The Early Mills, Railroads, and Logging Camps of the Crossett Lumber Company

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From the earliest small-scale logging and milling operations to the multinational conglomerates of today, the timber industry has long shaped the social and economic history of the southern United States. Nowhere is this more true than in Crossett, Arkansas. Born of the axe and saw, oxen and steam engines, and nurtured by the railroad during its infancy, Crossett was transformed from a remote and virtually unknown tract of rolling pine into one of the leading forest products centers in the United States, yielding enormous quantities of dimensional lumber, paneling, paper and related products, and wood-based chemicals. The story of Crossett through its first forty-five years rests almost exclusively on a single institution—the Crossett Lumber Company—and the cast of characters responsible for its founding and survival.

For most of the nineteenth century, the vast pine, hardwood, and cypress forests of southern Arkansas went largely untouched, with only small logging and milling outfits turning out goods mostly for local consumption. Industrial-scale lumbering operations could not begin until railroads and other transportation networks improved and regional timber markets developed. The year 1899 proved a momentous one for the re-

1Corliss C. Curry, "Early Timber Operations in Southeast Arkansas," *Arkansas Historical Quarterly* 19 (Summer 1960): 111-118. Cypress and pine logs were cut and floated to Louisiana for milling as early as the late 1820s, but not in any great quantity.

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Figure 1. Virgin loblolly and shortleaf pine timber near Huttig, Arkansas, southwest of Crossett. In 1905, such pine-dominated stands characterized much of the forests in southern Arkansas and northern Louisiana. From *American Lumberman*, January 28, 1905.
CROSSETT LUMBER COMPANY

Investors formed the Crossett Lumber Company soon after Edgar Woodrow "Cap" Gates (then of the Gates Lumber Company in Wilmar, Arkansas) learned of a 47,000-acre tract of prime virgin pine for sale in Ashley County, Arkansas, and Morehouse Parish, Louisiana. After its incorporation, the Crossett Lumber Company acquired this property from the Muskegon, Michigan-based speculators Horatio N. Hovey and John B. McCracken for $7 per acre, payable over a seven-year period. The Crossett Lumber Company was given the right to proceed with its lumbering plans later that same year. The company took its name from Edward Savage Crossett, who would serve as vice president. Other officers included: Cap Gates, secretary; Charles W. Gates (Cap's brother), president; and John Watzek, treasurer.

Cap Gates, who would supervise the day-to-day operations of the Crossett Lumber Company, moved swiftly to start lumber production. But officials in Hamburg, Arkansas, rebuffed his plan to build a sawmill in that city. By 1899, Hamburg already had three sawmills, and local employers did not want to lose any workers to a new outfit. According to John Wordy Buckner, Hamburg civic leaders "did not want the mill to hire their Negroes, and they felt foreign sawmill people in their town would be undesirable." Determined to establish the Crossett Lumber Company, Gates scouted other locations in Ashley County before picking a spot for his mill about nine miles southwest of Hamburg, reportedly on the favorite deer stand of a friend, County Judge Jim Lochala.

Hamburg officials probably felt justified in refusing the Crossett Lumber Company. Standard lumbering practice at the time called for a company to buy timber, build a mill, clear the forest, dismantle the mill, and move on. This "cut-out-and-get-out" strategy typically left extensive cutover lands of little or no value. Companies rarely attempted to sell the cleared properties. Instead, they simply abandoned the land, which reverted back to the county following tax delinquency. Undoubtedly, Cap

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3The legal transfer of the fee title of this property to the Crossett Lumber Company was finalized in 1905 when the terms of the initial land contract were satisfied.

4All of these men had experience in the pine lumber business in the area: Charles Gates at the Fordyce Lumber Company; and Crossett and Watzek as investors in several other operations.

5Buckner, Wilderness Lady, 7-8.

Gates initially planned to follow this standard practice. Soon after the company's founding, he opened a land office in Hamburg and purchased additional property and timber. By the end of 1900, the company owned almost 100,000 acres. These initial large-scale timber acquisitions ensured several decades of raw materials. And what a resource it was! Louis L. Morris, one of the earliest timber and land purchasing agents of the Crossett Lumber Company, reported that when he came to the Crossett area in January 1907, there were individual pines with 7,500 board feet of timber in them—enough to build a three-room house.

Typically, the first step in constructing facilities the size of Crossett's was to bring in a small mill and cut the heavy construction timbers required for the big mills. In the process, many other boards were manufactured, which were used to build offices, the company store, and homes for workers. Within weeks of being delivered to Hamburg on May 17, 1899, the small mill was hauled to Crossett and soon began operating. This mill required a main steam engine, a boiler, and heavy line shafts of metal and pulleys to saw timbers and lumber out of the logs. The slabs and sawdust were conveyed out of the mill to the waste burner or were used as fuel for the boiler that powered the mill and heated the company's office buildings. After producing the large timbers and other boards needed to construct the larger pine mill and other necessary facilities, the small mill was converted to cut hardwoods taken from the pine stands. This hardwood milling operation was subcontracted to Garretson and Gaughn, about whom little is known.

7George W. Gray, "The Forest Lives On," Business Magazine (November 1927) [retyped copy on file at the Crossett Public Library, volume unknown]: 1-4. Most lumber companies acquired from ten to thirty years' worth of timber before starting operations, which required a significant investment above and beyond the resources spent on building and staffing a mill complex; Kenneth L. Smith, Sawmill: The Story of Cutting the Last Great Virgin Forest East of the Rockies (Fayetteville: University of Arkansas Press, 1986), 7-90. Although much of the land was purchased outright, on some parcels only the right to the timber was purchased, often with contracts that permitted the company up to twenty-five years to cut the trees; "Crossett Names Giant Pine to Honor L. L. Morris," Forest Echoes 10 (May 1950): 4.


9The first residences in Crossett had wooden floors and walls but canvas tops, apparently a common practice as operations were beginning in undeveloped areas. Before this, almost assuredly, only canvas tents were used; Buckner, Tent City, 4-9.

10Etheridge, History of Ashley County, 144; Balogh, "Crossett," 157; Buckner, Wilderness Lady, 8.

