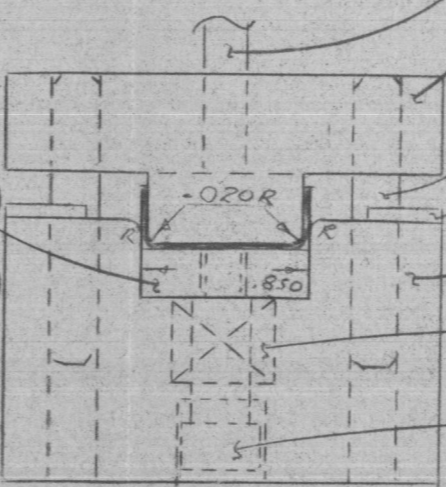
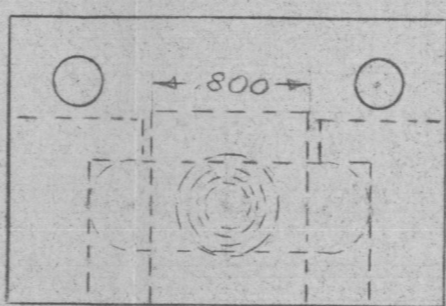
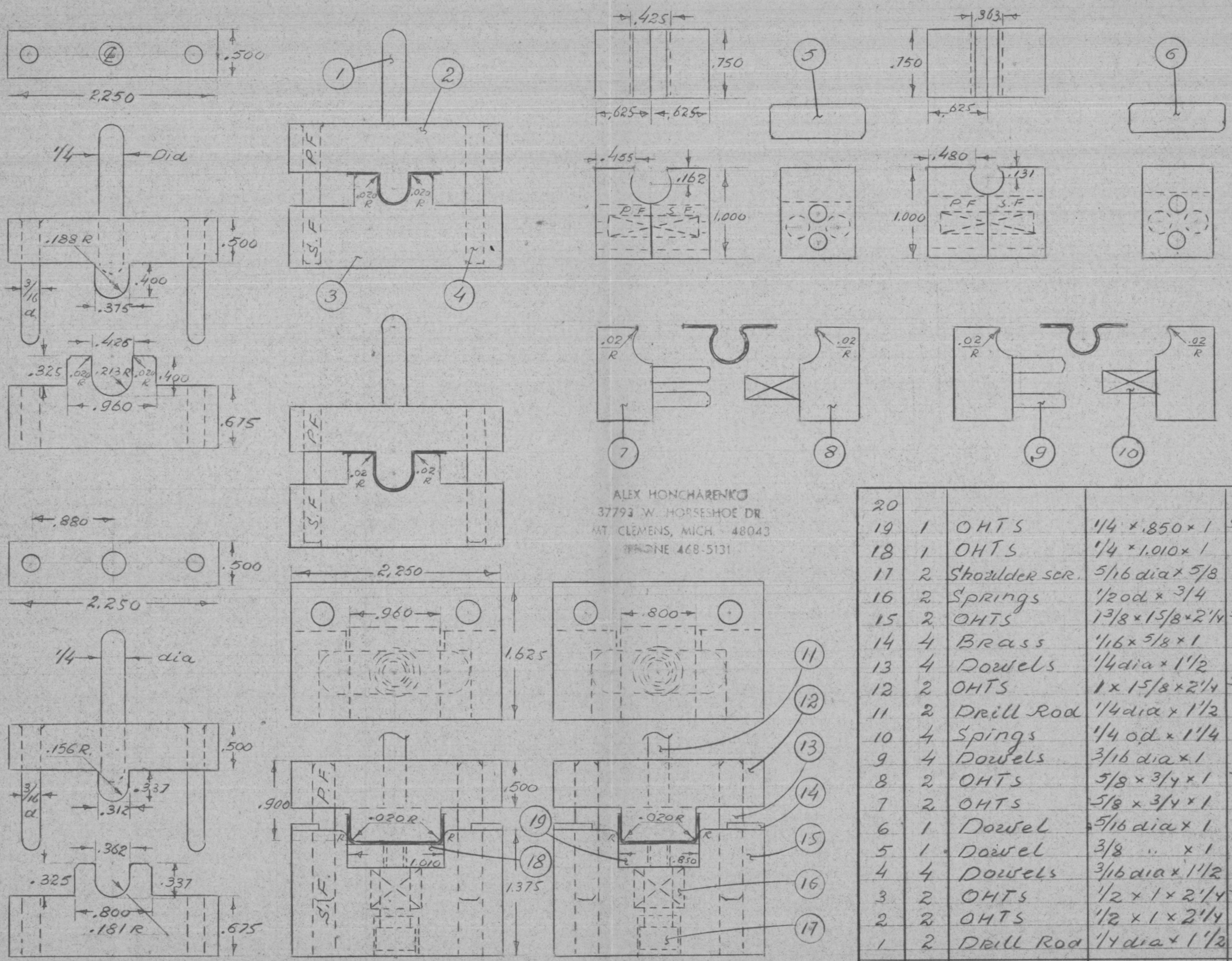


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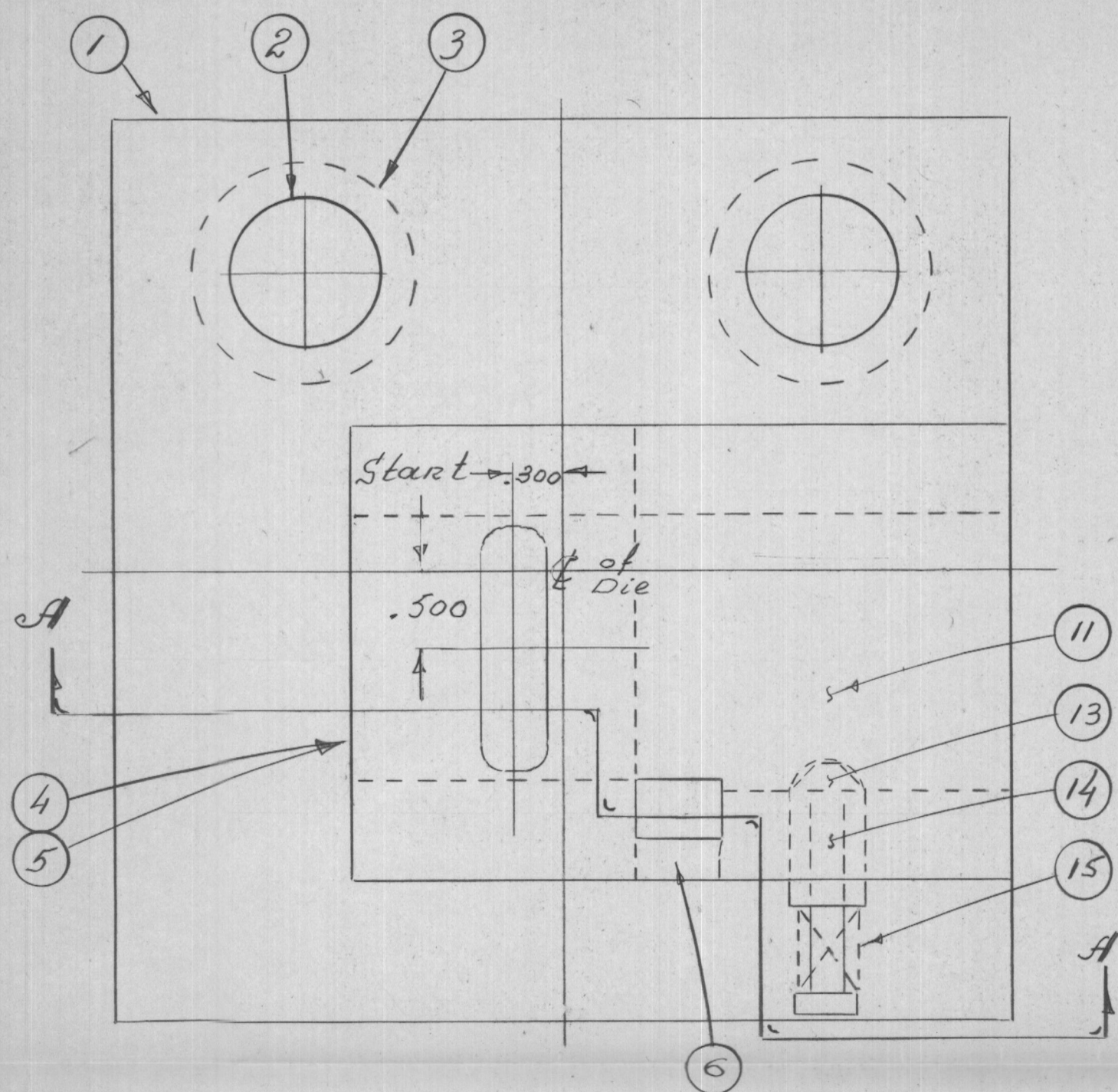


Det	Req	Materials	Size	Har
	20			
	19	1 OHTS	1/4 x .850 x 1	56/58
	18	1 OHTS	1/4 x 1.010 x 1	"
	17	2 Shoulder scr.	5/16 dia x 5/8	
	16	2 Springs	1/2 od x 3/4	
	15	2 OHTS	1 3/8 x 1 5/8 x 2 1/4	56/58
	14	4 Brass	1/16 x 5/8 x 1	
	13	4 Dowels	1/4 dia x 1 1/2	
	12	2 OHTS	1 x 1 5/8 x 2 1/4	56/58
	11	2 Drill Rod	1/4 dia x 1 1/2	
	10	4 Springs	1/4 od x 1 1/4	
	9	4 Dowels	3/16 dia x 1	
	8	2 OHTS	5/8 x 3/4 x 1	56/58
	7	2 OHTS	5/8 x 3/4 x 1	"
	6	1 Dowel	5/16 dia x 1	
	5	1 Dowel	3/8 " x 1	
	4	4 Dowels	3/16 dia x 1 1/2	
	3	2 OHTS	1/2 x 1 x 2 1/4	56/58
	2	2 OHTS	1/2 x 1 x 2 1/4	"
	1	2 DRILL Rod	1/4 dia x 1 1/2	

