

Tuck the strands over and under once, as is done in the back splice. Cut away about half of the yarn from the under side of each strand and tuck again. Trimming away the yarn gives a taper to the splice. Sometimes the trimming and tucking is done a third time. Then pound the tucks down into the lay of the rope, stretch the rope taut, and clip off the strand ends.

In another method (not illustrated), the strands are not tied with the overhand and the tucking is done with the lay, so that strand 1A, for example, would be wound about only strand 2A, instead of weaving under and over all three strands of the rope body. This method of following the lay ("sail-maker's method") is preferred by some experts for all splices.

### INTRODUCTION TO LASHINGS

Like knots and splicings, there are many kinds of lashings. Lashings is a broad term with several meanings, but for our purposes the term lashings will denote a method of binding poles together in different positions with a piece of rope. It is also used for wrapping and fastening, such as binding a rope to a tool, etc. It may also denote binding two rope parts together with a smaller cord; however, this is usually considered seizing. The lashings that we will consider here are: The Traditional Square Lashing, the Japanese Square Lashing, the Diagonal Lashing, the Round Lashing, the Traditional Shear Lashing, the Square Shear Lashing, the Traditional Tripod Lashing, the Sailmaker's 3 Pole Lashing and the Sailmaker's 4 Pole Lashing.

### LASHING LENGTHS AND THICKNESSES

Lashing ropes will have to vary with the size of the poles being used. A formula that is often used is to consider about one yard of lashing for each inch of the combined diameter of the two poles being used. If you are lashing a two inch pole to a four inch pole, you will need approximately 6 yards or 18 feet of lashing rope. Most of the lashing requirements fit this formula, except for the Japanese square lashing which needs to be about one third longer.

Thickness of lashing ropes will be determined by the thickness of the poles being lashed together. For poles up to  $1\frac{1}{2}$  inches in diameter use twine or sash cord. Twine is very poor but it is cheap. For poles between  $1\frac{1}{2}$  and 3 inches, use  $\frac{1}{2}$  inch cotton rope. For poles over three inches in diameter, use a rope with a  $\frac{3}{8}$  inch diameter.

### THE TRADITIONAL SQUARE LASHING

The traditional square lashing (Figure 174) is used whenever two poles cross, touching each other where they cross. It has nothing to do with the angles at which the poles are set to each other. The lashing is started with a clove hitch around the upright, immediately

under the cross piece. Twist the end of the clove hitch around the standing part. In wrapping the first 3 or 4 turns, the rope goes on the outside of the previous turns around the crosspiece; on the inside of the previous turns around the upright. Keep the rope tight at all times and make a smooth job. The wrapping procedure is shown in Figure 174 followed by the frappings. After the wraps, the frapping turns go on between the spars to help tighten the wrapping turns. Strain the 2 or 3 frapping turns tightly and finish with a clove hitch. Remember, start with a clove, wrap thrice, frap twice and end with a clove.

