

KNOTS OF MAY

Downett's extra views on Knots of May

10 Attlee Gardens
Church Crookham
Aldershot Hants

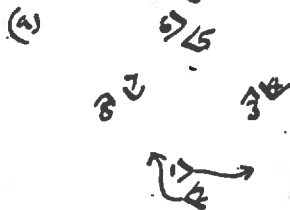
Dear Aunt

As I promised on Sunday I have checked back on what I intended in the two knots that caused difficulty & here are the details & notes.

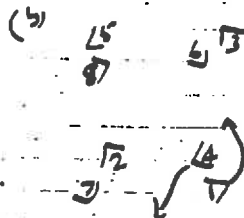
2ND KNOT

The problem I believe was that on Sunday the chain was not continued long enough so that we did not recognise that as people dropped out of the chain, those that were left in did not necessarily have an actual parcel to pass.

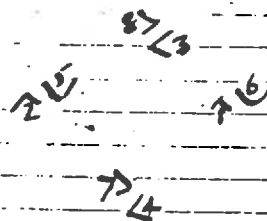
The chain goes



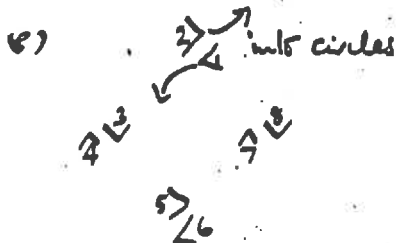
1st change by right shoulder



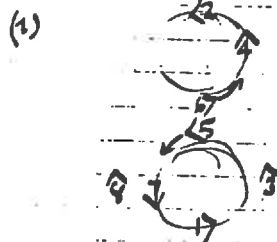
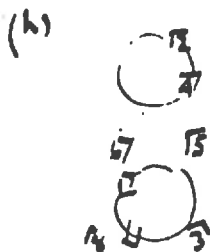
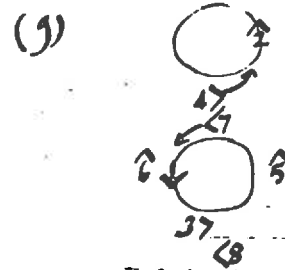
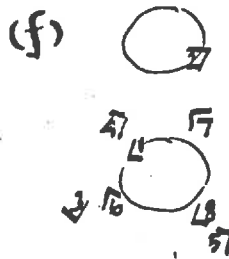
2nd change by left



and so on to get to

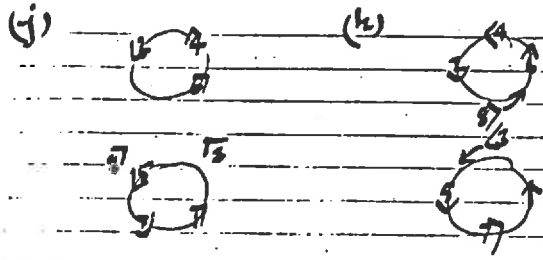


5th change by right and start the two circles.



This is the position we were in and what we were wrong just because no 8 appeared but in the proper place.

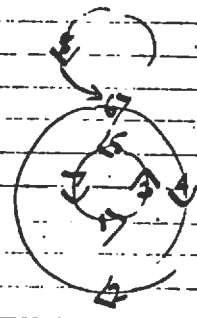
(2)



Note that after (e) there are dancers who are not passing any one in the chain because the persons they would have passed have gone to the inner or outer circles

The important point is that the two circles move at the same rate of rotation as the chain. To get it looking right all dancers still in the chain must continue to sway their partners.
 The movement goes from (a) to (e) - 12 times 4 steps = 48 steps not the 32 steps we tried on Sunday

