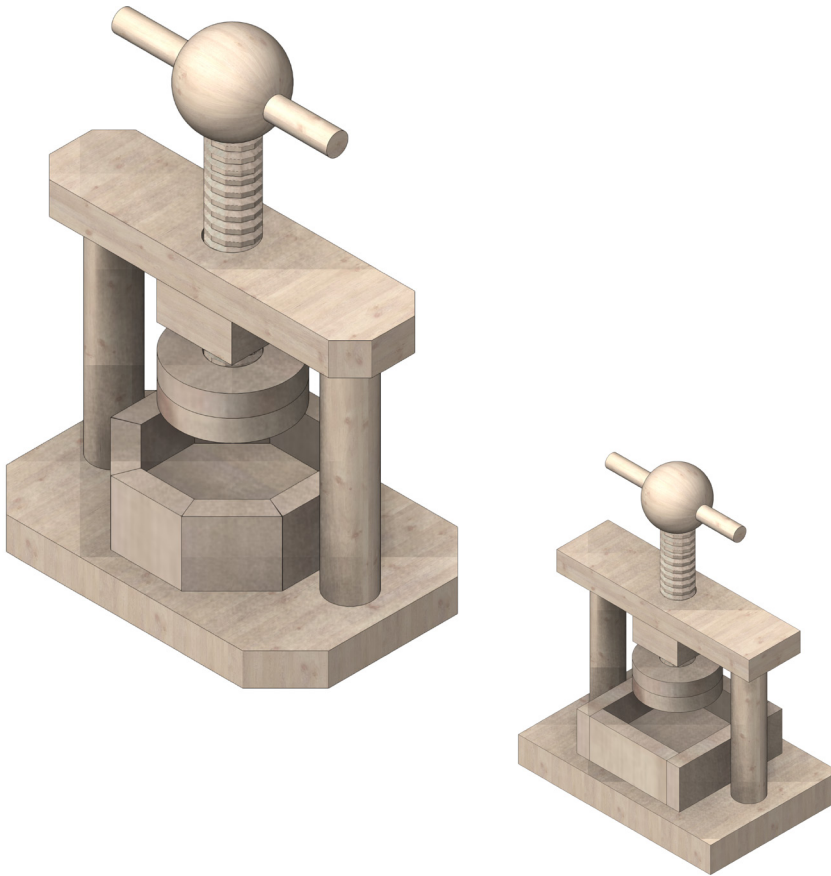
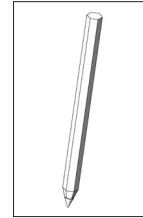


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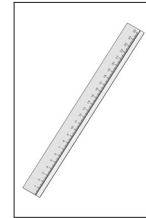
Nut Cracker



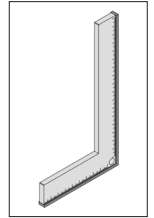
Necessary Tools:



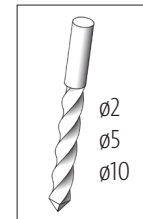
Pencil



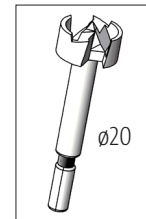
ruler



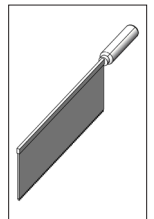
Set square



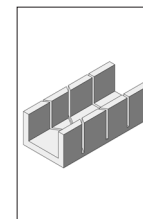
Drills



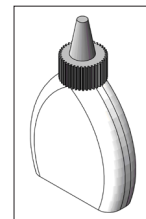
Forstner bits



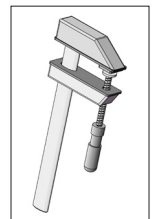
Fine saw



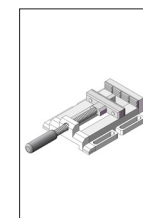
Cutting box



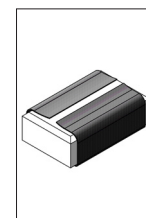
Wood glue



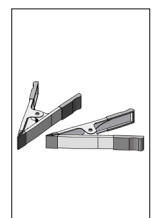
Screw clamp



Machine vice



Sandpaper



Glue clamp

Please Note

Bei den OPITEC Werkpackungen handelt es sich nach Fertigstellung nicht um Artikel mit Spielzeugcharakter allgemein handelsüblicher Art, sondern um Lehr- und Lernmittel als Unterstützung der pädagogischen Arbeit. Dieser Bau- satz darf von Kindern und Jugendlichen nur unter Anleitung und Aufsicht von sachkundigen Erwachsenen gebaut und betrieben werden. Für Kinder unter 36 Monaten nicht geeignet. Erstickungsgefahr!

