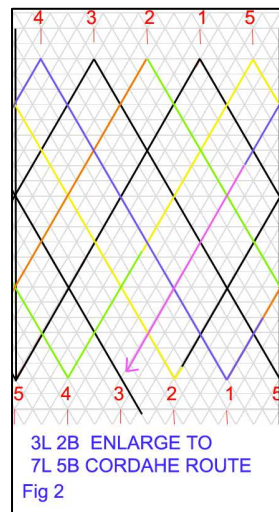
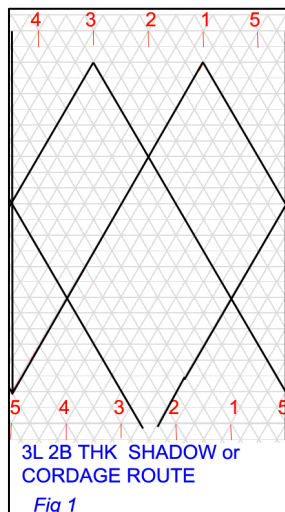


## A DIFFERENT TYPE OF ENLARGEMENT ON A TURK'S HEAD SHADOW ( SHADOW == CORDAGE ROUTE\* )



As shown by the **Fig 1 and Fig 2** it is quite easy to enlarge a 3L 2B THK (Turk's Head Knot) cordage route

( cordage route or shadow==the exact laying of the cordage BUT WITHOUT any indication of coding ; coding t is the type Over or Under of the crossings).

SCHAAKE defined TWO ENLARGEMENT processes (those consider the HP1, HP2, HP3 then.... as the "reference":

(HP==half-period – see my pages for a full explanation, in short on a vertical cylinder laying the cordage from a bottom pin to the adequate top pin – and vice versa top to bottom – is laying a half-period )

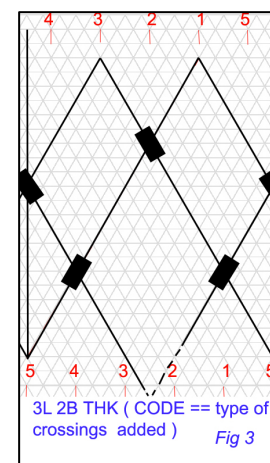
- TYPE 1 : on the RIGHT SIDE of the SPart-WEnd vector ( first Half-Period )
- TYPE 2 : on the LEFT SIDE of afore mentioned vector

NOW CONSIDER MAKING THE SEQUENCE OF THE REFERENCE HALF-PERIODS to **begin with HP3 and NOT HP1** as it happen in the 'usual' enlargements.

For a 3L 2B THK (**Fig 3**) :

-- Enlargement Process on the RIGHT side of HP1 (SPart-WEnd vector ) will lead to a 5L **4B** THK

-- Enlargement process on the LEFT side of HP1 will lead to a 7L **4B** THK

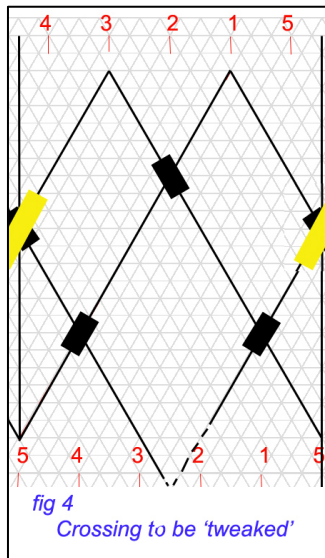


In each case it is going from 2B to 4B

WHAT IF I SHOW YOU THAT IT IS POSSIBLE TO GET **5B** instead of 4B and so **enlarge a 3L 2B to a 7L 5B ?**

IF THAT IS POSSIBLE THEN WE JUST NEED TO KNOW THE 3L 2B to get the 7L 5B without , as too many people do too often, relying on "memory" rather than on knowledge and intelligence.

Observation led me to suddenly "see" that particular enlargement inside a 7L 5B but I don't doubt that many other cases exist.



Starting with the 3L 2B :

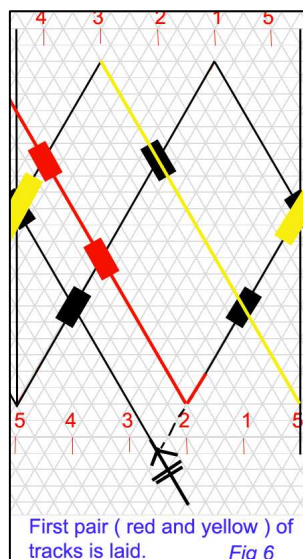
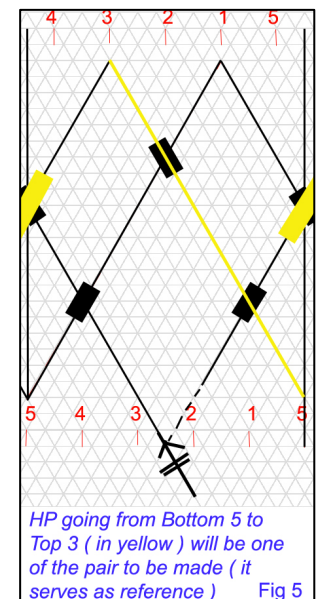
it is just sufficient to observe that ONLY ONE crossing need to be "manipulated". (Fig 4)

This manipulation may be done :

- either from the start ( but BIGHT '3' will be a shade unstable at first )
- or at the end of the making of the 7L 5B ( but you will have to always keep in mind the conversion to be made on that crossing for laying and splitting the tracks.)

