



US00D789430S

(12) **United States Design Patent** (10) **Patent No.:** **US D789,430 S**
Watanobe et al. (45) **Date of Patent:** **** Jun. 13, 2017**

(54) **THROW-AWAY TIP FOR METAL CUTTING TOOL**

(71) Applicant: **SUMITOMO ELECTRIC HARDMETAL CORP.**, Itami-shi (JP)

(72) Inventors: **Naoki Watanobe**, Itami (JP); **Katsumi Okamura**, Itami (JP); **Yosuke Korogi**, Kishima-gun (JP); **Hiroki Yonekura**, Itami (JP)

(73) Assignee: **Sumitomo Electric Hardmetal Corp.**, Itami-shi (JP)

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

(21) Appl. No.: **29/570,541**

(22) Filed: **Jul. 8, 2016**

Related U.S. Application Data

(62) Division of application No. 29/496,943, filed on Jul. 18, 2014.

(30) **Foreign Application Priority Data**

Jan. 22, 2014 (JP) 2014-001087
Jan. 22, 2014 (JP) 2014-001088
Jan. 22, 2014 (JP) 2014-001089

(51) **LOC (10) Cl.** **15-09**

(52) **U.S. Cl.**
USPC **D15/139**

(58) **Field of Classification Search**
USPC D8/16-20, 70, 90, 98; D15/124-140
CPC .. B23C 5/06; B23C 5/15; B23C 5/207; B23C 2200/086; B23C 2200/128; B23C 2200/362; B23C 2200/367; B23C 2200/0422; B23C 2200/0494; B23B 27/007; B23B 2200/087; B23B 2200/201; B23B 2200/321

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,507,023 A 3/1985 Shikata
5,178,645 A 1/1993 Nakamura et al.
5,585,176 A 12/1996 Grab et al.
D401,253 S * 11/1998 Inayama D15/139
6,161,990 A 12/2000 Oles et al.
6,655,881 B2 12/2003 Shimizu

(Continued)

Primary Examiner — Patricia Palasik

(74) *Attorney, Agent, or Firm* — Venable LLP; Michael A. Sartori; F. Brock Riggs

(57) **CLAIM**

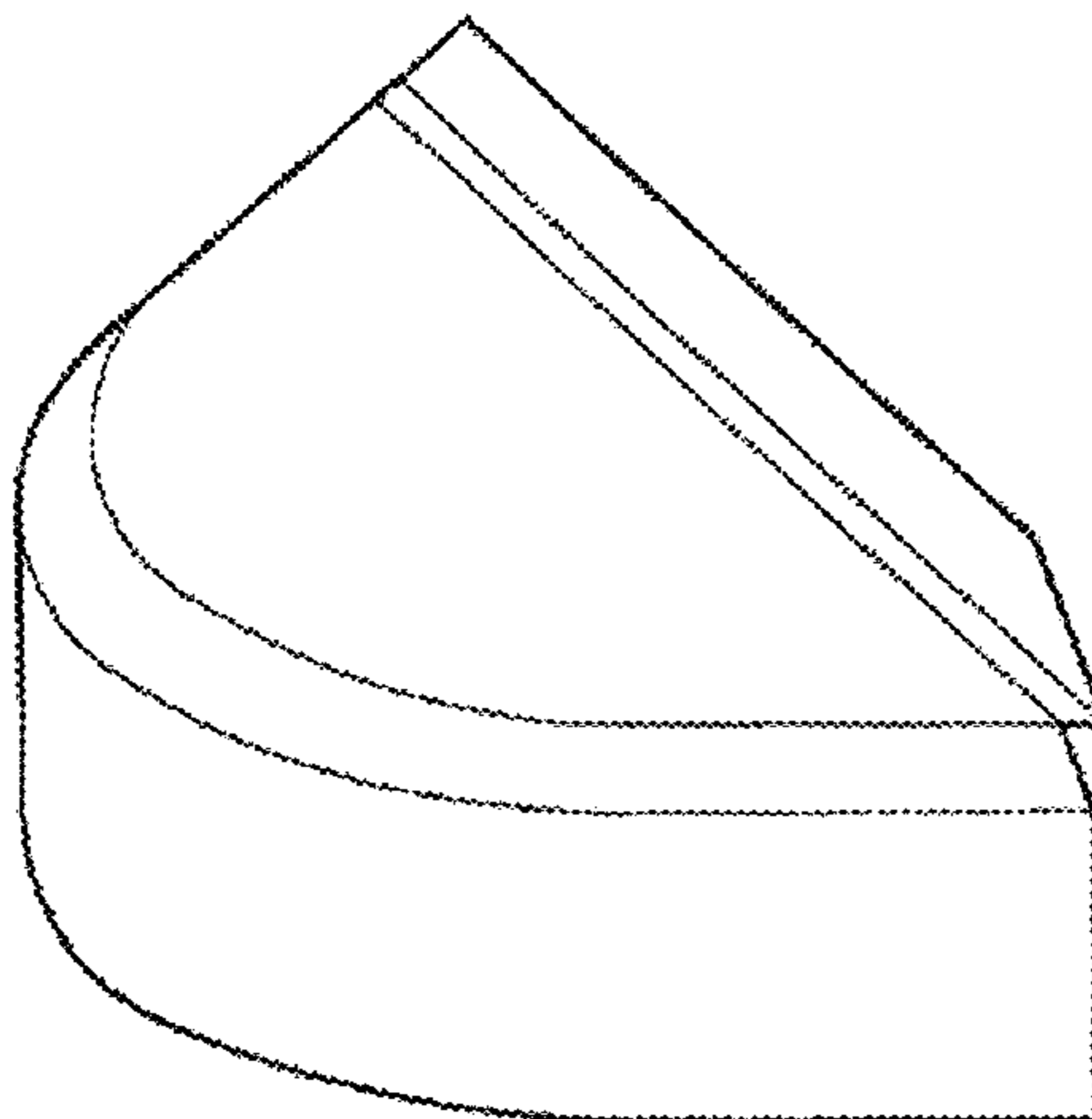
The ornamental design for a throw-away tip for metal cutting tool, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of an illustrative embodiment of a throw-away tip for metal cutting tool;
FIG. 2 is a top plan view of the illustrative embodiment;
FIG. 3 is a front view of the illustrative embodiment;
FIG. 4 is a rear view of the illustrative embodiment;
FIG. 5 is a bottom plan view of the illustrative embodiment;
FIG. 6 is a left-hand side view of the illustrative embodiment;
FIG. 7 is a right-hand side view of the illustrative embodiment;
FIG. 8 is an enlarged perspective view of the illustrative embodiment;
FIG. 9 is an enlarged top plan view of the illustrative embodiment; and,
FIG. 10 is an enlarged front view of the illustrative embodiment.