Parts List	Quantity	Size (mm)	Designation	Part No.
Threaded beech rod with nut	1	M20	Gag	1
Beech wooden wheels	2	ø50	stamp	2
Round bar	1	ø10x125mm	Gag stab	3
Round bar	2	ø20x150mm	pillar	4
Wooden strip	1	15x100x150	Base plate	5
Wooden strip		15x40x150	End strip	6
Wooden strip	2	10x30x200	Frame molding	7
Wooden strip	1	10x60x75	Nutshell base plate	8
Chipboard screw	1	ø4x30	Punch screw	9

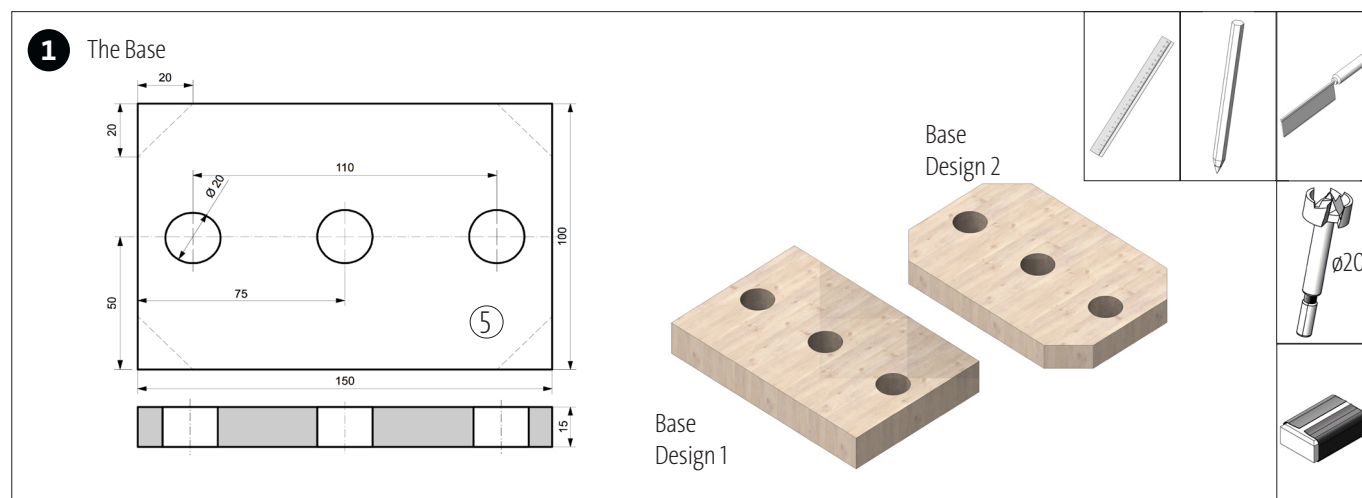
Instructions 100630

Nut Cracker

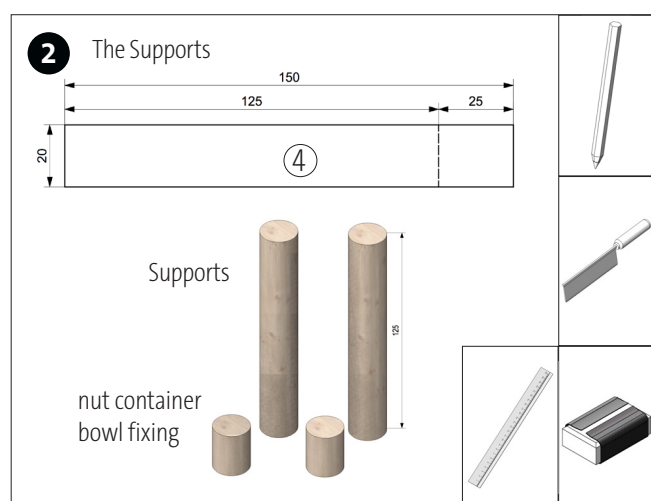
The project can be made in one of the two suggested designs, or your own design according to your experience.

