

US00D639837S

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

(10) **Patent No.:** **US D639,837 S**
(45) **Date of Patent:** **** Jun. 14, 2011**

(54) **MACHINE VISION VEHICLE WHEEL
ALIGNMENT SYSTEM CAMERA SUPPORT
STRUCTURE**

2005/0126021 A1* 6/2005 Robb et al. 33/288
2006/0169414 A1* 8/2006 Hillman et al. 157/1
2007/0068016 A1* 3/2007 Stieff et al. 33/203.18

* cited by examiner

(75) Inventors: **Mark E. Stirnemann**, St. Louis, MO
(US); **Michael T. Stieff**, Wentzville, MO
(US)

Primary Examiner — Patricia Palasik

(74) *Attorney, Agent, or Firm* — Polster, Lieder, Woodruff &
Lucchesi, L.C.

(73) Assignee: **Hunter Engineering Company**,
Bridgeton, MO (US)

(57) **CLAIM**

The ornamental design for a machine vision vehicle wheel alignment system camera support structure, as shown and described.

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

(21) Appl. No.: **29/385,230**

(22) Filed: **Feb. 10, 2011**

DESCRIPTION

(51) **LOC (9) Cl.** **15-99**

(52) **U.S. Cl.** **D15/199**

(58) **Field of Classification Search** D12/178;
D15/199; 33/203.12, 203.18, 288; 105/169,
105/218.1; 157/1; 200/61.25; 295/36.1;
340/442; 356/139.09, 155, 252; 396/428

See application file for complete search history.

FIG. 1 is a perspective view of the machine vision vehicle wheel alignment system camera support structure of the present invention;

FIG. 2 is a front elevation view of the machine vision vehicle wheel alignment system camera support structure of FIG. 1; FIG. 3 is a rear elevation view of the machine vision vehicle wheel alignment system camera support structure of FIG. 1; FIG. 4 is a top plan view of the machine vision vehicle wheel alignment system camera support structure of FIG. 1;

FIG. 5 is a bottom plan view of the machine vision vehicle wheel alignment system camera support structure of FIG. 1; FIG. 6 is a left side elevation view of the machine vision vehicle wheel alignment system camera support structure of FIG. 1; and,

FIG. 7 is a right side elevation view of the machine vision vehicle wheel alignment system camera support structure of FIG. 1.

The broken lines in the drawings depict unclaimed environmental subject matter.