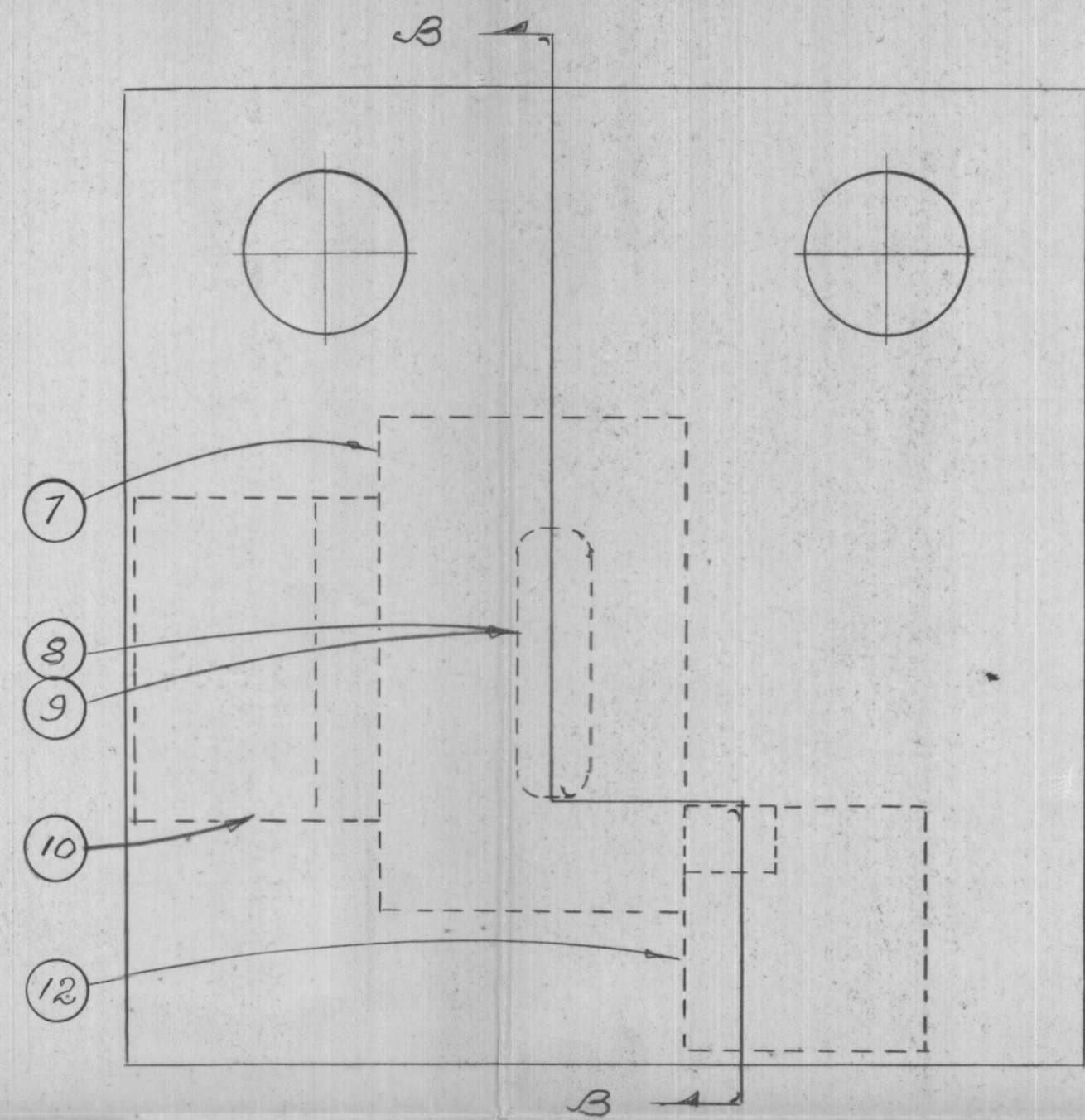


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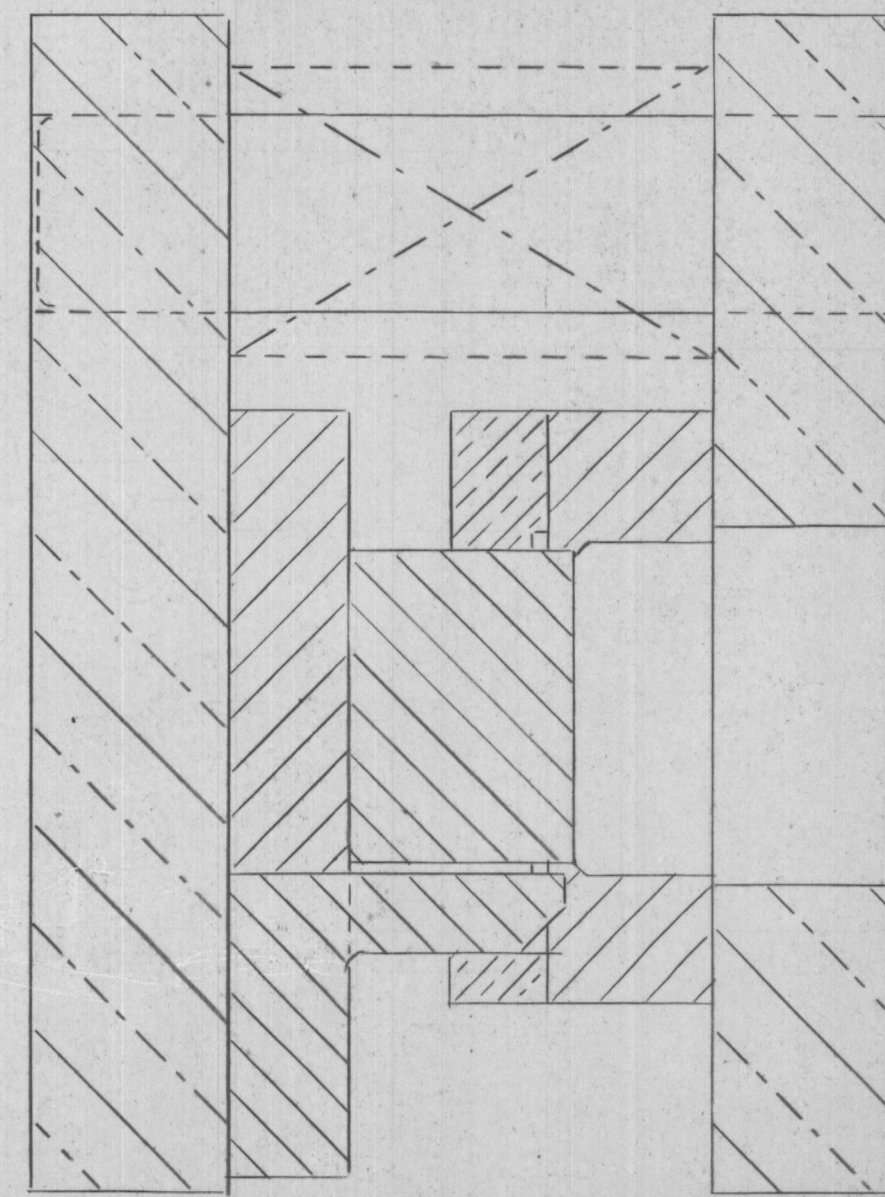
20				
19	1	OHTS	1/4 x .850 x 1	5/8
18	1	OHTS	1/4 x 1.010 x 1	"
17	2	Shoulder ser.	5/16 dia x 5/8	
16	2	Springs	1/2 od x 3/4	
15	2	OHTS	1 3/8 x 1 5/8 x 2 1/4	5/8
14	4	Brass	1/16 x 5/8 x 1	
13	4	Dowels	1/4 dia x 1 1/2	
12	2	OHTS	1 x 1 5/8 x 2 1/4	5/8
11	2	Drill Rod	1/4 dia x 1 1/2	
10	4	Spings	1/4 od x 1 1/4	
9	4	Dowels	3/16 dia x 1	
8	2	OHTS	5/8 x 3/4 x 1	5/8
7	2	OHTS	5/8 x 3/4 x 1	"
6	1	Dowel	5/16 dia x 1	
5	1	Dowel	3/8 " x 1	
4	4	Dowels	3/16 dia x 1 1/2	
3	2	OHTS	1/2 x 1 x 2 1/4	5/8
2	2	OHTS	1/2 x 1 x 2 1/4	"
1	2	Drill Rod	1/4 dia x 1 1/2	
Det	Req	Materials	Size	Har



