

# KNOT KNOWLEDGE

## PHOTO-ILLUSTRATIONS

Twenty-three practical knots are presented with photographs of the steps involved in tying each knot. Every step is also described in text. It is not the function (yet) of Knot Knowledge to teach how to use these knots, so please do not use friction hitches for dangerous activities like climbing rope unless you have been properly trained. Knot Knowledge provides in its [lexicon](#) definitions of the few knot tying terms used in the text descriptions.

Clicking on a category shows all the knots within that category on one page. Clicking on the name of a knot shows just that knot.

- [Single Loop Knots Page](#) (272K)
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  - [Figure 8 Loop](#)
  - [In Line Figure 8 Loop](#)
  - [Butterfly Knot](#)
- [Double Loop Knots Page](#) (297K)
  - [Spanish Bowline](#)
  - ["A Rigid Double Splayed Loop in the Bight" \(ABoK #1100\)](#)
  - [Triple Crown Knot](#)
  - [Bowline on a Bight](#)
- [Hitches Page](#) (324K)

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    - [Double Overhand Knot](#)
  
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    - [Sheet Bend](#)
    - [Full Carrick Bend](#)
  
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    - [Kreutzklem](#)
    - [Prusik](#)
    - [Kleimheist](#)
    - [Tautline Hitch \(aka Rolling Hitch\)](#)
    - [Sliding Sheet Bend](#)
- 

## Links:

- If you didn't find the knot you wanted on Knot Knowledge, try Peter Suber's [Knots on the Web](#). It's the most complete index of knot-related web sites on the web.

- [Roper's Knot Page](#) is Ed Prins' knot-related website index, which also has an [instruction section](#).
- Want to tie a rope halter for your horse? The Fiador (aka Theodore) knot can be found on [Part II](#) of Connie Nygard's [Rope Halter website](#).
- The trucker's hitch is a frequent request. It can be found on NetKnots.com's [Outdoor Knots](#) page.
- For information on using the Blake's Hitch in recreational tree climbing, check out Peter Jenkins' [Tree Climbers International](#) website.
- See the \*NEW\* knots on the [contributions page](#).



# KNOT KNOWLEDGE

## Lexicon

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**Here is a brief explanation of the few knot terms used in Knot Knowledge:**

**bend** - a knot used for joining two ends together

**bight** - a semi-circle of rope where the rope does not cross itself; also the part of the rope between the standing part and the end that can be used in tying the knot

**dress** - to remove slack in the knot by drawing up the knot neatly; to make sure the knot is tied correctly, that all parts are where they should be

**end** - the end of the rope

**friction hitch** - a knot tied directly to the standing part, another rope, or a cylindrical object that is adjustable (can be slid) when the knot itself is grabbed and moved, but otherwise stays put (from friction) when the load is

**on the standing part**

**hitch** - a knot that attaches a rope directly to an object

**loop** - a circle of rope in which the rope crosses itself

**set** - to fully tighten a knot by pulling on all parts

**slip** - to use a bight of rope instead of the end when finishing tying a knot; used to make untying a knot easier

**standing part** - the part of the rope not used in the knot itself

**stopper knot** - a bulky knot that is used to prevent the rope from pulling through a hole or pulley

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# KNOT KNOWLEDGE

## SINGLE LOOP KNOTS

[\[Bowline\]](#)

[\[Figure 8 Loop\]](#)

[\[In Line Figure 8 Loop\]](#)

[\[Butterfly Knot\]](#)

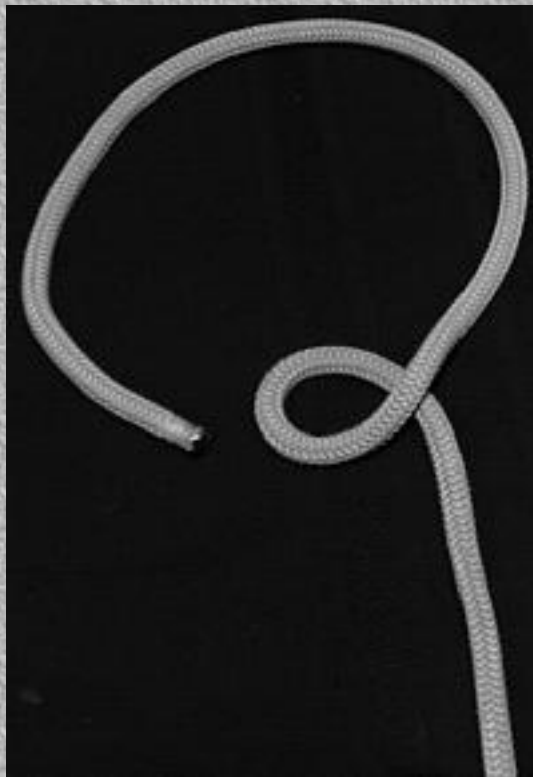
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### Bowline

There are several variations on tying the bowline, two of which are presented here. I start with one method of tying that is simple to photograph and then demonstrate the [one handed twist](#) method, which is an easy and reliable way of forming the loop in the standing part.

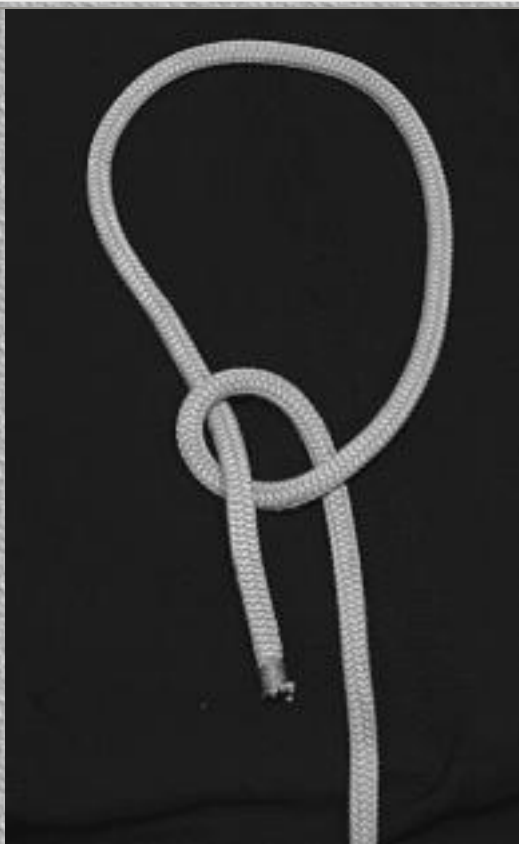
*Step #1*

**Arrange the rope as shown, with a small loop in the standing part and the end going around the object the loop is to be tied around.**



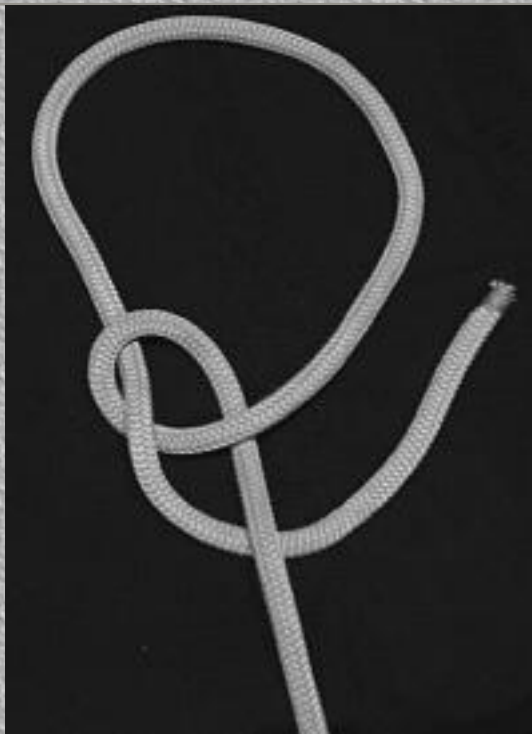
## *Step #2*

**Insert the end through the loop.**



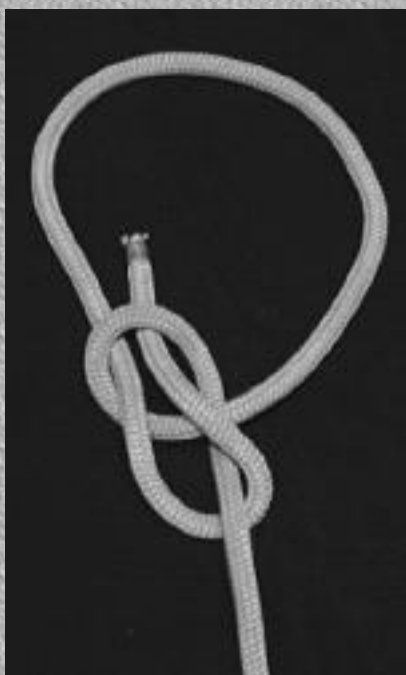
### *Step #3*

**Pull the end around and behind the standing part.**



### *Step #4*

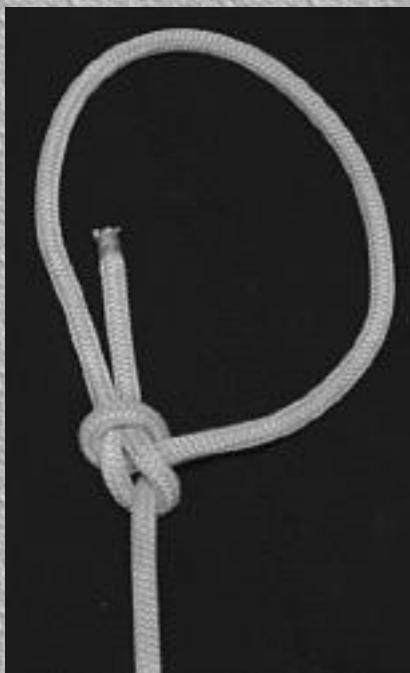
**Insert the end back through the loop.**





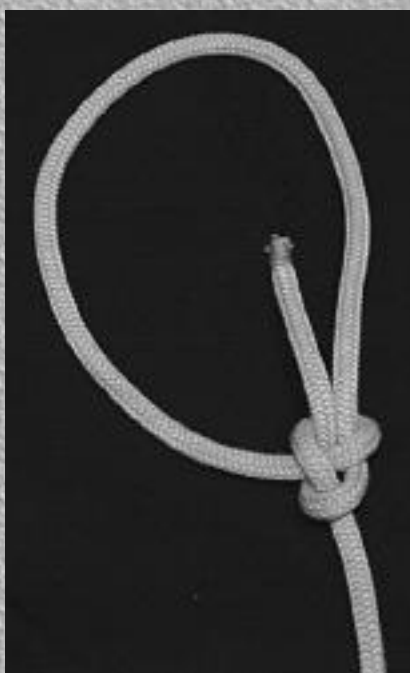
## *Finished Bowline - Front View*

**Dress and set the knot.**



## *Finished Bowline - Rear View*

**Dress and set the knot.**



## Bowline - One Handed Twist Method

This is a fast and reliable method for making the loop in the standing part. This method can also be used to tie a [sheet bend](#). To use this method for a sheet bend, instead of twisting the end into a loop in its own standing part (as shown below), twist a loop very near the end of a second rope. Be sure that the end of the rope you have in your hand is pointing up and the end of the second rope (that you'll be twisting a loop into) is pointing down.

### *Bowline - One Handed Twist Method - Step #1*

**Grab the end of the rope and place it across the standing part. Place your thumb under the standing part.**



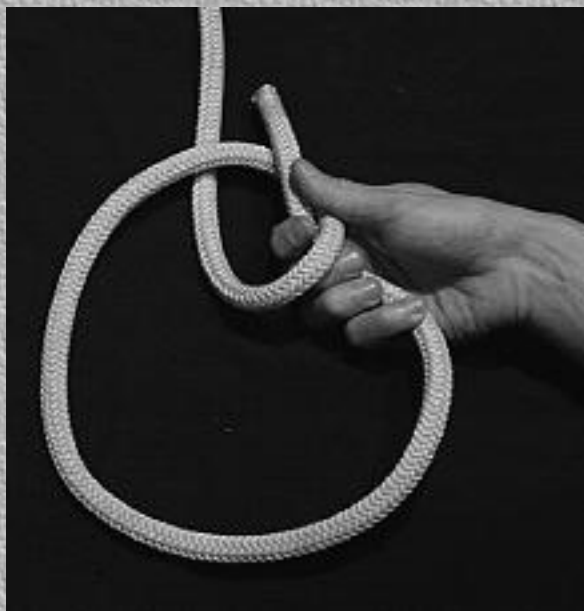
### *Bowline - One Handed Twist Method - Step #2*

**Rotate your wrist clockwise, hooking the standing part with your thumb and bringing it around in a loop. Keep the end inside the big loop.**



### ***Bowline - One Handed Twist Method - Step #3***

**Continue rotating your wrist until the loop is formed in the standing part with the end threaded through it. Now you can just weave the end behind the standing part and back down through the loop, as described above (do this to complete the sheet bend, too).**



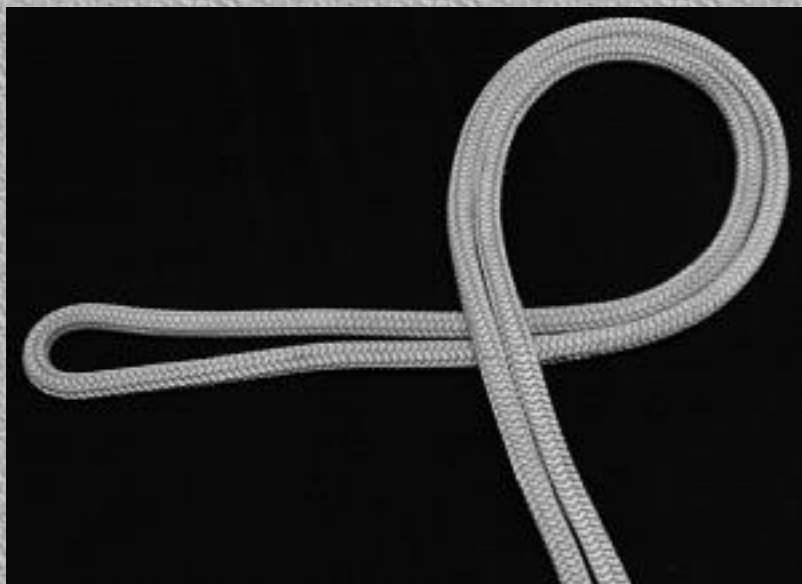
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## Figure 8 Loop

The Figure 8 Loop is just a [Figure 8 Knot](#) tied in the bight.

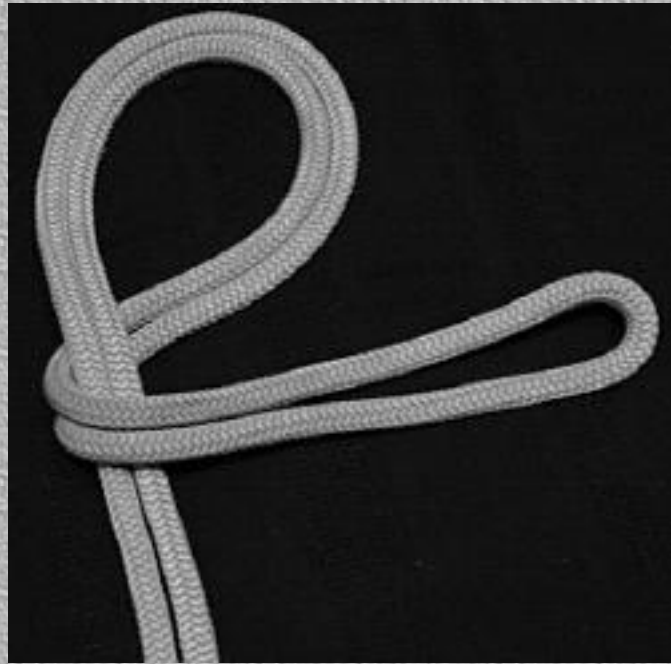
### *Step #1*

**Start with a bight of rope and form a loop where the end is behind the standing part.**



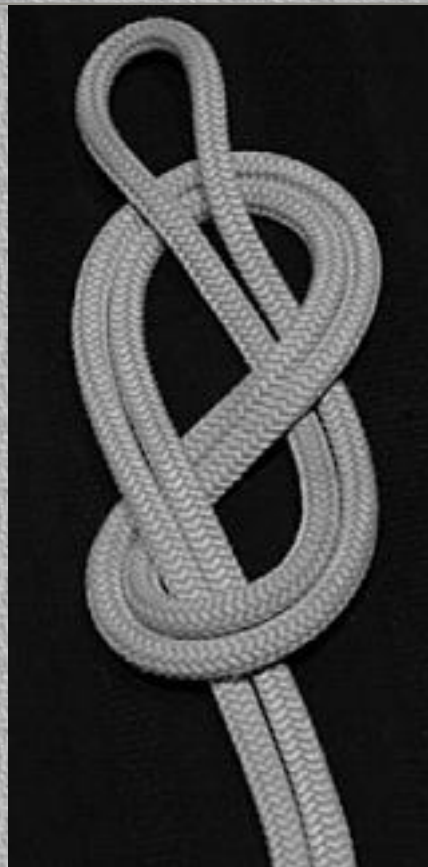
### *Step #2*

**Bring the end around and in front of the standing part.**



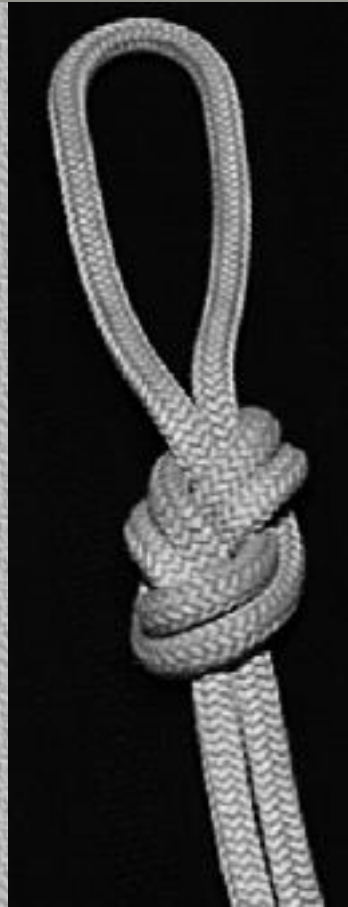
*Step #3*

**Insert the end back through the loop.**



## *Finished Figure 8 Loop*

**Dress and set the knot.**



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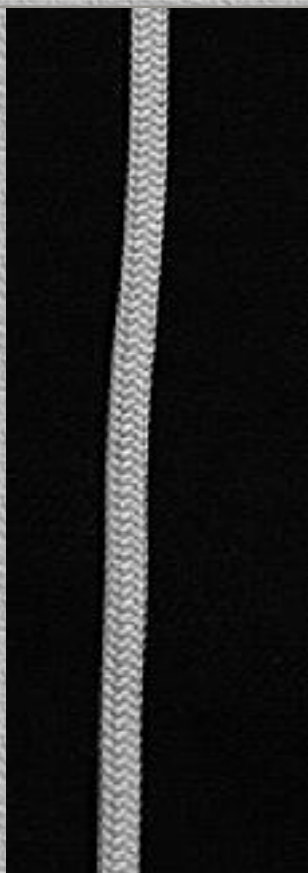
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**[In Line Figure 8 Loop](#)**

**The In Line Figure 8 Loop is used for a load that will be more or less parallel to the standing part. This loop knot can be pulled through a pulley easier than other loop knots.**

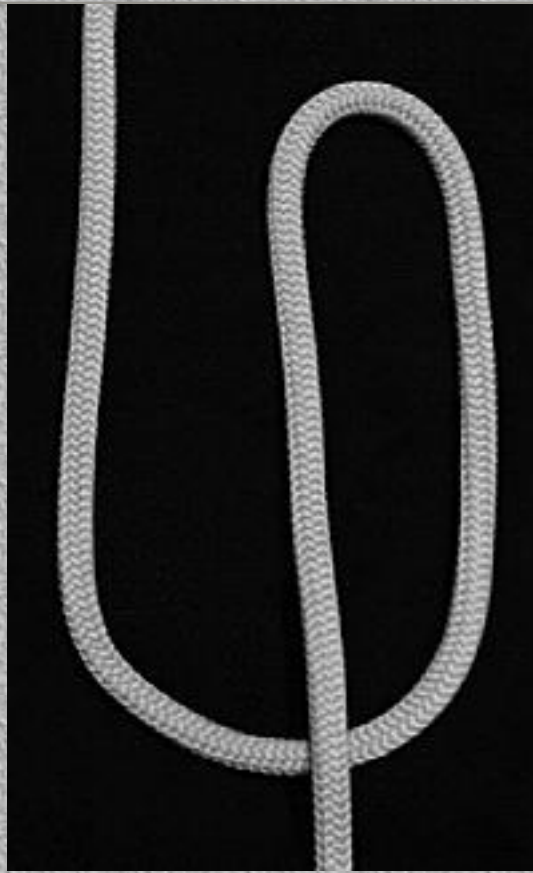
*Step #1*

**Start with the standing part of the rope.**



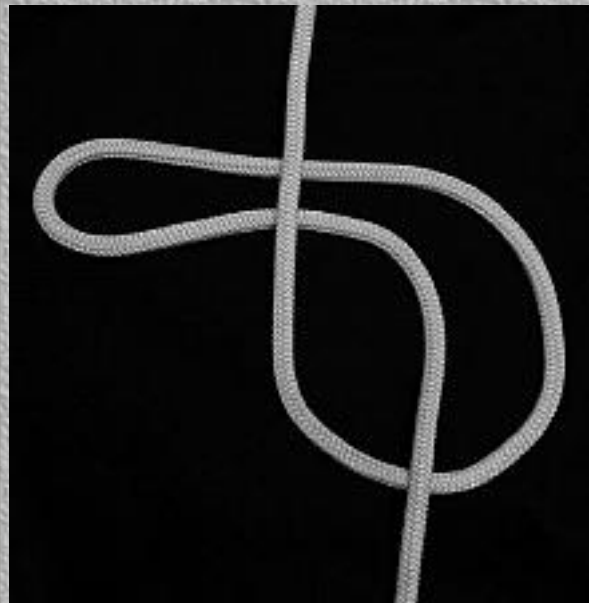
*Step #2*

**Twist the standing part to create a loop, as shown.**



***Step #3***

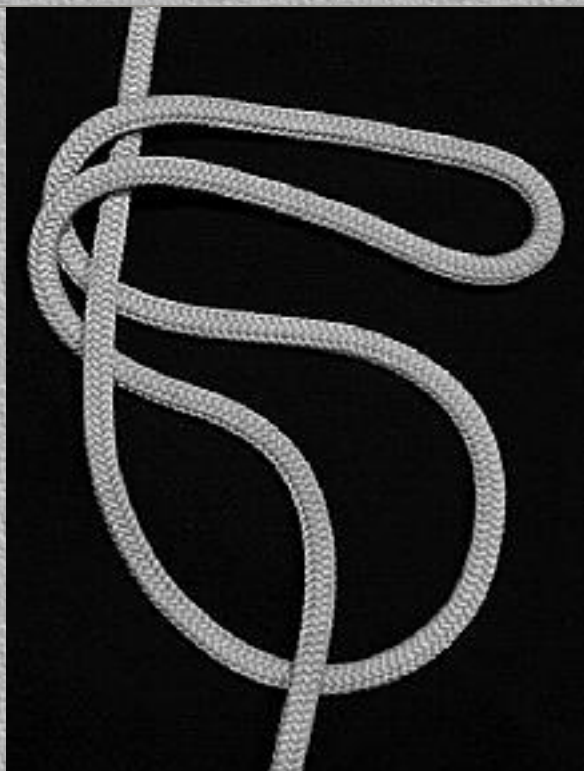
**Bring the loop behind the standing part.**





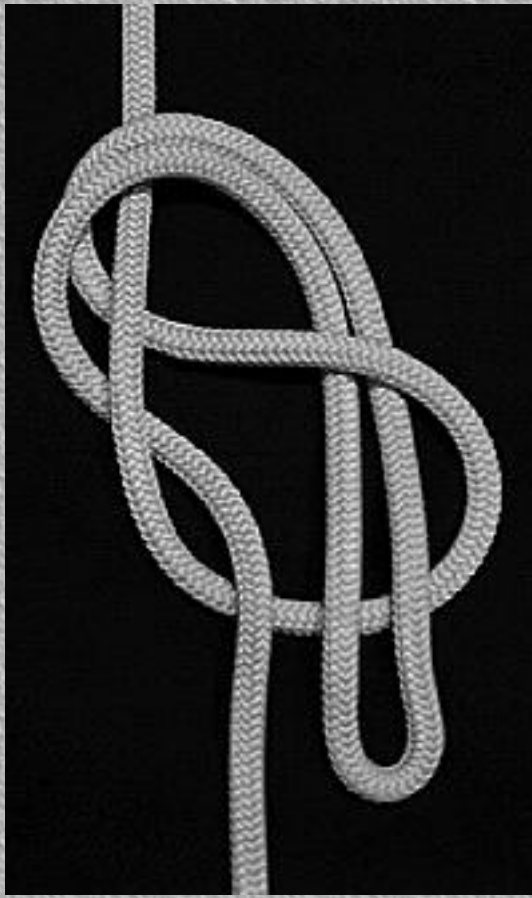
## *Step #4*

**Wrap the loop back around the standing part.**



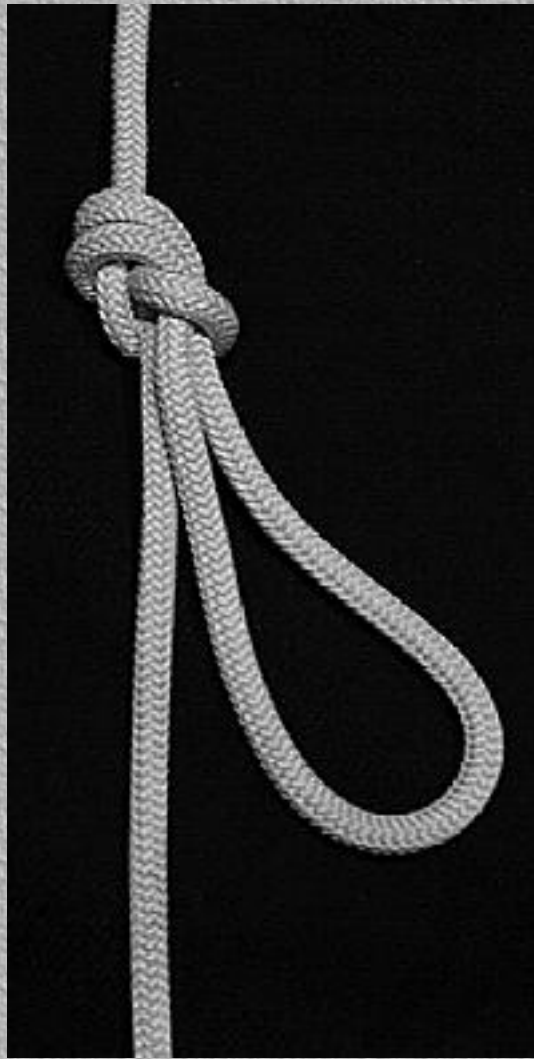
## *Step #5*

**Insert the loop back through itself, to the side of the standing part that comes down out of the knot.**



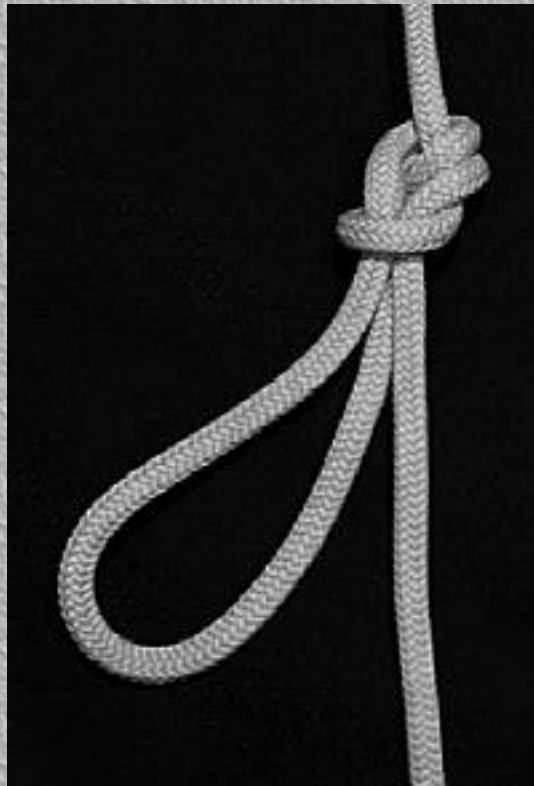
*Finished In Line Figure 8 Loop - Front View*

**To dress the knot, pull the standing part coming out of the top of the knot. Then pull on the loop to set the knot.**



*Finished In Line Figure 8 Loop - Opposite View*

**Opposite view.**



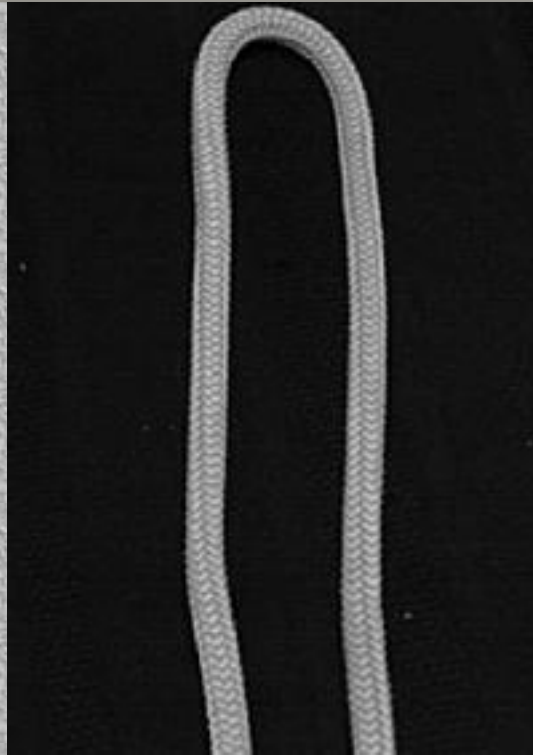
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## Butterfly Knot

**The Butterfly knot is good to use when you need an attachment loop in the bight of a loaded rope, because the ends lead out of the knot perpendicular to the loop.**

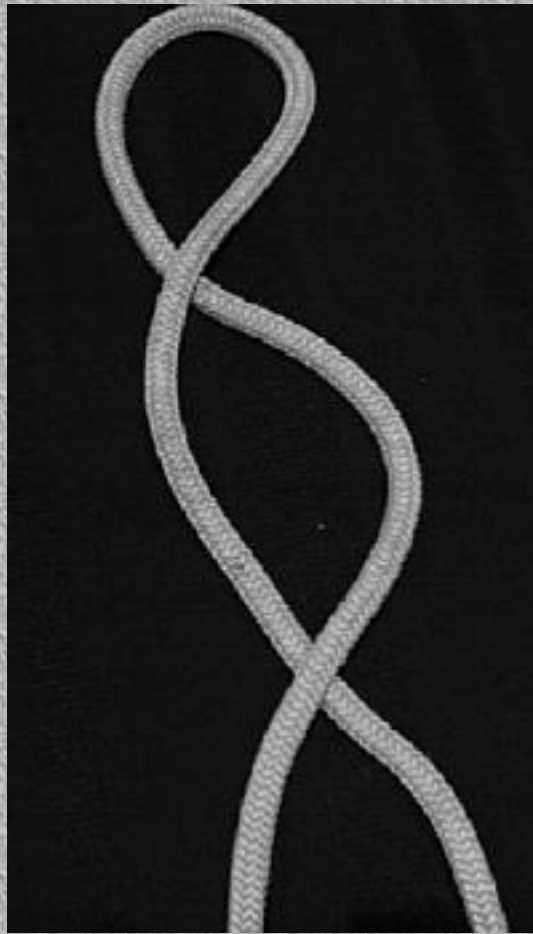
## *Step #1*

**Start with a bight of rope.**



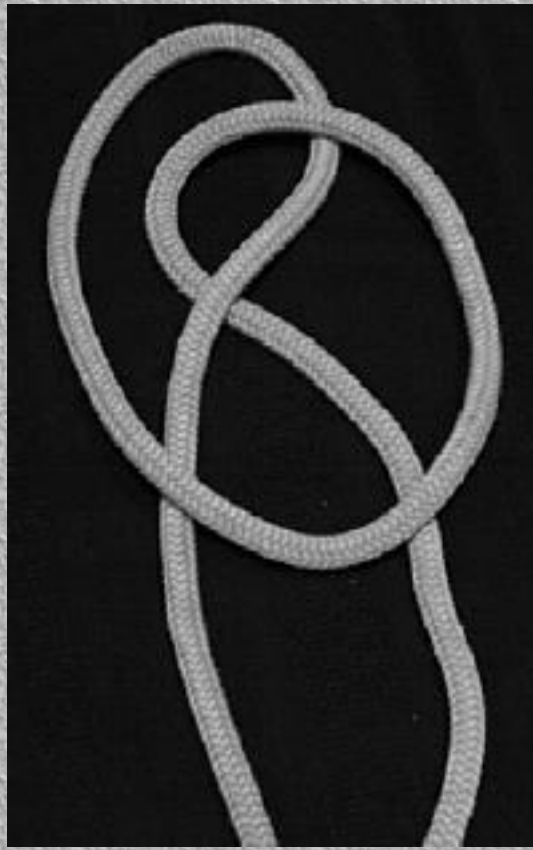
## *Step #2*

**Twist the rope twice; that is, one full turn.**



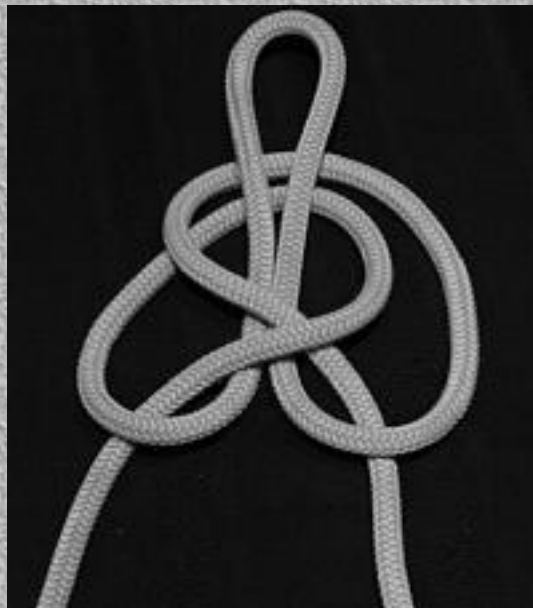
### *Step #3*

**Grasp the top of the bight and fold it down toward the ends.**



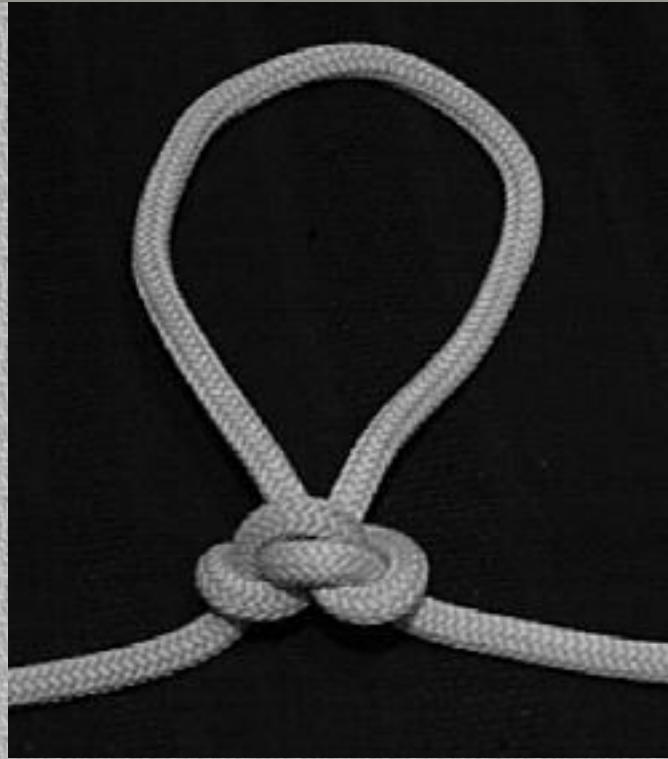
### *Step #4*

**With your hand still on the top of the bight, pull it underneath and through the the "hole" that was just formed.**



## *Finished Butterfly Knot - Front View*

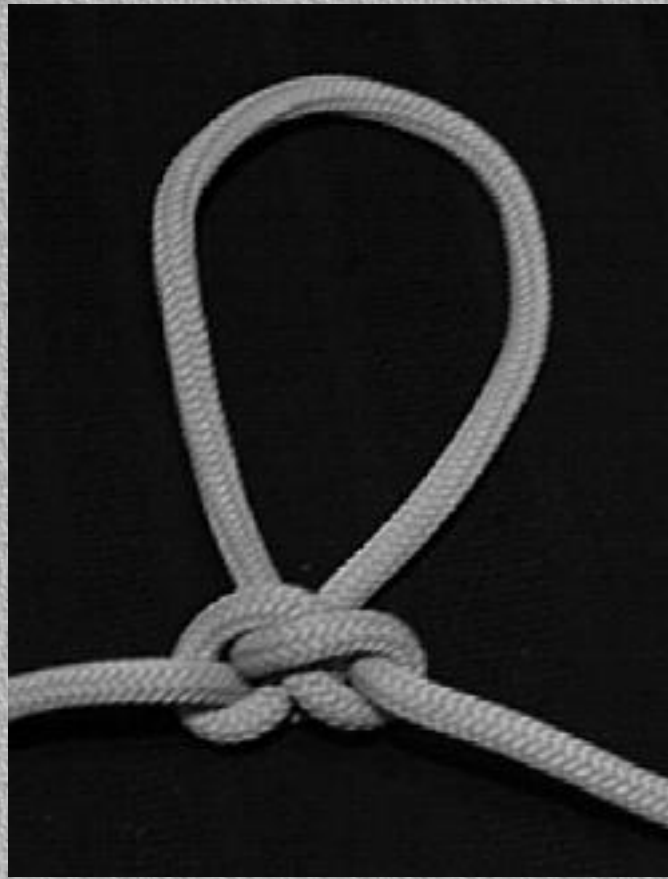
**Dress and set the knot.**



## *Finished Butterfly Knot - Rear View*

**Dress and set the knot.**





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# KNOT KNOWLEDGE

## BENDS

[\[Sheet Bend\]](#)

[\[Full Carrick Bend\]](#)

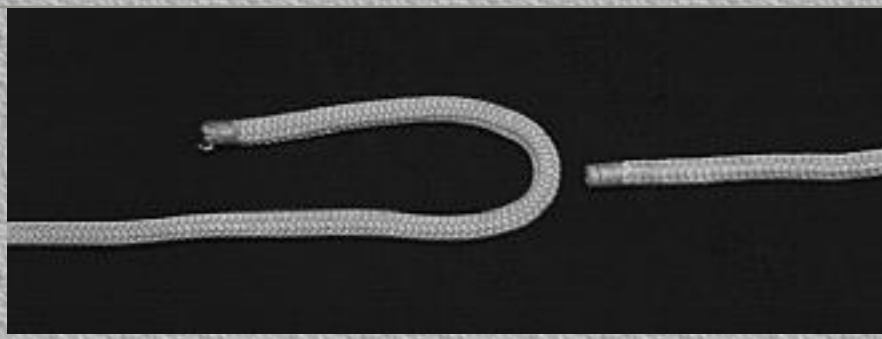
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### Sheet Bend

The sheet bend is very similar to the square knot, granny knot, thief knot, and particularly the bowline. In fact, the sheet bend can be tied using the [One Handed Twist Method](#) which is also used to tie the [bowline](#). The sheet bend is very fast to tie and when slipped, is one of the easiest bends to work with. It is also useful when joining two ropes of different diameters.