The features shown in broken lines 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

6,742,970	B2	6/2004	Oles et al.	
7,322,776	B2	1/2008	Webb et al.	
7,360,972	B2	4/2008	Sjögren	
8,079,786	B2	12/2011	Corbin	
9,028,953	B2	5/2015	Battaglia et al.	
D748,169	S *	1/2016	Tomoda	D15/139
D755,266	S *	5/2016	Tomoda	D15/139
2002/0054794	A1	5/2002	Kato et al.	
2008/0075543	A1	3/2008	Zhu et al.	
2008/0254282	A1	10/2008	Kukino et al.	
2010/0129168	A1	5/2010	Waki et al.	
2015/0016902	A1	1/2015	Okamura et al.	
2015/0202730	A1	7/2015	Watanobe et al.	
2015/0239050	A1	8/2015	Hirano et al.	
2015/0266100	A1	9/2015	Okamura et al.	

* cited by examiner

FIG. 1

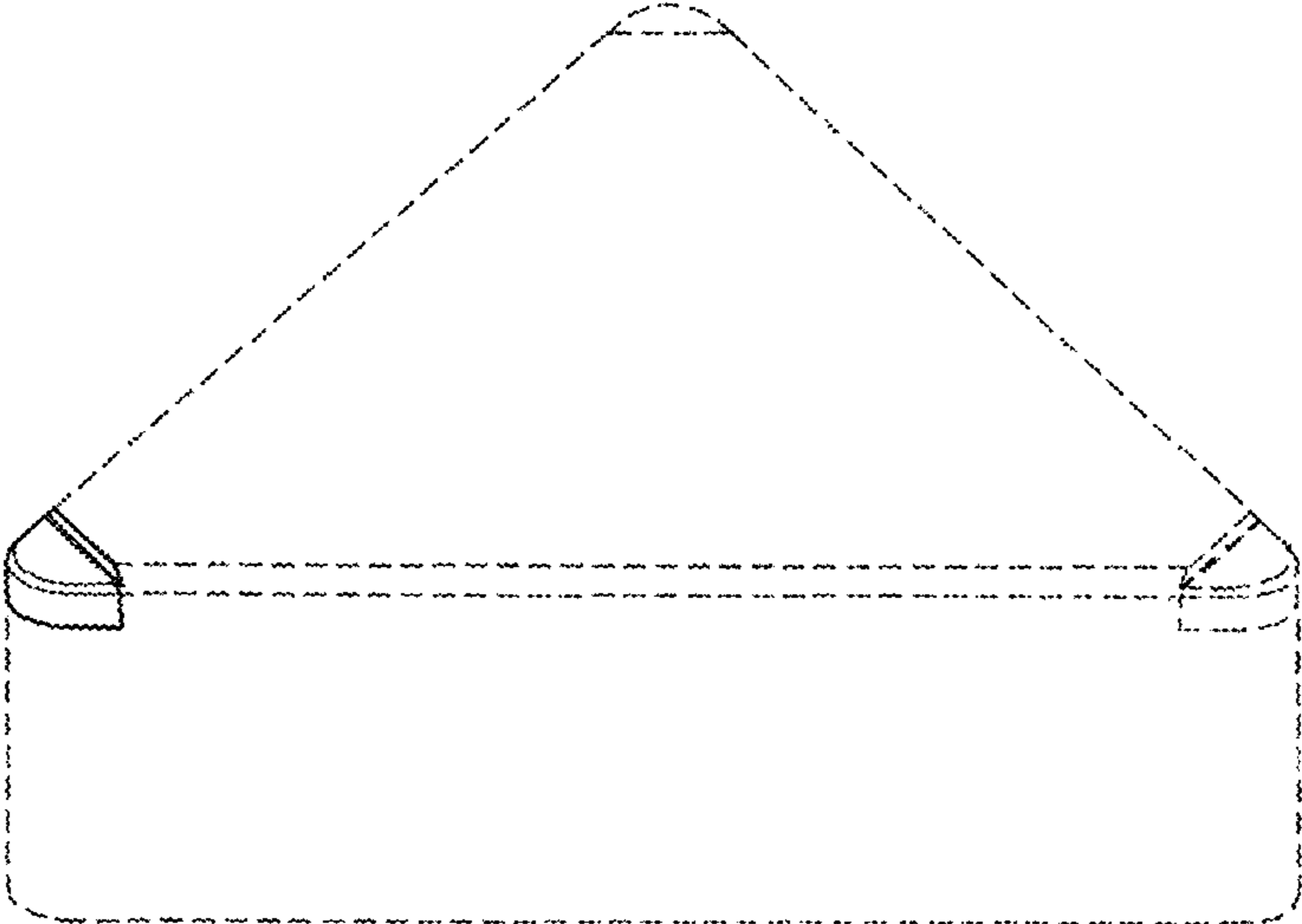


FIG. 2

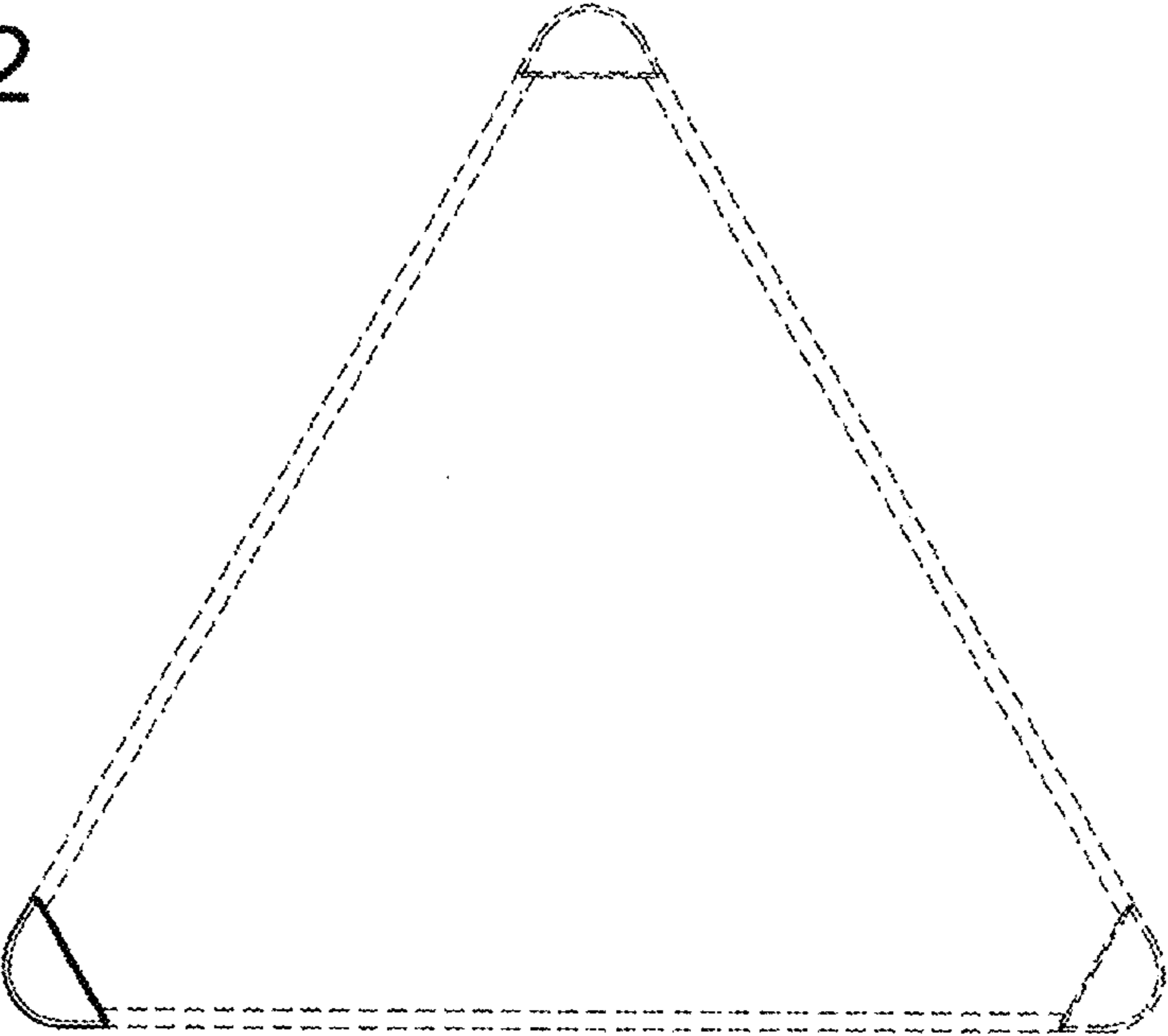


FIG. 3

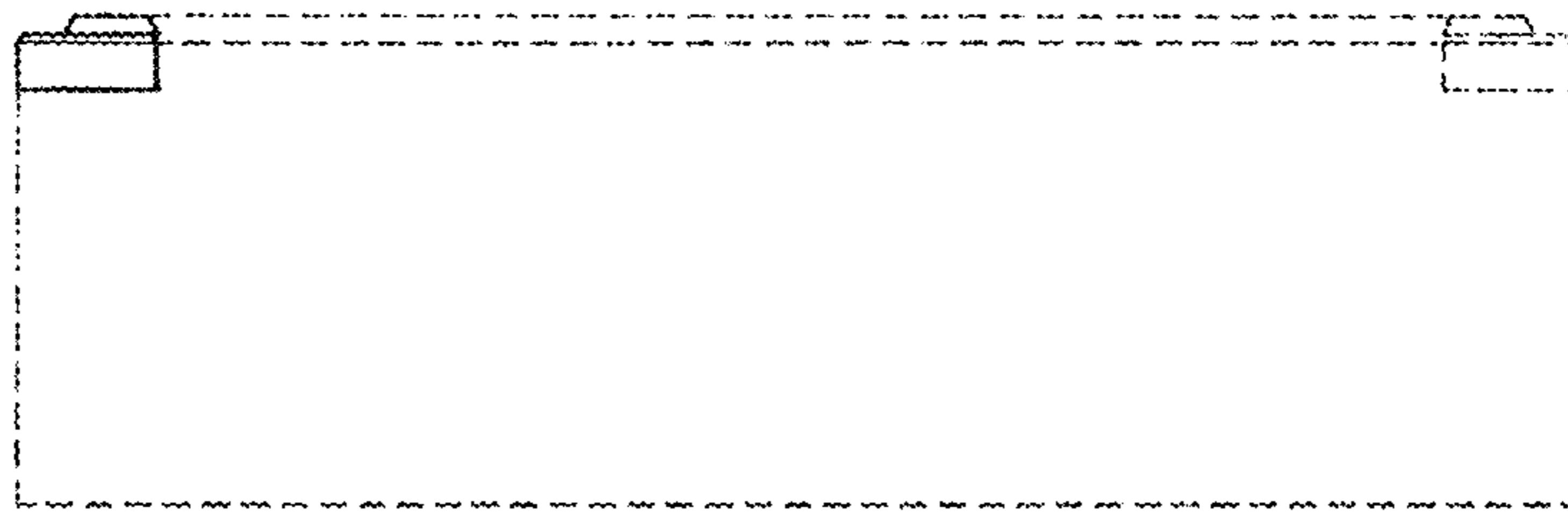


