Woodenclock Clock 5

Notes

?? Use close-grained timber such as Beech planed down to a thickness of 1
10 mm for all components unless otherwise stated.
?? All shafts for spindles should be made from 6 mm diameter bar.
?? 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.
?? 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.
?? 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.
?? 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.
?? The frame is held together using 5 threaded screws into spacers (3)glued
into the back plate. Alternatively pins fitted into holes cross drilled after
assembly can be used.
?? 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°).
?? 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 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.
?? 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.