

## Knot Tying Station

The aid is used in ABC 3 or Seamanship to provide something on which to tie knots. This particular cleat has something (post) that may be used to tie a clove hitch or bowline, as well as a cleat that can be used to tie a cleat hitch.

Construction is quite simple, requiring only a board, a cleat (wooden or metal), and a post, as well as screws to attach the cleat and post to the board. Additional materials required are a piece of rope and diagrams showing the various knots to be tied.

## The Cleat Hitch

This is the simplest but most important hitch used on a boat, and involves nothing more than making a few turns of the line around the horns of a cleat. (A *cleat* is a fitting with two projecting *horns* to which lines are made fast.) You must tie it correctly or it will be hard to untie under tension. Tied correctly, the knot is easy to tie, untie, and release under load. It will not slip or come undone.

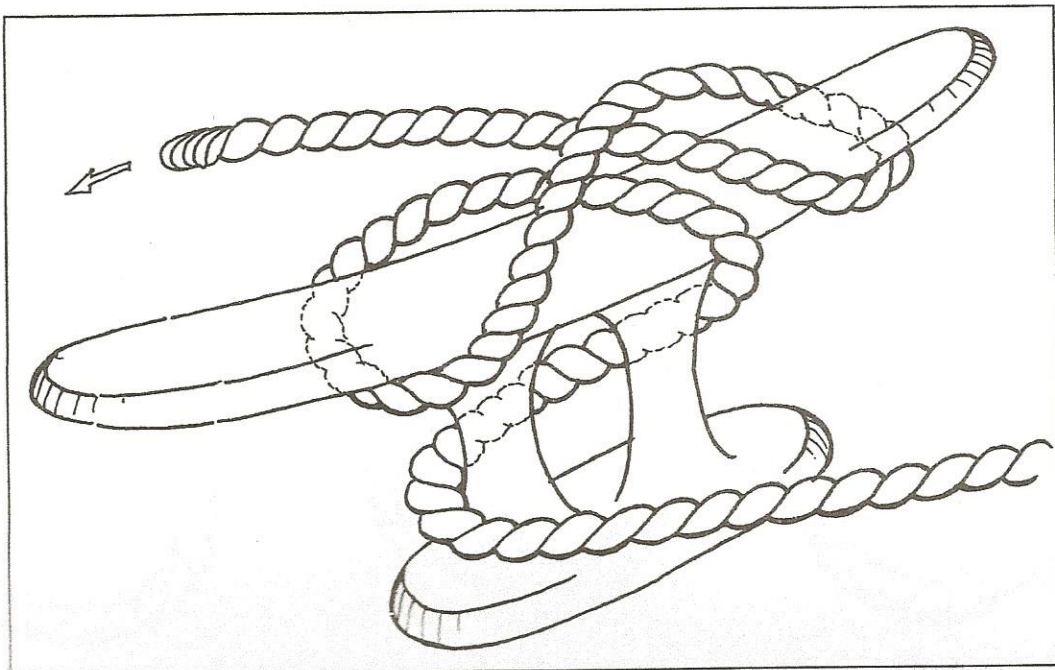
The following are some of the lines often fastened to a cleat with a cleat hitch

- anchor lines
- dock lines
- mooring lines
- tow lines
- sailboat halyards

## To Tie a Cleat Hitch

- 1) Lead the working end of the line under the horn of the cleat that is farthest from the object being fastened.
- 2) Lead the line around the base of the cleat, so that it passes under each horn once.
- 3) Form a figure eight around the horns of the cleat, being careful to keep the line on top of the previous turns around the horns. There is no added strength or security gained by using more than a single figure eight.
- 4) Secure the working end with a half hitch over the horn opposite the strain.
- 5) When tied correctly, the working end will lead off the cleat on the opposite side from the standing part and in an opposite direction.

When tied properly, it will be easy to release under load.





# The Bowline

The bowline is a versatile knot that forms a secure loop in the end of a line. It has many uses on a boat. With practice it is easy to tie and untie and will not slip or jam—all of the characteristics of a good knot.

## Use This Knot To

- form a secure loop on a mooring line to place over a cleat or post
- tie a line to a fitting, such as an anchor or mooring ring
- tie together lines equal and unequal in diameter, using a bowline at the end of each line
- form a free-running noose by passing a portion of the line through a bowline loop

## To Tie a Bowline

- 1) Make a small overhand loop, with the working end on top of the standing part of the line.
- 2) Then pass the working end up through the loop from the back, counterclockwise around behind the standing part, and back down through the loop.
- 3) Grasp the working end and the standing part, pulling in opposite directions to tighten the bowline.

The story of the rabbit, the hole, and the tree may help you remember the method of tying this knot. The standing part of the line is the tree. The small loop you make is the hole. The working end of the line is the rabbit. The rabbit comes up out of the hole, goes around the tree, and then goes back down into the hole.

