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## Vintner's Valet

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- Exploded view and elevation drawings.
- How-to photos with instructive captions.
- Tips to help you complete the project and become a better woodworker.



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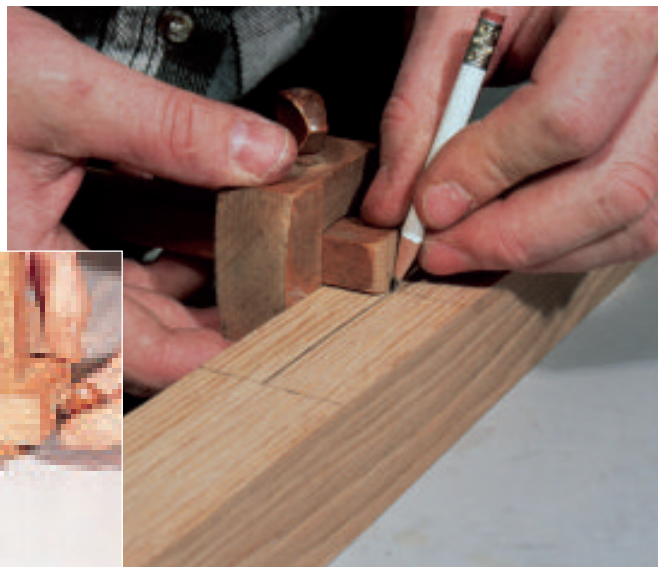


# A Vintner's Valet

This Gustav Stickley-inspired accent piece holds a full complement of wine glasses and champagne flutes, and it keeps a case of your favorite wine close at hand.

Build it from quartersawn white oak to add some authenticity and durability to this project.

**Figure 1:** A marking gauge (set to the right thickness with one of the side aprons, as shown in the inset) is used to lay out stopped rabbets in the legs.



Gustav Stickley (1857-1942) began his working life as a mason in his native Wisconsin. In his late teens he moved to Philadelphia, where he found a position at an uncle's furniture business. Given his early experience working with stone, it's not surprising that he later professed a "love for working in wood and (an) appreciation of the beauty and interest to be found in its natural color, texture and grain."

Our wine table follows Stickley's design tradition. However, remembering that the master had at his disposal a full complement of fine craftsmen, we've taken the liberty of simplifying some of the more complicated aspects. For example, the two bottle racks are set in stopped rabbets in the legs, rather than in the more daunting through mortises for which Stickley was famous. And the distinctively Arts & Crafts inspired slender slats in either end of the table are secured with

spacers in a dado, rather than being mortised directly into the stretchers.

So roll up your sleeves and head for the shop. But keep the wine for later, when the work is all done.

