

JHON MC CONNELL J.

WOODWORKING PROJECTS FOR BEGINNERS

THE ULTIMATE STEP-BY-STEP
GUIDE TO MASTER THE **ESSENTIAL
WOODWORKING SKILLS**,
WITH ALL THE TECHNIQUES, TIPS
AND **TOOLS FOR WOODWORKERS**

MORE THAN 30 MODERN EASY PLANS
INDOOR WITH DETAILED TO MAKE
FOR EVERY ROOM OF YOUR HOME.

Woodworking Projects for Beginners



**The ultimate step-by-step guide to master
the essential woodworking skills,
with all the techniques, tips, and tools for
woodworkers**

Jhon Mc Connell J.



Copyright © 2020 Jhon Mc Connell J.
USA

Woodworking Projects for Beginners

By Jhon Mc Connell J.

2020

All Rights Reserved

Designed by Alexander Mendoza

Table of Contents

Introduction

Part I:

Workshop, Tools, And Skills

Chapter 1 Woodworking Safety

Chapter 2 Basic Tools You Must Have

Chapter 3 Basic Woodworking Techniques And Skills

PART II

Projects For Indoor -Stylish Projects For Living Room Or Office

Chapter 4 Console Table And Desk

Chapter 5 Wood Table Lamp And Bookends

Chapter 6. Beautiful Magazine Rack And Sofa Arm Tray Table

Chapter 7 Projects For Indoor -More Stylish Projects For Living Room Or Office

PART III

Projects For Indoor- Bedroom

Chapter 8 Modern Farmhouse Bed

Chapter 9 Modern Farmhouse Bedside Table And Platform Bed

Chapter 10 Collapsible Dog Ramp, Cute And Stylish Kids Bed & Headboard

Chapter 11. Toy Box Or Chest & Shoe Organizer

PART IV

Projects For Indoor - Creative Projects For Kitchen And Dining Room

Chapter 12 Kitchen Cabinet

Chapter 13 Kitchen Step Stool

Chapter 14 Large Serving Tray & Set Of Wooden Salt And Pepper R

Chapter 15 Cupboard For Cups And Stocks

PART V

Projects For Indoor -Bathroom

Chapter 16 Bathroom Mat And Multifunctional Bath Tray

Chapter 17 Towel Rails And Creative Shelf Cabinet And Organizer

Conclusion



INTRODUCTION

Woodworking is often known as one of the most enjoyable activities of all. You will quickly make your parts by engaging in the use of woodworking equipment and tools. Such pieces are smaller tasks at first, but the abilities improve the elements you make.

Woodworking is a productive craft where wood is cut, shaped, and combined to create ornamental and useful things. The foundational principles are simple to learn, but they are always a diversion, which will be new and daunting as the experience progresses. This book will serve as your introduction for beginners who have little familiarity with the fundamental techniques, tools, and equipment in woodworking.

Like any sport, woodworking allows you to get some basic knowledge. You will need to familiarize yourself initially with different kinds of equipment and woodworking tools available. Every piece of the tool has a particular task. Nevertheless, because you cannot buy every computer and system available, you will learn to adapt that software to multiple applications.

The next stage of woodworking hobby development is to learn how to plan your woodworking projects. The design of the parts that you will manufacture is one step in this process. Next, you need to identify which materials are required, and finally, which specific tools are required to complete the job. You can either design your projects or purchase designs and projects that already detail it. These pre-designed projects will make more sense when you start first and help you to learn the woodwork design and planning process.

Another aspect of project design is to know about different types of wood products. As your hobby skills develop, you will find certain kinds of woods with which you enjoy working. Various types of woods are suitable for various multiple projects. Pine is significantly different from maple, and oak can work harder than ash. These parts of the woodworking puzzle are just more interesting.

Good preparation for woodworking projects is always necessary. The first element of woodworking projects is what you are trying to create precisely. You must also decide for specific purposes to fulfill your intended product. You will also have to determine what style is best suited to.

The most critical step of any woodwork project is preparation. Remember how much time you have and how much money you are going to have to spend. Such vital aspects play an essential role. You will write a detailed specification that contains sketches of the finished product and any subassemblies. This is very important in the planning of your activities. The dimensions of each section of the package must include thorough drawings.

The next part of the strategy is to list all the supplies you need. There is a vast selection of wood and construction materials so that you can choose everything that fits the style while taking the quality, robustness, and aesthetics into account.

Most woodworking projects require the procurement of certain materials. A wide range of tools is available. Some of them are quite inexpensive, and some of them quite pricey. You will strive to choose designs that don't need the most expensive tools when designing your woodwork projects. You may not have to be so careful with your decisions if you already have some resources.

Nonetheless, before using it, you must test if the devices need conditioning. If your current methods are harsh, this is very necessary. Apart from personal safety concerns, the use of stubborn tools can lead to incorrect and rough cuts or damage to softwood.

The next step in the entirety of woodworking projects is to start the work. This is a fascinating bit for most of us. You have to be very careful when doing it. Follow all instructions, particularly any power tools that come with your tools. So keep in mind that you always wear appropriate safety gear, such as safety glasses. Mistakes can be quite costly at this point. It is essential to stick to your plans and do nothing else.

The next step then is to ensure that your final product is fully completed. This may change the whole appearance of your work. Deciding on an excellent finish will change the look of the entire piece entirely, so consider that carefully. Even the best woodwork tasks can require the planning and execution of plans.

Excellent planning relies on all woodworking tasks. With Step by Step Guides, many things are now different, and woodwork projects technology is simple and easy to build. Before, it took comprehensive skills to make something with your own hands; some people would work as a hobby in their free time; others would take it seriously and turn it into a business.

Today, some people can build their woodworking creations, and the majority of people would call a contractor to build them a piece of furniture, a deck, or even something as necessary as a step ladder. But it would make life more comfortable and fun to learn to create your furniture made from quality wood of your choice.

Woodworking today is more accessible because today, it is quite easy to gain knowledge of woodworking projects. There are lots of information, but some are good, and some are bad. The experience I share with you will help you learn a lot about woodworking and how to continue with simple woodworking projects. Those methods will let you train to become skilled and to be enjoyed learning.

Many people go into the hobby before they even know if it is for them. How to create fantastic woodworking projects? To begin with, before you start your woodworking project, the first thing you want to know is that it suits your interests. The point is, you won't know unless you try, and that's a good argument.

First of all, agree that you will start with something small. Maybe a birdhouse or a planter or a decorative shelf. But nothing is too fancy. It can even be a great idea, to begin with, a pack. In this way, during this testing stage, you will not have to invest in many resources. When you completed your test project and found it to be a real pleasure, you are willing to move gradually on to more substantial and better stuff.

Now you have the best chance to know what it means to deal with wood—the time to educate and study. At least if you want to go on, you may reach the fundamentals. Plan to invest in certain magazines and books. Try buying magazines aimed at beginners and watch for the ones that offer free patterns.

The next thing on your list is what information you will need to use. Don't run out and buy state-of-the-art or high-end equipment. These aren't required. When you read books, you should have a good idea now what you will need. They certainly gave you reasonable indications on how to pick your devices. Every woodworking project has the equipment, but most of these projects typically cooperate with standard woodworking tools.

Read some details that have come with your equipment before you even start thinking about a severe woodworking project. You must become comfortable and comply with all health rules and guidelines first and foremost. Some severe accidents can occur with the tools you use.

You are now ready to start your project. Make sure you buy a pattern and, ideally, a basic design. When you leap into something too complicated, it can be expensive, and you can be disappointed if it doesn't work as well as you can.

Woodwork projects require the same discipline as anything you know how to do. The more you do, the more you slowly grow. Try to take a while to take a few classes, maybe. See your nearest investment shops and see whether they are holding workshops. Just make sure you apply to the sort of woodworking you do. When you follow these simple guidelines and continue reading and studying, you can classify yourself as an expert wooden craftsman before you know it.

PART I:

WORKSHOP, TOOLS, AND SKILLS





Chapter 1

WOODWORKING SAFETY



A Safe Workspace

A corner of a basement shed, or garage makes an ideal place to do woodworking—a garage, especially because it's easy to ventilate. You might even find it practical to set up a work table outside, as long as there's no rain in the forecast and you have an electrical outlet nearby. Make certain all outlets in your workspace are properly grounded and can handle the load of the tools. No matter what place you prefer to work, you'll need to have access to a sturdy work surface, around 3 feet by 6 feet and a couple of inches thick, upon which you can hammer and saw wood, and to which you can attach clamps and a vise. Many pieces of electrical woodworking equipment, such as routers and orbital sanders, will have a built-in dust extraction system or the ability to connect to one. For the beginner, these built-in dust extraction systems—coupled with proper ventilation and, ideally, a dust mask—will suffice. As you become more serious about woodworking, you might want to consider investing in a stand-up vacuum system, for example, which

will more thoroughly collect sawdust and chips. An industrial vacuum cleaner is another option that works wonderfully for general workshop cleaning. You will need to make sure your workshop is as clean and free from sawdust and wood chips as possible, not only for your health but also because the material can be a fire hazard. Be sure to equip your workshop with a smoke alarm and fire extinguisher.

Using Power Tools Safely

Failure to use power tools properly can impose extreme danger. It is essential that you carefully read and understand the guidelines that come with any power tool before you start using it. Putting on eye protection, particularly safety glasses or safety goggles, must also be kept in mind. Wearing such protective gear will aid in protecting your eyes from flying debris. Aside from the eyes, we must also take great precautions to work with our hands and fingers as it is most prone to cuts and injuries because of getting it too close to power. Your fingers must be kept at a distance of at least 4-5 inches from the bit or blade that is running.

Another given fact about power tools is the loud noise they produce, thus the need for hearing protection as well. Hearing damage can occur even during short exposures to the loud sound of power tools.

10 Safety Tips to Post in Your Shop

1. Presence of Mind.

Your brain is the most powerful tool in your shop, and you must make good use of it. Think through your actions and movements before doing it. Being fully aware of the things you are doing will actually prevent you from getting injured and, of course, will help not waste your materials too.

2. Keeping Your Shop Clean

A dirty, unorganized work area is an accident waiting to happen. Maintaining the shop's cleanliness will aid in protecting you and your tools from hazards.

3. Don't Get Distracted

Always pay attention and concentrate on what you are working on. Avoid distractions such as TV or holding long conversations with someone when working. Never take your eyes off what you're doing, especially when

handling blades and drills.

4. Never Rush

When we rush completing a project, mistakes tend to happen more. Always remember this is a hobby you should be enjoying and if there's a need to take a break when you feel stressed or frustrated, go on and take it.

5. Never Force It

When working with power tools, they must be easy to glide and easy to maneuver. Any presence of resistance might be a sign that something is wrong. It may be stuck, misaligned, or installed improperly. Never force it if you feel such resistance. Rather, turn off and unplug your tool and check the reason why it may be malfunctioning.

6. Protection is Key

An essential factor of safe tool operation is wearing the right protection gears, which include, but not limited to, ear covers, goggles, masks, work gloves, and lung protection. Make use of push sticks in instances you work near the blades.

7. Let The Tools Stop

Blades might still be spinning even though you unplugged the power, and touching it can be a grave mistake you can do. So give it time to stop and wind down on its own before handling it.

8. Dust and Fumes

Airborne dust and solvent fumes are all sources of explosion and health hazards. Keep your working area well-ventilated to have a steady supply of fresh air.

9. Proper Clothing

Never wear ill-fitting or loose clothing when working. Your hair must also be secured in a bun. Not doing so can lead to your hair or your clothes getting caught in the power tools.

10. Don't Work When Intoxicated

Do not drink alcohol when working or don't work when you're drunk, as it may cause grave injuries since it affects your cognitive senses.



Chapter 2

BASIC TOOLS YOU MUST HAVE



The best way to see your tools is as an extended body. They give you all sorts of extraordinary strength and expand your creative capacity enormously. However, all this does not occur automatically. It's only true if you know how the tools work and how you should work with them. However, we deal with wood, so you need to learn how the tools communicate with wood. When working with hand tools, this necessity is immediately clearer, but no less true because you add power.

If your skills are to be extended, in fact, you will have to develop your own capabilities. The raw material you need is a new tool—even a nice one—just out of the box. It should, as you could with a hand plane, be sharpened, tweaked, and setup. Or, as you might have to do with a table saw before it can accomplish the different work you need to do, it may need to be raised, balanced, and accessorized with a cross-sliced sleigh, jig, or dado blade. In any case, a new tool out of the box is not all so different from a new computer; the computer may be exciting and fresh, but until the software is

installed and the data are imported, it will not do what you have to do.

Hand Tools

Hand tools are the easiest to get when starting woodwork, as they are often readily available in the home and are inexpensive. Below are a number of the essential hand tools that a basic woodworking kit should be comprised of.

1. Hammer



The claw hammer is perhaps the most recognizable of all woodworking tools. It not only lets you drive nails into wood pieces but also remove them using the clawed end. The clawed end also serves as a counterweight to keep the hammerhead balanced. It can also come in handy for a variety of other tasks.

Weight is an important consideration when purchasing hammers. A heavier head would mean a stronger force for every stroke of the hammer, which makes driving a nail easier. However, it might also prove a bit more difficult to control. Another important consideration when purchasing a hammer is the handle size: the longer the handle, the faster you can swing the hammer, increasing force. The most preferred weight for a claw hammer is around 450 grams.

2. Hand saw, Ripsaw and Cross Cut Saw



The hand saw is another hand tool that is almost universally associated with woodworking. And even with the advent of power tools like the jigsaw and the circular saw, many experienced woodworkers find it a must-to-have at least two different hand saws included in their toolset.

3. Crosscut saw

It is given that there a number of different hand saws. The two essential kinds to have in a starter kit is the rip saw, and the crosscut saw. The focal differences are on how they cut into the wood: the ripsaw cuts along the grain while the crosscut cuts across the grain. Also, note that the number of teeth (denoted as teeth per inch/TPI) determines which saw should be used for cutting a particular size of wood stock. Saws with higher TPI are suited for the smaller stock, while a lower TPI is useful for doing more aggressive cuts on larger ones.

In case you don't want to have to deal with two separate tools, you can opt to get a saw with interchangeable blades.

4. Tape Measure



Accuracy is crucial when working on a wood project, as you want each piece to be exact to the specified dimensions to ensure the correct fit. Here, a tape measure would be more preferred than a ruler, as it is a lot more compact and can be easily carried around where needed. A 25-foot retractable tape measure will be ideal, as anything longer than that can cause a retract mechanism to not work properly.

When buying your tape measure, it is important to check the sturdiness of the hook at the end. When this hook becomes loose, it can slightly slide out of place, which can throw your measurements by as much as an eighth of an inch, which can screw up the accuracy a lot. Also, don't let the tape rollback too hard, so as not to damage the tab.

5. Screwdriver



Screws are useful when you want to easily disassemble joined pieces. However, they can be quite a pain in the neck when you don't have the right sized screwdriver for the job. A good screwdriver set should come with the

most common sizes for Philips and flat-head screws. Though less common, it would also be helpful to have some star drivers and Torx drivers for these types.

In deciding on what screwdriver set to buy, consider the scope of the job that you plan to undertake. In the case of woodworking, where most of the screws you will be likely using are standard Phillips and slotted head types, the preference is more towards the latter. Get a set that uses flared bit heads, which are just about the exact width as the screws you plan on using to not damage the wood when putting on and removing the screws.

6. Chisel



The chisel is probably one of the more overlooked of the basic hand tools, as it is more often associated with wood carving. However, the chisel can actually be a versatile piece, as it can be used as clean out joints and saw cuts. Furthermore, it can be used for such novel tasks as prying two joined pieces from each other.

When buying chisels, it would be a good idea to grab several different sizes. Choose ones that are made from high-carbon alloy steel or chromium-vanadium alloy steel, as these will resist wear and tear much longer. Also, get those with hardwood grips with metal caps on the ends, since this can take hammer strikes well.

7. Hand Plane and Block Plane



While beginners sometimes overlook the hand plane, it is one of the essential tools that a woodworking starter kit should have, as it is used not only for smoothing wood but also for shaping it according to needs and trimming it to meet measurements. A block plane is a good starting place for novices. You will probably be surprised to know that getting older block planes is actually a good idea, as the quality of the steel used for the parts is often higher.

Another good plane to acquire is the jack plane. This particular type of plane is useful when dealing with boards that are wider than your block plane. Jack planes are also useful when smoothing the face of a warped board that is too large to be handled by a face jointer (a tool used for cleaning such wood defects).

Power Tools



Power tools are designed to get common woodworking tasks done a lot quicker and easier. These tools come in two different varieties: corded tools,

where you need to plug them to a power outlet, and cordless tools that have their own battery pack. Almost all power tools come packed with an assortment of attachments, letting them do the work of several different tools.

1. Circular Saw



While the circular saw is sometimes considered to be more of a carpentry tool, it has also become indispensable for the woodworker's craft. The circular saw lets the woodworker do cuts that can be difficult to get with an ordinary hand saw. It can also be made to cut accurately by using clamps to hold the piece, which is ideal for dealing with plywood or fiberboard.

