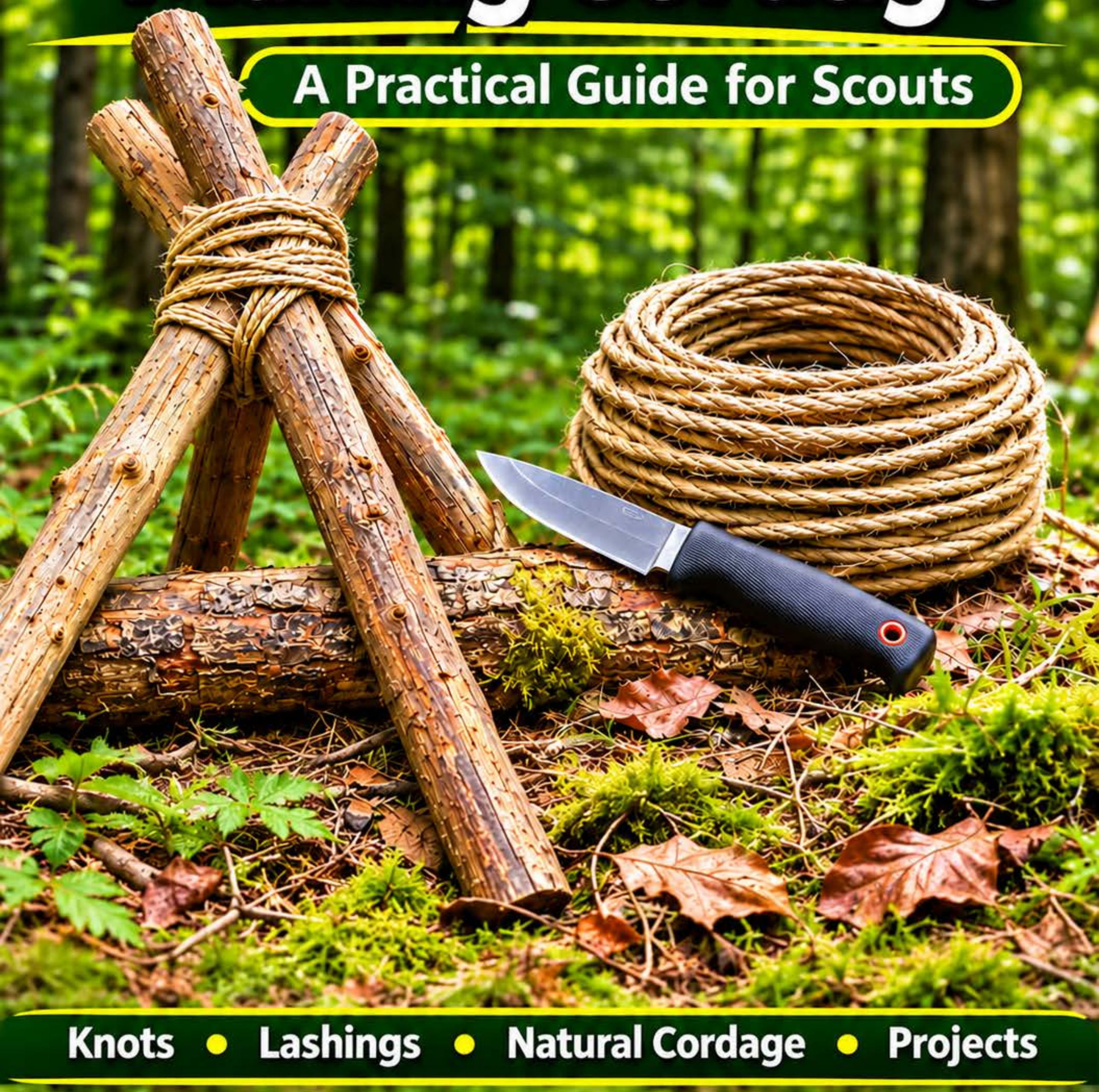
Scouts Bushcraft

Knots, Lashings & Making Cordage

A Practical Guide for Scouts



Knots • Lashings • Natural Cordage • Projects

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The Reef Knot (Square Knot)



A simple and useful knot for joining two ropes of the same thickness. It is quick to tie, strong enough for general use and easy to undo.

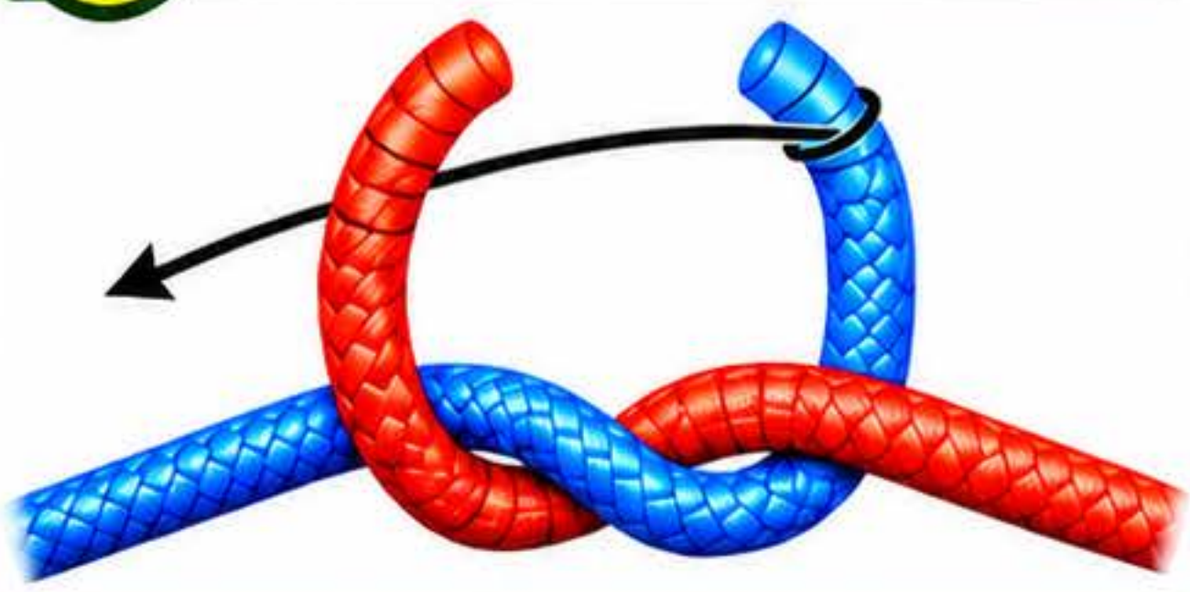
Uses:

- ✓ Joining two ropes
- ✓ Securing a bundle
- ✓ General camp use

⚠ Important:

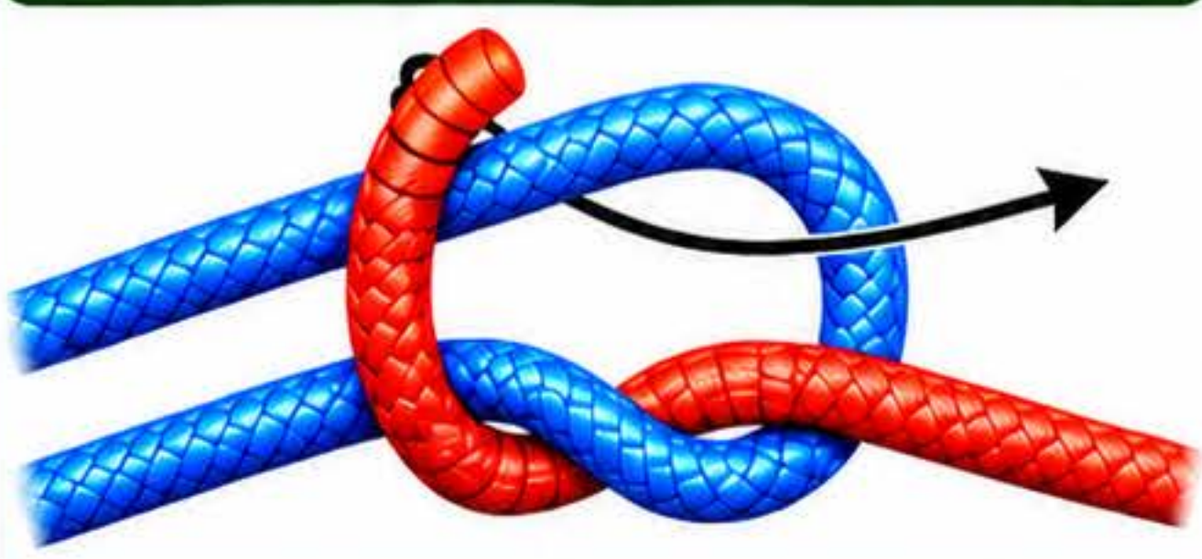
The reef knot is not suitable for heavy or life-critical loads, such as climbing, rescue or lifting.