*Step #1*

**Form a bight  
(with the  
larger  
diameter  
rope).**



### *Step #2*

**Insert the second rope  
under and then over the  
end of the first rope.**



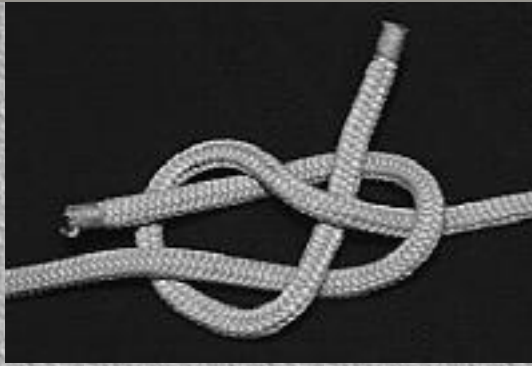
### *Step #3*

**Take the end of the second  
rope and bring it under the  
bight.**



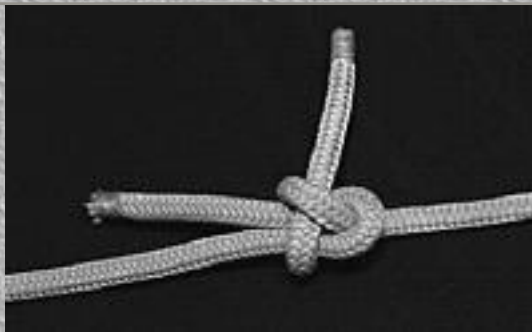
### *Step #4*

**Bring the end over the bight, putting it under its own standing part.**



### *Finished Sheet Bend*

**Pull on both standing parts to set the knot.**



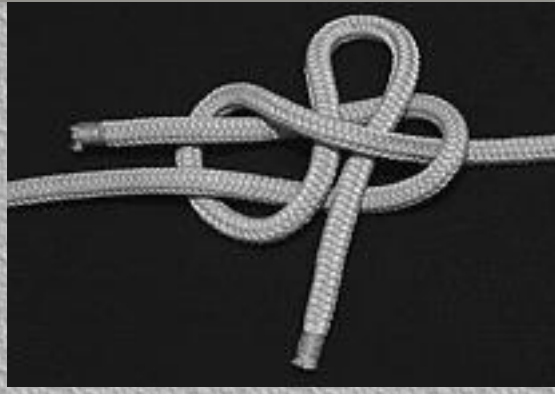
### *Double Sheet Bend*

**A double sheet bend is a more secure knot and can be tied by adding another wrap around the bight (that is, repeating steps 3 -4).**



### *Slipped Sheet Bend*

**To slip the sheet bend, stick a bight through instead of the end. Pull on the end to untie the knot.**



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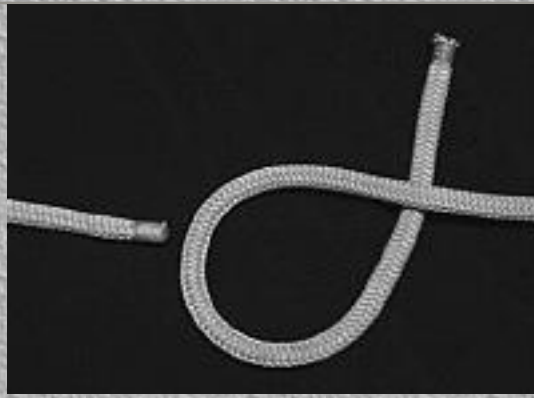
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## **Full Carrick Bend**

**The Carrick Bend is a strong, secure knot that can be used to join two ropes of different construction.**

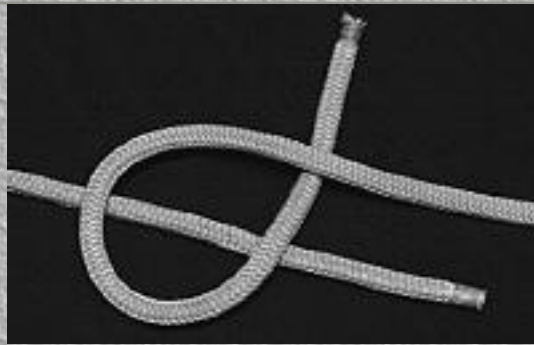
*Step #1*

**Form a loop with the first rope, with the end behind the standing part.**



### *Step #2*

**Place the second rope under the loop.**



### *Step #3*

**Bring the end over the standing part of the first rope.**



### *Step #4*

**Place the end of the second rope under the end of the first rope.**



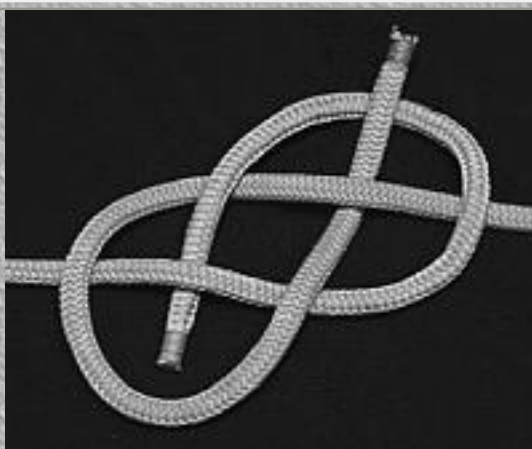
### *Step #5*

**Place the end over the standing part of the first rope.**



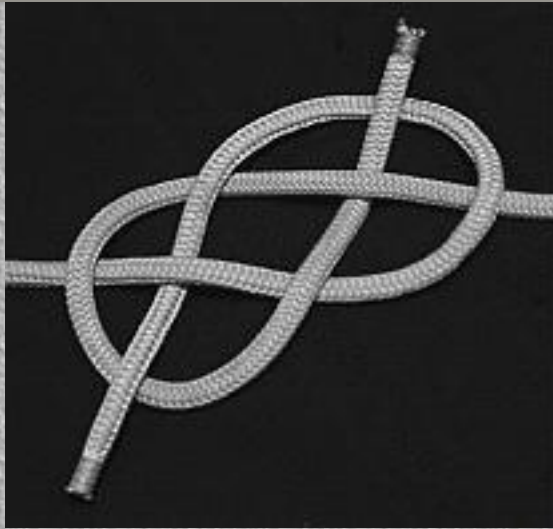
### *Step #6*

**Weave the end of the second rope under its own standing part.**



## *Step #7*

**Finally, pull the end over the first rope. The knot should be symmetric with the ends on opposite sides.**



## *Finished Carrick Bend - Front View*

**Pull on both standing parts and then the ends to tighten the knot.**



## *Finished Carrick Bend - Rear View*

**Rear view.**



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# KNOT KNOWLEDGE

## STOPPER KNOTS

[\[Figure 8\]](#)

[\[Heaving Line Knot\]](#)

[\[Double Overhand Knot\]](#)

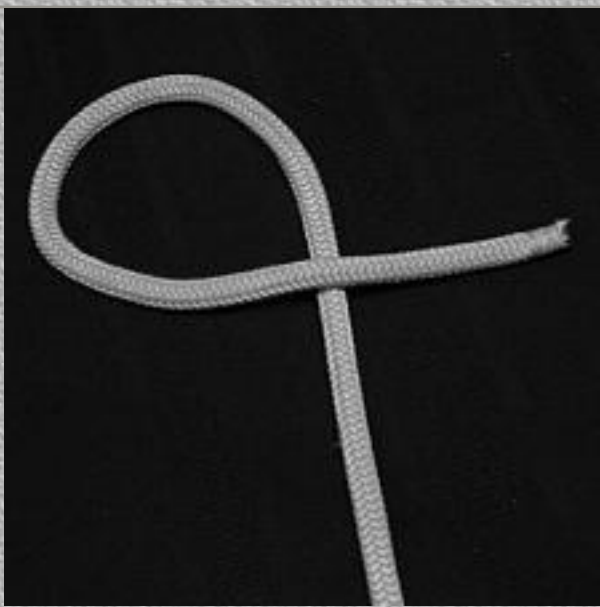
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### Figure 8

**The Figure 8 knot is made in the end of a rope. It is bulkier than an Overhand knot.**

*Step #1*

**Make a loop.**



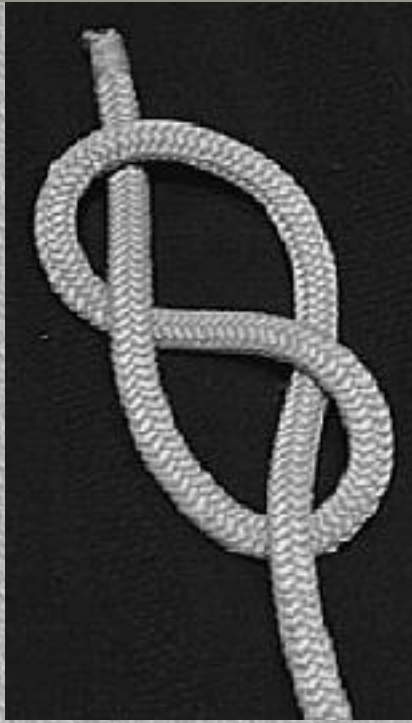
*Step #2*

**Bring the end around behind the standing part.**



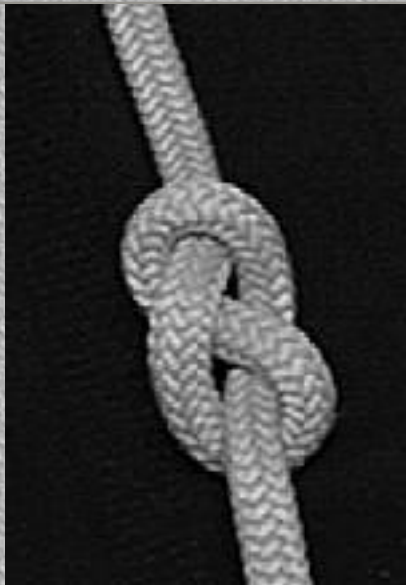
*Step #3*

**Put the end through the loop.**



***Finished Figure 8***

**Dress and set the knot.**



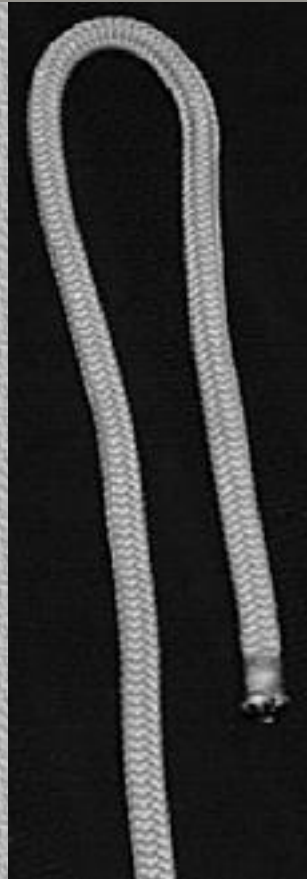
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## Heaving Line Knot

The Heaving line knot can be used to add weight to the end of the rope to give mass to it when you want to throw it.

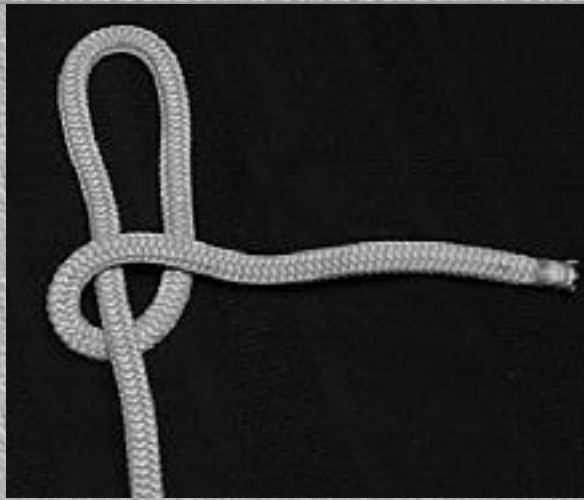
### *Step #1*

**Form a bight.**



### *Step #2*

**Start making turns, taking the end behind the standing part and wrapping it around the bight.**



### *Step #3*

**Make several turns.**



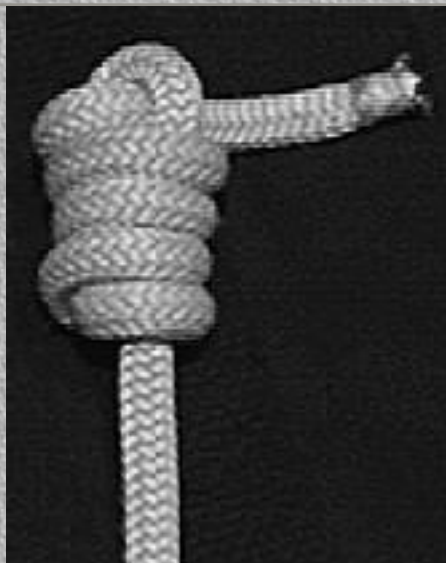
### *Step #4*

**Insert the end through the loop.**



***Finished Heaving Line Knot***

**Pull on the standing part to tighten the knot.**



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## Double Overhand Knot

The Double Overhand is bulkier than the Figure 8 knot and is more difficult to untie.

### *Step #1*

**Begin with an overhand knot.**



### *Step #2*

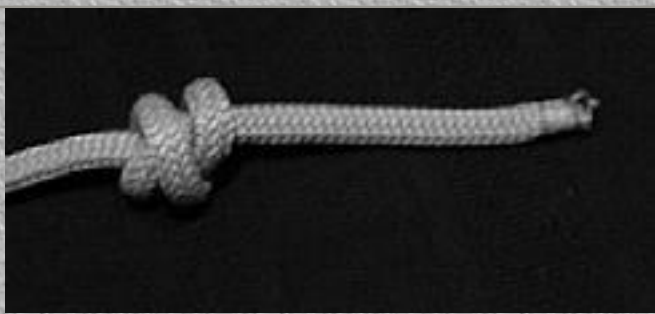
**Put the end back through the loop.**



*Finished Double Overhand Knot*



**Yank firmly on both ends to snap this knot tight.**



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# KNOT KNOWLEDGE

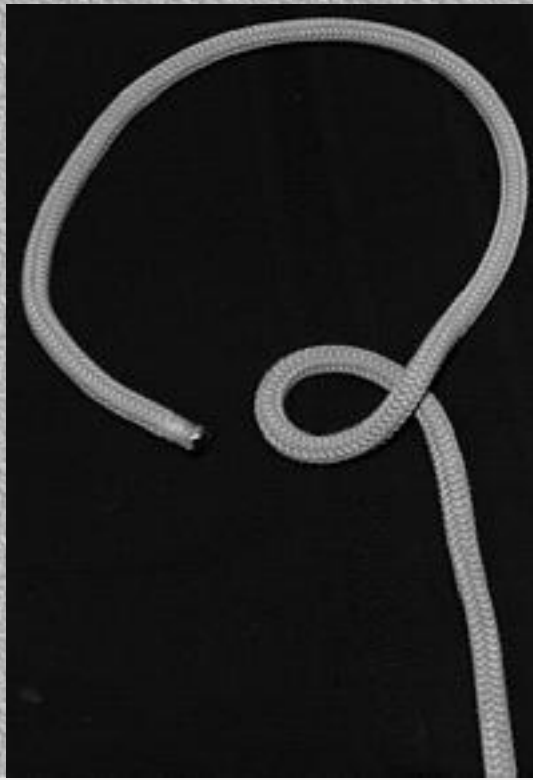
## SINGLE LOOP KNOTS

### Bowline

There are several variations on tying the bowline, two of which are presented here. I start with one method of tying that is simple to photograph and then demonstrate the [one handed twist](#) method, which is an easy and reliable way of forming the loop in the standing part.

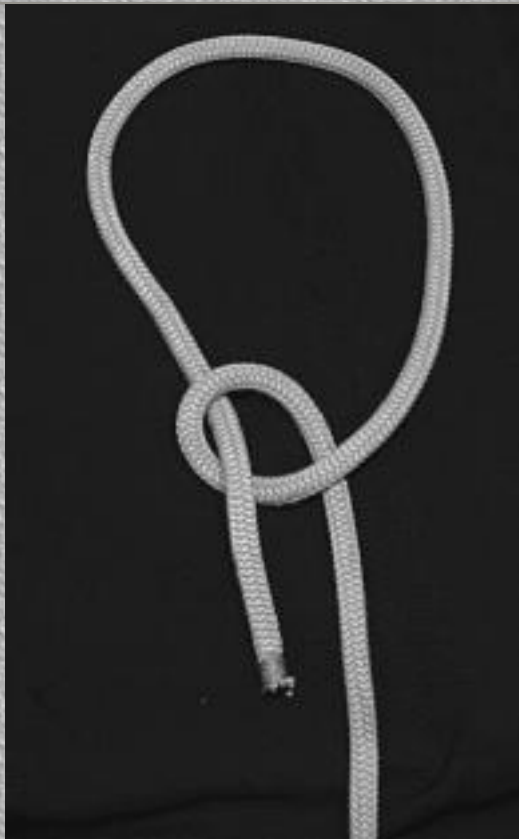
#### *Step #1*

Arrange the rope as shown, with a small loop in the standing part and the end going around the object the loop is to be tied around.



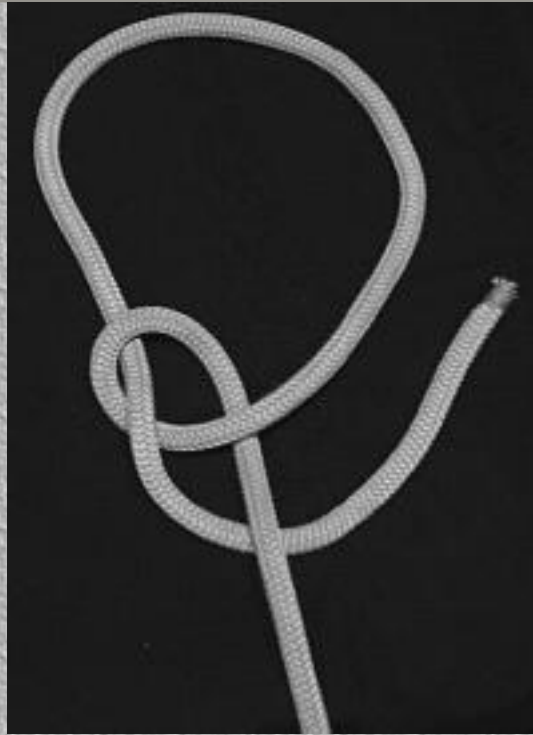
*Step #2*

**Insert the end through the loop.**



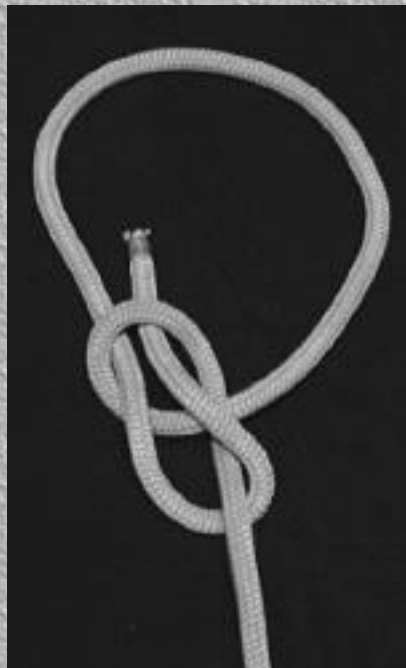
### *Step #3*

**Pull the end around and behind the standing part.**



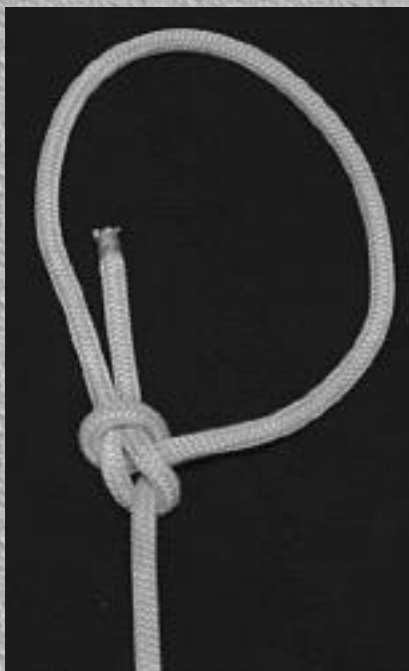
### *Step #4*

**Insert the end back through the loop.**



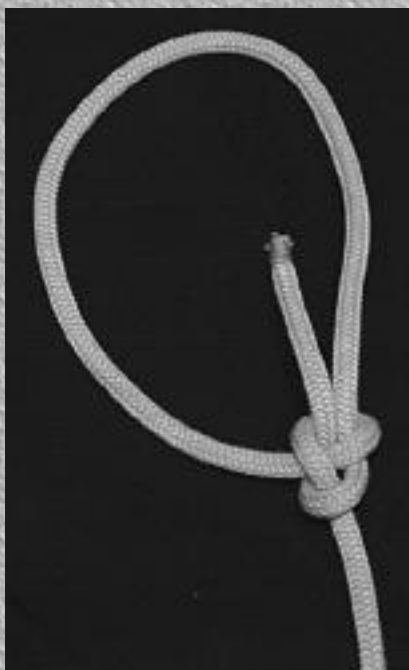
## *Finished Bowline - Front View*

**Dress and set the knot.**



## *Finished Bowline - Rear View*

**Dress and set the knot.**



## Bowline - One Handed Twist Method

This is a fast and reliable method for making the loop in the standing part. This method can also be used to tie a [sheet bend](#). To use this method for a sheet bend, instead of twisting the end into a loop in its own standing part (as shown below), twist a loop very near the end of a second rope. Be sure that the end of the rope you have in your hand is pointing up and the end of the second rope (that you'll be twisting a loop into) is pointing down.

### *Bowline - One Handed Twist Method - Step #1*

**Grab the end of the rope and place it across the standing part. Place your thumb under the standing part.**



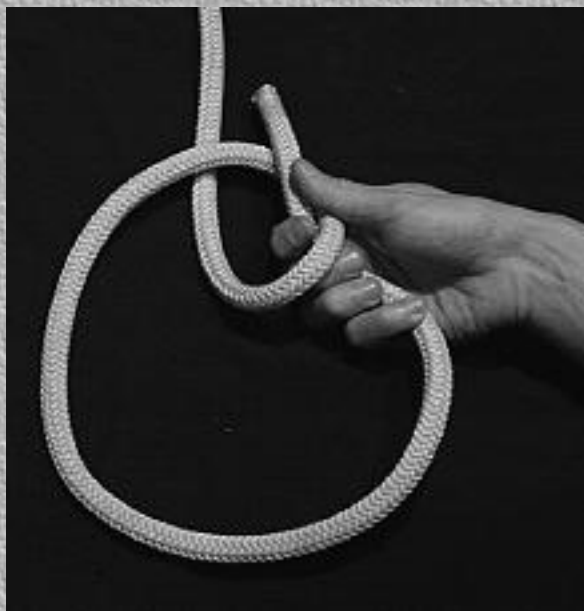
### *Bowline - One Handed Twist Method - Step #2*

**Rotate your wrist clockwise, hooking the standing part with your thumb and bringing it around in a loop. Keep the end inside the big loop.**



### ***Bowline - One Handed Twist Method - Step #3***

**Continue rotating your wrist until the loop is formed in the standing part with the end threaded through it. Now you can just weave the end behind the standing part and back down through the loop, as described above (do this to complete the sheet bend, too).**



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# KNOT KNOWLEDGE

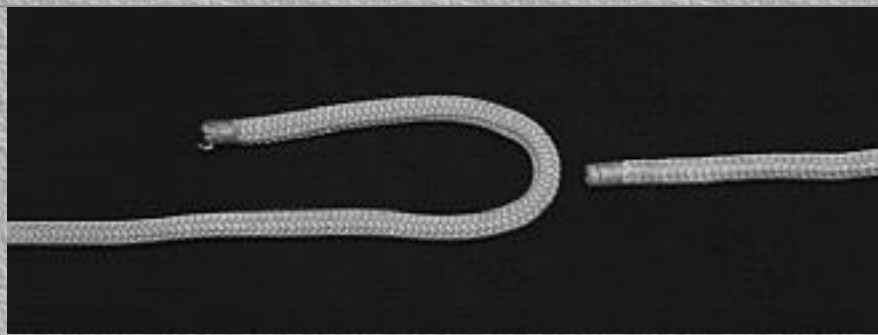
## BENDS

### Sheet Bend

The sheet bend is very similar to the square knot, granny knot, thief knot, and particularly the bowline. In fact, the sheet bend can be tied using the [One Handed Twist Method](#) which is also used to tie the bowline. The sheet bend is very fast to tie and when slipped, is one of the easiest bends to work with. It is also useful when joining two ropes of different diameters.

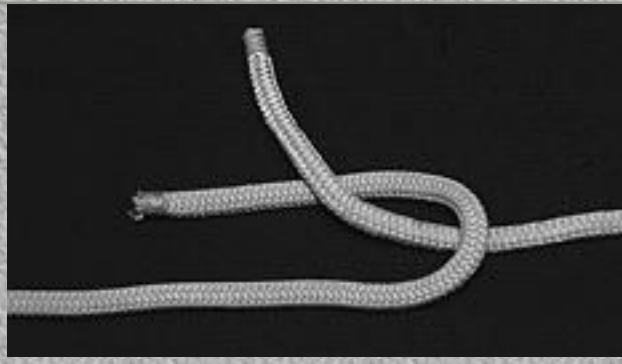
#### *Step #1*

**Form a bight  
(with the  
larger  
diameter  
rope).**



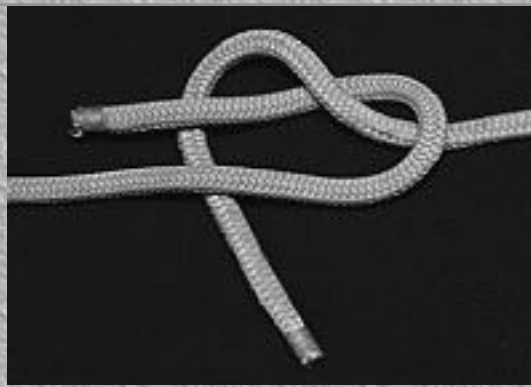
#### *Step #2*

**Insert the second rope under and then over the end of the first rope.**



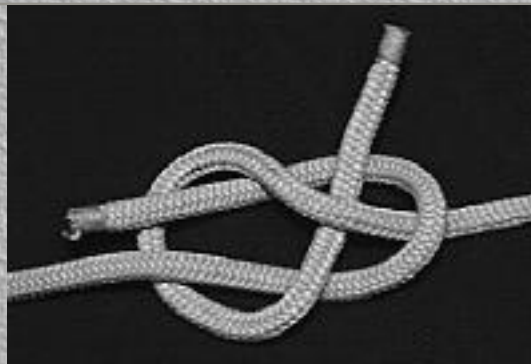
### *Step #3*

**Take the end of the second rope and bring it under the bight.**



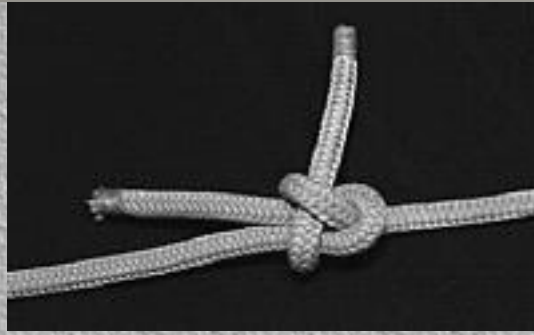
### *Step #4*

**Bring the end over the bight, putting it under its own standing part.**



***Finished Sheet Bend***

**Pull on both standing parts to set the knot.**



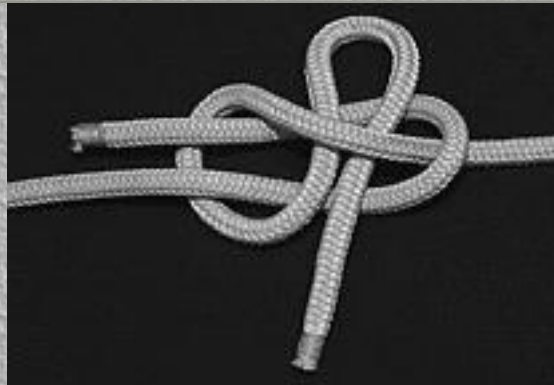
## *Double Sheet Bend*

**A double sheet bend is a more secure knot and can be tied by adding another wrap around the bight (that is, repeating steps 3 -4).**



## *Slipped Sheet Bend*

**To slip the sheet bend, stick a bight through instead of the end. Pull on the standing part to set the knot. Pull on the end to untie the knot.**



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# KNOT KNOWLEDGE

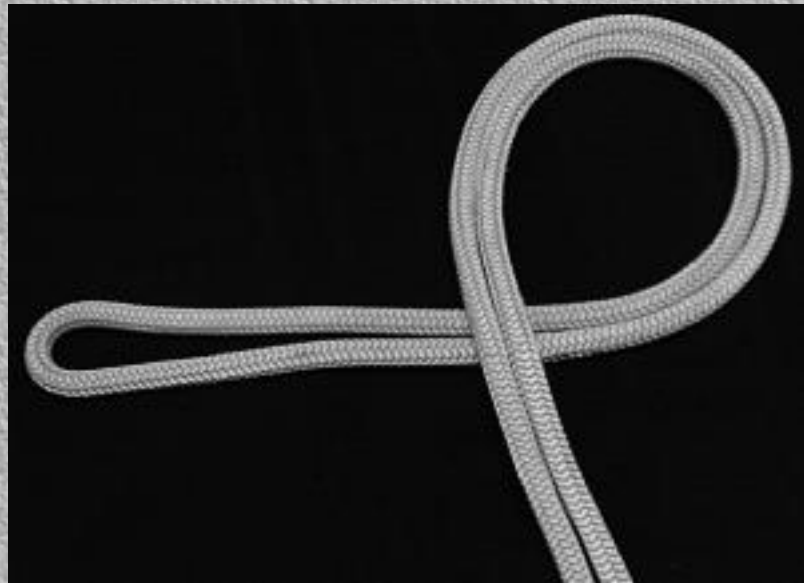
## SINGLE LOOP KNOTS

### Figure 8 Loop

The Figure 8 Loop is just a [Figure 8 Knot](#) tied in the bight.

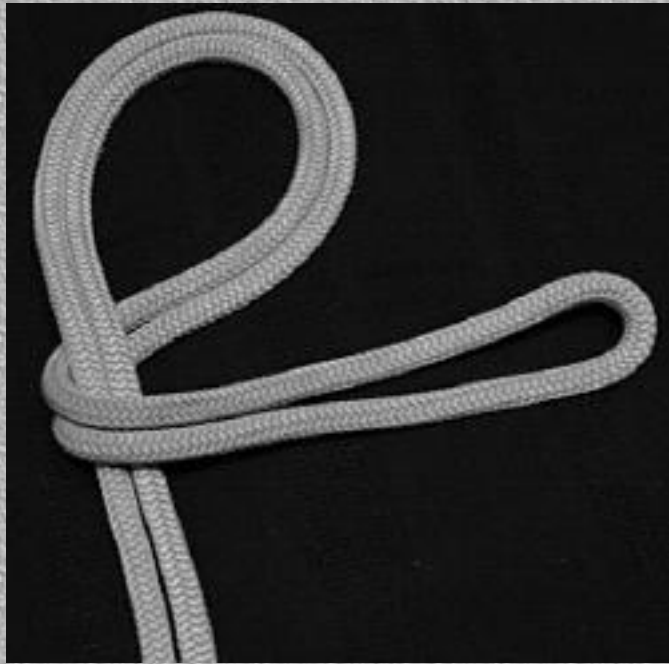
#### *Step #1*

**Start with a bight of rope and form a loop where the end is behind the standing part.**



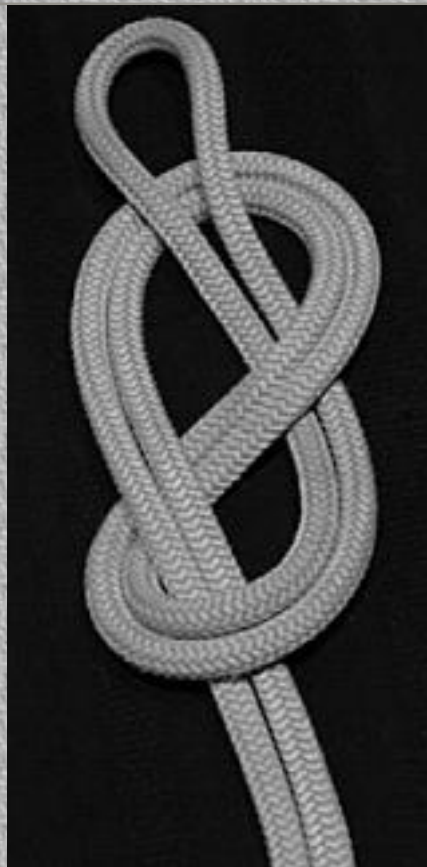
#### *Step #2*

**Bring the end around and in front of the standing part.**



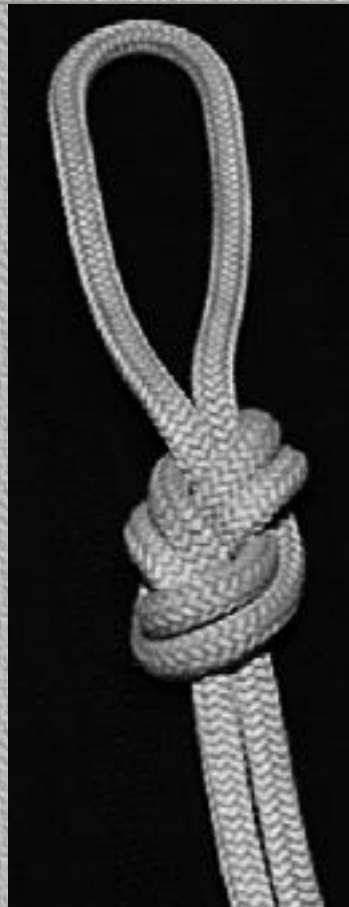
*Step #3*

**Insert the end back through the loop.**



## *Finished Figure 8 Loop*

**Dress and set the knot.**



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# KNOT KNOWLEDGE

## SINGLE LOOP KNOTS

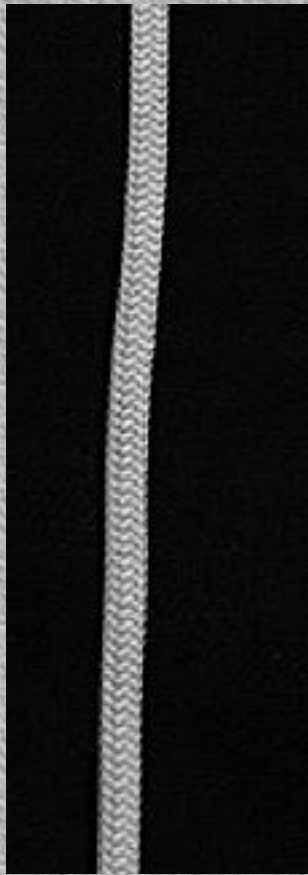
### In Line Figure 8 Loop

**The In Line Figure 8 Loop is used for a load that will be more or less parallel to the standing part. This loop knot can be pulled through a pulley easier than other loop knots.**

#### *Step #1*

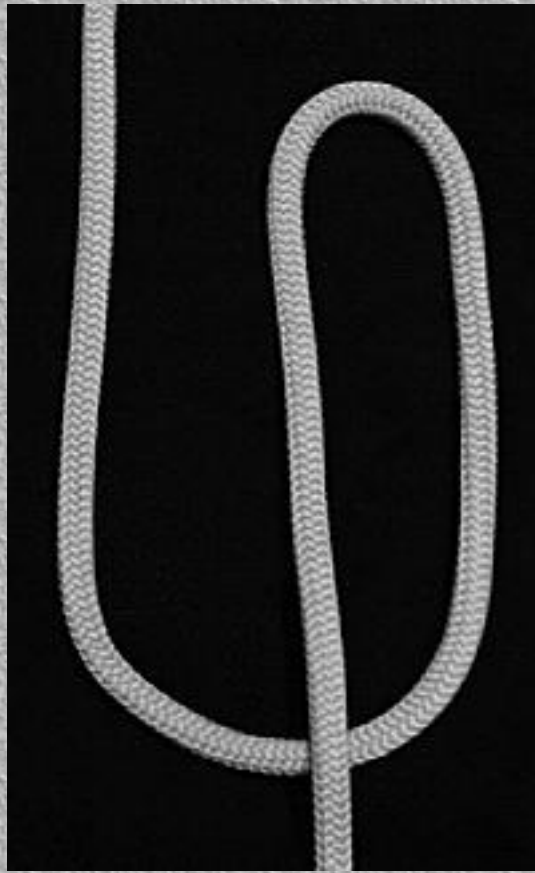
**Start with the standing part of the rope.**





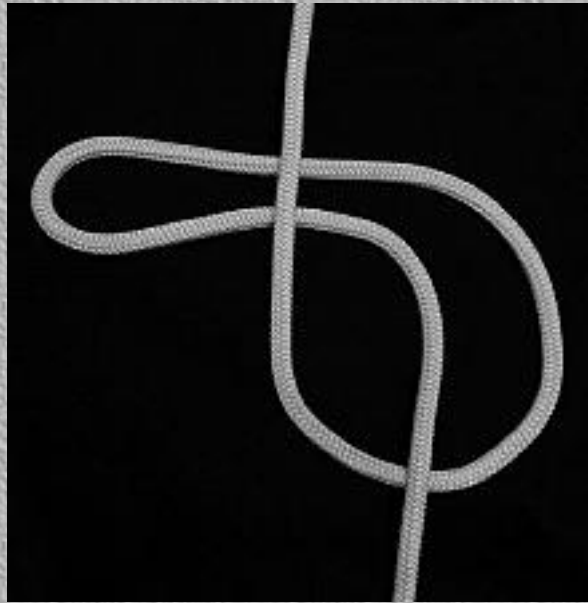
## *Step #2*

**Twist the standing part to create a loop, as shown.**



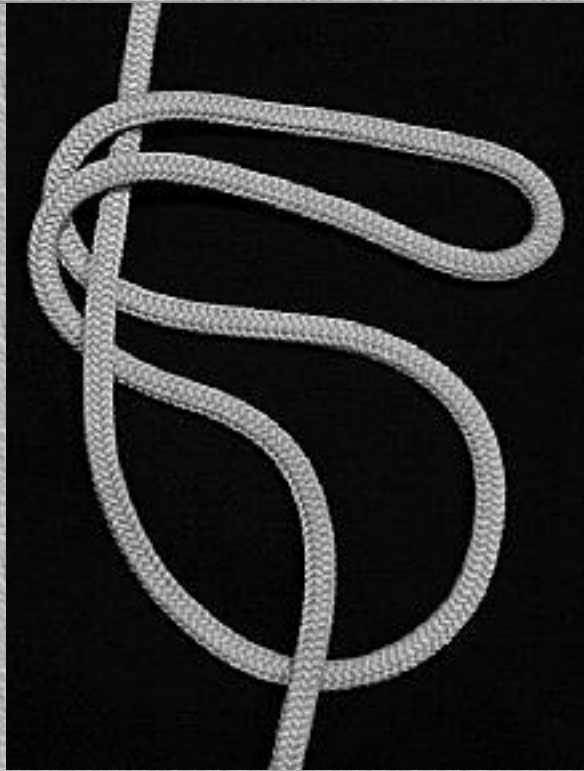
*Step #3*

**Bring the loop behind the standing part.**



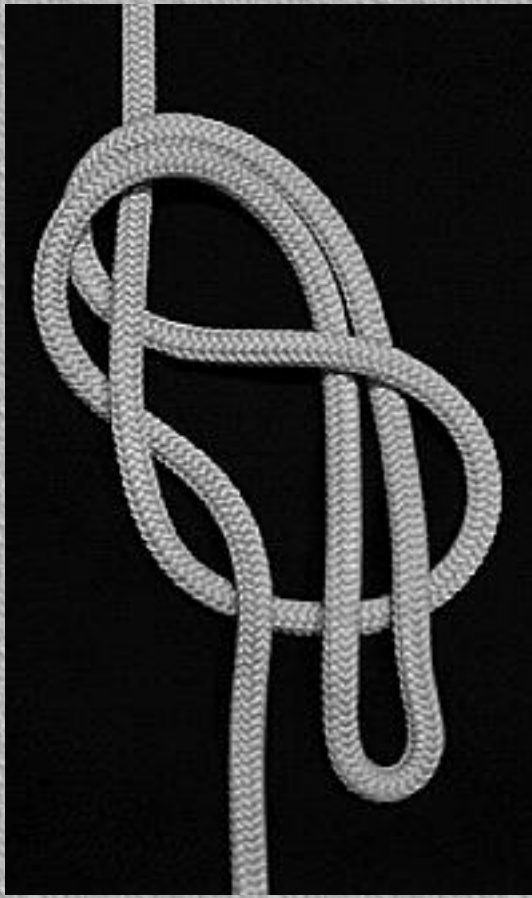
## *Step #4*

**Wrap the loop back around the standing part.**



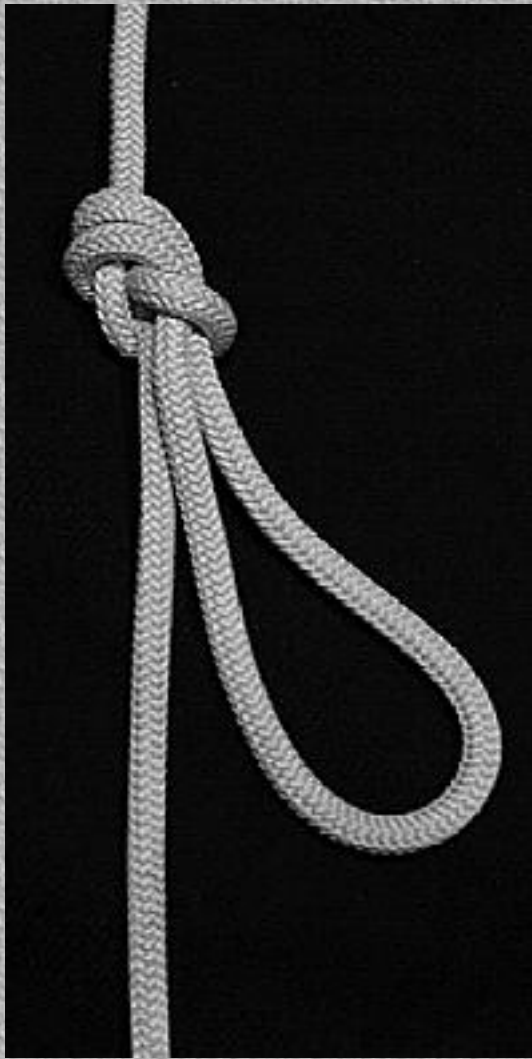
## *Step #5*

**Insert the loop back through itself, to the side of the standing part that comes down out of the knot.**



*Finished In Line Figure 8 Loop - Front View*

**To dress the knot, pull the standing part coming out of the top of the knot. Then pull on the loop to set the knot.**



*Finished In Line Figure 8 Loop - Opposite View*

**Opposite view.**



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# KNOT KNOWLEDGE

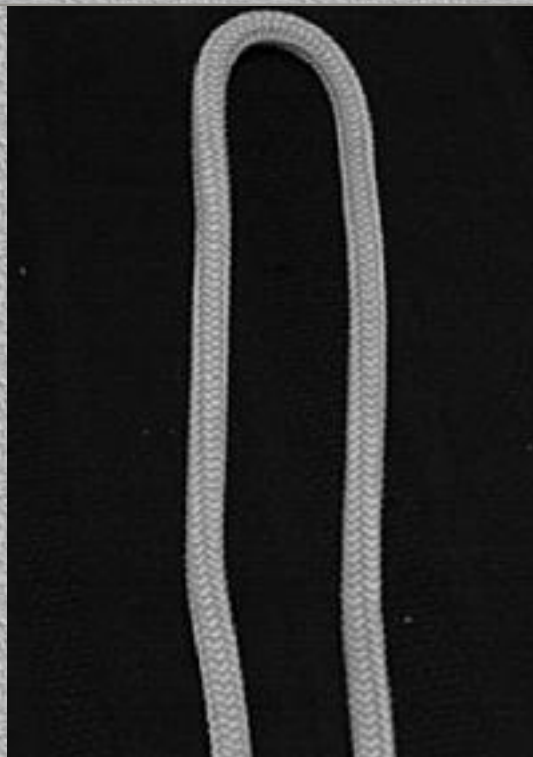
## SINGLE LOOP KNOTS

### Butterfly Knot

The Butterfly knot is good to use when you need an attachment loop in the bight of a loaded rope, because the ends lead out of the knot perpendicular to the loop.