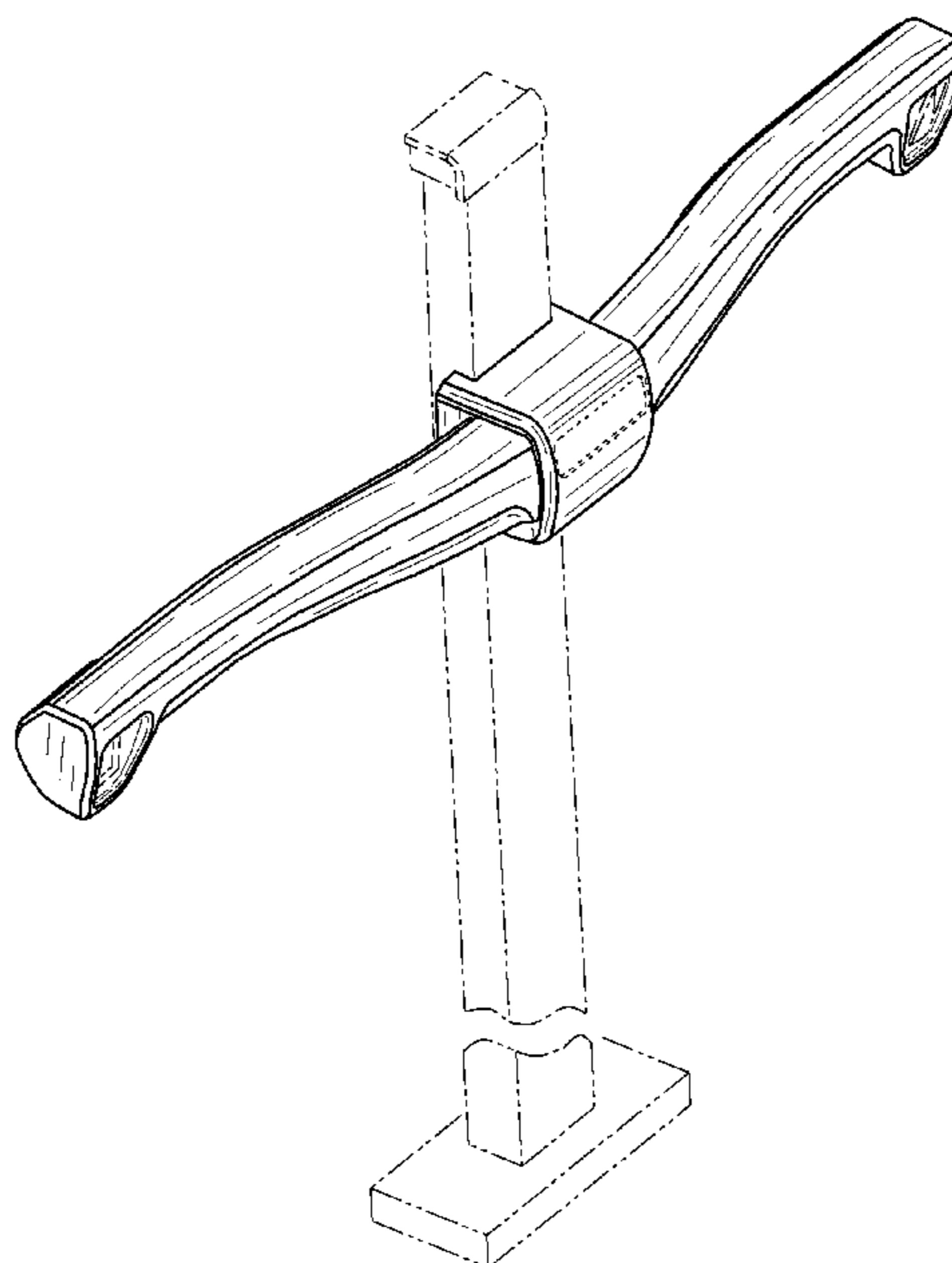
The broken line vertical support structure is shown broken away to indicate no particular length.

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,869,804	A *	3/1975	Friend	.....	33/288
4,165,567	A *	8/1979	Olsson	.....	33/288
4,408,879	A *	10/1983	Ragan	.....	356/155
4,899,457	A *	2/1990	Fergus et al.	.....	33/608
5,150,515	A *	9/1992	Merrill et al.	.....	33/203.12
D345,955	S *	4/1994	Jeshurun et al.	.....	D12/178
5,335,420	A *	8/1994	Kling et al.	.....	33/288
5,685,201	A *	11/1997	Renshaw	.....	74/551.2
D425,463	S *	5/2000	Clarkson	.....	D12/178
D431,803	S *	10/2000	Renshaw	.....	D12/178
6,149,112	A *	11/2000	Thieltges	.....	248/178.1
6,626,117	B1 *	9/2003	Chapman	.....	105/218.1
D497,582	S *	10/2004	James	.....	D12/178
2001/0022655	A1 *	9/2001	Stieff	.....	356/139.09