1 Cross the Ropes



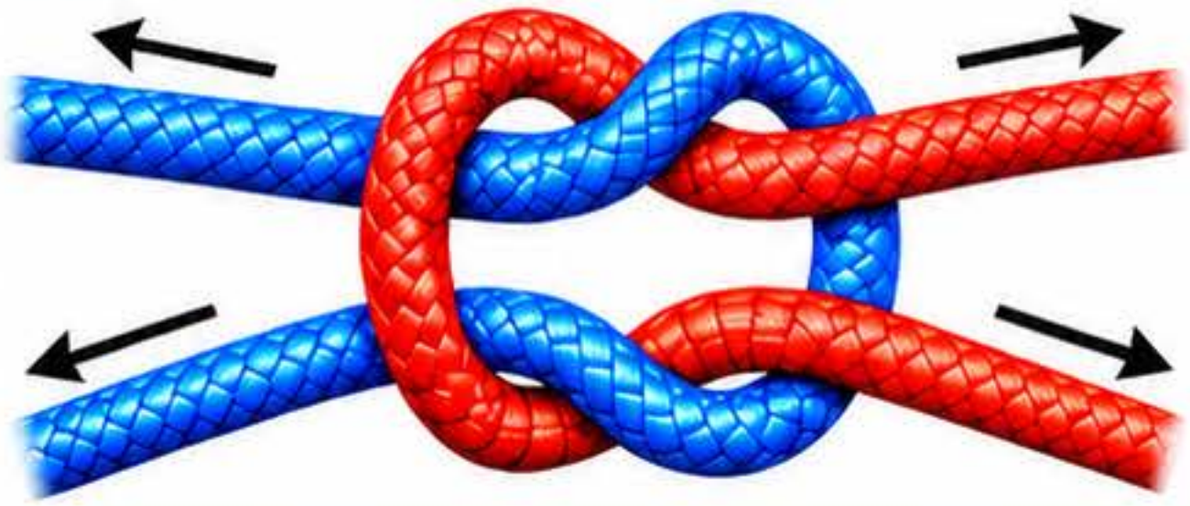
Cross the blue and red ends.

2 Pass the Red End Through the Blue Loop



Pass the red end through the blue loop.

3 Pull the Ends to Tighten



Pull the ends to tighten.

4 The Knot is Complete



The knot is complete.

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The Bowline Knot

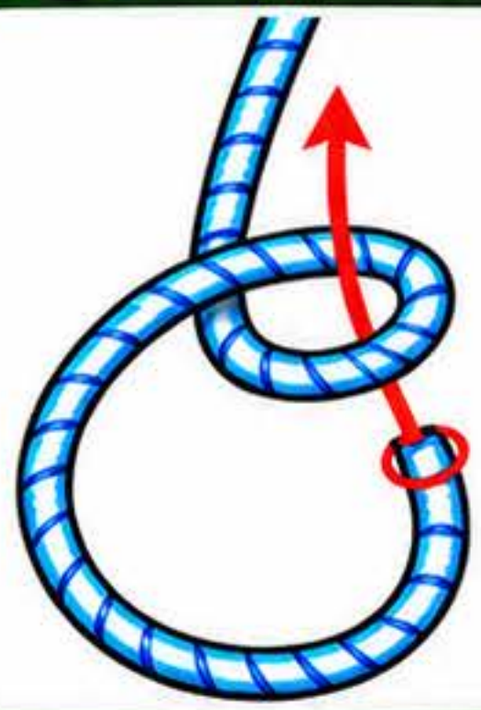
A strong and reliable loop that will not slip or tighten. It is easy to tie and undo, even after being under load.



Uses:

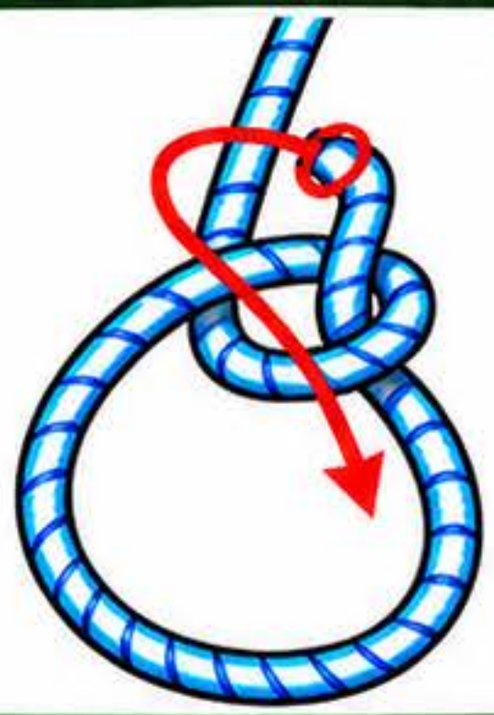
- ✔ Creating a fixed loop
- ✔ Securing to a person or object
- ✔ Rescue and general camp use

1 Pass the Tag End Through the Loop



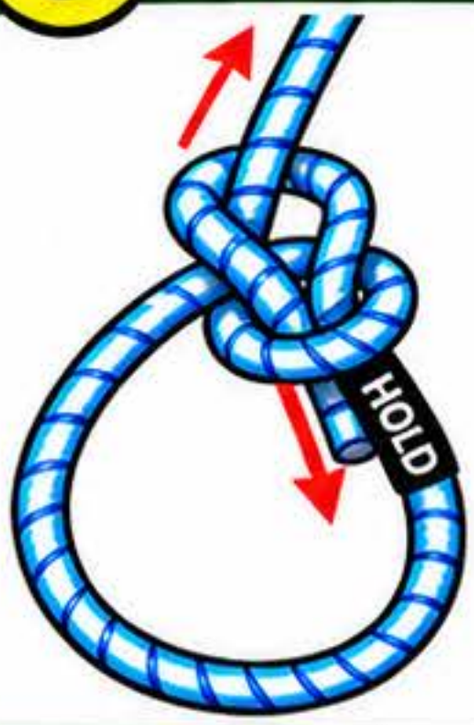
Pass the tag end through the rope loop.

2 Pass Behind and Through Again



Pass it behind the standing part and through the loop again.

3 Hold and Tighten



Hold the loop and tag end and pull to tighten.

4 The Knot is Made



The bowline knot is complete.

Key Points:

- ✔ Makes a fixed, non-slip loop.
- ✔ Strong and reliable.
- ✔ Easy to tie and undo.
- ✔ Works well in natural and man-made rope.

⚠ Note:
Ensure the knot is tied neatly and pulled tight before use.