## Choosing Quartersawn Stock

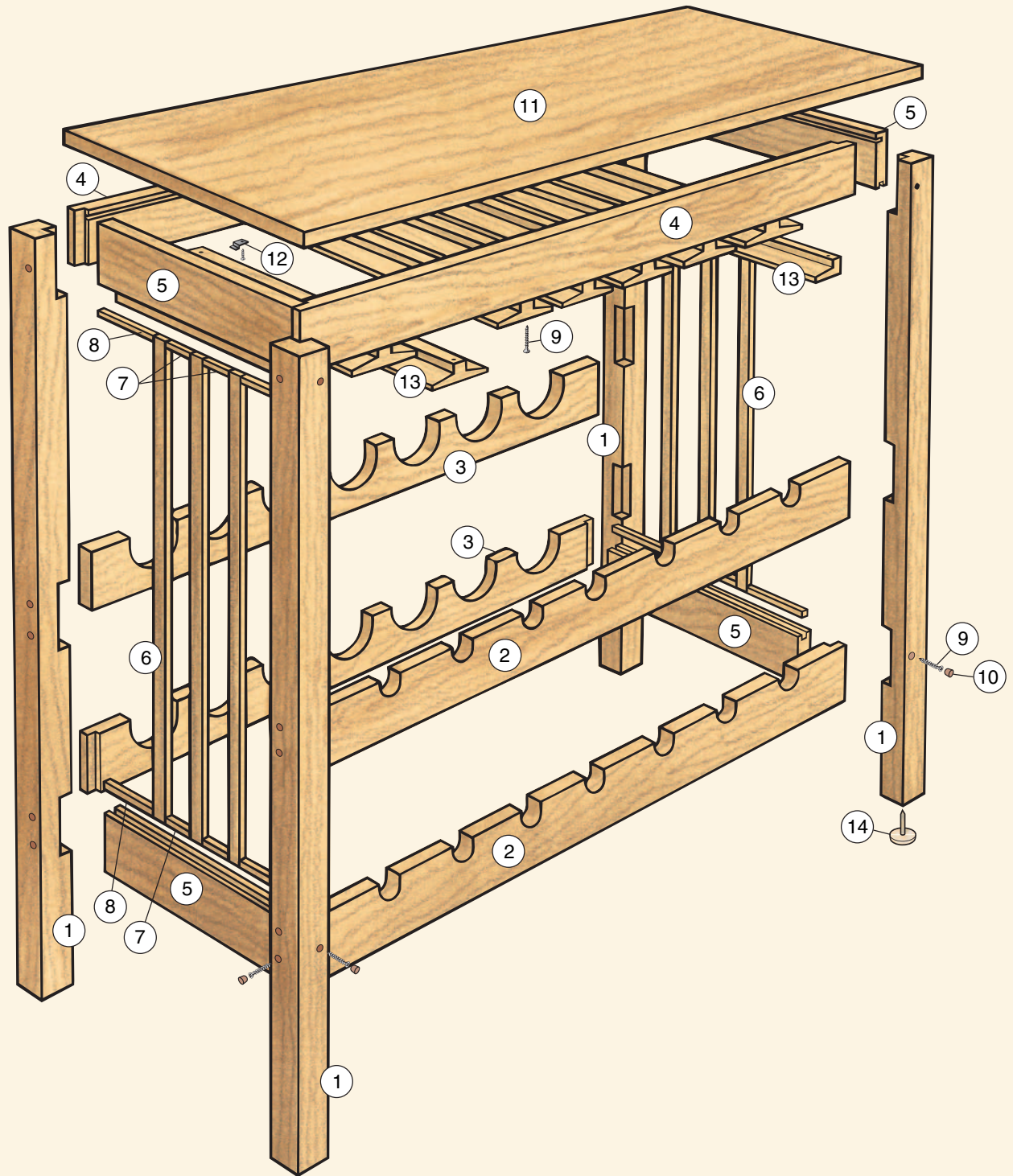
Quartersawn white oak was Stickley's wood of choice for the vast majority of his furniture pieces. Why quartersawn? According to Stickley, "the quarter-sawing method of cutting oak—that is, the making of the cut parallel with the medullary rays and

thus largely preserving them, instead of cutting across them and thus destroying their binding properties, renders quartersawn oak structurally stronger, also finer in grain, and...less liable to check and warp than when sawn in any other way."

Trouble is, 1 $\frac{1}{4}$ "-square white oak is not always readily available as quartersawn stock. That's not necessarily a bad thing: If you look at a wide plain-sawn board, the stock near the edges—where the annual rings are tightly packed together—is, in effect,



