

WESTERN RAILWAY OF ALABAMA

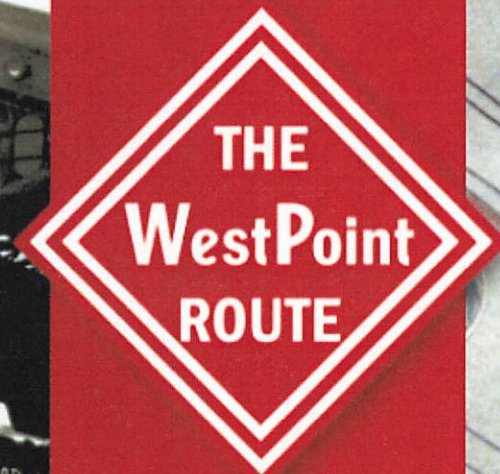
FILM PREMIERE

THE MONTGOMERY SHOPS

ILFORD

14 | 20
FEB | 23

CITY HALL
5:30 PM



PRESENTED BY THE HISTORIC
PRESERVATION COMMISSION



WESTERN RAILWAY OF ALABAMA MONTGOMERY RAIL SHOPS
(Montgomery and West Point Rail Road
Western Railroad of Alabama)
701 North Perry Street
Montgomery
Montgomery County
Alabama

HAER No. AL-186

HAER
AL-186

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

REDUCED COPIES OF MEASURED DRAWINGS

HISTORIC AMERICAN ENGINEERING RECORD
National Park Service
U.S. Department of the Interior
1849 C St. NW
Washington, DC 20240

HISTORIC AMERICAN ENGINEERING RECORD
WESTERN RAILWAY OF ALABAMA MONTGOMERY SHOPS
(Montgomery and West Point Rail Road)
(Western Railroad of Alabama)
(Western Railway of Alabama)
(WofA)

HAER No. AL-186

Location: 701 N. Perry St.
Montgomery, AL
UTM: 16.564360.3584340

Date of Construction: 1900-1910; 1913
(extant buildings)

Fabricator: Cook & Laurie Contractors; Roberts & Schaefer Contractors

Present Owner: CSX

Present Use: Abandoned

Significance: When built, the Western Railway of Alabama shops at Montgomery were hailed as the largest in Alabama and the best equipped in the South. Their connection with the second oldest railroad in Alabama places them within a long and often tumultuous historical context.

Historian: Seth C. Bruggeman, 1999

Introduction

In 1832, a group of Montgomery citizens, led by Abner McGehee, chartered the Montgomery Rail Road (renamed the Montgomery & West Point RR in 1843, the Western Rail Road of Alabama in 1870, and, finally, the Western Railway of Alabama in 1883). Following soon after the establishment of the Tuscumbia railroad – the first line to operate in Alabama – the Western Railway of Alabama represented one of the earliest American efforts to harness rail as an effective means of passenger and commodity transport.¹ This effort was intrinsically tied to the southern economy and, therefore, to the political and social tensions of the region and evolving nation.

Montgomery was one stage upon which this evolution played out. By the end of the nineteenth century, Alabama's capitol city had become the heart of a vast transportation network. Several rail systems serving Alabama, including the Western of Alabama, laid track near or through Montgomery. Eventually positioned between Selma, AL and West Point, GA (the WofA's western and eastern termini), Montgomery offered a natural fulcrum for rail operations and became home to the primary rail shops for the WofA and her sister railroad in Georgia, the Atlanta & West Point RR (A&WP). Here, between the 1850s and 1971, skilled laborers produced everything from passenger depot furniture and signs to freight cars and locomotives; anything and everything necessary for operation along the road's 160 miles.

Early History

The introduction of rail in Alabama occurred simultaneously with the greater frenzy of rail activity sweeping the nation by the late 1820s. David Hubbard, a north Alabama merchant and politician, first entertained notions of rail construction in 1829 while dealing in Chickasaw land near Courtland on the Tennessee River. Disruptive rapids near Muscle Shoals, AL, had long frustrated north-south transport through the Tennessee Valley. Though other like-minded developers proposed canals to bypass the shoals, Hubbard looked to Pennsylvania for a solution. A visit to Mauch Chunk (now Jim Thorpe), PA, and a tour of that town's stationary steam engine-powered switchback railroad convinced the developer of the system's potential utility back home.² Plans were made and the Tuscumbia Railway Company received a charter from the Alabama State Legislature on January 16, 1830. Construction was underway by 1831 and in 1832, Alabama welcomed its first railroad.

Hubbard's initial line was a crude affair, extending only two miles and dependent entirely upon horses for motive power. Nonetheless, the Tuscumbia Railway was heralded as a great success and perked the interests of other state developers, such as Abner McGehee. A wealthy Montgomery planter, he also appreciated rail's potential, but cast his vision somewhat wider than Hubbard. Until the 1850s, trade between Montgomery and points east followed wagon routes extending from the Alabama capitol, through often hostile Creek Indian territory, to cities such as Charleston and Savannah.³ The journey was long and hazardous, plagued by harsh geography, a torrid sub-tropical climate, and expensive tolls levied and enforced by the Creeks. McGehee realized the value of a regularized cotton trade between Montgomery and the East and resolved to enact his vision via rail.

On January 20, 1832, McGehee and a small group of investors received a charter from the Alabama State Legislature for the Montgomery Rail Road Company. The charter provided for a line between

¹Construction of the country's first general-use railroad, the Baltimore and Ohio, began in 1827, only five years before the Montgomery Railroad received its first charter.

²Wayne Cline, *Alabama Railroads* (Tuscaloosa and London: The University of Alabama Press, 1997), 10. My discussion of early Alabama rail history draws heavily on Cline, who provides the only in-depth handling of the subject and offers an excellent overview of state rail development.

³Cline, *Alabama Rails*, 19.

Montgomery and Columbus, GA on the Chattahoochee River. A November survey produced a cost estimate of \$8000 per mile.⁴ Failing to initiate construction within the time prescribed, they received a second charter on January 15, 1834. The new charter provided for a line between Montgomery and West Point, GA, also located on the Chattahoochee River, but some miles north of Columbus.⁵ McGehee dispatched his Assistant Engineer in December 1835 to survey the first twenty-seven miles east of Montgomery. The *Final Report* included expenses for the original length plus thirteen additional miles, with a total estimated cost for excavation, embankment, and bridges at \$800,000. McGehee accepted this figure and awarded McGehee & Scott contractors the first twenty-nine miles, breaking ground on March 1, 1836. With these first steps, McGehee introduced a transport option with benefits extending far beyond Montgomery. Mobile merchants, for instance, embraced the railroad as a means of extending their own reach into the Tennessee Valley and then north, capitalizing on their strategic position along the Gulf Coast. Once company stock became available to the public, Mobile interests consumed nearly half of all available shares at \$1/share, confirming McGehee's faith in the utility of his project.⁶

Social and economic problems stalled McGehee's initial efforts. In 1836, the second Creek Indian War ripped through eastern Alabama, weakening investor confidence in the potential success of the line and converting construction sites into literal battle zones. Further difficulties occurred due to the vast economic depression of 1837 that resulted from years of inflated land values and widespread speculation combined with the recent failure of the New Orleans cotton market. Nonetheless, Mobile's desire to best Pensacola's commercial prowess ultimately reaffirmed investor confidence. With the aid of Charles Pollard, a fellow Montgomery planter and company member, the Montgomery Rail Road rallied and prepared for operation in 1839.⁷

The addition of Pollard to the company proved a boon, for it was his charismatic efforts that produced the additional capital necessary to begin operations, when the state was unwilling to subsidize the operation. The Board of Directors issued \$50,000 in bonds on October 9, 1839. With twelve miles of iron-capped wooden-stringer rail completed, the Montgomery Rail Road Company used the additional capital to stage a trial run to attract the remaining funds necessary to extend the track. The company purchased an engine in July (a 4-2-0 named the *Abner McGehee*) and published invitations in local newspapers. On June 6, 1840, a select number of distinguished locals boarded the inaugural train and traveled seven miles to a grand-opening celebration hosted by the company. Not long after, the company obtained a second engine and began passenger and freight service between Montgomery and Franklin, AL. Operations were far from efficient, and technical problems prevented all but the loosest adherence to schedule. By 1841, public confidence in the Montgomery Rail Road Company had waned considerably.⁸

Faced with imminent financial failure, McGehee took out a new lease on the company, but was

⁴Marshall L. Bowie, *A Time of Adversity and Courage, A Story of Montgomery and West Point Rail Road and Predecessor Company of the Western Railway of Alabama and its Activities During the War Between the States, 1861-1865* (West Point Route, 1961), 1.

⁵Interstate 85 between Montgomery and Atlanta approximates the railway's path, suggesting the importance of this route as early as the 1830s.

⁶First *Annual Report* of the Montgomery R.R. Co. (1836). *Annual Reports* issued between 1836 and 1898 are summarized in *The Western Railway of Alabama Information Compiled from Annual Reports, First Annual Report-Year 1836 through June 30, 1898* in the University of Louisville Archives. All references to reports issued during this period refer to this collection; Cline, *Alabama Rails*, 18-20.

⁷Cline, *Alabama Rails*, 19-20.

⁸*Annual Report* (1850): 2; Cline, *Alabama Rails*, 22.

nevertheless forced to sell the operation on July 6, 1842.⁹ Charles Pollard and a number of associates were able to underwrite the cost and obtain a new charter on February 13, 1843, extending the completion date until January 1, 1850.¹⁰ Nominally reorganized, the railroad operation changed in two important ways under Pollard's ownership. First, Pollard secured a critical advantage that had eluded McGehee throughout his tenure as president: governmental subsidization. Though the Alabama state government did not support the road with a direct loan during its first charter, the Federally-sponsored Two Percent Act helped to make state funds available. Pollard's persuasive sales pitch, combined with a hefty security against the loan, convinced the legislature to award the company a \$120,000 loan. Thus began a long and often turbulent relationship between the railroad company and the Alabama State government.¹¹

The second change under Pollard involved his own personal vision for what the Montgomery road should become. McGehee's plan was farsighted, given that rail development remained in its infancy at the time of the company's first charter. By the time of Pollard's ascent, rail travel had become an important means of travel. By 1840, more than 300 U.S. railroads encompassed almost 3,000 miles of track, up from 2,000 just five years earlier. In only a few years, Samuel F. B. Morse would transmit the first telegraph message and J. M. W. Turner would release his famous homage to the union of nature and rail technology: *Rain, Steam, and Speed*. In short, Pollard's vision materialized in an atmosphere of rail development far more advanced than that known by McGehee. Accordingly, his scheme eclipsed merely joining southern ports with the Tennessee River Valley. Instead, Pollard "envisioned a railway hub at Montgomery with tracks radiating outward to connect with the great main lines of the country, and he would not rest until he achieved that goal."¹² The new president renamed his road to reflect this new outward vision; as ownership of the road passed from McGehee to Pollard, so the name "Montgomery Railroad Company" was exchanged for "Montgomery and West Point Rail Road Company."

In 1851, the railroad laid its final length of track into West Point. Despite heavy expenses necessitated by the refitting of forty-seven miles of track, that year the company also constructed a passenger depot and shed, and established a regular rail service schedule. Pollard's vision began to unfold and the company thrived. The president desired further expansion, though, and this time looked forty-five miles west of Montgomery to Selma, which, if reached by rail, would afford access to the Alabama and Mississippi Rivers Railroad, creating unbroken rail service across the state. On February 16, 1854, Pollard, joined by Boiling Hall, Daniel Pratt, and John Whiting, consolidated the Montgomery and West Point Rail Road with the proposed Selma extension, forming the Western Rail Road Company of

⁹"Act to Amend Charter," 13 February 1843, 10.

¹⁰"Section 1. *Be it enacted by the Senate and House of Representatives of the State of Alabama in General Assembly convened*, That all the rights, and privileges, and immunities, heretofore invested in the Montgomery Rail Road Company, by the Act of Incorporation, approved January the eighteenth, one thousand eight hundred and thirty-four, or which may have been given by any subsequent Act or Acts of the Legislature amending the same, be, and the same are hereby fully invested in, and confirmed unto Charles T. Pollard, Lewis Owen, Benajah S. Bibb, Abner McGehee, William Taylor, James E. Scott, Thomas M. Cowles, and Charles P. Shannon ... and that the said Company shall have until the first day of January, one thousand eight hundred and fifty, to complete said road." "Act to Amend Charter," 10-12.

¹¹Assistance through the Two Per Cent Fund did not come without strings attached. Indeed, the Montgomery and West Point, and the Tennessee and Coosa Rail Road Company (recipients of the fund's other half) were required to present hefty security against the loan, make annual progress reports to the Governor, submit to a specially appointed penal board if necessary, and in the M&W.P.'s case, issue bonds ensuring completion of the road to Auburn by January 1, 1849. Moreover, the governor reserved the right under this act to reevaluate security if deemed necessary, meaning that the road's success lay in the hands of a governor whose best wishes may or may not have been in favor of the M&W.P. "Act to Amend Charter," 12-15.

¹²Cline, *Alabama Rails*, 22.

Alabama.¹³

Although profits increased throughout the second half of the decade, the road was hindered by continued reliance upon 4' 8 ½" gauge track that made it "necessary to break bulk, which caused delays and increased expenses" at connections with other lines. The company prepared to regauge the road, but did not begin soon enough and again failed to fulfill the requirements specified in its charter. Pollard returned to the capital to raise additional funds, and surveyors soon began work between Selma and Montgomery.¹⁴

Construction efforts were delayed, this time to a wholly unprecedented extent, by the Civil War. The repercussions of the bombardment of Fort Sumpter rippled almost immediately along the tracks to Montgomery. "For the first time in the history of the Company," noted the 1861 *Annual Report*, "the receipts for the current year showed a decrease as compared to the previous year, which was due to the short cotton crop, political disturbances, and competition." Indeed, the outbreak of Civil War put Pollard in an awkward position. While devoted to the Selma extension, he nonetheless possessed the only east-west road across Alabama and was, therefore, subject to the demands of the Confederate States of America (CSA). "No movement had yet been made," the report continued, "to put under contract the road between Montgomery and Selma, owing to the embarrassed and depressed condition of the Country. The recent events imperatively require an early connection of Montgomery with Vicksburg by rail. To the confederate states it becomes a necessity in order to perfect with as little delay as possible a continuous line between the Atlantic and Mississippi Rivers."¹⁵

The road's importance to the southern war effort jeopardized its financial stability. By 1862, the company devoted one-third of its resources to the transport of Confederate troops at one-half the normal rate. This excessive volume, combined with the harsh rains of 1862 and the simultaneous shortage of railroad spikes on the southern market, made road maintenance and upkeep virtually impossible. By 1863, the company noted emphatically that "[s]uch was the worn out condition of the flange rail on the upper end that the only hope to meet the wants of the country is to obtain through the confederate government sufficient iron to relay at least ten miles of road."¹⁶ Moreover, the deteriorating gold value of Confederate currency made payment of dividends almost impossible, further eroding support from investors. Even so, the road remained loyal to the CSA and continued to maintain services.¹⁷

Late into the war, the Montgomery and West Point Rail Road's east-west route retained so much importance that Union Forces under General Wilson were dispatched to disable it. Following the Union victory in Selma, troops marched eastward to Montgomery, which surrendered without a fight. Three days after Lee's surrender at Appomattox, Union forces destroyed the M&WP depot and shops in Montgomery. The troops proceeded up the tracks toward West Point and southeast to Columbus, points to which the M&WP had sent all locomotives and rolling stock. These were destroyed in the last battles of the Civil War at West Point and Columbus.

After the withdrawal of Federal troops, the intact survival of at least one locomotive and five flat cars

¹³Bowie, *A Time*, 3-4; *Annual Report* (1852): 8; *Annual Report* (1854): 9.

¹⁴*Annual Report* (1859): 34.

¹⁵It is worth noting that the telegraph that initiated the bombardment originated in downtown Montgomery. *Annual Report* (1861): 41-42.

¹⁶*Annual Report* (1863): 49.

¹⁷*Annual Report* (1861): 46; *Annual Report* (1864). President Lincoln's January 1, 1863 Emancipation Proclamation notwithstanding, the road retained ownership of fifty-eight slaves in 1864.

“enabled (a force of repairmen) to work down as far as Osanippi Creek.” Until the line was rebuilt into Montgomery, repairs to sixteen locomotives were made “under the passenger shed at West Point.” Yet, the reconstruction of the line into Montgomery offered little consolation. As the *Annual Report* of 1866 noted, “[t]he machine shop, blacksmith shop, roundhouse, car factory, freight depot and shed, oil house and store room and passenger station at Montgomery were destroyed and nothing remained but paint shop and foundry.”¹⁸

Post-war repairs were costly, made worse by a nationwide depression triggered by the War’s end. With \$750,000 of debt and only a skeleton of a railroad, M&WP began to rebuild the line. By the end of 1867, new freight depots and car shops stood at Montgomery, and the road’s gauge had been widened to the standard 5’. Further difficulties plagued the company in 1868 when steamers transporting freight between Savannah and Charleston raised prices, effectively diverting business to Mobile and New Orleans. This instigated a mass decline in cotton prices and, consequently, in road revenues. The situation appeared so dire on February 1 that “all forces were reduced and salaries reduced 20%.”¹⁹

Pollard sought assistance from William Wadley, president of the Central Railroad & Banking Company of Georgia, resulting in a loan-financed completion of the track between Montgomery and Selma in 1870. The achievement spurred yet another reorganization; the *Annual Report* noted, “the entire line of railroad from Selma to West Point and the branch road from Opelika to Columbus became the Western Railroad of Alabama on September 1st, 1870.” Wadley provided additional funds at the beginning of the 1873 depression, this time combining funds from the Central Railroad and Banking Company of Georgia and the Georgia Railroad and Banking Company to purchase the Western Railway outright. In 1881, the Louisville & Nashville leased the Western Railway, and the line once again changed its gauge, converting all locomotives, rolling stock, and rails to narrow gauge.²⁰

By 1883, the Western Railroad formed an extensive system of east-west running roads stretching from Augusta to Selma. The system was comprised of three individual lines. The eastern-most stretch, from Augusta to Atlanta, fell under the auspices of the Georgia Railroad, which was owned and operated by the Georgia Railroad and Banking Company. The Atlanta and West Point Railroad carried freight and people from Atlanta to West Point. Finally, the Western completed the triptych, extending its reach from West Point to Selma. On March 15, the Western reorganized for the last time, changing its name yet again, this time to the Western Railway of Alabama.²¹ With this final change, the WofA, with its sister lines, entered a second stage of existence where memories of frail charters receded beneath the demands of competition, transportation innovations, and great social upheaval.

Evolution of the Montgomery Shops

Just as the coming of the new century witnessed the WofA’s entry into a new era of railroading, so did it bring physical reorganization. The Western’s headquarters always had been located in Atlanta, GA, but primary shop operations – maintenance, construction, and handling of cars and other rolling stock – began in Montgomery in about 1849. Budget statements for that year and the next reveal a flurry of activity. Land deeds indicate that the railroad was carefully procuring land to the west of North Court Street between 1845 and 1850. The first registered parcel of land, however, was deeded to the Montgomery Rail Road in 1837 by John Scott, one of the founders of Montgomery. By 1856, the

¹⁸*Annual Report* (1866): 57, 63-64.

¹⁹*Annual Report* (1867): 65, 69-70; *Annual Report* (1868): 71.

²⁰Cline, *Alabama Rails*, 75; *Annual Report* (1871): 78; James F. Doster, *Railroads in Alabama Politics, 1875-1914* (University of Alabama Press, 1957), 51.

²¹Doster, *Railroads*, 58-59; *Annual Report* (1883): 104-5.

M&WP had procured its largest piece of property, on which the current Shops stand, to the east of North Court Street.²² There is no extant evidence as to what the Shops looked like before and during the Civil War.

An 1887 city map does provide some sense of how the WofA shops appeared just prior to the turn of the nineteenth century. Until the 1890s, the shops occupied the two parcels of land straddling North Court Street in north Montgomery.²³ The eastern plot contained a freight yard, freight depot, offices, and a hand full of secondary car shops. Primary shop operations occurred to the west in the roundhouse, machine shops, blacksmith shop, and paint shop.

Though neither photos nor detailed descriptions remain of these shops, the company's *Annual Reports* do offer some clues to changes in layout over time. The history of the shops themselves was often as tumultuous as that of their parent company. Fire presented a constant threat prior to conversion from wooden buildings to brick. One such fire ravaged the shops on April 23, 1860, destroying the car factory and requiring a \$13,500 reconstruction the following year. In 1865, General Wilson's troops crippled Alabama's railway backbone, destroying nearly every depot and bridge, including the Montgomery facilities. By the end of 1867, however, the company had built a new machine shop on the original site, this one with a 100-foot extension, as well as new offices, a pattern shop, a carpenter shop, and blacksmith shop, all of brick. The reports indicate that a "full line of wood-working tools" was purchased and no doubt operated by a stationary engine similar to, if not the same as, that purchased and installed in 1852.²⁴

The record for the last quarter of the nineteenth century was mixed for the company. It rebuilt its equipment, as well as its shops, between 1870 and 1890, purchasing "three new power tools, a drill press, planer and driving wheel lathe . . ." in 1876.²⁵ Though records are scarce for the 1880s, the company declared in 1891 that "at no period in its history have the road and equipment been more perfect or in a higher state of repair."²⁶ On the other hand, in the aftermath of the combined effects of the nationwide depressions of the 1870s and the 1890s, and the labor activism of the 1880s and 1890s that targeted the railroads especially, "the machine shops were found to be in so bad a condition as to require immediate and extensive repairs."²⁷ Continued hard times and the added complication of poor payoffs on the Selma route, which was hoped to financially rejuvenate the road, continued to plague both road and shops throughout the 1880s until a final catalyst for building reorganization occurred in 1897:

Since the close of the fiscal year, the roundhouse and machine shops at Montgomery were partially destroyed by fire on the night of July 31, 1897. Three engines belonging to the Western Railway of Alabama and seven engines of the Atlanta and West Point R.R. were damaged in this fire. By temporary repairs the shops were placed in operation four days after the fire. The loss

²²1849: For new machinery in shops, \$2,745; For building brick house for stationary engine, \$1,200; For increasing value of wood and iron materials on hand in Car Factory and Machine shops, \$2,790.

1850: For building 7 pass. And baggage cars and 51 Frt. Cars, \$32,800; For machinery in shops, \$4,083; For materials of wood and iron on hand in shops, \$6,000.

²³Though the Alabama State Archives no longer contain the land records for the shops, this bird's-eye view rendering of Montgomery in 1887 offers a clear view of the shops and their cross-road configuration.

²⁴*Annual Report* (1861): 42, 45; *Annual Report* (1866): 63-64.; *Annual Report* (1852): 9.

²⁵*Annual Report* (1876): 89.

²⁶*Annual Report* (1891): 6.

²⁷*Annual Report* (1892): 12.

of buildings, tools and machinery was covered by insurance, which was promptly paid aggregating \$10,644.56. Plans for construction of new machine, boiler and blacksmith shops adjoining the present car shops have been prepared and substation buildings will be erected. Roundhouse will be temporarily rebuilt on old location, and permanent structure will be erected adjoining the new shops at future convenience.²⁸

The July fire prompted a massive rebuilding of the WofA's shop facilities. By the end of the 1898 fiscal year, over \$30,000 had been invested in new shops, including a roundhouse rebuilt with nineteen stalls, a new roof and temporary repairs for the old machine shop, a new brick machine shop (115' x 102'), boiler shop (83' x 52'), blacksmith shop (83' x 38'), and a two-story office building (52' x 31') with a store-room annex (72' x 32').²⁹ A rebuilt boiler and engine room for the car shops and a storeroom for the road department completed the list. These additions to the shop facilities represented not only a rebuilding, but rather an entire reorganization. Until this point, only the freight depot and a few scattered small buildings occupied the WofA's eastern plot. The commencement of construction in 1898, however, effectively moved operations across the tracks. Company reports do not mention relocating operations; however, the building sizes quoted above match exactly those represented by a Sanborn Fire Insurance map drawn in 1910, soon after the reconstruction.³⁰ The map depicts each of these buildings on the eastern plot.

Work continued on the new location in succeeding years, with plans for "a new roundhouse, turntable, coal chute, and water station on grounds adjoining(the) new shops . . ."³¹ Despite these plans, the roundhouse and engine facilities were foregone in favor of a new brick paint shop (68' x 198') and wooden coach shed (68' x 289') built by Cook & Laurie, contractors, for \$22,700, to be completed in September of 1900.³² As work on these structures neared completion, the road offices were also relocated, and on "July 1, 1898, the general offices of the company were moved from the old building near the present shops into the handsome new building" on the corner of Coosa and Tallapoosa Streets.³³ In September, 1900, the offices and freight house once located on the eastern plot were dismantled and the materials moved further east to the site of a proposed new roundhouse.³⁴ By the end of 1902, the new roundhouse, steel tank and water station, had been completed at a cost of \$31,122.³⁵

Despite increases in the cost of materials and supplies, including iron, steel, and coal, the new shops flourished during the following years, deriving significant business from repair work to the rolling stock of other carriers. The 1903 *Annual Report*, for instance, suggests a plethora of shop activity, including repairs to cars belonging to the Atlanta and West Point, the Union Springs and Northern, the Louisville and Nashville, and the Mobile & Ohio railroads. The shops also painted signs, built and repaired office furniture, constructed three and rebuilt thirty-one cars, "made heavy repairs to 113 and light repairs to

²⁸*Annual Report* (1897): 153.

²⁹*Annual Report* (1898): 5, 12.

³⁰The 1898 *Annual Report* does refer to these structures as being "erected adjoining the car shops on the east side of your Montgomery yards." *Annual Report* (1898): 12.

³¹These required an expenditure of approximately \$40,000. *Annual Report* (1899): 18.

³²*Annual Report* (1900): 12-13.

³³W.W. Screws, Jr., "The Story of the Montgomery Railroads," *Montgomery Advertiser*, 16 Dec 1906, 7, 10.

³⁴*Annual Report* (1900): 12-13, 16-17.

³⁵*Annual Report* (1902): 15.

803 for the Atlanta & West Point Railroad,” and made heavy repairs to fifty-four “foreign cars . . . and 1447 light repairs . . .”³⁶

The success of the shops fueled the final stage of construction on the eastern plot. On July 1, 1906, WofA officials once again employed the services of Montgomery contractors Cook & Laurie, this time for a proposed \$200,000 complex to include a 700’ car shed and planing mill. Requiring somewhat more time than the anticipated six to seven months to complete, both structures were in operation by 1910, at which time the eastern plot neared completion. In 1913, Roberts & Schaefer contractors of Chicago provided a \$22,698 concrete coaling station, and the WofA’s Montgomery shops assumed the shape they would more or less maintain until they closed six decades later.³⁷

WofA and the Politics of Railroad Growth

The rise of the new shops at Montgomery between 1883 and 1907 occurred during a period of rapid and tumultuous rail development throughout the United States. Rail operation was refined and regularized throughout these years through the adoption of standard time in 1883, a Federal mandate for the installation of air brakes ten years later, and a host of tariff, commerce, and race-related social statutes and court cases.³⁸ Labor agitation also spawned wide-spread disturbance as workers flocked in record numbers to podiums held by 8-hour day advocates who, in 1886 alone, managed to rally over six hundred thousand workers to strike the lines run by Jay Gould, in one of the largest labor actions in U.S. history. Finally, the introduction of the automobile and airplane in the early 20th century presaged the decline of railroad pre-eminence in passenger transportation.

The rapid development of rail transport facilities in the late nineteenth century brought conflict and regulation to the WofA. The tensions attending rail expansion in Montgomery exploded in 1897 as the arrival of the Mobile & Ohio Railroad threatened the WofA’s local privileged competitive position, plunging the WofA into a battle over track and depot placement. Known as the “Battle of Clay Street,” the month-long conflict was one of several the WofA fought as it grew and prospered. (For a contemporary newspaper account of the “Battle of Clay Street,” see Appendix V)

Far more important were conflicts attending the increasing regulation of rail construction and transport. In the wake of the Civil War, states’ rights issues strongly shaped rail legislation such as the establishment of an authority to set transport rates. As of March 1, 1877, the Supreme Court supported the authority of individual states to regulate rates on intrastate traffic and/or all freight originating within a state’s boundaries. Though the decision boded well for state officials, local businesses feared heavy handed governmental control of the rails and campaigned to ensure their own check upon potentially detrimental legislation. When Alabama’s first railroad commission was organized in 1881, it was composed of three members with special knowledge of rail affairs, including Charles Pollard Ball, the former superintendent of the Western Railroad. Nonetheless, the Western received no special treatment. In fact, it became entwined in one of the first and most significant disputes growing out of the new relationship between businesses, the state, and the Railroad Commission. The Commission recommended on February 5, 1886, that the Western’s rates between Montgomery and Selma be reduced

³⁶*Annual Report* (1903): 13-14.

³⁷*Annual Report* (1906): 16; “Contract Awarded for Mammoth Railroad Shops,” *The Montgomery Advertiser*, 5 September 1906, 3. (Though the newspaper reports a 700’ car shed, the shed built was only 400’ long. The source of this discrepancy is unknown.) *Annual Report* (1913): 14.

³⁸These included the Interstate Commerce Act of 1887, the Dingley Tariff Act and Sherman Anti-Trust Law of 1897, the Elkins Act of 1903, the Hepburn Act of 1906, and the Supreme Court’s “separate but equal” ruling in *Plessy v. Ferguson* in 1896. On the state level, “Jim Crow” laws appeared in Arkansas, Georgia, Tennessee, and Alabama.

from four to three cents per mile. The Western's general manager, Cecil Gabbett, resisted the measure, but the Commission forced the reduction.³⁹ Ironically, only a year later, the Supreme Court reversed its rail rate decision in *St. Louis & Pacific Railway vs. Illinois*, ruling that only the federal government, and not individual states, could declare rates on intrastate shipments. Nonetheless, friction between the Commission and the Western would continue.

