



US00D788904S

(12) **United States Design Patent** (10) **Patent No.:** **US D788,904 S**  
**Hanig et al.** (45) **Date of Patent:** **\*\* Jun. 6, 2017**

(54) **VENT ASSEMBLY FOR A GRAIN BIN**

(71) Applicant: **Sukup Manufacturing Co.**, Sheffield, IA (US)

(72) Inventors: **John A. Hanig**, Sheffield, IA (US);  
**Steven E. Sukup**, Clear Lake, IA (US);  
**Eugene G. Sukup**, Hampton, IA (US);  
**Charles E. Sukup**, Dougherty, IA (US);  
**Bradley A. Poppen**, Sheffield, IA (US)

(73) Assignee: **Sukup Manufacturing Co.**, Sheffield, IA (US)

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

(21) Appl. No.: **29/529,766**

(22) Filed: **Jun. 10, 2015**

**Related U.S. Application Data**

(63) Continuation of application No. 13/032,413, filed on Feb. 22, 2011, now abandoned.

(51) **LOC (10) Cl.** ..... **23-04**

(52) **U.S. Cl.**  
USPC ..... **D23/393**

(58) **Field of Classification Search**  
USPC ..... D14/356; D10/93, 104.1, 108, 114;  
D8/4, 25, 52; D17/20, 22, 23; D23/323,  
D23/328, 333, 335, 336, 337, 341, 352,  
D23/357, 370, 385, 386, 397, 399, 400,  
D23/406, 411, 413, 499, 382, 388, 391,  
D23/392, 393, 394, 395; D13/182  
CPC ..... H01R 13/5213; B60Q 1/04; B60Q 1/26;  
G10D 3/006; G10D 13/023; G10D  
13/027; B25B 15/001; G10H 3/143;  
G10H 3/181; G10G 5/005; A42B 1/04;  
B64C 11/04; B64C 11/16; B64C 11/18;  
B64C 11/20; B64C 2001/009; F03D  
3/062; F03D 11/04; F04D 19/002; F04D  
25/068; F04D 25/088;

(Continued)

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

45,814 A 1/1865 Burnett  
316,861 A 4/1885 Apple  
(Continued)

**OTHER PUBLICATIONS**

Farm Storage Grain Bins, image post date Jan. 2, 2012, site visited Jan. 9, 2017, (online), <[http://web.archive.org/web/20120102103248/http://www.siouxsteel.com/index.php/products/category/farm\\_bins/?](http://web.archive.org/web/20120102103248/http://www.siouxsteel.com/index.php/products/category/farm_bins/?)>.\*

(Continued)

*Primary Examiner* — Kevin Rudzinski

*Assistant Examiner* — Sean D Lough

(74) *Attorney, Agent, or Firm* — Zarley Law Firm, P.L.C.