As is with the hand saw, the number of teeth is important when getting a circular saw and saw blade. A blade with more teeth in it produces finer cuts, which is ideal for making accurate slices. Meanwhile, a coarser wheel with fewer teeth is good for quickly cutting larger pieces down to size. Height is another point to consider when choosing circular saws. Get one that has a height range that will allow you to comfortably cut pieces for projects.

2. Jigsaw



Cutting curves into wood pieces is often a difficult task to accomplish when using regular saws. A jigsaw makes the work easier by giving you better control to guide the direction of the cut. One feature you would want to get with a jigsaw is orbital action. Unlike standard jigsaws, which simply move the blade up and down, orbital action jigsaws angle the blade forward, driving it into the wood in the upswing to produce a smoother cut. Do keep in mind that this feature is usually more common in pricier units, but you still find it.

You also need to take note of the cutting depth of the jigsaw. For woodworking applications, the recommended cut depth would be around 2 inches. While you can get a unit that can provide higher cut depth for other purposes, be aware that such blades would be more prone to bending and breaking.

3. Table Saw



For many beginners, the table saw would be their first major acquisition for the shop as it is where much of the work will be centered. A table saw lets you cut large pieces of wood, as well as accurately trim smaller pieces to size. Many table saws also come with components that let you cut the varying thickness of wood at desired angles.

When picking your first table saw, it's important to consider the feature you want to have, as well as those you expect to actually use. From there, you can narrow down your selection to those models that fit your budget while still providing most, if not all, of these.

4. Power Drill



Just like cutting, drilling holes is another common task you will encounter. Here, you will probably be surprised to know that a corded power drill will be a better recommendation than a cordless one. This is mainly because corded drills are less expensive and will be able to provide constant power much longer.

When going through the available power drills, look for one which has a comfortable grip for easier handling. Getting one that has a reverse action feature will add versatility to the tool. Make sure that your drill bits are compatible with your other tools, like screwdrivers and wrenches.

5. Router



The router is a versatile power tool that beginners will find handy for a variety of tasks. A stationary model is a good option for beginners, as it will get most tasks done easily. Choose a unit that is at least 2 HP up, which has enough power to handle larger bits.

Another feature that you want to check more closely is the router's collet diameter. A $\frac{1}{4}$ inch diameter collet would be a good pick for beginners, as bits for this are a lot easier to find and cheaper. Once you get more experienced with the router, you can switch to the $\frac{1}{2}$ inch variant, which is more stable and create less chatter.

6. Random Orbital Sander



Of all the woodworking tasks, sanding is definitely one of the most laborious, as you will likely be spending hours to achieve the desired smoothness of the wood surface. The random orbital sander makes this task less tedious while freeing your hands from all the pain of having to vigorously rub sandpaper onto the wood. Another great thing about the random orbital sander is that it lessens the appearance of noticeable sanding

marks, as it moves in a random motion instead of a definite pattern.



Chapter 3

BASIC WOODWORKING TECHNIQUES AND SKILLS



Cutting

The first step in building the actual project is cutting. First, look over the project's Cutting List in detail. Read through the plan and note any angled or curved cuts, taking into account long-point or short-point measurements. Plan your cuts to minimize waste of boards. A good practice is to draw out your boards on graph paper and mark cuts on paper before cutting. You can choose to cut all your boards at once or cut as you go, depending on your workspace. I personally like to cut all of the main box boards first and then cut the trim and face frame boards for the most precise fit. This book does not provide cutting layouts on most projects, because you will most likely be pulling from your scrap pile with nonstandard-length boards after your first project.

Think of a cutting list as the ingredients list in a recipe. It is organized as

boards appear in the plan, first giving the quantity needed, followed by the length to cut to, the type of board, and a description of the board.

Ripping



If you are working on a project that uses nonstandard-width boards or chooses sheet goods for boards, you will need to rip the board to size. Ripping, or cutting board down to size in the direction of the grain, should be the first cuts made, as you want the width cut to be consistent from board to board. Most home improvement stores will make flattering cuts for you. Ask to have your plywood cut into strips as directed in the plan. This will make hauling plywood much easier, too. If you are ripping your own plywood, you will need to use either a table saw or a circular saw. For ripping with a table saw, carefully set your table saw fence to the desired width using your tape measure. Have someone help you run the wood through the table saw. This is a two-person task, as one person will feed the plywood through, and the other person will catch the plywood as it is passed through the table saw. For ripping with a circular saw, mark the cut with a chalk line. Adjust your circular saw blade for the thickness of the wood. Support all parts of the wood so that your saw blade does not get pinched as you cut. And remember: You need to measure each cut as you go because as you cut, sawdust is created, resulting in loss material, altering measurements.

Crosscuts or square cuts

Crosscuts or square cuts are used to cut a board to size needed. A crosscut is perpendicular to the length of the board at a straight 90-degree angle, usually across the grain. It is always good practice to first square up the end

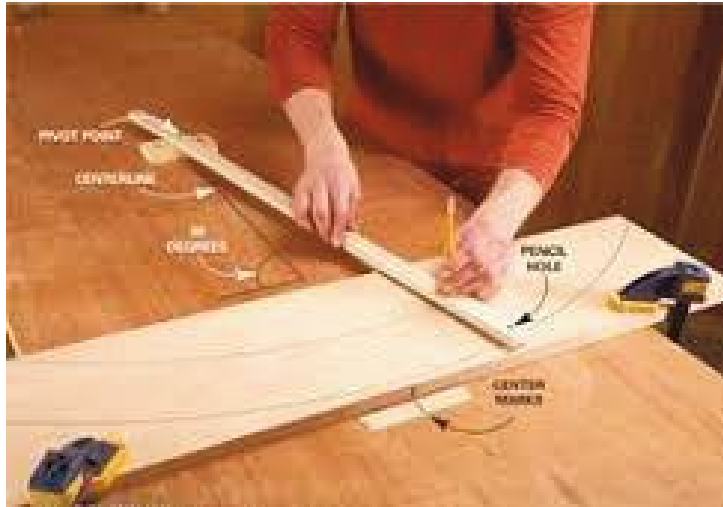
of your boards by making a quick crosscut at the very end, since you cannot assume they are already square. At the very least, check the factory ends for square using your carpentry square.

If you are cutting with a handheld saw (a circular saw or jigsaw), measure the cut from the squared up end and mark. Use your speed square to sketch a line at the mark perpendicular to the board length. Considering the width of your saw blade, cut the board along the outside edge of the marked line. Measure your cut to make sure it is accurate to the cut list. If you are using a miter saw, chop saw, or other fixed saws, measure the length of the cut, hold the board flush to a fence on the saw, and make your cut. On your first cuts, take a second to measure and confirm that your cuts are accurate in length.

Angled cuts

Making an angled cut is not too different from making a square cut. You are still cutting a straight line across the grain. It is the marking of angle cuts that will take a little extra effort. If you have a miter, saw or compound miter saw or other fixed saw that cuts angles, simply set your saw at the correct angle as directed in the project plan and cut. Angles in project plans are given as an “off-square” angle. A crosscut or square cut always measures 90° or perpendicular to the board edge. Off square is measured as degrees from the square cut. For example, if the plan calls for a 10-degree off-square cut, the angle itself to the board edge would be 80° or 100°, figured by adding or subtracting 10° off of the square, which is 90°. So first, measure the board and mark the cut to the measurement given as you would a square cut. Use a compass to measure and mark degrees off square. And then draw a line between the measurement and the angle mark. All angled cuts in the plans are noted as long-point or short-point measurements. When you make an angled cut, one end will be the longer end—meaning it will measure longer—and the other will be the shorter end. Pay attention to long-point and short-point measurements as you cut; it will determine what direction the cut is made off of a square.

Curved cuts



In the plans, curved cuts are mostly used for decorative purposes—to soften the lines of a project or to create interest. For the best success with curved cuts, carefully mark out the cut on scrap board. Secure a scrap to your workbench and carefully cut the curve with your saw, considering the width of the saw blade as you cut, cut to either the inside or the outside of the line. When you have made a curved cut you are happy with, use it as a pattern to make cuts on your project. Always use the same pattern for all cuts, and consider saw-blade placement as you cut. For example, always cut to the inside of your pattern marks or cut to the outside of your pattern mark, for the most consistent cuts from board to board.

In most cases, curved cuts will require sanding. Sand with coarse sandpaper followed by medium grit until the cuts are smooth and, if you made multiple cuts from the same pattern, identical. For multiple cuts from the same pattern, consider clamping all cut edges together and sanding them as a stack to create the most consistent edges.

Building

This is my favorite part! We've prepared, prepped, and cut, and now it's time to actually build your project! If you can follow these steps, then you will be confident and cruise right through the building process.

Marking joints

Taking a few minutes to mark your joints prior to actually building will help you put your project together more accurately. Make a dry run of the plans, marking all joints with a square, as outlined in the plans. This dry run will also give you a good understanding of how the project is assembled.

Marking screw holes

If you are screwing your project together, you will want to predrill all holes. As you go through your dry run and mark joints, take a second to also mark the location of all screws. If you are using pocket holes, this is especially important; as drilling a pocket hole can be very difficult once you have started assembly. Predrill all of your screws before building, with screws placed every 6" (15cm) to 8" (20.5cm) and screws on each end of the joint.

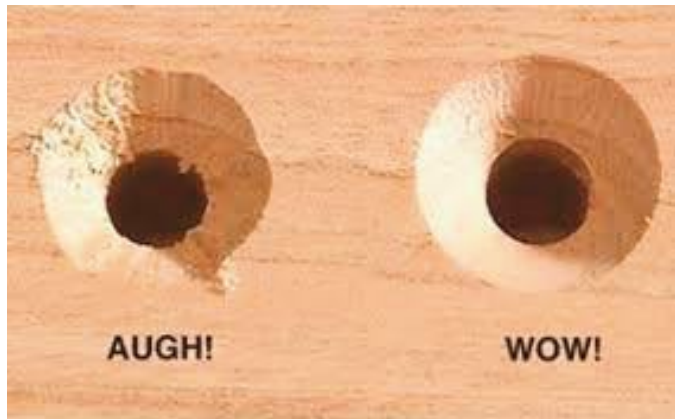
Assembling

Nailing



Once your joints are marked, apply glue to the joint, and line up the two boards as directed in the project plan. A good rule is to use the longest nail possible without going through the second board. Clamp boards when possible. Keep your fingers away from the joint, so you don't accidentally injure them with a stray nail. Apply firm, even pressure, and nail your joint. Nails should be spaced every 6" (15cm) to 8" (20.5cm), and on the beginning and end of every joint.

Countersinking



With your joints marked and your holes predrilled, countersinking should be as easy as applying glue and driving screws. It is still a good idea to clamp boards, and you also may need to predrill pilot holes in the second board to avoid splitting, especially near the ends. Carefully insert your screws. If the board begins to split, remove the screw, and predrill a pilot hole. Self-tapping screws, screws with a tiny sharp edge at the tip that predrill a pilot hole as they are driven, though more expensive, can reduce board splitting and save you time.

Checking for square

As you assemble your project, take a second after each step to ensure your project is square. If a project is square, the diagonal measurements from opposite corners will match up. If the opposing diagonals do not match, push the two corners with the longer measurement together until a square.

Finishing

Once the project is completely assembled, it's time to finish it. Finishing is always a little scary; you have put so much time and effort into your project, you do not want to mess it up now! Follow these simple instructions to achieve a finish worthy of your beautiful project.

Filling holes

No doubt, building your project has left a screw hole or two shows, and maybe an imperfection that you could live without. Use your putty knife to fill all holes with wood filler, overfilling the holes. Note that wood filler can shrink as it dries, so for larger holes, you will need to apply second or possibly more coats of wood filler. Let the wood filler dry completely between coats. If not completely dried, the wood filler will come off in

chunks as you sand.

Sanding



Once the wood filler has dried completely, begin sanding with coarse-grit sandpaper. Sand your project in the direction of the wood grain, evening out joints, and removing excess wood filler. Follow the initial coarse-grit sanding with medium-grit sandpaper, sanding the entire project in the direction of the wood grain. Finish with fine-grit sandpaper if necessary for your type of finish. If you notice any imperfections or holes, apply another round of wood filler. It's easier to get it right now than later. Repeat the sanding process.

Preparing for paint or stain

After you finish sanding, your project is now covered with sawdust. Vacuum the entire project with a soft-bristled brush, removing all sawdust and debris from the project. Do the same for your work surface to avoid sawdust in your paint. With a slightly damp rag, wipe the project clean, removing any remaining sawdust particles from the project. Remember, you are only removing sawdust, and don't want to soak your wood, as that will affect your finish. Let your project dry completely.

Painting or staining

If it looks good au naturel, it's going to look great finished! Before you paint or stain, take a second to test out the finish on a scrap piece of wood. The time to make adjustments is before, not after, you paint. If you are happy with the results, it's go time. With the project elevated to your height, preferably on a workbench, turn the project upside down and paint from the center outward. This way, you can avoid covering your sleeves in paint or, at

the very least, creating difficulties with painting tight spots. A good rule is to paint the hardest-to-reach places first. Let dry. Once dry, flip your project over and repeat the painting process, starting with the most difficult-to-reach places first, working your way outward. Apply as many coats as needed to achieve your desired finish, as directed on your paint or stain cans.

PART II

PROJECTS FOR INDOOR -STYLISH
PROJECTS FOR LIVING
ROOM OR OFFICE

Chapter 4

CONSOLE TABLE AND DESK



Console Table

Materials

For the Table:

A	Tops	1 pc	$\frac{1}{2}$ x 17 $\frac{1}{2}$ x 30 $\frac{5}{8}$
B	Legs	2 pcs	$\frac{7}{8}$ x 3 $\frac{5}{8}$ x 20 $\frac{7}{8}$
C	Foot	2 pcs	$\frac{7}{8}$ x 7 $\frac{1}{2}$ x 16 $\frac{1}{8}$
D	Cross Brace	2 pcs	$\frac{7}{8}$ x 1 $\frac{5}{8}$ x 16 $\frac{1}{2}$
E	Stretcher	1 pc	1 x 1 $\frac{5}{8}$ x 28 $\frac{3}{4}$
F	Drawer Runner	2 pcs	$\frac{1}{4}$ x $\frac{3}{8}$ x 7
G	Screws	various	

For the Drawer:

H	Front	1 pc	$\frac{1}{2} \times 2 \frac{5}{16} \times 21 \frac{3}{4}$
I	Side	2 pcs	$\frac{3}{8} \times 2 \frac{3}{16} \times 7 \frac{1}{8}$
J	Back	1 pc	$\frac{3}{8} \times 1 \frac{3}{4} \times 21 \frac{3}{8}$
K	Bottom	1 pc	$\frac{1}{4} \times 7 \times 21 \frac{3}{8}$
L	Pull	1 pc	$\frac{1}{2} \times \frac{1}{2}$

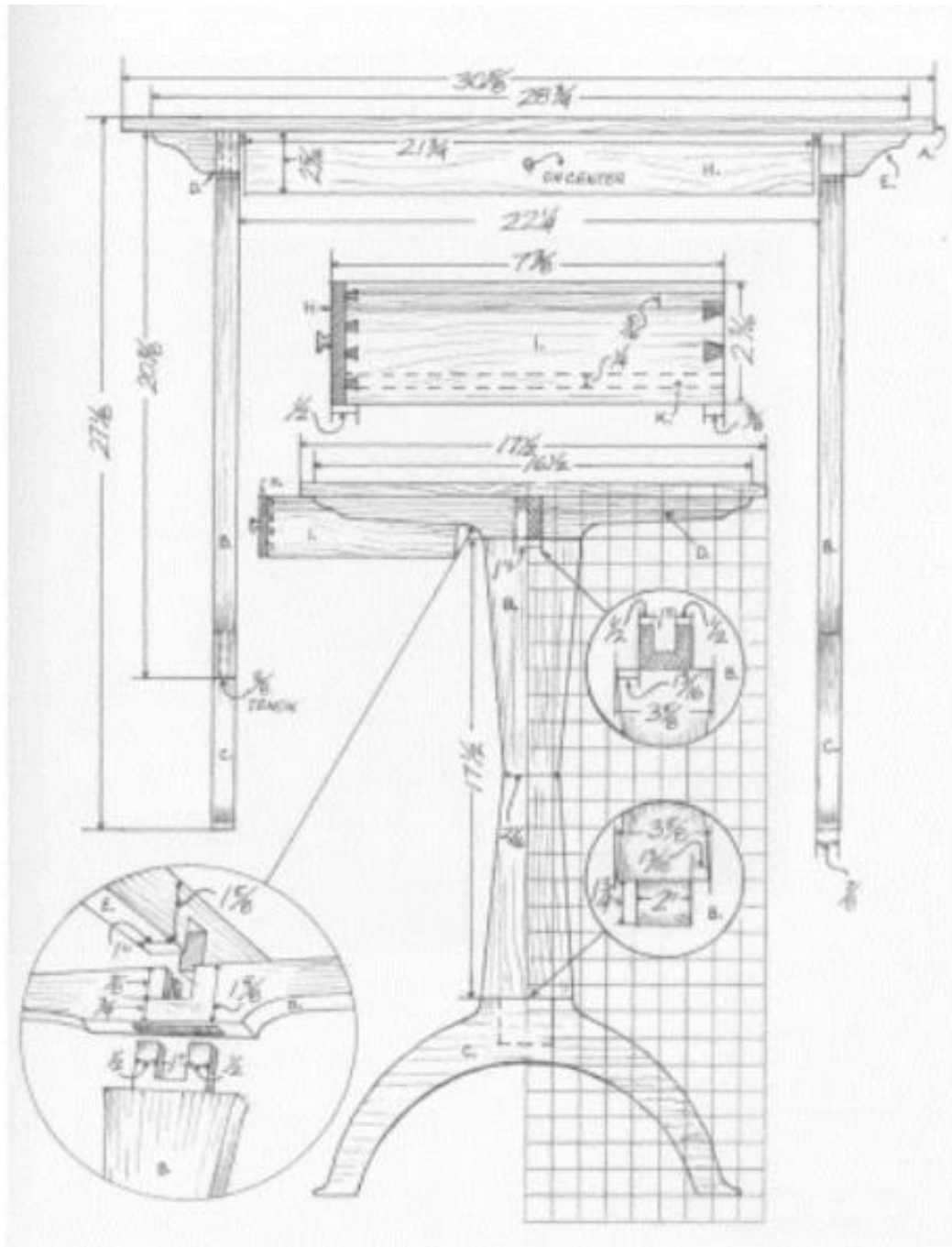
Steps

First, you must lay-out the dimensions you need for the console table and cut the wooden pieces. Next, you must joint then attach the stock for the top part by gluing them. Build the legs after that. Leg tenons must be cut using a band saw with a measurement of 2-inch-deep mortises. Next, using a drill press, clamp your pieces, so they will stick together well.

