Details of connection of sextant arm and backplane.

The design of the extant arm and backplane contains 2 elements:

- The bearing of the arm in the backplane of the sextant. The function of the bearing is to guarantee:
 - A smooth and frictionfree turning and
 - A fixed center for the arm.
- Variable friction to keep the arm in the position of the measurement.

This last mentioned point is solved by adding some friction at the end of the arm, on the backside where the arm hits the backplane.



Design of the bearing.

The connection between the arm and backplane is made by a piece of copper pipe (diameter 12 mm) and a brass socket for solder.



These two parts are mounted in the sextant arm and backplane as shown in the drawing and picture.



Detail of the bearing in the backplane.



With a screw through the backplane side, both parts are kept together. The copper pipe in the arm has to be filled up with a piece of wood to fasten the screw.

