



Northumbrian Woodturners Weekly Bulletin No4

Northumbrian Woodturners Association continues to offer sincere thanks to all at the NHS and to all those other services and individuals who are helping at this time of National crisis. Our condolences to all those who have lost loved ones and to families of those who have given their lives whilst caring for others

The NWA Quiz

We aim to look after your Brain (where found!!!) and your Body!!!

- 0 24 H in a D = 24 hours in a day (example)

- 1 26 L in the A
- 2 7 D in a W
- 3 7 W of the W
- 4 12 S of the Z
- 5 66 B of the B
- 6 52 C in a P (WJs)
- 7 13 S in the U S F
- 8 18 H on a G C
- 9 39 B of the O T
- 10 5 T on a F
- 11 90 D in a R A
- 12 3 BM (S H T R)
- 13 32 is the t in D F at which W F
- 14 15 P in a R T
- 15 3 W on a T
- 16 100 C in a D
- 17 11 P in a F T
- 18 12 M in a Y
- 19 13 = U F S
- 20 8 T on an O
- 21 29 D in F in a L Y
- 22 27 B in the N T
- 23 365 D in a Y
- 24 13 L in a B D

- 25 52 W in a Y
- 26 9 L of a C
- 27 60 M in an H
- 28 23 P of C in the H B
- 29 64 S on a C B
- 30 9 P in S A
- 31 6 B to an O in C
- 32 1000 M in a K
- 33 15 M on a D M C

NB --- if you have not spoken with a fellow Club Member in the last week – shame on you!! Pick up the phone now and ring someone in the Club – you will both enjoy the conversation!!!

Important message from The Woodturner-

We would like to notify you that due to the current situation, the next issue of Woodturning has been delayed. Issue 344 will now be on sale on 30 April (in the UK) instead of 16 April. This means you will receive your copy around 27 April if you live in the UK, and at the beginning of next month if overseas, presuming international postal services still run as normal. If for any reason you need to contact us, our preferred method of communication is via email at pubs@thegmcgroup.com. However, if you need to discuss an urgent matter with us, please call our temporary number on 07470 112473. We apologise for the inconvenience.

So you will just have to enjoy the Bulletin as Bed Time Reading!!!!!!!!!!!!

Sue Parker has been re-landscaping a lawn and this week reached the point of getting some grass seed down, and taken the opportunity to get into the workshop and made some small replacement wooden parts for wooden train for a toddler that her daughter in law found in a charity shop. Like Sue make sure you use this time to get some of the many requests for work done !! it keeps everyone Happy!!

Have you Been watching Colwin Way on YouTube.? He is a good demonstrator and seems to have been watched by several Club Members. Here is a link:

<https://www.youtube.com/user/axminstertoolcentre>

Kevin McAlister has found a good inexpensive use for card stickers. He wanted to try having a go with the airbrush so tried spirit stains over card making stickers which were removed after.



Fred Cervantes has made a couple of fine stools.



Helen Bailey has made a raggy edged bowl inspired by the Irish turner Pat Carroll. Here is a link to [Pat's website](#) if you need some inspiration of your own.



Martin Stacey has been making a wedding gift for his brother and his wife.



Ray Harrison has spent a lot of time on this only the movement needed to complete the job.



This is a double decker bus Jim Towers made. About ten inches long for his neighbour who was a bus driver. It's maple, walnut and Purple Heart.



A giant dart trophy Mick McCabe made for his mate who is into his darts. Made from scratch metal turned parts, stainless steel point, brass front body and flights, aluminium rear body.