1 Claim, 3 Drawing Sheets



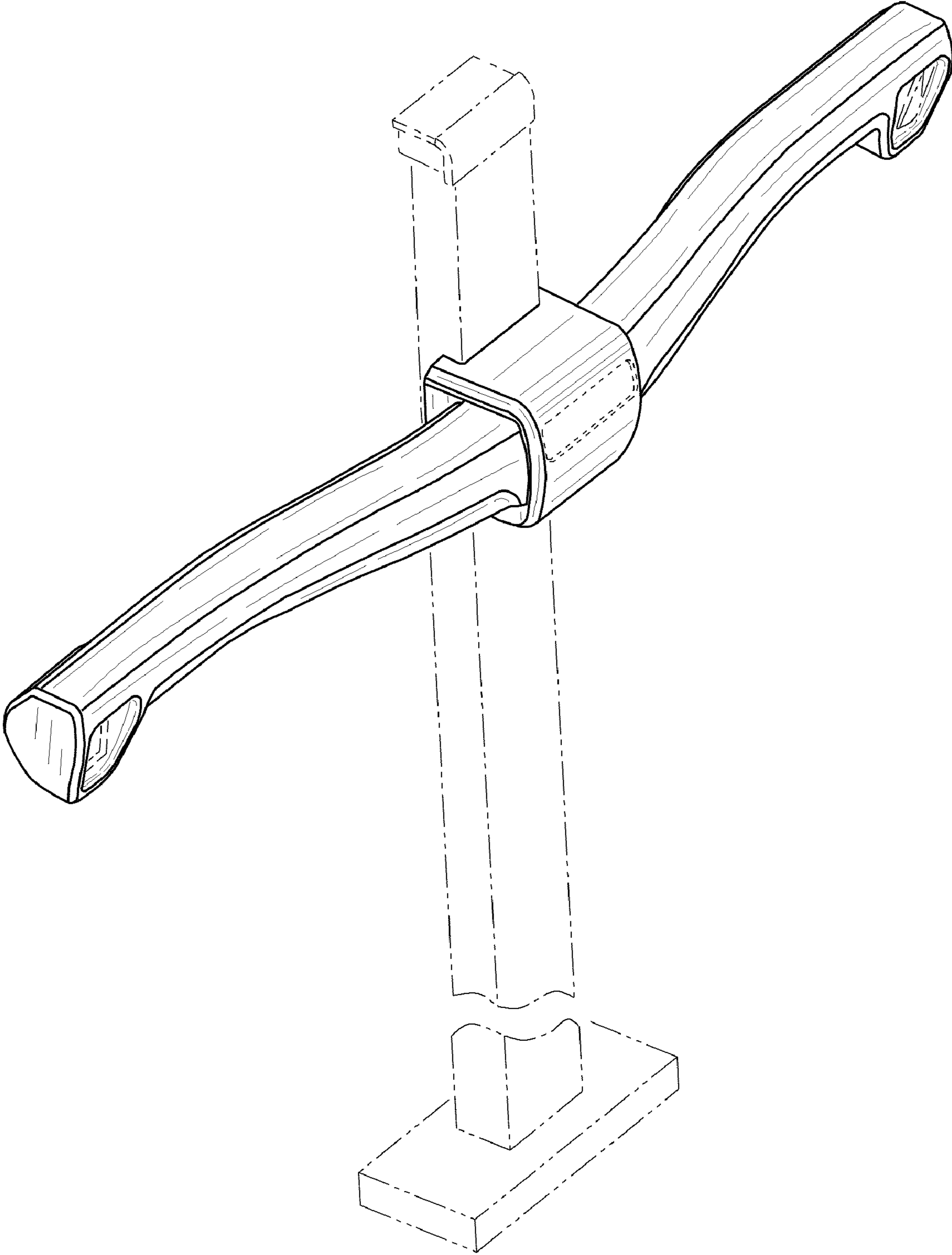


FIG. 1

