

## I wonder if she'll notice?

I have had a Record (rebadged Burgess BK3) bandsaw for quite some time now, and I've been very pleased with it. In fact Karen bought it for me as a birthday present several years ago. It's cut all sorts of things (so far no fingers) that are really beyond its capacity, but it's soldiered on bravely.

A few weeks ago, the blade kept stopping, and investigation showed that the blade was coming off the upper wheel. This was due, it seemed, to the flange wearing away. The blade wasn't sufficiently stable to stay on, so I had a Good Think. This was necessary because Mrs Google didn't seem to have any spare wheels for sale.

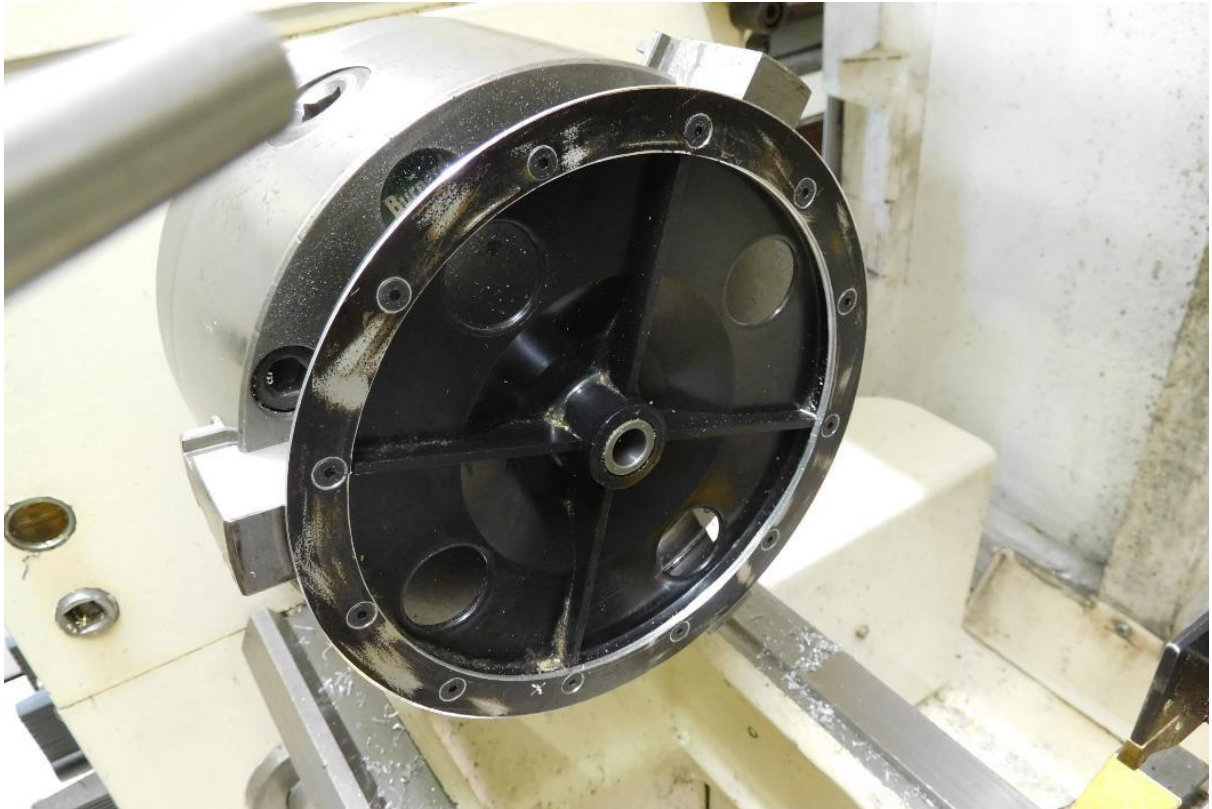
Cunning Plan A was to swap over the top and bottom pulleys. The bottom pulley doesn't really need a guide flange, because the blade sits on top of the toothed belt, which runs on the bottom wheel for metal-cutting. Thanks to some brilliant design on the part of Messrs Burgess, all three wheels are identical, even to them all possessing toothed pulley profiles, which only the lower (drive) pulley needs for wood cutting. Case solved?

Well, no, it seems. After changing the top and bottom pulleys over, I did some more sawing, during which I noticed that there was some suspicious black plastic swarf appearing on top of the brass I was cutting. "Perhaps it's just settling down", I hoped to myself. I then had a repeat of the blade coming-off problem. I opened the access panel and examined the upper pulley, which only a week or two before had possessed a lovely unblemished flange. It had now been attacked viciously by the blade and had almost disappeared like the first one. What to do now?