A decade later, just as the Montgomery shops brought their new facilities to completion, new state legislation converged with the financial depression sweeping the country to generate more conflict for the WofA. As economic conditions worsened, the WofA suspended operations at the Montgomery shops, rousing further anti-legislation animosities. Occurring immediately after a flurry of railroad reforms issued by the Alabama State legislature, state roads and their supporters blamed legislators for the greater financial crisis. In session on November 7, 1907, the state legislature addressed the situation and Governor Braxton Bragg Comer questioned "whether or not the people of Alabama had the right to dominate their intrastate affairs and make laws to regulate them." Comer issued a series of retaliatory proposals against the railroads that were structured to deny the latter access to Federal courts. Much to the dismay of WofA officials, the proposals were accepted. Road auditor, W. H. Smith, then secured a temporary restraining order against Comer's legislation for the Western and its cohorts.⁴⁰

The showdown spawned an atmosphere reminiscent of the "Battle of Clay Street." Railmen arrived from all over to offer support. "The greatest crowd in Montgomery's history was said to have been in attendance . . . some of the railroads, including the L&N and the Western of Alabama, transported national guardsmen along their lines to the capitol free of charge."⁴¹ The financial crisis thickened and railroad supporters levied harsh criticism against President Roosevelt, the Hepburn Act, and, more locally, Governor Comer. By the time that official hearings were finally held in Montgomery and Atlanta in 1911, public opinion supported the railroads' claims of political exploitation. The WofA received a permanent injunction in May 1912, but the precedent set by this decision limited state intervention in rate determination to such an extent that the Supreme Court stepped in to re-install some balance of power. The Railroad Commission again ordered a reduction of rates in 1913; in response, the WofA sought Federal protection. This time, the Commission's order was enforced by the Feds who thought the reduced rates fair because passenger traffic was increasing WofA's profits. From then on, a two and one-half cent rate remained fixed.⁴² The Commission demanded further rate reductions in July 1914, this time requesting that the WofA adhere to rates that historian Wayne Cline argues were equal to those earlier demanded by Comer, thus forcing a symbolic defeat for the railroad. The Western accepted the reduction without opposition, according to its lawyers, as an act of reconciliation.⁴³ Thus the Western and its cohorts accepted the commission's authority and yielded a degree of power, if not pride, to the hands of Alabama's state officials.

As the freight battles raged on, the years encompassing the turn of the century demonstrated the extent to which environmental factors created serious obstacles for the growing line. In 1886, for instance, despite strong earnings, profits fell due to "an unprecedented flood in the Alabama River and its tributaries" that

³⁹Doster, *Railroads*, 30.

⁴⁰Cline, *Alabama Rails*, 210, 212. These "cohorts" included the Louisiana & Nashville, South & North Alabama, Central of Georgia, and North Carolina & St. Louis.

⁴¹Doster, *Railroads*, 116,.

⁴²Doster, *Railroads*, 203, 211, 218-19.

⁴³Cline, *Alabama Rails*, 212ff; Doster, *Railroads*, 223.

complicated narrowing of gauge during that year.⁴⁴ Less than a decade later, a second deluge caused \$25,000 in damages, washing out culverts, destroying engines and suspending traffic for three days.⁴⁵ In addition, yellow fever ripped through the south twice during this period, costing the line both passenger and freight traffic, and increasing expenses for compliance with quarantine regulations.⁴⁶

At the close of the nineteenth century, the Western Railway of Alabama had survived depression, disease, attack, warfare, and a host of other trials and tribulations. Nevertheless, by 1900, it had mustered the funds and initiative to undergo an entire reconstruction and relocation of its Montgomery shops. The Western had begun to flex its locomotive muscle, but not until the rise of the twentieth century would the line achieve full modernization.

Charles A. Wickersham and the New Century

As the nineteenth century passed into the twentieth, the WofA presidency passed from C. H. Phinzy to Charles A. Wickersham. In 1902, Wickersham took managerial control of the road, retaining that position for a notable forty-four years. During this time, the road grew from a small line into a giant enterprise where finances, operations, and even its relationship with its community flourished.

Though it is unclear to what extent Wickersham was involved in the reorganization of the Montgomery shops, given that such efforts clearly began before 1902, it is certain that the new president shaped the manner in which the facilities crafted their own identity for the new century. Between 1900 and 1950, the WofA shops pursued a policy of horizontal integration in which operations were expanded to reduce reliance upon outside manufacturers, utilities were altered to reduce reliance upon Montgomery, and the administration assumed a central role in shaping the lives of its employees. This process of self-definition began with the consolidation of shop activity on the east side of N. Court St. Once consolidated, the shops severed significant ties with Montgomery by developing their own water source rather than using city utilities. Simultaneously, shop activities expanded to include production of parts and materials hitherto purchased from outside suppliers, thereby liberating shop production from often unreliable markets. In addition, Wickersham took great measures to cultivate a shop persona of sorts. Throughout the twenties, the Montgomery shops made great efforts to offer comfortable working conditions for employees and missed no opportunity to demonstrate this to the public. Sponsorship of youth groups and orphanages, a shop baseball team, and even a shop band served to cement bonds between the shops and the community.

Moving and consolidating the WofA shops broadened their scope of operation and saved the company considerable money. The pre-1900 shops housed repair and maintenance functions only. If fabrication occurred at all, it was on a limited scale with most parts and materials obtained from outside suppliers. In the course of the reorganization, the WofA shops grew to be almost completely self-sustaining with regard to material acquisition and processing. An 1890 letter from Chief Engineer, William Apps, to E. L. Tyler suggests an explanation for this change:

We can also procure our axles, turnbuckles, truss rod ends, stake pockets, c. from the forges about as cheap as they can, we can also get our wheels from Decatur FOB here for \$1.00 per wheel less than the OF Co. will do it. We have a lot of bridge iron that we can use as truss rods all we need to get from them will be the arch bars and bolts nuts complete for them and the heavy castings and brake material, there is no advantage in getting the trucks put up and shipped here as you can only get 8 trucks on a 34 ft flat by loading them 2 up whereas we can get the

⁴⁴Cline, *Alabama Rails*, 200; *Annual Report* (1886): 113-114, 115.

⁴⁵*Annual Report* (1902): 16.

⁴⁶*Annual Report* (1898): 6; *Annual Report* (1906): 14.

irons for 30 trucks in our car of the same capacity, excepting the wheels and axles the only advantage the Ohio Falls Co have over us is their improved machinery, if we build these cars here we can keep our machines fully employed, will put in req for necessary material as soon as you desire.⁴⁷

By 1890, shop officials had already begun to consider the implications of extending fabrication operations in order to minimize expense and dependence upon suppliers. Indeed, dependence upon suppliers proved a special problem throughout this period, as suggested by continual complaints in correspondence books concerning the difficulty of obtaining materials and the lackadaisical attitude manufacturers often displayed toward the urgency of railroad deadlines.

As the shops prepared for operational consolidation, they moved away from dependence upon city utilities. The first major step toward this goal occurred in 1892 when the shops completely severed their ties with the city water works. "I have before me your circular relating to hydraulic pumping," W. H. Harrison wrote to Garrett's Hydraulic Motor Co. in Union, SC, one year earlier. "As we are constantly in need of some source of power for conveyance of water to tanks etc I am naturally interested in any form of power that promises a minimum cost. Please explain to me more freely . . . the working of the motors. Have you sufficient confidence in your machine to make a conditional test? . . . I have at present a 50000 Gal. Tank to supply that I would be glad to have you test your motor on with chance for . . . orders if test . . . proved satisfactory."⁴⁸ Harrison had just witnessed the erection of the new tank in place of the shops' old 12,000 gallon tank. The new water tank measured 15' in diameter and 120' high, with a 20' wide brick well 52' deep beneath. This tank was built just southeast of the roundhouse. Water moved from well to points throughout the shops by means of a Dayton Hydraulic Co. turbine pump size #6 type DSV, with Westinghouse induction motor of 50 h.p. and equipped with a Westinghouse auto starter. The near quadruple increase in capacity and substantial increase in head was no doubt intended for purposes beyond fire prevention and drinking water: it made the shops almost completely independent of the city water supply.⁴⁹

In 1910, at which point construction of the new shops was complete, operations had expanded to all aspects of road. The list of miscellaneous items built in the shops in that year's *Annual Report* suggests the breadth of operations, and included, in addition to running stock, office equipment such as tables, chairs, stools, etc. As the list suggests, the Montgomery shops were equipped with tools and staffed with workers capable of performing a variety of tasks ranging from rough construction to cabinetmaking to mechanics. It also suggests the growing number of employees located at Montgomery and the extent to which the shops were, by 1910, becoming more autonomous within their own environs.⁵⁰

In the same year, however, the boll weevil struck a blow to the company that sent profits plummeting. The WofA estimated that "five hundred families...left farms in that section during the year," substantially reducing cotton acreage and agricultural and passenger freight.⁵¹ By 1916, the boll weevil had deeply scarred both agriculture and rail profits. The road's heavy dependence on regional agriculture left it vulnerable to the effects of the boll weevil.

⁴⁷Wm. Apps to E. L. Tyler, 11 June 1890.

⁴⁸W. H. Harrison to Garrett's Hydraulic Motor Co., 22 August 1891.

⁴⁹Interstate Commerce Commission, WofA Building Records, Valuations Section 2ALA, 1918 (hereafter WofA Building Records); *Annual Report* (1892): 12. The opening to the brick well is still visible. As of 1915, 8' of water filled the bottom of the well.

⁵⁰*Annual Report* (1910): 16; *Annual Report* (1916): 14.

⁵¹*Annual Report* (1916): 14.

The beginning of U.S. involvement in World War I thrust the road into a sort of limbo as President Wilson ordered governmental occupation of all national transportation operations on December 31, 1917.⁵² Lasting until March 1, 1920, governmental occupation actually increased freight traffic, passengers and profits, marking the war years as the summit in terms of WofA passenger service. The WofA purchased two 2-8-2 Mikado engines from the Lima Locomotive Works in 1918 especially to accommodate increased traffic.⁵³

The Montgomery shops capitalized on war-related activity, sparking a decade of unprecedented growth, expansion, and modernization. Each *Annual Report* between 1920 and 1929 provides a lengthy list of tools purchased and buildings constructed. The most active year for equipment purchases was 1928, when much of the heavy fabrication and repair equipment such as lathes, presses, milling machines, grinders, etc. was purchased.⁵⁴ Though 1928 was perhaps one of the most active years in terms of new equipment purchase, acquisitions throughout the decade suggest considerable investment in new machinery and an obvious effort to make the Montgomery shops the best equipped in the south. A few years earlier, the Montgomery shops had been one of the first businesses to establish telephone communication in the city.⁵⁵ Between 1917 and 1922, the shops installed a storage battery for telephone power, a motor generator set for the telephone, an additional line to the roundhouse foreman, and a wireless telephone booth and outfit – perhaps for the workers themselves.⁵⁶

The innovative character of the Montgomery shops was perhaps most clearly revealed in the water testing station maintained on site in the Paint Shop. In 1929, a collection of “original equipment and supplies for laboratory” was purchased for shop use. Former shop employee, Bud Sweatt, recalls lab operations:

It [water testing laboratory] was located between the Stencil Cutting Room and the Men’s Showers, all three being located in the Southwest corner of the Paint Shop. The lab was well equipped with the necessary apparatus, Bunsen burners, glassware, chemicals, etc., needed for testing water used for producing steam in locomotives. Samples from water tanks between Selma and Atlanta would be periodically sent to the lab for testing. Certain elements found in water would cause it to foam when heated to boiling temperatures, and others, could otherwise be destructive to locomotive steam making components. When unwanted elements were detected, the necessary chemicals were added to the water supply to make it suitable for use ... the lab was moved to the second floor of the Shop Office Building, and the former lab space was used for the Silk Screening Process of printing the West Point Route logo on headrest covers used in passenger cars. With the coming of diesels the lab was no longer needed and some of the apparatus was given to a local school to be used in their lab.⁵⁷

Modifications at the shops during the 1920s followed employee welfare and safety practices common among large corporations of the era. Perhaps foremost among these was the opening of a shop first aid station on September 1, 1923. Work at the shops was no doubt hazardous: within a year, over 650 injuries were treated at the station with only one developing further with severe infection. The station

⁵²See Wilson’s “A Proclamation,” reprinted in *Annual Report* (1917): 14-15.

⁵³Cline, *Alabama Rails*, 216.

⁵⁴*Annual Report* (1928): 20-21.

⁵⁵“30 Used Phone Service in 1880,” *Montgomery Advertiser*, 9 February 1961, 9J.

⁵⁶*Annual Reports* (1917-1922).

⁵⁷*Annual Report* (1929): 21-22; M. P. “Bud” Sweatt to Seth Bruggeman, 29 June 1999.

was "equipped with sterilizer, operating table and all accessories that would be required in performing any operation that necessity might demand."⁵⁸

In addition to keeping the men safe at work, the WofA did its part during the twenties to shape the free time of its employees. The shops sponsored various sports teams. Bank account books remain, for instance, from The West Point Route Baseball Club whose life from 1922 to 1924 – briefly revived in 1926 and 1927 as the Western Shop Baseball League – was evidently well-funded and well-appreciated. The shops also sponsored a band. On January 17, 1926, the Western Band, starring young Chester Wickersham Kitchings – grandson of the road president – performed *gratis* for a crowd of two thousand in Montgomery's Municipal Auditorium, where "Judge Leon McCord gave a brief talk, telling of the accomplishments of the Western Band and its work in advertising Montgomery through broadcasting concerts and other ways."⁵⁹

To keep everybody informed on issues related to the railroad and its employees, the WofA, together with its sister railroads, the A&WP and Georgia RR, chronicled all of these events in its monthly road journal, *The Courier*. Throughout the 1920s, *The Courier* covered road events, noted appreciated workers, and included a few recipes in each issue for wives at home. In conjunction with the civic activities sponsored by the shops, *The Courier* allowed the WofA administration to gild its operation with a patina of civilized morality and decency – a standard until then rarely associated with railroaders though desperately sought during the oft-raucous twenties, when teetotalers and rum runners grabbed hand over fist for moral supremacy. Indeed, the spirit of camaraderie fostered by the company during the twenties occasionally boiled over into the hands of the workmen themselves. Mrs. Phil Dunning, Jr., daughter of roundhouse foreman and, later, master mechanic, A. E. "Wink" Edwards, tells the story of one of the more outlandish episodes of shop tomfoolery:

Of course they had an alligator there. There was a little round fountain that had a little wrought iron fence around it. Somebody brought that thing over there – I don't know who it was – and put it in there. And then it got to where they had a real hard time with it escaping and they named it Roy Dickerson. Roy Dickerson was a famous prisoner who was great at escaping back in those days. Well, after he had escaped quite a few times and had gotten up close to town and scared the daylights out of people and somebody call the police and the police knew where it came from and they'd call up the shops and somebody would go over there, lasso him, put him in something, and bring him back. Well, it reached a stage where the police told daddy, 'you're gonna have to get rid of him.' Daddy went down to see the mayor – now we lived right across from Oak Park – he told him what we really need over there is to put an alligator pond, and he would donate the first alligator. Well, he talked him into it and old Roy was the first one in there and then they got quite a few more.

Before Roy left the shops, though, he developed a close working relationship with the employees: "Sometimes in winter, he would just get real cold and start to ice up ... they'd take old Roy out, run him into the office, and put him over top the radiator. When his eyes began to blink – when he began to thaw out – they'd frantically take him back and put him into the pond again."⁶⁰

Thus, as the shops grew increasingly well-equipped, modern, and mechanically independent of the city, they also assumed a persona of their own. Baseball teams, the band, *The Courier*, and even the Roy Dickerson saga all lent themselves to developing a sense of community among employees. This was no

⁵⁸"First Aid Station, in The Montgomery Shops, Complete Hospital in Itself," *The Courier*, March 1925, 9.

⁵⁹"Western Railway of Alabama Band Gives Concert to its Montgomery Friends," *The Courier*, January 1926, 15.

⁶⁰ See the WofA *The Courier*, passim; Mrs. Phil Dunning, Jr. (Mary Cecil), telephone interview by Seth Bruggeman, 5 July 1999.

doubt a tactical effort on the part of Wickersham, for happy employees are generally productive employees. At the same time, labor activism may have sparked some of the company's pro-worker activities.

WofA Labor Activism

By the 1920s, labor activism had been a part of WofA shop history for generations. Indeed, the WofA shops were heir to a long period of labor activism dating to the Civil War. The first railway-related organized labor effort succeeded in 1864 when U.S. workers organized the Brotherhood of Locomotive Engineers. The Brotherhood was formed because of the erratic, unpredictable pay schedules characteristic of wartime and only less so of peacetime. On February 1, 1868, forces and salaries were reduced twenty percent at the WofA shops, suggesting to workers a need for some safeguard against administrative whims.⁶¹ Nineteenth-century labor activism culminated nationally in 1886 when agitation for an 8-hour day – not attained for another thirty years at the WofA shops – sent over six hundred thousand workers on strike nationally. Similar strikes continued throughout the century, ultimately crippling U.S. railroads in 1894 when President Grover Cleveland refused to assert authority in favor of labor demands. Counter measures, including Eugene V. Debs' founding of the American Railway Union, offered support but did not offer immediate improvements to most American rail workers' lives.

Increased labor pressure ultimately forced Federal action, so the Department of Commerce and Labor was created February 14, 1903, to serve as a regulator of labor disputes. The WofA Shops reacted immediately. Though no explanation is offered, the *Annual Report* of 1904 indicates that "the increase in conducting transportation ... is due largely to increased wages paid trainmen."⁶² It is not clear whether these resulted from shop-based agitation, employer generosity, or eagerness to appease and avoid inspection by the new Department of Commerce and Labor.

More formal labor action occurred in 1907. Effective May 1, 1907, WofA workers and administration released the "Amended Articles of Agreement between Atlanta & West Point R.R. Co. and the Western Railway of Alabama and Locomotive Engineers."⁶³ This agreement fixed pay rates, and roughly outlined the duties and expectations of engineers and callers. What is intriguing about this agreement is the timing of its release. The WofA received a double blow in 1907. First, reductions in freight and passenger rates were ordered by the Railroad Commission of Alabama, to become effective June 1, 1909. Second, and most likely in reaction to the rate reduction, the Montgomery shops closed in 1907, partly as a protest and partly as a result of the vast depression that was then sinking the nation. WofA workers had timed their labor agreement wisely. They enjoyed fixed pay under relatively predictable conditions throughout the course of that year's events, although administrators noted in the *Annual Report* that "the increase in conducting transportation is due largely to cost (and inefficiency) of labor."⁶⁴

No evidence exists of significant labor activism at the WofA shops throughout the remainder of the decade, but the 1920s introduced a whole new series of labor-related issues. In 1920, the extent to which acknowledgment of workers' rights could and did reduce profits became increasingly evident. On August 26 of that year, the ICC raised freight and passenger rates across the nation to ease the burden of May 1 pay hikes, but the aid was insubstantial.⁶⁵ In the meantime, post-war depression still hobbled the

⁶¹*Annual Report* (1868): 9.

⁶²*Annual Report* (1904): 15.

⁶³Subsequent reissuing of this agreement with progressively increased pay rates followed in 1910 and 1911.

⁶⁴*Annual Report* (1907): 14.

⁶⁵*Annual Report* (1920): 13.

country, forcing employers to cut pay rates by ten to twenty-five percent across the nation. These cuts included a severe twelve percent cut by the Railroad Labor Board on July 1, 1920. This was followed by a thirteen percent cut for all railroad employees, announced by the Railroad Labor Board on May 28, 1922. The cut sparked a nationwide strike involving nearly 400,000 U.S. workers. Rail unions rallied and began the great strike of 1922 on July 1. The wave of labor revolt flooded the Montgomery shops. On July 1, all members of the Federated Shop Crafts left their stations:

It seems necessary and proper in order to complete the record of the year's happenings to make reference to the strike of members of the Federated Shop Crafts, who left their work on July 1, 1922 in protest against a reduction of wages made by the United States Railroad Labor Board. Although all of the skilled White employees walked out of the shops, the loyal and tireless efforts of the supervisory force made possible the operation of the road without interruption until July 6th at which time the employment of new men began and continued until about September 1st when the force reached approximately normal proportions and practically normal conditions.⁶⁶

Though the accountant's tone suggests an administrative victory in the walkout, the company signed three labor agreements in the Fall and Winter of 1922. These agreements granted Montgomery's metal workers, car workers, and trainmen, among other provisions, a guaranteed eight-hour work day, overtime and holiday vacations, order of seniority, and fixed pay rates with increases over the old. The road renegotiated agreements with locomotive engineers and metal workers in 1923 and 1926 respectively, and the railway Labor Act of 1926 established a new labor mediation board.

Depression and War

Though the WofA prospered during the 1920s, the seeds of its eventual demise were sown in that decade. Indeed, the same innovations that bolstered growth during the twenties were those that fostered the public's interest in new and different forms of transportation. Even earlier, in 1916, Congress had passed a Federal Highway Act, authorizing a five-year road improvement program. Complaints concerning increased use of the automobile first appear in the WofA 1916 *Annual Report*: "It is estimated that at least five hundred families have left the farms in that section during the year. This, together with the increased use of automobiles by farmers and the traveling public in general, has caused a material decrease in passenger revenue."⁶⁷ A second Federal Highway Act passed on November 9, 1921, coordinated state highways and attempted to standardize U.S. road-building practices. Opposition came from the skies as well. In 1926, just as young Chester Wickersham Kitchings played his banjo to the crowd at Montgomery's Municipal Auditorium, Congress passed the Air Commerce Act to encourage the growth of commercial aviation through mail contracts. Therefore, by the end of the 1920s, the WofA faced strong competition on two fronts.

The WofA weathered the crash of the U.S. stock market and the start of the ensuing depression with surprising resolve. The 1930 *Annual Report* simply comments on the increase in cotton and livestock production and the slight ill effect of a local drought. Given the special circumstances, the WofA may have rejoiced in 1930 at the opportunity to reduce passenger service, and save some of its profits: "Passenger revenues continue to show decided decreases; and to meet these decreases we have been enabled to reduce our passenger train mileage, having withdrawn from operation certain of our local trains."⁶⁸ Not until two years later did the company even mention the 1929 stock market crash, and then only in the shadow of a far greater problem:

⁶⁶*Annual Report* (1922): 10.

⁶⁷*Annual Report* (1916): 14.

⁶⁸*Annual Report* (1930): 9.

The continued decrease in operating revenues is attributable to the sustained depressed condition of business in general, and the diversion of traffic to competitive modes of transportation. The latter cause is most distressing and threatens further decline in railway operating revenues if relief is not obtained through equitable regulatory legislation. While total operating revenues decreased . . . and all freight revenue decreased . . . included therein is a decrease . . . in local freight revenue.⁶⁹

Thus, by 1932, the WofA fully understood the implications of a diversified transportation market and felt the full force of its toll.

In the eyes of the WofA, agricultural improvements or deficits were primarily responsible for the road's own economic status. Indeed, attack by the boll weevil in the 1920s forced reorganization and diversification among farmers throughout the depression era. New approaches spawned diverse crops. In 1933, for instance, the WofA recognized a new industry with abundant revenue-generating potential: "Commercial pecan orchards continue to expand. One-half the total number of trees have reached bearing age, which indicates future development. Demand is keeping pace with supply."⁷⁰ Shifts in agricultural reliance from cotton to livestock, however, proved problematic when the screw worm infestation destroyed a large portion of the region's beef, sheep and hogs. Thus, agricultural ebbs and flows combined with the Depression to cause a decade of wavering, unpredictable profits for the struggling road.

The flood of labor laws growing out of Roosevelt's New Deal programs strongly influenced company-worker relations at the WofA. The Norris-La Guardia Act outlawed "yellow-dog" contracts, easing labor's ability to strike, picket, and conduct boycotts, and the National Industrial Recovery Act established the National Labor Board. Rail-specific legislation began in 1934 with the Dill-Crozier Act, establishing a National Railroad Adjustment Board to ensure railway workers' right to organize and bargain through representatives of their own choice. WofA reaction to the Dill-Crozier Act occurred soon after. Until 1936, shop union organization was trade-based. The Dill-Crozier Act encouraged the consolidation of labor organizations, promoting an agreement between shop employees and the American Federation of Labor in which "the Railway Employees' department, American Federation of Labor, has been duly designated and authorized to represent the crafts of machinists, boiler makers, Blacksmiths, sheet metal workers, electrical workers, carmen, the helpers and apprentices of the foregoing, coach cleaners, power house employees, and railroad shop laborers of the Atlanta and West Point Railroad Company and the Western Railway of Alabama."⁷¹

Other legislation encouraged and benefitted workers. As a result of the hearings in *Railroad Retirement Board v. Alton Railway Co.*, Congress enacted the Railway Retirement Act, requiring that railroads and workers contribute equal amounts to employee retirement funds. The WofA *Annual Report* for that year noted that "your company accrued in 1936 accounts a liability of \$25,337.00 under the Railroad Retirement Act of 1935 which became effective March 1, 1936." The Social Security Act aided

⁶⁹*Annual Report* (1932): 3.

⁷⁰*Annual Report* (1933): 8.

⁷¹Certification of National Mediation Board Case No. R-66, January 31, 1935, Representation of employees of the Atlanta and West Point Railroad Company and Western Railway of Alabama, Mechanical and Other Departments. "On the basis of this investigation and check of authorization, the National Mediation Board hereby certifies that Agreement Between the Atlanta and West Point Rail Road Company Also Western Railway of Alabama and railway Employees' department, American Federation of Labor, acting for and in behalf of the following member organizations: International association of Machinists, International Brotherhood of Boiler makers, Iron Ship Builders, and Helpers of American, International Brotherhood of Blacksmiths, Drop Forgers and helpers, Sheet Metal Workers International Association, International Brother hood of Electrical Workers, Brotherhood of Railway Carmen of America, International Brotherhood of Firemen and Oilers, Signed February 16, 1935."

unemployed workers, and the WofA *Annual Report* noted "a liability of \$8672 under the Social security Act relating to Unemployment Insurance." The report also suggested that this would be escalating at the rate of one percent per year for the next two years.⁷² Reports from later years reveal a general preoccupation on the part of the railroad with New Deal legislation. The Carrier Taxing Act of 1937, Railroad Retirement Act of 1935, and the Social Security Act are regularly mentioned as responsible for loss of profits. Also of great importance, though neglected by the reports, was the Fair Labor Standards Act of 1938, which stabilized wages and limited work hours. The pre-war years ended in 1940 with two Revenue Acts designed to generate capitol for the impending war effort.

World War II dramatically raised demand for rail service, and would be the last major increase in business before a steady decline that lasted into the 1970s. Higher farm prices, near full employment, gasoline rationing, the rubber shortage, and unrestricted government defense spending boosted traffic and revenues during the war years, but the WofA may have reached a critical point at which rising costs and taxes actually reduced net income as a percentage of gross revenues. To this difficulty was added the extra complication of continued labor disputes and negotiations. As in other industries, the war brought demands for wage increases in all of WofA's departments. Wage increases stemmed from the Railway Labor Act, but conflicted with wage stabilization regulations that were growing out of the war effort. President Roosevelt intervened, and as a result of the arbitration, wages increased throughout the remainder of the war years.⁷³

The glut in war-related business continued into 1944, but signs of decline were evident even before fighting ceased in Europe. In 1944, a new Federal Highway Act initiated construction of a nationwide highway system. Five days after the ending of conflict in the Pacific, gasoline and fuel oil rationing ended, as did the WofA's brief spell of unprecedented income and passenger service. WofA employees negotiated two labor agreements in 1944, one establishing pay rates for locomotive engineers and a second, more sweeping agreement, fixing the eight-hour day for shop workers and mechanics.⁷⁴ Moreover, more shop departments managed to secure labor rights in 1944, as stationary firemen, coal chute operators, fire builders, locomotive crane firemen, fire knockers, engine watchmen, and cinder pit men, engine wipers and cleaners, sand house men and "all other laborers in and about shops and engine houses" obtained a fixed forty-hour week of five eight-hour days.⁷⁵

With the coming of mass national labor legislation and the post-war effects of World War II, the WofA and its Montgomery shops began yet another period of transition. In 1947, President Wickersham ended his forty-four year reign as road president and handed over the reins to S. R. Young. Wickersham's departure coincided with the passing of the great age of American rail travel into a new steamless era.

⁷²*Annual Report* (1936): 8.

⁷³*Annual Report* (1942): 8; *Annual Report* (1943): 8.

⁷⁴Agreement Between the Atlanta West Point Rail Road Company the Western Railway of Alabama and its Locomotive Engineers, Effective September 1, 1944; and Agreement Between the Atlanta and West Point Rail Road Company the Western Railway of Alabama and its Machinists, Boiler makers, Blacksmiths, Sheet Metal Workers, Electricians and Carmen, their Helpers and Apprentices, Represented by System Federation No. 126 Composed of International Association of Machinists, International Brotherhood of Boiler makers, Iron Shop Builders, and Helpers of America, International Brotherhood of Blacksmiths, Drop Forgers and Helpers, Sheet Metal Workers International Association, International Brotherhood of Electrical Workers, Brotherhood Railway Carmen of America, Stamped September 29, 1944.

⁷⁵Agreement Between Atlanta and West Point Rail Road Co. The Western Railway of Alabama and System Federation No. 126 of the Railway Employees' Department of the A.F. of L. in Behalf of International Brotherhood of Firemen, Oilers, Helpers, Roundhouse, and Railway Shop Laborers of the Railway Employees' Department of A.F. of L. Establishing Rules, Rates of Pay and Working Conditions for Power House Employees and Railway Shop Laborers, Effective February 1, 1946 (Rev. September 1, 1949).

The WofA joined its peers across the nation by instituting a dieselization program in 1948; a change again manifest in the organization of the Montgomery shops.

The Montgomery Shops in Detail

The Montgomery shops remained relatively unchanged between the 1920s and the arrival of diesel; in 1948, however, a number of changes accompanied the move from steam. For our purposes, this final stage of shop development, from roughly 1950 to 1970, is the most significant. A visit to the abandoned shops today reveals early twentieth-century architecture manifest in the paint shop, planing mill, and car shed, but the organization of buildings and rails with attendant subsequent alterations are primarily indicative of operations following the introduction of the diesel. Moreover, the best, if not the only, extant accounts of these facilities come from the very employees who operated the facilities during their final half century. With the help of these individuals, it is possible to partially reconstruct work life at the Montgomery shops, and to understand both the mechanical and social processes that defined the site's final fifty years.

As of 1950, the Montgomery shops contained approximately thirty-five buildings, twenty-eight primary yard tracks, and numerous sheds and storage racks, all located on thirty-eight acres of land in north Montgomery along N. Court St., with the Alabama River a mile to the west. About one-half mile separates the shops from downtown Montgomery, placing the site within the city's commercial/industrial district, close to Union Station on Water Street and the former WofA freight terminal (1898) on the corner of Coosa and Tallapoosa Streets.

