

## Glastonbury Chair



By Daniel Diehl (Copyright @1994) Capt. Frederich von Schwarzbourg

THE BASIC STYLE OF THE GLASTONBURY CHAIR is of a type called a 'faldstool,' meaning folding seat. When adapted to ecclesiastical use, the style was referred to as a 'litany desk.' This particular version of the chair was developed for use at the great medieval abbey at Glastonbury, Somerset, England, sometime around 1500 – supposedly by a monk named John Arthur, whose name can still be found carved on the inner face of the right arm.

Glastonbury abbey was the richest and oldest Christian enclave in all England. Having been a place of Christian worship since the first century, and reputedly, the site of the tomb of King Arthur, the power and influence of Glastonbury was unrivaled. Setting this chair apart from other faldstool and litany desks is the richly decorative Latin script on the arms and back. Across the top of the back are the words 'Monacus Glastome', identifying its place of origin.

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This particular chair, probably an 18th or early 19th century copy, can still be found in the pub of the George and Pilgrim Hotel in Glastonbury, which was constructed just prior to 1500 as an hostelry for pilgrims visiting the abbey. Located less than a thousand yards from the entrance to the abbey, the George and Pilgrim's last official pilgrim was Henry VIII. It was here, in 1539, that King Henry stayed the night, while his troops burned the abbey to the ground and

brutally murdered its abbot. An earlier, possibly original, version of the chair is located in St John's Church, Glastonbury.

This marvelous chair is a visually striking piece of furniture. It is also rather difficult to construct. Not only is the carving extensive and detailed, but some of the joins are trickier than they may appear. But if you are willing to take your time on this one, the results will be stunning.

The drawings provide all of the information necessary to build this chair, but I suggest making cardboard patterns, at least for the arm and leg pieces. Even slight deviations from the drawings may slightly alter the angle of some of the miter cuts, or the location of the dowel holes.

All of the lumber in this chair, other than the maple dowel pins and wedges, is white oak. To ensure proper fit and to maintain the structural integrity of the chair, it is best to use the full dimension lumber as noted in the material list.

Framing Members: The arms, front edge of the seat and the top and bottom rails of the back are made of 1¼-in. thick stock. The legs and side rails of the seat and back are 1-in. thick.

With the exception of the arms, all of these pieces can be planed down from a mill dimension 2x4. The arms will require an 8-in.-wide board, but by interlocking the narrow portion of the arms when they are laid out prior to being sawed, both arms can be cut from a single 3½ ft. long board. Note that while the side rails on the seat and back, and the legs, are both only 1-in. thick, the legs are 2¾-in. wide, while the side rails are 3 inches in width.

Seat and Back Panels: On the original chairs these were made from a single, 4-in. thick board, but even in the several centuries old copy in the photograph they are made of two boards glued together along the joining edge. I recommend the latter approach, but we will glue together a seat and back that are three boards wide, for reasons of economy. The boards used for seat and back are standard mill dimension 1x6 and 1x8. The seat, because it is wider than the back, will be made of two boards 1x8, and one board, 1x6. The back is made from two 1x6's and one 1x8. Remember to allow an extra three-quarters of an inch on both the height and width of these panels to provide the tongue that scats into the rabbeted groove in the frame that goes around both the seat and back.

Don't use oak veneer plywood for the seat and back. When plywood panels are cut down to fit into the rabbeted grooves in the frame members the plywood will lose strength, and you would see the layers of the ply on the back side of each panel. These chamfers were originally shaped with a draw knife, or a plane, but they can more easily be cut on a table saw or router. Using a drawknife or plane will, of course, give the chamfers the slightly irregular surface found on earlier pieces.

Framing Construction: The original Glastonbury chairs, as was true of all medieval furniture, were made without the benefit of glue. The large dowels that extend through the side rails and into the cross rails of the seat and back, were held in place by small dowels as illustrated on the blue prints in details "A" and "B". This combination of large and small dowels held the back and seat frames together, which, in turn, held the back and seat panels in place. For this procedure to work properly you must have a good snug fit at all of the major joins. A 'snug' fit means that the pieces should go together with a firm tap with the palm of your hand. The small dowels, of which there are twelve (two in each large dowel on the seat and back) should need to be driven lightly into place with a mallet if necessary, and then trimmed off carefully with a knife after they have been driven into place.

