What is lashing?

Ropework and Construction

A **lashing** is an arrangement of rope, wire, cable, or webbing used to bind, fasten, or secure two or more items (such as timber poles or cargo) together in a rigid or semi-rigid manner.

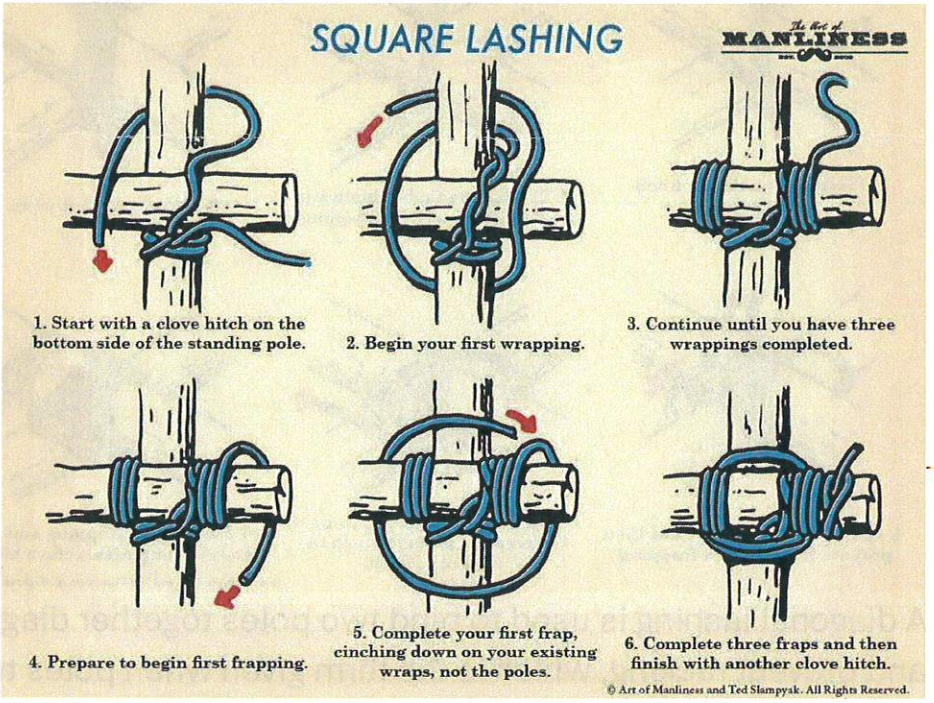
Core Components: It relies on:

1. **wraps** (winding cordage around the poles) and
2. **frappings** (winding cordage between the poles to pull and tighten the wraps).

Common Types:

Common types include:

1. **Square Lashing:** Used to join poles that cross at 90-degree angles.



A square lashing is used to bind two things (often logs/poles) together at a right angle. It is important to note that it is used for items that will be used at a right angle to the ground as well. If poles are intended to be used diagonal to the ground, or diagonal to their load, then a diagonal lashing should be used.

