



US00D809149S

(12) **United States Design Patent** (10) **Patent No.:** **US D809,149 S**  
**Tsuzuranuki et al.** (45) **Date of Patent:** **\*\* Jan. 30, 2018**

(54) **KNEE JOINT SUPPORTER**

(56) **References Cited**

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**ADVANCING INC.**, Osaka (JP);  
**DMCHAIN COOPERATIVE**,  
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U.S. PATENT DOCUMENTS

D334,827 S *	4/1993	Brown	.....	D24/190
5,267,951 A *	12/1993	Ishii	.....	A61F 13/061 602/14
D360,263 S *	7/1995	Holland	.....	D24/190
D374,547 S *	10/1996	McDonald	.....	D24/190
D389,582 S *	1/1998	Bodenschatz	.....	D24/190
D404,819 S *	1/1999	Rodgers	.....	D24/190
D405,180 S *	2/1999	Reina	.....	D24/190
D439,342 S *	3/2001	Seip, Jr.	.....	D24/190
D503,806 S *	4/2005	Williams	.....	D24/190
D619,267 S *	7/2010	Beckwith	.....	D24/190
D626,243 S *	10/2010	Sagnip	.....	D24/190
D634,437 S *	3/2011	Gramza	.....	D24/190

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(Continued)

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

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Friedrich LLP

(21) Appl. No.: **35/501,089**

(57) **CLAIM**

(22) Filed: **Dec. 16, 2015**

The ornamental design for a knee joint supporter, as shown  
and described.

(80) **Hague Agreement Data**

**DESCRIPTION**

Int. Filing Date: **Dec. 16, 2015**

Int. Reg. No.: **DM/090016**

Int. Reg. Date: **Dec. 16, 2015**

Int. Reg. Pub. Date: **Jun. 17, 2016**

1. Knee joint supporter  
**1.1** is a front view;  
**1.2** is a back view;  
**1.3** is a left view;  
**1.4** is a right view;  
**1.5** is a top view;  
**1.6** is a bottom view;  
**1.7** is a perspective view;  
**1.8** is a front view shown in an environment; and  
**1.9** is another front view shown in an environment.  
In the reproductions, the stippling feature indicates a contrast in appearance. In **1.1** through **1.7** the broken lines are for the purpose of illustrating a stitching feature and form a part of the claimed design. In **1.8** through **1.9** the broken lines are for the purpose of illustrating environment only and form no part of the claimed design.