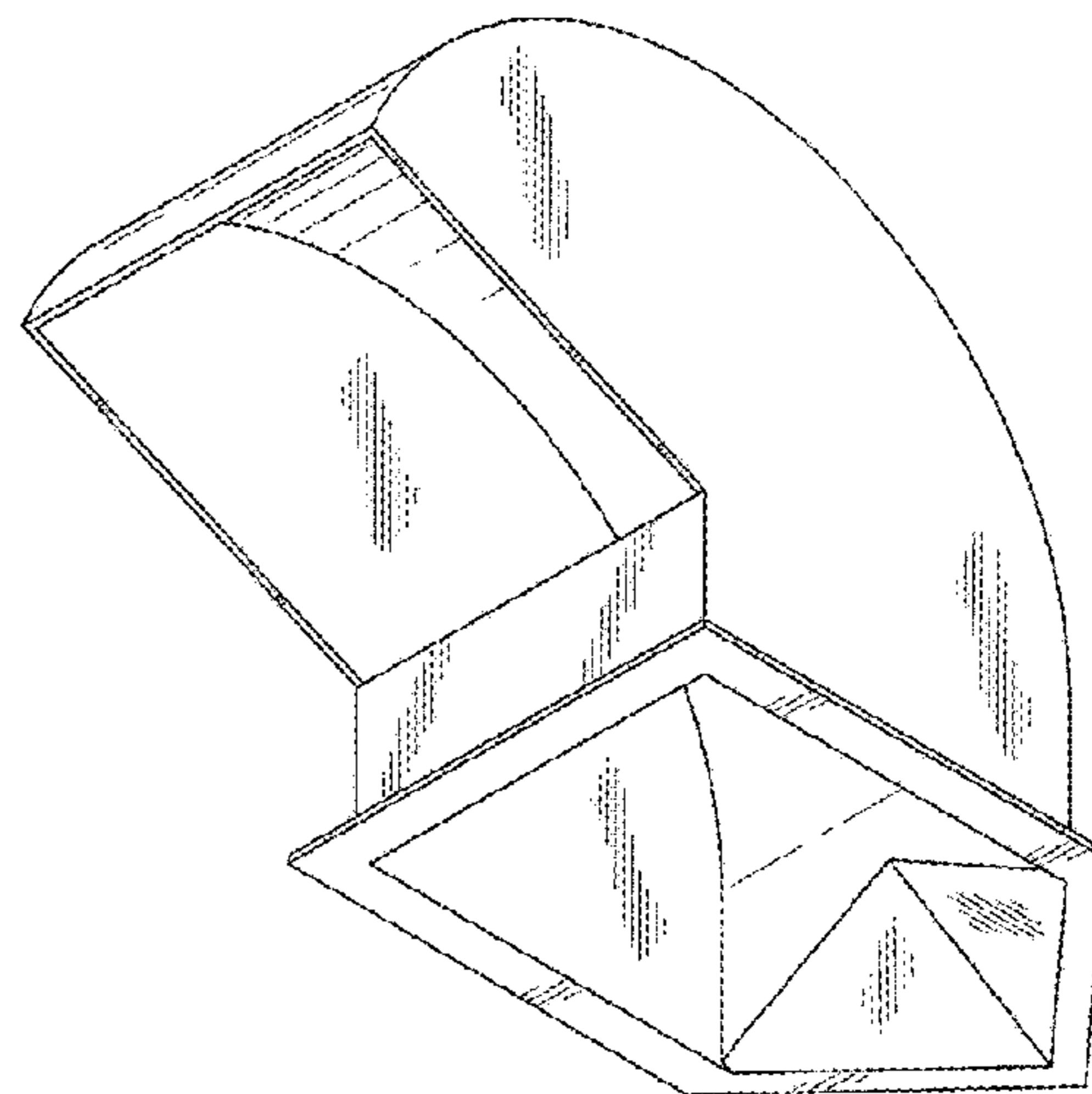
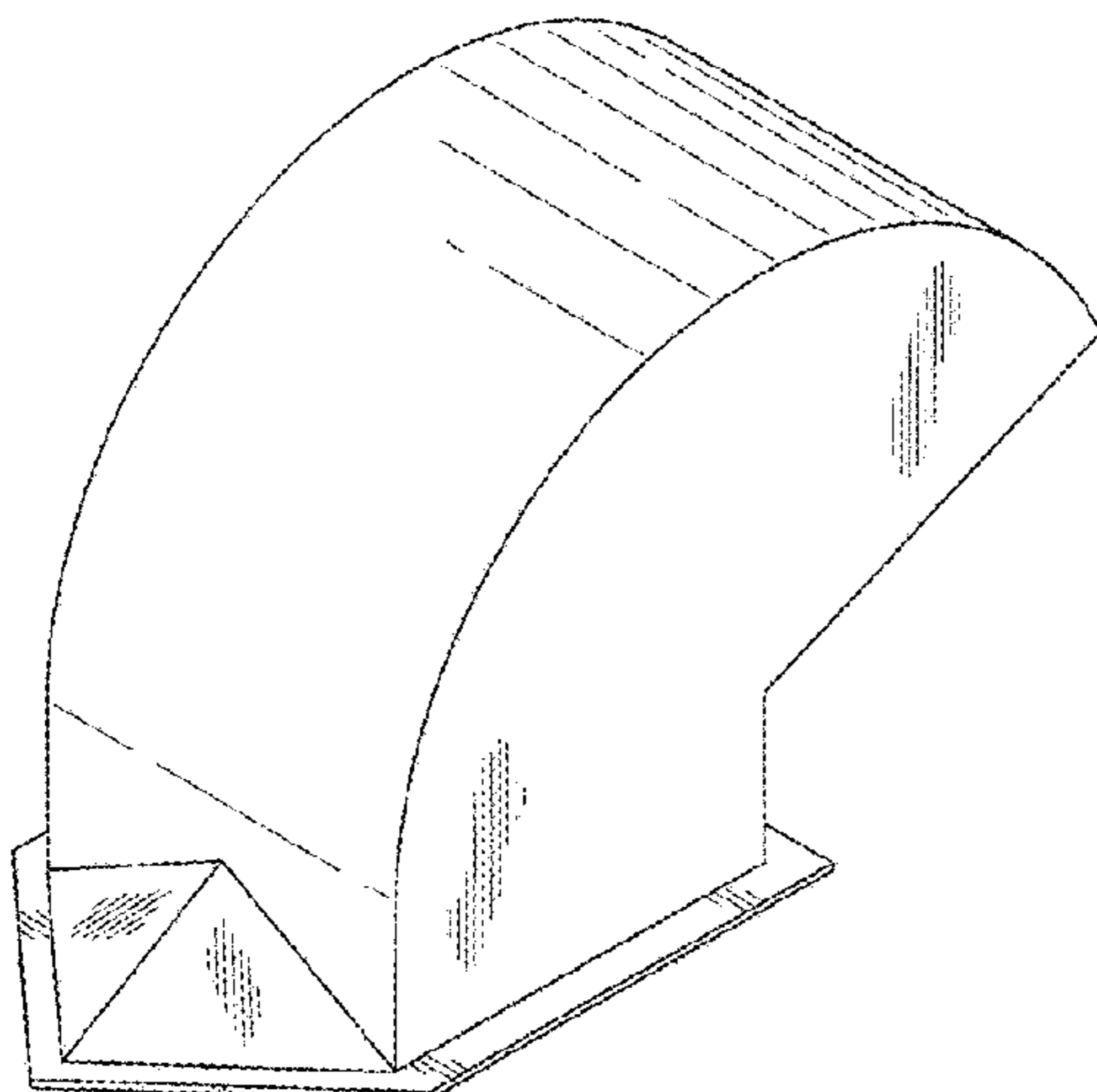
(57) **CLAIM**

We claim the ornamental design for a vent assembly for a grain bin, substantially as shown.

**DESCRIPTION**

FIG. 1 is a top, front perspective view of a vent assembly for a grain bin;  
FIG. 2 is a bottom, rear perspective view of a vent assembly for a grain bin;  
FIG. 3 is a front elevation view of a vent assembly for a grain bin;  
FIG. 4 is a rear elevation view of a vent assembly for a grain bin;  
FIG. 5 is a side elevation view of a vent assembly for a grain bin;  
FIG. 6 is a side elevation view of a vent assembly for a grain bin;  
FIG. 7 is a top elevation view of a vent assembly for a grain bin; and,  
FIG. 8 is a bottom elevation view of a vent assembly for a grain bin.

**1 Claim, 8 Drawing Sheets**



# US D788,904 S

(58) **Field of Classification Search**  
CPC ..... F24F 1/0018; F24F 13/24; B64D 13/02;  
B64D 13/00; E04C 2/427; E06B 3/5892;  
E06B 7/02; B24B 37/04; E04F 17/00;  
E21F 1/04; F01P 1/02; F17C 13/04;  
F22B 1/1876; F22B 1/22; F22B 3/04  
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

