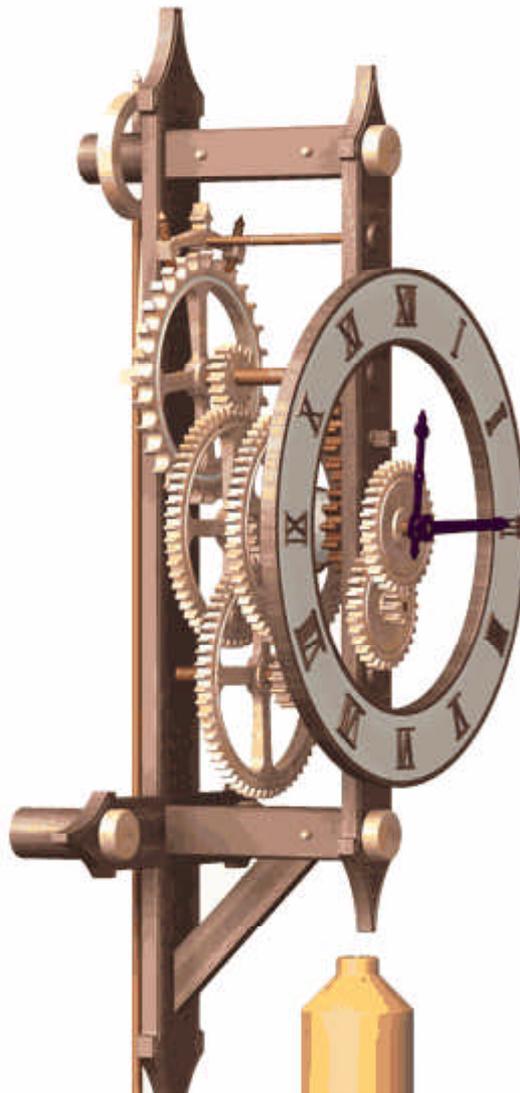
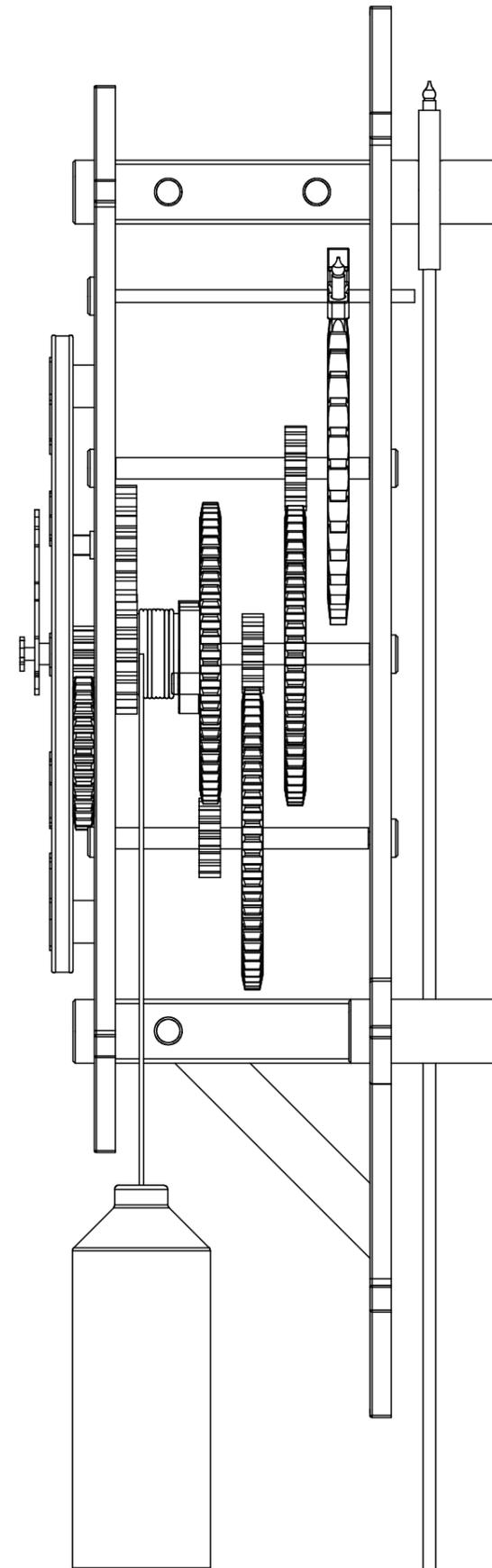
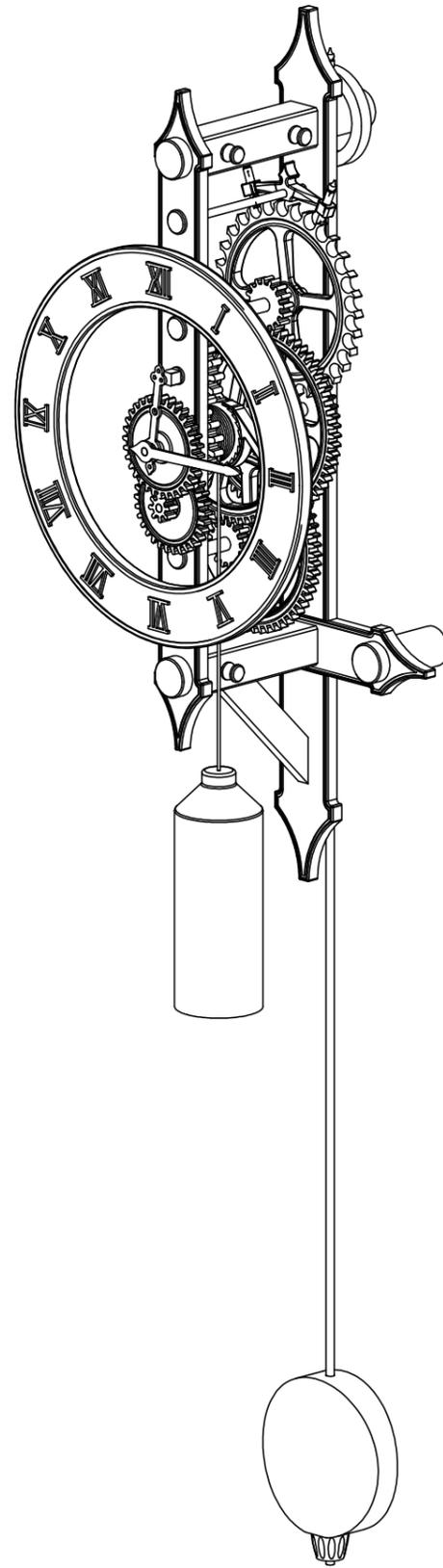
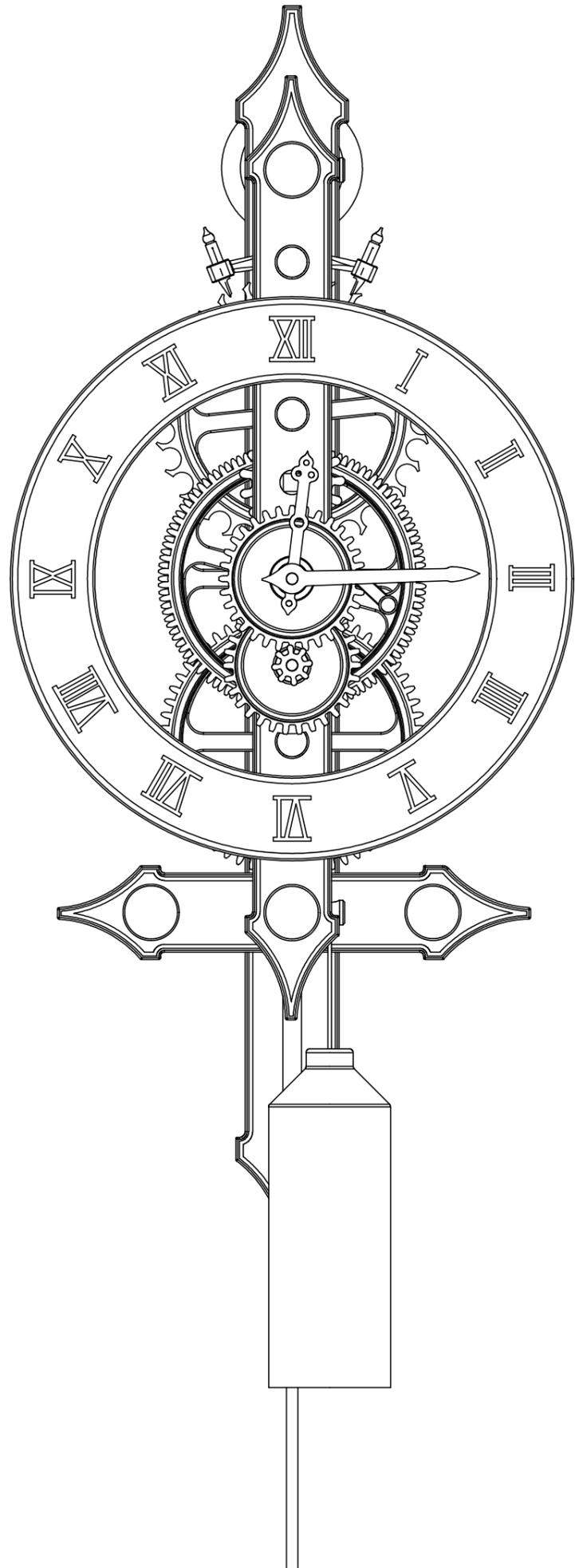


