Creole Carpentry in 1800

Building Practices and Carpenters' Tools That Created Alexandria's Kent Plantation House

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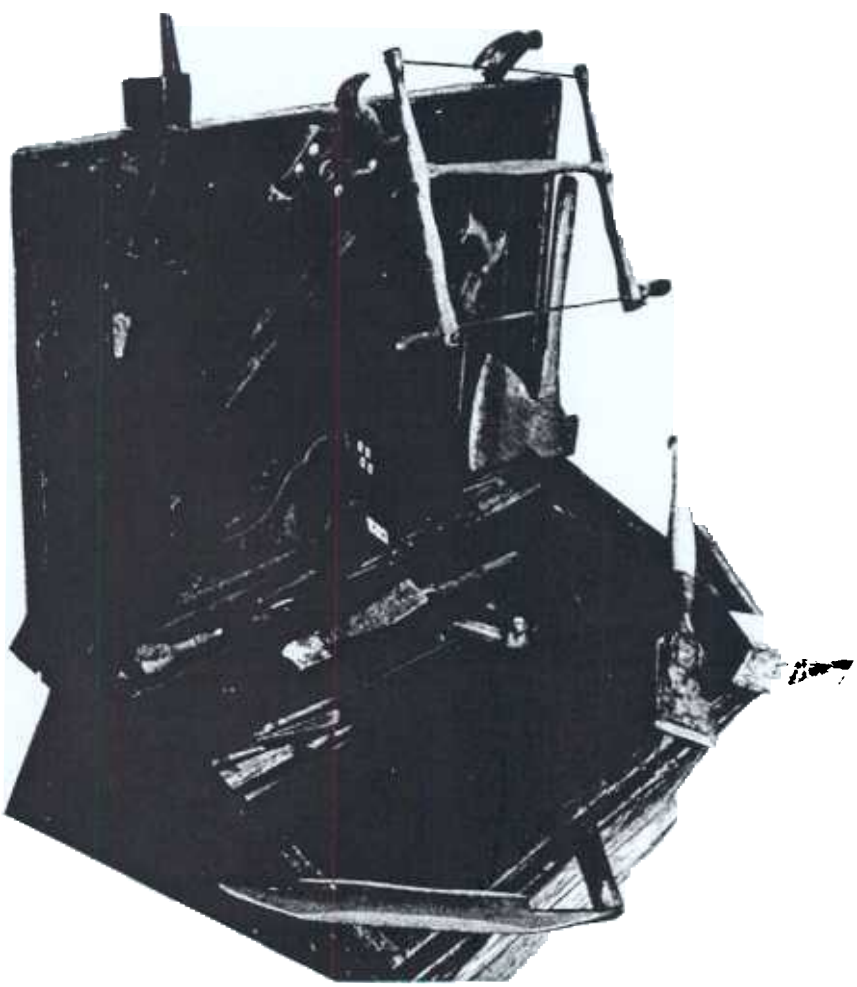
It is the year 1796 or thereabouts. Louisiana is a Spanish colony with French traditions and culture. Pierre Baillio II, of a prominent French family, has a sizeable grant of land along the Red River near a small town called El Rapido.

Baillio undertakes to have a house built for himself and his family, and he succeeds so well that the dwelling still remains sound and attractive after 175 years, a very great age for a house in America. To reach it takes good luck—escape from fire, flood and the Civil War. Continuous occupancy and the care that goes with it also helps. Most of all, the house must be soundly designed and made with good materials.



Carpentry tools typical of those used in the construction of Kent House. *Photograph by Thomas Sand.*

Now known (from a later owner) as the Kent Plantation House, Baillio's home has recently been made into a museum in Alexandria, a short distance from where it was originally constructed. There it stands as testimony to the skills of early Louisiana carpenter craftsmen.

In contrast to architects, who seem to leap into print with no great difficulty, carpenters are a silent tribe. They come to the job with their tool chests, exercise many skills of construction and some of design, and then pass on. Often their works are their only record. Occasionally some tools survive and, after generations of neglect and abuse, these may find their way into antique shops or museums.

Thus it is difficult to speak in detail of the builders of any given house. Here, methods, materials and tools of colonial Louisiana will be described in general terms but with the Kent House drawn upon for examples.

By 1800, when Baillio's house is completed, the Louisiana Purchase is 3 years away. The Industrial Revolution has not yet progressed far in America. The first Mississippi River steamboat will not appear until 1811. Upriver transport is limited, roads are few and poor and the cost of hauling freight by land is immensely high. Human travel overland is tedious. Iron is scarce and steel for cutting tools is scarcer yet.

Lumber is scarce too, at least in one sense. There is no shortage of timber but turning the trees into

Kent House Plantation, built 1798-1800, by Pierre Baillio II and named, by a subsequent owner, for Kent County, Maryland.

Authors' Note

Restoration of the Kent Plantation House gives Louisiana a very old and very rare example of homes representing the French and Spanish colonial periods. Local people built these houses with native materials. To aid in understanding their accomplishments, FORESTS & PEOPLE is publishing this article about carpentry as it was practiced around the time of the Louisiana Purchase of 1803.

