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(12) **United States Design Patent** (10) **Patent No.:** **US D855,569 S**
Featherstone (45) **Date of Patent:** **** Aug. 6, 2019**

- (54) **EDGE-WOUND RESISTOR**
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- (72) Inventor: **Daniel Featherstone**, Cedarburg, WI (US)
- (73) Assignee: **Vishay Dale Electronics, LLC**, Columbus, NE (US)
- (**) Term: **15 Years**
- (21) Appl. No.: **29/567,803**
- (22) Filed: **Jun. 13, 2016**

Related U.S. Application Data

- (63) Continuation of application No. 29/491,946, filed on May 27, 2014, now Pat. No. Des. 758,970.
- (51) **LOC (12) Cl.** **13-03**
- (52) **U.S. Cl.**
USPC **D13/125**
- (58) **Field of Classification Search**
USPC D13/117, 123-125, 184, 199; 257/360; 338/267, 270, 278, 296, 334; 439/817
CPC . H01C 1/084; H01C 3/00; H01C 3/06; H01C 3/12; H01C 3/14; H01C 1/01; H01C 1/14; H01C 1/18; H01C 3/20; H01C 10/00; H01C 17/04; G05D 3/10; H01R 13/24; H01R 13/2421; H01R 13/2435
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

- 1,550,640 A 8/1925 Whittingham
- 1,550,641 A * 8/1925 Whittingham G05D 3/10
338/278
- 1,662,771 A 3/1928 Whittingham
- 1,687,357 A 10/1928 Whittingham
- 1,706,014 A 3/1929 Whittingham

- 1,728,090 A * 9/1929 Whittingham H01C 1/14
174/138 J
- 1,733,023 A * 10/1929 Johann H01C 10/301
338/161
- 2,032,104 A 9/1933 Umstott
(Continued)

OTHER PUBLICATIONS

Coudoint Edgewound Resistors, Hardware Reference, Edition Jun. 2009 (2 pages).

(Continued)

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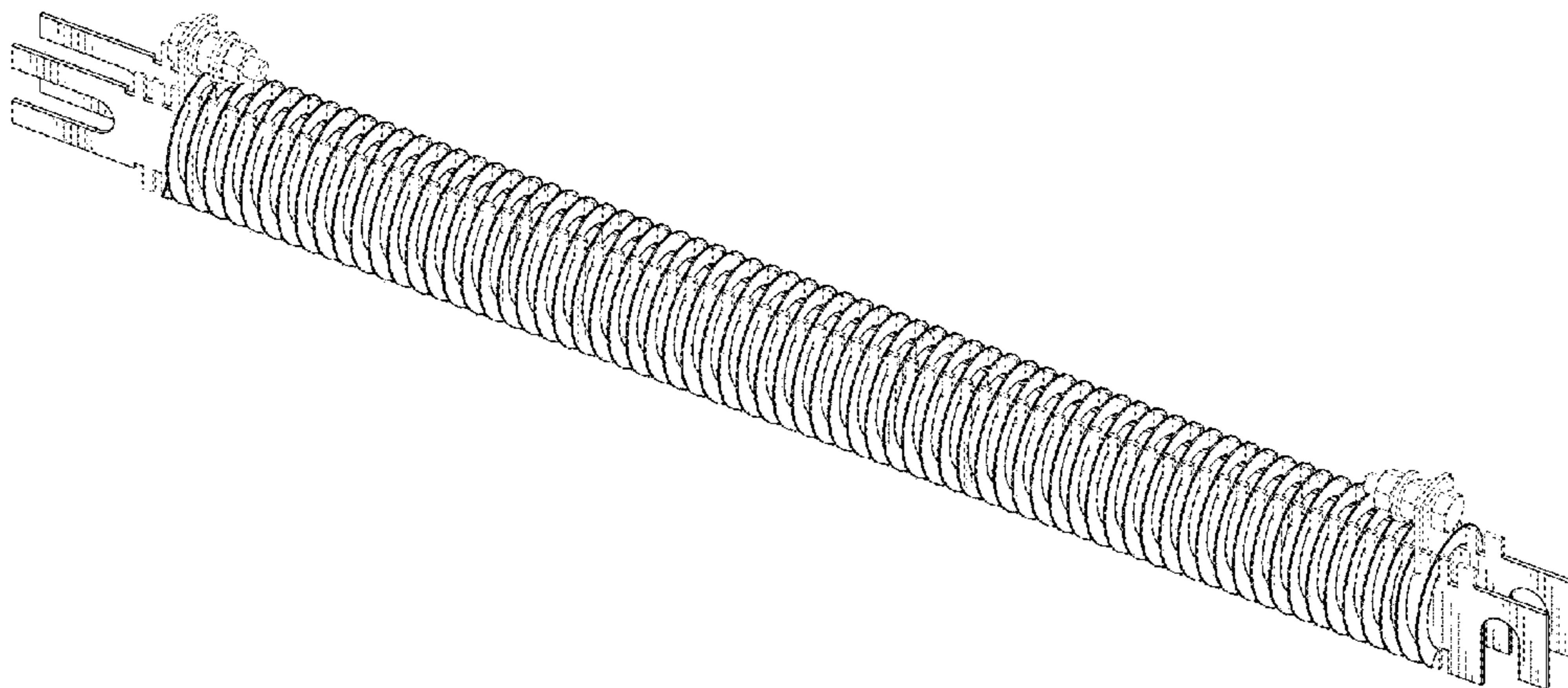
(57) **CLAIM**