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The Clove Hitch

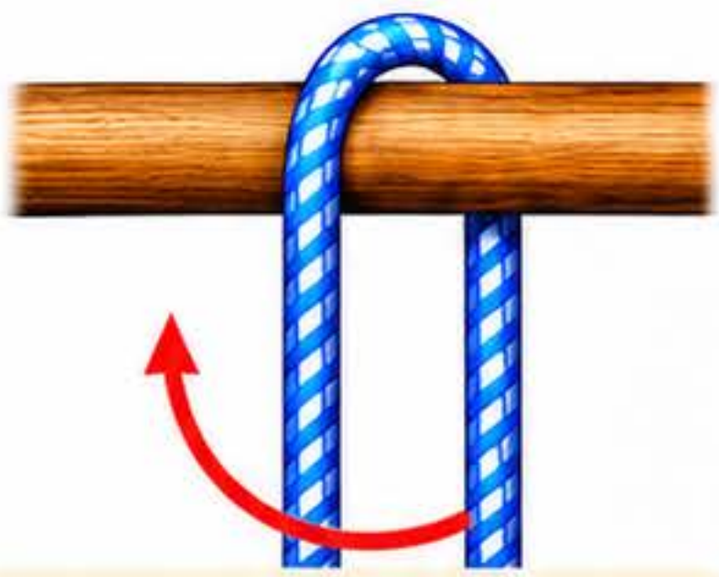
A quick and versatile hitch for securing a rope to a post, pole or tree. It grips well and can be adjusted easily.



Uses:

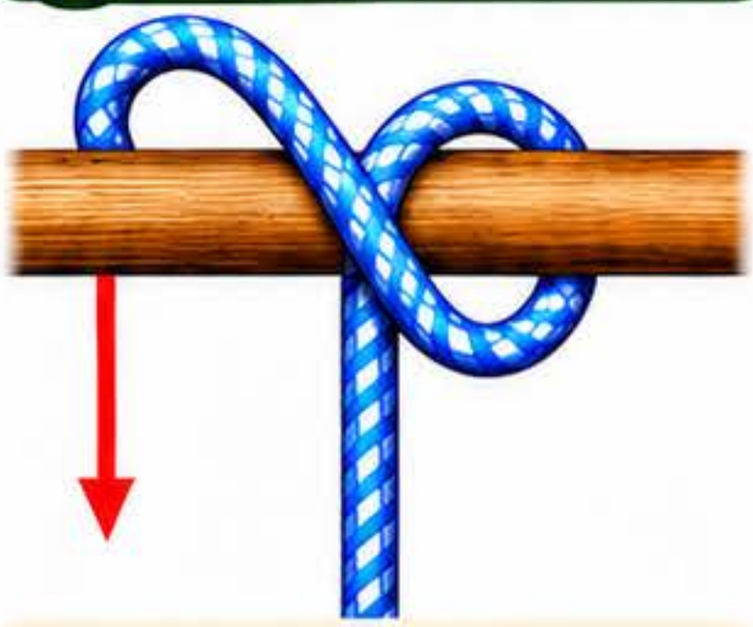
- ✓ Tying to poles or trees
- ✓ Starting lashings
- ✓ Temporary securing

1 Hang the Rope from the Support



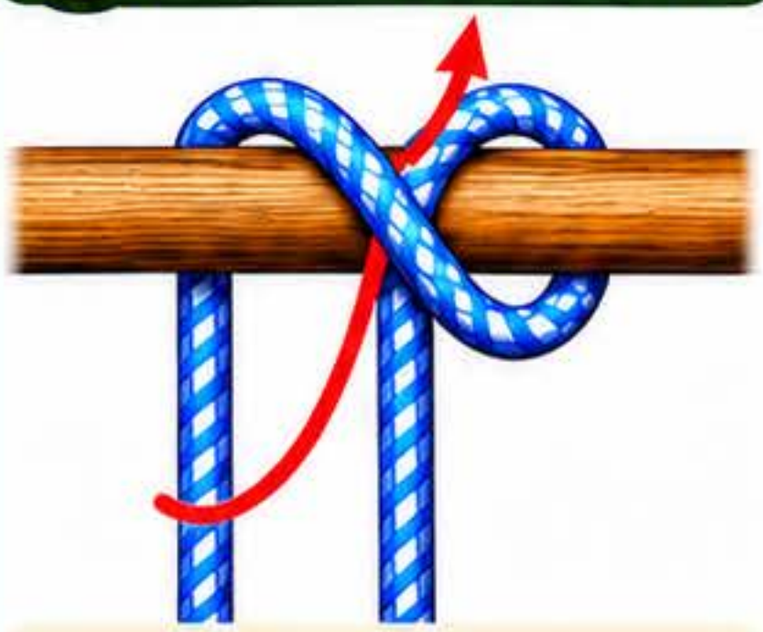
Hang the rope from the support.

2 Loop Around the Support with the End



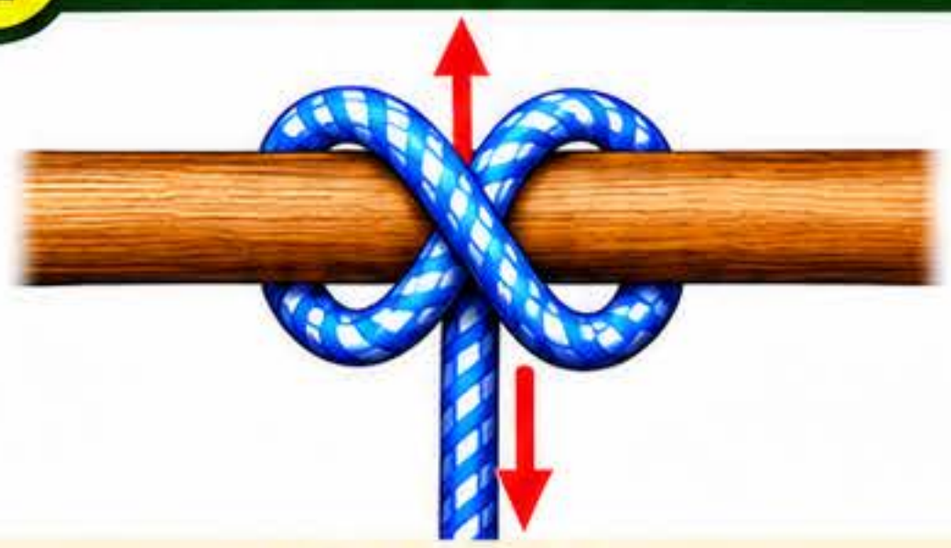
Loop around the support with the end.

3 Pass it from Behind the Rope



Pass it from behind the rope.

4 Pull to Tighten



Pull to tighten.

5 The Knot is Complete



The clove hitch is complete.

Key Points:

- ✓ Quick and easy to tie.
- ✓ Holds well under tension.
- ✓ Can be adjusted or released easily.
- ✓ Useful for campcraft and pioneering.

⚠ Note:

The clove hitch is ideal for light to medium loads and for temporary securing.