You can also opt to manually cut the mortises by securing the pieces using a vise, then eliminating the mass of the waste using a drill bit, and by utilizing a chisel, you can clean the mortise walls. In the same way, slice mortises in the two cross braces. After this, profile the cross braces and feed on your band saw followed by fabrication of the leg tenons you can do on a table saw snugged with a stack of dado cutters, or you can also do it manually with a tenon saw. Glue the two assemblies after fitting tenons into mortises. Form the stretcher then join it to the top part of the cross braces using $\frac{1}{2}$ notch joints. This top part must be securely placed using wood screws surpassing the oversized drilled parts in the braces. These drilled parts or oversized holes will let the table adjust during humidity changes. The bigger part of the table is made of a combination of pine and cherry for the bottom, sides, and drawer back, maple for the front. Because of this, I recommend adding the drawers upon completion of the table because of the drawer's feature not being originally affixed in the plant.

After putting the drawer, sand the rough edges and finish the table and drawer with stain.

Image/Diagram



Desk

Materials

- Pallets.
- Extra poles for the legs.
- Paint.
- Hammer.

- Nails.
- Stain.
- Saw.
- Pencil.
- Measuring tape.



Steps

Remove all the wood from one pallet and cut the lengths of the board in half. Screw these in place on the second pallet, and then sand it down, so you don't have to worry about splinters. Make sure there are no cracks or rough spots, then stain. Once the stain has dried, flip the piece over. Paint all 4 poles the color of your choice, and place them at equal distances at the bottom of your table. Screw securely in place. Make sure there are no rough spots, and your new table is ready.

Image/Diagram



Chapter 5

WOOD TABLE LAMP AND BOOKENDS



Wood Table Lamp

Materials

Sandpaper

- Pencil, level (optional).
- Wood.
- Palm sander (optional).
- Drill.
- Saw (use if you desire to straighten the bottom and top of the wood).
- 3/8" x about 12" to 18" drill bit (length will vary depending on the height of the wood).

Steps

Begin by getting any piece of wood for your lamp. You may get it anywhere from your backyard to buying wood pieces from online stores. The one I used in this project is a block of red cedar. This one is irregular in shape and kind of triangular in most of its parts. Your piece of wood will be different from what I got, but it's always up to you what shape you want your lamp to be. In my case, I already liked most of the shape, so I sanded it using a palm sander and just removed some barks to even out the shape. For the bottom and top of the lamp, I like to be more parallel, so cutting the smaller end using a hand saw became my solutions. Then I mark a cut line making use of a level. In order for you to do this, draw a level line on the two sides of the wood.

After I cut the wood using a hand, saw, but if you have a band or table saw, the task will be easier for you, especially if you have a hardwood like mine. Next, I made a hole through the wood for the lamp wire using a drill. You must make the hole $\frac{3}{8}$ inch, at least. To make it stable while drilling, use a vise, or have someone hold it for you. Then, make another hole ($\frac{3}{8}$ inch) through the back part of the lamp going to the first hole enable for the wire to exit the back part.

After finishing the holes, you can now apply wood stain or sealant. Lastly, install the lamp fixtures following the guide on your lamp kit.

Bookends



The easiest way to make a bookend that works is to evaluate why typical bookends—both heavyweights and lightweights—fall down on the job. The Shop Info box on the next page highlights some of the things you have to

take into consideration when designing bookends. After reading it, you'll understand exactly why the Bookends here look the way they do (and why some different-looking bookends might not work so well under pressure).

Materials

The main part of the Bookends (the L-shape) is made from solid 4/4 oak, for looks and strength. The base plate that slides under the books is actually made of brass. But don't worry about cutting this thin metal - it's made easy with a simple hardboard backing.

- (4) No. 8 X 1 ¼ inch woodscrews.
- (8) No. 6 X ½ inch brass screws.
- (2) 1/16 inch thick brass (3-inch x 6 inches).

Wood

- Base 2- ¾ x 5- 3 ½
- Base 2- ¾ x 4-8



Steps

- Recess base

It's best to cut the recess first and then cut the plate to fit snug in the recess. To do this, use an "h" straight bit in the router table. Adjust the router, so the bit sticks up above the table the thickness of the plate (use the plate material itself as a gauge).

- Set fence

To establish the size of the recess. Set up the router table using the fence and two stop blocks. To set the length of the recess, position the fence 2” from the far side of the bit.

- Set stops

Then stops are used to control the width. I clamp plywood scraps to the router table, so their edges were 4” from either side of the bit then, I routed the recess, using the fence and stops to control the limits of the cuts.

- Clean up corners

After the recess has been routed in the base, square the corners with a chisel.

- Make the plate

Now the plate can be installed. This takes two steps: cutting the plate to size and fastening it in position.

- Cutting thin material

Cutting thin material on a table saw is tricky. The problem is the edge that overhangs the slot in the table insert vibrates as the blade cuts, and the edge ends up ragged. To help prevent these problems, I backed the base plate with hardboard.

- Cut to size

Now cut the plate and hardboard to size on the table saw. Begin by sawing off one side to make sure one edge of the plate and hardboard is even). Note: Brass is very soft and is easy to cut with a carbide-tipped saw blade. Next, set the fence to the width of the recess in the base. With the freshly-cut edge against the fence, rip the plate to the width, and test the fit in the base. Then cut it to a length of 6”.

- End profile

After the plate is cut to size, cut a semicircle at the end that will slip under the books. To do this, first, draw the arc on the backing. Then, clamp the piece with the hardboard side up, cut the curve to shape with a jigsaw, and file it smooth.

- Chamfer edges

Before installing the plate, chamfer its edges on the router table. To do this, set the height of the chamfer bit, so it takes just a tiny cut off the edge. Then, with the plate facing down, guide it past the bit with the hardboard

riding on the bearing. Finally, smooth the chamfer with 220-grit silicon carbide paper. Then carefully separate the plate from the hardboard and knock off the other sharp edges with the sandpaper.

- Mount the plate

After the edges are smooth, the plate can be mounted to the base. This is where the method will differ slightly, depending on whether the plate is plastic laminate or brass.

- Plastic laminate

A plastic laminate plate can be glued to the base with epoxy. Begin by roughing up the surface that will be mounted in the recess with 60-grit sandpaper. Then glue the plate in place.

- Brass

To mount the brass plate, I used a stick that dates back to the days when gunmakers would inlay decorative brass matchboxes on the stocks of woods. The trick involves fastening the plate with brass screws, then filing off the screw heads flush with the plate.

- Install screws

To install the screws, position the plate in the base recess. Then, Drill pilot holes through the plate and into the base.

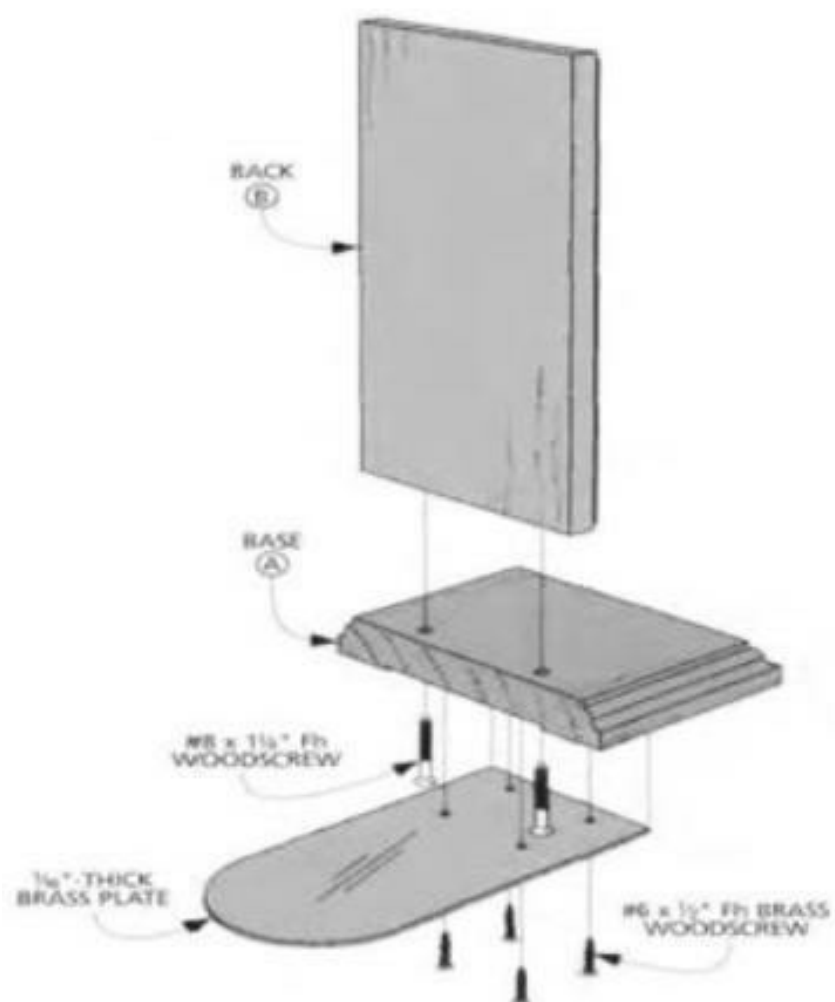
- Countersink

After drilling the pilot holes, countersink just deep enough, so the screw head is just partway into the plate (the screw slot should be a little higher than the plate surface).

- File flush

After the screws are tightened, file the heads off flush with the plate. This gets rid of the screw slot. Leaving a solid brass “rivet” holding the plate to the base. Then sand and polish the bottom of the plate smooth.

Image/Diagram



Chapter 6.

BEAUTIFUL MAGAZINE RACK AND SOFA ARM TRAY TABLE



Beautiful Magazine Rack

Materials

Woodcraft

2 wall hangers, 2"x 9/16"

#	Part	Stock	Inches
2	Side parts	Red Oak	$\frac{3}{4}$ x 3 $\frac{1}{3}$ x 34 $\frac{3}{4}$
6	Front parts	Aspen	$\frac{3}{4}$ x 3 $\frac{1}{3}$ x 9 $\frac{1}{4}$
3	Shelf parts	Aspen	$\frac{3}{4}$ x 23/5 x 9 $\frac{1}{4}$
1	Hanger support	Aspen	$\frac{3}{4}$ x 3 $\frac{1}{3}$ x 9 $\frac{1}{4}$

Steps

Start by slicing the sides to the required dimensions. You can also do what many woodworkers do, stack wood pieces on top of one another to slice identical parts in length. For some, to have accurate cuts, they do it with a miter saw equipped with a stop on an extended table. You measure, draw, and slice the wood materials. All remaining parts of the shelf are fabricated to

the same length, after crosscutting the sides. For this step, prepare to use a stop-block, which can be done with ease on miter saws even when you have no extension on your table. Set aside the 7 of the pieces as they are finished. The three remaining pieces will be used for the shelves and are needed to fix by ripping. Situating a front piece facing down and fitting tight against a rack side that's set on its edge enables you to measure the width of the shelves. Fix the body a combination flatly on the side of the racks using a ruler. Place the body of a combination square flat on the side of the rack using a ruler lengthening to just reach the front piece. Then lock the square. After this, mark an incision line on the three shelves using your pencil to make markings and your combinations square set-up. Handle the pencil at the tip of the square, glide the unit further along the shelves. To make these cuts, use a jigsaw and let it stay to the waste of each line. Use a block plane to trim the wood pieces to their set width. Now that all the pieces needed for the rack are measure and cut to their needed dimensions, you can now soften its look by doing more shaping of the stock. Most of the time, it's complicated to make perfect flushes to the face of the front and sides. To fix this, you can sand-flush the rough edges. You can also round it using a sandpaper and block plane if the variation is only slight. Station the plane for lightweight cut and do some passes along the front's edges by beginning on the end-grain edges. Round these edges using a plane and polish them down with #150 sandpaper

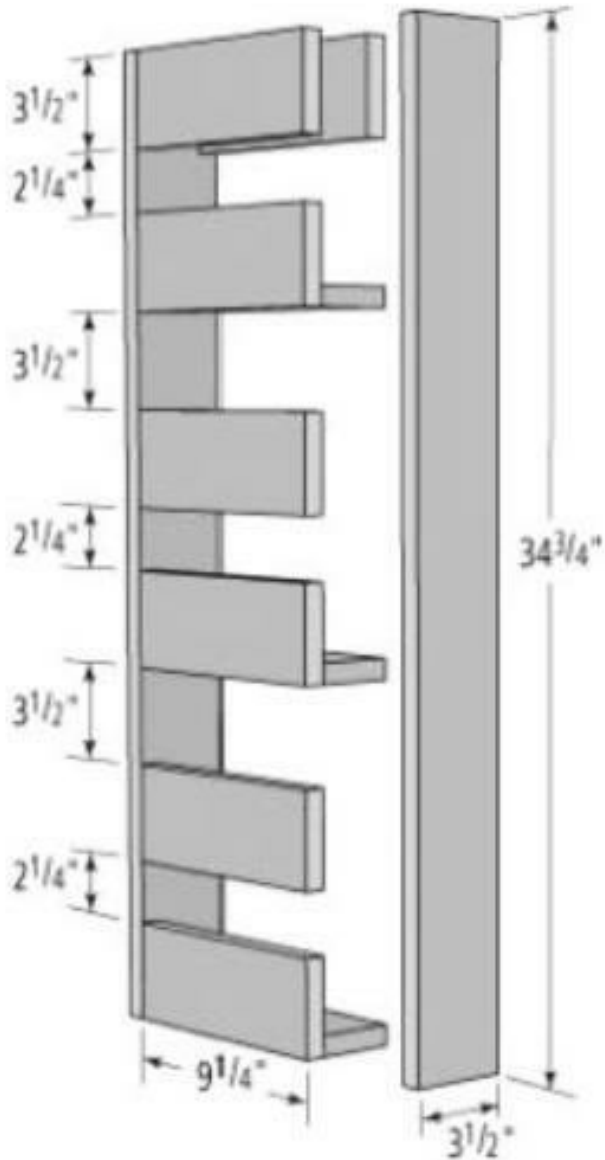
Using pocket screws, all horizontal pieces are connected to the sides. Make a total of 4 holes in the hanger support and back face of each front piece. You can use the least beautiful piece for your support. You can also opt to make 2 holes in front pieces than 4 holes.

With regard to the shelves, it requires 3 drilled screw holes—one in the center, second to fix the shelf to the adjoining front and last for the middle part. Like previously done, refine all parts by sanding them first, and then assembly comes next. It is essential to let the side pieces erect on its end and on a flat surface; the other one, front pieces, must be laid down with its end side to the rack's side. Join the pieces (front) to a side by beginning at the top. Screw until it is well attached following a spacing of about 2 ½ inches or 3 ¼ from the piece connected directly above it. Slice a block for a particular size.

Do this repeatedly until all pieces are utilized, and the desired height of your magazine rack is achieved. It's your option if you desire to attach brass handles to the back but ensure you seek at least one stud on the wall for

additional support.

Image/Diagram



Sofa Arm Tray Table

Materials

1 - 2x4

3 - 1x4

NOTE: All board lengths are 8' long unless otherwise noted.

- Pocket hole crews.
- Polyurethane.
- Choice of stain.
- Pocket hole screws.
- Wood Glue.
- Pocket Hole Jig.
- Miter Saw.