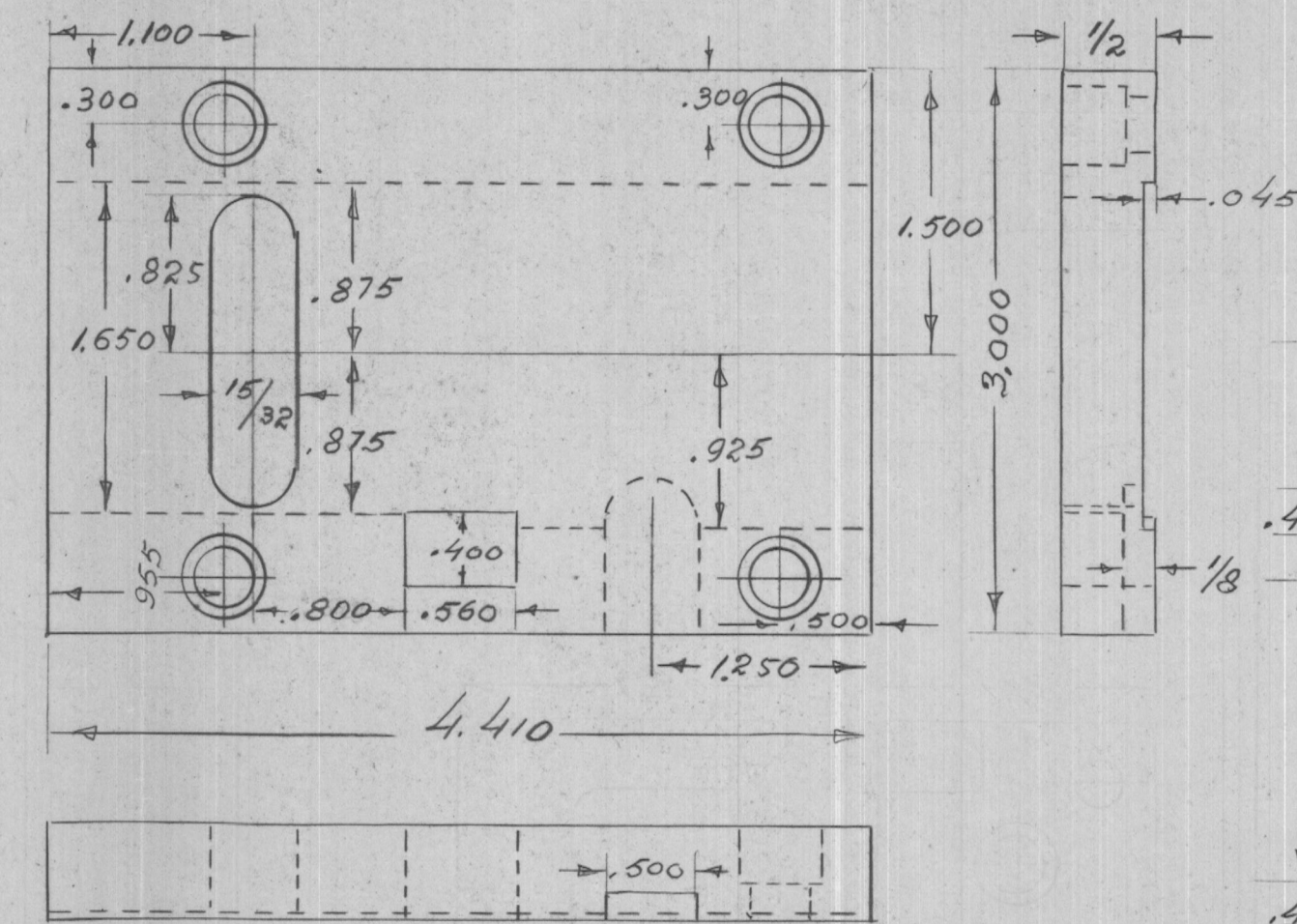
Plan of Die



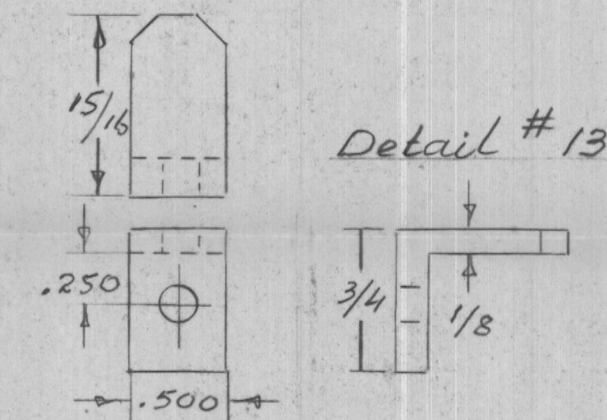
Plan of Punch



Section B-B



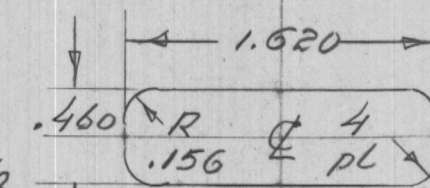
Detail #6



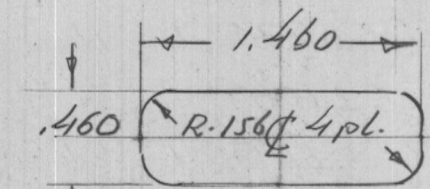
Detail #13

Points of

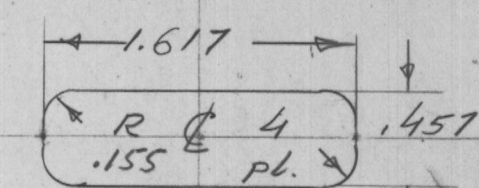
Dies  
Detail #4



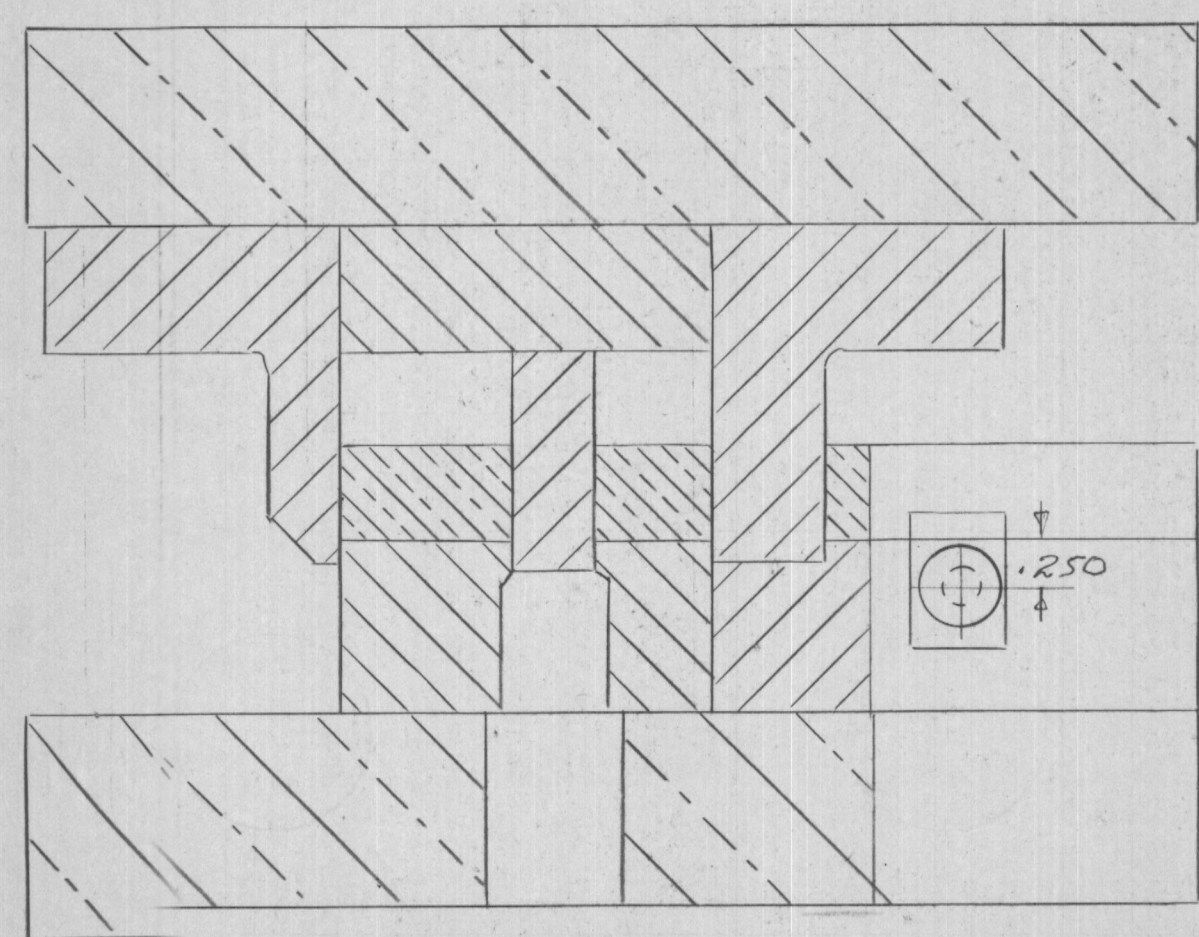
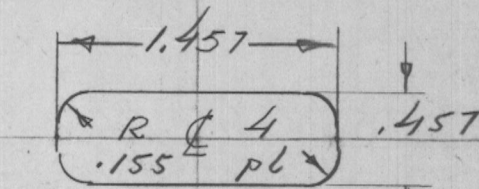
Detail #5