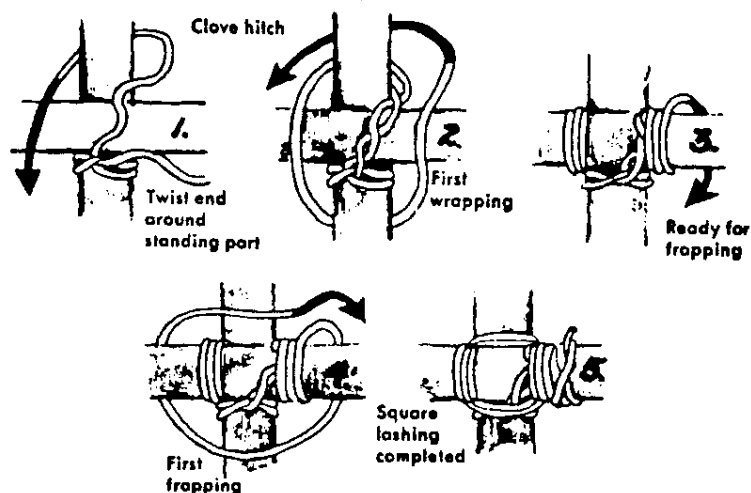


Figure 174 The Traditional Square Lashing

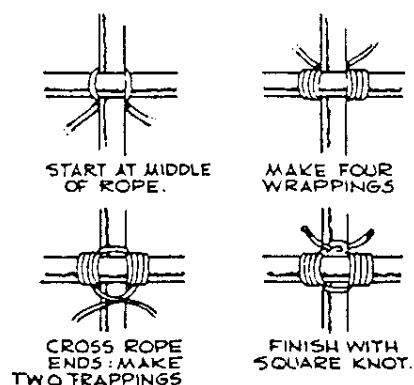


Figure 175 The Japanese Square Lashing

#### THE JAPANESE SQUARE LASHING

The Japanese square lashing (Figure 175) is a lashing equally as good as the traditional square, but it is easier to apply even though the lashing rope has to be one third longer than the lashing for the traditional square. Start the lashing by doubling the rope and passing the bight in back of the upright. Keeping the two rope ends side by side and never over-riding previous turns, take two complete turns around both poles as in Figure 175. Then split the doubled rope and make two or three frapping turns in opposite directions, pulling tightly and then finish with a square knot.

#### THE DIAGONAL LASHING

Diagonal lashing (Figure 176) is used when two poles have a tendency to spring apart. It has nothing to do with the angle of the two poles being lashed together. If two poles have to be pulled together in order to make them touch each other, a diagonal lashing is indicated. Start by pulling the two poles together with a timber hitch. When wrapping the turns, be sure that the turns lay beside each other rather than overlapping each other. Take three more turns, this time cross-wise over the previous turns. Pull tightly. Make 2 or 3 frapping

turns between the poles around the wraps and finish with a clove hitch around any convenient pole.

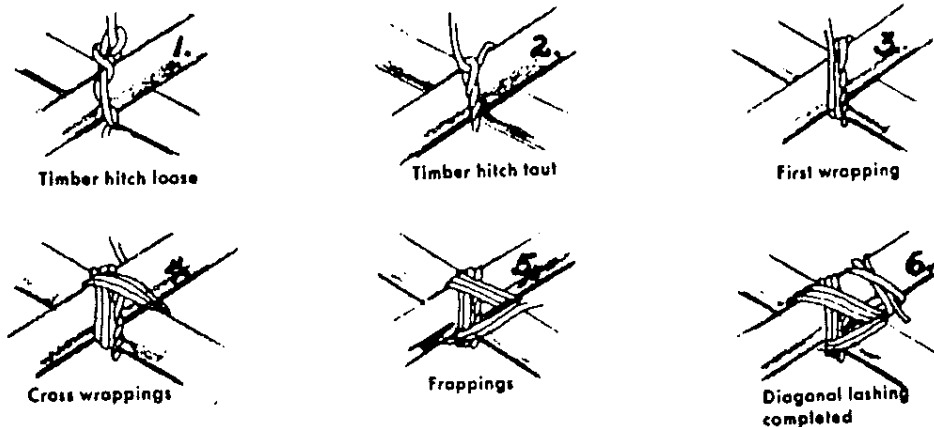


Figure 176 The Diagonal Lashing

#### THE ROUND LASHING

The round lashing as shown in Figure 177 is used to extend several shorter poles into a longer pole. Place two poles side by side overlapping the poles from  $1/4$  to  $2/3$ . Put a tight clove hitch around both poles and tightly make 7 to 10 wrappings around both poles. Then finish with a tight clove hitch around both poles. It requires 2 lashings for each pole that you want to lash together.



