

Illustrated construction manual: The Compass Sundial

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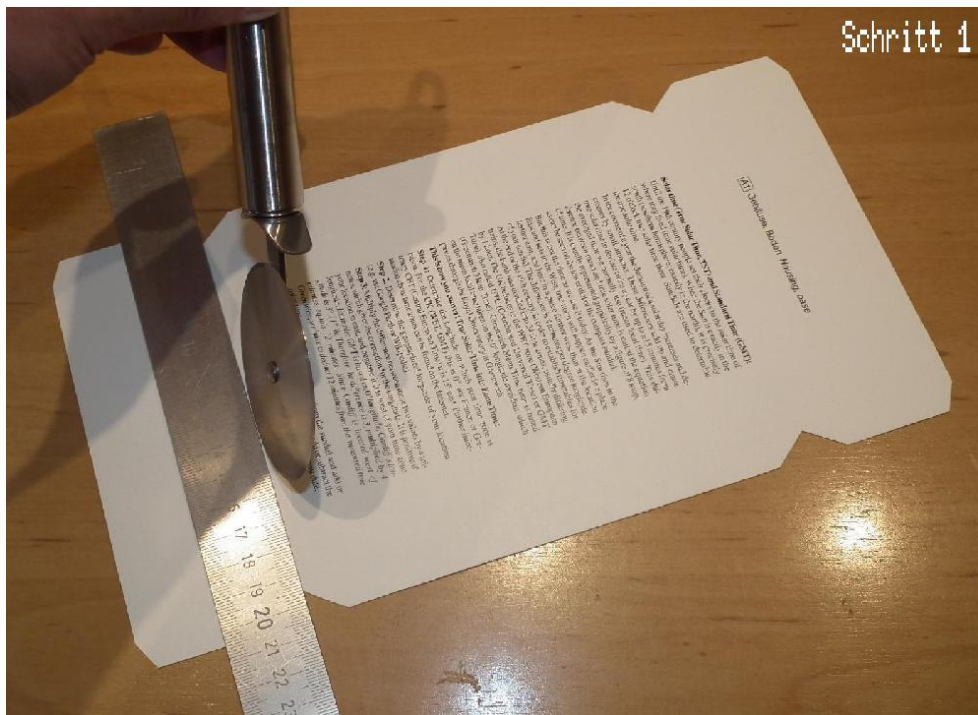
<https://michelswunderland.de/solderiron/ksu.html>

Kit, required material and tools...



The toothpicks are helpful for evenly distributing the glue on the surfaces to be glued.

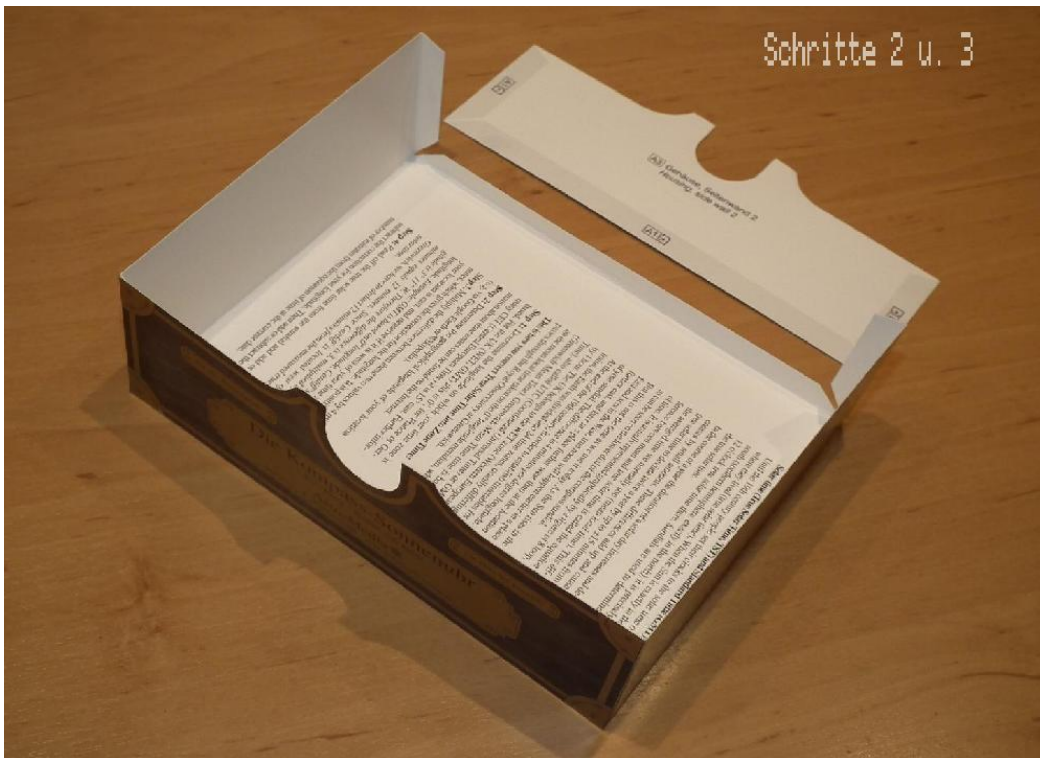
The pizza cutter is used to score the pieces to be folded, which makes the subsequent folding much easier.



