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

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(54) **SKELETAL BONE FIXATION ROD**

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

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(52) **U.S. Cl.**
USPC **D24/171**

(58) **Field of Classification Search**
USPC D24/171, 170, 231, 214, 215, 140, 142, D24/178, 181, 190, 192, 191, 146, 147, 149, D24/152, 154, 155; D28/10, 35, 37, 39, 43, D28/99; D8/16; D32/49; 83/873, 875, 86, 83/120; 601/134, 135; 606/53, 54, 57, 60, 606/246, 248, 250, 253, 254, 256, 258, 259, 606/260

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D405,536	S *	2/1999	Haynes	.....	D24/214
6,123,708	A *	9/2000	Kilpela et al.	.....	606/62
6,355,039	B1	3/2002	Troussel et al.		
6,379,358	B1	4/2002	Kuo		
7,678,139	B2	3/2010	Garamszegi et al.		
7,942,876	B2 *	5/2011	Hack	.....	606/64
8,075,592	B2	12/2011	Landry et al.		
8,226,659	B2 *	7/2012	Rabiner et al.	.....	606/92
8,430,879	B2 *	4/2013	Stoneburner et al.	.....	606/74
8,460,293	B2 *	6/2013	Coati et al.	.....	606/62
D696,414	S *	12/2013	Tabe et al.	.....	D24/215

8,628,535	B2 *	1/2014	Mitchell et al.	.....	606/86 A
8,641,766	B2 *	2/2014	Donner et al.	.....	623/17.16
2006/0064092	A1	3/2006	Howland		
2006/0184171	A1	8/2006	Biedermann et al.		
2006/0195087	A1 *	8/2006	Sacher et al.	.....	606/61
2006/0229608	A1	10/2006	Foster et al.		
2007/0288008	A1	12/2007	Park		

(Continued)