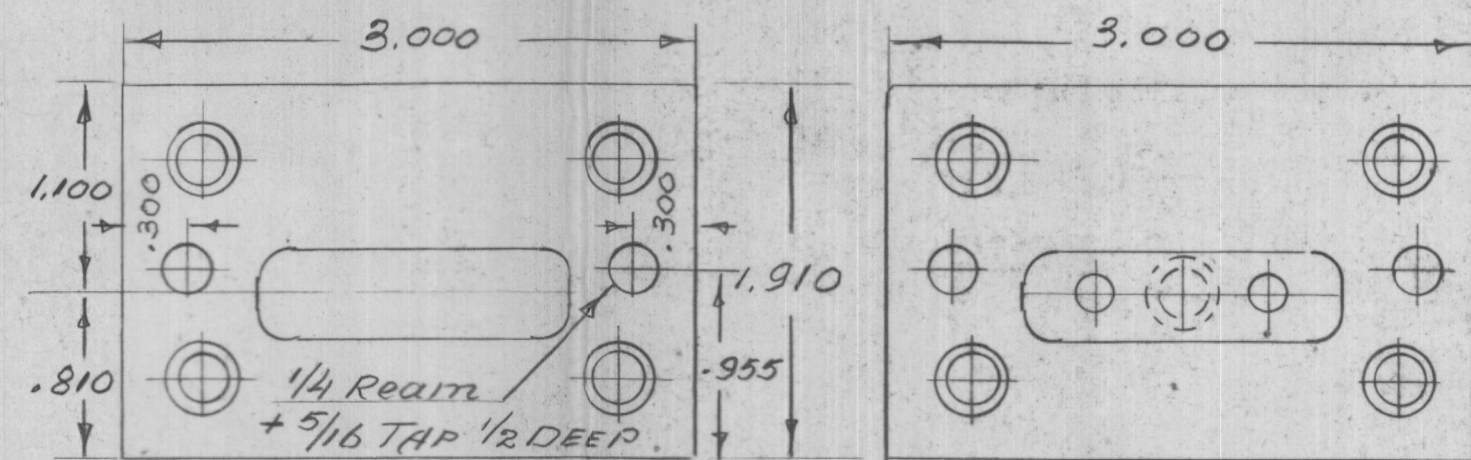
Punches  
Detail #8



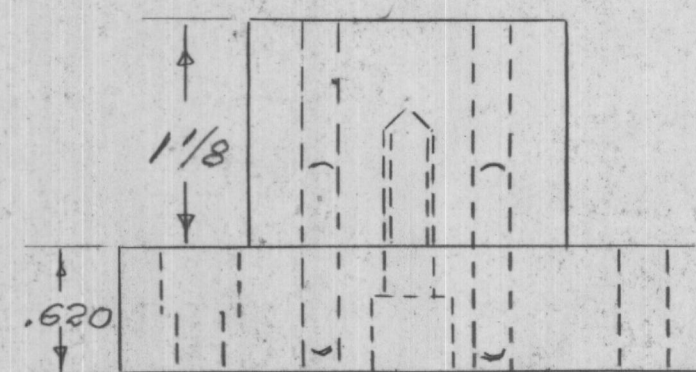
Detail #9



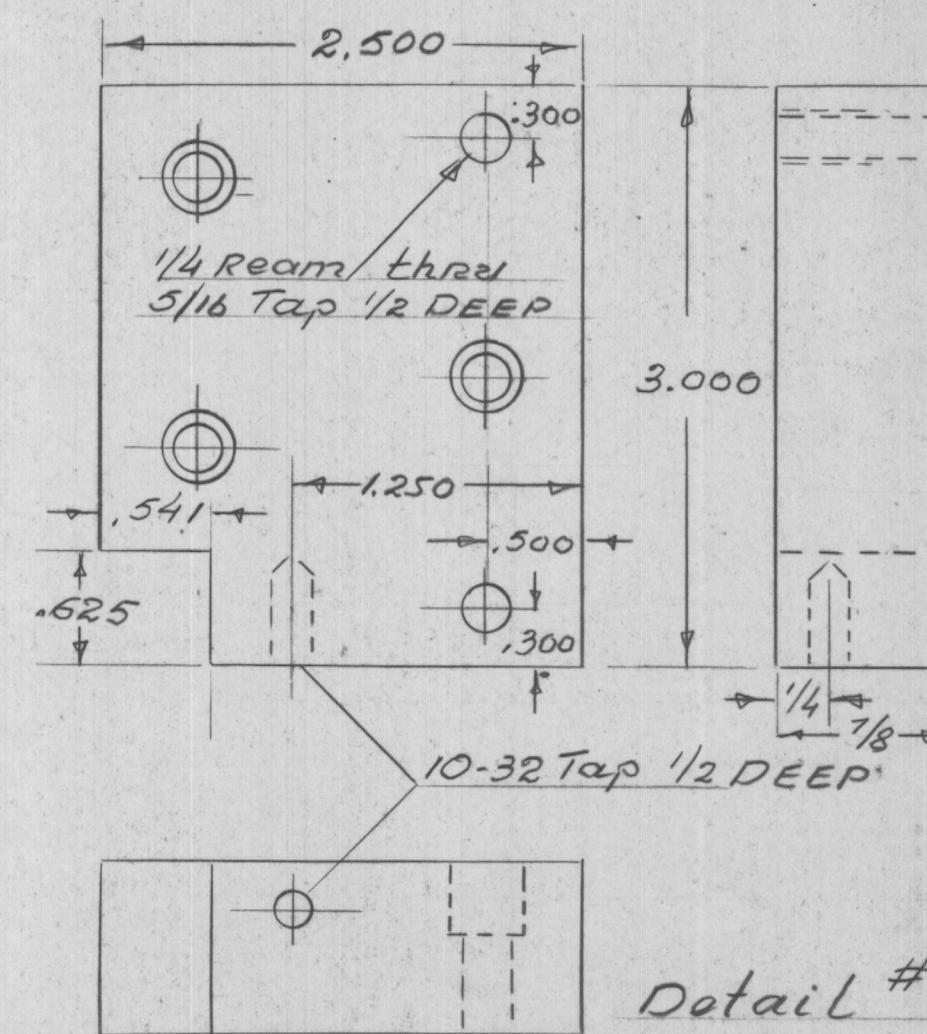
Section A-A



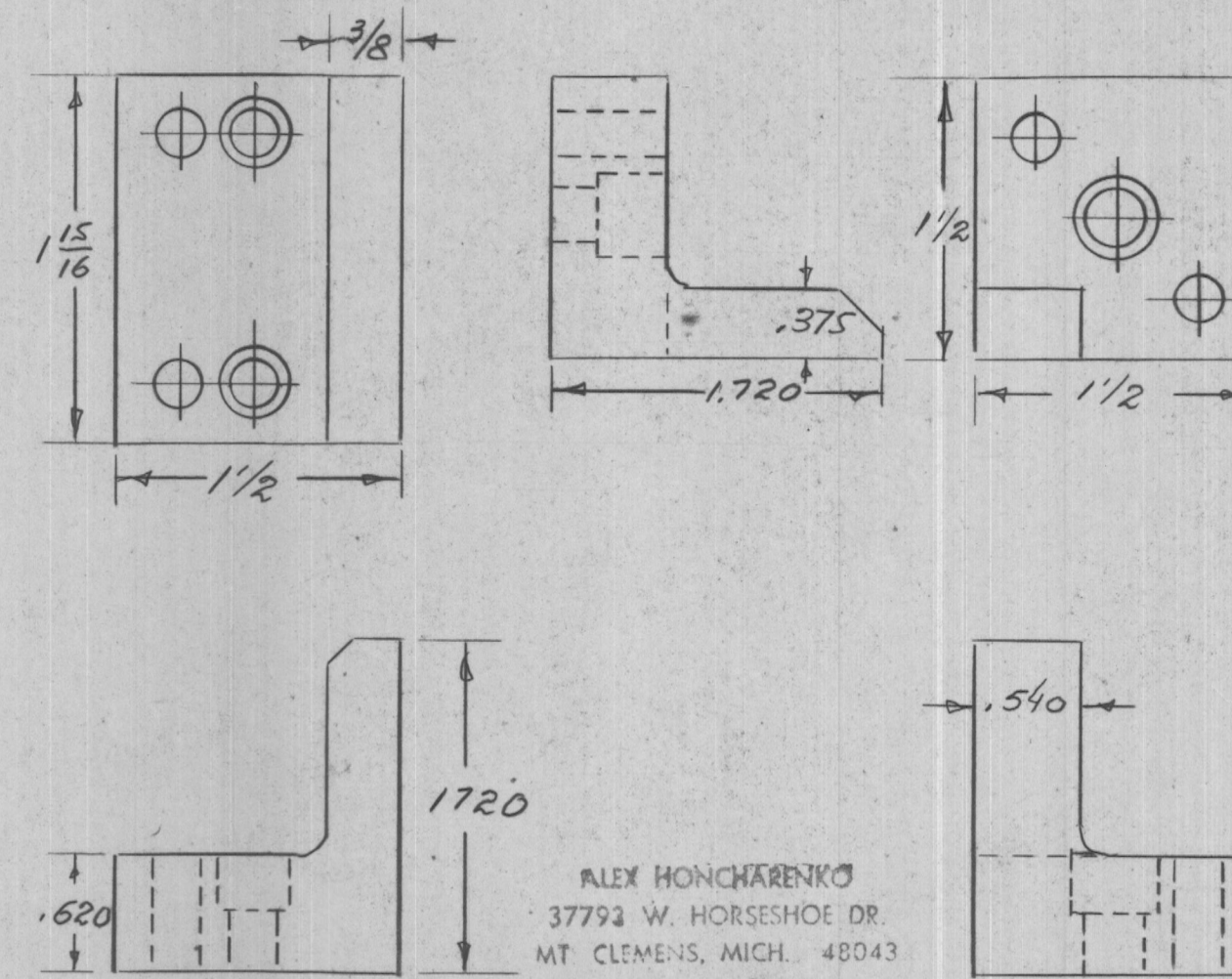
Details #4-5



Detail #7-8-9



Detail #11



Detail #10

Detail #12

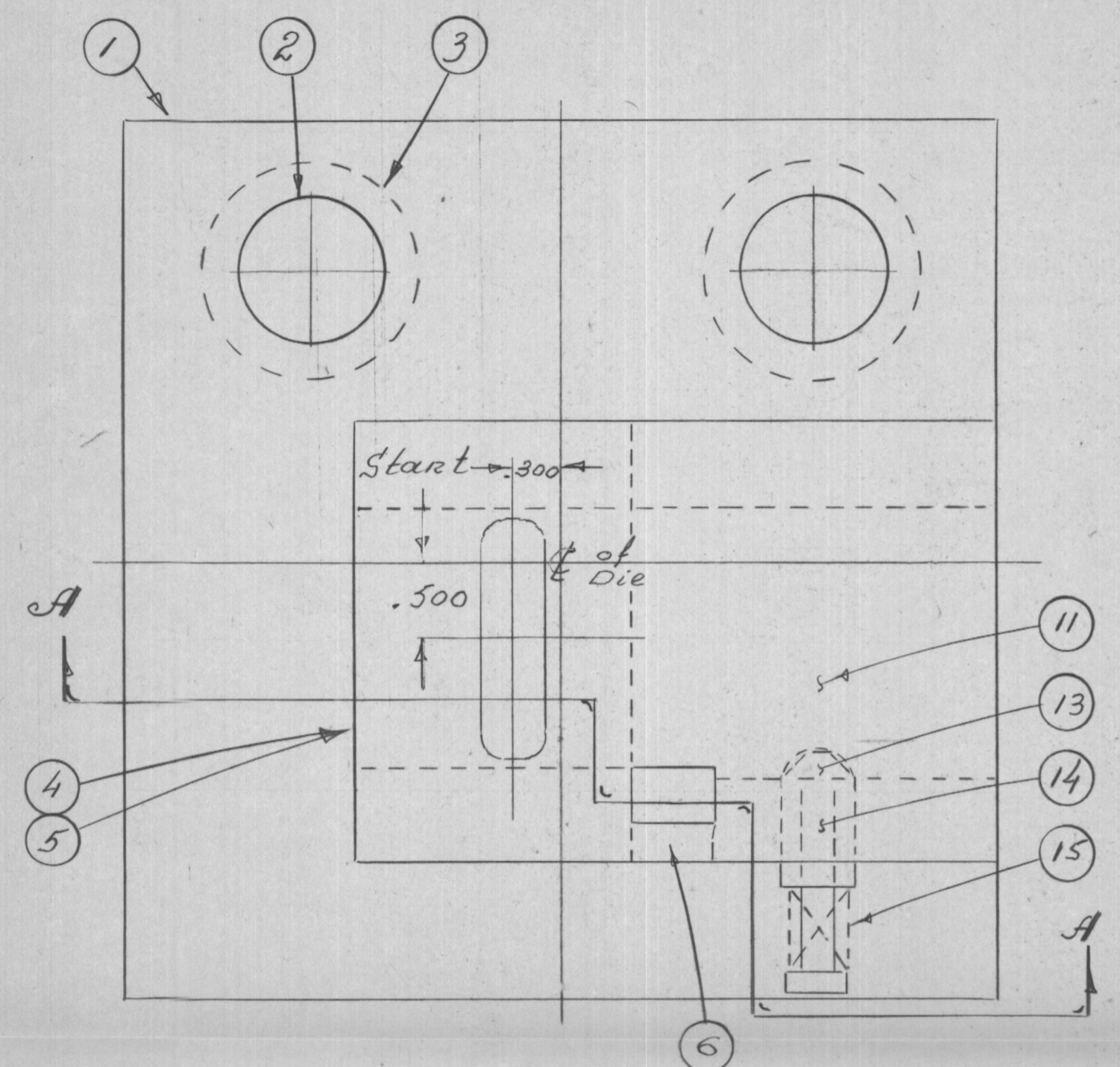
20	2	CRS	3/4 dia x 2 1/2 Lon	Stop Block
19	10	Dowels	1/4 x 1-10 1/4 x 3/4-1	
18	2	Dowels	3/16 x 1	
17	5	Screws	5/16 x 3/4-1; 5/16 x 1/2-4	Socket
16	13	Screws	1/4 x 1-7; 1/4 x 1/2-6	Socket
15	1	Spring	3/16 id x 1 Long	
14	1	Screw	#10-32 x 1 1/4 Lon	Socket
13	1	OHTS	.500 x 3/4 x 1 5/16	56-58
12	1	AHTS	1 1/2 x 1 1/2 x 1 3/4	58-60
11	1	AHTS	7/8 x 2 1/2 x 3	60-62
10	1	AHTS	1 1/2 x 1 3/4 x 1 5/16	60-62
9	1	AHTS	.460 x 1.460 x 1 1/8	60-62
8	1	AHTS	.460 x 1.620 x 1 1/8	60-62
7	1	OHTS	5/8 x 1.910 x 3	56-58
6	1	CRS	1/2 x 3 x 4.410	Ground
5	1	AHTS	7/8 x 1.910 x 3	60-62
4	1	AHTS	7/8 x 1.910 x 3	60-62
3	2	Spring	1 id x 3 long	
2	2	Dowels	1 dia. x 4 1/2 long	
1	2	B. PL.	1 x 6 x 6	Ground

Det Req Material S L & e Rockwel

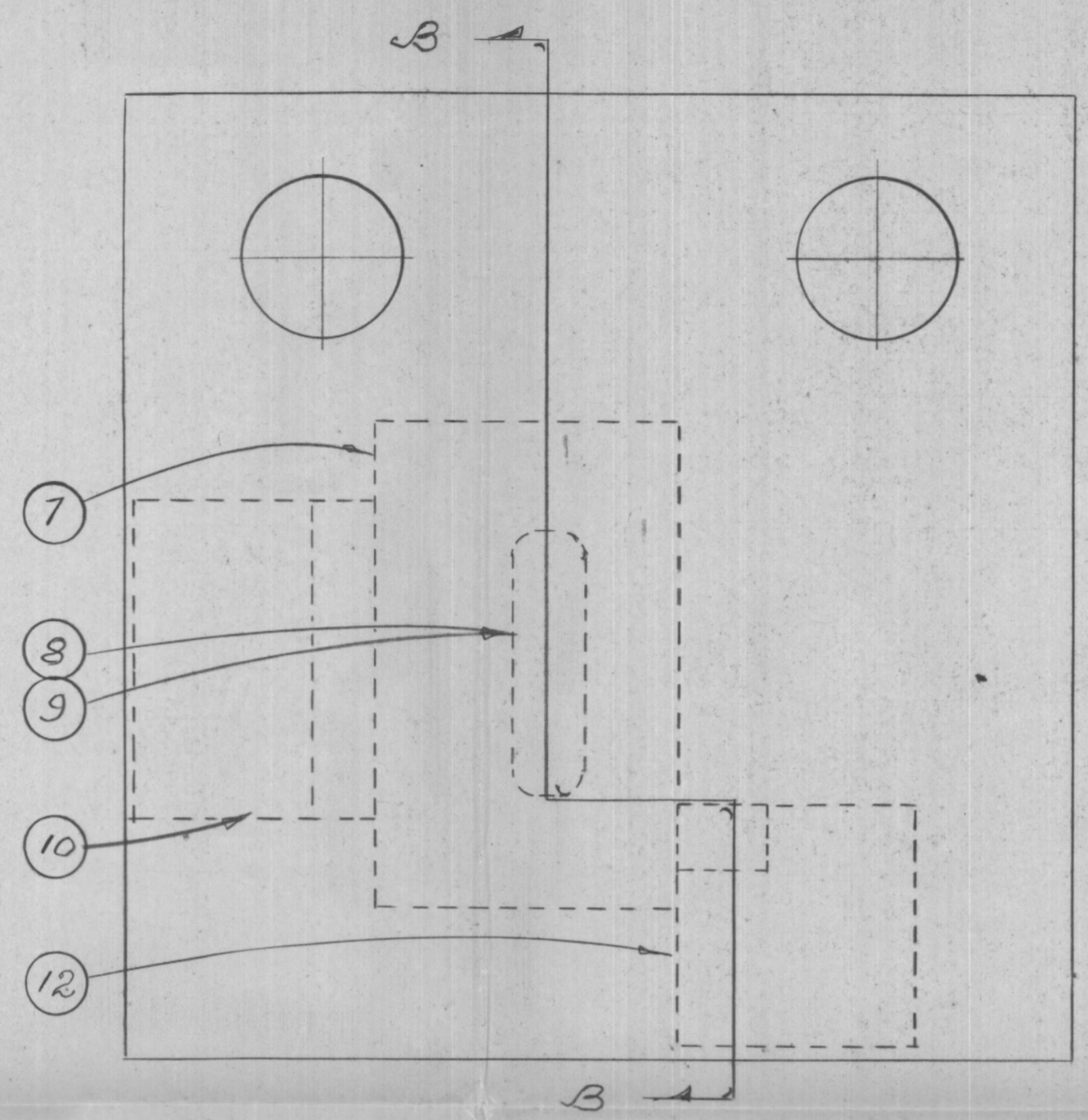
Blank Die to production retainer detail # 38 of Bandura mod. 1982