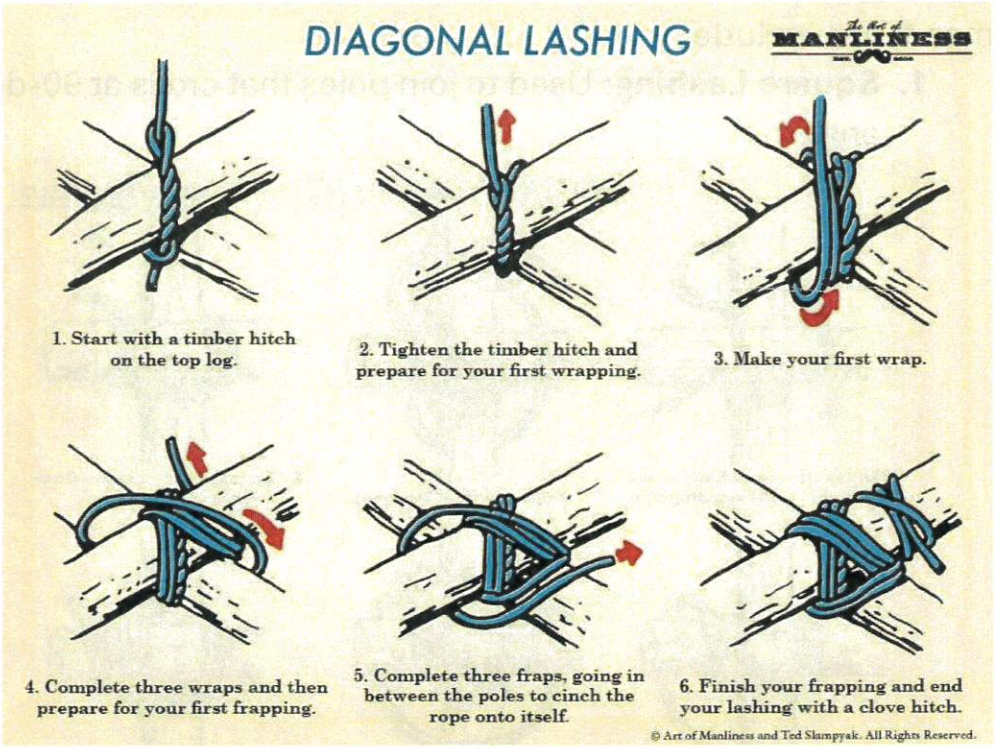
Square knot

R over L thru

L over R thru

1. Start with a clove hitch on the bottom side of the standing pole.
2. Begin your first wrapping.
3. Continue until you have three wrappings completed.
4. Prepare to begin first frapping
5. Complete your first frap, cinching down on your existing wraps, not the poles.
6. Complete three fraps and then finish with another clove hitch or tie a square knot using the tail from when you started.

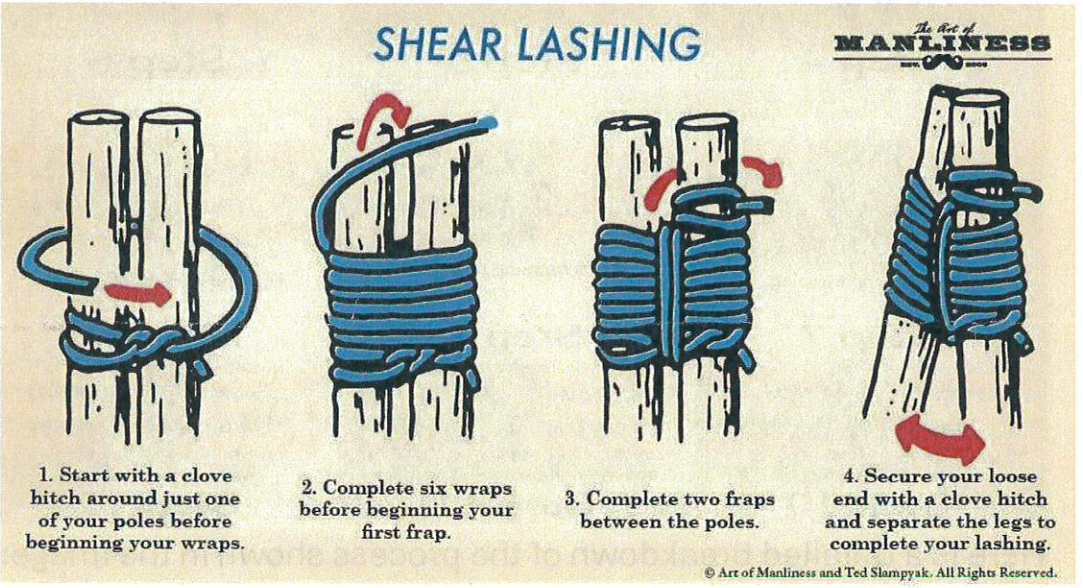
2 **Diagonal Lashing:** Used to bind poles that cross at acute or obtuse angles to prevent twisting ("racking").



A diagonal lashing is used to bind two poles together diagonally and prevent racking, which is the term given when poles twist or rotate within their lashing. Like a square lashing, the poles do come together at right angles, but in a diagonal lashing the poles themselves are diagonal to the ground or the load which they are supporting, like the legs of a picnic table.

1. Start with a timber hitch or clove hitch on the top log.
2. Tighten the hitch and prepare for your first wrapping.
3. Make your first wrap.
4. Complete three wraps and then prepare for your first frapping.
5. Complete three fraps, going in between the poles to cinch the rope onto itself.
6. Finish your frapping and end your lashing with a clove hitch or tie a square knot with the tail from when you started.