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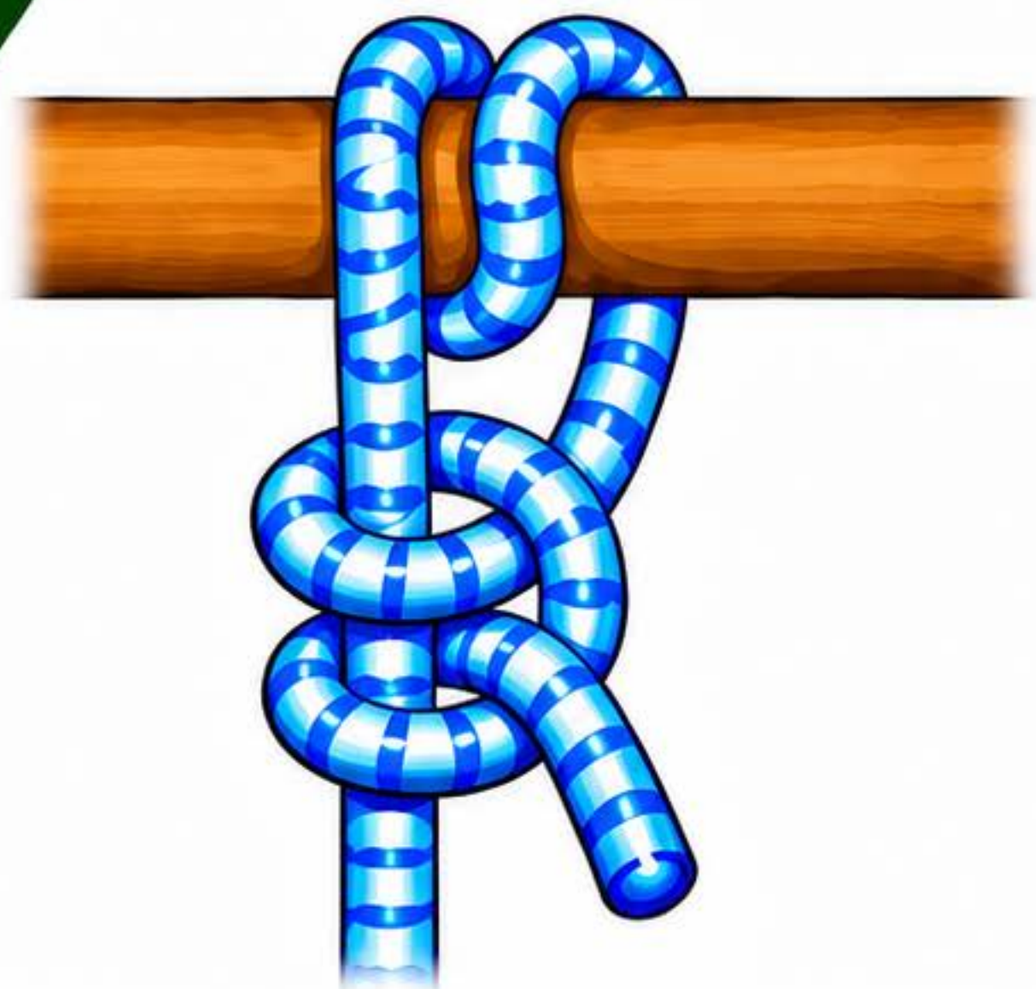
Round Turn & Two Half Hitches

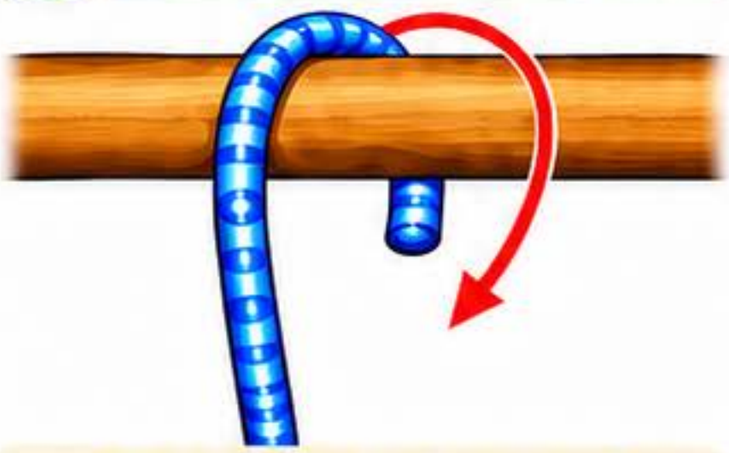
A strong and reliable knot for securing a rope to a post, ring or tree. It holds well under load and is easy to tie.



Uses:

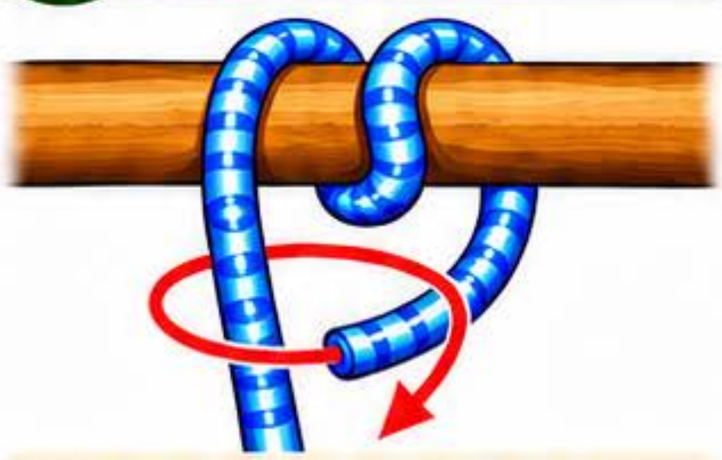
- ✓ Tying to fixings (posts, rings, stumps)
- ✓ Securing tarps and shelters
- ✓ General camp use

1 Wrap the End Around the Support



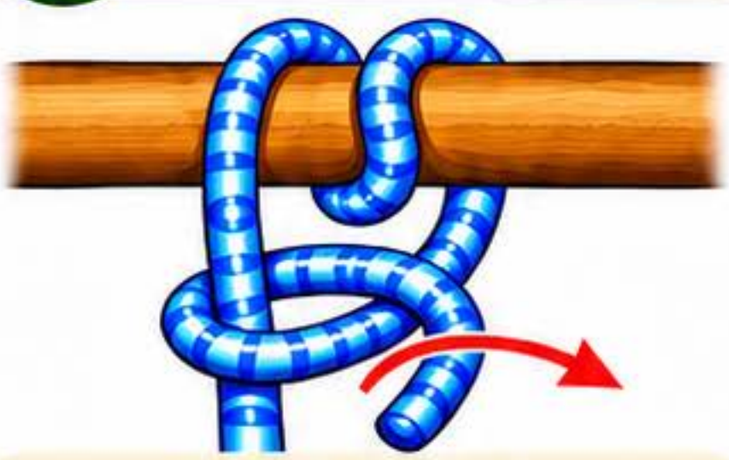
Wrap the end around the support.

2 Wrap it Around the Standing Part



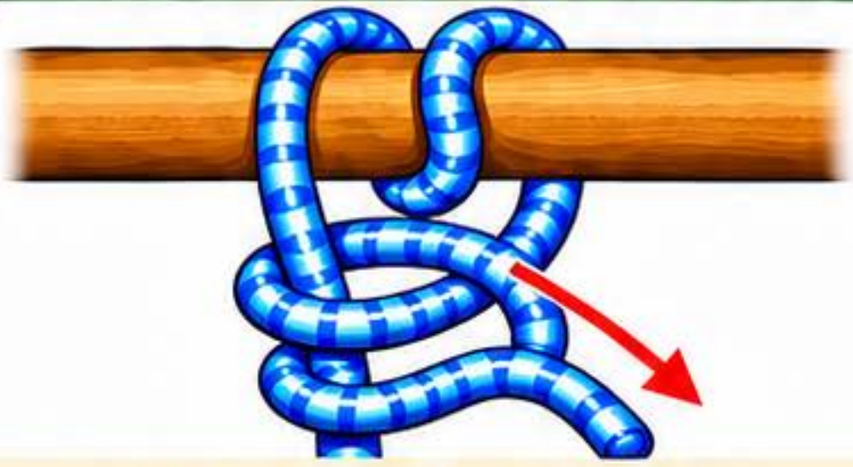
Wrap it around the standing part of the rope.

