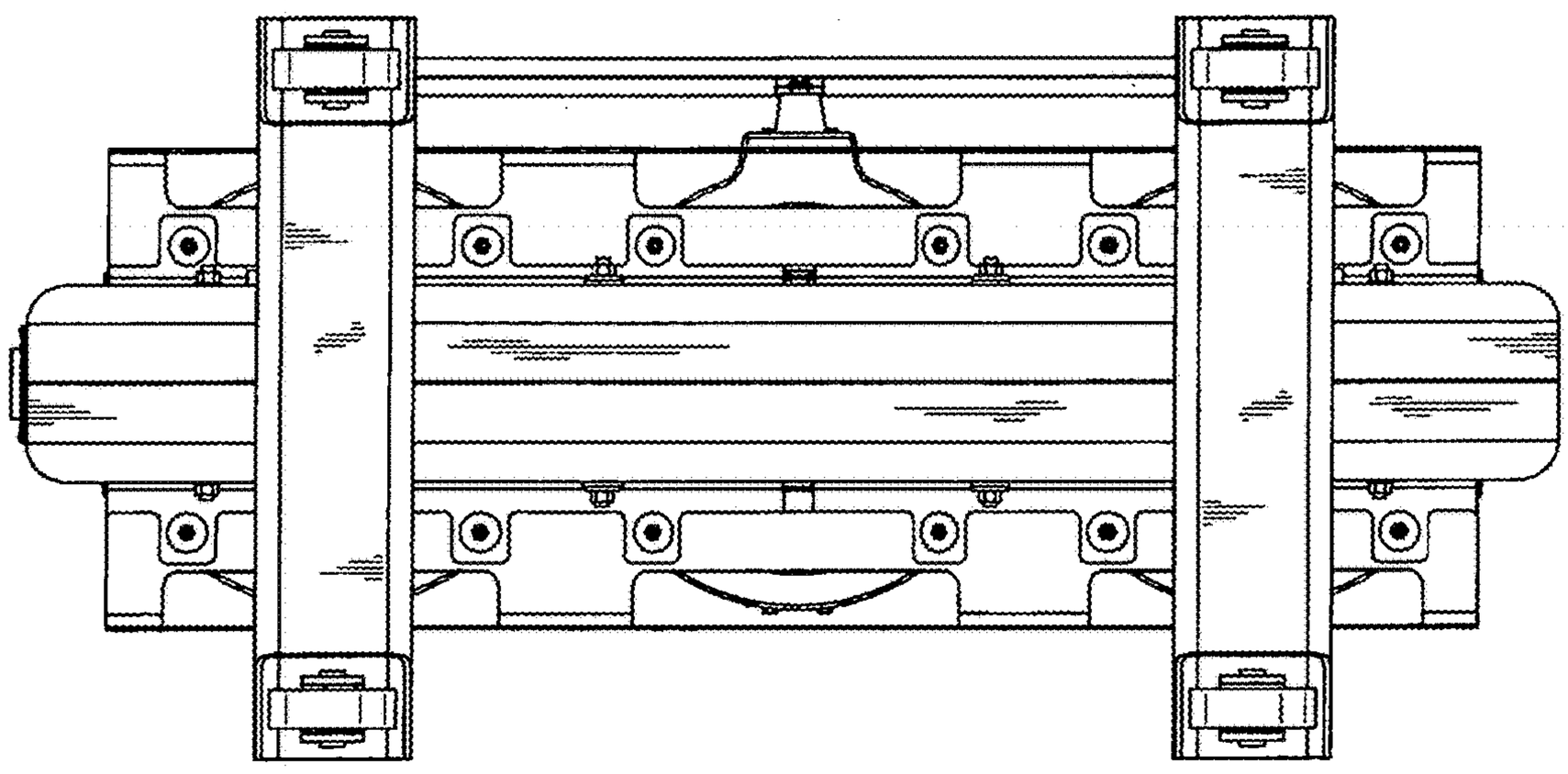


FIG. 5