11According to a handwritten account in an old Crossett Railway Company ledger on file at the University of Arkansas-Monticello Library, these gentlemen not only operated the hardwood mill but acted as agents of sale for the company as well. This arrangement prevailed for at least a decade.
Soon after Gates had located his mill, the Mississippi River, Hamburg and Western Railroad (MRH&WR) began extending its tracks from Hamburg southwest to Crossett. This line was not yet complete when Gates started building the first of the sawmills. Not surprisingly, the lack of rail access at the Crossett site hampered construction. The first milling had to be skidded for miles on sleds pulled by oxen over ground muddied by recent rains. After the MRH&WR reached the growing town on May 7, 1902, a local newspaper observed, "[t]he machinery of Crossett Lumber Company now coming in, packed in freight cars, covers more than a mile of track, with the big boilers and engines to bring up the rear"—a clear indication of the scale of this operation.12

12Ashley Eagle (Hamburg), May 8, 1902.
By June 1902, investors had spent one million dollars just to start the Crossett Lumber Company. The first big pine mill was more of a complex than a single plant, consisting of two band mills, dry kilns, a planer mill and associated finishing equipment to smooth the lumber, and a boiler and heavy equipment to feed and distribute the boards (Figure 2). A second pine mill opened in 1905 with one band saw and a Wickes' gang mill. At this point, the two pine mills could produce 250,000 board feet per ten-hour shift. The small hardwood mill produced much less, about 50,000 board feet per day, but it provided a valuable source of ties and timbers for company use, as well as hardwood lumber for sale. Soon, a promotional booklet was proclaiming that the annual capacity of the Crossett mills had hit eighty-four million board feet—the equivalent of fifteen railcars of finished boards cut from the timber growing on roughly thirty-five acres of land every day!

The Crossett Lumber Company had to build not only mills but a town to sustain its workforce. By 1904, the new village of Crossett had been well-furnished with electric lights (powered by the mill’s electric generator), 250 gray and white company homes for millyard and rail workers, a bank, and a “huge” and “well-stocked” commissary. The company eventually built a well-appointed (at least for rural Arkansas) hotel called the “Rose Inn” to lodge visitors and some employees until their homes were ready. The Crossett Lumber Company also provided many of the


14 A gang mill had a series of parallel saw blades that cut large, squared-off timbers called “cants” into multiple boards in one pass. The cants were produced at the band mill. Thus, while the steam-powered gang saw was producing boards from the cants, the band saw was free to work on the next log, increasing overall productivity. Gang saws built by the Wickes Brothers of Saginaw, Michigan, were very popular.

15 “The Story of a Yellow Pine Sextet,” *American Lumberman* (March 5, 1904): 43-73. Though these numbers are accurate, some companies (including Crossett Lumber Company) paid *American Lumberman* to publish glowing descriptions and photographs of their mills, logging operations, and timberlands.

16 Ibid. According to a 1915 directory of American sawmills, the Crossett Lumber Company was capable of sawing 300,000 board feet of yellow pine, white oak, and red oak, of which 75 percent were boards and 25 percent were timbers. The directory listed only two mills at Crossett (excluding the small hardwood mill, which actually cut the oak); J. C. Nellis and A. H. Pierson, “Directory of American Sawmills,” *Department of Commerce, Bureau of Foreign and Domestic Commerce Miscellaneous Series* 27 (1915): 7-42.


Figure 3. The three original Crossett Lumber Company mills, redrawn from a 1908 map by Sanborn Map Company. The hardwood mill on the left, dismantled in the 1920s, was built out of the original sawmill. The first electric power station in the Crossett area lay between the two rail lines, operated with steam produced by burning shavings blown over from the planer mill.
goods and services required by its population. A factory made over 1,100 tons of ice every year, and a mercantile department did about $500,000 worth of business in 1915.\textsuperscript{20} The Arkansas Commission to the Panama-Pacific International Exposition touted Crossett as:

one of the most unique cities in the United States, as modern as money, time and brains can make it, and the sole property of the Crossett Lumber Company, a million-dollar corporation, maintaining three sawmills, two planing mills, employing 800 men, with a monthly payroll of about $50,000, and doing a business of $1,500,000 annually.\textsuperscript{21}

This article went on to claim that the residents of Crossett enjoyed healthy lifestyles, outstanding school systems for students of all colors, and ample cultural and religious offerings “little short of perfect.” According to one story, Cap Gates had the first church built to stymie a local farmer’s attempt to open a saloon near Crossett—but the company eventually helped with the construction of many other places of worship.\textsuperscript{22} By 1913, Crossett had six churches: two for whites and four for blacks, each built with funds matched by Crossett Lumber Company contributions.\textsuperscript{23} Crossett was to remain a company town until 1946, when the company began selling homes and businesses and encouraging outside investments, such as by Safeway Grocery and Bemis Brothers Bag Company.\textsuperscript{24}

In addition to its main lumbering operation, the Crossett Lumber Company developed new product lines to fit its timber holdings and support its forestry program. For instance, it established the Crossett Silo Company in 1914 to produce silos for farmers in the region. The company could manufacture 1,000 annually.\textsuperscript{25} The Crossett Lumber Company also established the Crossett Chemical Company in 1931 to manufacture char-
coal and chemicals from the abundant small-diameter hardwoods growing on their timberlands. Later, the Crossett Lumber Company built a hardwood flooring plant to improve the returns on the lower grades of some of their hardwood lumber, which required further facility investments, including the addition of kilns to dry the hardwood lumber and heavy machinery to plane and mill the dried boards into more valuable products. In 1937, the Crossett Lumber Company constructed a pine-based pulp and paper mill. The success of the chemical and paper businesses encouraged the company to invest more in a forest products research and development program (including laboratory facilities) to improve the quality and affordability of its products and to help develop new markets.

Railroads were the lifeline of operations like the Crossett Lumber Company (Figure 4). In addition to transporting needed equipment, merchandise, and workers, they provided the company a means to ship finished lumber to markets in the eastern and northern United States. Within a few years of the arrival of the MRH&WR, other railways reached Crossett, including the Chicago, Rock Island and Pacific Railroad (CRI&PR) on March 10, 1907, and the Arkansas, Louisiana and Gulf Railroad (AL&GR) on October 1, 1908. In 1915, the AL&GR became the Arkansas and Louisiana Midland Railroad (A&LMR). By 1908, the St. Louis, Iron Mountain, and Southern Railroad (SLIM&SR) had acquired the MRH&WR, and the SLIM&SR merged with the Missouri Pacific Railway (MPR) in 1917. Locally, the SLIM&SR had connections to the AL&GR, the CRI&PR, and the Crossett Railway Company (CRC). All of these lines cooperated in freight transfer and shipment.