The ornamental design for an edge-wound resistor, as shown and described.

DESCRIPTION

FIG. 1 is a top second end first side perspective view of an embodiment of an edge-wound resistor showing my new design;
 FIG. 2 is a first end view of the edge-wound resistor shown in FIG. 1;
 FIG. 3 is a second end view of the edge-wound resistor shown in FIG. 1;
 FIG. 4 is a first side view of the edge-wound resistor shown in FIG. 1;
 FIG. 5 is a second side view of the edge-wound resistor shown in FIG. 1;
 FIG. 6 is a top view of the edge-wound resistor shown in FIG. 1; and,
 FIG. 7 is a bottom view of the edge-wound resistor shown in FIG. 1.
 All broken lines appearing in the drawings illustrate portions of the edge-wound resistor that form no part of the claimed design.

1 Claim, 3 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

2,050,221 A 8/1936 Frese
 2,061,516 A 11/1936 Frese
 2,275,840 A * 3/1942 Britton H01C 1/012
 338/278
 RE22,313 E * 5/1943 Britton et al. H01C 1/14
 338/278
 2,390,790 A * 12/1945 Immel H01C 3/20
 174/138 J
 2,560,690 A * 7/1951 Griffes H01C 3/20
 174/138 J
 3,218,437 A 11/1965 Laing
 3,887,894 A 6/1975 Rudd et al.
 4,028,793 A 6/1977 Liebler et al.
 4,038,628 A 7/1977 Salemi
 4,230,933 A 10/1980 Glucksman et al.
 4,238,756 A 12/1980 Immel
 4,652,852 A 3/1987 Asai
 5,138,138 A 8/1992 Theilacker et al.
 7,559,806 B2 * 7/2009 Lin H01R 13/2421
 439/289
 8,157,601 B2 * 4/2012 Lin H01R 13/2435
 439/700
 D662,895 S 7/2012 Kimura et al.

8,262,419 B2 * 9/2012 Chen H01R 13/2421
 439/700
 8,373,430 B1 2/2013 Sochor
 8,460,010 B2 6/2013 Kimura et al.
 8,519,727 B2 8/2013 Yamamoto
 8,547,128 B1 10/2013 Sochor
 8,764,458 B1 7/2014 Rathi et al.
 D711,326 S 8/2014 Shibutani
 9,124,013 B2 9/2015 Frushhour et al.
 D758,970 S * 6/2016 Featherstone D13/125
 D769,749 S * 10/2016 Teranishi D10/78
 2010/0267291 A1 10/2010 Chabineau-Lovgren et al.
 2011/0171839 A1 7/2011 Yang et al.
 2012/0129408 A1 5/2012 Kimura et al.
 2012/0214356 A1 8/2012 Hasegawa
 2015/0348683 A1 * 12/2015 Featherstone H01C 3/18
 338/301

OTHER PUBLICATIONS

Vishay EDG Series Edgewound Power Resistor, Revision: Dec. 11, 2012 (2 pages).
 Sungjin Edge Wound Resistor, dated Jul. 28, 2013, [online], [accessed Sep. 4, 2015]. Available from Internet, <URL: <http://sjohm.co.kr/products/product01.php>>.