Woodenclocks

Clock1

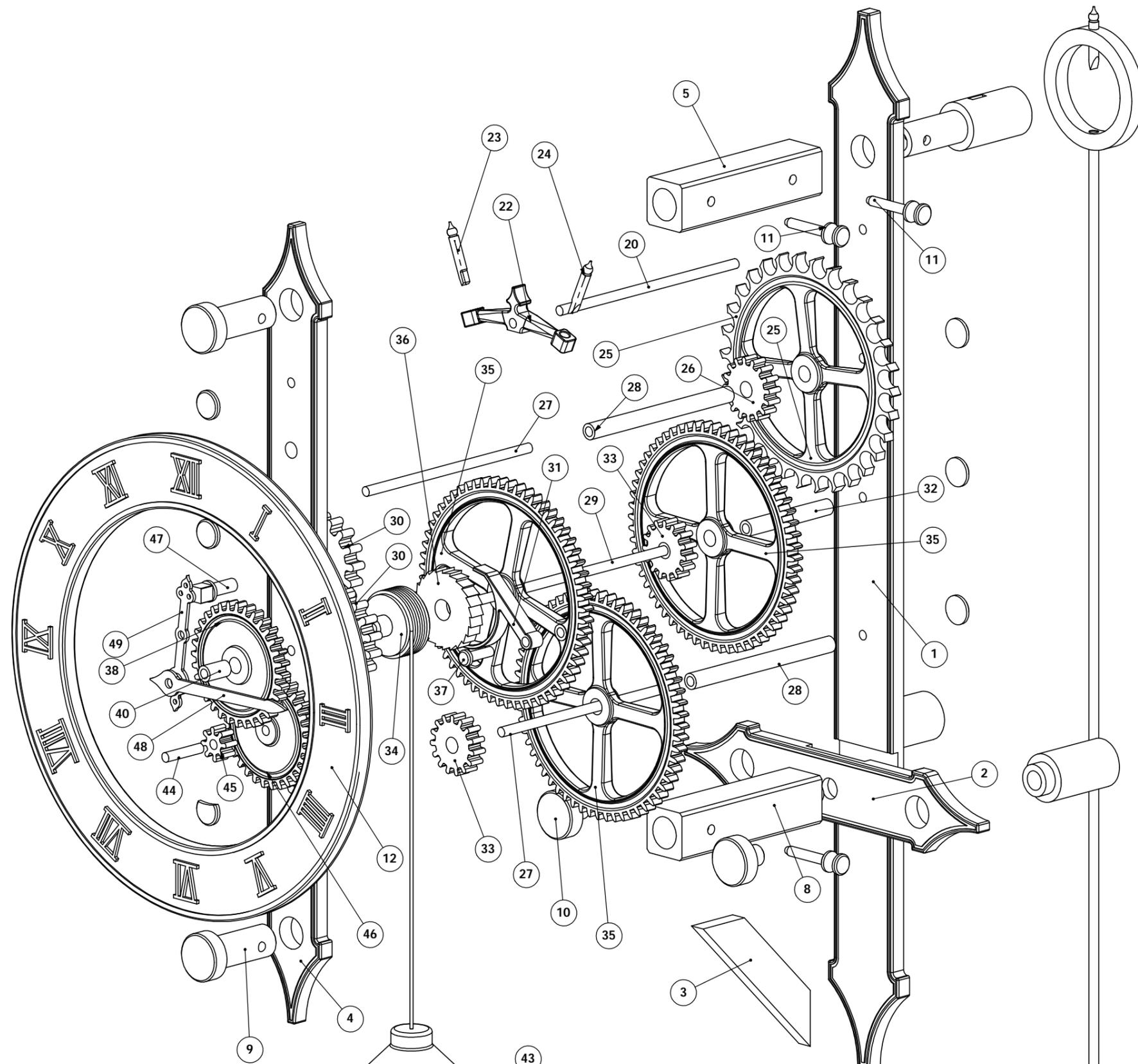


The drawings on the following pages contain plans to build the wooden clock shown above.
For further information and more detailed rendered images visit www.woodenclocks.co.uk

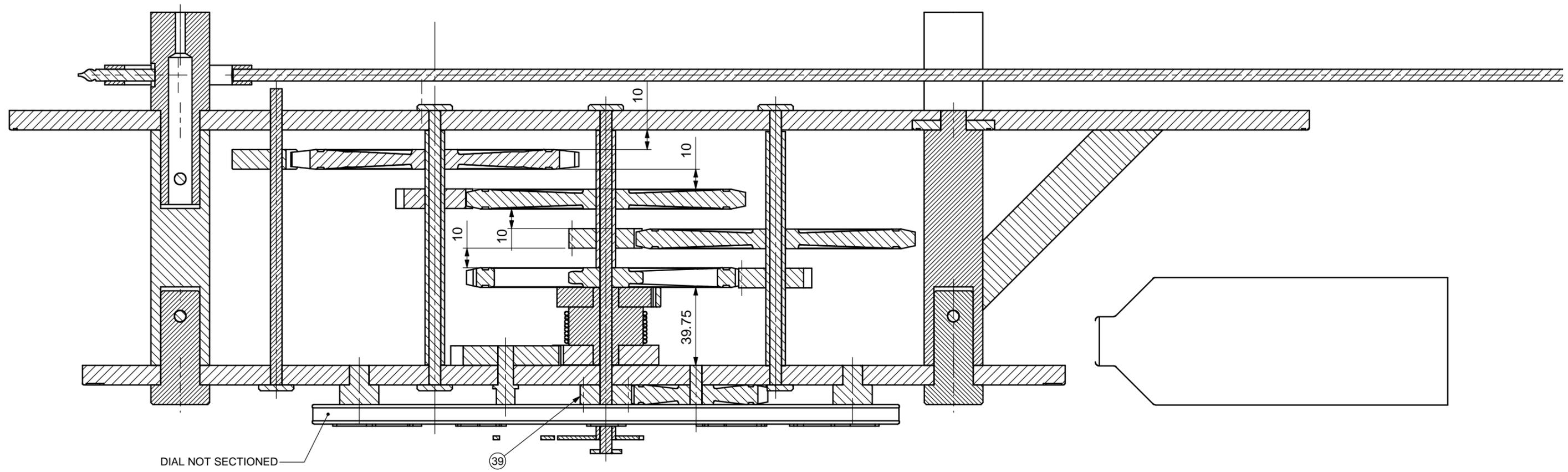


SHT 1 OF 10 SHTS	LAW WOODEN CLOCK 1	GENERAL ASSEMBLY	
NTS	ALL DIMENSIONS IN MM 3rd ANGLE PROJECTION UNTOLERANCED DIMS +/- 0.5	JAN 2000	Designed by: BRLAW www.woodenclocks.co.uk

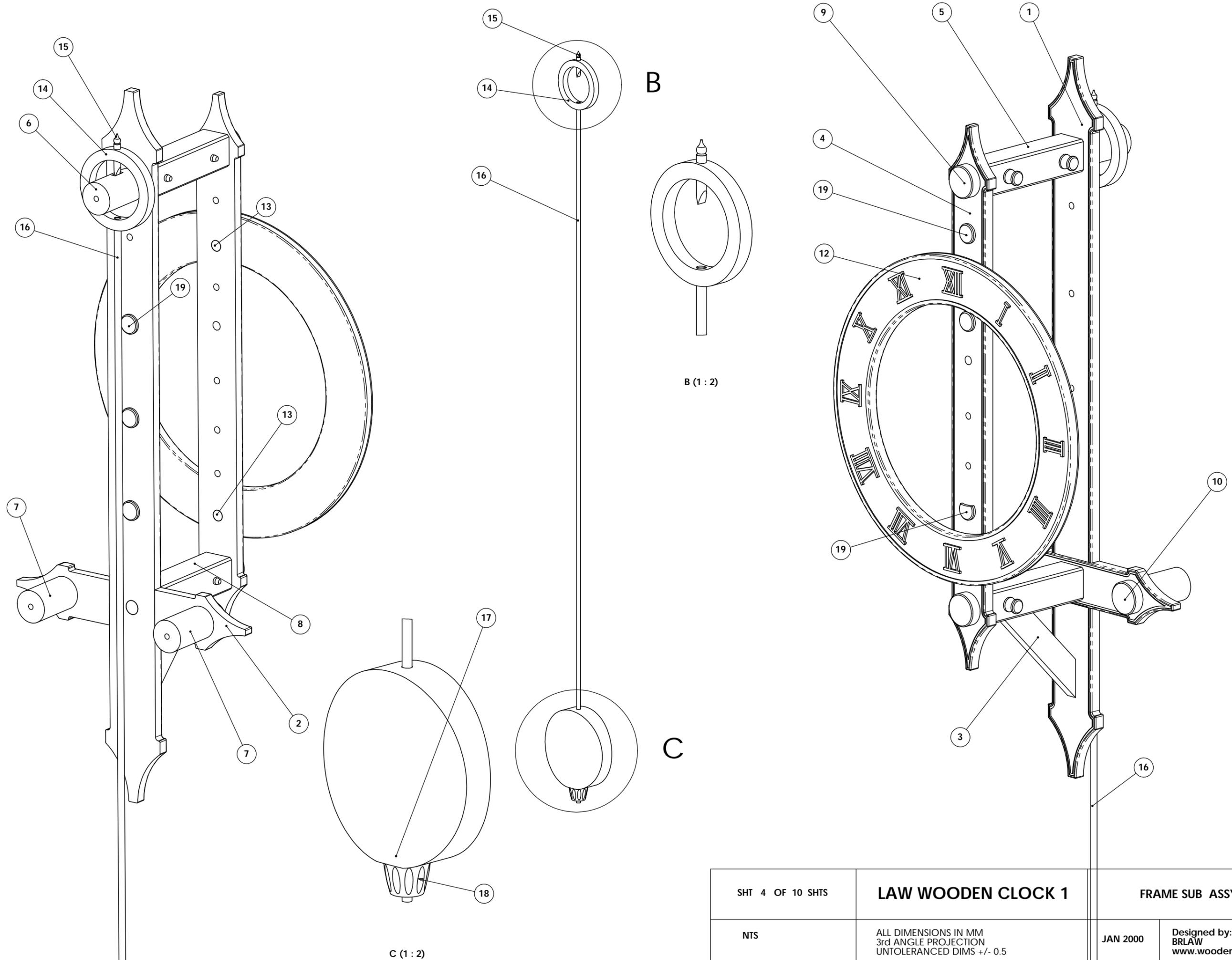
ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1		back
2	1		cross
3	1		Angled brace
4	1		front
5	1		squarespacer top
6	1		Pendulum hanger
7	2		Wall spacer
8	1		squarespacer bottom
9	2		Front pin
10	2		cover pin
11	3		Securing pin
12	1		Clock dial
13	2		Dial spacer
14	1		Pendulum head
15	1		Pendulum pivot
16	1		Pendulum rod
17	1		Pendulum bob
18	1		Pendulum nut
19	6		Shaft cover
20	1		Shaft151
21	1		yoke
22	1		escape
23	1		Pallet2
24	1		Pallet1
25	1		Timing
26	1		16teeth
27	2		Shaft140
28	2		Sleeve119
29	1		Shaft175
30	2		15teeth_1.5
31	1		Pawl
32	1		Sleeve70
33	2		15teeth
34	1		drum
35	3		60teeth
36	1		Ratchet
37	1		Pawl pin
38	1		32teeth
39	1		10teeth
40	1		sleeve18
41	8		ropering
42	1		rope
43	1		Weight
44	1		shaft30
45	1		8teeth
46	1		30teeth
47	1		Key shaft
48	1		Minute hand
49	1		Hour hand



SHT 2 OF 10 SHTS	LAW WOODEN CLOCK 1	EXPLODED VIEW	
NTS	ALL DIMENSIONS IN MM 3rd ANGLE PROJECTION UNTOLERANCED DIMS +/- 0.5	JAN 2000	Designed by: BRLAW www.woodenclocks.co.uk