Cut List

- 6 Bottom Base Pieces measured at 3.5" x 18"
- 6 Table Top Pieces measured at 3.5" x 18"
- 2 Legs measured at 3.5" x 36"
- 2 Middle Cross Pieces measured at 3.5" x 13.5"
- 1 Middle Cross Piece measured at 3.5" x 10.5"

Steps

From the 2 x 4 cut the legs and make the two middle shorter cross pieces from the 1x 4. Using a ruler or tape measure, mark 18" from each end of the legs and glue these pieces with screws from the underside. In this project, this is the only placed pocket holes will be utilized. All other joinery can use 1/4 inch or 3/8-inch sized dowels. One reason why I prefer dowels to be used on joinery is due to its added visual aesthetic. The two middle cross pieces that are lingering in size can be joined together and clamped with glue. Let this dry for a minimum of one hour or even overnight. Once dry, you may now make dowel holes by making use of the drill.

Three along the bottom and two on each side, this is where holes must be made. The bottom and top pieces of wood are again affixed with glue (1 x 4s as listed on our cut list). So, glue together a total of 5 (1x4s) and trim or cut the wood to its utmost size that is 18"x 18".

At the same time, you may clamp the two pieces together. Carefully, position as required to be able to reach over the armrest of your choice and from bottom and top, drill for ½ "dowels.

Image/Diagram



Chapter 7

PROJECTS FOR INDOOR -MORE STYLISH PROJECTS FOR LIVING ROOM OR OFFICE

Reclaimed Wood Key Hanger



Materials

- Nails (I recommend the rusty ones for your rack to have some style however if you are afraid of getting a tetanus virus then you can just color the nail with brown).
- Varnish.
- Screws.
- Hooks.
- Steel for the frame.

Steps

It is produced by using little screws at its back so that you cannot see it when you hang it up on your door or wall.

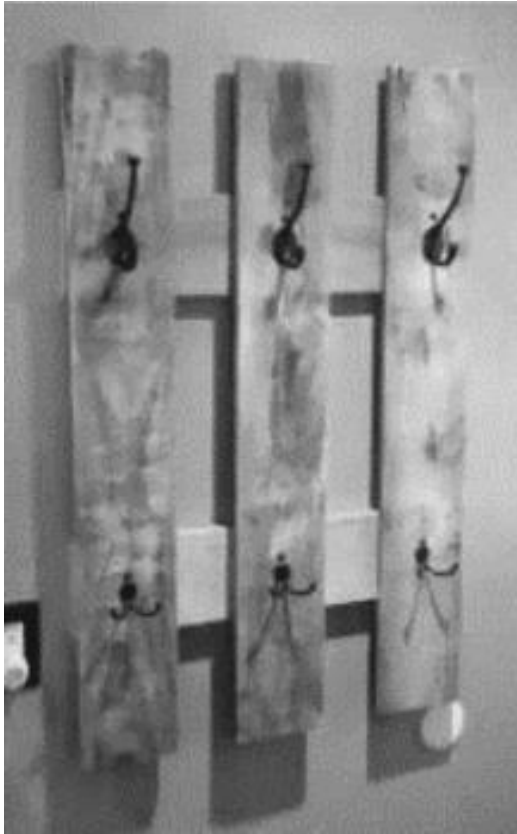
The rusty nails are integrated into it to create a more classic and natural

look, which is truly astonishing if you are aiming to have a traditional house theme in your bedroom.

Its varnish will ensure that the rack will not deteriorate quickly and, at the same time, will give it a better appearance.

You will need to put blocks on the back by using a drill to support it when it is hanged. The holes are not too deep to avoid damaging the interior of the pallet wood.

Image/Diagram



Multi-Level Plant Stand

Materials

- Sandpaper.
- Drill, Level, and Hammer.
- 2 wood pallets.
- Wood screws.
- Wood, 2 by 4 inches.

- Saw and Nails.
- Paint and Paintbrush.
- Wall anchors.



Steps

In the first step, you have to sand the surface of the wood to get smooth surface pallets. You can use the underside of each pallet. Wood screws and drills will be used to attach the pallets to each other. Keep one pallet on the top of each pallet in the same direction. The undersides will grasp the shelves.

Gauge the interior of the top pallet for width and cut the wood in the size of 2 by 4 inches. Insert this wood in the horizontal direction into the pallet

and keep it 6 to 8 inches from the top of the wood. Check the level of the wood to make sure it is even before keeping it on the top of the wood. Secure the shelf with the use of hammer and nails. Repeat the same process for every shelf. You can paint your shelves or leave them unfinished to get a rustic look. With the help of wall studs or anchors, you can fix the shelving unit into the wall.

Image/Diagram



Angled Floating Bookshelves

The creation of shelves is a good place to start due to the simple nature of their creation. These shelves will be floating shelves, meaning that there will be no visible supports beneath them. This creates a very minimalist aesthetic and looks visually impressive when done properly.

Materials

- At least two 2-2.5 inch screws.
- Two to four nails, .75-1 inch long each.
- Carpenter's glue.

- A wooden post, about one inch thick, and as long as you need your shelf to be.
- A hollow rectangle of wood, to act as your shelf. Only one side of it should be open, and the inside measurements should match that of the post.



Steps

Find where you want to place your shelf, and measure the ideal length. Keep in mind stud positioning as you find your ideal shelf placement. Write the length down somewhere.

If you do not already have the wooden post, create one by cutting it out. Use a straight edge to trace along with your board, and cut it out using a bandsaw or circular saw.

If you do not have your hollowed rectangle, create one. The wood used here should be thin, less than a half an inch for sure. Start by tracing out two identical rectangles, with the length being the measurement of your post plus twice the width of the material being used to create the shelf, and the length should measure about a foot to a foot-and-a-half long. Next, trace out two more rectangles that are the depth of your post, and the length of your shelf. Finally, one final rectangle, this one for the outside edge, should be as long as your post, plus double the width of the material used to create it, and as wide as it too, plus double the width of the material used to create it. Glue these pieces together to create your shelf. Since all of these cuts will be straight,

you can use a band or a circular saw.

Take your post, which will be the length of your shelf, and screw it into the wall using a handheld electric drill, screwing only into the studs when possible. If your shelf comes up short of a stud on one side, carefully drill into the wall. Make absolutely certain that you are drilling level, using a leveling tool to denote this. Not where you place screws with pencil marks on the top of your post.

Paint or stain your shelf, if desired.

Once this is done, dry-fit your shelf to your post, hold it stable and press it into the wall. Check for flayed wood, or an uneven cut, and make sure that it fits snugly into the wall.

Remove the shelf from the wall and apply the carpenter's glue to both the inside edge of the shelf and the post upon which it will rest. Place the shelf back on the post, and hammer it into place using small nails.



Rustic shelf

Materials

- Planks/ Pallet.

- Hooks.
- Cords.
- Saw.
- Driller.

Steps

Measure the length of the planks that are going to be used as the shelf's surface. Cut the planks to the same size and level right to the ends; mark where the holes for the attached cords will be and drill the holes. Pull the cord through the holes and secure the shelf with sailors' knots under each shelf.



Coat Rack and Hat Rack

Materials

- Pallets.
- Hammer.
- Nails.
- Stain.
- Saw.
- Screws.

- Screwdriver.
- Paint.
- Sandpaper.
- Hooks.



Steps

Decide how big you want your coat hanger to be and cut the pallet down to this size. Remove the backing, and leave the support boards in place, so the wood lies flat against your wall.

Sand down the wood first, and then paint it any color you want. The brighter the colors, the better. Let the paint dry, and then add the hooks wherever you want them to be.

Add a hanger to the back of the rack, and that's it!

Image/Diagram



PART III

PROJECTS FOR

INDOOR- BEDROOM

Chapter 8

MODERN FARMHOUSE BED



Materials

Quantity	Part	Actual Size	Notes
2	Side rails	1¼" × 6½" × 76"	6/4 hardwood Don't worry if the two rails don't match perfectly; few people will ever see both at once.
2	Ledger strips	¾" × 1" × 73"	Use whatever hardwood stock you have on hand.
2	Headboard and footboard bottom rails	1¼" × 6½" × 50"	6/4 hardwood Cherry, walnut, oak, or maple would all work well.
2	Headboard and footboard top rails	1¼" × 4½" × 50"	6/4 hardwood Position the top and bottom rail stock next to each other (before cutting to length) to ensure a pleasing grain match.
2	Headboard legs	1¼" × 3½" × 44½"	8/4 hardwood You probably want the legs to match the rails.
2	Footboard legs	1¼" × 3½" × 32"	8/4 hardwood
9	Headboard slats	¾" × 2¼" × 26"	Cherry was used here, but you can use a different species for a nice contrast. Cut a few extra to ensure good grain match from slat to slat.
9	Footboard slats	¾" × 2¼" × 13½"	Cut a few extra to ensure good grain match from slat to slat.
4	Mortise strips	¾" × ½" × 50"	Cut strips 2" long and trim to fit after gluing into rails.
5 or 6	Support planks	¾" × 5½" × 52½"	Pine or poplar is fine. Space them evenly across the ledger strips to support the box spring.
24	#20 biscuits		Buy a container.
14	1½" #10 wood screws		To attach ledger strips to side rails
4	Bed-rail fasteners		See Resources on p. 296.
32	1" #8 wood screws		To attach bed hardware to side rails and legs
	Yellow glue		Extended or slower-setting glue can be handy for assembling headboards and footboards.
1 pint	Oil/varnish finish		The tops of the legs will wick in oil like a sponge.
	Miscellaneous		Wax, blue masking (painter's) tape, white synthetic wool pad, cotton rags, 150- and 220-grit sandpaper (sheets and disks)

Steps

• Start and Finish the Rails

Using the measurements from your mattress, cut the rails for the sides, headboard, and footboard to rough length. Normally, an extra 1" is more than enough, but in this case, you'll want to cut one bottom and one top rail 4" to 6" longer than needed. Joint one edge then set your table saw fence to 6½" and rip the side rails and the bottom rails for the headboard and footboard. Reset your fence to 4½" and rip the boards for the top rails. Place the headboard and footboard pieces safely aside for now. Using your miter saw, or circular saw and the edge guide cut the side rails to length. The extra 2" allows some wiggle room for the mattress, so it's okay if you're off by as much as ¼". Just make sure that the rails are the same length. Cut the ledger strips, so they are 3" shorter than your side rails. After cutting them to size, drill, countersink, and attach the cleats to the rails using 1½"-long screws, spaced about 12" apart. Knock the sharp edges off the rails and ledger strips. The fastest way to do this is with a router and bearing-guided chamfer bit.

Lay both rails on your bench, so the ledger strips are facing up. Use a

centering bit to drill pilot holes, then screw the metal clips in place.

Before putting the rails aside, apply at least one coat of finish to protect them from glue and miscellaneous shop stains. Temporarily remove the hardware, plane, and/or sand the rails up to 220 grit, then wipe on a coat of oil. Wait 20 minutes, and then wipe away any excess. Apply at least three coats before top coating with wax.

- Making the Legs

Start by cutting the legs to rough length (cut the headboard legs to about 46" and the footboard legs to about 33"). Joint one edge, then set your table saw to 3 1/2" and rip all four pieces to width. Now that they're a more manageable size, trim the headboard legs to 44 1/2" and the footboard legs to 32".

Using your router table and 1" radius bit, round over the outside edge of each leg. Lower the operating speed of your router to prevent damaging you, your router, or your workpiece. After softening the outside corner, knock down the remaining three sharp edges with a chamfer bit set just below 1/8" high. Now for the fun part. Clamp one leg to your bench. Using one or more of your favorite planes, knock down any bump that might exist at the edge of the rounded-over corner. Concentrate on knocking off any ridges along the corner to make the fairest curve possible. If your planes are working to your satisfaction, continue smoothing the outside faces of the leg. Alternately, you can hand sand or use a random-orbit sander to smooth the legs up to 220 grit.



You no longer need the pencil marks on the tops of the legs to know which end goes up. The sand, plane, or slice off the reference marks you

made earlier (no one will know if your leg is 1/32" shorter than the given dimension). Next, secure the leg to your bench, bottom end up. At this point, you're ready to chamfer the ends. The chamfer on the bottom end prevents the wood from catching and splintering; on the top, it's purely for decoration. Cutting a chamfer with a chisel is easier than you might think. Start by making short, light cuts. Resist the chisel's inclination to drive itself too deeply into the wood. Aim for about a 1/8"-high chamfer, but feel free to stop when it looks good. After chamfering, the bottoms of all four legs, sharpen your chisel and do the top ends (alternately, you can make the chamfer using a file or sandpaper wrapped around a block of wood).

- Making the Headboard and Footboard

Headboard and footboard rails usually rely on tenons to attach them to the legs. Tenons are a good choice; they're solid enough to help keep the frame square and can be designed to allow single-plank headboards room to move in response to changes in humidity.

- Starting the rails and finishing the slats

Pull out the headboard and footboard rails you made at the beginning of this project and cut all four boards 2" shorter than the width of your mattress or box spring next, lay them out on your bench and pick out the best faces of each and arrange them to make the most attractive pairs. Knots or other blemishes can usually be hidden simply by flipping the board. Temporarily put the rails aside and start cutting the slats. To make the slats, begin by cutting the 3/4"-thick wood to rough length.

Join one edge, then set your table saw to 2 1/4" and rip the strips to final width. Using your router and chamfer bit set to 1/8" high, or just your block plane, chamfer the long edges of the four rails and your slat stock. It's easier to sand and finish the slats now than to attempt to work between them once they're joined to the rails. Finish-sand all surfaces up to 220 grit, and then apply one or two coats of oil. While you're waiting for the oil to dry, focus your attention on the rails. Replace your sawblade with the inner and outer blades from your dado cutter and set the cutter height to 1/2". Cut a 1/2"-wide groove centered along the bottom edge of the top rail and the top edge of the bottom rail. Start by making one pass, then turning the board end for end and cutting a second pass.

Before moving or removing the jig, cut two or three extra-long and short

slats, just in case you make a wrong move later on in the assembly process. Adjust the dado cutter so that it's just $\frac{1}{8}$ " high and $\frac{1}{4}$ " away from the fence. Next, using your miter gauge to guide a sample slat, cut a tenon on one end. If necessary, you can adjust the fit by changing the cutter height.

- Making mortise strips

The mortise strip starts out as a $4\frac{1}{2}$ " by 52" board dadoed across its top face; it's then ripped into strips that fit into the grooves cut into the headboard and footboard rails. Making four rows of "mortises" at once is faster than cutting them separately, and it ensures the holes in the bottom and top rails line up. Start by cutting the mortise board to rough size. Plane or resaw a board to $9\frac{1}{16}$ ". Cut the board to 52" long (2" longer than your headboard and footboard rails). Draw lines at each end of the board to indicate the final length. Use a $2\frac{1}{2}$ "-wide scrap spacer and one of the actual slats to layout the dados. Center the first dado at the midpoint between your two pencil lines. Using the spacer board as a guide, start the second and third dado $2\frac{1}{2}$ " away from the center dado (on either side of the center dado). After laying out the three center slats, use the spacer to position the first end slat $2\frac{1}{2}$ " in from the pencil line and a slat to obtain the exact width of the dado. Draw X's on the dados, to ensure that you don't accidentally rout out "good" wood. After marking out the board, the next step is to cut the dados with either the table saw or the router.

To turn those dados into mortises, adjust the bevel angle of your table saw to 3° , then set your table saw's fence to rip a strip a hair thicker than the groove you made in the rail. When you rip the dados board, orient it, so the notched side is wider than the unnotched side. Make sure to align the end marks on the notched strip. Use as little glue as possible; you don't want squeeze-out to fill your brand-new mortises. The mortise strip was made $\frac{1}{16}$ " thicker than the depth of the groove. Use a hand plane to trim the strip flush with the edge of the rail, Set your plane for a light cut and balance it on the exposed strip. Stop planing as soon as the blade bites into the rail.

- Assembling the headboard and footboard

Before you can start pulling the headboard and footboard together, you'll need to cut biscuit slots in the legs and end rails. Start by cutting a pair of biscuit slots in a scrap of $6\frac{1}{2}$ "-wide rail to see how far you can space the slots without coming out through the edges. Then transfer the slot locations to

the leg stock. Continue laying out the slot locations on the bottoms of all four legs and both ends of the bottom ends of both end rails. Repeat this step using the 4 1/2"-wide rail scrap to position the slots for the top rail.

The rails are offset from the legs by 1/4". To offset the biscuit slots, place a leg flat-side down against your bench, lay one 1/4" spacer under your biscuit joiner, and cut the bottom slot. Insert two more 1/4" spacers under the joiner and cut the higher slot. Repeat on all four legs. To cut the slots in the rails, place the rail against your bench, inside face down, and cut the biscuit slots, first with no spacer, then with two. When the rails are fit against the legs, their biscuit slots will be offset 1/4" in from the edge of the leg. Repeat the biscuit-cutting process on all four rails.

You're now set to assemble the headboard and footboard. Assembling this many pieces at one time can be tricky, so try a dry run without glue. This is also the perfect time to enlist an extra pair of hands to assist with positioning the slats as you clamp things together. Glue the slats into the rails, glue the rails to the legs, use as many clamps as necessary to pull it all together, and check for a square. When clamping, it's okay if the top rail shifts down slightly, but make sure the bottom rail doesn't move from your original layout lines.

Give the glue at least an hour before removing the clamps. You should allow the glue at least a full day to cure completely, but at this point, you can remove any drips, finish-sand the legs, and coat unfinished surfaces with oil. After two or three coats of oil, apply a coat of wax to all finished surfaces and buff to a shine.