Step 1: Before folding the sides of the case bottom, the corresponding edges were grooved on the back.



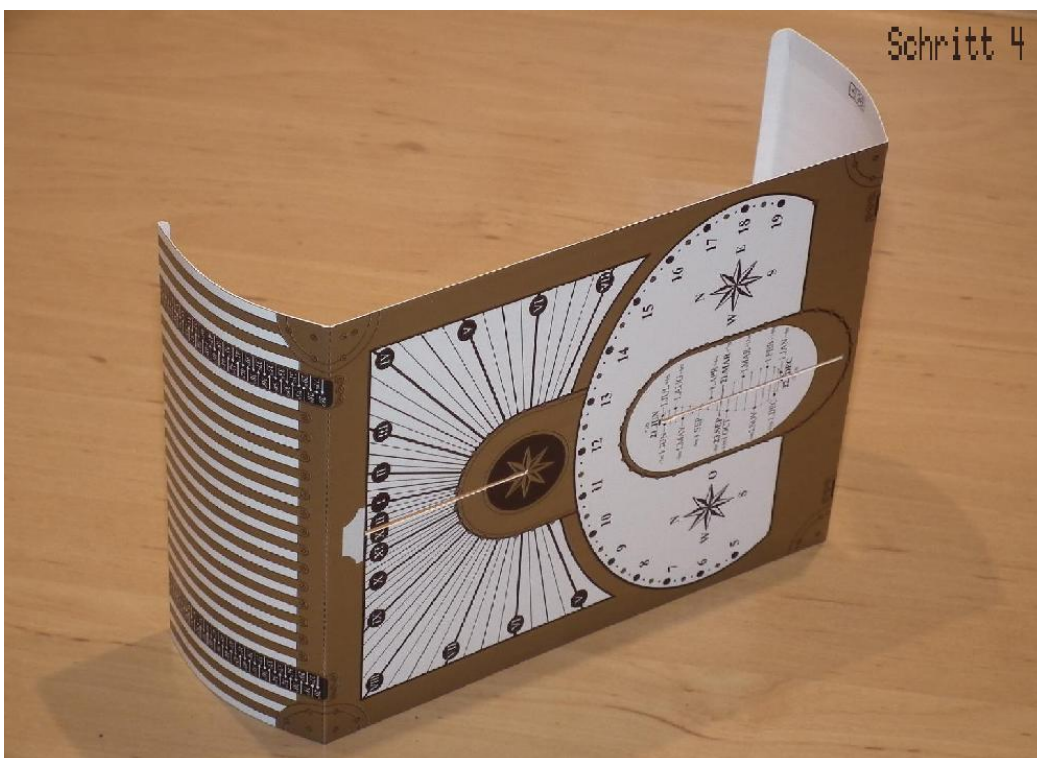
The housing floor after completing **step 1**.



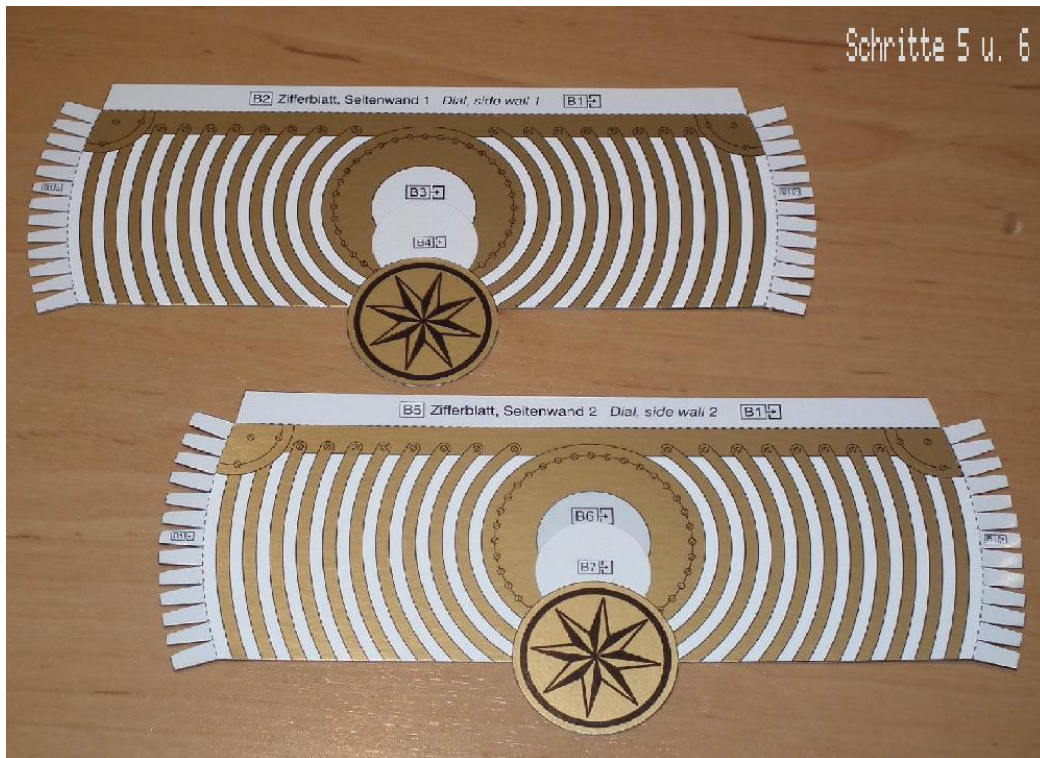
Steps 2 & 3: After cutting out the side walls, they are joined to the bottom of the housing using all-purpose glue.



