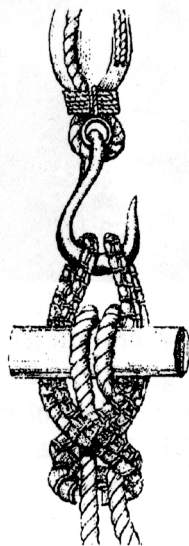


# Marlinspike Seamanship



An Anarchist Yacht Club Pamphlet  
For IAP 2005

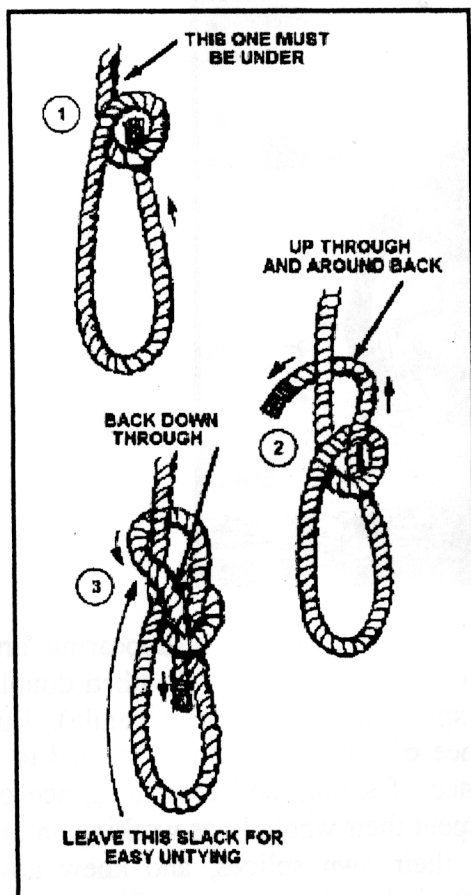
## Introduction



Marlinspike seamanship is, in many ways, a disappearing art. Some of this has to do with changing materials (sheathed double braid Dacron line is harder to splice than three-strand manila). But I suspect that the disappearance of this art is also connected to a larger trend: the disappearance of sailors and the emergence of yachtsmen. The sailors who spent their whole lives working on the water made their own rope, their own splices, and knew how different knots would react to different situations. The general trend these days, however, is to buy a pre-packaged solution from West Marine that is marketed to ensure maximum cruising comfort.

This pamphlet is an introduction to the knots and splices of marlinspike seamanship

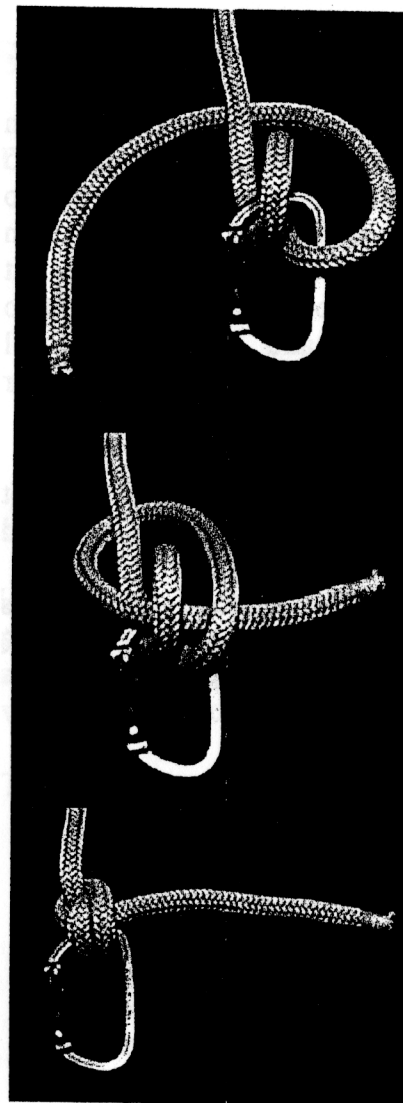
## Knots



### The Bowline

The bowline is, essentially, the ultimate sailing knot. It is incredibly versatile, and almost impossible to sail without. It's quick to tie, forms a "bite" (or loop), and is easily untied when necessary. It is possible to use the bowline for almost everything on a boat, but it has some significant disadvantages:

1. It reduces the breaking strength of a line by about 45%.
2. It is not perfectly secure, and the ease at which it unties causes it to fail occasionally. While it's alright if this knot occasionally fails on your jib sheet, it's not alright if you decided to use it for your anchor rode or halyard.