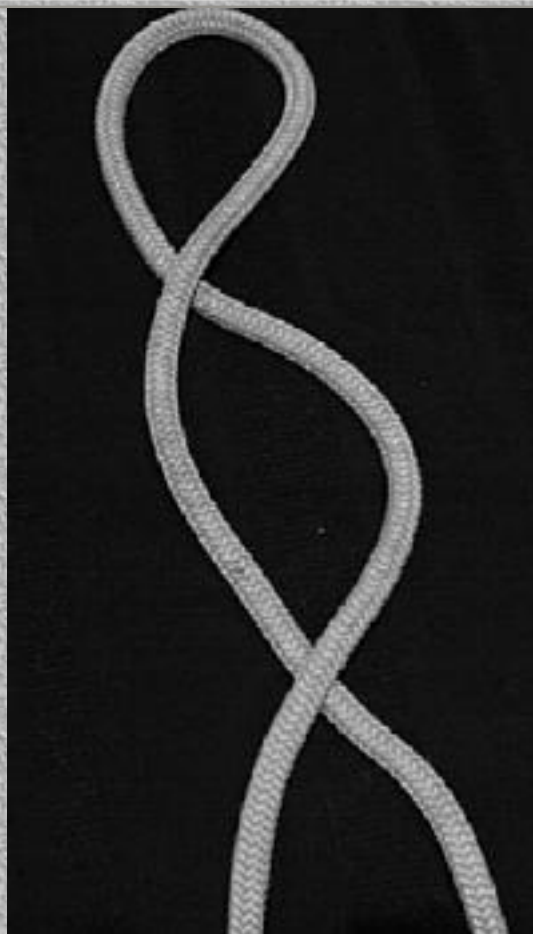
#### *Step #1*

**Start with a bight of rope.**



## *Step #2*

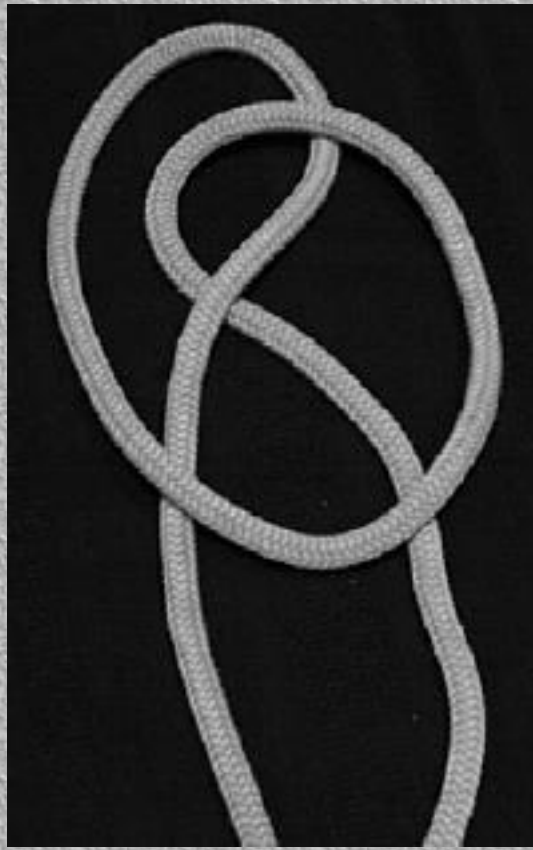
**Twist the rope twice; that is, one full turn.**



## *Step #3*

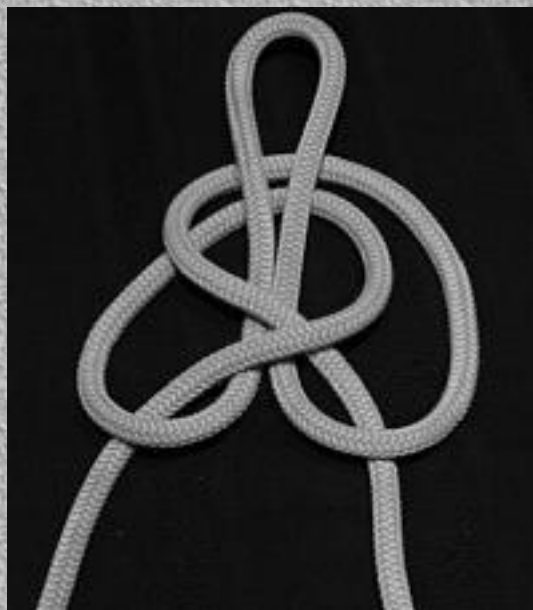
**Grasp the top of the bight and fold it down toward the ends.**





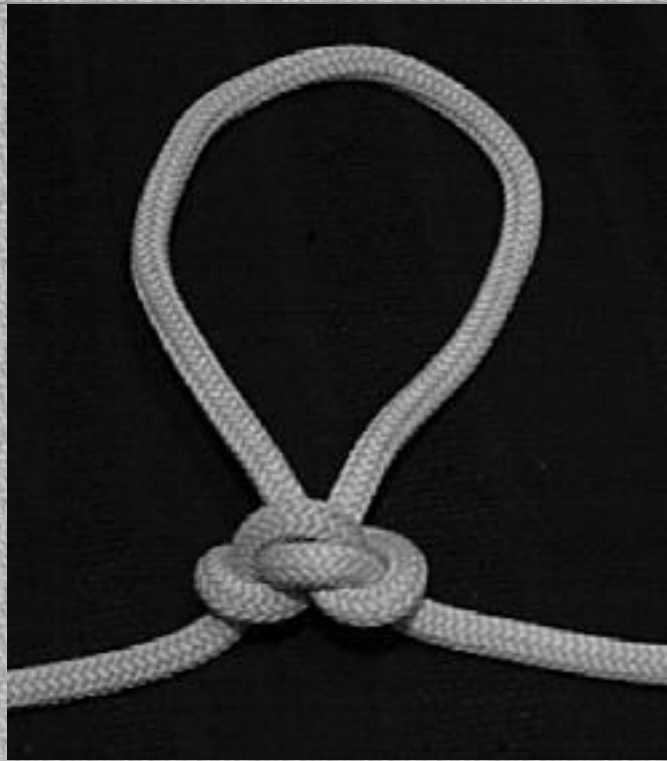
### *Step #4*

**With your hand still on the top of the bight, pull it underneath and through the the "hole" that was just formed.**



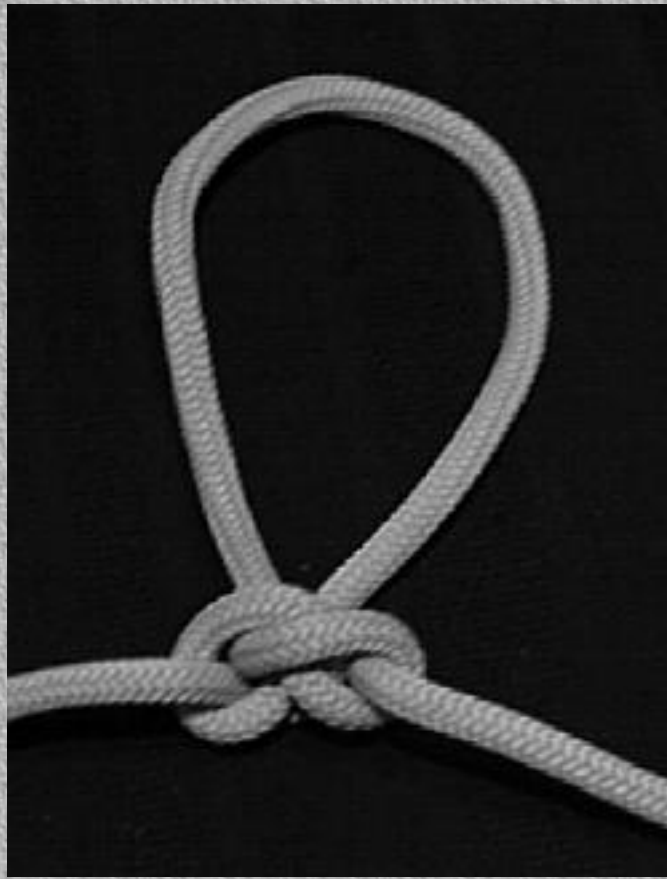
## *Finished Butterfly Knot - Front View*

**Dress and set the knot.**



## *Finished Butterfly Knot - Rear View*

**Dress and set the knot.**



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# KNOT KNOWLEDGE

## DOUBLE LOOP KNOTS

[\[Spanish Bowline\]](#)

[\["A Rigid Double Splayed Loop in the Bight"\]](#)

[\[Triple Crown Knot\]](#)

[\[Bowline on a Bight\]](#)

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### Spanish Bowline

The Spanish Bowline is a double splayed loop knot that is easy to adjust (before putting on a load) due to the fact that the rope communicates between the two loops. However, unless this knot is set very tightly, it is possible that the rope will slip when you have put it to use, which could be disastrous. When tied and set properly, it is an excellent utility knot.

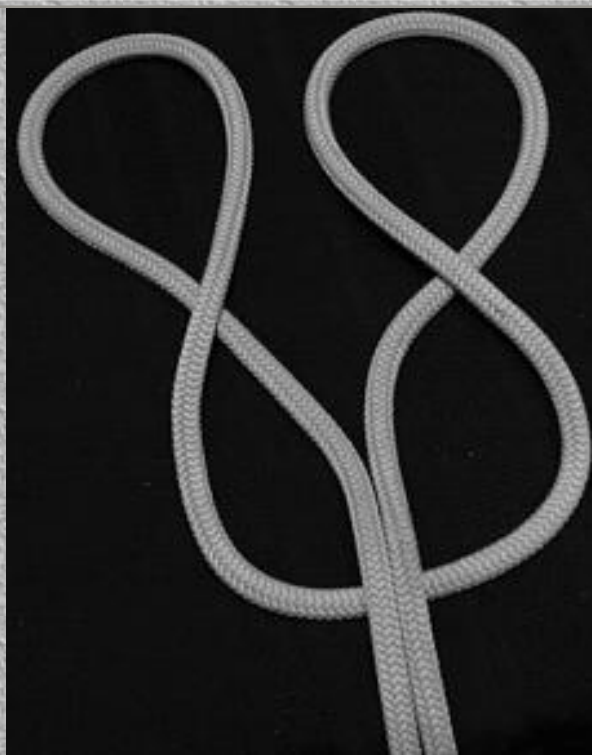
*Step #1*

**Make two loops.**



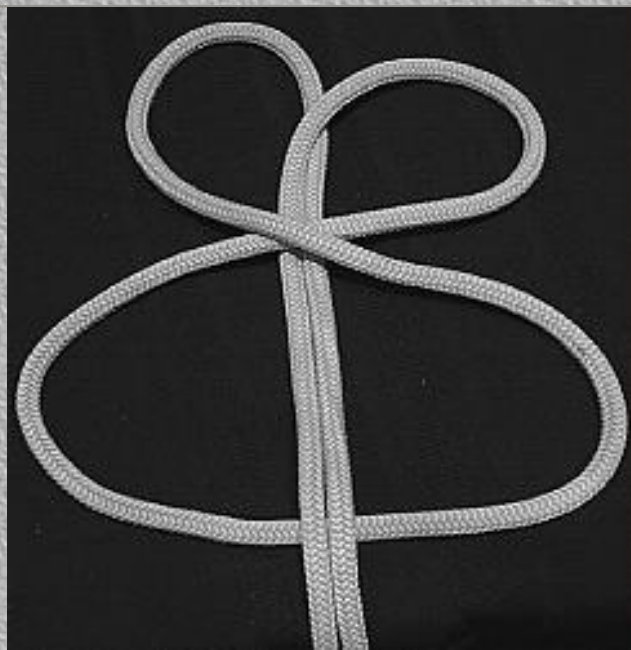
*Step #2*

**Put a half twist in each loop, turning the outside of each loop to the middle.**



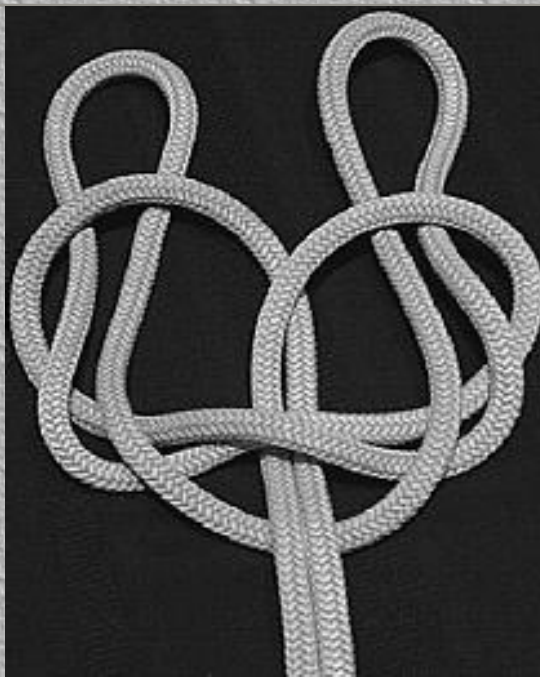
*Step #3*

**Take the left-twisted loop and insert it through the right-twisted loop.**



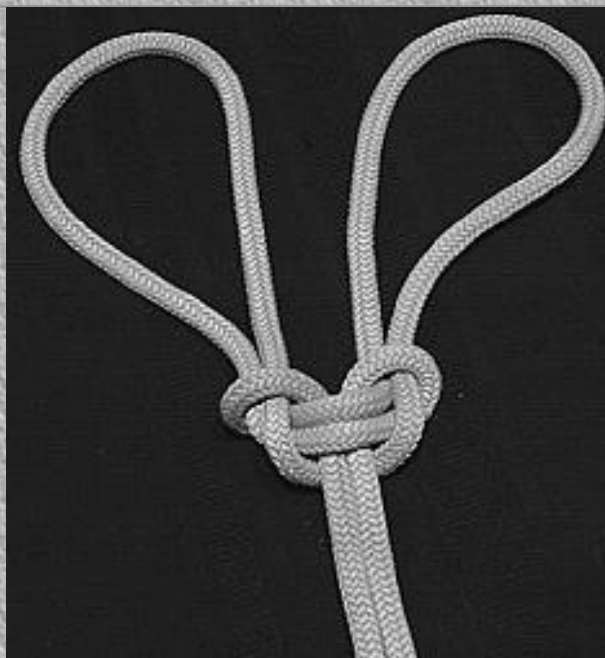
### *Step #4*

**Take the material from the bottom of the twisted loops and pull up bights through the top of the twisted loops.**



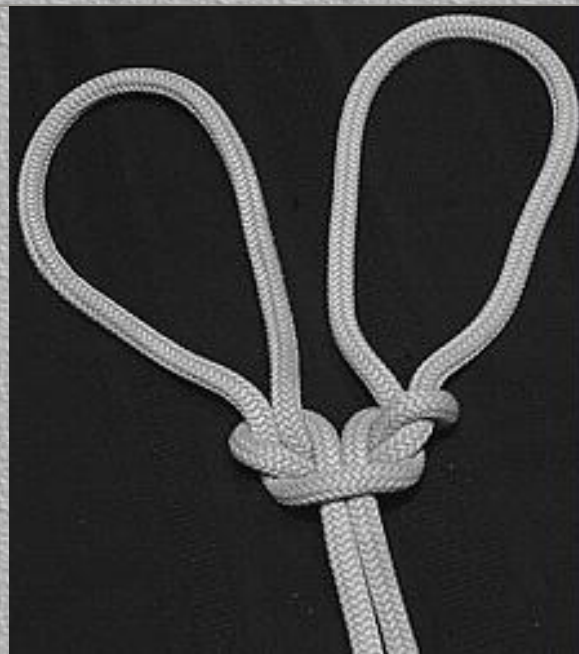
***Finished Spanish Bowline - Front View***

**Pull on the standing line to dress the knot. Pull on all parts to set the knot.**



***Finished Spanish Bowline - Rear View***

**Pull on the standing line to dress the knot. Pull on all parts to set the knot.**



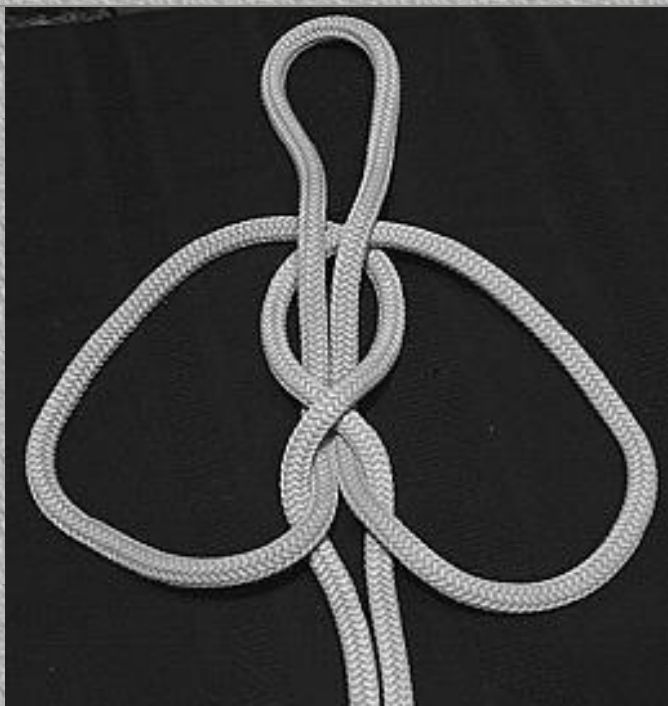
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## "A Rigid Double Splayed Loop in the Bight" (ABoK #1100)

This knot is touted by Ashley as being "one of the firmest of the Double Loops since the two loops do not directly communicate with each other" (ABoK, p. 200). It seems to me that the loops still indirectly communicate, and I use that for initial adjustment. When the knot is properly set, it would be nearly impossible to get the rope to move between the loops.

### *Step #1*

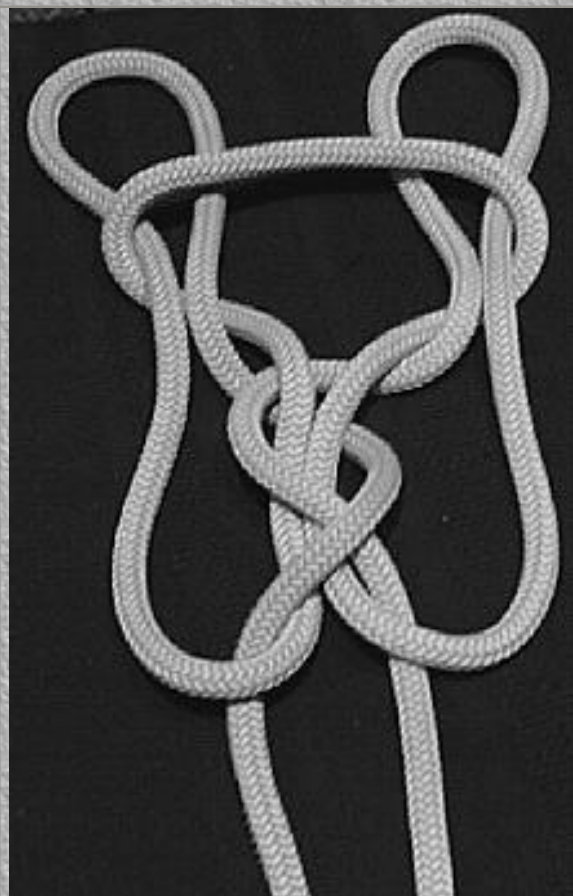
To start this knot, begin with a [butterfly knot](#), but leave it loose as shown instead of drawing it up tight.



### *Step #2*

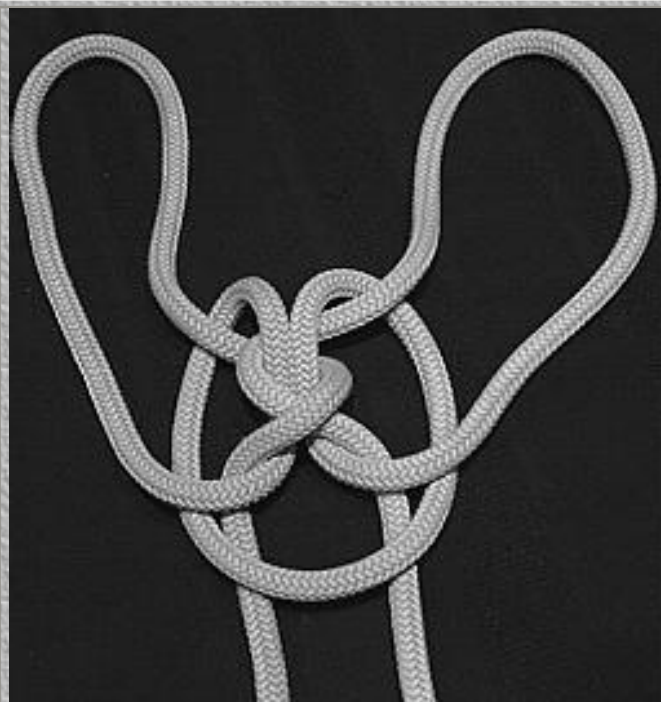


**Take the material from the lower two loops and pull bights through the upper loop.**



### *Step #3*

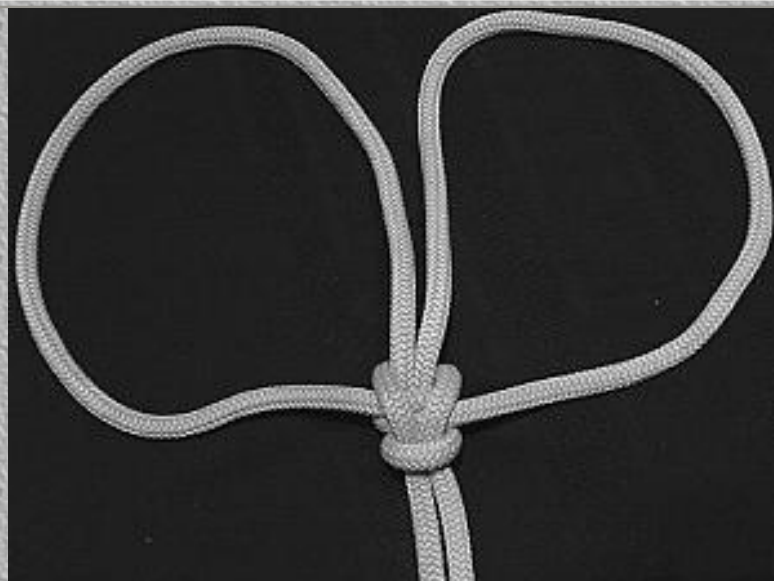
**Grasp the the top of the loop you just poked the bights through and bring it toward you and down so that it rests across the standing lines.**



*Finished "Rigid Double Splayed Loop in a Bight"*

*Front View*

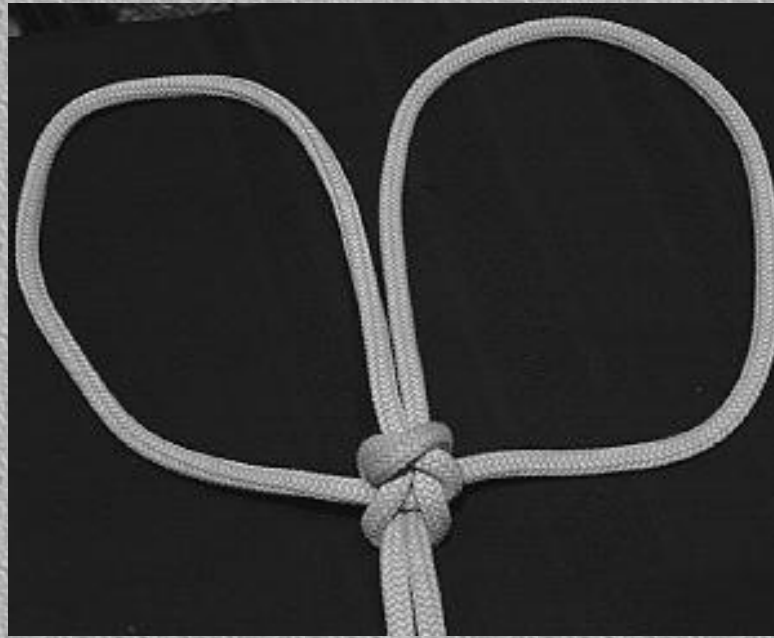
**Pull on the standing part to dress the knot.  
Pull on all parts to set the knot.**



*Finished "Rigid Double Splayed Loop in a Bight"*

*Rear View*

**Pull on the standing part to dress the knot.  
Pull on all parts to set the knot.**



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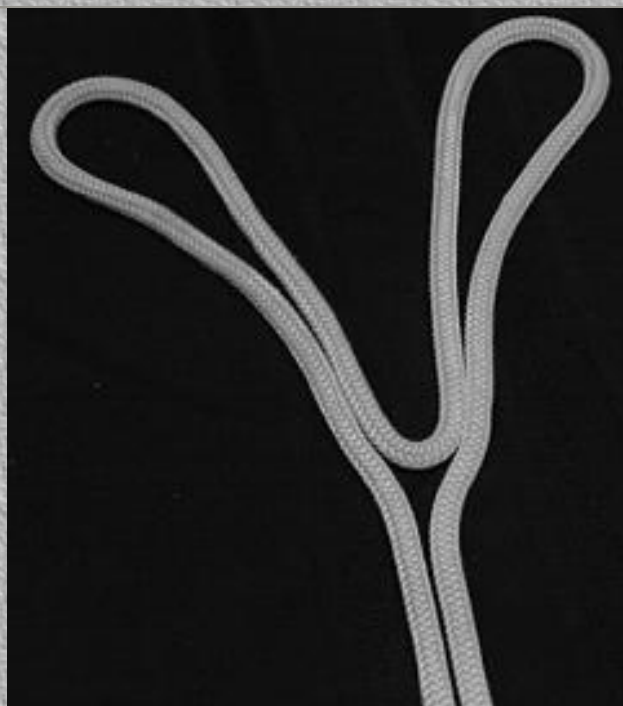
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## Triple Crown Knot

**The Triple Crown Knot is my favorite double splayed loop knot because it is easy to tie and the loops definitely don't communicate.**

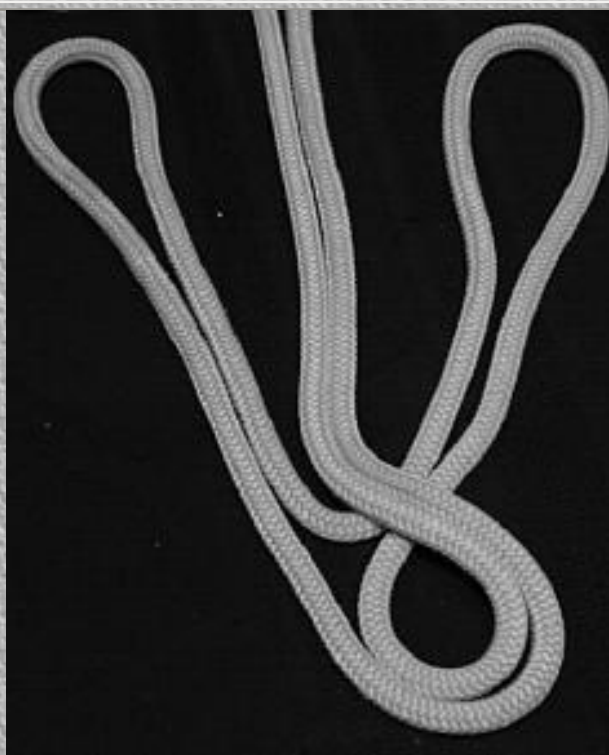
*Step #1*

**Form two equal length bights in a bight.**



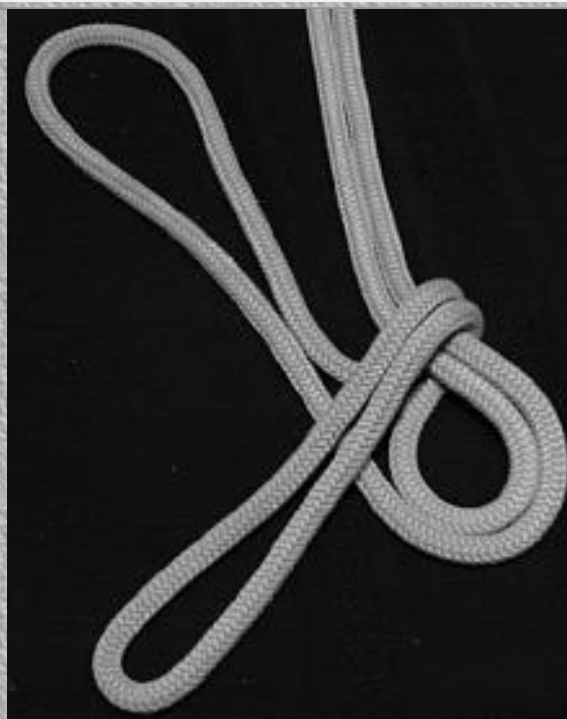
## *Step #2*

**Grasp the standing part and bring it up over and between the two bights, forming a small loop at the bottom**



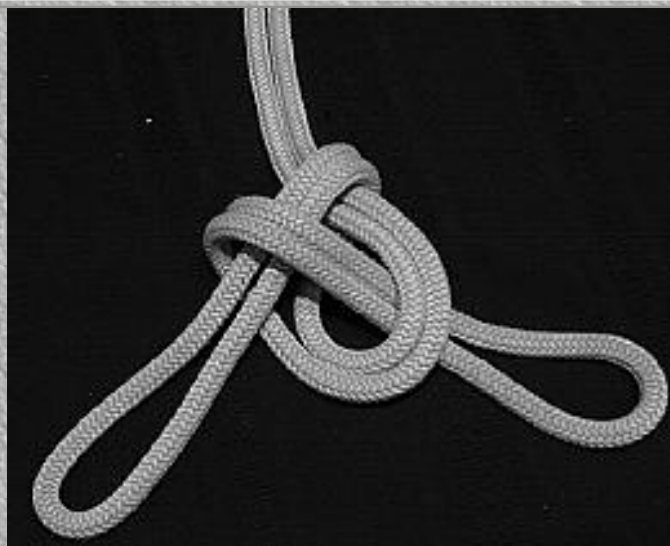
### *Step #3*

**Grasp the right hand bight and cross it over the standing part and the left hand bight.**



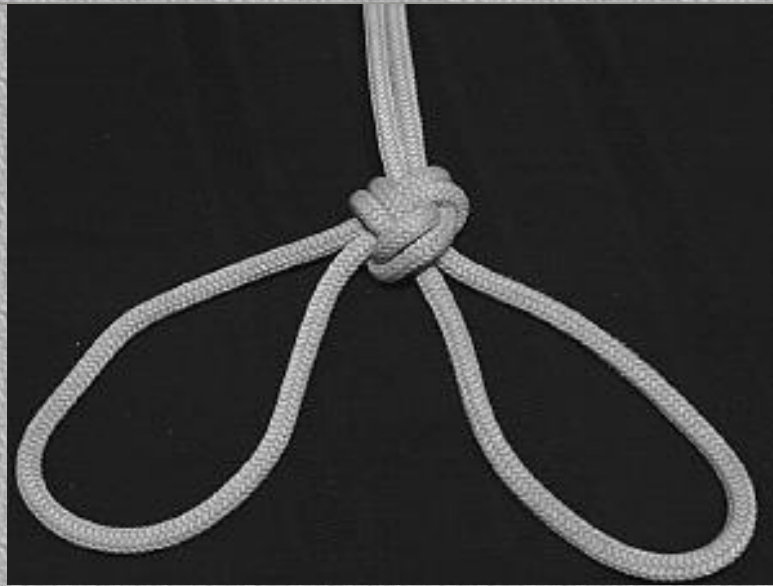
### *Step #4*

**Grasp the left hand bight and cross it over the right hand bight, inserting it through the small loop.**



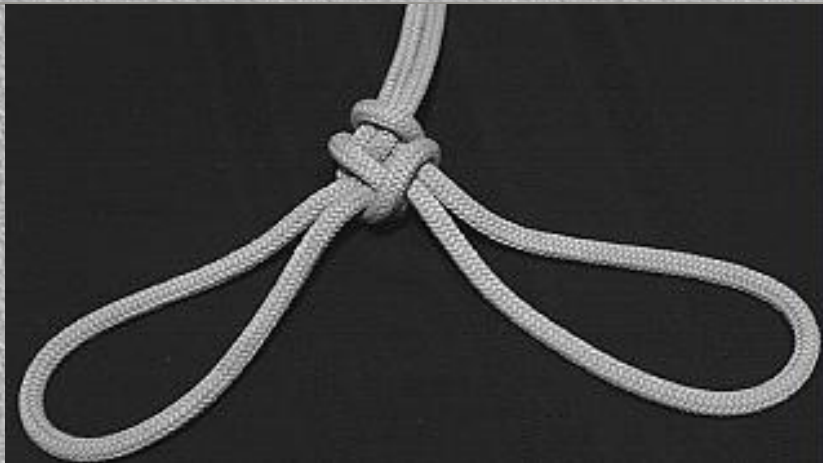
*Finished Triple Crown Knot - Front View*

**Pull on the standing part to dress the knot. Pull on all parts to set the knot.**



### *Finished Triple Crown Knot - Rear View*

**Pull on the standing part to dress the knot. Pull on all parts to set the knot.**



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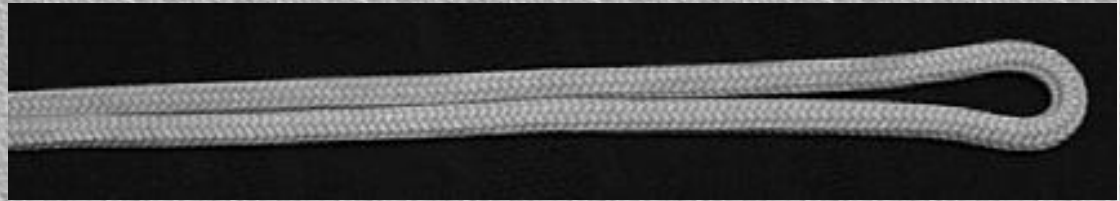
## **Bowline on a Bight**

**The Bowline on a Bight is good parallel loop knot to use when you need hand**

loops to tug on the rope to get it unstuck from a vine-choked branch. It is easy to tie and does not readily jam, so it is usually easy to untie after applying a load.

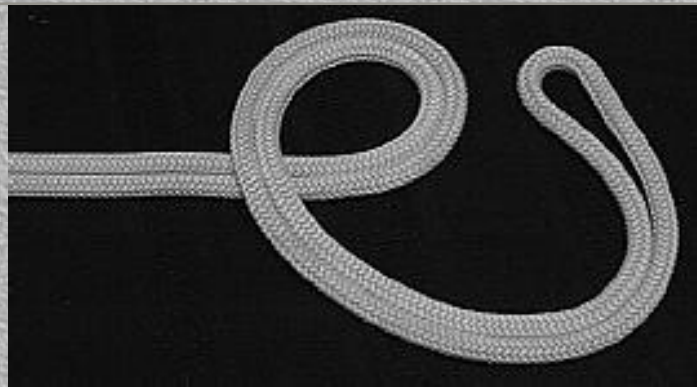
### *Step #1*

**Start with a bight of rope.**



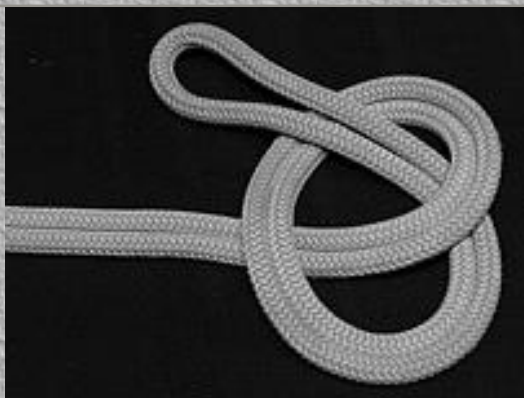
### *Step #2*

**Form a loop by bringing the end over the standing part.**



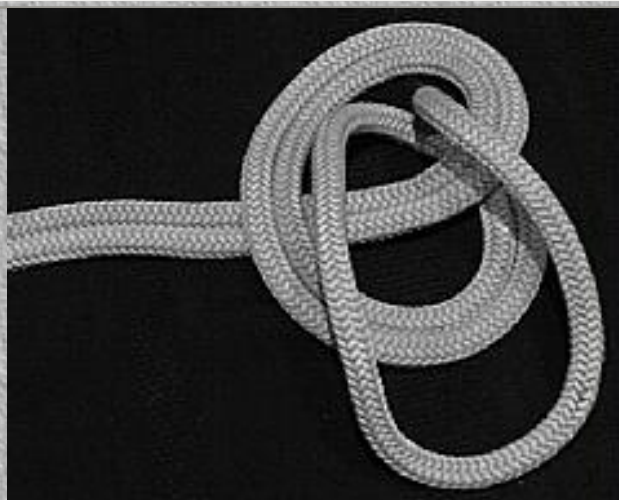
### *Step #3*

**Insert the end of the bight through the loop.**



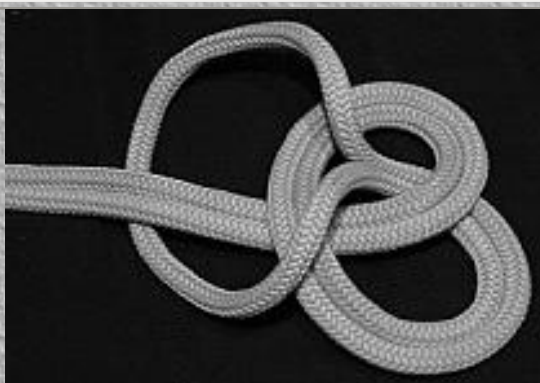
### *Step #4*

**Grasp the end of the bight and bring it toward you and down across the bottom of the loop.**



### *Step #5*

**With your hand still on the end of the bight, drag it beneath all the material that makes up the loop so that it ends up behind the standing part.**





## *Finished Bowline on a Bight - Front View*

**Pull on the lower loop to pull the end of the bight snug against the original loop. Pull on the standing part to set the knot**



## *Finished Bowline on a Bight - Rear View*

**Pull on the lower loop to pull the end of the bight snug against the original loop. Pull on the standing part to set the knot**



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# KNOT KNOWLEDGE

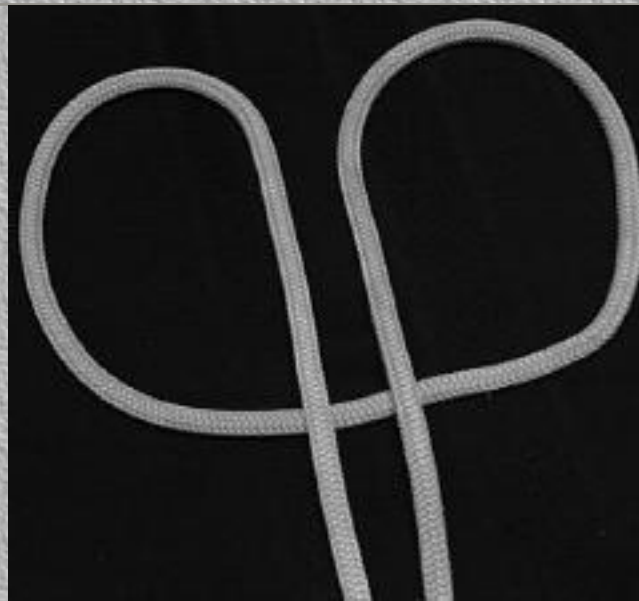
## DOUBLE LOOP KNOTS

### Spanish Bowline

The Spanish Bowline is a double splayed loop knot that is easy to adjust (before putting on a load) due to the fact that the rope communicates between the two loops. However, unless this knot is set very tightly, it is possible that the rope will slip when you have put it to use, which could be disastrous. When tied and set properly, it is an excellent utility knot.

