

# ***Long Turk's Heads •• •• •• ••***

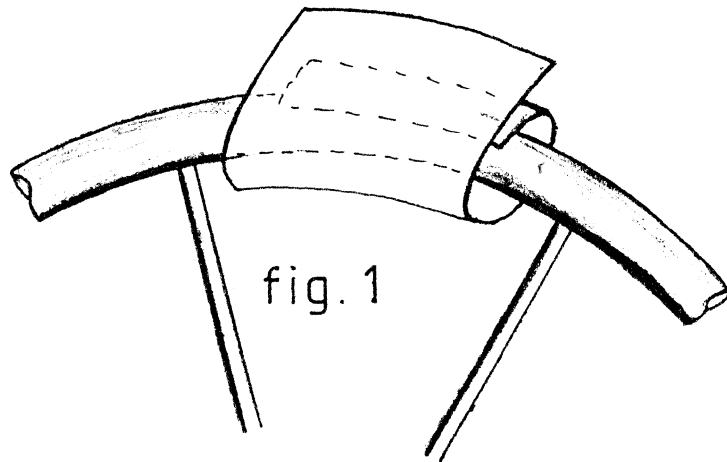
## ***2- "Origami" Method***

***by Capt. C. Allan McDOWALL***

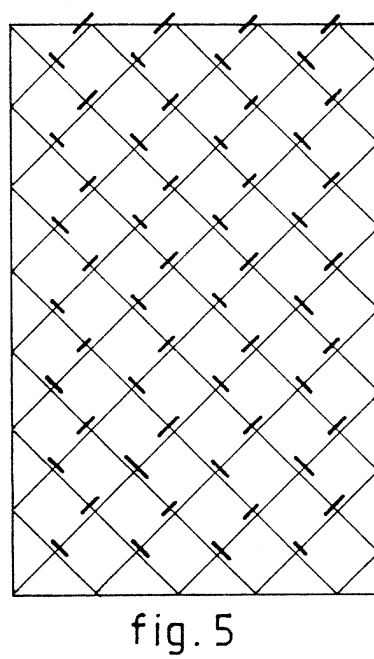
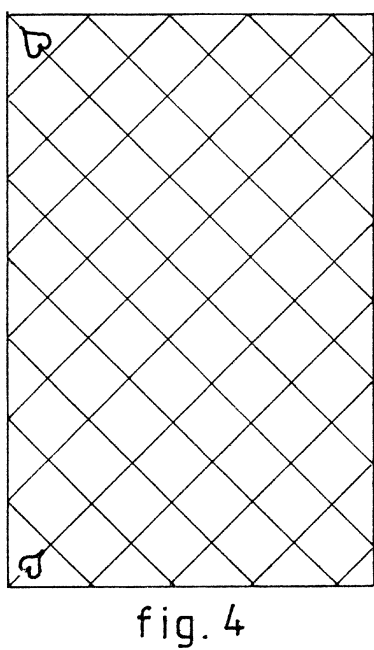
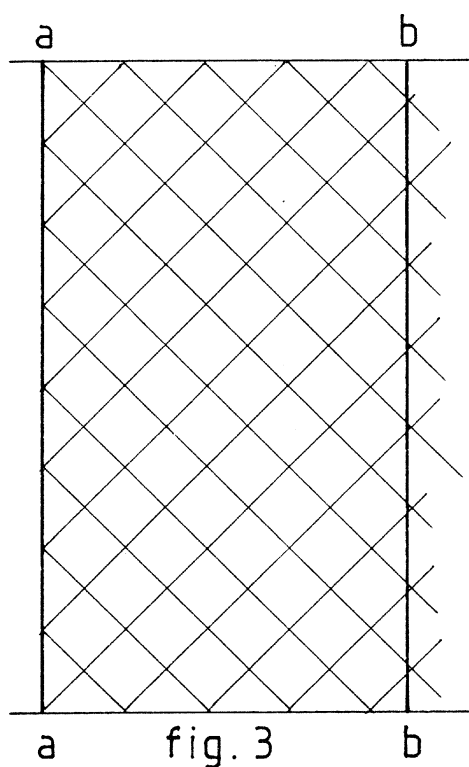
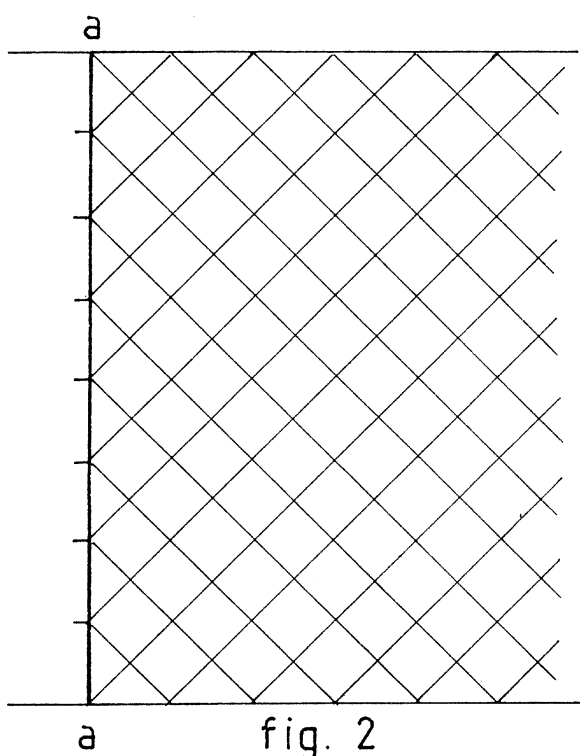
In my first article we used a "series" which I called "The Magic Number Method" to solve the 4-bight Turk's Head of any length. It was not really magic but the title makes the method memorable. Similarly here, "The Origami Method" is not truly concerned with origami; but it uses paper, strong white paper, so the name should help you remember it. For that is what fancywork is about . . . memory. You need a little (very little) intelligence and some dexterity but, above all, you must be able to recall how the thing is done!