Design 1: Which uses a simple base which only needs to be drilled and sawn and squared off

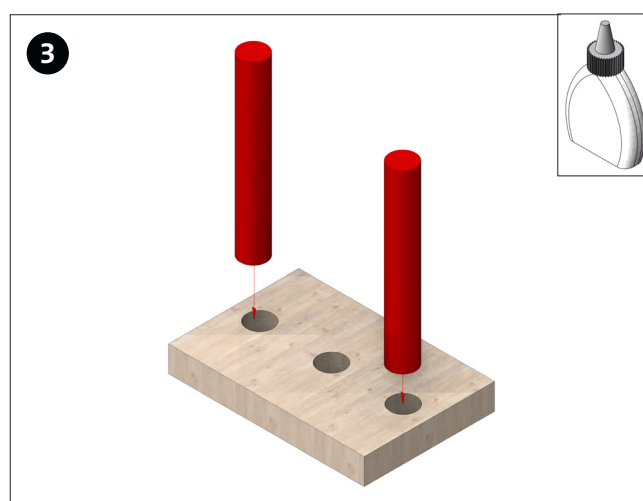
Design 2: This uses an octagonal base which must be accurately marked out and cut to shape using a mitre box.



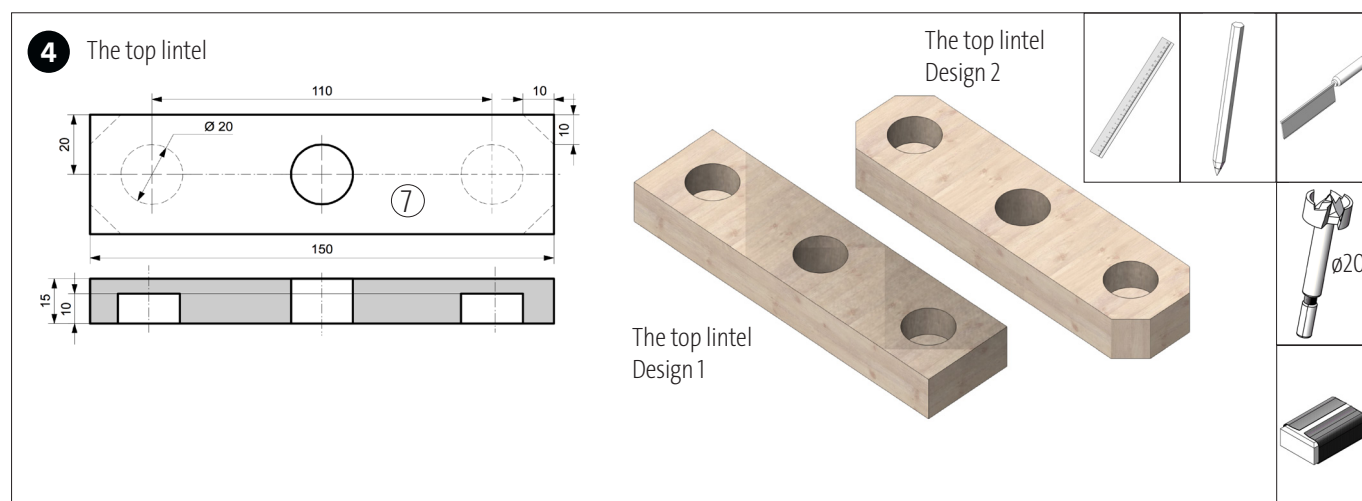
Mark out and drill the 20mm diameter holes as shown, saw the corners according to your choice of design.



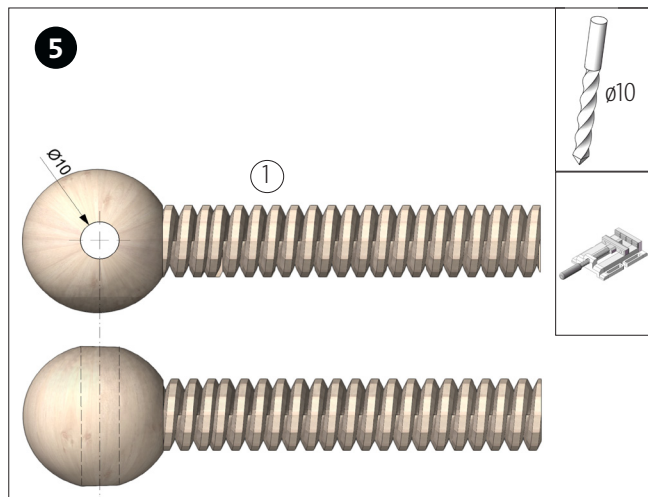
Saw the 20mm dowels to a length of 125mm.
The remainder is used for the nut holde