FIG. 4

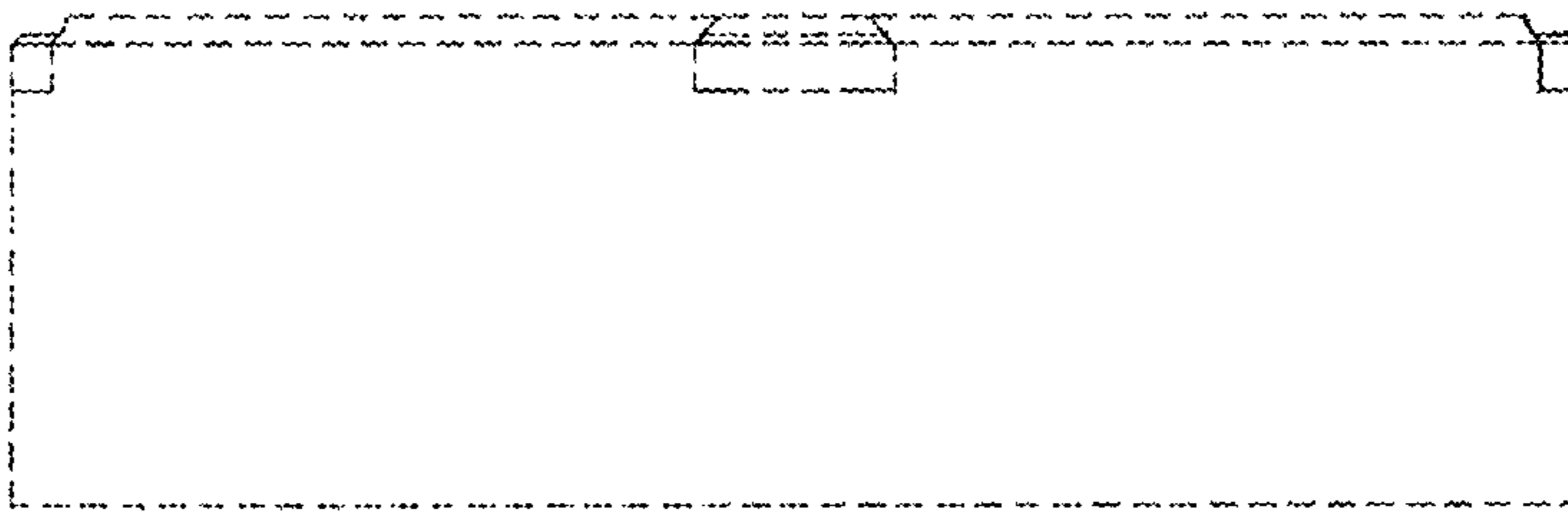


FIG. 5

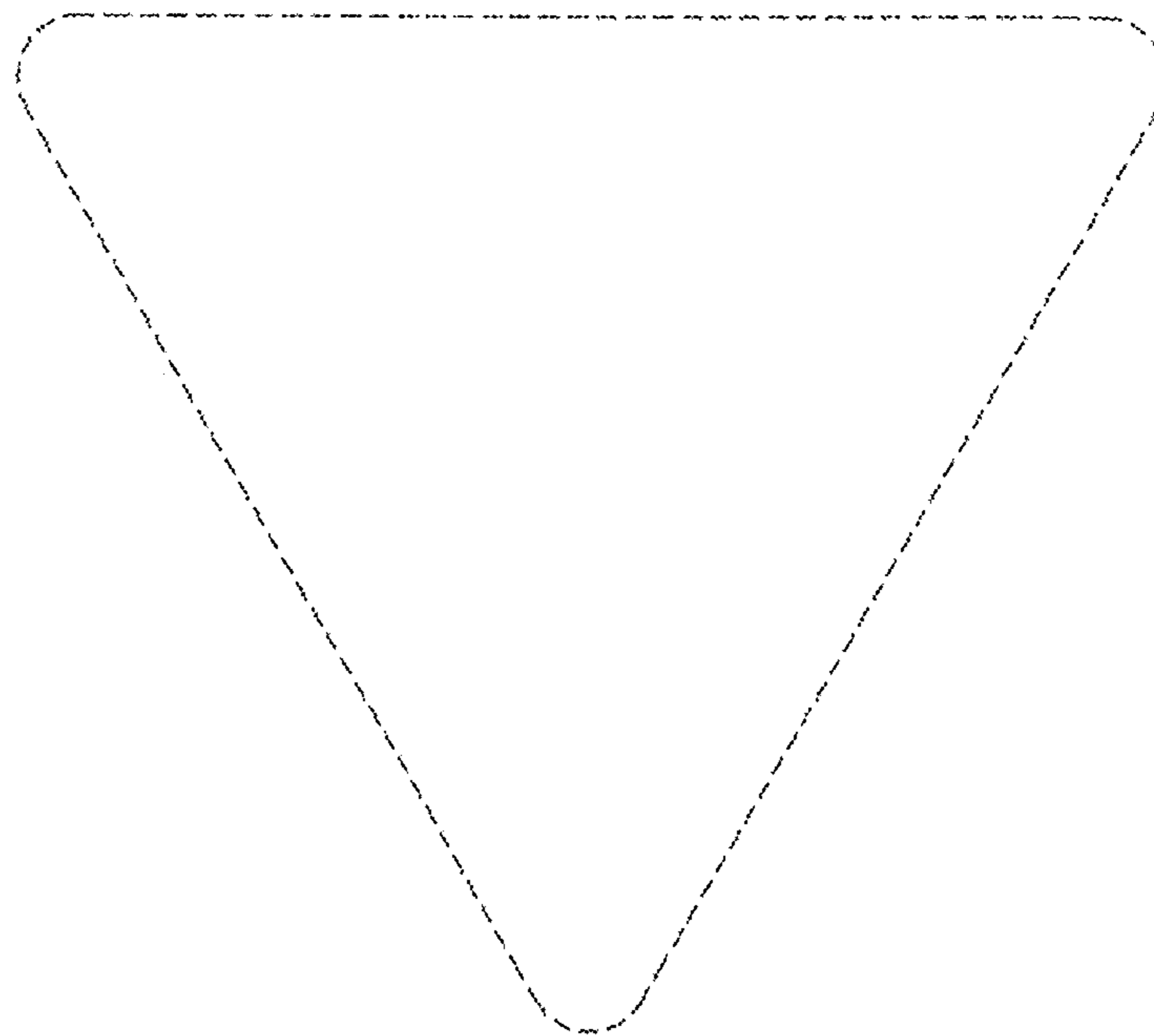


FIG. 6

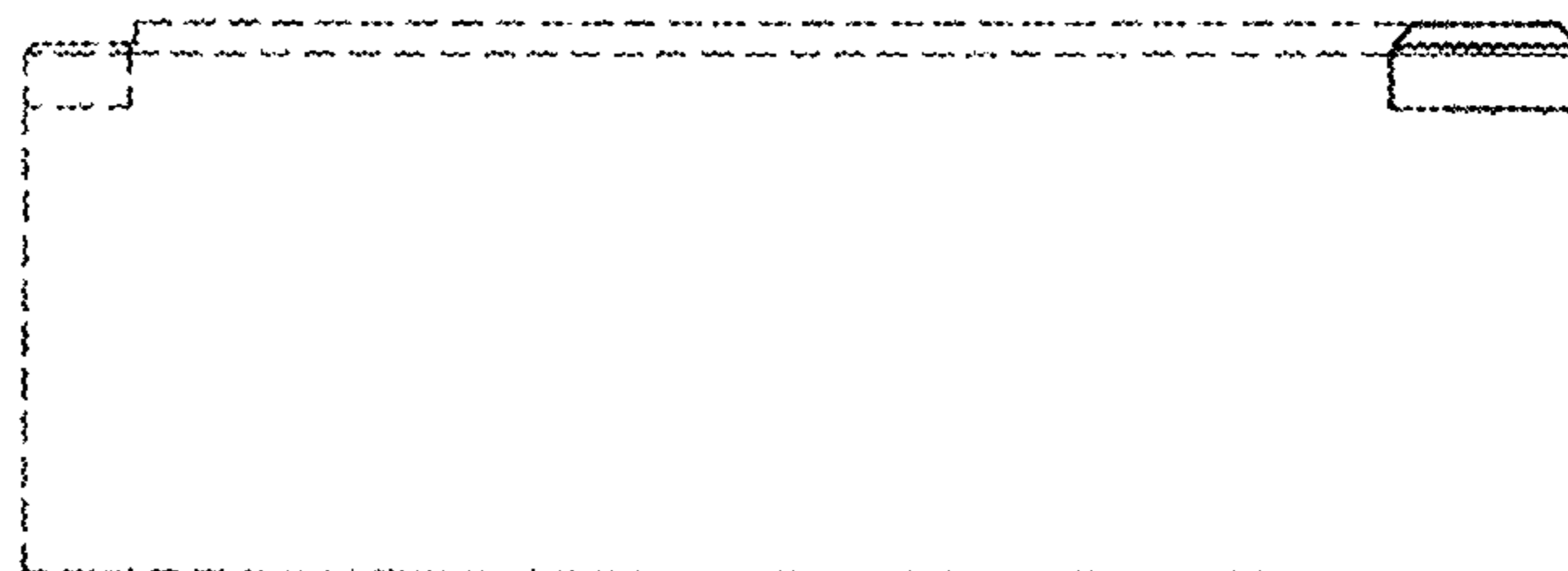