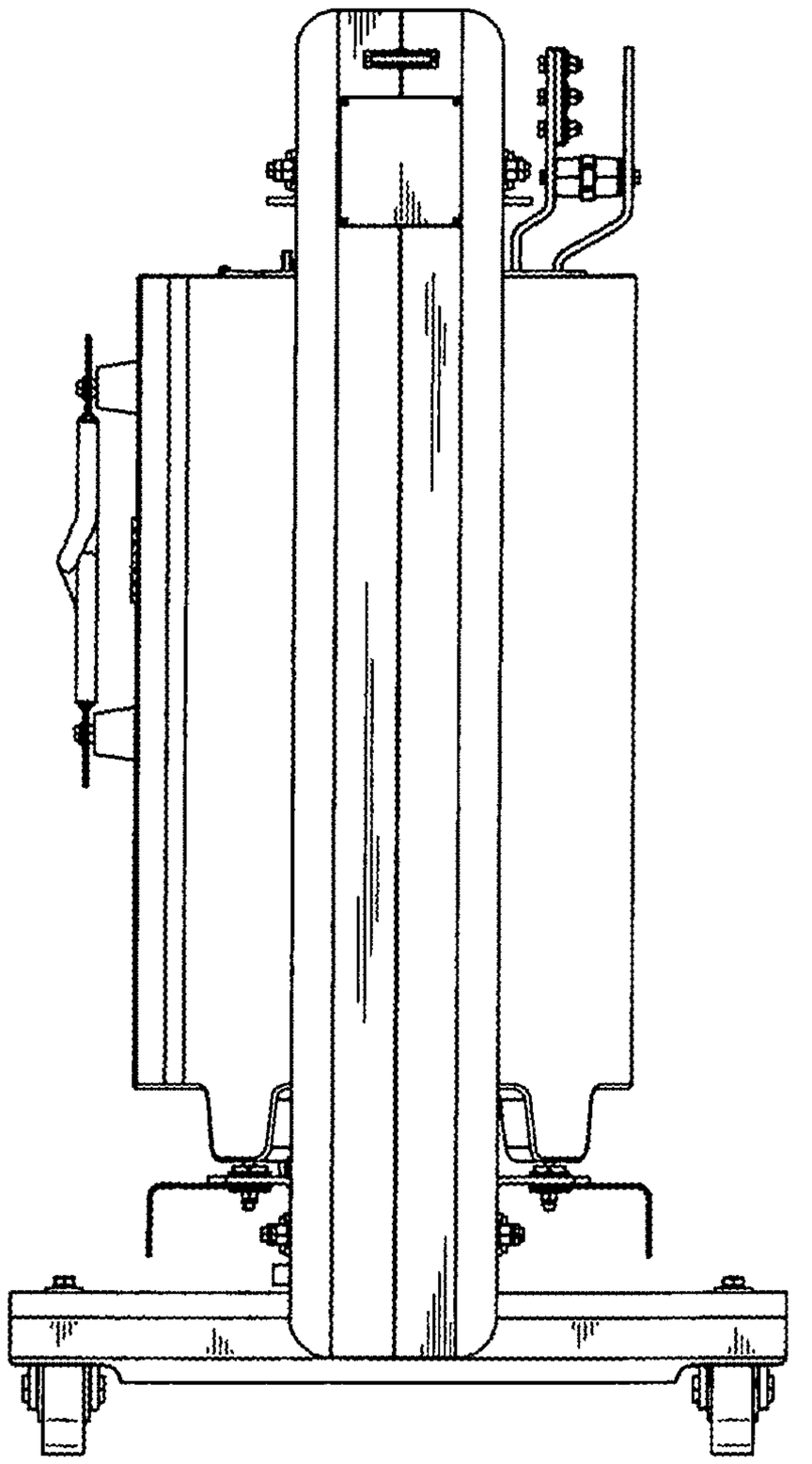


FIG. 6