(30) **Foreign Application Priority Data**

Jun. 26, 2015 (JP) ..... 2015-014230

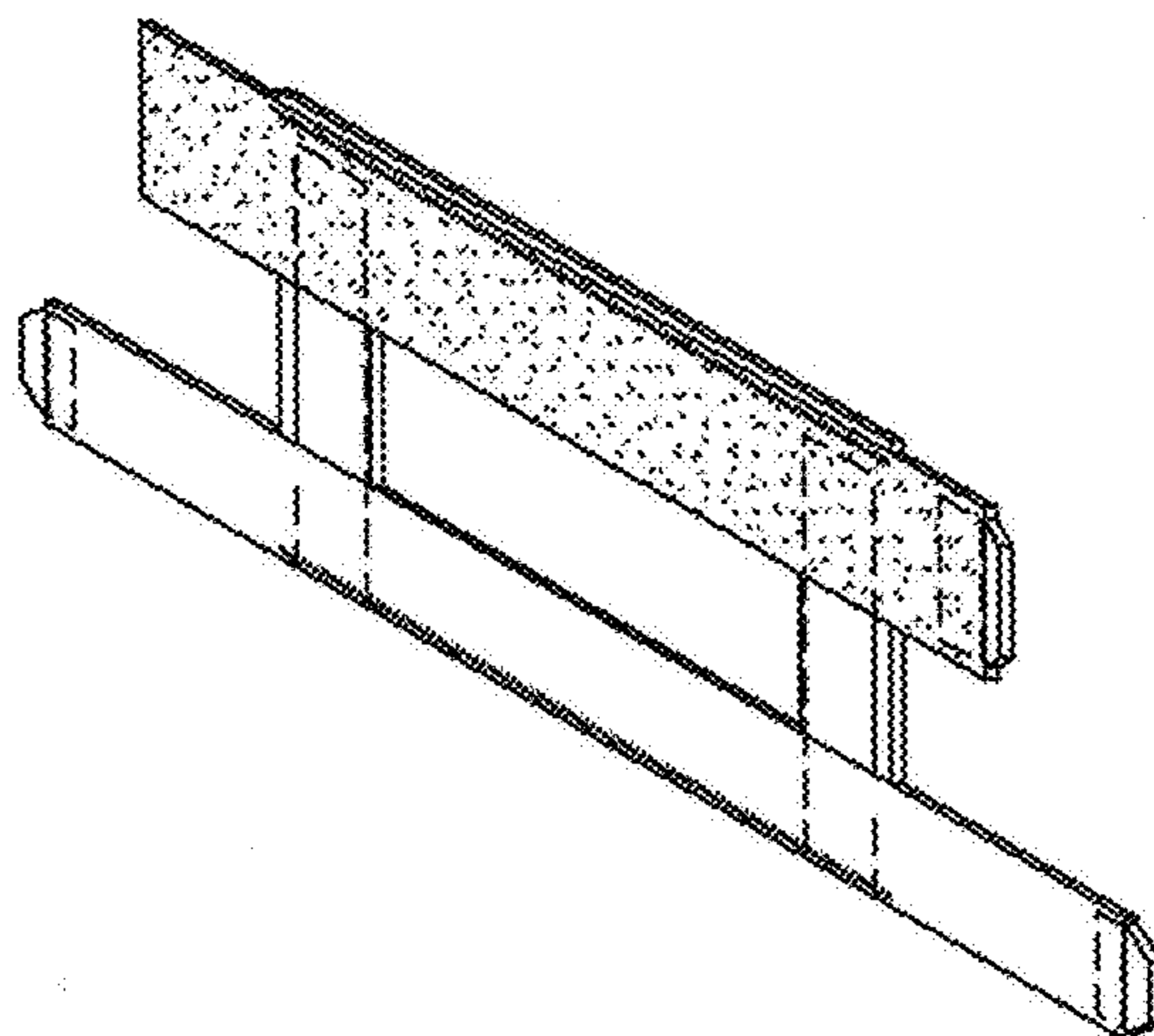
(51) **LOC (11) Cl.** ..... **24-00**

(52) **U.S. Cl.**  
USPC ..... **D24/190**

(58) **Field of Classification Search**  
USPC ..... D24/190, 231, 189; D14/411; 602/19,  
602/14

See application file for complete search history.

**1 Claim, 9 Drawing Sheets**



(56)