The Trustees of Kent Plantation House, Inc., would like to hear from anyone who can contribute to the knowledge of the subject, and they would particularly welcome the donation of tools and other items known to date from this era. The address is 3601 Bayou Rapides Road
P. O. Box 4354
Alexandria, Louisiana 71301

The site is now known as Kent House State Commemorative Area. It is owned and operated by the Louisiana State Parks and Recreation Commission.

boards and planks is another matter for sawmills are few and primitive. In New Orleans several mills are located along the Mississippi River and are driven by water wheels set in ditches cut in the levee. When the river is high the mills run briskly, mainly sawing cypress. When the river falls the mills shut down. In general, however, the streams of Louisiana don't offer nearly as many wheel sites as do the small waterways of rocky New England. Possibly some horse-powered mills exist. There are no large circular saws yet and certainly no bandsaws. Instead, mills operate with a straight blade set vertically in a wooden frame or sash that is pushed up and pulled down by a pitman or connecting rod attached to the power source. There are no planing mills for dressing boards and making mouldings.

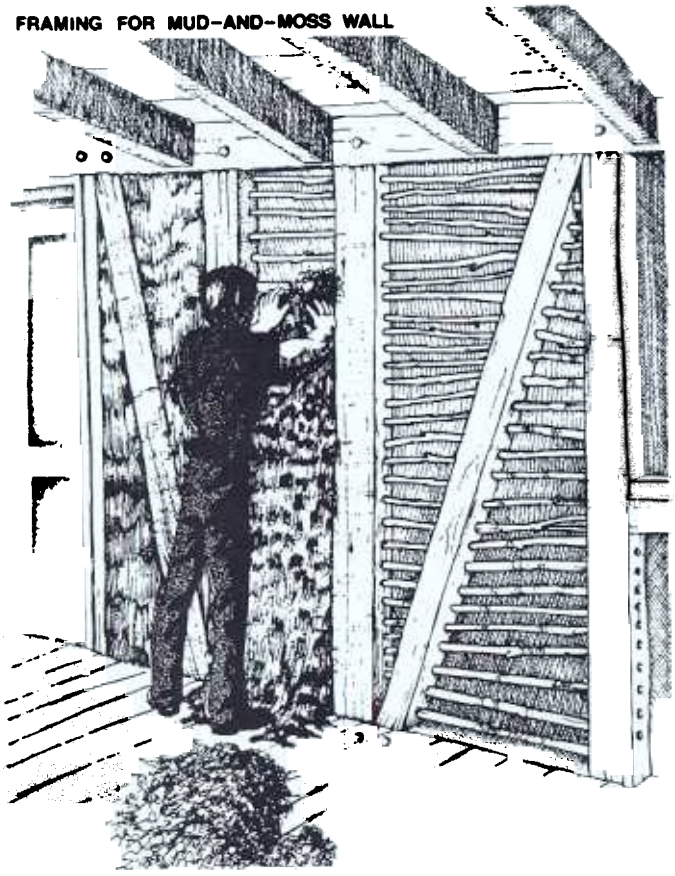
But important technological developments are in progress and in a few decades steam power will be widely used in transportation and to drive woodworking machinery. Yet at the turn of the century building technology in Louisiana consists mostly of taking local materials and transforming them with tools powered by the human arm.

Mud and Moss

The design and construction methods that Baillio chose were typical of the French and Spanish colonial period in Louisiana. The plan called for two large, almost square, rooms surrounded on all sides by a wide gallery. There was no second floor.

A big hipped roof extended without break over the galleries, shading the walls and allowing doors and windows to be kept open for ventilation even during heavy rains. The end galleries probably were enclosed before construction was complete, creating another room at each end and a smaller one at each rear corner.

Still in the tradition of country architecture, Baillio had brick piers built as a foundation. He thus raised the main floor for easy passage beneath his house but he may also



have been thinking of protection from floods in the spring and cooling effects in the summer.

Large timber sills were laid down on the piers and hewn vertical members were mortised into them and the ceiling plates above. These verticals were less numerous than the studs in a modern house and much heavier. Some were set at an angle to provide bracing. Probably the framing was jointed and assembled on the ground and the sections for the various walls then erected with the aid of pulleys and push poles.

When the frame was up and the roof in place, the spaces between the timbers were filled to ceiling height with mud—largely clay—in which Spanish moss or sometimes deer hair was mixed as a binder. This mud-and-moss wall filling, called bousillage, is also seen in the Rogue House of Natchitoches. The Kent House walls are about 6¼ inches thick and contain both deer hair and moss.

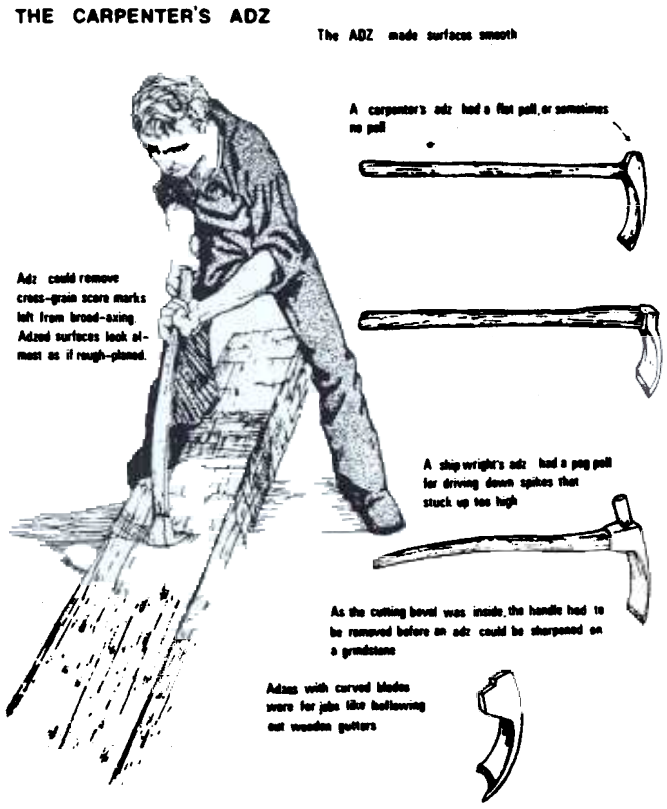
As it aged, the mud became very dry and hard. The roof overhang sheltered it in many places and elsewhere it was covered with wide, feather-edged cypress boards.