# Vintner's Valet Exploded View



## MATERIAL LIST – *Vintner's Valet*

|                               | T x W x L         |                                 | T x W x L         |
|-------------------------------|-------------------|---------------------------------|-------------------|
| 1 Legs (4)                    | 1¼" x 1¼" x 35¼"  | 8 Large Spacers (8)             | 7/16" x 3/8" x 2" |
| 2 Front Racks (2)             | ¾" x 3" x 28¼"    | 9 Screws (46)                   | #8 x 2½" Flathead |
| 3 Back Racks (2)              | ¾" x 3" x 28¼"    | 10 Plugs (28)                   | ¾" Oak Face Grain |
| 4 Front & Back Aprons (2)     | ¾" x 3" x 28¼"    | 11 Tabletop (1)                 | ¾" x 14¾" x 32¾"  |
| 5 Side Aprons, Stretchers (4) | ¾" x 3" x 9"      | 12 Tabletop Fasteners (10)      | 3/32" Steel       |
| 6 Slats (6)                   | 7/16" x 1" x 22¾" | 13 Wine Glass Molding (7 or 8)* | ¾" x 2¾" x 10¼"   |
| 7 Small Spacers (8)           | 7/16" x 3/8" x 1" | 14 Glides (4)                   | 7/8" Nylon Glides |

\* Depending on your stemware (see Technical Drawings).

quartersawn. When you choose the lumber for your legs (pieces 1), just make sure you keep one of these quartersawn faces to the front.

Rip the four legs to size about 1/8" larger in each direction than the dimensions that are given in the *Material List*, above. (While you're at the saw, this is a good time to cut all the wine rack's parts to size.) Joint or plane the legs to final dimensions, then cut them to length.

The two racks that hold the wine bottles and the apron that supports the tabletop are all set in stopped rabbets cut into the legs (see the *Exploded View* on the facing page). For the locations and dimensions of these rabbets, consult the *Technical Drawings*. Mark these locations on the legs using a pencil and marking gauge (see *Figure 1*), then score the ends of each rabbet location with a sharp knife, as shown in *Figure 2*. Use a Forstner bit in your drill press to remove most of the waste, then clean out each rabbet with a sharp chisel (see *Figure 3*).

### If You Don't Like Chisels...

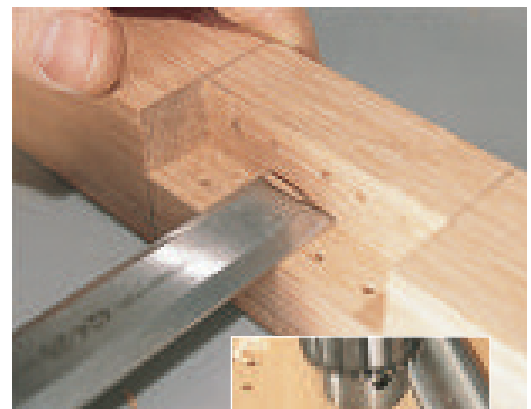
An alternative to the traditional drill-and-chisel method for making stopped rabbets is to split each leg, cut dados in one half, then glue the leg back together. The only disadvantage to this method is that a joint line is created, but it could be located in the side, rather than the front of each leg. You'd also have to oversize your stock in one direction by 1/8" to compensate for the blade kerf.

### Cutting Out the Bottle Racks

Your favorite beverage bottles will rest on two pairs of racks, each of which is scalloped out to hold seven bottles. The cuts in the two front racks (pieces 2) are 1½" diameter, while those in the back (pieces 3) are 3¼". You can create both the front racks at the same time by clamping them edge-to-edge, then drilling seven holes along the joined edges (see the *Technical Drawings* for locations) with a spade bit chucked in a drill press, as shown in *Figure 4*. The rough walls left by the spade bit can be cleaned up with a drum sander mounted in the drill press, as shown in the inset *photo* on the next page.



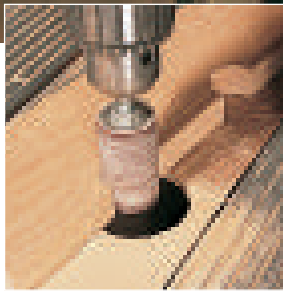
**Figure 2:** To stop chipping and tearout, use a sharp utility knife to score across the grain at each end of the stopped rabbets.



