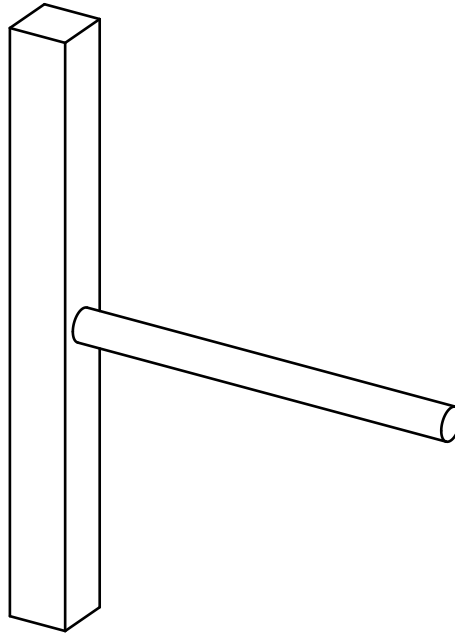


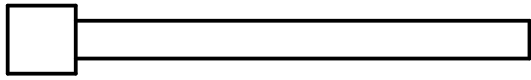
Round mortise tenon



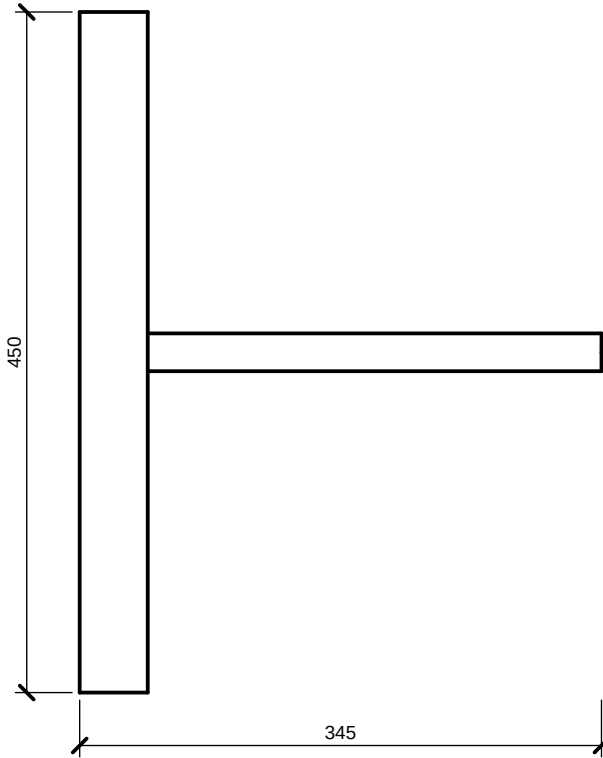
parts	2
overall	345 x 45 x 450 (W x D x H)
material	oak
date	2026-10-25
made with	woodwright 0.9.0

Contents

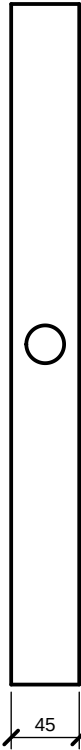
Drawings	3
Assembly	3
Parts	4
1 leg	5
2 rung	6
 Cut list	 7
 Appendix: source	 8