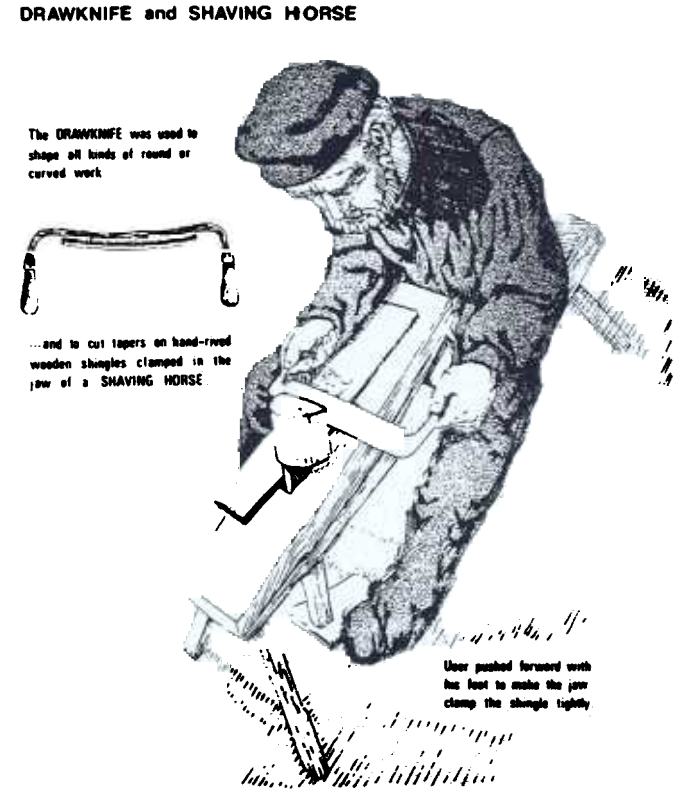
In that age of poor transportation, materials were taken close at hand. The rose-colored bricks were made on site from local clay, the timber cut from nearby forests. Dr. Floyd G. Manwiller, of the U. S. Forest Service in Pineville, has sampled wood from various parts of the house and found it predominantly baldcypress. The only other wood is southern pine, probably the fabled longleaf pine, which also abounded in the region. One of the 12- by 12-inch main sills is pine. It is probably a replacement since it shows the witness marks of saw teeth rather than the broad-ax marks common to the cypress sills. Also pine are the cap beam over the east wall of the original house, some of the rafters and some ceiling boards. Rather surprisingly, the panel over the mantle in the original east room is pine also. Any or all of these pine pieces may be replacements but the cap beam at least is probably original. Floors of the southeast and southwest rooms are cypress. The northeast room, added about 1842, has pine flooring made with a circular saw.

Cypress heartwood is very resistant to both decay and termites, and in the slow-grown stands of that day the stems were nearly all heartwood. Southern pine is stronger and thus serves well where resistance to bending is wanted—as in floor and ceiling joists of large rooms and rafters of long span. But the pine was more difficult to work with hand tools and so, as one student of the subject remarks, "If you needed more strength, you just hewed the cypress pieces larger."

The framing was carefully put together with mortise-and-tenon or lap joints locked in place with pegs driven into auger holes. Such joints are probably better than those made with spikes. Typically again, the roof was covered with hand-rived cypress shingles. Window woodwork is cypress, shutters and doors also. Moulding was sparingly used.

Ironwork such as hinges and fasteners was simple and may have been forged locally from iron bars and strips purchased from New Orleans importers. It may also have been purchased ready-made from





France. Window glass was similarly available in New Orleans as an import. In simpler country houses of the time locks and hinges were often of wood and window panes verged on luxury.

Machines for making old-style rectangular shaped nails were in production in the eastern states but by 1800 most nails were probably still hand wrought. The trade of nail maker was a recognized one and could be practiced wherever iron was available. Whether purchased or made locally, nails were expensive.

Bousillage walls were a common choice of country builders even when they had considerably less means than Baillio. Log cabins, it has been said, did not become common until English-speaking people from the Southeastern United States came to northern Louisiana after 1830.

What was the appeal of this method? Besides being adapted to local material, it required less work and time than brick construction (though brick-between-posts was also in use, especially in New Orleans). It gave weight and perhaps rigidity to a house—an advantage in windstorms. It had insulating value and might help to stop an Indian's bullet or arrow. It provided an inside wall that could be coated with lime or other preparation and then painted. Outside walls protected from rain by galleries or roof overhang could be given the same finish or left bare, at a saving of siding lumber. The method was popular in Louisiana for almost a century after the early settlers arrived in the 1720s.