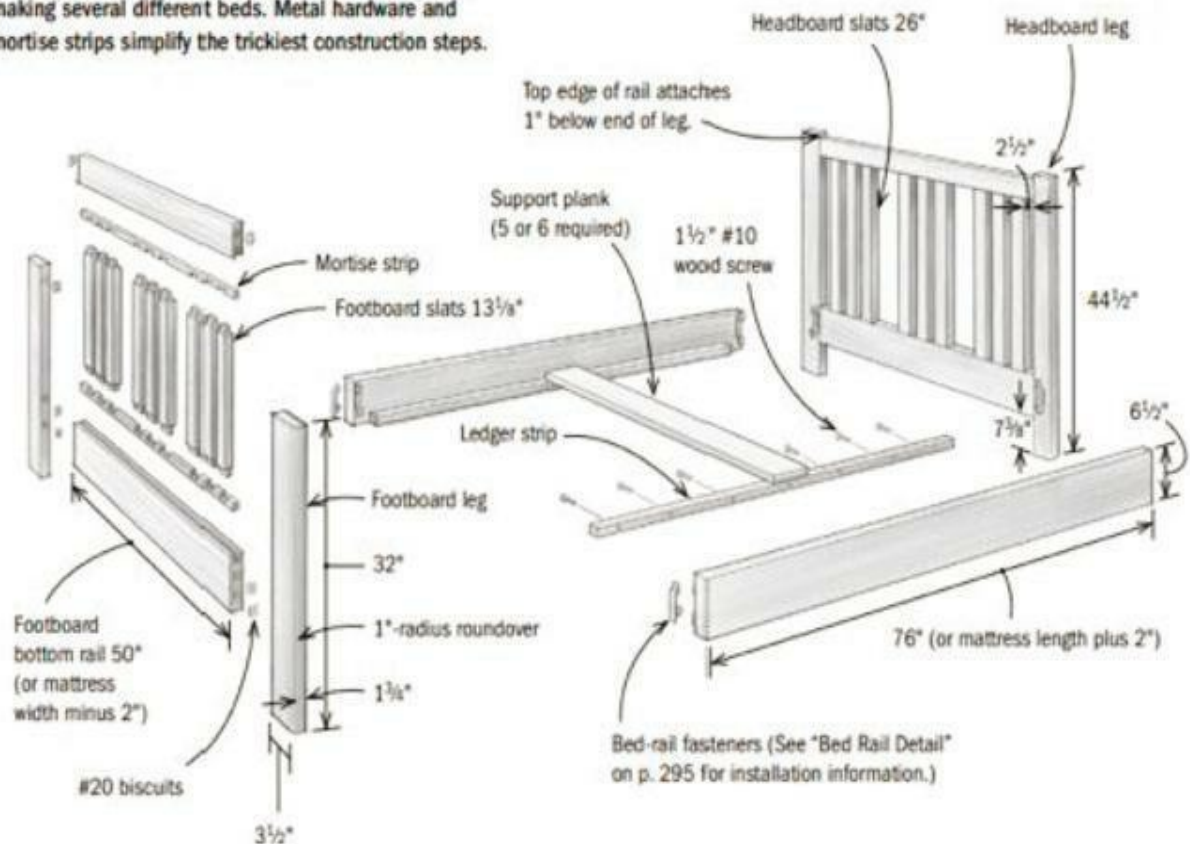
● Making the Bed

Mount the bed-rail fasteners to the headboard and footboard legs, as shown in the drawing at right. Use a centering bit to drill the pilot holes, and then attach the metal clips using 1" #8 wood screws. Attach the side rails to the headboard. If everything was installed correctly, the two should clip together. Be careful not to twist the rails around too much at this point. The fasteners are sturdy enough to aid in supporting the weight of the mattress and sleeper, but they can be damaged by levering the rail from side to side. Cut the support planks about 1/8" shorter than the distance between the side rails. The materials list specifies five or six planks, but if you're going without a box spring, you may need a few more. Alternately, if you install enough planks, so there is less than a 1" gap between boards, you can use a

softer futon-like mattress. Complete the bed with a box spring, mattress, mattress pad, linens, and comfy pillows, and it's ready for a well-deserved rest.

Image/Diagram

This bed is fine as is, but both the dimensions and the construction methods can be used as a template for making several different beds. Metal hardware and mortise strips simplify the trickiest construction steps.



Chapter 9

MODERN FARMHOUSE BEDSIDE TABLE AND PLATFORM BED



Modern farmhouse bedside table

Materials

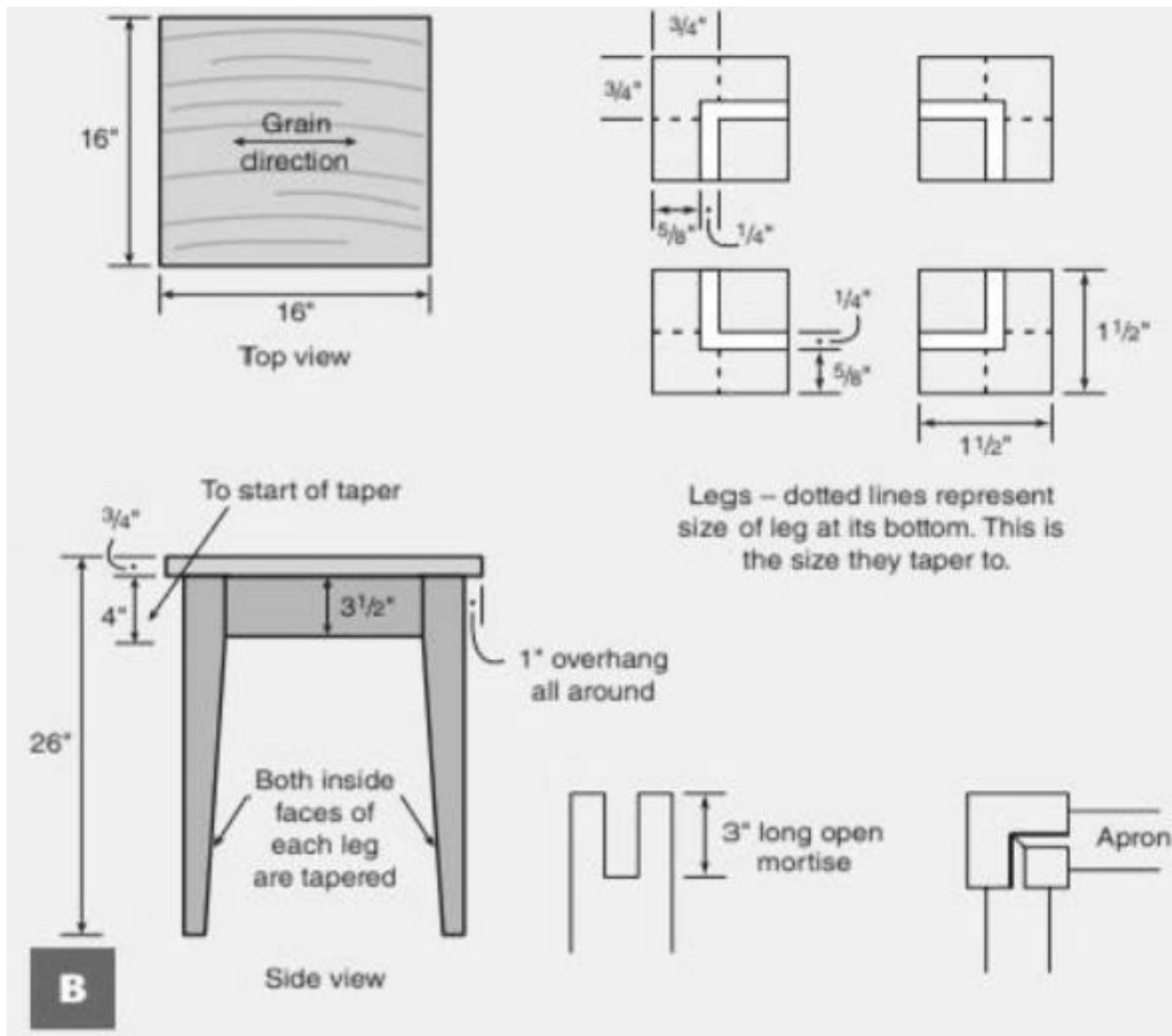
- Square.
- Z-clips.
- Table saw, or band saw.
- Miter saw.
- Drill and small twist bit.
- Sander.
- Router and decorative edge bit (optional).
- 3/4" x 3 4" solid stock for top and aprons.
- 1 1/2" x 3 1 1/2" solid stock for legs.
- Mortising machine or plunge router with a straight bit and mortising jig.

Steps

Determine the size of the legs, aprons, and tabletop. Glue and clamp up an oversized blank for the tabletop and set aside. Cut legs to length and carefully layout mortises then Machine mortises. Using a tapering jig, cut the tapers on the inside of each leg (this is the side with the mortise on it). This procedure may be done on the table saw, band saw, or with a hand plane. Layout and cut the tenons on each end of all four aprons. Check for a snug fit in the mortise, and miter ends at 45° so that they meet in the center of the mortise. Mill a groove on the inside of each apron to accept the Z-clips Sand legs and aprons then glue and clamp two separate leg-and-apron assemblies, each consisting of two legs and an apron to make sure the assemblies are square. While these are drying, cut the tabletop blank to size and rout a decorative edge on it if desired, and then sand it. Glue and clamp the two leg-and-apron assemblies together with the remaining two aprons, again checking for square. When the base of the table comes out of clamps, place it upside down on the bottom of the tabletop, and position it so that there is an equal overhang of the tabletop all around the frame. Insert Z-clips in grooves, two per apron, and mark and drill the hole for the screw. Finish the table base and top as desired. Attach top.



Image/Diagram



Platform Bed

Materials

- 1" 3 12" pine.
- 1" 3 6" pine.
- 3/4" plywood.
- 10 L-brackets and screws.
- 2 1/2" screws.
- 6d finish nails.
- Square.
- Circular saw, or power miter saw.
- Table saw and dado blade or router table and 3/4" straight bit.

- Drill, 1/8" bit, and 3/8" flatbottom bit.
- Drill press and 3/8" plug cutter.
- Chisel or plane.
- Sander.



Steps

Measure the mattress you will be using on your bed. Subtract two feet from the length and width of the mattress. This is the size of the box that will be built to support the platform.

Use the 1" x 3 1/2" pine to build the box. Use simple butt joints to attach the sides to the ends. Counterbore 3/8" holes 3/8" deep; drill 1/8" pilot holes, and use 2 1/2" screws. Using 1" x 3 1/2"s will result in a low bed. If you desire a higher bed, glue up material to reach the desired height. Use the plug cutter on the drill press to make plugs to fill the counterbores you made in the base. Glue in place; when dry, plane or chisel flush with the surrounding surface.

Add 1 1/2" to the length and width of the mattress and cut the 3/4" plywood to these dimensions. If you are building a twin bed, a single sheet of plywood will be enough. A bigger bed will require two sheets. If two sheets are needed, the joint between the two should run across the width of the bed. The two pieces should be reinforced from below using pine or plywood scrap glued and screwed in place. Center the base on the plywood platform and fasten them together with the L-brackets.

Turn the bed right side up. Joint, rip, and joint the 1" x 3 6" material to 5 1/4" wide. Mill a 3/4" dado 1/4" deep in the 1" x 3 6" material. Cut the 1" x 3 6" material to fit around the plywood. Pieces should run the length of the long sides, with the ends fit between them. Counterbore 3/8" holes 3/8" deep and predrill for the screws using a 1/8" bit. Spread glue in the dados on the rails, fit onto the plywood and attach the side rails to the head and foot rails with 2

1/2" screws. Drive 6d finish nails through the rails into the plywood, spacing them about 10 inches apart. Make plugs and glue into the counterbored holes, when the glue is dry, plane or chisel flush. Sand and finish as desired.



Imagen/Diagram



Chapter 10

COLLAPSIBLE DOG RAMP, CUTE AND STYLISH KIDS BED & HEADBOARD



A dog ramp can help your disabled or older dogs get in and out of the vehicle or go all over short stairwells. A ramp that can be folded has the additional advantage of having the option to be put away when not being used and conveyed and set up effectively when required. Dog ramps are accessible for buy at pet stores and other specialty stores, yet with minimal effort, supplies and time, you can make and tweak your own ramp for your pooch.

Collapsible Dog ramp

Materials

- Saw.
- Utility knife.
- Tape measure.
- Staples.
- Screwdriver.
- Heavy-duty staple gun.
- 1 6 foot by 15-inch piece of carpet.
- 2 Slide bolts kit.
- 2 2 1/2 foot by 16-inch piece of lumber.
- 4 135-degree heavy duty angle brace.
- 4 2 1/2-foot-wide baseboard molding.
- 12 1 1/4-inch drywall screw.
- 2 Heavy-duty hinges kit.
- 1 2 1/2 foot by 6-inch piece of lumber.
- 24 1/2-inch flathead screw.

Steps

Join the four 2 ½ foot-wide baseboard trim to the two 2 ½ foot amble with six ¼ inch screws on each side. Secure the screws through the thickest piece of the trim to guarantee that the molding is safely attached to the wood. This will make the principle bit of your ramp.

Turn the ramp over to the other side, and the bottom side should be the one you're working on now. Attach two of the 4 135 degrees rock-solid edge support, to the corner of the top using flathead screws. Connect the 2 ½ foot by a 6-inch bit of wood to the point supports with a similar ½ inch flathead screws. Guarantee that the edge of the highest point of the ramp and the 6-inch bit of timber is flush. At long last, secure the canine slope by appending the staying two edge supports to the structure with the ½-inch flathead screws adjacent to the point supports previously joined.

Using two heavy-duty hinges, connect (2) 2 ½ foot wood parts together to the bottom part of the ramp with screws you have. Make sure the spacing of the hinges is even.

Affix the two slide bolts onto the sides of your ramp for additional balance

and support by making use of the screws. Slice the carpet into two using a knife. Lay each piece of carpet on the (2) 2 ½ foot parts of the ramp. Once you are satisfied with how it looks, you can put in permanently in place using a heavy-duty staple gun.

Image/Diagram



Creative Headboard



Those are just thin strips of a wood beadboard attached horizontally to three thin pieces of wood running vertically up the back; you can see the three rows of nails.

This look can easily be replicated with pallet wood instead of beadboard. And you could even run the pallet wood vertically and the boards along the back horizontally. If you need to purchase them, 1×2s or 1×4s will work well for the boards along the back. But you know I'd encourage you to scrounge around for some pallet support boards or other reclaimed wood to use.

Hopefully, this project helps give your ideas for your very own headboard and ways to use old wood even if you don't end up using pallet wood specifically. Once you start keeping an eye out for reclaimed wood of all kinds, you'll be amazed at where you find it and what you end up using it for.

Materials

- Pallet slats, cut to the preferred length of the headboard.
- Support boards, cut to the preferred height of the headboard.
- 1 1/8" screws.
- Foam sticker letters (optional).
- Paint (optional).
- Medium-grit sandpaper.
- Dark wax (optional).

Tools

- Tape measure.
- Natural-fiber brush (optional—to apply the wax).
- Cordless drill.
- Paintbrush.
- Palm sander (optional).
- Miter or handsaw.

Steps

Use a handsaw or miter to cut the pallet slats and support boards to the desired measurements. Put the pallet pieces next to each other horizontally over the support boards that are laid vertically and attach screws using any drill you have.

To create the “sweet dreams” lettering, simply use foam sticker letters that can be purchased at an arts and crafts supply store for a few dollars (if desired). Use a variety of neutral-colored paints and paint right over the stickers to create a unified yet still uneven and imperfect paint finish. Using a

dry-brush paint technique—where there is only a little bit of paint on the very tip of your brush, in a variety of colors—will give you this uneven finish.

Remove the foam letters and lightly sand the paint finish with medium-grit sandpaper. Apply a coat of dark wax to further age the look of the paint finish and blend in the very subtle wording detail if desired. To hang the headboard, be sure you screw it directly into wall studs to support the weight. Stud finders can be found at most home improvement stores.

Image/Diagram





Cute and Stylish Kids Bed

Materials

- Pallets.
- Hammer.
- Nails.
- Stain.
- Saw.
- Screws.
- Screwdriver.
- Sandpaper.



Steps

Start by cutting 1 pallet into thirds, and disassembling another. Leave 2 pallets complete, and sand all the wood down, you don't want there to be any splinters. Assemble, filling in the gaps of the cut pallet with wood from the disassembled one.

Screw these in place on top of the two intact pallets, and apply a stain or paint to the entire piece. You can also place these on wheels if you like, but that is up to you.

Once all is secure, you are done!

Image/Diagram

Chapter 11.

TOY BOX OR CHEST & SHOE ORGANIZER



Toy Box or Chest

Materials

- 4 narrow pallet slats, cut 19" long.
- 4 narrow pallet slats, cut 12" long.
- 2 wide pallet slats, cut 19" long.
- 2 wide pallet slats, cut 12" long.
- 4 (3/4") square dowels, cut 15" long.
- 1 sheet 3/4" plywood for the bottom of the crate, measuring 17 3/4" × 12".
- Medium-grit sandpaper.