3 Make a Turn



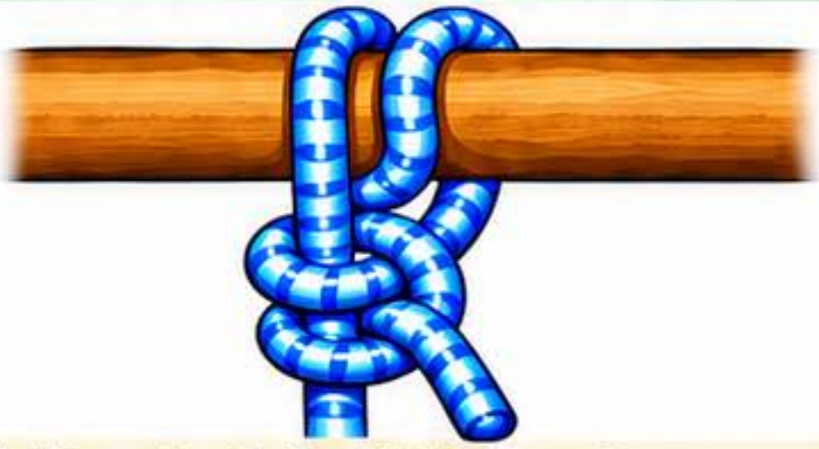
Make a turn (a second half hitch).

4 Make Another Turn



Make another turn.

5 Tighten and You are Done



Tighten both half hitches to secure.
The round turn and two half hitches is complete.

Key Points:

- ✓ Strong and secure knot.
- ✓ Holds well under load.
- ✓ Quick and easy to tie.
- ✓ Useful for campcraft and shelters.

⚠ Note:

Use two half hitches after the round turn for a secure and reliable knot.

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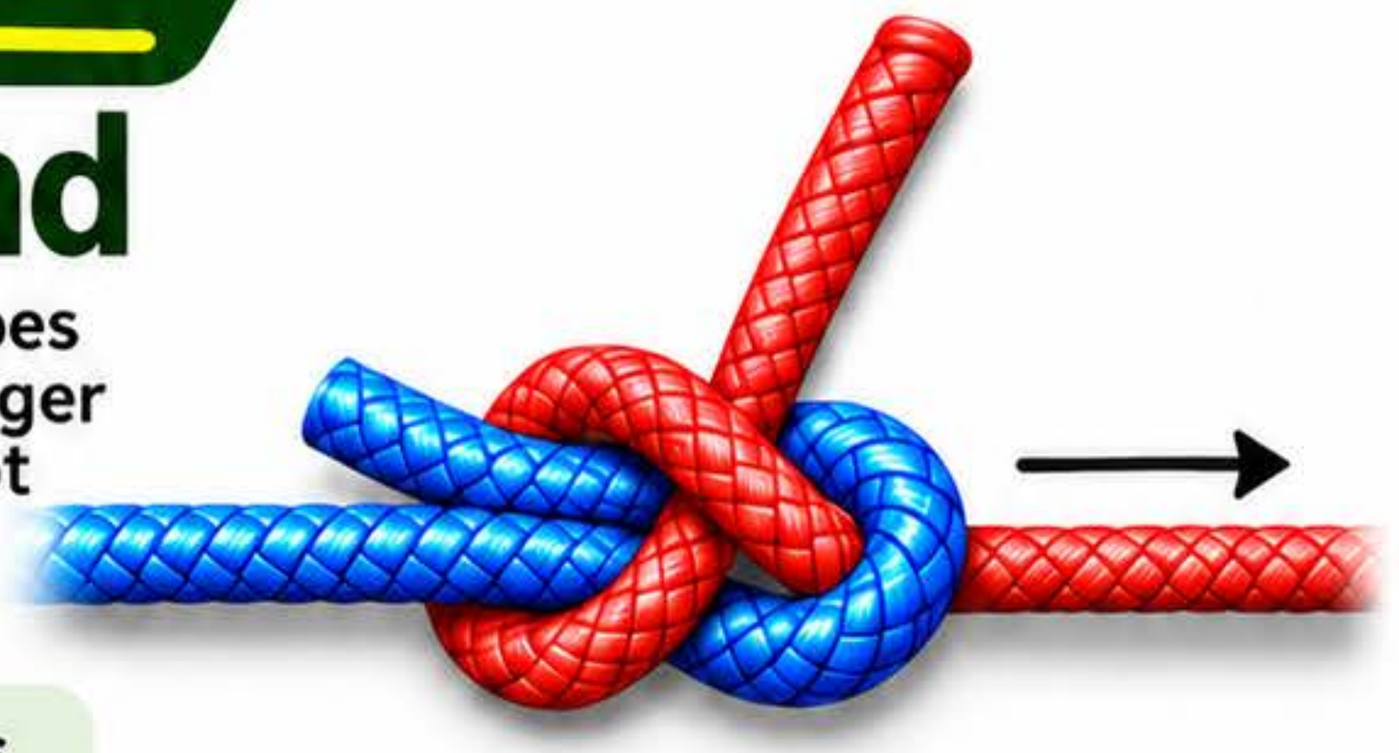
The Sheet Bend

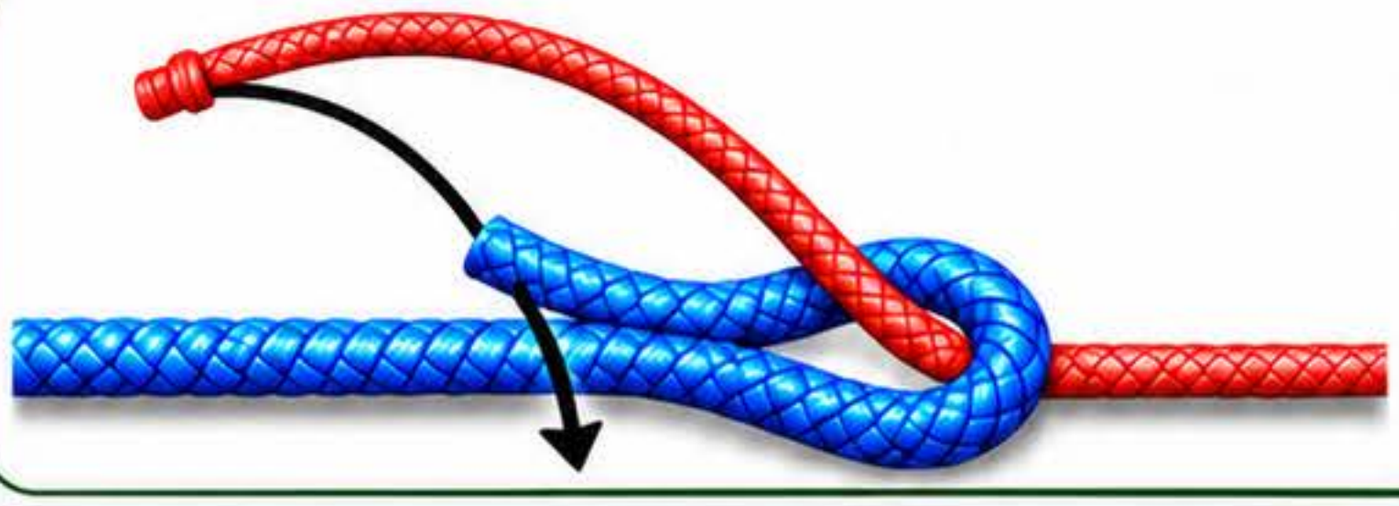


A reliable knot for joining two ropes of different thicknesses. It is stronger and more secure than a Reef Knot for this purpose.