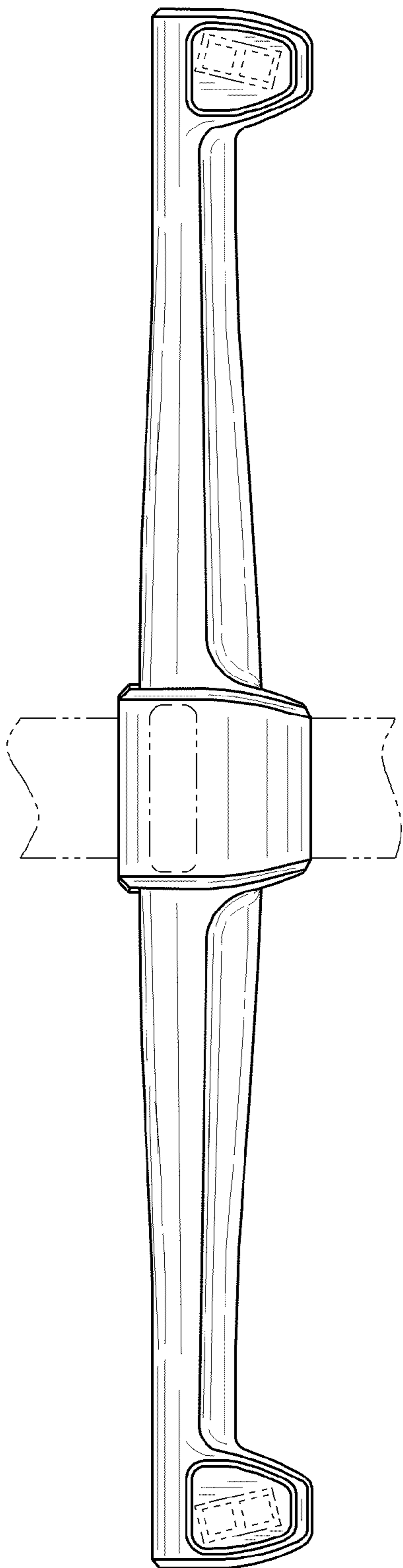


FIG. 2

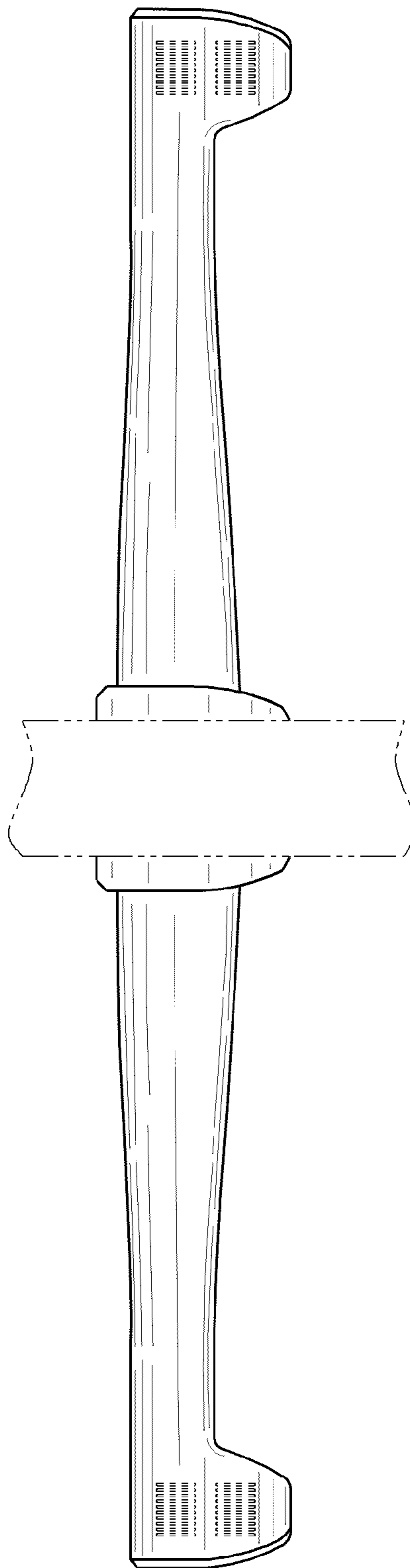


FIG. 3

