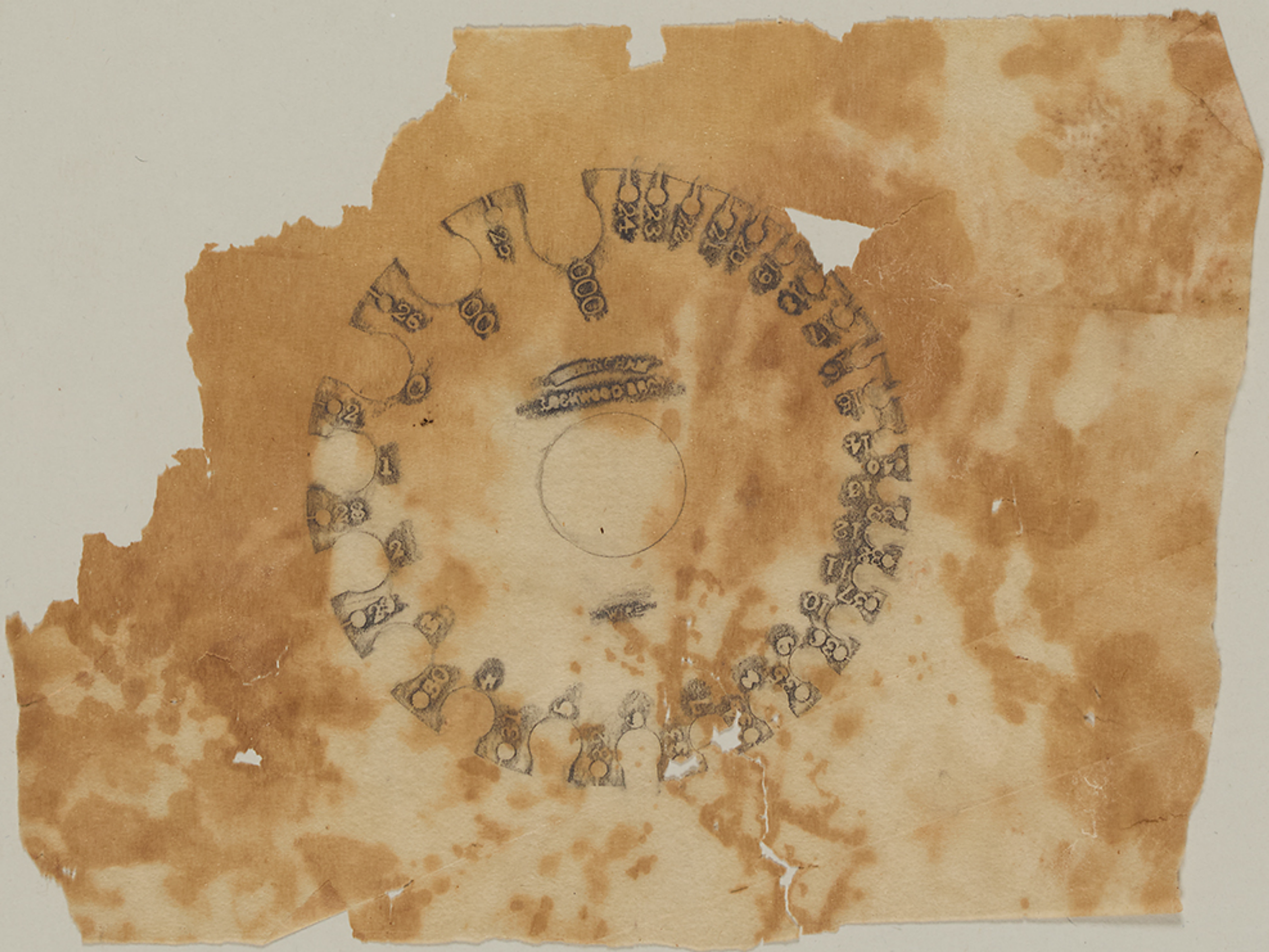


外国文献からの蒐集資料_トレーシングペーパー_2_001

Superimposed Loads on Floors.