359,796 A 3/1887 Lewis  
885,479 A \* 4/1908 Huber ..... E06B 7/02  
454/213  
1,264,056 A 4/1918 Geibig  
1,672,291 A 6/1928 Williams  
1,862,213 A 6/1932 Emisch  
2,161,001 A \* 6/1939 Bedol ..... E06B 7/02  
160/104  
2,216,864 A \* 10/1940 Wasmund ..... F16L 41/025  
138/DIG. 4  
D124,294 S \* 12/1940 Leslie ..... D23/373  
2,300,842 A \* 11/1942 Leslie ..... E04D 13/17  
454/361  
2,447,472 A \* 8/1948 Donley ..... F24F 7/02  
454/366  
D155,345 S \* 9/1949 Johnson ..... D23/373  
2,490,220 A 12/1949 Leslie  
2,565,131 A 8/1951 Johnson  
2,630,748 A 3/1953 Brockelsby  
2,741,972 A 4/1956 Pryne  
2,807,202 A 9/1957 Mylting  
3,083,633 A 4/1963 Hochberg  
3,094,915 A 6/1963 Leigh  
3,200,735 A 8/1965 Bergen  
3,225,679 A \* 12/1965 Meyer ..... F24F 13/08  
220/326  
3,403,616 A 10/1968 Nelson  
3,521,414 A 7/1970 Malissa  
3,579,930 A 5/1971 Murphy  
D226,609 S \* 4/1973 Hilton ..... D23/373  
3,742,659 A 7/1973 Drew  
3,822,637 A 7/1974 Whitlock  
3,919,927 A \* 11/1975 Bernard, Jr. .... B60H 1/262  
454/104  
4,090,436 A 5/1978 Wright  
4,214,511 A 7/1980 Mueller  
4,287,816 A 9/1981 Riccard  
D269,112 S \* 5/1983 Armbruster ..... D23/370  
D271,713 S \* 12/1983 Hicks ..... D23/393  
4,480,534 A 11/1984 Sloan  
4,546,693 A 10/1985 McTaw, Jr.  
4,625,630 A 12/1986 Carroll et al.  
D288,230 S \* 2/1987 Thatcher ..... D23/263  
D295,216 S \* 4/1988 Morris ..... D23/355  
D299,530 S \* 1/1989 Hansen ..... D23/374  
D304,367 S \* 10/1989 Saas ..... D23/373  
4,890,546 A 1/1990 Venge  
5,344,363 A \* 9/1994 Pollock ..... B65D 90/34  
137/527.8  
5,394,663 A 3/1995 Jackson  
5,630,752 A 5/1997 Gubash  
5,632,678 A 5/1997 Doelfel  
5,655,964 A \* 8/1997 Rheault ..... F24F 7/02  
454/368  
5,759,098 A 6/1998 Jarnot  
D397,202 S \* 8/1998 Saar ..... D23/387  
5,970,667 A 10/1999 Thaler

D421,644 S \* 3/2000 Andersen ..... D23/263  
D433,496 S \* 11/2000 Hadley ..... D23/373  
6,155,008 A 12/2000 McKee  
D448,468 S \* 9/2001 Koessler ..... D23/373  
D459,007 S \* 6/2002 Campacci ..... D25/119  
D471,991 S \* 3/2003 Maylon ..... D25/119  
6,793,171 B1 \* 9/2004 Clark ..... B64C 17/00  
244/1 R  
D528,646 S \* 9/2006 Stout, Jr. .... D23/393  
7,200,970 B2 \* 4/2007 Koenig, Jr. .... E04F 19/02  
52/255  
D545,423 S \* 6/2007 Delallo ..... D23/386  
D553,475 S \* 10/2007 Gorin ..... D8/353  
7,334,420 B1 \* 2/2008 Garris ..... F24F 13/32  
454/365  
D571,450 S \* 6/2008 Brown ..... D23/387  
D574,479 S \* 8/2008 Brockington ..... D23/373  
D594,964 S \* 6/2009 Miyake ..... D23/393  
D618,780 S \* 6/2010 Williams, Sr. .... D23/373  
D618,825 S \* 6/2010 Johnson ..... D25/164  
7,810,291 B2 \* 10/2010 McPherson ..... E02D 31/02  
404/2  
7,882,670 B2 2/2011 West  
D634,085 S \* 3/2011 Lin ..... D32/31  
D653,745 S \* 2/2012 Gregg ..... D23/386  
D656,601 S \* 3/2012 Roderique ..... D23/386  
D658,281 S \* 4/2012 Goemans ..... D23/387  
D669,571 S \* 10/2012 Penlesky ..... D23/393  
D674,077 S \* 1/2013 Miyake ..... D23/372  
D675,719 S \* 2/2013 Eicher ..... D23/373  
D678,996 S \* 3/2013 Jones ..... D23/393  
D680,253 S \* 4/2013 Herberholt ..... D26/60  
D683,214 S \* 5/2013 McAdam ..... D9/430  
D690,805 S \* 10/2013 Correia ..... D23/393  
D692,115 S \* 10/2013 Ramberg ..... D23/365  
8,595,989 B1 \* 12/2013 Greene ..... E04H 7/065  
52/182  
D705,419 S 5/2014 Leonard  
D705,420 S \* 5/2014 Eichelberg ..... D23/387  
D715,417 S \* 10/2014 McCoy ..... D23/365  
8,869,470 B2 \* 10/2014 Lanza ..... E04D 1/30  
285/42  
D721,799 S \* 1/2015 Forlong ..... D23/393  
D731,034 S \* 6/2015 Eggink ..... D23/267  
D731,047 S \* 6/2015 Leonard ..... D23/373  
D732,147 S \* 6/2015 French ..... D23/267  
9,080,779 B1 \* 7/2015 Leonard ..... F24F 7/02  
D752,190 S \* 3/2016 DeNooy ..... D23/267  
D757,924 S \* 5/2016 Briggs ..... D23/386  
D762,838 S \* 8/2016 Jones ..... D23/393  
D767,786 S \* 9/2016 Smith ..... D25/119  
9,534,392 B2 \* 1/2017 Wey ..... E04D 13/1476  
2002/0124493 A1 9/2002 Mayo et al.  
2005/0005541 A1 1/2005 West  
2006/0025067 A1 2/2006 Koessler  
2007/0173191 A1 7/2007 Daniels, II et al.  
2008/0188176 A1 8/2008 Hunt et al.  
2011/0294412 A1 12/2011 Vagedes  
2012/0184198 A1 7/2012 Cull et al.  
2012/0214400 A1 \* 8/2012 Hanig ..... B65D 88/741  
454/365  
2016/0313015 A1 \* 10/2016 Uhlenbusch ..... B60H 1/34

OTHER PUBLICATIONS

MP+ roof system, image post date Apr. 28, 2012, site visited Jan. 9, 2017, (online), <[http://www.grainnet.com/articles/MFS\\_York\\_Stormor\\_Introduces\\_New\\_MP\\_Roof\\_System-122401.html](http://www.grainnet.com/articles/MFS_York_Stormor_Introduces_New_MP_Roof_System-122401.html)>.\*

