

LORD BADEN-POWELL UNIVERSITY OF SCOUTING

SC101A

Pioneering Skills (PART 1 HANDOUT)

- PART 1 HANDOUT will show you how to tie all knots required for Tenderfoot and First Class ranks.

- Tenderfoot thru First Class Knots:

(Tenderfoot)

- Two Half Hitches
- Taught Line
- Square Knot

(First Class)

- Timber Hitch
- Clove Hitch
- Bowline

- TYPES OF ROPES

- MANILA

The best all-round rope. It is easy to handle and is the recommended rope for pioneering kits.

- POLYPROPYLENE

This rope is made of man-made plastic fibers and is good for pioneering projects because of its lightweight and strength-to-size ratio.

- NYLON

This rope is commonly available in both braided and twisted forms. It is 2 1/2 times stronger than same size manila rope.

- POLYETHYLENE

This is the cheapest of the man-made ropes. It is not suited to either knot tying or lashing because it holds kinks after being under strain.

- SISAL

This rope has much the same appearance as manila rope, but is much weaker in strength and does not handle well when used for lashings and knot tying.

- COTTON

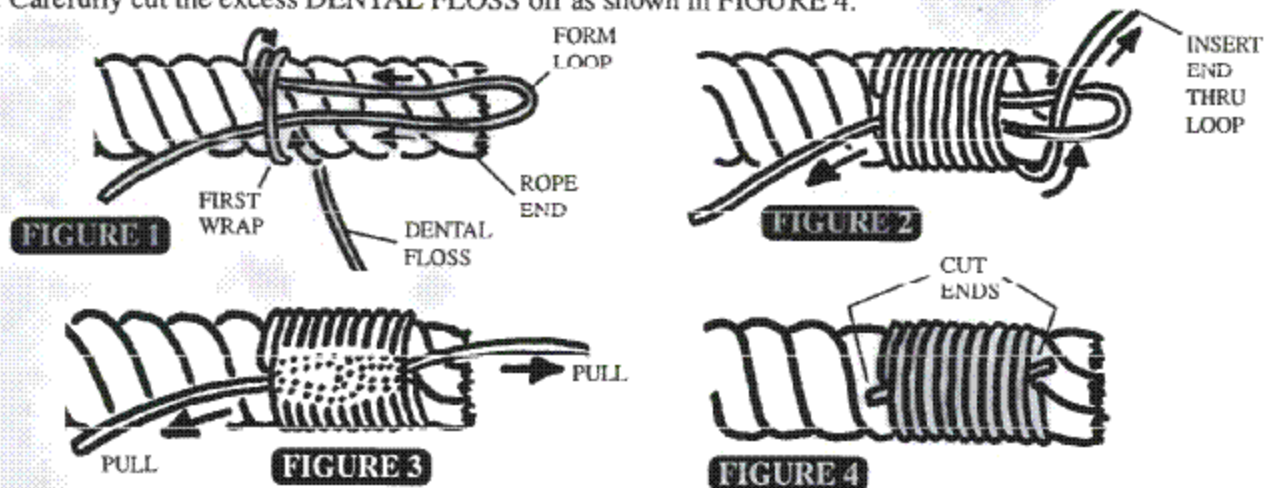
There is little use for this rope in pioneering and camping. Not recommended.

- ROPE CARE

1. Ropes should be dry and clean before storing.
2. Keep ropes out of prolonged exposure to sunlight.
3. Do not walk or stand on a rope. Dirt from your shoes will be ground in and will weaken the rope.
4. Coil a rope loosely for storage. Coil the rope using the natural twist found within the rope.