**Figure 3:** Clean out the rabbets with a well-honed chisel, after first removing most of the waste with a Forstner bit (see inset) in the drill press.



**Figure 4:** The two front racks are clamped together when drilling the half circles along their top edges. A drum sander cleans up these borings (see inset photo).



The larger semicircles in the back racks are best cut on a band-saw (see *Figure 5*), because a 3/4" hole saw can really chew up a nice piece of stock. However, a sharp circle cutter may make an acceptable cut. Either way, clean up these cuts with the drum sander, too.

### Building Two Frames

The frame under the tabletop is made up of the front and back aprons (pieces 4) and two side aprons (pieces 5). Before that assembly can be completed, however, you need to do a little milling.

Start by creating a single saw kerf in the inside face of each top apron piece (see *Technical Drawings*) for the fasteners that will later hold the tabletop in place.

Then cut a 7/16"-wide dado into the bottom edge of each short apron and the top edge of each stretcher (pieces 5) as shown in the *Technical Drawings*). These dadoes will house the slats (pieces 6) that adorn the sides of the table and the spacers (pieces 7 and 8) that separate these slats.

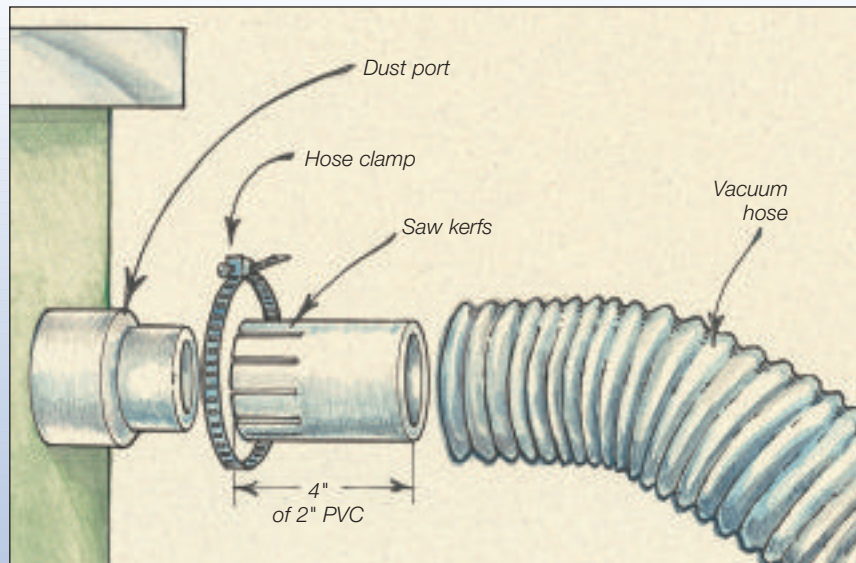
Cut a rabbet on each end of the two longer aprons. This rabbet not only makes for stronger joinery, but it will keep the joints invisible by hiding them inside the legs. Cut these rabbets on your table saw with a dado head, then predrill for the screws (pieces 9), and assemble the apron frame with glue.

A second frame is created when the side stretchers are joined to one front and one back rack in

## QuickTip

### PVC Collet Couples Vacuum Hose

If you are looking for an inexpensive way to attach a shop vac hose to a 2" machine dust port, a short piece of schedule 40 PVC may provide the solution. Make several 2" saw kerf slits into the length of the PVC so you can create a reducing fitting on one end. Tighten a hose clamp around the PVC and it will securely grab the dust port. The other end of the PVC should be just the right size as is to fit a standard 2 1/4" vacuum hose.



## STORING WINE



**Figure 5:** Slice the large semicircles in the back racks on a bandsaw, then remove the kerf marks with a drum sander.

the same manner as the tabletop apron. Rabbet the racks just like you did with the long aprons (see *Figure 6*), then assemble this frame too.

