

The Log Cabin

History

The log cabin had its beginnings in Europe. Some theorize that it was brought to America in the 1630's by the Scandinavians (Swedes) who colonized the area which later became Delaware. Others believe that it originated in Germany, Europe, and was brought to America by either the Mennonites in the early eighteenth century or the Moravians who settled in the Pennsylvania area. This question is still unanswered today. We do know that British settlers, who needed substantial shelter immediately and who lacked a basic knowledge of primitive building construction, turned to the log cabin as a means of protection from the elements.

Since there was no labor force available, a man and his family were dependent on themselves to build the shelter they needed as a protection from "the driving winds of winter and the drenching rains of spring..."¹ Trees were plentiful and only two metal tools were needed for basic cabin construction. This was the American ax and a froe. The froe was used to make shingles. Thus, with adaptations from other cultural groups, the American cabin was born and provided shelter and comfort for rich and poor alike. It could last for several generations. It needed only a new roof approximately every fifty years.

For purposes of the Rural Life Museum, we focus on the log cabins of the southeastern section of the United States (Georgia, Tennessee, Alabama, the Carolinas, and Virginia), which were built by the pioneers of English and Scotch-Irish descent who migrated and settled the various sections of Louisiana.

English Cabins

1. Simple floor plan
2. Roughly sixteen feet square with one door, sometimes a window or two; low ceiling
3. Loft reached by tiny stairway

¹ Bealer, Alex. *The Log Cabin: Houses of the North American Wilderness*: Massachusetts: Barre Publishing Co., c. 1978.

4. Fireplace for heat and cooking

Scotch-Irish Cabins

1. Rectangular in shape – 16x20 feet
2. Two doors – one in front and one directly opposite in back
3. Generous hearth

Variations of the English and Scotch-Irish basic cabin designs developed according to need.

Some of the more common were:

Saddlebag

1. Two rooms, or pens, with a central chimney that provided a hearth for each room
2. Door for each room as well as 1 or 2 windows
3. Sometimes connecting door between the two rooms
4. Common loft for boys to sleep as well as for common storage

Dogtrot (English)

1. Constructed of two rooms separated by an open hallway
2. Shared a common floor and roof
3. Each room generally had a fireplace in its end wall

Cabin Construction

A well-made log cabin had its sides smoothed in and out, its corners neatly notched, its lines plumb and square. The wood was usually left unpainted and the natural color gradually changed over the years. Carefully constructed from the ground up, they lasted for many, many years.

Building Tools

The quality of workmanship reflected the skill of the workman. It required a number of tools that were simple and ingenious in principle but difficult to use properly without years of experience. These basic tools and their functions were as follows:

1. *Felling ax* – basic tool for felling the trees that formed the walls, sills, and joists. Other axes were the broad ax, used for making boards, and the mortise ax for chinking.
2. *Froe* – used for more delicate splitting of shingles. It was of iron doubled to form an eye and forge-welded with one of its edges blunt
3. *Foot Adz* – used for smoothing floorboards in the cabin
4. *Auger* – bored holes for pegs that were used for installing doors and windows frames
5. *Hammer* – used for nailing split shingles

Types of Wood

Tall, straight trees were necessary for cabin construction. Many different species were considered suitable, but the most frequently used were oak, pine, cedar, chestnut, and yellow poplar. Where available, cypress was used in the South and was the preferred wood.

A log cabin's durability depended on its sills, and, in Louisiana, native cypress was one of the woods used. When cypress was not available, then oak was the predominate wood for sills.

Most cabins had walls of pine logs, since they were plentiful in the virgin forests and shot up straight and tall as they searched for the sunlight essential to pine growth.

Laying the Foundation

Depending on its location, the foundation was built of stones, or wood, usually a foot or more in thickness. Most foundations might be raised two feet from ground level. This was due to possible flooding and ground moisture and to provide air circulation. Foundations and piers were carefully checked for level with a plumb bob or pan of water.