\* cited by examiner

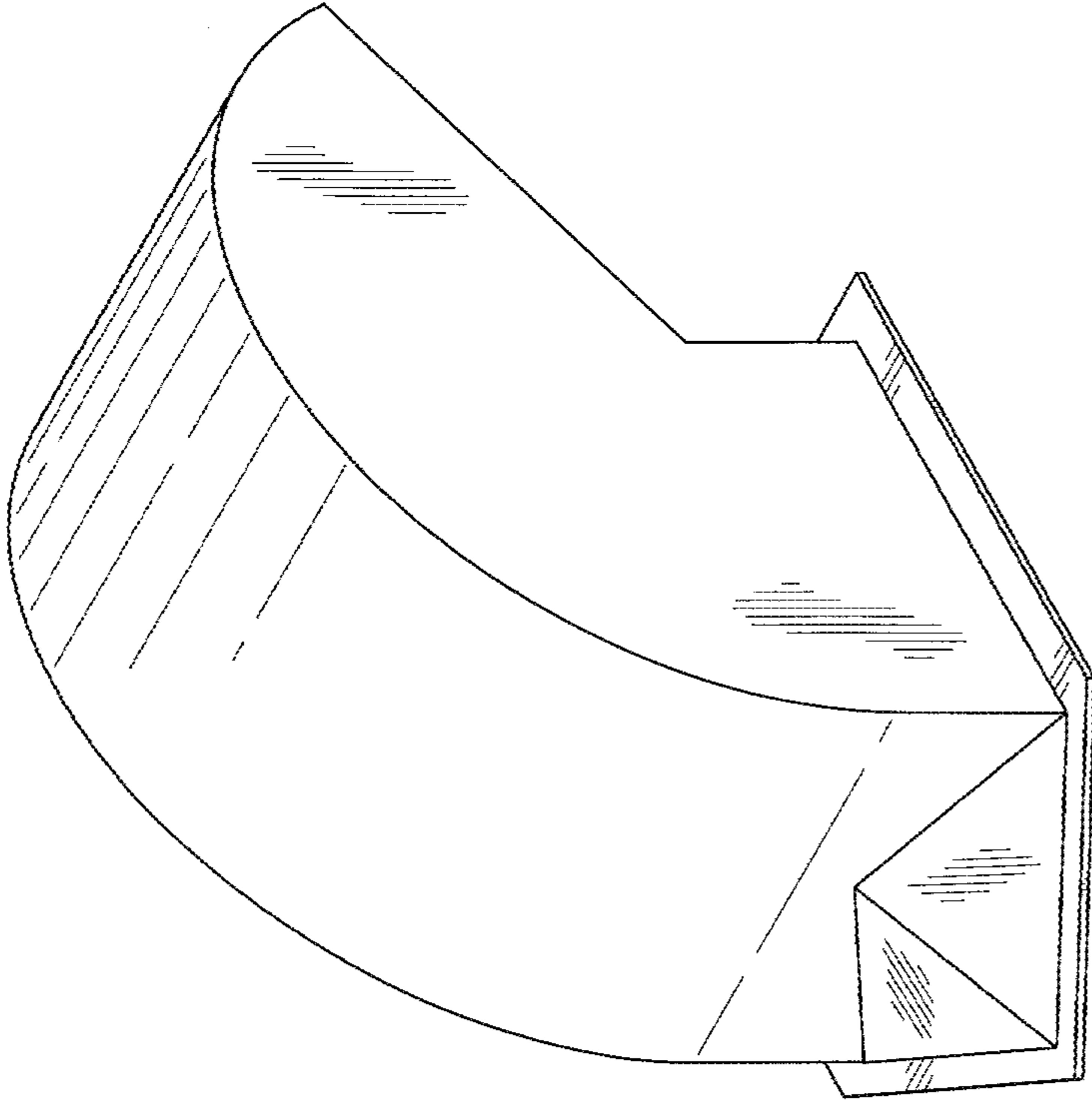


FIG. 1