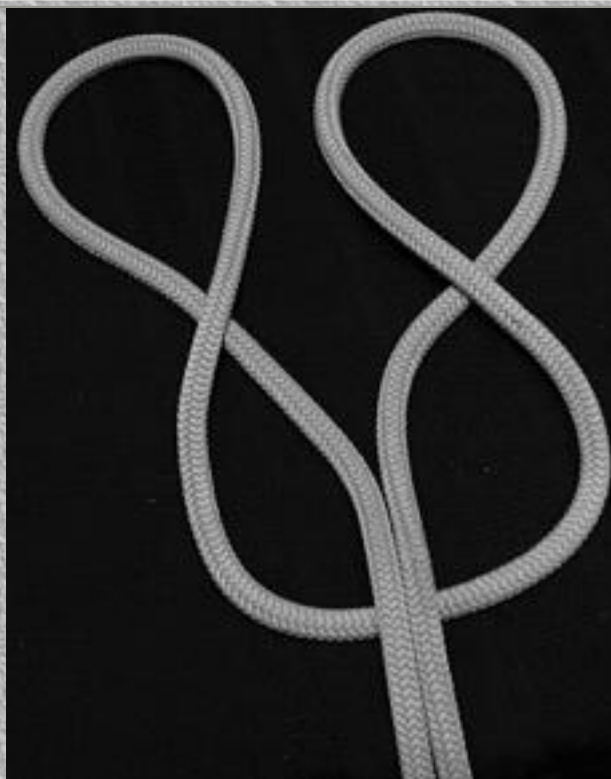
#### *Step #1*

**Make two loops.**



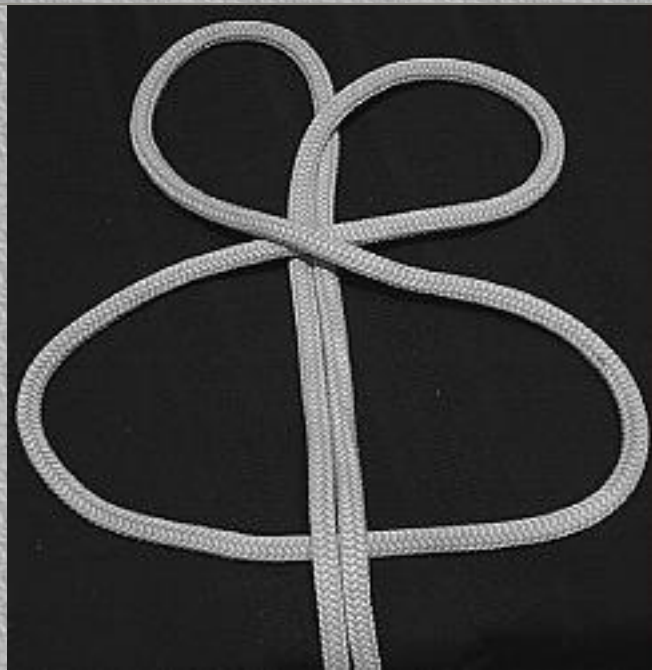
## *Step #2*

**Put a half twist in each loop, turning the outside of each loop to the middle.**



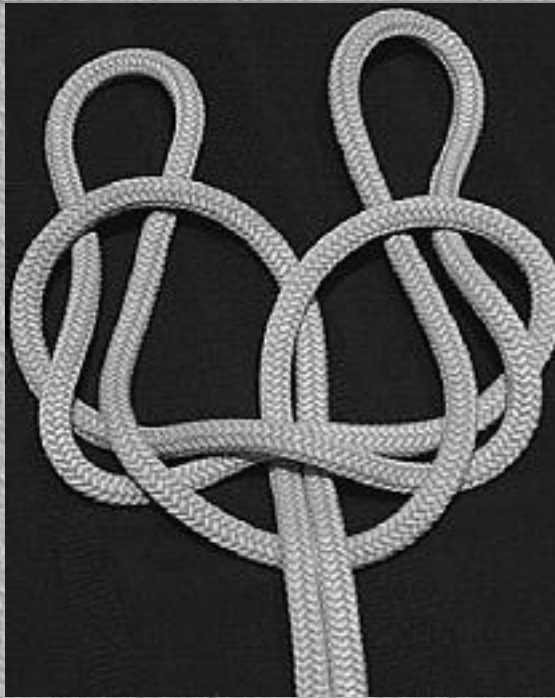
## *Step #3*

**Take the left-twisted loop and insert it through the right-twisted loop.**



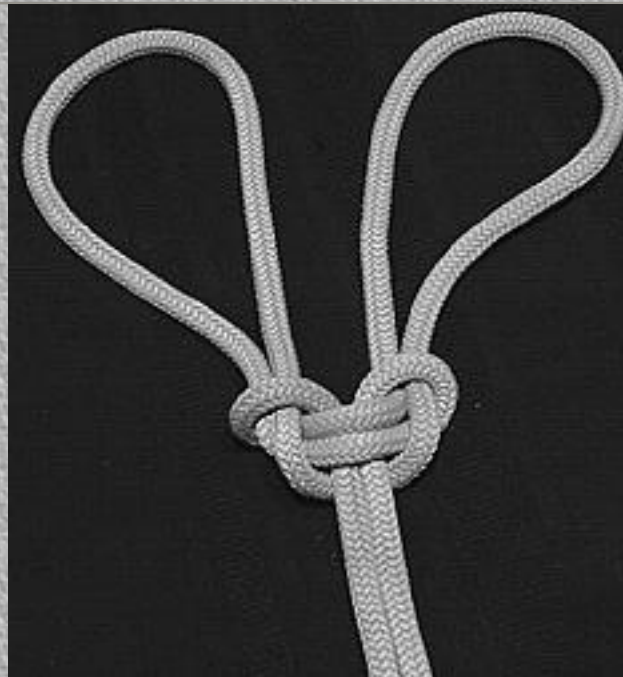
## *Step #4*

**Take the material from the bottom of the twisted loops and pull up bights through the top of the twisted loops.**



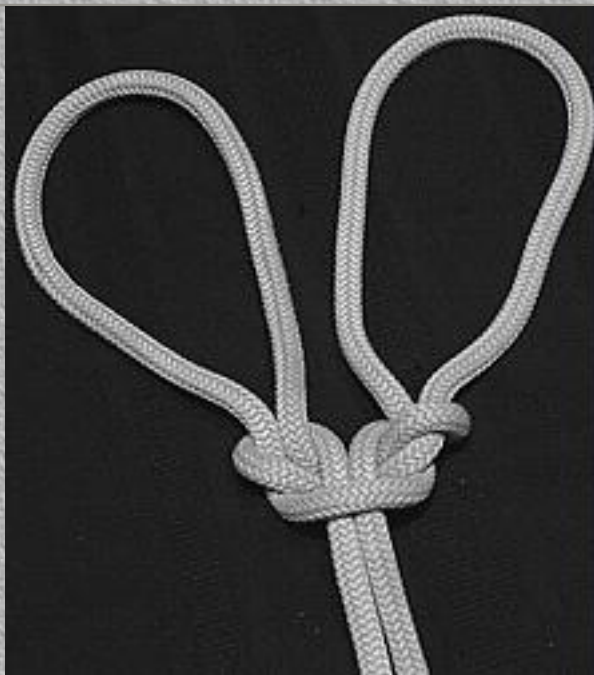
## *Finished Spanish Bowline - Front View*

**Pull on the standing line to dress the knot. Pull on all parts to set the knot.**



## *Finished Spanish Bowline - Rear View*

**Pull on the standing line to dress the knot. Pull on all parts to set the knot.**



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# KNOT KNOWLEDGE

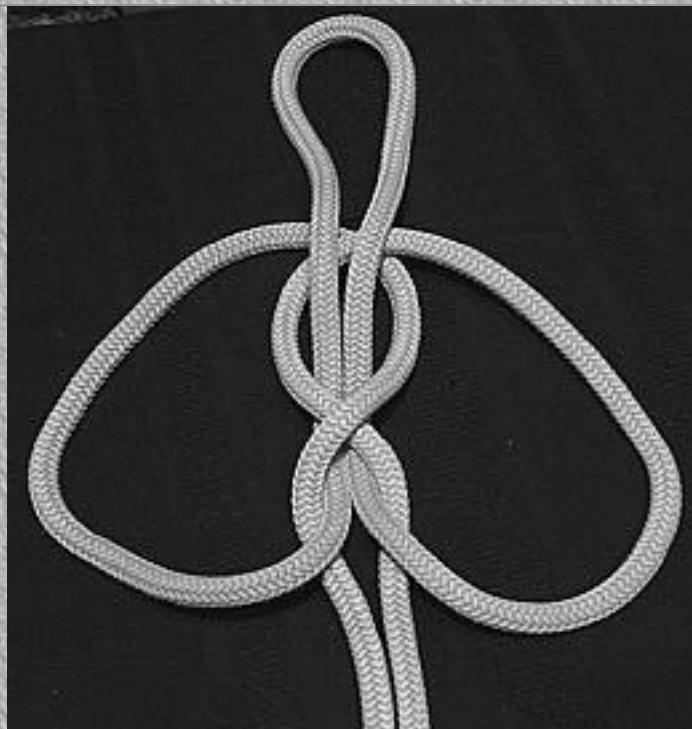
## DOUBLE LOOP KNOTS

### "A Rigid Double Splayed Loop in the Bight" (ABoK #1100)

This knot is touted by Ashley as being "one of the firmest of the Double Loops since the two loops do not directly communicate with each other" (ABoK, p. 200). It seems to me that the loops still indirectly communicate, and I use that for initial adjustment. When the knot is properly set, it would be nearly impossible to get the rope to move between the loops.

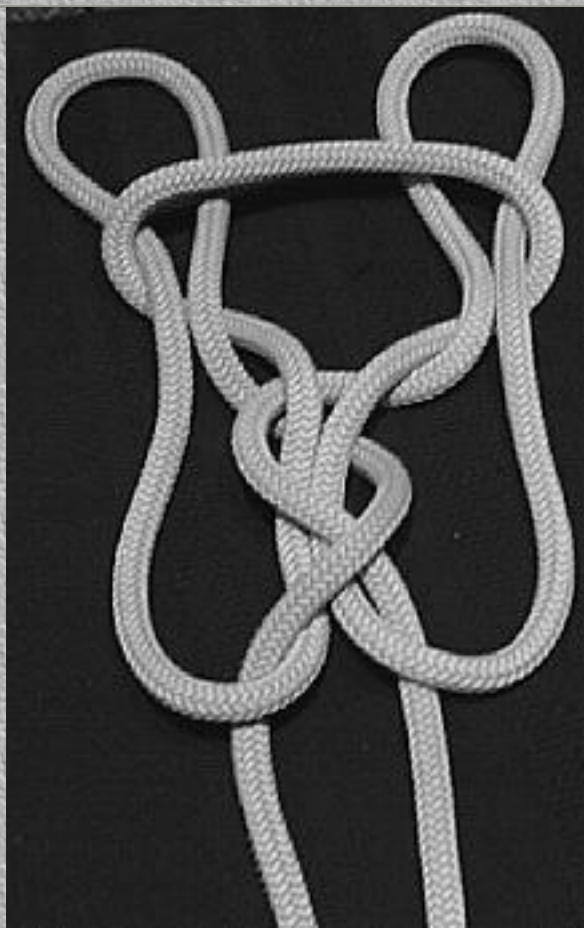
#### *Step #1*

To start this knot, begin with a [butterfly knot](#), but leave it loose as shown instead of drawing it up tight.



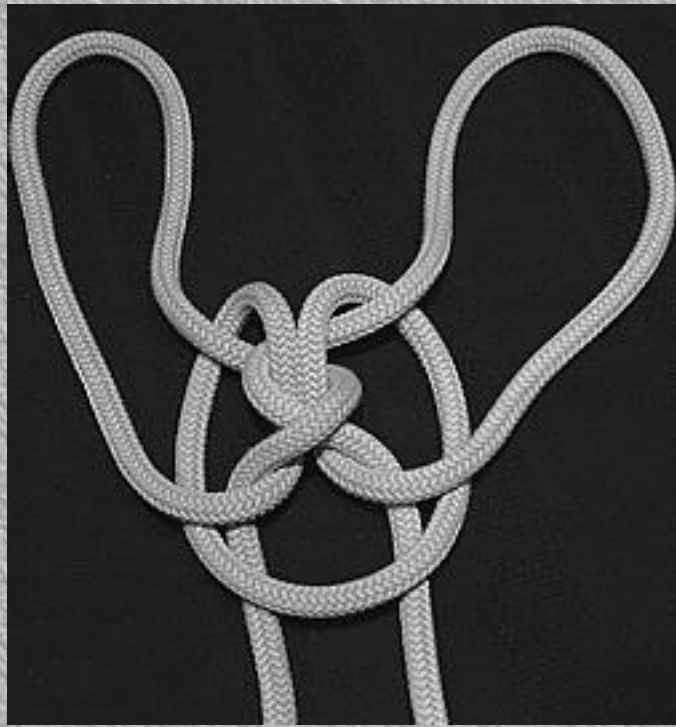
## *Step #2*

**Take the material from the lower two loops and pull bights through the upper loop.**



## *Step #3*

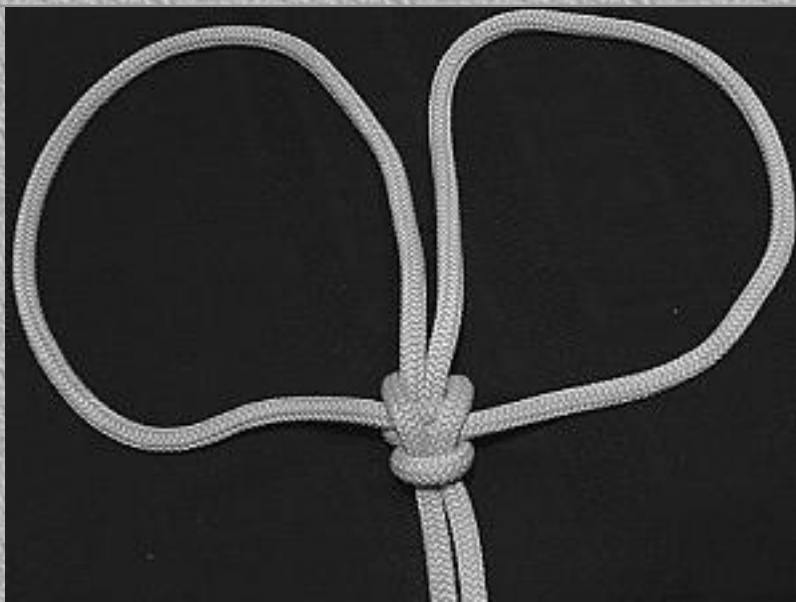
**Grasp the the top of the loop you just poked the bights through and bring it toward you and down so that it rests across the standing lines.**



*Finished "Rigid Double Splayed Loop in a Bight"*

*Front View*

**Pull on the standing part to dress the knot. Pull on all parts to set the knot.**

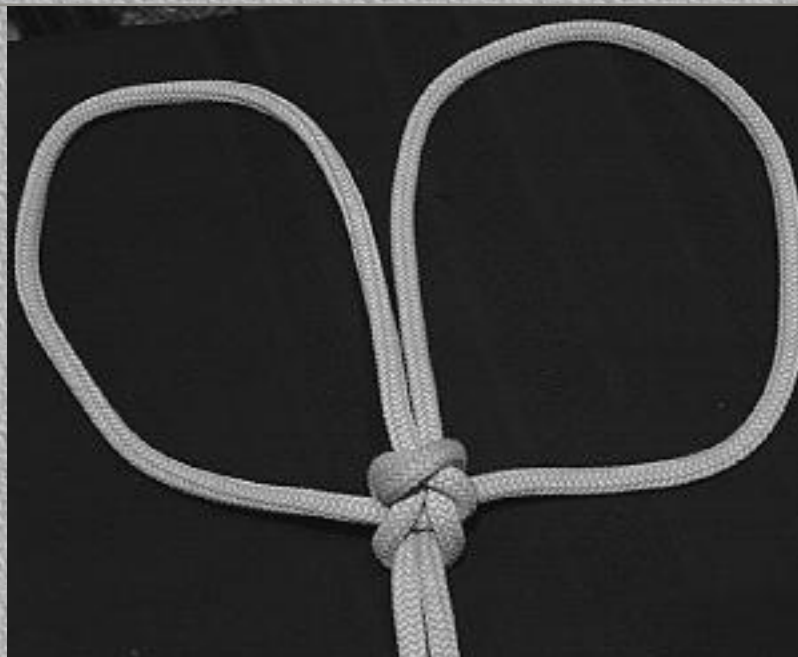




## *Finished "Rigid Double Splayed Loop in a Bight"*

### *Rear View*

**Pull on the standing part to dress the knot. Pull on all parts to set the knot.**



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# KNOT KNOWLEDGE

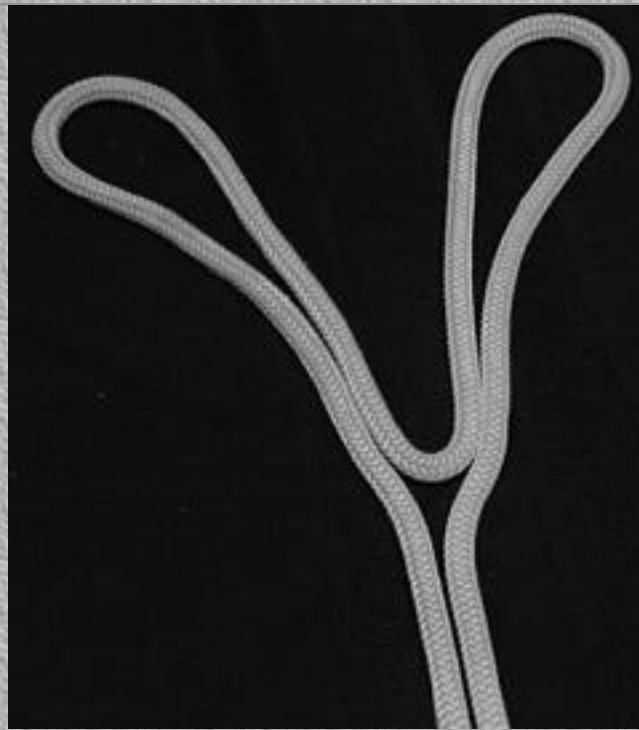
## DOUBLE LOOP KNOTS

### Triple Crown Knot

The Triple Crown Knot is my favorite double splayed loop knot because it is easy to tie and the loops definitely don't communicate.

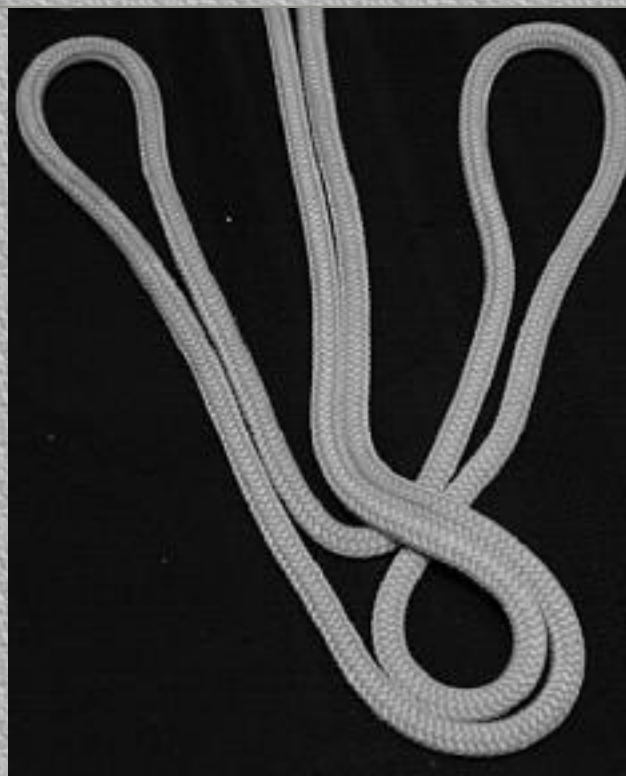
#### *Step #1*

**Form two equal length bights in a bight.**



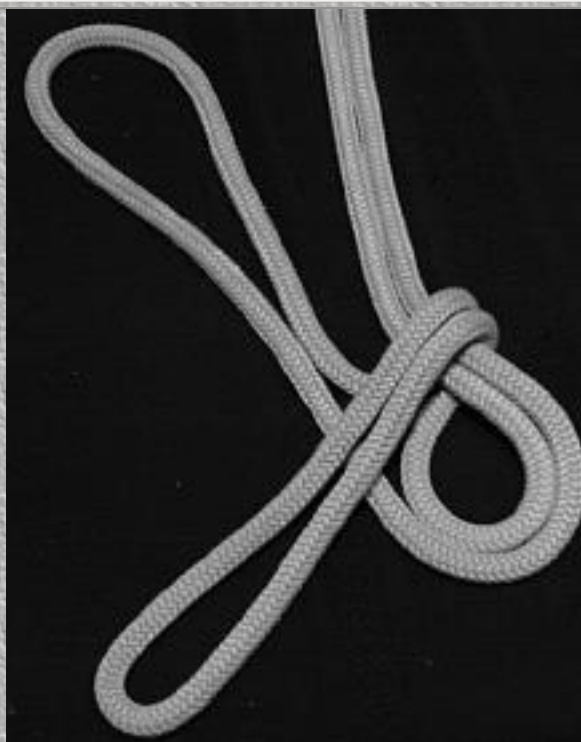
#### *Step #2*

**Grasp the standing part and bring it up over and between the two bights, forming a small loop at the bottom**



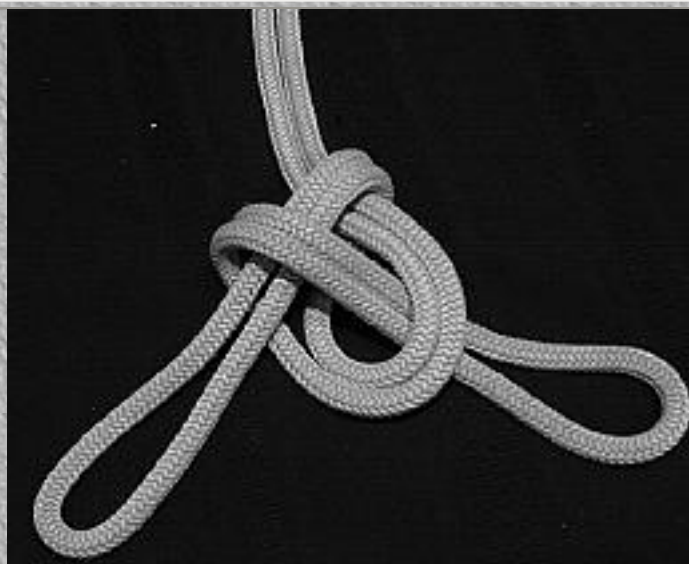
### *Step #3*

**Grasp the right hand bight and cross it over the standing part and the left hand bight.**



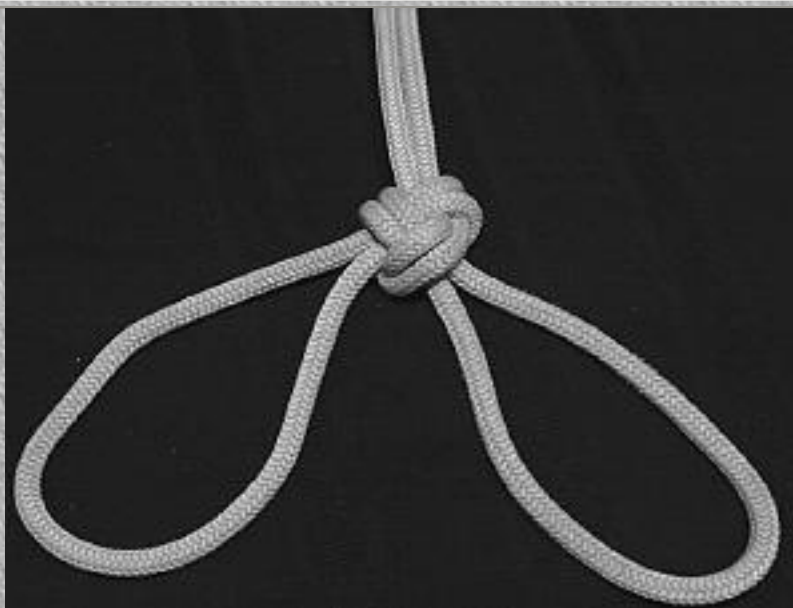
## *Step #4*

**Grasp the left hand bight and cross it over the right hand bight, inserting it through the small loop.**



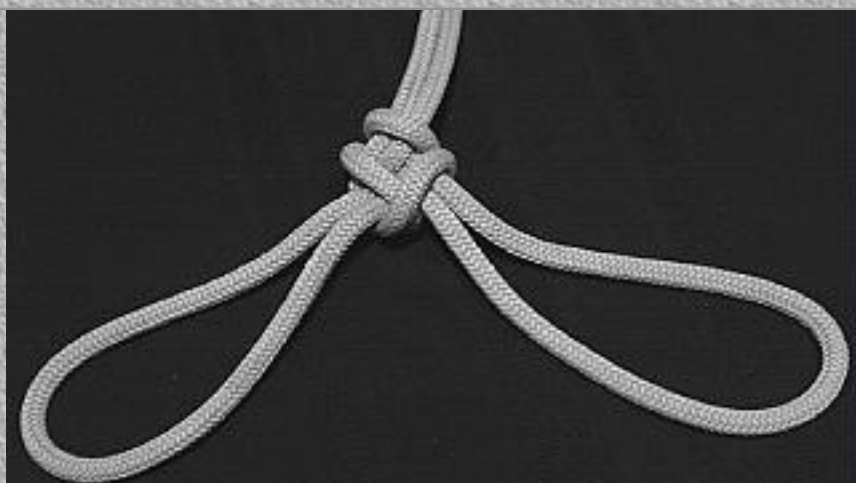
## *Finished Triple Crown Knot - Front View*

**Pull on the standing part to dress the knot. Pull on all parts to set the knot.**



## *Finished Triple Crown Knot - Rear View*

**Pull on the standing part to dress the knot. Pull on all parts to set the knot.**



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# KNOT KNOWLEDGE

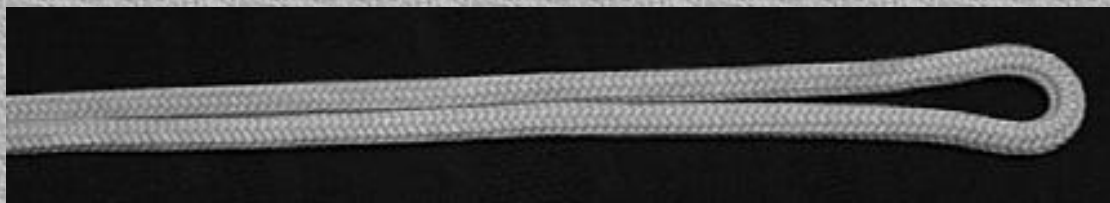
## DOUBLE LOOP KNOTS

### Bowline on a Bight

The Bowline on a Bight is good parallel loop knot to use when you need hand loops to tug on the rope to get it unstuck from a vine-choked branch. It is easy to tie and does not readily jam, so it is usually easy to untie after applying a load.

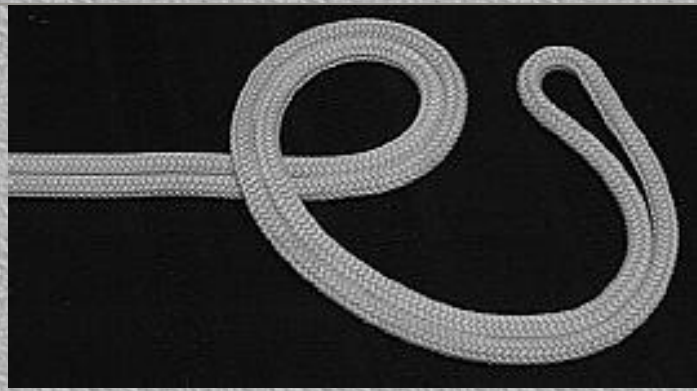
#### *Step #1*

Start with a bight of rope.



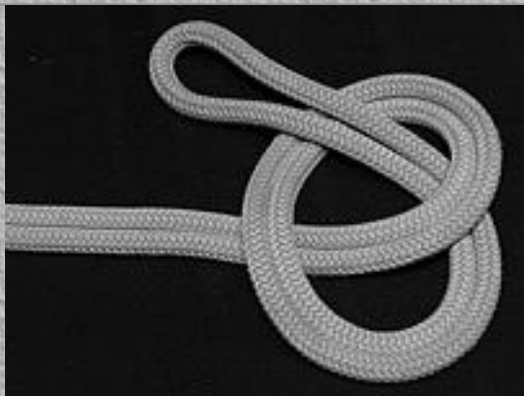
#### *Step #2*

**Form a loop by bringing the end over the standing part.**



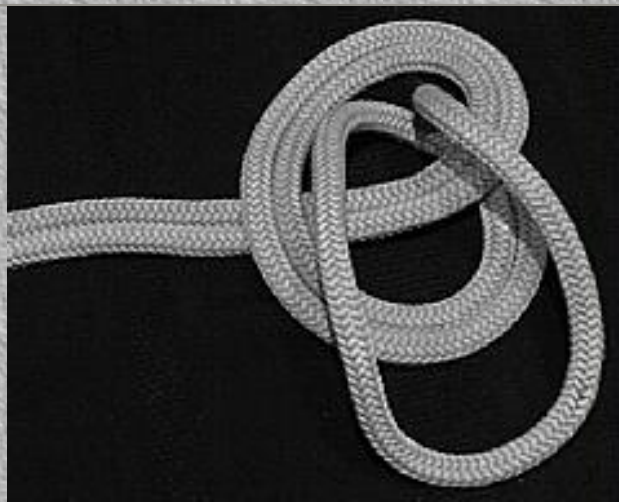
### *Step #3*

**Insert the end of the bight through the loop.**



### *Step #4*

**Grasp the end of the bight and bring it toward you and down across the bottom of the loop.**



## *Step #5*

**With your hand still on the end of the bight, drag it beneath all the material that makes up the loop so that it ends up behind the standing part.**



## *Finished Bowline on a Bight - Front View*

**Pull on the lower loop to pull the end of the bight snug against the original loop. Pull on the standing part to set the knot**



## *Finished Bowline on a Bight - Rear View*

**Pull on the lower loop to pull the end of the bight snug against the original loop. Pull on the standing part to set the knot**



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# KNOT KNOWLEDGE

## HITCHES

[\[Clove Hitch\]](#)

[\[Constrictor Hitch\]](#)

[\[Anchor Bend\]](#)

[\[Bunt Line Hitch\]](#)

[\[Highwayman's Hitch\]](#)

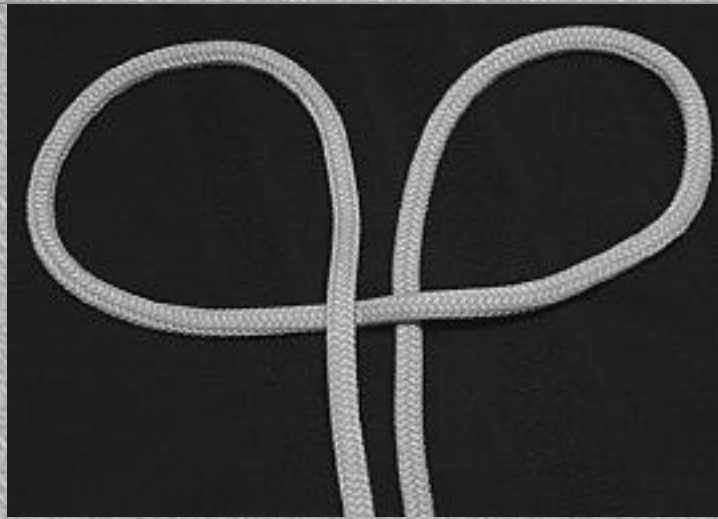
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## Clove Hitch

**The clove hitch is a quick and easy knot to tie especially when you can pop it over the end of what you're tying on to. It's easy to untie even after a load has been applied.**

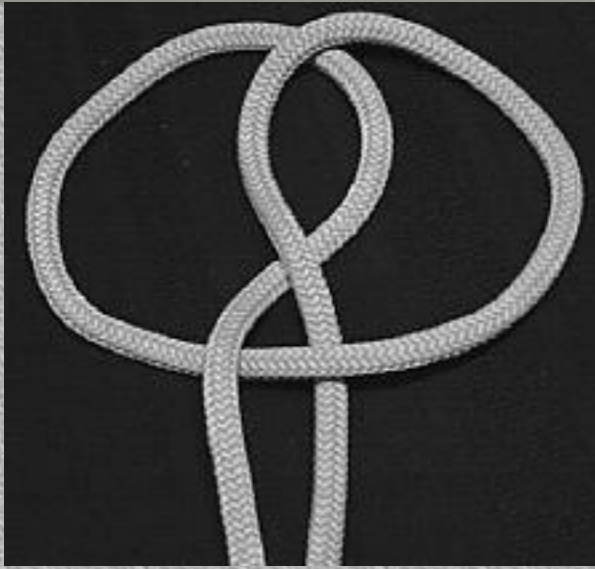
## *Step #1*

**Make two loops,  
twisted in opposite  
directions.**



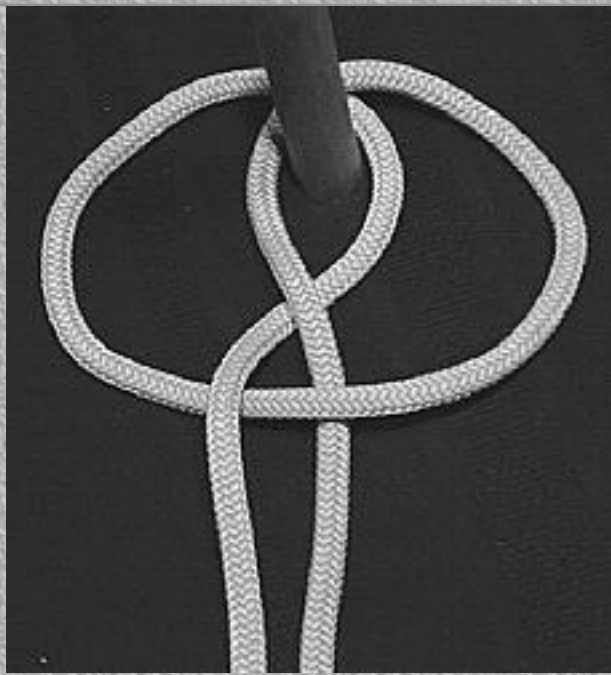
## *Step #2*

**Place the left loop under  
the left part of the right  
loop, to form a hole.**



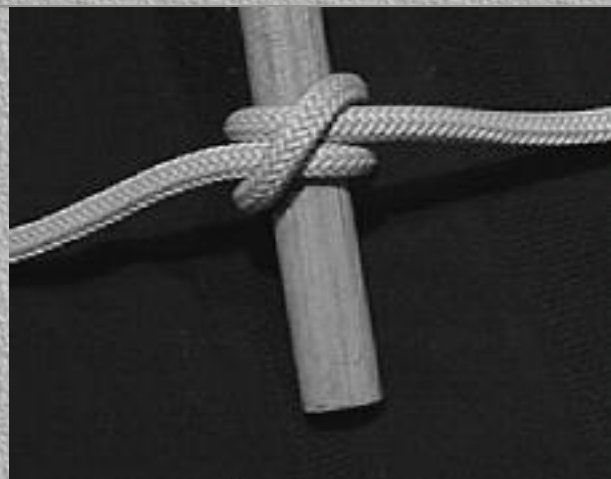
## *Step #3*

**Pop the hole over the end of the object you're tying on to (in this case a barely-visible dowel rod).**



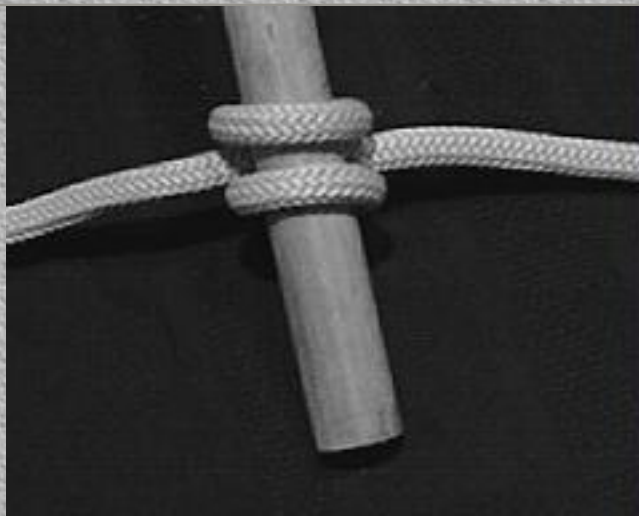
***Finished Clove Hitch - Front View***

**Dress and set the knot.**



***Finished Clove Hitch - Rear View***

**Dress and set the knot**



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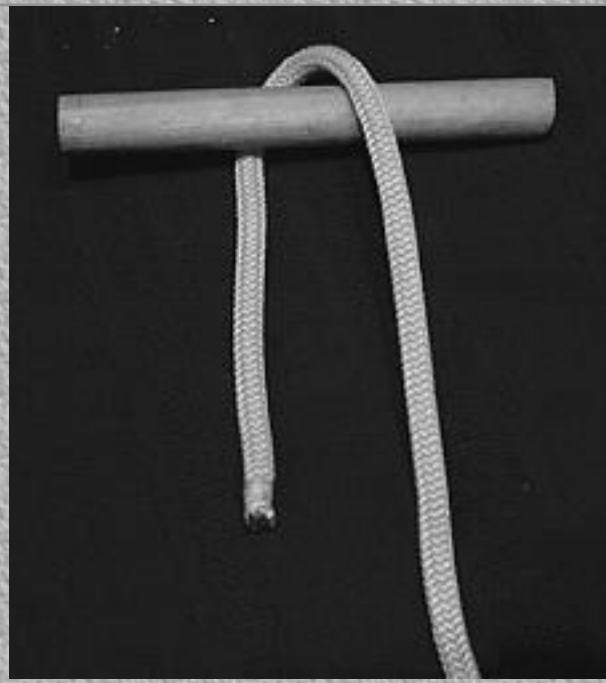
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## **Constrictor Hitch**

**Use the Constrictor Hitch when you need to clamp a rope tightly around an object. It has a vice-like grip and is very hard to untie unless you slip the knot.**

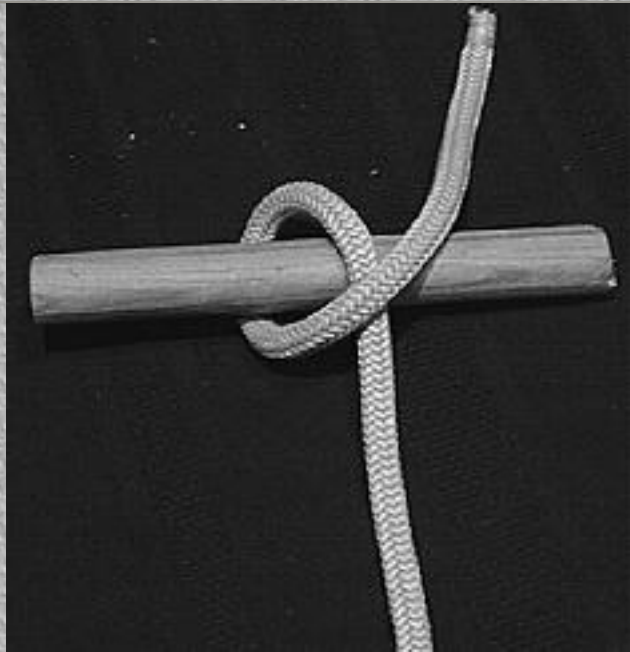
*Step #1*

**Place the end around and behind the item you're tying the rope to.**



## *Step #2*

**Wrap the end around to the other side of the object, crossing the standing part.**



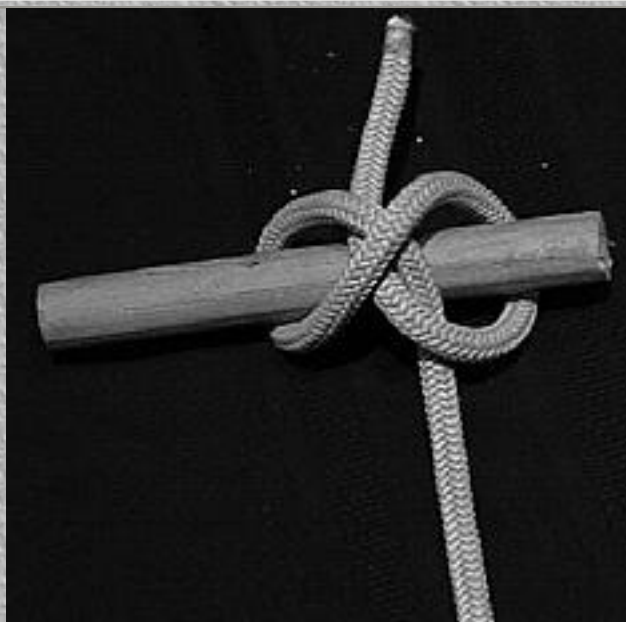
## *Step #3*

**Continue wrapping the end around the dowel so the end is parallel with the standing part.**



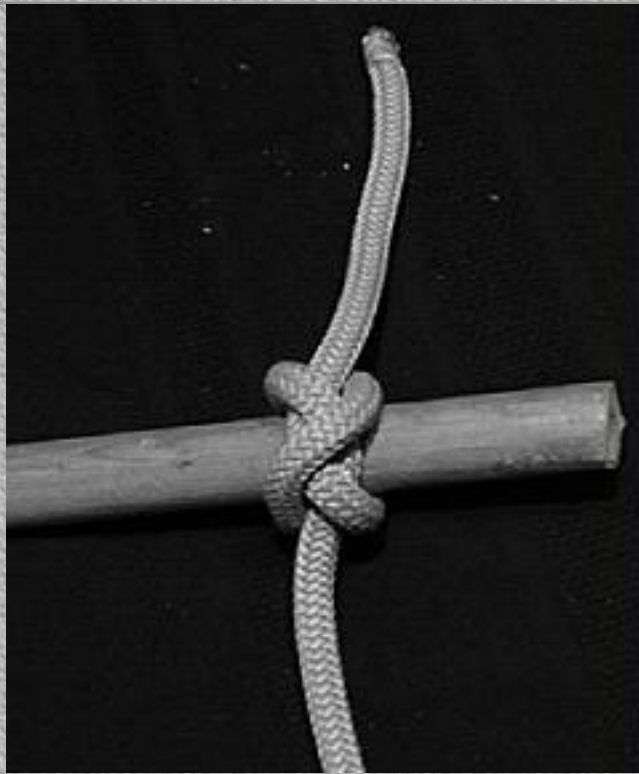
### *Step #4*

**Bring the end over the standing part and tuck it under and between the two loops.**



### *Finished Constrictor Hitch*

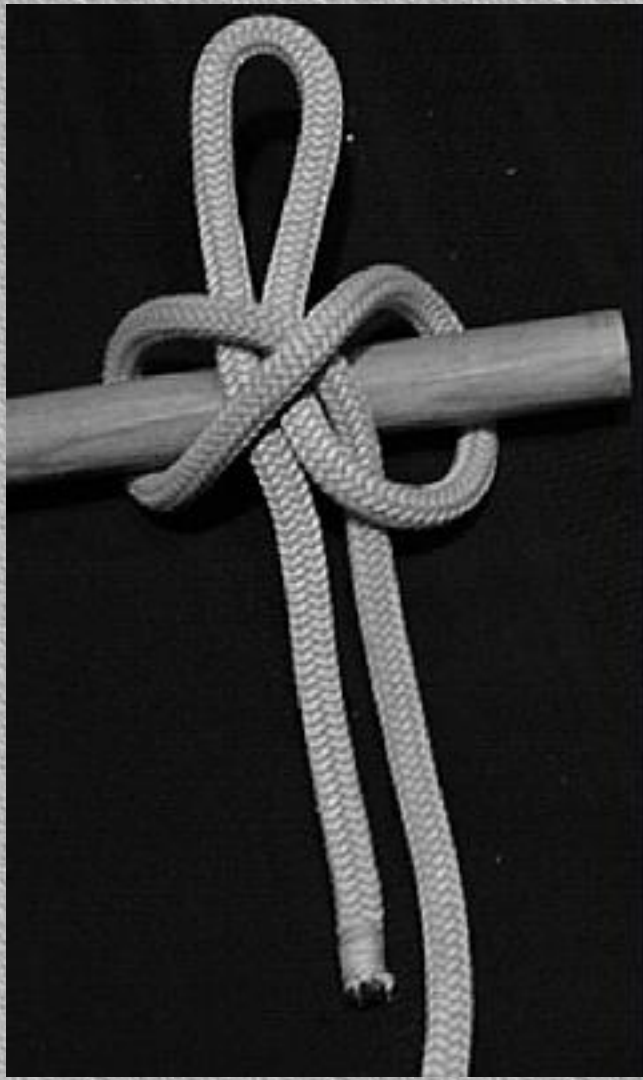
**Dress and set the knot.**



## *Slipped Constrictor Hitch*

**Since this knot cinches up so tightly, if you plan to untie it, stick a bight of rope through instead of the end. Yank on the end to disengage the knot from the object.**





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## Anchor Bend

**The Anchor Bend can be used to attach a rope to a carabiner or ring. The following shows two turns, and three or more can be used.**