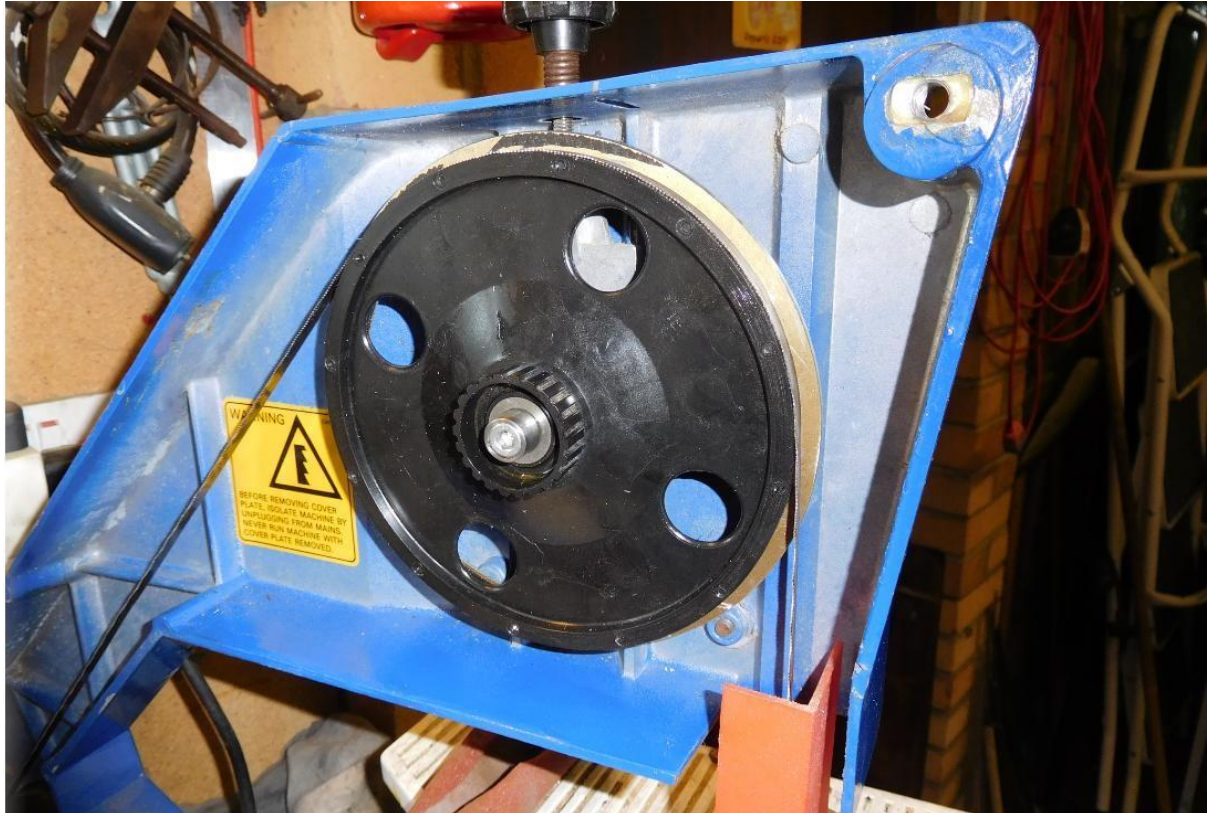
What I needed was to turn a little rebate on the pulley and make up a piece of material and screw it on to the pulley to make a new flange.

I used a piece of aluminium, as I happened to find a suitable piece of vaguely-round material from which to make it. A bandsaw would have been a useful appliance to cut it out, but for some reason I was denied that option.

I trepanned it out on the lathe, and then found that there was a lovely sequence of twelve ejector pin marks on the bandsaw plastic pulley. Absolutely perfect marking-out for twelve M3 screws! The aluminium was secured to the pulley, and a little skim or two taken to neaten it up:



Here it is in place on the bandsaw; you can also see the unused toothed belt teeth on it and the twelve ejector pin marks I mentioned earlier around the periphery:





I started it up, and there was a horrid chewing noise as the blade started to dig into the new aluminium flange. That wasn't going to last long... Doh! I'd contrived to upset the adjustment of the upper pulley somehow; it would appear that I had adjusted it (or fiddled with it) sometime in the past and it had been canted over slightly, causing the blade to rub aggressively on the flange and I hadn't realised. It should be adjusted so the flange on the pulley hardly contacts the blade. This is what was causing the problem. A quick turn of the screw in the right direction quietened it all down and it ran beautifully again. If I'd done that a few weeks ago, I wouldn't have had to spend two hours making a new flange.

The only problem now is – will she notice where the aluminium came from?



So if you see me cycling past with a bandaged head you'll know that she's found out and has got out the wok...