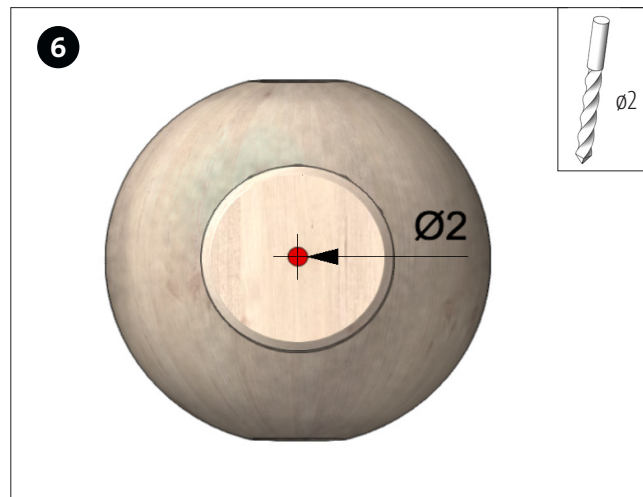
Insert and glue the supports into the two outer holes in the base.



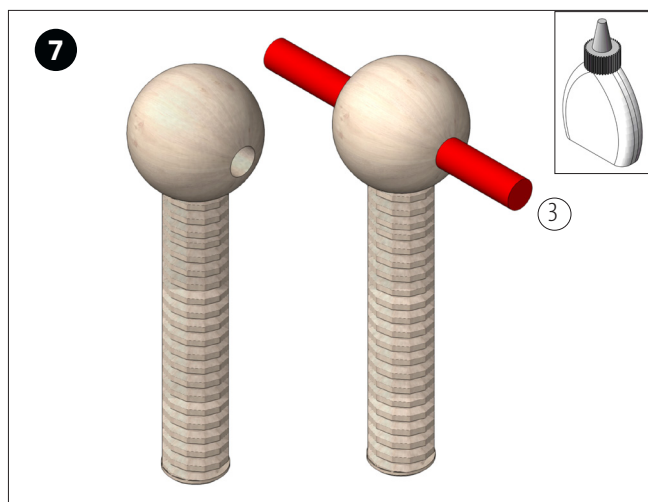
Mark out and drill the 20mm holes as shown on the plan. The holes for pillars are blind (not drilled completely through) Cut the corners according to your design.



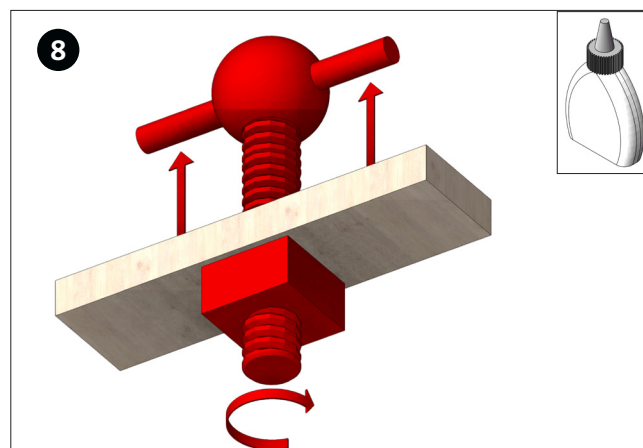
Drill a 10mm hole in the side of the ball. To carry out this process, hold the ball in a vice and ensure that the drill is held at right angles