*Step #1*

**Bring the end behind and then through the carabiner.**



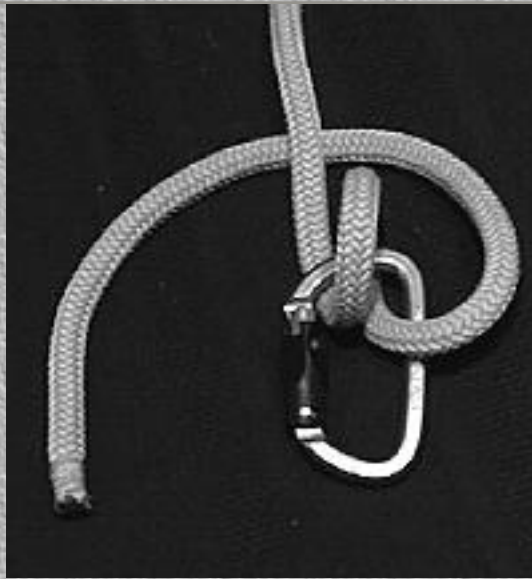
## *Step #2*

**Loop the rope once around the carabiner.**



### *Step #3*

**Bring the end behind the standing part.**



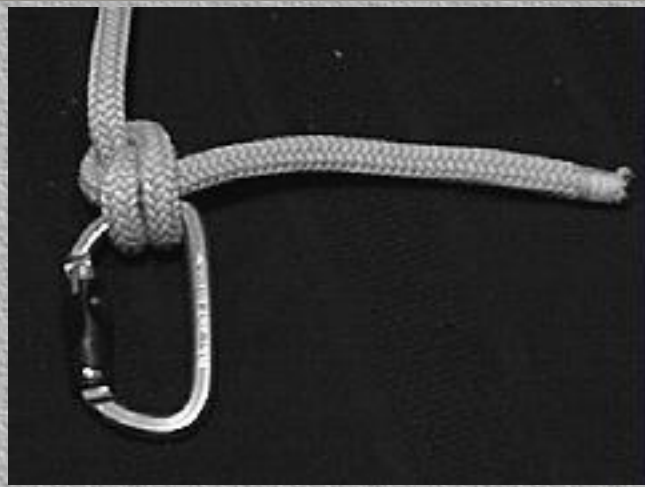
### *Step #4*

**Bring the end through the two loops.**



***Finished Anchor Bend***

**Dress and set the knot.**



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[Bunt Line Hitch](#)

**The Bunt Line Hitch is also a good attachment knot for a carabiner or a ring.**

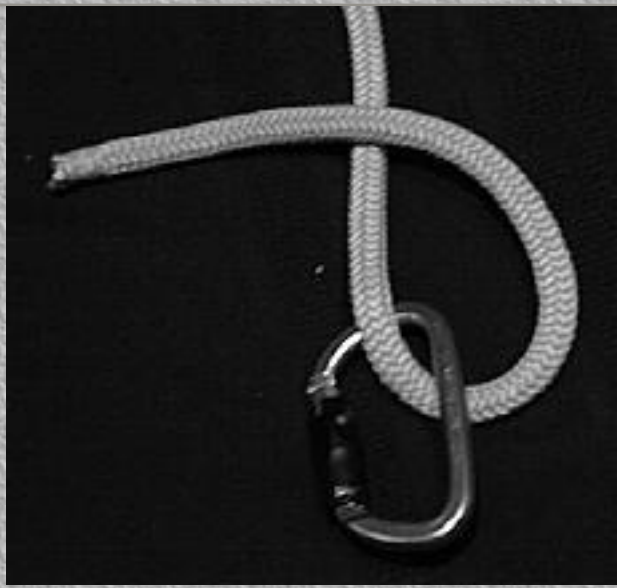
### *Step #1*

**Bring the end in front and then through the carabiner.**



### *Step #2*

**Pull the end over and across the standing part.**



### *Step #3*

**Bring the end behind the loop.**



### *Step #4*

**Pull the end around the front of the loop, or below it, as pictured.**



### *Step #5*

**Insert the end through the loop.**



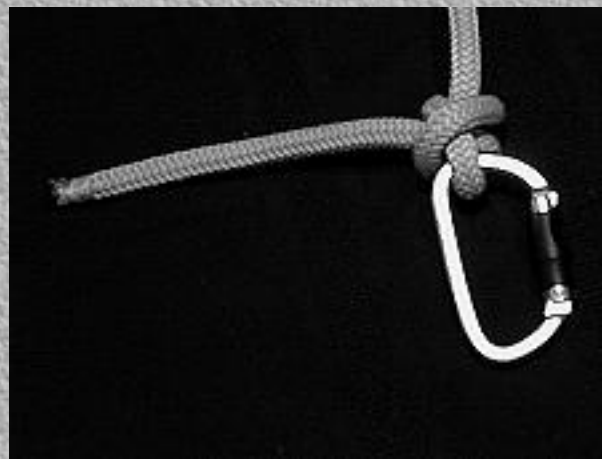
## *Finished Buntline Hitch - Front View*

**Dress and set the knot, bringing the standing part snug against the carabiner.**



## *Finished Buntline Hitch - Rear View*

**Dress and set the knot, bringing the standing part snug against the carabiner.**



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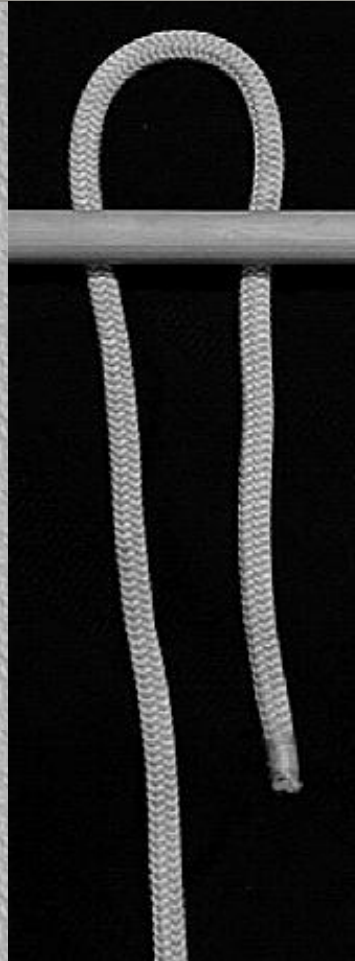
Highwayman's Hitch



**The Highwayman's Hitch is ideal for tying a rope to an object when you need a quick release. Just yank on the end that is not supporting the load to untie and completely remove the rope from the object it was made fast to.**

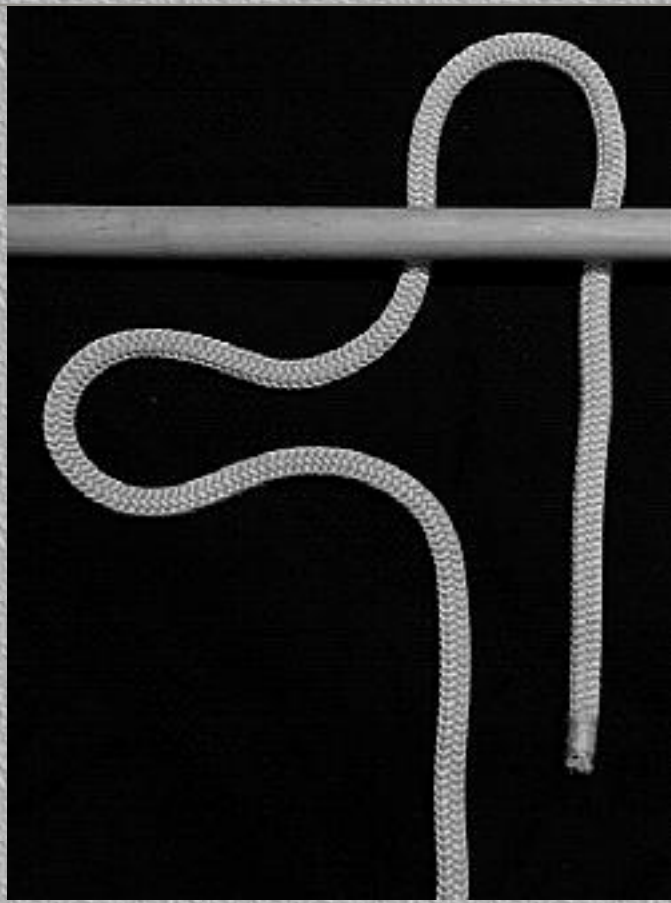
### *Step #1*

**Pull a bight under the object you are tying on to. The left side is the standing part and the right side is the end. The standing part is connected to the load.**



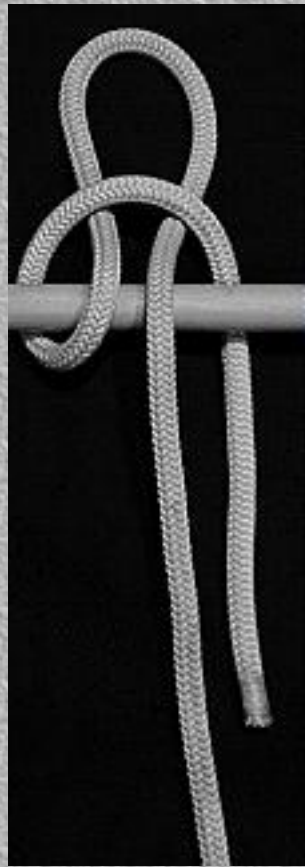
### *Step #2*

**Form a bight in the standing part.**



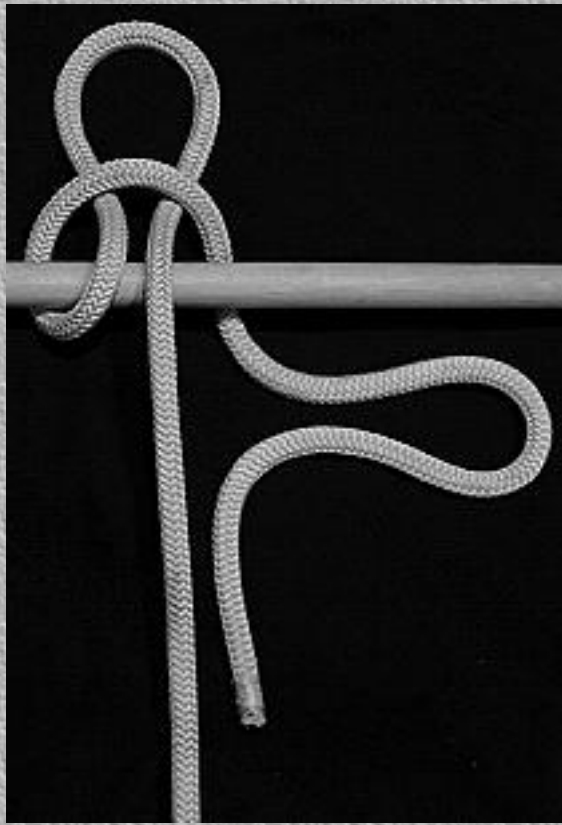
*Step #3*

**Pull the bight over the object and through the original bight.**



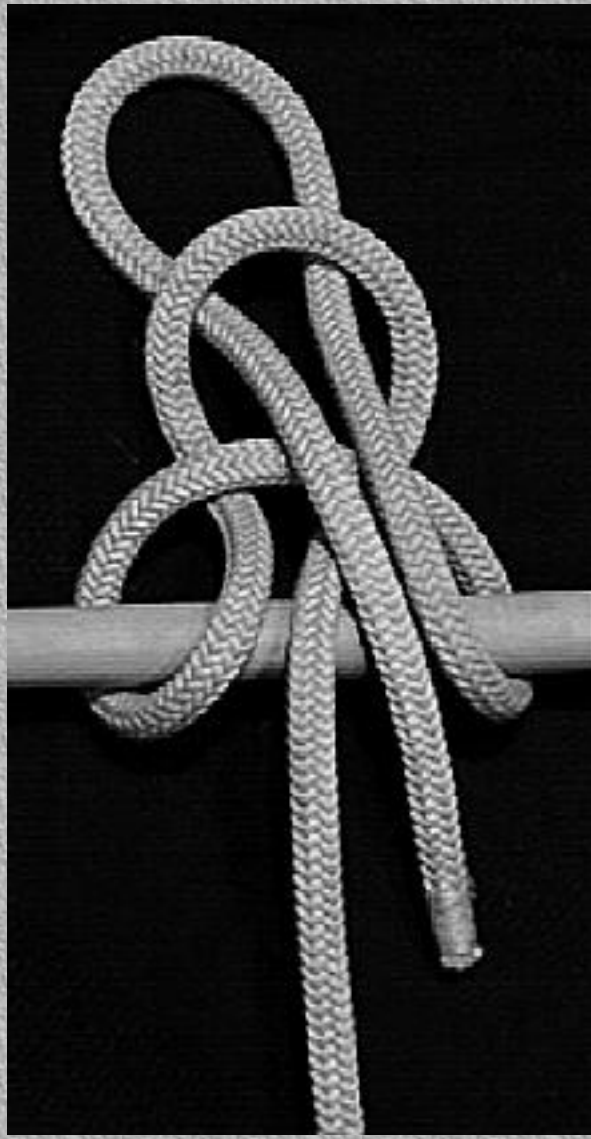
### *Step #4*

**Make a bight in the end.**



*Step #5*

**Insert it through the previous bight.**



### *Step #6*

**Pull the standing part to dress the knot. Then set the knot by pulling on all parts. The end is yanked abruptly**

**to disengage the knot.**



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# KNOT KNOWLEDGE

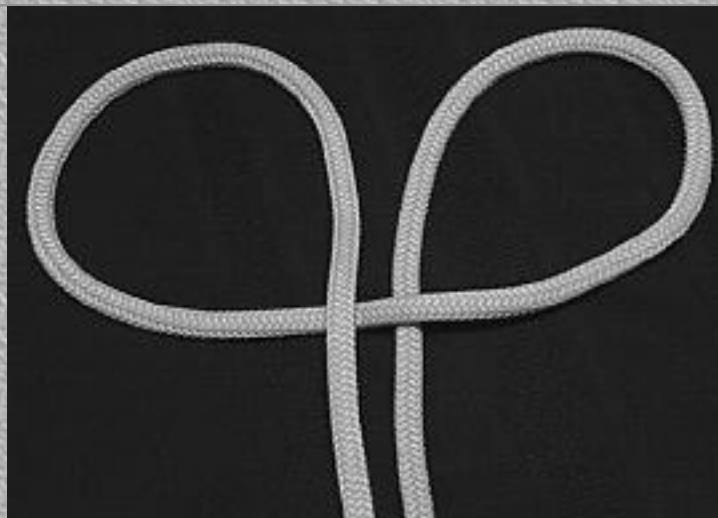
## HITCHES

### Clove Hitch

The clove hitch is a quick and easy knot to tie especially when you can pop it over the end of what you're tying on to. It's easy to untie even after a load has been applied.

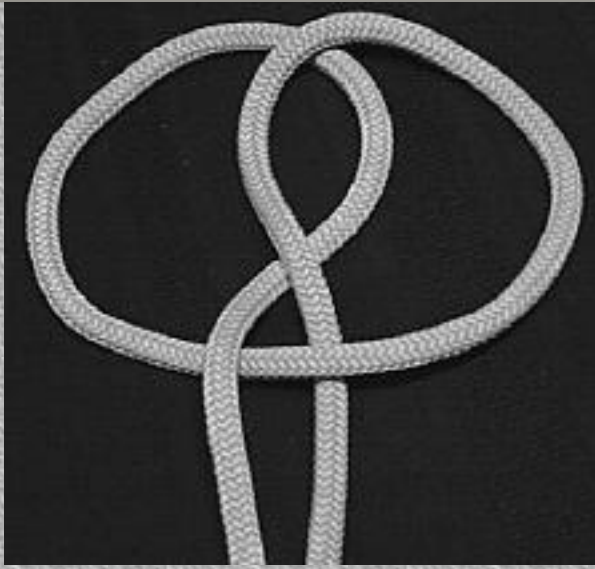
#### *Step #1*

**Make two loops,  
twisted in opposite  
directions.**



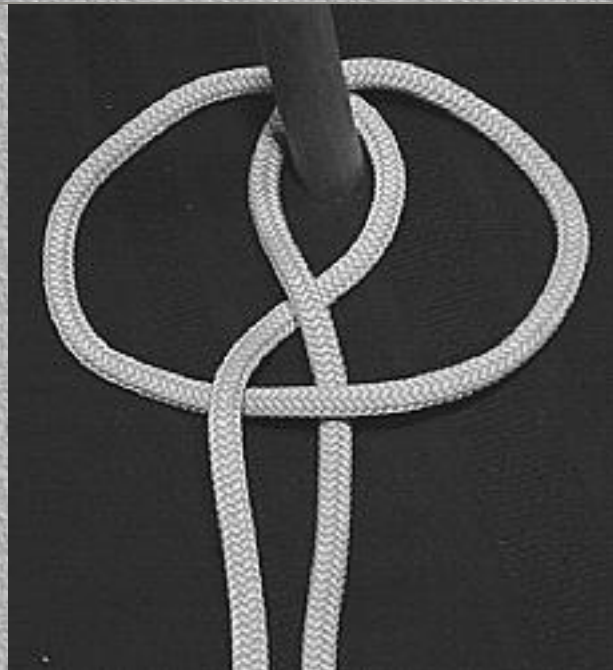
#### *Step #2*

**Place the left loop under the left part of the right loop, to form a hole.**



### *Step #3*

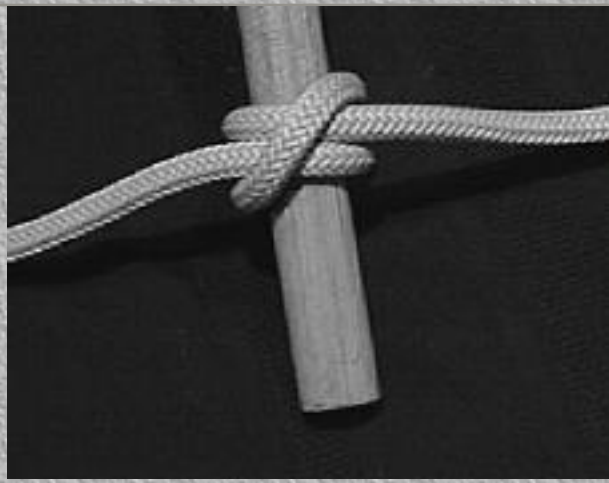
**Pop the hole over the end of the object you're tying on to (in this case a barely-visible dowel rod).**



*Finished Clove Hitch - Front View*

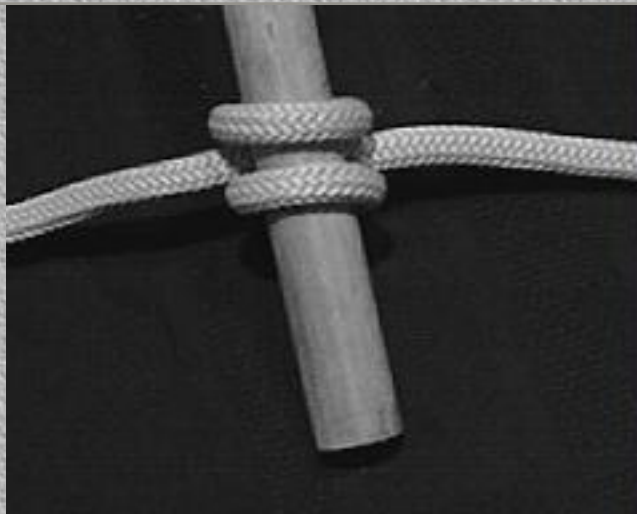


**Dress and set the knot.**



*Finished Clove Hitch - Rear View*

**Dress and set the knot**



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# KNOT KNOWLEDGE

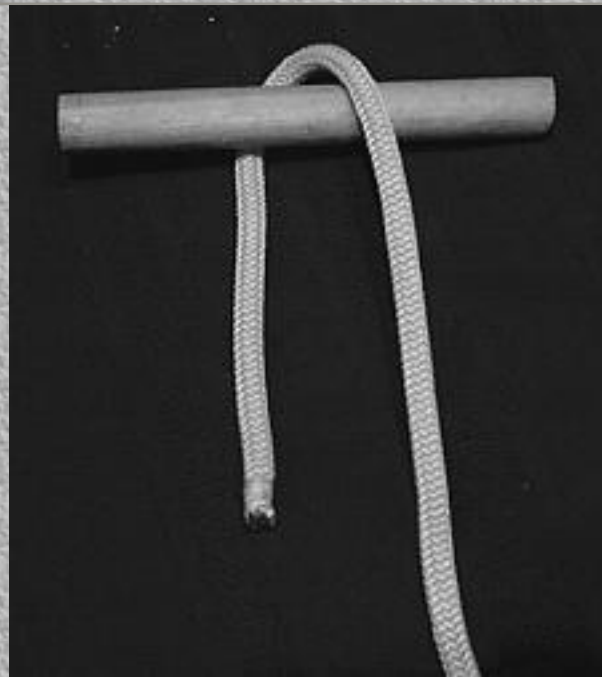
## HITCHES

### Constrictor Hitch

Use the **Constrictor Hitch** when you need to clamp a rope tightly around an object. It has a vice-like grip and is very hard to untie unless you slip the knot.

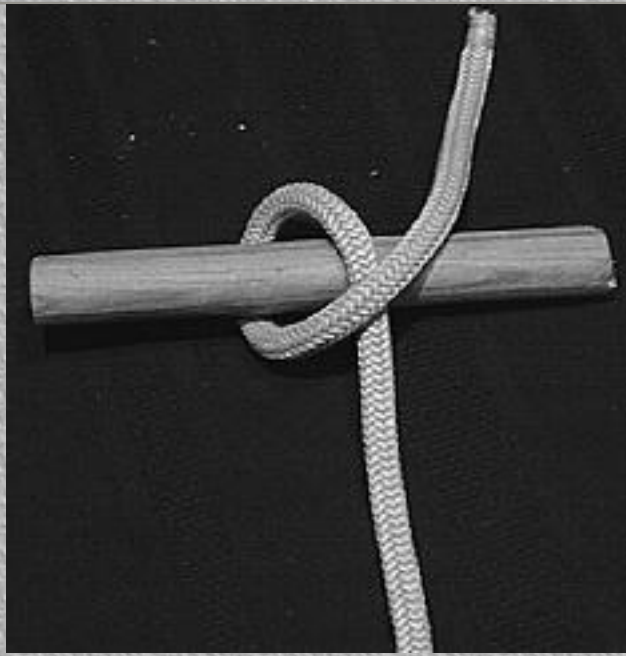
#### *Step #1*

**Place the end around and behind the item you're tying the rope to.**



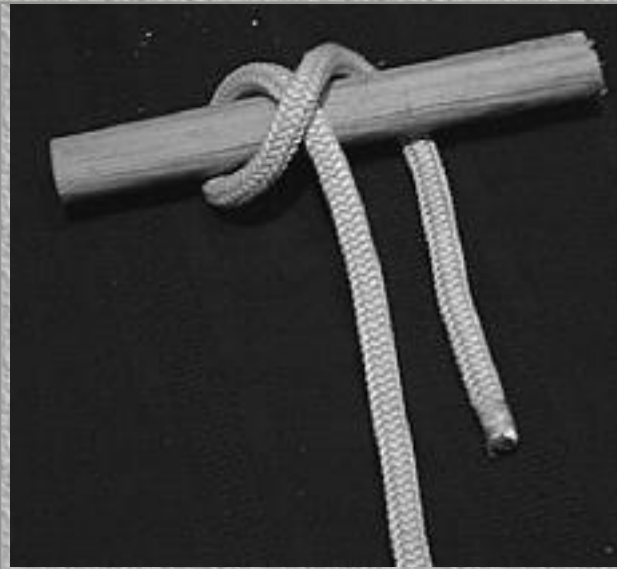
## *Step #2*

**Wrap the end around to the other side of the object, crossing the standing part.**



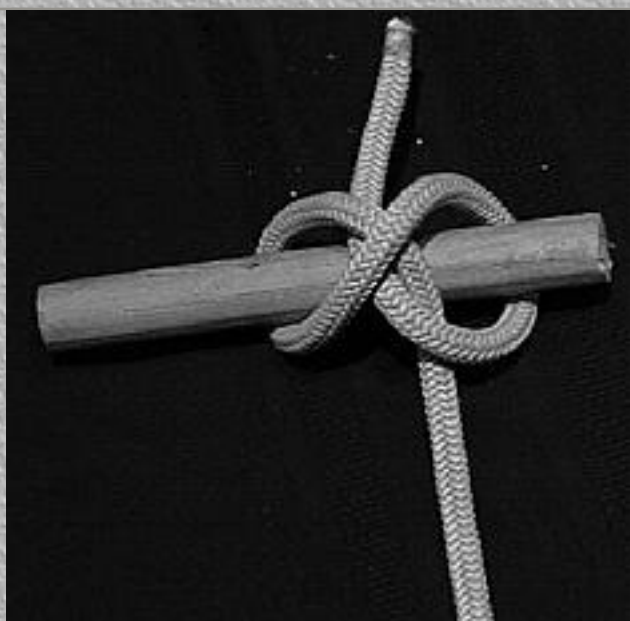
## *Step #3*

**Continue wrapping the end around the dowel so the end is parallel with the standing part.**



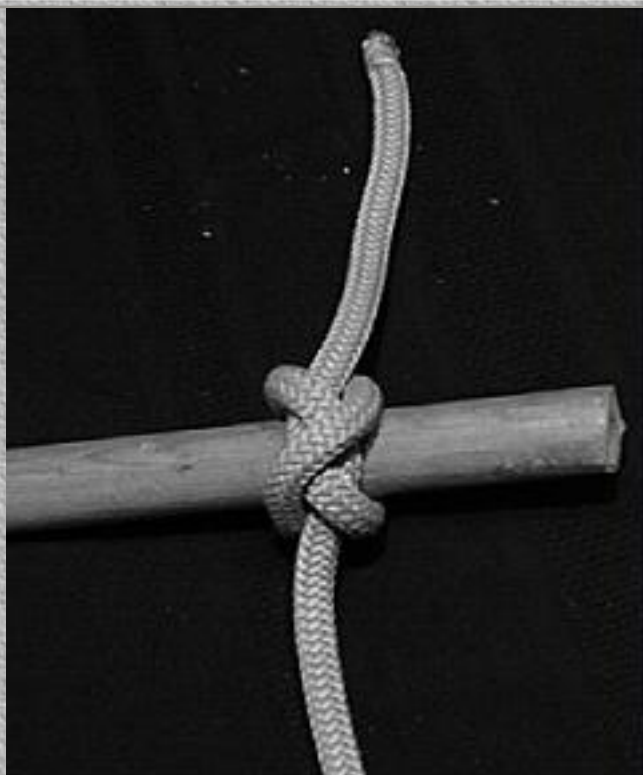
## *Step #4*

**Bring the end over the standing part and tuck it under and between the two loops.**



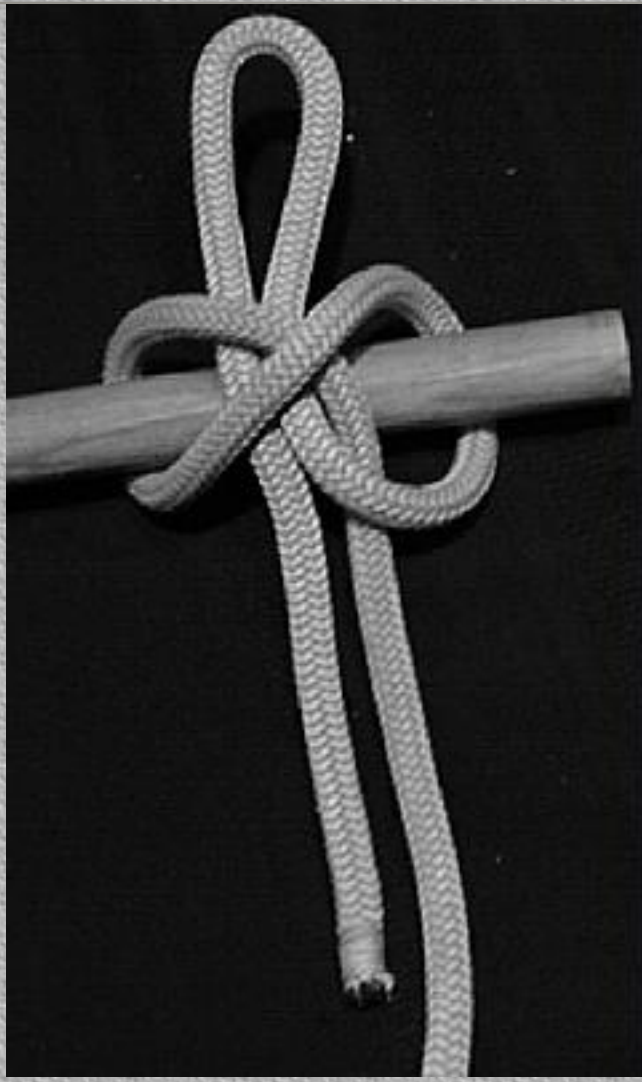
### *Finished Constrictor Hitch*

**Dress and set the knot.**



### *Slipped Constrictor Hitch*

**Since this knot cinches up so tightly, if you plan to untie it, stick a bight of rope through instead of the end. Yank on the end to disengage the knot from the object.**



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# KNOT KNOWLEDGE

## HITCHES

### Anchor Bend

The Anchor Bend can be used to attach a rope to a carabiner or ring. The following shows two turns, and three or more can be used.

#### *Step #1*

**Bring the end behind and then through the carabiner.**



## *Step #2*

**Loop the rope once around the carabiner.**



## *Step #3*

**Bring the end behind the standing part.**



## *Step #4*

**Bring the end through the two loops.**



## *Finished Anchor Bend*

**Dress and set the knot.**



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# KNOT KNOWLEDGE

## HITCHES

### Bunt Line Hitch

**The Bunt Line Hitch is also a good attachment knot for a carabiner or a ring.**

#### *Step #1*

**Bring the end in front and then through the carabiner.**



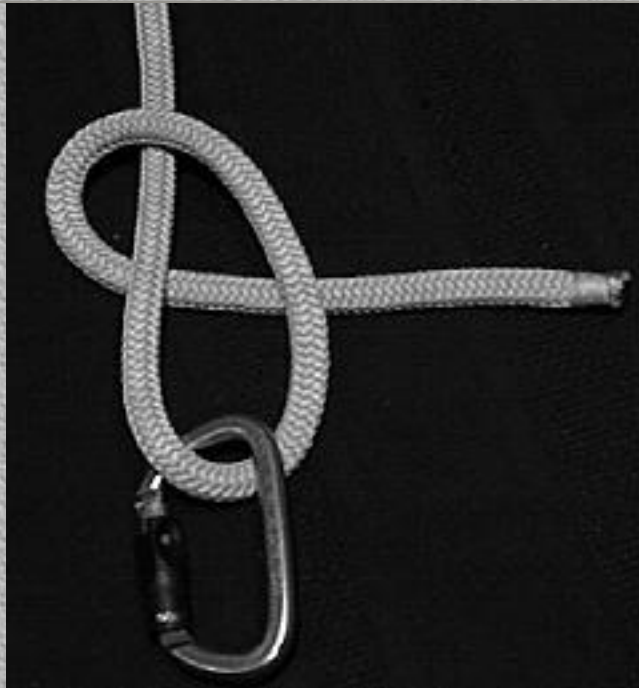
## *Step #2*

**Pull the end over and across the standing part.**



## *Step #3*

**Bring the end behind the loop.**



## *Step #4*

**Pull the end around the front of the loop, or below it, as pictured.**



### *Step #5*

**Insert the end through the loop.**



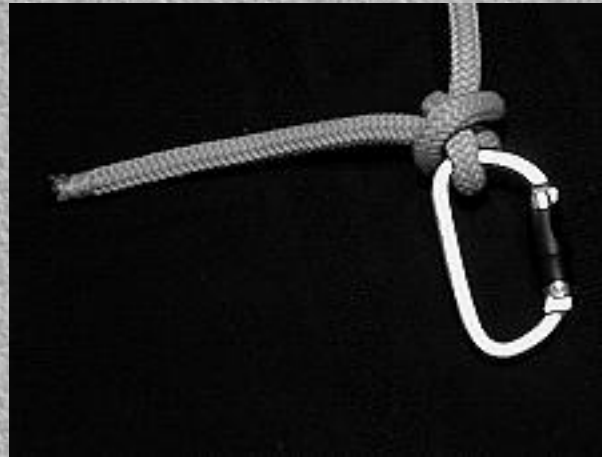
## *Finished Buntline Hitch - Front View*

**Dress and set the knot, bringing the standing part snug against the carabiner.**



## *Finished Buntline Hitch - Rear View*

**Dress and set the knot, bringing the standing part snug against the carabiner.**



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# KNOT KNOWLEDGE

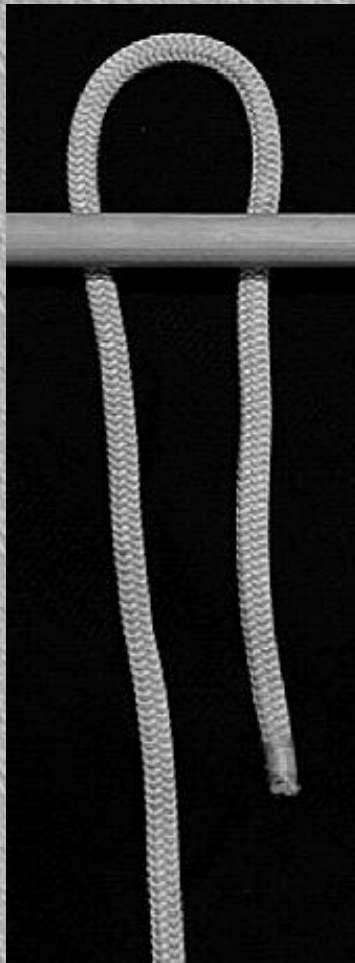
## HITCHES

### Highwayman's Hitch

**The Highwayman's Hitch is ideal for tying a rope to an object when you need a quick release. Just yank on the end that is not supporting the load to untie and completely remove the rope from the object it was made fast to.**

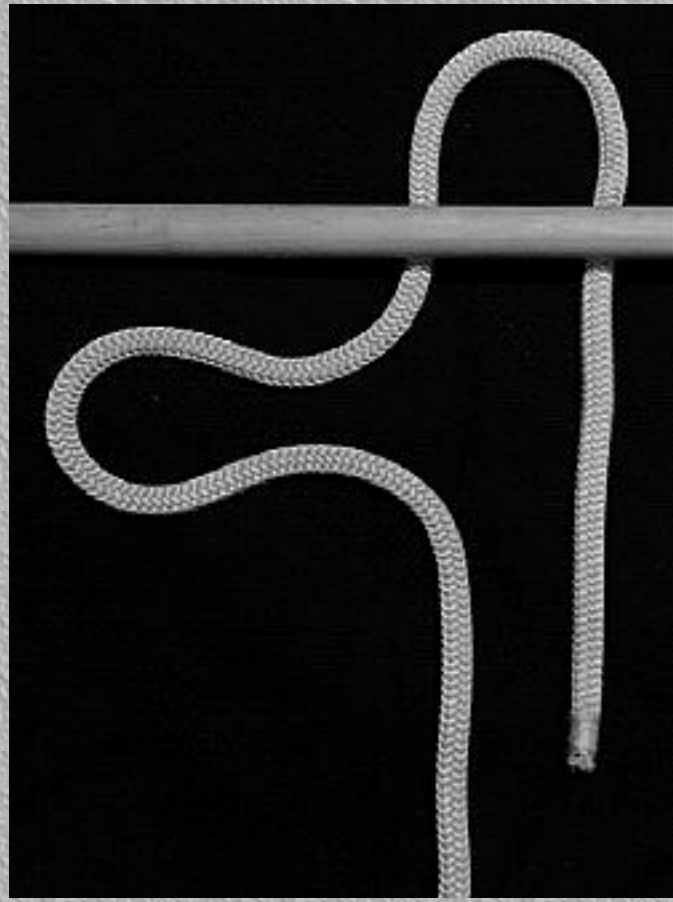
#### *Step #1*

**Pull a bight under the object you are tying on to. The left side is the standing part and the right side is the end. The standing part is connected to the load.**



## *Step #2*

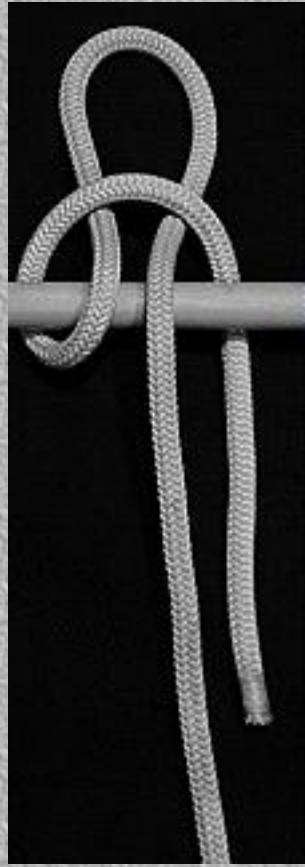
**Form a bight in the standing part.**



### *Step #3*

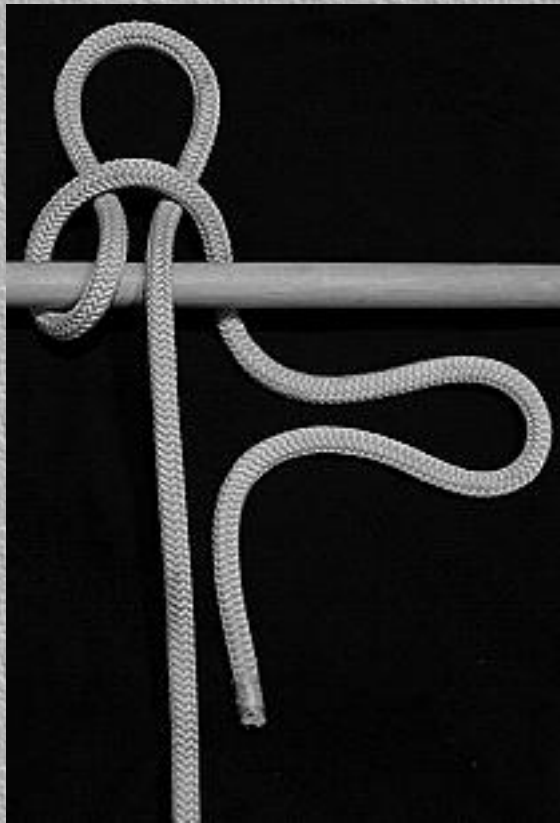
**Pull the bight over the object and through the original bight.**





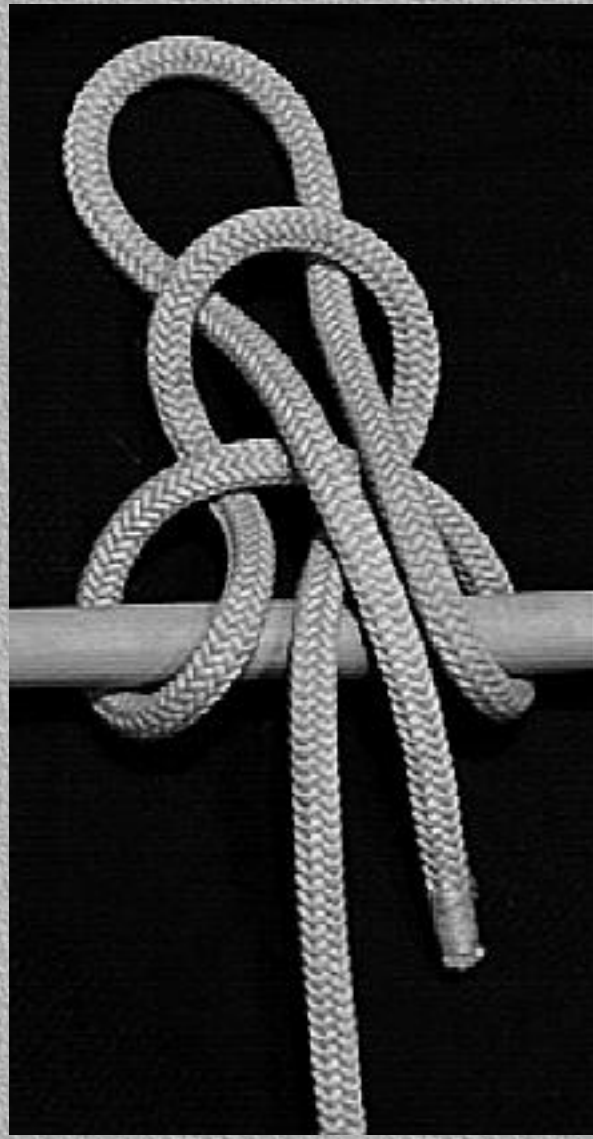
### *Step #4*

**Make a bight in the end.**



## *Step #5*

**Insert it through the previous bight.**



### *Step #6*

**Pull the standing part to dress the knot. Then set the knot by pulling on all parts. The end is yanked abruptly**

**to disengage the knot.**



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# KNOT KNOWLEDGE

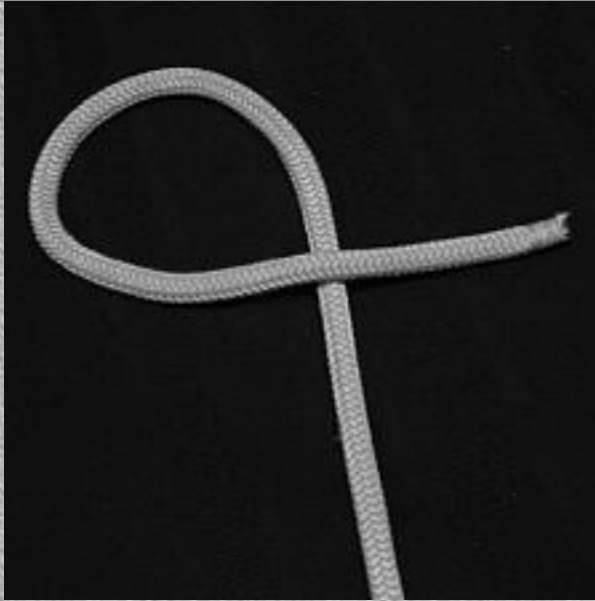
## STOPPER KNOTS

### Figure 8

The Figure 8 knot is made in the end of a rope. It is bulkier than an Overhand knot.