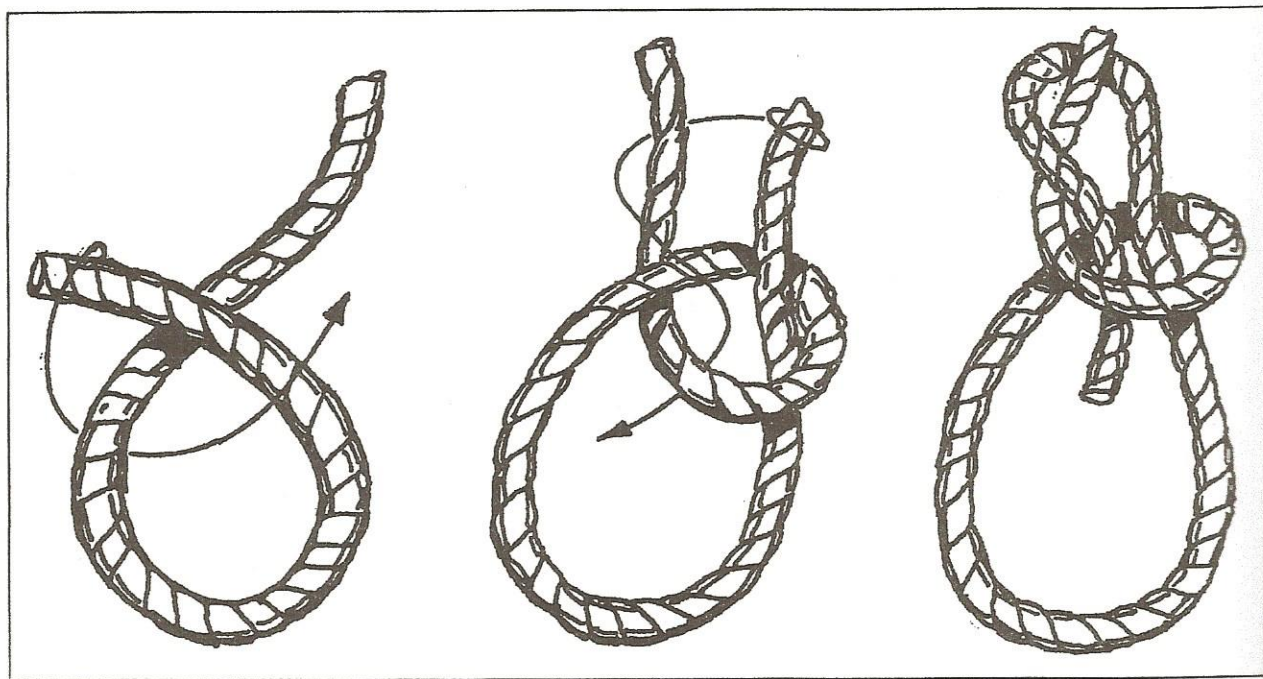


Figure 4-7 The Bowline



## The Clove Hitch & Two Half-Hitches

The clove hitch and two half hitches are easy to tie and untie. They are easily adjustable and will not slip or come undone if tied properly. The clove hitch without the half hitches is not reliable; it can slip if not under constant tension.

### Use This Knot To

- tie a line to a post or piling
- tie a fender to a railing. It allows easy adjustment
- tie a line to a loop, grommet, or ring

### To Tie the Clove Hitch & Two Half Hitches

- 1) Loop the working end of the line around the object twice, in the same direction, once below the standing part of the line; once above it.
- 2) Finish the clove hitch by passing the working end of the line between the second loop and the standing part of the line.
- 3) Then form a half hitch by passing the free end of the line around the standing part of the line, and under itself.

Do this once more for the second half hitch. Always remember to secure a clove hitch with *two* half hitches.