The average workday began as workers approached the shops via N. Court or Perry streets on foot or by automobile. A large gravel parking lot flanked the southeastern corner of the shops near the combination flower pond and fountain, already mentioned in regard to the notorious "escape artist" alligator Roy Dickerson. Workers entered the premises by passing through the 860' cyclone fence that protected the south, east and north boundaries of the complex, and stopped at a 7' x 10' x 9' building housing the shops' time clock.⁷⁶ Once punched in and perhaps with a few minutes before work, workers might sit with other early arrivals for a cigarette or bite to eat, on a bench placed in the grass immediately in front of the paint shop. Here, talk of shop gossip or labor activity filled the time until the shop whistle sounded and the men took their stations in any one of a number of shop departments.⁷⁷

There were three to four hundred employees as of 1950, with about seventy-five on the clean-up crew alone.⁷⁸ Apprentices and assistants might work in a variety of positions from the coaling tower to the planing mill. Carmen spent their time in the car shed inspecting, repairing, and building freight cars for company use. A variety of carmen occupied positions within the planing mill, paint shop, blacksmith shop, diesel shop, roundhouse, and so on. Though promotion and advancement might see an employee move between departments, very rarely did workers venture into other departments without a pass.

Once clocked in, employees filtered into the complex and past the main office building, which had been

⁷⁶An extra 500' of fence was added around the shop yard in 1925 following the relocation of the extant fence that same year.

⁷⁷Though a complete list of shop departments is not available, a telephone directory from 1965 suggests a general breakdown of each major operation: master mechanic, chief clerk, general diesel supervisor, freight car foreman, clock house – shop gate; crew callers, diesel fueling station, diesel shop, diesel shops storeroom, electric shop, freight car shop – storeroom; paint shop, pipe and tin shop, radio repairman – shops; and wheel and axle shop from Atlanta and West Point Rail Road Company. The Western Railway of Alabama, Georgia Railroad, Atlanta, Joint Terminals, The West Point Route Telephone Directory, August 1, 1965.

⁷⁸M.P. "Bud" Sweatt and W.B. Hartley, interview by Seth Bruggeman, 17 June 1999.

constructed in 1898 following the move of the site's old offices and freight depot to the corner of Tallapoosa and Coosa Streets in downtown Montgomery.⁷⁹ Among the first four buildings constructed on the new site east of N. Court St., the office building was no doubt designed as the flagship of the Montgomery shop facilities, and physically assumed that role at the entrance to the complex. Originally, the office was constructed as a two-story brick building with slate roof measuring 52' x 31'.⁸⁰ An even larger brick store room and annex connected to the eastern side of the office, adding an additional 72' x 32'. A 4' x 8' x 7' ice house fit into the corner formed by extension of the storage house past the rear of the office and was rebuilt in 1925.⁸¹

Little information exists on the construction of the office building, and even less exists concerning its use. A photograph of the office entrance taken sometime before 1926, and reproduced in *The Courier*, shows a handful of shop officials austerely posed in front of the building's main entrance. Only including a corner of the structure, the photo shows an attractive brick building with broad stone foundation and pine steps flanked by glass-inlaid door frames and a large swinging front door, but captures little else. The only other remaining photograph of the office building is an interior photo taken of the first aid center described earlier. Here, we see what appears to be a second floor room with lofty ceilings and a wonderful arched window with multiple panes overlooking the shop yards. These details suggest a degree of aesthetic concern not usually associated with industrial sites, but no doubt suggestive of a need to express the importance and dignity of the WofA's main shops.

Once past the office, workers moved to one of four operational sections within the shop complex. An overhead view of the shops reveals a four-part layout. The first section consisted of the shop yard along the northwestern border of the premises. Here, trains entering Montgomery sometimes stopped to be cleaned before pulling into Union Station. If a train passing through the yard pulled cars requiring maintenance, a yard engine would pull the car into the car shed. The car shed, along with the paint shop, wheel and axle shop, and planing mill formed the complex's second operational section. This segment housed all operations related to actual construction and maintenance of freight and passenger cars. If the engine itself needed extensive repairs, it entered the shop's third section, best defined by the roundhouse along the eastern edge of the property but also home to the blacksmith shop and diesel shop. Finally, once all repairs were made, the repaired or serviced locomotive visited the fourth section, the fueling station, for replenishment of coal, sand, and water. This fourth section occupied the northern end of the yard and included a series of cinder pits and a massive coal pile stretching all the way from the coaling tower to the roundhouse. A building-by-building survey will better illustrate the operations within each section.

Coach Yard

Though extant drawings of the coach yard are vague and photographs have not been uncovered, we can make some sense of how the yard looked and operated. A number of small support buildings housed men and equipment throughout the yard. Between tracks 11 and 12, for instance, stood a metal corrugated building with a storeroom in one end, a painters' room in the other end where carmen stenciled cars, and an air room for cleaning brake cylinders. A coach inspector's office and washroom, and washrooms for coach cleaners were also located between the air room and office in the store room.

⁷⁹This freight depot and office house still stands in Montgomery in remarkably good condition. Though now occupied by loft apartments, the building retains its turn of the century appearance and even boasts a masonry shield emblazoned with its owner's namesake and a wonderful mosaic reading "Western Railway of Alabama" in an array of colors upon the front landing.

⁸⁰WofA Building Records, 12.

⁸¹*Annual Report* (1925).

These structures were presumably first built between 1899 and 1900, as suggested by *Annual Reports*.⁸² Perhaps the most defining feature of the coach yard was a series of track scaffolds operated by washmen and shared with the Central of Georgia Railroad. M. P. Sweatt describes the set up: "Each one of them had a scaffold running down the side where the coach cleaners could get up and clean the windows and wash the car, they would wash the car every time they would come in. Also had a steam and air room up there and electrical lines."⁸³ It should be noted that these electrical lines were not installed until 1923, suggesting that evening operations in the coach yard were at least partly limited until that point.

Car Construction and Maintenance

The Western's Montgomery shops were primarily concerned with construction and maintenance of freight and passenger cars. Nearly every car on the West Point Route was either built, rebuilt, or repaired at the shops. A typical forty-foot steel gondola underwent a four-step construction process. First, the car's superstructure was formed from a grid-like arrangement of center sills, bolsters, and crossties. Once formed and riveted fast, carmen fastened a cover plate and steel floor sheets to the superstructure, thus forming the car's floor, or deck. The third step involved securing side walls to the supporting framework, also known as the undercarriage. Workmen maneuvered car sides into position with a crane and other carmen secured the panels using pneumatic rivet guns. Following attachment of the sides, steel ends completed the box unit of the freight car. Finally, trucks – generally Bettendorf trucks – and all other attendant equipment found places along the length of the car. According to *The Courier*, the cars were built:

entirely of steel, the center sills being made of two A.R.A. special 12-inch center sill sections connected at the top by a 20" x 3/8" cover plate running the full length of the car. The body bolsters and cross bearers are of pressed steel. The sides of the car are of 1/4" steel plate with side stakes of pressed steel. The ends are Murphy Corrugated Steel Ends. The sides and ends have 5" x 3 1/2" x 3/8" bulb angle stiffeners at the top. The trucks have cast steel side frames with journal boxes cast integral. The cars are equipped with the following specialties: Bradford Rocker Type Draft Gear, Miner Ideal Hand Brakes, Miner Rocker Side Bearings.⁸⁴

This process remained relatively unchanged over the following thirty years, as indicated by Harry Taylor's description of car construction during his time at the shops:

"Under that shed, that's where we built cars. We had about four crews and they would bring four cars down there Monday morning, we was building box cars, they would bring them down there, the sides would already be hung on them – they would hang them outside the shed – and then bring them under there. Then we'd shoot all the holes, tie them up, drive all the rivets. We start on a car on a Monday and finish it up on a Friday. That was driving every rivet, putting all the woodwork in and everything. We built about 3(00) or 400 boxcars."⁸⁵

Car Shed (Still Standing)

The shed to which Taylor referred is the 400' long, imposing open-framed car shed, which served as the operational heart of all shop activity relating to car repair and construction. When first centralized east of N. Court St., the Montgomery shops contracted with Cook & Laurie builders to construct a 68' x 289'

⁸²Sweatt and Hartley, interview.

⁸³Sweatt and Hartley, interview

⁸⁴"All Steel Gons Built from End to End in Montgomery Shops," *The Courier*, February 1926, 18-19.

⁸⁵Interview by author with Harry Taylor, 9 June 1999.

wooden car shed in 1900.⁸⁶ Oddly enough, only six years later, the *Montgomery Advertiser's* announcement of the awarding of a new contract to Cook & Laurie included, in the list of structures to be built, a new 700' shed. Though not reported in the *Annual Reports*, it seems that sometime between 1900 and 1906, fire again ravaged the Montgomery shops for, as Bud Sweatt recalls, "there was a wooden shed here that burnt down. My grandfather worked here and I remember grandmother tell me about all his tools, his tool bucket burned up out here in the shed and then they built this shed."⁸⁷

The shops' decision to construct a new shed that would be nearly twice as long as the original one, within only a few years of the original's construction, suggests a reevaluation of shop needs and further emphasizes the importance of the car shed. It also reveals the increasing ease with which large buildings could be constructed as metal construction technologies advanced. Plans apparently changed again, however, for the shed extended only 400' upon completion. Unlike the original, the second and currently standing shed, is constructed entirely of steel. Twenty-five 20' columns line each side of the shed, supporting a massive, interlocked concrete-tile roof. A rippled, worn brick floor lies beneath four tracks that extend the length of the shed. The shed's walls are currently unsheathed and have been so for some time, as attested to by former employees, but photographs from 1920s issues of *The Courier* portray shed walls as partly sheathed with corrugated siding hung halfway to the ground. The purpose of these half-walls is unclear. Whether they were intended to reduce glare from the rising and setting sun or to afford some protection from harsh rains, it is certain that they have been gone for some time and most likely were of little structural importance.

The car shed served as the central point for car building and repair operations, and offered the work space necessary to perform large construction tasks. This being the case, the car shed did not contain a great deal of equipment. Numerous hand tools, pneumatic tools, jacks, and welding units filled the space, but every effort was made to maintain large open spaces beneath the shed's roof so that cars could be assembled and disassembled with a minimum of effort. The car shed was designed to facilitate mobility for the carmen who moved about cars under construction, in order to perform a variety of tasks. Harry Taylor describes activity in the shed at the time of his arrival: "My first job was driving rivets. Tough, I mean tough. The gun weighed about fifty pounds, it was a steel gun, weighed about fifty pounds, it had about ninety pounds of air pressure on it, it had a rubber hose on the gun and you'd hold it; that gun would get so hot ... you'd have to wear rubber gloves driving them rivets ... they [Black helpers] would buck them [the rivets], I would get in the car and he would get outside the car and when they'd stick it through the hole I'd get down on it and all. It's not a bad job - it's hot, but I enjoyed it; it'll make a man out of you ... it'll give you something in your arms."⁸⁸

Taylor's experience characterized general operations in the shed, but operations were also tailored to accommodate diverse needs. When Bud Sweatt first arrived at the shops during World War II, for instance, war-related traffic demanded fast construction of cabooses. "On the first day I worked, [we were converting] old 900 series boxcars, and all they done was put four windows on each side and made little hitches out on the end for a platform and turned those into cabooses."⁸⁹

The space provided by the shed lent itself to a variety of uses. The shops served as home to two road wreckers, one built by WofA, and the other built by Bucyrus and owned by the A&WP. The wreckers occupied the southwest corner of the shed when not in operation. Each wrecking outfit entailed a

⁸⁶*Annual Report* (1900): 12-13.

⁸⁷Sweatt and Hartley, interview.

⁸⁸Taylor, interview.

⁸⁹Taylor, interview.

number of cars, including a cable car, water tender, and camp car (dining and residence unit).⁹⁰ Upon returning from a job, wreckers deposited wrecked cars – called heavies – on the outer rails along the east side of the shed where they awaited reconstruction or repair. Repair work occurred in the northern half of the shed where rows of trucks and axles lined the western wall either awaiting rebuilding or reinstallation. Scaffolds also lined the tracks in the north end of the shops. Two types of scaffold arrangements eased repair work on cars in the shed. Adjustable steel framed scaffolds traveled the shed's outside tracks so that workers could position themselves at any point along the length of a car or train. Inside-track scaffolding was fixed. Unlike that used along the outside tracks, inside scaffolding hung from the shed's ceiling trusses and afforded workers easy vertical access for working on tall cars.⁹¹

The car shed also possessed a wheel drop pit along the northwest wall, which allowed carmen to change wheels on passenger cars or withdraw batteries and generators.⁹² The drop pit, which remains in the shed today, consisted of a roughly 5' x 25' brick and concrete trench oriented perpendicular to the centerline of the shed and covered by a small roof where the pit extended past the shed's own roof. Pit operations were facilitated by a 16" x 5' air cylinder lifting jack carried on four 8" wheels and supplied by shop air with 50' of 1" rubber hose.⁹³ Bud Sweatt describes the process: "You'd stop that wheel, take the binders off from under the boxes, it had a hydraulic – in the bottom – a lift, it had a wooden top on it you know, raise that wheel up enough to take the bolts out of that rail and swing it around, you get the wheel out of there and it was on a little dolly, slide it over to that other track. They kept all the passenger car wheels stored outside. It wouldn't take but a few minutes to do it." Trains in need of new wheels while en route through Montgomery would often stop inside the car shed even while full of passengers. Sweatt continues: "I've seen them come in here – the Crescent Limited or the Piedmont – trains from New York to New Orleans and have a hot box, a flat wheel or something; even with the passengers in, with Pullman cars with people sleeping . . . even in the middle of the night sometimes. This guy . . . H. D. Howard . . . we sent him up here one morning to put on in a Pullman car and he was down in there and somebody flushed right on top of him . . . you could here him cussin . . ." ⁹⁴

The final area of operations within the car shed was actually located in the small 62' x 22' brick building attached to the shed's northwestern end. Until the early 1950s, this building housed the battery or car lighting shop. Electricians stored and charged car batteries here as well as kept belts, hydrometers, and other equipment relevant to the job. The building also housed a generator, small office, and an air room that aided in the process of recharging air conditioning. At some point in the 1950s, the car lighting shop was entirely taken over by electricians and the tasks attending battery charging and storage. The building still stands attached to the car shed.

Car Shed Smith Shop

A second work space once stood connected to the northeastern end of the car shed. Physically connected to the car shed, it functioned more like the blacksmith shop or the planing mill in relation to operations within the shed. (Though metal work obviously occurred in the blacksmith shop, blacksmiths primarily occupied themselves with forming tools and dies.) In the 12' x 43' x 15' shed adjoining the car shed, carmen shaped actual metal car parts by using a steel forge, often in combination with a 3' cylinder pneumatic pipe press. They made large parts, including frame bolsters and window sills, and more

⁹⁰Sweatt and Hartley, interview.

⁹¹Sweatt and Hartley, interview.

⁹²James H. Bass, telephone interview by Seth Bruggeman, 4 August 1999.

⁹³WofA Building Records, 4

⁹⁴Sweatt and Hartley, interview.

delicate pieces like window frames, especially during conversion from wooden cars to steel. Near the large corkscrew-like press sat a second, small rivet forge that was attached to the same main line that fed the large forge and surrounding pneumatic equipment.¹ Adjacent to the rivet forge was a combination punch and shearing machine that was substituted, sometime following the close of the blacksmith shop, with a larger shear installed primarily for construction of steel locomotive springs. Though not divided by a structural wall, the space covered by this shed was divided near the shear by a sign reading “noon-hour smoking zone” and a soft drink machine. South of the partition, a handful of additional metal-forming machines, such as pipe bending and pipe threading machinery, enabled carmen to form parts for air brakes. Finally a welding station at the southern end of the shed produced steel fittings for boxcar frames that were then forwarded to the blacksmith for immersion in the annealing furnace. Then the fittings were sent to the planing mill, where they would be fastened to built doors.²

Planing Mill & Car Shops (Still Standing)

Unlike the other buildings at the Montgomery shops, the planing mill, also referred to as the car shops, greeted its employees with the aroma of milled lumber and cut leather instead of the burnt industrial breath of iron and coal common elsewhere. Here, woodworking operations of all varieties took place, from rough to elegant, and it was here that upholsterers prepared passenger car interiors. The planing mill constituted sacred shop ground where carpenters kept close watch over their wares and where few ever witnessed first hand the intricate work of the finish men on the building’s second floor.

Development and use of the planing mill before the turn of the century remains ambiguous in the extant historical record. It seems most feasible that the operations that were ultimately consolidated within the planing mill, were once dispersed across the complex on both sides of N. Court St. In 1897, when plans were proposed for the new consolidated shops east of N. Court St., the auditors noted that “plans for new machine, boiler and blacksmith shops adjoining present car shops prepared.” It is evident from this comment that what was referred to as “car shops” before 1897 were located on the eastern side of the street. Nonetheless, what was also then referred to as the “car factory” – a structure located on the west side of N. Court St – possessed a “full line of wood-working tools,” the very tools since associated only with the planing mill and car shops. It seems reasonable to conclude, therefore, that the name given to the most recent incarnation, planing mill and car shops, was more nostalgic than accurate, intended to evoke the range of roots of the operations consolidated under one roof. The building’s partial namesake, the original car shops, were constructed of brick and completed in 1867 following the mass rebuilding necessitated by General Wilson’s raid in 1865.

In 1898, during the first stage of consolidation, the car shops were extensively modified, including the reconstruction of their original boiler and engine room and the addition of a store room. Even by this point it is unclear to what extent the car shops and carpenter shops were merged, or if so, for in 1902, a dust and shaving conveyor was installed in the carpenter shop without any mention of the car shops.³ By 1906, the confusion ends, for in that year the Western shops began their final construction stage east of N. Court St. by awarding to Cook and Laurie contractors “a contract for the erection of mammoth new shops of the Western of Alabama Railroad in Montgomery, which when completed will cost more than \$200,000.”⁴

Again, the original orientation of these facilities is somewhat ambiguous. The author of the *Montgomery Advertiser* article continues by noting that “the planing mill will be built on the exact site of the present mill.” Despite this confusion, the result of the 1906 construction is clear, for the planing mill and car shops remain today as constructed between 1906 and 1910. At an imposing 62’ x 198’, the two-story brick structure represents an interesting point in the development of twentieth-century industrial architecture. Unlike the adjacent brick and timber paint shop (described below) also constructed by Cook & Laurie roughly six years earlier, the planing mill incorporates a steel truss and frame system complemented by brickwork. Where paint shop window and door frames are supported with brick arches, the planing mill frames are steel enclosed by brick, an obvious attempt to utilize new steel building technology while maintaining a certain aesthetic congruity. The planing shop also differs from

its neighbor and, indeed, the majority of complex buildings, in that it possesses a complete second floor supported by steel joists.⁵

Three general operations occurred in the planing mill: woodworking, upholstering, and pattern-making. Harry Taylor provides a rough description of the building during his time at the shops:

From the time you walked into that room there was machinery; cranes, saws, all the way up to the other end of it. It was out in the middle of it and lined up against the walls ... at that time, they didn't buy anything, they made everything. Upstairs, that was all finishing work up there. Small machinery that would do some of the carving because, see, the coachwork was immaculate work. It was nothing like the building of a boxcar. The engine work was all immaculate and the coachwork was with all kinds of carving, stained glass – all of that was first class and all of the machinery was up there. There was a little pattern room up there ... and there was a little upholstery room up there too. You see, they upholstered all of the seats; engine seats and coach seats and everything.⁶

Planing mill operations were divided by floor. First-floor carpenters formed large wooden structural members, such as freight car doors and 40' car sills, for passenger cars.. Heavy woodworking equipment lined the walls of the planing mill's first level, most driven by belts turned by electric engines mounted on the ceiling above. A system of flue piping was mounted adjacent to the machine motors. Installed in 1923, this shaving system linked each machine to a shaving conveyor which fed a stationary steam boiler system, where the dust fueled the steam production necessary for heating the shops and preheating passenger car air conditioning units. The shaving system used a number of 75 horsepower ceiling-mounted blowers, one of which remains in the shops today.

Moving north along the shop's single rail, one first encountered a general workspace with sawhorses to the right, and a staircase and shop office to the left. Further along the eastern wall stood a mortise and tenon machine with coping head, extra heavy automatic gaining machine, and boring mill, all used in combination to shape car parts, including truss rods and car sills. Opposite these, operators worked a large sander, two four-sided matching planers, a 16" table saw, and a 6" jointer along the western wall. A large 15' lathe for turning push poles for steam engines, a drill press, router, and steam-powered gaining machine occupied the northeastern corner of the building; a 42" band saw, rip saw, shaper, grinder, and mortising machine filled the northwest corner. Mill workers fabricated rawhide machinery belts in a roughly 4' x 6' room at the northern end of the building, and made freight car doors atop a 10' x 10' metal table in the extreme northeast corner. Passenger coach furniture framed in ash, and ready for springs and upholstery, traveled to the second floor by means of an electric lift nestled in the far northwestern corner of the shop next to a second stair case.

The shop's second level housed three operations. The first, the upholstery shop, stood at the top of the electric lift at the northern end of the second floor. Here, an upholsterer padded and covered passenger coach furniture built downstairs for new cars, and for cars undergoing reconstruction. A series of racks stretched from the upholstery shop to the other end of the planing mill. Each rack supported a number of patterns – the templates used in shaping wooden car parts as well as parts cast in the brass and iron foundries. All patterns originated from the southern end of the second floor in the pattern shop. This space – also referred to as the cabinet shop – specialized in producing fine finish woodwork. A 24" finish planer, jigsaw, bandsaw, combination table saw, wood lathe, and molding cutter allowed cabinet makers to form both wooden patterns for parts shaped downstairs and patterns that were sent to the foundry for casting. Second-floor carpenters also produced detailed items such as passenger car window trim, earning the second floor the name of cabinet shop. A small hardwood storage loft completed the second level. The loft, containing lengths of poplar, cocobolo, and white pine, was considered forbidden territory to all but finish carpenters.

Paint "Coat" Shop (Still Standing)

Morning at the Montgomery shops often began around the benches in the grassy yard in the shadow of the paint shop's southern façade. Cook & Laurie built the paint shop in 1900. The 68' x 198' red brick building looms large at the complex entrance, rife with attractive aesthetic detail. Staggered brick layering highlights each of the building's twenty-six window bays, all complemented by subtle brick arch caps and marble lintels. A grand 7'10" diameter circular window keeps watch from the second floor of the south façade, and red brick mortar speaks to the builder's effort to create uniform color across all exterior surfaces.⁹⁵ Though almost wholly collapsed today, the building's heavy, once-whitewashed wooden trusses recall the infancy of steel construction at the turn of the century. The trusses also beckon looters aware of their value on today's market. The entire roof's roofing tile consisted of Federal Factory Roofing arranged in panels of nine slabs each containing wire glass skylights.⁹⁶ Though vitrified paving brick filled the spaces in between paint shop tracks, concrete floors predominated throughout. Indeed, the care of construction, and attention to detail manifest in the paint shop suggests not only an abundance of cheap labor and materials, but also a desire to endow the Montgomery shops with a degree of dignity and beauty.

If any building in the complex begged a degree of aesthetic respect, it was the paint shop. It was here that newly constructed or reconstructed cars were finished and prepared for operation. "The paint shop was where they painted the coaches and the baggage cars," Harry Taylor described the operation. "It had to be pretty clean and – working on the freight car, you'd get greasy and dirty, but you'd better not get dirty and greasy working on the coach . . . they come along and paint before you'd get through. It had to be pretty well clean, they'd get half a dozen painters out there, some helpers, and before they brought it in there, they would strip it out inside and then roll it inside for the carpenter to do his work on it, and then they'd paint it in there in that building."⁹⁷

Paint shop operations not only demanded the highest degree of cleanliness, but also required unprecedented thoroughness and detail. "When you took a car in there, you were going to rework it," recalled Taylor.

If you took a coach in there, you pretty well knew that you was going to take every seat, you was going to take every pipe, anything you could take off that thing you was going to take off. You was going to repair it or put new on there. In other words, when it came out of there – when it rolled out of that paint shop – it looked like it was coming from the factory. In other words, if you went to Pullman Standard Company and bought a car, it wouldn't look any better coming out of Pullman than it would there. But, everything was done mostly by hand, you see, you would jack the car up and they had big stands. You would set it down on those stands then they would roll the wheels out from under it and they would knock those wheels apart. There were a lot of things under there that had to be built up. A lot of things on the coach had bushings on it, but some of the old ones didn't have bushings on them and what they did when they didn't have bushings, they would just weld it and grind it. But, when you took a car in there, you knew that everything was going to be done: all the upholstery was going to be redone, new flooring, new windows, new everything.⁹⁸

⁹⁵Uniform with the exception of a white stripe surrounding the building's bottom four feet. All shops structures were dressed with a white band intended to increase safety. This band was originally painted with a standard white wash, but following the invention of acetylene in 1892, the stripe was applied with an extra bright wash made with the byproduct of on-site acetylene production. The remaining stripe is a result of this process.

⁹⁶WofA Building Records, 3.

⁹⁷Taylor, interview.

⁹⁸Taylor, interview.

The paint shop's interior was specially tailored to accommodate car finishing labor. Employees most commonly entered the shop through a single door near the southern end of the eastern wall. Though the door opened into the shop's primary work space, it also provided access to a series of rooms to the left (the southern end of the shop) in which a number of diverse operations occurred. Immediately to the left of the entrance stood another door leading into a paint mixing room with a workbench and numerous paint containers. Here, paint was mixed and prepared for application in whatever project occupied the primary work space. The western end of this room housed glass-cutting operations. Here, a pigeon hole cabinet (remaining) stored pieces of rough cut glass to be cut and shaped on an adjacent bench for any of a variety of uses, from car windows to shop windows. Bud Sweatt recalls making mirrors in the glass shop, adding to the variety of self-sustained operations occurring at the Montgomery shops. The department foreman and chief car inspector occupied the offices located in a second adjacent room, also home to all stencils used in painting passenger and baggage cars. Racks of stencils lined the back wall and were handed to painters on demand, occasionally through a service counter built into the office window. A final first floor division equipped with showers stood along the eastern wall abutting the office. The paint shop's second floor entailed only a small mezzanine and paint storage area. A painter needing supplies might venture up to the second floor via a wooden stairway suspended from a steel cable onto an oak-railed mezzanine with a view onto the shop floor. A door led from the mezzanine into the storage area located directly above and with the same dimensions as the office below.

On the shop floor, painting operations were facilitated by means of a complex system of counter weighted scaffolding that was adjusted vertically with the use of fixed pulleys. One to four cars might occupy any of the shop's four tracks, around which movable scaffolding could be located. The two outside tracks were most often used for painting and stenciling, given the ease of scaffold operation near the walls. On both side walls, cable and pulley systems attached to scaffold frames extending the length of the shop. A painter needing to reach the top of a car could alter his vertical position by adjusting the nearest cable at hand. Removable boards laid across the scaffolding frame so as to provide horizontal movement as well.

Given that the majority of work performed in the paint shop was done by hand, the shop contained few power tools. Conduits routed along each wall carried air for pneumatic tools, water for cleaning operations, and oxygen and acetylene for welding and cut-off operations (four stations along each wall). Other equipment included a variety of jacks and small hand tools in addition to one Spraco painting machine purchased in 1926.

Paint shop operations were rigorous and physically demanding. W. B. Hartley recalls spending days at a time sanding and preparing car surfaces for painting. Despite excessive dust and fumes, there was little ventilation. Windows and doors were generally kept shut to protect drying paint, and concern for worker welfare had not yet reached the point of requiring ventilation systems. Lighting in the shops was adequate, improved by skylights installed in the building's ceiling sometime after the 1920s, when dormer windows adorned the roof. The remaining original heating system, a vertical engine and system of steam pipes purchased and installed in 1902 (inside what appears to be the building's main entrance), was never really used.⁹⁹

Pride ran high in the paint shops as painters prepared cars to be ambassadors of their line. Just as the painters valued their own contribution to the quality of the joint product, so did they value their own sense of craftsmanship. Painters reacted passionately when their work fell victim to the tarnish of progress.

Wheel and Axle Shop

Adjacent to the car shed and adjoining the planing mill via an open breezeway, stood the roughly 68' x 230' wheel and axle shop. Almost no record remains of the wheel and axle shop, aside from brief

⁹⁹Annual Report (1902).

mentions of equipment in *Annual Reports* and some recollections of past employees. Here, all operations concerning wheel construction and repair occurred. Along the center of the eastern wall stood a brass foundry. A wheel lathe and a Niles No. 3 axle lathe occupied the north end of the building with an electric shop in the corner. A radio shop stood in the southwestern corner. The shop "fire engine" occupied an 8' x 10' metal shed adjoining the wheel and axle shop along the outside of the western wall. The shop Ajax chemical fire engine, purchased in 1923, consisted of little more than a large fire extinguisher on a wheel. Perhaps the most important of the wheel and axle shop's tool complement was the massive 48" 500 ton double car wheel press with motor and attachments, used for pressing wheels onto axles before they were transferred to the car shed for installation.

Locomotive Construction and Maintenance

Cars were not the only focus of operations. Indeed, locomotives received a great deal of shop attention as well. Though the WofA purchased the majority of its motive power from American, Baldwin, Lima, and Rogers locomotive companies, it produced a number of its own and refurbished a significantly larger number. "Mr. Gross and his forces have reason to feel proud of this locomotive, as it was constructed at the Montgomery Shops," the August 1926 edition of *The Courier* claimed, as it summarized construction of WofA 175. "All of the material used is new with the exception of some of the smaller parts such as pilot, bell, whistle, steam and air gauges, steam turret, throttle box, etc. Engine 175 has 21" x 26" piston valve cylinders, 72" driving wheels, Baker valve gear. The boiler has a working pressure of 200 pounds per square inch and is equipped with a superheater." A second report discussed in some detail the extent and type of work taking place at the shops. "This job," noted *The Courier*, "consisted of the complete rebuilding throughout of a ten-wheel type passenger locomotive. This engine was completely dismantled and the boiler stripped with exception of the wrapper sheets and back head." The majority of the new parts listed were fabricated on site.⁸

Roundhouse

The majority of engine construction and/or repair work occurred in the roundhouse. The roundhouse, or engine shed, began life on the west side of N. Court St. The earliest mention of the structure occurs in the 1857 *Annual Report*, in which recommendation is made to add stalls to the house to increase operations and accommodate varying gauge cars. A wooden roundhouse had apparently been constructed following General Wilson's 1875 raid, as indicated by William Harrison's reference, in a letter to Henry Smith, to the "new roundhouse to be built in place of the old wooden one." The new brick roundhouse was erected in 1892 surrounding a turntable constructed in 1883, which replaced one built to apparently poor standards only six years prior. Of all the pre-consolidation period buildings, we have the best records for this second roundhouse, manifest in a bill of materials for construction of the shed issued by chief engineer W. H. Harrison to Edmund Tyler on August 5, 1891. Though the plans Harrison attached to his requisition are now missing, leaving us without a visual image of the house, his letters do indicate that the roundhouse was whitewashed along with adjacent buildings so as to improve "the new patchwork brick work."

