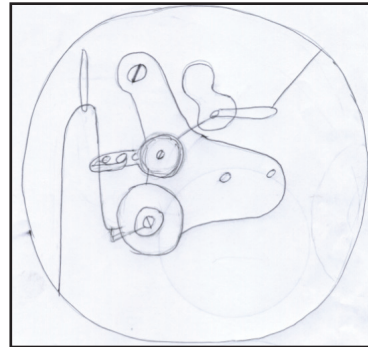
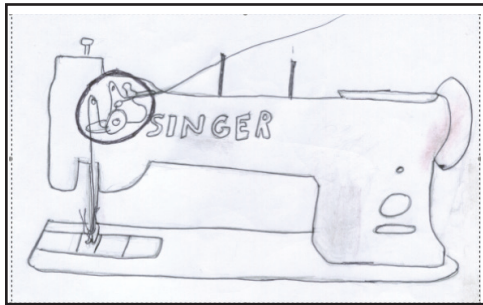
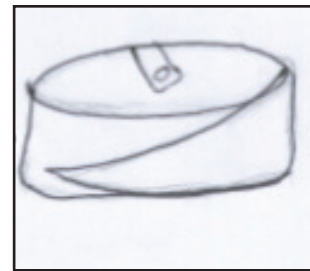
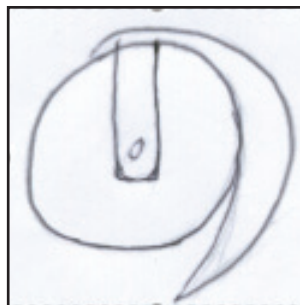
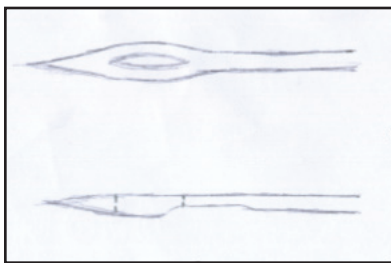


Sewing Machines

Elius Howe, born in Spencer MA, patented the Lock-Stitch sewing machine September 10, 1846 in New Hartford CT. Standard modern sewing machines sew thread differently than hand sewing and they are powered by motors.

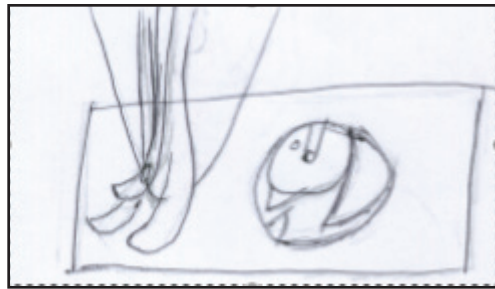


Most machines use a loop stitch method that uses two threads instead of one like hand sewing. Machine needles have a loop hole on the sharp end of the needle and create stitch that is half way between the materials instead of on the surface. The needle is fastened to the needle bar which is driven up and down by the sewing machine's motor.

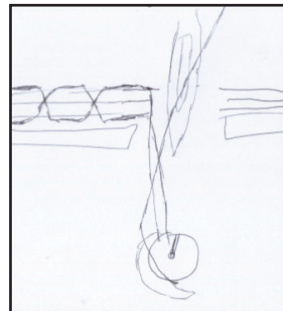
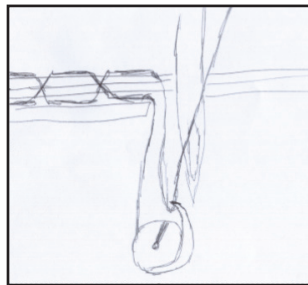


Lock-Stitch sewing machines use a shuttle hook and bobbin assembly to create a stitch. The bobbin is a spool of thread that is surrounded by a shuttle hook and is spun by the machine's motor.

There is another spool placed on the top of the sewing machine where the thread used by the needle comes from. When the sewing machine is operating, the needle punctures through the materials while connected to the thread from the spool above. The thread from the needle is hooked by the spinning shuttle hook right as the needle is at its lowest position.



This lets the above thread spin around the thread from the bobbin to twist and connect the two threads.



A presser foot is used to press down and slide the material along as the needle sews. After the two threads twist the needle rises and the material is moved which tightens the threads and sews the material together.

