



US00D687435S

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

(10) **Patent No.:** **US D687,435 S**  
(45) **Date of Patent:** **\*\* Aug. 6, 2013**

(54) **ARCHED HOLE CARD READER**  
(75) Inventors: **Arthur C. Miller**, Las Vegas, NV (US);  
**Dean A. Isaacs**, Las Vegas, NV (US)  
(73) Assignee: **Tech Art, Inc.**, Las Vegas, NV (US)  
(\*\*) Term: **14 Years**

3,731,936 A 5/1973 Copeland  
3,742,616 A 7/1973 Heller  
3,743,294 A 7/1973 Forster  
3,751,041 A 8/1973 Seifert  
3,779,554 A 12/1973 Brix  
3,814,436 A 6/1974 Boren  
3,858,797 A 1/1975 Takeuchi  
3,929,339 A 12/1975 Mattioli  
4,026,309 A 5/1977 Howard

(Continued)

(21) Appl. No.: **29/400,400**

(22) Filed: **Aug. 26, 2011**

(51) **LOC (9) Cl.** ..... **14-02**

(52) **U.S. Cl.**  
USPC ..... **D14/385**

(58) **Field of Classification Search**  
USPC ..... D14/356–358, 383–385, 420, 426,  
D14/427, 432–439, 447, 453, 454, 217, 253,  
D14/299; D13/107, 108, 133, 146, 147, 152,  
D13/154, 156, 158, 162, 162.1, 168, 173,  
D13/177, 102; 235/441, 451, 492, 380, 439,  
235/375; 361/679.31, 600, 679.01, 679.02

See application file for complete search history.

FOREIGN PATENT DOCUMENTS

DE 1039429 9/1958  
DE 3807127 A1 9/1989

(Continued)

*Primary Examiner* — Austin Murphy

(74) *Attorney, Agent, or Firm* — Kevin P. Crosby;  
GrayRobinson, P.A.

(57) **CLAIM**

The ornamental design for arched hole card reader, as shown  
and described.

**DESCRIPTION**

FIG. 1 is a left front perspective view of a second embodiment  
of the design.

FIG. 2 is a top plan view thereof.

FIG. 3 is a right side elevational view thereof.

FIG. 4 is a front elevational view thereof.

FIG. 5 is a bottom plan view thereof.

FIG. 6 is a rear elevational view thereof.

FIG. 7 is a left elevational view thereof.

FIG. 8 is a right front perspective view thereof.

FIG. 9 is a left rear perspective view thereof; and,

FIG. 10 is a right rear perspective view thereof.

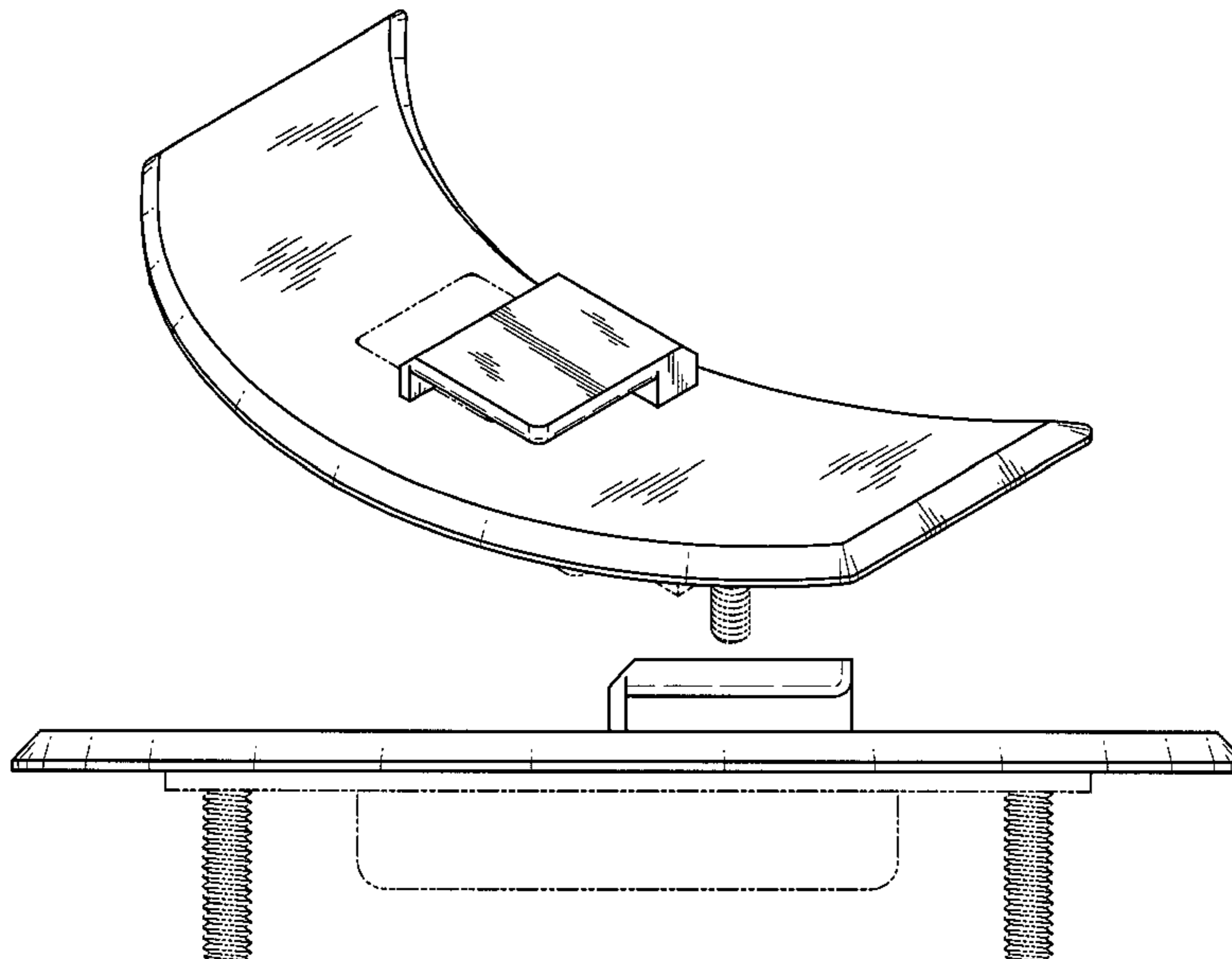
The broken lines shown in the drawings represent portions of  
the arched hole card reader that form no part of the claimed  
design.