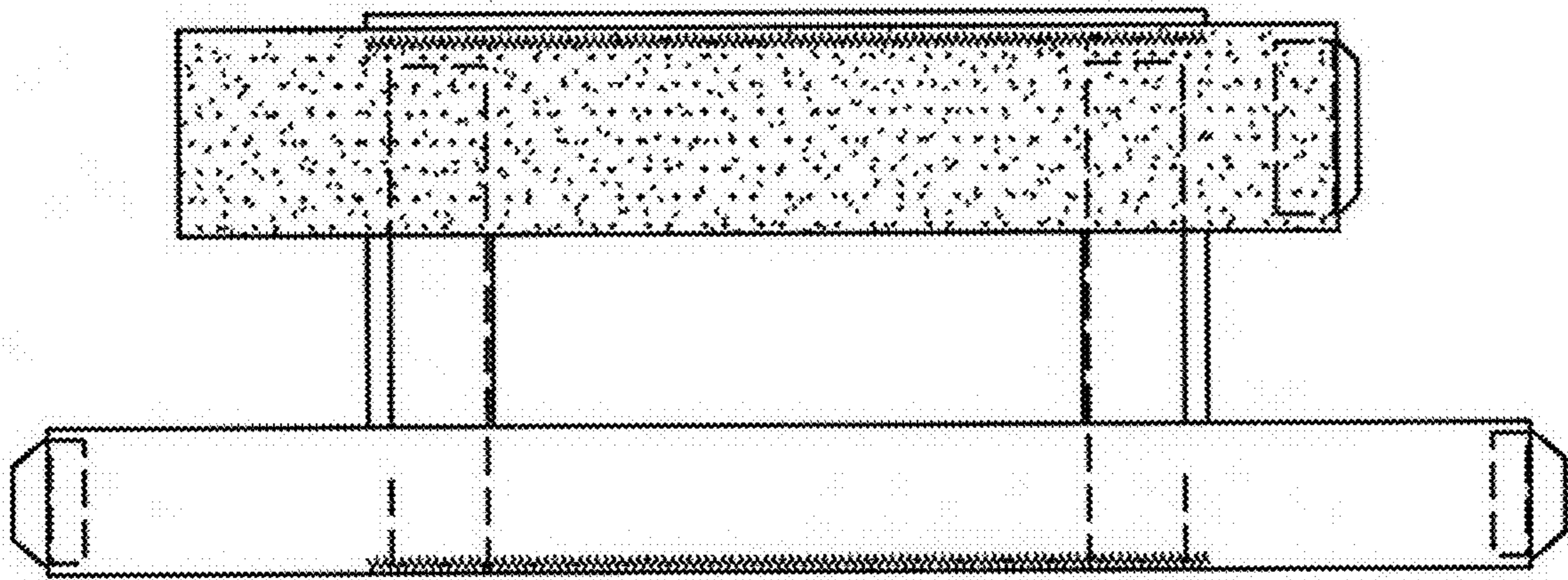
**References Cited**

## U.S. PATENT DOCUMENTS

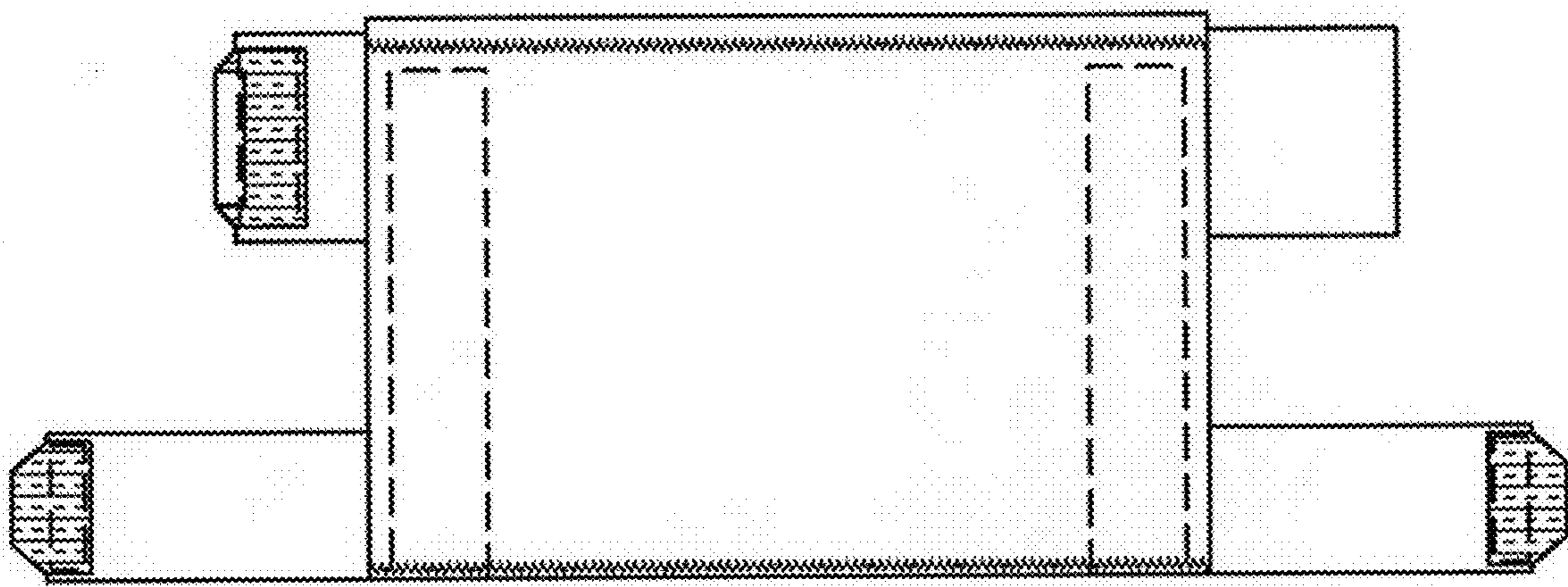
D658,300	S *	4/2012	Rhijn .....	D24/190
D685,484	S *	7/2013	Brambilla .....	D24/190
D687,154	S *	7/2013	Chen .....	D24/190
D710,018	S *	7/2014	Forbes .....	D24/190
D716,956	S *	11/2014	Ortega .....	D24/190
D733,895	S *	7/2015	Wratten .....	D24/190
D746,997	S *	1/2016	Higgins .....	D24/190
D750,262	S *	2/2016	Kusmirek .....	D24/190
D750,790	S *	3/2016	Ortega .....	D24/190
D751,720	S *	3/2016	Williams .....	D24/190
D758,598	S *	6/2016	Forbes .....	D24/190
D769,451	S *	10/2016	MacMillan .....	D24/190