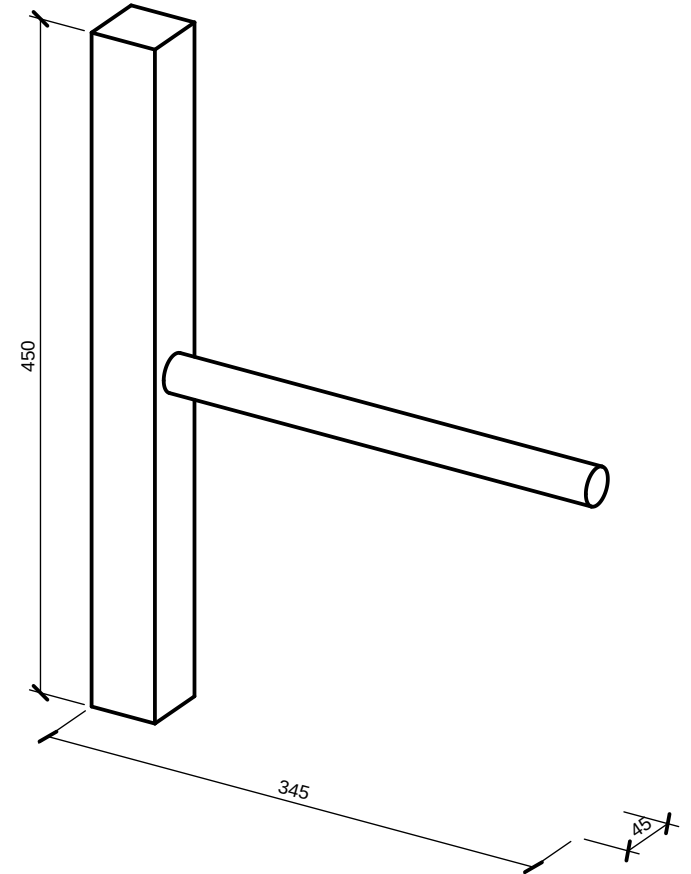
TOP



FRONT

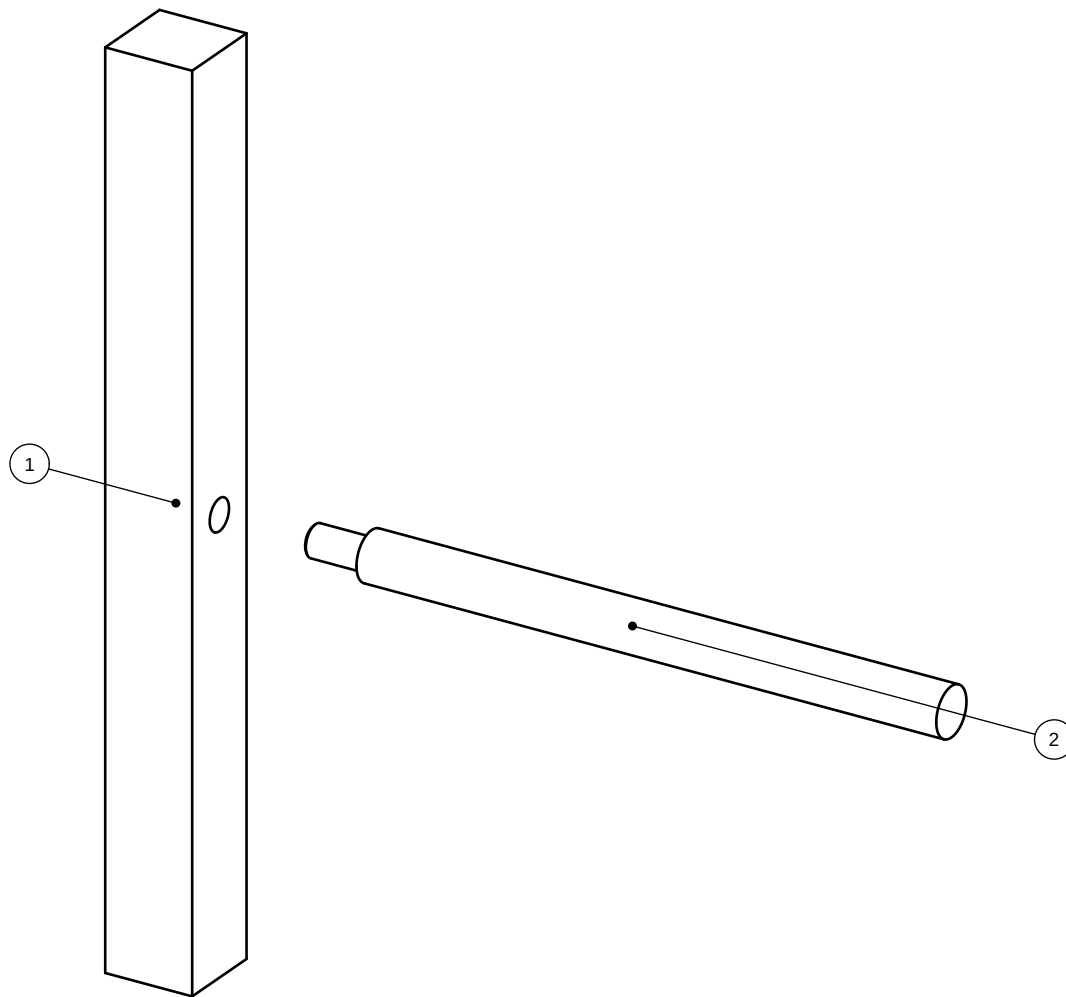


RIGHT SIDE



ISOMETRIC

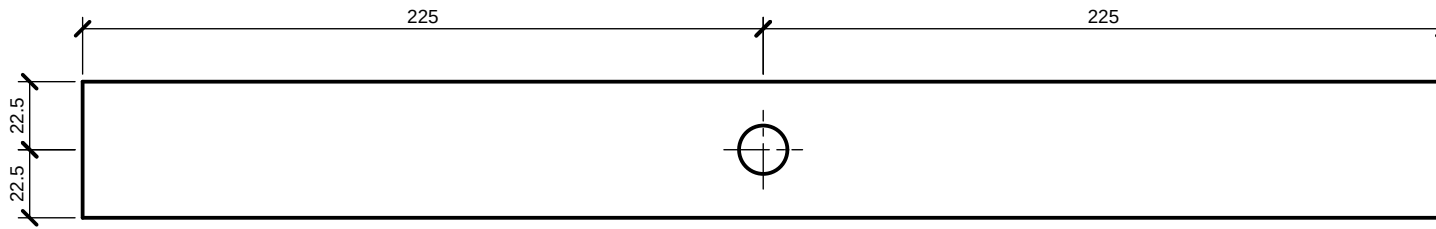
assembly	round_mortise_tenon
parts	2
overall	345 x 45 x 450 (W x D x H)
material	oak
scale	1:5, mm