FIG. 7

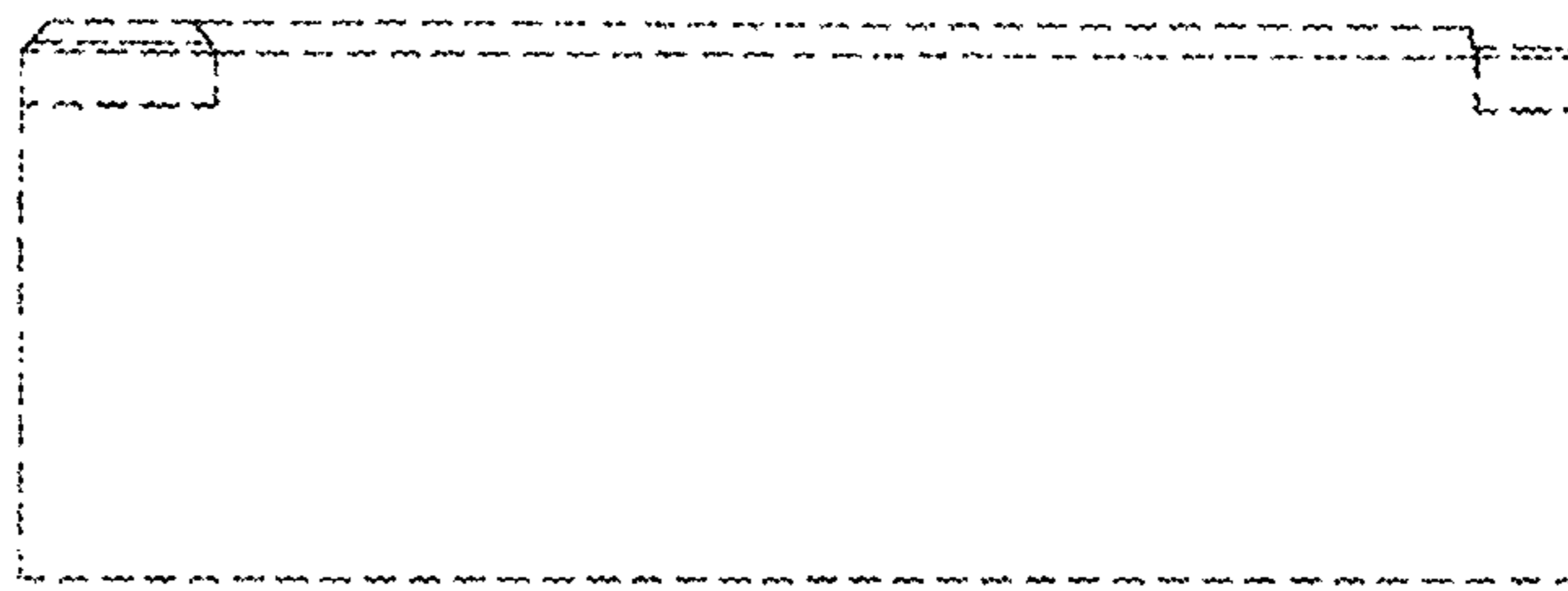


FIG. 8

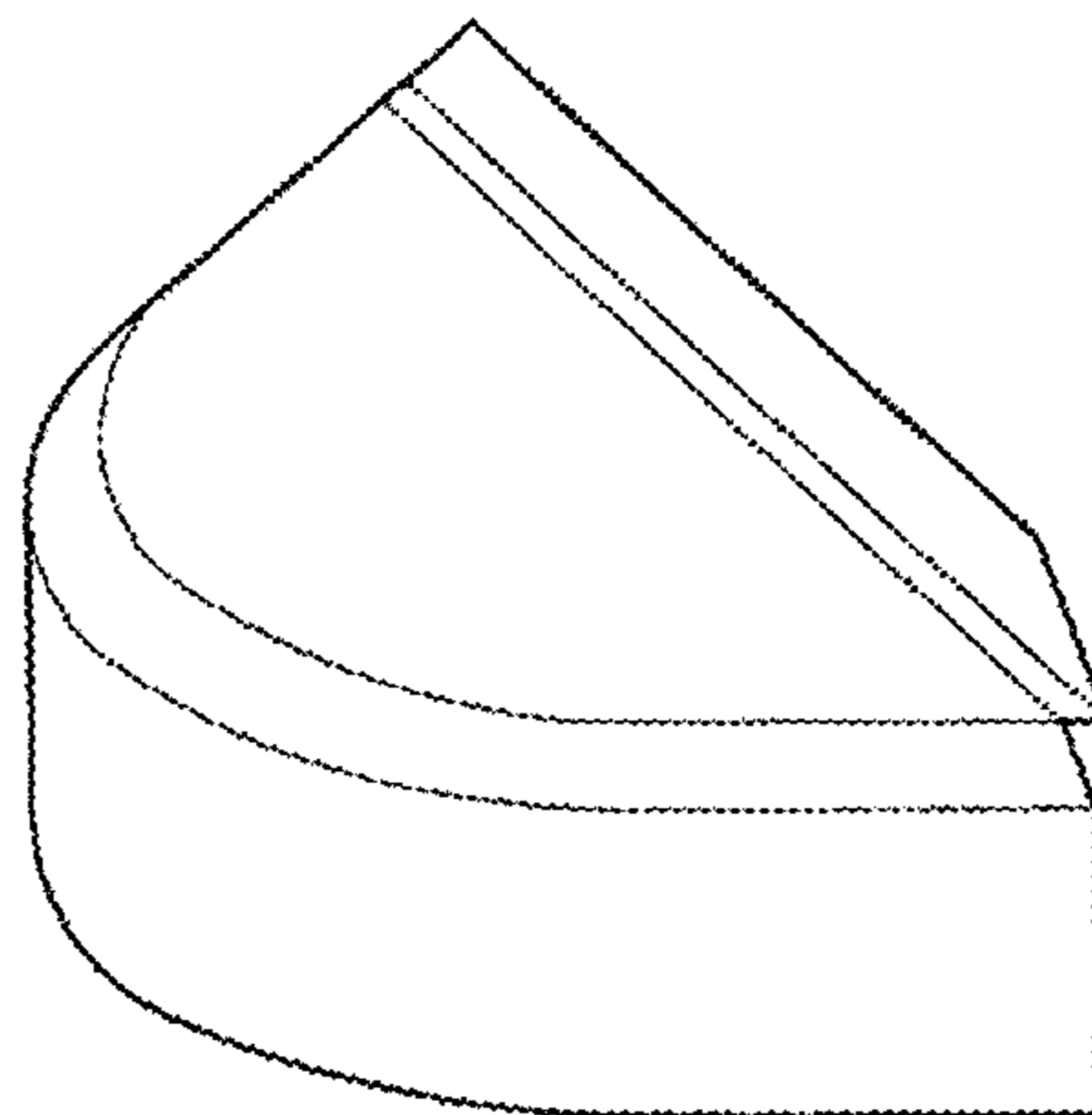


FIG. 9

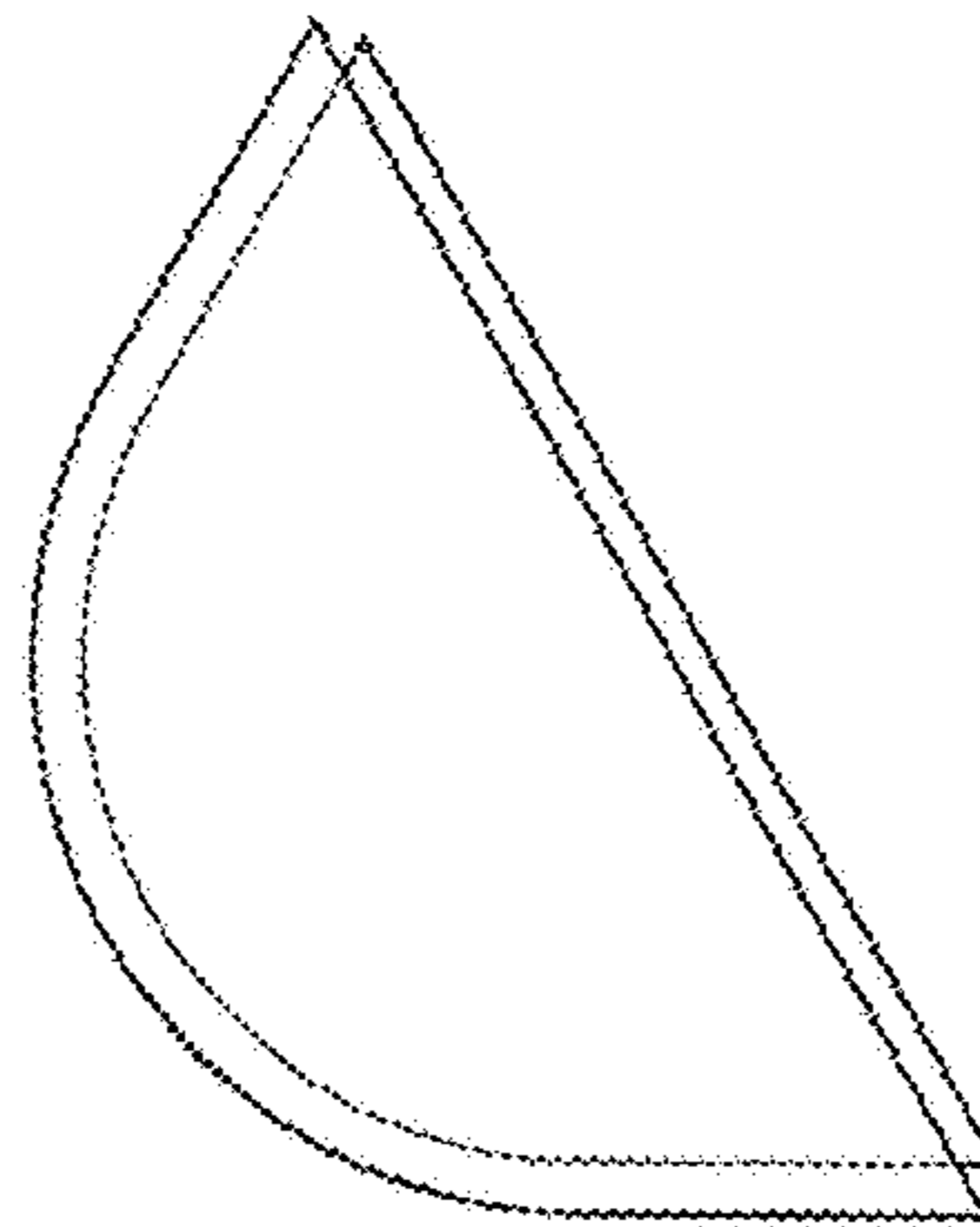


FIG. 10