In – ( Fig 5)-yellow colour is HP 3 ( on the right side of HP1 – vertical cylinder frame of reference and \*not horizontal mandrel- , the first SPart-

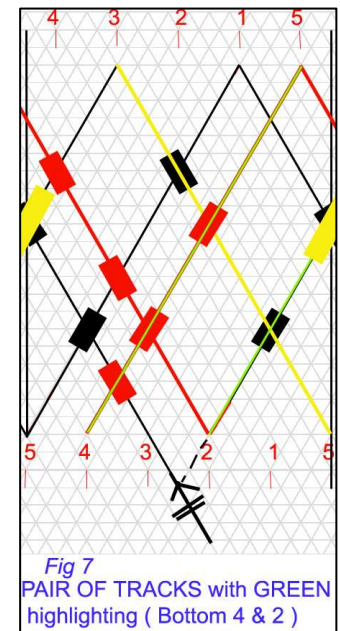
WEnd vector ) this HP3 will be the reference for laying the tracks ( just as HP1 and it following HP is the reference for the Type 1 and Type 2 enlargements) ( SPART== Standing Part / WEnd ==Working End )



(Fig 6) RED HP is "laying the track"

Laying is parallel to the yellow HP, so forming the second of the pair that will have to be split to get back to the O1-U1 (U1 – O1) coding of the standard single strand THK.

Getting to "going beyond" the bight border it will be with an OVER crossing ( OVER, to be in accord with the type of crossing on this TOP BIGHT RIM)

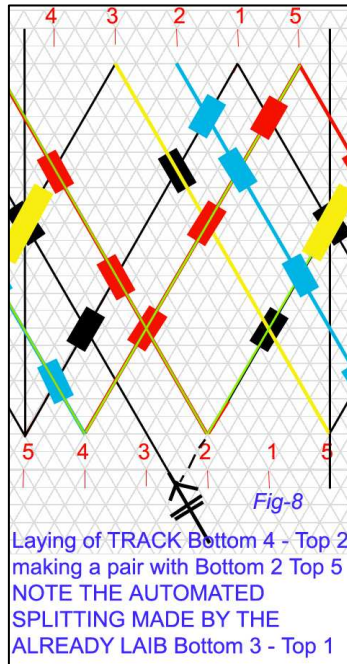


Going on (Fig 7):

the two tracks ( the pair ) are highlighted with a GREEN line.

Getting to cross the bight border it will be with an UNDER (to be in accord with the type of crossing in this BOTTOM BIGHT RIM)

Observe that each time going from an ODD numbered HP to and EVEN numbered HP ( laying on a vertical cylinder going from bottom right to top left are the ODD numbered HP and going down from Top Right to Bottom Left are the ODD numbered HP ), and vice versa, you change the side of the reference HP you are on just as with the usual enlargements.



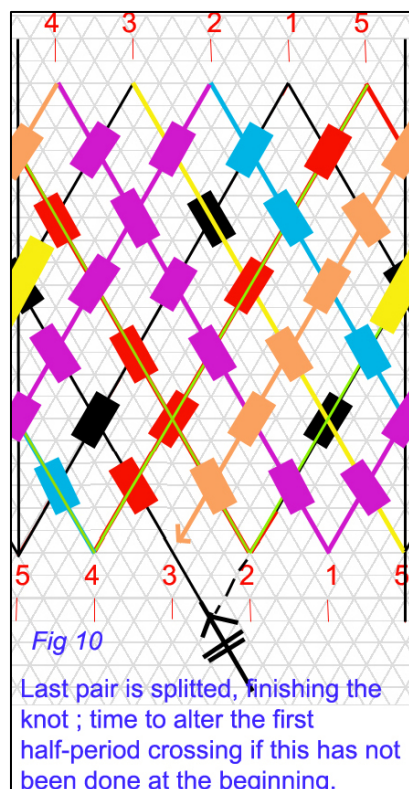
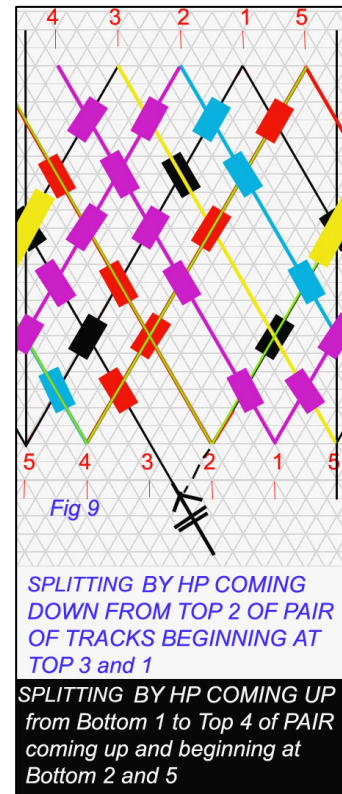
### YOUR ATTENTION PLEASE

ON A PARTICULAR SITUATION (**Fig 8**):

you will observe that you are laying a track (HP coming UP from PIN 4 ) that IS PASSIVELY SIMULTANEOUSLY SPLITTED by pre-existing HP1

**THIS IS THE BEGINING OF THE 'SPLITTING OF THE PAIR' PHASE, albeit a PASSIVE SPLITTING in this first step.**

We go on (**Fig 9**) with the splitting of the tracks but here it is no longer simultaneous/passive but active well after the pair has been laid.



Going on with splitting (**Fig 10**)

**Fig 10**

Closing the route with the return to the very first laid HP. (**Fig 11**)

**THERE HAS BEEN BROUGHT TO EXISTENCE THE 7L 5B "impossibly" obtained from a 3L 2B**

Hope you enjoyed the exercise.

It is useless to learn many knot recipes when "understanding" those knots allow you to just have to memorize a handful of small easy ones and yet get all the others in the bargain.

Alert brains will have realized that in fact this is just an 'avatar' of the already known LEFT side enlargement process simply 'phase shifted' to HP3 instead of beginning with HP1.