- Wood glue.
- 1” nails.

Tools

- Hammer or nail gun.
- Tape measure.
- Palm sander (optional).
- Miter or handsaw.
- Wood shim or small level to use as a spacer.

Steps

Utilize a handsaw or a miter to make all of the slices. Utilize your sandpaper (medium-grit) and palm sander to sand each piece one by one before anything is joined. Running a dab of glue at every link as you go, utilize 1” nails and a mallet or nailer to connect the 2 base end pieces to the middle base bit of compressed wood. Next, connect the 2 base side pieces. Append the highest points of those supports to one another with 1 more nail for each corner. Append the 3/4” square dowel vertical corner pieces by running a dot of the wood stick in each corner and utilizing 2 nails in the two sides of each corner. Running a dab of glue at every connection, secure the following layer of side bed supports.

To attach the rows of pallet slats an equal distance apart, cut a shim piece out of excess wood to use as a spacer. This will ensure each slat is attached at exactly the same height in that. Or you could use a small level for each section. Attach the end slats to the corner pieces with 2–4 nails per end. Next, attach the side slats in the same manner first attach the slats on the end of your crate and then line up the slats on each side. Attach the top layer the same way, don’t worry if your vertical corner pieces don’t line up perfectly right away with the end of the slats you are connecting horizontally. You might need to “persuade” each piece a little to set them in the exact spot you want at each end of the crate.

Image/Diagram



Shoe Organizer



What you have here is a very easy and useful storage solution that will surely help you or possibly change your wardrobe. These instructions make two particular, stackable shelves, and this task can be effortlessly altered depending on what number of shoes you have and, in the possibilities, you have more shoe variety.

Materials

With regards to length, the slat pallets I utilized were just 38” long, yet I’ve considered braces to belong as 48”. You could likewise arrange two rack segments start to finish to make long lines of shoes. Be certain to aid any long segments with support pieces in the center for the prevention of sagging after some time. With regards to height, you could utilize a 2×6 or 2×8 board rather than the pallet bolster sheets for extra length in the event that you don’t have a similar choice of flip-flops I appear to have had. Likewise, with any venture, sanding it down is consistently a pleasant touch for a smoother finish, yet for this specific task, I didn’t think that its vital supplies.

- 24 (1 1/8”) screws.
- 2 support boards of equal width.
- Shoes.
- 6 pallet slats of equal length and thickness.

Tools

- Tape measure.
- Miter or handsaw.
- Cordless drill.

Steps

Lay 2 arrangements of 3-bed braces one next to the other and measure the width of each arrangement of 3. Cracked or broken supports will work okay for this project. Those flaws can be easily fixed confronting the rear of your storage room and under shoes. Use a handsaw or miter to cut 4 bits of the help bedsheets to the estimations from the past advance.

Line up the cut to help barricade’s edge side opposite with each finish of your arrangements of 3 supports, and utilize your drill to interface them with 1 1/8” screws. Screw into the gaps left when you remove the nails from the pallets when disassembling them from the bed—this will aid in the prevention of extra splitting. Or on the other hand, you can make new holes if you like. If your storage room is in any way similar to mine, now may be an ideal opportunity to get out anything on the floor and give it a fast and careful tidying before you put your new coordinator in there.

Image/Diagram



PART IV

PROJECTS FOR INDOOR - CREATIVE

PROJECTS FOR KITCHEN AND

DINING ROOM

Chapter 12

KITCHEN CABINET



Simply Rustic Oak

This simple, cabinet mounted on a wall a useful stockpiling unit for the washroom or kitchen. There are numerous sorts of fixings accessible: pick one that is appropriate for the wall on which you plan to affix it. Comprising of an internal shelf, back door, and a jointed box, it is a decent piece for the beginner woodworker to make to get to holds with the essential standards of cabinet structure and design.

Materials

- Marking gauge.
- Dividers.
- Marking knife.
- Square.
- Pencil.

- Tenon saw, or band saw.
- Coping saw.
- Bevel-edged chisel.
- Ruler.
- Rubber mallet.
- Wood glue and brush.
- Masking tape.
- Sash cramps Bench plane.
- Router and bearing guided rebate cutter.
- Hammer.
- 8-panel pins.
- 2 brass butt-hinges and screws.
- Bradawl Drill and bits.
- Screwdriver.
- Sandpaper.
- Liming wax.
- Door catch T.

CUTTING LIST					
<i>Item</i>	<i>Material</i>	<i>No.</i>	<i>Length</i>	<i>Width</i>	<i>Thickness</i>
Side	Oak	2	452mm*	150mm	18mm
End	Oak	2	352mm*	150mm	18mm
Shelf	Oak	1	334mm*	130mm	18mm
Back	Oak - Faced MDF	1	434mm*	334mm	4mm
Door	Oak	1	450mm*	360mm	18mm
*Include excess to allow for cutting to size					

Steps

- Mark out the comb joints on the ends and sides

Set the marking gauge at the measurement of 20mm (13/16in)—the thickness of the lumber of the wood pieces in addition to 2mm (1/16in). Mark

this estimation around all sides of the two finishes of the four body pieces to demonstrate the shoulder of the joint. Set a couple of dividers to 30mm (1 3/16in) and scribe holes to separate the end grains of each piece into five equivalent portions.

Imprint the divisions with a marking blade and square, scoring over the width of the end grains of each piece. Stretch out the markings to the shoulder on the two sides of every one of the four pieces, utilizing the square and marking blade. Mark the excess to be eliminated with a pencil. Ensure to mark alternate sections as the top, base, and side pieces.

- Cutting the joint

With the piece fixed to a vice, slice through the end grain using a small tenon saw, retaining the marks' waste side. Release the excess wood using a coping saw. Cut somewhat away from the markings to take into consideration for finishing. Trim the bases and edges of the attachments using a bevel-edged chisel. If needed, cramp support allowing you to chisel correctly. Test the fittings of the brush joints and, if vital, chisel out the extra pieces to have an exact fit.

- Mark and cut the housing

Mark the casing for the rack within the face of each side piece, 160mm (6 5/16in) from the shoulder at the top. From the shoulder at the bottom of the joint, make markings on how thick the lumber is—18mm (11/16in)—178mm (7in).

Square the markings from both of these positions 120mm (4 3/4in) over the face to detail out the length of the casing. Extend the markings at the back edge of the piece, and utilize the marking gauge to engrave the casing depth of 10mm (3/8in). Mark the casing stop 23mm (7/8in) from the front edge. Replicate the same steps to scribe the casing on the opposite side piece in an equivalent way. Eliminate the excess from each casing by hand or machine, as depicted for full casing joints. Finish the edges by hand using a bevel-edge chisel.

- Make the shelf

Scribe the stop on the front edge of the two finishes of every rack piece, 10mm (3/8in) depth (to coordinate the casing depth) and 5mm (3/16in) along the face. Broaden the markings onto the end grain and the other face. Remove the excess by slicing to the waste side of the markings using a small tenon saw. Complete the process of cutting using a bevel-edged chisel. Check the

fittings of the rack in the casing. Note that the rear of the rack ought not to be flush with the side piece, to leave space for the back piece.

- Assemble the casing

Do a fit test of the body components and rack. Check the joints for its squareness and modify it if important. Disassemble and apply wood glue. Shield the wood from the glue with concealing tape (to be removed before its assembly). Assemble the pieces and afterward cramp together to guarantee that the casing dries solidly. When the glue is dry, take out the cramps then plane the joints flush.

- Fit the cupboard back

Utilize a switch fitted with an orientation guided cutter set to a measurement of (3/16in) and width of 3/8 into cut an allowance along the inward edge of the frame. Square off the corners and tidy up the edges around the rack casing, utilizing a bevel-edged chisel. Test-fit the pantry back and change it if needed. Make markings 5mm (3/16in) from the edge of the back piece on all sides, and tap in two board pins on each side.

- Fix the hinges to the carcass

Mark the location of the allowances for the two metal butt-hinges on the front edge of one side of the casing frame. The first is 50mm (2in) from the base and the second 50mm (2in) from the top. Put the hinge in the primary position and imprint its length. Do this again for the second hinge position. Set a marking measure to the thickness of the scribe and hinge between the length marks for each hinge on the casings' outside face.

Remove the excess using a chisel to the markings for both hinge allowances and tidy up, being mindful so as not to surpass the markings. Put the hinge into the allowances, watching that it is flush with the wood. Imprint the screw gaps with a bradawl. Drill pilot gaps (and leeway gaps if utilizing customary screws). Pick the drill bit and measure how deep it is to fit the screws. Insert the screws using a screwdriver. Affix the hinge, drill the screw openings, and drill the screws in.

- Fix the hinge to the door

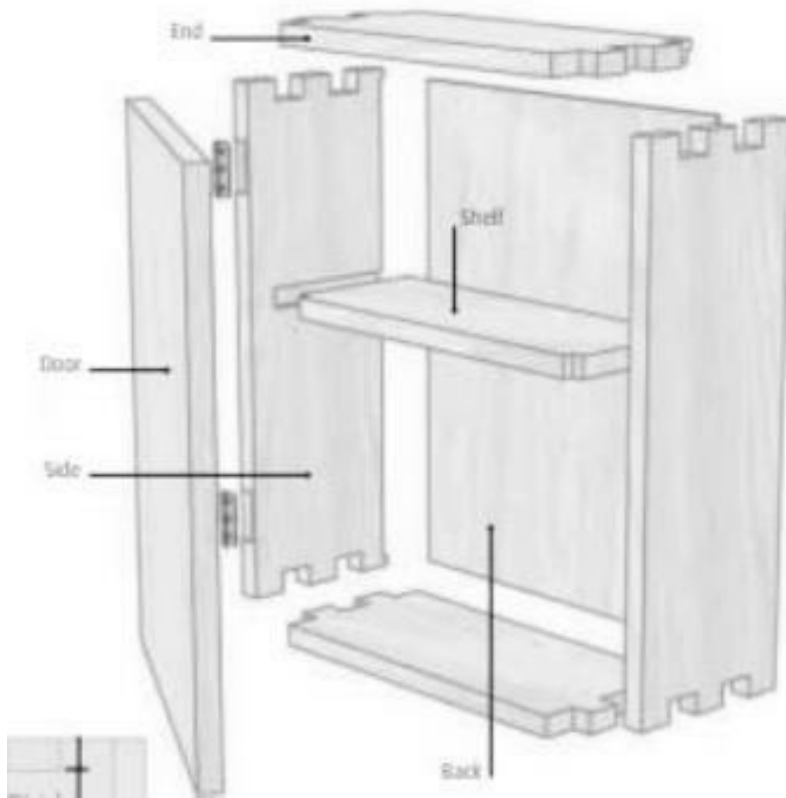
Imprint the positions of the hinge within the face of the door utilizing the same estimations from on the casing. Cut the allowances using a chisel, then check the fit, screwing in the other flap of the hinges to fit the door.

- Finishing the cabinet

Sand the edges and surfaces of all nook and cranny of your cabinet to

come up with a totally smooth finish. Finish the outside of the storage cabinet. The door must be removed and be applied with liming wax or utilize a finish of your choice. Screw a ball get or other catch of your choice into placement in the top corner of the cabinet on the contrary side to the hinges of the door. Hold the entryway against the cabinet and mark the placement of the catch face inside. Fit the other piece of the catch in that position. Check the fit of the door and attach it again.

Image/Diagram



Chapter 13

KITCHEN STEP STOOL



You can fabricate this woodwork project during your free time or even the weekend, and it's not hard to do. If there's a need for you to construct this furniture, but need to sharpen your carpentry skills, this is an incredible task to take on. The instructions are direct, and you can finish the whole piece utilizing just the basic tools you have. Purchase your wood previously surfaced (level and square), and the fundamental force devices you will

require are a table saw, jigsaw, or band, and the power tools you will require are a table saw, jigsaw or band saw, and a drill.

Materials

- 24- No. 8x2 inches (50mm) flathead wood screws
- Wood glue
- Stain polyurethane finish

Cutting List

Reference	Qty	Part	Stock	Thickness	Width	Length
A	1	Sides	White oak	¾ inch	18 inch	18 inches
B	1	Back	White oak	¾ inch	15½ inch	18 inches
C	2	Threads	White oak	¾ inch	7 inch	18 inches

Steps

After buying or processing the entirety of the stock, fabricate all parts to width. To make the back, edge a wood glue the same number of wood pieces required to accomplish the last width. Square up one finish of each board and make markings on end utilizing a pencil.

The sides are made of three pieces of the board joined together with a glue to make the indents for the steps. Reference the squared finish of the side sheets against the fence. Cut the two longest side sheets and the back sheets to length. Move the saw fence and cut the center side sheets. Set the fence again and cut the most limited side pieces.

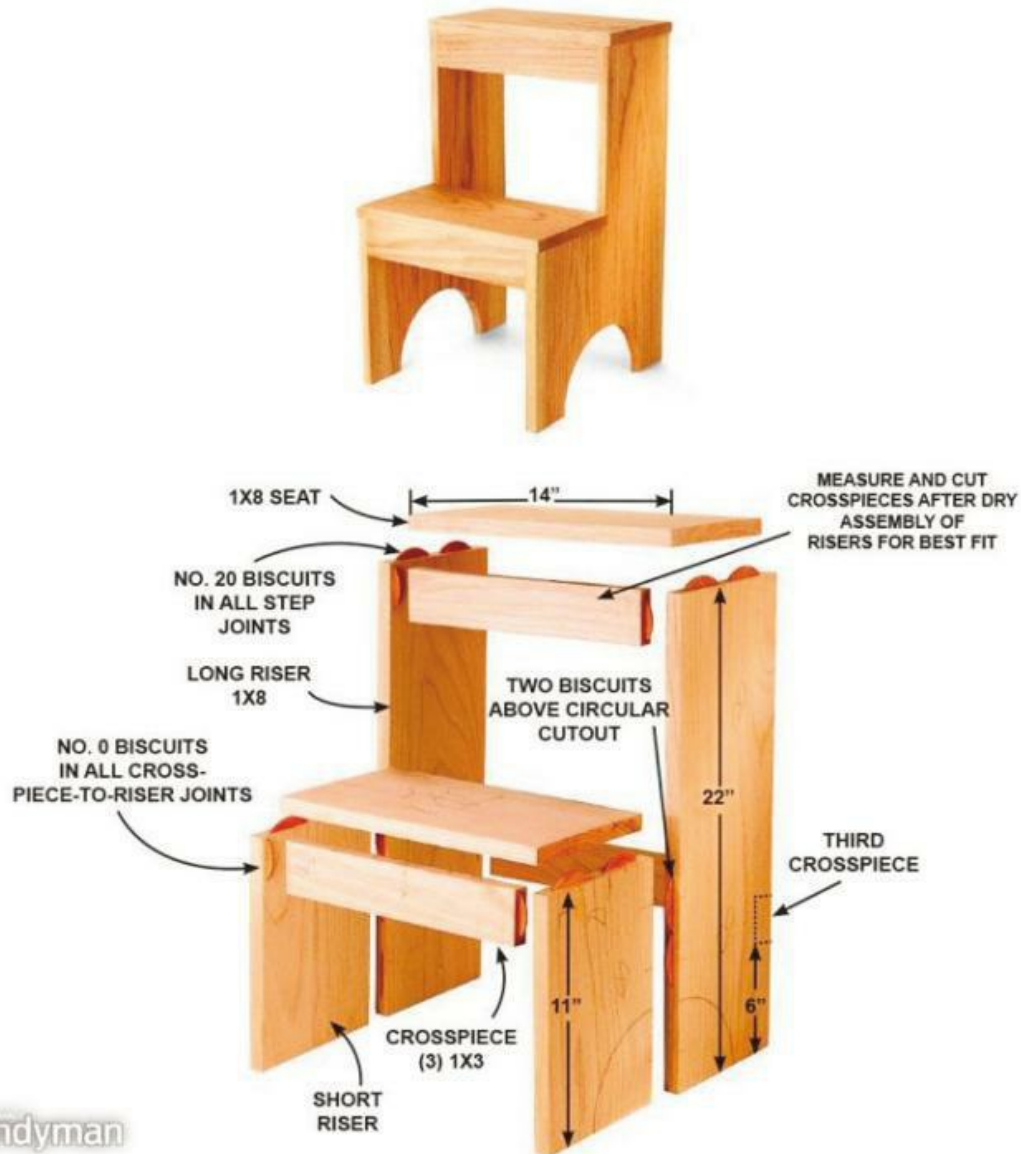
From my own experience, it is effortless to stick up the sides two sheets up at a time, utilizing a spacer slice to the height of the step. Glue the short sideboard set up to finish the side get together (the baseboard square, so ensure the grain runs vertically).

To add a personal and aesthetic touch on your stepstool, cut bends in the back and the two sides. When you're done gluing the sheets together to make the back, lay the back on a bit of cardboard two or three inches from the base edge and draw a line around the border.

Decide how wide and tall you need your bend to be. Put a conciliatory board (pressed wood or medium thickness fiberboard [MDF]) under the cardboard and drive a nail at the bend's tallest point in the inside (left to

right) of the back. Drive nails on the baseline at the bend's most stretched out point, one on each side. Tie a string onto the left base nail, bring it over the top nail and circle it twice around the base right nail.