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(57) **CLAIM**

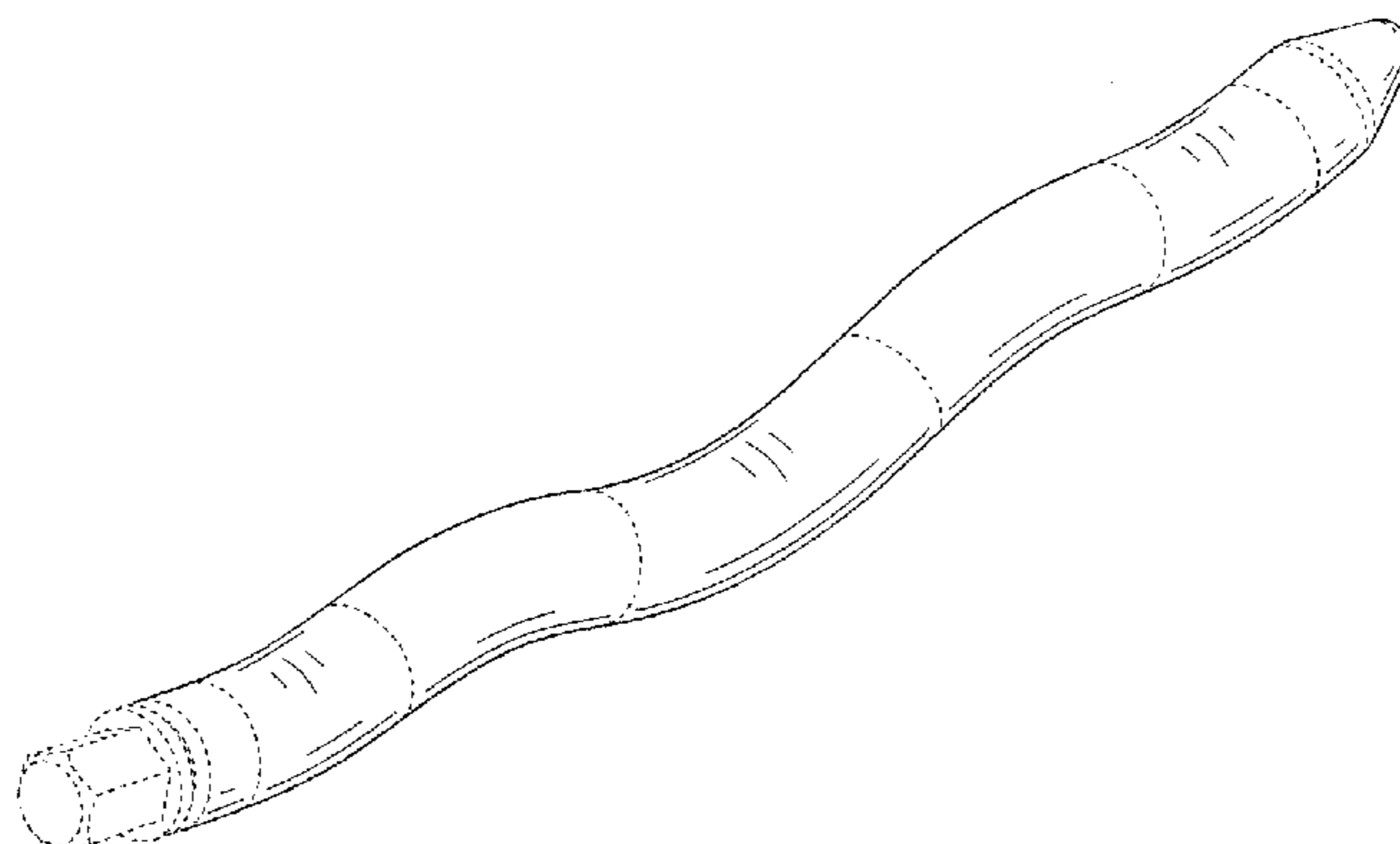
The ornamental design for a skeletal bone fixation rod, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a skeletal bone fixation rod comprising the new design;
 FIG. 2 is a top view thereof;
 FIG. 3 is a right side view thereof, where the left side view is a mirror image thereof;
 FIG. 4 is a front view thereof;
 FIG. 5 is a back (or rear) view thereof;
 FIG. 6 is a bottom view thereof;
 FIG. 7 is a side view of an alternative embodiment of the new design, portions of which are cut away to illustrate indeterminate length, which is the sole difference between it and FIGS. 1-6; and,
 FIG. 8 is a side view of an alternative embodiment of said new design, portions of which are cut away to illustrate indeterminate length, which is the sole difference between it and FIGS. 1-6.

The skeletal bone fixation rod is shown with a symbolic break in its length in FIGS. 7 and 8. The appearance of any portion of the article beyond the break line forms no part of the claimed design. The broken lines in the drawings depict environmental subject matter only and form no part of the claimed design.

1 Claim, 5 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

2009/0240284	A1 *	9/2009	Randol et al.	606/254	2010/0204700	A1 *	8/2010	Falahee	606/80
2009/0248026	A1 *	10/2009	Draper	606/90	2011/0004249	A1	1/2011	Wu et al.	
2010/0111631	A1	5/2010	Trieu et al.		2011/0202095	A1	8/2011	Semler et al.	
2010/0160967	A1 *	6/2010	Capozzoli	606/256	2012/0065687	A1	3/2012	Ballard et al.	
					2012/0130429	A1 *	5/2012	Mitchell et al.	606/259