The Builders

While no records are known, it is likely that actual construction of Kent House was done by slave labor. Newspaper advertisements of the time often mentioned slaves with carpentry skills. Perhaps Baillio had sufficient expertise among his own slaves but he probably also had the option of borrowing or hiring such craftsmen from other plantation owners.

To supervise the workers he may have employed a master carpenter, perhaps a freed slave but more probably an itinerant carpenter. Records show that many carpenters emigrated from France during the eighteenth century and there probably were others from New England and other states of the recently independent Union which Louisiana was yet to join in 1812. C. C. Robin, a Frenchman who traveled in Louisiana from 1803 to 1805, observed that carpenters' wages were excellent.

It is also clear that many who called themselves carpenters were capable of performing duties of an architect and contractor. Some had skilled slaves of their own. An advertisement in the New Orleans *Louisiana Gazette* for November 15, 1806, reads:

> O. P. Roberts, having lately arrived in this city, offers his services to the public as an ARCHITECT and HOUSE CARPENTER and presumes he can give every satisfaction in his branch of business. ...Either public or private buildings executed in every stile (sic) with a general estimate of materials necessary for the same. Any communication left at the store of Messrs. David and Harper, will be duly attended to.

Architects with formal training lived in New Orleans and books on

house designs were available but Baillio probably used neither. The traditional house he had in mind could have been executed by any good carpenter.

It seems likely that he sent slaves, armed with axes and saws, to cypress stands of the nearby Red River bottoms to cut timber for the wood he needed. The workers may have girdled the big trees in advance, let them stand for a year or so to partially dry out, and finally felled and floated them to high ground. Shaping of the logs into timbers could have been done at the landing to save hauling weight or the entire logs could have been transported to the building site before being shaped into dimension materials.

Though his testimony is from the 1850s, the experience of Solomon Northrup may apply also to the times of the Kent House. Northrup was a free man who had been kidnapped in Washington, D. C., and sent to Avoyelles Parish, adjoining the parish where Baillio had his land. Here he was put to work under itinerant white carpenters. He relates that he was once sent out with a logging crew that included four women who proved to be excellent choppers and equal to men in piling logs. Since there were no sites for water-power sawmills within many miles, Northrup added, planks and boards were generally made by slaves with whipsaws. Thus, he commented in his autobiography, there was plenty of extra work for the slaves when a planter decided to erect a dwelling.

One of Northrup's supervisors was a carpenter named Bass. Bass resided in Marksville but was a Canadian by birth and had traveled widely in practice of his craft, being most recently from Illinois. He was regarded as an eccentric and an abolitionist, but also as an excellent carpenter, and hence nearly indispensable to the community. (True to this characterization of his political views, he left his work and journeyed to New York State to enable Northrup to regain freedom.)

Steel Tools Are Best

In basic form, the hand tools of woodworkers are very old. The portable power tools of our own day have heavily infringed on a tradition that began when Stone Age man chipped an ax blade out of flint and created the hammer by hafting a stone to a stick.

If we can imagine a nineteenth-century carpenter dying and taking his tools with him to the far shore, we can also imagine that he would find it easy to explain their use to a Roman of the time of Christ. And he would not encounter undue difficulty with an Egyptian of 1,500 B.C. Both ancient carpenters would be surprised to see handsaws cutting on the push stroke instead of the pull. The Egyptian would find planes new to him but, being accustomed to doing fine joinery with copper tools, he would be most astonished by the cutting properties of the new arrival's steel-edged tools. The Roman may have had steel available if he could pay a high price.

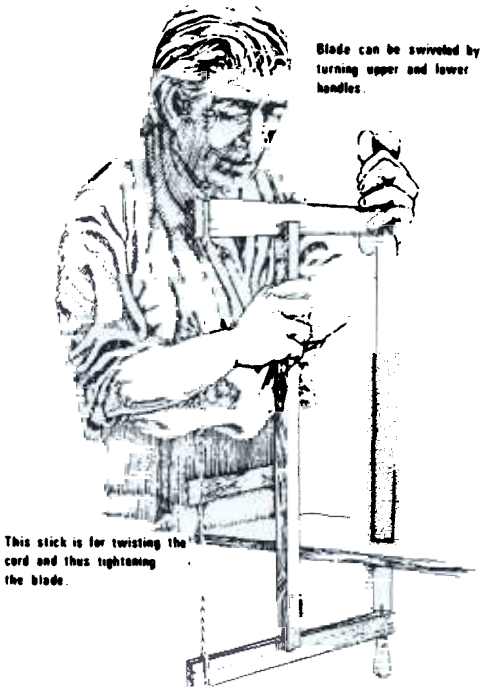
Men learned to smelt iron very early, perhaps about 1900 to 1400 B. C. This iron was almost free of carbon and therefore was easily bent and much too soft to hold a cutting edge. Very early men also, learned that heating the iron in exposure to carbon would produce a surface layer of steel that greatly enhanced the properties of all kinds of cutlery, from swords to saws.