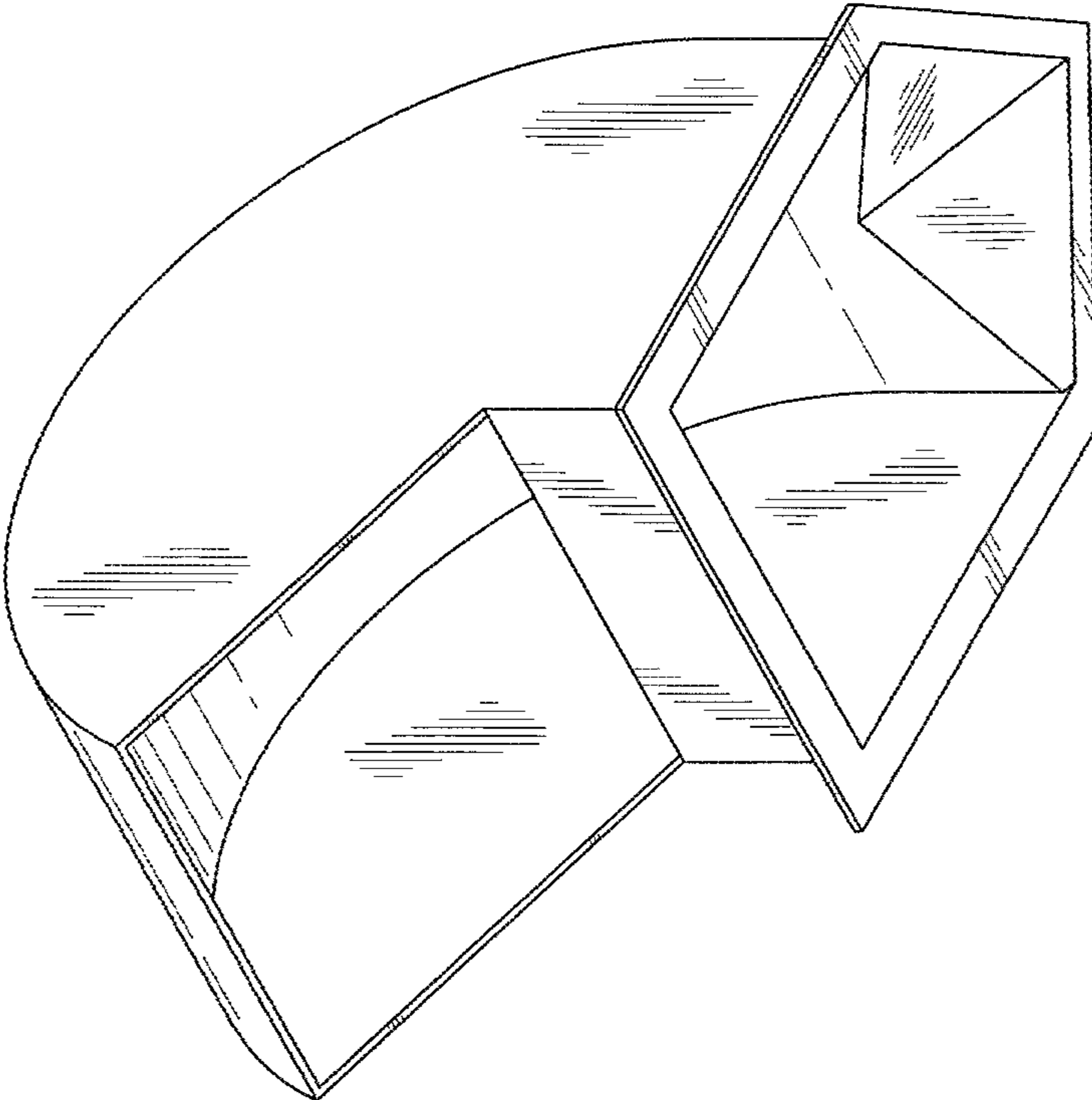


FIG. 2

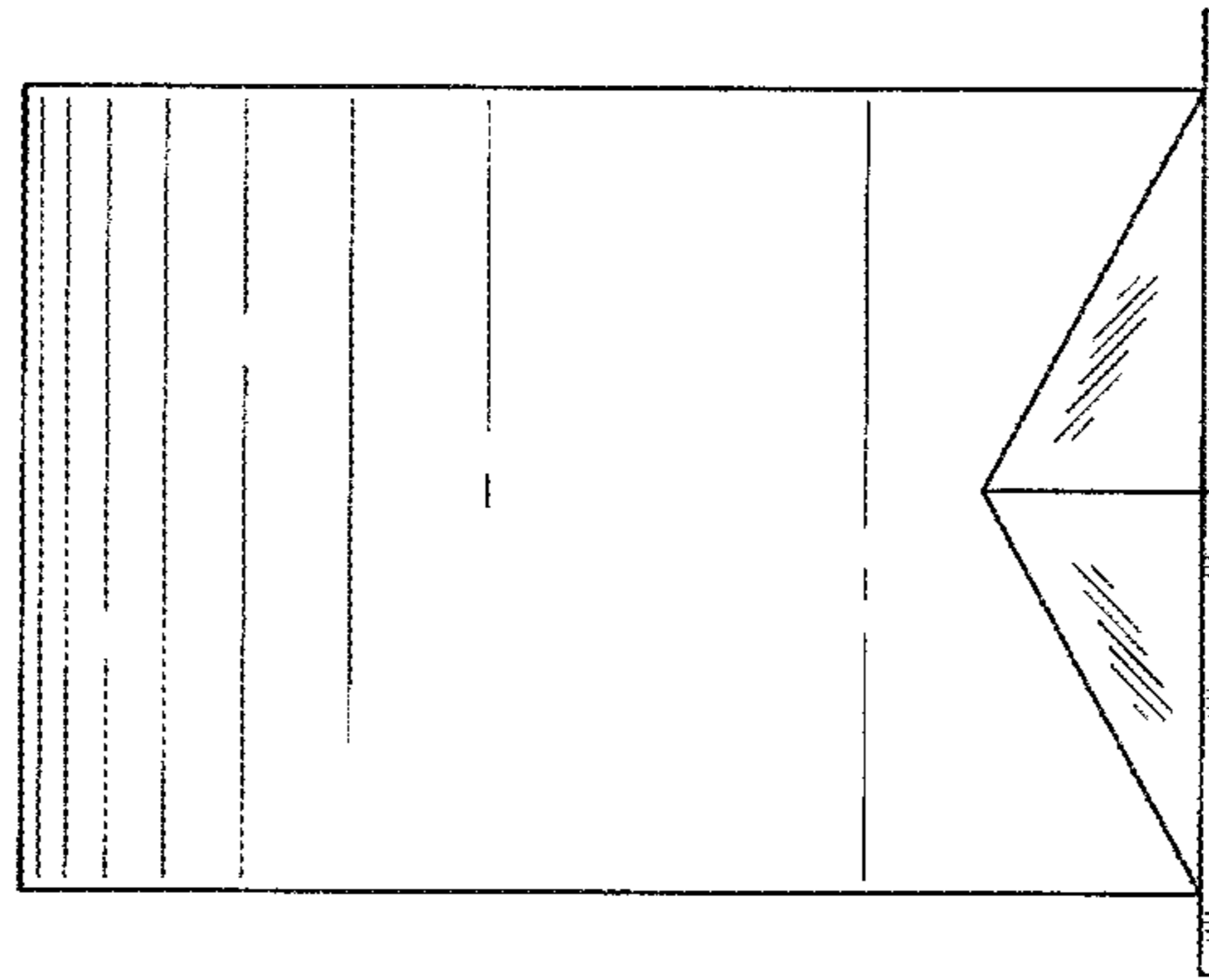


FIG. 3

