



Explanation of the Machine N^o 1 for spinning twisting and doubling the Thread or other Materials.

Fig 1. Represents the Machine complete A. is the Pistoff to put the materials upon to be spun. B. is a Collar of which N. is the End View and O. the side view in which are fixed the pieces of Steel Fig 2. This Collar regulates the Thread to be spun as to quality or fineness The pieces of the Steel must be so fast or fastened by screws in the Collar as in O. and, 1, 2, 3, 4, 5, 6 in N. as it terminates in a Point, shorter and shorter and are made sharp at the flanks and inside Edges. C. C. is a Carriage divided into two parts and which run in a Groove, as at 3 to one part of this Carriage is fixed the Pinus P. by a Rivet at 3, and work in the other part in Grooves at R. R. and open and shut by the motion of the Carriage c. c. - These Pieces are to draw the Thread through the Collar B. To the end of C. is fixed the Slide C. which is put in motion by the Crank H. The Pinus are turned up at the points to hold the Thread - as D. is a hole through which the Thread passeth to the Fly at E. F. is the Spool that receiveth the Thread. I. L. are holes in the Crank H. to regulate the twisting which will be the harder, the nearer the slides G. G. are fixed to the centre M. M. are two Pullies to convey the Cord to the Pulley upon the Spool H. H. is a Spindle whereon any number of Wheels may be fast, which may all have motion at the same time or any one of them may be stopped by distanding it - T. is the Windlass by which the Spindle H. puts I in motion by the Band at S. Figure 7. is a bearing for the Spindle.

Explanation of the Machine N^o 2. for stitching quilting or sewing, A. B. C. is the Frame. Figure 1. is the Rule for the Thread. 2. is a Spindle which moving to the Right conveys the Thread to the Needle at 4 and moving to the left again takes hold of the Stitch and keeps it tight, till the Needle has brought another Stitch through the last taken, and so it goes on alternately, till the whole Article is completely stitched. 3. is the Awl that makes the holes for the needle to pass through 5 is a Spindle that goes through the Poppet at 6 which by turning the Spindle at 5, the Awl and Needle is worked by the Crps 15 and 16. which are in the Spindle at 3 and the motion of this Spindle gives motion to the Prongs 26 and 27 which are in the spindle at 2. 14 is a Cog that gives motion to the Wheel 7 which wheel gives motion to a Slide at 12 which moves along the Grooves at 9 and 10. by means of a Saw that is fixed in the Wheel, to which Slide the Article is fixed for stitching - The Prong 26 goes into a hole at the Slide 13 and gives motion to it, which draws the Thread on the under side of the Article and holds it tight, till the next Stitch is taken and so on till it is done - 22 in Figure 6 is a Shoulder that the Cog at 15 works against - At 21 is a Shoulder that the Cog at 16 works against these work the Poppet at 6 19 & 20 are two screws to fasten the Awl and Needle 3. and 4. in 23 is the Thread passing in between the Awl and Needle which the Eye of the Needle receiveth - 24. is a Saw to regulate the distance from the edge or side of the Article you are stitching - 25 is a Brace or Support to the Top of the Machine - The Crps 14. 15. 16. 17. and 18. in the Spindle, at 3, should be so fastened, as to be screwed up or down according to the quality of the Article and fineness or coarseness of the stitching required - Explanation of Figures 1 and 2 in the Machine N^o 3 for Plating or Mowing - Figure 1. A. is a Cylinder that receiveth the Piston B. with the Material plated upon it. C. C. are Tubes or Pipes that convey the Thread to the Piston whereon it is plated by pulling the Line upon a circular Slide at D. D. first one and then the other and at the same time moves up the Slide F. F. and likewise moves the Circular Sliding Frame E. E. which causeth the Tubes or Pipes to cross each other G. G. is a bearing for the Sliding Frame E. E. to work upon - At H. H. are two Grooves in the Cylinder whereon two pins slide that are fastened to the supports of the Circular Slide at I. I. which by pulling the Lines occasions them to rise in the Grooves and the two Springs at K. K. moves them back again - L. is a weight that draws down the Piston as the Plating increases upon it M. M. M. M. is a circular Frame that the Slides F. F. move upon and down in - N. is a handle to pull up the Piston O. O. is a circular piece of Lead to lean down the Tubes or Pipes P. P. is a support for the Circular Frame M. M. M. M. T. T. T. T. are Shoulders on the Tubes or Pipes O. O. that prevent them from slipping endways. Figure 2. is the bottom part of the Circular Frame M. M. M. M. in Figure 1. R. R. R. R. in Fig 1 is a Circular Frame with half the number of Kitches in it to what the light parts are in Figure 2. At S. S. S. S. are four points that belong to the Slides at F. F. in Figure 1 which go through the holes in Figure 2 and down to the Circular Slides at D. D. in Figure 1. The light parts in Figure 2, are the Grooves that the Slides F. F. in Figure 1, work in - Note. These Machines may be worked by hand by a Mill Steam Engine or other power - The Method of Maching Shoes Boots &c. is as follows - Take two common Lasts and join the two top sides together at the narrowest part of the Heel so that when set down the one shall hang over the other then fix one of the Lasts in a Vice and work upon the other, first put the inner sole upon the last then put a little of the Composition N^o 3 upon the sole to stick the edges of the upper parts to, then stitch the upper part and bind quarters together then draw it tight on the last Hammer the edges well down all round, then put the bottom of the inner sole with a little of the same composition all over then put on the inside sole and stitch it on to the inside sole either by the Machine N^o 2 or by hand with the Awl and Needle N^o 3 and 4 when so done peg or brad the Heel then take an Iron Mould the exact size of the sole of the Shoe and another of the exact form of the bottom of the Last upon which the Shoe was made (but not too tight in the upper part) then put a little of the same Composition on the stitches on the inside of the shoe then put in the lining smoothly then make the Moulds warm and put one to the sole and the other into the shoe then put it into a Saw press and press it well and it is completed - Note. instead of stitching the soles together they may be sewed bradded withed or pegged together and then pressed but this is not equal to stitching them together. The Leg part of the Boots Spatterdash dachies &c. may when be made in the common way or may be plated up by means of the Machine N^o 3 and stitched by the Machine N^o 2.