In areas such as Louisiana where stone was scarce, the cabin might be set on piers of rock or wood that rested on subsoil and rose a foot or two above the earth. This provided a space for dogs, chickens, or young pigs to find shelter from the elements. It was also used to store tools, etc.

Hewing the Logs

When the selected trees were cut, they were usually hauled to the cabin site where they were hewn by hand, using the broad ax and the felling ax.

Raising the Cabin

One man and his family could usually fell the trees, hew the logs, and build the foundation. But raising the cabin required strength, which was partly supplied by horses and oxen. Most of it, though, was provided by the men of neighboring farms. A cabin raising was treated as a rare social event, similar to a barn raising.

Twenty to thirty men and several teams of oxen could raise and roof a cabin in a day; finished except for the hearth and chimney. The following steps were used in raising a building:

1. Lay massive sill logs on the foundation or piers
2. Level sills and measure distance from front and back sills to ensure parallel
3. Mortise sill logs for floor joists
4. Install joists before walls go up
5. Put up walls
6. Lay flooring

Notching

Notching was a critical step in the process of log cabin construction. It served two purposes, and, as with all floor plans, reflected to some extent the cultural background of the builder. These were:

1. It allowed the logs to be locked together at the corners to provide solidity to the structure.
2. Minimized the interstices (spaces) between the logs and saved on the amount of chinking (filling) needed to make the cabin weather tight.

There were primarily three main types of notches. They are as follows:

1. Saddle Notches – found widely in Northeast Georgia in areas settled by the Scotch-Irish who moved from North and South Carolina in the 1830's. They were very easy to make. Examples are found on the Corn Crib and Stoker Barn at the Rural Life Museum.
2. Dove-tail Notches – *Half-dovetail* notches came from families of English descent. Considered the best because the outward sloping of the notches allowed water to drain away before it caused rotting. Examples can be found on the Stoner-Athens House and the Potato House at the Rural Life Museum. *Full-dovetail* notches came from the Germans of Old Salem, North Carolina and those in Virginia and Pennsylvania.
3. Square or Flat Notches – sometimes a cabin was constructed with square or flat notches. It was the easiest to make but did not lock the logs together and was not considered a sound construction method for a regular cabin. Because skilled carpenters were not available as people moved westward, they began building a “log pen” with square notches and covered with weatherboard; thus covering the open edges. We see this type of construction in two of the buildings at the Rural Life Museum – the Pioneer's Cabin (1810 House) and the Dog Trot House.

Fitting the Logs in Place

Most cabins had the heaviest timbers on the bottom, including the sills, which were quite heavy. These were pulled into place by horse or oxen. They were then raised by eight to ten men and set on the foundation. Levers were also used. Windows and doors were cut with a crosscut saw.

Roofing

Several thousand shingles were needed for a roof. These were made from green wood, which would not easily split when nailed. Elsewhere, oak, chestnut, and cedar were preferred because of their accessibility and durability. Because of the absence of these woods in Louisiana, cypress was commonly used for shingles. They all lasted 50 to 75 years.

Chinking

To make the cabin walls weather tight, mud and moss would be packed in the interstices between the logs. In the warm coastal plain of the South, many cabins had no chinking. This would allow light in a windowless room in the daytime.

Hearth and Chimney

These were the most time-consuming and the last components to be constructed in a cabin. Depending on the availability, rock, clay or cement were used for their construction. Along coastal regions, cement, which was made from shells, was used. In the 1810 House (Pioneer Cabin) at the Rural Life Museum, the hearth and chimney are made of clay. The cabin's roof has been extended to protect the clay chimney from rain.

Summary

Life in a log cabin was an education in life as a whole. Those born and raised in such a structure were exposed naturally to birth, death, sickness, joy, sadness, pleasure and much hard work. Families born and raised in such an environment lived in a crowded life but usually a good one. Their experiences shaped their character and lives into a deeply ingrained sense of self-reliance. This self-sufficiency could not have been drawn from any home but a log cabin.

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