Class of Buildings.	Live Load in lb. per square foot.
Dwellings, Flats, and Tenements	40
Schoolrooms	50
Offices (upper stories)	60
Offices (first floor)	80
Stables and Coachhouses	65
Banks, Churches, and Theatres	80
Assembly Halls, Dancing Halls, Corridors of Public Buildings, and Hotels	120
Shops and Drapery Warehouses	120
Drill Halls	150
Warehouses	150-400

Weight of Floor Slabs of Various Thicknesses per Square Foot.

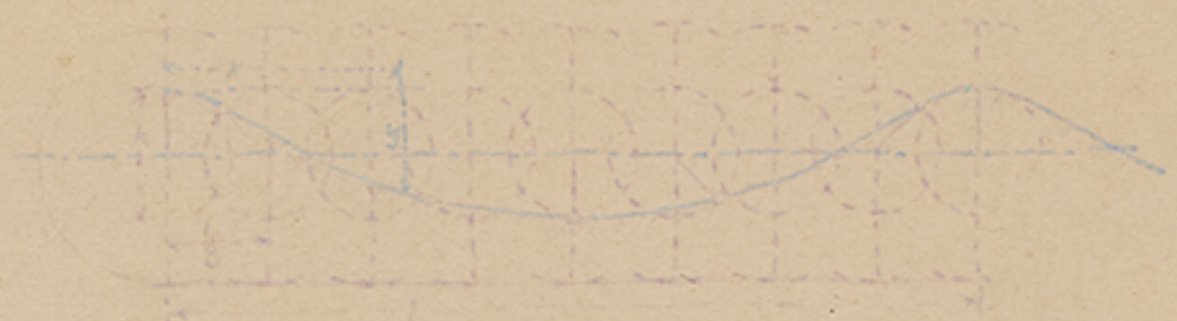
Thickness of Slab in inches.	Weight of Floor Slab per square foot in lb.	Thickness of Slab in inches.	Weight of Floor Slab per square foot in lb.
2 inches	25 lb./ft²	5½ inches	69 lb./ft²
2½ "	31 "	6 "	75 "
3 "	38 "	6½ "	81 "
3½ "	44 "	7 "	87 "
4 "	50 "	7½ "	94 "
4½ "	56 "	8 "	100 "
5 "	63 "		

鍊鉄製、瓦斯管寸法表

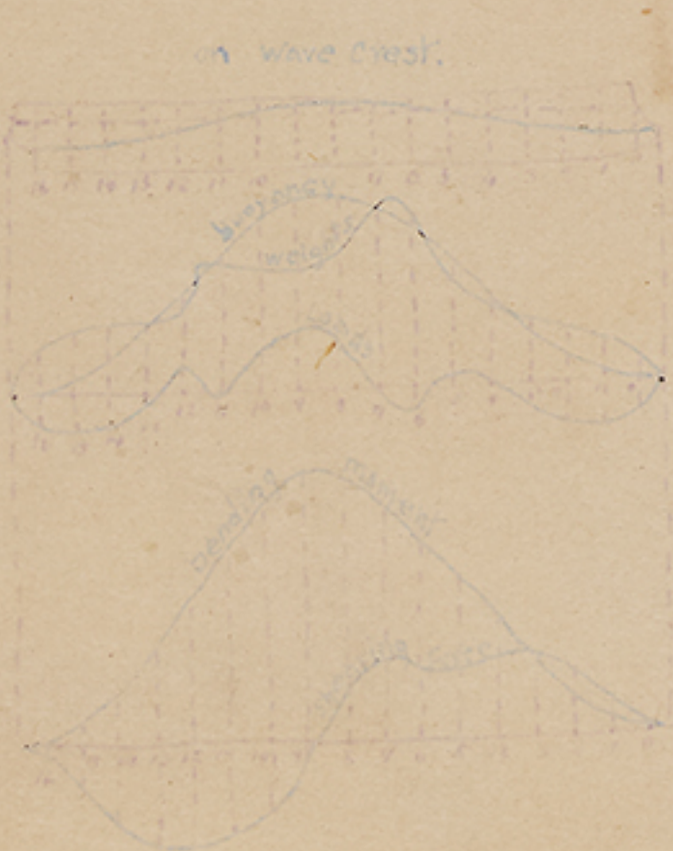
管ノ名称直径、吋	管ノ本當内径、吋	管ノ本當外径、吋	一呎ノ重サ、㎏	一吋ノ山数
1/4	.364	.54	.422	18
3/8	.494	.675	.561	18
1/2	.623	.840	.845	14
3/4	.824	1.050	1.126	14
1"	1.048	1.315	1.670	11½
1¼	1.380	1.660	2.258	11½
1½	1.610	1.900	2.694	11½
2	2.067	2.375	3.667	11½
2½	2.468	2.875	5.773	8
3	3.067	3.500	7.547	8
3½	3.548	4.000	9.055	8
4	4.026	4.500	10.728	8
4½	4.508	5.000	12.492	8
5	5.045	5.563	14.564	8
6	6.065	6.625	18.767	8
7	7.023	7.625	23.410	8
8	7.982	8.625	28.348	8
9	9.000	9.688	34.077	8
10	10.019	10.750	40.641	8

