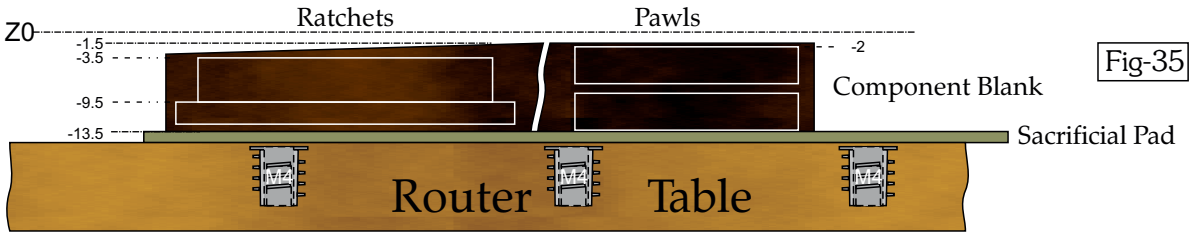

Fig-35

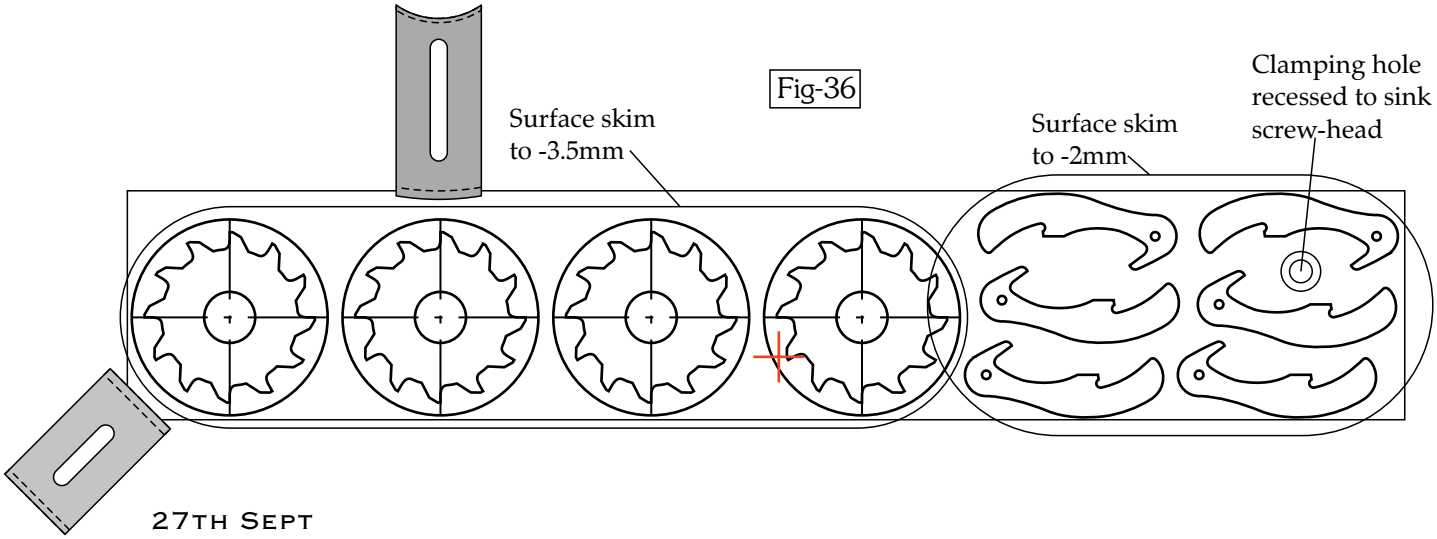

Fig-36

27th Sept

I'm somewhat stymied today since the G-Code to cut the Ratchet outline is over 6000 lines and my current version of Mach3 will only handle 500 lines. I have ordered (and paid for) the full version but haven't yet received the Licence Key so there is no point in loading he blank on to the Denford Table until that is to hand.

Spent much of the morning analysing what Brass & St-Steel I need and placed an order with the local stock-holder. I don't have enough 'on the shelf' so can't get on with making any of the components that will be done on the lathe.

There's plenty more work to do converting the CorelDRAW! drawings to .DXF files and eventually CamBam files & G-Code though. I've done some preparatory work on two frame components and the bracing bracket but then realized that I have a lot of work to do before I can even think about creating the G-Code for the Gears. I don't want to simply cut the large gears (72T, 64T, 60T) from a single thin flat sheet since that would mean that many of the teeth would have the grain of the wood across it rather than along it. A better explanation (as ever) can be seen by a drawing. From Fig-37a you'll appreciate that the teeth at the 12 o'clock & 6 o'clock positions will be weaker than those at the 3 o'clock & 9 o'clock positions. Therefore the large gears will be cut from a composite blank made from 5 segments plus a centre disc as shown in Fig-37b which will be jointed and glued together before being cut on the

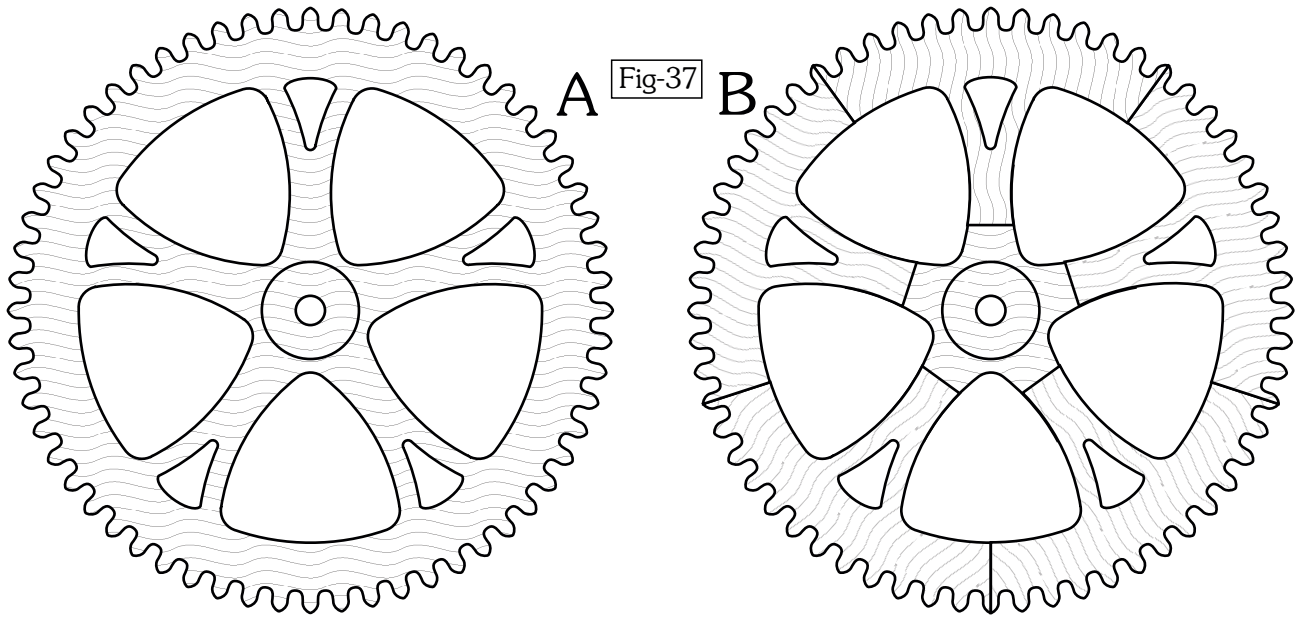

Fig-37