This cementation process served through long ages, and until the middle of the eighteenth century the reliance of carpenters was on a form of it that yielded "blister steel." The steel was made by heating a good grade of soft iron in conjuntion with carbon-containing substances —charcoal, wood ashes, bones or the like. After a week or more of heating the iron absorbed enough carbon and also displayed surface blisters created by a reaction between the carbon and slag in the iron. After being worked to improve distribution of the carbon the steel was ready for use. In the *Louisiana Gazette* for July 7, 1810, two New Orleans merchants advertised that they had received, "per ship *Mary* from Philadelphia... 20 bundles Blistered Steal." (sic)

In 1742 or thereabouts the Englishman Benjamin Huntsman greatly improved the quality by melting pieces of blister steel in a closed crucible. Fluxes removed impurities and melting made the metal homogeneous. At the end of each crucible run, the steel was cast into ingots that were later reheated and formed into bars and flat stock from which tool bits could be made.

The advantages of this crucible (or cast) steel seemingly were first appreciated in France. The British

SMALL FRAME SAW
for straight and curved cuts



regarded it as unnecessarily hard. French carpenters moving to Louisiana may have had tools so edged. At any rate, French competition caused manufacturers in the great British tool-making city of Sheffield to step up their export production and promotional efforts. Modern tool collectors cannot escape the impression that thousands of Sheffield workers must have spent their entire lives stamping "cast steel" on the many edge tools made in that city. Manufacture did not begin in this country until well into the nineteenth century but thereafter blades with pretensions to quality were also labeled as cast steel, a practice which survived until well into our own century. Blister steel continued to be manufactured but could not compete in prestige.

Whether cast or blistered, steel was expensive. Whenever possible, it was used only for the cutting edges. The rest of the tool was made of soft iron. Blacksmiths made many tools locally by welding but it took skill to get both metals to the right temperature at the same moment. Too much heat would burn the steel, whereas the iron had to be very hot before it could be welded.

Wherever the tool was made, the weld between the hard steel edge and the soft iron body can easily be seen when the rust is scraped off old axes, drawknives or plane blades. Some tools, like files, were of steel throughout.

The Tools Themselves

In general design as well as in edges, English tools became the standard in America. The traveller C. C. Robin observed that in 1803-1805 all tools used by the wheelwrights, carpenters, and coopers of New Orleans were of English manufacture. Though inclined to measure things by the standard of Paris, Robin concluded that English tools were superior in shape and finish to French ones. So much so, he averred, that Frenchmen arriving in Louisiana abandoned the tools they had brought with them and adopted English ones. He particularly admired the handsaws, thinking them less clumsy and tiring than French frame saws. For a reasonable sum, he said, one can import a chest of carpenter's tools from Philadelphia.

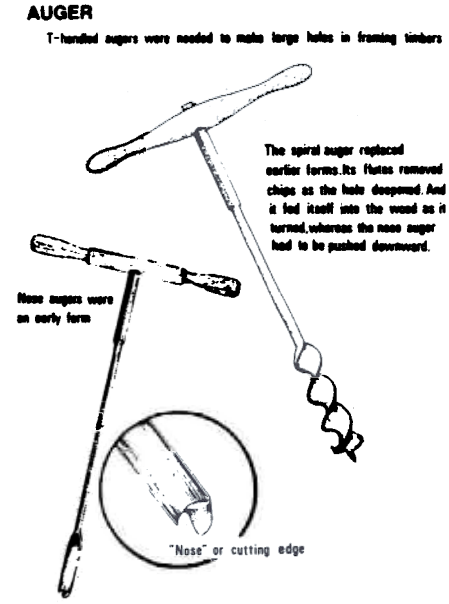
Though Robin's comments indicate that complete tools were being imported, many craftsmen purchased blades and made the wooden parts themselves. They could thus suit their own ideas

about design and also save money. With a blade in hand, for example, it is easy to make the rest of a frame-saw and old woodsmen often had their own personalized patterns for ax and adz handles. A testimony to the scarcity of metal is the considerable number of surviving tools with blades formed by reshaping and retempering worn-out files and rasps.

Many tools of colonial times are readily recognizable in modern counterparts. A chief difference is in items made obsolete by the coming of steam-powered sawmills and planing mills. Another difference is that many tools formerly made of wood are now of metal. Following are brief descriptions of tools that a journeyman or master carpenter of 1800 probably owned. To protect and transport the smaller tools he typically built for himself a stout wooden chest with dovetailed corners and a paneled top.

A modern builder is likely to have an ax and a hatchet, but an earlier carpenter had several. Besides a chopping ax, he had a wide-bladed broadax for squaring timbers out of logs. To use it, he propped the round log a foot or so off the ground and with twine and chalk snapped a line along the length to mark the first face. Next he took an ordinary ax and chopped guide cuts at right angles to the log length and as deep as the line. Then he broad-axed his way down the log, cutting parallel to the grain. It was a man familiar with broadax technique who first said, "Hew to the line, and let the chips fall where they may." Depending on how the timber was to be used, the worker then turned the log and hewed only the opposite face, or squared all four faces. Some beams of the Kent House plainly show the transverse guide cuts of broad-ax work.