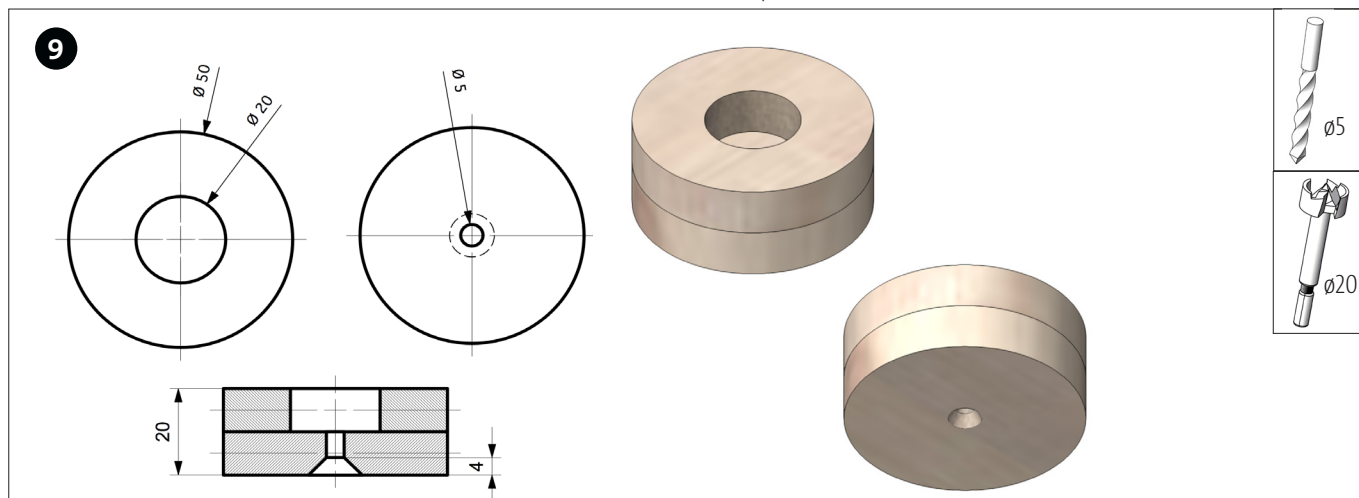
Then drill a 2mm hole 20mm deep at the threaded end of the screw (see drawing)



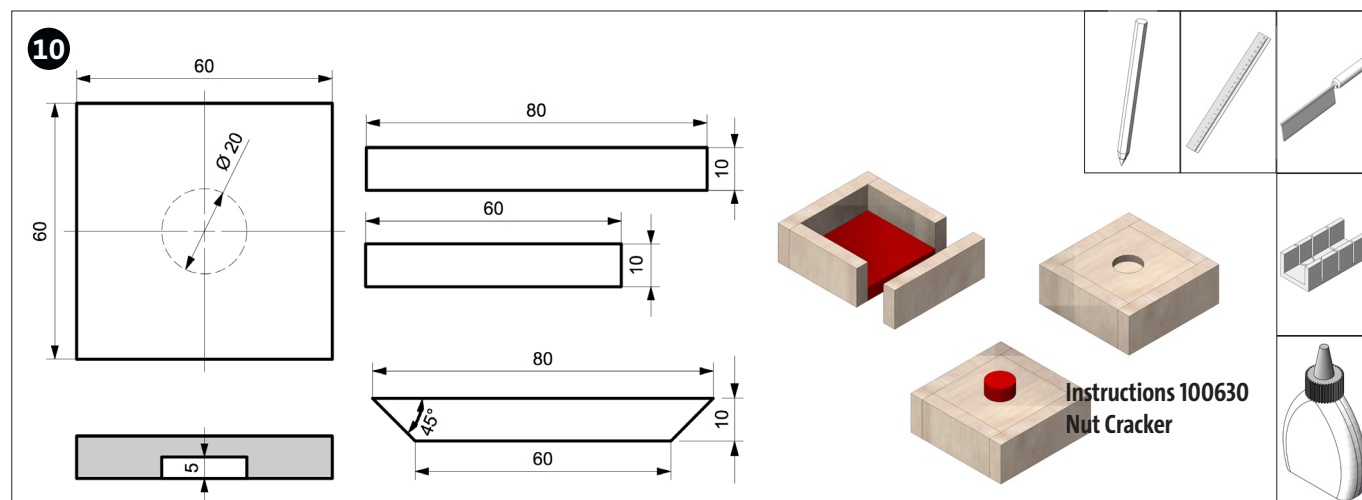
Insert and glue the beech dowel 10 x 125mm centrally through the ball