#### *Step #1*

**Make a loop.**



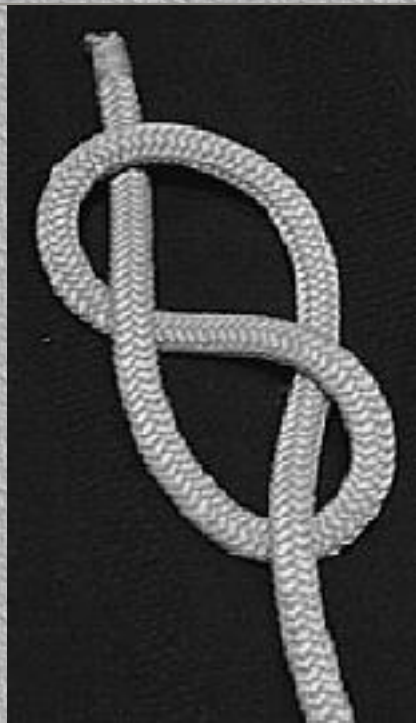
#### *Step #2*

**Bring the end around  
behind the standing part.**



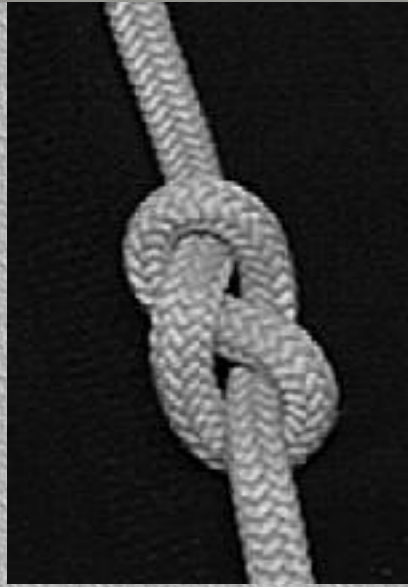
*Step #3*

**Put the end through the  
loop.**



## *Finished Figure 8*

**Dress and set the knot.**



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# KNOT KNOWLEDGE

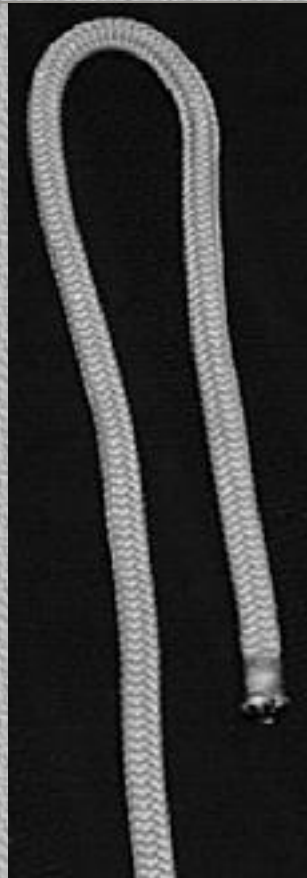
## STOPPER KNOTS

### Heaving Line Knot

**The Heaving line knot can be used to add weight to the end of the rope to give mass to it when you want to throw it.**

#### *Step #1*

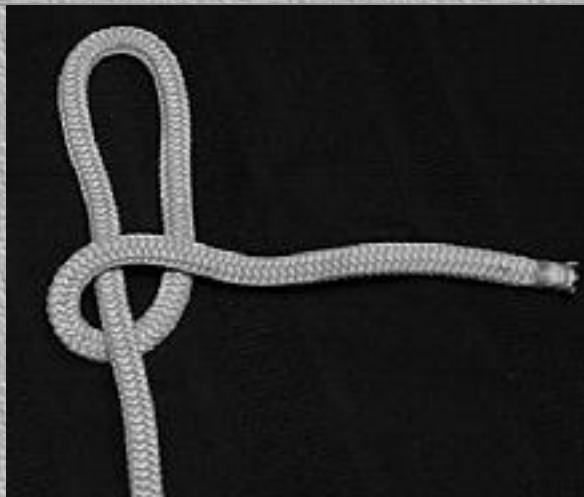
**Form a bight.**





## *Step #2*

**Start making turns, taking the end behind the standing part and wrapping it around the bight.**



## *Step #3*

**Make several turns.**



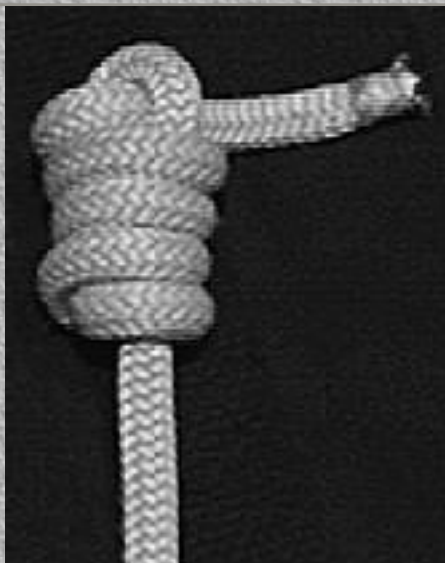
## *Step #4*

**Insert the end through the loop.**



***Finished Heaving Line Knot***

**Pull on the standing part to tighten the knot.**



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# KNOT KNOWLEDGE

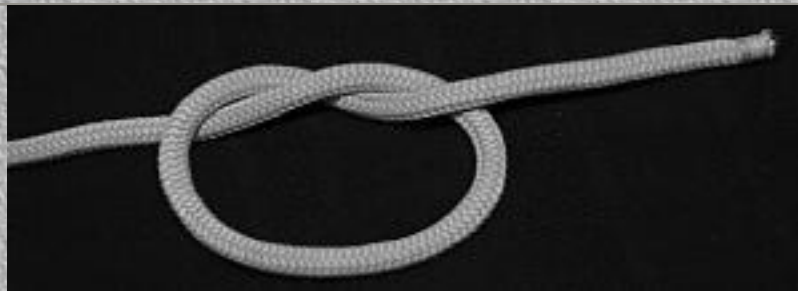
## STOPPER KNOTS

### Double Overhand Knot

**The Double Overhand is bulkier than the Figure 8 knot and is more difficult to untie.**

#### *Step #1*

**Begin with an overhand knot.**



#### *Step #2*

**Put the end back through the loop.**



### *Finished Double Overhand Knot*

**Yank firmly on both ends to snap this knot tight.**



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# KNOT KNOWLEDGE

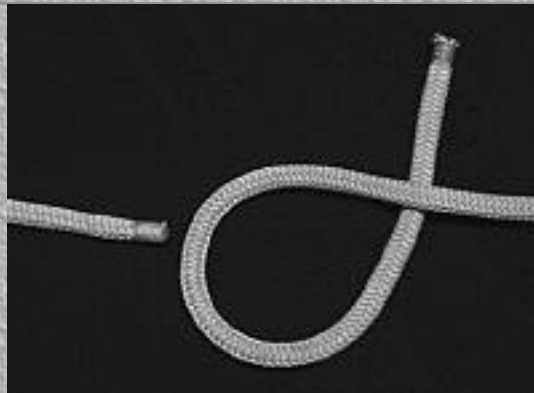
## BENDS

### Full Carrick Bend

The Carrick Bend is a strong, secure knot that can be used to join two ropes of different construction.

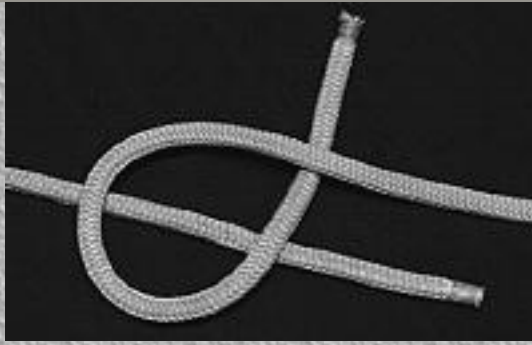
#### *Step #1*

**Form a loop with the first rope, with the end behind the standing part.**



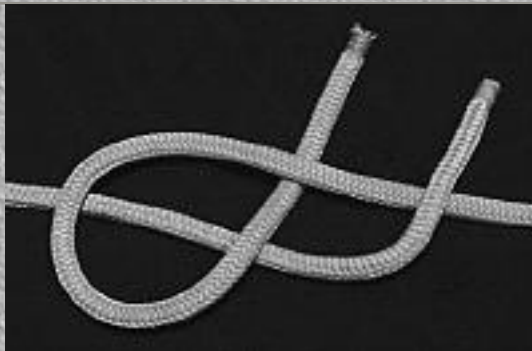
#### *Step #2*

**Place the second rope under the loop.**



### *Step #3*

**Bring the end over the standing part of the first rope.**



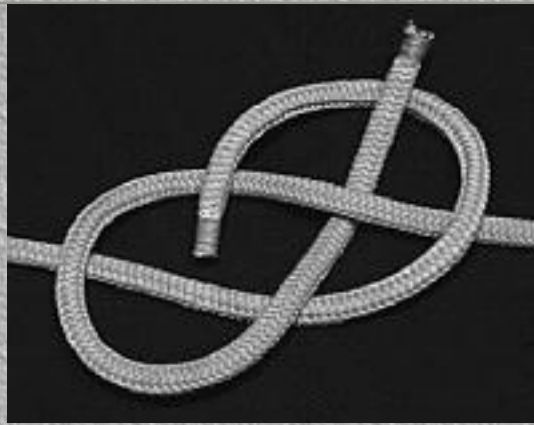
### *Step #4*

**Place the end of the second rope under the end of the first rope.**



### *Step #5*

**Place the end over the standing part of the first rope.**



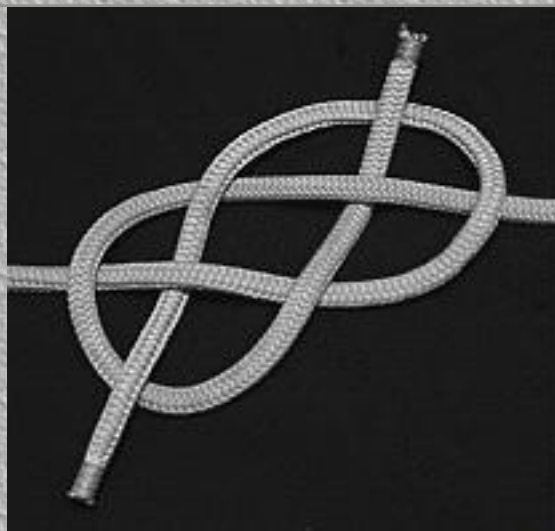
### *Step #6*

**Weave the end of the second rope under its own standing part.**



### *Step #7*

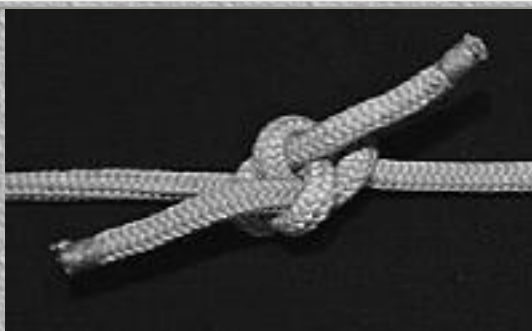
**Finally, pull the end over the first rope. The knot should be symmetric with the ends on opposite sides.**





## *Finished Carrick Bend - Front View*

**Pull on both standing parts  
and then the ends to tighten  
the knot.**



## *Finished Carrick Bend - Rear View*

**Rear view.**



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# KNOT KNOWLEDGE

## FRICTION HITCHES

[\[Blake's Hitch\]](#)

[\[Kreutzklem \(Hedden\)\]](#)

[\[Prusik\]](#)

[\[Kleimheist\]](#)

[\[Tautline Hitch/Rolling Hitch\]](#)

[\[Sliding Sheet Bend\]](#)

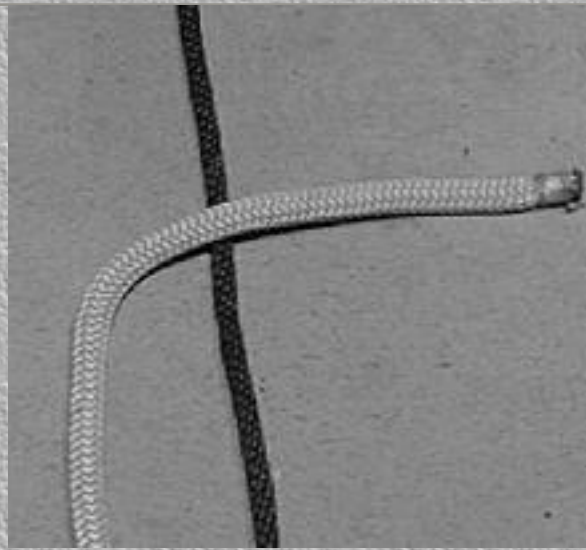
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### [Blake's Hitch](#)

**The Blake's Hitch is an ascending knot commonly used by arborists and tree climbers in general. It should only be used on arborist rope. Used for ascending, it is also used for descending as well.**

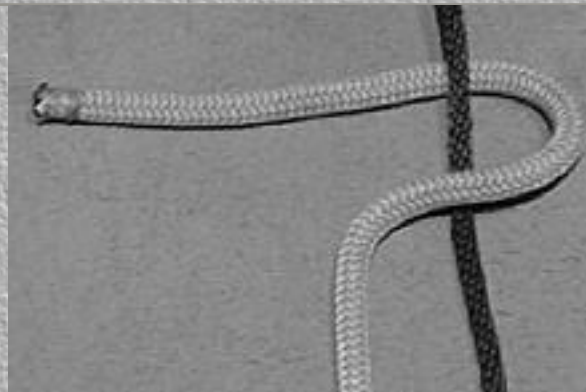
### *Step #1*

**In this picture, the black rope is what you tie the Blake's Hitch to (the standing part), and the white rope (the end) is what will be used to tie the Blake's Hitch. Place the end in front of the standing part.**



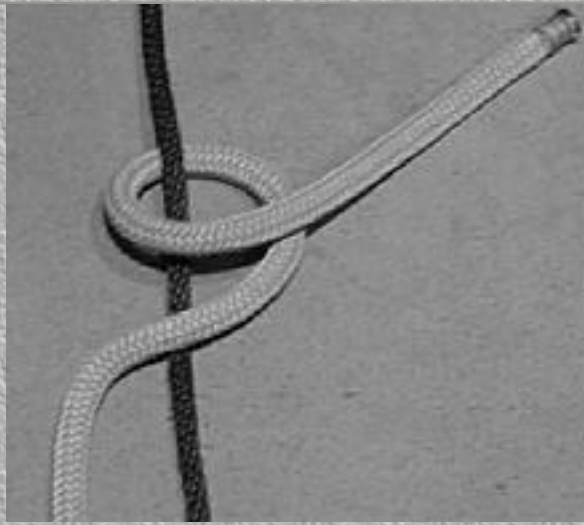
### *Step #2*

**Bring the end around behind the standing part.**



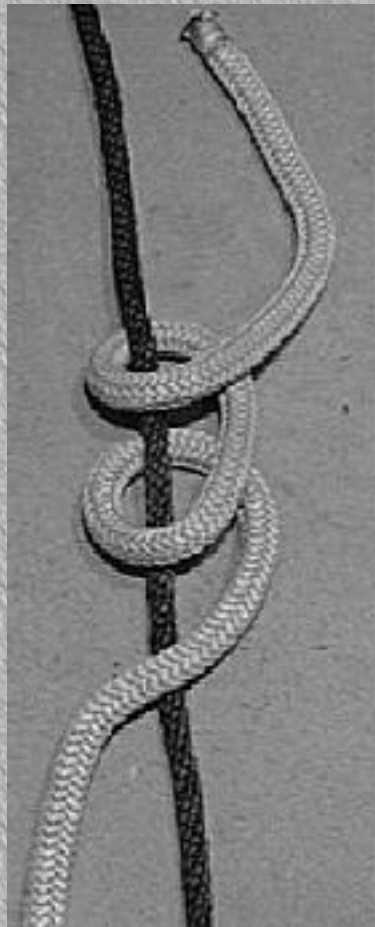
### *Step #3*

**Keep wrapping the end  
around the standing part.**



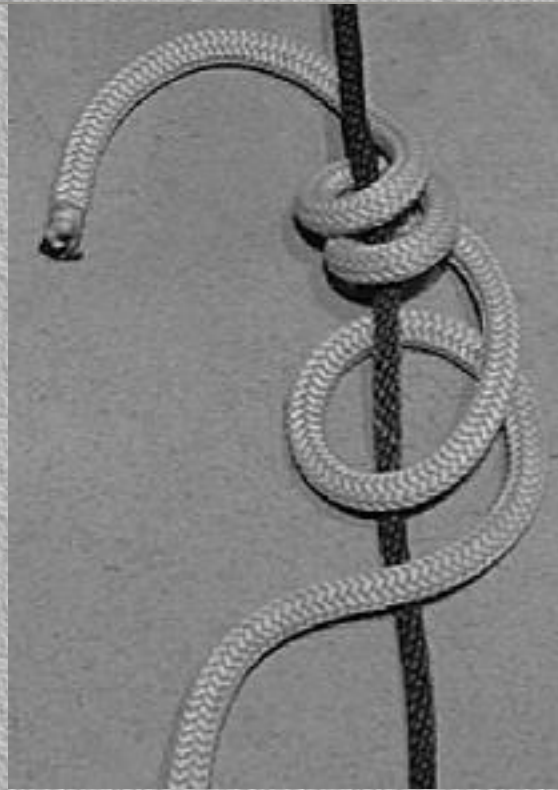
***Step #4***

**Make more turns.**



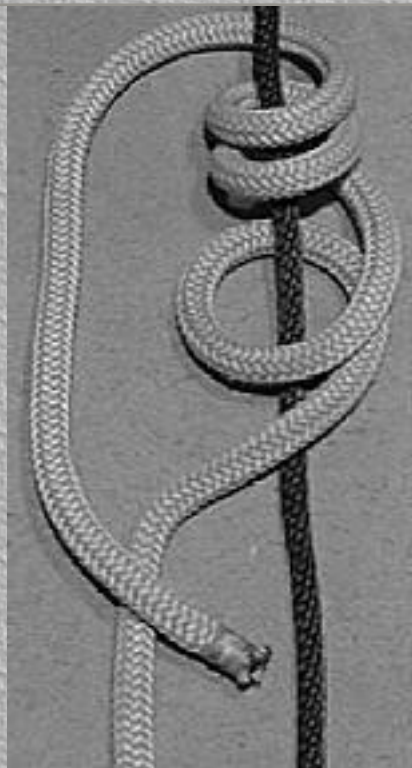
## *Step #5*

**Three turns are required.**



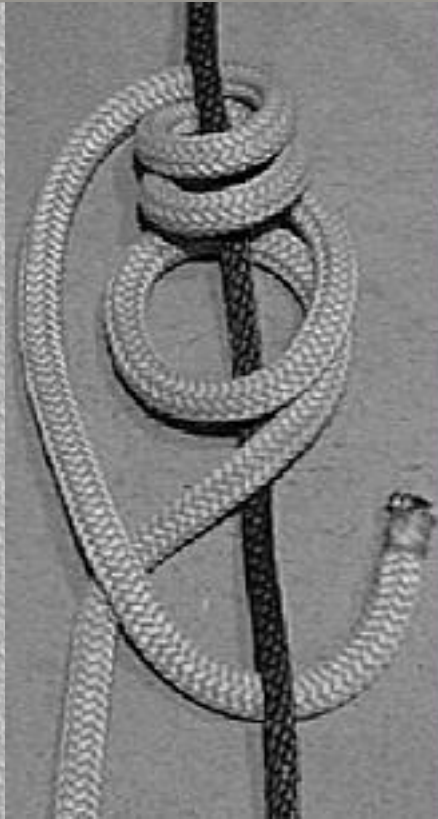
## *Step #6*

**Bring the end down over itself...**



## *Step #7*

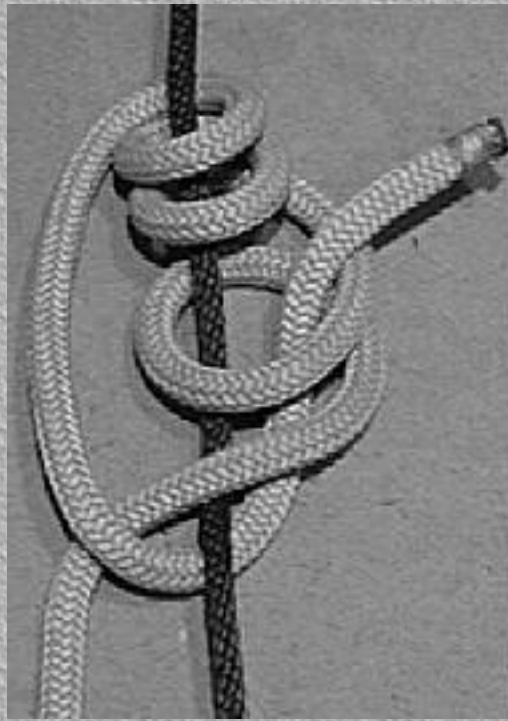
**...and behind the standing part.**



## *Step #8*

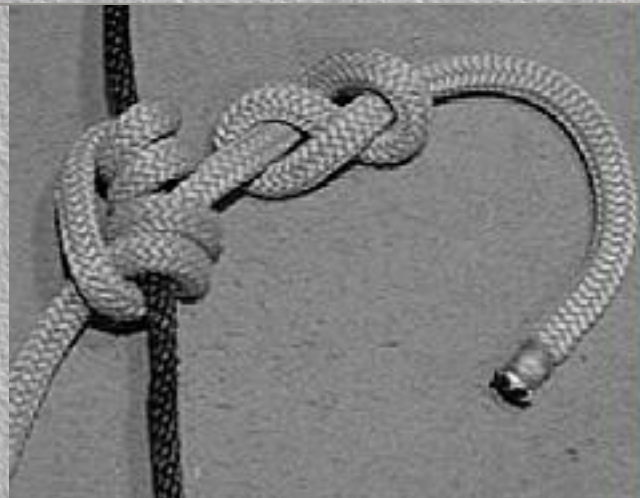
**Insert the end through the bottom two turns. When tying the knot it is helpful to wrap the bottom two turns around your thumb, so when you arrive at this step, you can remove your thumb and poke the end through the hole where your thumb**

was.



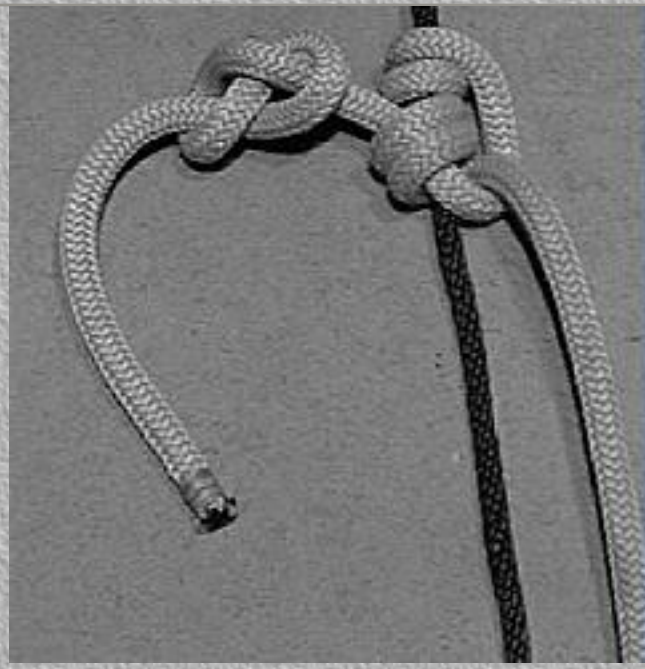
*Finished Blake's Hitch - Front View*

Dress and set the knot, adding a [Figure 8](#) stopper knot in the tail for safety.



*Finished Blake's Hitch - Rear View*

**Rear view.**



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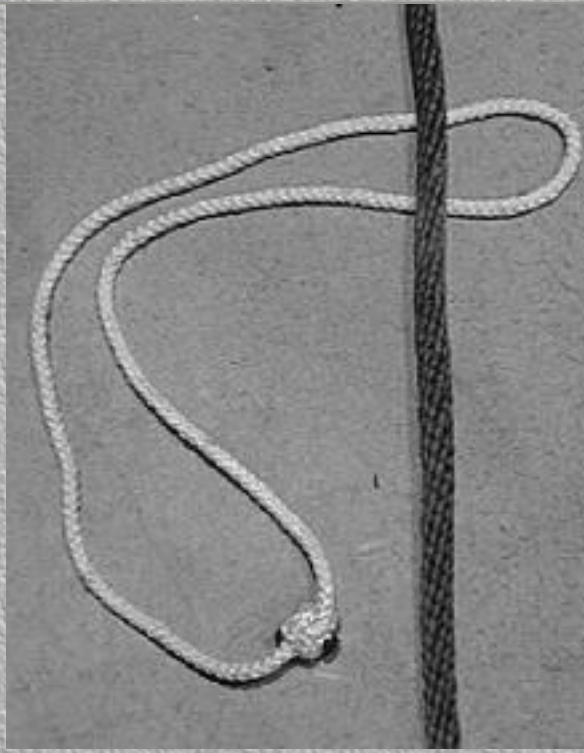
## **Kreutzklem (Hedden)**

**The Kreutzklem (or Hedden) is quick and simple to tie and untie. It is also easy to loosen the knot after applying a load, to advance it up the rope.**

*Step #1*

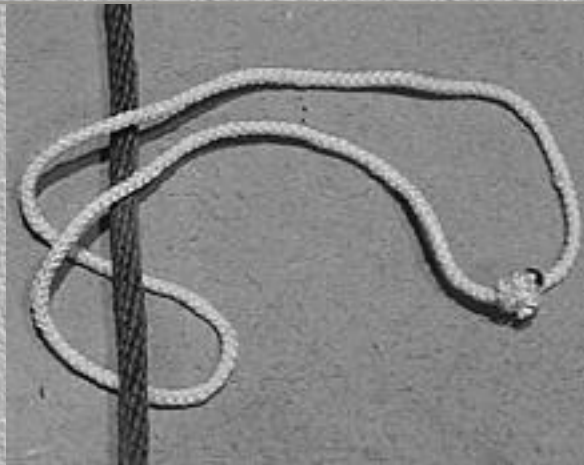


**Form a bight from the loop and place it behind the climbing rope.**



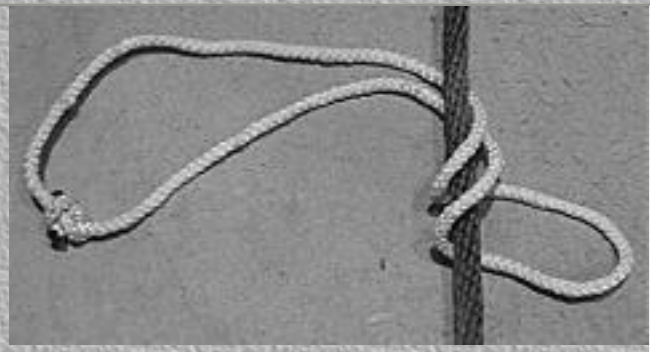
***Step #2***

**Wrap the loop across the climbing rope.**



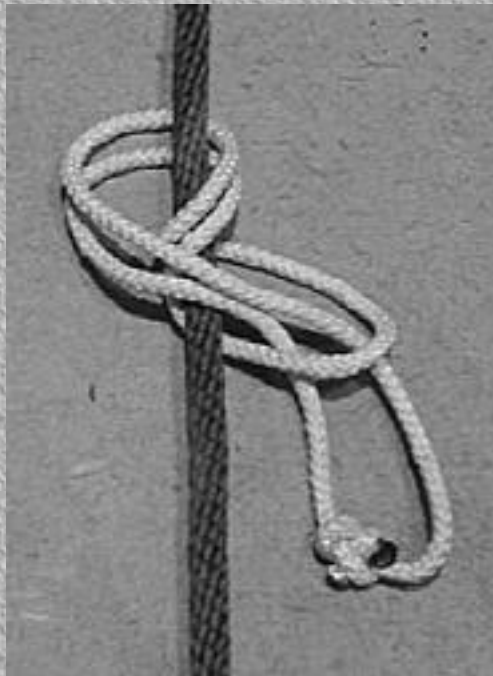
***Step #3***

**Continue wrapping the loop around the climbing rope.**



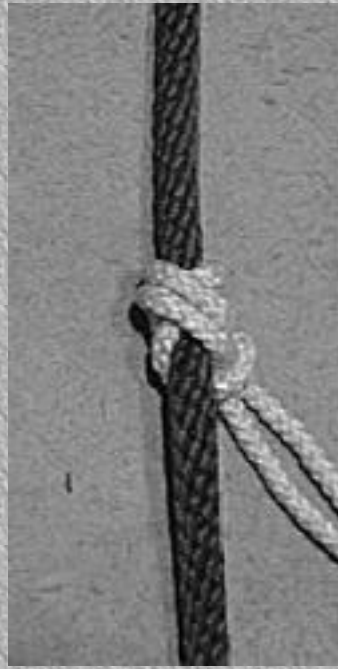
***Step #4***

**Insert the loop through the bight.**



***Finished Kreuzklem***

**Dress and set the knot.**



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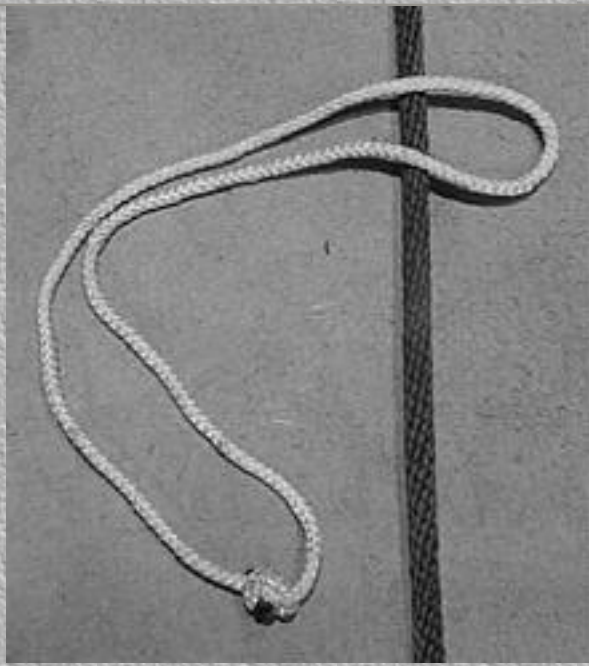
---

## Prusik

**The prusik is widely used as an ascending knot. The friction can be increased by adding a third turn. The prusik can cinch up tightly and the friction can be somewhat difficult to break after a load has been applied.**

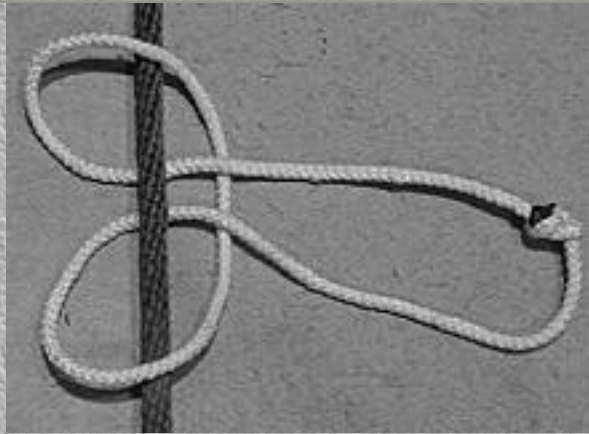
*Step #1*

**Place a bight of the loop  
across the climbing rope.**



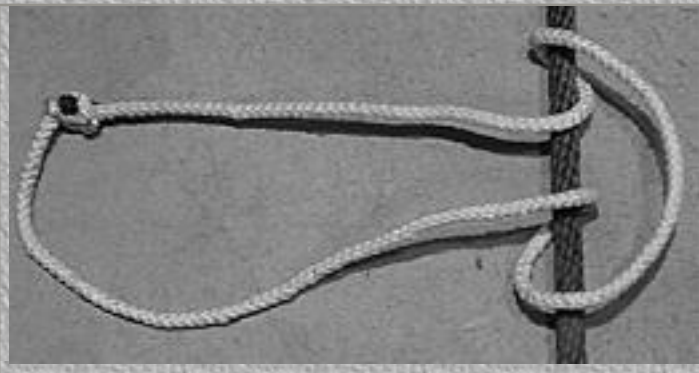
***Step #2***

**Wrap the loop behind the  
climbing rope and through  
the bight.**



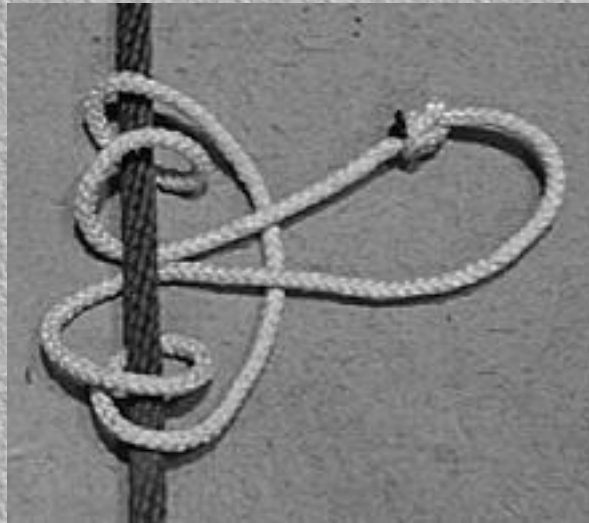
***Step #3***

**Continue wrapping the loop around the climbing rope.**



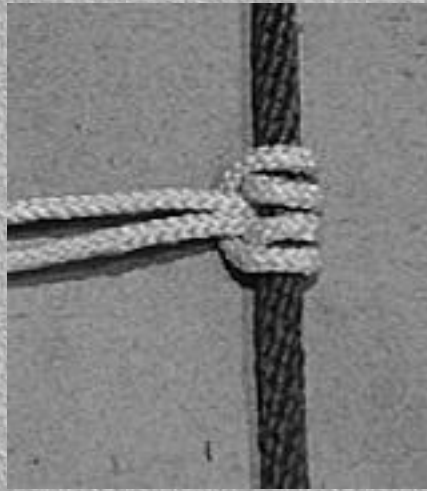
### *Step #4*

**Wrap it behind the climbing rope again and through the bight.**



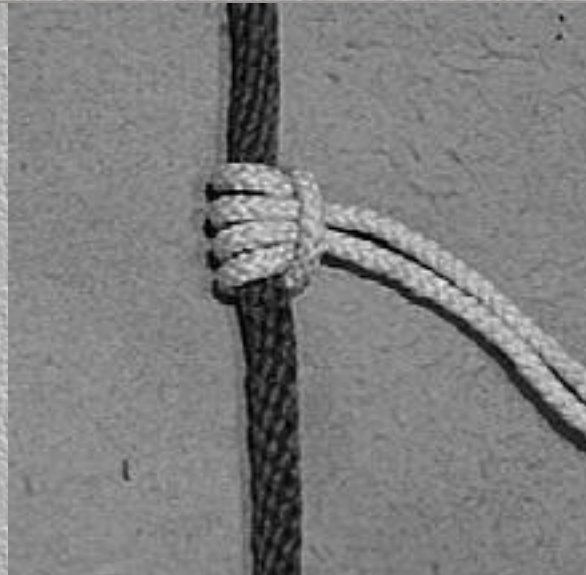
### *Finished Prusik*

**Dress and set the knot. It is important to keep this knot neat while tightening.**



***Finished Prusik - Opposite View***

**Opposite view.**



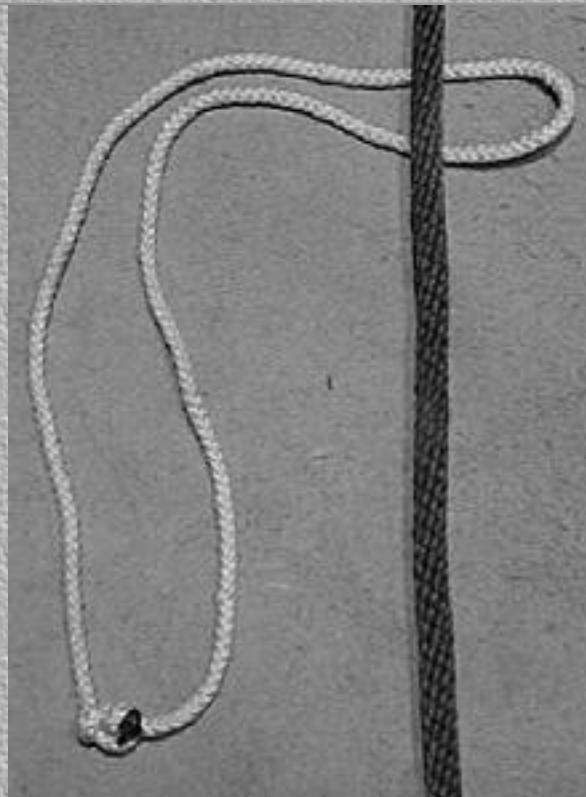
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## Kleimheist

The Kleimheist is easier to tie and untie than the prusik. It does not tend to cinch up as tightly as a prusik, so it is easier to break friction after releasing the load. You can add more turns to increase friction, as well.