**1 Claim, 10 Drawing Sheets**

(56) **References Cited**

U.S. PATENT DOCUMENTS

233,829 A 11/1880 Adt  
1,356,398 A 10/1920 Owens  
1,590,463 A 6/1926 Wood  
1,919,922 A 7/1933 Baker, Jr. et al.  
2,046,595 A 7/1936 Yerkes  
3,034,512 A 5/1962 Hunter  
3,165,319 A 1/1965 Benima  
3,190,440 A \* 6/1965 Palmer ..... 229/107  
3,222,071 A 12/1965 Lang  
3,312,473 A 4/1967 Friedman et al.  
3,489,907 A 1/1970 Kenez  
3,529,829 A 9/1970 Seifert  
3,658,342 A 4/1972 Borea  
3,690,670 A 9/1972 Cassady et al.  
3,716,238 A 2/1973 Porter



# US D687,435 S

## U.S. PATENT DOCUMENTS

4,146,229	A	3/1979	Morse	
4,314,700	A	2/1982	Dylag	
4,531,187	A	7/1985	Uhland	
4,534,562	A	8/1985	Cuff et al.	
4,667,959	A	5/1987	Pfeiffer et al.	
4,814,589	A	3/1989	Storch et al.	
4,822,050	A	4/1989	Normand et al.	
D317,951	S	7/1991	Miller	
5,039,102	A	8/1991	Miller	
5,067,713	A	11/1991	Soules et al.	
5,110,134	A	5/1992	Laughlin et al.	
5,219,172	A	6/1993	Laughlin et al.	
5,224,712	A	7/1993	Laughlin et al.	
5,283,422	A	2/1994	Storch et al.	
5,312,104	A	5/1994	Miller	
5,319,732	A *	6/1994	Jones	385/135
5,362,053	A	11/1994	Miller	
5,364,106	A *	11/1994	Laughlin et al.	273/304
5,374,061	A	12/1994	Albrecht	
5,451,054	A	9/1995	Orenstein	
5,531,331	A	7/1996	Barnett	
5,651,548	A	7/1997	French et al.	
5,669,816	A *	9/1997	Garczynski et al.	463/12
5,681,039	A	10/1997	Miller	
5,722,893	A	3/1998	Hill et al.	
5,757,876	A	5/1998	Dam et al.	
5,779,546	A	7/1998	Meissner et al.	
5,781,647	A	7/1998	Fishbine et al.	
5,809,482	A	9/1998	Strisower	
5,933,244	A	8/1999	Kiritchenko	
5,941,769	A	8/1999	Order	
5,961,121	A	10/1999	Brown	
D415,960	S *	11/1999	Majdanski et al.	D9/418
6,039,650	A	3/2000	Hill	
6,126,166	A	10/2000	Lorson et al.	
6,254,484	B1	7/2001	McCrea, Jr.	
6,267,671	B1	7/2001	Hogan	
6,293,038	B1 *	9/2001	Chang	40/738
6,299,536	B1	10/2001	Hill	
6,313,871	B1	11/2001	Schubert	
6,346,044	B1	2/2002	McCrea, Jr.	
6,431,984	B2	8/2002	Coyer et al.	
6,460,848	B1	10/2002	Soltys et al.	
6,514,140	B1	2/2003	Storch	
6,517,435	B2	2/2003	Soltys et al.	
6,517,436	B2	2/2003	Soltys et al.	
6,520,857	B2	2/2003	Soltys et al.	
6,527,271	B2	3/2003	Soltys et al.	
6,530,836	B2	3/2003	Soltys et al.	

6,532,297	B1	3/2003	Lindquist	
6,533,276	B2	3/2003	Soltys et al.	
6,567,159	B1	5/2003	Corech	
6,579,180	B2	6/2003	Soltys et al.	
6,595,857	B2	7/2003	Soltys et al.	
6,609,710	B1	8/2003	Order	
6,619,662	B2	9/2003	Miller	
6,626,750	B2	9/2003	Momemy	
6,629,889	B2	10/2003	Mothwurf	
6,638,161	B2	10/2003	Soltys et al.	
6,652,379	B2	11/2003	Soltys et al.	
6,663,490	B2	12/2003	Soltys et al.	
6,685,568	B2	2/2004	Soltys et al.	
6,688,979	B2	2/2004	Soltys et al.	
6,712,696	B2	3/2004	Soltys et al.	
6,758,751	B2	7/2004	Soltys et al.	
6,845,905	B2	1/2005	Blad et al.	
6,848,994	B1	2/2005	Knust et al.	
6,857,961	B2	2/2005	Soltys et al.	
6,964,612	B2	11/2005	Soltys et al.	
7,011,309	B2	3/2006	Soltys et al.	
D555,403	S *	11/2007	Arrosagaray	D6/509
7,316,615	B2	1/2008	Soltys et al.	
7,586,580	B2 *	9/2009	Matsuda et al.	349/158
D646,273	S *	10/2011	Daniel	D14/385
D651,509	S *	1/2012	Methe et al.	D9/434
8,212,970	B2 *	7/2012	Nagata	349/96
D675,618	S *	2/2013	Behar et al.	D14/385
2002/0086727	A1	7/2002	Soltys et al.	
2003/0220136	A1	11/2003	Soltys et al.	
2004/0219975	A1	11/2004	Soltys et al.	
2005/0239542	A1	10/2005	Olsen	
2005/0258597	A1	11/2005	Soltys et al.	
2005/0282623	A1	12/2005	Matsuno et al.	
2006/0019739	A1	1/2006	Soltys et al.	
2006/0063577	A1	3/2006	Downs, III et al.	
2006/0199649	A1	9/2006	Soltys et al.	