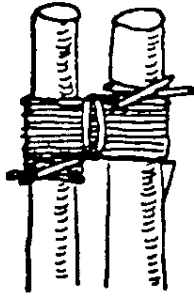
Figure 177 The Round Lashing

#### THE TRADITIONAL SHEAR LASHING

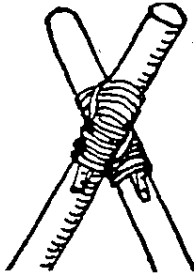
The traditional shear lashing (Figure 178-A) is made by laying two poles together, which when finished, will make shear legs as shown in Figure 178-B. Place a clove hitch around one of the poles. Then lash the two poles together with 8 or 10 loosely laid wrappings. Then take two frapping turns around the wrappings and finish with a clove hitch around either one of the poles. This lashing will tighten as the shear legs are spread apart. If a crosspiece is needed on the lower aspect of the legs, it is lashed on with a square lashing. See Figure 178-C.

#### THE SQUARE SHEAR LASHING

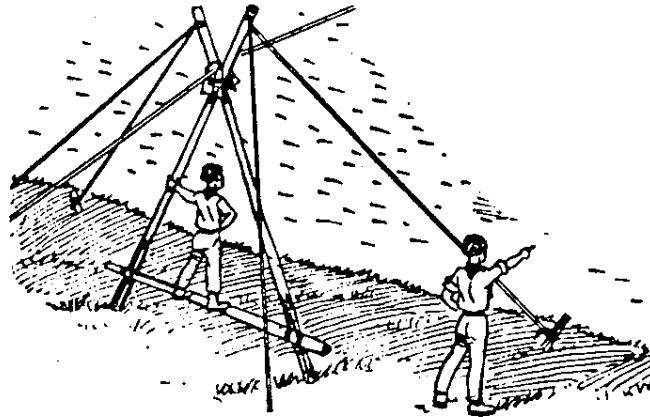
The square shear lashing (Figure 179) is another method of tying shear legs together. Start the lashing by laying the lashing rope



A. Traditional Shear Lashing



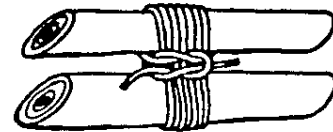
B. Opened Shear Legs



C. Shear Legs with Crosspiece

Figure 178 The Traditional Shear Lashing

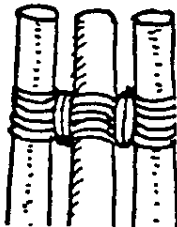
between the two poles near the end. Let the short 12 to 15 inch end hang free. Then with the long end wrap the two poles 8 to 10 times keeping the wraps snug and close together. Allow the second 12 to 15 inch end to hang free between the poles with the two ends coming out on the same side. Frap the wraps once or twice by taking the two ends around the frapping turns in different directions and finish off with a square knot. The shear legs are now ready to be spread. This lashing is just as good as the traditional shear lashing.



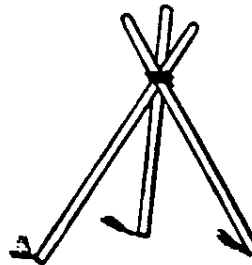
The Square  
Figure 179 Shear Lashing

### THE TRIPOD LASHING

The tripod lashing is seen in Figure 180-A. Place three poles beside each other and put a clove hitch around the outside pole with a lashing rope. Then bring the rope over and under the poles 5 to 7 times, figure-of-eight-wise. Finish with two loose frappings and a clove hitch around one of the poles. To make the tripod, spread the poles as in Figure 180-B.



A. The Traditional Tripod Lashing



B. A Lashed Tripod

Figure 180 The Tripod Lashing

### THE SAILMAKER'S 3 POLE LASHING

The sailmaker's 3 pole or tripod lashing is another method of making a tripod. It is clearly illustrated in Figure 181 from start to finish. This is not only a good lashing to use but it is a very good looking lashing. After the three poles are wrapped 8 - 10 times the bight is brought up over the indicated poles and pulled taut by pulling on the two ends. The bottom rope end is then brought up and over the wrappings between the poles where there is no vertical rope laying and the two ends are tied together on top of the lashing with a square knot.