* cited by examiner

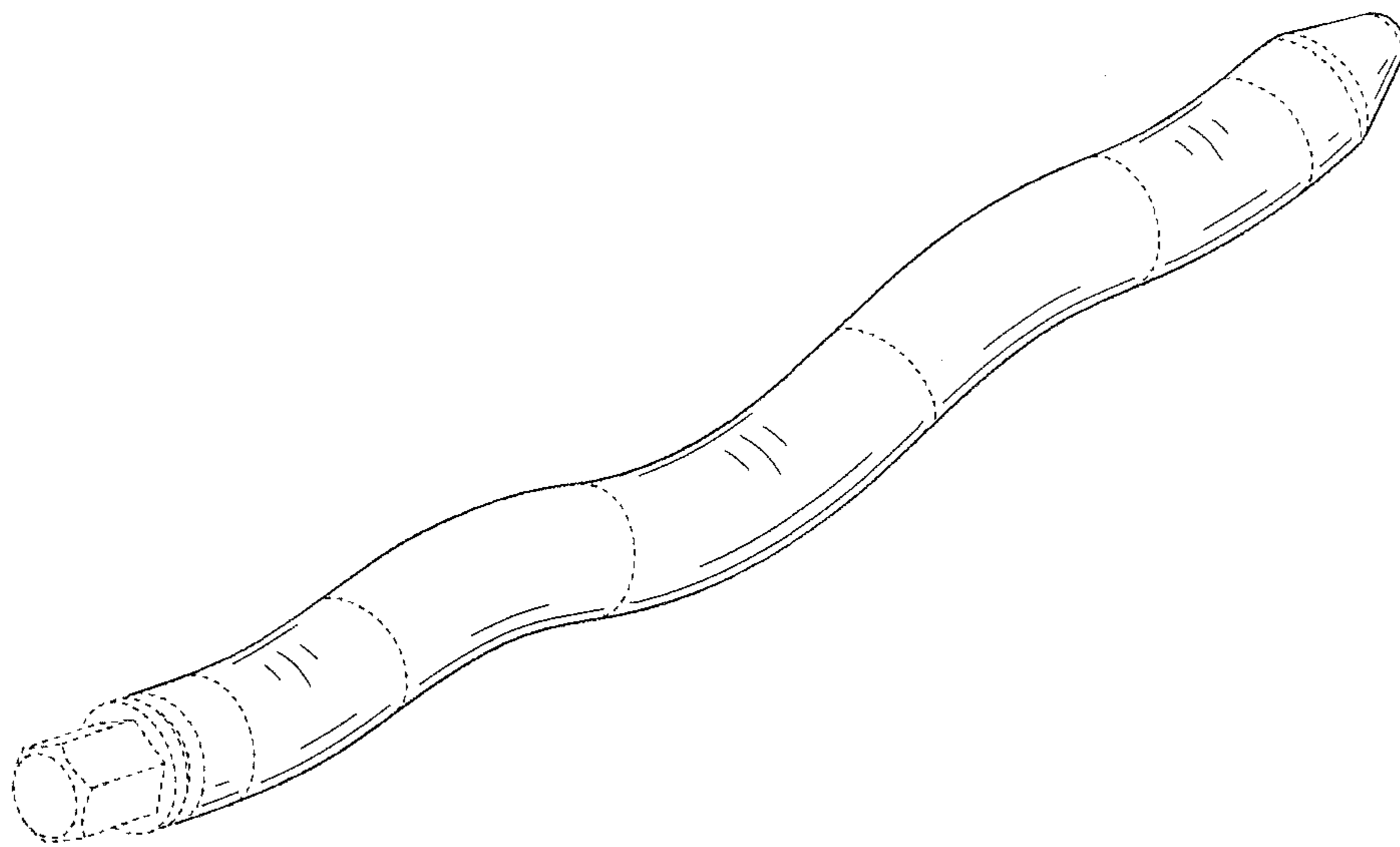


FIG. 1

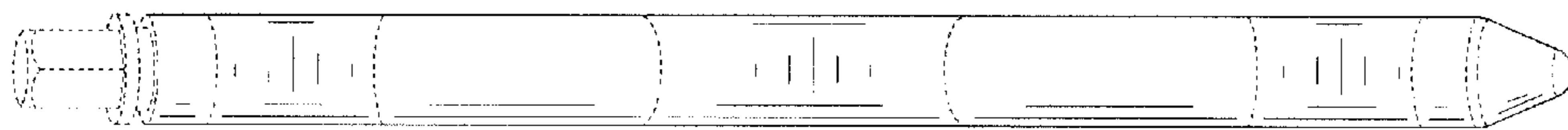


FIG. 2



FIG. 3

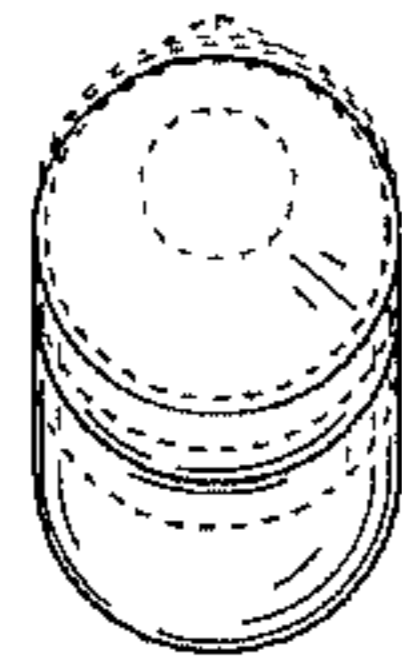