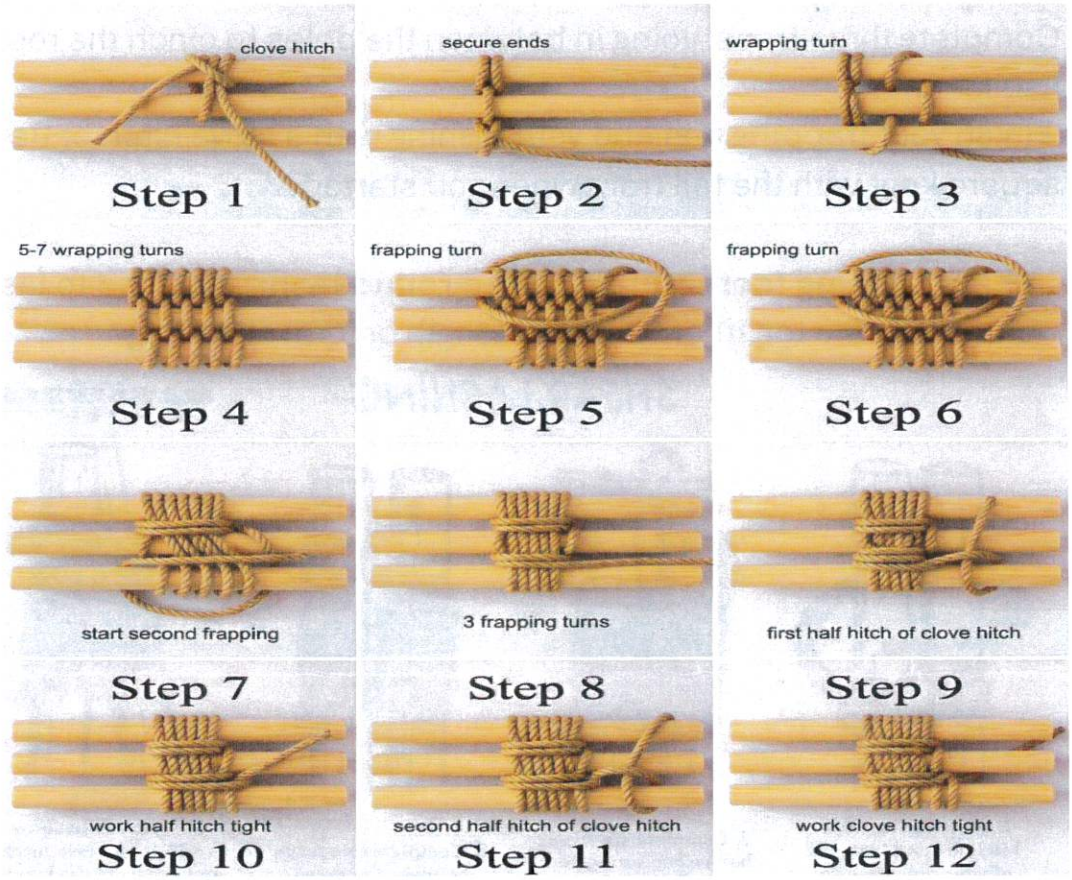
Shear Lashing (sometimes called round lashing): Used to lash parallel spars together to extend length or form shear legs.



A shear lashing is used when you need to bind two poles at their tops so that they can ultimately support weight, like the legs of a sawhorse or the basic supports of an A-frame structure. When starting a shear lashing, begin with your poles parallel and adjacent to each other. After the lashing is completed, you can separate the legs to create the basic A-frame shape.

1. Start with a clove hitch around just one of your poles before beginning your wraps.
2. Complete six wraps before beginning your first frap.
3. Complete two fraps between the poles.
4. Secure your loose end with a clove hitch or tie a square knot with the tail from when you started.

Tripod Lashing: Used to connect three poles for building tripods, towers, or camp furniture.



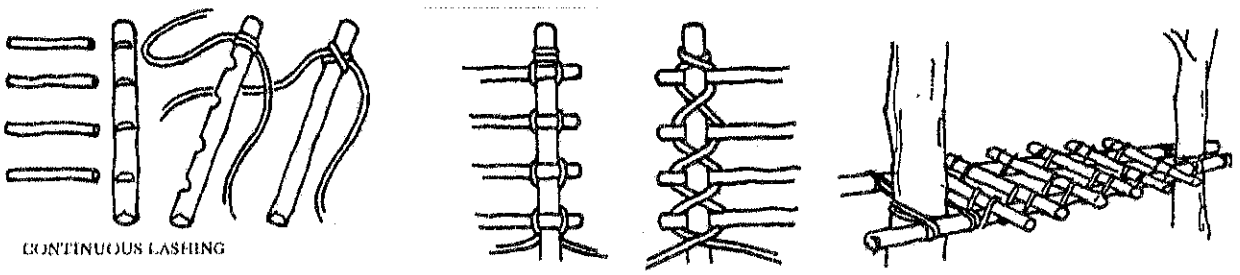
Here is a detailed breakdown of the process shown in the image:

1. (clove hitch): The process begins by tying a clove hitch knot around one of the outside poles (in this case, the top pole). A long working end of the rope hangs down.
2. (wrapping turn): The rope is woven over and under the three parallel poles. It goes down under the middle pole and up over the bottom pole to begin the weave.
3. The weaving pattern (over and under) is repeated tightly. The image shows a neat, tight block of 5 to 7 wrapping turns across all three poles.
4. (frapping turn): The rope changes direction to begin frapping (wrapping the rope around the lashing itself, between the poles, to

pull the joint tightly together). The rope is threaded between the top and middle poles.

5. (start second frapping): The rope is then guided down to start a second set of frapping turns in the gap between the middle and bottom poles.
6. Finish with a clove hitch. Open into tripod shape

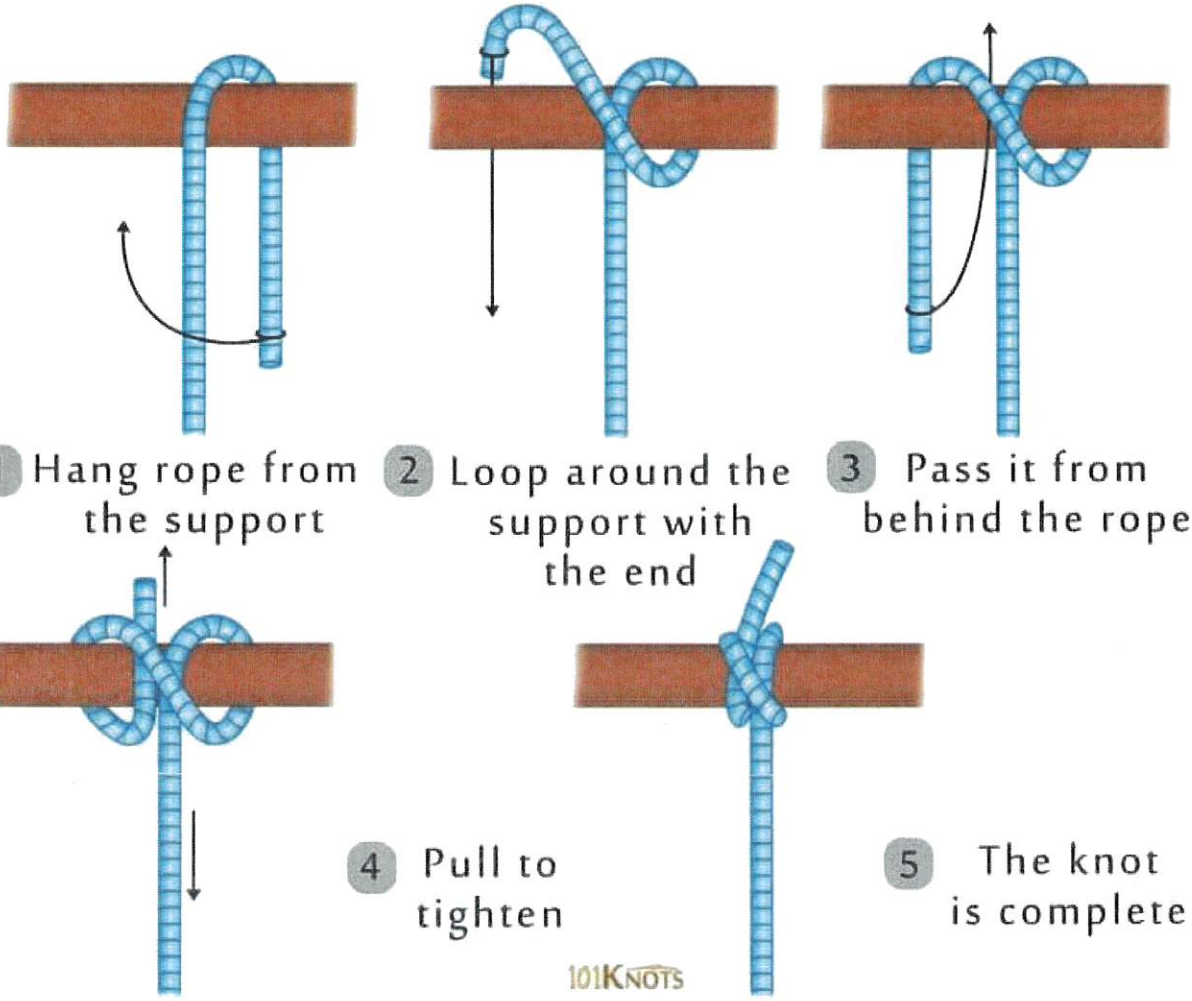
Continuous Lashing:



