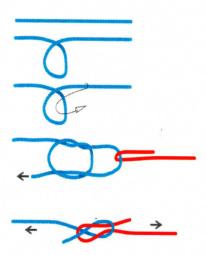
CATERPILLAR STITCH (and yes we know it is a centipede)

The stitch is from Keith Smith's book *Non-Adhesive Binding, Volume 3*. His instructions can be followed but it is an effort. We hope this is less onerous. We have developed some techniques for finishing the tail which is left a little bit up in the air in the book.

It took some playing with the stitch to understand how to get the legs to stand out from the body rather than remain slanted and close to the body. To ensure the legs stand out you need to wrap down on the leg threads (rather than at where they come off the body) forcing them to splay.

It takes quite a lot of thread so you need to start with long threads. To ensure that you make the most of the thread it is worth using a weaver's knot when joining. The beauty of using this knot is that you can manage if one of the threads is very short. Below is a good demonstration of how to do the knot courtesy of Dave Foster http://davethedesigner.net/books/daves-book-tutorial/ who also has it demonstrated on his website using photographs.



You will need two needles threaded with threads at least 600 to 800 cm and with their ends knotted together. To sew the stitch you will need two rows of holes (see photos).

Photographs are provided to assist you. They are labelled according to the text instructions e.g. 1(a); 1(b), 2(a) and in the text are denoted as (a) (b) etc. For your first try it might help to number the holes.

- 1. (a) Both threads up through holes to surface (knot on the underside) Red left hole, black right. (b) Use the Red thread to diagonally cross from Left (L)1 to Right (R)2 and cross back on the underside and come up to L2.
- 2. (a) Continue with Red thread which is taken under (b) and over its first diagonal stitch, continue down and through R4 (c). Hold thread firm, this pulls the stitch down and forms the antenna.
- 3. (a) Black thread down through L3 across underside to R3 and up to surface. Take the needle and push it under the threads at R2 and R1 (b) in that order and pull firmly over the top of these threads and enter L5 (c).
- 4. Bring Red thread to surface at L4. Take it up and under the very first diagonal (a) (only it) and enter R6 (b). Hold firmly.
- 5. Bring Black thread up on R5 (a). You now form the head. Bring thread over the top of the bundle of threads at the junction of antennae. Over and under 3-5 times across (b) the bundle of stitches and then down to L7 (c). That's the head.

- 6. Red thread up through L6 (a). Now bring it across the body and slip needle (around from the right side) underneath the threads between legs 2 and 3. Three to five times around the core and legs start to form. This starts the body. The thread always comes across the 'body' and goes under and around from the opposite side from which it start. When completed enter at R8 (b). Remember to wind around a little way down the 'legs' and force them to splay.
- 7. Repeat the previous action with Black thread from 7R and wrap between 3 and 4 (a) and down to R9. Remember to come across the body and slip needle under core of threads. (See photo 7)
- 8. Repeat until you reach a point where you need to finish at tail end. Remember if you are completing this across book covers and sections the caterpillar will be a lot longer.

You can (A) just continue to angle and wrap and then tie off. This leaves a long tail and this may be tied off as is.

OR (B) you can decide to finish off with more wraps and a shorter tail.

- 9. You have run out of holes to go to. After wrapping hold this thread down against the core so that when you bring the other colour up and angle across you include it as part of the core and wrap it. When you finish wrapping bring the thread down across the body and hold firmly along the core. Now bring the other thread up across, underneath and wrap including the last thread used for wrapping. (See photo 9)
- 10. When the body is long enough after wrapping the last time push needle up through middle of cord (within the wrapping) about a centimetre or so and cut (a). It should stay firm if you are using waxed thread.

Once you have mastered the basic stitch, moving on to incorporating it across a book spine is really simple. Assuming that you have sewn your book together (top and bottom) and wish to embellish it with caterpillar stitch you don't need to go into every section – go into the first and last and about every third section –there are no strict rules. If you have Keith Smith's book it is worth looking at the cover critically to see how he has done it. If not find a website and examine it. or the Penland (p 14) book has Daniel Essig's book shows the spine treatment.

You can also use caterpillar stitch exclusively to sew an exposed spine book together.

When going from the cover to the spine don't do the stitch too tightly – the covers won't close (bitter experience?).

Until you get confident the stitch works well as decoration on the top of handmade a box .

A curved caterpillar is much more difficult because you need to account for the way the legs will fall round the curves.

Happy sewing!!