Harrison's careful planning for construction of the new 60' table was apparently lost on his laborers, for on September 3, 1892, the chief engineer chastised his gang leader for letting "the masons use the Portland Cement a little carelessly. You must keep your eye on them about this cement." Nonetheless, work on the turntable continued smoothly until November, at which time Harrison's correspondence ends. Whatever the result of his efforts, Harrison had to return to the drawing board in 1897 following partial destruction of the roundhouse by fire in that year.

As a result of the fire of 1897, a temporary roundhouse was built east of the N. Court St. consolidation to serve engines until a new house could be erected on the new site. In 1900, work began on the new east plot roundhouse as materials from the old office building and freight depot – both since relocated to the corner of Coosa and Tallapoosa Streets – were moved to the proposed site of the new house, presumably on the eastern plot. By 1902, the new house was in operation and boasted a steel tank and water station.

A new turntable was installed in 1903, and was repaired numerous times between 1910 and 1912, as was the roundhouse. A final, more or less successful 80' turntable was installed in front of the roundhouse in 1913; it was modified in 1918 by the addition of an electric tractor to replace the air motor that had turned the table since 1915 (and had replaced the hand mechanism that operated the table until that point). A larger, 100' turntable was installed in the 1940s.¹⁰ No visual depiction of the house and table during this period exists, but ICC valuation reports provide some sense of how the structures appeared and operated. The roundhouse had a vitrified paving brick floor and tin-covered doors through the "plain"-painted fire walls. Wiring was exposed throughout the house in 1915, and sixty-six lockers lined the walls. A 19' x 25' x 13' electrician's shop hugged its back wall, as did a 13' x 21' x 17' structure housing an engine room, shower and locker room. A tender shop extended from the northern end of the roundhouse.¹¹ The turntable was about 6' wide at its center and tapering to its ends. A heavy system of pipes supplied the Weir & Craig motor with pressurized air.¹²

A number of small additions were made throughout the 1920s, including erection of a new machine shop adjoining the building in 1922, and a Nathan boiler washer and tester in 1925. In 1929, a Whiting electric drop pit with 15 h.p. motor, a No. 1093 portable alemite lubricator, an electric power transformer in the building's rear, and another new machine shop building were added. Operations continued here until sometime during the 1950s when dieselization forced the building's retirement. The turntable remained for some years after, but all that remains today is the pit that contained it.

Blacksmith Shop

The blacksmith shop served all shop operations as supplier of any tool, die, or miscellaneous metal part requiring fabrication. As of 1950, the blacksmith shop had been located immediately behind the office for roughly fifty years. The shop was initially located on the other side of N. Court St., and it was first mentioned in 1865 in reference to General Wilson's destruction of the facility. In the same year, the shop was rebuilt perpendicular to and adjoining the new machine shops, which also had been rebuilt and extended on their original site. By 1891, it was undergoing extensive modification as part of the large complex that included the roundhouse and machine, blacksmith and boiler shops.¹³

Following the fire of 1897, plans for a new series of shops were drawn for the complex east of N. Court St., including plans for a new blacksmith shop. Built in 1898, along with the office building, and measuring 83' x 38', it was extended twelve years later to approximately 110' x 70', with a double hipped slate roof and six-foot elevated section extending along the length of the roof's center line.¹⁴ All interior walls were whitewashed to improve lighting, and all wood and metal surfaces were painted. The structure was repaired in 1912, and an 11' x 14' x 13' brick fan room, with 6" concrete floor and tin roof, was added at some point before 1915.¹⁵ The blacksmith shop remained relatively unchanged until 1926 when an electric annealing furnace was installed along the northwestern edge of the building and covered with a steel shed. A second addition in 1929, an iron storage rack, was located immediately behind (north of) the shops, although the two structures were not connected. The 1929 *Annual Report* also notes the construction of three concrete platforms in the blacksmith shop, but does not refer to their use or design. Though the concrete platforms are not explained in the *Annual Reports*, they likely supported heavy machinery, given that the blacksmith shop was the only structure on the site with an earthen floor. Most buildings, with the exception of the car shed and sections of the paint shop floor, had concrete or brick floors. As explained by Harry Taylor, the blacksmith shop required an earth floor because "you'd cool some of that iron by sticking it in the ground . . . that's how you'd get hard iron, it all depends on how you cool it. Then you snatch it out of there and put it in the water."¹⁶

Operations inside the blacksmith shop consisted primarily of forging tools, tempering car parts, and casting new parts on demand. Grabirons, sill steps, and cut levers, for instance, were all made in the blacksmith shop. Blacksmiths also made dies for side sheets, body bolsters, sills, and posts. Couplers, yokes, truck sides, bolsters, and journal boxes were sent to the annealing furnace in the blacksmith shop so as to eliminate internal tensile stress prior to installation. Blacksmiths also shaped side rods and axles out of steel billets for steam locomotives. Equipment located in the blacksmith shop reflected these

duties. An electric pyrometer for the shop's spring tempering furnace was installed in 1925. More spring-forming tools were obtained in 1926 with the addition of a Ryerson pneumatic spring bending press and a Ryerson No. 2 universal elliptic spring former. A vat for tempering springs was installed in the following year, as was an 8059-gallon fuel oil tank for use by the store department. In 1928, a No. 3 Stewart double-deck high-speed steel furnace and a No. 1230 Stewart vertical muffle furnace were installed for both. Finally, the blacksmith shop housed the site's massive 12-inch piston steam hammer that shook the entire complex when used. The blacksmith shop was one of the first buildings destroyed after the site closed.¹⁷

Diesel Shop

The Montgomery shops included two separate diesel shops during the course of their existence, though little information remains on either. The first was built sometime between 1948 and 1955, with the introduction of diesel locomotives to the WofA's line. Diesel engines required a number of operations unnecessary for steam engine maintenance. Foremost among these was truck removal. Unlike a steam engine (see discussion of Whiting hoist below), diesel trucks were extracted as single units and could therefore be dropped into a sufficient size pit. Accordingly, the original brick diesel shop – located between the planing mill and roundhouse – included a large drop pit that remains at the site today. In addition to truck removal, this pit facilitated changing of brake shoes and attendant equipment, and inspection of traction motors that occasionally seized while in use

When Harry Taylor arrived in the mid-1950s, the new diesel shop was under construction and the old diesel shop and roundhouse were being torn down. The new shop replaced what previously had been the machine shop, just east of the blacksmith shop. The machine shop specialized in steam locomotive parts, planing, polishing, drilling, fitting, and installing side rods, axles, and other equipment, as well as making tools and occasional parts for shop equipment. Once dieselization began, the machine shop lost its utility and was replaced by the new diesel shop. This second, larger building featured five or six tracks and an assortment of drop pits. The transition from steam to diesel was dramatic. Bud Sweatt recalls two visionary workers: "we had two men on the railroad who knew nothing about diesels and they saw the writing on the wall and they took a correspondence course . . . they learned all about diesels, so when they got diesels, they got the job – and they were good, both of them."

Back Shop/Boiler Shop

The final significant building in this area of the complex was the back shop that was provided for the steam-related operations that were ultimately displaced with the arrival of new diesel locomotives. Four workers rebuilt and maintained all pneumatic steam engine and brake parts. A lathe and planer aided in fabricating parts when necessary. Most important, however, was the Whiting hoist, installed in 1925. As described by *The Courier*:

Through the use of the 200-ton fourjack Whiting Hoists with which the shops at Montgomery have but recently been equipped, the stripping of the 181 was accomplished with one-third the labor and in considerably less than half the time that would have been required with the old drop pit arrangement. The operation of the Whiting Hoists, while simple, is a great improvement over the drop pit method in economy, speed and safety. The hoist is bedded in a concrete foundation two feet thick, with side walls 12 inches thick; the lifting beams are raised and lowered by electric motor through slots in the foundation. The locomotive is spotted over the hoist at the proper point. Two of the jacks are then thrown out of engagement and the two remaining jacks slowly hoisted until they arrive at the proper point under the engine. The blocking is then placed and engine lifted slightly so as to see that blocking properly functions. These two jacks are then thrown out of engagement and the other ... thrown in. They too, are raised and blocked in the same manner. With beam and blocking in proper position, the first two jacks are again thrown into commission, and all four jacks are now engaged. The engine is thus lifted uniformly and on a level, which means much in the correct adjustment of parts.¹⁸

Once the new diesel shop appeared, however, the Whiting hoist vanished with the very engines it was used to maintain.

Fueling Station

Perhaps the most impressive extant structure at the rail shops today is the massive reinforced concrete coaling tower, measuring roughly 40' x 40' and rising over 60' above the site. Built in 1913 by Roberts & Shaefer of Chicago, it was, according to railroad historian Richard Prince, "one of the most impressive in the South."¹⁹ Located at the northern end of the shop complex, the coaling tower worked in concert with the coal pile and cinder pits to service steam engines leaving and entering the complex.

Prior to the installation of the current tower, a long trestle system for unloading coal hoppers and fueling locomotives occupied the same site, as is evident from a Sanborn map of 1900.²⁰ The first specific mention of fueling operations, however, appears in Harrison's 1890-92 correspondence book. A coal chute was under construction in 1890, when Harrison issued a series of letters requesting inspection of lumber for the 3000 ton structure. "The increase in fuel for locomotives is expanding," the *Annual Report* for 1891 noted. "With the platform at Montgomery, and the system which we now have for handling coal at that point, a correct and satisfactory account of every pound received and used should be had."²¹ Harrison's letter indicates structural difficulties hindered the chute's operations, and directed Taylor: "I have your wire of today relating to jacking up chute. If you find it altogether impracticable to lighten the load sufficiently to admit of making tight fit with the hostlers, you had better put in temporary posts on each side and wedge them up. You can get some oak for wedges at the car shops."²²

It is unclear whether or not the 1891 coal chute was constructed on the east side of N. Court St. as part of the shop consolidation process, but in 1902, erection of a new coal chute for \$1173 indicates dissatisfaction with the old one and further implies inclusion in the consolidation process. The 1903 *Annual Report* mentions improvements to the coal chute, including a \$980 extension as well as a new cinder pit, but offers no explanation for the improvements nor comments on the performance of the new chute. In 1904, a combined coal platform and air hoist priced at \$2300 were added. The cinder pit was repaired and an anthracite coal bin constructed in 1911, suggesting growth, and perhaps further consolidation, of fueling operations in the north complex. By 1913, however, the coal chute had outlasted its efficiency, and a new, \$23,000 concrete tower (indicating previous chutes were wood) was erected to "decrease the cost of coaling locomotives about seven cents per ton."²³

Not long after construction of the new chute, ICC evaluators documented the structure, providing a rough description of the building's equipment. The tower was typical of mid-sized chutes built by Roberts & Schaefer, with a basic tower, coal-lifting mechanism, and adjacent coal pit in which the lift was situated. The WofA station featured a 600-ton capacity with a General Electric Industrial Type 10e 22 horse power motor operating the station's lift system. Coal poured through a Type-B Gotter Hammer controller. When constructed, the tower featured two drop lights in the motor house and four drop lights mounted on the plant's exterior, these upgraded to flood lights in 1926.²⁴ The valuation also refers to a sand-drying plant "built in connection with fuel station." The sand equipment was located high on the southeast corner of the coaling tower, so that locomotives receiving coal could simultaneously fill their sand domes. The sanding apparatus is clearly visible in photographs.²⁵ The tower received its coal from a pit on the station's eastern side; the pit measured 16' x 22' and 8.5' deep, and had 16" walls.

"Clam-shell" scooping buckets hauled coal to and from the pit. First, the coal was transferred to the pit from an adjacent coal pile. Given the lessons learned from years of periodic coal strikes, the WofA deliberately kept a large coal pile; this one was so large that it extended from the chute to the roundhouse. This system of coal locomotion apparently remained relatively unchanged until the late 1940s. "When I got there," Bud Sweatt recalls, "they were unloading all their coal by clamshells and then later on, they put in what they called a drag line. They drove steel posts out here in certain places, they had cable with machinery on them and they could pick up that coal from a big coal pile . . . and drag (it onto) the elevator."²⁶

The tower remained unchanged from that point on, but other nearby construction modified its operation. The coaling station operated in conjunction with the neighboring cinder pit. As engines entered the shop complex, their fireboxes were emptied into the cinder pit. A new cinder pit was constructed in 1914, no doubt to complement the just-completed coaling station. The pit itself was a simple affair, consisting of a 15' x 15' square, as suggested by the 60' of railing noted by the evaluator as enclosing the pit. Yardmen handled cinders with a Browning hoisting crane. This standard locomotive crane, powered by a vertical duplex engine with 42" x 8'6" vertical tubular boiler, could manipulate roughly 1 ton of cinders at a time, greatly easing a job no doubt performed by hand and shovel at one time. Cinder pit operations remained relatively unchanged throughout the course of the shop's history, except for enlargement in 1918 and installation of a new pit in 1919.

Work at the coaling station was strenuous and dirty. Foremen were well aware of this, and used it to their advantage. Harry Taylor recalls disciplinary actions levied on apprentices and young workers:

If they thought you was getting a little lazy on them, dragging around, and they didn't want to fire you, they just want to kind of bring you back down to earth, they'd send you on over to the coal chute, that's where they were tearing them cars down, you see. They would take . . . the wood side box car, you'd have to shoot all the wood off of it and then they would put steel sides is what they was doing. Then, when they took the wood sides off, they had a rivet buster and it weighed ninety pounds and they put you over there – no helper – you go over there by yourself because you didn't *need* no help and you knock them cars down. And when they figured you had enough of it and you was ready to go to work . . . you'd get your old job back.²⁷

This list of buildings is far from complete, but it does present some idea of how the site was organized and how operations were carried out. What the list neglects are the numerous small outbuildings placed throughout the complex. Just north and to the east of the wheel and axle shop stood five attached buildings, each housing a different operation. The first, at the northern end, still remains. The two story concrete building was the supply house and locker room, and housed a variety of operations. The first floor was completely devoted to storage of miscellaneous hardware and materials, including assorted nuts and bolts. The second level was divided into three compartments: the northern division housed a washroom for black workers, a white washroom was next door, and at the southern end was as a storage area for air brake parts. A large supply shed abutted the supply house and locker room, where larger miscellaneous hardware and materials that did not fit in the supply house were stored. A small building stood along the western wall of the supply shed and contained the complex's oxyacetylene plant. At the end of the supply shed stood one last building in which two large air compressors provided the pressurized air necessary for operation shop-wide pneumatic devices.

The Post-War Years and Decline

The story of the final twenty years of the Montgomery shops is one of decline, conflict, and, ultimately, dissolution. When charted, the financial figures for these years are most revealing. (See Appendix IV) A line representing road net income slopes severely downward from 1948 to 1971 as the corresponding line representing tax expenses remains relatively constant. The same goes for a comparison of passenger and freight traffic. Following a W.W.II increase, passenger figures slope steadily downward while freight figures shoot upward at a slightly higher rate, suggesting a road desperately trying to ease the impact of declining passenger traffic by emphasizing freight distribution, even as improved highways and truck technology gnawed away at this traditional business main stay. When combined with increasingly successful labor demands and the rigors of racial integration, continually falling road revenue forced a major reorganization of the WofA and, consequently, the close of the Montgomery shops. This rapid decline is clearly documented in the WofA's *Annual Reports*, which read like lists of grievances touching on everything from difficult labor negotiations to the continual impact of the automobile.

Post-war wage increases were substantial. In the fall of 1947, wage increases became effective for

nonoperating employees, conductors and trainmen. The next year, engineers and firemen were granted an increase of 15.5 cent per hour, retroactive to November 1, 1947. The raises increased payroll taxes by approximately \$275,676 for 1948. Conductors, trainmen, engineers, and firemen were granted an additional increase of 10 cents per hour effective October 16, 1948.²⁸ The following year, WofA machinists, boiler makers, blacksmiths, sheet metal workers, electricians and carmen won a fixed work day of eight hours and a set week of forty hours.²⁹ Later that year, Congress passed a new minimum wage act, revising the Fair Labor Standards Act of 1938 and increasing the minimum hourly wage from 40 cents to 75 cents. Cost of living adjustments in 1951 made substantial differences in workers' earnings: Harry Taylor began work at the shops immediately before this pay hike and recalls his reaction to the change: "I started out at 75 cents a hour . . . and about 3 months after that, the union got a raise, it went from 75 to 90 cents a hour. I never had made that much money in my life . . . I just fell in love with it."³⁰ A shop-wide strike in 1955 produced a series of benefit packages and pay increases. In addition, Congress once again raised the minimum wage in 1955 from 75 cents per hour to one full dollar per hour.³¹

The conflict in Korea did not boost rail revenues as had the last war. As the war grew, so did inflation, driving up farm prices 28 percent throughout the year. Federal legislation also struck at profits. Congress passed the Revenue Act on September 23, increasing income taxes levied on U.S. corporations. Labor activism continued, as the Brotherhood Railway Carmen worked to increase the pay for freight carmen to match that received by passenger carmen. Labor tensions gripped the county, and President Truman ordered Federal troops to assume control of the railroads on August 25, 1950.

In 1951, when the Eighty-First Congress passed Public Law 914 amending sections of the Railway Labor Act, organizations of non-operating employees demanded a "Union Shop." The WofA, along with other railroad lines, rejected the demand and it went to arbitration. The President appointed an Emergency Board to hear this case, which submitted its report on February 14, 1952, recommending that a "Union Shop" be established by national agreement.³² The facilities along N. Court St. became a closed shop, much to the joy and pride of those involved in the agitation. Taylor's account of an anti-union worker suggests the extent of worker support for unionization: "They had a closed shop. It wasn't closed when I first went there, but not long after I went there, they had a closed shop. You had to go on with the union for you to get a job. Out of all of that, we had one man who come out there, but he was sorry, he didn't want to work anyway, but he come out there and the sorry excuse he gave to get his butt run away was he didn't believe in the union and he wouldn't pay his union dues. So, he challenged them to fire him and they did."³³

Possibly the most significant change in the operation of the WofA in the post-war era was the move from steam to diesel locomotives. The WofA initialized dieselization with the purchase of four Baldwin VO-1000 diesel switchers in 1944.³⁴ With two more diesel engines on order, the WofA had already fully integrated diesel power into daily operation. By 1952, about 93% of freight operations, 73% of passenger service, and 96% of switching work was performed by diesel locomotives. The company operated twelve diesel locomotives by the end of 1952.³⁵

The growth in popularity of alternative modes of transportation was a key post-war development with tragic consequences for the WofA. President Eisenhower's proposal for the Interstate highway system was passed by Congress in 1956. The Federal Aid Highway Act provided for the construction of a 425,000-mile network of roads throughout the United States. Aside from its obvious repercussions for the railways in diminished passenger traffic, the act subsidized trucking companies, urban bus routes, automobile manufacturers, and oil companies, all at the expense of the railroads. Ironically, in 1957 the WofA could not even benefit by transporting the very materials used to construct new highways, since a strike in the concrete industry and general lag in construction business had curtailed shipment of those materials.³⁶ Passenger traffic also plummeted as increased use of airplanes and automobiles reduced revenues by over ten percent. Profits from transport of mail declined almost twice as much, because truck delivery quickly replaced train service.³⁷

Desegregation

WofA reports of the 1950s and 1960s are inundated with analyses, complaints, and prophecies concerning the fate of their enterprise. Paragraphs are devoted to labor struggle, increased use of automobiles and airplanes, and even to the increasingly insignificant weight of agricultural products in freight shipments. Mention of race occurs only two times in the entire run of company reports: when President Pollard complained of ill-behaved slaves, and in references to the construction of a washroom with White and "colored" divisions. One might infer that race had little to do with the WofA's operation. A closer look reveals otherwise.

Between 1865 and 1965, as was common throughout the South, tasks assigned black workers at the Montgomery shops remained menial and ill-compensated. For nearly one hundred years, black employees were allowed only to assist white employees. "Assist," in this case, meant performing only menial, heavy tasks that in no way – at least theoretically – jeopardized the safe operation of the road. Whenever "assistant" is referred to in the job descriptions (See Appendix I), the position was likely occupied by a black man. According to Harry Taylor,

See, when I hired out there, a Black man couldn't be a mechanic, he couldn't be nothing but a helper. He couldn't burn with a torch. If a bolt was going to be tightened permanently, he couldn't do it. If it was going to be tightened temporarily, he could do it. Now, see, all of these was union dudes, but see that's just the way it was down south and I guess up north too, for a while. So, I had three helpers and I had to do all of the torch work, I had to do all of the reaming, I had to do all the tightening up, I had to do all of the rivet driving – they worked the hell out of a damn mechanic. And I had three men that sometimes two of them was standing there watching. There wasn't nothing they could do, but I'll tell you, they taught me more on that railroad. They come up hard and they knew how to handle the heavy stuff without killing themselves. They'd say "don't do that Mr. Taylor, just do it this way." They'd take care of you and teach you how to do . . . but when the Civil Rights deal came in and got finalized and settled down, all the helpers was made mechanics. And then they could burn with a torch, they could weld, they could do anything I could do. But they could do it all the time anyway, they just wouldn't let them. . . . That's just the way it was.³⁸

As in other industries, at precisely the moment that the Civil Rights movement opened up job opportunities for black workers, broad changes in the economy and in the way WofA conducted its operations, severely truncated the number of jobs available. By the 1960s, the WofA found it cheaper to outsource parts than to build them in house.

The general desegregation of American industry during the Civil Rights movement affected the shops in a number of ways. For over one hundred years, the Montgomery shops had been segregated facilities. Until 1964, all washrooms and other non-operational spaces intended for worker use were segregated just as employment was segregated by means of the "helper" classification. Desegregation manifested itself in the architectural record: following 1964, the shops changed in subtle ways. "White only" signs disappeared, walls separating white and black lavatories disappeared, and where once stood dual staircases leading to race-specific facilities separated only by thin walls, single staircases appeared, forcing white and black workers into one current moving throughout the complex.

The Final Decade

The road pursued a general policy of modernization during the late 1960s. In addition to installing a system-wide VHF radio station remote control system and roadway maintenance gear, including a Junior Electromatic Tamper and Quickway Crane, the WofA entered the computer age in 1967. "Our electronic data processing program was expanded with the installation of an I.B.M. 360 model 20 computer," noted the *Annual Report* of that year, "which will enable us to apply computer techniques in the field of accounting and traffic statistics, and offered a more coordinated use of freight car equipment. In the

coming years this program will produce timely, meaningful analyses of operations which will permit operating personnel to rapidly detect areas of below-standard performance and to take corrective action.”³⁹

Computer technology made few inroads at the aging turn-of-the-century Montgomery facilities. On May 30, 1968, the operators of the West Point Route ceased using the old shops and consolidated workers and operations in the joint terminals at Atlanta. The consolidation was complete by 1971, and the facilities entered a period of neglect and deterioration that continues to the present day.

Epilogue

The Western Railway of Alabama no longer exists except as a corporate shell within CSXT. CSX still maintains the WofA's Chester Yard approximately one mile north of the old N. Court Street Shops. CSX also has a small diesel maintenance facility to the immediate west of the Shops across Court Street. The facilities are small and unremarkable in terms of importance to the railway or the community. Once the Western withdrew from the old Montgomery Shops, activity did not come to a complete standstill. Kershaw Manufacturing Company of Montgomery – a railroad equipment producer – rented the site for some time to handle excess business during the early 1970s. During Kershaw's occupation, a number of concrete slabs, fences, steel roll doors, and other smaller modifications were made to the site. A great deal of what one sees at the site today must be taken with a grain of salt in terms of identifying original structures, for old foundations occasionally merge with new slabs making the complex footprint faint at times.

Old Alabama Rails, a Montgomery based organization, is currently attempting to resurrect the old shops in hopes of creating a Montgomery railway museum. The task is considerable, given the poor condition of the shops.

WORKS CITED

Newspapers and Magazines

The Courier
The Montgomery Advertiser

Labor Agreements (Arranged Chronologically)

Amended Articles of Agreement Between Atlanta & West Point R.R. Co. and the Western Railway of Alabama and Locomotive Engineers, Effective May 1, 1907.

Amended Articles of Agreement Between Atlanta & West Point R.R. Co. and the Western Railway of Alabama and Locomotive Engineers, Effective September 1, 1910.

Amended Articles of Agreement Between Atlanta & West Point R.R. Co. and the Western Railway of Alabama and Locomotive Engineers, Effective November 16, 1911.

Agreement Between the United States Railroad Administration and the Employees Represented by the Railway Employees Department of the American Federation of Labor and its Affiliated Organizations of the Mechanical Section and Division Nos. 1, 2, and 3 Thereof. Washington: Government Printing Office: 1919.

United States Railroad Administration, Director General of Railroads. Supplement No. 4 to General Order No. 27. Atlanta, Birmingham & Atlantic Railroad; Charleston & Western Carolina Railroad; Augusta & Summerville Railroad; Atlanta & West Point Railroad—Western Railroad of Alabama; Georgia Railroad. Atlanta, GA: 10 April 1919.

United States Railroad Administration, Director General of Railroads. Supplement No. 7 to General Order No. 27. Atlanta, Birmingham & Atlantic Railroad; Charleston & Western Carolina Railroad; Augusta & Summerville Railroad; Atlanta & West Point Railroad—Western Railroad of Alabama; Georgia Railroad. Atlanta, GA: 10 April 1919.

United States Railroad Administration, Director General of Railroads. Agreement Between the Director General of Railroads in Respect of Railroads in Federal Operation and Employees Thereon Represented by the United Brotherhood of Maintenance of Way Employees and Railway Shop Laborers. Washington: Government Printing Office, 1919.

United States Railroad Administration, Director General of Railroads. Agreement Between the Director General of Railroads in Respect of Railroads in Federal Operation and Employees Thereon Represented by the Brotherhood of Railway and Steamship Clerks, Freight Handlers, Express and Station Employees. Washington: Government Printing Office, 1920.

Agreement Between Atlanta and West Point Rail Road Company, The Western Railway of Alabama and their Association of Metal Workers Covering Rules and Regulations Governing Rates of Pay and Working Conditions of Machinists, Boiler makers, Blacksmiths, Sheet Metal Workers, Pipefitters, Electrical Workers and Other Locomotive Department Employees. Effective October 1, 1922.

Agreement Between Atlanta and West point Rail Road Company, The Western Railway of Alabama and their Association of Car Workers Covering Rules and Regulations Governing Rates of Pay and Working Conditions of Car Department Employees. Effective October 1, 1922.

Agreement Between the Atlanta & West Point Railroad Company the Western Railway of Alabama and

it's Trainmen. Effective November 1, 1922.

Agreement Between the Atlanta and West Point Rail Road Company the Western Railway of Alabama and Locomotive Engineers. Effective January 1, 1923.

Agreement Between Atlanta and West Point Rail Road Company the Western Railway of Alabama and their Association of Metal Workers Covering Rules and Regulations Governing Rates of Pay and Working Conditions of Machinists, Boiler makers, Blacksmiths, Sheet Metal Workers, Pipefitters, Electrical Workers and Other Locomotive Department Employees. Rules Effective October 1, 1922. Rates Effective February 1, 1926.

Agreement Between the Western Railway of Alabama and Central of Georgia Railway Company Covering Use and Operation of Joint Freight Terminal at Montgomery, AL. July 1, 1921.

Agreement Between the Atlanta and West Point Rail Road Company, Also Western Railway of Alabama and Railway Employees' Department, American Federation of Labor Acting for and in Behalf of the Following Member Organizations: International Association of Machinists, International Brotherhood of Boiler makers, Iron Ship Builders, and helpers of America, International Brotherhood of Blacksmiths, Drop Forgers and helpers, Sheet metal Workers International Association, International Brotherhood of Electrical Workers, Brotherhood of Railway Carmen of America, International Brotherhood of Firemen and Oilers. February 16, 1936.

Agreement Between the Atlanta and West Point rail Road Company the Western Railway of Alabama and Railway Employees' Department, American Federation of Labor Acting for and in Behalf of the Following Member Organizations: International Association of Machinists, International Brotherhood of Boiler makers, Iron Ship Builders, and Helpers of America, International Brotherhood of Blacksmiths, Drop Forgers and Helpers, Sheet Metal Workers International Association, International Brotherhood of Electrical Workers, Brotherhood of Railway Carmen of America, International Brotherhood of Firemen and Oilers. April 4, 1935.

Agreement Between the Atlanta & West Point Rail Road Company the Western Railway of Alabama and its Locomotive Engineers. Effective September 1, 1944.

Agreement Between the Atlanta and West Point Rail Road Company the Western Railway of Alabama and Its Machinists, Boiler makers, Blacksmiths, Sheet Metal Workers, Electricians and Carmen, their Helpers and Apprentices, represent by System Federation No. 126. September 29, 1944.

Agreement Between Atlanta and West Point Rail Road Co. The Western Railway of Alabama and System Federation No. 126 of the Railway Employees' Department of the A.F. of L. in Behalf of International Brotherhood of Firemen, Oilers, Helpers, Roundhouse, and Railway Shop Laborers of the Railway Employees' Department A.F. of L. establishing Rules, Rates of Pay and Working Conditions for Power House Employees and Railway Shop Laborers. Effective February 1, 1946.

Agreement Made This 30th Day of May, 1968 by and Between Atlanta and West Point Rail Road Company the Western Railway of Alabama, Georgia Railroad, Atlanta Joint Terminals and their employees Represented by: Brotherhood of Railway, Airline and Steamship Clerks, Freight Handlers, Express and Station Employees, International association of Machinists and Aerospace Workers, International Brotherhood of Boiler makers, Iron Ship Builders, Blacksmiths, Forgers and Helpers, Sheet Metal Workers, International Association, International Brotherhood of Electrical Workers, International Brotherhood of Firemen, Oilers, Helpers, Roundhouse and Railway Shop Laborers, Brotherhood Railway Carmen of American.

The Western Railway of Alabama Information Compiled from Annual Reports, First Annual Report-year 1836 though June 30, 1898. University of Louisville Archives.