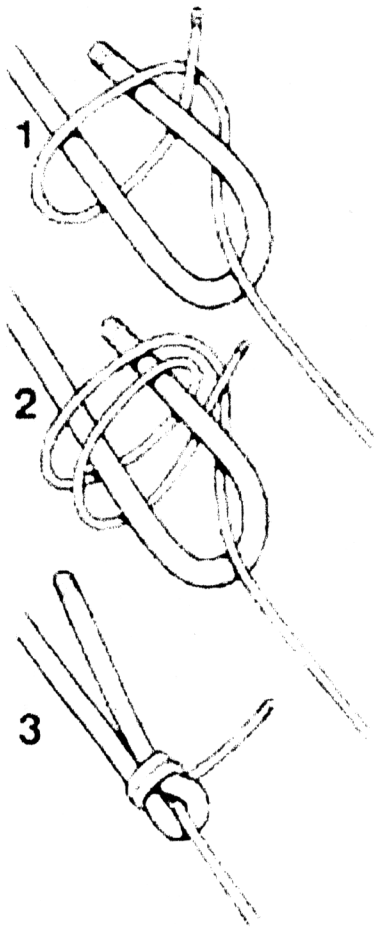


### The Anchor Bend

The anchor bend is also known as the "fisherman's bend." The anchor bend is used when you need a knot that will absolutely not fail under high tension. It is known as a "bend" because the line loops back on itself. This means that as tension increases, the bend constricts further and increases the holding of the knot.

As its name indicates, the anchor bend is often used to attach an anchor or drogue. There are a few disadvantages to this knot:

1. The line's breaking strength is reduced to 70% of its rated strength.
2. This knot, especially after heavy use, is very difficult to untie. After a season's use on an anchor rode, it will probably need to be cut off.



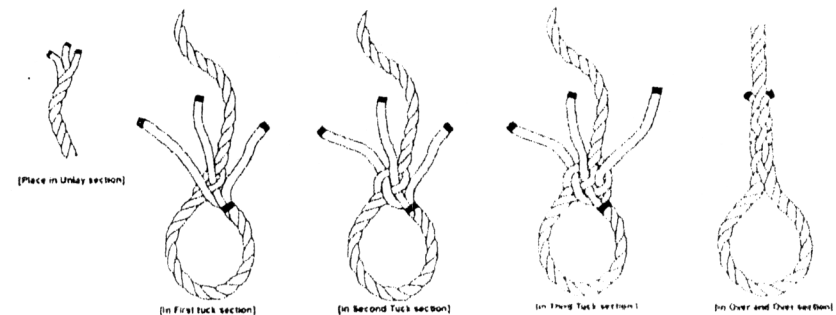
## Double Sheet Bend

The double sheet bend is an excellent knot for joining two lines together, and happens to also work well when the two lines in question are different sizes. It holds strong, is very resistant to slipping, and even works well when wet. The major disadvantages of this knot are:

1. The joined lines will not run free through a fairlead or block.
2. It reduces the line's breaking strength to 55% of its original strength.