## FOREIGN PATENT DOCUMENTS

EP	0310516	A1	4/1989
FR	1356398		2/1964
FR	2109213		5/1972
FR	2186839		1/1974
FR	2427107		12/1979
FR	2576518		8/1986
GB	2061490	A	5/1981
WO	9942186	A1	8/1999
WO	0120489	A1	3/2001

\* cited by examiner

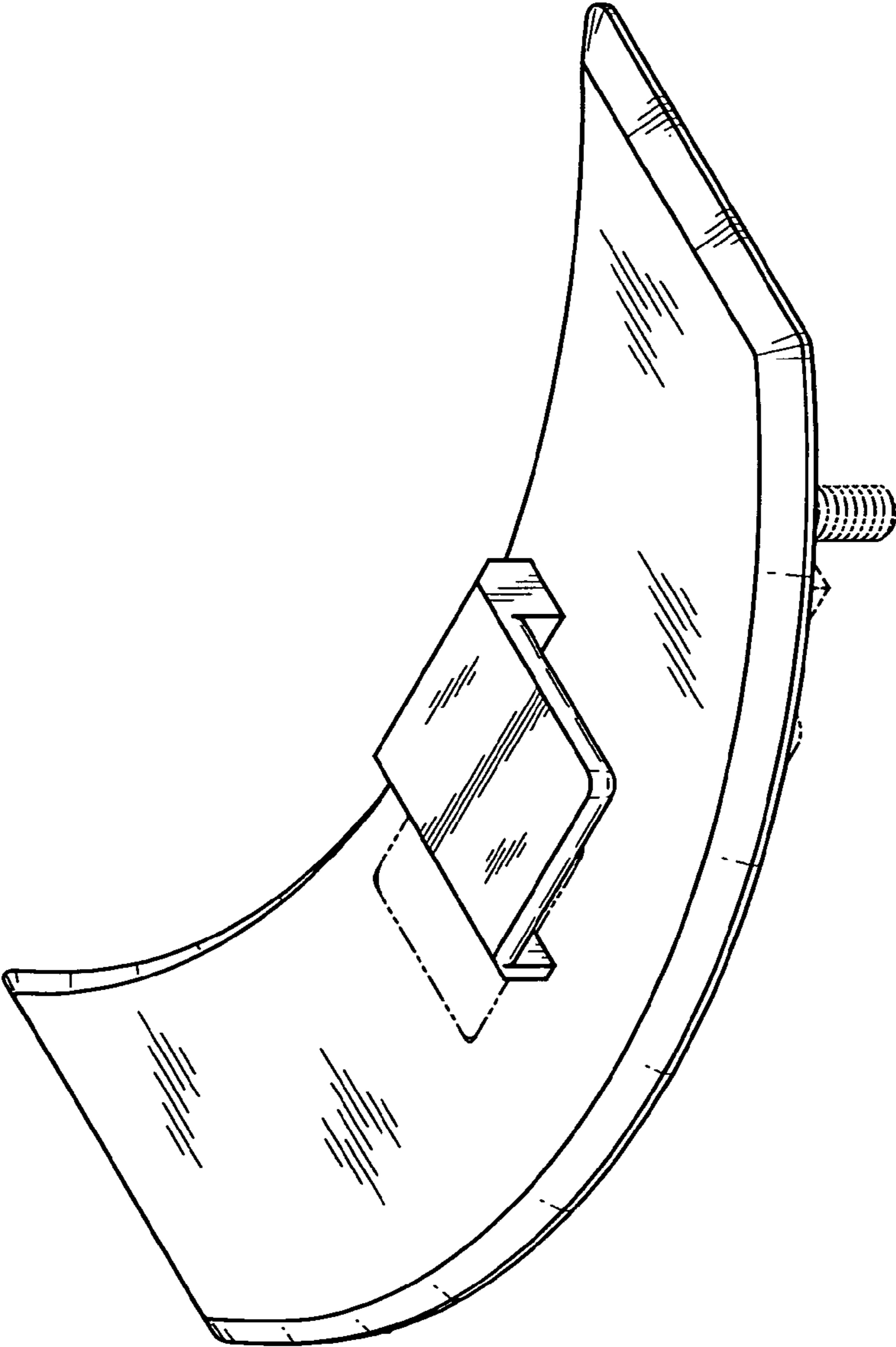


FIG. 1

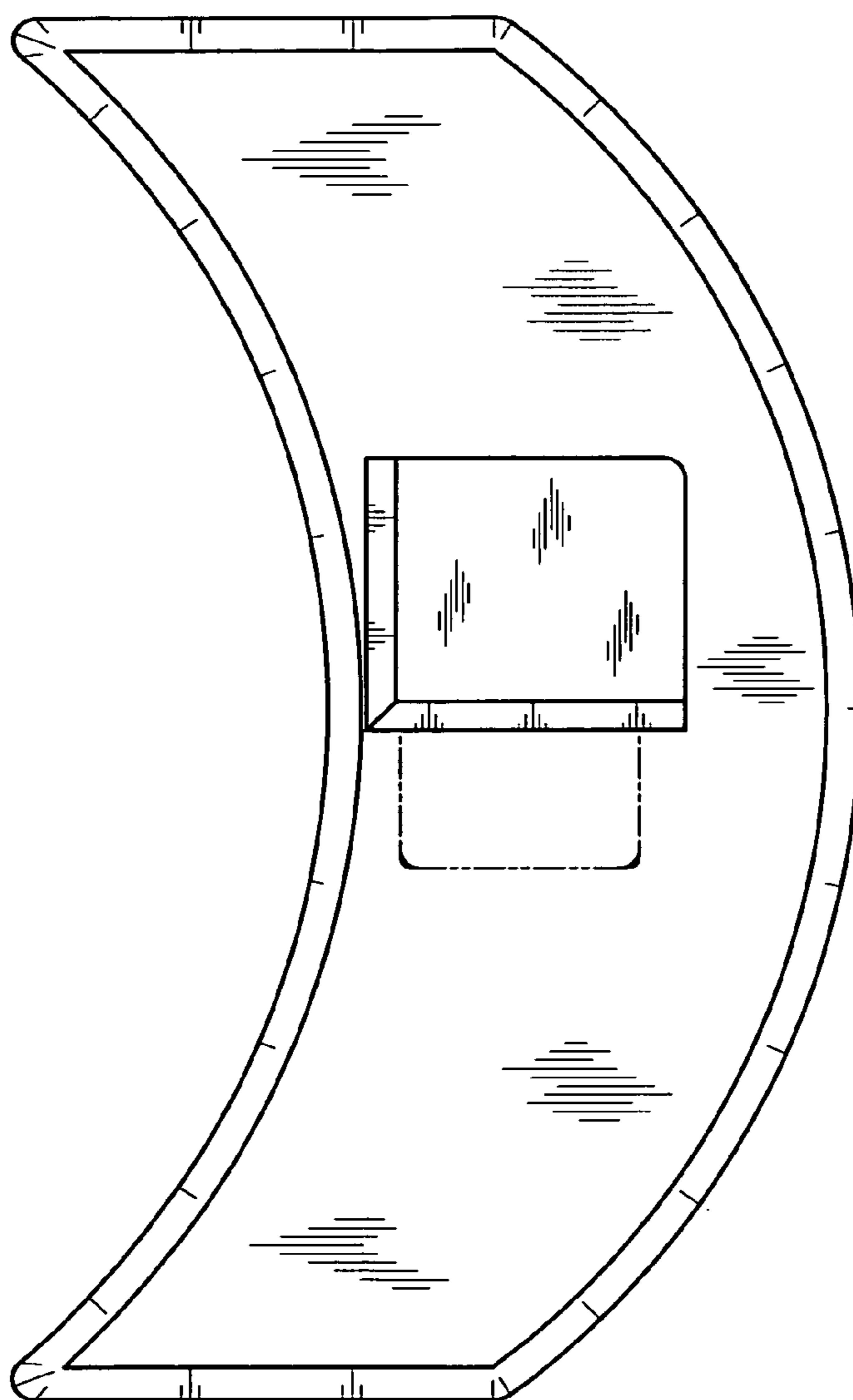


FIG. 2

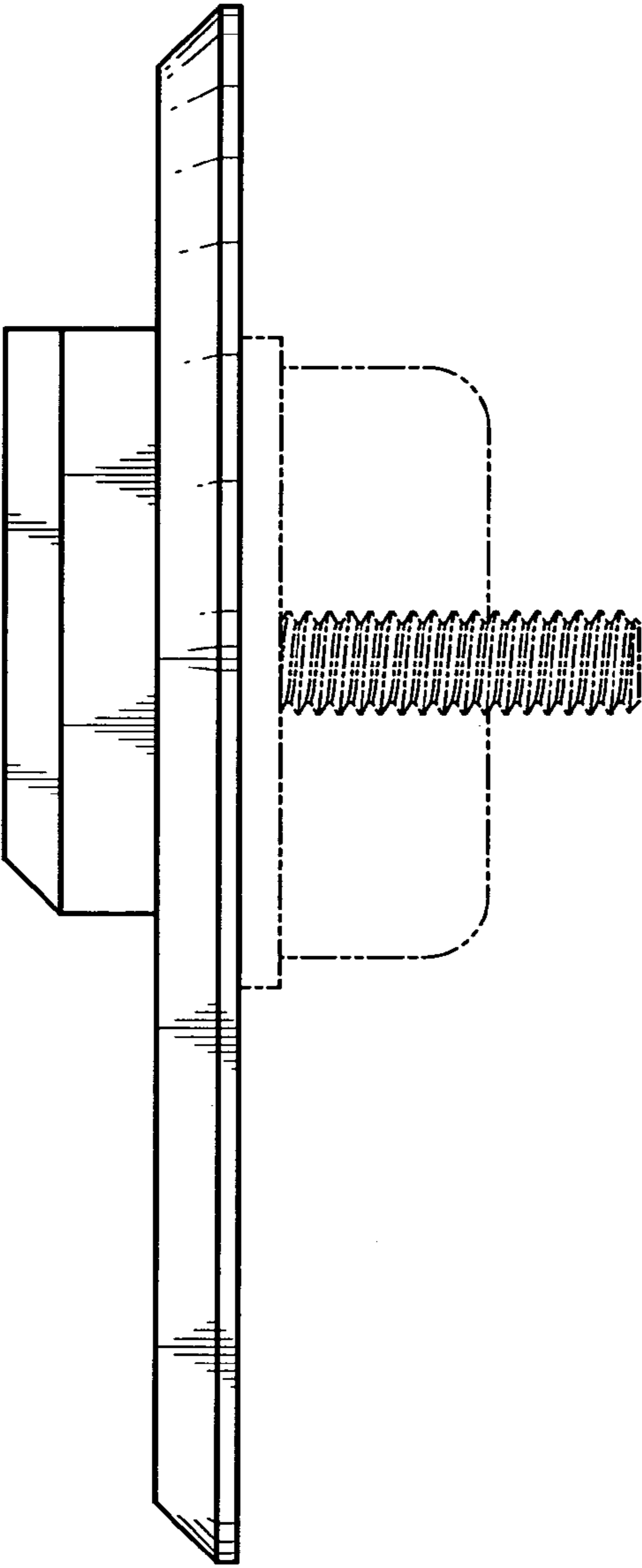