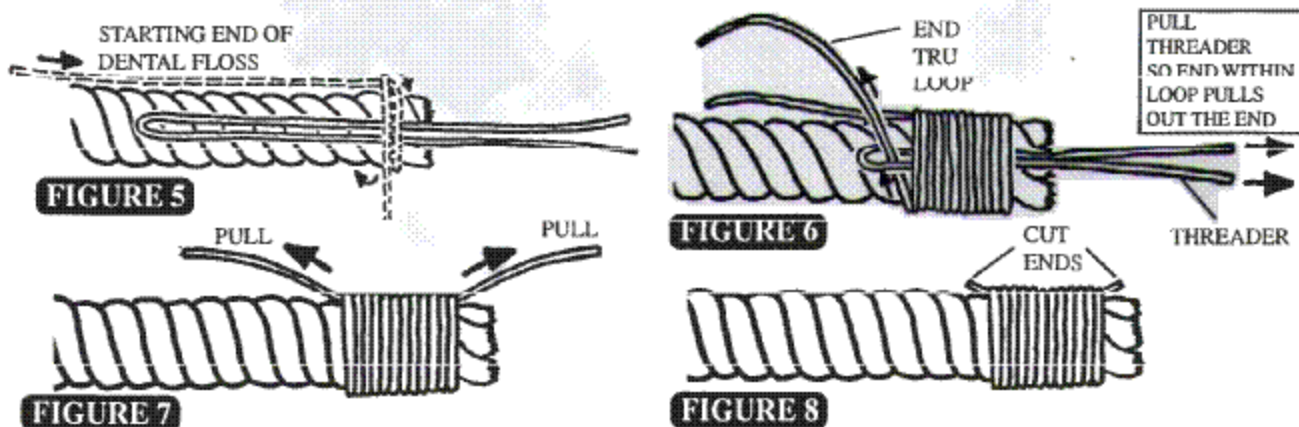
• ENGLISH WHIPPING

1. The ends of your ROPE will need to be WHIPPED in order to stop the ends from unraveling. You will be supplied with a ROPE section and a WHIPPING material (DENTAL FLOSS).
2. Lay the DENTAL FLOSS so you form a LOOP as shown in FIGURE 1, then start your first wrap so it is about 1" from the end.
3. Continue wrapping the DENTAL FLOSS tightly around the ROPE end until you are about 1/4" from the end (see FIGURE 2). Insert the end of your DENTAL FLOSS through the LOOP (see FIGURE 2), then pull on the lower end of the DENTAL FLOSS so it pull the upper strand under the wraps (see FIGURE 3). Now grasp both ends of the DENTAL FLOSS and pull HARD as shown in FIGURE 3 (make sure to keep the loops under the wrappings).
4. Carefully cut the excess DENTAL FLOSS off as shown in FIGURE 4.



• MODIFIED ENGLISH WHIPPING

1. This is a second method of WHIPPING your ROPE. You will need a second piece of DENTAL FLOSS which will act as a THREADER. Form the short piece of DENTAL FLOSS into a LOOP as shown in FIGURE 5. This piece will be know as the THREADER.
2. Lay your main piece of DENTAL FLOSS along side the THREADER so a short piece extends just past the LOOP, then start the first WRAP about 1/4" from the end of the ROPE (see FIGURE 5).
3. Continue WRAPPING tightly for about 3/4" (see FIGURE 6), then insert the WRAPPING end of your DENTAL FLOSS into the LOOP. Grasp the THREADER ends and pull hard so the previous working end pulls completely through (see FIGURE 6). (NOTE: Save this THREADER for later use.)
4. Grasp the ends of the DENTAL FLOSS (see FIGURE 7) and pull HARD on each end.
5. After cinching down TIGHT, cut off excess ends of the DENTAL FLOSS (see FIGURE 8).



• KNOT BASICS

1. Knots are formed by the use of three simple turns, the BIGHT, LOOP and OVERHAND.
2. The understanding of these forms will help you better understand the knots you will be tying.



FIGURE 9



FIGURE 10



FIGURE 11



FIGURE 12

• TAKE A TURN AND A ROUND TURN

- The term "TAKE A TURN" means to wrap the rope around a spar or stake so it continues off in the same direction (see FIGURE A).
- To make a "ROUND TURN", wrap the rope completely around a spar and bringing the running end back along the standing part of the rope (see FIGURE B).

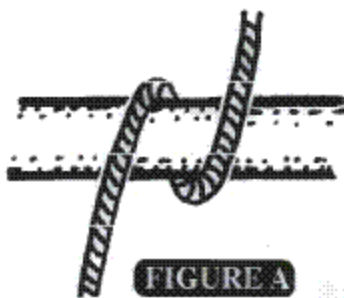


FIGURE A

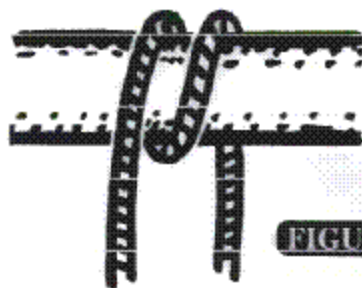


FIGURE B

• SQUARE KNOT

- This a useful knot for tying two rope ends together.
- 1. There is a simple phrase to remember for this knot, "RIGHT OVER LEFT . . . LEFT OVER RIGHT".
- 2. Lay the RIGHT END over the LEFT END as shown in FIGURE 17. Now lay the LEFT END over the RIGHT END as shown in FIGURE 18 and pull tight.

NOTE: The knot shown in FIGURE 20 is not a SQUARE KNOT. It is know as a THIEF KNOT, can you see the difference??