## Splices

### Three-Strand Eye Splice

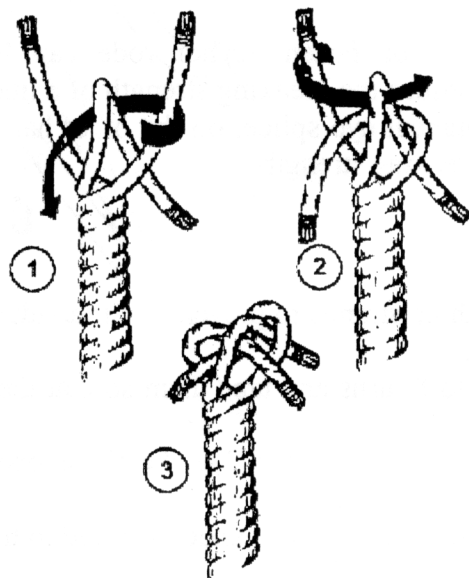


Using knots to create an eye or fasten anchor rode can be problematic. Knots can slip, reduce the breaking strength of a line, and be inconvenient. A permanent eye splice, on the other hand, will retain 95% of the line's breaking strength.

To Splice:

1. Tape each end of the three strands to prevent the individual yarns from unraveling.
2. Unravel the strands 4 to 8 turns and tape them so that they don't unravel further.
3. Form a loop the size you want, and lay the three open strands across the standing part of the line.
4. Take the center free strand, and tuck it under a strand in the standing end.
5. Take the left free strand, and tuck it under the next strand in the standing end.

6. Finally, flop the whole eye over, and tuck the remaining free strand under the remaining strand in the standing end. All tucks should be made from right to left.
7. At this point, continue with the first free strand again. Tuck it over the next strand on the standing end, and under the one after that. Do the same with the second and third free strands. Continue this rotation until you've made six tucks with each strand. At no point during this process should you be tucking two free strands under the same loop. If that happens, you've done something wrong.
8. Pull hard on the loop, and cut the free strands close to the standing edge.



### Back Splice

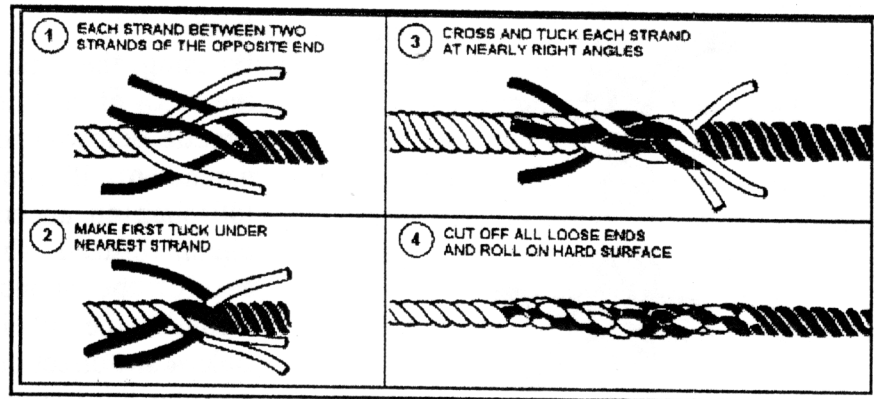
The back splice is a nice way to finish the end of a three-strand line, or to splice it directly to an anchor chain. When used to finish the end of a line, it is also known as a 'Spanish Whipping.'

1. Tape each end of the three strands to prevent the individual yarns from unraveling.
2. Unravel the strands 4 to 8 turns and tape them so that they

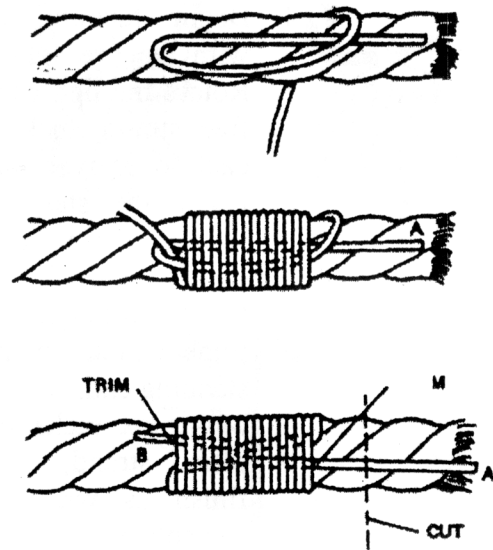


3. If using the finish the end of a line, first tie a crown knot as shown. If using to splice an anchor chain, instead slip two of the strands through the chain link in one direction, and the third strand through the chain link in the other direction.
4. Begin tucking, as with the eye splice. Rotate through each free strand, tucking each one over and under the standing strands. At no time should you tuck two strands through the same strand on the standing end.
5. Make six tucks for each strand, and finish as with the eye splice.