FIG. 3

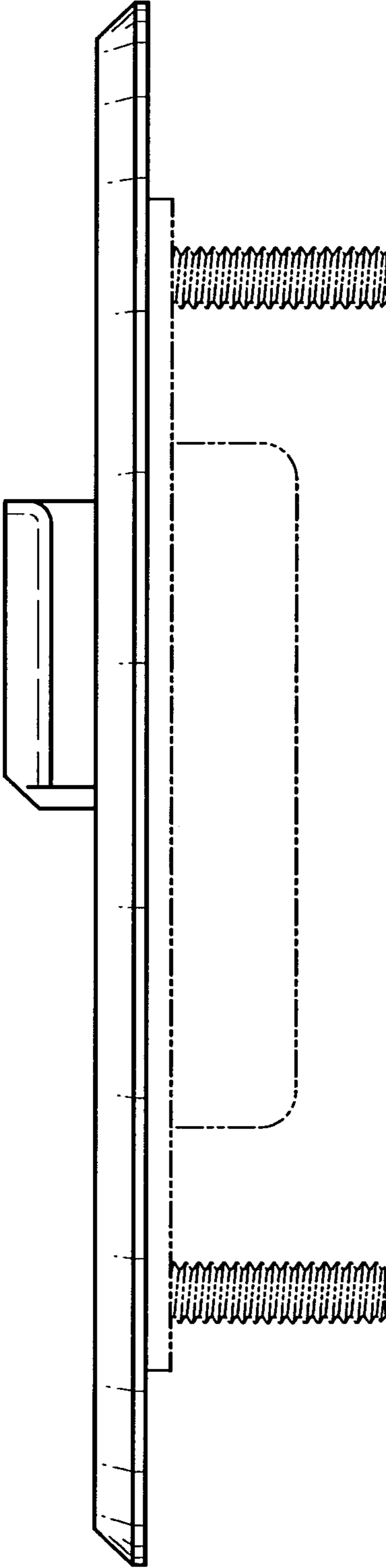


FIG. 4

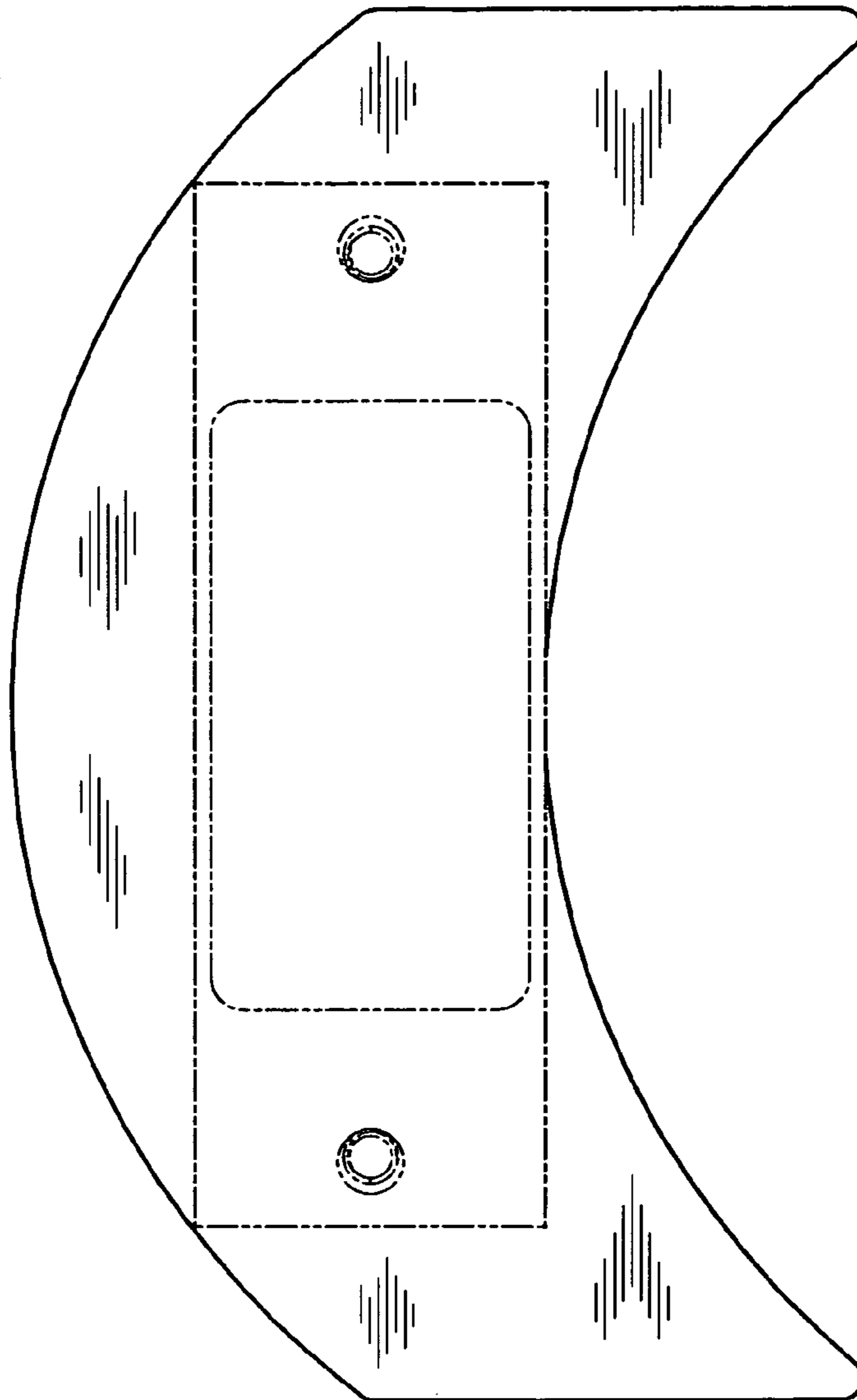


FIG. 5