SHT 3 OF 10 SHTS	LAW WOODEN CLOCK 1	CENTRELINE CROSS SECTION	
NTS	ALL DIMENSIONS IN MM 3rd ANGLE PROJECTION UNTOLERANCED DIMS +/- 0.5	JAN 2000	Designed by: BRLAW www.woodenclocks.co.uk



SHT 4 OF 10 SHTS

LAW WOODEN CLOCK 1

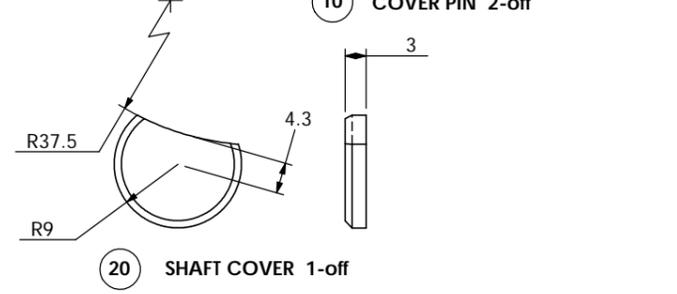
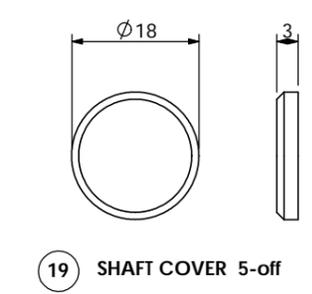
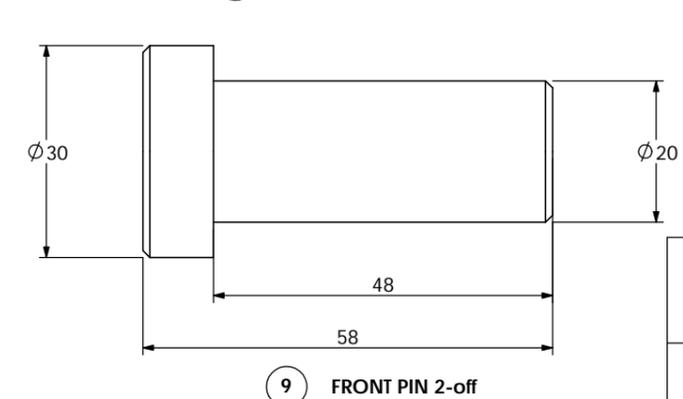
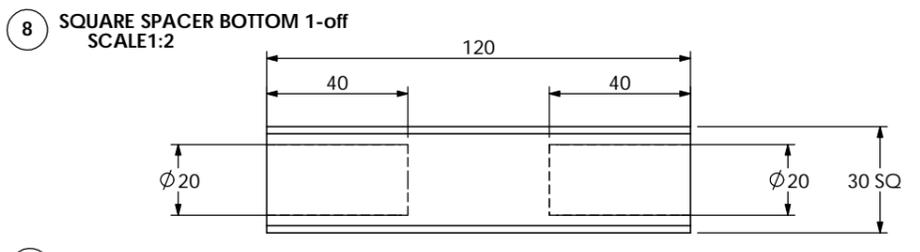
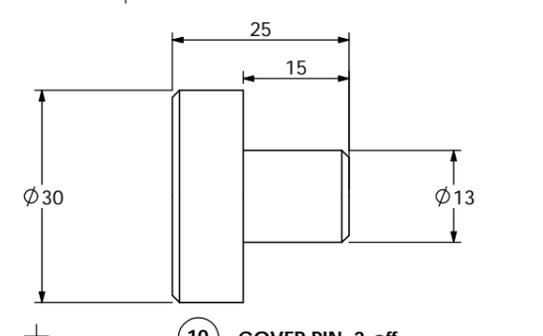
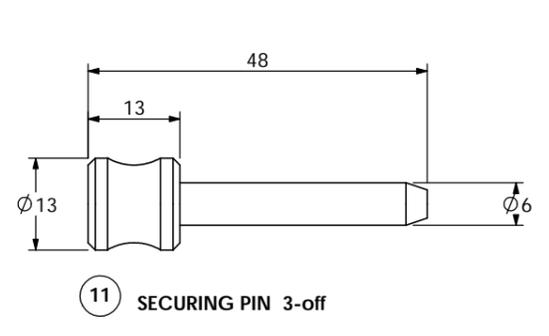
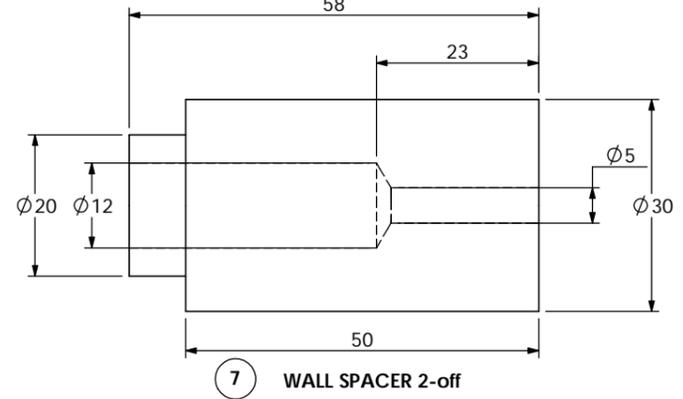
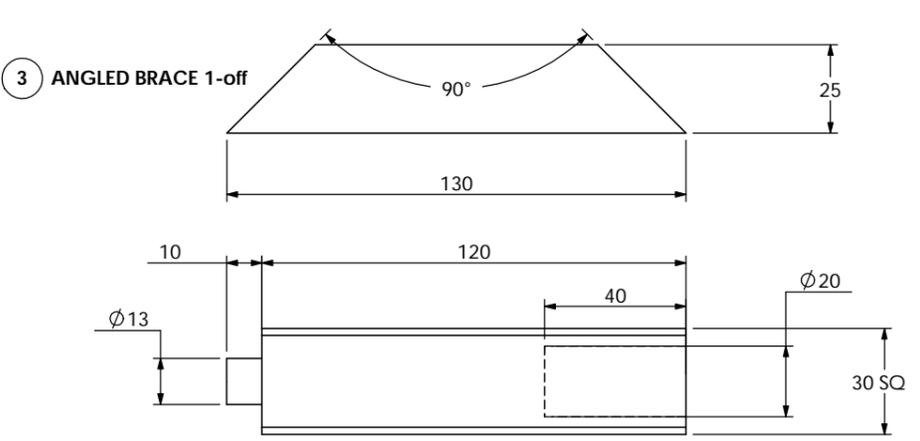
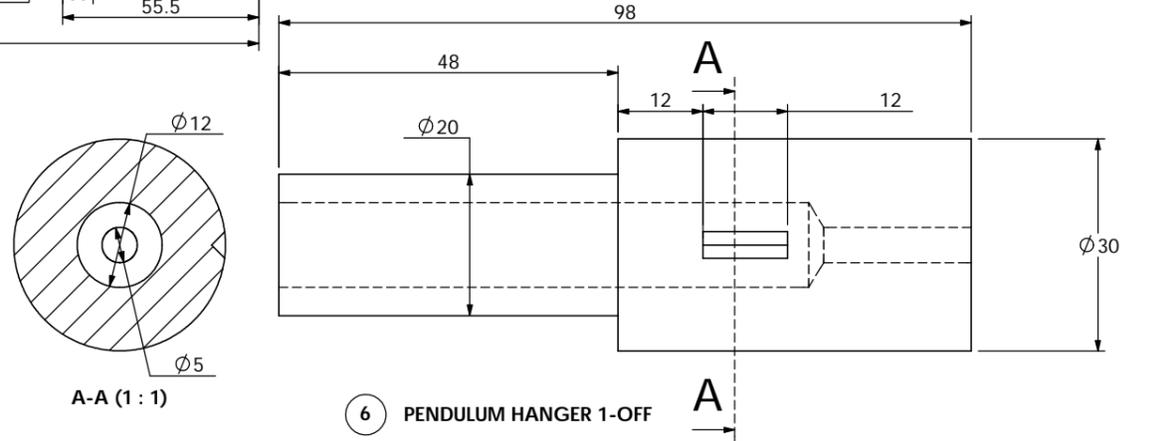
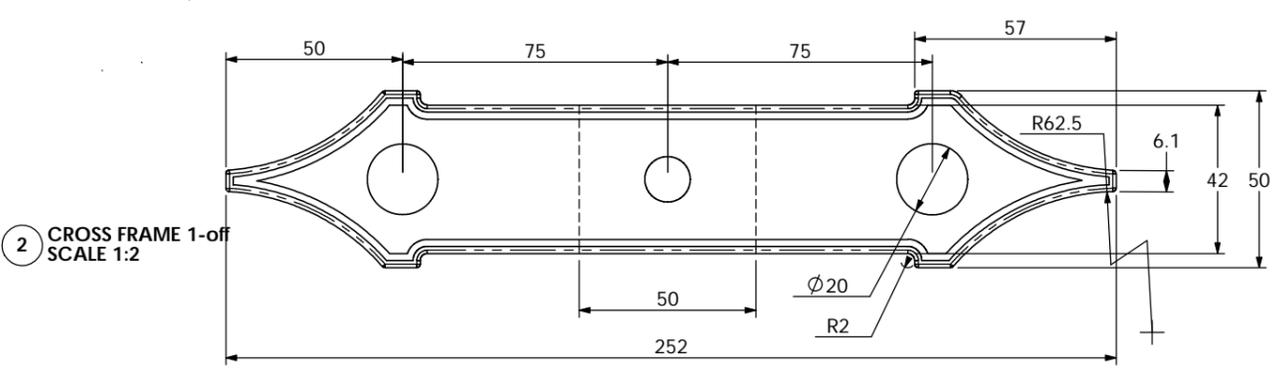
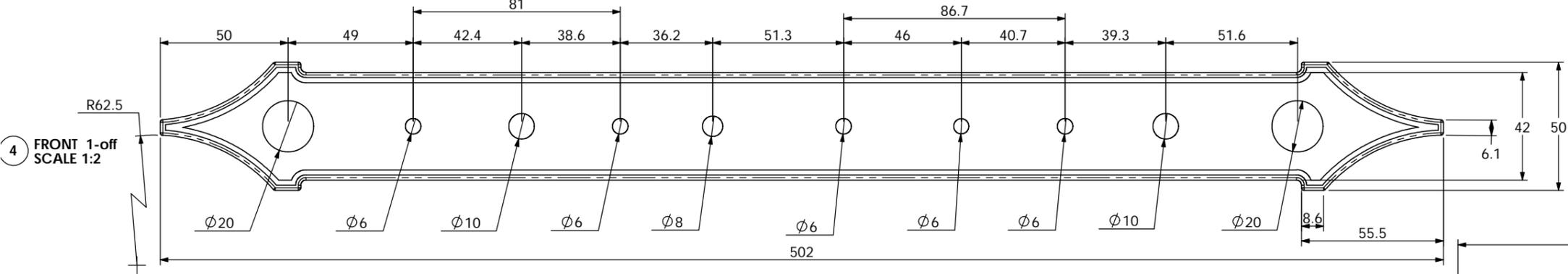
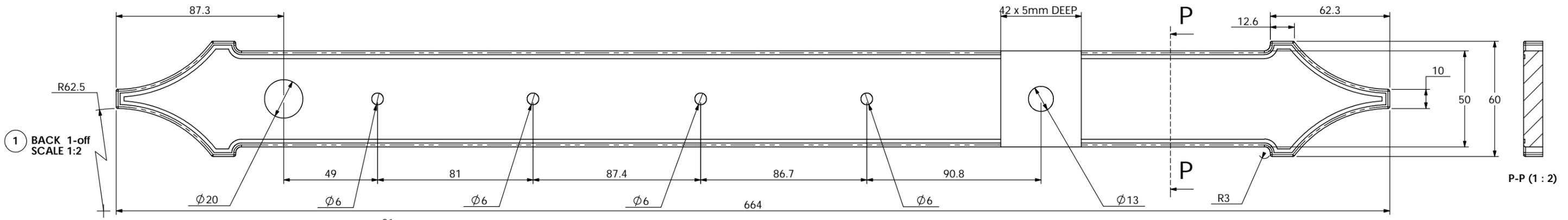
FRAME SUB ASSY