The side of the broadax toward the finished face of the beam was flat, the sharpening bevel being entirely on the chip side. The carpenter typically had a large hewing hatchet sharpened in the same way as a broadax and also used for shaping timber. He probably had a shingling hatchet. He may or may not have had a flat-topped hatchet for splitting and nailing on lath, for the involuntary carpenter Solomon



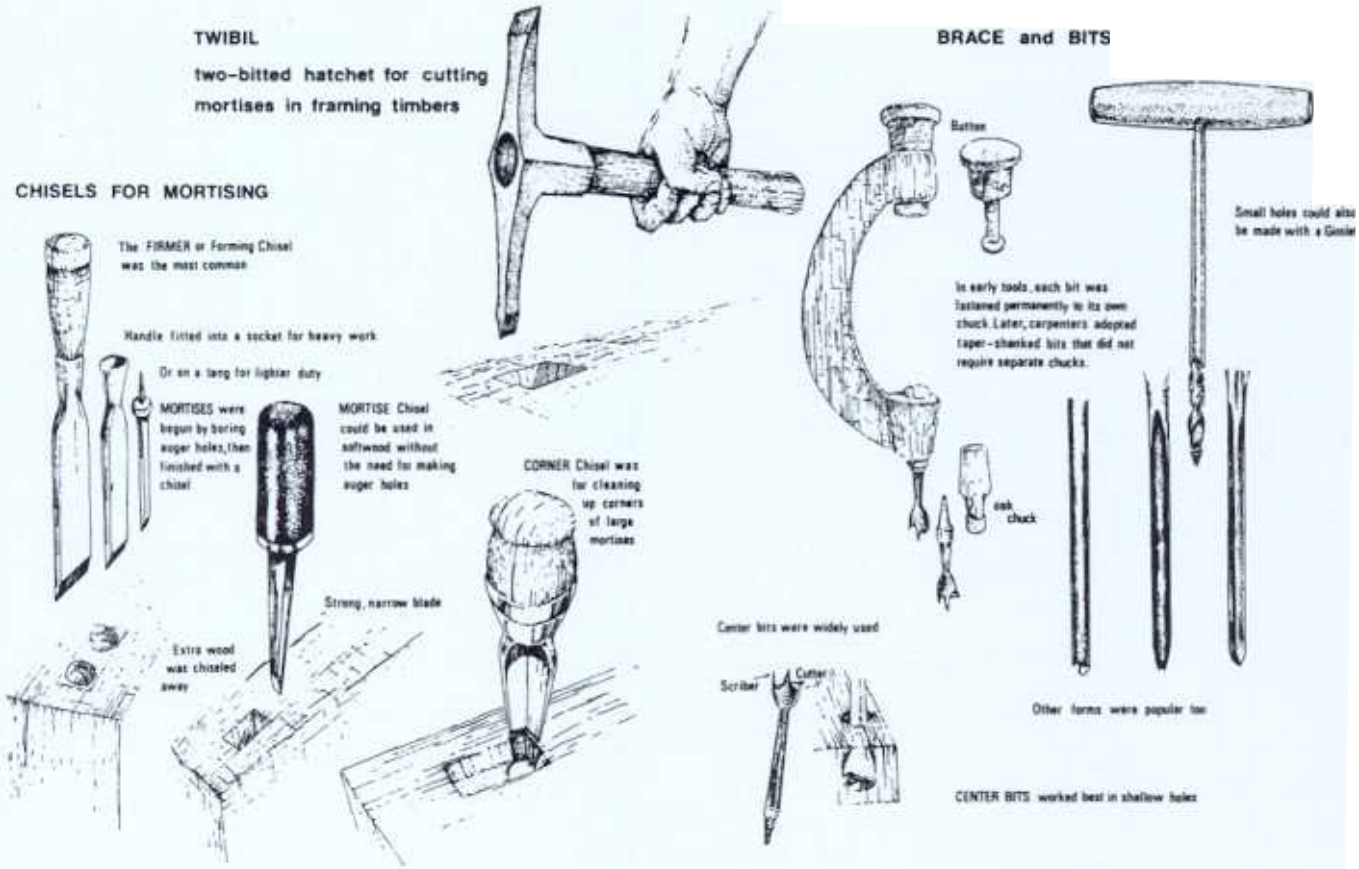
Northrup said that plastered rooms were rare in Avoyelles Parish even as late as the 1850s.

To aid in making the rectangular holes for tenons of mating beams, the carpenter may have had a short-handled mortise ax. For smoothing the rough cuts of this ax, he may also have owned a twibill, a kind of cross between an ax and a chisel.

Adzes were premier tools of shipbuilders in an era when most long-distance transport was by water. House carpenters used them also, as when they wished to smooth off broad-ax marks on beams exposed inside the house. Good adz work looks much like planing. Contrary to some opinion, adzes were seldom employed for squaring timbers out of logs. But since the adz can be used to dress top surfaces of timbers (while the heavier broad-ax is restricted to side surfaces), it was handy for trimming and leveling after framing was in place but before floors were laid. It could also be used to surface beams exposed to view inside the house.

An adz must be very sharp to do good work, and the direction of swing is toward the user. Thus the tool was dangerous to feet. It has been said, one hopes untruly, that expert adzmen sometimes used their toes as chip breakers.

The carpenter needed a variety of chisels. Perhaps his most unusual one had two cutting edges, at an angle of 90 degrees to each other for cleaning out the corners of mortises. He also had conventional



chisels with very heavy blades for mortising, and lighter chisels for easier cuts. Some were pushed into the work by hand, some were struck with a mallet. For general trimming and fitting of large joints he used a slick, a chisel with a blade 3 to 5 inches wide and a long wooden handle. Depending on his skill and interests, he had gouges for simple carving and for close fitting of curved surfaces.