**Short Splice** – Strongly join two lengths of the same size line.



## Whipping



### Common Whipping

Whipping is the means used to secure the end of a line from fraying. It is now common to use tape, or to burn the ends of synthetic fibers. Both can fail in time, and classic whipping adds a nice touch. There are many different kinds of whipping, but the common whipping is nice because it can be done without the use of a needle.



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# How to Build A Chip Log

## About

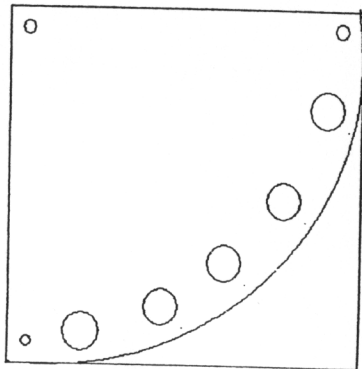
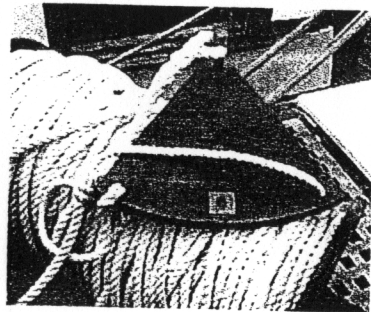
The term 'knot' is derived from this device for measuring speed. A drogue is thrown overboard with a long line attached. The number of knots in the line which go by after a specific amount of time indicate how fast the boat is traveling.

## Construction

The drogue is constructed from a 1" piece of wood cut into a quarter-circle of a 12" radius. Drill holes in the three corners of this quarter-circle, and sink larger holes (which do not fully penetrate the wood) into the curve. Fill the larger holes with a weighted material, either by melting lead into them or by lashing fishing weights in. This will enable the drogue to sit properly in the water.

Acquire about 500' of thin three-strand line, and unlay 12-14" from one end. Strongly seize the line where the three strands part, so that it does not unlay further, and run each strand through a hole in the corners of the drogue. Tie a stopper knot on the back side of each strand to make it hold fast.

With the rest of the three-strand line, tie in a piece of string every 47'3". The first piece should have one knot in it, the second two, etc... Wind on a spool such as used for kites. To use, throw the drogue overboard as someone else starts timing. After thirty seconds, stop the line and see how many knots have paid out. That's your speed.





# How To Use A Lead Line

## About

The lead line is a simple method for measuring the depth and determining the bottom type. It is, essentially, a long marked line with a heavy piece of lead attached to one end. It is also how Mark Twain got his name.

## Construction

First, attach a heavy weight to one end of a long line. Then mark the line as follows: 1 fathom (6ft) is marked by one strip of leather, 2 fathoms is marked by two strips of leather, 3 fathoms by three strips of leather, 5 fathoms by a white cotton rag, 7 fathoms by a red woolen rag, and ten fathoms by a strip of leather with one round hole.

## Use

The leadsman should take a place at the bow of the boat, whirl the lead around, and cast it out forward. The idea is that the lead should be resting on the bottom and the line taught by the time the boat is above it. The leadsman should then call the depth. The strips in the line are referred to as "marks," while the unmarked fathoms are called "deeps." So one fathom would be "mark one!" Two fathoms "mark twain!" Three fathoms "mark three!" Four fathoms "by the deep four!" The lead can also be coated with wax so that it will bring up a sample of the bottom type.