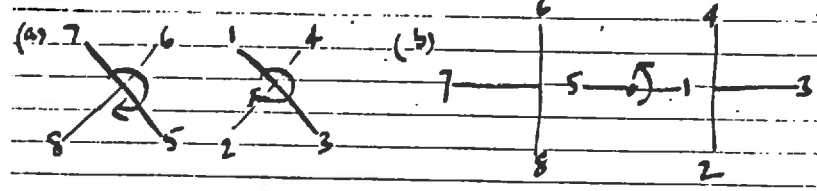
We agreed that the two circles should do one complete independent circuit before forming the outer circle



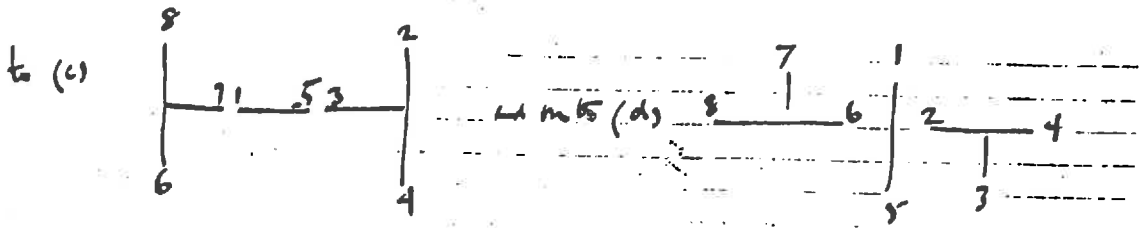
To avoid NO 8 slipping across to get along side NO 7 the inner and outer circles need to go round 1 1/2 times

3RD KNOT

The problem is one of timing the rotations. If the rotations are all at the same speed it does not work. Thus;



③

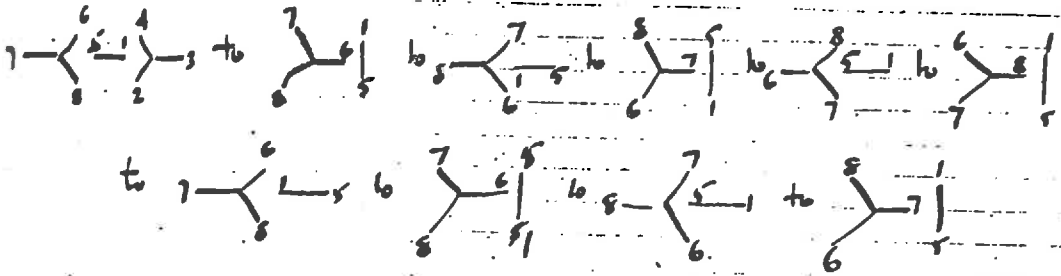


that is they will clash, it will not look symmetrical as 3 and 7 will never get into the proper position relative to 1 & 5.

The cogs need to mesh. There are 3 possibilities

- a) the middle pair mesh every gap, that is rotate faster than the 3 hundred start
- b) the middle pair mesh every other gap, but this leads to near collisions all the time
- c) actually rotate incorrectly to mesh alternating every one or two places. This risks getting in wrong side at the change, which is what happened on Sunday

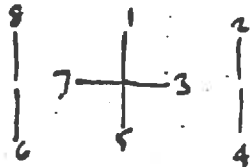
Thus I recommend,



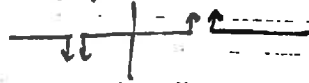
which is the desired position for forming the central star!

1 & 5 will turn not $2\frac{1}{4}$ as No 7 will turn $1\frac{1}{2}$ times

That looks to set like



The rotation is not a mesh but a meshing pair in the same direction

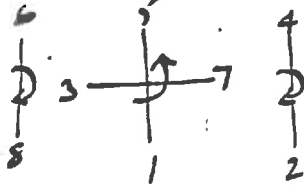


(f)

Note that the 3 has to change from \rightarrow to \leftarrow
as the 2 from $>$ to \downarrow at same time

Now in the final rotation again the groups have to rotate at same
speed at different speeds & eventually match up.

Rotate to



2 and 6 push up with 1 and 5
and 4 and 8 need to get
a boost or to catch up the
pusher

Best wishes

Roy