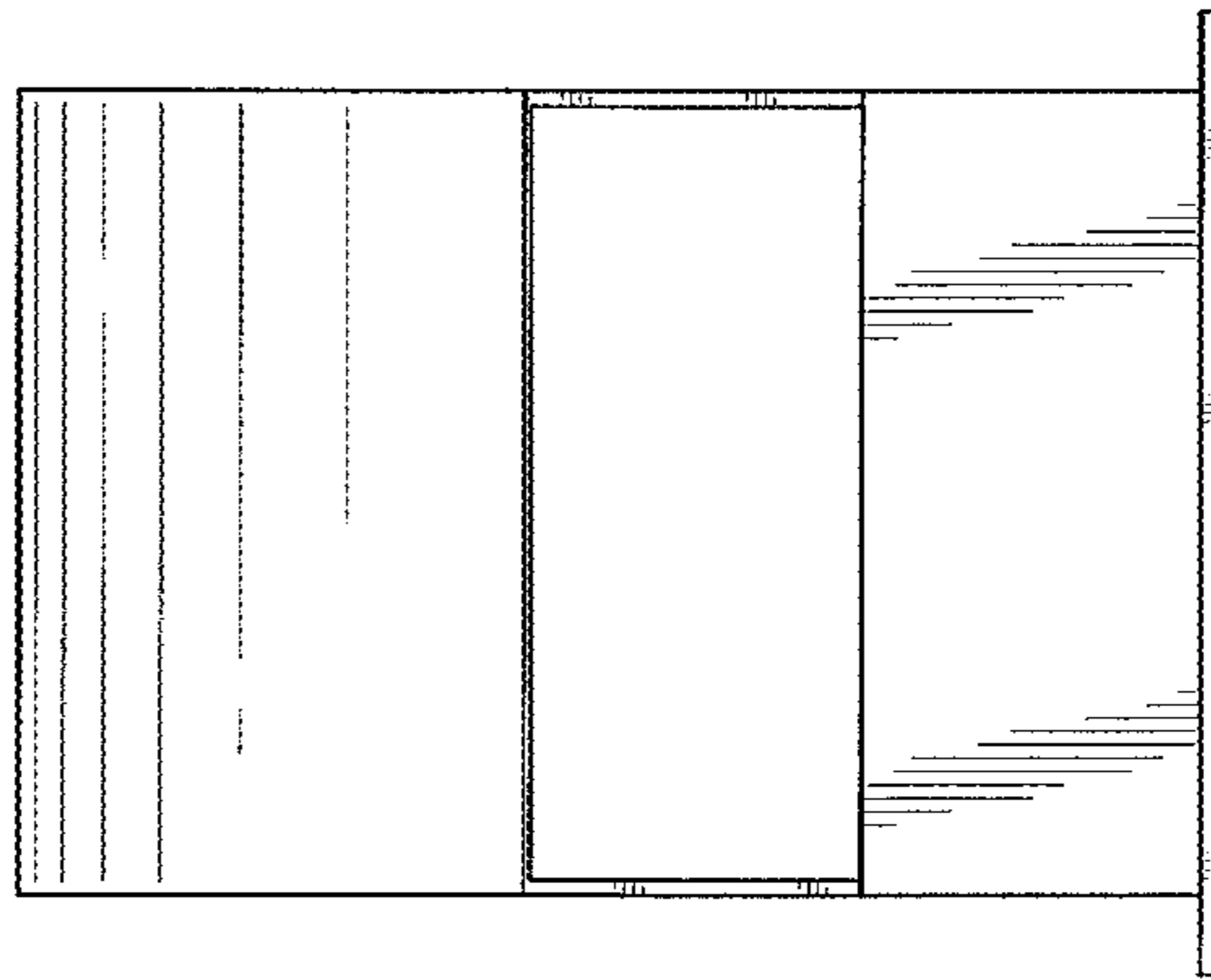


FIG. 4

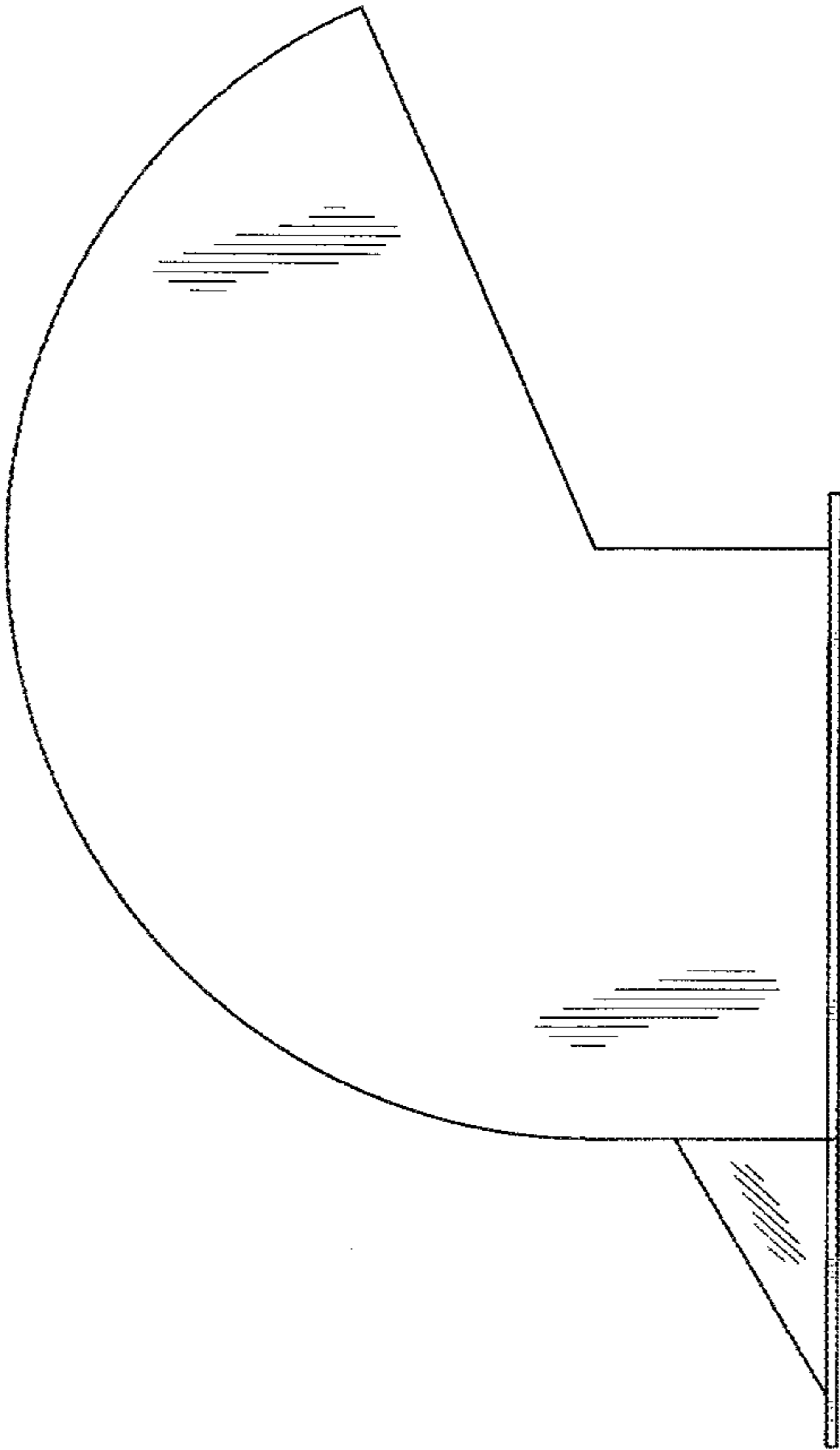


