

Four Strand Helical Sennit Grips Rails

Applied Friction In Cordage Art

Cord.

Mankind's earliest technology, after teeth and fingernails.

Cord normally requires a knot, some clever kink, to hold it to its task. Typically, knots must be untied to remove the rope. As you know, I always start with "For What Do I Need A Knot?" and then tie a knot to meet that need.



Here's a way to make a cordage structure which will grip many objects strongly enough to hold small things like key rings or other personal items, yet still be easily removed & replaced.

Suppose you just want to carry spare cord, and

have lots of bare tubing on your Expedition Backpack? This puts significant amounts of cordage into compact packages which hold themselves in place until



you need them, when you just "grab and pull" to remove for untying. It's made to come off easily, so don't use it on a handle! You can cover those parts with Hitches in the usual way.

Suppose you ride a bicycle & want to keep your pants leg out of the chain, or keep small personal items easily accessible. Pepper spray, perhaps, or a snack container, or whatever you like, but you want it secure-yet-easy-to-remove? You could tie a knot, untie it, and retie it every single time you need it. Yeah, right.

Suppose you're getting along in years & need to use a walker, or a cart for your Oxygen, or something similar, and you need to keep your door/car keys handy, but you may not have pockets "at hand". What could be better than to have a knot that will let you hang things on the handlebars of your walker, yet easily take them to the keyhole or badge reader when you need to? And with no



fiddly spring-reel-string-thing to fight with!



Why not try this Sennit? It is easy to describe, relatively easy to tie, self-setting (no "massaging into shape", although you're welcome to manipulate it), and surprisingly grippy when applied. I don't know if I can illustrate this, but I can take this Sennit and "whip" it over a rail (e.g.) and it "automagically" wraps itself around, single-handed!



If you notice the direction of the helix... Arrange it so it makes a flat mat as shown at Left. Get yours to that point, then pull the center out --- which way???



One way makes it work MUCH differently than the other way. Try it yourself and see!



If you're still interested, let's get you tying them:

First concern, how much of what kind of cord? Tough question. I take scraps from earlier projects and make up short pieces of whatever I want to ultimately make, measure the result, then measure how much of the scrap piece(s) were eaten by that length of finished goods. Then if you know your finished length (say, a 4" Fob or 10" around your wrist), it's simple math. That's assuming you



have scraps. Lucky. If you don't, consider sacrificing "that much" of the ends of your cords; tying as much as you can with it, measuring the result, and extrapolating the other way. The only other choice would be to trust someone else's opinion, and I would advise against that in all cases. Knowing is very reassuring, which is, as you know, my own opinion...

In each “tier” or “level” of this Sennit, you'll notice there are two "kinks" of one color and only one of the other. This eats the "double" color not exactly twice as fast as the "single" color. When you're measuring, be sure you keep track of which color is which!

For this demonstration, the "double" cord is Red and the "single" cord is Green. I will try to be consistent, but I mix my metaphors sometimes...

When you have your cords, one of each color, middle both and lay the Single one out horizontally. With the Double one, make a Ring Hitch around the Single one's middle and draw it tight. Haul away, and fair both cords. At this point, I must pause and point to the wee gap in the Ring Hitch. If you're really looking for a clean look, I would reckon you could reeve the single cord through some Terminal Tackle there. If it matters, I think that's the way I'll be starting these from now on – with the clasp or ring on this end. But for purposes of communicating the technique, I hope to be clear.



The Trick To Making It helix

Decide which way you want the resulting Sennit to helix and begin to weave the Single cord. The trick helix effect seems to be caused by consistently crossing the Single Cord the same way each tier. If you reverse that, the helix is reversed. If you alternate right then left, the result won't helix, but what fun would that be?? I would suggest making one where each crossing of the Single Cord goes Right-

over-Left, then making another where each crossing goes Left-over-Right and see what it does for you. In this case, I laid the ***RH cord OVER the LH cord every time.***



Notice the Single cord makes a "hole" with the Double cords behind it. Take the ends of the Double cord and reeve them through the middle of the pair behind the "hole". Keep each to its own side and begin to draw all parts tight. It has been demonstrated that reeving the red cords to the outsides instead of the inside performs essentially the same way, with a different surface texture on the inside of the Helix. To me that confirms the Helix is caused by the Single cord's involvement with the structure.

I'd have to suspect that Very Firm tightening helps some. Basically, when I say "Haul away", just pull as hard as you can. If you find yourself breaking cord, it may be too tight.



Continue to remove slack carefully, until you can really haul away on the Single cord & the Double cord stays in place pretty well when you do. IMNERHO you can't pull it tight enough, but my hands disagree. The tighter you can make it, the better it works, at least as tight as I can make it. As usual, try really hard to, as Roy puts it, be a smart robot. Try to pull on the last one just exactly as hard as the first, second, third, etc.

First, a flipped close-up of the Double cord *almost* home:



And the finished first crossing of the Single Cord:



Cross the Single Cord the same way each time and repeat until your brains fall out on the floor.



As this Sennit builds, it will develop into a helix shape naturally. Play with it. Avoid letting slack creep back in, as it would soften the spring effect.





It hangs on a Long Fid, and the example on the left is a lamp or fan chain pull.



To finish, use whatever 4-strand knot floats your boat. This is where you'd attach Terminal Tackle or continue into some other Knottery. I was looking for a match to the other end of the Sennit because I really like the ultra-clean start. As you can see I missed the mark a little, but here's what I was trying to do:

Instead of just crossing the Single cord, put in an Overhand Knot instead, but as loosely as you made the loops before. Reeve the Double cords as before, but this time take the

ends back around and between the Double cords and the Single cord's knot.

This is supposed to mimic the initial Ring Hitch, except as you see it leaves the crossing member doubled. I'm afraid I ended up "tying lots". :^/ Use whatever knot you like to lock the ends in place. SWMBO suggested a triangle



shape to resemble a snake's head, but I don't know that knot yet...

I hope you enjoyed this!

Jimbo the Kinky

Wretched Knottyer of Lower-Easterrn Cordage