Initially, there had been sufficient pine timber near Crossett to keep the mill supplied by dragging or hauling the logs with horse or bull teams. But, even before the second of the two big mills was built, it was necessary to go farther into the forest than was economical using only wagons or skidding individual logs. Before 1905, the Crossett Lumber Company ran its own rail line due west from Crossett for fifteen miles to serve the company’s timber and logging camps.

This arrangement did not last long—quite a few lumbermen realized that there were advantages to setting up their logging main lines as sep-

26 Chemicals extracted during the distillation process used to make charcoal or from the waste materials of the company’s paper mill included wood alcohol, glacial acetic acid, and “Tall Oil,” which was marketed under the brand name “Seecotel”; Etheridge, History of Ashley County, 145-146.
28 “Yellow Pine Sextet,” 64-66.
Figure 4. Rail and spur lines associated with the Crossett Lumber Company. Approximate dates of operation are shown for some lines.
They could share, for instance, in the freight charges on lumber and other shipments hauled from the mills to connecting lines for forwarding to customers. On May 22, 1905, the CRC was formed and granted a charter to build ten miles of railroad north from Crossett to a place called Stephens. Eventually, the CRC leased four more miles (nearly up to Longview Crossing) from the Crossett Lumber Company, and later took its line to Duncan, between Longview Crossing and Fountain Hill. Over time, the CRC extended its line northward as the Crossett Lumber Company moved its logging operations farther from the mill.

The CRC hauled logs from its connections at the company’s rail spurs that served logging operations north of Crossett. After the log cars were unloaded at the mills, the CRC brought the empty cars back to the spurs. The CRC also transported empty freight cars from other connecting lines to the mills for loading and then returned the loaded cars to the connectors. For example, the CRC brought in wood and then shipped chemicals refined from it as outbound freight. The CRC became the Crossett, Monticello and Northern Railroad (CM&NR) in May 1912, and five months later became the Ashley, Drew and Northern Railway (AD&NR). The Crossett Lumber Company also acquired running rights for their log trains on the MPR, and several log yards were located on its track east of Crossett.

Early on, though, the Crossett Lumber Company had its own rail equipment and rail-based logging crews. In 1904, it had one thirty-five-ton rod locomotive, one forty-five-ton rod locomotive, two Shay locomotives, two Barnhart loaders, forty regular log cars (forty-feet in length), and at least 200 loggers in the woods. These first steam engines burned wood but were later modified to use coal and then oil (which threw fewer sparks and thus reduced the number of forest fires).

Shay engines were unique in that they were geared locomotives with a boiler offset to the left to make room for vertical cylinders on the right side of the boiler. These powered a shaft that through special gears drove every wheel on the rail, including those on the fuel and water-carrying

29 Though typically run by the same people who operated the lumber companies, most of these railroads were not subsidiaries but separate corporations.
30 Freight from a single large milling operation like the Crossett Lumber Company could be highly lucrative. In 1914 alone, the company paid freight of over $500,000; Keeley, Arkansas and Her Resources, 19.
31 Clifton E. Hull, Shortline Railroads of Arkansas (Norman: University of Oklahoma Press, 1969), 122-132. The major shareholders of the CRC were the same people who had incorporated Crossett Lumber Company a few years earlier.
32 “Yellow Pine Sextet,” 64-66.
tender trucks located immediately behind the engine. The wheels under the tenders were very effective drivers because the fuel and water’s weight added traction. The slower Shay engines were primarily used for short hauls. They had great power but could use tracks with shorter, tighter curves than more conventional engines. Shays were also more tolerant of poorly constructed track, and this made them particularly well-suited for logging spurs off the main line. Because each wheel was powered, a Shay engine could usually be worked back on the rails more easily following a derailment, often triggered when trees felled across the tracks threw off the alignment of the rails. The platform over the front wheel assembly made a wonderful place for all sorts of needed equipment, as evidenced by the water barrel, keg of spikes, oil cans (used to keep the gear train properly lubricated), and funnel visible in Figure 5.33

Rod engines, by contrast, had big steam cylinders at the front of the engine that applied power only to the large drive wheels. They were connected to each other and to the piston in the steam cylinder through connecting rods (hence the name) on each side of the engine. Unlike the offset boiler of a Shay engine, a rod engine boiler was centered on the frame. Rod engines required better roadbed and heavier rails, but they were faster on the main-line hauls to and from the sawmill and were almost always used for this job. Both types of locomotives could pull in reverse or forward, though rod engines were much more efficient when driving forward.

Early in its operations, the Crossett Lumber Company used flat rail cars to transport the logs. Each flat car held two tiers of logs and was equipped with rails to facilitate movement of the loaders, which would perch on top of them to lift and place the logs. Later, the company used a different type of rail car called a “skeleton” that held only one tier of logs. Regardless of car type, a link and pin coupler joined the log cars. This was a simple, inexpensive method of connecting the cars but could prove very dangerous to the man doing the coupling. The tongue had to be held up to

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33Named for their inventor, Ephraim Shay, Shay engines were primarily manufactured by the Lima Locomotive Works of Lima, Ohio; Rick Henderson, “Ephraim Shay, The Man,” http://www.shaylocomotives.com/shaypages/EphraimShay.htm (accessed April 22, 2008). According to Lima Locomotive Company records at www.shaylocomotives.com, the Crossett Lumber Company had two thirty-two-ton standard gauge Shay engines (shop numbers 751 and 752) built in early 1903. Engine 751 was eventually transferred to the Gates Lumber Company in Wilmar, Arkansas, in January 1920, before being returned to Crossett in December 1924. The Crossett Lumber Company later purchased two thirty-seven-ton Shay engines: shop number 1529, built in June 1905, which was sold to the Kirsten Gravel Company of Benton, Arkansas, in 1930; shop number 1660, built in March 1906, was transferred to the CRC before returning to the Crossett Lumber Company in 1929. These Shay engines were scrapped by the 1930s.
Figure 5. A Crossett Lumber Company Shay locomotive in the foreground being followed by a second Shay loaded with large, high-quality logs on flat cars, circa 1910. This engine has a specially designed stack to catch hot embers, preventing them from falling on dry debris and starting forest fires. *Courtesy Crossett Public Library.*
Figure 6. A Crossett Railway Company (CRC) rod engine after receiving loaded log cars. The car behind the tender was used to haul water from Crossett to the various operations in the woodlands. This undated photograph also shows the wide right of way and excellent track work typical of the CRC main lines. Courtesy Crossett Public Library.
fit into a socket on the other car and the pin dropped at the proper time to finish the connection. Fingers and hands could be easily crushed, and a wrong step between the cars might well result in grievous harm or even death.