Nov. 1982 Design by Alex Honcharenko

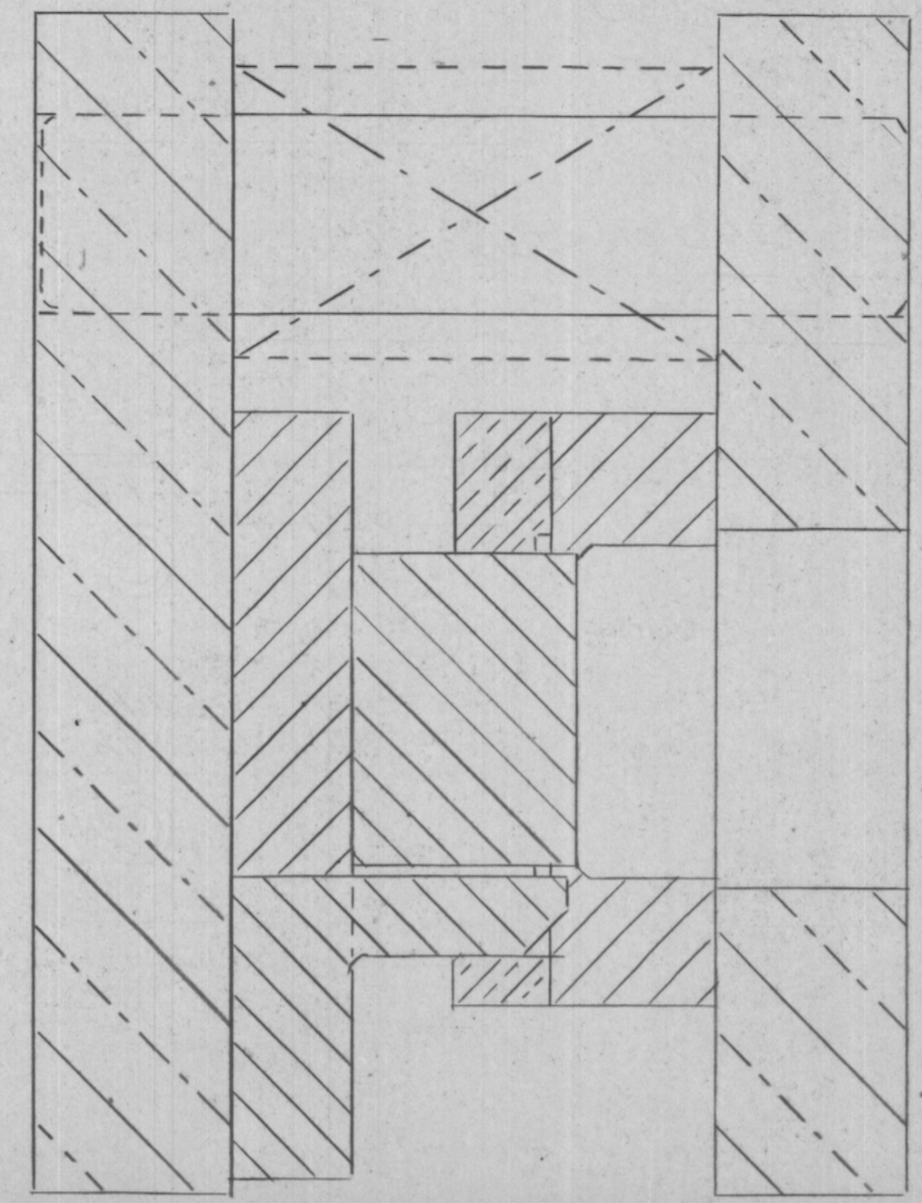
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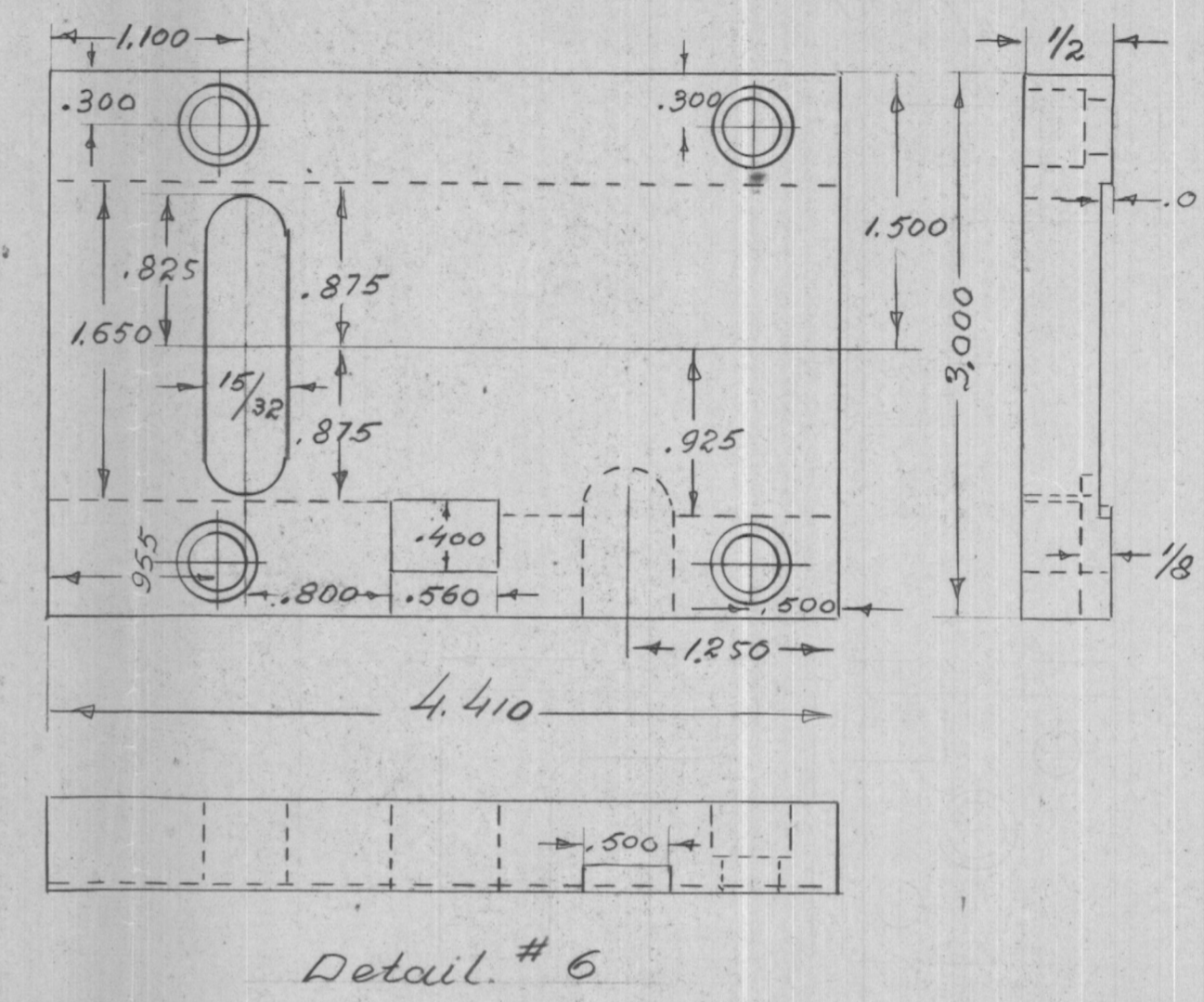
Plan of Die