FIG. 5

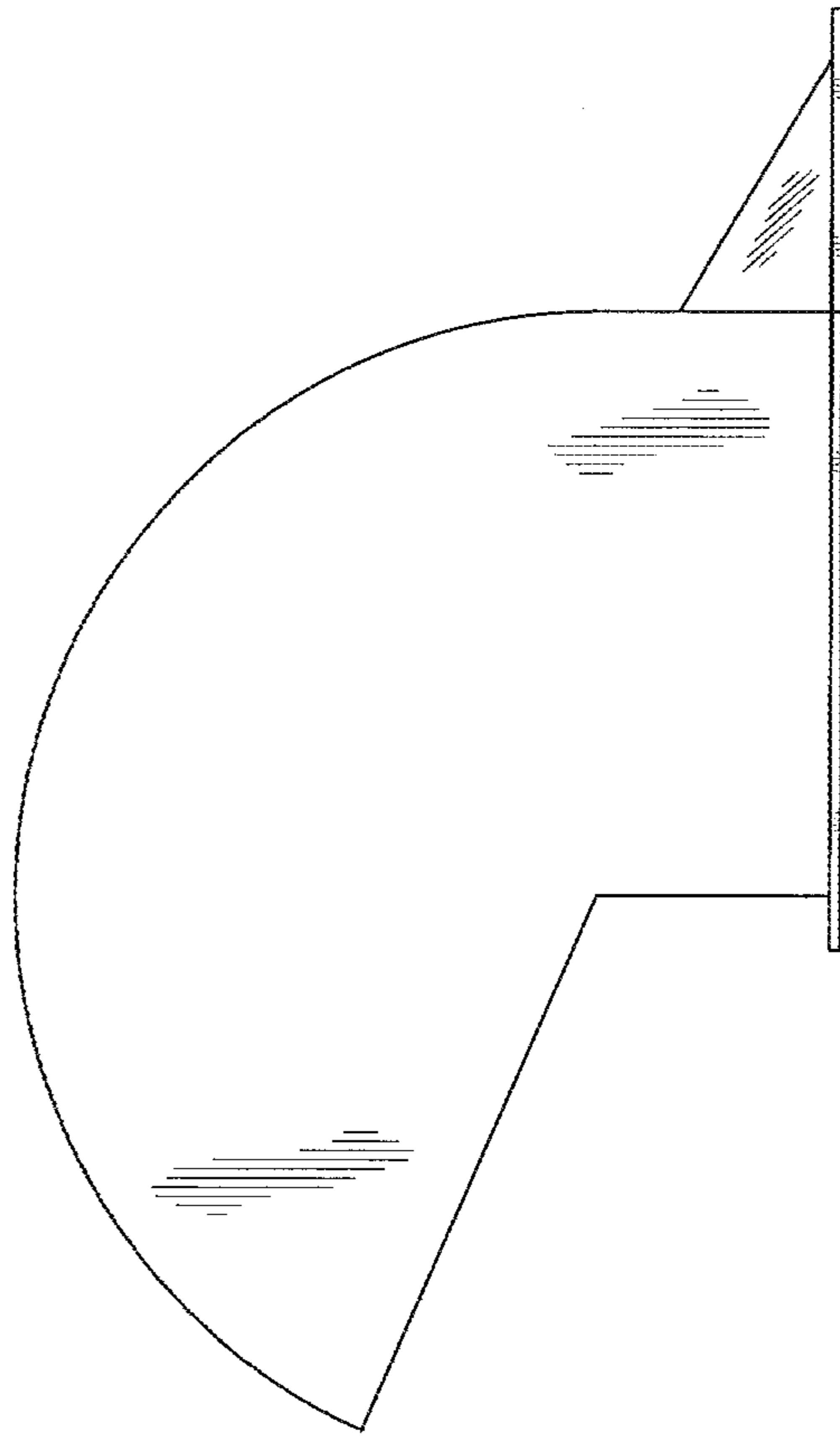


FIG. 6