At the company’s mill, rail spurs along two sides of the mill pond allowed logs to be rolled into the water by hand as they came in from the forest. Storing logs this way served to wash away loose dirt and grit, helping to keep the mill saws sharper. Partial submersion of unprocessed logs also helped minimize the unwanted coloration of the wood by a blue fungus. A crew working in small boats or walking on the floating logs separated them by size, grade, or other measures according to the sawmill’s cutting orders for that day. Both big pine mills took logs out of this single pond, but, because green hardwood logs were too heavy to float, Crossett’s first hardwood mill had a simple dry-log skidway to store logs as they came off rail cars. Over the years, the Crossett Lumber Company adjusted the delivery systems. For example, in the late 1920s, it built a rail spur across the pond to the Number 2 sawmill after it had been converted to produce both pine and hardwood lumber. Pine logs were still dumped into the mill pond, but a Barnhart loader removed hardwood logs from the rail cars and fed them directly to the mill.

Not surprisingly, railroads followed the timber. Before 1905, almost all of the company’s logging was west and north of Crossett, except for limited operations near Lucas Pond, just south of the village. After 1914, lumbering had shifted primarily to the south, extending to near Bastrop, Louisiana. By the 1920s, most company logging had shifted southeasterly, with daily trains going through Cremer Junction to the vicinity of Crossett Camp to pick up pine logs for the mills. Log trains also ran southwesterly from Crossett through Cremer Junction to Venice Landing on the MPR and then about eight miles west on that line, where they switched onto dedicated logging lines in the Felsenthal area. Some rail operations north of Crossett also expanded during this period. For example, in the 1930s the AD&NR established new spurs (Beech Creek, Womack, and Norrell) at short intervals to facilitate the movement of wood to be used for charcoal and chemicals. One of the other new northern lines split from the AD&NR at Longview Junction about four miles west of Fountain Hill, Arkansas, and ran due north about nine miles into Drew County, where it ended in a layout of two spurs. Another line, built

34This fungus (Ophiostoma minus) colors wood a shade of blue. Blue-stained wood loses none of its mechanical properties (like strength) but is aesthetically less appealing, and thus decreases the value of the lumber. Second-growth pine and hardwoods did not float as well as the virgin pine, and thus, by the late 1930s, the pond was no longer used.
Figure 7. The cutting history of the Crossett Lumber Company, 1902-1921, showing lands owned by the company outright. The company also worked lands for which it held timber deeds, allowing it to cut trees for a specified period without acquiring title to the land. This figure was redrawn from a hand-drawn map, probably by someone with the timber acquisition staff. *Courtesy Crossett Public Library.*
prior to 1940, left the AD&NR at Scipio Junction about four miles east of Fountain Hill before running about nine miles almost due east near the line between Ashley and Drew Counties.

Figure 4 also shows portions of the former rail networks of other lumber companies in the area, such as the Wilmar and Saline Valley Railroad (W&SVR) and the Warren and Saline River Railroad (W&SRR).35 The Crossett Lumber Company acquired a short branch line just south of

35Gates Lumber Company used the W&SVR to log the virgin timber north of Crossett prior to the closure of its Wilmar mill in 1924. The Bradley Lumber Company moved hardwood timber cut in the bottomlands east of the Saline and Ouachita Rivers up the W&SRR and CRI&PR to its mill in Warren.
Figure 9. A “bummer” ready to go to the railroad. The team pulled the log on the ground, with one end elevated to reduce friction. The man on the front was the “teamster.” Behind him was the “swamper,” who used his ax to clear debris from the haul road. It would have been dangerous for either man to actually ride the log while in motion. Courtesy Crossett Public Library.

the Ramseur Homestead (southwest of Crossett) from the short-lived Cremer Lumber Company.36 Most of the timberlands that the Cremer Lumber Company had originally purchased were covered with virgin bottomland hardwoods, which were of no interest to the Crossett Lumber Company in 1913. Hence, following bankruptcy proceedings in 1911, Cremer’s 79,000 acres along the Ouachita and Saline Rivers came back onto a market with no buyers. Thus the land reverted to the American Timber Company, the previous owner. Less than two decades later, following a strategic shift into the hardwood lumbering business, the Crossett Lumber Company purchased an 11,243-acre uncut portion of these lands for $31 per acre.37 The purchase of the virgin timber on the former Cremer Lumber Company lands was accompanied by an aggressive cutover land acquisition program. During this period, the Crossett Lumber Company obtained properties once logged by the Gulledge Brothers’ Lumber Company near White, Arkansas, the former Gates Lumber Company property south of Wilmar, and the Bradley Lumber Company lands west of Crossett.

36After logging the pine timber along the former Cremer rail line in 1914 and 1915, the Crossett Lumber Company likely pulled up the rails and used them elsewhere. The company also acquired a few houses and a small hotel from Cremer.

37The Bradley Lumber Company also acquired a large block of the former Cremer property and logged the virgin hardwoods there in the 1930s and 1940s.
The Crossett Lumber Company adopted railroad logging techniques developed in the Great Lakes region and already used in other parts of the South. Branching off of the main rail lines were a network of temporary spur lines (Figure 4 shows an abundance of logging spurs between Beekman, Louisiana, and Hamburg). These spur lines were typically about one-quarter mile (440 yards) apart, with logs pulled to either spur.