Uses:

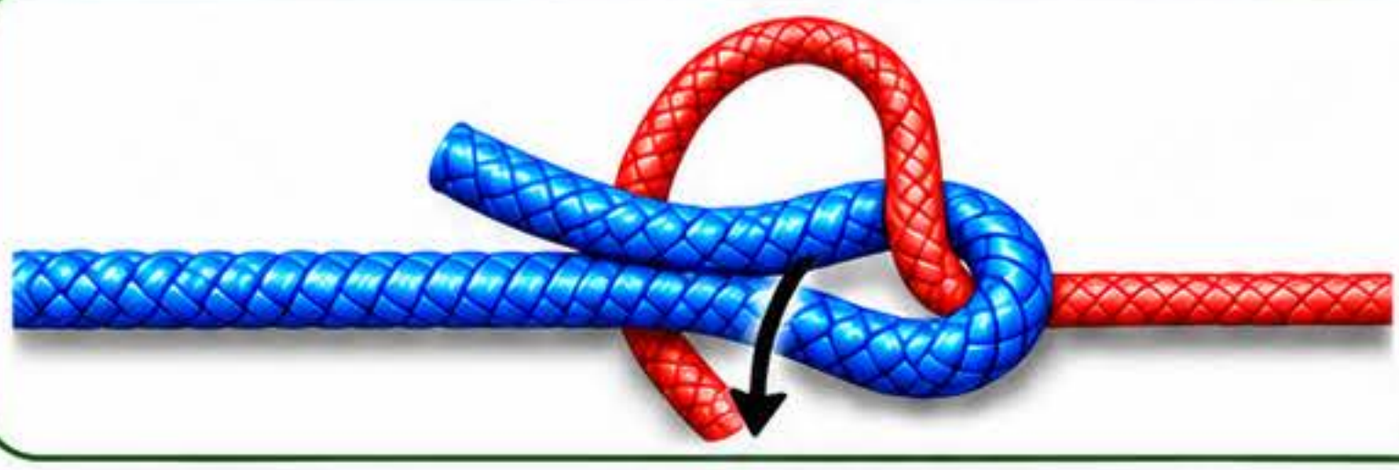
- ✓ Joining ropes of different sizes
- ✓ Extending a rope
- ✓ General camp and pioneering use

Sheet Bend – Step by Step



1 Pass the Thin Rope Through the Thick Rope

Pass the thinner rope through the bight (loop) of the thicker rope.



2 Wrap and Tuck

Wrap the thinner rope around the thicker rope and tuck it under itself.



3 Hold and Tighten

Hold the thicker rope and pull the thinner rope to tighten and secure the knot.

Key Points:

- ✓ Join two ropes of different sizes.
- ✓ Strong and more secure than a Reef Knot.
- ✓ Useful for extending ropes and camp projects.

⚠ Tip:

Make sure the thinner rope passes around and then under itself to form a secure Sheet Bend.

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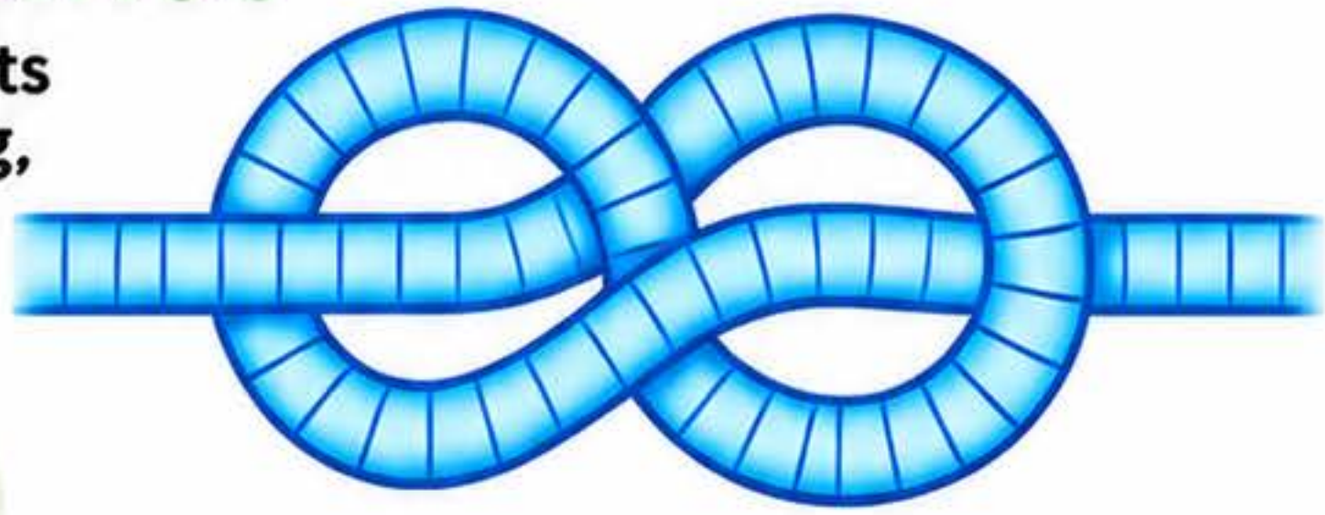
The Figure Eight Knot

A strong stopper knot that prevents a rope from running through a ring, pulley or hole. It is simple, strong and easy to check.

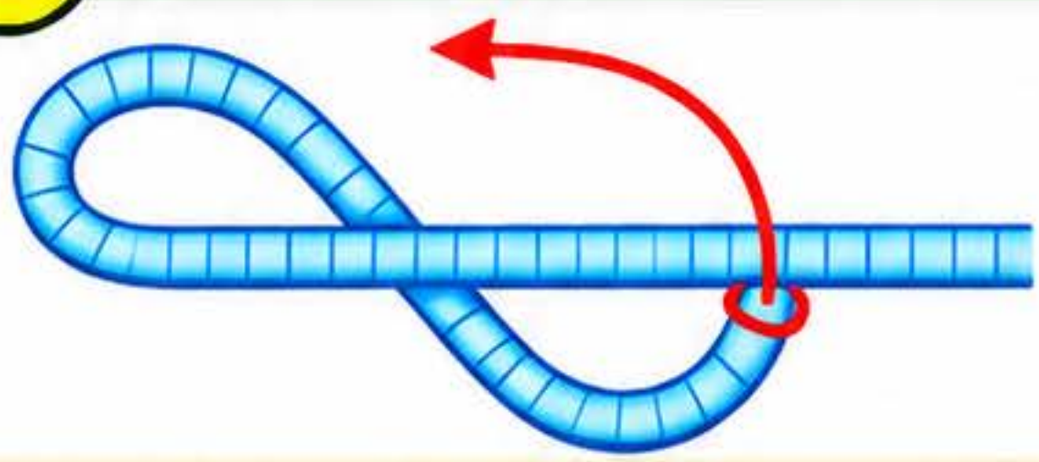


Uses:

- ✓ A stopper at the end of a rope
- ✓ Preventing a rope from slipping
- ✓ General safety and camp use