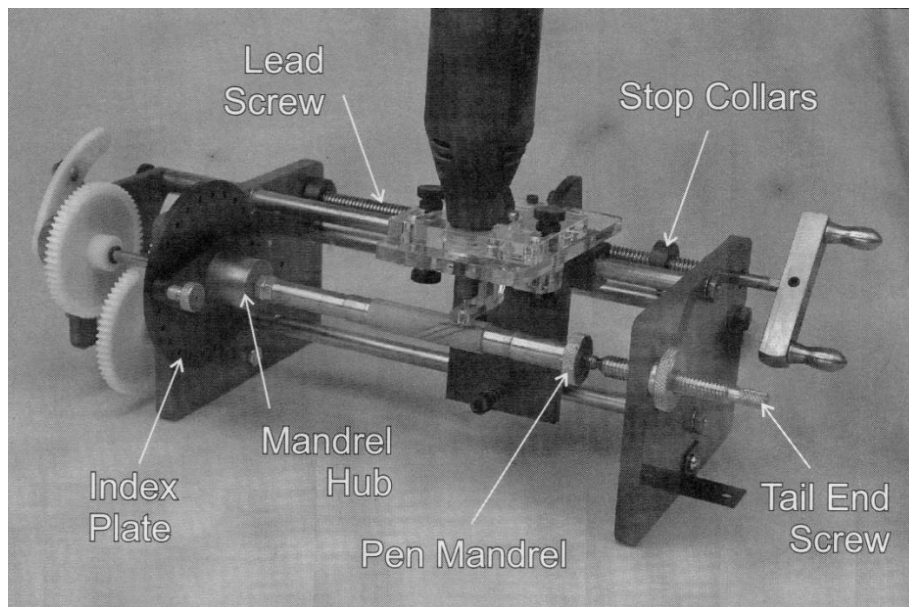


Beall Pen Wizard part two

By Ian Elliott

Last time I told you how I came by my Pen Wizard. Now I am going to try and explain how it works. Please bear with me as it's not the easiest piece of equipment to explain without having it in front of you and the person you trying to explain it too. I have also tried to cover everything, so forgive me if I go on a bit. If you are really interested in understanding how it works you will probably have to read this more than once.

To make it more complicated, as I said last time my model is the opposite hand to the instructions, photographs and diagrams in the manual (the photograph below is from the manual)



The Pen Wizard is a stand-alone piece of equipment for putting spiral patterns along the length of a pen blank. Using a Dremel to do the cutting. The Dremel travels slowly along the pen blank whilst the Pen Mandrel rotates in accordance to your Gear settings.

For the moment I am going to concentrate on how it works to cut spirals on parallel pen blanks, I will later go into curved or tapered pen blanks, polygons both parallel or spiral and Guilloche patterns (wavy lines rather than spirals).



Double Spiral or Crosshatch



Guilloche

The Pen Wizard consists of a Pen Mandrel mounted below the Dremel. The Dremel is mounted at the outer edge of the top of a "T" shaped carrier, (see my diagram 1 and photograph below). The other side of the top of the "T" has a slot that fits into a guide that is mounted on the Lead Screw. In turn this guide traverses along the Lead Screw thus moving the Dremel either to the right or left, depending which direction you turn the handle. There are also two adjustable stop collars (not shown on diagram 1) on the Lead Screw, to determine start and stop points when cutting your spirals. At the bottom of the leg of the "T" is a thumb adjusted screw which rubs on Guide Bar 3 that is parallel to the Lead Screw and Pen Mandrel. By adjusting the thumb screw this cantilever's the "T" lifting or lowering the Dremel. This determines the depth of cut only when your pen blank is of a parallel shape, a separate demountable Depth Guide, must be attached when your pen blank is either curved or tapered.