In the woods, loggers felled and bucked trees with hand tools like axes and crosscut saws, a daunting task given the size of the virgin timber and the density of the wood. Logs would be skidded on the ground over short distances or loaded onto wagons for longer hauls. Figure 8 shows a “bull team” in action. Another more common skidding technique involved the use of a “bummer” (Figure 9). Bummers were two-wheeled carts with long tongues used to help skid logs. A set of tongs held the log and lifted it partially off the ground so that only the back third of the log dragged. The proper arrangement of tongs to hold the logs, along with the skill of a good team driver, could get the front of the log on the cart in one swift move. The wide wheels of a bummer were usually made from sections of black gum logs and offered good support in the boggy ground. The company blacksmith supplied the metal parts.

Early in its lumbering operations, Crossett Lumber Company crews loaded pine logs on rail cars using a technique called “cross-hauling” (Figure 10). They dragged logs up near the rail car and slipped a chain under the logs that had both ends attached to the car. Another chain going over the car was attached to horses or oxen on the opposite side, who pulled and thus rolled the log up a ramp of poles leaned against the load. The main advantage of this method was that it required very little in the way of capital investment, but it was a slow process and would not have kept the two big pine mills adequately supplied. Rather, the Crossett Lumber Company came to rely on steam-powered, car-top loaders to keep the logs flowing to the mill.

The company preferred the Barnhart loader (Figure 11). A Barnhart loader required at least four men. A fireman tended the steam boiler. The loader operator swung the lifting arm with its cable and single set of tongs toward the logs laid out at the rail landing. The tong hooker then attached the tongs to the log. After the loader operator maneuvered the hooked log onto on the rail car, the top loader (standing on the logs) disconnected the tongs. The process was repeated until the car was full. After one car had been filled, the self-propelled loader rolled along to the next car on a set of rails (visible beneath the loader in Figure 11). These two short sections of rail were hoisted onto place with a winch line by the loader operator. With a capable crew, a Barnhart loader could fill three to four cars per hour.
Figure 10. The cross-hauling technique of loading a rail car with animal power. *Courtesy Crossett Public Library.*

Figure 11. The Barnhart log loader replaced cross-hauling because it was much faster. The size of this machine, the first of its kind in Ashley County, caused quite a stir. *Courtesy Crossett Public Library.*
After an area was logged and the spur lines were of no further use, a special crew called the “steel gang” picked up the rails and any salvageable ties and reused them to lay new lines. While it remains unclear exactly how the Crossett Lumber Company gangs operated, a steel gang in Texas had an “eight-up and eight-down rule” by which eight rails and their ties had to be picked up and eight rails and their ties put down elsewhere for each man in the crew. After reaching their quota (called “hopping a day”), the men were free to quit for that day. The right-of-way had already been prepared for the steel gang, and an engine accompanied this crew carrying the ties, rails, and equipment (Figure 12).

During its earliest years, the Crossett Lumber Company employed hundreds of men in the woods, based in camps with both portable houses (for married men) and a boarding train (for single men). In an interview on March 1, 1948, Levi R. Wilcoxon gave perhaps the best available description of life in the first logging camps. The Crossett Lumber Company ran four logging camps between 1902 and 1904 (their locations in Figure 4 are approximated from Wilcoxon’s descriptions). These early camps, Wilcoxon declared, were “tough as a boot” and full of “drunks.

and rowdies." The few women present were mostly spouses of the black workers. George Pless, another longtime Crossett Lumber Company worker, remembered the roughness and starkness of those early logging camps. In particular, Pless mentioned that these first camps did not have a store, forcing employees to travel into Crossett to do their shopping. 39

The first camp was near the Stephens’ place west of Crossett, and the second was a mile farther out. 40 Still farther along the line was Camp 3, listed by Wilcoxon as a “team camp,” or a corral where the horses, oxen, and mules were penned overnight and usually watched over by two men. A special rail car allowed the animals to be watered on both sides of the car while feed was dispensed from the middle. In the morning, the crew was brought out from Camp 2 to help prepare the animals for a day’s work. This arrangement avoided the time and trouble of bringing all the livestock back to the main camp every night. Wilcoxon also mentioned a Camp 4 near the Ramseur homestead. No evidence remains of the rail line that would have served the camp, but many of these lines were obliterated by time and the elements and reclaimed by the forest once abandoned.

Camp 5, located just north of the sawmill pond, was the last of the numbered camps. Wilcoxon noted that after logging superintendent George Ritchie left the Crossett Lumber Company, it began naming the camps for its foremen. Hence, the Duncan Camp established near Whitlow Junction, Arkansas, was named after camp boss John Duncan. Duncan, a longtime foreman, presided over a number of camps at different locations over the years, and there would be at least four called Duncan—two between Crossett and Fountain Hill to the north and two south of Crossett. None of these camps operated simultaneously.

The Dunnigan Camp lay northwest of the CRC tracks toward Longview. Clint Dunnigan was a camp boss for only a short period, so little is known about his camp including the exact location—its site on Figure 4 is an approximation as there is no other information than what is available in Y. W. Etheridge’s History of Ashley County. The appendix of the

39 Ashley County Genealogical Society, Crossett Sawmill Interviews (Crossett: Nowlin Printing, 1995), 35-37, 85-86. In 1948, Crossett Lumber Company president Peter Watzek requested that the personnel department interview some of the older workers about the “early days” of the company. These “sawmill interviews” provide information about the mills, the woods, and the city of Crossett. However, since memories fade with time, there are inconsistencies in some of the dates and names given. When this occurs, we have tried to use common sense to put things in an orderly sequence.

40 Many of the old railroad beds and tram lines were improved over the years and now serve as roads. Railroad fills across ravines and wetlands were especially prized improvements.
book, using excerpts from a 1909 issue of the *Ashley County Eagle*, stated:

with [Tom] Toler’s camp a short distance west of Milo and Dun­nigan’s between there and Longview, that village was in a prosper­ous condition. There were two sawmills operating there and Gardner and Williams were running a general store. The two camps were putting out logs for the Crossett Lumber Company and belonged to it. 41

This dates the Tom Toler and Dunnigan camps to the same time period. Another short-lived camp, the second Duncan Camp, appeared at what was then the end of the rail line near Fountain Hill.