### Assembling the Frames and Legs

Dry-fit your two frames—and the six slats—to the stopped rabbets you cut in the legs (the apron frame goes in the top rabbets, and the bottle rack in the bottom one). Test the fit of the remaining rack elements in the middle rabbets, then use glue and screws to complete this assembly, setting the slats loosely in place without their spacers now, as you won't be able to install them until after the frame is glued up. To do so, drill large pilot holes through the legs (so the screws can move freely),



**Figure 6:** Use your table saw to cut shallow rabbets into each end of the front and back aprons and the lower racks for attaching these parts to the legs.

Many wines age well when cellared in a controlled environment. According to Bill Abrahamson of Sutler's Wines & Spirits in Stillwater, Minnesota, the temperature in a wine cellar should be between 55° and 58° F, while the ideal humidity range is a little more forgiving—40% to 60% works well. The most important aspect of both temperature and humidity is that, once set, they remain constant. Large variations in either can cause irreparable damage. Wine must also be protected from direct sunlight, which will break it down and cause an “early death”.

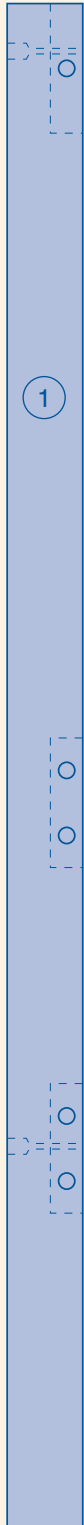
Cellared wine should never be stored in a vertical (upright) position, where there is no contact between the wine and the cork. If the cork dries out, oxygen can come in contact with the wine, causing rapid aging. Wine laid on its side lets the entire bottom surface of the cork contact the liquid: This is ideal. However, some vintners prefer to store wine at an angle, an arrangement that allows a better view of the label. This is fine as long as at least some of the cork is immersed.

Abrahamson also points out that not all wines are intended for prolonged cellaring: Some wines are best when used closer to their bottling date. A good wine merchant can help you choose the best options here.

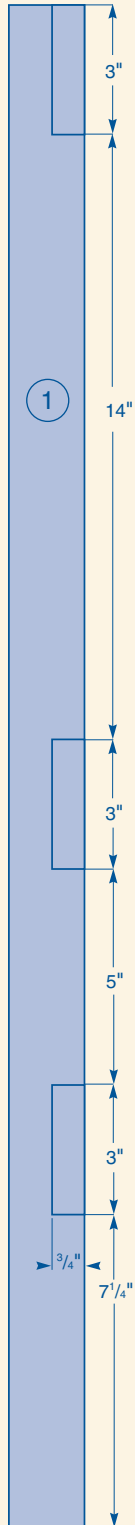




**Back Leg**  
(Side View)

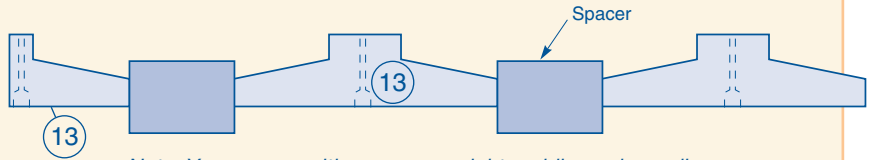


**Back Leg**  
(Front View)



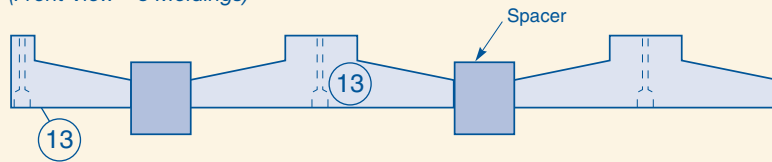
Note screw locations

**Wine Glass Molding Spacing**  
(Front View—7 Moldings)



Note: You can use either seven or eight moldings, depending on the size of your stemware. Use 1 3/8" spacers with seven moldings (above) and 5/8" spacers with eight moldings (below).