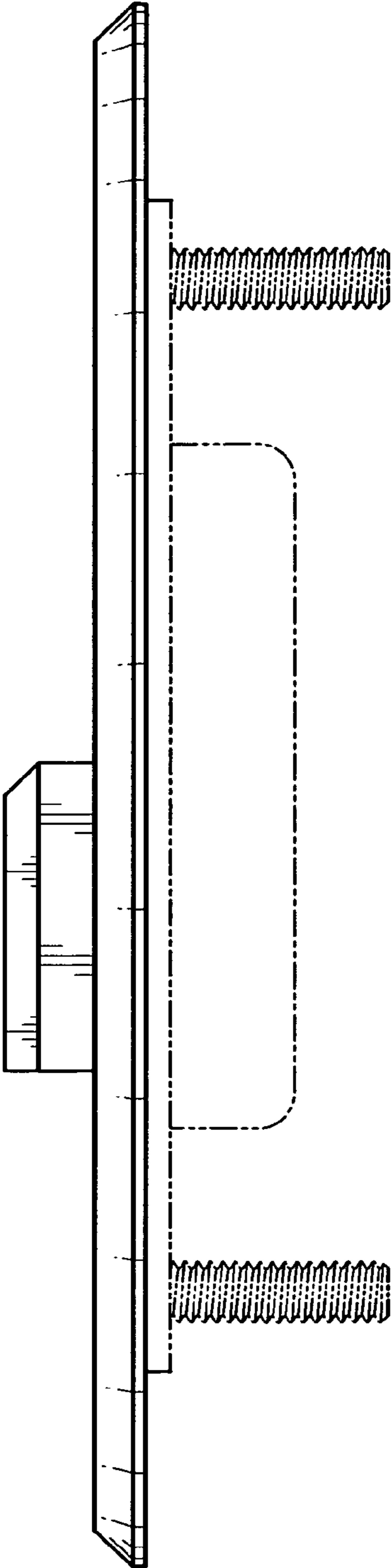


FIG. 6



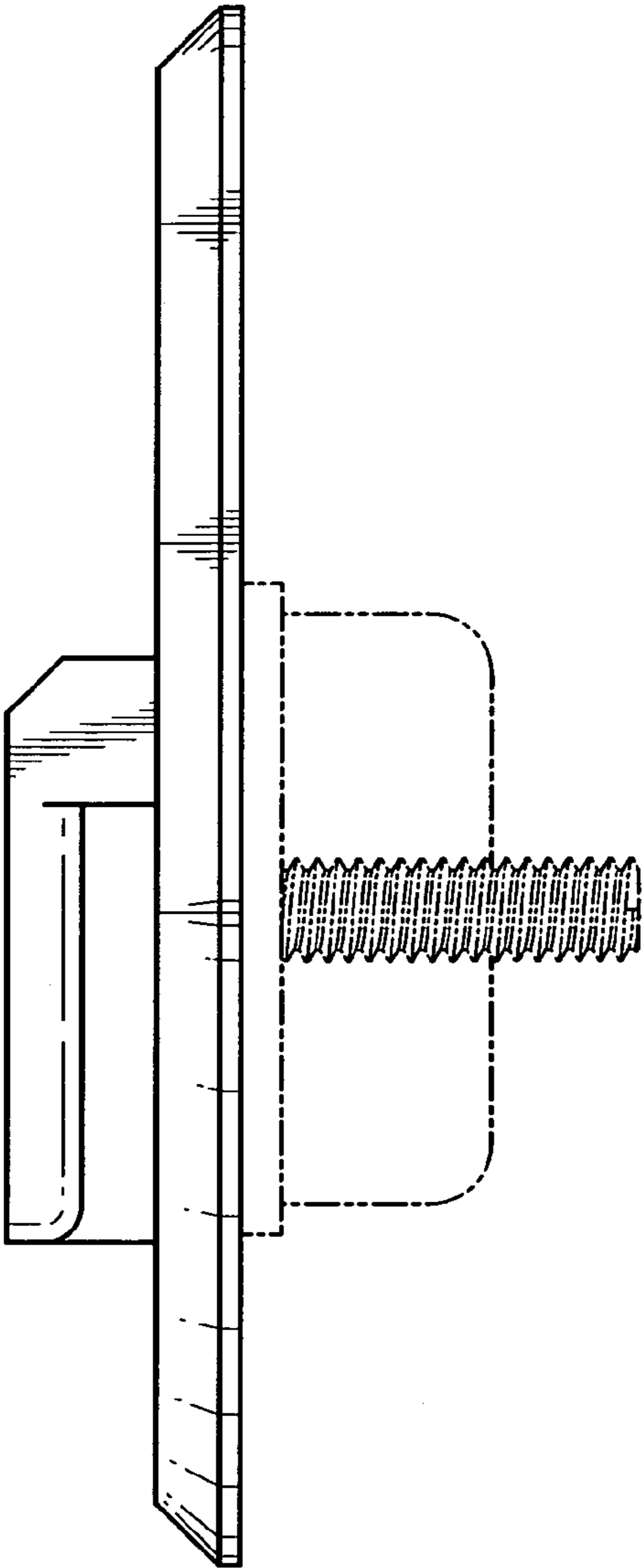


FIG. 7

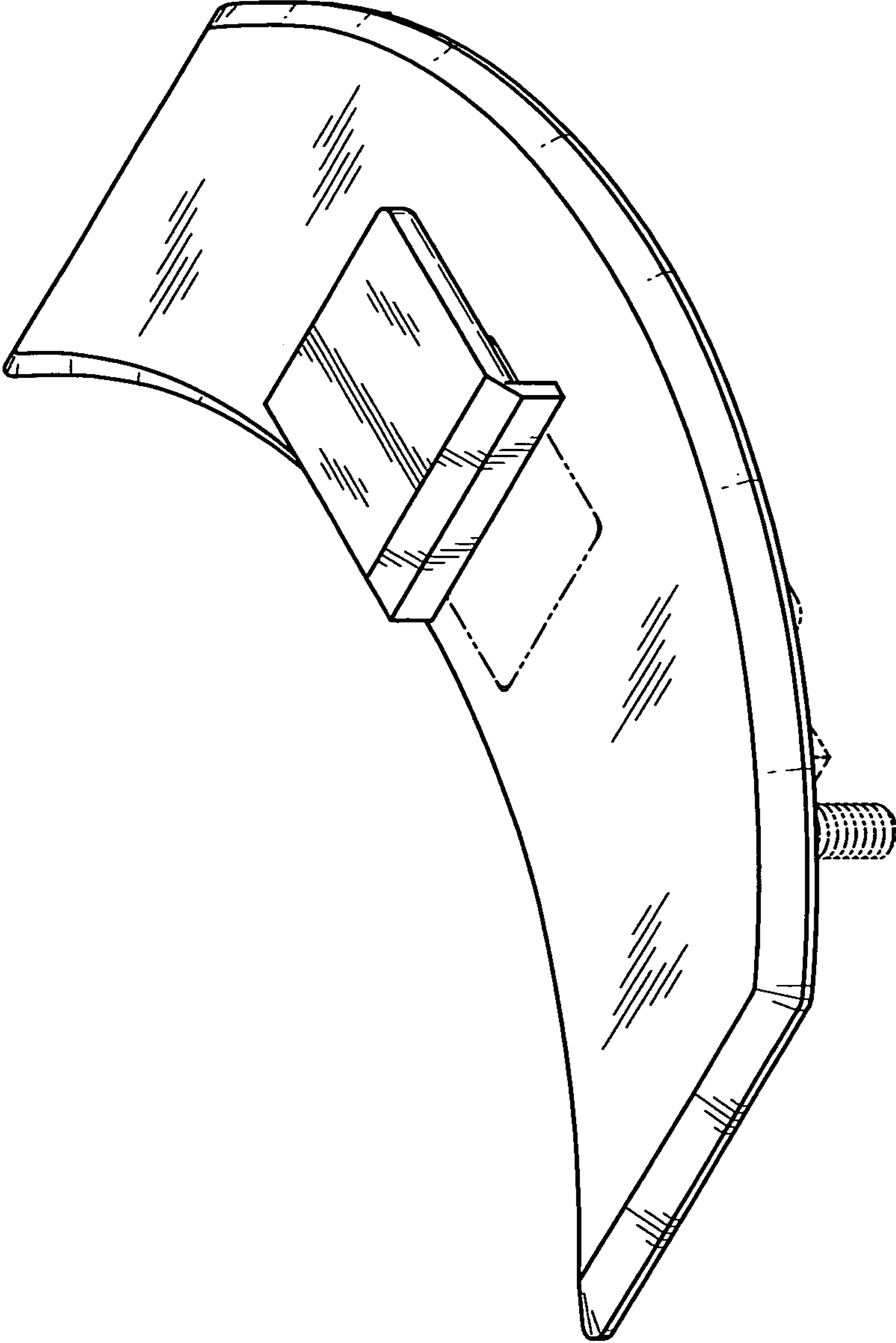