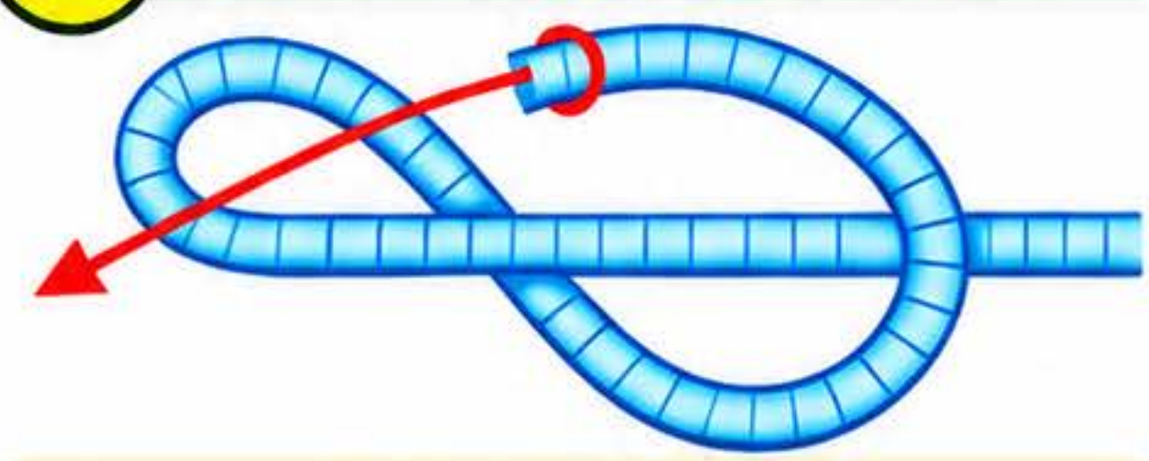
Figure Eight Knot – Step by Step

1 Make a Loop with an End



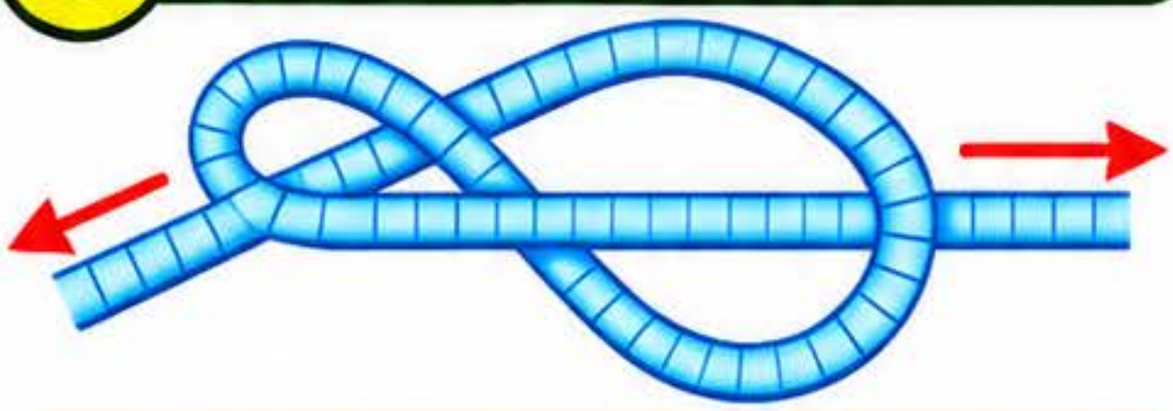
Make a loop with an end of the rope.

2 Pass the End Through



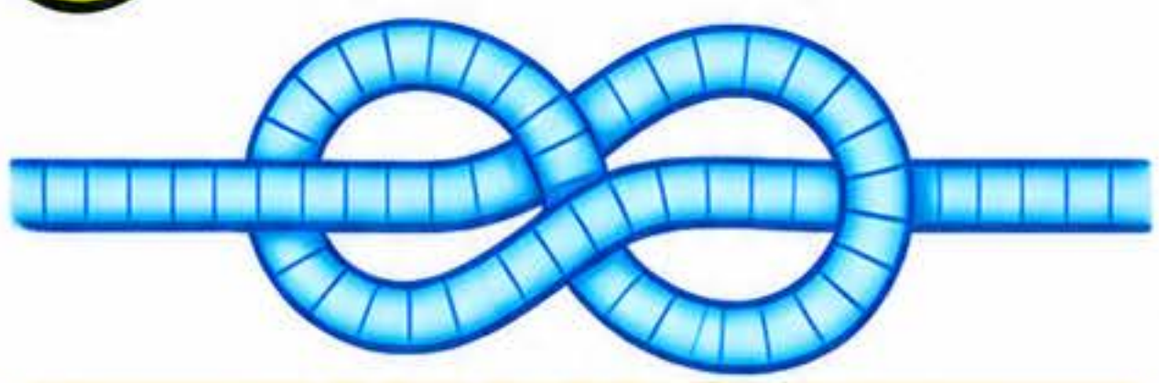
Now pass the end through the loop.

3 Pull Both Sides



Pull both sides to adjust the knot.

4 The Finished Knot



The finished knot resembles a figure eight (8).

Key Points:

- ✓ A strong and reliable stopper knot.
- ✓ Stops a rope from running through a ring, pulley of hole.
- ✓ Simple to tie and easy to check.
- ✓ Useful for camping, climbing and general scout activities.

⚠ Note:

The Figure Eight Knot is used as a stopper Knot. It is strong, reliable and less likely to jam than a simple overhand knot.

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The Timber Hitch



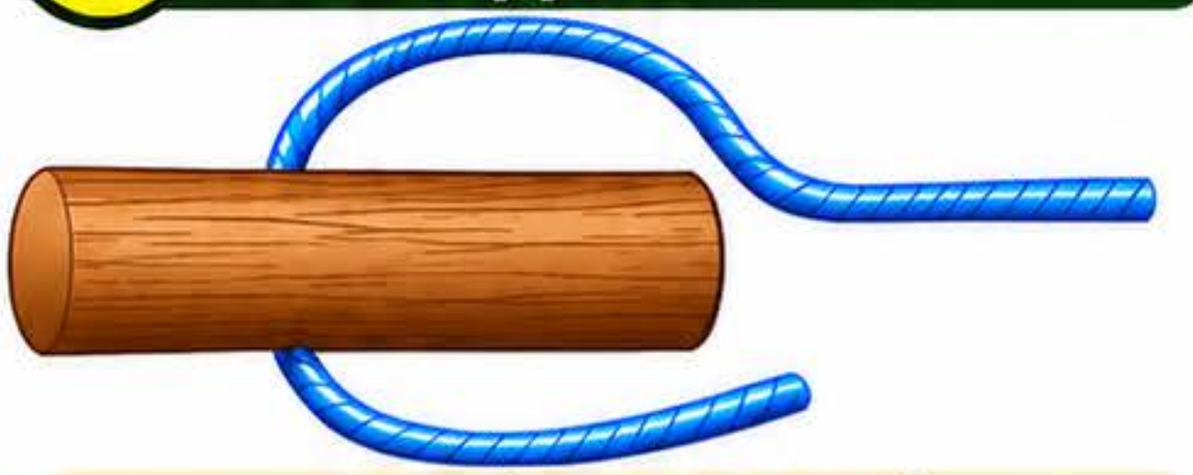
A strong, adjustable knot used for attaching a rope to a pole, log or bundle of wood. It grips tighter when under tension.

Uses:

- ✓ Dragging or pulling logs
- ✓ Securing a load
- ✓ Towing and camp work

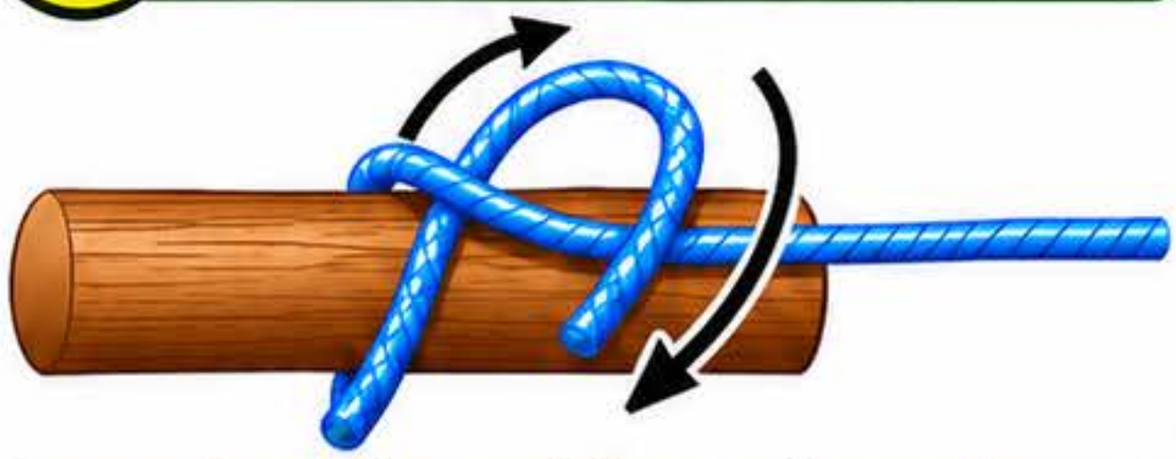
Timber Hitch – Step by Step

1 Wrap the Rope Round the Support



Wrap the rope round the support (pole or log).