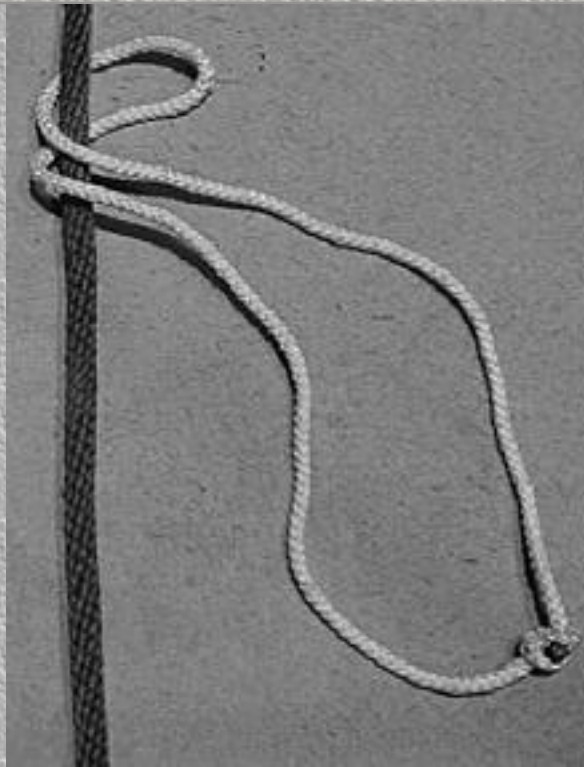
### *Step #1*

**Place a bight of the loop behind the climbing rope.**



### *Step #2*

**Wrap the loop across the climbing rope.**



*Step #3*

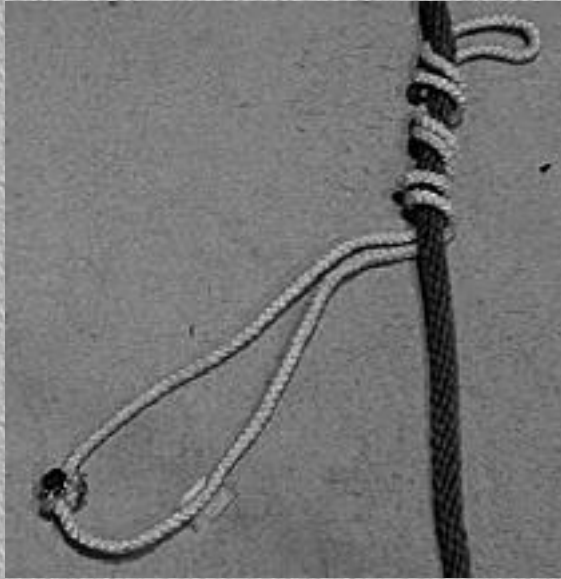
**Wrap the loop behind the climbing rope.**





## *Step #4*

**Repeat steps 2 - 3 two more times.**



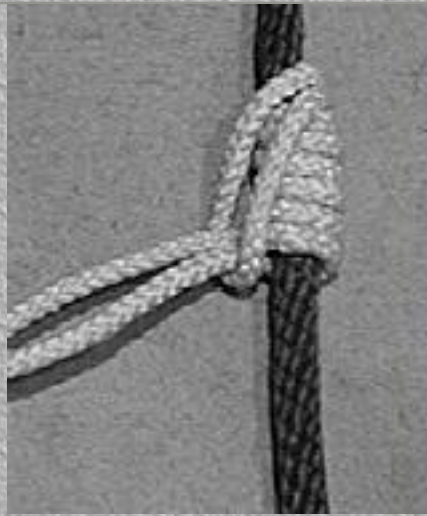
## *Step #5*

**Insert the loop through the original bight**



***Finished Kleimheist***

**Pull the loop back down, bringing the bight down across the wraps. Tighten the knot.**



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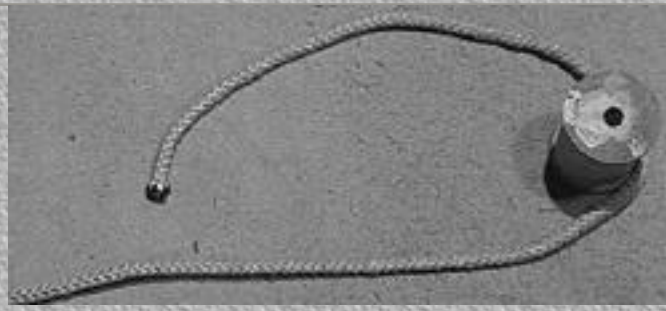
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## **Tautline Hitch (aka Rolling Hitch)**

**The Tautline Hitch is an adjustable knot that is commonly used for tensioning guy lines, such as on a tent. The knot can slide along the standing part. When the knot is released, the tension on the standing part tightens the coils in the knot, increasing the friction which keeps the knot in place under tension. Since the Tautline Hitch is tied to its own standing part, the rope must be able to slide around the object it is secured to for it to be adjustable. This knot is known as the Rolling Hitch when, instead of being tied around its standing part, it is tied around another rope, spar, or cylindrical object.**

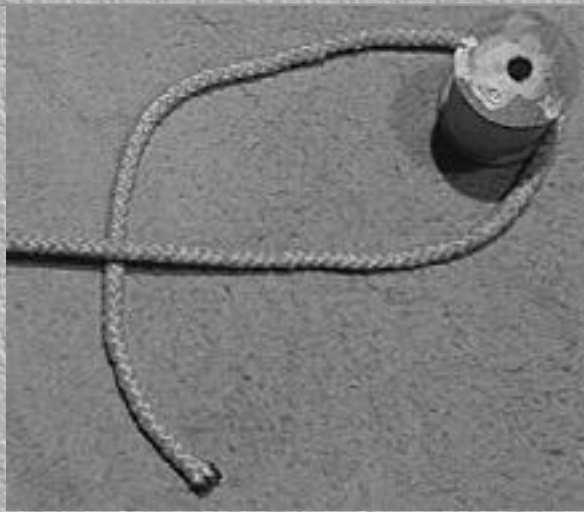
### *Step 1*

**Pull the end around a secure object (The picture shows an empty thread spool.)**



### *Step 2*

**Bring the end under the standing part.**



### *Step 3*

**Wrap the end around the standing part.**



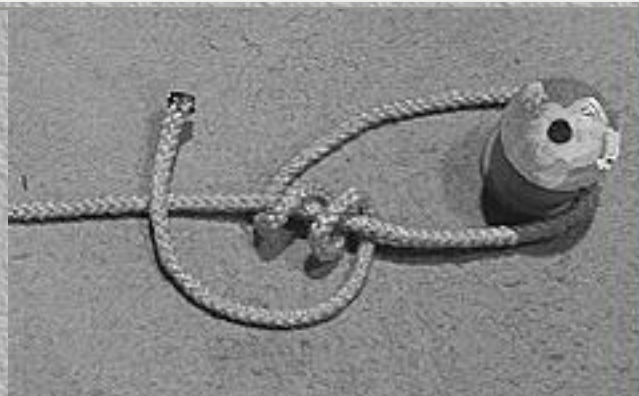
### *Step 4*

**Wrap the end around the standing part a second time.**



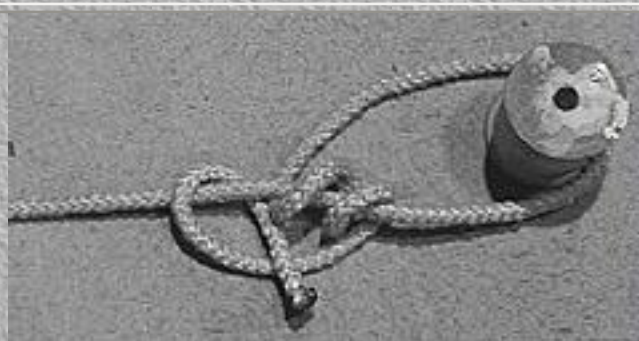
### *Step 5*

**Now you add a half hitch above the turns. Bring the end over the standing part.**



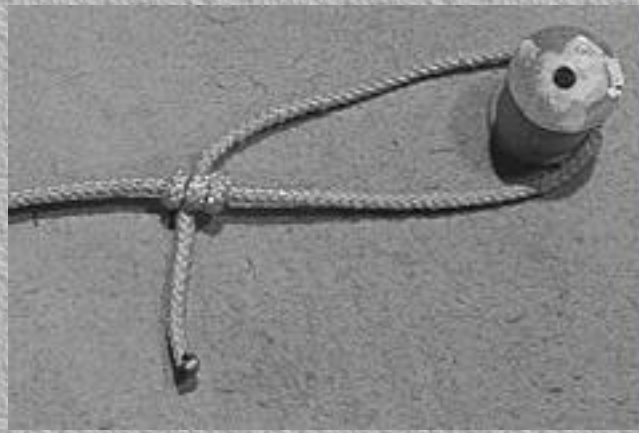
### *Step 6*

**Make a half hitch.**



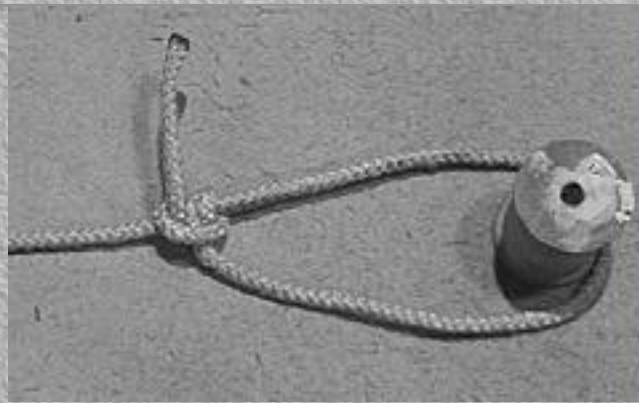
## *Finished Tautline Hitch*

**Tighten the loops. Be careful to keep the knot neat while doing this, and tighten it enough so that it will grip the standing part reliably, but not so tight that it can't easily slide.**



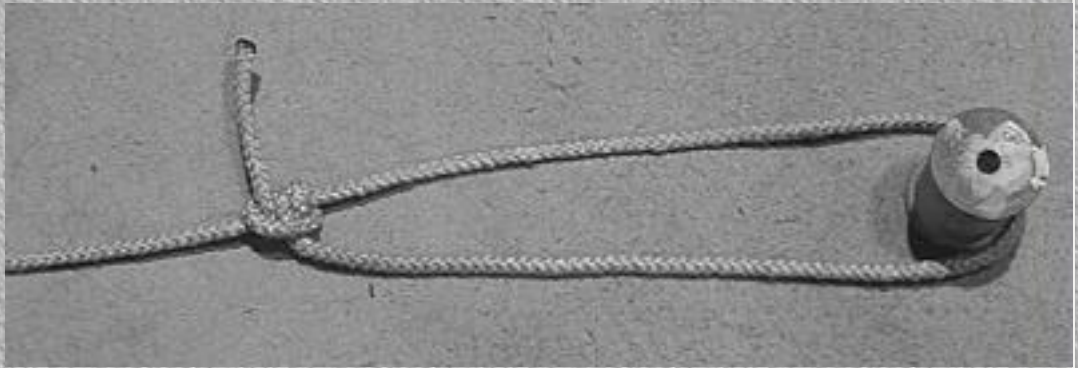
## *Finished Tautline Hitch - Opposite View*

**Opposite view.**



## *Finished Tautline Hitch*

**This picture shows the knot having been slid further up the standing part. Note that the rope had to move around the spool in order for this to occur.**



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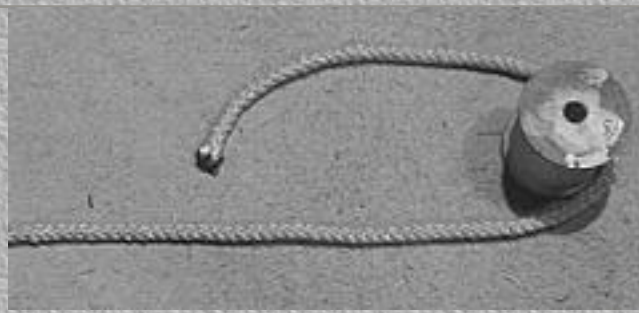
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## Sliding Sheet Bend

**The Sliding Sheet Bend is used for the same purpose as the [Tautline Hitch](#), but with a quick yank of the end, it is completely untied. This is a boon for those wearing gloves or who have cold, numb fingers. Moreover, unlike the Tautline Hitch, the Sliding Sheet Bend can be "locked" in place to prevent it sliding. It can also be unlocked to make it adjustable again. This is one of the most useful knots I know, and I gladly give credit and much appreciation to Peter Suber, who came up with this knot and shared it with the world. Visit [Dr. Suber's website](#) for more knots like this.**

### *Step 1*

**Wrap the end around the object it is to be secured to (a spool in this picture).**



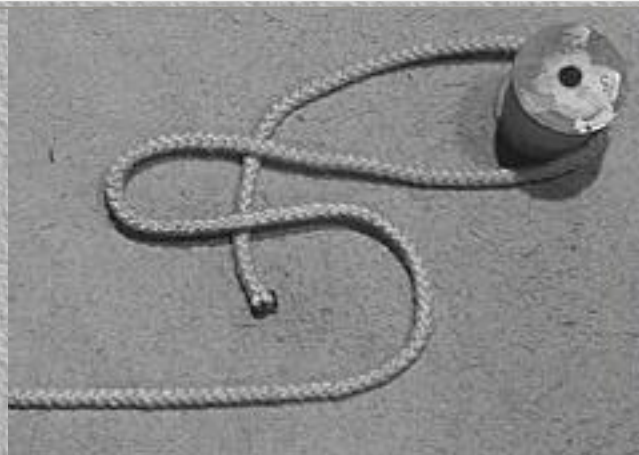
### *Step 2*

**Form a bight in the standing part, pointing away from the spool.**



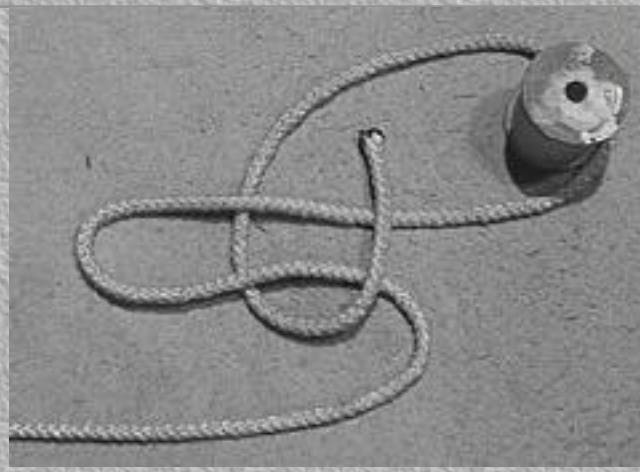
### *Step 3*

**Pull the end under the bight.**



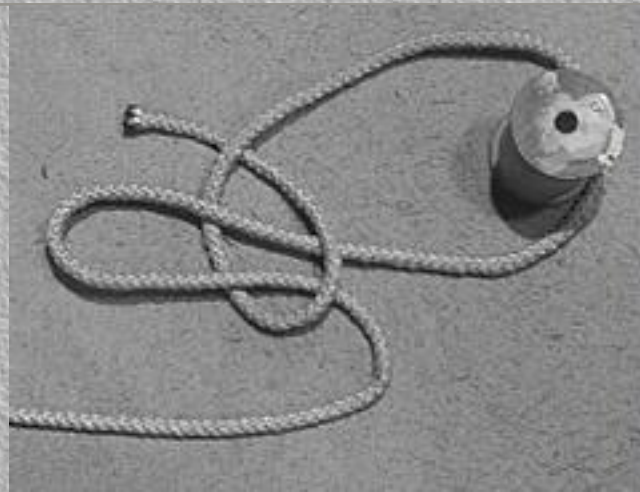
### *Step 4*

**Bring the end over the bight...**



### *Step 5*

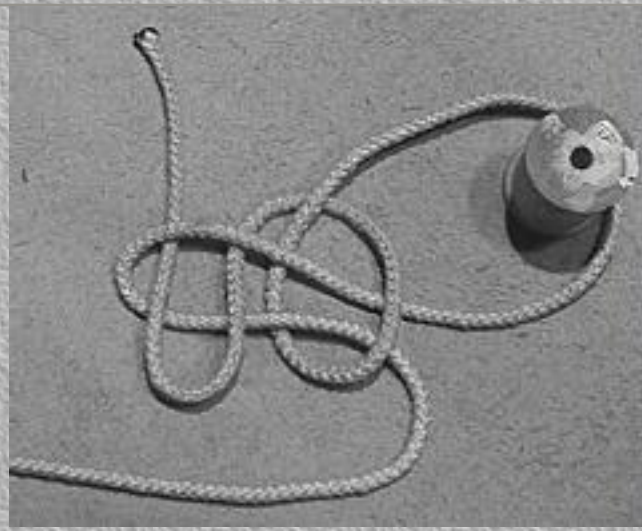
**...and form a loop.**



### *Step 6*

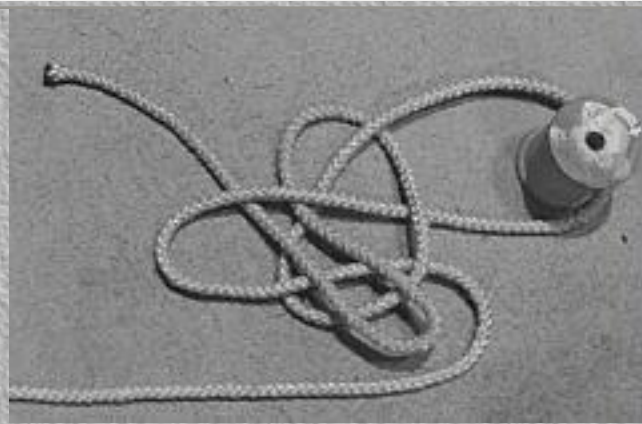


**Now, form a bight in the end and stick it through the bight in the standing part.**



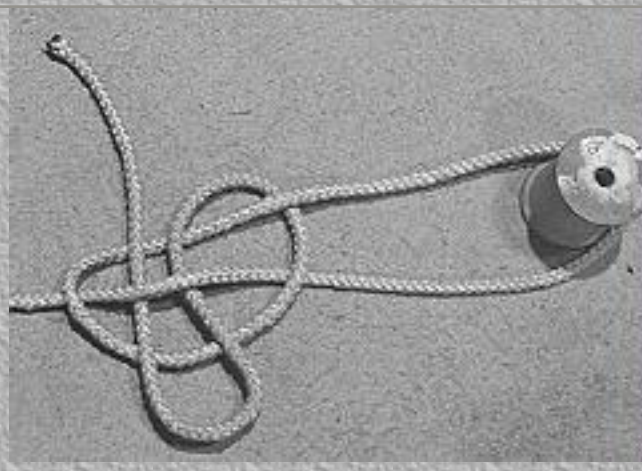
### *Step 7*

**If you are tying this knot flat as pictured, it helps at this point to slide the bight in the end so that it is over the loop formed earlier.**



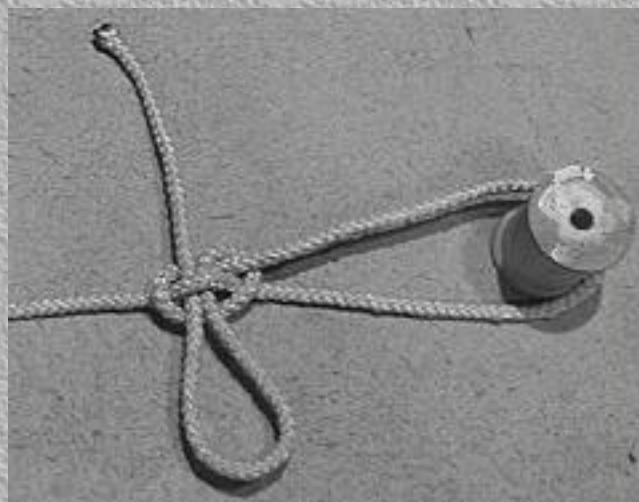
### *Step 8*

**Pull on both ends of the bight in the standing part, removing the bight, so the standing part is straight as pictured. Keep the knot neat while doing this!**



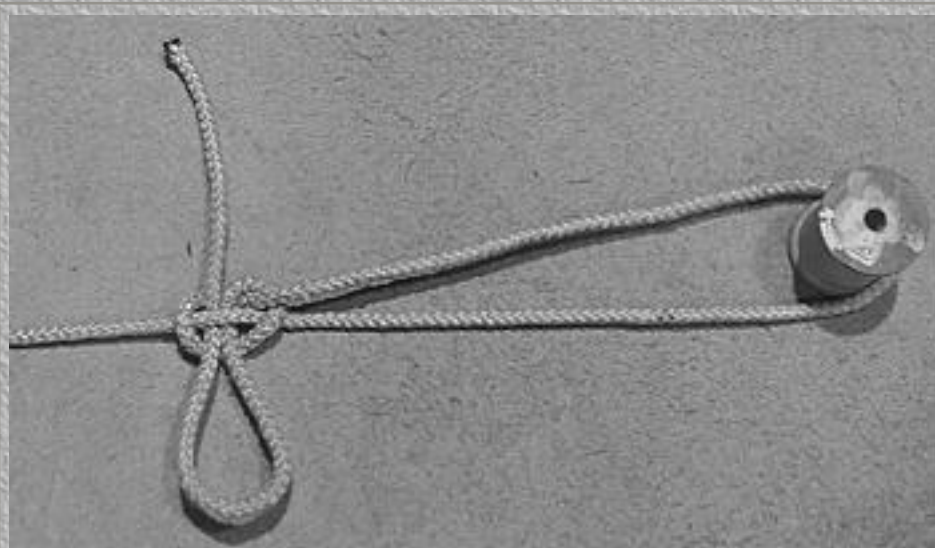
## *Finished Sliding Sheet Bend*

**Tighten the knot, so that the standing part forms a "hump" as it passes over the bight in the end. This is what creates the friction, and the friction can be adjusted by increasing or decreasing the hump (by tightening and loosening the knot).**



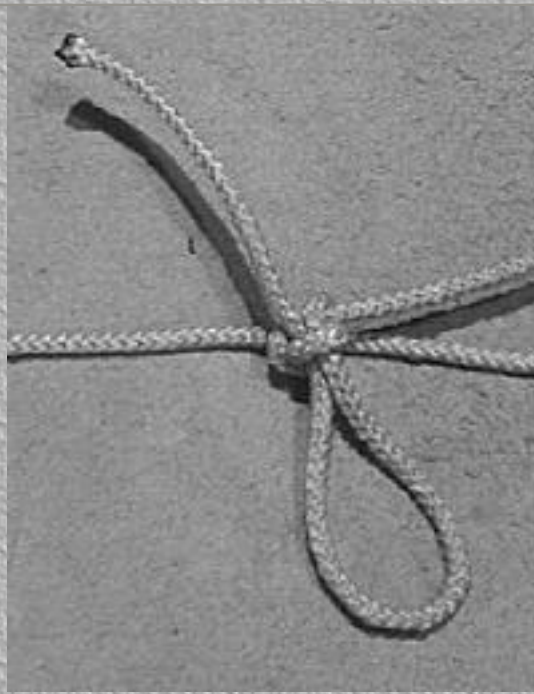
## *Finished Sliding Sheet Bend*

**This picture shows the knot having been slid further up the standing part. Note that the rope had to move around the spool in order for this to occur (like the [Tautline Hitch](#)).**



## *Locked Sliding Sheet Bend*

**Once you have adjusted the knot to your satisfaction, it can be locked by tightening the knot by pulling on the non-sliding parts of the knot. To unlock, loosen and flatten the knot, to reduce the hump. To untie, simply yank on the end.**



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# KNOT KNOWLEDGE

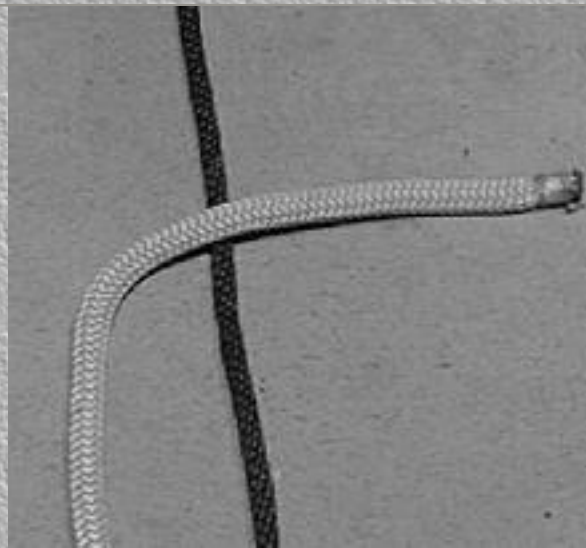
## FRICITION HITCHES

### Blake's Hitch

The Blake's Hitch is an ascending knot commonly used by arborists and tree climbers in general. It should only be used on arborist rope. Used for ascending, it is also used for descending as well.

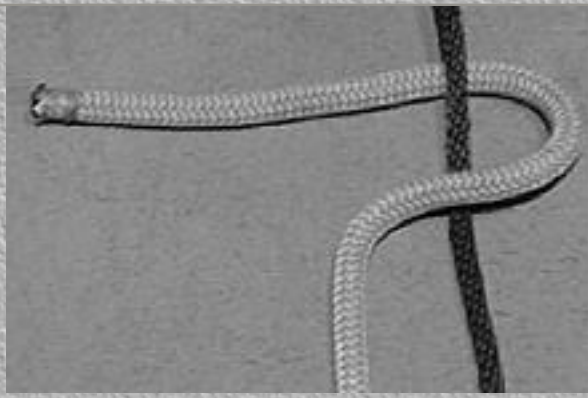
#### *Step #1*

**In this picture, the black rope is what you tie the Blake's Hitch to (the standing part), and the white rope (the end) is what will be used to tie the Blake's Hitch. Place the end in front of the standing part.**



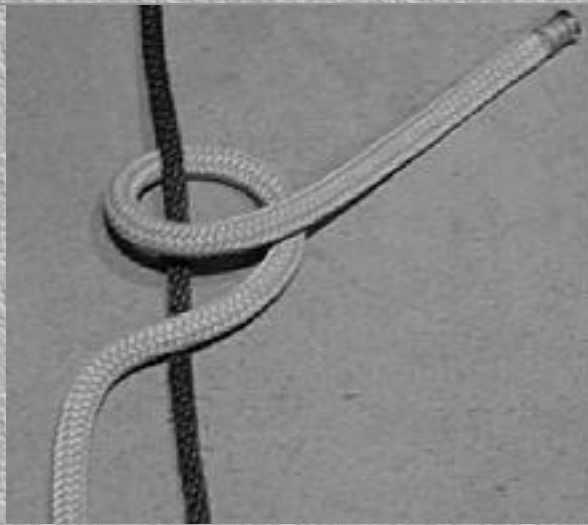
#### *Step #2*

**Bring the end around  
behind the standing part.**



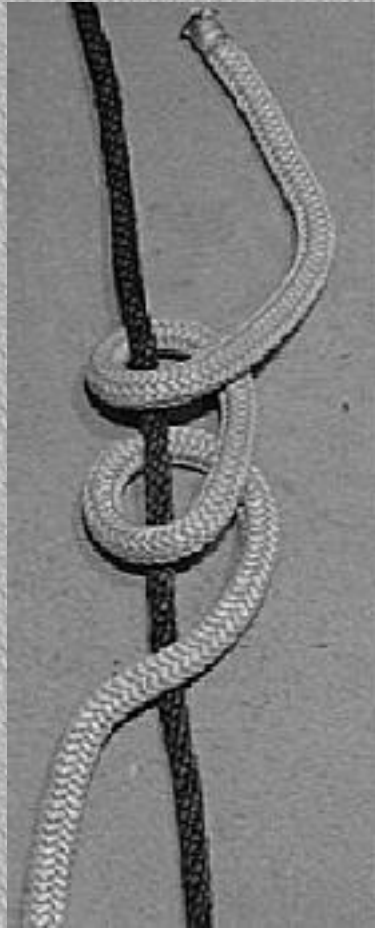
### *Step #3*

**Keep wrapping the end  
around the standing part.**



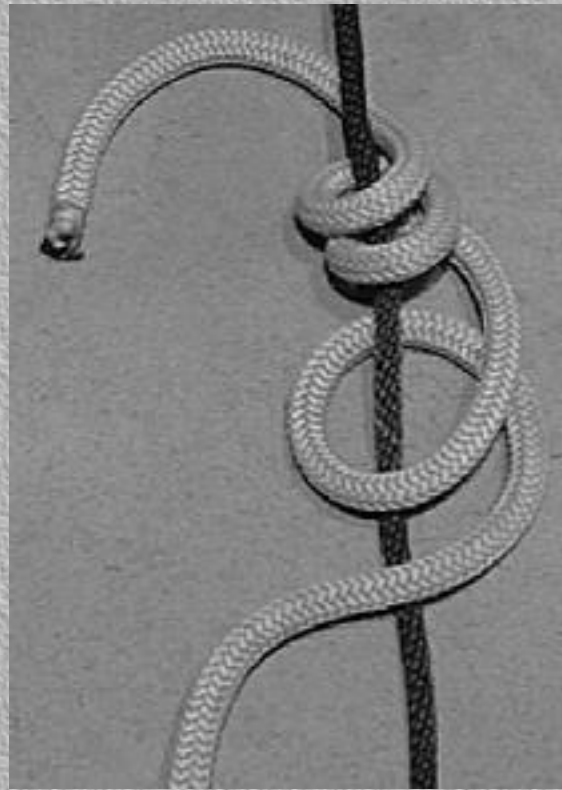
### *Step #4*

**Make more turns.**



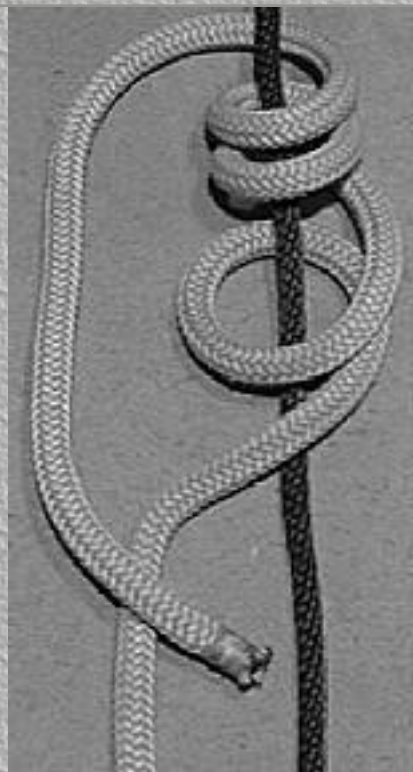
***Step #5***

**Three turns are required.**



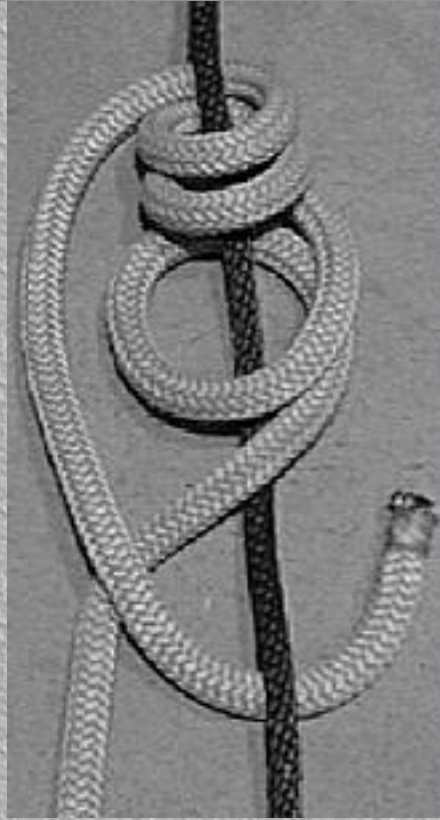
*Step #6*

**Bring the end down over  
itself...**



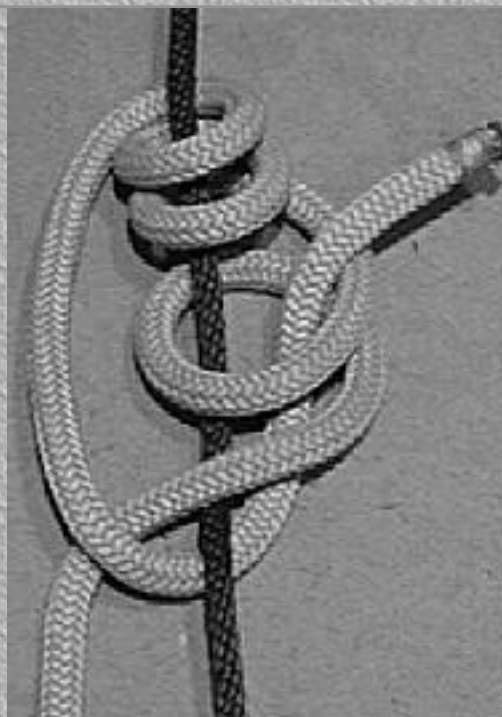
## *Step #7*

**...and behind the standing part.**



## *Step #8*

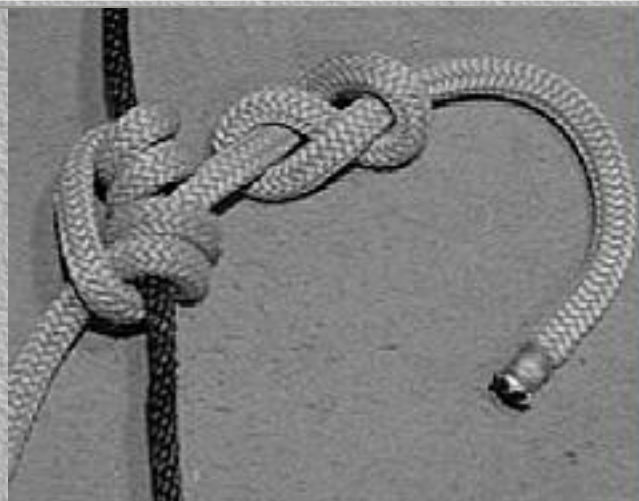
**Insert the end through the bottom two turns. When tying the knot it is helpful to wrap the bottom two turns around your thumb, so when you arrive at this step, you can remove your thumb and poke the end through the hole where your thumb was.**





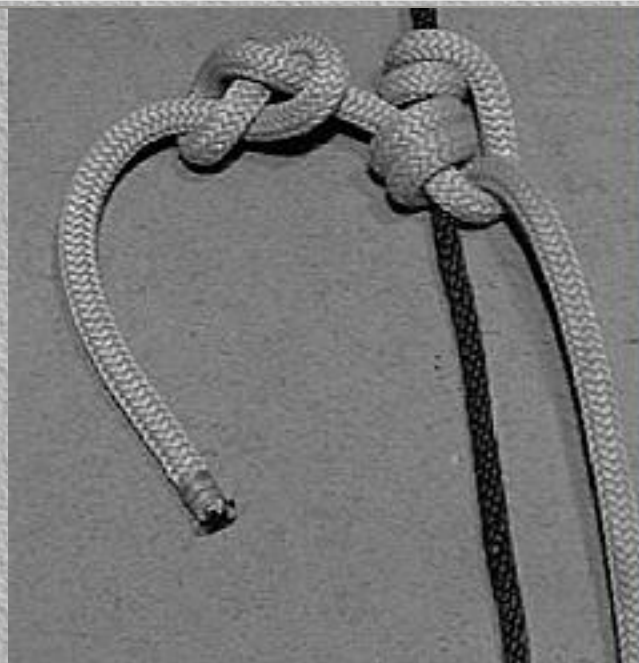
## *Finished Blake's Hitch - Front View*

Dress and set the knot, adding a [Figure 8](#) stopper knot in the tail for safety.



## *Finished Blake's Hitch - Rear View*

Rear view.



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# KNOT KNOWLEDGE

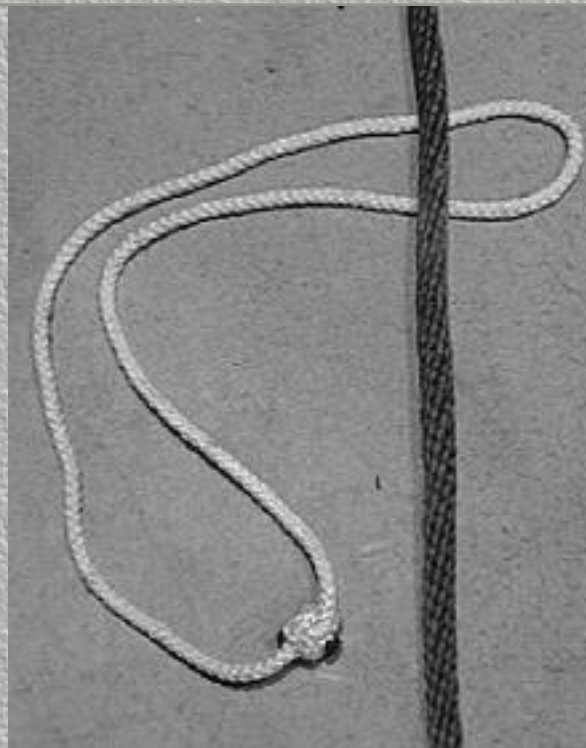
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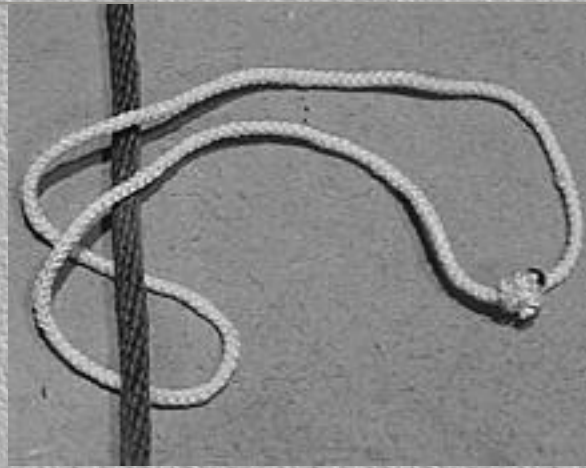
#### *Step #1*

**Form a bight from the loop and place it behind the climbing rope.**



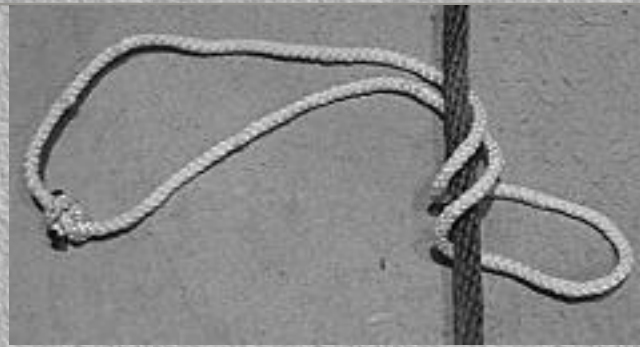
## *Step #2*

**Wrap the loop across the climbing rope.**



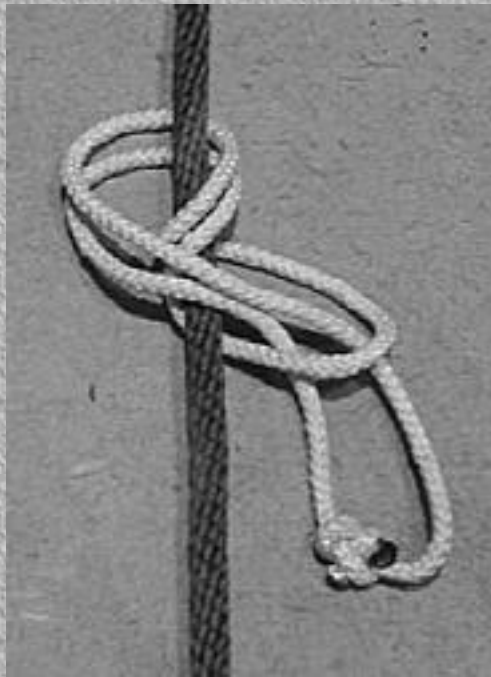
## *Step #3*

**Continue wrapping the loop around the climbing rope.**



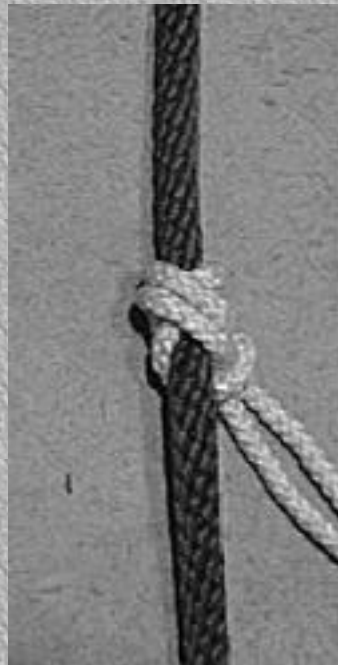
## *Step #4*

**Insert the loop  
through the bight.**



***Finished Kreuzklem***

**Dress and set the  
knot.**



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# KNOT KNOWLEDGE

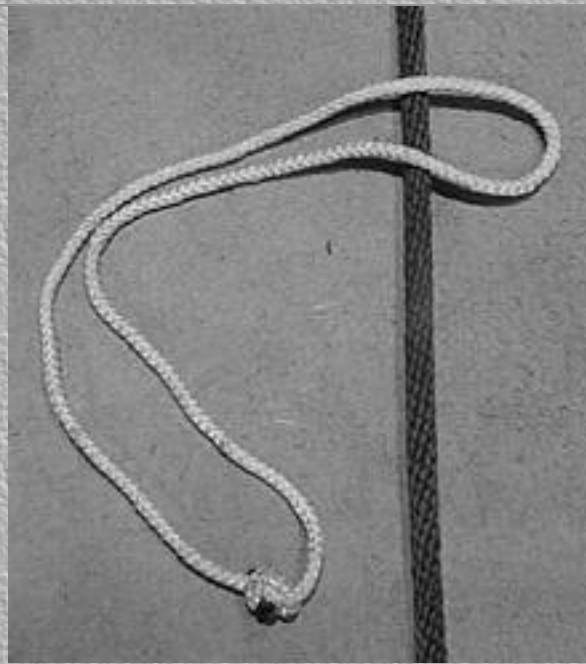
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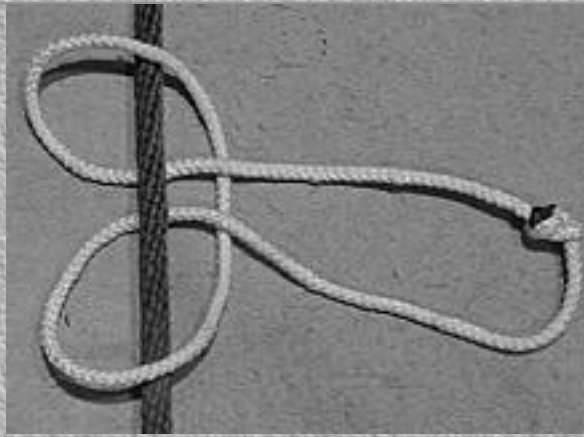
#### *Step #1*

**Place a bight of the loop across the climbing rope.**



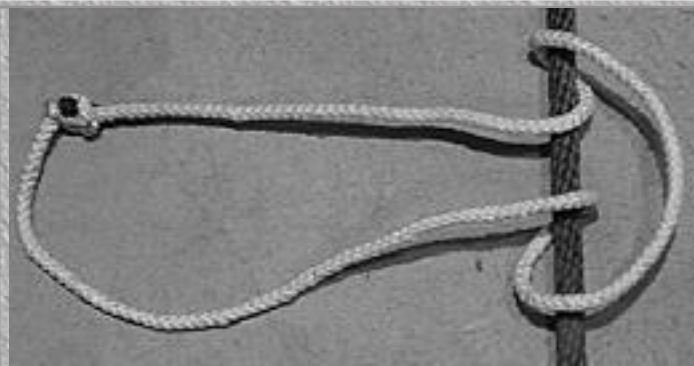
## *Step #2*

**Wrap the loop behind the climbing rope and through the bight.**



## *Step #3*

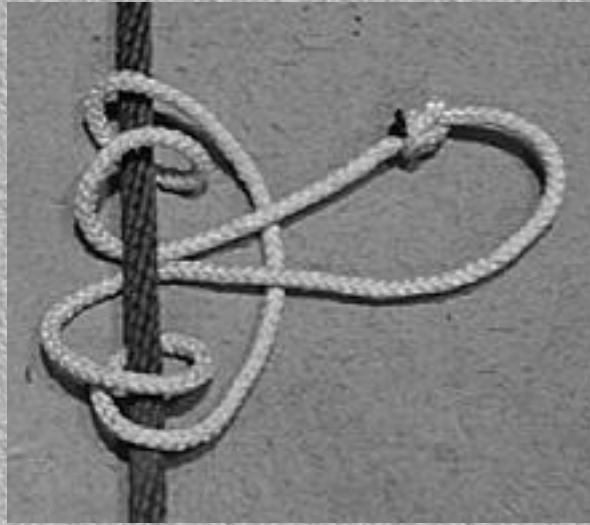
**Continue wrapping the loop around the climbing rope.**



## *Step #4*

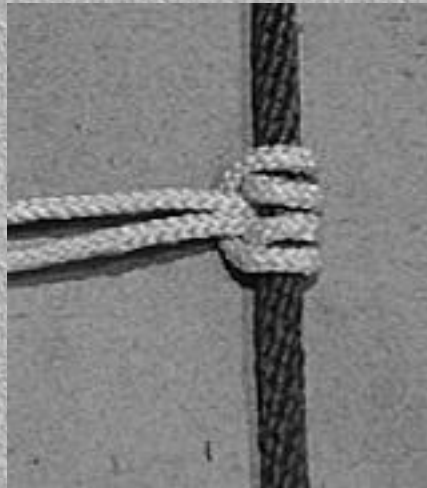


**Wrap it behind the climbing rope again and through the bight.**



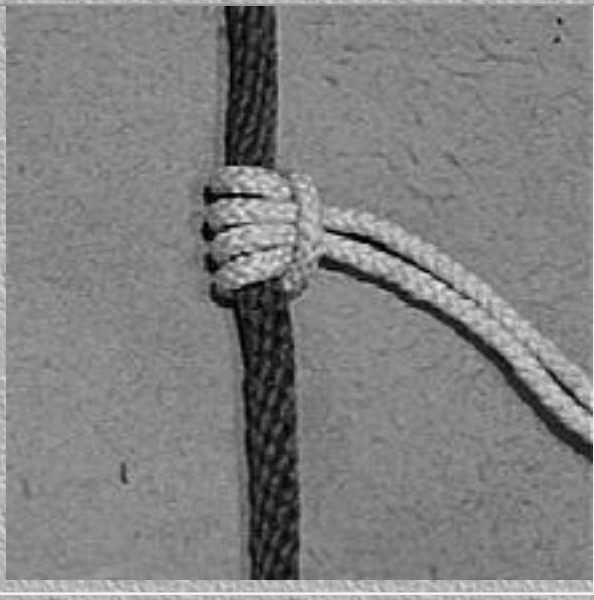
### *Finished Prusik*

**Dress and set the knot. It is important to keep this knot neat while tightening.**



### *Finished Prusik - Opposite View*

**Opposite view.**



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# KNOT KNOWLEDGE

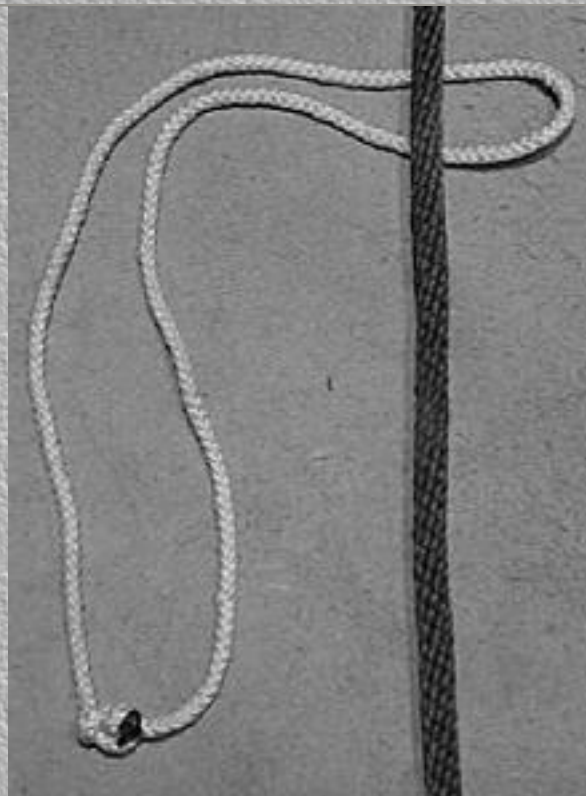
## FRICITION HITCHES

### Kleimheist

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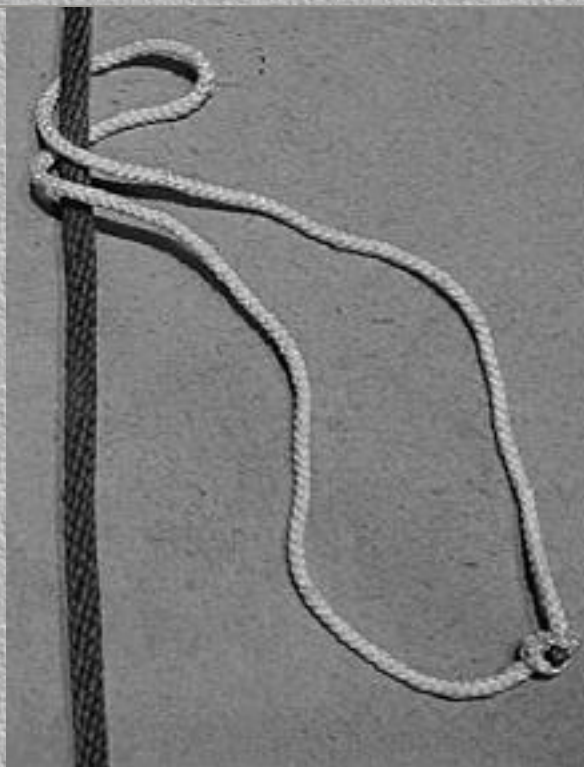
#### *Step #1*

**Place a bight of the loop behind the climbing rope.**



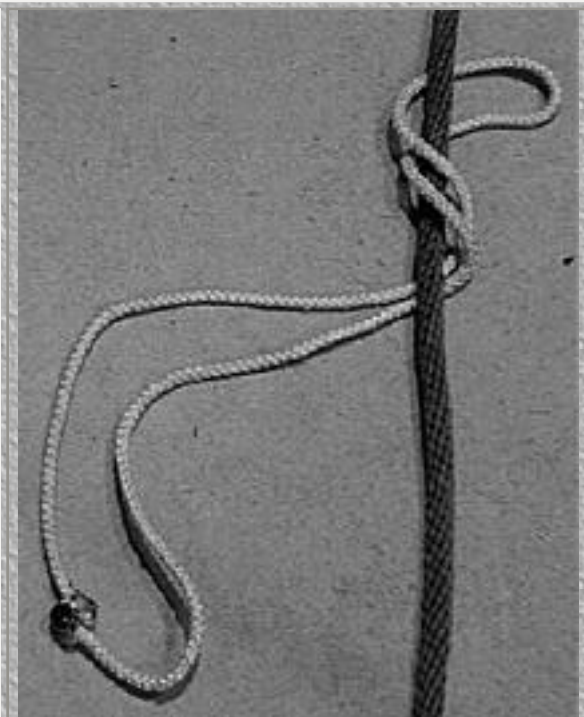
## *Step #2*

**Wrap the loop across the climbing rope.**



## *Step #3*

**Wrap the loop behind the climbing rope.**



### *Step #4*

**Repeat steps 2 - 3 two more times.**



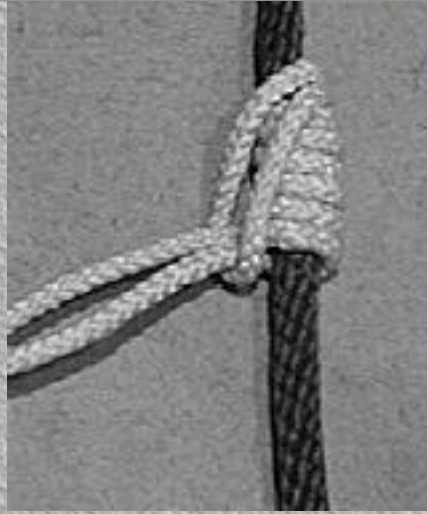
### *Step #5*

**Insert the loop through the original bight**



## *Finished Kleimheist*

**Pull the loop back down, bringing the bight down across the wraps. Tighten the knot.**



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# KNOT KNOWLEDGE

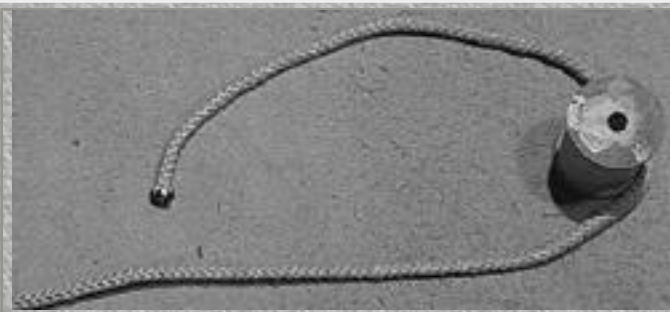
## FRICITION HITCHES

### Tautline Hitch (aka Rolling Hitch)

The Tautline Hitch is an adjustable knot that is commonly used for tensioning guy lines, such as on a tent. The knot can slide along the standing part. When the knot is released, the tension on the standing part tightens the coils in the knot, increasing the friction which keeps the knot in place under tension. Since the Tautline Hitch is tied to its own standing part, the rope must be able to slide around the object it is secured to for it to be adjustable. This knot is known as the Rolling Hitch when, instead of being tied around its standing part, it is tied around another rope, spar, or cylindrical object.

