

TEX'S

TIPS & TOPICS

Hello and welcome to the occasional column that, although it's called **Tex's Tips and Topics**, (TT&T) is really about your ideas, tips and any 'tricks' you may use in the hobby. So, here's a few suggestions from readers seeking to win book vouchers for every tip published!

This month's tips include a knotty subject, toroid winding and measuring battery current drawn. I'll start with a tip from **Colin Topping GM6HGW/MM3ACL**, who remarked on a tip from **G0GJP**, to use a flame to 'whip' the ends of polypropylene ropes.

Colin was obviously not impressed as he wrote "The melting of plastic or polypropylene rope ends to prevent the lay from fraying is a most unsatisfactory procedure and does not reflect well upon our nation's great maritime heritage, in short it is most un-seaman like."

Warming to his subject Colin went on..."More pleasing to the eye and a far more durable solution to the problem is the use of whippings made from suitable twine or cod line. Old tarry 'sea dogs' like myself often refer to the practice of melting plastic rope ends as Yankee or lazy man whippings".

With his tongue firmly in his cheek, and after berating our Editor, Colin went on to say "May I respectfully refer you to two excellent journals, *Admiralty Volume of Seamanship Parts I and II*. Between the covers of these publications you will find instructive text and numerous plates demonstrating the care and maintenance of ropes etc, including whipping rope ends. Also described in full detail is the tying of a 'monkey's fist' (Fig. 1), to provide a weighted end to a rope for heaving aloft.

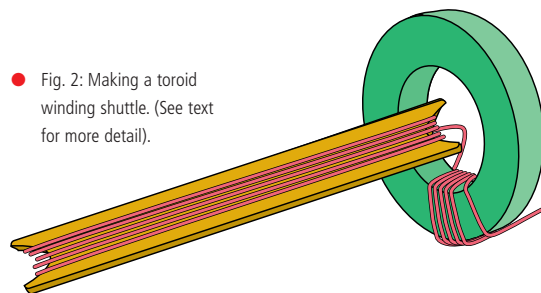
"This being a most useful item for rigging supporting rope guys for aerials over tree branches etc. As there is no stone or heavy metallic object attached, it is

therefore far safer, should the rope land upon the head of any onlooker". Colin signed himself: "Disgusted, Tarry and well salted Old Sea Dog, Lower Reaches of the Silvery Tay".

Moving swiftly on from Tayside, but still in Scotland, I now have a couple of tips from **Mike Beith GM00XS**, one of which is to make winding toroidal coils easier. But I'll let Mike explain as he wrote "Winding toroids, or at least winding a few turns with a thicker gauge of wire, is usually quite easy and a small number of turns means a short length of wire is used. However, winding a toroid with a significant number of turns of a lighter gauge wire, can be tricky, as wire damage occurs easily.

"Carefully wind the wire on a piece of card, narrow enough to pass through the hole of the core, Fig. 2. Estimate the length of wire needed plus enough for terminations and lay it on the shuttle. It's then a simple matter to pass the shuttle and wire through the core gradually unwinding the card as needed. The card is easier to handle than a long length of wire getting in a tangle or 'fankle' as my XYL would say up here in GM land".

Thanks Mike that's a great idea for those coils with more turns,



● Fig. 2: Making a toroid winding shuttle. (See text for more detail).

such a simple idea, but one that would make winding them, much easier. Now let's turn to Mike's other idea, which is aimed to make testing current drawn, in battery powered items, easier to read.

Again, I'll let Mike explain in his own words. "Quite often it is



● Fig. 1: A monkey's fist knot, makes a good, and safer rope's end than a heavy stone or metal block says Colin GM6HGW / MM3ACL. Donna G7TZB thinks it makes a fine 'attention getter' when used on editors!

necessary to check the current drawn by a battery powered circuit. This usually entails desoldering a connection to insert the meter. This small testing jig, Fig. 3, saves having to desolder a connection when measuring current in a battery pack that contains separate cells.

Mike continued "the test jig, Fig. 3, consists of a small piece of double-sided copper clad board with either a simple wire loop soldered on each side of the p.c.b. for the meter clips, or single wires taken to plugs



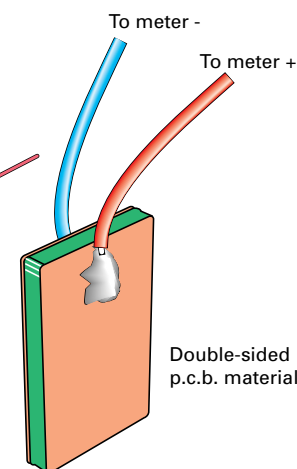
handy in the tool-box". I couldn't agree more Mike, it's usually the simple ideas that are the most difficult to come up with.