NTS

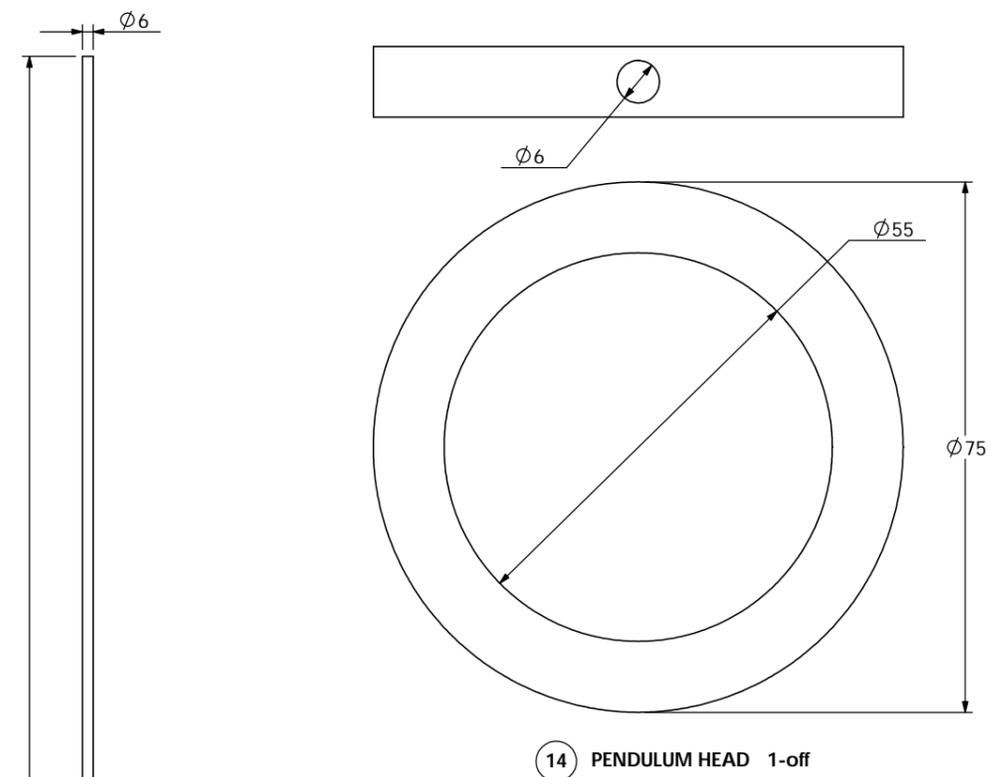
ALL DIMENSIONS IN MM
3rd ANGLE PROJECTION
UNTOLERANCED DIMS +/- 0.5

JAN 2000

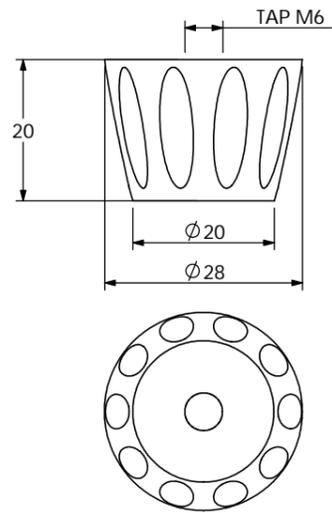
Designed by:
BRLAW
www.woodenclocks.co.uk



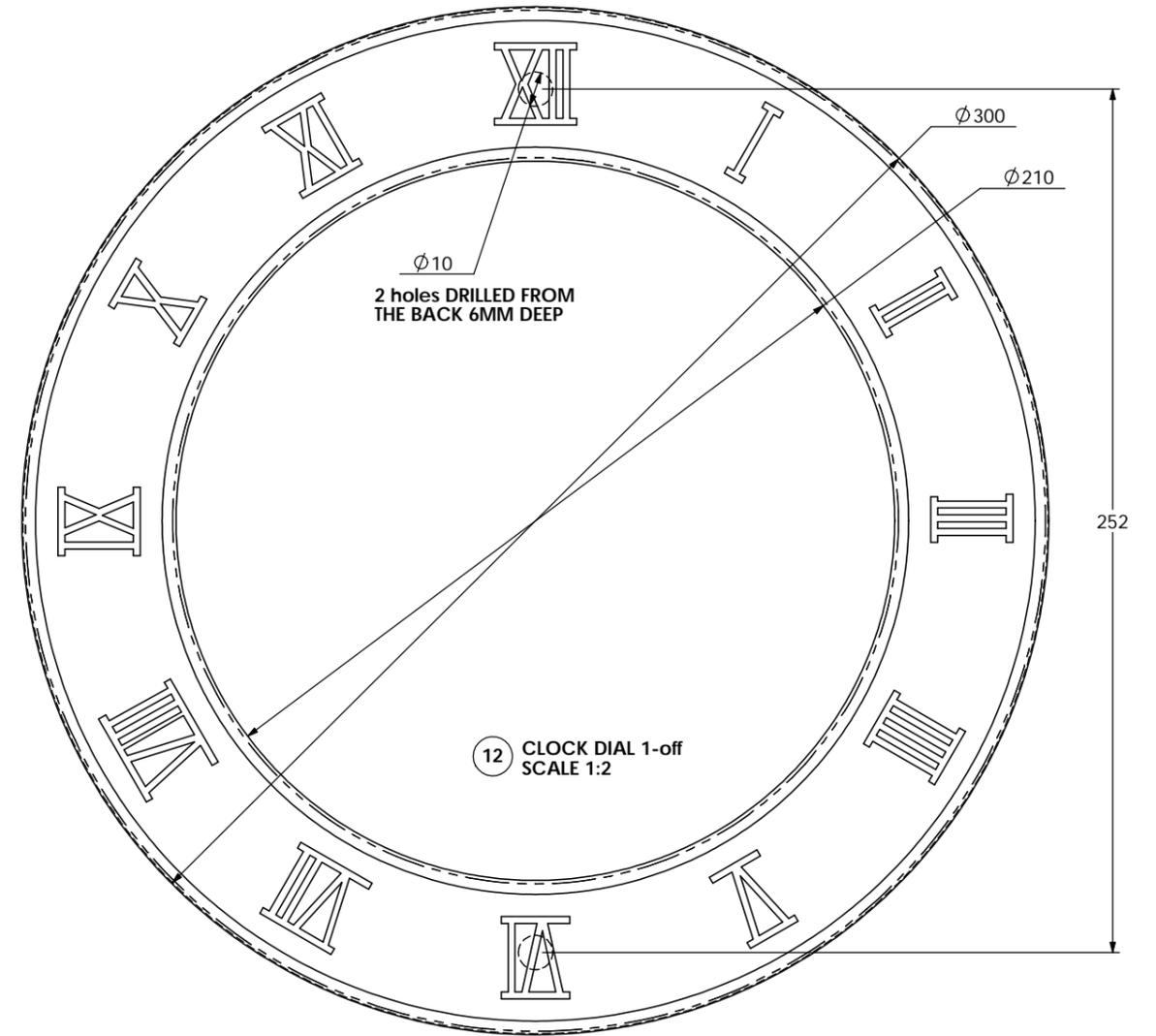
SHT 5 OF 10 SHTS	LAW WOODEN CLOCK 1	FRAME DETAILS	
SCALE 1:1 UOS	ALL DIMENSIONS IN MM 3rd ANGLE PROJECTION UNTOLERANCED DIMS +/- 0.5	JAN 2000	Designed by: BRLAW www.woodenclocks.co.uk



