



(16) Top brace 1-off

(25) Verge support 1-off

(32) Bottom brace 1-off

(38) Pin for hand 1 -off

| SHT 4 OF 10 SHTS | LAW WOODEN CLOCK 4 | Braces |  |
| :---: | :---: | :---: | :---: |
| Scale 1:1 UOS | ALL DIMENSIONS IN MM Brd ANGLEPROJECTION UNTOLERANCED DIMS $+1-0.5$ | JAN 2002 | Designed by: BRLAW <br> www.woodenclocks.co.uk |



(31) Hand 1 -off

(13) Gear with 48 teeth 2 -off

| SHT 5 OF 10 SHTS | LAW WOODEN CLOCK 4 | Dial |  |
| :---: | :--- | :--- | :--- |
| Scale 1:1 UOS | ALL DIMENSIONS IN MM <br> 3d ANGLEROJECTON <br> UNTOLERANCED DIMS $+/-0.5$ | JAN 2002 | Designed by: <br> BRLAW <br> WWW.woodenclocks.co.uk |

(5)

Cown wheel shaft 1-off $\square$

(6) Crown wheel 1-off


View on $N$

| SHT 6 OF 10 SHTS | LAW WOODEN CLOCK 4 | Crown wheel |  |
| :--- | :--- | :--- | :--- |
| Scale 1:1 UOS | ALL DIMENSIONS IN MM <br> 3r ANGLE PROECION <br> UNOLERANCED DIMS $+1-0.5$ | JAN 2002 | Designed by: <br> BRLAW <br> Www.woodenclocks.co.uk |



| SHT 7 OF 10 SHTS | LAW WOODEN CLOCK 4 | Centre wheel |  |
| :--- | :--- | :--- | :--- |
| Scale 1:1 UOS | ALL DIMENSIONS IN MM <br> 3r ANGLE PROECION <br> UNOLERANCED DIMS $+1-0.5$ | JAN 2002 | Designed by: <br> BRLAW <br> Www.woodenclocks.co.uk |


(8) Gear with 56 teeth 1 -off

(11) Ratchet pin 1-off


J-J 14 Cord pulley 1-off

(10) Pawl 1-off


## Woodenclock Clock 4

## Notes

1. Use close-grained timber such as Beech planed down to a thickness of 6 mm for all components unless otherwise stated
2. 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.
3. The hand is again given for guidance only, although in this instance it is drawn to size so that you can copy it if you wish. It should in any event be cut from thin sheet.
4. 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
5. The frame components i.e. Back, Cross bar, Top and Bottom braces should be glued together. The front, verge, and Dial should also be glued.
6. The clock is adjusted for accuracy by moving the Foliot weights in or out along Foliot until the best accuracy is achieved. Please note that the clock will never be more accurate than 1 hour per day.
7. 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 linished to size. At this point it would help to mount them on two separate pieces of wood and test there 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.
8. 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.
9. The verge construction has the Hanger formed with a bent end so as to secure it into the Verge in the correct position, because of this the Verge bush and the Foilot have to be fitted to the Hanger before it is bent. An alternative to this is to dispense with the bend altogether and simply drill a hole in the top of the Verge for the Hanger to fit in, and then pin the Verge and the Foliot in the correct positions. Dimensions are given for this on sheet 2 . This also saves having to make and fit the verge in-fill piece.
10. The Verge assembly is fitted after the gears have been located on the back frame. It is fitted by lifting the verge bush and sliding the


| SHT 10 OF 10 SHTS | LAW WOODEN CLOCK 4 | Notes |  |
| :---: | :--- | :--- | :--- |
| Scale 1:1 UOS | ALL DIMENSIONS IN MM <br> 3rd ANGL PROJCTION <br> UNTOLERANCED DIMS $+1-0.5$ | JAN 2002 | Designed by: <br> BRLAW <br> Www.woodenclocks.co.uk |