FIG. 8

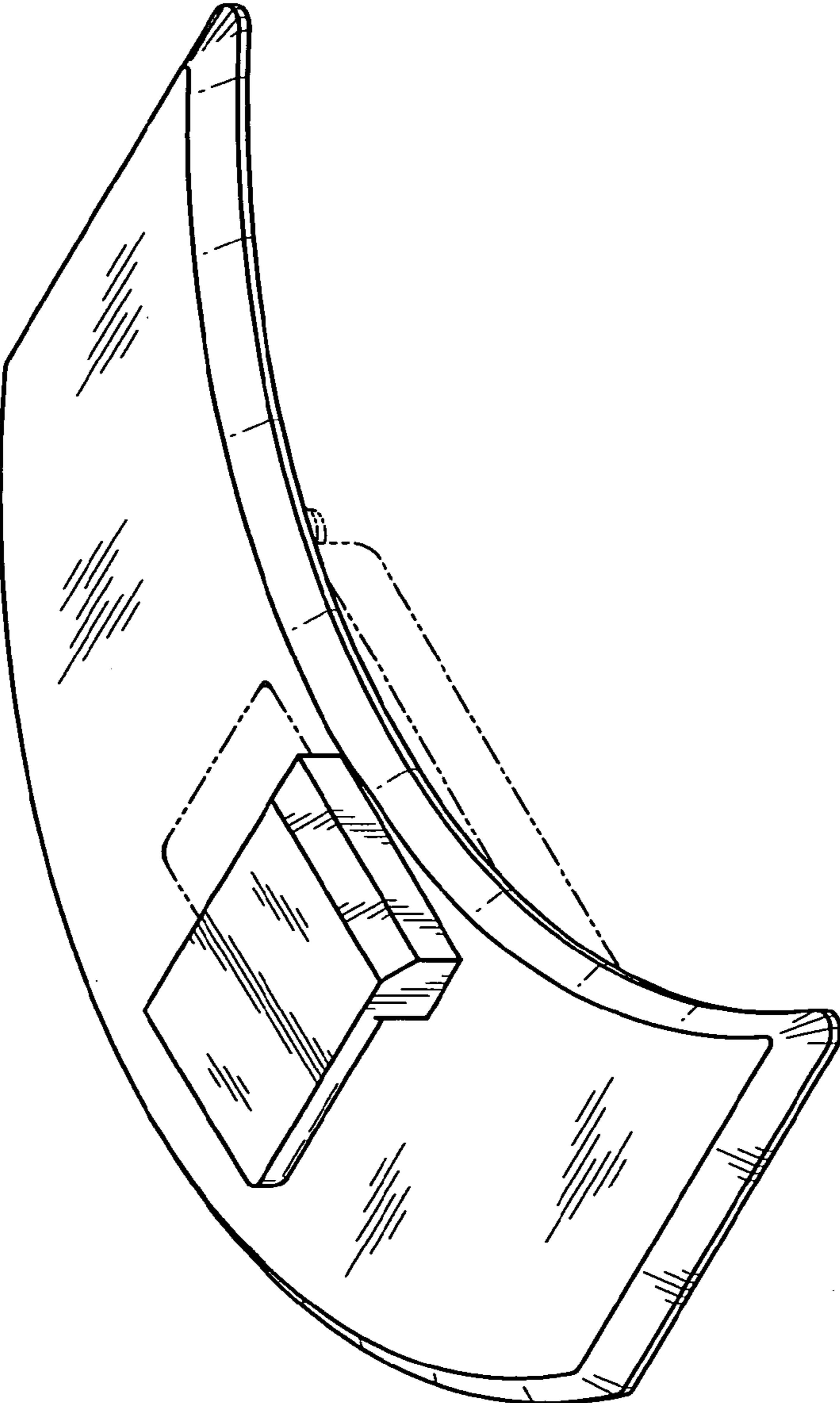


FIG. 9

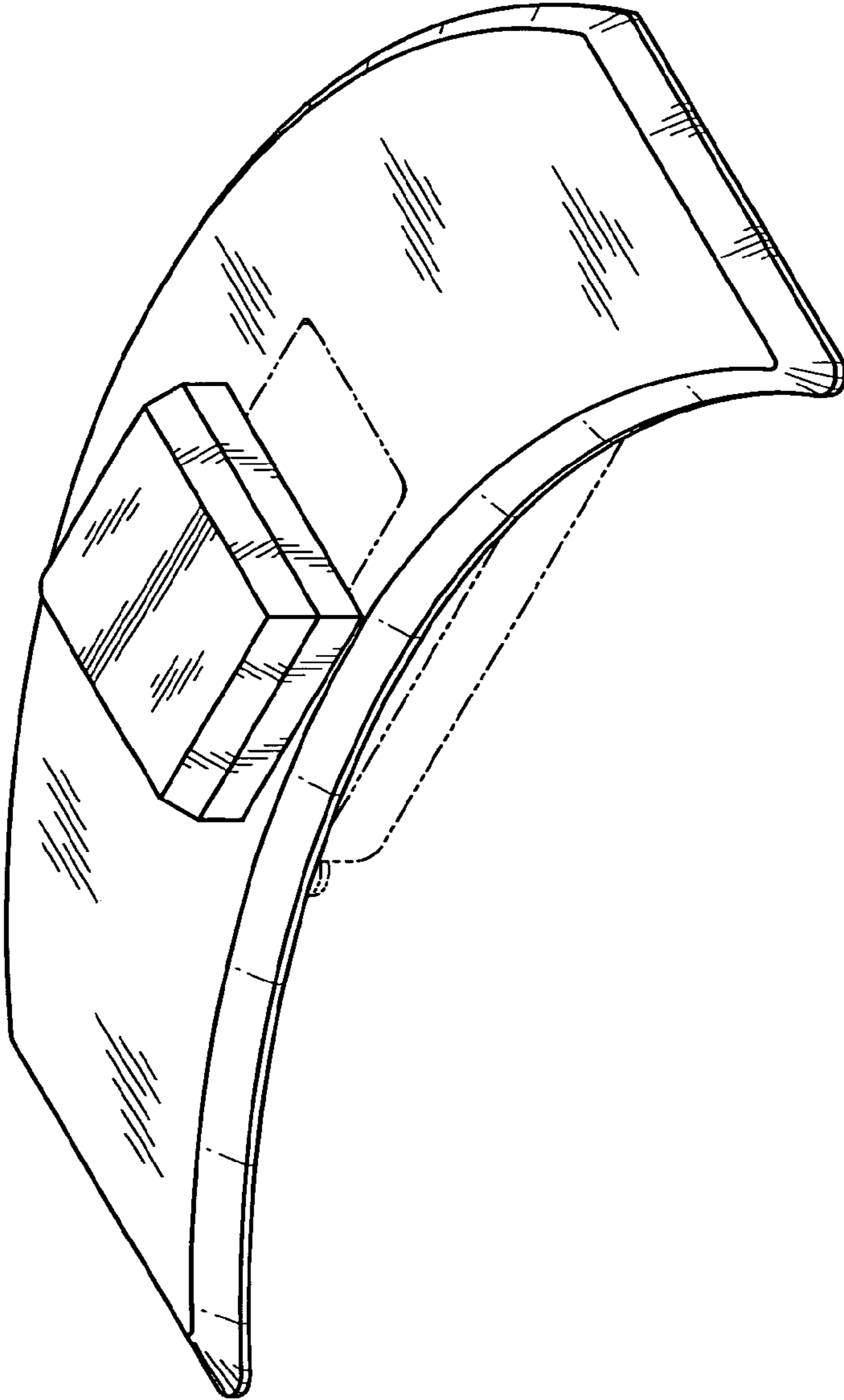


FIG. 10