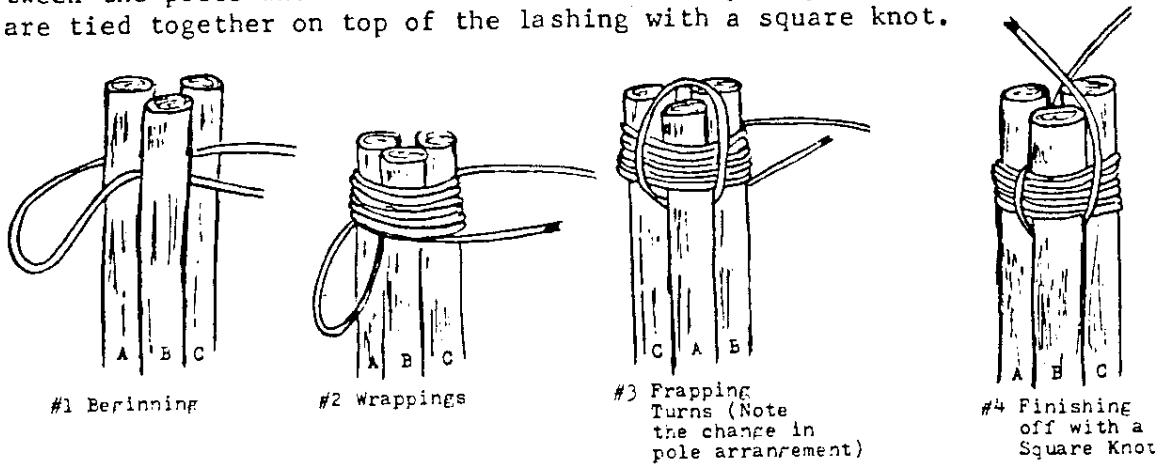


Figure 181 The Sailmaker's 3 Pole or Tripod Lashing

### THE SAILMAKER'S 4 POLE LASHING

This lashing is made to lash 4 poles together into a quadruped. It is illustrated in Figure 182-A. It is started with a modified figure-of-eight around two of the four poles. Then it is wrapped from the bottom up as in the 3 pole lashing 8 to 10 times. After the wrappings are on, the two loops are flipped up and over the indicated poles on each side and tightened down. The bottom end is then brought up between any two of the poles and secured to the other end with a square knot. This makes an excellent lashing for building a Chippewa table as seen in Figure 182-B.

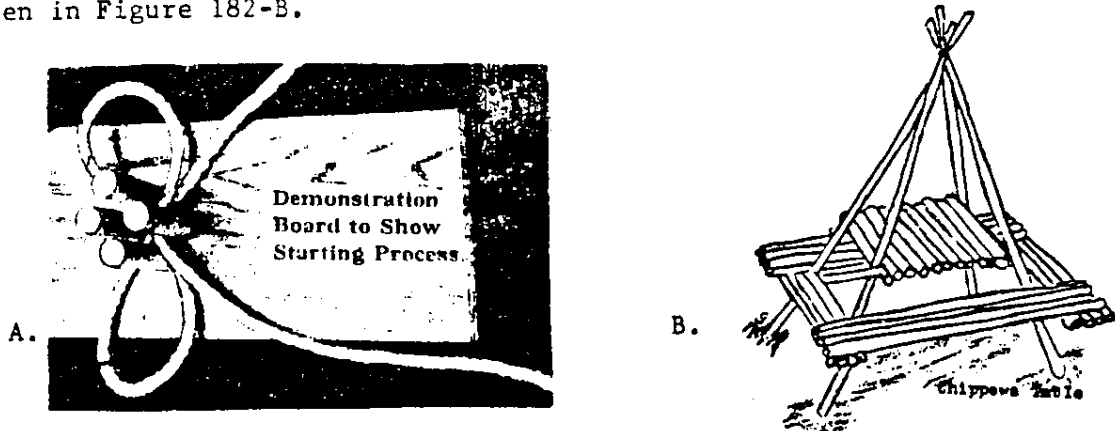


Figure 182 The Sailmaker's 4 Pole Lashing