管ヲ通ル水ノ速サ及ビ流量ノ表

管ノ直径 吋	水ノ速サ 一分間ニ付キ呎	流量 一分間ニ付キ立方呎	水ノ速サ 一分間ニ付キ呎	流量 一分間ニ付キ立方呎	水ノ速サ 一分間ニ付キ呎	流量 一分間ニ付キ立方呎
½	60	0.0818	90	0.123	120	0.164
¾	90	0.276	120	0.368	150	0.460
1	90	0.491	150	0.818	180	0.982
1¼	120	1.02	180	1.53	210	1.78
1½	120	1.47	180	2.21	240	2.95
2	150	3.17	210	4.48	300	6.55
2½	150	5.12	240	8.19	330	11.3
3	180	8.84	270	13.3	360	17.7
4	180	15.7	300	26.2	390	34.0
5	210	28.6	300	40.9	420	57.3
6	210	41.2	330	63.8	420	82.5
7	210	56.1	330	88.2	450	120.
8	240.	83.8	360.	126.	450	157.
9	240	106.	360	159	480	212
10	240	131.	360.	196	480	262.
12	240	189	360	283	480	377.
16	270	377	390	545	510	712
24	270	848	390	1230	540	1700
30	270	1330	420	2060	540	2650
36	270	1910	420	2970	540	3820
48	270	3390	420	5280	540	6790
60	270	5300	420	8250	540	10600
72	270	7640	420	11900	540	15300



Trochoidal Wave Profile.
$x = L\frac{\theta}{2\pi} - \frac{h}{2}\sin\theta$. $y = \frac{h}{2}(1-\cos\theta)$



L - length
D - 排水噸数

	Wave	L.D / B.M.			D / S.F.			Max, Stress		Conditions
		still water	onCrest Hogging	onHollow Sagging	still water	Crest	Hollow	Deck	Keel	
								Tons/□"	Tons/□"	
Asahi (1st B.S.)	400-6½×20	Hogging 61.9	32.2	156.4	15.6	8.3	25.9	T 5.07	C 4,37	fully loaded
Royal Sovereign (1st B.S. old)	380' × 24'	" 297	39.3	51.0				T 3.5		
Izumo (1st Arm. C)	400' × 20'	" 76.2	31.6	144.7	17.7	8.5	27.9	T 4.6	C 4.0	
Harusame (T.B.D)	227' × 11'-4.8"	Sagging 195.5	28.1	24.8	0.5	20.3	16.5	C 5,00 T 4.40	T 6.00 C 3.50	
Atlantic Passenger Paris + New York 527 ft.	1/20	122	36.5	28.5		9.5	7.0			no Cargo Coal in.
Do. 492 ft.	1/20	122	32	46						"
Passenger or Cargo	1/20		24.4	17.7						no Cargo coal out on Crest in Hollow
ordinary Cargo steamer 360 ft.	1/22.8	19	37	83						
River steamer 210'	1/30	90.0	37	19						

Design and Construction of Ships
Prof. F. Harvard Biles. Vol I Calculation and strengths. 1908 London

Text book of Theoretical Naval architecture
Attwood. 1911. Longman, Green.