Step 4: After cutting out the clock face, it has two slots for mounting the shadow casts, which are attached with the help of a steel ruler and a sharp knife.



The clock face after completing **step 4**.



Steps 5 & 6: Making the side walls of the clock face.

The small round discs serve as an axle, the large ones as a cover.



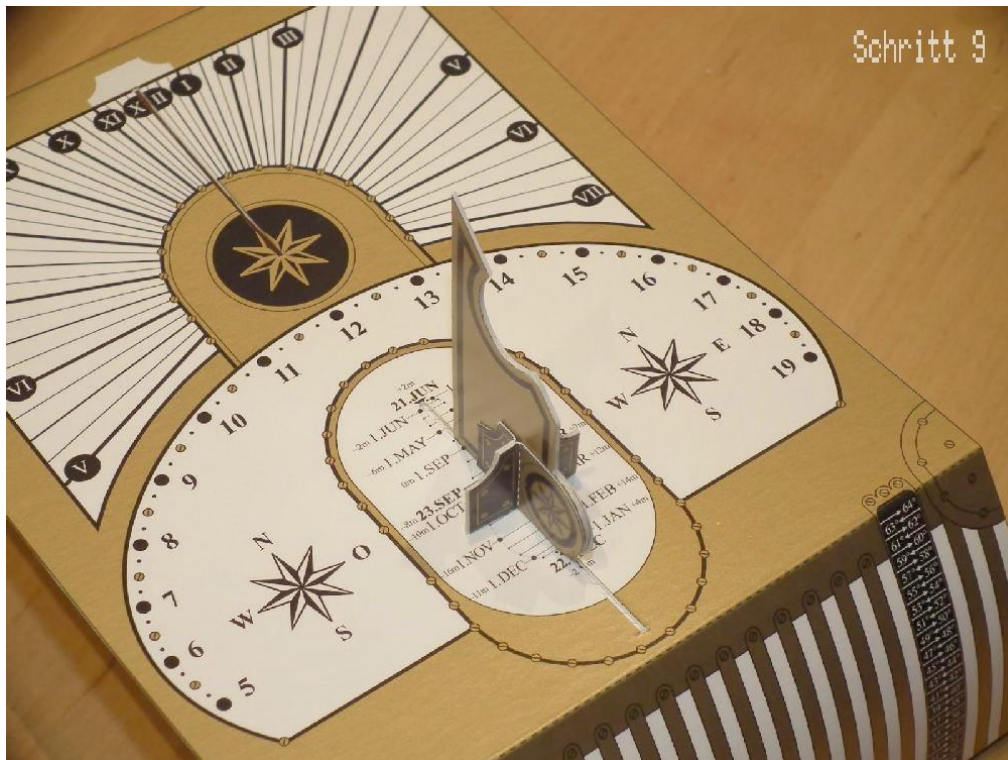
Step 7: Creation of the vertical shadow cast.



Step 8: Creation of the supports for the vertical shadow caster.



Step 9: Mounting the cover plate under the vertical shade projector.



Step 9: Obviously, the instructions were not followed completely...

and the shadow projector was put through the slot before the supports were mounted. Advantage: The supports can be glued more accurately and there is no play when they rest on the clock face during gluing.

The gluing of the base plate and the supports was done with superglue, which virtually excludes slipping when drying. Experience with superglue is an advantage, if in doubt use all-purpose glue.



Steps 10 & 11: Pieces of the slanting shadow projector and its supports joined together.



Steps 11 & 12: The slanting shadow caster mounted on the clock face.



Step 13: The side walls of the dial.

For gluing to the clock face, the tabs are folded backwards.



Step 14: Assembling the side walls of the clock face.

The gluing was done with superglue to avoid the need to fix the parts while drying. A little experience in using superglue is required for this though.