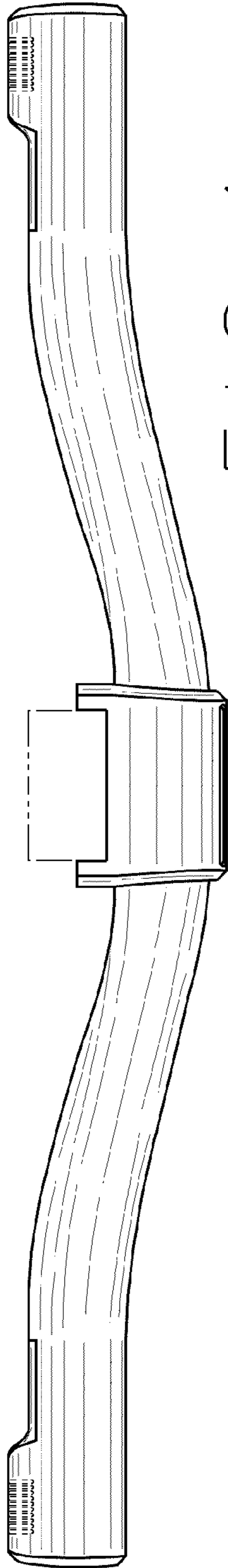


FIG. 4

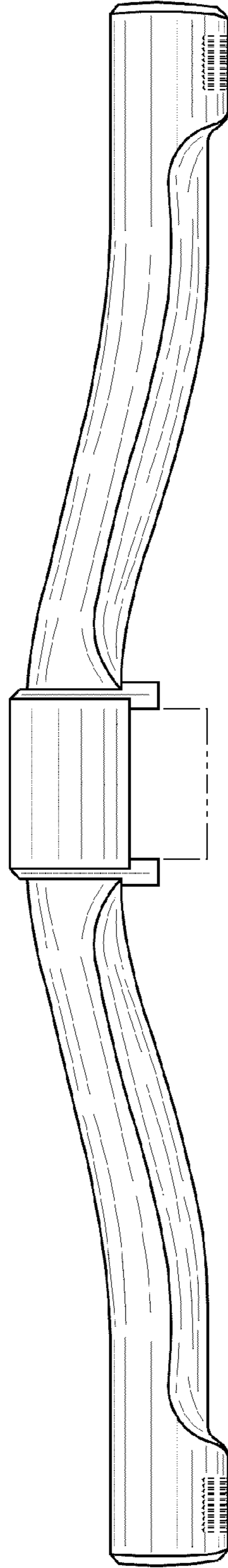


FIG. 5