Annual Report of the Western Railway of Alabama. 1899.
Annual Report of the Western Railway of Alabama. 1900.
Annual Report of the Western Railway of Alabama. 1902.
Annual Report of the Western Railway of Alabama. 1903.
Annual Report of the Western Railway of Alabama. 1904.
Annual Report of the Western Railway of Alabama. 1906.
Annual Report of the Western Railway of Alabama. 1907.
Annual Report of the Western Railway of Alabama. 1910.
Annual Report of the Western Railway of Alabama. 1913.
Annual Report of the Western Railway of Alabama. 1916.
Annual Report of the Western Railway of Alabama. 1917.
Annual Report of the Western Railway of Alabama. 1918.
Annual Report of the Western Railway of Alabama. 1919.
Annual Report of the Western Railway of Alabama. 1920.
Annual Report of the Western Railway of Alabama. 1921.
Annual Report of the Western Railway of Alabama. 1922.
Annual Report of the Western Railway of Alabama. 1925.
Annual Report of the Western Railway of Alabama. 1926.
Annual Report of the Western Railway of Alabama. 1929.
Annual Report of the Western Railway of Alabama. 1930.
Annual Report of the Western Railway of Alabama. 1932.
Annual Report of the Western Railway of Alabama. 1933.
Annual Report of the Western Railway of Alabama. 1934.
Annual Report of the Western Railway of Alabama. 1936.
Annual Report of the Western Railway of Alabama. 1941.
Annual Report of the Western Railway of Alabama. 1942.
Annual Report of the Western Railway of Alabama. 1943.
Annual Report of the Western Railway of Alabama. 1948.
Annual Report of the Western Railway of Alabama. 1950.
Annual Report of the Western Railway of Alabama. 1951.
Annual Report of the Western Railway of Alabama. 1952.
Annual Report of the Western Railway of Alabama. 1953.
Annual Report of the Western Railway of Alabama. 1954.
Annual Report of the Western Railway of Alabama. 1955.
Annual Report of the Western Railway of Alabama. 1957.
Annual Report of the Western Railway of Alabama. 1958.
Annual Report of the Western Railway of Alabama. 1959.
Annual Report of the Western Railway of Alabama. 1960.
Annual Report of the Western Railway of Alabama. 1961.
Annual Report of the Western Railway of Alabama. 1962.
Annual Report of the Western Railway of Alabama. 1966.
Annual Report of the Western Railway of Alabama. 1967.

Secondary Sources

Bowie, Marshall L. *A time of Adversity and Courage, A Story of Montgomery and West Point Rail Road and Predecessor Company of the Western Railway of Alabama and its Activities During the War Between the States, 1861-1865*. A pamphlet issued by the West Point Route, 1961.

Cline, Wayne. *Alabama Railroads*. Tuscaloosa and London: The University of Alabama Press, 1997.

Doster, James F. *Railroads in Alabama Politics, 1875-1914*. University of Alabama Press, 1957.

Drury, George. *Guide to North American Steam Locomotives, History and Development of Steam Power since 1900*. Waukesha, WI: Kalmbach Publishing Co., 1993.

Prince, Richard E. *Steam Locomotives and History, Georgia Railroad and West point Route*. Green River, Wyo.: Richard E. Prince, 1962.

Correspondence

Sweatt, M. P. "Bud". Electronic mail to author, 29 June 1999.

Sweatt, M. P. "Bud". Electronic mail to author, 2 August 1999.

Wm. Apps to E.L. Tyler, 11 June 1890.

W. H. Harrison to Edmund Tyler, 1 July 1891.

W. H. Harrison to Garrett's Hydraulic Motor Co., 22 August 1891.

W. H. Harrison to Henry Smith, 14 September 1891.

W. H. Harrison to Edmund Tyler, 1 July 1892.

W. H. Harrison to Edmund Tyler, 25 August 1892.

(Note: Apps and Harrison correspondence is contained in a fragile bound volume of Western of Alabama records in possession of Mr. Harry Taylor, of Montgomery, who kindly made these available to HAER historian Seth Bruggeman during this project.)

Interviews

Bass, James H. Telephone interview with author. Montgomery, AL. 4 August 1999.

Dunning, Mrs. Phil, Jr. (Mary Cecil). Telephone interview with author. Montgomery, AL. 5 July 1999.

Sweatt, Mr. M. P. "Bud" and W. B. Hartley. Interview with author. Montgomery, AL. 17 June 1999.

Taylor, Harry. Interview with author. Montgomery, AL. 9 June 1999.

Miscellaneous Documents

By-Laws of the Western Railway Employees Credit Union, Revised January 1930.

Interstate Commerce Commission. WofA Building Records. Valuations Section 2ALA. 1918.

Interstate Commerce Commission. Inventory of Bridge Branch Structures on the Western Railway of Alabama. Section 2ALA. 1918.

Montgomery Railroad. Act to amend Charter, approved February, 1843.

Appendix I: Classification of Shop Employees⁴⁰

Apprentices:

All apprentices must be able to speak, read, and write the English language and understand at least the first four rules of arithmetic.

Applicants for regular apprenticeship shall be between 16 and 21 years of age, and, if accepted, shall serve four years of 290 days each calendar year. If retained in the service at the expiration of their apprenticeship they shall be paid not less than the minimum rate established for journeymen mechanics of their respective crafts.

In selecting helper apprentices seniority will govern and all selections will be made in conjunction with the respective craft shop committees.

All apprentices must be indentured and shall be furnished with a duplicate of indenture by the company, who will also furnish every opportunity possible for the apprentice to secure a complete knowledge of the trade.

No apprentice will be started at points where there are not adequate facilities for learning the trade.

Two apprentices will not be worked together as partners.

The distribution of apprentices among shops where general repairs are made on the division shall be as nearly as possible in proportion to the mechanics in the respective trades employed therein.

In computing the number of apprentices that may be employed in a trade on a division the total number of mechanics of that trade employed on the division will be considered.

If within six months an apprentice shows no aptitude to learn the trade he will not be retained as an apprentice.

An apprentice shall not be dismissed or leave the service of his own accord, except for just and sufficient cause, before completing his apprenticeship.

Apprentices shall not be assigned to work on night shifts. An apprentice shall not be allowed to work overtime during the first three years of his apprenticeship.

If an apprentice is retained in the service upon completing the apprenticeship, his seniority rights as a mechanic will date from the time of completion of apprenticeship.

Preference will be given to sons of employees in the selection of apprentices to the extent of at least 80 per cent of the number employed.

Machinists:

Any man who has served an apprenticeship or has had four years' experience at the machinists' trade and who, by his skill and experience, is qualified and capable of laying out and fitting together the metal parts of any machine or locomotive, with or without drawings, and competent to do either sizing, shaping, turning, boring, planing, grinding, finishing, or adjusting the metal parts of any machine or locomotive whatsoever shall constitute a machinist.

Machinists' work shall consist of laying out, fitting, adjusting, shaping, boring, slotting milling, and grinding of metals used in building, assembling, maintaining, dismantling, and installing locomotives

and engines (operated by steam or other power), pumps, cranes, hoists, elevators, pneumatic and hydraulic tools and machinery, scale building, shafting, and other shop machinery; ratchet and other skilled drilling and reaming; tool and die making, tool grinding and machine grinding, axle truing, axle, wheel, and tire turning and boring; engine inspecting; air equipment, lubricator and injector work; removing, replacing, grinding, bolting, and breaking of all joints on superheaters; oxyacetylene, thermic and electric welding on work generally recognized as machinists' work; the operation of all machines used in such work, including drill presses and bolt threaders using a facing, boring or turning head or milling apparatus, and all other work generally recognized as machinists' work.

Employees assigned to help machinists and apprentices, operators of drill presses and bolt threaders not equipped with a facing, boring or turning head or milling apparatus, bolt pointing and centering machines, wheel presses, bolt threaders, nut tappers and facers; crane men helpers, tool-room attendants, machinery oilers, box packers, greasocup fillers and oilers, and applying all couplings between engine and tenders; locomotive tender and draft rigging work except when performed by carmen.

Apprentices shall be instructed in all branches of the machinists' trade. They will serve three years on machines and special jobs. Apprentices will not be required to work more than four months on any one machine or special job. During the last year of their apprenticeship they will work on the floor. Apprenticeship they will work on the floor. Apprentices shall not work on oxyacetylene, thermic, electric, or other welding process until they are in their last year.

Helpers who have had not less than two consecutive years' experience as machinist helper at the point where employed, at the time application for apprenticeship is made, may become a helper apprentice. When assigned as a helper apprentice they must not be over 25 years of age.

Helper apprentices shall serve three years, a minimum of 290 days each calendar year, and shall be governed by the same laws and rules as govern regular apprentices.

Boiler makers:

Any man who has served an apprenticeship, or has had four years experience at the trade, who can with the aid of tools, with or without drawings, and is competent to either lay out, build or repair boilers, tanks, and details thereof, and complete same in a mechanical manner shall constitute a boilermaker.

Boiler makers' work shall consist of laying out, cutting apart, building, or repairing boilers, tanks, and drums; inspecting, patching, riveting, chipping, caulking, flanging, and flue work; building, repairing, removing, and applying steel cabs and running boards; laying out and fitting up any sheet iron or sheet steel work made of 16-gauge or heavier (present practice between boiler makers and sheet-metal workers on railroads to continue relative to gauge of iron), including fronts and doors; grate and grate rigging, ash pans, front end netting and diaphragm work; engine tender steel underframed steel tender truck frames, except where other mechanics perform this work; removing and applying all staybolts, radials, flexible caps, sleeves, crown bolts, stay rods, and braces in boilers, tanks, and drums, applying and removing arch pipes; operating punches and shears for shaping and forming, pneumatic staybolt breakers, air rams, and hammers; bull, jam, and joke riveters; boiler makers' work in connection with the building and repairing of steam shovels, derricks, booms, housing, circles, and coal buggies; I-beam, channel iron, angle iron, and tee iron work; all drilling, cutting and tapping, and operating tools in connection with boiler makers' work; oxy-acetylene, thermic, and electric welding on work generally recognized as boiler makers' work, and all other work generally recognized as boiler makers' work. It is understood that present practice in the performance of work between boiler makers and carmen will continue.

Employees assigned to help boiler makers and their apprentices operators of drill presses, and bolt cutters in the boiler shop, boiler washers, punch and shear operators (cutting only bar stock and scrap).

Running repair work for boiler makers shall consists of such boiler makers' work as is necessary to fit

locomotive to make a successful trip. It shall include staybolt inspection, ordinary repairs to ash pan and front end nettings, caulking and repairing leaks in fireboxes and exterior of boiler or tanks. The application of staybolts, patches, and flues, will be done by deadwork forces, but at points where no deadwork forces are employed, the roundhouse men will be expected to do such work as will be necessary to fit engine to return to main terminal.

Flange turners, layer outs, and fitter ups shall be assigned in shops where flue sheets and half side sheets or fireboxes are flanged, revolved, and applied. One man may perform all these operations where the service does not require more than one man.

Boiler inspectors – staybolt inspectors will be assigned at all points where monthly staybolts and boiler inspection of 15 or more engines is required. When such employees have no inspection work to perform, they may be assigned to other boiler makers' work.

Boiler makers, apprentices, and helpers will not be required to work on boilers or tanks while electric or other welding processes are in use or when tires are being heated, unless proper protection is provided.

Not more than one oxyacetylene welding or cutting operator or electric operator will be required to work in firebox or shell of boiler at the same time, unless proper protection is provided.

There will be two helpers used in helping a boilermaker or an apprentice in breaking down 10 or more staybolts with a hand ram.

Classified boilermaker helpers will attend tool room in boiler shop.

Holding on all staybolts and rivets, striking chisel bars, side sets, and backing out, punches, scaling boilers, and heating rivets (except when performed by apprentices) will be considered boilermaker helpers' work. When rivets larger than five-eighths inch are to be cut off or backed out, sufficient help will be furnished.

Boiler makers or apprentices, when using compound motors, will be furnished sufficient competent help.

Two helpers will be furnished, when holding on rivets, with wedge bars.

Helpers will do all other work generally recognized as boilermaker helpers' work. Fifty per cent of the apprentices may consist of boilermaker helpers who have had not less than two consecutive years' experience as boilermaker helper at the point where employed at the time application for apprenticeship is made.

They shall be between the ages of 21 and 40 years and shall serve three years, a minimum of 290 days each calendar year.

Helper apprentices shall be governed by the same laws and rules as regular apprentices. Apprentices shall not work on oxyacetylene, thermic, electric, or other welding processes until they are in their last year.

Blacksmiths:

Any man who has served an apprenticeship or who has had four years' varied experience at the blacksmith's trade shall be considered a blacksmith. He must be able to take a piece of work pertaining to his class and, with or without the aid of drawings, bring it to a successful completion within a reasonable length of time.

Blacksmiths' work shall consist of welding, forging, heating, shaping, and bending of metal; tool

dressing and tempering, spring making, tempering and repairing, potashing, case and bichloride hardening; flue welding under blacksmith foreman; operating furnaces, bulldozers, forming machines, drop-forging machines, bolt machines, and Bradley hammers; hammersmiths, drop hammermen, trimmers, rolling mill operators; operating punches and shears doing shaping and forming in connection with Blacksmiths' work; oxyacetylene, thermic, and electric welding on work generally recognized as blacksmith's work, and all other work generally recognized as Blacksmiths' work.

Employees assigned to helping Blacksmiths and apprentices; heaters, hammer operators, machine helpers, drill press, and boltcutter operators, punch and shear operators (cutting only bar stock and scrap) in connection with blacksmith's work.

Fifty per cent of the apprentices may consist of helpers who have had no less than two consecutive years' experience in shop on the division where advanced.

Seniority shall prevail in the selection of helper apprentices; those selected to be not over 30 years of age.

Apprentices selected from helpers shall serve three years, a minimum of 290 days each calendar year. When started as an apprentice they shall receive the minimum helpers' rate of pay for the first six months; at the end of that time they shall receive 2 cents per hour in crease a.... Apprentices shall be given opportunity to learn all branches of the trade and will not be kept on any one class of work longer than four months. Apprentices shall not work on oxyacetylene, thermic, electric, or other welding processes until they are in their last year.

Blacksmith helpers required to prepare furnaces or build riles on their own time will be allowed 30 minutes' straight time for each fire built or furnace prepared. Regularly assigned Blacksmiths and helpers engaged on running repair work located at enginehouses will work the same hours as other crafts in engine houses.

Furnace operators (heaters) will be assigned to operate furnaces making or working material 6 inches or over and heating it for forgemen.

Heaters will be assigned to operate furnaces used in connection with forging machines 4 inches and over or to heat any material 4 inches and over to be forged.

Heaters will also be assigned to heavy fires.

When operators are required on other furnaces, helpers will be used.

Coal and oil suitable for smithing purposes will be furnished at all times.

Sheet Metal Workers

Any man who has served an apprenticeship, or has had four or more years' experience at the various branches of the trade, who is qualified and capable of doing sheet metal work or pipe work as applied to buildings, machinery, locomotives, cars, etc., whether it be tin, sheet iron, or sheet copper, and capable of bending, fitting, and brazing of pipe, shall constitute a sheet metal worker.

Sheet metal workers shall include tanners, coppersmiths, and pipe fitters employed in shop yards and buildings and on passenger coaches and engines of all kinds, skilled in the building, erecting, assembling, installing, dismantling, and maintaining parts made of sheet copper, brass, tin, zinc, white metal, lead, black, planished, pickled and galvanized iron of 10 gauge and lighter (present practice between sheet metal workers and boiler makers on railroads to continue relative to gauge of iron), including brazing,

soldering, tinning, leading, and babbitting; the bending, fitting, cutting, threading, brazing, connecting and disconnecting or air, water, gas, oil, and steam pipes; the operation of babbitt fires and pipe-threading machines; oxyacetylene, thermic, and electric welding on work generally recognized as sheet metal workers' work, and all other work generally recognized as sheet metal workers' work.

Employees regularly assigned as helpers to assist sheet metal workers and apprentices in their various classifications of work.

Sheet metal workers shall not be required to remove or apply blowoff or surface pipes or ash-pan blowers on boilers under steam.

Sheet metal workers will be sent out on line of road and to outlying points, when their services are required, but not for small, unimportant running repair jobs.

The assignment of running sheet metal workers to dead work, shall not be the recognized practice; but at points where no dead work sheet metal workers are employed, they may be so assigned if the needs of the service require it.

Fifty per cent of the apprentices may be selected from helpers of this craft who have had not less than two consecutive years' experience as a sheet metal worker helper at the point where employed, and shall not be more than 30 years of age; such apprentice shall serve three calendar years, a minimum of 290 days each calendar year, seniority to govern.

Helper apprentices will start at the third classification of regular apprentices' schedule when entering their apprenticeship, and continue through as regular apprentices.

Electrical Workers

Any man who has served an apprenticeship or who has had four years' practical experience in electrical work and is competent to execute same to a successful conclusion will be rated as an electrical worker.

An electrician will not necessarily be an armature winder.

Electricians' work shall consist of repairing, rebuilding, installing, inspecting, and maintaining the electric wiring of generators, switchboards, motors and control, rheostats and control, static and rotary transformers, motor generators, electric headlights and headlight generators, electric welding machines, storage batteries, and axle-lighting equipment; winding armatures, fields, magnet coils, rotors, transformers, and starting compensators. Inside wiring in shops and on steam and electric locomotives, passenger train and motor cars; include cable splicers, wiremen, armature winders, electric crane operators for cranes of 40-ton capacity or over, and all other work properly recognized as electricians' work.

Linemen's work shall consist of building, repairing and maintaining pole lines and supports for service wires and cables, catenary and monorail conductors and feed wires, overhead and underground, and all outside wiring in yards.

Signal maintainers who, for 50 per cent or more of their time, perform work as defined ...

Men employed as motor attendants, generator attendants, and substation attendants who start, stop, and oil and keep their equipment clean and change and adjust brushes for the proper running of their equipment, switchboard operators, coal pier car dumpers and coal pier conveyor car operators in connection with loading and unloading vessels.

Electric crane operators for cranes of less than 40-ton capacity.

Groundmen's work shall consist of assisting linemen in their duties when said work is performed on the ground.

Coal pier elevator operators and coal pier electric hoist operators in connection with loading and unloading vessels.

Employees regularly assigned as helpers to assist electrical workers and apprentices, including electric lamp trimmers who do no mechanical work.

Fifty per cent of the apprentices may consist of electrical workers' helpers who have had two years continuous service at the point where employed. When assigned as helper apprentices, they must not be over 25 years of age, and shall serve three years, a minimum of 290 days each calendar year.

Carmen

Any man who has served an apprenticeship or who has had four years' practical experience at car work, and who with the aid of tools, with or without drawings, can lay out, build, or perform the work of his craft or occupation in a mechanical manner, shall constitute a carman.

Carmen's work shall consist of building, dismantling, painting, upholstering, and inspecting all passenger and freight cars, both wood and steel, maintaining planing mill, cabinet and bench carpenter work, pattern and flask making, and all other carpenter work in shop and yards; carmen's work in building and repairing motor cars, lever cars, hand cars and station trucks; building, repairing, and removing and applying locomotive cabs, pilots, pilot beams, running boards, foot and head light boards, tender frames and trucks; pipe and inspection work in connection with airbrake equipment on freight cars; applying patented metal roofing; repairing steam heat hose for locomotives and cars; operating punches and shears doing shaping and forming, hand forges, and heating torches in connection with carmen's work; painting, varnishing, surfacing, lettering, decorating, cutting of stencils, and removing paint; all other work generally recognized as painter's work under the supervision of the locomotive and car departments; joint car inspectors, car inspectors, safety appliance and train car repairers, wrecking derrick engineers, and wheel record keepers; oxyacetylene, thermic and electric welding on work generally recognized as carmen's work, and all other work generally recognized as carmen's work. It is understood that present practice in the performance of work between the carmen and boiler makers will continue.

Employees regularly assigned to help carmen and apprentices, employees engaged in washing and scrubbing the inside and outside of passenger coaches, preparatory to painting, car oilers and packers, stock keepers (car department). Material carriers, rivet heaters (except when performed by apprentices), operators of bolt threaders, nut tappers, drill presses and punch and shear operators (cutting only bar stock and scrap), holding on rivets, striking chisel bars, side sets, and backing out punches, using backing hammer and sledges in assisting carmen in straightening metal parts of cars, cleaning journals, assist carmen in erecting scaffolds, and all other work generally recognized as carmen helper's work.

Wrecking crews, including engineers and firemen, shall be composed of regularly assigned carmen, and will be paid for such service as per general rules from time called until return to their home station. Meals and lodging will be provided by the company while crews are on duty in wrecking service. When wrecking crews are called for wrecks or derailments outside of yard limits, the regularly assigned crew will accompany outfit. For wrecks or derailments within yard limits sufficient carmen will be called to perform the work.

Men assigned to inspecting must be able to speak and write the English language, and have a fair knowledge of the M.C. B. rules and safety appliance laws.

Inspectors and other carmen in train yards will not be required to take record, for conducting

transportation purposes, of seals, commodities, or destination of cars.

Men assigned to follow inspector in yards to make safety appliance and light running repairs, shall not be required to work on cars taken from trains to repair tracks.

Switches of repair tracks will be kept locked with special locks.

Appendix II: Directors by Year

1890-1891

Cecil Baggett
M. H. Smith
Thomas G. Jones
E. P. Alexander
Henry C. Semple
Alex. C. King

1891-1892

H. C. Semple
Jeff. M. Faulkner
John W. Green
M. H. Smith
Alex. C. King
E. P. Alexander

1897-1898

George C. Smith
M. H. Smith
L. Lanier
John M. Egan
Jeff. M. Falkner
R. M. Green
H. M. Comer

1898-1899

George C. Smith
M. H. Smith
L. Lanier
John M. Egan
Jeff. M. Falkner
R. M. Green
H. M. Comer

1899-1900

George C. Smith
H. Walters
L. Lanier
John M. Egan
Jeff. M. Falkner
R. M. Green
H. M. Comer

1901-1902

H. Walters
John M. Egan
L. Lanier
J. F. Hanson
Jeff. M. Falkner
R. M. Green
Chas. A. Wickersham

1902-1903

H. Walters
John M. Egan
L. Lanier
J. F. Hanson
Jeff. M. Falkner
R. M. Green
Chas. A. Wickersham

1903-1904

H. Walters
John M. Egan
L. Lanier
J. F. Hanson
Jeff. M. Falkner
R. M. Green
Chas. A. Wickersham

1904-1905

H. Walters
A. R. Lawton
L. Lanier
J. F. Hanson
Jeff. M. Falkner
R. M. Green
Chas. A. Wickersham

1905-1906

H. Walters
A. R. Lawton
L. Lanier
J. F. Hanson
Jeff. M. Falkner
R. M. Green
Chas. A. Wickersham

1906-1907

H. Walters
A. R. Lawton
L. Lanier
J. F. Hanson
Jeff. M. Falkner
R. M. Green
Chas. A. Wickersham

1909-1910

H. Walters
A. R. Lawton
Zach Hagedorn
J. F. Hanson
R. E. Steiner
J. B. Greene
Chas. A. Wickersham

1910-1911

H. Walters
A. R. Lawton
Zach Hagedorn
J. F. Hanson
R. E. Steiner
J. B. Breene
Chas. A. Wickersham

1911-1912

H. Walters
A. R. Lawton
Zach Hagedorn
W. A. Winburn
R. E. Steiner
J. B. Breene
Chas. A. Wickersham

1912-1913

H. Walters
A. R. Lawton
M. H. Smith
W. A. Winburn
R. E. Steiner
N. P. Renfro
Chas. A. Wickersham

WESTERN RAILWAY OF ALABAMA MONTGOMERY SHOPS
HAER No. AL-186
(Page 49)

1913-1914
H. Walters
A. R. Lawton
M. H. Smith
W. A. Winburn
R. E. Steiner
N. P. Renfro
Chas. A. Wickersham

1916-1917
H. Walters
A. R. Lawton
M. H. Smith
W. A. Winburn
R. E. Steiner
N. P. Renfro
Chas. A. Wickersham

1920-1921
H. Walters
A. R. Lawton
W. L. Mapother
W. A. Winburn
R. E. Steiner
N. P. Renfro
Chas. A. Wickersham

1923-1924
H. Walters
A. R. Lawton
W. L. Mapother
L. A. Downs
R. E. Steiner
N. P. Renfro
Chas. A. Wickersham

1926-1927
H. Walters
A. R. Lawton
W. R. Cole
John J. Pelley
R. E. Steiner
Chas. A. Wickersham

1929-1930
H. Walters
A. R. Lawton
W. R. Cole
A. E. Clift
R. E. Steiner
Chas. A. Wickersham

1914-1915
No Listing

1918-1919
H. Walters
A. R. Lawton
M. H. Smith
J. E. Murphy
R. E. Steiner
N. P. Renfro
Chas. A. Wickersham

1921-1922
H. Walters
A. R. Lawton
W. L. Mapother
W. A. Winburn
R. E. Steiner
N. P. Renfro
Chas. A. Wickersham

1924-1925
H. Walters
A. R. Lawton
W. L. Mapother
L. A. Downs
R. E. Steiner
N. P. Renfro
Chas. A. Wickersham

1927-1928
H. Walters
A. R. Lawton
W. R. Cole
John J. Pelley
R. E. Steiner
Chas. A. Wickersham

1930-1931
H. Walters
A. R. Lawton
W. R. Cole
H. D. Pollard
R. E. Steiner
Chas. A. Wickersham

1915-1916
H. Walters
A. R. Lawton
M. H. Smith
W. A. Winburn
R. E. Steiner
N. P. Renfro
Chas. A. Wickersham

1919-1920
H. Walters
A. R. Lawton
W. L. Mapother
W. A. Winburn
R. E. Steiner
N. P. Renfro
Chas. A. Wickersham

1922-1923
H. Walters
A. R. Lawton
W. L. Mapother
W. A. Winburn
R. E. Steiner
N. P. Renfro
Chas. A. Wickersham

1925-1926
H. Walters
A. R. Lawton
W. R. Cole
John J. Pelley
R. E. Steiner
N. P. Renfro*
Chas. A. Wickersham

1928-1929
H. Walters
A. R. Lawton
W. R. Cole
A. E. Clift
R. E. Steiner
Chas. A. Wickersham

1931-1932
Lyman Delano
A. R. Lawton
W. R. Cole
H. D. Pollard
R. E. Steiner
Chas. A. Wickersham

WESTERN RAILWAY OF ALABAMA MONTGOMERY SHOPS
HAER No. AL-186
(Page 50)

1932-1933
Lyman Delano
A. R. Lawton
W. R. Cole
H. D. Pollard
R. E. Steiner
Chas. A. Wickersham

1935-1936
Lyman Delano
T. M. Cunningham
J. B. Hill
H. D. Pollard
R. E. Steiner
Chas. A. Wickersham

1938-1939
Lyman Delano
T. M. Cunningham
J. B. Hill
H. D. Pollard
R. E. Steiner
Chas. A. Wickersham

1941-1942
Lyman Delano
T. M. Cunningham
J. B. Hill
R. R. Cummins
R. E. Steiner
Chas. A. Wickersham

1944-1945
Frederick B. Adams
J. B. Hill
G. H. Lanier
F. H. Schroeder
R. E. Steiner
Fred E. Waters

1947-1948
C. McD. Davis
J. B. Hill
Joseph L. Lanier
F. H. Schroeder
R. E. Steiner, Jr.
Fred E. Waters
S. R. Young

1933-1934
Lyman Delano
T. M. Cunningham
W. R. Cole
H. D. Pollard
R. E. Steiner
Chas. A. Wickersham

1936-1937
Lyman Delano
T. M. Cunningham
J. B. Hill
H. D. Pollard
R. E. Steiner
Chas. A. Wickersham

1939-1940
Lyman Delano
T. M. Cunningham
J. B. Hill
H. D. Pollard
R. E. Steiner
Chas. A. Wickersham

1942-1943
Lyman Delano
T. M. Cunningham
J. B. Hill
R. R. Cummins
R. E. Steiner
Chas. A. Wickersham

1945-1946
Frederick B. Adams
J. B. Hill
G. H. Lanier
F. H. Schroeder
R. E. Steiner
Fred E. Waters

1948-1949
C. McD. Davis
J. B. Hill
Joseph L. Lanier
F. H. Schroeder
R. E. Steiner, Jr.
Fred E. Waters
S. R. Young

1934-1935
Lyman Delano
T. M. Cunningham
J. B. Hill
H. D. Pollard
R. E. Steiner
Chas. A. Wickersham

1937-1938
Lyman Delano
T. M. Cunningham
J. B. Hill
H. D. Pollard
R. E. Steiner
Chas. A. Wickersham

1940-1941
Lyman Delano
T. M. Cunningham
J. E. Hill
H. D. Pollard*
R. E. Steiner
Chas. A. Wickersham

1943-1944
Frederick B. Adams
J. B. Hill
F. H. Schroeder
Lawrence G. Tighe
Fred E. Waters
R. E. Steiner
Chas. A. Wickersham

1946-1947
C. McD. Davis
J. B. Hill
G. H. Lanier
F. H. Schroeder
R. E. Steiner, Jr.
Fred E. Waters
S. R. Young

1949-1950
C. McD. Davis
J. E. Tilford
Joseph L. Lanier
F. H. Schroeder
R. E. Steiner, Jr.
Fred E. Waters
S. R. Young

WESTERN RAILWAY OF ALABAMA MONTGOMERY SHOPS
HAER No. AL-186
(Page 51)

1950-1951

C. McD. Davis
J. E. Tilford
Joseph L. Lanier
F. H. Schroder
R. E. Steiner, Jr.
Fred E. Waters
S. R. Young

1951-1952

C. McD. Davis
J. E. Tilford
Joseph L. Lanier
George E. Boulineau
F. H. Schroeder
R. E. Steiner, Jr.
Fred E. Waters
S. R. Young

1952-1953

C. McD. Davis
J. E. Tilford
Joseph L. Lanier
F. H. Schroeder
R. E. Steiner, Jr.
George E. Boulineau
S. R. Young

1953-1954

C. McD. Davis
J. E. Tilford
Joseph L. Lanier
R. H. Schroeder
R. E. Steiner, Jr.
J. C. Mixon
S. R. Young

1954-1955

C. McD. Davis
J. E. Tilford
Joseph L. Lanier
F. H. Schroeder
R. E. Steiner, Jr.
J. C. Mixon
S. R. Young

1955-1956

C. McD. Davis
J. E. Tilford
Joseph L. Lanier
F. H. Schroeder
R. E. Steiner, Jr.
S. R. Young
J. C. Mixon

1956-1957

W. T. Rice
J. E. Tilford
Joseph L. Lanier
F. H. Schroeder
R. E. Steiner, Jr.
S. R. Young
J. C. Mixon

1957-1958

W. T. Rice
J. E. Tilford
Joseph L. Lanier
B. A. Culpepper
R. E. Steiner, Jr.
S. R. Young
J. C. Mixon

1958-1959

B. Alton Culpepper
William H. Kendall
Joseph L. Lanier
J. Clyde Mixon
W. Thomas Rice
Robert E. Steiner
Samuel R. Young

1959-1960

B. Alton Culpepper
William H. Kendall
Joseph L. Lanier
J. Clyde Mixon
W. Thomas Rice
Robert E. Steiner, III
Samuel R. Young