As a first demonstration you can easily make an 8-bight Turk's Head of 9 parts, as distinct from the 4B x 9P knot you made last time.

1. Wrap a sheet of stout paper loosely around the object to be covered, leaving about 1/4" slack, and mark the circumference on the paper (fig. 1).



2. Lay the paper on a flat surface and (fig. 2) divide one side into a number of equal spaces, in this instance (line 'a'-'a') the number of bights(8) you have chosen. From each dividing mark lightly draw straight pencilled lines going off at 45 degrees in each direction. Use a soft-ish pencil so that erasing mistakes is easy. Any ruler or other straight edge will do; and, unless you have the use of parallel rules or drawing board instruments, a sheet of graph paper visible beneath your actual drawing paper will help you produce a quick and accurate pattern.
3. From the lefthand margin, count 9 parts and draw a line (fig. 3, 'b'-'b') which is parallel to line 'a'-'a' and passes through intersections of the 45 deg. lines at all points. Erase the excess pencil lines to the right of



this righthand line to avoid confusion later.

4. Starting at one end of the diagram (fig. 4, bottom left-hand corner), lightly trace your way around the layout until you reach an end. In this example you should cover all the lines in one non-stop journey (arriving at the top lefthand corner). If not, you have gone wrong. Check stages 2, 3 and 4.

(Some knot patterns can only be fully traced over in two separate operations, using different coloured pencils. They produce, when tied, TWO intertwined Turk's Heads and we shall do this deliberately in the next article.)