Augers of modern type, with spiral flutes for lifting chips out of the hole, were patented in 1809 by Ezra L'Hommedieu of Connecticut. Possibly they were in use before that. C. C. Robin noted that New Orleans woodworkers were using bits that cleared out the hole, but he did not elaborate. It is likely that the builders of Kent House used bits whose cutting portion was a half-cylinder (somewhat like half of a pea pod), with the bottom edge and lower portions of the side sharpened. On bits of the large diameters needed in framing, the upper shafts was fixed to a wooden handle, so that the complete tool was T-shaped. Since there usually was no lead screw, a shallow starting hole had to be gouged, and the worker had to keep pressing downward to make the bits cut. When the hole filled with chips, the auger had to be pulled out and reinserted. The spiral auger, developed later, was a great improvement since it lifted chips out of the hole.

For holes of diameters up to a half inch or so, the carpenter used the same kind of bits in a wooden brace of rather fragile construction. He also had gimlets, either for chucking into the brace or with a small wooden handle permanently riveted to each bit. Gimlets had a worm or screw at the tip and thus fed themselves into the wood. For shallow holes, center-bits were also available.

Drawknives were common. Froes, struck with a club, were widely used to split shingles from blocks of cypress.

Measuring tools included those in use today but different in design. The carpenter usually made his own squares out of wood though he may have had an iron framing square. His level, also of wood and handmade, had no glass or bubble. Instead the base supported an upright to which a small plumb bob was attached. When the bob pointed to a permanent mark on the base, the work was level. These levels could only be used on horizontal work. For getting house framing vertical, the carpenter resorted to a plumb line, often merely a lead weight hung on a long cord.

A wooden marking gauge, handmade but resembling modern instruments, enabled the carpenter to scribe a guideline when he wished to rip a board parallel to its edge. A compass or dividers was common equipment also. Rules and measuring sticks were made and scaled to lengths deemed convenient but the folding rule probably was still in the future. Pencils were known but scratch awls were more widely used to mark wood for cutting.

Because nails were scarce in 1800, the hammer was less overwhelmingly the carpenter's symbol than it became later. Still the craftsman would have a claw hammer for nailing floor boards, stairs, shingles, and siding boards. For riveting and for setting saws, he might have a hammer with a cross peen.

Because iron should not be used for pounding on wood, the carpenter made himself a hickory mal-

let for striking the handles of chisels and driving pegs into joints. He might have a very large two-handed mallet, called by English carpenters a commander, for driving home the joints of heavy framing. A screwdriver may also have been among his fastening tools, but screws were sparingly used. They were manufactured in crude machines powered by hand or water. Until 1846 all had flat points.

The planes in a colonial carpenter's tool set differed in at least two ways from those of a modern craftsman. First, they were much more numerous and varied, 20 to 30 not being unusual. Second, they were made almost entirely of wood, except for the blades.

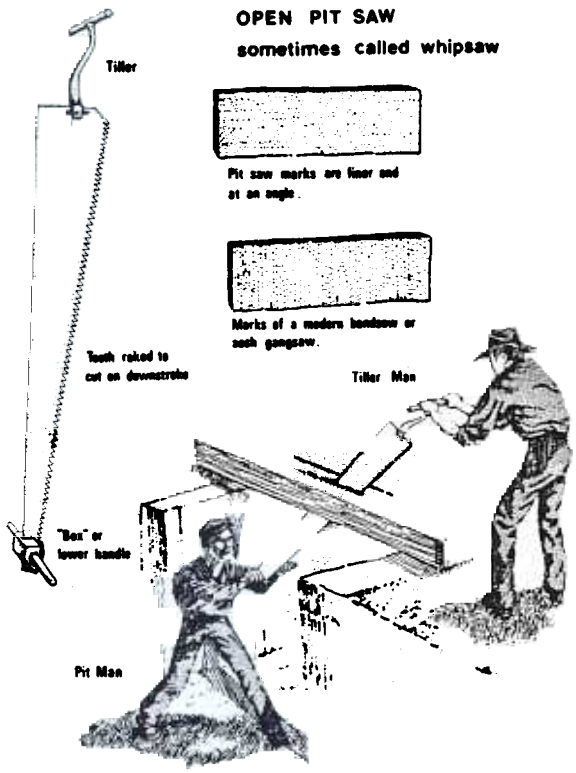
To start off with; the carpenter needed a jack plan, a jointer and a smooth plane. Hardly less necessary was a fourth plane for cutting rabbets in the edges of boards such as the joints in shiplap siding. When boards were used to cover a large surface (for example, the ceilings of some Kent House rooms), the edges were often mated with tongue and groove joints. Such joints helped to keep the boards in alignment and also restricted the passage of air and light. Here the carpenter used a pair of planes, one to cut the tongue and one the groove. Often he had several pairs, for lumber of various thicknesses.