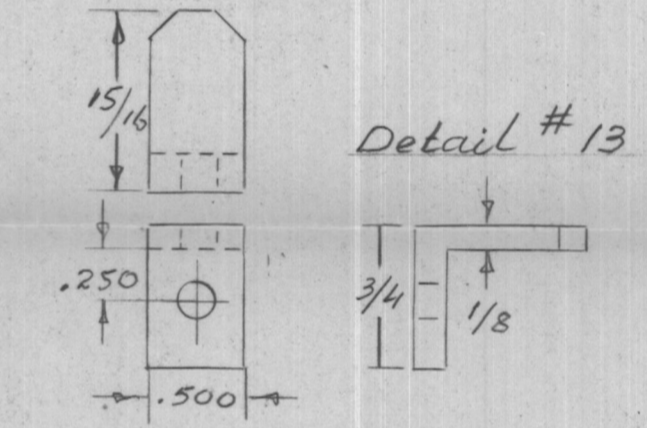
Plan of Punch



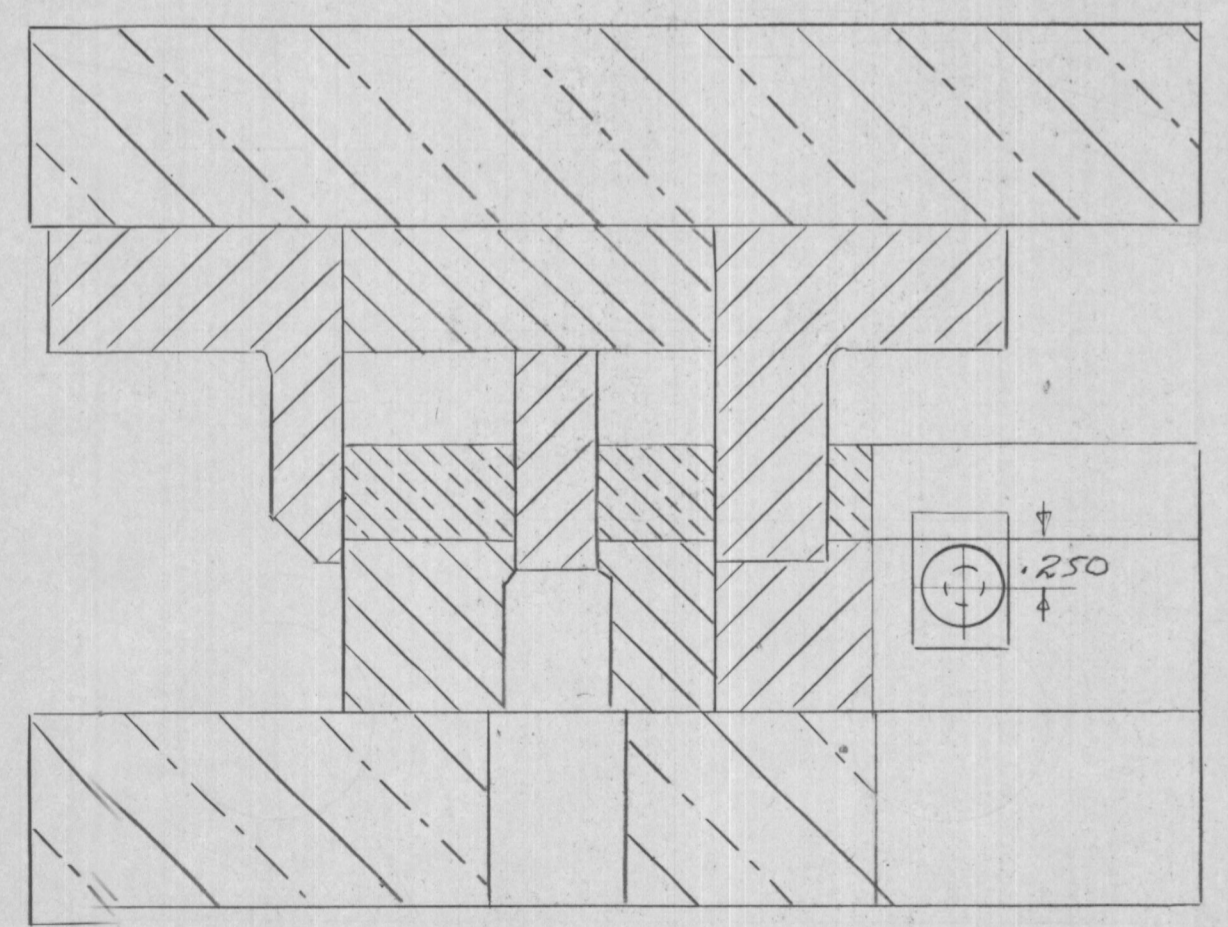
Section B-B



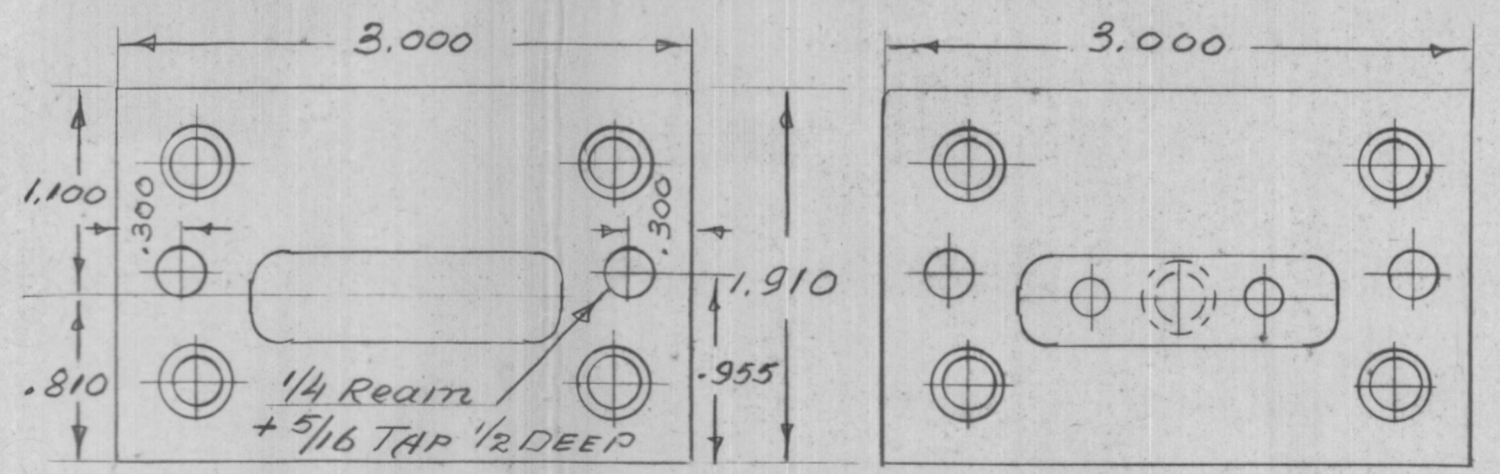
Detail #6



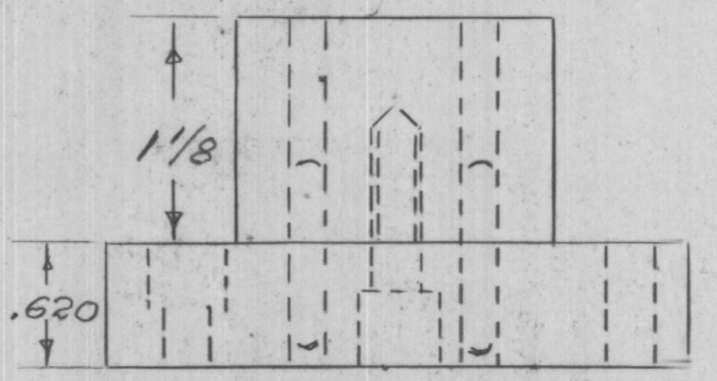
Detail #13



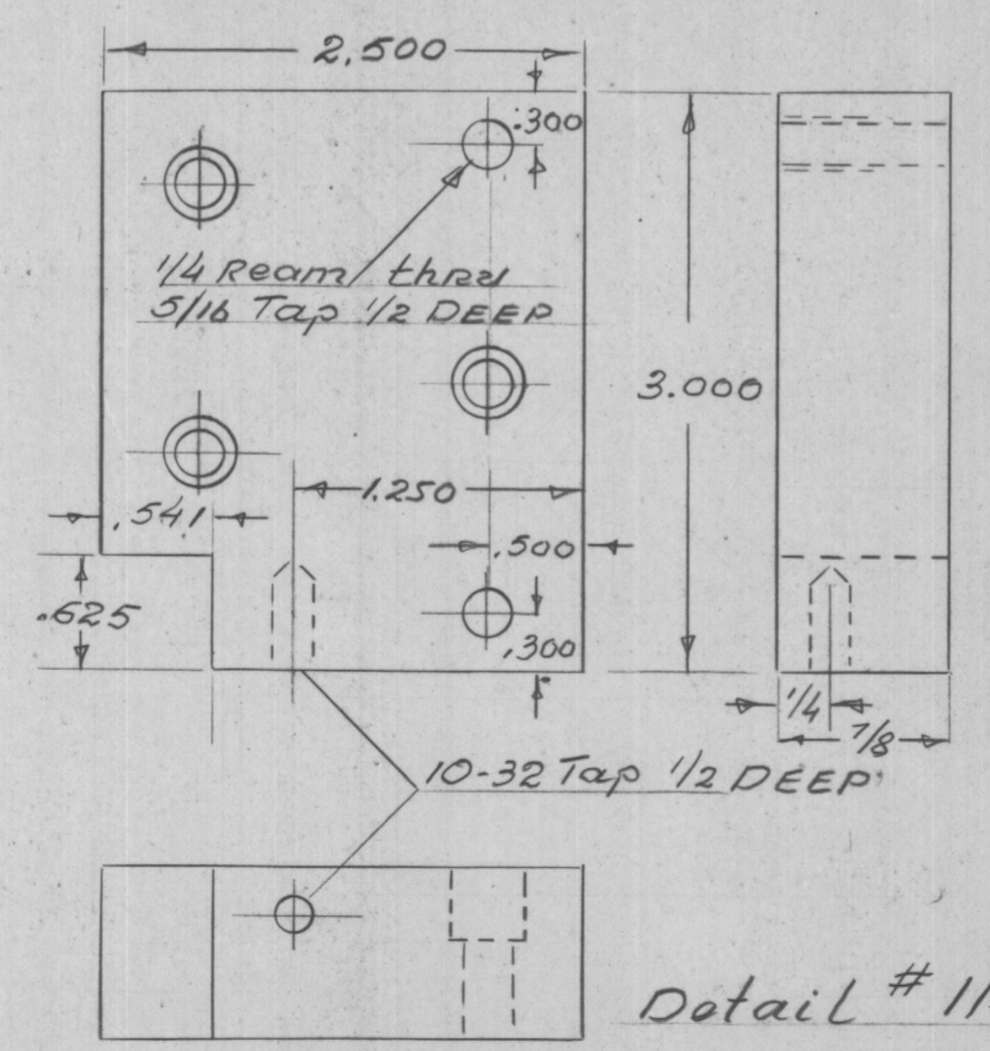
Section A-A



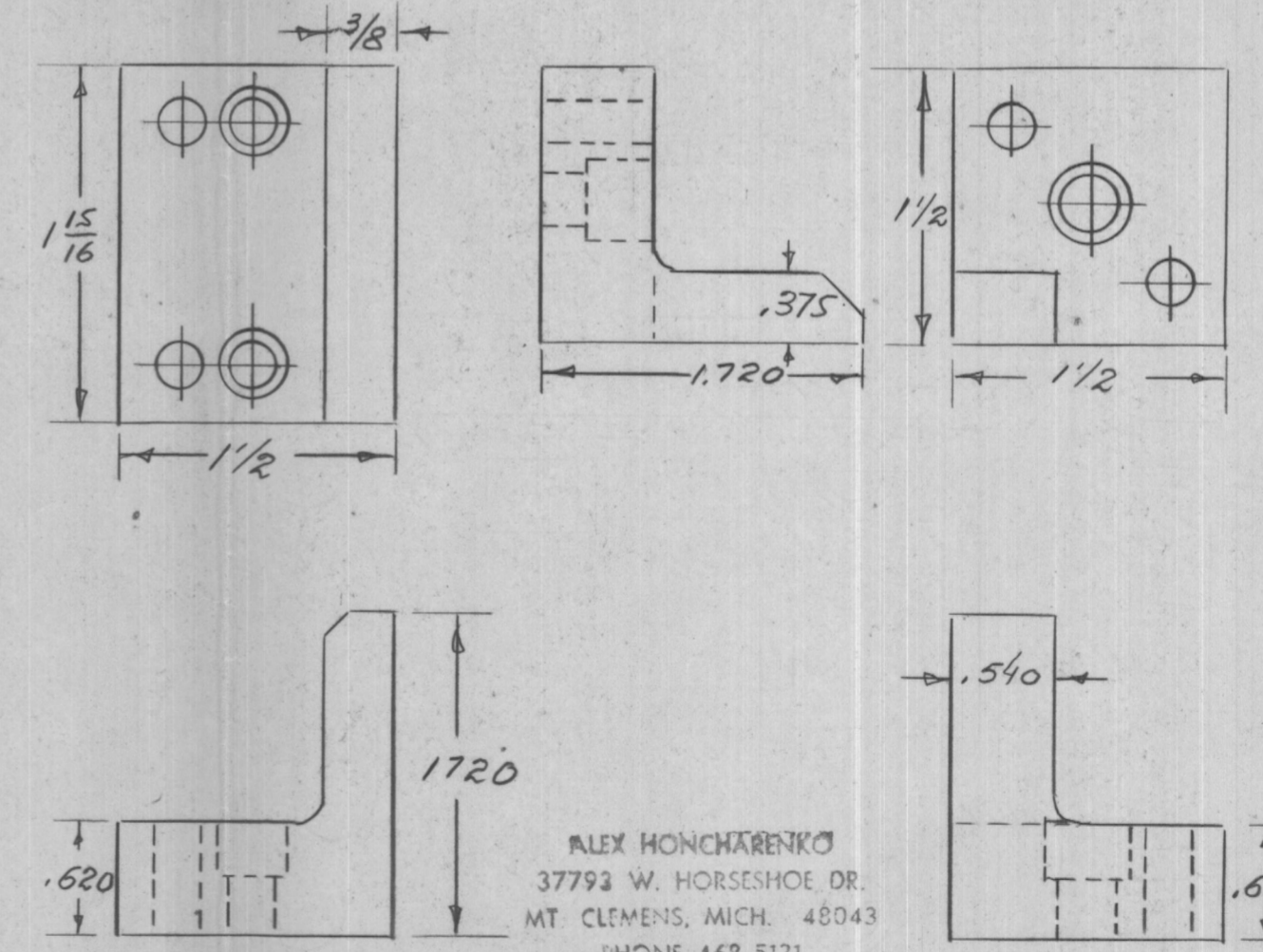
Details #4-5



Detail #7-8-9



Detail #11



Detail #10

Detail #12

Points of

Dies	Punches
Detail #4	Detail #8
Detail #5	Detail #9

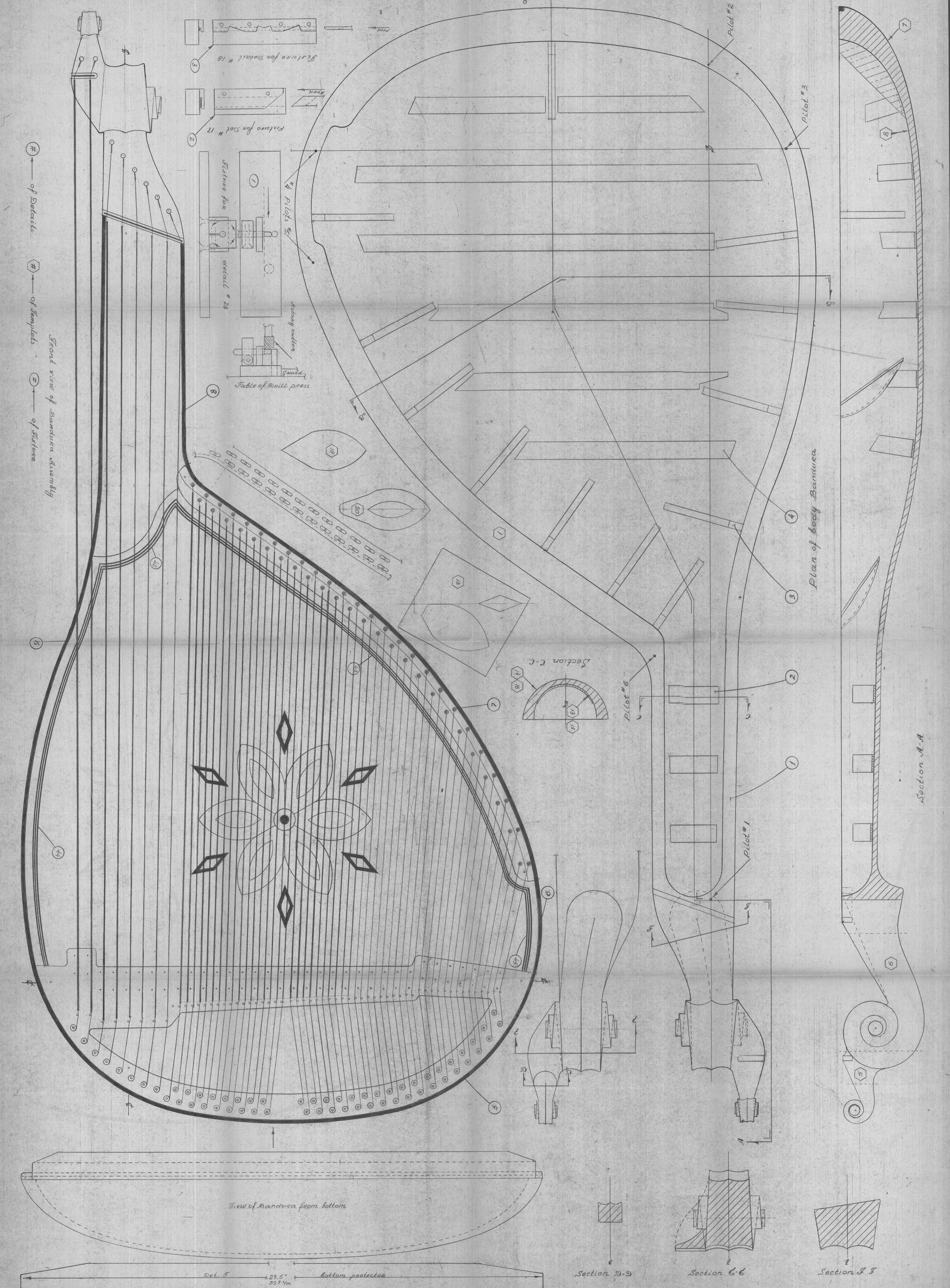
20	2	CRS	3/4 dia x 2 1/2 lon	Stop Block
19	10	Dowels	1/4 x 1-10	1/4 x 3/4-1
18	2	Dowels	3/16 x 1	
17	5	Screw	5/16 x 3/4=1; 5/16 x 1/2=4	Socket
16	13	Screw	1/4 x 1=7; 1/4 x 1/2=6	Socket
15	1	Spring	3/16 id x 1 Long	
14	1	Screw	#10-32 x 1 1/4 lon.	Socket
13	1	OHTS	.500 x 3/4 x 15/16	56-58
12	1	AHTS	1 1/2 x 1 1/2 x 1 3/4	58-60
11	1	AHTS	7/8 x 2 1/2 x 3	60-62
10	1	AHTS	1 1/2 x 1 3/4 x 1 5/16	60-62
9	1	AHTS	.460 x 1.460 x 1 1/8	60-62
8	1	AHTS	.460 x 1.620 x 1 1/8	60-62
7	1	OHTS	5/8 x 1.910 x 3	56-58
6	1	CRS	1/2 x 3 x 4.410	Ground
5	1	AHTS	7/8 x 1.910 x 3	60-62
4	1	AHTS	7/8 x 1.910 x 3	60-62
3	2	Spring	1 id x 3 long	
2	2	Dowels	1 dia. x 4 1/2 long	
1	2	B. PL.	1 x 6 x 6	Ground