* cited by examiner

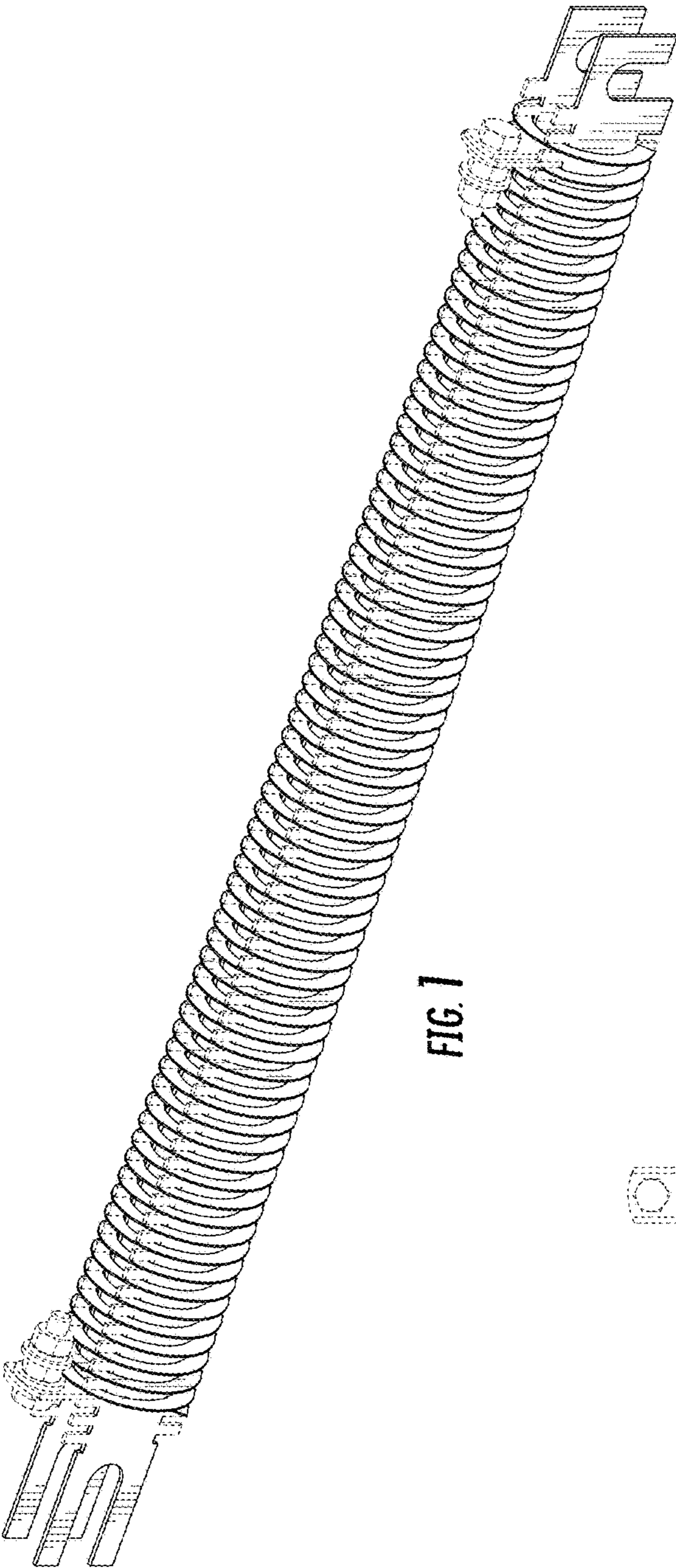


FIG. 1

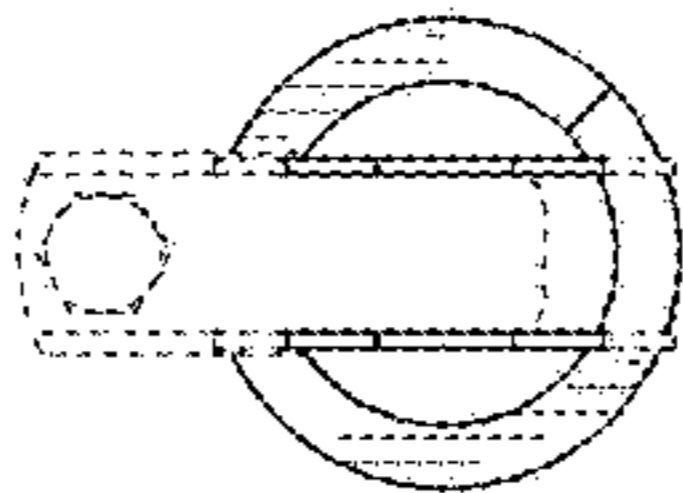


FIG. 2

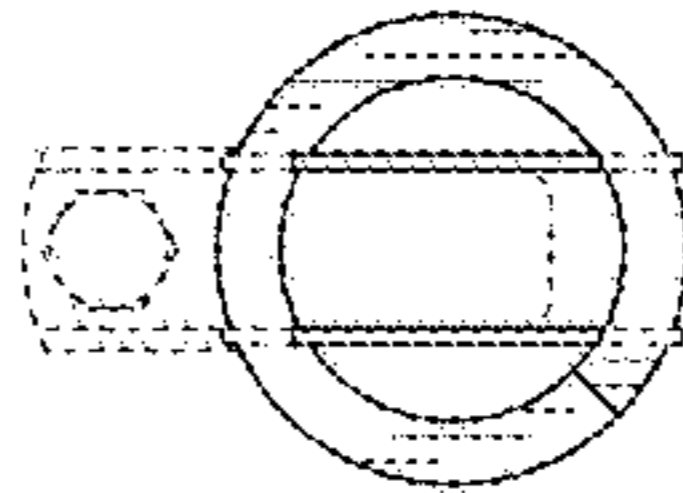


FIG. 3