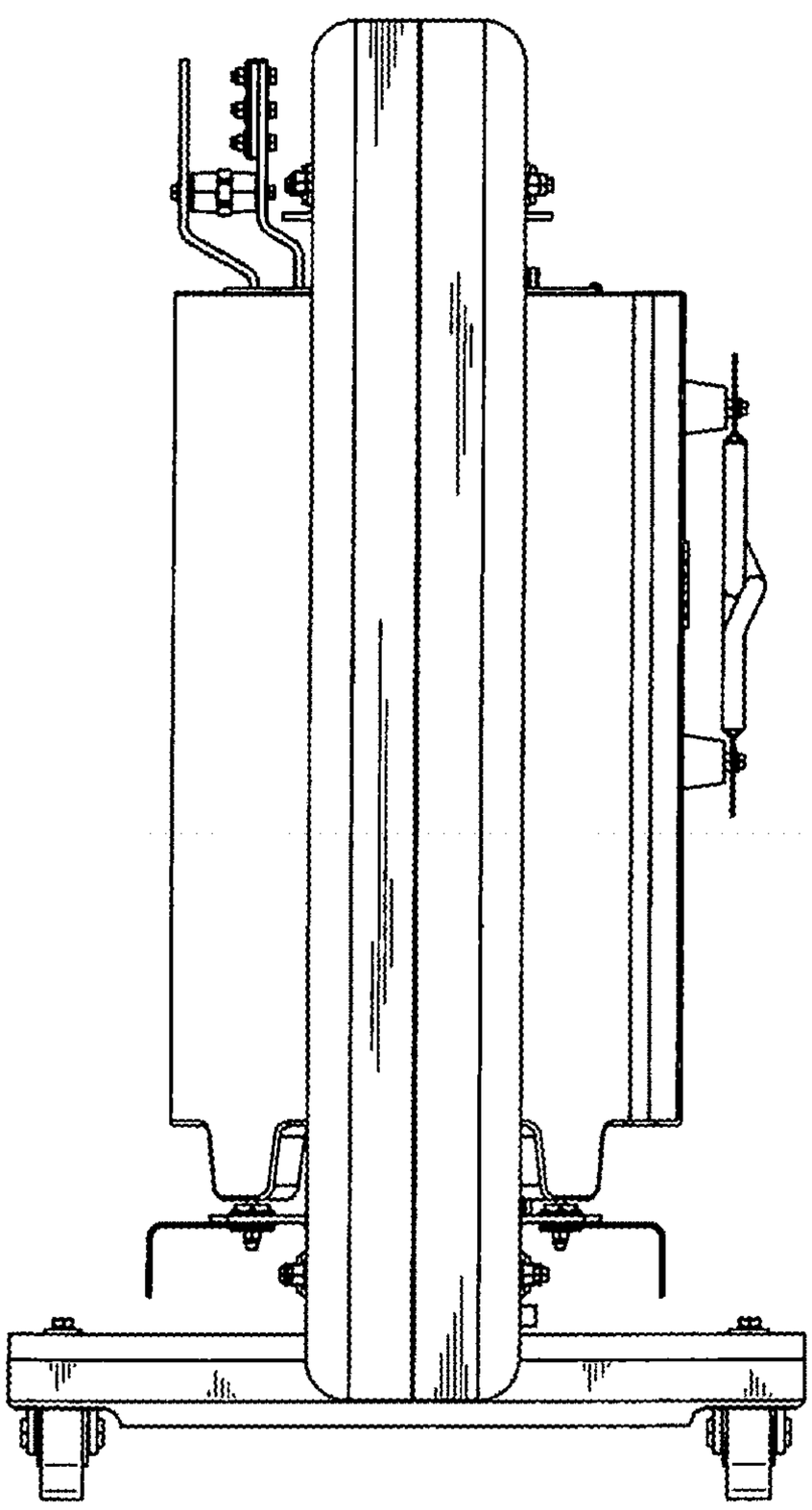


FIG. 7