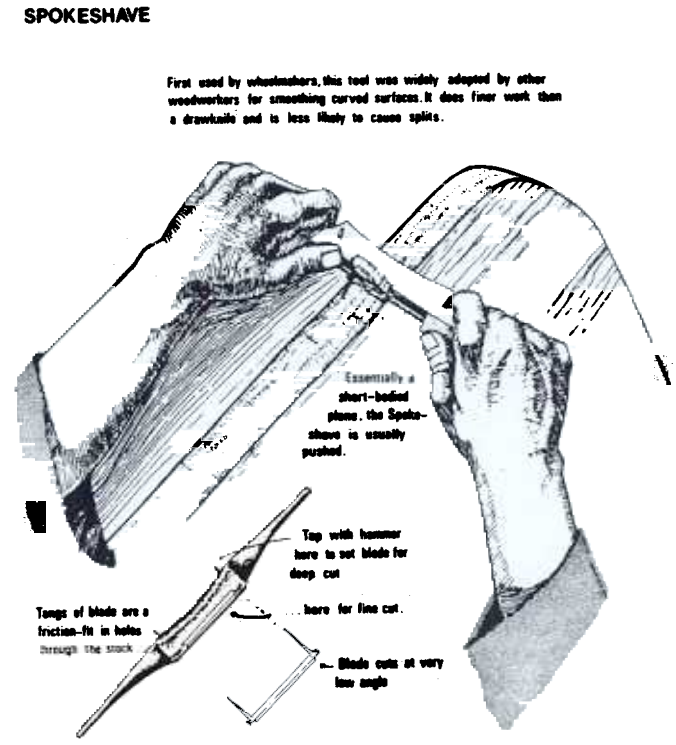
Probably he also had a plow plane with 6 or 8 interchangeable blades for cutting grooves of different widths. The plow was the most complicated and expensive plane in the chest. It had a fence or guiding piece that could be adjusted to make it cut at any desired distance from the edge of the board. Further, a shoe could be set to regulate the depth of cut.

Additionally, the carpenter would want at least a few planes for making simple mouldings. Partly for decoration, partly to mask any unevenness between mating boards, he often planed a bead on the edges of tongue-and-groove paneling or on corners of exposed beams and other interior woodwork. Such beads can be seen in the Kent House. Beading planes came in sizes from one-eight of an inch to more than an inch—a different plane for each size.

Because there was no other source of millwork, the carpenter needed a plane for making wooden window sash.

If he wished to run some purely decorative mouldings, he had a very wide choice in size and style of planes. Hollows and rounds, astrag-





als, ogees, scotias, and ovalos were only a few of his options.

Beech was the primary wood for making all of these planes. It was hard, yet could be worked and in use it developed a polish that made it slide easily. Sometimes splines of very hard boxwood were inserted at points most exposed to wear, and much less frequently iron or brass wear plates were installed. Blades extended through holes skillfully cut through the stock and were held in place by wooden wedges. A tap on top of the blade would deepen the cut, and a whack on the back of the stock would raise or loosen the blade. But old carpenters seldom spoke of plane blades. In recognition of the reliance on wood, they referred to the cutting part as "the iron." Progressive-minded carpenters were likely to have double irons in their jack, jointer, and smoothing planes. The second iron did not cut but was a chip breaker to improve smoothness of work in contrary-grained wood.

The carpenter also had a wooden spokeshave—in function a very short-bedded plane for use on curved surfaces. He may have had sandpaper, and he surely had a rasp. A pincers, made by a local blacksmith, was handy for pulling nails. For raising heavy weights he may have carried a jack and tackle blocks. He probably had wedges for splitting big logs to size at times when it was inconvenient to use a saw. He touched up his blades with whetstones and did heavy sharpening on a circular grindstone, turned by hand.

Finally, his tool set was completed with a number of saws, of which the biggest was a pit saw for ripping boards and planks out of squared-up logs. Traditionally this saw consisted of a blade 5 feet or more in length, strained in a rectangular wooden frame. The log was placed on a trestle or over a pit in the ground and a chalkline was snapped to mark the width of the board to be cut. The saw required two men. One stood below, to pull down for the cutting stroke, and the other stood on top to raise the saw again. In a second form of pitsaw, probably more common in America, the frame was omitted and the handles attached directly to each end. This was often called an open pitsaw or a whipsaw. Like the framed pitsaw, it was for ripping only. For felling trees or cutting timbers in two, a two-man crosscut saw was used.

Once he had his boards, the carpenter may have done further cutting and fitting with a one-man frame saw that could cut curves as well as straight lines. If he liked English tools, however, he probably preferred to do his straight cutting with a handsaw like those seen today.

He perhaps had a fine-toothed saw, the back stiffened by a strip of iron or brass, for making dovetails or small tenons, or for use in a miter box. Probably he had a keyhole saw. He may have had a trenching saw for use in stair building. He kept his saws sharp with files and set them with a wrest or a hammer.

It is a mistake to idealize the past, but interesting to study it. As one becomes familiar with the tools and works of the old carpenters, he sees how they and their work represent a close and very skillful accommodation to the materials, knowledge, and economic conditions of their day. In design the tools were clean and almost entirely functional, making them still appealing in their own right to collectors.

The carpenters themselves were human beings, and irrelevancies had not been as completely sifted from them as from their tools. They

therefore sometimes made mistakes or bungled jobs through carelessness. But many worked in pride of their calling, combining technical skill with honesty of effort and directness of purpose. The Kent House, among many others, remains as a self-created memorial to men who did as well as they could in their own time.

Baillio and his wife have their graves in Rapides Cemetery in Pineville, across the Red River from Alexandria. Their workers are buried—who knows where? In their day, these craftsmen sustained a tradition of woodworking that began thousands of years ago. And craftsmanship did not die with them.

Acknowledgments and Apologies

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Errors of fact and judgment undoubtedly remain, and are solely chargeable to us. Since our references tended toward the Anglo-American tradition in tool design and use, we may have understated French influences. In addition, there were many aspects, such as wood seasoning, on which we found little or no published information.

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