If you want to make a shelf or dishwashing station, you begin by square lashing two long poles between two trees (if you don't have trees, you will need to make legs for the ends and square lash the poles to the legs. Now begins the continuous part. You will need lots of small sticks (notching isn't required) to create your shelf on the two long poles. If you have three people working, two will wrap twine and one will feed the sticks between wraps. Measure twine that is about 4-5 times the length of your finished structure for each person wrapping. Find the center and wrap the twine around each hand. Using this center, tie a clove hitch around the cross pole for each side. The third person now lays a stick between the two poles. Working together, each person wrapping goes over the pole (one hand inside the poles, one outside), down under the pole, making a cross (switch bundles to opposite hands while underneath). Each person continues working in unison, bringing the twine up, over another stick, down, and cross, until your shelf is complete. End the lashing with a square knot. The design possibilities for this type of lashing are endless.

Footnote – these diagrams and instructions were taken from various internet sites. Some were slightly modified. AD 10/16/26

Clove Hitch Tutorial



1 Hang rope from the support

2 Loop around the support with the end

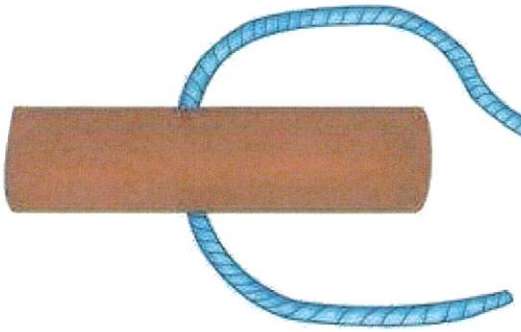
3 Pass it from behind the rope

4 Pull to tighten

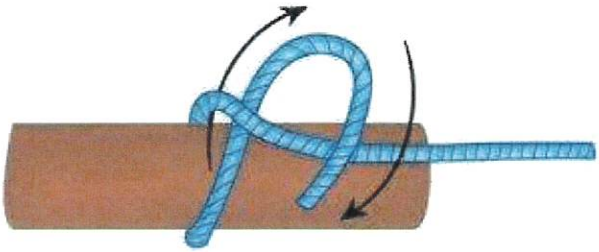
5 The knot is complete

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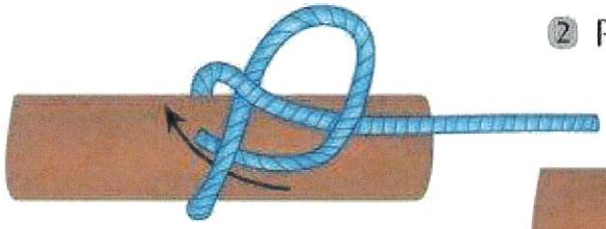
How to Tie a Timber Hitch



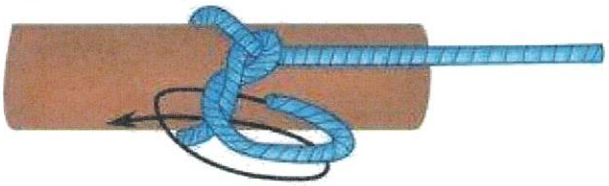
1 Wrap the rope round the support



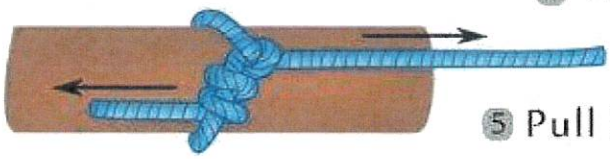
2 Pass the working end round the standing part



3 Pull it to the left from below the loop formed



4 Turn it round two more times



5 Pull both ends tightly to secure

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