D779,075	S *	2/2017	Fried .....	D24/190
D787,518	S *	5/2017	Tudisco .....	D14/411
2013/0116609	A1 *	5/2013	Matsuo .....	A41D 13/0531
				602/19
2014/0288474	A1 *	9/2014	Okada .....	A61F 5/024
				602/19
2017/0065449	A1 *	3/2017	Tsuchiya .....	A61F 5/0118
2017/0071773	A1 *	3/2017	Tsuchiya .....	A61F 5/0106
2017/0079847	A1 *	3/2017	Tsuchiya .....	A61F 13/065
2017/0135842	A1 *	5/2017	Tsuchiya .....	A61F 5/028

\* cited by examiner

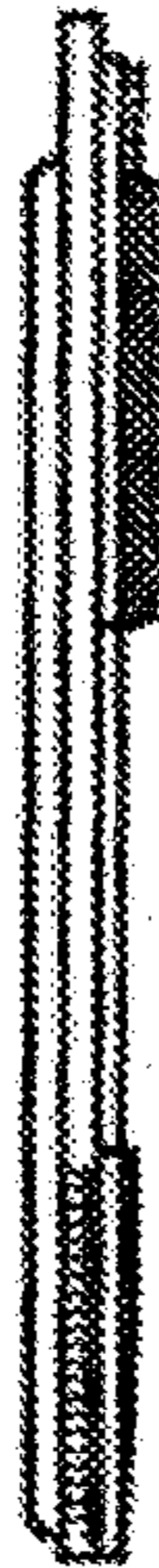
1.1



1.2



1.3

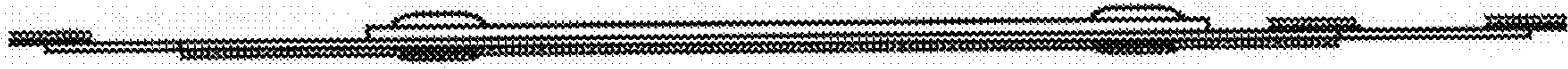


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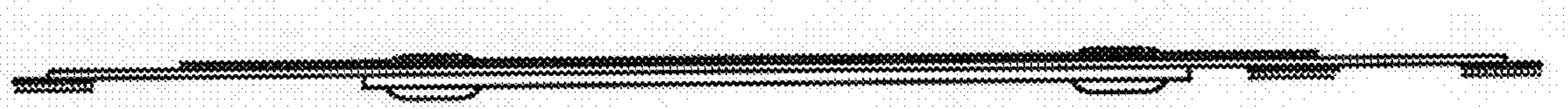