FIG. 4

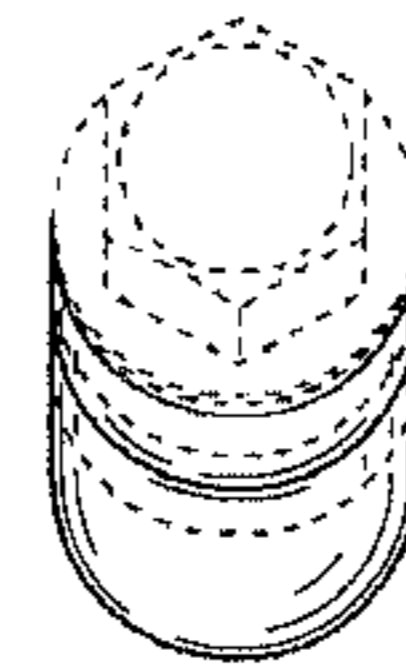


FIG. 5

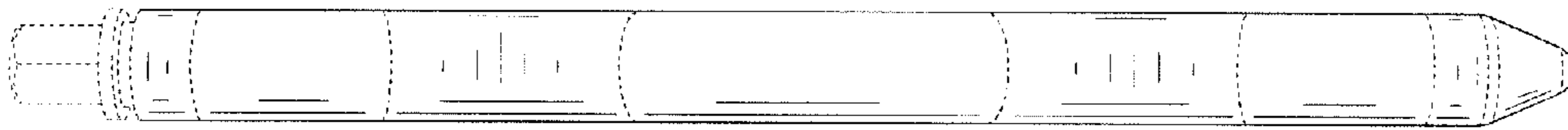


FIG. 6



FIG. 7

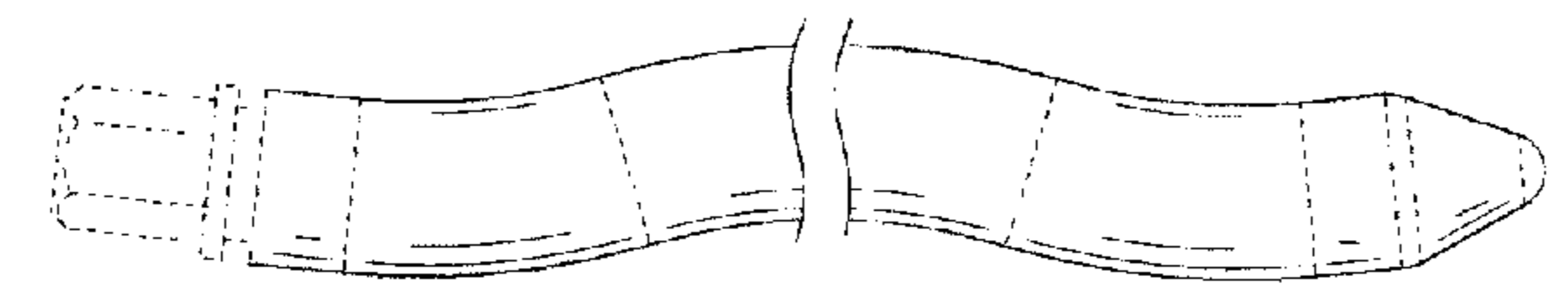


FIG. 8