If you have questions about your ability to achieve a snug fit, or just want to insure tight construction, the dowels can be replaced with screws. The heads of the screws should be counter sunk about %-in. beneath the surface and the hole then plugged with a short length of dowel. The finished work will be virtually indistinguishable from the original means of construction.

Arms: Because the seat of the Glastonbury chair is two inches wider than the back, the arms set on a slight angle. To allow them to set flat against the side rails of the seat and back, the inside surfaces of the top and bottom ends of the arms will have to be cut on a slight angle. This angle will be about 5 degrees, but may vary slightly. It is prudent to reach the proper fit by sanding away excess wood with a belt sander. This allows you to remove only a tiny bit of wood at a time, until the proper fit is achieved. IMPORTANT: Remember not to drill the dowel holes in the arms until the arms fit properly against the side rails of the seat and back. Because the arms set on an angle, the

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dowel holes will have to be drilled at a corresponding angle to slide over the dowels properly.

Legs: The four 1-in. thick, leg pieces are all the same dimensions. The outside legs are cut away ¼ in. at the point where they cross the inside legs so that the two members interlock slightly. By interlocking the legs in this manner, the weight of anyone sitting in the chair is transferred off the dowels onto the leg stretcher and the legs themselves.

Dowels and Wedges: The entire chair is held together by eight 1½-in. dowels. Because the ends of six of these dowels are inserted into the ends of the 1¼-in. thick top and bottom rails of the back and seat, they will have to be stepped-down in size. Chisel (or turn if you own a lathe) the 2½-in. section of dowel that will be inserted, then carefully drill the hole in the end of the rail into which the dowel will be inserted. The hole must be straight, and drilling into end-grain can be tricky. If possible, use a drill press or boring machine for this operation.

The smaller dowels that hold the larger dowels in place should be positioned so that they help bear the weight of anyone sitting in the chair. That is to say, the small dowels in the top and bottom rails of the back should be inserted vertically, and the dowels in the front rail of the seat should be installed horizontally.

The wedges in the ends of the large dowels are all that actually hold the chair together. For the greatest strength, cut these wedges from ¼-in. thick maple or ash. The slots in the large dowels, into which the wedges are scaled, are difficult to cut. I suggest start-

ing these slots by drilling two holes a quarter-inch in diameter in the large dowel. One of them should be a vertical hole at the rear of the wedge slot, and the other, on a 15- or 20-degree angle at the front. The wood between these holes can be removed with a sharp knife.

I suggest that the rear edge of this slot (the edge closest to the chair), actually extend slightly beneath the surface of the arm (or leg) against which the inserted wedge will rest. This way, the wedge is actually pulling against the body of the chair and not just against the end of the slot.

Carving & Finishing: Executing the carving on this chair is going to be tedious and time consuming work. The combination of the complex arrangement of letters and the difficulty of working with oak probably make this a job for someone who has had previous experience. Although the ornate carvings are an integral part of this chair, the piece is both attractive and serviceable if it is left uncarved.

Cushion: Select the fabric for the cushion cover based on the amount of carving you execute on the chair, and how dark a finish you apply. A rich tapestry, a damask trimmed in fringe and tassels, or leather in natural or dyed colors, could all be used as historically appropriate seat covers.

(PLANS CONTINUE...)

## MATERIALS LIST

# OF PIECES	THICKNESS	WIDTH	LENGTH	Part
1 @	1 1/4"	8"	3'6"	Arms
10	1"	2 3/4"	9'	Legs
10	I"	3"	7*	Side Rails
10	1 1/4"	2 3/4"	3'	Scat Rails
10	1 1/4"	3 1/2"	1'6"	Top Rail of Back
10	2 1/4"	2 1/4"	2'	Stretcher
MILL TO STANDARD	MILL DIMENSIONS			
1@	1"	8"	4'	These two boards are to
10	1"	6"	4'	be used to construct seat
DOWELING				and back panels.
20	1 1/8" diameter		3'	Large Dowels
10	1/4" diameter		4'	Small Dowels
WEDGES				
10	1/4"	2"	3'	All Wedges