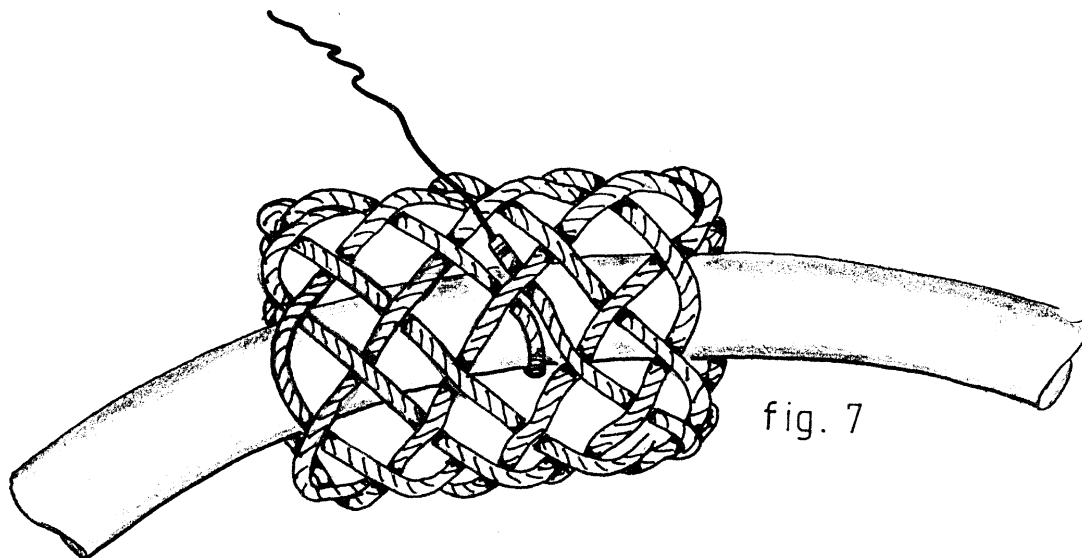
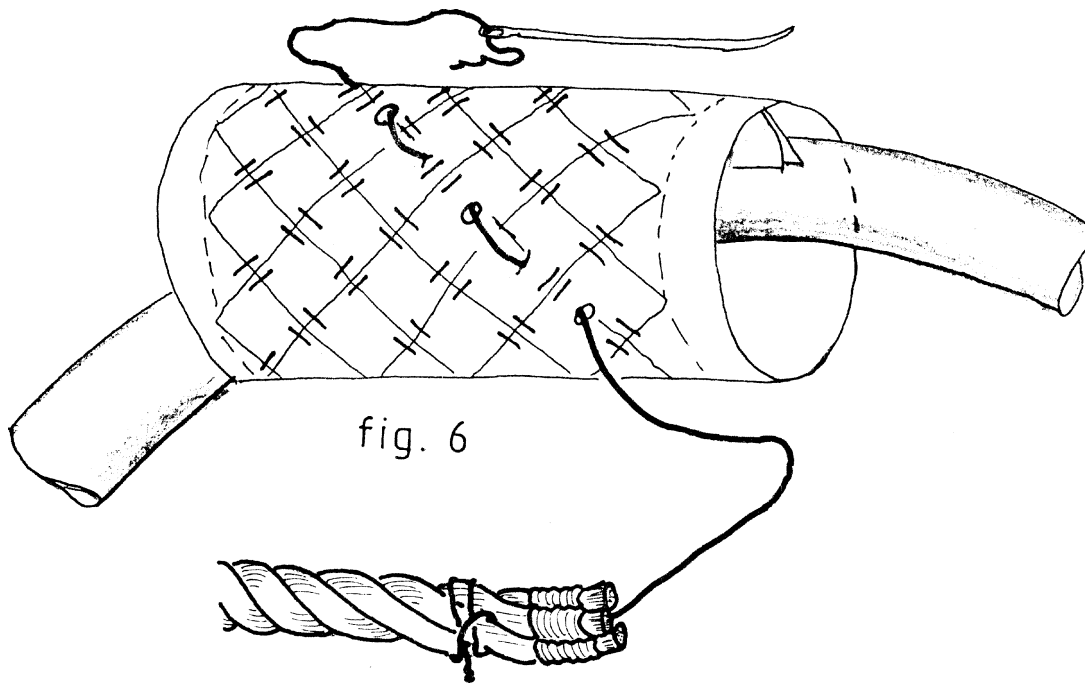
5. Decide whether you want a righthanded or lefthanded knot. When the covering knot, like this one, has an odd number of parts then simply turn the knot pattern around because each end is the opposite hand. Mark each crossing point (fig. 5) how the cord will pass OVER the intersecting strand. I generally use two lines - like a bridge on a map - but for simplicity in the newsletter's small-scale diagram - only one short mark is shown.
6. Transfer the paper pattern to the object which is to be covered, wrapping it around and lining up the ends to form a continuous knotted layout, glueing it in place.
7. Using a darning needle and strong thread (or, better - because they are easier to work with - try a sailmaker's needle and twine) follow around the pencilled lines of the prepared knot pattern, stitching under all the "bridges" (fig. 6) until you arrive back where you started.

(Handy tip:- Blunt the needle's point and you will avoid irritating snags in the twine at crossing points...as well as safeguarding your fingers!)

8. Attach the standing end of your twine or thread to the working end of the cord or rope which will make the actual Turk's Head knot. Insert the cord so as to duplicate the twine knotted layout, removing the displaced twine as you go. Tear off the paper diagram (which ends up in small bits, so PHOTOCOPY it if you need to tie more than one knot.) (fig. 7).
9. Cut off the twine from the cord and follow the knot around twice for a traditional 3-plait effect.

This method can be used to make any knot but it is best for Turk's Heads and mats. Make sure at the outset that your twine and cordage is long enough to complete tying the desired knot in its SLACK state.

THE NEXT ARTICLE will show you how to make a two-coloured, interlocking knot of two intertwined Turk's Heads. Then, in article No. 4, you can use the method to solve (from first principles . . . not by slavishly following a book) the Crucifix Turk's Head. After that, we will explore the designing of mats, letting our imaginations really soar!



## **Quotation**

"With a bit of string and a modicum of topological ingenuity it was possible to convert my long-sleeved sweater into an impromptu rucksack

"OSSIAN'S RIDE" by Fred Hoyle, pub. Heinemann (1959)