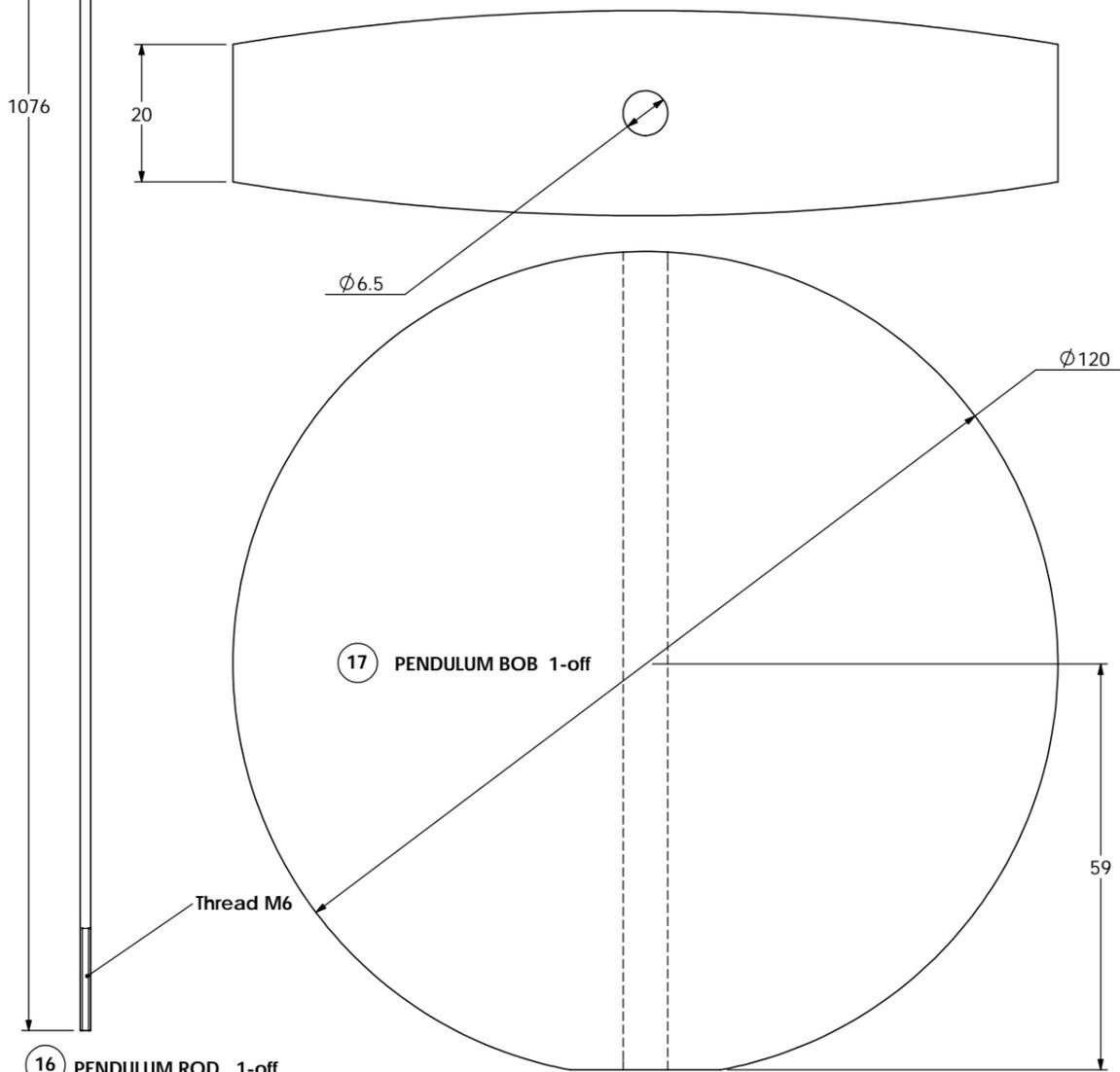
14 PENDULUM HEAD 1-off



18 PENDULUM NUT 1-off

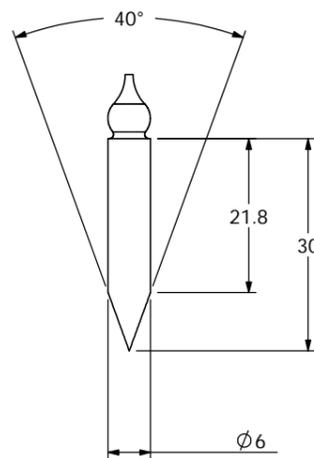


12 CLOCK DIAL 1-off
SCALE 1:2

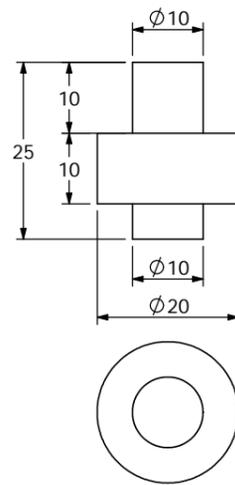


16 PENDULUM ROD 1-off

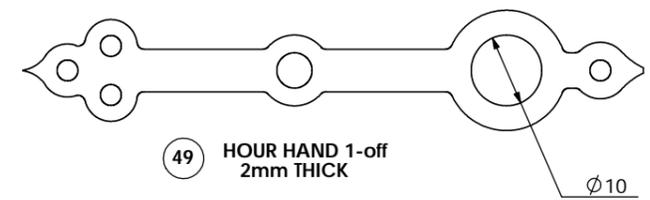
17 PENDULUM BOB 1-off



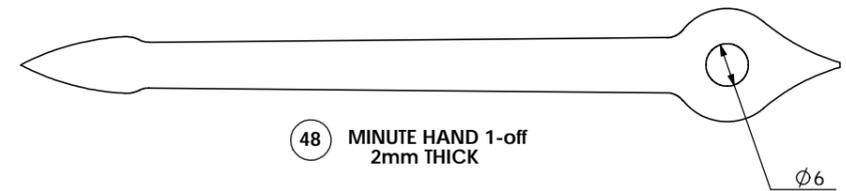
15 PENDULUM PIVOT 1-off



13 DIAL SPACER 2-off

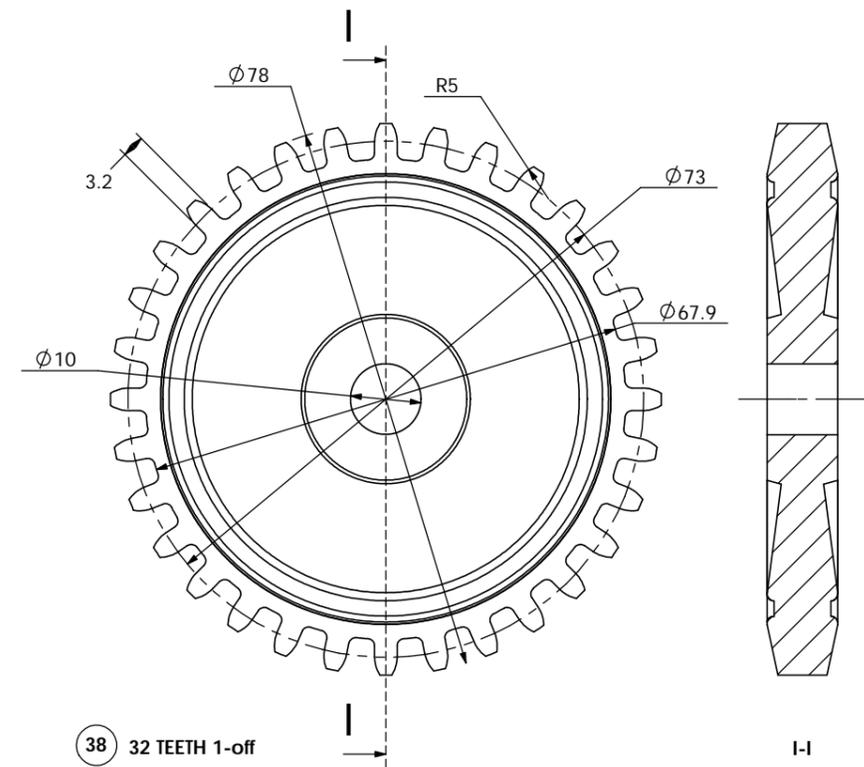
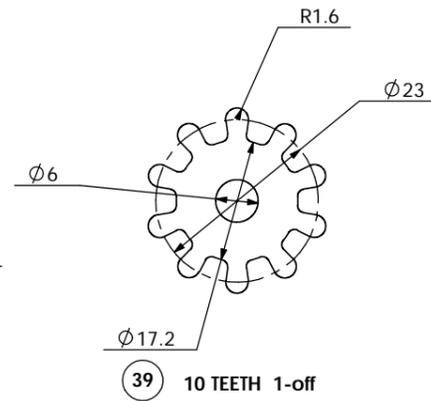
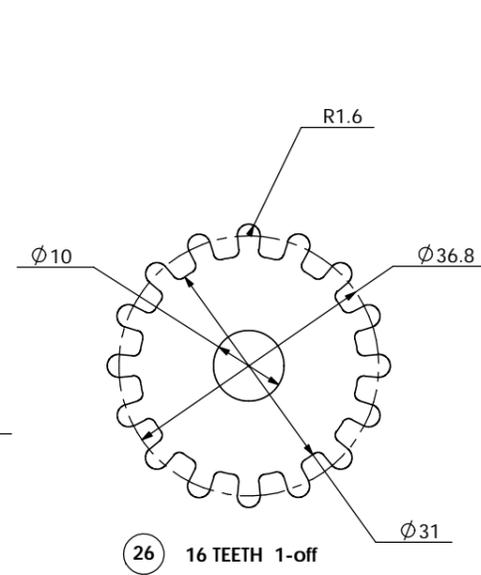
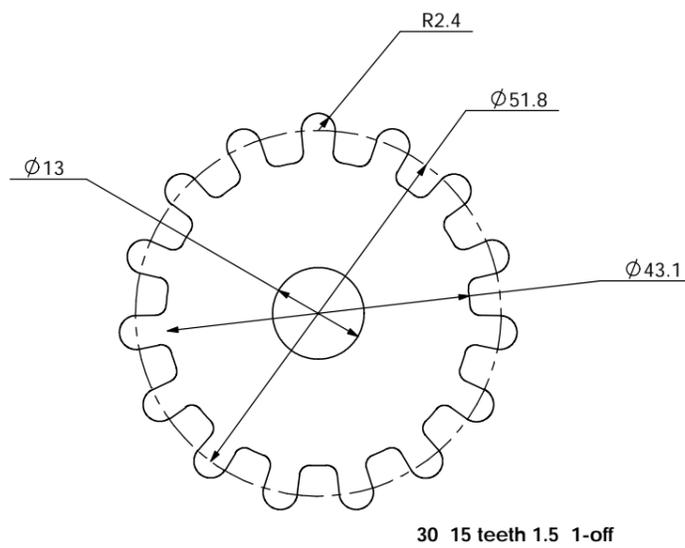
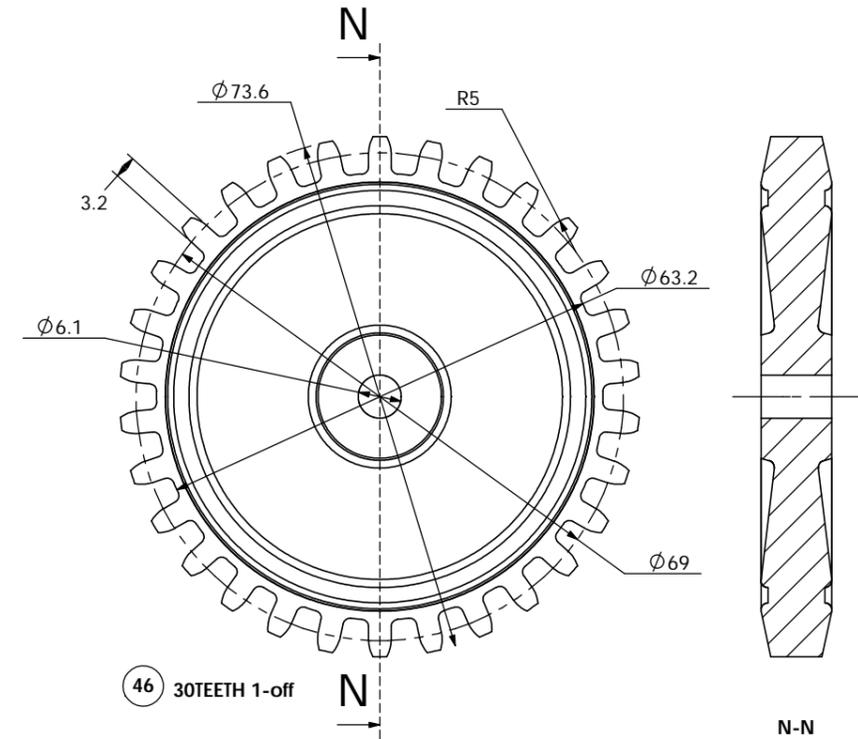
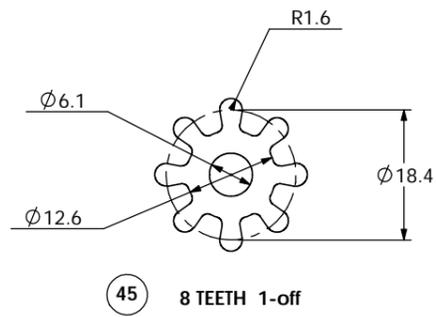
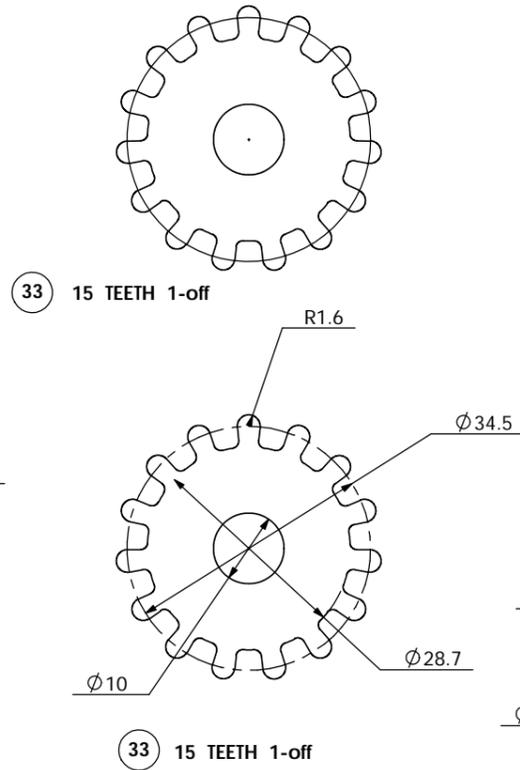
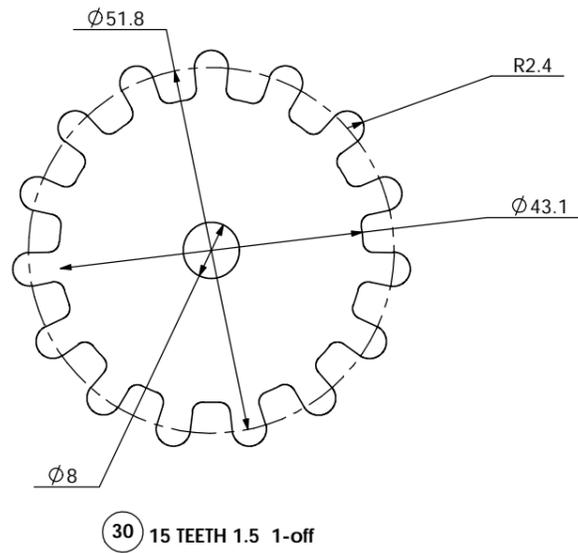