1960-1961

B. Alton Culpepper
William H. Kendall
Joseph L. Lanier
J. Clyde Mixon
W. Thomas Rice
Robert E. Steiner, III
Samuel R. Young

1961-1962

B. Alton Culpepper
William H. Kendall
Joseph L. Lanier
J. Clyde Mixon
W. Thomas Rice
Robert E. Steiner, III
Samuel R. Young

1962-1963

B. Alton Culpepper
William H. Kendall
Joseph L. Lanier
J. Clyde Mixon
W. Thomas Rice
Robert E. Steiner, III
Samuel R. Young

1963-1964

Carl W. Bear
B. Alton Culpepper
William H. Kendall
Joseph L. Lanier
J. Clyde Mixon
W. Thomas Rice
Robert E. Steiner, III
Samuel R. Young

1966-1967

Carl W. Bear
William H. Dendall
Joseph L. Lanier
J. Clyde Mixon
W. Thomas Rice
Robert E. Steiner, III
Donald D. Stentch

Appendix III: Equipment Purchased/Installed Per Annual Report

1852	Stationary engine installed
1876	Drill Press Planer Driving Wheel Lathe
1877	New lathe in machine shop
1892	Shops now independent of city water, now utilize on-site wells
1902	New air compressor Heating system installed in new Paint shop consisting of vertical engine and system of steam Dust and shaving conveyor installed in Carpenter shop
1910	8 tables 8 step ladders 12 train boxes 6 pigeon hold cases 2 bulletin boards 2 stools 7 record boxes 1 motor car 2 profile cases 6 cots for baggage cars 1 clothes cupboard 1 frame built over boiler room for shavings collector 7 large chairs repaired 5 station seats repaired 1 roller top desk repaired 4 station seats 24 office chairs 4 pigeon hold cases for tariffs 28 sighs for stations, etc.
1911	New Wheel press foundation Concrete foundation for shearing machine
1912	Shed for shear machine
1917	Storage battery for telephone power
1918	Replacing Cadillac gas with 6 h.p. engines Replacing 3 Jerry Boy and 1 Cadillac engine with 4-6 h.p. Fairmont Electric tractor to turn table
1919	New flue welder Installing motor generator set for telephone
1920	Installing electric drive air compressor 1 new royal typewriter Blue print case 1 locomotive crane, special no. 2597 2 Dictaphones, nos. 69945, 47343 1 no. 33 Moor car 1 Fairmount 8 H.P. gas engine
	Addition to welding outfit Wireless telephone booth and outfit Telephone and line installed, R. H. Foreman Installation of shaving conveyor and boiler feeding system in place of conveyor pipes

WESTERN RAILWAY OF ALABAMA MONTGOMERY SHOPS
HAER No. AL-186
(Page 53)

	<p>1 Pels single end vertical punch and one splitting shear, type RB-16 1 extra heavy automatic car gainer Erection of shed over punch and shear machine in steel car shop Stationary boiler 1 feed valve test rack at shop 1 Cyclone arch tube cleaner 1 Globe valve reseating outfit 1 portable rod bushing complete and one portable sand blast</p>
1923	<p>Purchase of 1 Ajax chemical fire engine 4 electric portable drills Air hoist, bolt cutter and lathe 2 small drill presses 1 portable pneumatic rivet tool 1 D. C. Motor generator set 1 Loco driving wheel watering gauge 1 National die sharpener 1 hydraulic press 1 250 h.p. Babcock Wilson boiler Installation of shaving conveyor and boiler feeding system</p>
1924	<p>1 42" band saw machine Small tools and material whiting hoist Whiting locomotive hoist 1 pipe cutting machine 1 75 h.p. motor on suction fan in mill For motor truck chassis and building body on same for use in shops 1 Kerling duplex adjustable bending machine 1 turrent lathe with motor drive complete 1 portable boiler washer and tester</p>
1925	<p>Electric pyrometer for spring tempering furnace in blacksmith shop Malleable metal pattern makers tool complete Pearce portable journal truing machine Nathan boiler washer and tester for roundhouse</p>
1926	<p>12 Plomene fire extinguishers Installing arc welding circuit 1 Ryerson pneumatic spring bending press 1 Ryerson no. 2 universal elliptic spring former 1 Spraco paint machine Second handed stationary boiler 1 no. 22 Keller grinder Ingersoll-Rand air motor hoist Building two whiting hoist trucks 1 no. 6 multiplex Smith pressure jack 1 Warner & Swasey staybolt threading machine 2 AMP portable arc welding generator sets Building one pop testing machine Installation of car bottom type annealing furnace Installation electric annealing furnace, blacksmith shops Installation 1 35 ton Southwork Gross pneumatic straightening press</p>
1927	<p>Paving runways in shop yards for electric crane Addition to fuel oil tank and raising foundation</p>

	<p>Installation of steel lockers replacing wood lockers in shops Installation of vat for tempering springs Installation of 8059 gallon fuel oil tank on top of blacksmith shop for use of store department Installation of 4" cast iron gas mains in shops Installation of two porcelain wash sinks in place of wood troughs in wash room of machine</p>
1928	<p>Wiring in conduit replacing open wiring in machine shops Concrete platforms for Oakite cleaning system, machine shop Wiring in conduit replacing open wiring, boiler shop Runway for handling axles, wheel and axle shop Galvanized wire netting to windows in mill room Permanent scaffold in freight car repair shop Concrete runway around Whiting hoist for electric crane Water pipes to cinder pits Eye beam runway and carriage for Ingersoll Rand air hoist Permanent battery charging line from battery room to coach yard Additional wiring for new machines 2 pneumatic wood boring machines for freight car repair track 8 Duff car jacks for freight car repair shop 1 no. 3 Stewart double deck high speed steel furnace, Black smith shop 1 standard electric grinder with motor 1 no. 4 Cincinnati plain high power milling machine with motor and attachments 1 Pratt-Whiting 13" model B, geared head lathe 1 Cincinnati cutter and tool grinder with motor and attachments 1 Carlton 4' ball bearing radial drill with motor and attachments 1 Whiting electrically operated drop pit table with motor and attachments 1 CAW electric grinder with motor 1 no. 1230 Stewart vertical muffle furnace 2 Flohr superior no. 1 saw guards for rip saws 1 Niles no. 3 axle lathe with attachments 1 Niles 48" 500 ton double car wheel press with motor and attachments Hear registering equipment for Stewart no. 3 DDHS steel furnace and no. 1230 vertical muffle 1 Betts heavy duty car wheel boring machine with motor and attachments 1 27" x 6' Monarch model N., extra heavy duty 16 speed helical geared, full Timkinized lathe 1 ½ ton Ingersoll-Rand air hoist 3 motors in round house machine shop 1 Sheldon T-17 locomotive grinder and 1 T-19 super heater grinder 1 Sprague electric crane 1 Little David no. 7 pneumatic saw complete 1 freight car roof reclaiming machine 3 milling cutters, 2 vises, arbor adapter, and 6 emery wheels for milling machine 3 milling cutters for no. 4 HD Cincinnati milling machine 1 electrically driven centrifugal oil pump for fuel oil lines</p>
1929	<p>1 Whiting electrically operated drop pit table with special 15 hp motor and attachments, Original equipment and supplies for laboratory, shops Additional trolley and table for electric crane, machine shop 1 no. 1093 portable alemite lubricator for use in roundhouse 2 additional motors in roundhouse and machine shop 1 model F-4 power driven Foley automatic saw filer, car department 1 2-G vertical piston type grinder no. 112 for coach shop 1 John Deere tractor, 1 2 ton model 2 LCZ highway universal industrial trailer</p>

Manufacturing of mandrel for turning 54" and 56" driving wheel tires
1 3" centrifugal pump, shops
1 12" Williams LG hammer feed mill, dry lumber shed
1 portable rivet forge no. 11 for boiler shop
2 milling machine cutters for machine shop
1 new Hardie-type air compressor
2 complete sand blasting outfits for new sand blast house
2 pneumatic safety rivet busters no. 900, freight car shops
2 tractor trailers for handling carsills
1 Ingersoll-Rand die pneumatic wrench with one chuck
1 pneumatic safety rivet buster no. 900, freight car shop
2 additional Thor air motors, no. 22-1, freight car shops
2 additional portable rivet forges for freight car shops
1 additional 8 ½" milling cutter, for milling machine shops
120' addition to pneumatic hoist runway in steel car repairs shed
6 no. 25 lumber buggies for shops
4 no. 60 Boyer rivet busters, 1 no. 34 RC-LG and 1 no. 91 LG corner drill
1 flue rattler for boiler shop

Appendix IV: Construction Chronology Per Annual Reports

1849	Building of brick house for stationary engine
1857	Recommended that new car factory and stalls be added to round house, "calling attention to the
1860	Car factory burns at Montgomery, April 23
1861	Construction of new car factory
1865	Machine shop, blacksmith shop, round house, car factory, freight depot and shed, oil house and Paint shop and foundry remained Machine shop was built on original site with 100' added Adjacent offices, pattern shop, carpenter and smith shop The walls of the car factory are nearly ready for the roof and a full line of wood-working tools
1867	Passenger house and car shops completed, built of brick
1877	New Turntable erected
1883	New turntable
1891	Coal Chute erected, 3000 ton capacity 50000 gallon water tank proposed to replace 12000 gallon tank
1892	New round house New sand house Improved water supply at shops Machine shop floor and floor timbers replaced and roof shingled Eight stall annex to brick house built 50000 gallon water tank erected Water piping connecting tank and round house for washing of engines
1897	Round house and machine shops partially destroyed by fire on July 31 Plans for new machine, boiler and blacksmith shops adjoining present car shops prepared; round house will be temporarily rebuilt on old location and permanent structure will be erected adjoining the new shops
1898	New brick machine shop (115' x 102') New round house (19 stalls) Temp repairs to old machine shops New boiler shop (83' x 52') New blacksmith shop (83' x 38') 2-story office building (52' x 31') with store-room annex (72' x 32') Boiler and engine room of car shops rebuilt Car shop repaired Store-room of car shops rebuilt Store-room for road department erected
1900	New brick yard master office (24' x 40') New car inspector's house, joint with M&O New 6-inch water main laid to shops for fire protection New fence built around shop grounds Material from old office building and freight house torn down and removed to site for proposed Erection of new brick paint shop commenced (68' x 198') New wooden car shed commenced (68' x 289') Both above by Cook & Laurie Contractors
1902	New round house with steel tank and water station New coal chute
1903	Extending coal chute New turn table New cinder pit

WESTERN RAILWAY OF ALABAMA MONTGOMERY SHOPS
 HAER No. AL-186
 (Page 57)

	New sand house Stationary Room
1904	Coal platform and air hoist
1906	Drop pit Fence around old round house
1910	Repairs to turn table Repairs to pain shop Changes in oil vault Repairs to floor coach shop Repairs to round house Extension of old blacksmith shop and re-locating power plant Building concrete floor in well at shops Building combination store and locker house New shops completed
1911	Repairs to round house Repairs to turntable Repairs to cinder pit Paint shop and roof, coach shed, store room, machine shops, and boiler shop painted Moving and brick veneering fan house at shops Building paint store house Building combination store and locker house and scrap bins Building fuel storage house Building electrician's shop Building anthracite coal bins Building two air compressor buildings
1912	Coal chute repairs Repairs to car inspector's house Repairs to sand chute Repairs to round house and smoke jacks Repairs to turn table Repairs to lumber shed Store room roof painted Paint shop roof painted Repairs to machine shops Repairs to blacksmith shop Repairs to boiler shop Engine room painted Repairs to iron house Repairs to engine room Repairs to planing mill Repairs to coach shed
1913	Concrete coaling station Drain to drop pit 80' turn table
1914	Water columns Sand house cinder pit
1915	Coach shed constructed Sand house
1916	Turntable

	Wheel pit
1917	Additional storage room Asbestos roof replacing tin roof
1918	Toiler master mechanic's office Replacing tin roof with asbestos Enlarging cinder pit
1919	Asbestos roof replacing tin roof New cinder pit Flue house Addition to old cinder pit Four flue tracks
1920	Construction material racks Construction flue house Engine pits Paint, airbrake and toiler rooms New 7' Cyclone fence New storage house
1922	Move fuel oil tank from pit and place on concrete foundation Construction of dry lumber shed Moving front wall and placing overhead beam in coal and coke house Building oil house Erection of machine shop building and retiring partition in round house Construction of locker in bath room Increasing size of water main and additional pipe Building shed for tank repair shop at round house Construction of shed for steel car material Installation of four smoke jacks Retiring asbestos sheeting from walls of coach shop
1923	Remodeling shelving in store room Extension of electric light line, coach shop yard Drain from shop power house Extending welding circuit machine shop to boiler shop Building and installing oil waste and reclaim vat Building 49' extension on dry lumber shed Construction 4 stationary car washing benches Construction of lockers in wash room
1924	Steel frame asbestos covered shed over hoist Installation of traveling shelf ladder Installation of six portable flood lights Installation and arrangement of lights in shed
1925	Steel frame asbestos covered shed over hoist Relocation of 860' Cyclone fence and addition of 500' fence around shop yard Paving floor on two engine pits and constructing brick wall Construction ice storage house at shops
1926	Flood lights, coal chute Building steel shed over annealing furnace blacksmith shop
1928	Shed to east side machine shop Additional structural steel bent, beams, and braces to strengthen sand house
1929	New water station for new yard, 10" potage stand pipe replacing 8" Fairbanks-Morse stand pipe Construction of scrap bin for freight car shop

Construction of iron storage rack, blacksmith shop
Storage bin for passenger car material, wheel and axle shop
Electric power transformer in rear of roundhouse
Concrete water storage tank for stationary boiler
10 Murdock air boxes, replacing wooden air boxes, freight car repair yard
200' additional 8" CI pipe from river water main to stand pipe in rear of roundhouse
2" EH galvanized pipe water line and 4" CI pipe water line for artesian water
1 3" pipe line traefier and trap, to shop line in shops
Concrete floor replacing wood floor, storehouse
New machine shop building for roundhouse, replacing old shop shed
Sand blast house and sand storage bin, shops
Concrete floor and engine pit, replacing old brick and wood block floor, etc.
Construction of concrete platform and paving driveway in shop yard
Concrete paving on electric drop pit tracks, rear of round house
Installation of wiring for lights in conduit, replacing open wiring in roundhouse
Construction of 3 concrete platforms, blacksmith shop, and 2 back of roundhouse

Appendix V: The "Battle of Clay Street"

(Note: This account is reprinted verbatim from *The Montgomery Advertiser*, 16 December 1906, 7, 10. Much of the account is confusing and unverifiable, and is reprinted here to give a sense of the turmoil accompanying rail expansion in Montgomery during this period. Words in brackets are either best approximations of illegible text or comments concerning that text.)

The Mobile and Ohio was trying to put in a crossing and get into the tracks leading to the railroad cut and the union depot. The Western and Louisville and Nashville did not intend to let them do it without a fight and the Alabama Midland or Plant-System was quiescent, though really in sympathy with the Mobile and Ohio. The first gun of the war was fired Sunday afternoon, May 10, 1897. At 3 o'clock that afternoon the Western force backed several boxes on the track in front of where J. N. Hall's home then was. The cars were filled with men and material for laying tracks and under the direction of Section Foreman Lane of the Western Railway the work was started.

That night Captain E. A. Graham and William C. Fitts, at that time Attorney General of Alabama, attorneys for the Mobile and Ohio secured a writ of injunction which was served on Mr. Lane by Deputy Sheriff Ira Virgin. Policemen, constables and a justice of the peace were there then but when the legal paper was served things quieted down.

This was the beginning of the biggest railroad fight that Montgomery ever had and one of the biggest in this section of the South. The city was beginning to fill up with railroad men and the lines were being sharply drawn.

On the second of June, President George C. Smith of the Western and General George P. Harrison General Counsel came to Montgomery and spent the morning going over old records in the Probate office at the Montgomery County court house trying to find records showing that the land sold by J. N. Hall to the Mobile and Ohio Railroad, did not belong to him. So far the Louisville and Nashville had not shown its hand. It did so that very night and precipitated the liveliest scrimmage of the campaign. About 9 o'clock on that Thursday night, Superintendent J.L. McKinney, Master of Trains Tom Mizell, Roadmaster Shields and other Mobile and Montgomery men, suddenly showed up at the Clay street battle ground. With them was a string of freight cars loaded with laborers and material for track laying. This outfit had been kept in readiness on a sidetrack at McGehee's Switch, ten miles from Montgomery so as to be brought here at a moment's notice. Soon after the string of freight cars arrived, Superintendent Pat Downs of the Western and some of the Western Road men hurried up. Work was begun at once laying a track just to the west of where the Western had started its track the Sunday night before and between the main line of the Western's Selma road and the Mobile and Montgomery main line. The news had by this time been telephoned to the city, and Major Dunham of the Plant System, Col. A.A. Willey, attorney of that road, Colonel Graham and Mr. Fitts, attorneys for the Mobile and Ohio, Colonel William Butler Duncan of New York, Chairman of the Board of Directors, and a number of other railroad men and laborers, and several policemen, were interested spectators of the second act of the drama. Threats were made on both sides, but the track-laying continued until a good long stretch of track was laid. Then twenty box cars were backed on the track and held there to prevent the possibility of the track being taken up. One of the cars a Western Railroad car no. 14447 was deliberately thrown across the track by having the rail underneath forced apart.

The third Act began at 3 o'clock Friday morning when the Mobile and Ohio people made their move. Chief Engineer Farrow and General Manager Mann of the Mobile and Ohio, with the Hanover Construction people, started a gang of men to laying a track beginning at the limits of Mr. Hall's front yard and running through the 400 feet of land that he was said to have sold the Montgomery, Tuscaloosa and Memphis. This track was laid parallel with the track laid by the

Western people Sunday night and continued for about 1,200 feet parallel with it. Later in the night Deputy Sheriff Virgin again had a speaking part. An injunction had been obtained by Dr. S [illegible] restraining President Woolfolk of the Hanover Construction Company, from [operating] on his land, and Mr. Virgin served it in person. After a [consideration] it was found that the mobile and Ohio track was twenty feet from the [line] of the Seelye property, and track laying recommenced. On the track that they had laid a few nights before, the Louisville and Nashville [had] some switch engines [constantly] patrolling and one of these engines struck some torpedoes that had been put on the track. The track laying gang was working then just on the edge of a small pond, and to a man the big crowd of negroes splashed in the water nearly waist deep when they heard the report. This put a dash of comedy in the drama and some what relieved the tension.

As if weary of all this night work, the scene was shifted Saturday to the courts and all of that day injunctions and counter injunctions were sailing around. On the 16th of June there was a conference in the private car of General Manager Metcalf of the Louisville and Nashville. This car was on a track at Clay street – right where the battle field had been two weeks before – and General Manager Mann of the Mobile and Ohio, with the attorneys of both the Louisville and Nashville and Mobile and Ohio, President George C. Smith of the Western, with General Harrison. Right then the treaty of peace was signed and the dogs of war called off.

The Louisville and Nashville and Western had agreed to the proposals of the Mobile and Ohio and the crossing at Clay Street was put in. The Mobile and Ohio bridge was almost finished about this time and the work of completing the track between Montgomery and the river was rushed through. June 16, 1898, the Mobile and Ohio ran its first train into Montgomery. Dan Buhl was division freight agent in Montgomery at the time, and as he had been soliciting freight for this train for some time previously, the train came into Montgomery with a long string of heavily-loaded freight cars.

1. The outlet for this main line is still visible where the shop roof once stood. The concrete from which the line emerges was added sometime after 1971 by Kershaw Manufacturing Co. during a period in which they rented the closed shops to handle business overflow.

2. Though connected only by roof. This shed was formed by a roof extension following the slope of the car shed roof. It had neither walls nor a floor other than packed dirt.

3. *Annual Report* (1898); *Annual Report* (1902).

4. "Contract Awarded for Mammoth Railroad Shops," *Montgomery Advertiser*, 5 Sept 1906.

5. "Contract Awarded."

6. Taylor, interview.

7. "Engine 125 Built at Montgomery Shops [Although the articles addresses engine 175]," *The Courier*, August 1926.

8. "Engine 170 was formerly a saturated steam locomotive with 20" x 26" slide valve cylinders. As rebuilt the locomotive is practically new throughout, the following parts being new: Vanadium steel frames, Vanadium steel driving rods, 21" x 26" piston valve cylinders, Superheat equipment, Baker valve gear, Frame braces, Frame castings, Furnace bearers, Expansion pads, Radial buffers, Unit safety draw bar, Driving spring rigging, Piping, Lagging, Jacket, All bolts and boiler studs, Running board brackets, Cab brackets, Smoke stack, Water column." "Passenger Locomotive Built Throughout in Montgomery Shops," *The Courier*, November 1928, 22.

9. W. H. Harrison to Henry Smith, 14 September 1891.

10. Information on the 100' turntable was provided HAER by Rev. Andrew Waldo, in a review of the WofA history draft, February, 2000.

11. Information on the tender shop was provided HAER by Rev. Andrew Waldo in a review of the WofA history draft, February, 2000.

12. WofA Building Records, 18-19.

13. W.H. Harrison's letter to Henry Smith contained the following instructions: "Attached hereto please find a sketch showing the position of arch to be cut in side of present blacksmith's shop. Referring our conversation of Tuesday evening you will remember that I told you the Gen'l Manager had decided to cut 50 feet off the East end of the blacksmith shop and connect it into a boiler shop. You will arrange to put in a brick partition wall (leaving a 4 foot arch door about the center) 50 ft from east end of building. Let your arch and of side of building so that center of the track entering will be [?] feet from face of the above truss [?] from east end of building." Letter from W.H. Harrison to Henry Smith, August 21, 1891.

14. The hipped roof and 6-foot extension appear on the Sanborn map.

15. WofA Building Records, 11.

16. Taylor, interview.

17. Information on blacksmith shop operations in this and the following paragraph was provided electronic mail from M.P. "Bud" Sweatt to author, 2 August 1999; Sweatt and Hartley, interview.

18. "With Glory Renewed the 181 leaves Montgomery Shops," *The Courier*, January 1925.

19. Richard E. Prince, *Steam Locomotives and History, Georgia Railroad and West Point Route* (Green River, Wyo.: Richard E. Prince, 1962), 61.

20. Rev. Andrew Waldo pointed out the existence of the trestle system in his review of the HAER WofA history draft, February, 2000.

21. *Annual Report* (1891): 10. Harrison noted that "the Montgomery chute held 82,682 cubic feet of coal at forty cubic feet per ton for a total of 2067 tons indicating that the structure was complete and in operation by that year." W. H. Harrison to Edmund Tyler, 1 July 1891.

22. W. H. Harrison to Edmund Tyler, 1 June 1892.

23. *Annual Report* (1913): 13.

24. *Annual Report* (1926).

25. Rev. Andrew Waldo pointed out the existence of the sand equipment and photo references in his review of the HAER WofA history draft, February, 2000.

26. Sweatt and Hartley, interview.

27. Taylor, interview.

28. *Annual Report* (1948).

29. Agreement Between Atlanta and West Point Rail Road Company the Western Railway of Alabama and Its machinists, boiler makers, Blacksmiths, sheet metal workers, electricians, and carmen, their helpers and apprentices, represented by System Federation No. 126, Railway Employees' Department, Mechanical Section Thereof, American Federation of Labor, Effective September 1, 1949.

30. Taylor, interview.

31. *Annual Report* (1955): 3.

32. *Annual Report* (1951): 8.

33. Taylor, interview.

34. Drury, *North American Steam Locomotives*, 28.

35. *Annual Report* (1952): 8.

36. *Annual Report* (1957): 4-5.

37. *Annual Report* (1959): 4.

38. Taylor, interview.

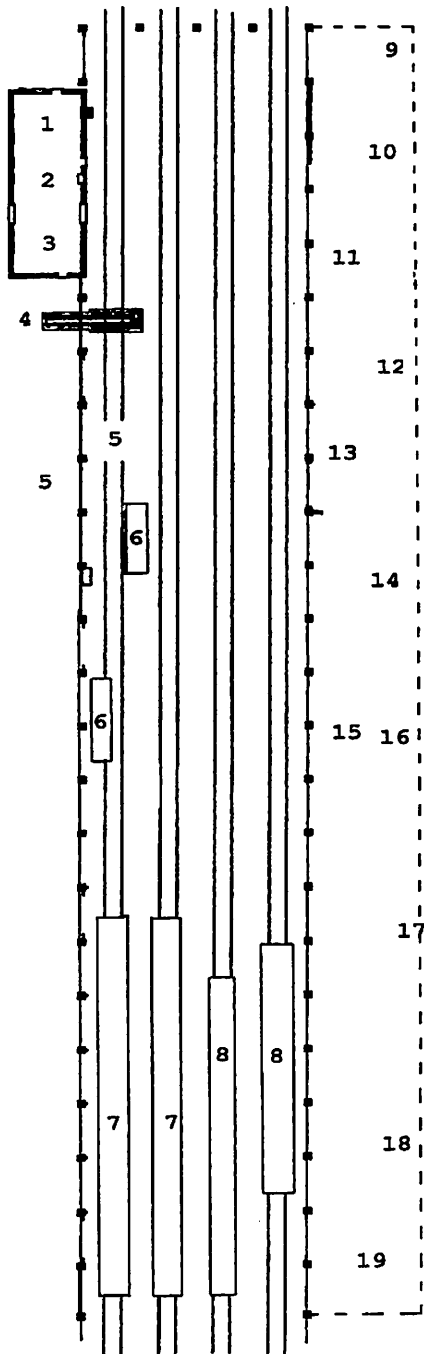
39. *Annual Report* (1967): 3.

40. Information in this Appendix is taken from: United States Railroad Administration Director General of Railroads, Supplement No. 4 to General Order No. 27, Atlanta, Birmingham & Atlantic Railroad, Charleston & Western Carolina Railroad, Augusta & Summerville Railroad, Atlanta & West Point Railroad – Western Railroad of Alabama (Atlanta, GA: April 10, 1919).

