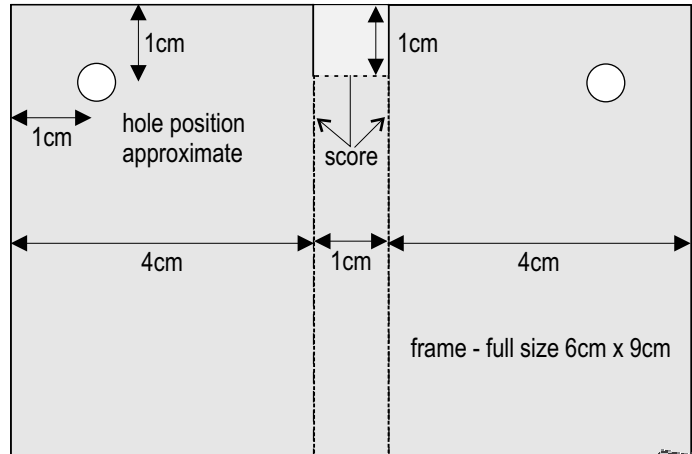


An apparently sophisticated machine that can be made in under an hour. It can be built as shown, but there is much opportunity for variation. All components may be replaced with perfectly adequate alternatives, eg. a paper stick crank, or an all wood hammer (see small illustration).

- Glue the 4cm block of wood (B) in the centre of base (A).
- Prepare the card frame (C). Score the fold lines first, then fold over and punch the two sides together. Cut down the folds for about 1cm and bend tab out. Make sure that the tab is the full width of the 1cm side.
- Glue the frame to the base block. Push dowel or equivalent through the holes to keep them in line.
- Make up the crank/trip unit. The one shown is made from one block of wood with two holes (the crank) and one block with one off-centre hole (trip). Use either dowel or paper stick pieces for the shaft and handle. The unit will need to be assembled inside the frame, (you won't be able to get the trip through the holes!) If the trip is loose on the shaft, then put just a little glue on the shaft and slide the trip over the glue.
- Bend the paper stick at about one third of its length to form the head of the hammer. Push the stick through the bracket holes. The holes in the bracket should be right against the folds, so that the paper stick lies more or less in contact with the bracket.
- Glue the bracket to the tab. ALL the bracket must be outside the frame or it will jam when the hammer is operated.
- Slide the paper stick through the bracket until it overlaps the long side of the trip but misses the short side. Turn the handle and the hammer should rise and fall.



**TROUBLESHOOTING** - There are several reasons why the hammer might not work. The model should be **ON A FLAT SURFACE**, and you must turn the handle so that the **TRIP PRESSES DOWN** on the end of the paper stick. Any other way will damage the machine. If the length of the overlap is about right, then the most likely cause is that the 'head' of the paper hammer is too short. Either re-bend the paper stick or add a drilled block to the end to raise it a little. Better still mount the whole machine on a stiff card base and glue a small 'anvil' to this card, directly underneath the hammer head.