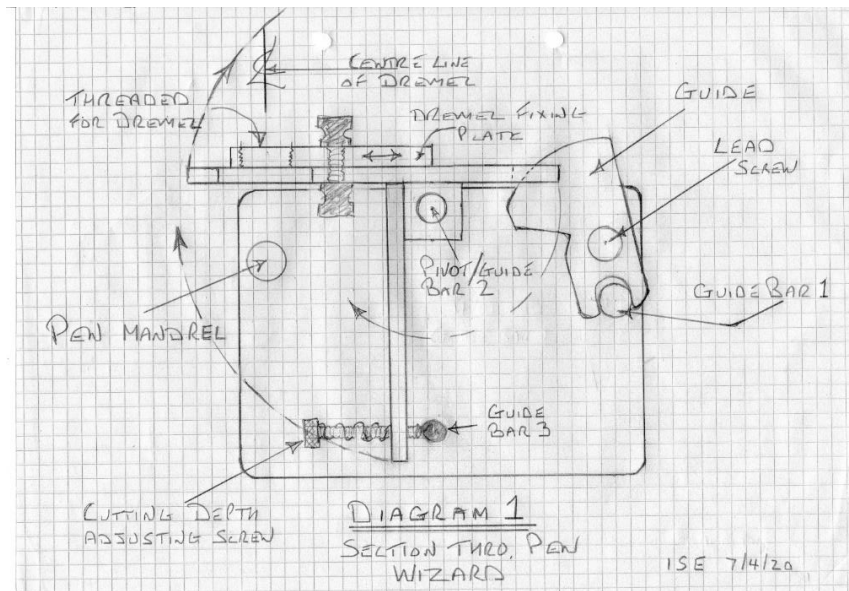


Diagram 1 is of my Pen Wizard which is the opposite hand to the photograph from the manual.



At the other end of the Pen Mandrel is the Indexing Wheel and the Mandrel Hub. Unlike a lathe the Indexing Wheel is a permanent part of the Pen Wizard.



Indexing Wheel

Indexing Wheel & Mandrel Hub

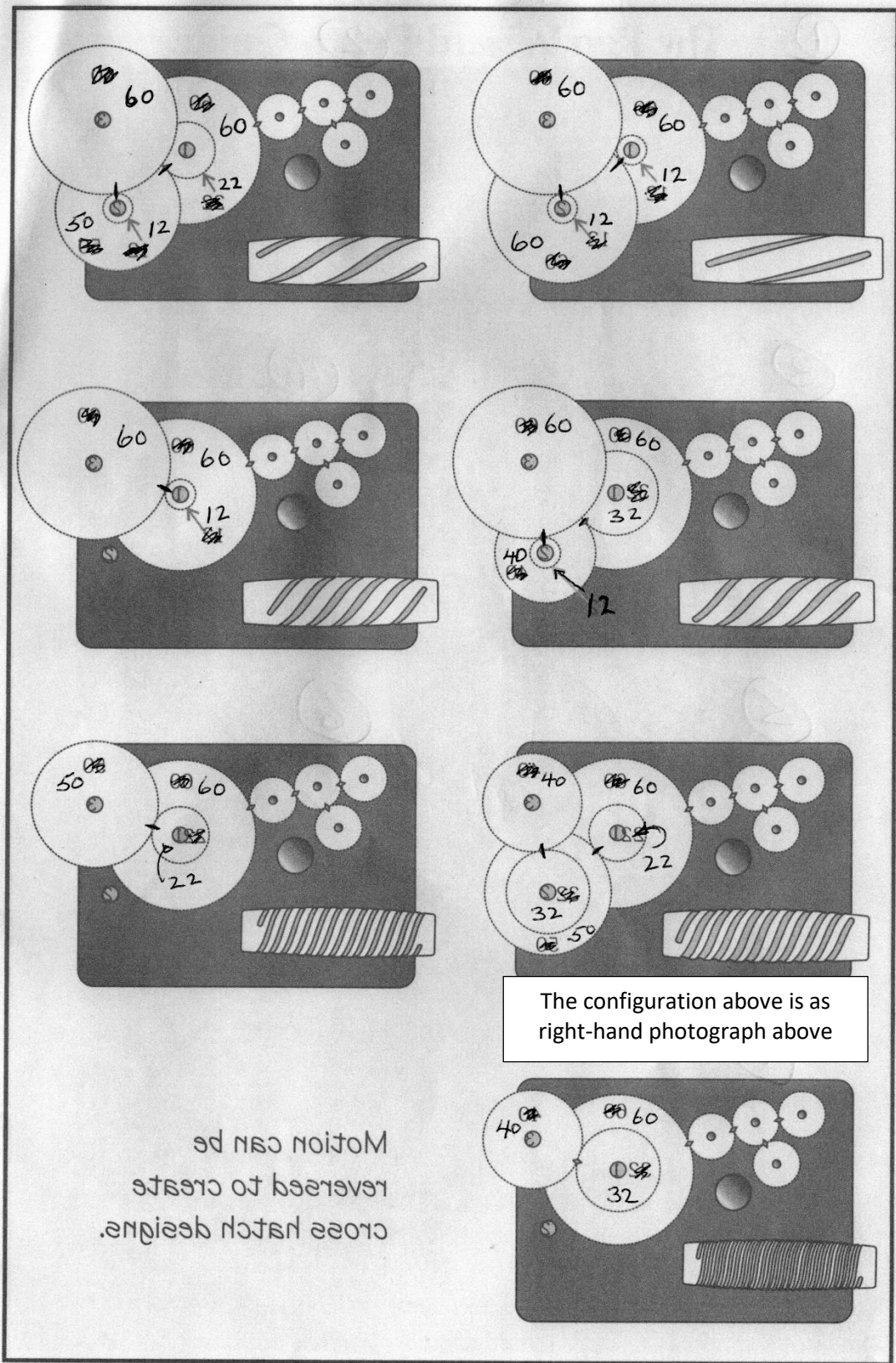
The Indexing Wheel has 24 holes; therefore, you can make any number of passes that are equally divisible by 24: 2,3,4,6,8,12, or 24. You can very easily make mistakes, (I have done this, it completely ruins the blank you were working on. Bin job!) as you are counting between passes, you are also concentrating on the cuts etc. So, I purchased some coloured dots, these I applied to both sides of the wheel, as the ones on the front can be obscured by the hub. Red = 8 passes,