Operated until 1912, the third Duncan Camp sat three-and-a-half miles south of Crossett, and may have existed as early as 1906. Crews were hauled via rail to the job-site every day, which got them to work more quickly. Unlike the short-lived early camps, which depended on water shipped from the village of Crossett in a special rail car, this Dun­can Camp had its own well and pump. Later camps had many more of the comforts of town. The third Duncan camp also had a dining car, a kitchen car, a car for the cook’s quarters, and even a commissary on wheels. 42 The store was a modified boxcar built specially for the company, stocked at the main mercantile in Crossett and taken to the camp as a conven­ience.

The Crossett Lumber Company had ten distinct logging camps in the first decade of its operation. With the exception of the third Duncan Camp, the company spent these years logging around the mill site and moving northward into the timber via rail, reaching as far north as Foun­tain Hill by 1910. After 1913, there was no logging of company-owned land north of Crossett, with the exception of a block cut in 1920 just east of the AL&GR rail line that ran into Hamburg. 43 The large area covered over this period by Crossett Lumber Company logging crews reflects the company’s scattered ownership in the areas north of the village of Cros­sett, not lower yields of pine per acre. The larger blocks of company

41Etheridge, *History of Ashley County*, lxxvii. The other mills referred to here were small private operations.
42Ashley County Genealogical Society, *Crossett Sawmill Interviews*, 159, 165.
43There is no record of a Crossett Lumber Company camp to cut the timber in this parcel, so it seems likely that the cutting was done by contract. The contractors would have placed the logs along the railroad so company trains could haul them to the mill via the AL&GR.
property south of Crossett meant that the camps did not have to move as often.44

From 1912 until 1934, the company operated only three camps—Hickory Grove, Prairie de Butte, and Crossett. In late 1912, the company established Hickory Grove, a logging camp on its southbound main line about seven miles south of the village of Crossett. At the same time, ten miles farther south, the company established its only Louisiana logging camp at Prairie de Butte. Interestingly, the land surrounding the Hickory Grove Camp was not cut immediately.45 Rather, the Hickory Grove crews started in the first township across the state line in Louisiana. Gradually, these crews moved northward along the main-line railroad toward Hickory Grove, so that all the timber in proximity to the camp was gone by 1919. During this same period, the Prairie de Butte Camp loggers worked Morehouse Parish between the bottomlands of the Ouachita River and Bayou Bartholomew, along the southernmost reach of lands belonging to Crossett Lumber Company.

According to a report in a trade magazine, both the Hickory Grove and Prairie de Butte camps were well established by 1916. This article spoke highly of these “miniature editions of the mill town,” with their living quarters, boarding houses, and the other refinements of what it termed “Contentment Camps:”

Each camp has a population of about 150 whites not to speak of the numerous Negroes. The headquarters in each case are Y.M.C.A. buildings with the houses of the workers surrounding, all located on high ground which permits of perfect draining on all sides. Dr. C. L. Vines, the company’s doctor and sanitary expert, has charge of all sanitary work and is constantly making improvements for the betterment of the inhabitants.46 All houses are screened, the camps are regularly swept and cleaned, every house has a sanitary garbage can and as the men are fully in-

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44Timber productivity varied by the size of the camp, the weather, and the nature of the forest, but one report noted that the J. W. Toler's crew cut 6 million board feet of lumber in November 1915; “Camps of Contentment at Crossett, Ark.,” Logging, A Monthly Magazine of Men, Machinery and Methods 4 (April 1916): 114-122.
45Following a tradition of naming the camps after their supervisors, Hickory Grove was also called the “Toler Camp” after camp boss J. W. Toler, and Prairie de Butte was another of the “Duncan” camps.
46Some Crossett sawmill interviews specifically described how company doctors (including Dr. Vines) worked hard to rid the camps of mosquitoes and hence limit the scourge of diseases such as malaria and yellow fever. The Rockefeller Foundation assisted the anti-malarial efforts in Crossett during the 1910s; Ashley County Genealogical Society, Crossett Sawmill Interviews, 21, 173.
formed as to the penalty of hygienic laxity there is never so much as a tin can or a piece of waste paper to be found on the grounds. Sickness is a rarity and general good health and robust bearing are the rule. . . . The grounds surrounding the Y.M.C.A. buildings, tennis, volley ball, and croquet courts are laid out. These are well illuminated by high-candle-power electric lamps which enable the enthusiasts to enjoy themselves in the evening hours . . . .

Not only does the influence of the splendid men who superintend Contentment Camps exert itself in the direction of sanitary surroundings, but it also teaches the men that personal cleanliness is next to Godliness. Hot and cold baths may be had at all hours and soap and towels are free. That the men appreciate these luxuries is proved by the fact that 3442 baths were taken last year.

Each camp has a boarding train that runs out at noontime to the district where the men are working. A long, white table, loaded down with good, wholesome food, occupies practically a whole car. The dinner bell brings the workers scurrying from all directions and the dinner hour is passed in comparative luxury. This is an important economic feature as it eliminates the necessity of the men going to and from the headquarters and is much to be preferred to carrying a cold lunch as the boarding train supplies hot food as well as good food.\(^\text{47}\) The cars are double-screened and the pesky fly and stinging mosquito are kept well out of bounds.

A modern machine shop is part of the equipment of the camps. Mr. Hammond, the foreman, is an expert mechanic and a rapid-fire worker. In Contentment Camps there is no such thing as waiting on promised delivery. High efficiency and quick action are the ruling thoughts. And high production is the result.\(^\text{48}\)

The rosy picture painted by the author, though undoubtedly overly generous in its praise for what would have been a hard life, does speak to the enhancements at the later, larger Crossett camps. Yet, as improved as the Hickory Grove and Prairie DeButte Camps were, better accommodations were to come.

In 1920, the Crossett Lumber Company moved its loggers to its last, largest, and longest-lasting camp. Located about ten miles east-southeast of Crossett and eleven miles south of Hamburg (just east of today’s U.S. Highway 425), the Crossett Camp was formed by the consolidation of the

\(^\text{47}\)This description was erroneous. Each logger carried his own lunch to work each morning to be eaten in the woods—there was no hot lunch brought out in dining cars.