49 HOUR HAND 1-off
2mm THICK

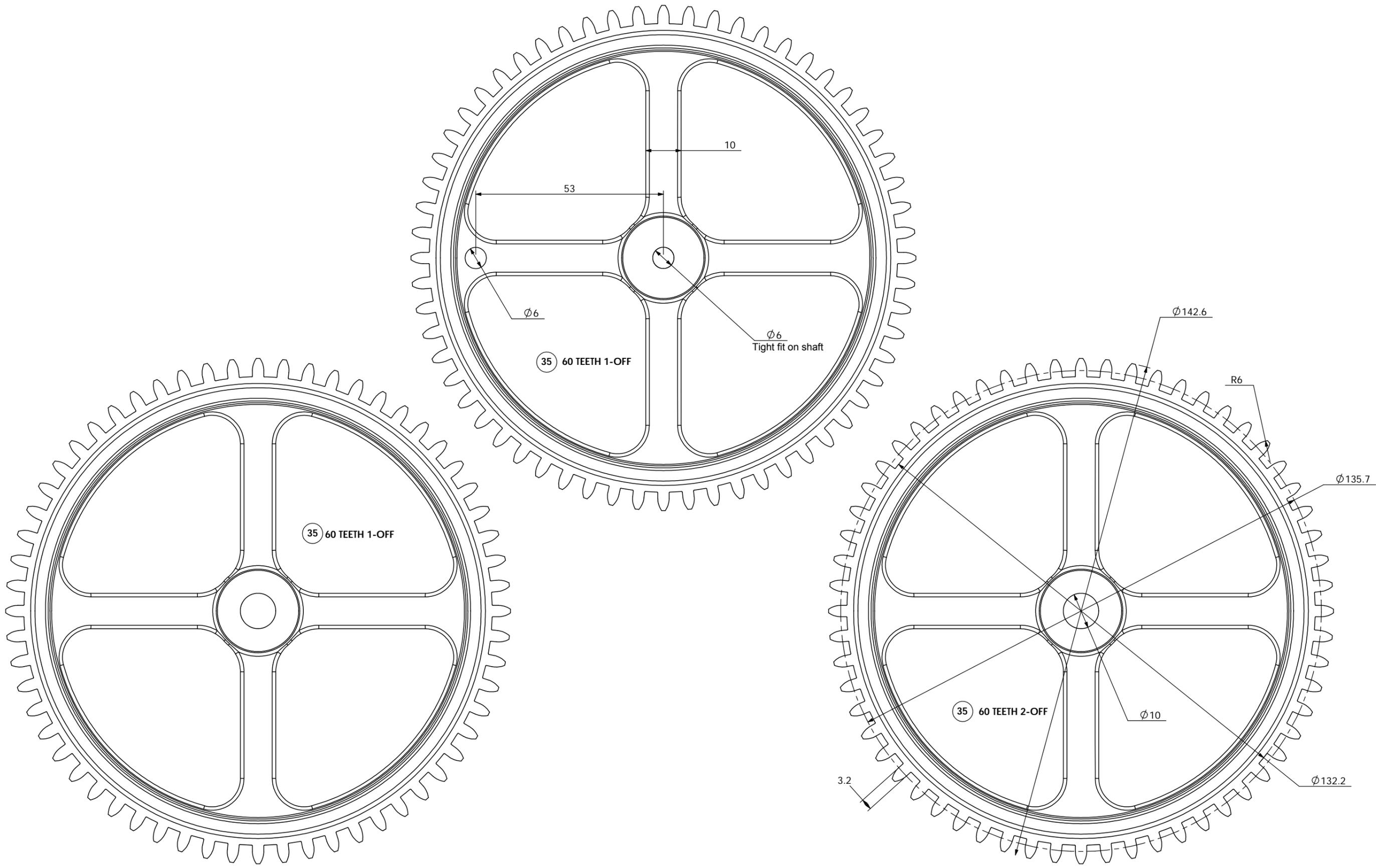


48 MINUTE HAND 1-off
2mm THICK

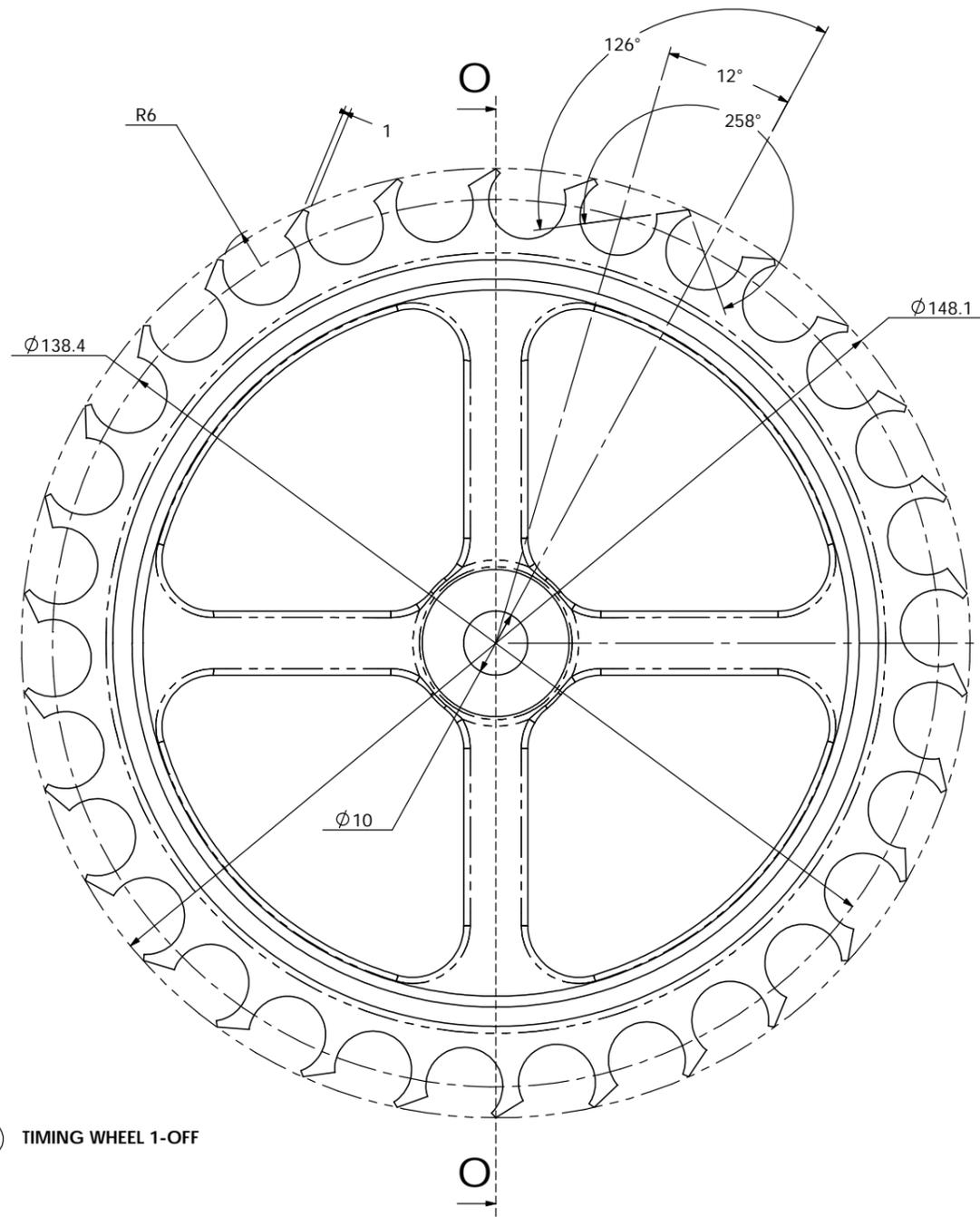
SHT 6 OF 10 SHTS	LAW WOODEN CLOCK 1	DIAL AND PENDULUM DETAILS	
SCALE 1:1 UOS	ALL DIMENSIONS IN MM 3rd ANGLE PROJECTION UNTOLERANCED DIMS +/- 0.5	JAN 2000	Designed by: BRLAW www.woodenclocks.co.uk