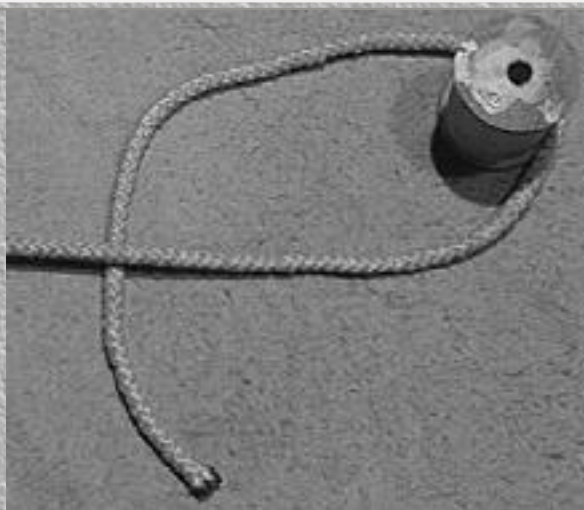
#### *Step 1*

**Pull the end around a secure object (The picture shows an empty thread spool.)**



## *Step 2*

**Bring the end under the standing part.**



## *Step 3*

**Wrap the end around the standing part.**



## *Step 4*

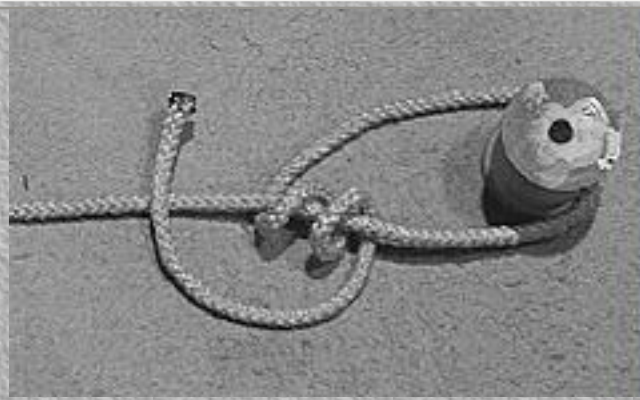


**Wrap the end around the standing part a second time.**



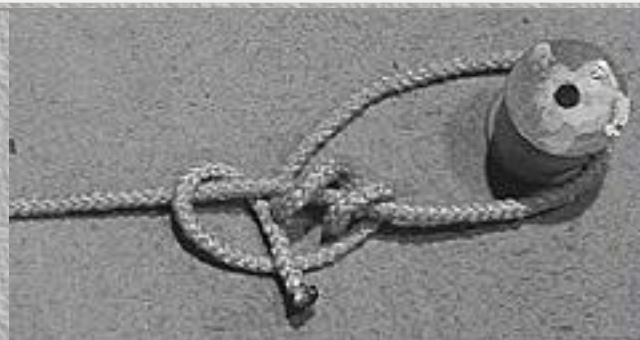
### *Step 5*

**Now you add a half hitch above the turns. Bring the end over the standing part.**



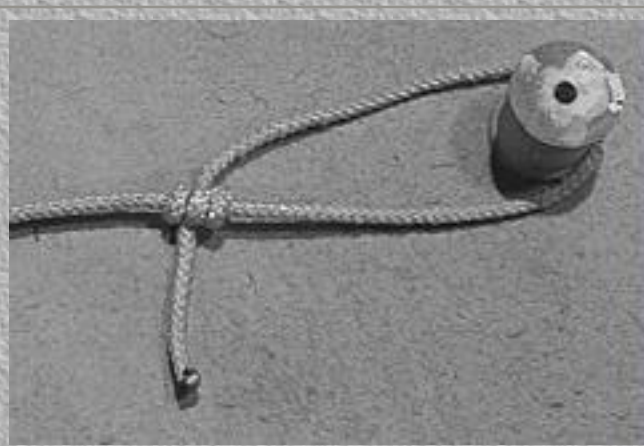
### *Step 6*

**Make a half hitch.**



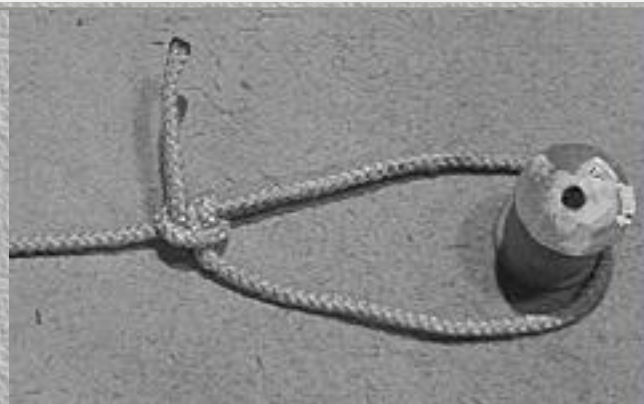
***Finished Tautline Hitch***

**Tighten the loops. Be careful to keep the knot neat while doing this, and tighten it enough so that it will grip the standing part reliably, but not so tight that it can't easily slide.**



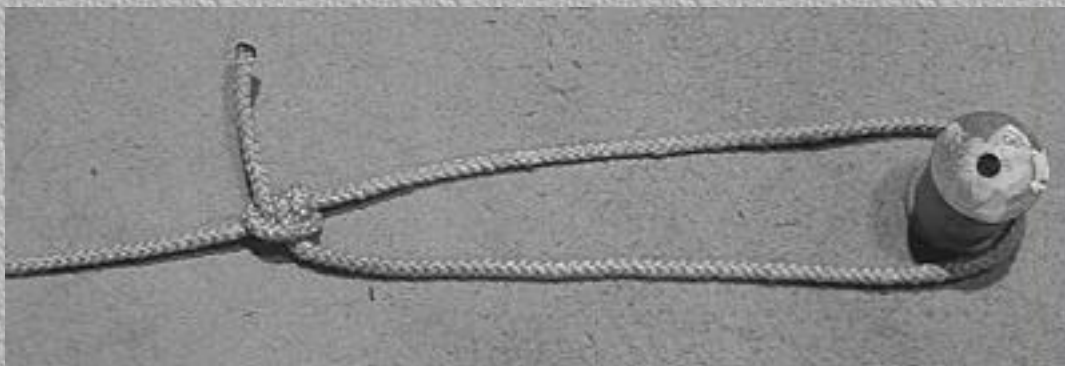
### *Finished Tautline Hitch - Opposite View*

**Opposite view.**



### *Finished Tautline Hitch*

**This picture shows the knot having been slid further up the standing part. Note that the rope had to move around the spool in order for this to occur.**



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# KNOT KNOWLEDGE

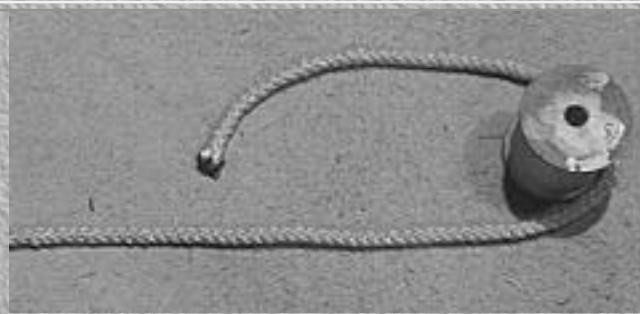
## FRICITION HITCHES

### Sliding Sheet Bend

The Sliding Sheet Bend is used for the same purpose as the [Tautline Hitch](#), but with a quick yank of the end, it is completely untied. This is a boon for those wearing gloves or who have cold, numb fingers. Moreover, unlike the Tautline Hitch, the Sliding Sheet Bend can be "locked" in place to prevent it sliding. It can also be unlocked to make it adjustable again. For this clever knot, I gladly give credit and much appreciation to Dr. Peter Suber, who came up with this knot and posted it to the Web. I learned to tie this knot using his instructions, and you can [visit his website](#) for more knots like this.

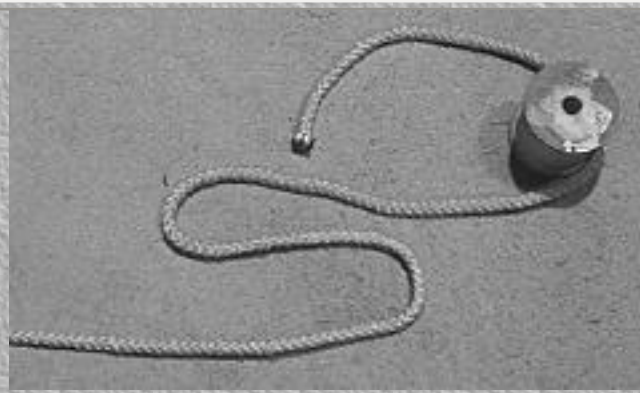
#### *Step 1*

**Wrap the end around the object it is to be secured to (a spool in this picture).**



## *Step 2*

**Form a bight in the standing part, pointing away from the spool.**



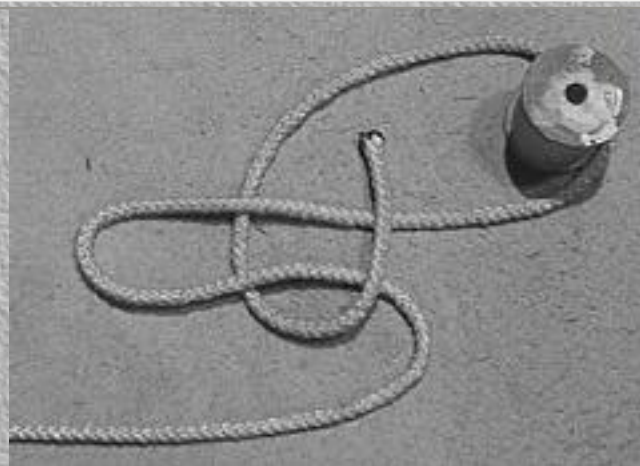
## *Step 3*

**Pull the end under the bight.**



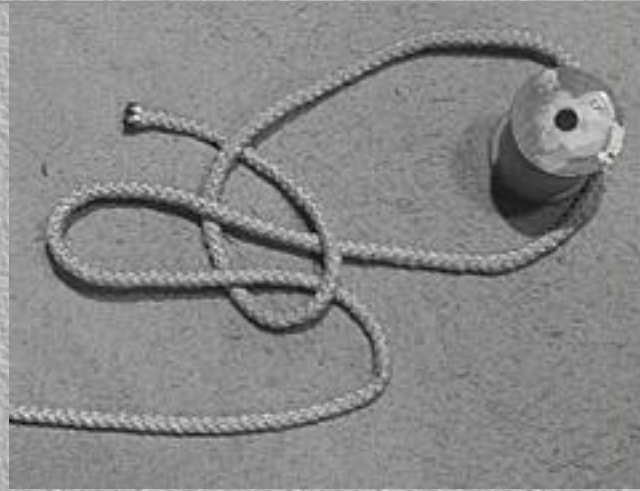
## *Step 4*

**Bring the end over the bight...**



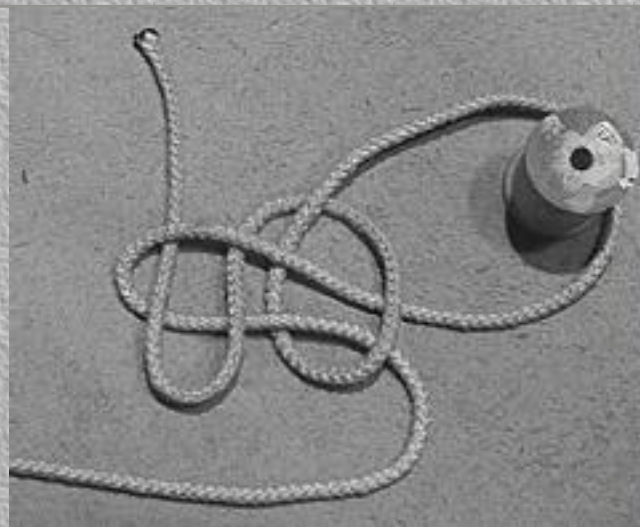
### *Step 5*

**...and form a loop.**



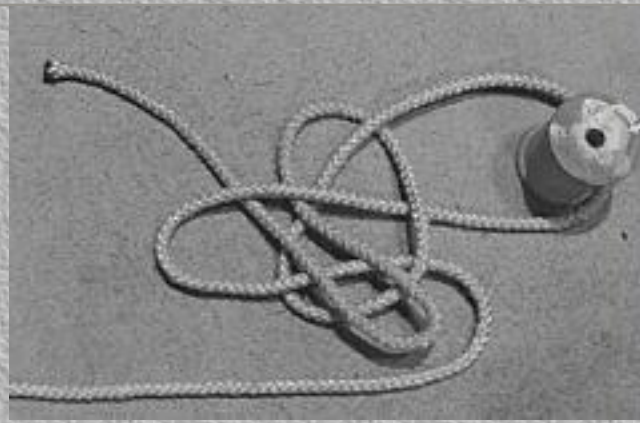
### *Step 6*

**Now, form a bight in the end and stick it through the bight in the standing part.**



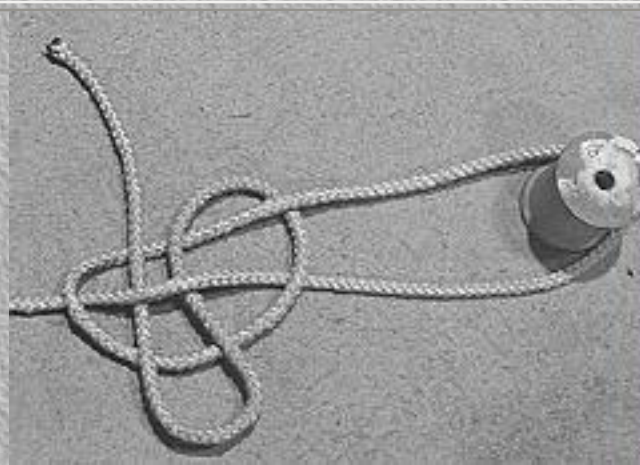
### *Step 7*

**If you are tying this knot flat as pictured, it helps at this point to slide the bight in the end so that it is over the loop formed earlier.**



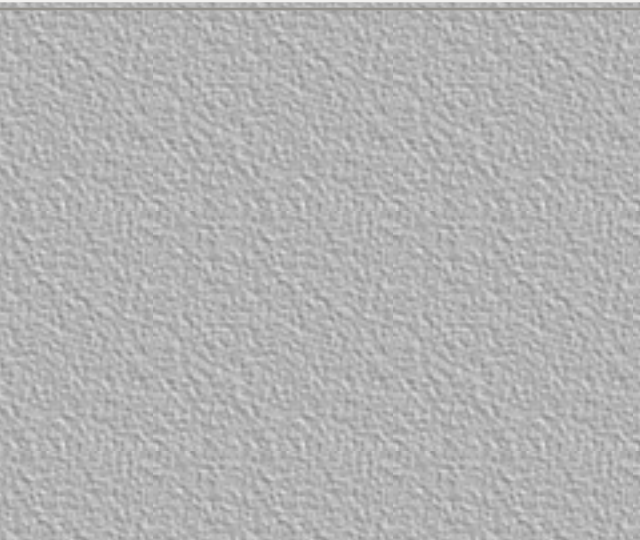
### *Step 8*

**Pull on both ends of the bight in the standing part, removing the bight, so the standing part is straight as pictured. Keep the knot neat while doing this!**

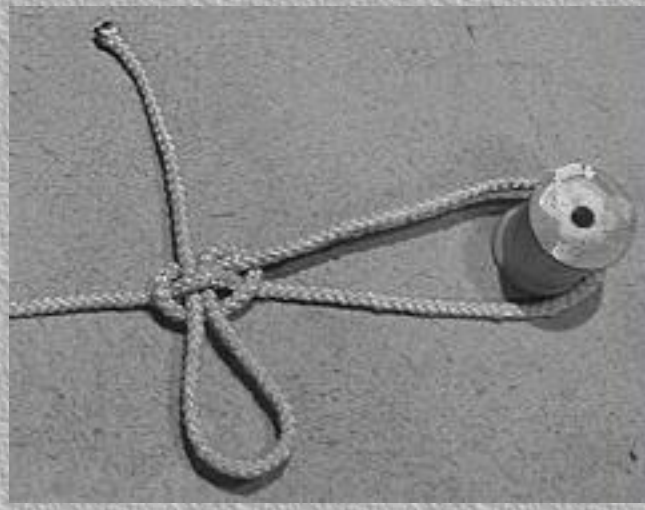


### *Finished Sliding Sheet Bend*

**Tighten the knot, so that the standing part forms a "hump" as it passes over the bight in the end. This is what creates the friction, and the friction can be adjusted by increasing or decreasing the hump (by tightening**

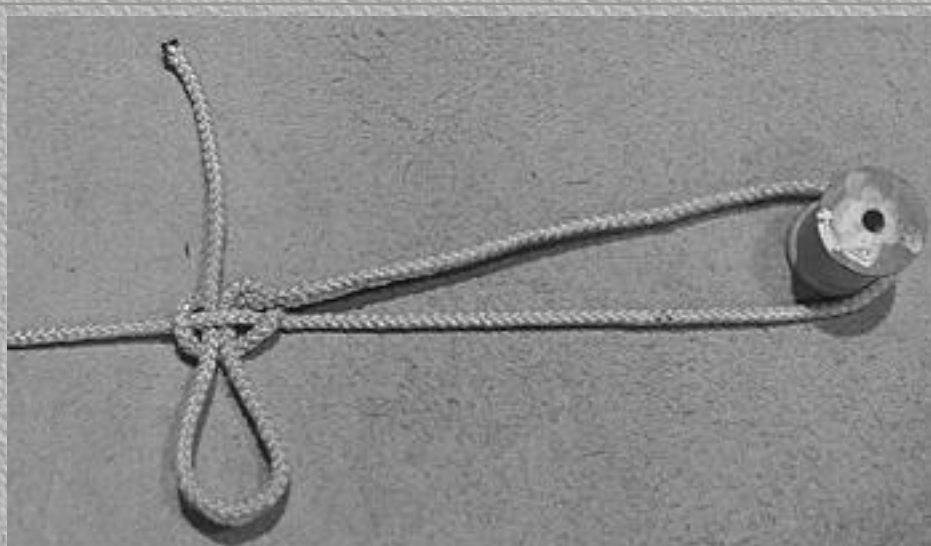


and loosening the knot).



### *Finished Sliding Sheet Bend*

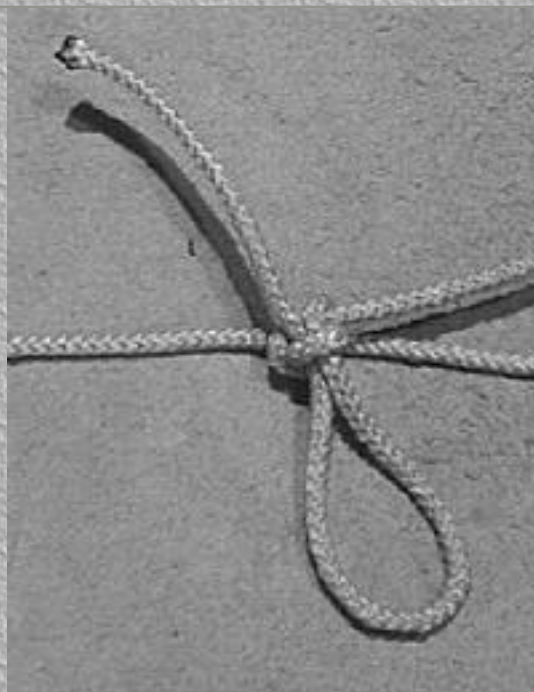
This picture shows the knot having been slid further up the standing part. Note that the rope had to move around the spool in order for this to occur (like the [Tautline Hitch](#)).



### *Locked Sliding Sheet Bend*



**Once you have adjusted the knot to your satisfaction, it can be locked by tightening the knot by pulling on the non-sliding parts of the knot. To unlock, loosen and flatten the knot, to reduce the hump. To untie, simply yank on the end.**



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# KNOT KNOWLEDGE

## Contributions

### Lehman8

**This knot is Dan Lehman's creation. The sketch is his own handiwork. His design goal was to combine a "Figure 8 Loop's strong form and a Bowlinesque ease of untying". Notice the sketch labels the segments of the knots, and the scan of the knot is in the same orientation as the sketched knot.**

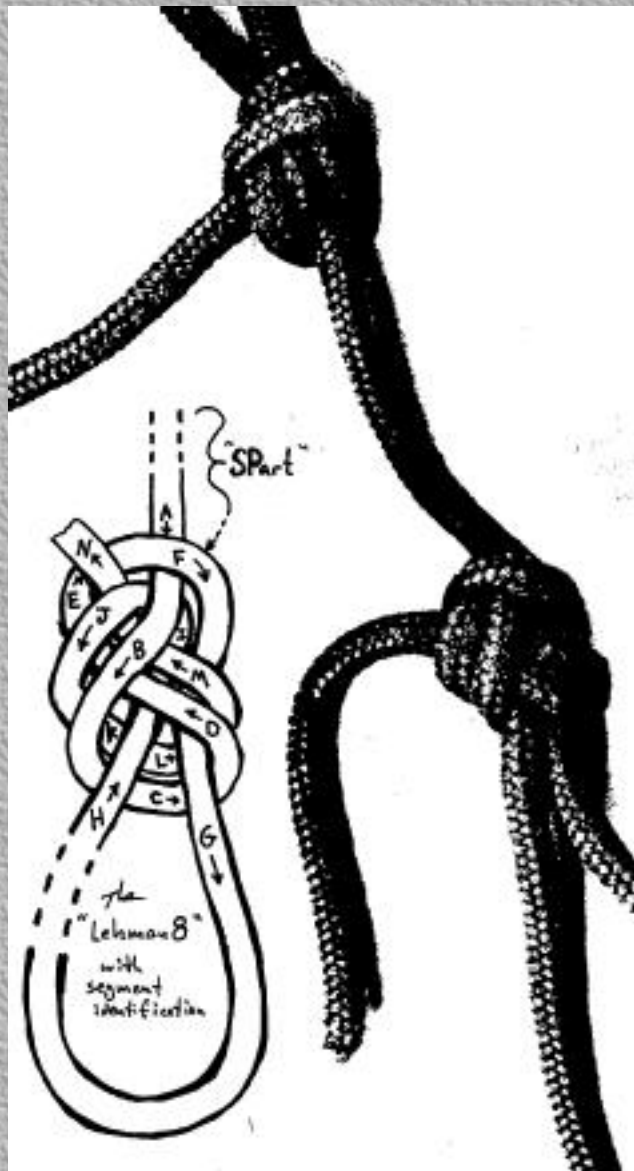
### *Lehman8*

#### **Dan's comments:**

**"The end (M-N) can be tucked out with the loopParts (F-G), which I think 'softens' the SPart's initial deflection (under the 'collar') and adds into the SPart's u-turn (A-B-C).**

**"NB: the end can here exit over-**

over-under-under-under (under E-F) (It's drawn over-over-under-under-over); and that version also allows a further tucking. But I think that then the end (M-N) provides less or no 'softening' at the point immediately after the 'collar'. That is, 'B' is hardly touching 'M-N', deflecting over 'D-E'."

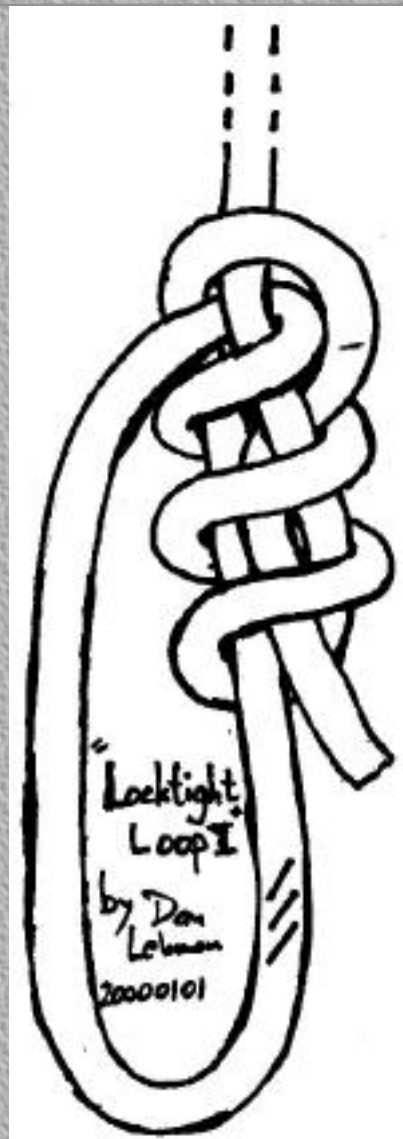


## Locktight Loop I

Dan Lehman shows how to tie version one of his Locktight Loop:

### *Locktight Loop I*

**Sketch by Dan Lehman, 1/1/2000.**

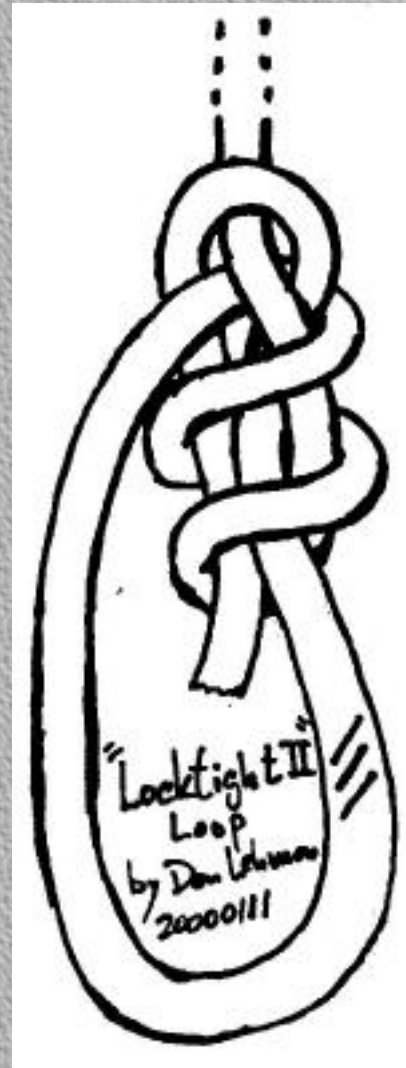


## **Locktight Loop II**

**Dan Lehman shows how to tie version two of his Locktight Loop:**

### *Locktight Loop II*

**Sketch by Dan Lehman, 1/11/2000.**

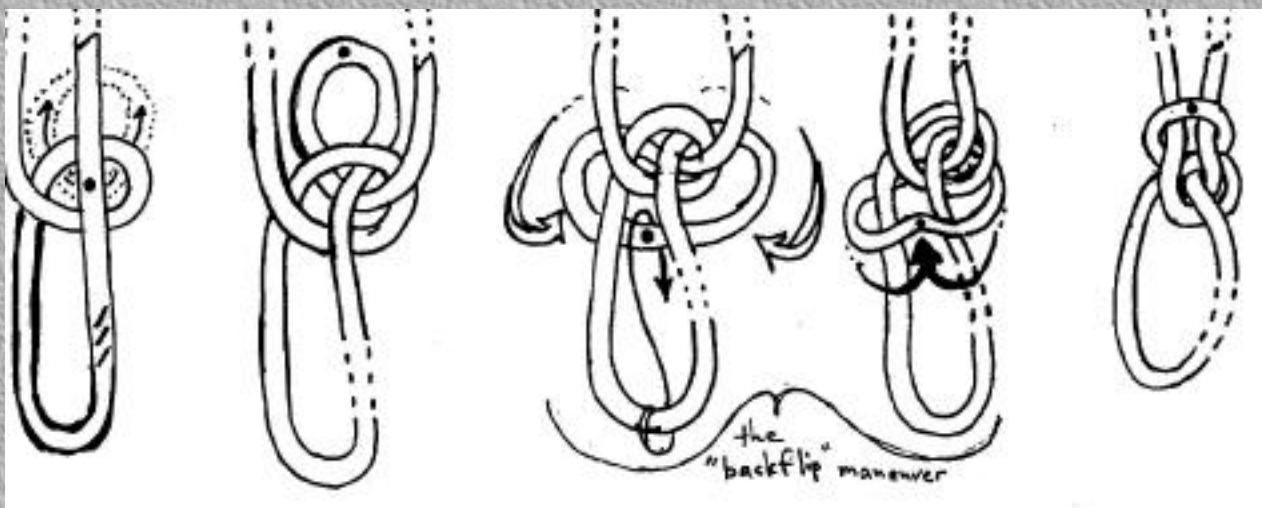


## **Single Bowline on the Bight**

**This is Dan Lehman's sketch of his Single Bowline in the Bight:**

## *Single Bowline on the Bight*

**Sketch  
by Dan  
Lehman**



## **Figure 8 Loop, Strong Form**

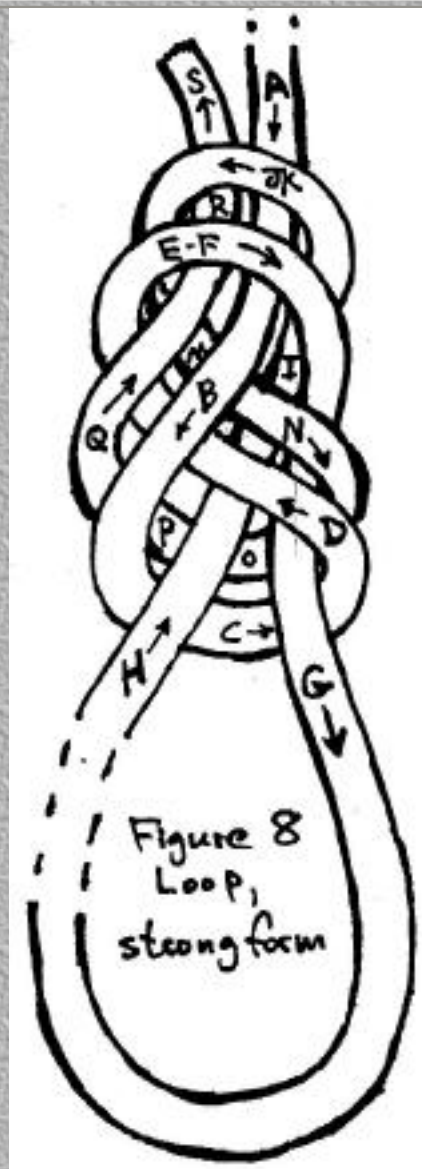
**Dan Lehman shows the correct way to tie the Figure 8 Loop Knot:**

## Figure 8 Loop, Strong Form

**Dan Lehman's comments:**

"I've labelled the segments so as to match - as closely as they do - the labels on the Lehman8 (hence, there is a 'collar' here labelled 'E-F', corresponding to that on the Lehman8-part of the Figure 8 component).

"One can see how 'padding' (of the SPart) section 'P-Q-R' of the Figure 8 above was modelled by 'J-K' in the Lehman 8."

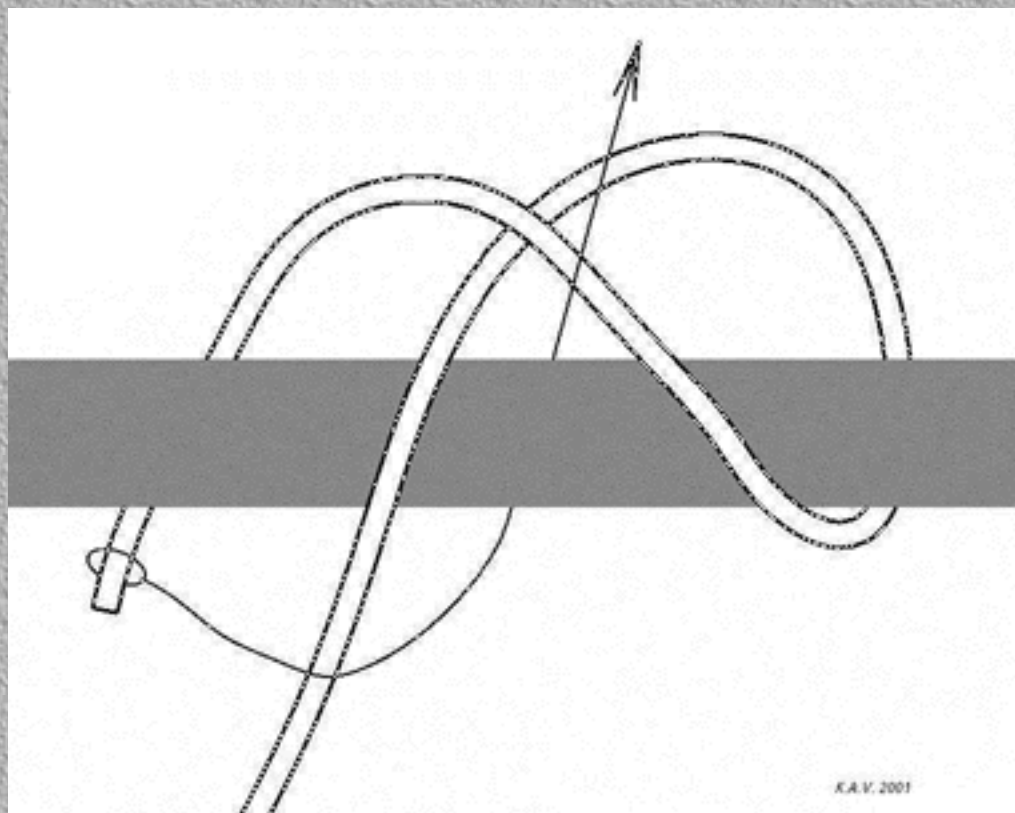


## Sailor's Hitches

These knots were sent to me by Kevin. They are his drawings, and the descriptive text is also his words. Thanks, Kevin, for contributing.

## *Sailor's Hitch*

**Draws up without working to form a strong, secure hitch that will not jam. It may be used as a way to tie a smaller rope to a very large rope. (The smaller rope should pull left when tied as shown here.) Push a bight through the final tuck to form a Slipped Sailor's Hitch.**

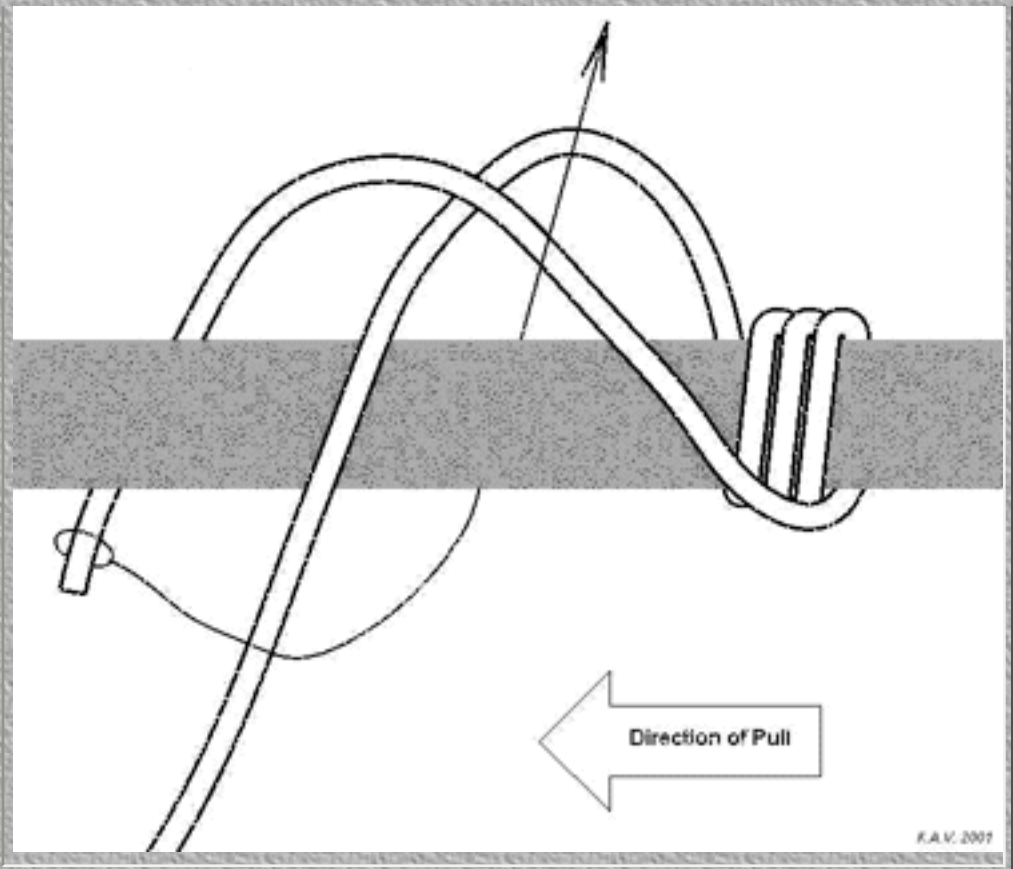


## *Gripping Sailor's Hitch*

**This hitch is a modification of the Sailor's Hitch that allows a lengthwise pull on smooth spar, even if tapered. This hitch even outperforms the Icicle Hitch in this regard. Ensure that**



**the hitch is tight before applying the lengthwise pull. (The pull should be steady.)**



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