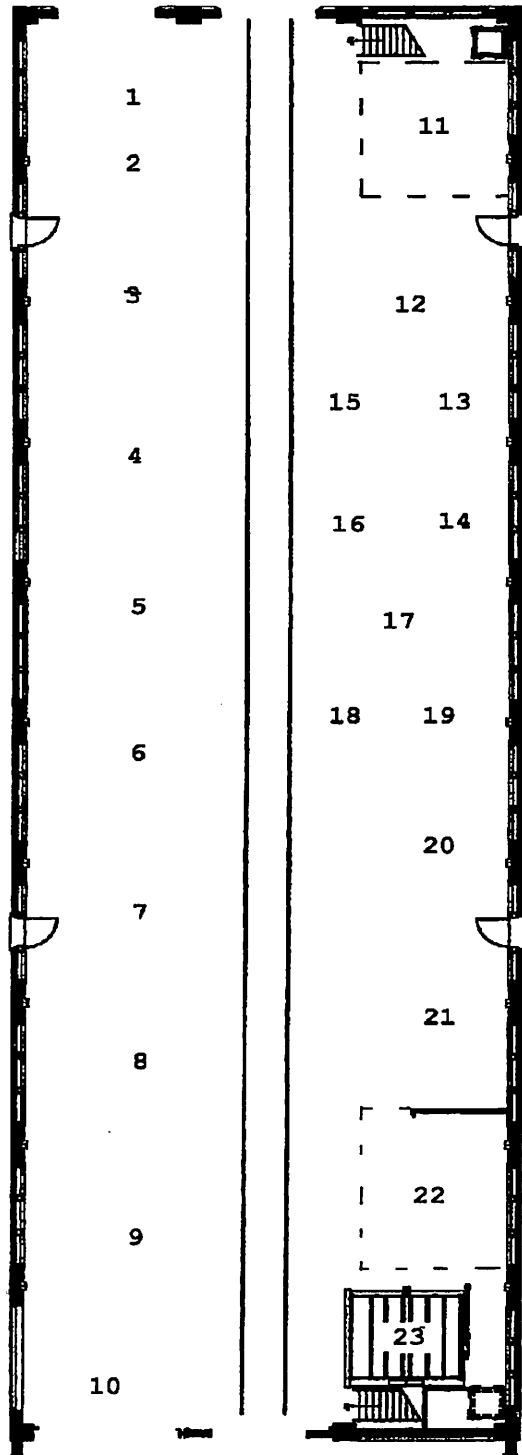
Appendix VI: Diagrams

Car Shed

Floor Layout



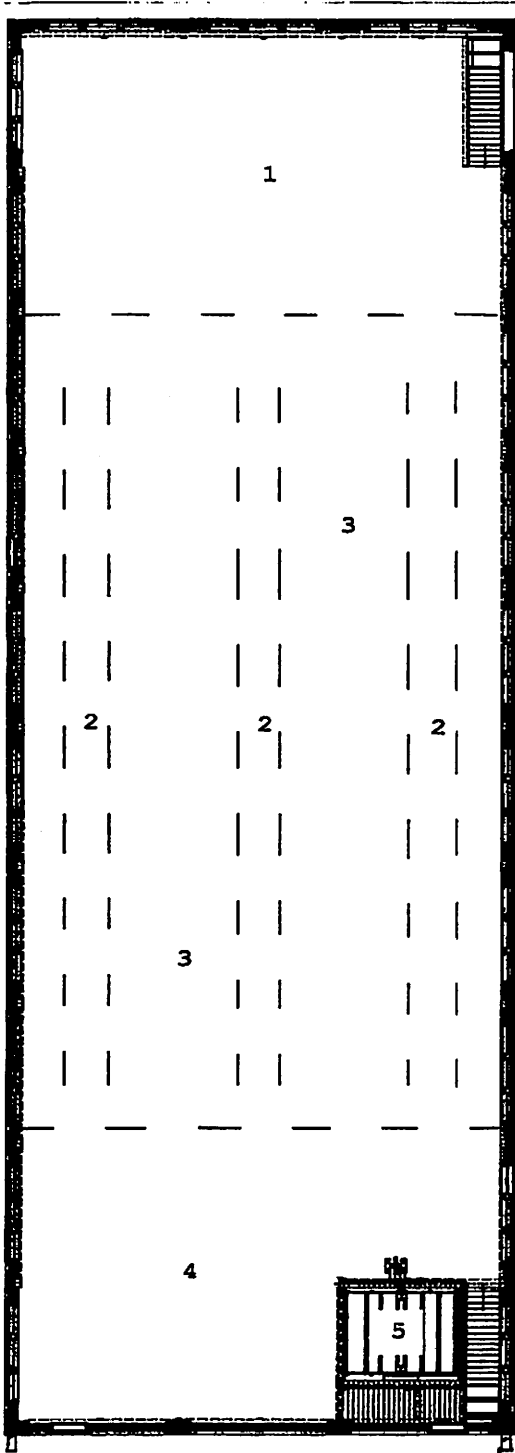
1. Air room
2. Office
3. Battery storage and charging
4. Wheel drop pit
5. Truck and axle storage
6. Scaffoldings
7. Wrecking trains
8. Heavies
9. Steel forge
10. Pipe press
11. Rivet forge
12. Combination shear and press
13. Air outlet
14. Large shear (following close of blacksmith shop)
15. Sign, "Noon-Hour Smoking Zone"
16. Vending machine
17. Pipe bending machine
18. Pipe threading machine
19. Welding outfit



Planing Mill

First Floor Shop Layout

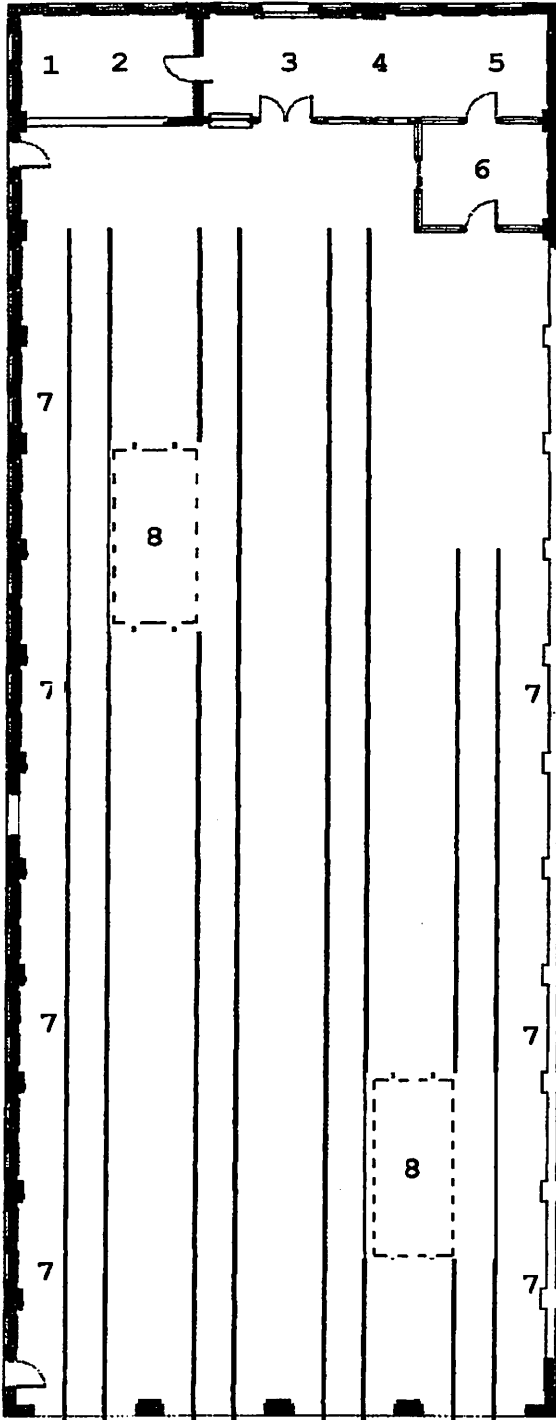
1. Workspace with Saw Horses
2. 30" Planer
3. Mortise and tenon machine with coping head
4. Gaining machine
5. Boring mill
6. Large lathe
7. Drill press
8. Router
9. Steam gaining machine
10. Metal table for construction of freight car doors
11. Office
12. Sander
13. 4-sided matching planer
14. 4-sided matching planer
15. 16" table saw
16. 6" jointer
17. Band saw
18. Rip saw
19. Shaper
20. Grinder
21. Mortising machine
22. Belt room (workbench, vices, saw, bandsaw, files)
23. Upholstery lift



Planing Mill

Second Floor Shop Layout

1. Pattern shop
 - 24" finish planer
 - Jigsaw
 - 3' bandsaw
 - Combination table saw
 - Small wood lathe
 - Molding cutter
2. Pattern racks
3. Walkways
4. Upholstery
5. Upholstery lift



Paint Shop

Shop Layout

1. Work bench for paint mixing
2. Glass rack and storage
3. Chief car inspector/foreman office
4. Water testing laboratory
5. Stencil shop and storage
6. Showers and washroom
7. Oxyacetylene stations; cut-off torches
8. Adjustable scaffolding

WESTERN RAILWAY OF ALABAMA (1900-1913)

MONTGOMERY SHOPS

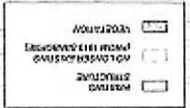
Montgomery Shops Site Plan



Map of Georgia Railroad and West Point Route

The Montgomery Railroad (later, the Western Railway of Alabama - the *WofA*), founded in 1892, was one of the earliest railroads in the American South. Founded by Abner McOwen to transport cotton east from the state capital of Montgomery, the road evolved under the aegis of Charles Folsom and Charles Wickesheim from its initial stretch of rail into one of the largest and most elaborate southern railroads.

By the end of the nineteenth century, Montgomery had grown into the heart of a vast transportation network. The city's central location, between Selma, Alabama and West Point, Georgia, attracted nearly every rail system serving Alabama. The *WofA* built its primary rail shops here in the 1890s, where workers produced everything from passenger depot furniture and signs to freight cars and locomotives, for both the *WofA* and its sister line, the Atlanta & West Point (together known as the West Point Route).



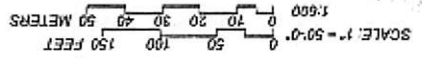
The *WofA* rail shops began as a loose collection of buildings including N. Court Street, approximately one mile north of downtown Montgomery. Following consolidation east of N. Court St. and dramatic growth between 1890 and 1910, the shops were considered the largest and most complete in Alabama. After peaking in the 1920s, the road declined as a result of the continued effects of the depression, improved highway systems, and increasing air traffic.

The Western Railway of Alabama Foundation was sponsored by the Historic American Engineering Record. Eric H. DeLoach, Chief, Richard O'Connor, HALEE historian, and Dana Lockard, HALEE architect, directed the project. Five personnel were: Elizabeth Dubin, supervising architect; architect Gregory Hahn, Tomasz Kotarski (US/CADWGS), and historian Seth Pruggeman. Ken Andrew-Wilde managed the project and facilitated contacts with former *WofA* personnel. Kim Landon of the Alabama Historical Commission and Carole King of Historic Montgomery helped with project logistics and provided needed support along the way.

- BUILDING KEY**
- 1 Planing Mill
 - 2 Paint (Coal) Shop
 - 3 Car Shop
 - 4 Car Laying Shop
 - 5 Coaling Tower
 - 6 Locker Room &
 - 7 Locker Room
 - 8 Oil House
 - 9 Round House
 - 10 Turntable
 - 11 Machine Shop
 - 12 Tender Shop
 - 13 Supply Shop
 - 14 Car Shed Extension
 - 15 Wheel & Axle Shop
 - 16 Boiler Building
 - 17 Machine Shop / Diesel Shop
 - 18 Tin Shop
 - 19 Blacksmith's Shop
 - 20 Office and Storage Area

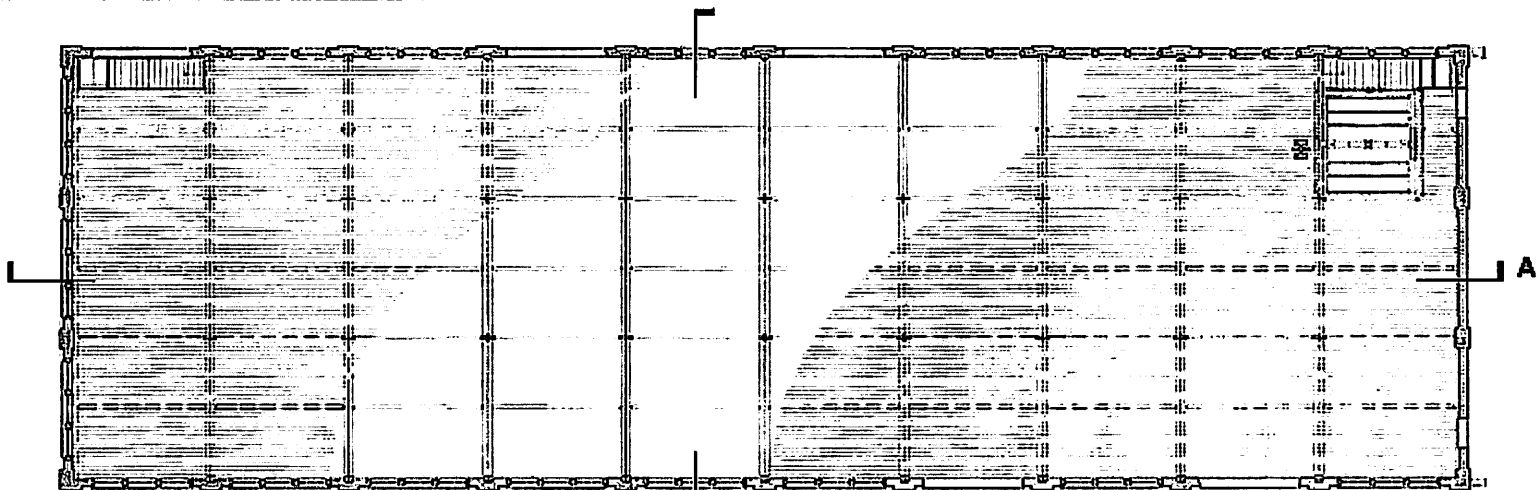


LOCATOR MAP UTM 16S81380 3594340

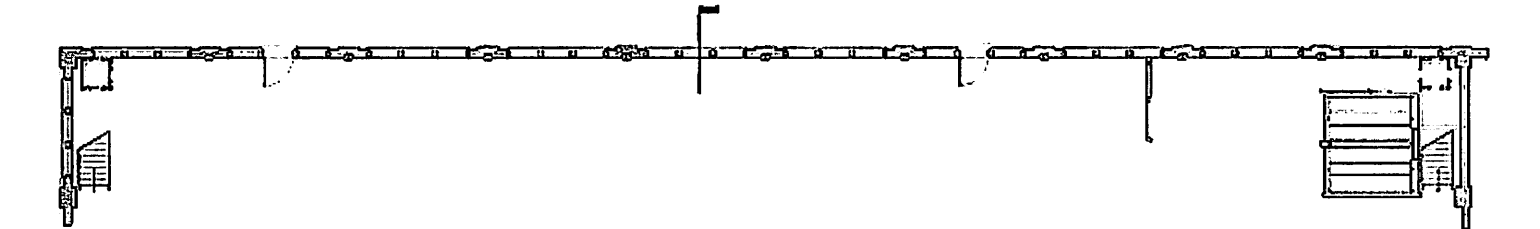


Source: U.S. Census Bureau, 1900
WESTERN RAILWAY OF ALABAMA
RECORDED AND PLATED
RECORDS SECTION
MONTGOMERY
MONTGOMERY
WESTERN RAILWAY OF ALABAMA MONTGOMERY SHOPS (1900-1913)
ALABAMA 1-14
HISTORIC MONTGOMERY
RECORDS SECTION
AL-178





Second Floor Plan



First Floor Plan

PLANING MILL

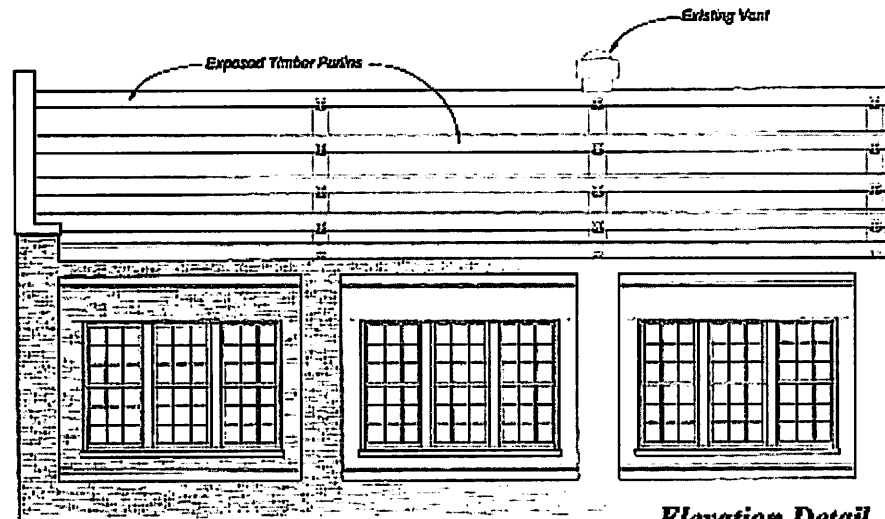
SCALE: 1/8" = 1'-0" $\frac{0 \quad 5 \quad 10}{0 \quad 1 \quad 2}$ 20 FEET
 1:50 $\frac{0 \quad 1 \quad 2}{0 \quad 1 \quad 2}$ 4 METERS



DRAWN BY: THOMAS H. HANCOCK, 1897
 WESTERN RAILWAY OF ALABAMA
 RECONSTRUCTION SHOPS
 MONTGOMERY
 ALABAMA
 2. 2. 14
 WESTERN RAILWAY OF ALABAMA
 RECONSTRUCTION SHOPS (1910-1913)
 171 NORTH PEARY STREET
 MONTGOMERY, ALABAMA
 AL-158

PLANING MILL

The Planing Mill was built by Cook & Latta, Montgomery contractors, between 1908 and 1910. An imposing 62x188', the two-story structure represents an interesting point in the development of twentieth-century industrial architecture. Unlike the adjacent brick and timber Paint Shop, constructed by Cook & Latta a year or so earlier, the Planing Mill incorporates a steel truss and frame system complemented by brickwork. Where the Paint Shop's window and door frames are supported by brick arches, planing mill frames are formed of steel encased in brick. The planing shop also differs from the Paint Shop and the majority of shop structures, in that it possesses a complete second floor supported by steel joists.



Elevation Detail

SCALE: 1/4" = 1'-0" 0 5 10 FEET
1:48 0 1 2 3 METERS



East Elevation

SCALE: 1/8" = 1'-0" 0 5 10 20 FEET
1:96 0 1 2 4 METERS

DRAWN BY: TOMORROW'S ARCHITECTS, 2008
 WESTERN RAILWAY OF ALABAMA
 WESTERN RAILWAY SHOPS
 RECONSTRUCTION PROJECT
 MONTGOMERY
 WESTERN RAILWAY OF ALABAMA MONTGOMERY SHOPS (1908-1912)
 AN HISTORIC DISTRICT
 MONTGOMERY, ALABAMA
 3-14
 4-1888

PLANING MILL



North Elevation



South Elevation

SCALE: 1/4" = 1'-0" 10 FEET
1:48 METERS

DRAWN BY: TOMOYUKI KATANO, 1998
WESTERN OF ALABAMA RAIL SHOPS
RECORDING PROJECT

MONTGOMERY

WESTERN RAILWAY OF ALABAMA MONTGOMERY SHOPS (1900-1913)
731 NORTH BERRY STREET
MONTGOMERY COUNTY

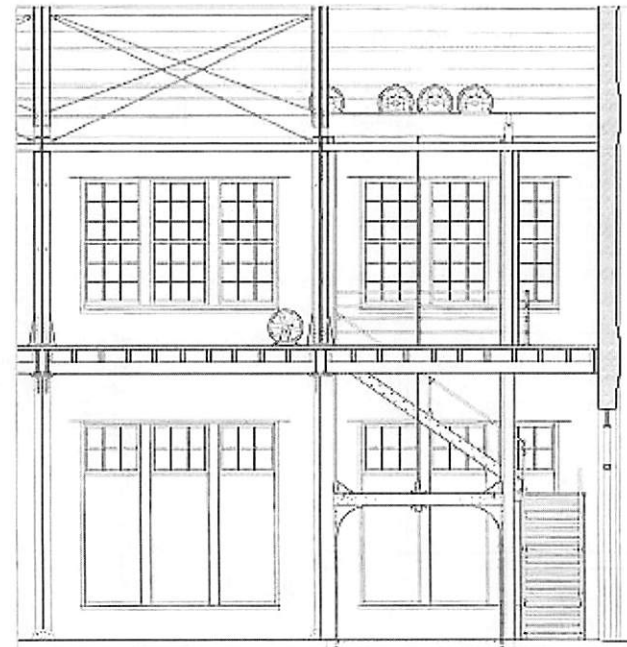
ALABAMA 4-14

HISTORIC AMERICAN
ENGINEERING RECORDS
61-158

© REPRODUCED FROM THE ORIGINAL RECORDS OF THE ARCHIVES OF THE HISTORIC AMERICAN ENGINEERING RECORDS. THESE RECORDS ARE IN THE PUBLIC DOMAIN.

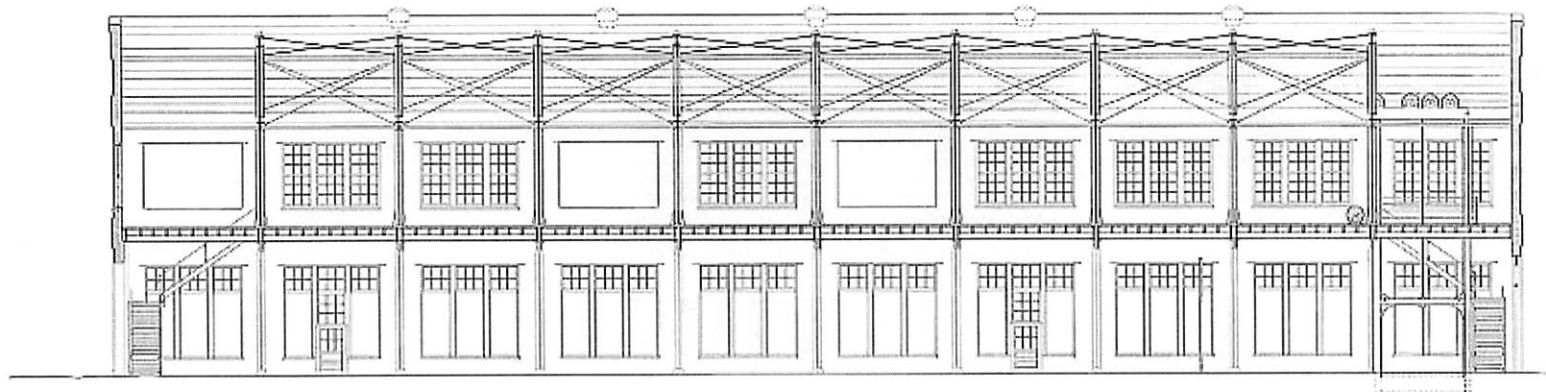
PLANING MILL

Planing mill operations were divided by floor. First-floor carpenters formed large wooden structural members for passenger cars, as well as freight car doors and 40' car oills. Heavy woodworking equipment lined the walls. Each machine was joined by a network of metal piping that collected and fed sawdust to a storage bin and, subsequently, to a stationary boiler where the dust-fueled steam production necessary for heating the shops and preheating passenger car air conditioning units. On the eastern wall stood a mortise and tenon machine with coping head, gainer, and boring mill. Opposite these, on the western wall, operators worked a large bander, two 4-sided matching planers, a 16' table saw, and a 6' jointer. A large lathe, drill press, router, and steam-powered gainer occupied the northeastern corner of the building, and a band saw, rip saw, shaper, grinder, and mortising machine filled the northwest. Mill workers fabricated machinery belts in a small room at the northern end of the building and freight car doors atop a large metal table in the extreme northeast corner. Passenger coach furniture ready for upholstery traveled to the second floor by means of an electric lift installed in the far northwestern corner of the shop.



Detail

SCALE: 1/2" = 1'-0"
 1:24
 0 1 2 3 4 5 FEET
 0 50 100 150 CENTIMETERS



Section A

SCALE: 1/8" = 1'-0"
 1:96
 0 5 10 20 FEET
 0 1 2 4 METERS

DRAWN BY: TONKIN & KATZ 1929
 WESTERN OF ALABAMA RAIL SHOPS
 RECORDING PROJECT
 401 N. 17th Street, Montgomery, AL 36104

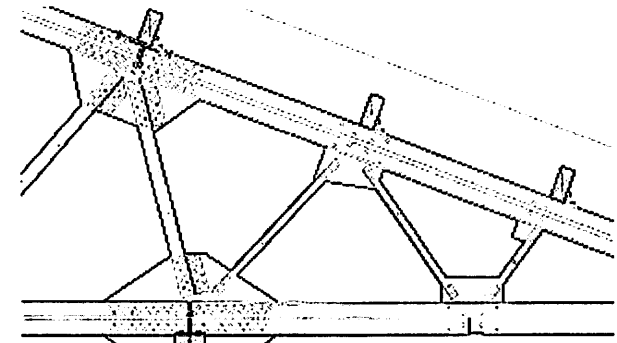
WESTERN RAILWAY OF ALABAMA MONTGOMERY SHOPS (1500-1913)
 701 NORTH BERRY STREET
 MONTGOMERY COUNTY

ALABAMA 5-16
 HISTORIC AMERICAN
 ARCHITECTURE RECORDS
 91-186

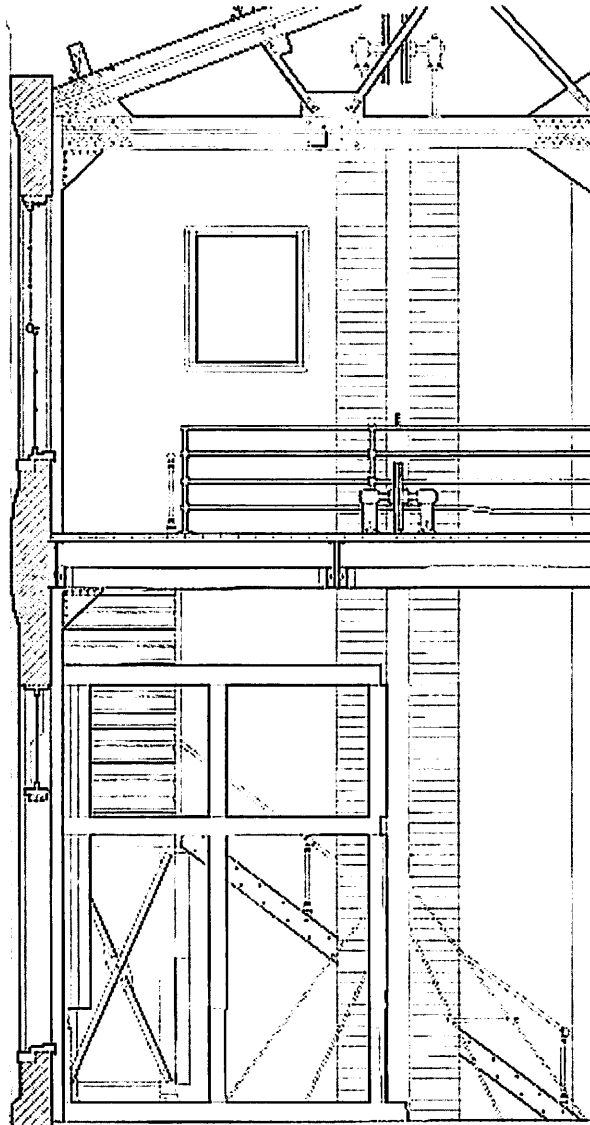
PHOTOGRAPH COURTESY OF THE HISTORIC ARCHITECTURE RECORDS PROJECT. PHOTO BY MICHAEL J. SMITH FOR HISTORIC ARCHITECTURE RECORDS.

PLANING MILL

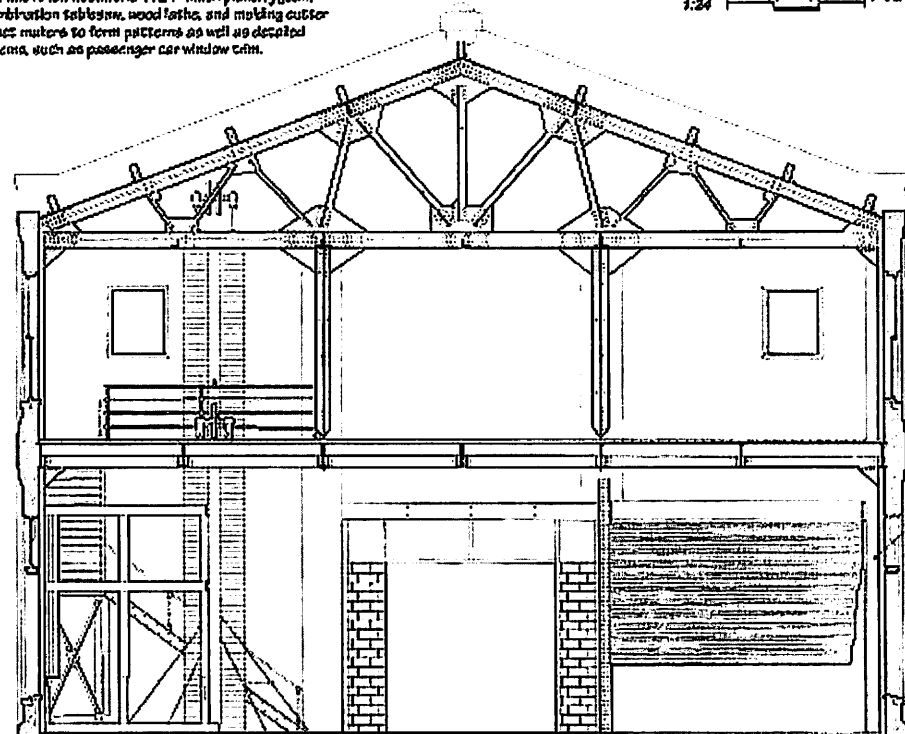
The shop's second level housed three operations. The first, the upholstery shop, stood at the top of the electric lift at the northern end of the second floor. Here, upholstery padded and covered passenger coach furniture built downstairs for new and reconstructed cars. A series of racks stretched from this upholstery shop to the other end of the planing mill, each supporting a number of patterns used in shaping wooden car parts and parts cast in the brass and iron foundries. All patterns originated from the southern end of the second floor in the pattern shop. This space - also referred to as the cabinet shop - specialized in fine finish woodwork. A 24" finish planer, jointer, bandsaw, combination set saw, wood lathe, and molding cutter allowed cabinet makers to form patterns as well as detailed structural items, such as passenger car window trim.



Truss Detail SCALE: 1/2" = 1'-0"
1:24 0 1 2 3 4 5 FEET
0 50 100 150 CENTIMETERS



Wall and Elevator Detail SCALE: 1/2" = 1'-0"
1:24 0 1 2 3 4 5 FEET
0 50 100 150 CENTIMETERS

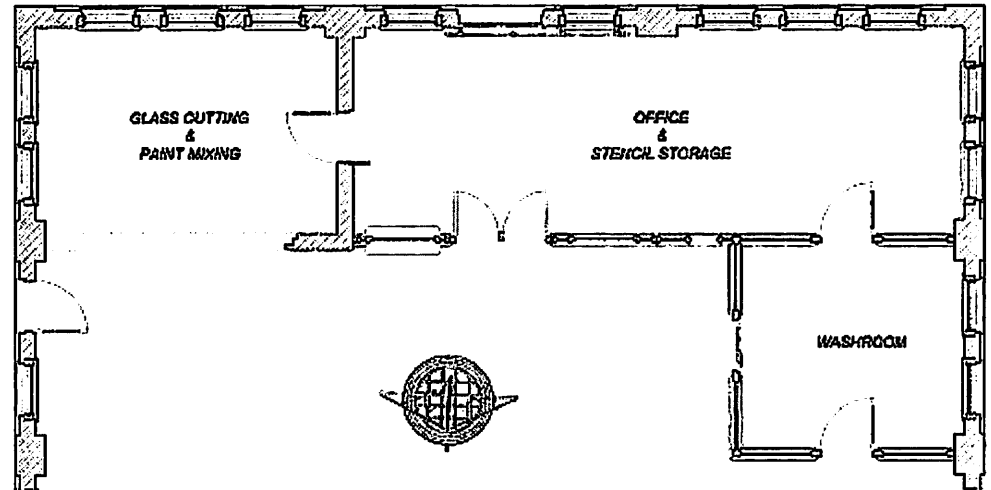


Section B SCALE: 1/4" = 1'-0"
1:48 0 5 10 FEET
0 5 10 METERS

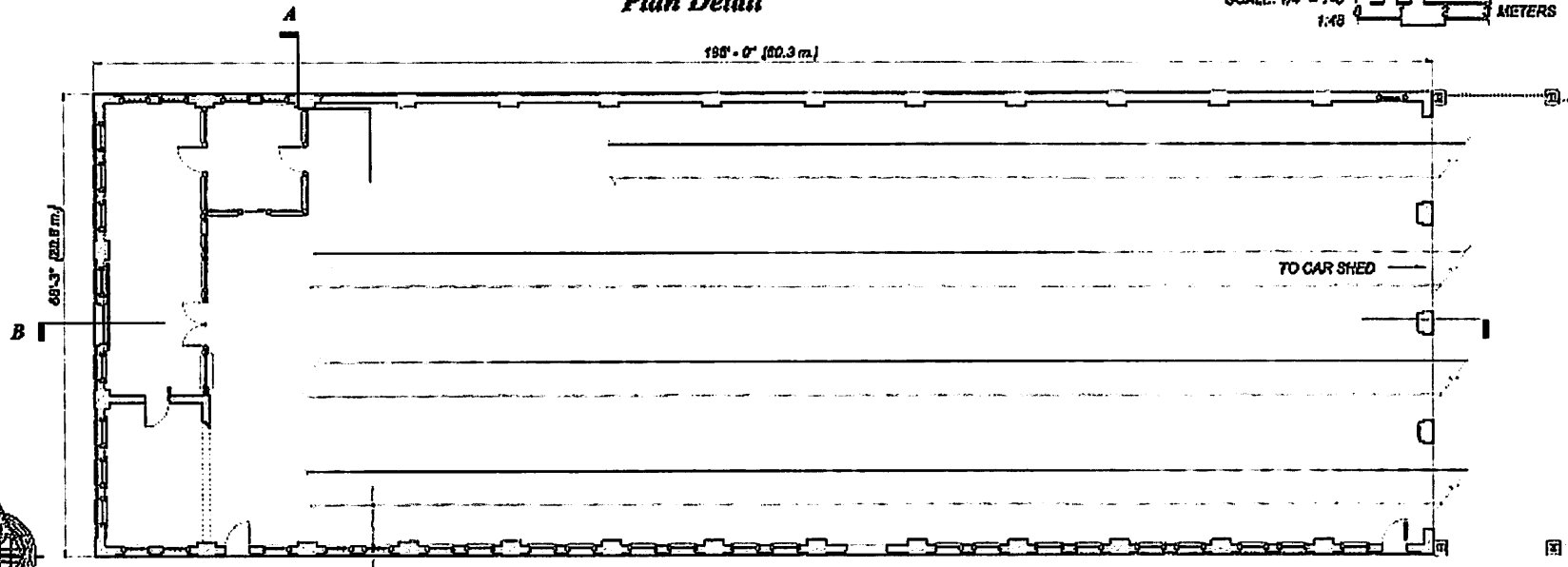
DRAWN BY: THOMAS WATSON, 1968
 WESTERN RAILWAY ARCHITECTURAL STUDIO'S
 RECORDING PROJECT
 1000 20th Avenue, Suite 100
 Berkeley, CA 94710
 WESTERN RAILWAY OF ALABAMA MONTGOMERY SHOPS (1800-1813)
 7th Street Park Center
 MONTGOMERY
 ALABAMA 36104
 HISTORIC ARCHITECTURAL ENGINEERING
 ALA 158

PAINT SHOP

The Paint Shop's interior was designed to accommodate car-finishing. Workers entered through a single door near the southern end of the eastern wall. Opening into the Shop's primary work space, it also provided access to a series of rooms located in the southern end of and for mixing paint, cutting glass, cutting and storing enamel, inspection and supervisor, and a small washroom with showers.