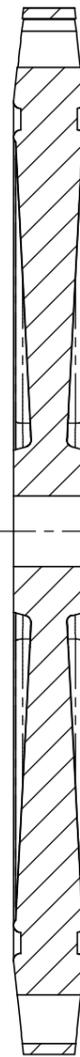
SHT 7 OF 10 SHTS	LAW WOODEN CLOCK 1	GEARS	
SCALE 1:1	ALL DIMENSIONS IN MM 3rd ANGLE PROJECTION UNTOLERANCED DIMS +/- 0.5	JAN 2000	Designed by: BRLAW www.woodenclocks.co.uk



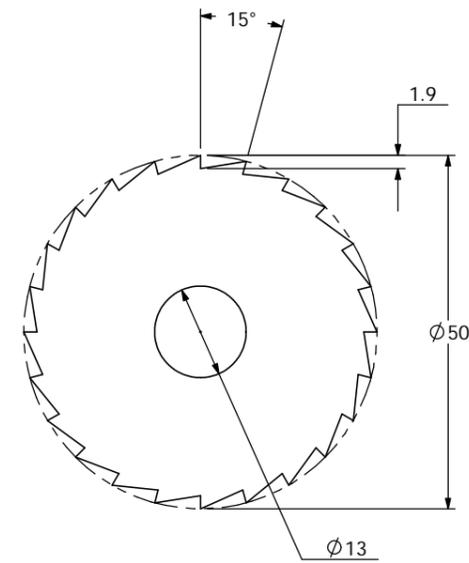
SHT 8 OF 10 SHTS	LAW WOODEN CLOCK 1	GEARS LARGE	
SCALE 1:1 UOS	ALL DIMENSIONS IN MM 3rd ANGLE PROJECTION UNTOLERANCED DIMS +/- 0.5	JAN 2000	Designed by: BRLAW www.woodenclocks.co.uk



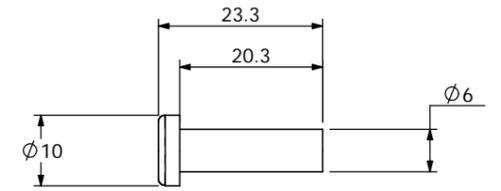
25 TIMING WHEEL 1-OFF



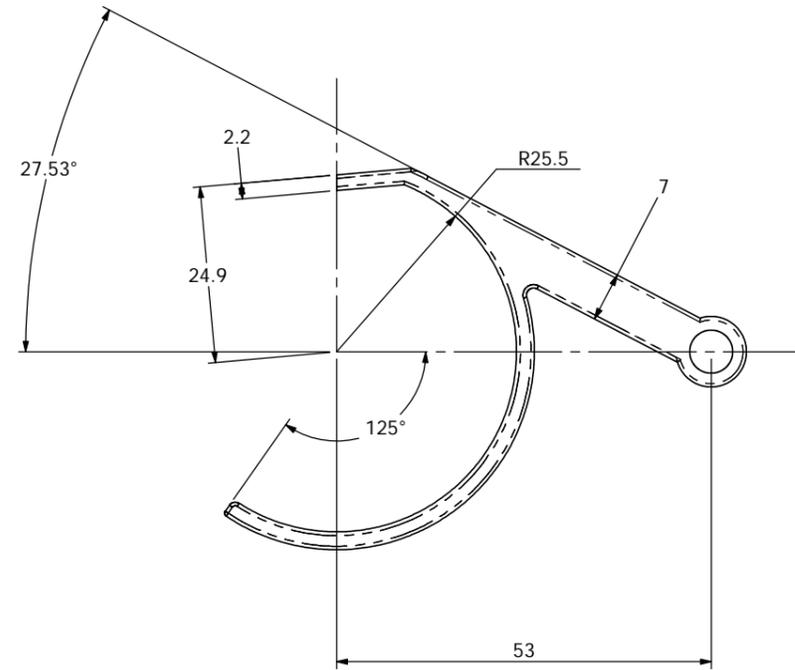
O-O (1 : 1)



36 RATCHET 1-OFF

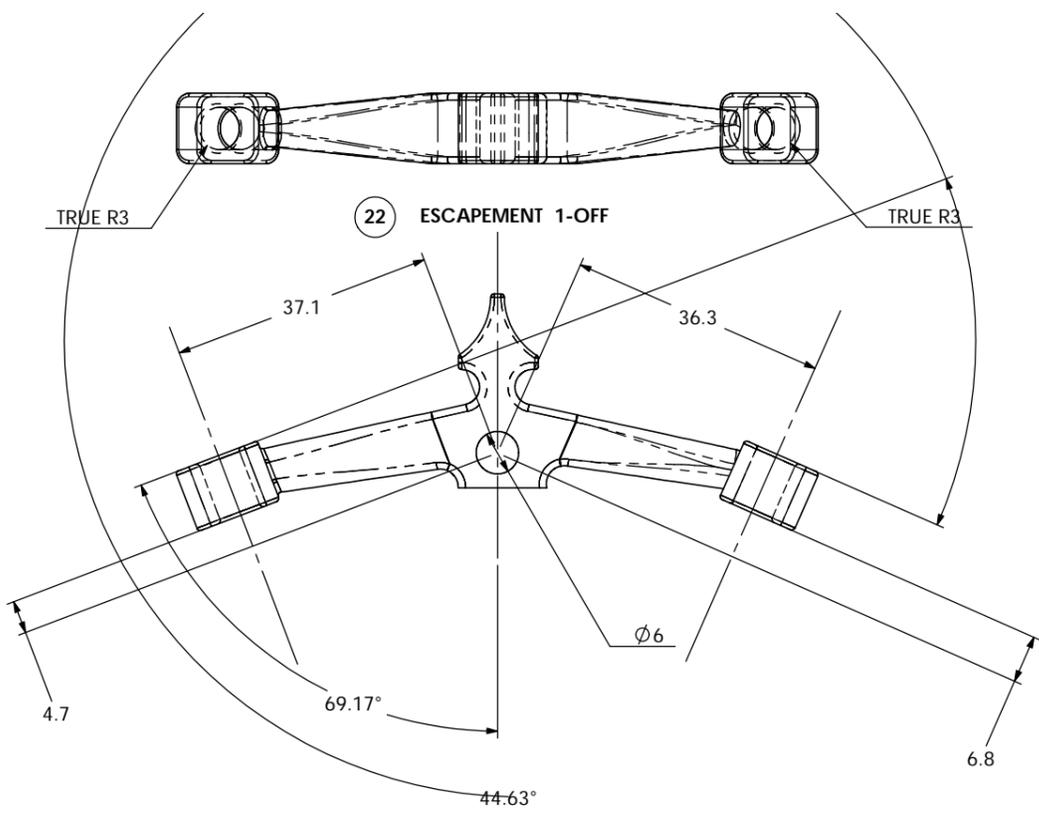


37 PAWL PIN 1-OFF

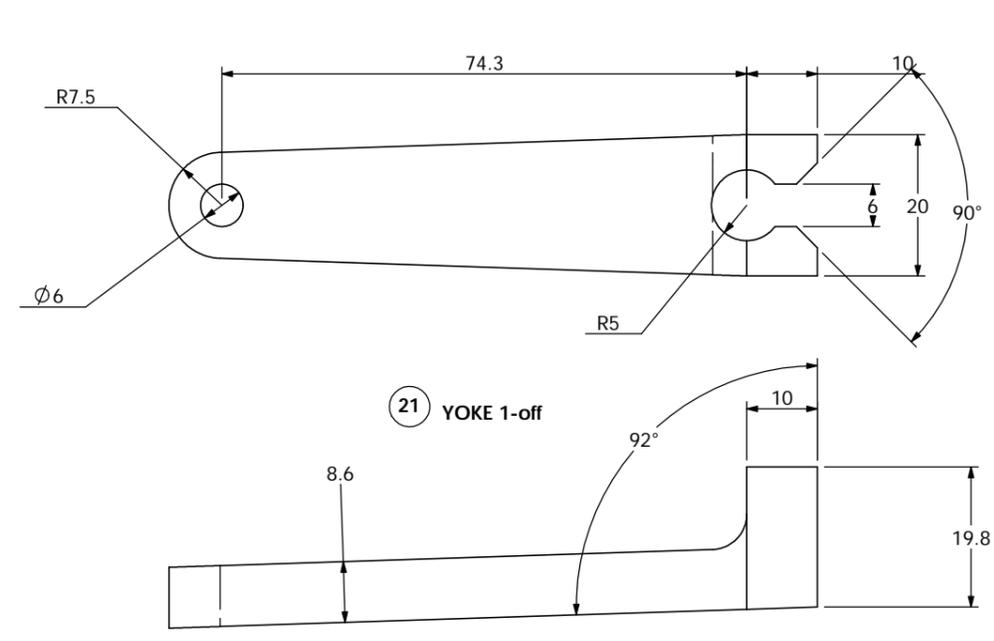


31 PAWL 1-OFF

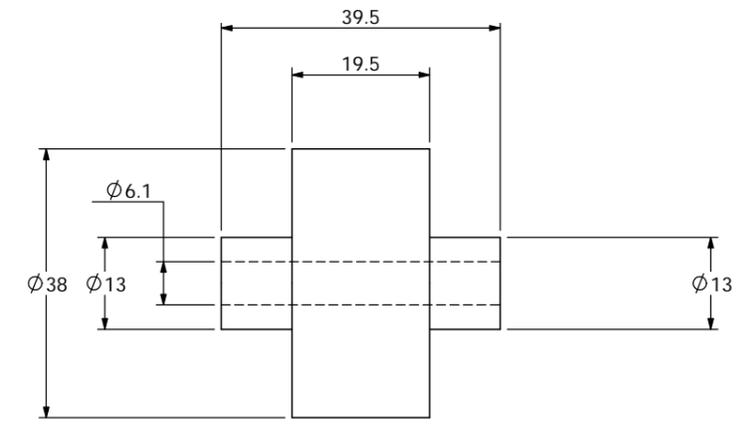
SHT 9 OF 10 SHTS	LAW WOODEN CLOCK 1	TIMING WHEEL AND RATCHET	
SCALE 1:1 UOS	ALL DIMENSIONS IN MM 3rd ANGLE PROJECTION UNTOLERANCED DIMS +/- 0.5	JAN 2000	Designed by: BRLAW www.woodenclocks.co.uk