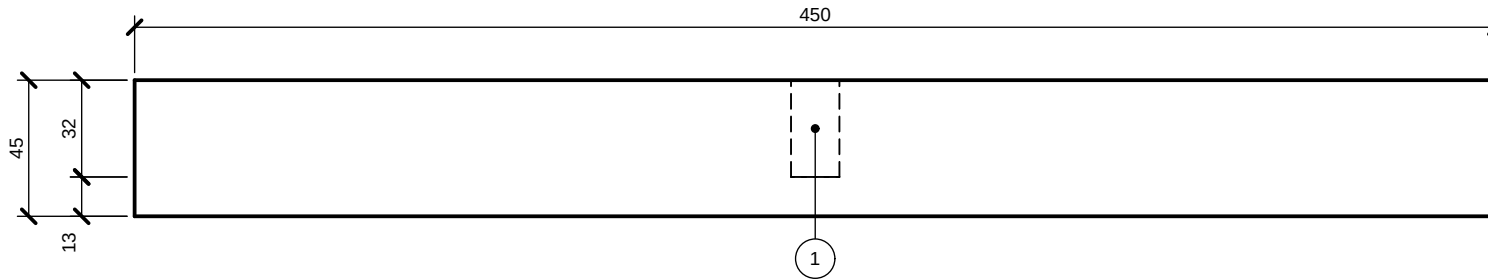
no.	part	qty	cut size (L x W x T)	material
1	leg	1	450 x 45 x 45	oak
2	rung	1	ø25 x 330	oak

EXPLODED

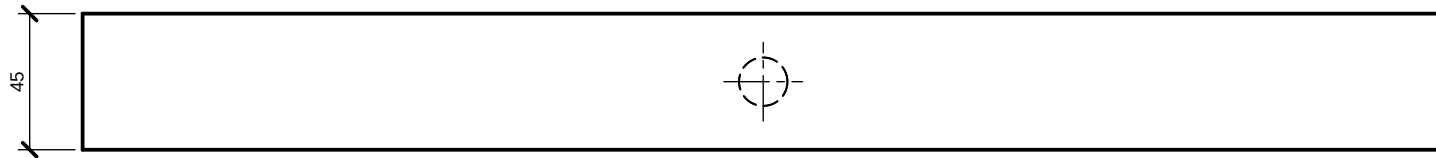
assembly	round_mortise_tenon
parts	2
overall	345 x 45 x 450 (W x D x H)
material	oak
scale	not to scale, mm



