Woodenclock Clock 2

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 threaded screws into spacers (3) glued into the back plate. Alternatively pins fitted into holes cross drilled after assembly can be used.
⑧ Care should be taken to adjust the pallets (17 & 18) 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 time 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.
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.