FIGURE 17



FIGURE 18



FIGURE 19



FIGURE 20

• TWO HALF HITCHES

- This a useful knot for attaching a rope to a pole or boat mooring.

1. Lay the ROPE around the pole, then wrap the end of the ROPE as shown in FIGURE 13 so it forms the first HALF HITCH.
2. Now wrap the end of the ROPE one more time to form the second HALF HITCH (see FIGURE 14).
3. Snugging the loops together will form the TWO HALF HITCH KNOT.



FIGURE 13

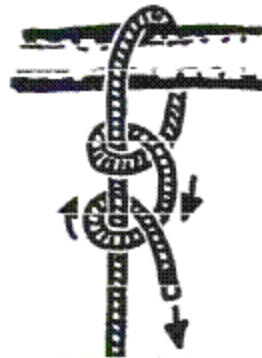


FIGURE 14

• TAUT - LINE HITCH

- This a useful knot for tent ropes since it will slide only one way.

1. Lay the ROPE around the pole, then wrap the end of the ROPE as shown in FIGURE 13 so it forms the first HALF HITCH.
2. Now wrap the end of the ROPE one more time to form the second HALF HITCH (see FIGURE 14).
3. Snugging the loops together will form the TWO HALF HITCH KNOT.

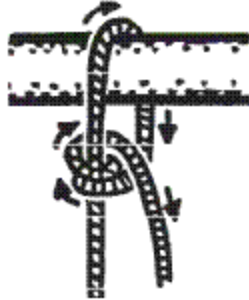


FIGURE 15

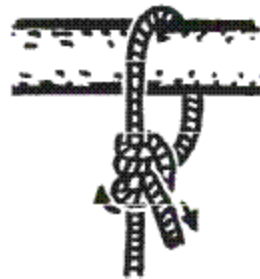


FIGURE 16

• TIMBER HITCH

This a useful knot for dragging a heavy log or starting a lash.

1. Loop the ROPE around the log, then form a LOOP and wrap the end at least three times (see FIGURE 21).
2. Pull on the ROPE end and cinch the knot down so it is tight (see FIGURES 22 & 23).



FIGURE 21



FIGURE 22



FIGURE 23

• CLOVE HITCH

- This knot is one of the most widely used knots.

1. Lay the ROPE around the pole, then wrap the end of the ROPE over the ROPE (see FIGURE 24).
2. Continuing around the log, feed the end under the wrap as shown in FIGURE 25.
3. Pull on both ends of the rope in order to snug it down (see FIGURE 26).
4. This knot can be LOCKED by simply tying an OVER HAND knot on the short end (see FIGURE 27).

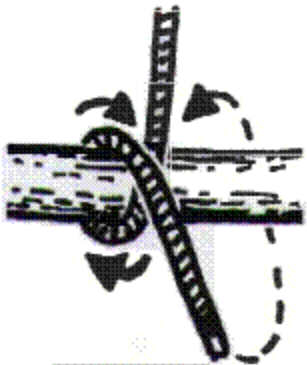


FIGURE 24

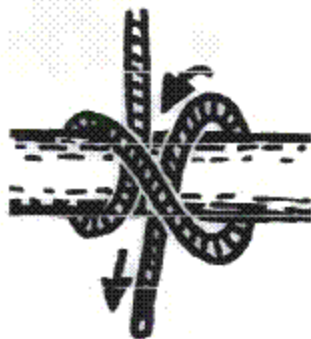


FIGURE 25

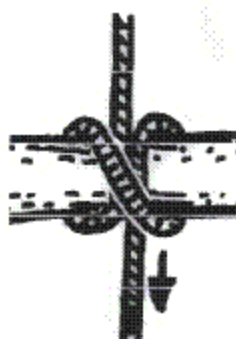


FIGURE 26

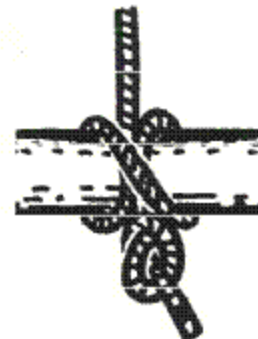


FIGURE 27

• BOWLINE

- This knot is used to form a loop or loops either permanent or "running".

1. Form a LOOP, then insert the end (remember this phrase) "*THROUGH THE HOLE AROUND THE TREE . . . AND BACK THROUGH THE HOLE*", see FIGURE 28 & 29.
2. Pull on the two lower ends to set the knot (see FIGURE 30).



FIGURE 28



FIGURE 29



FIGURE 30