2 Pass the Working End Round the Standing Part



Pass the working end round the standing part.

3 Pull it Through the Loop



Pull it to the left from below the loop formed.

4 Turn it Round Two More Times



Turn it round the standing part two more times.

5 Pull Both Ends Tight



Pull both ends tightly to secure the Timber Hitch.

⚠ Key Points:

- ✓ The Timber Hitch grips tighter when under tension.
- ✓ It can be adjusted along the log or pole.
- ✓ Useful for towing, securing loads and camp projects.

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Square Lashing

Used for tying two spars at right angles (90°).



A strong lashing used to join two poles at right angles. It is widely used in campcraft and pioneering for frames, tables, gateways and shelters.

Uses:

- ✔ Building camp furniture
- ✔ Making frames and gateways
- ✔ Pioneering projects

How to Tie a Square Lashing – Step by Step

1 Clove Hitch



Tie a clove hitch underneath the spar to be supported.

2 Wrap the End



Wrap the end around the spars as shown.

3 3 × Wrapping Turns



Make three wrapping turns around the spars, keeping the turns neat and tight.

4 Start Frapping Turns



Start the frapping turns by passing the rope around the wraps between the spars.

5 2–3 Fraps & Tighten



Make 2–3 frapping turns between the spars and tighten each turn.

6 1st Half Hitch



Tie the first half hitch on the opposite spar to the one where you started.

7 Tighten & 2nd Half Hitch



Tighten the wraps and tie a second half hitch on the same spar.

8 Tighten Clove Hitch



Tighten the clove hitch to secure and finish the lashing.

⚠ Key Points:

- ✔ Begin with a clove hitch underneath the spar.
- ✔ Make three wrapping turns around the spars.
- ✔ Apply 2–3 frapping turns between the spars.
- ✔ Finish with a clove hitch (two half hitches) on the opposite spar.
- ✔ Keep the running end tight at all times.

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Diagonal Lashing

Used for joining two spars that cross at an angle.



A strong lashing used to join two poles that cross, such as in a tripod or A-frame. It prevents the poles from moving apart.

Uses:

- ✔ Joining crossed poles (A-frames)
- ✔ Tripods and shelter frames
- ✔ General pioneering structures

How to Tie a Diagonal Lashing – Step by Step

1 Timber Hitch



Start with a timber hitch to draw the spars together and hold them in position.

2 First Turn & Pull Tight



Make the first turn around the crossed spars and pull it tight.

3 3 × Wrapping Turns



Make three wrapping turns around the crossed spars, keeping the rope neat and tight.

4 2nd Wrapping 3–4 Turns



Make three more wrapping turns (3–4 in total) in the same direction, keeping the turns tight.

5 Start Frapping Turns



Begin the frapping turns by passing the rope around the lashing between the wraps.

6 2–3 Frapping Turns



Add 2–3 frapping turns around the lashing to pull it tight and secure the wraps.

7 1st Half of Clove Hitch



Tie the first half of a clove hitch around the lashing.

8 2nd Half Hitch



Make the second half of the clove hitch on the lashing.

9 Tighten Clove Hitch



Pull the clove hitch tight to secure and finish the lashing.

Key Points:

- ✔ Start with a timber hitch to hold the spars.
- ✔ Make 3–4 wrapping turns around the spars.
- ✔ Add 2–3 frapping turns to tighten.
- ✔ Finish with a clove hitch (two half hitches).
- ✔ Keep the running end tight at all times.

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The Shear Lashing

Used to lash two or more poles together side by side.



A strong lashing used to join two or more poles side by side, typically for an A-frame or shear legs. It provides strength and stability.

Uses:

- ✔ A-frames and lifting rigs
- ✔ Shelter and gateway frames
- ✔ Pioneering and camp projects

How to Tie a Shear Lashing – Step by Step

1 Clove Hitch



Start with a clove hitch around just the left pole before beginning your wraps.

2 Wraps



Complete six wraps around both poles before beginning your first frap.

3 Frapping Turns



Complete two frapping turns between the poles.

4 Finish



Secure your loose end with a clove hitch and separate the poles to complete your lashing.

Key Points:

- ✔ Use a clove hitch to start and finish.
- ✔ Make six tight wraps around both poles.
- ✔ Add two frapping turns between the poles.
- ✔ Pull tight and keep the wraps neat and close together.



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The Tripod Lashing



A lashing that binds three poles together at one end to form a tripod. It is quick to tie and provides a strong, stable, freestanding frame.

Uses:

- ✔ Tripods for cooking (trivet)
- ✔ Hanging pots and lanterns
- ✔ Shelter and camp structures

1 Clove Hitch



Start with a clove hitch around all three poles to hold them together.

2 Secure End



Twist the working end around the standing part to secure it.

3 Wrapping Turns



Make several wrapping turns around all three poles.

4 Frapping Turn



Make a frapping turn by passing the rope around the wraps, from left to right.

5 Three Fraps & Tighten



Add three frapping turns around the wraps and pull them tight.

6 2nd Frapping Turns



Add a second set of frapping turns to secure the wraps firmly.

7 First Half Hitch



Make the first half hitch around the lashing.

8 Tighten & 2nd Half Hitch



Add a second half hitch and tighten both hitches.

9 Tighten Clove Hitch



Tighten the clove hitch to complete and secure the lashing.

Key Points:

- ✔ Use three similar-sized, straight poles.
- ✔ Keep the wraps neat and tight.
- ✔ Add three frapping turns (or more).
- ✔ Finish with two half hitches and tighten.

Scouts Bushcraft



Nettle Cordage – Step by Step

A traditional and accessible natural cordage made from the fibres of stinging nettles. It is strong, light and ideal for bushcraft projects.



Uses:

- Camp craft and simple lashings
- Bushcraft projects (pouches, cord, nets)
- A traditional woodland skill

1 Harvest the Nettles



Harvest mature nettle stems (wear gloves).

2 Peel the Outer Skin



Peel the outer skin away and discard the inner, woody pith.

3 Twist the Fibres Together (Reverse Wrap)



Twist the fibres together using the reverse wrap method (twisted).

4 Make the Cordage



Continue twisting to make a strong, even cordage.

Key Points:

- Use mature, healthy nettles (late spring to summer).
- Peel the outer skin away and discard the inner, woody pith.
- Twist the fibres together using the reverse wrap method.
- Keep twisting to make a strong, even cordage.

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- Keep twisting to make a strong, even cordage.

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Reverse Wrap (Twisted) Method

The most common method for making strong, natural cordage. Two twisted strands are wrapped together in the opposite direction, locking the fibres in place.



Key Points:

- Twist both strands the same way.
- Wrap them together in the opposite direction.
- Keep steady, even tension.

1 Twist Two Bundles



Twist two bundles of fibres in the same direction (e.g. clockwise).

2 Cross the Bundles



Cross the twisted bundles over each other.

3 Reverse Wrap



Wrap (twist) the bundles together in the opposite direction (e.g. anticlockwise).

4 Continue Twisting



Keep twisting and adding fibres to make a strong, even cordage.

Result:

A strong, natural cordage made using the reverse wrap (twisted) method.



Uses:

- Lashings and camp craft
- Bushcraft projects (pouches, cord, nets)
- A traditional wilderness skill

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Bushcraft Skills, Resources and Practical Guides for Scouts

The **Scouts Bushcraft** book series provides practical, easy-to-follow guides to help Scouts, Explorer Scouts, Scout Leaders and other youth groups learn outdoor skills, develop confidence, work as a team and build a greater understanding and respect for the natural world.

In This Series

- Expert, practical guidance
- Step-by-step activities
- Useful tips and techniques
- Printable worksheets and resources
- Ideas for meetings, activity days and camps
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