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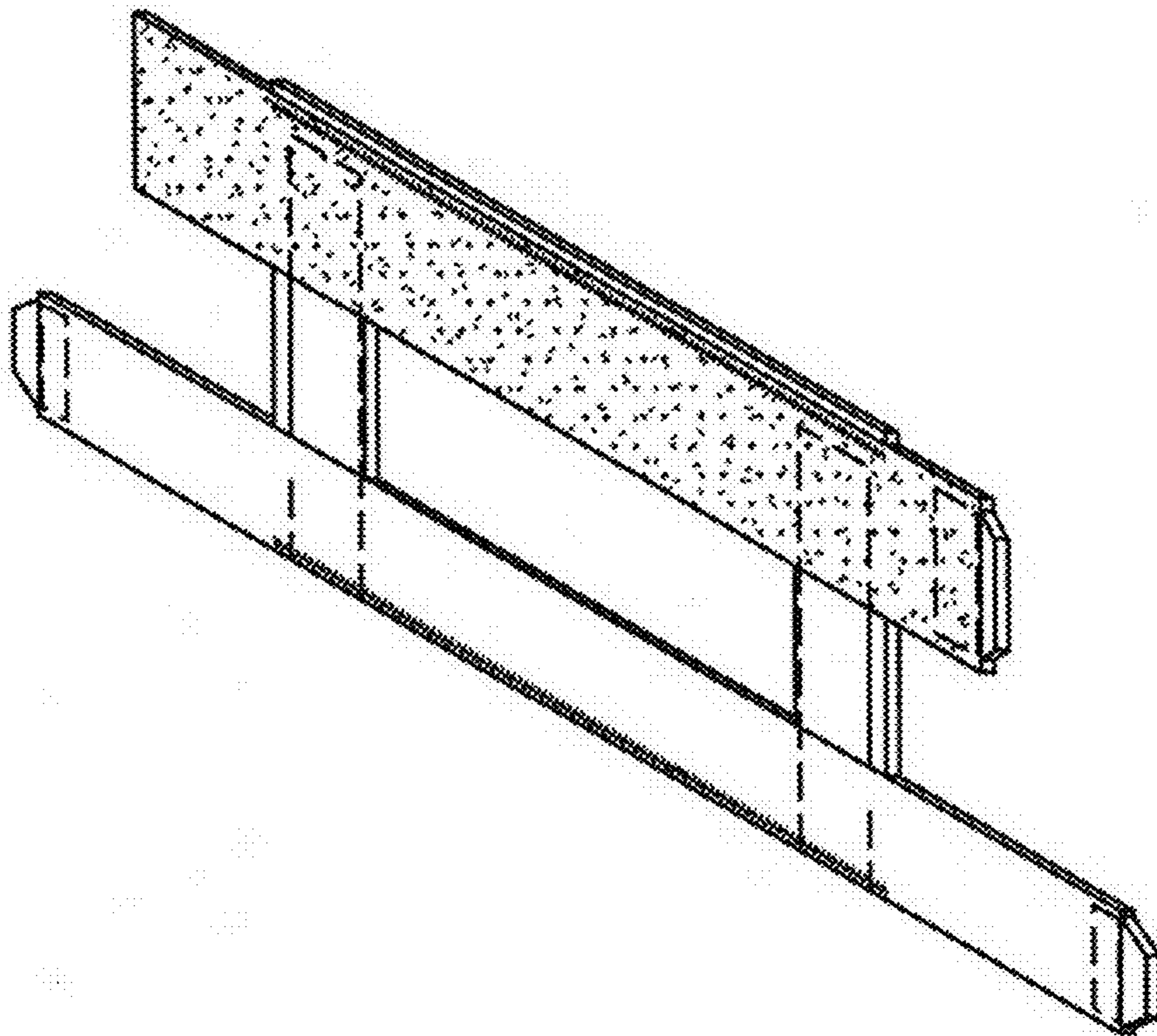