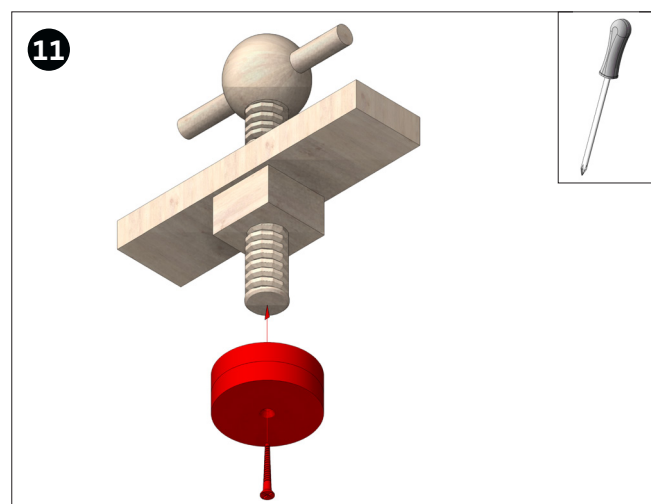
Finally push the screw through the central hole in the lintel and wind on the threaded block. Apply glue to the top surface of the threaded block, and then draw the screw thread back up through the lintel and hold the threaded block against the lintel with G clamps until it sets. Make that it is square to the frame.



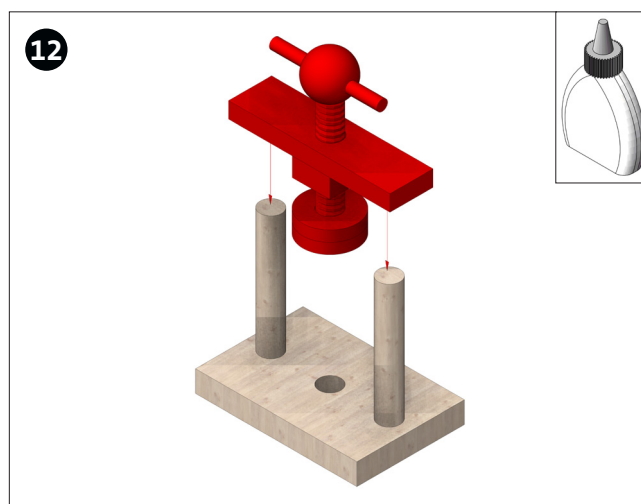
Drill a 20mm dia hole in one of the beech wheels. Drill a 5mm hole in the other wheel and countersink it as shown. Finally glue the two beech wheels together. Instead of the beech wheels there may be a 20mm long beech dowel in the pack which is not pre-drilled. Drill the dowel as shown in the instructions



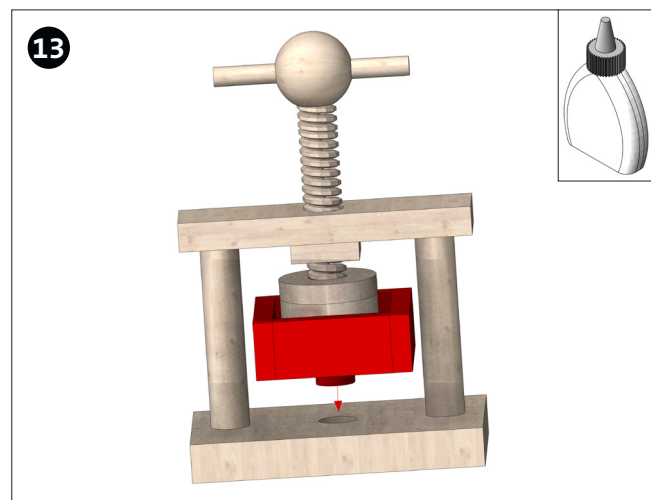
The nut container base is made from pine strip 10 x 60 x 75mm and shaped according to your design. The centre of the nut container base needs to be drilled from underneath with a 20mm radius x 5mm deep blind hole. Then insert and glue the nut container locating dowel (see step 6) The side walls are made from the pine strip 10 x 30 x 200mm, again according to your design, and glued to the base (see plan)



Fit the stamp to the end of the thread and fix it in position with a small screw. (the stamp should be able to turn easily)



Fit the lintel to the pillars and ensure that everything is square. If they do not fit, re-drill the blind holes or adjust the pillars.



When you are satisfied glue the pillars and lintel in position. Finally set the nut container in blind hole in the main stand. Test the mechanism and then finish the nut-cracker with clear varnish or wax