\(^\text{48}\)“Camps of Contentment,” 114-122.
Hickory Grove and the Prairie de Butte Camps as they cut out their available timber and the focus of company operations moved northeastward. The Crossett Camp had a number of advantages when it came to transportation, including its proximity to a "wye," a track arrangement that allowed rod engines to be turned around for their return trip to Crossett and Shays to be turned around for the trip back to the loading areas. The spurs just north of the wye could store a lot of cars, and there was also plenty of room on sidings at camp. The Crossett Camp was also better located. With previous camps, the engines were sent from Crossett each morning, which took time from the business of lumbering. As logging progressed, the distance between camp and cutting operations were farther than ever before, meaning that the loggers had to endure longer and longer rides. Having a locomotive and rail car shop, a machine shop, oil supplies for fuel, and the ability to leave engines overnight at the Crossett Camp meant that the crews could head to the woods earlier.

By all accounts, the Crossett Camp stood out from the average logging camp. First, being in a single spot for fourteen years was a novel experience for the veteran loggers and their families—the Crossett Lumber Company had never had a camp in one place for this long. Second, this was the first company camp where people had real houses, rather than tents, portable buildings, or railcars. It was set up like a town, with running water, electric lights, a YMCA building, schools, a large company store that could make ice, bunk houses, and a boarding house for the unmarried men. The mostly new homes were placed on foundation blocks, and all had space for a garden plot. By 1921, the Crossett Camp had 1,000 persons. A 1931 plat (partially reproduced in Figure 14) showed 208 homes laid out in blocks with alleys and streets, six bunk houses, and an automobile garage.

A local newspaper described life in the camp:

Much has been said and written about the physical comforts and conveniences of Crossett Camp. It has been heralded in several nationally known magazines as a model sawmill camp, and it de-

49 Ashley News Observer, June 28, 1939. The Crossett Camp was also called the "John Purdue Camp" and the "Chemin-a-Haut Camp" in reference to a creek two miles to the east; "Scenes from Crossett History," Forest Echoes 21 (February 1961): 10.

50 A wye is a triangle-shaped arrangement of tracks with a switch on each corner that could be used to change the direction of a locomotive.

51 Ashley News Observer, June 28, 1939.

52 Population of the Crossett Camp was listed by the Sanborn Map Company. For some reason, the Sanborn Company called it "Crossett Camp No. 2," although there were never any other Crossett Camps listed. This plat was filed with the Map Division of the Library of Congress on February 9, 1922.
serves all this praise. However the thing that most impressed people who know Crossett Camp well was the feeling of comradeship among its inhabitants. It is doubtful if any other town its size ever so closely approached the ideal considering all its people as members of one large family. Crossett Camp completely belied the usual idea that a logging camp is a tough place. Few communities anywhere could boast more law abiding and God fearing citizens.53

In fact, the Crossett Camp proved a microcosm of social and economic conditions in southern industry more generally. During the life of the camp, company management vigorously opposed any attempt by labor to organize, and no union was permitted. Blacks and whites worked together for equal pay in many jobs, but management was entirely white and many examples of the segregation typical of the era can be found.54 The map of the Crossett Camp (Figure 14) demonstrates this clearly—the “C” blocks of the residential area were for “colored” workers. Transportation, shopping, and recreational facilities were also segregated. Indeed, the company took pride in what it offered, claiming “[t]he club for colored persons is large, well equipped and designed to meet the requirements of the colored race to the same extent that the other club meets the requirements of the white[s].”55 Of course, the degree to which separate was really equal depended on how the white-run company defined the requirements of any given race.

In 1934, the company closed the Crossett Camp, after more than a decade of operation. Running a large logging camp with houses, services, and rail yards was expensive, and the Crossett Lumber Company was determined not only to continue operations but expand in the midst of the Great Depression. Some camp facilities were relocated to the town of Crossett, north of what is now Eighth Avenue and west of Florida Street, at the former mill site of the Cremer Lumber Company. The rail equipment was brought there, including a handful of house cars. The Crossett Lumber Company also moved many of the regular homes at the Crossett Camp

53Ashley News Observer, June 28, 1939.
54Buckner, Wilderness Lady, 105-110, 113. A similar segregation of blacks and whites was also found in Crossett. In early 1940, a number of streets in “White-Town” were renamed, affecting “all mail addressed to white people” in this section; “Crossett’s Streets Named in White-Town,” Forest Echoes 1 (May 1940): 1. Forest Echoes, the company’s magazine for its employees, often listed “White” and “Colored” events like births and promotions. For an example, see “White and Colored Civic Calendars,” Forest Echoes 1 (January 1940): 12-13.
Figure 13. A Crossett Camp scene, looking east in the mid-1920s. The machine shop and supply house is on the right, while the building with the stack is the power house. Three Barnhart log loaders are shown (two attached to locomotives, and one in the machine shop). Courtesy Crossett Public Library.
Figure 14. Part of the Crossett Camp including the rail yards and a few buildings, redrawn from a larger plat in the Crossett Public Library drafted in 1931 by Southwestern Appraisal Company of Kansas City, Missouri. The “C First Street” on the right of the map was short for “Colored First Street.”
into town to provide additional lodging. Virtually nothing remains of the Crossett Camp today, save some building foundations and other debris.56

Many of the former camp workers found jobs in the sawmills at Crossett, while others went to work for logging contractors who by the mid-1930s had become the company’s sole source of logs. Contract loggers were not new to the company—advertisements for contract loggers appeared in local newspapers as early as 1903, and over the years contractors likely cut a considerable portion of the timber used at Crossett. But by the 1930s, the company had concluded that it was more economical to rely exclusively on contractors to log company-owned lands and deliver the wood to rail lines, rather than paying its own employees to do so. Contract loggers had inherent flexibilities regarding their equipment overhead and maintenance, hiring decisions, and worker hours and benefits that were not available to the Crossett Lumber Company.57 The exact arrangements the Crossett Lumber Company made with logging contractors are unclear, but other companies did not take any responsibility for housing or feeding the contract crews. For instance, contractors fended for themselves for lodging and often tent-camped near their job-sites.

As with the company crews before them, contract loggers typically cut timber within 250 yards of the spur lines, skidded the logs to the edge of the tracks, and then uniquely marked the logs they cut. Before loading the logs onto rail cars, Crossett Lumber Company employees came to landings along the tracks and scaled newly delivered logs to determine what was owed each contractor. A running tally of the volume of logs cut by each crew was kept, and the contractors would be paid weekly. The log trains came if wood was needed at the mill or when room to stack more logs was needed at the landings.