"Well, I've run out of space again. These are all splendid ideas, and a good cross-section of some of the useful tips that readers keep sending in. Many thanks for the

tips that you've all sent in, they're all very useful. Book vouchers on the way for all published. So, if you want a book voucher for an idea - you've got to write in first! - What are you waiting for?

Tex

suitable for the meter. It's easily inserted between cells or between a cell and the battery box terminal. Different sizes can be made for various cell sizes and kept



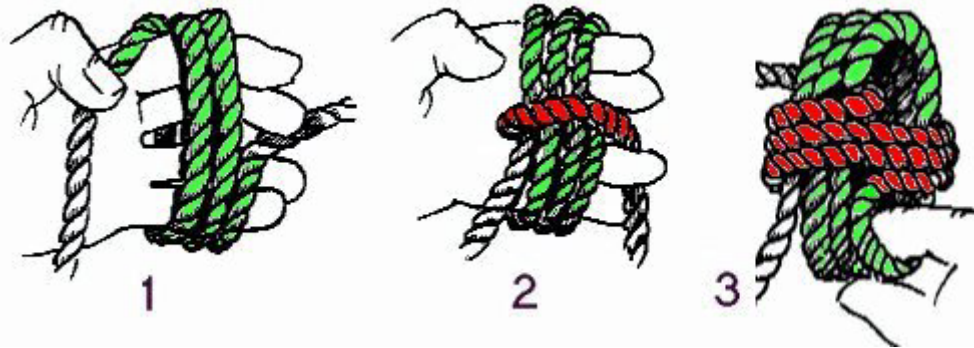
● Fig. 3: A simple current measuring jig, may be placed anywhere in the battery pack to monitor the supply current. (See text for more detail).

The Monkey's Fist Knot

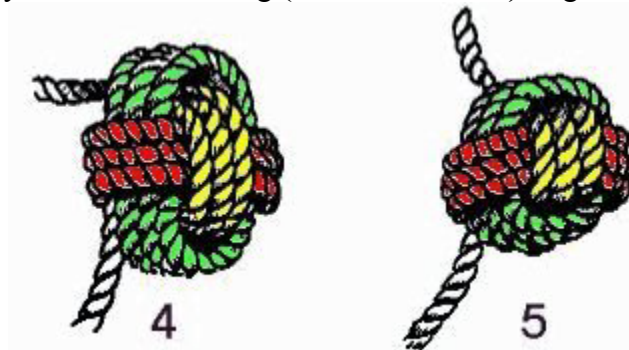
The Monkey's Fist was created so that a line could be thrown from ship to ship or ship to dock. Inside the knot would be a weighted ball. You can also use it as an interesting decoration, or tie it to your jackknife or keychain, to make it easy to find and get out of your pocket or pack !

For a small version you can use a marble and 1/8" braided nylon rope (~5 ft). For this size rope there are some changes to the directions below – they are highlighted in **bold**. The pictures are still helpful although you will be using only two fingers while the pictures show using four.

The Monkey's Fist knot is tricky but not too hard if you follow these simple instructions. Take your time and don't be afraid to start over again !



1. Begin by wrapping the rope around four fingers (**for this smaller rope use only two fingers**). Make 3 revolutions (**for this smaller rope use 4 revolutions**).
2. Go between your middle and ring finger (**first and second finger**) and wrap the rope three times (**for this smaller rope use 4**) around the center of the first loops.
3. It might be easier to remove your middle and ring (**first and second**) fingers while doing this.



4. Insert a small stone or pebble (**marble**), [or a golf ball, baseball or ... for thicker rope / larger monkey fist] and make the final three wraps (**for this smaller rope use four**) .
5. Once all of the wraps are complete, carefully tighten the loops. I like to use a small screw driver or needle nose pliers to help pull the ropes.

To finish – you can cut off one of the free ends and tuck it in so it is invisible; you can then use the remaining free end to tie it to a key ring or your jack knife or what ever! If you would like, you can leave a loop in the middle wraps. Tie an overhand knot and use the loop as a key ring or loop it on your backpack; in this case, clip off both free ends very close to the ball and tuck them in so that they are invisible.

Good Luck.... and don't give up!

Drawings and directions from Troop 173 Etna,PA web site (modified by KC)

-----**Courtesy of Boy Scout Troop 39 Marlborough, CT**-----

For these directions (in color !!) and other info, visit our troop's web site: www.ct-troop39.org