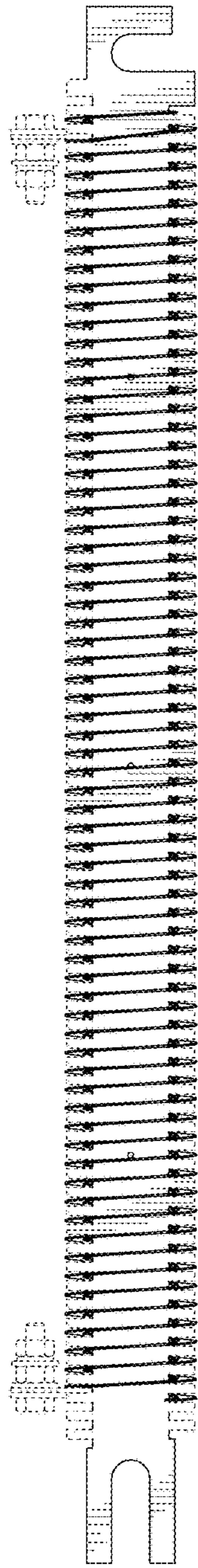


FIG. 4

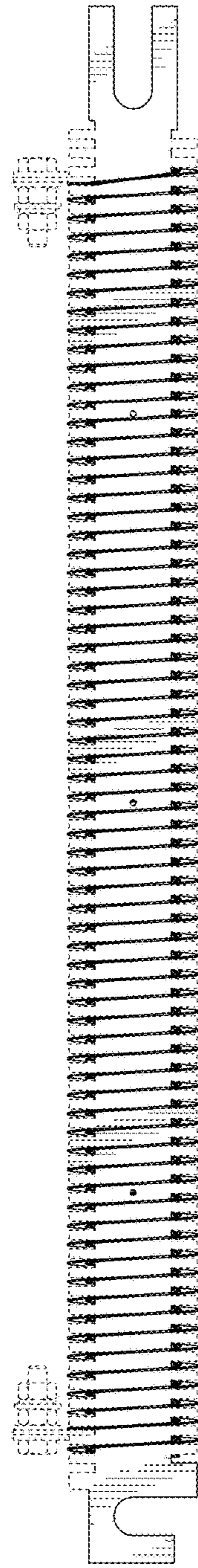


FIG. 5

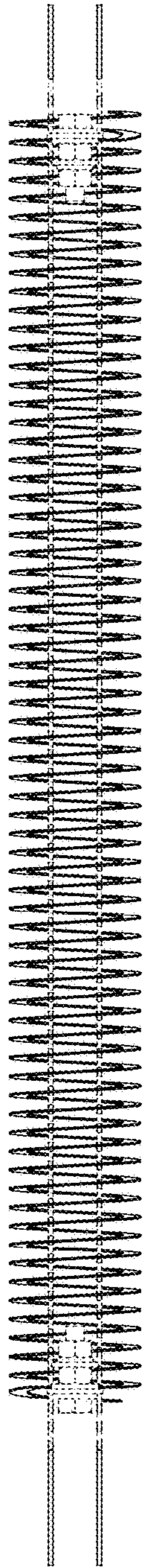


FIG. 6

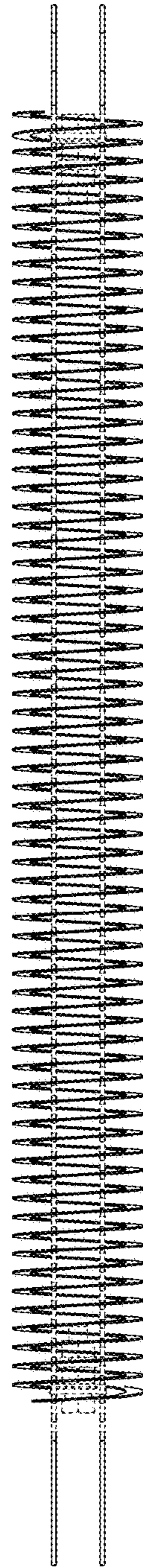


FIG. 7