**Wine Glass Molding Spacing**  
(Front View—8 Moldings)

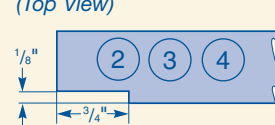


**Side Aprons and Stretchers**  
(End View)



The 1/8" kerf at left is also cut in the front and back aprons (pieces 4), but not in the bottom stretchers.

**Lower Racks and Front and Back Aprons**  
(Top View)

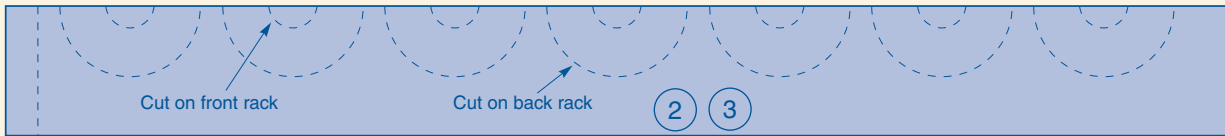


Cut rabbets only on the lower rack.



## Technical Drawings

### Front and Back Racks (Front View)



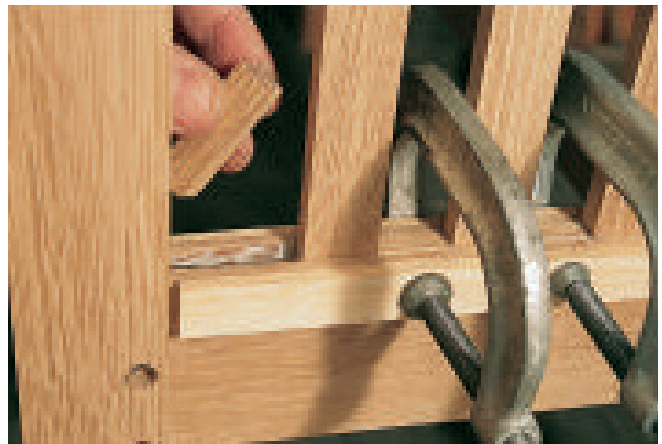
and drill small pilot holes in the frames where the screws need to grip. Counterbore for the screw heads with a 3/8" Forstner bit, placing screws at the locations shown on the *Technical Drawings*, then cover their heads with oak face grain plugs (pieces 10).

### Making the Tabletop

Three boards work well for the tabletop (piece 11), edge-joined and glued together. When the glue is dry, cut the top to size and sand it before installing it with tabletop fasteners (pieces 12). These lock into the saw kerf you cut earlier, and they are screwed to the underside of the top. Place three fasteners on each side and two at the ends.

Your wine glasses will be held in place by moldings (pieces 13) which are cut to length and screwed to the bottom edges of the long aprons. Note that the two outside moldings are made from a

**Figure 7:**  
*Use scraps of wood between the clamps and workpiece when installing the slat spacers in their dadoes.*



single piece that's ripped in half. You can use either seven or eight moldings, depending on the size of your stemware (if in doubt, go with the wider spacing), and dimensions are given in the *Technical Drawings* on the facing page for scrap spacers for this installation.

Glue and clamp the slat spacers into their dadoes, as shown in *Figure 7*, then sand the project up through the

grits to 180 and apply your favorite finish: we chose a darker walnut stain to match Stickley's original furniture. Finally, tap a nylon glide (pieces 14) into the bottom of each leg, and call your best friends over to admire your new Stickley-style wine table.

## QuickTip

### Resawing on the Bandsaw with a Point Fence

Resawing makes two thin boards (say, 5/16") out of one thick one (3/4"). It's usually done on the bandsaw with a stiff 1/2"- or 5/8"-wide blade. The best way to guide the board is to clamp a point fence to the saw. That's just a V-shaped fence, where the point is positioned the thickness of the resawn board (5/16") away from the blade. The idea is to keep the board vertical and pivot the board against the point the fence as needed to keep an even width of cut.