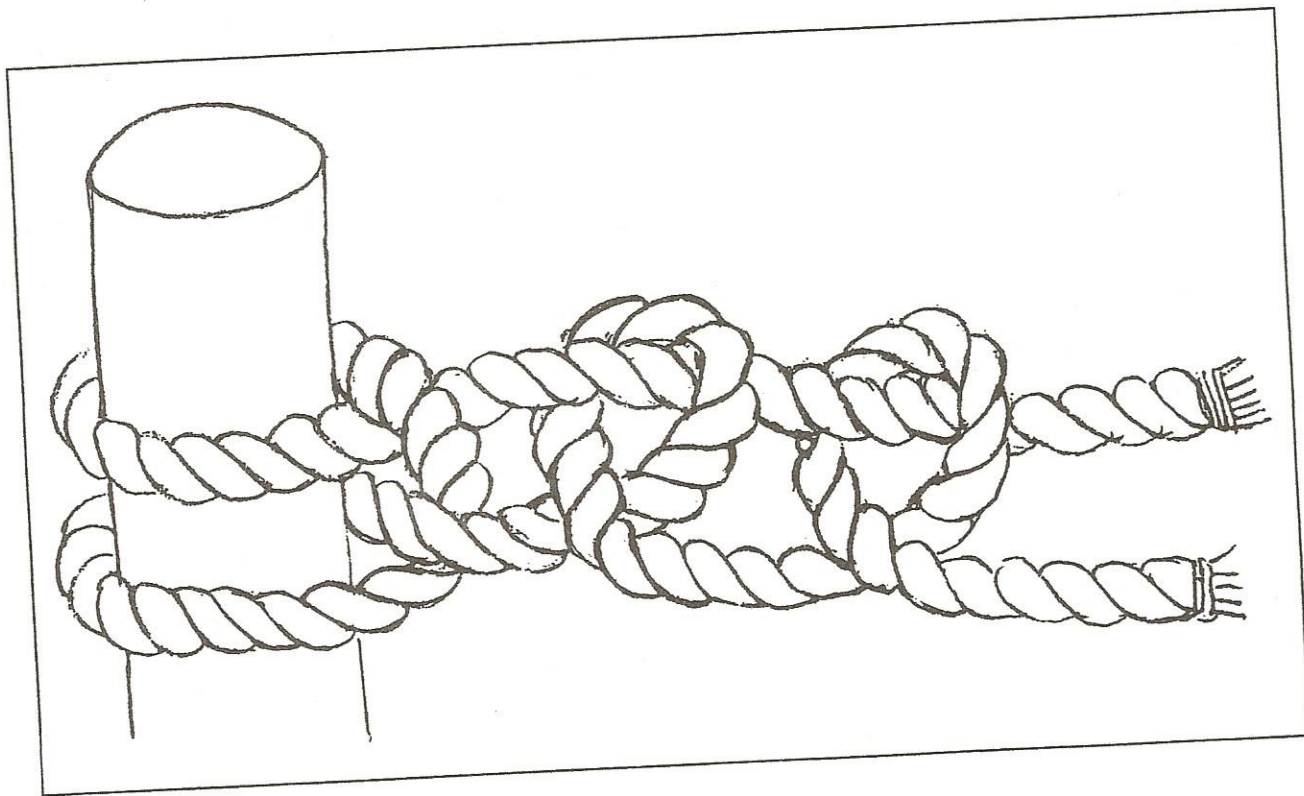


Figure 4-5 The Clove Hitch & Two Half Hitches

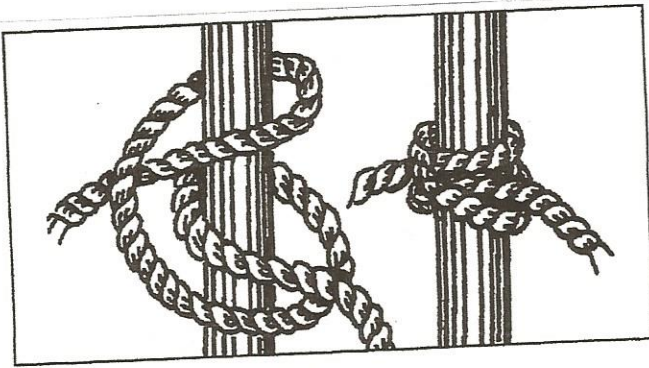


Figure 1-13. Clove hitch

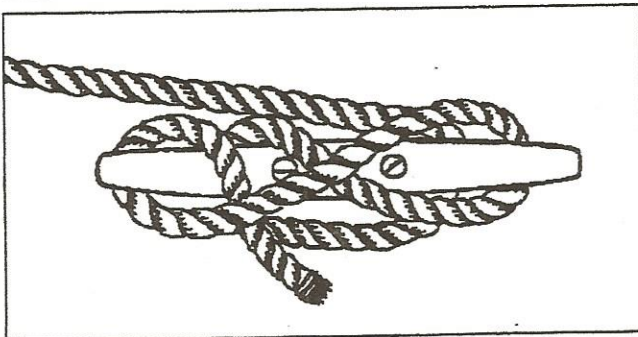


Figure 1-8. Cleating a line

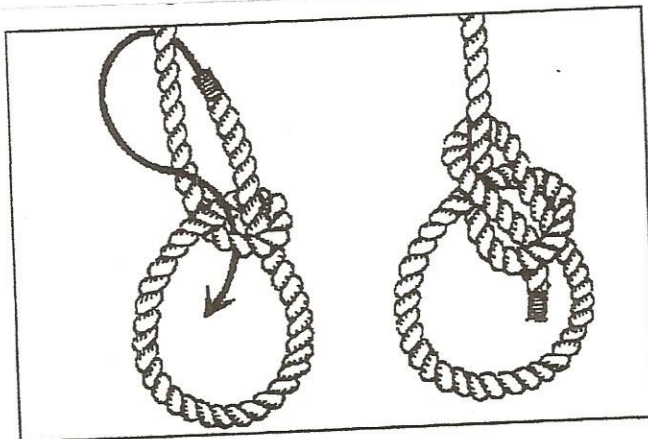


Figure 1-12. Bowline