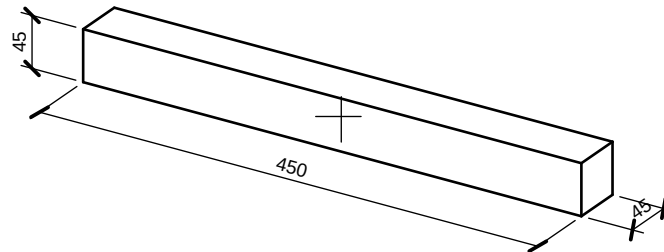
BACK EDGE



TOP FACE



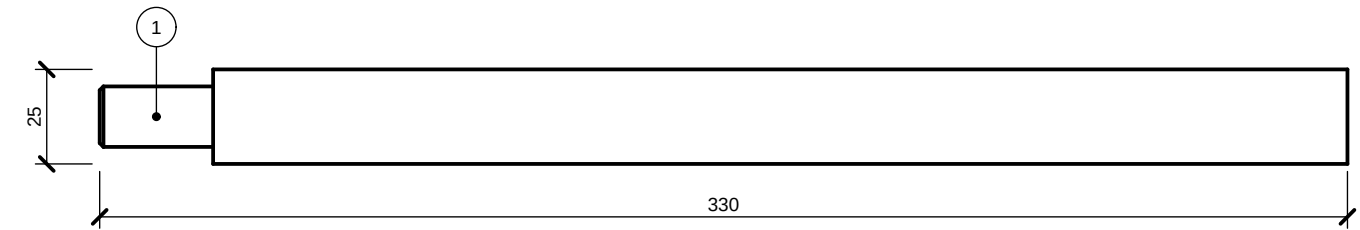
FRONT EDGE



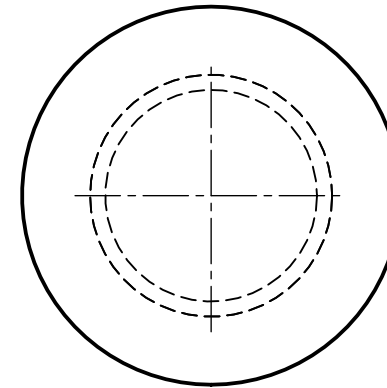
ISOMETRIC

1 hole $\varnothing 16$, 32 deep, in back_edge

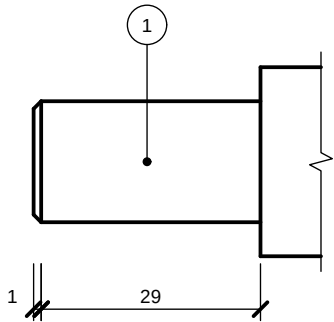
part	leg
of	round_mortise_tenon
make	1
cut size	450 x 45 x 45
material	oak
scale	1:2.5, mm



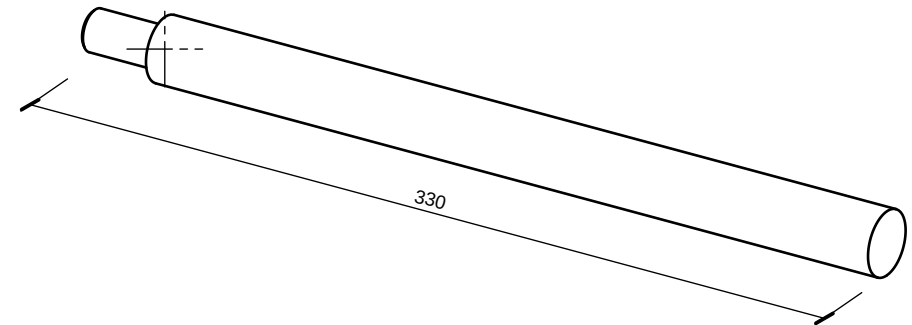
SIDE



RIGHT END 2:1



SIDE: 1 1:1



ISOMETRIC

1 round tenon $\varnothing 16$, 30 long, end chamfered 1 mm, on left_end

part	rung
of	round_mortise_tenon
make	1
cut size	$\varnothing 25 \times 330$
material	oak
scale	1:2, mm

Cut list

leg 450 x 45 x 45 mm oak
- hole $\varnothing 16$, 32 deep, in back_edge, centered
rung $\varnothing 25$ x 330 mm oak
- round tenon $\varnothing 16$, 30 long, end chamfered 1 mm, on left_end

Appendix: source

Made with woodwright 0.9.0, build123d 0.13.0, Python 3.14.4.

To make these plans again:

```
uvx --python 3.14 woodwright==0.9.0 export joints.round_mortise_tenon
```

joints.round_mortise_tenon, in woodwright/examples/joints.py

```
def round_mortise_tenon(
    leg_length: float = 450, rung_length: float = 300, diameter: float = 16
) -> Assembly:
    """A rung with a round tenon (a shoulder all round, its end chamfered)
    in a blind hole in a square leg."""
    asm = Assembly("round_mortise_tenon", root_location=STANDING)
    leg = asm.add(Board("leg", LEG_STOCK, length=leg_length, width=45))
    rung = asm.add(Rod("rung", ROD_OAK, length=rung_length))
    asm.join(
        RoundMortiseTenon(tenon=rung.left_end, mortise=leg.back_edge, diameter=diameter, chamfer=1)
    )
    return asm
```