A detailed diary of events carried out during the construction of the bedside locker

Reflective journal

Detailed diary of events

Luke Mullally

Table of contents

Estimated time chart

Glue top	30 mins
Turn legs	1hr 30 mins
Mark all pieces	30 mins
Mortise legs	10 mins
Tennon back rail	20 mins
Dowel legs and rails	10 mins
Mortise and tennon front rail	20 mins
Dovetail front rail	30 mins
Sand all pieces	30 mins
Glue frame fully	1 hr
Make drawer	2 hrs
Glue drawer	10 mins
Adjust drawer	10 mins
Attach rails and handle	15 mins
Clean, cut and router top	30 mins
Attach top	10 mins
Final sanding	10 mins

Actual time chart

Glue top	35 mins
Turn legs	2hrs 15 mins
Mark all pieces	45 mins
Mortise legs	10 mins
Tennon back rail	25 mins
Dowel legs and rails	10 mins
Mortise and tennon front rail	30 mins
Dovetail front rail	35 mins
Sand all pieces	20 mins
Glue frame fully	50 mins
Make drawer	2 hrs 15 mins
Glue drawer	10 mins
Adjust drawer	15 mins
Attach rails and handle	30 mins
Clean, cut and router top	35 mins
Attach top	25 mins
Final sanding	30 mins

Detailed sequence of events

The first step in the manufacturing process of the bedside locker was to check all timber for sizes and defects; I then marked face side and edge on all pieces.

The first step was to make the top for the bedside locker. I followed the drawing using a rubbed glue joint, a biscuit joint, dowel joint and a groove with a slip of plywood. Once I used the biscuit joiner, dowelling machine and spindle moulder I could begin gluing. I set up the cramps and added the glue to each joint and then cramped the timber together ensuring it was flat and free from any buckles or twists, I then left the glue to set before removing it from the cramps.

The next step was to turn the legs for the locker using the lathe. After first securing the lathe to the work bench I joined the diagonals on the ends of my legs to find the centres, I then used a nail and hammer to give the points on the lathe a groove to fit into the centres on both ends. I then secured the piece to the lathe ensuring it was safely secured and that the piece would not hit off the tool rest. I could now turn the lathe on and ensuring to wear glasses, start to turn my legs.

I marked the relevant lines on the piece from the drawing so I could follow the sizes and dimensions that the finished legs should match; I then began to turn the first leg using different types of chisels for specific sections and details of the leg ensuring to match the dimensions on the drawing. Once I was happy with the leg I began to sand it using 180 grit sandpaper until I was satisfied with a smooth finish, I then repeated the steps for the next 3 legs and made sure all legs were matching as closely as possible.

Next I marked out the position of the mortises on the 2 back legs and used the mortise machine to remove the mortises; I then marked out the back rail of the bedside locker and began to cut the tennons using a tennon. Once the waste was removed I cleaned the tennons and shoulders until they fit hand tight into the mortises, I then cut the tennons to leave the haunches and fitted it into the mortises.

Detailed sequence of events

I then used the dowelling machine to dowel the side rails to the back and front legs; I marked the position of the dowels first to ensure no mistakes and then used the machine to remove the holes for the dowels making sure to keep my hands well away from the timber when it was being dowelled. I fit the dowels into the holes and assembled the back and sides of the locker.

Then next step was to make the front rails of the locker for the drawer to fit into. I marked out the dovetail joint on the top rail and the top of the two front legs; I then used the tennon saw to cut the tail on the rail and a chisel to clean the shoulders. I then made relief cuts with the tennon saw and removed the socket for the dovetail on the top of the leg; I made the necessary adjustments until the dovetails fitted on both legs and were hand tight. Next I marked out the mortise and tennon on the legs and front rail for the bottom rail; once they were marked I removed the mortises using the mortise machine and then cut the tennons using a tennon saw and chisel to clean the tennons and shoulders until they were hand tight.

I could now glue the frame together. I first glued the two front legs and rails together using glue and cramps as well as gluing the two back legs and rail together using the same method, once the front and back of the bedside locker were set and out of the cramps I could then glue the whole frame together repeating the process of using cramps and glue, once the glue was set it could be removed from the cramps.

Next I began the construction of the drawer. First I had to plane each piece slightly to ensure it would fit between the front rails, once all pieces fit the frame I marked out all pieces and began to cut the dovetails. I first cut the through dovetails at the back of the drawer using a tennon saw and a chisel to clean the shoulders, once the dovetails at the back were both fitting I began to cut the lapped dovetails at the front of the drawer. First I cut out the sockets using relief cuts with the tennon saw and then removing the waste with a chisel ensuring to leave the lap marked by the marking gauge; I could then mark the tails from the sockets and cut them using a tennon saw and chisel to clean the shoulders.

Detailed sequence of events

Once all corners of the drawer were fitting together after making adjustments, I had to run the groove on the spindle moulder for the base of the drawer to slot into. I had to set the height of the spindle so that the top of the head was in line with the bottom of the back rail, after setting the depth and guarding I ran the front and side pieces through ensuring to wear glasses. I could now glue my drawer together using cramps and glue ensuring that it was square when left to set.

The next step after the drawer was removed from the cramps was to make sure it went smoothly into the frame, I had to make a few adjustments to make it fit nicely which involved cleaning the corners up with a plane and then sanding all over until I got the fit that I was satisfied with. When the drawer was fitting I had to make runners and kickers, I cut the runners to length and planed them down until they were the required thickness. I then attached them to the unit using screws which were countersunk; I then cut the kickers to length and attached them to the runners using screws after taking off a slight chamfer so as not to interfere with the drawer. I made adjustments to both the runners and kickers until I was satisfied with the way the drawer fit.

Next I had to give my top a light sanding and cut it to size, once it was cut to size on the table saw I had to choose a router bit to router a design around the edges. When I chose the router bit I wanted to use, I secured it into the router using the correct tools ensuring it was not plugged in. using a vacuum clamp I secured the top so it would not move, I could then begin to router the design around the edges of the top using the router ensuring to wear glasses.

When the top was routered around the edges I had to attach it to the unit, I did this by ensuring the top was centred and then simply screwing two pieces of wood to the underside of the top and then screwing the same pieces to the unit thus attaching the top to the locker.

I then made a handle using a small piece of hardwood, after taking off a small chamfer on the handle I attached it using screws which were countersunk from the inside of the drawer. Finally I gave the whole unit a final sanding until I was happy with the overall finish.

Reflection

As a whole I felt that the complete construction process of the bedside locker went quite smoothly and I experienced no huge problems or setbacks. I was happy with the finished product as a whole and with the way I manufactured each part of the locker, obviously there were some areas that could have been slightly better.

One thing that I could have done differently was getting more practice on the lathe before turning the legs, I was able to use the lathe properly and safely but I could have done with a bit more practice shaping the required legs to the correct dimensions. In the end I thought the legs came out very well but a bit more practice would have helped my accuracy slightly.

Another area that I could have done differently was when I was constructing the drawer, I had to plane down the wood for the drawer using a hand plane so it would fit into the slot already made for it. I did do this but once the drawer was assembled and glued I found it was still slightly tight, as a result I used the hand held electric sander to get it down to the required size to fit the unit. This wasn't a major setback by any means but it would have been a slightly quicker and smoother process if I had planed it slightly more before gluing to fit the unit.

I was satisfied that both the unit and drawer were square after being glued and cramped and that everything fit together to a good standard. Overall I thought the process was smooth with just a few minor kinks and I was happy with the final product as a whole.