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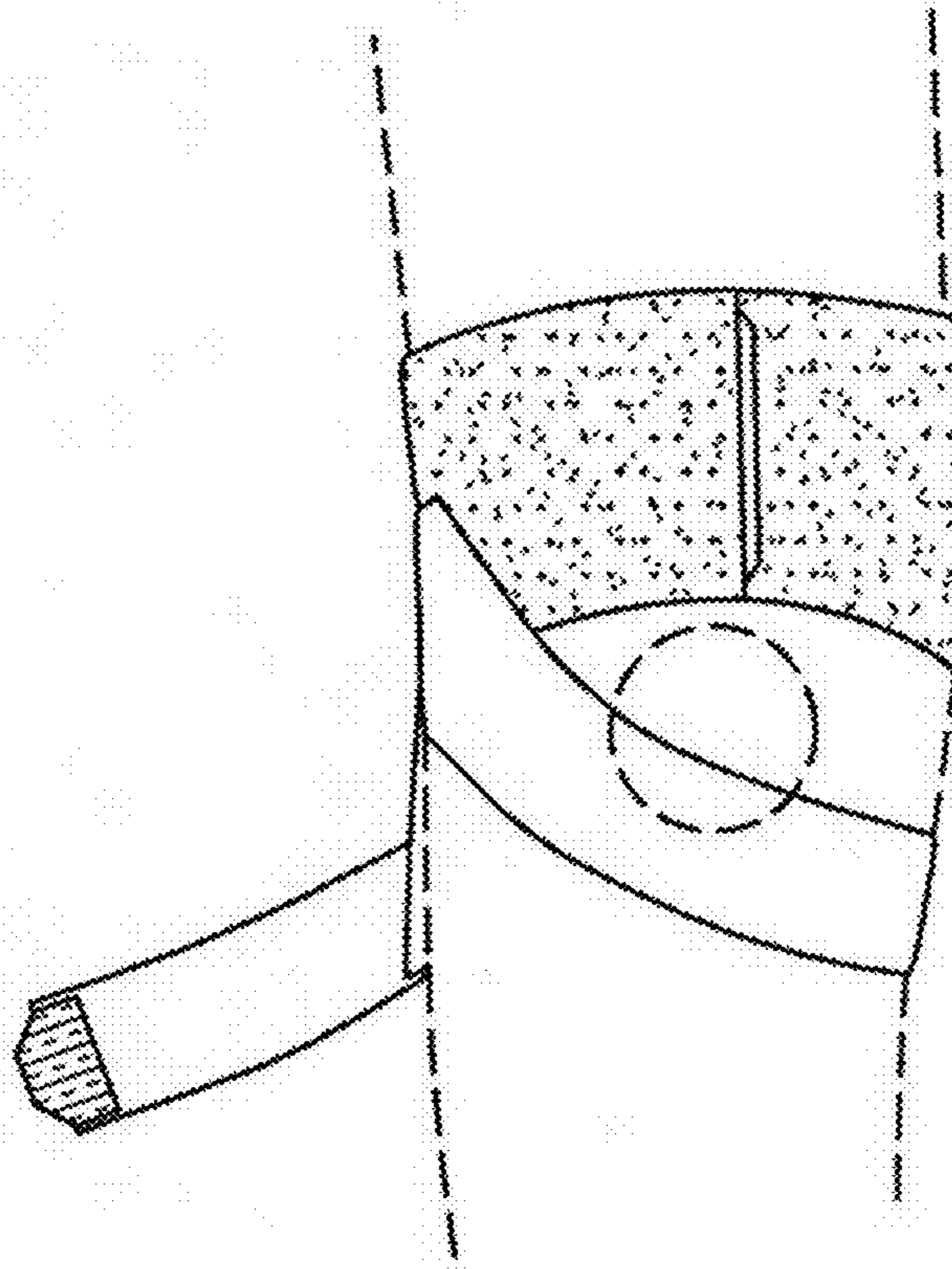




1.7



1.8



1.9