Put a pencil inside the string and sketch the bend. Tighten or loosen the string to come up with the curve you like. The looser you have the string, the rounder and wider your curve will become. For the curves in the sides, do the same steps but offset the top nail instead of centering it.



When you have your ideal bends drawn on cardboard, cut them out with a utility blade and use them to draw the bends onto the back and sides of your project. Utilizing a jigsaw or band saw, cut out the bends on the two sides and the back. Then make use of sandpaper or file or an axle sander, to tidy up the

saw marks.

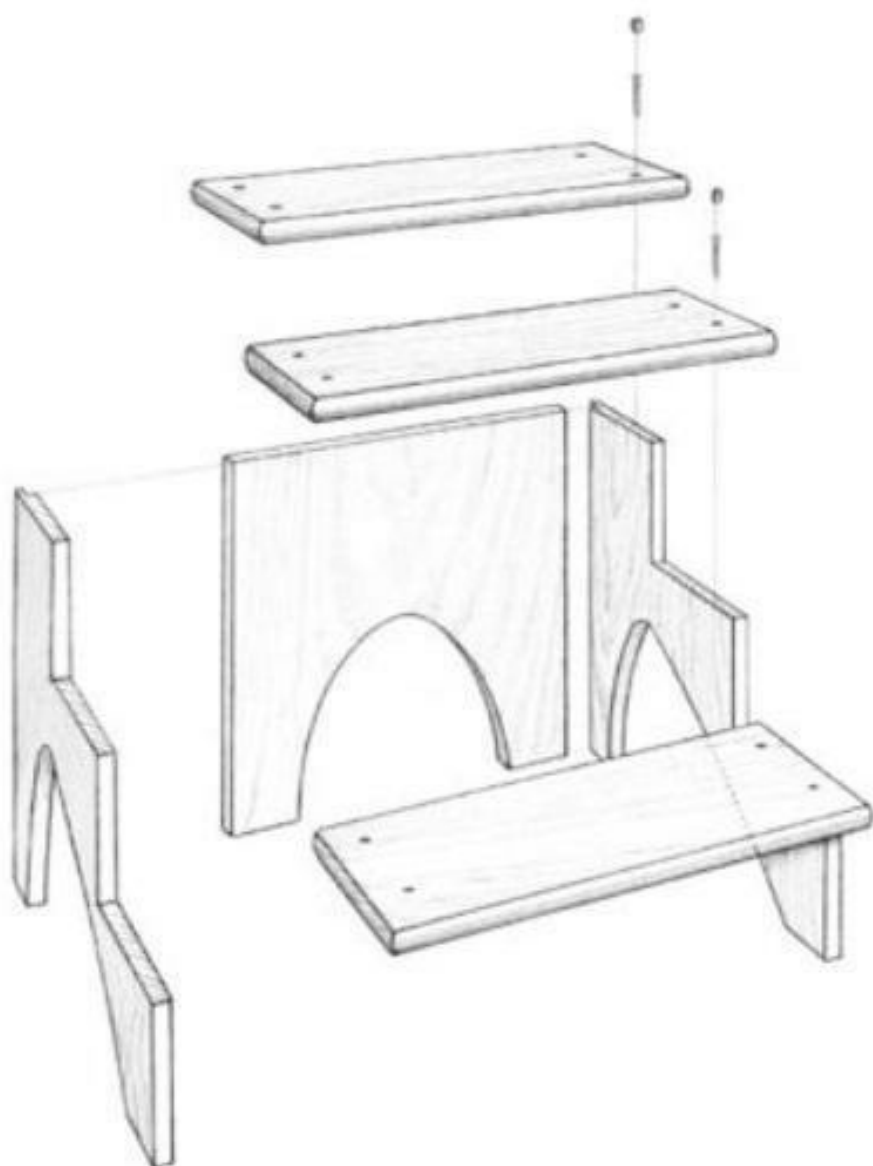
Put the sides back edge to the back edge. Mark the screw hole locations for attaching the sides to the back because the back is $\frac{3}{4}$ " thick, drill the holes $\frac{3}{8}$ " from the back edge of each side using a countersink bit. Make holes on the countersink following the $\frac{1}{4}$ "-deep hole that will accept a plug to hide the screw head.

Sand the back's insides. At that point, clamp the sides and back together and drill in the screws. You can make use of glue to the screws if only you want to. Using part of a roundover switch bit, facilitate the front edges, and finishes of the treads. Rout the end-grain first, taking a light pass. Steering the long-grain after the process of routing the two edges tidies up any detach brought about by routing end-grain. Make marking on the back edges of the treads, so you don't unintentionally round over the back edges. A rasp, file sandpaper, or square plane can likewise be utilized to make the roundover on the tracks.

After the process of sanding the whole piece (sides, back, and steps), connect the tracks to the base get together utilizing screws and wood plugs. Cut a piece bit of wood a similar width as the back and put it between the different sides at the base advance so the sides will stay equal.

Start with the base treads. For a more aesthetic look, pick opposite lumber for the plugs. Since this piece will get a great deal of wear, I applied four layers of polyurethane, scouring with No.0000 steel brush or wool between each coat—including the last coat—for a decent semigloss look. Applying stain and polyurethane can change the wood's shading and appearance, so utilize some piece of wood from your project as a test piece. Play around with various finishes and stains.

Image/Diagram



Chapter 14

LARGE SERVING TRAY & SET OF WOODEN SALT AND PEPPER



Large Serving tray

Materials and Steps

Straight cuts and simple, butt joinery make this project quick and easy. A simple curved shape on the end pieces is easy to cut. The handle cutouts make it look nice and are easy to make with two holes drilled through and a connecting cut.

Assemble the best boards for the bottom and edge glue them together, or just set them side by side for a more rustic look. Rip one pallet slat into two sideboards on a table saw. To work on the end pieces and get identical results, I tacked them together in a waste area before I cut the two decorative end pieces, then drilled and cut out handles. This process, known as gang cutting keeps things lined up and gives more consistent results.

Wrap the frame around the bottom and nail into the end grain of the

boards with several nails per board. I used an 18ga brad-nailer, but you can predrill and use fine finish nails. If you are going to hang on the wall, drill a shallow hole centered in the bottom edge on one end. If you like things hanging crooked, drill it off-center — sand and finish to your own personal style.

I stained, wiped excess stain away, and let dry. Then I sanded lightly to bring out the rough sawn character of the wood before spraying with a clear finish.

Image/Diagram



Set of Wooden Salt and Pepper



Materials

A (2) 2 ½ inches x 2 ½ inches x 12 inches pieces of beech

B (2) 7 ½ inches-long mechanisms -one for salt and for the pepper

First, make sure that the wood does not have cavities, and splits. Afterwhich, affix the wood on the lathe and promptly turn the larger part of the length to a measurement of 2 ¼ inches diameter. Maneuver guidelines rounding the cylinder enable the top piece of the mill to be near the tailstock end of the lathe. Next, turn the capstan or the top of the mill for shaping.

Fit the Tailstock drill hurl, set the 1 1/8"- measurement Forstner bit in the throw, and run a gap into the finish of the cylinder Sink the gap into a depth of around 3". Part of the 5 1/5"- long cylinder.

Wrap the Tailstock up with the short length of wood is all around bolstered. Turn off a nozzle that will be a tight push-fit in the 1 1/8"- breadth gap that you have made a hole into what will be the top finish of the body. Presently, slide the body onto the spigot, refit the Tailstock drill hurl and drill distinctive size gaps into what will be the base of the mill body.

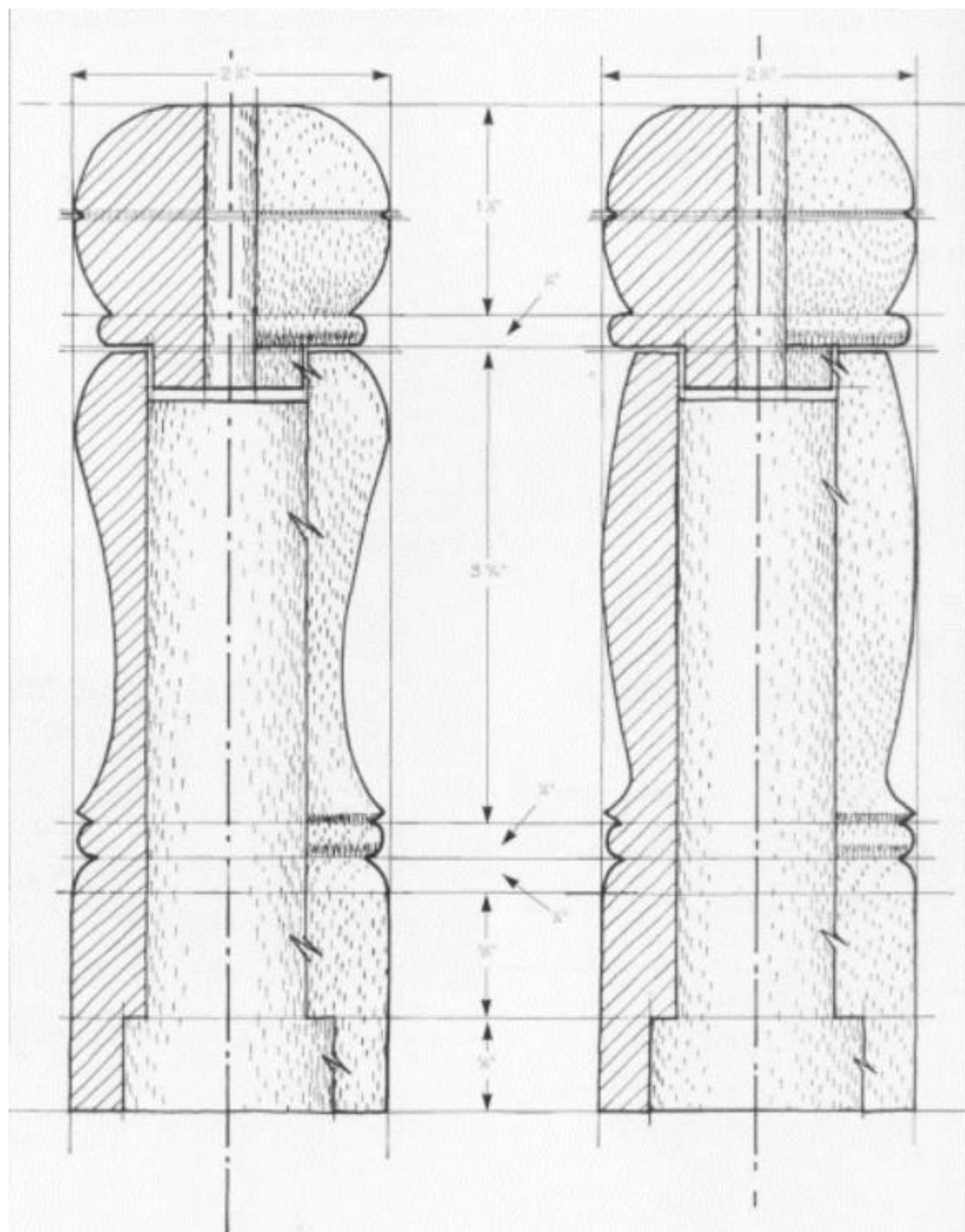
Drill the main opening at 1/2"- the distance across and 1/2" depth, followed up another hole at 1/8"- width and as deep as it will go. At the point when you are this far, the rest is simple. You essentially switch the body of the mill in the hurl—with the goal that the bottom is in the chuck—place the

capstan on the mill and afterward wrap up the Tailstock and turn the mill to shape.

Having pretty much turned the capstan to shape, fit it in the toss, and carry it to a decent completion. Run a 3/8"- width opening through the workpiece. Fit the entire works back on the machine and sand and shine to a decent smooth completion.

Slide the mill instrument up through the body and fix it with the little bar and several screws. Now that you are finished screwing the capstan spigot to the ring washer, finish it off by slicing the rod and fitting it with the head screw.

Image/Diagram



Chapter 15

CUPBOARD FOR CUPS AND STOCKS

Materials

CUTTING LIST		<i>Measurements in inches/mm</i>		
QTY	COMPONENT	LENGTH	WIDTH	THICKNESS
Carcase				
2	sides	35 ¹ / ₂ (900)	5 ³ / ₄ (145)	³ / ₄ (20)
2	carcase top/base	9 ¹ / ₄ (235)	5 ³ / ₄ (145)	³ / ₄ (20)
3	shelves	7 ³ / ₄ (195)	5 ¹ / ₂ (140)	³ / ₄ (20)
Door and back panel				
4	door/back panel stiles	35 ¹ / ₂ (900)	1 ¹ / ₂ (40)	³ / ₄ (20)
6	door/back panel rails	6 ¹ / ₈ (155)	1 ¹ / ₂ (40)	³ / ₄ (20)
2	panels (cut to fit)	32 ¹ / ₄ (820)	6 ⁷ / ₈ (175)	³ / ₈ (10)
Base				
	sides	6 ¹ / ₄ (160)	7 ¹ / ₄ (185)	³ / ₄ (20)
	front/back	14 ³ / ₈ (365)	3 ³ / ₄ (95)	³ / ₄ (20)
	panel	8 ³ / ₄ (220)	6 ¹ / ₂ (165)	³ / ₈ (10)

Steps

- Machining the wood

The cutting list shows the dimensions of the components you will need to machine. The wood was machined with all the parts left longer to allow for trimming later. When your machine plane wood, the ends of the boards often

suffer a degree of snipe. It is better than to saw around 50mm (2") off the ends of planed boards to get to the good stuff. Always machine up some extra pieces to use as test pieces for setting up things like miter cuts and routing.



- Cut and glue the carcass

After setting up for the miter on my table saw and checking some test pieces, the sides, top, and base were sawn. I used a biscuit joint at the miter, but you could also use a domino or dowels. I find biscuit joints fast and accurate. Sand the insides of the boards and glue the top, base, and sides together. I used light cramps with woodblocks, and the miters closed up fine.

- Cut and glue in the shelves

The shelves, which are 3/16" (5mm) less in width than the outer pieces, can be sawn to length and sanded. I marked the position of these, applied glue and pushed them in place, then applied the clamps. Dowels were used to secure the shelves in place. The dowel heads add a decorative touch. You can also buy dowels off the shelf from timber yards and hardware stores, or make your own with a dowel plate. The dowel positions are marked, holes drilled, and dowels glued in.

- Door and back panel

The door and back frames are made at the same time as they are identical in construction. For the door panel, I had two short pieces of white cedar that were wide enough, but the grain did not quite match. It would have been better, of course, to have one long piece to cut the two-door panels from.

- Jointing the door

The joint used for the door can be a mortise and tenon, a floating tenon, domino, or dowels. I used the router to make the mortises and made up loose tenons from white cedar. The door frame encloses a solid timber panel, 3/8" (10mm) thick.

The panel is housed in a groove. Before cutting the groove on a router table, I removed part of the waste by making a saw cut on the table saw. This makes the work of the router a little easier. Spend some time aligning the fence and router cutter perfectly. Theoretically, you can run the wood over the router cutter and then flip it and run the other face against the fence of the router table. However, I have tried this and found that every now and then, one piece of wood can be grabbed by the cutter and flung across the workshop. Hence, I prefer only making one pass over the router table.

- Glue up the door and back

All the wood machining should now have been completed. The back is laid out and ready to be assembled. Sand the panels before assembly. If you wish, do a test assembly of the door and back without glue; once you are happy with everything, apply glue and clamp up. Leave overnight if possible.

- Make the base

A biscuit joint connects the pieces. I spent time getting the top edges flush to keep the unit without twist and to avoid having to spend time planing the edges flush later. An offcut from the door panels was glued in place on top of the base.