Det. Reg. Material S L z e Rockwell

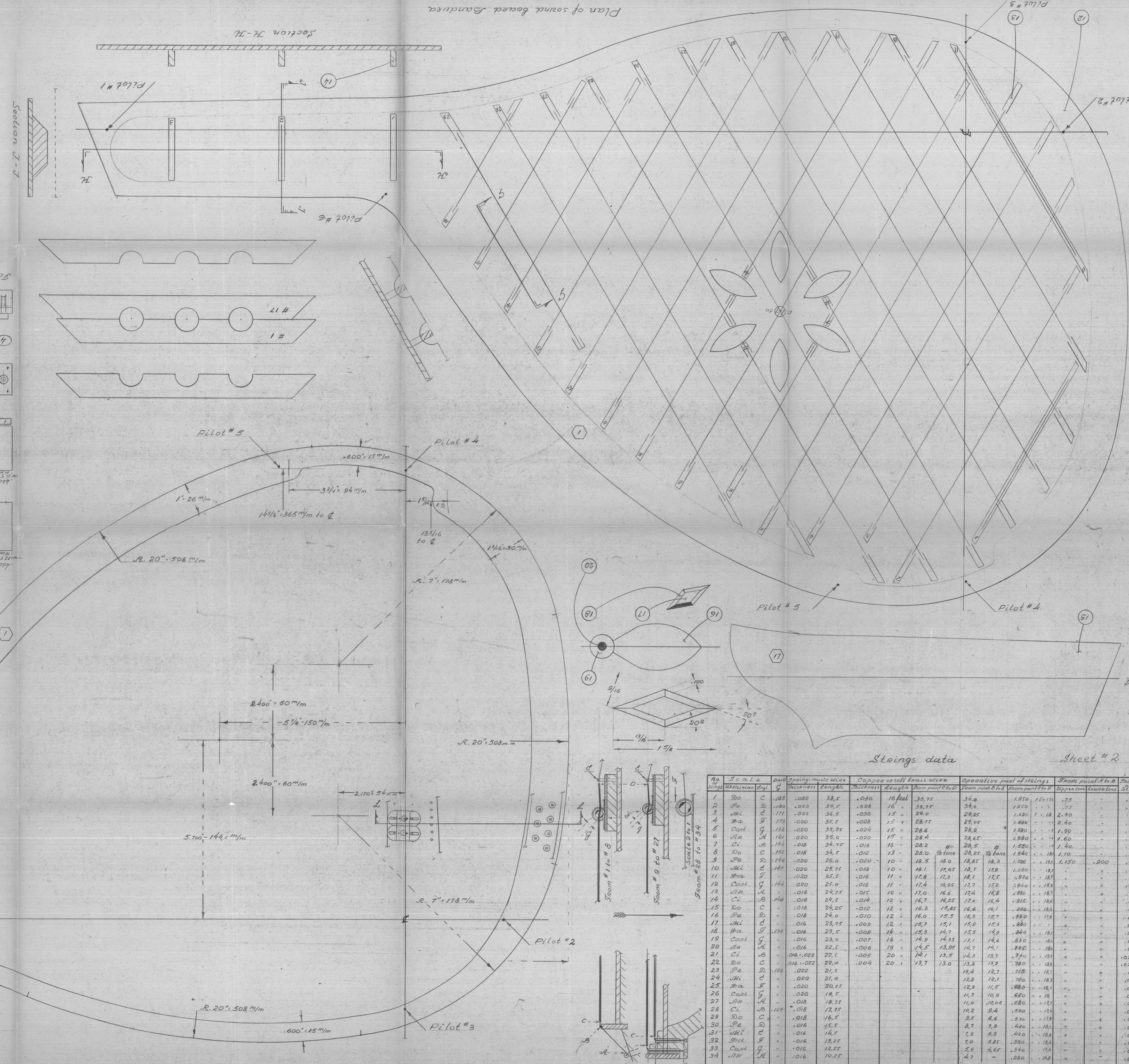
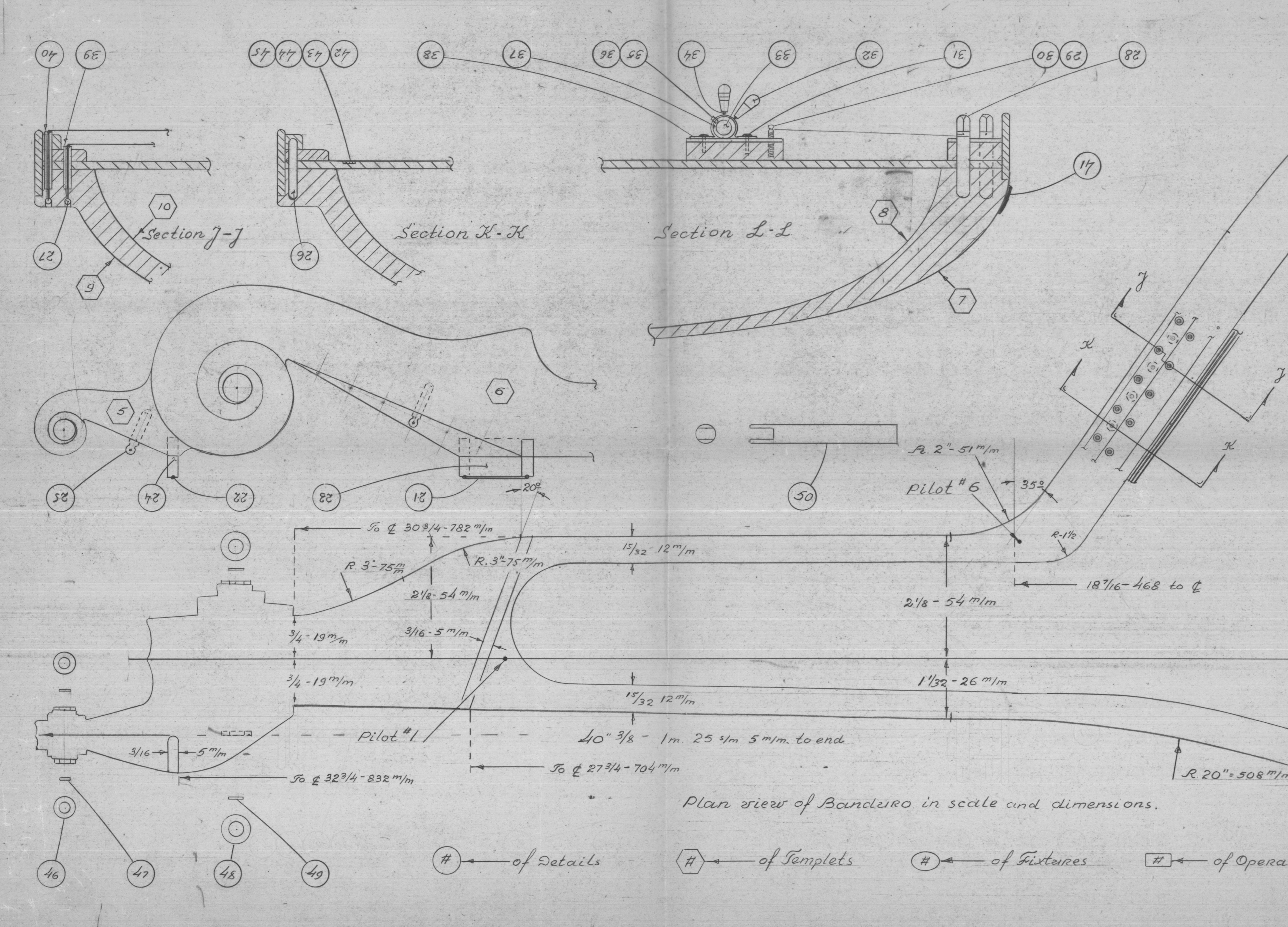
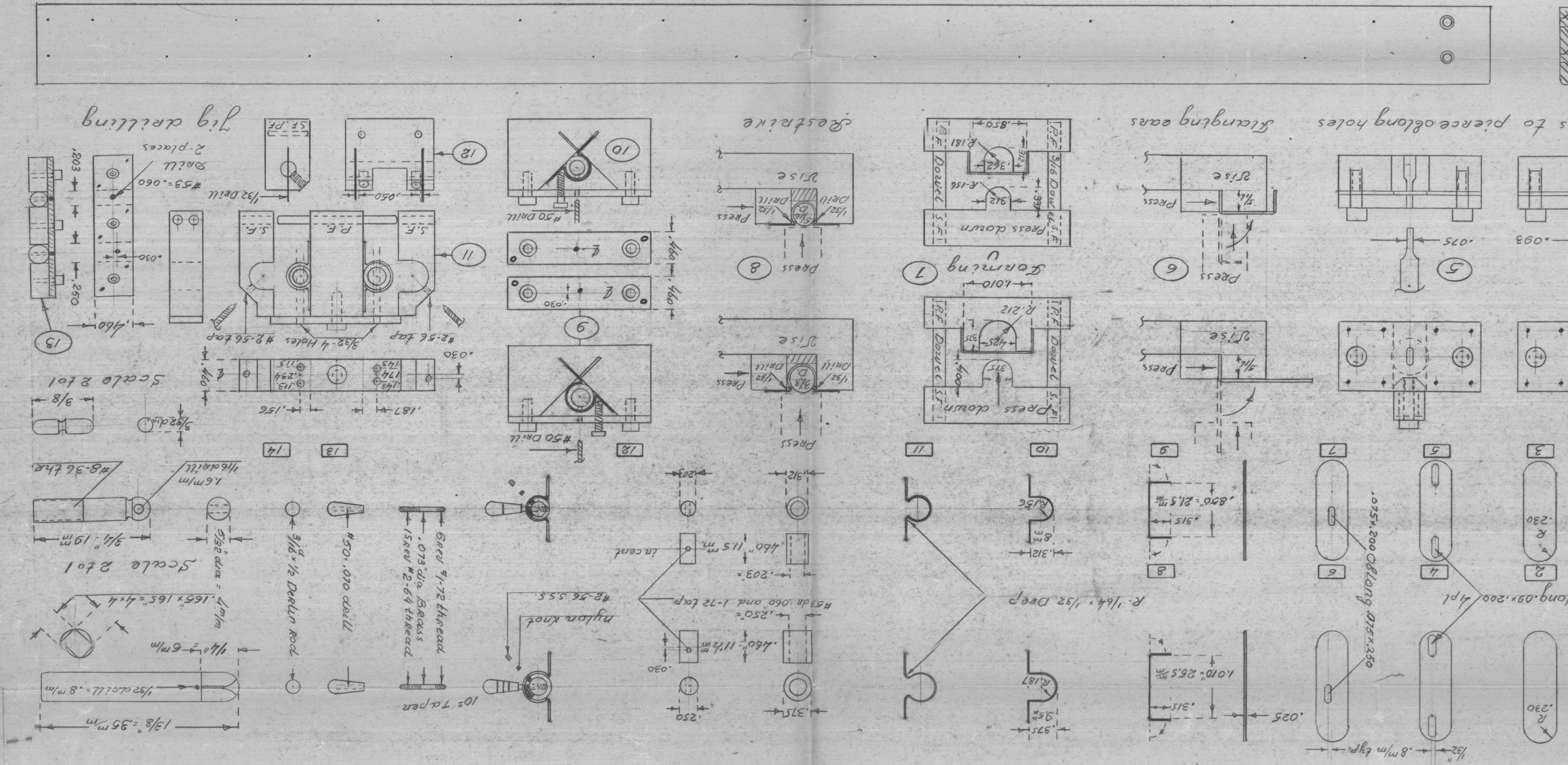
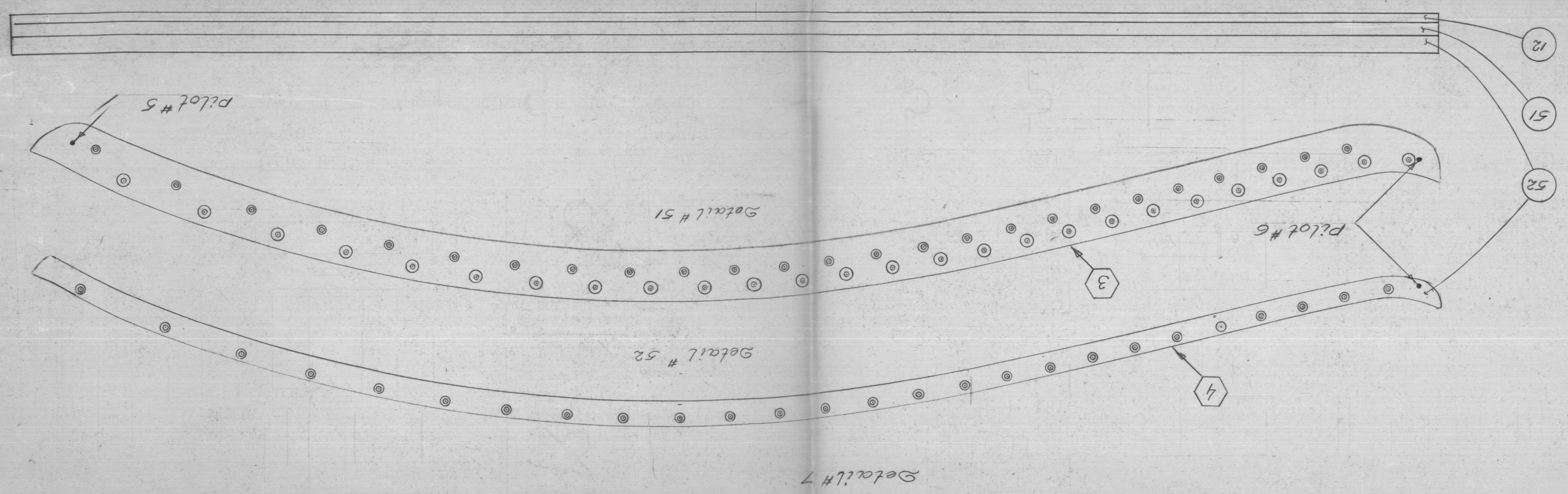
Blank Die to production retainer detail # 38 of Bandura mod. 1982

Nos. 1982 Design by Alex Honcharenko

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Detail #	Description	Material	Quantity
1	Body of Banarua	Steel	1
2	Riser-retain	Steel	1
3	Strut	Steel	1
4	Strut	Steel	1
5	Strut	Steel	1
6	Strut	Steel	1
7	Strut	Steel	1
8	Strut	Steel	1
9	Strut	Steel	1
10	Strut	Steel	1
11	Strut	Steel	1
12	Strut	Steel	1
13	Strut	Steel	1
14	Strut	Steel	1
15	Strut	Steel	1
16	Strut	Steel	1
17	Strut	Steel	1
18	Strut	Steel	1
19	Strut	Steel	1
20	Strut	Steel	1
21	Strut	Steel	1
22	Strut	Steel	1
23	Strut	Steel	1
24	Strut	Steel	1
25	Strut	Steel	1
26	Strut	Steel	1
27	Strut	Steel	1
28	Strut	Steel	1
29	Strut	Steel	1
30	Strut	Steel	1
31	Strut	Steel	1
32	Strut	Steel	1
33	Strut	Steel	1
34	Strut	Steel	1
35	Strut	Steel	1
36	Strut	Steel	1
37	Strut	Steel	1
38	Strut	Steel	1
39	Strut	Steel	1
40	Strut	Steel	1
41	Strut	Steel	1
42	Strut	Steel	1
43	Strut	Steel	1
44	Strut	Steel	1
45	Strut	Steel	1
46	Strut	Steel	1
47	Strut	Steel	1
48	Strut	Steel	1
49	Strut	Steel	1
50	Strut	Steel	1
51	Strut	Steel	1
52	Strut	Steel	1
53	Strut	Steel	1
54	Strut	Steel	1
55	Strut	Steel	1
56	Strut	Steel	1
57	Strut	Steel	1
58	Strut	Steel	1
59	Strut	Steel	1
60	Strut	Steel	1



Stings data

No	Material	Section	Length	Thickness	Weight	Operative part of stings	From point A to B	From point B to C	From point C to D
1	Do	C	.188	.022	38.5	.030	16.00	38.75	34.0
2	Pe	D	.190	.020	39.5	.028	16	38.75	34.0
3	Ml	C	.171	.022	36.5	.030	15	29.0	28.25
4	Sha	F	.173	.022	35.5	.028	15	28.75	28.0
5	Cont	G	.166	.020	35.75	.024	15	28.6	28.5
6	Ml	M	.161	.020	35.0	.020	15	28.4	28.65
7	Cl	B	.154	.018	34.75	.018	16	28.2	28.25
8	Do	C	.152	.018	34.5	.012	13	28.0	28.5
9	Pe	D	.148	.020	26.0	.020	10	18.5	18.0
10	Ml	C	.147	.020	25.75	.018	10	18.1	17.65
11	Sha	F	.145	.020	25.5	.016	11	17.8	17.3
12	Cont	G	.144	.020	25.0	.016	11	17.4	16.95
13	Ml	M	.141	.020	24.75	.015	12	17.0	16.6
14	Cl	B	.140	.018	24.5	.014	12	16.7	16.25
15	Do	C	.138	.018	24.25	.012	12	16.3	15.85
16	Pe	D	.138	.018	24.0	.010	12	16.0	15.5
17	Ml	C	.136	.016	23.75	.009	12	15.7	15.3
18	Sha	F	.136	.016	23.5	.008	14	15.3	14.9
19	Cont	G	.136	.016	23.0	.007	16	14.9	14.55
20	Ml	M	.135	.016	22.5	.006	18	14.5	14.15
21	Cl	B	.135	.016	22.5	.005	20	14.1	13.75
22	Do	C	.132	.016	22.25	.004	20	13.7	13.0
23	Pe	D	.128	.022	21.5		13.4	12.7	12.1
24	Ml	C	.120	.020	21.0		12.8	12.1	11.5
25	Sha	F	.120	.020	20.75		12.8	11.5	10.8
26	Cont	G	.120	.020	20.5		11.0	10.25	9.5
27	Ml	M	.120	.020	20.5		11.0	10.25	9.5
28	Cl	B	.120	.020	20.5		10.2	9.4	8.7
29	Do	C	.120	.020	20.5		9.5	8.6	7.9
30	Pe	D	.120	.020	20.5		8.7	7.8	7.0
31	Ml	C	.120	.020	20.5		7.9	6.9	6.0
32	Sha	F	.120	.020	20.5		7.0	5.85	5.0
33	Cont	G	.120	.020	20.5		5.9	4.65	3.8
34	Ml	M	.120	.020	20.5		4.7	3.4	2.6

Plan view of Bandiera in scale and dimensions.

⊙ of Details ⊕ of Templates ⊕ of Fixtures ⊕ of Operations