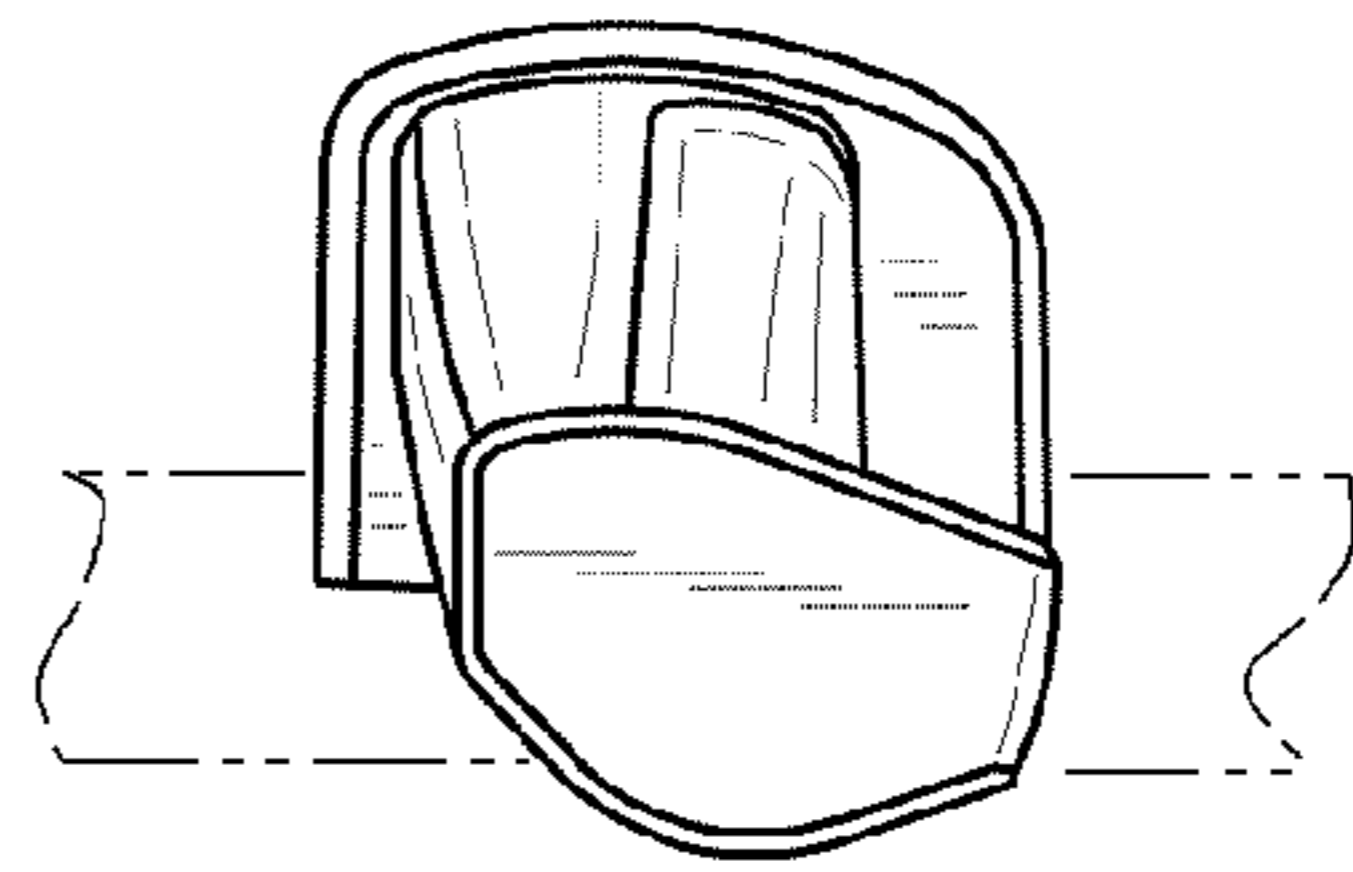


FIG. 6

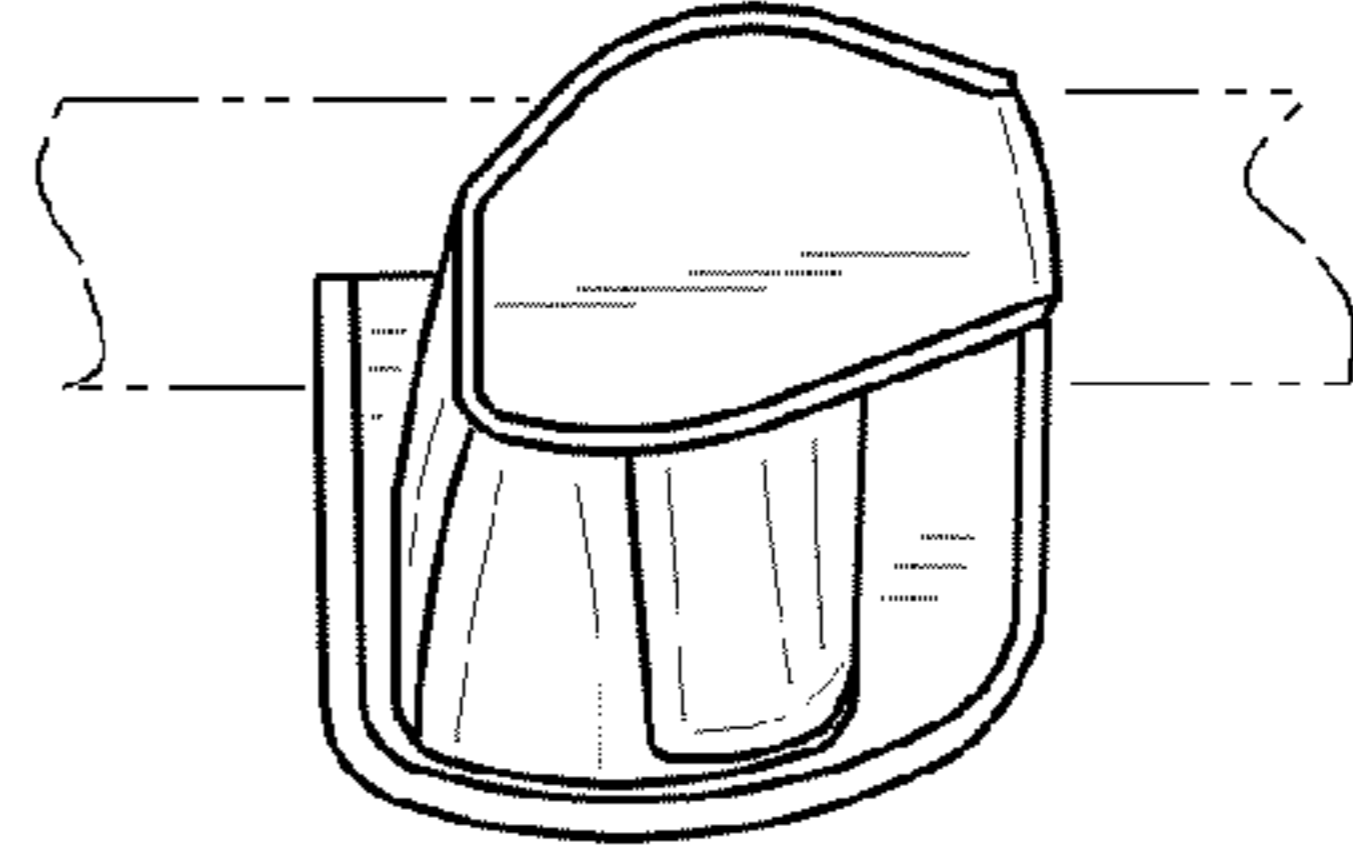


FIG. 7