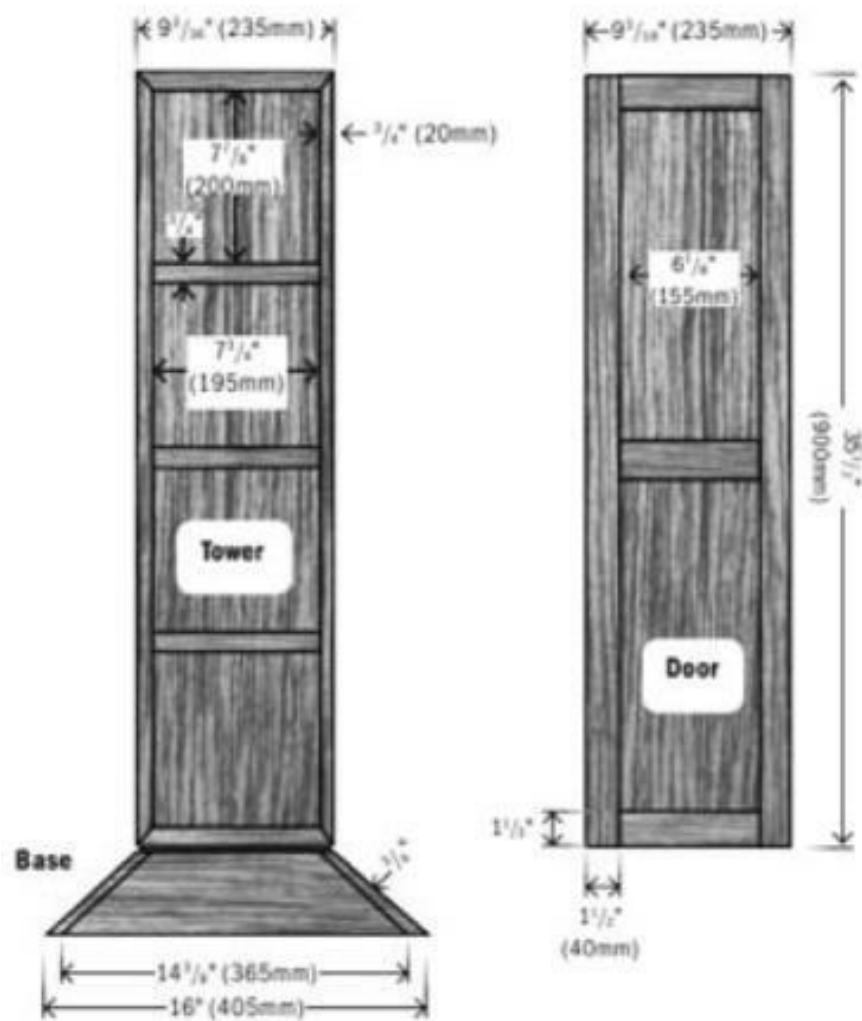
- Fitting the door

I used butt hinges, and these were carefully recessed into position. You can use a laminate trimmer or small router to cut out the recess for the hinge. I have started using a router hand plane for this sort of work and find this far superior for small jobs like this. The router plane is quiet, fast to set up, and without the racket and danger of an electric router. I decided to opt for a routed finger pull near the top of the door instead of a knob. Instead of a catch, I fitted rare earth magnets into some countersunk holes just above the finger pull.

- Assembly and polishing

The tower is fixed to the base by screwing in four screws from underneath. A small panel separates the cabinet from the base I fixed the back panel to the tower with screws in countersunk holes. Wood plugs go in the holes to hide the screws. You could just glue on the back, but it is easier to polish the piece without the back on, better to polish everything first, fix the back then tap in the wood plugs and touch up the plugs with polish.

Image/Diagram



PART V

PROJECTS FOR

INDOOR -BATHROOM

Chapter 16

BATHROOM MAT AND MULTIFUNCTIONAL BATH TRAY



The deep spaces in this mat give grip for footwear, and somewhere for mud to drop in, you can then lift it and sweep the dried mud away easily. Use 50 x 25mm prepared teak (*Tectona Grandis*) or iroko (*Milicia excels*) for

their toughness in outdoor conditions. They are slightly waxy feeling woods, but be careful of the wood dust as it can be an irritant.

Bathroom Mat

Materials and Steps

Cut enough pieces to length; six to eight slats are needed to make the doormat wide enough, and the length needs to be between 520–600mm. Improve the look of the ends by chamfering them with a block plane at a roughly 45° angle. Sand the long sharp edges with a sanding block to avoid nasty splinters. At about 90mm in from each end, make a mark and use a try-square to draw a line right across all of the pieces. Now mark the center of each face on the pencil line, so you can drill in the middle each time. Drill through each slat with a drill slightly larger than the rope size. Use a piece of sacrificial board underneath to protect your bench. Use natural fiber rope, as it knots easily without coming undone, and it looks more in keeping with the wood. Tape the end to keep it small enough to feed through the holes. Make a tight knot at the outside edge and knot between each slat, working at both ends each time. Finish off with a tight knot when you get to the other end. Now you can give your old doormat the boot!

Image/Diagram



Multifunctional Bath Tray

Materials

- Screwdriver.
- Wood piece.
- Pencil.
- Metal handles.
- Ruler.
- Sanding block.
- Tape measure.
- Wood stain + cloth.
- Woodworking clamps.
- Drill bit.
- Screws.
- Quick square (optional).
- Drill + spade bit.
- Jigsaw.



Steps

Begin your creating of a bath tray by measuring the width of your bathtub. Next, you must have a piece of wood that is cut marginally bigger than the width of your bathtub so it can hang over it. The size of the tray in this project is 32 inches. Aside from the wood material for the base of the tray, you also must have 2 (7-inch) wood pieces that will support the tray's structure. Its measurement will depend on the width of the tray you are making.

Then, make a space for your wine glass Holder. Here, I measured about 6 inches from the side that is short and 2 inches from the long side. Clamp the

tray in a hard place and make a hole with a drill. Draw lines that are straight from both sides of the opening and utilize a jigsaw to make an incision along the lines, making a good space for your glass wine. For rough edges, just sand it down. Gather the pieces of wood on a work surface then finish with a wood stain using a cloth or brush.

Dry it at least 8 to 12 hours. Choose what side of the wood tray you like to be the bottom part—mark and measure at least 4 inches from the edge on the two ends of your wooden tray. Put one of the wood pieces (7-inch) on the markings you made and securely hold while drilling a total of two holes. Then, ensure the wood piece is secured to the wood with screws. Do the same on the other side. Then lastly, add the handles by drilling holes and securing it with screws. Test its integrity before using it.



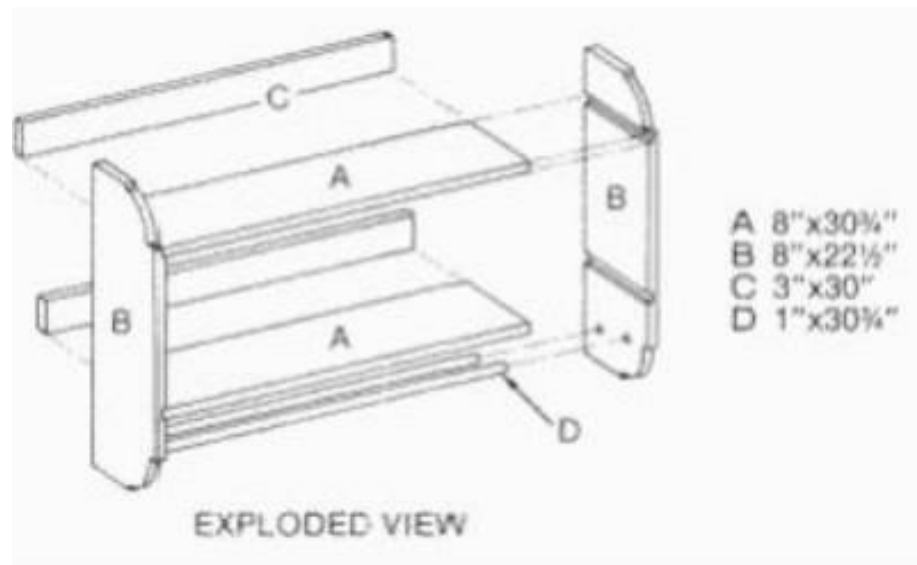
Image/Diagram



Chapter 17

TOWEL RAILS AND CREATIVE SHELF CABINET AND ORGANIZER

This is a functional addition to your bathroom, which will also add a nice touch to it. You may choose whatever type of wood you want for this project.



Towel Rails

Materials and Steps

Begin by sawing the dados to be used for your shelves. To make the design, use a band saw and make holes using a drill for the rack/s. Then, build the bathroom rack. This plan consists of two shelves, two sides, and the back for your shelves. If the wood is not squared, you must square before you cut the stock. Using a table saw equipped with a stop block crosscut the stock to length. Make use of a miter gauge to guide the wood. Refrain from using a miter gauge with the rip fence because it may lead to the binding of wood. Split the stock and proportionate from the rip fence going to the inner part of the blade enable for the cut to be in the proper measurements. Check and examine the plans for the precise placement of the dado cuts. To make the cuts, utilize a table saw equipped with a dado set. To have an accurate, you must use a miter gauge with a stop block and extension fence. Another thing

you can use to make dado cuts is a router with a clamped guide board at the right distance. In all instances, kick off the router away from the wood and slow it down at the beginning to make precise cuts.



- Cut the Curve

Mark and measure the wood for your desired design. Making use of jigsaw or a bands saw, cut two straight marks followed by making the same cut on the side of the curve. Repeat this on the other side.

To make holes for the towel rods, use a drill press or a drill. For the hole locations, use the marks and measurements as indicated on the plan. Lay the hole's depth to be drilled. To make a depth gauge, you can use a bit of tape wrapped around the bit.

- Assembling the Bathroom Rack

To make the pieces smooth before assembly, sand the pieces. Try the fittings before gluing them to check the proper fit. If everything is okay, put glue to the rod ends and all edges. To ensure it glues well, use clamps to make it tight. After drying, add nails for added strength.



Creative Shelf Cabinet & Organizer



Every bathroom needs a cabinet for all those ablution essentials— toothbrush, toothpaste, razor, shaving foam, deodorant, etc. Here is a simple design with a modern wipe-clean interior, but a traditional outside appearance. I've finished it in two ways, clear pine (*Pinus sylvestris*) or painted to show how it can be changed to suit the setting. The core carcass is standard melamine-faced chipboard. The cladding is decorative wainscoting that pushes together to create the old fashioned look, that can be 'shabby chic' with a little surface distressing if needed.

Materials and Steps

The first step is to cut a piece of 3mm thin ply, slightly oversize, and paint it with the first coat of waterbased satinwood brilliant white paint while that

is drying start cutting the melamine-faced board to length. This is standard 15mm board used for shelves, etc. So long as the top face is undamaged from cutting, any breakout underneath won't be seen. Mark and drill clearance holes in the outer face at each end of the two side panels. Note the breakout that will be hidden. Make a small pilot hole for each screw using a drill, so the chipboard won't split apart during assembly. Use screws long enough to bite and hold in the chipboard; the heads need to be buried in the surface.

Now return to painting the back panel and rub it down with medium abrasive before applying a cross-wise coat of paint. A third coat running on the other axis will be needed to give a really good, bright white finish. The shelf will be seen at the ends, so use masking tape to reduce breakout and mark the cut line on the tape. Now give the melamine edges a light abrasive rub to smooth them and remove any unevenness.



Next, mark where the shelf will go inside the carcass. The idea is to have a large space at the bottom for mouthwash bottles, shaving foam, aerosols, etc. and small items like toothpaste and makeup pads go on the top shelf. Carefully place the shelf against the internal pencil marks and fix using small ring nails to hold it securely.

Cut the wainscot boards for the top and bottom to length, matching the overall width of the cupboard. Now, cut the outer boards narrower to match the melamine chipboard. This will remove both the tongue on one board and the groove on the other one. Plane the front edges smooth. Bond the top and bottom boards using a heavy grade of adhesive mastic. Make sure the front edges and the ends are flush with the carcass. Note that they must overhang at the back to hide the back panel.

Use plenty of clamps to hold all the pieces in place. The ends overlap the top and bottom boards. Be careful not to get any mastic on the outer faces of the wainscot pine. To be quite sure that the middle of the boards is pulled down, you could use a luggage strap with some pieces of cardboard to protect the edges from holding it all together until the mastic has set.



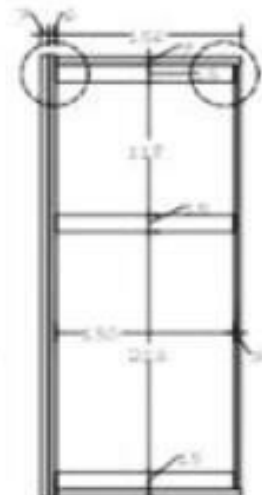
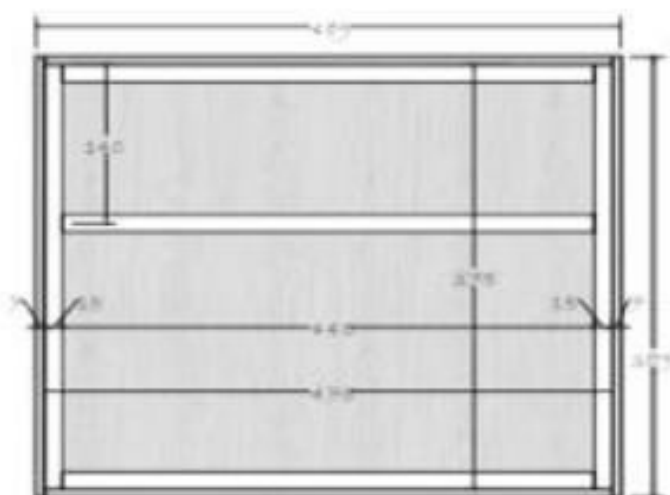
The previously painted back panel needs to be trimmed to size, so it fits tightly in the space created by the wainscot upstand. This will help to ensure the cabinet is rigid and square. A piece of A4 paper makes a good square to mark out with. A flat carpenter's pencil will actually run against the paper edge – believe it or not... Fix the panels firmly using small ring nails that

won't pull out (handy for hanging as the panel won't detach). Be careful to center the nails roughly in the middle of the chipboard carcass, so no breakout occurs inside the cabinet.

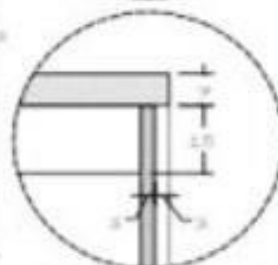
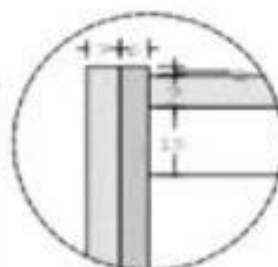
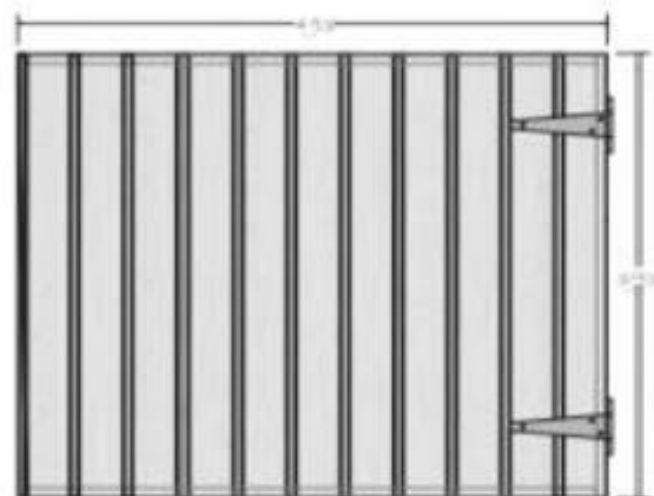
The door consists of wainscot glued to birch (*Betula pendula*) ply backing to hold it all together. The rustic look is helped by using small T-hinges, but there is no way the hinge will fix to the cabinet side, so they are simply cranked by hammering to shape in a vice. 18 This is how the hinges will sit, they need short blackened screws to fix them in place and a black knob at the other side of the door and a magnetic catch inside to close the door.

Bare pine is rather out of fashion at the moment, but I think one version with just a varnish finish should look good, but there is always the 'shabby chic' alternative. Fix the cabinet to the wall with screws and plugs and put all your bath time essentials inside and ready for use!

Image/Diagram



vertical dimensions indicated between the center line profiles and panels



FRONT ELEVATION
SIDE 1 TO 2

SECTION DETAILS
SIDE 1 TO 2

CONCLUSION

I want to congratulate you for finishing my woodworking Project for beginners. Woodworking is an incredible hobby to get into. The best part is that you really don't need much to get started making simple things. The tips and topics we covered in this book have given you more than enough information to be able to make trays, tables, benches, chairs, and more. Now, all you need are the specifications of what you want to make, the woodcut to the proper length, and you're ready to go!

There are lots of places to get started making your first set of projects for beginners. I've given you some projects in this book to get you started. Give yourself a confidence boost by getting started making your own things. Remember, you always have the freedom to tweak the materials and final look you desire depending on your taste.

The next step is to pick out a field you may want to try out. Contemplate the time you have to spend per venture, the number of funds you have to commit, and the workspace you have or can build.

This will help you hone in on a field or two to try out. Begin with the basics and gradually build your skill set with repetition. Don't expect to have a lavish and perfect table the first time you make one. Instead, have fun and try new techniques or tools whenever you can. Or sharpen a particular set of skills and become a master! Either way, take the first step and dive into woodworking! You won't regret learning this noble skill. The next step is to move up and try more complicated woodworking plans. You can continue to master the craft, and who knows; maybe you can turn it to business later on.

Customized pieces of wood items are something that many people love to have. Plan and visualize what you prefer to do for your next woodworking project. Do remember the tips and facts that you have learned here. Whether you are doing woodworking as a business or hobby, the more experience you have, the better your craftsmanship will be.

As you work in your woodshop, be prepared to make mistakes. Be prepared to mess up projects and have to start over. These experiences are frustrating, but they are lessons to be learned. Skill is only gained through experience, and if you stop when you mess up, then you never learn from the mistake. Remember, all it takes to be an expert is time, attention, and experience, and only you can give these to yourself. But I know in my heart

that if you've gotten this far through the book, you're going to bring some amazing projects to life. I invite you to share these projects with others or even in reviews for this book. Seeing the way that my words have inspired others is a gift that words can't describe. Thank you for making it through to the end of this book. Stay safe, stay working, and have fun.