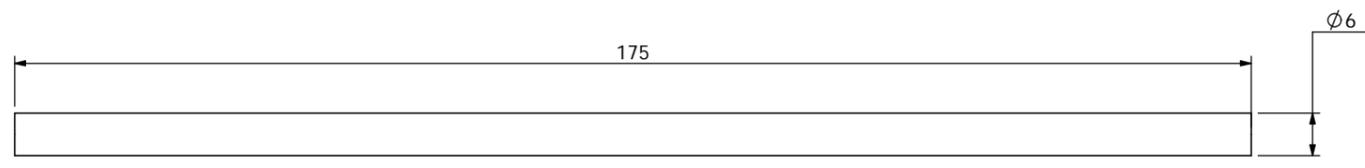
22 ESCAPEMENT 1-OFF



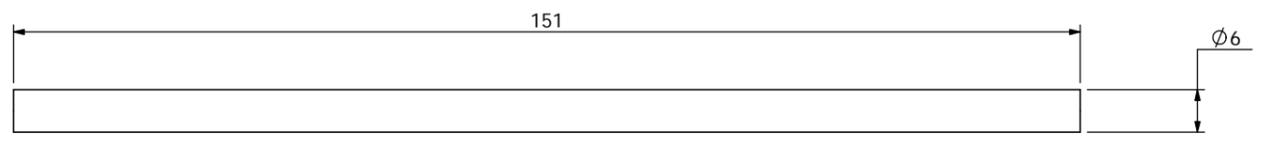
21 YOKE 1-off



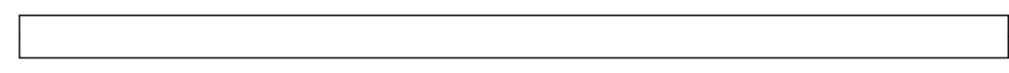
34 DRUM 1-OFF



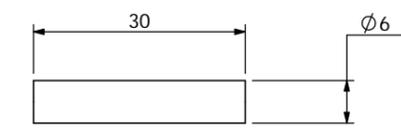
29 SHAFT 175 1-OFF



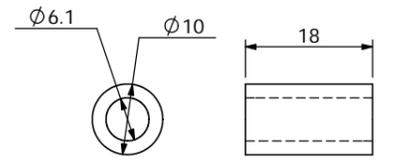
20 SHAFT 151 1-OFF



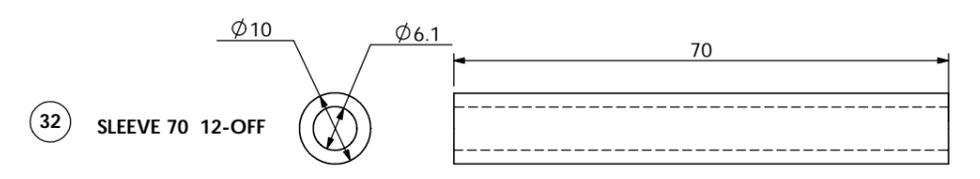
27 SHAFT 140 2-OFF



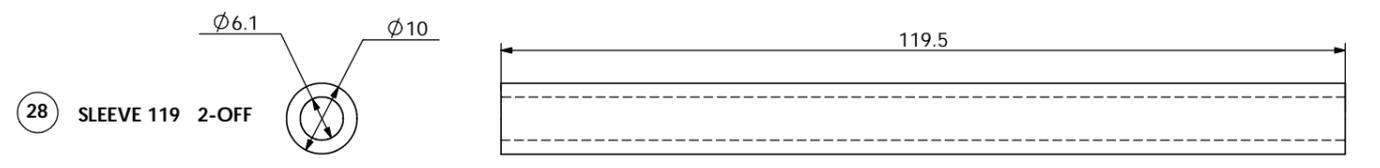
44 SHAFT 30 1-OFF



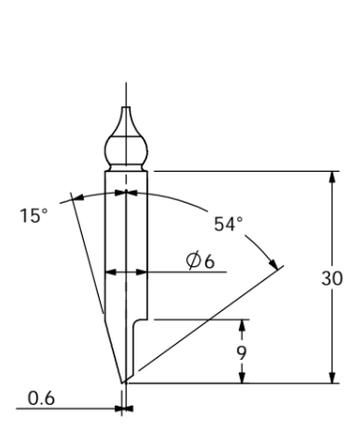
40 SLEEVE 18 1-OFF



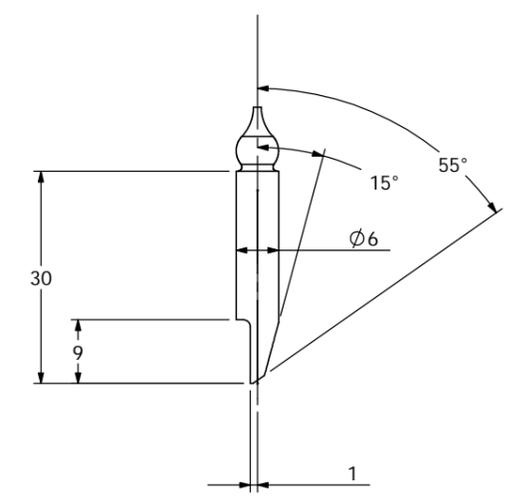
32 SLEEVE 70 12-OFF



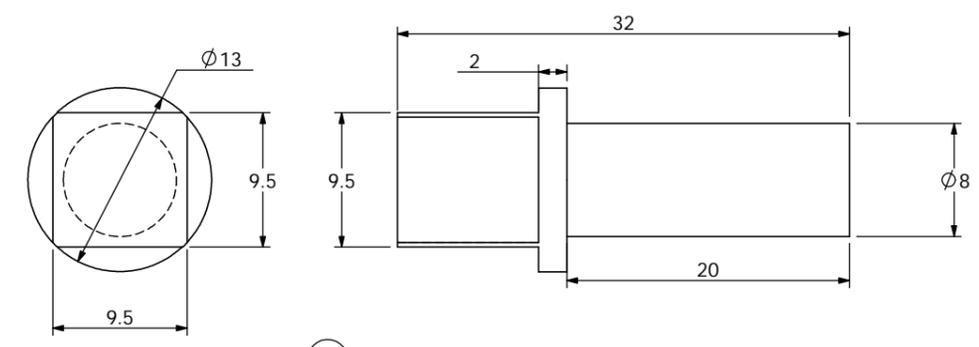
28 SLEEVE 119 2-OFF



23 PALLET 2 1-OFF



24 PALLET 1 1-OFF



47 KEY SHAFT 1-OFF

SHT 10 OF 10 SHTS	LAW WOODEN CLOCK 1	Shafts and sleeves	
SCALE 1:1 UOS	ALL DIMENSIONS IN MM 3rd ANGLE PROJECTION UNTOLERANCED DIMS +/- 0.5	JAN 2000	Designed by: BRLAW www.woodenclocks.co.uk

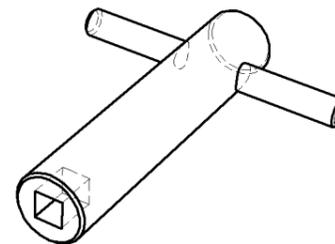
Woodenclock Clock I

Notes

1. Use close-grained timber such as Beech planed down to a thickness of 10 mm for all components unless otherwise stated.
2. All shafts for spindles should be made from 6 mm diameter bar.
3. Any suitable material can be used for the weight. The mass of the weight will need to be established by experiment, but a good starting point would be 6 lbs.
4. Details of the dial numerals are shown for guidance only, the actual form of the numerals is left to your own discretion. They can be applied by painting or as relief numerals cut from thin sheet.
5. The hands are again given for guidance only, although in this instance they are drawn to size so that you can copy these if you wish. They should in any event be cut from thin sheet.
6. Where the components are drawn to 1:1 scale you can attach the drawing to the timber using a low tack adhesive, and cut around the profiles. Great care should be taken with this approach when cutting the gear teeth because they need to be cut very accurately to avoid problems when assembling the clock
7. The frame is held together using 3 pins fitted through holes crossdrilled after assembly.
8. Care should be taken to adjust the pallets (23 & 24) relative to the timing wheel. They should operate to allow the timing wheel to move incrementally forward when swinging through a small arc of movement of the pendulum. (<10°).
9. The pitch of the gears is controlled by the drilling of the hole centres in the front and back frames. It may help to delay the drilling of these holes in the frames until after the gears are first cut and then finished to size. At this point it would help to mount them on two separate pieces of wood and test their free movement one to the other and measure the centre distance between them, so that the hole centres can be drilled at this dimension rather than the theoretical dimension on the drawing.
10. The winder used is not drawn on the plans but a simple 'T' bar with a square hole in the end to engage over the end of the square end of the shaft holding the winding gears.
11. The profiling of the larger gears is not necessary to the functioning of the clock, and can be carried out at the discretion of the clock builder.

Fits between components

Loose	Tight	Bond
1 & 20	11 & 5	1 & 19
1 & 7	11 & 8	1 & 2
1 & 29	12 & 13	1 & 3
16 & 17	20 & 21	1 & 8
27 & 28	20 & 22	14 & 15
29 & 32	22 & 23	14 & 16
	22 & 24	3 & 8
31 & 37	25 & 28	4 & 13
32 & 29	26 & 28	4 & 19
4 & 20	30 & 34	7 & 2
4 & 27	32 & 33	45 & 46
4 & 29	32 & 34	
4 & 44	32 & 35	
4 & 47	35 & 37	
45 & 4	38 & 40	
46 & 4	44 & 4	
	44 & 45	
	44 & 46	
	47 & 30	
	6 & 5	
	9 & 5	
	9 & 8	
	28 & 35	
	29 & 35	



Notes	LAW WOODEN CLOCK 1	
SCALE 1:1 UOS	ALL DIMENSIONS IN MM 3rd ANGLE PROJECTION UNTOLERANCED DIMS +/- 0.5	JAN 2000
		Designed by: BRLAW www.woodenclocks.co.uk