Yellow = 6 and Green = 4, I think that these will be the most likely ones I will use. If I need to use any others, I will just have to be more careful with my counting. The Mandrel Hub has a spring-loaded Indexing Pin that you locate into the holes on the Indexing Wheel.



The only difference in the two photographs above is the position of the 4 small (20 teeth) cogs on the far right. These are the only cogs that are permanently fixed to the back plate; these cogs are driven by the Lead Screw they in turn drive all the other cogs. The other larger cogs are all changeable to give you a different pitch (tightness of the spiral). 3 of the 4 small cogs are moved either up or down by means of a metal thumb screw, which has two possible location holes threaded into the back plate. The Photograph on the right shows them in the up position, when the handle of the Lead Screw is turned to cut along the length of the mandrel, the mandrel will turn clockwise. When they are in the down position (photograph left), the mandrel will turn anticlockwise. By using both settings, is how you achieve the crosshatch effect on a pen blank (see Double spiral pen above)

There are three $\frac{1}{4}$ " D shaped shafts that carry the other Gear cogs, the top left one is connected too and drives the Pen Mandrel. These Gear cogs have a D shaped hole matching the shaft. The shafts are all equidistant from each other. This allows you to obtain a wide variety of gear ratios, therefore giving you a large variety of effects. Any pair of cogs that teeth interlock must always add up to 72 teeth. The diagram below was scanned as a mirror image from the manual, the numbers I have written on the cogs are the number of teeth on each cog. I have also put different coloured dots on each size of my cogs, so I can easily identify them, as there is only a very small almost unreadable mark on each cog. You will note that the cog nearest the 4 drive cogs is always a 60-tooth cog. For my photographs above I have removed the outer plate to show the cogs.



Hope I have covered everything regarding spirals and have not bored you too much. Next time I'll try and cover Guilloche and polygons.

Keep Safe.