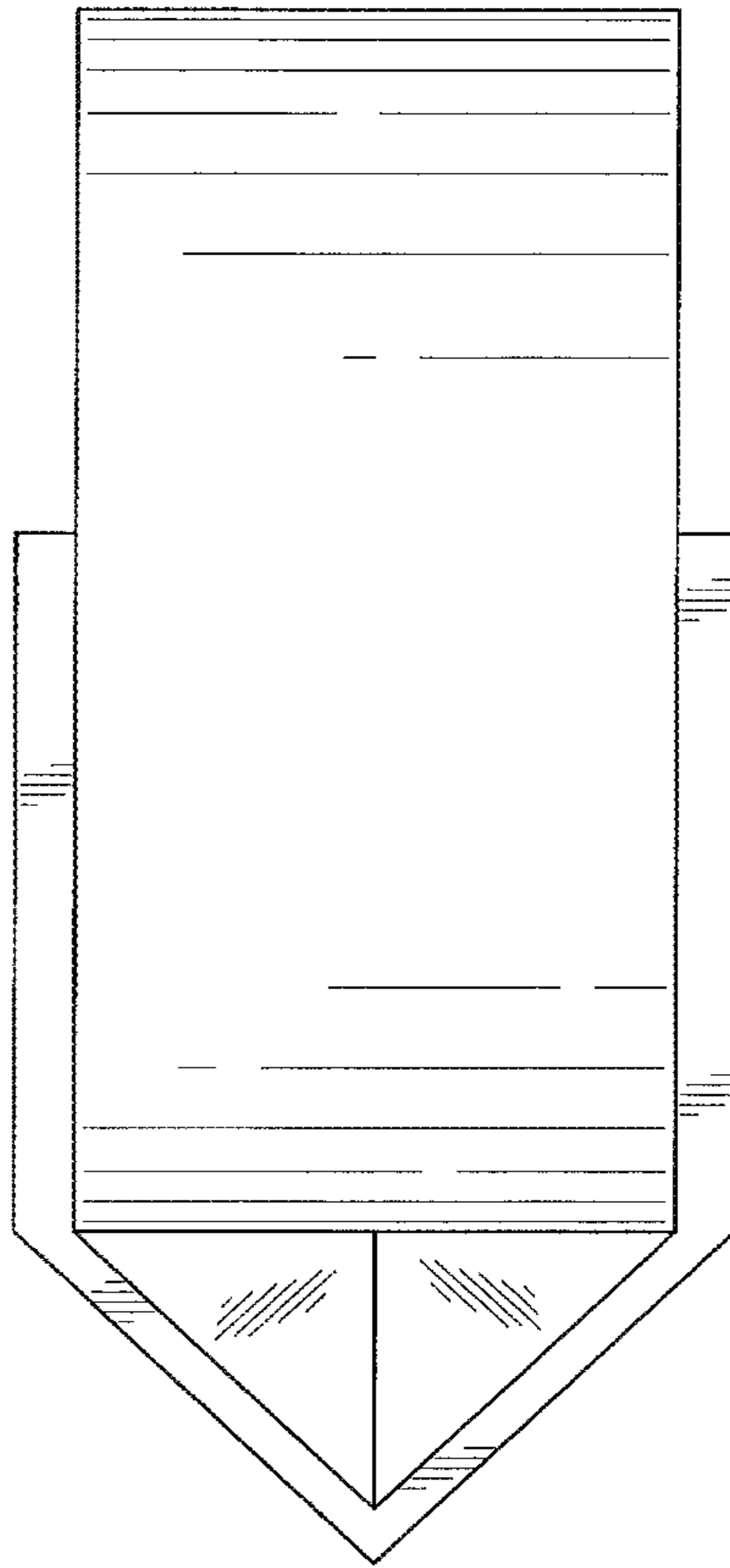


FIG. 7

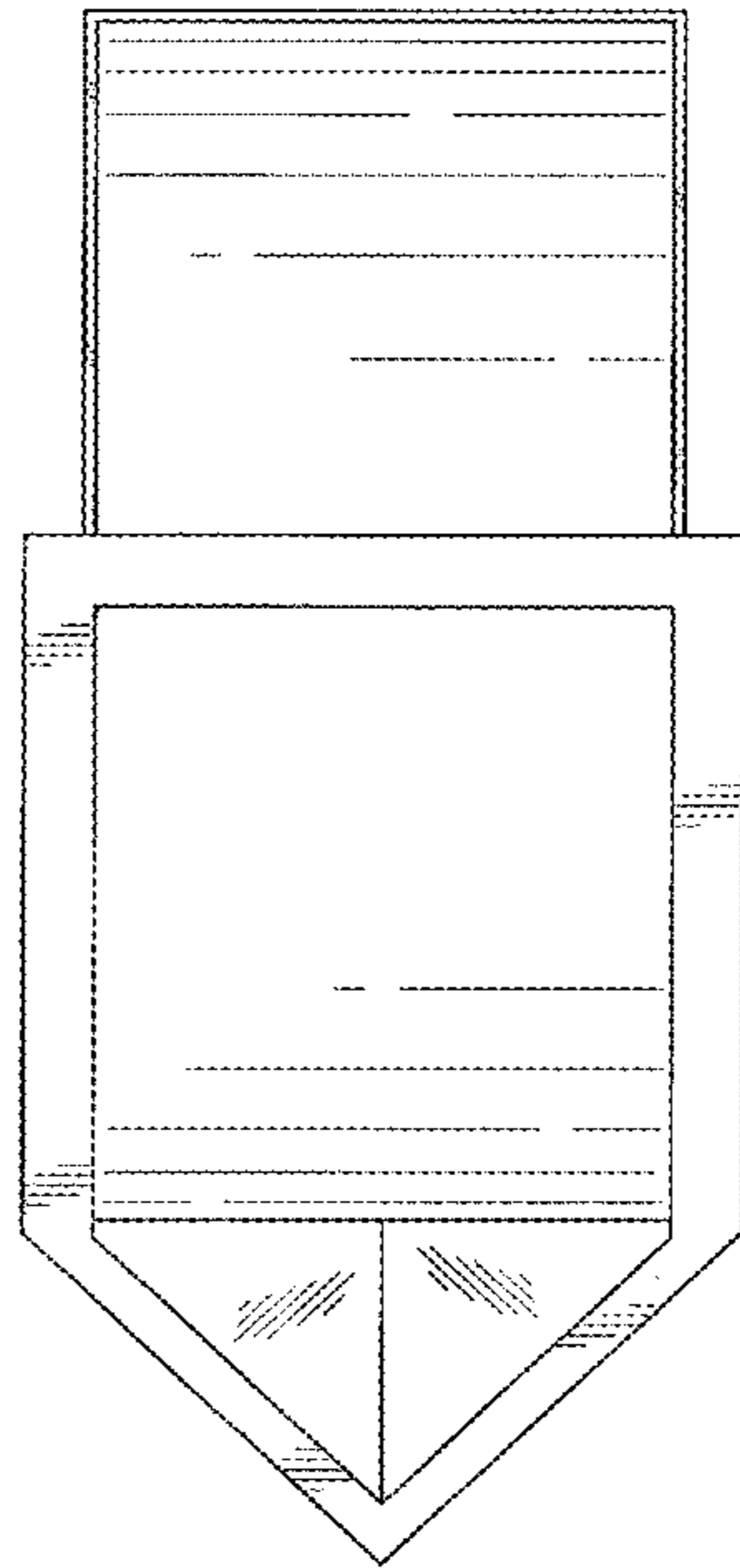


FIG. 8