Undoubtedly, the shift to contracting altered relations between labor and management. For decades, the Crossett Lumber Company had held what John Wordy Buckner termed a “liberal paternalistic view of its employees.” As noted, the company contributed to the amenities offered to all races, including aiding the construction of recreational facilities, churches, schools, hospitals, and banks. It also offered more generous wages and better living conditions than found in many company-owned sawmill communities, for which loyalty, sobriety, and hard work were

56 These house cars had probably originally quartered men who cared for the animals used to skid logs. Corrals were kept very near the cutting area. Longtime company employee P. R. Higganbotham recalled that when he came to Crossett in 1940 there were families still living in these cars; Higganbotham interview with O. H. Darling, Crossett, March 10, 2003.

57 Etheridge, History of Ashley County, liv-lixviii.
Figure 15. A contractor’s truck at Crossett in the 1920s. This must have been one of the earliest logging trucks in the area. Its tires are solid rubber and the wooden wheels were very similar to the wagon wheels of the time. The cab is mostly canvas, compared to later models with metal cabs. Given how the trailer is connected to the truck, this rig would have had limited maneuverability in the forest. Courtesy Crossett Public Library.

expected in return. A further instance of this paternalism occurred when the Crossett Lumber Company revamped their lumbering and saw-milling operations to cut hardwood in part to ensure continued employment as virgin pine timber began to run out in the late 1920s. Many companies simply closed down or moved on when faced with similar circumstances.

Even still, relations eroded by the early 1930s. After years of effort by Cap Gates to dissuade his employees from unionizing, the rapid growth of the Crossett Lumber Company fostered deteriorating working conditions and increased neglect of worker welfare, and a union affiliated with the American Federation of Labor was finally organized in 1934—the same year Crossett Camp closed. Cap Gates died the following year. Company management spent much of the next decade trying to undermine the union, and the community suffered through bitter

59 Buckner, Wilderness Lady, 109-110.
strikes. Labor issues and race relations would intertwine in what was perhaps the darkest period of company history. In 1940, the union struck for better working conditions, and both sides engaged in rough tactics to uphold their positions. The strike dragged on for months. Some violence occurred, including the shooting and wounding of two black workers, presumably because they had returned to work. Racial tensions were aggravated by rumors that the company was using black workers to replace whites during the strike and that blacks were interfering with the efforts of the union, even though many whites had also crossed the picket lines or otherwise opposed organized labor.

Along with the closing of Crossett Camp and the more exclusive use of contract logging, the transition from strictly railroad logging to the use of trucks marked the end of a first phase of the Crossett timber industry's history. By the end of World War I, automobiles and trucks were growing in popularity but were still far from common in southern Arkansas. The 1914 Sanborn Map showed a space for a gasoline motor car inside the AD&NR storage headquarters, and the Crossett School was listed as having a gasoline engine at the Manual Training building. A plat of the switchyard, supply houses, and shop area made in September 1931 by the Southwestern Appraisal Company of Kansas City, Missouri, showed an automobile garage in the shop area and a garage at the superintendent’s home (Figure 13). But horses, mules, and oxen still moved logs to the rail lines, and railroads were the sole means of delivering logs to the mills.

As capable logging trucks and better public roads gradually became more common by the 1930s, pressure increased to change the decades-old practice of logging with spur rail lines. Trucks had a distinct advantage when harvesting smaller timber on scattered parcels, eliminating the necessity of investing money and time in building rail lines to each small job. In this new arrangement, crews used trucks to haul logs from the harvest sites to railroad landing sites for loading onto trains. The example set by other operations also helped convince the Crossett Lumber Company to shift to truck-based logging. For example, in the 1920s and 1930s a number of new, small-scale sawmills were established by other owners to harvest the smaller second-growth pine that was more economical to


61 The roads in Ashley County during the early years of the company’s operation were abysmal, as reported in the first soil survey of the county: “The wagon roads of the county are very poor, many being little more than winding trails, especially in the less developed southern portion of the county;” E. S. Vanatta, B. D. Gilbert, E. B. Watson, and A. H. Meyer, “Soil Survey of Ashley County, Arkansas,” *Field Operations of the Bureau of Soils*, 1913 (November 1916): 1189.
Figure 16. The first logs being delivered directly by truck to the sawmill of the Crossett Lumber Company in 1945. These trucks could haul logs cut to lengths of ten to twenty feet. 
*Courtesy Crossett Public Library.*
haul by truck. Compared to the big Crossett mills, production at these small mills was low but profitable.62

The Crossett Lumber Company never completely gave up on using railroads to deliver raw materials to its mills.63 But it became increasingly apparent that smaller second-growth logs could be more efficiently and economically delivered by trucks. Thus, the Crossett Lumber Company developed a new process. Following some modifications to the skidway, trucks could by 1945 drive right up to the mill and be unloaded manually by the driver. A mechanical loader picked these logs up off of the skidway and fed them into the sawmill, making room for the next load.

Evidence of the early camps, logging efforts, and railroads of the Crossett Lumber Company have all but vanished, as have the people who remember how things used to be. One legacy, fortunately, is likely to remain for many generations. By the early 1920s, Cap Gates was dreaming of developing an industrial forestry program second-to-none—a vision sustained by his successors at Crossett Lumber Company.64 The idea of using forests to generate a “perpetual cut” of pine sawtimber had been unpopular with most early lumber operations because of the expense involved—it was simply easier to move to another location with virgin timber or just get out of the business. Undeterred, the Crossett Lumber Company proceeded with assistance from Yale University’s School of Forestry and the USDA Forest Service and helped to make forestry work, bearing any expenses involved in the process. By the late twentieth century, the Arkansas lands of the Crossett Lumber Company and its successor, Georgia-Pacific, were one of the finest examples of industrial timberland in the United States, a tremendous and enduring tribute to the pioneering lumbermen who helped carve civilization from the wilderness.


63Even today, though all sawlogs are delivered to the mill by trucks, rail deliveries of pulpwood and chips to the paper operation continue at Crossett.