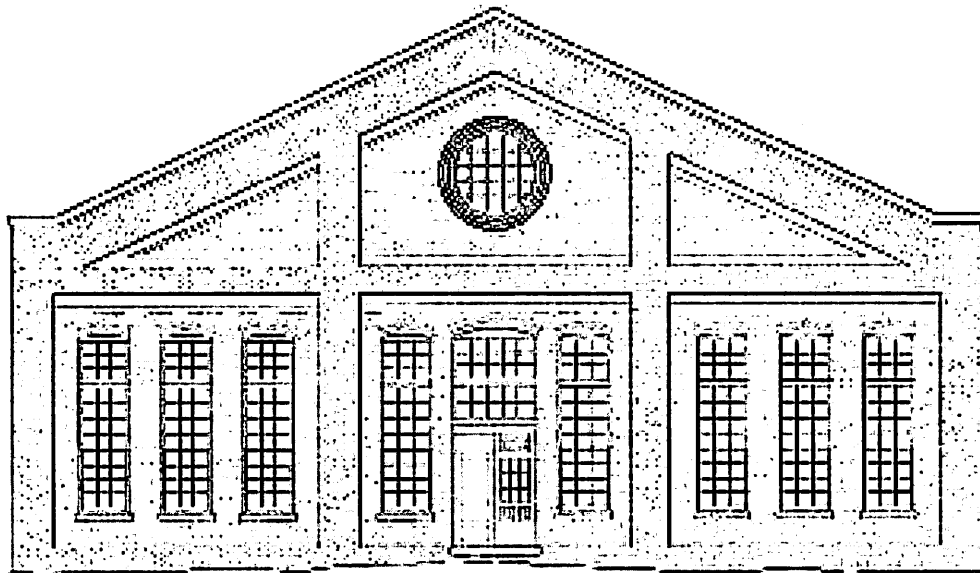


Plan Detail

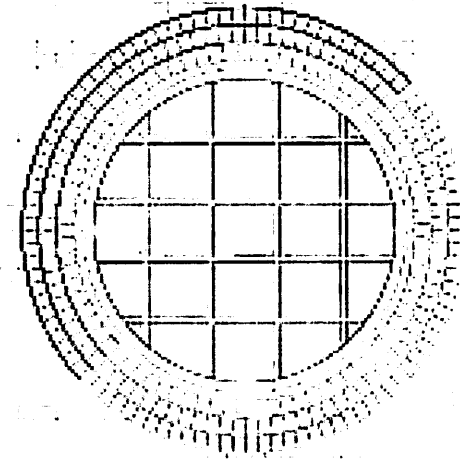


Plan

DRAWN BY: CREDNEY HOLLAND, TRD
 WESTERN RAILWAY OF ALABAMA
 MONTGOMERY, ALABAMA
 WESTERN RAILWAY OF ALABAMA MONTGOMERY SHOPS (1890-1913)
 ARCHIVES
 7-1-14
 ALABAMA
 ARCHIVES
 1-1-18



South Elevation



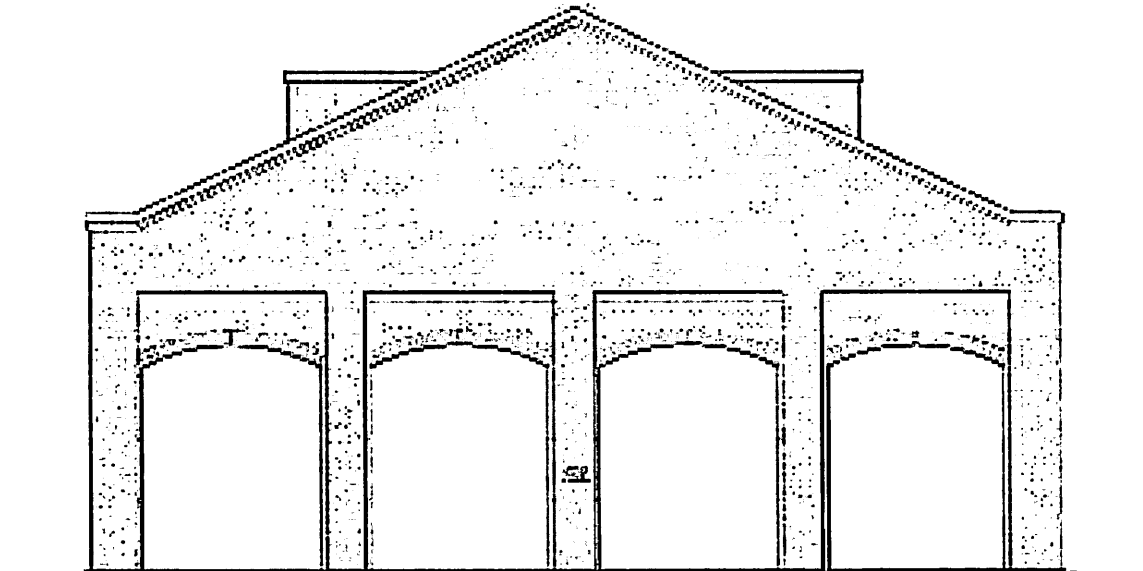
Window Detail

SCALE: 1" = 1'0" $\frac{1}{2}$ 1 2 FEET
 1:20 0 100 200 CENTIMETERS

PAINT SHOP

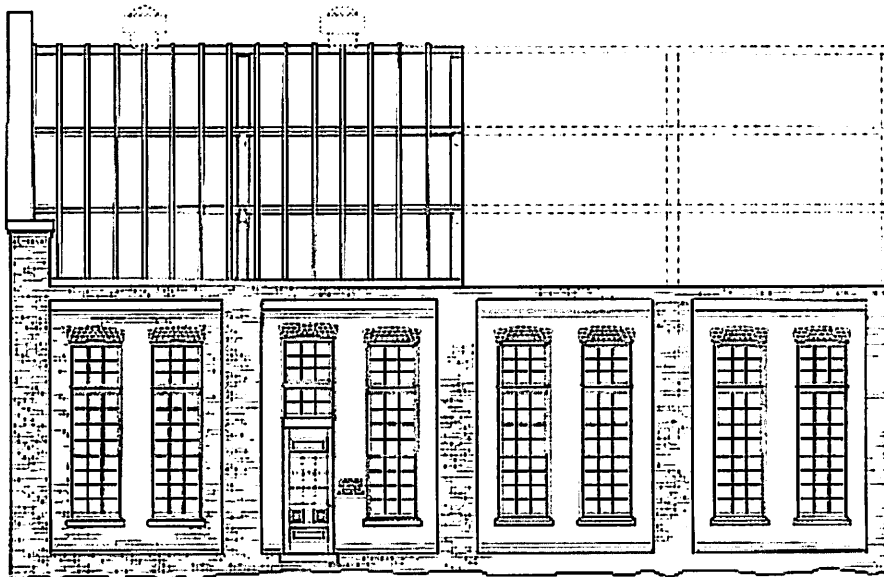
Built in 1920 by Cook & Conner, construction of this facility, the 60' x 120' two-story brick paint shop occupied a prominent position in the center of the old shops, and continues to stand with its rich architectural detail. A large 7'6" circular window dominates the east facade's second story. The tower comprising the building's roof line, and supports the building's structure with aesthetic appeal. This, with its rich, detailed work, is a great architectural asset as the product of an early American profession, and the building's foundation.

SCALE: 1/4" = 1'0" $\frac{1}{2}$ 1 2 FEET
 1:40 0 100 200 METERS



North Elevation

DRAWING NO. 100-100-100-100
 WESTERN UNIVERSITY OF ALABAMA BIRMINGHAM 35295 (2008-10-11)
 ARCHITECTURE
 UNIVERSITY OF ALABAMA
 BIRMINGHAM, ALABAMA 35295
 2008-10-11



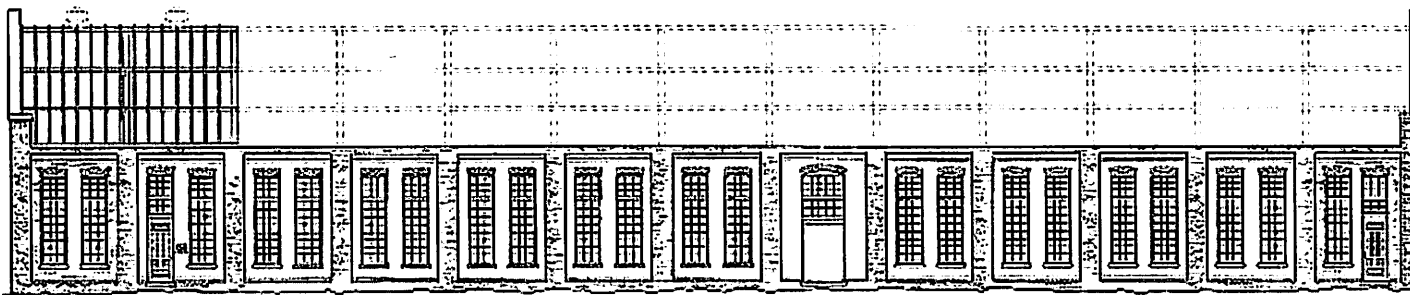
Elevation Detail

SCALE: 1/4" = 1'-0"
1:48

0 5 10 FEET
0 2 4 METERS

PAINT SHOP

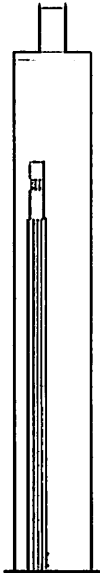
Staggered brick layering highlights each of the building's twenty-six regularly-intervaled window and door bays, each complemented by a subtle oblique brick arch cap. The building's heavy wooden trusses are in stark contrast to nearby structures built several years later. The building is almost completely collapsed today.



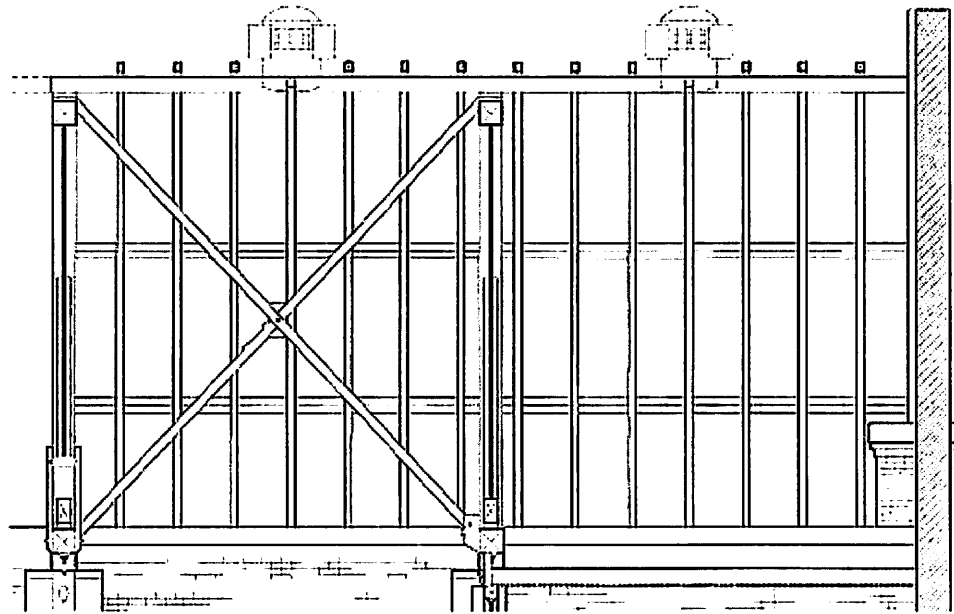
East Elevation

SCALE: 1/8" = 1'-0"
1:96

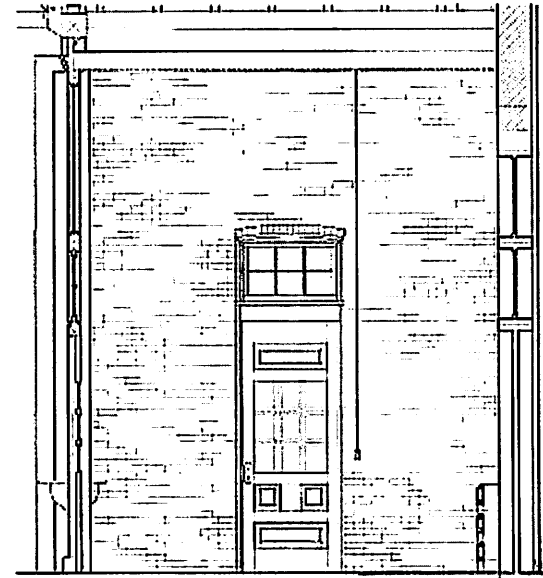
0 5 10 FEET
0 2 4 METERS



**Scaffold
Bracket
Detail**



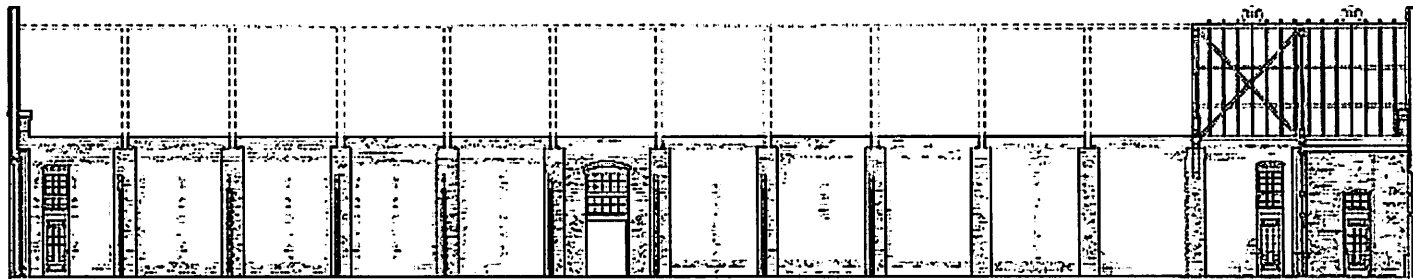
Framing Detail



Office Detail

SCALE: 1/2" = 1'-0" FEET
1:25 0 50 100 150 CENTIMETERS

PAINT SHOP



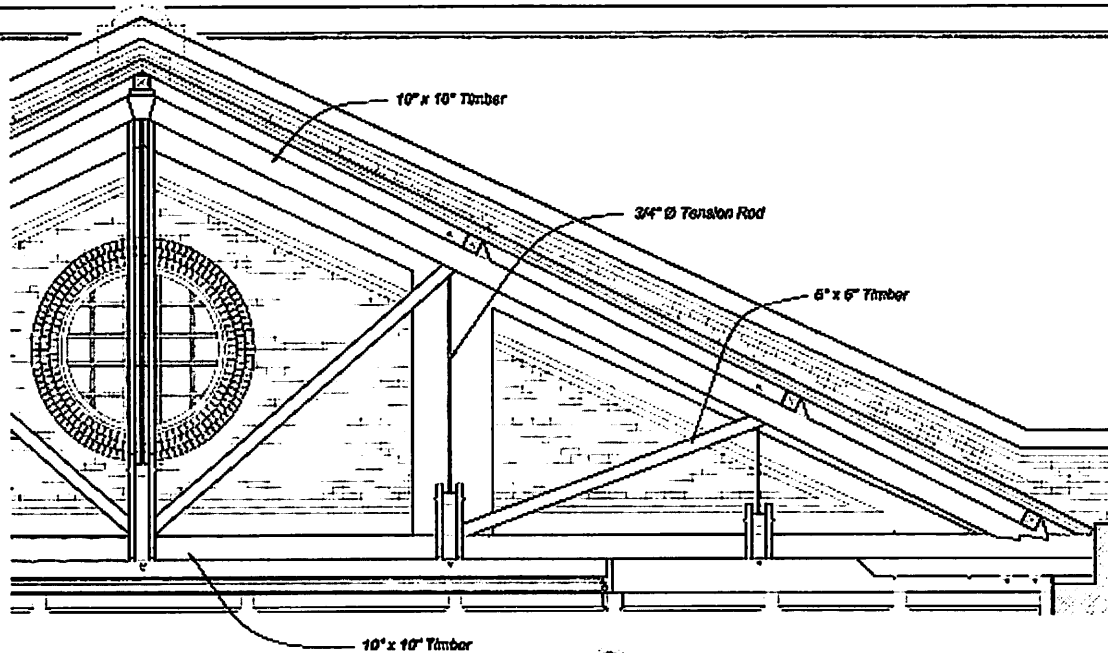
Section B

SCALE: 1/8" = 1'-0" FEET
1:96 0 5 10 20 FEET
0 1 2 4 METERS

DRAWN BY: GREGORY HULLMAN, 1988
 WESTERN RAILWAY OF ALABAMA
 WEST END OF MOBILE STREET
 MOBILE, ALABAMA 36602
 ARCHITECT: JAMES H. HULLMAN ARCHITECTS
 WESTERN RAILWAY OF ALABAMA MONTEGOMERY SHOPS (1980-1918)
 ALABAMA 30-14
 ARCHITECTURAL RECORD
 45-188

Truss Detail

SCALE 1/8" = 1'-0"
1:24
0 1 2 3 4 5 FEET
0 30 60 90 120 CENTIMETERS

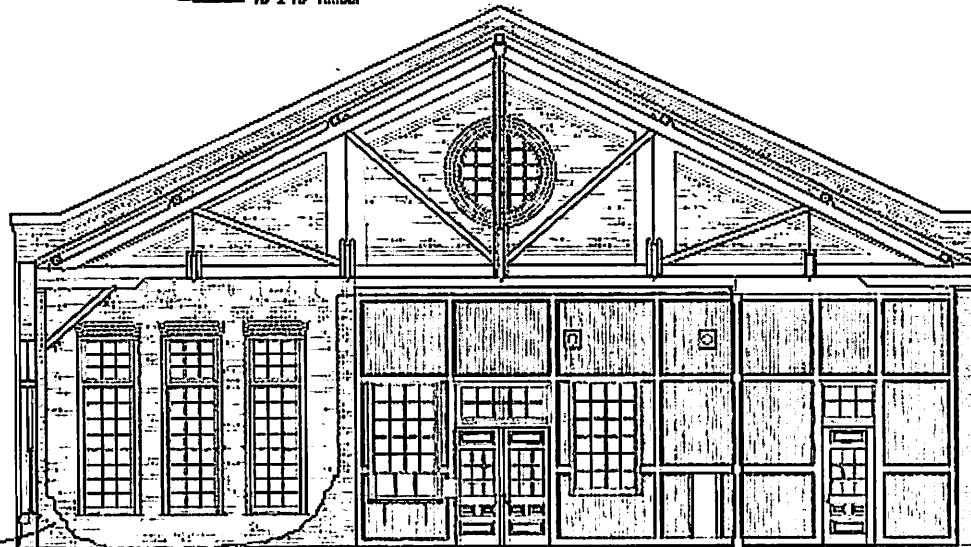


PAINT SHOP

Counterweighted scaffolds lined the shop, allowing painters access to cars' full heights by means of a rope and pulley system that extended the length of the long walls. Removable boards laid across the frame provided horizontal movement. The two outside tracks, most readily accessible by scaffold, were used for painting and sandblasting. One to four cars might occupy any of the shop's four tracks, around which movable scaffolding could be located.

Most work in the Paint shop was done by hand, so few tools were needed. Conduits routed along each wall carried air for pneumatic tools, water for cleaning operations, and oxygen and acetylene for welding and cut-off operations. There were four stations along each wall. Other equipment included jacks, hand tools, and one Spraco painting machine purchased in 1926.

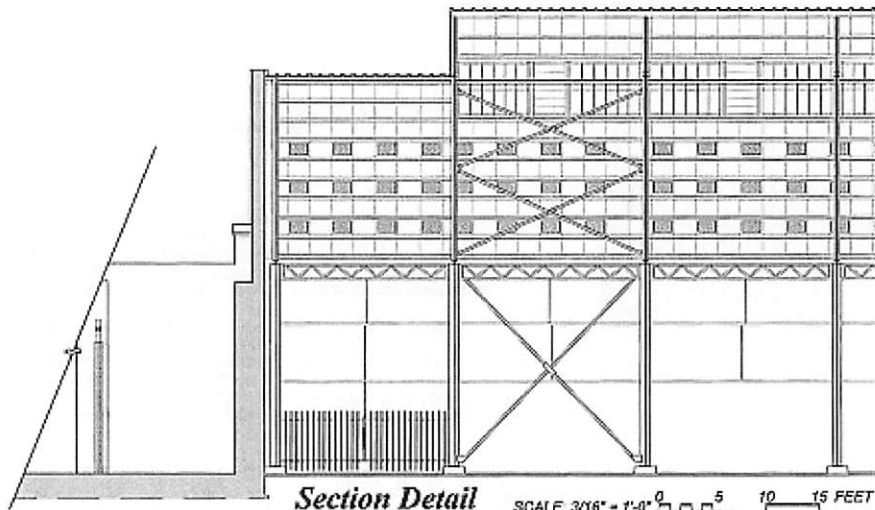
REMAINS OF WALL DAMAGED
BY ERRANT RAILCAR



Section A

SCALE 1/4" = 1'-0"
1:48
0 5 10 FEET
0 2 3 METERS

DRAWN BY: GREGORY-HOBEAU, 1989
 YES! WE CAN SAVE OUR HISTORIC RAILROADS
 WESTERN RAILWAY OF ALABAMA MONTGOMERY SHEDS (1926-1913)
 MONTGOMERY
 ALABAMA
 11.10.14
 2016



Section Detail

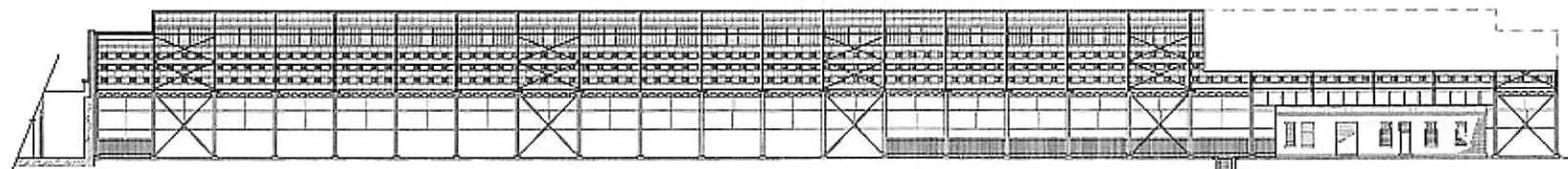
SCALE: 3/16" = 1'-0"
1:64

0 5 10 15 FEET
0 2 3 4 METERS

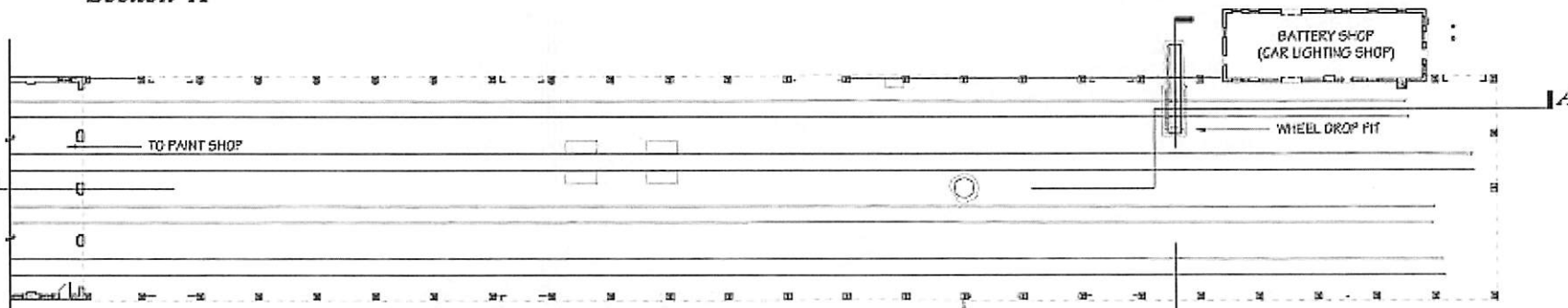
CAR SHED

The expansive space afforded by the shed lent itself to a variety of uses. Wrecker trains, for instance, occupied the southwest corner of the shed when not in operation. Upon returning from a job, they deposited wrecked cars - called heaves - on the outer rails along the east side of the shed, where they awaited reconstruction or repair. Repair work took place in the northern half of the shed, where rows of trucks and axes lined the western wall, either awaiting rebuilding or reinstallation. Scaffolds also lined tracks in the north end of the shed. The Car Shed had two types of scaffold arrangements. Adjustable scaffolds lined the shed's outside tracks. These steel frame structures moved along the length of the outside tracks so that workers could position themselves at any point along the length of a car. Inside-track scaffolding remained fixed, suspended from the shed's ceiling trusses, and afforded easy vertical access when working on tall cars.

Until the early 1930s, the 62' x 22' brick building attached to the northwestern end of the building housed the battery shop, otherwise known as the car lighting shop. Here, electricians stored and charged car batteries, and maintained an inventory of belts, hydrometers, and other electrical equipment. The building also housed a generator, small office, and air room, which aided in the process of recharging air conditioning units via the shop's complex system of steam distribution pipes.



Section A



Plan

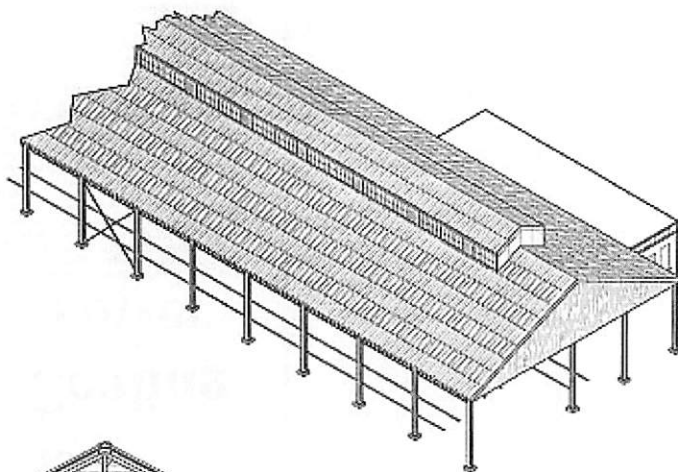
SCALE: 1/16" = 1'-0"
1:192

0 10 20 40 FEET
0 2 4 8 METERS

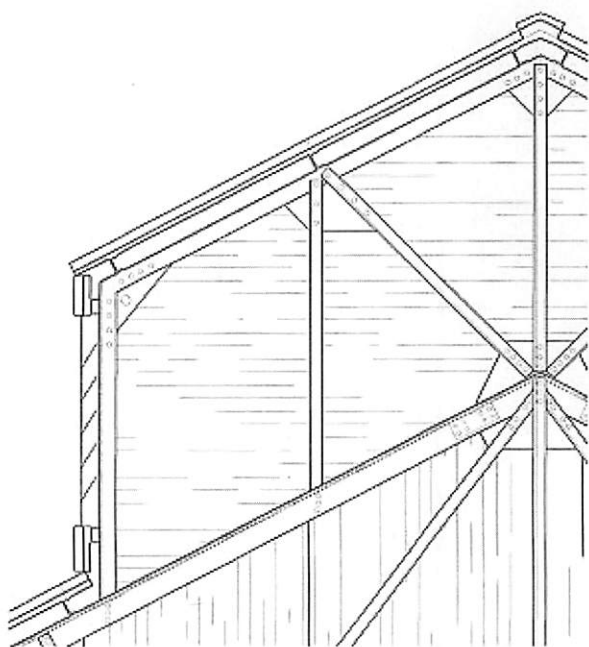
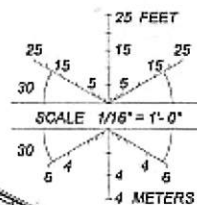
ARCHITECT: HARRISON ENGINEERING ARCHITECTS
 ALABAMA 12-14
 WESTERN RAILWAY OF ALABAMA MONTGOMERY SHOPS (1500-1513)
 MONTGOMERY COUNTY
 MONTGOMERY
 CONSTRUCTION HISTORY & TOURISM MARCH 1988
 WESTERN RAILWAY OF ALABAMA
 RECORDING PROJECT
 MONTGOMERY COUNTY
 MONTGOMERY

CAR SHED

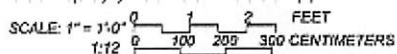
Over 400' long, the open-frame car shed was the center of all ship activity relating to car repair and construction. When first centralized east of N. Court St., the Western Railway of Alabama contracted in 1900 with Cook & Laurie, Montgomery contractors, to construct a 68' x 288' wooden car shed. Soon destroyed by fire, the decision to build a new shed over twice as long as the original suggests a reevaluation of ship needs. It also reveals the increasing ease with which large buildings could be constructed. Unlike the original, the currently standing, larger shed is constructed entirely of steel. Twenty-five 20' I-beams line each side of the shed, supporting an interlocked concrete-tile roof. A rippled, worn brick floor supports four tracks extending the length of the shed. Walls are currently unheated, but photographs from the 1920s reveal partial corrugated-metal siding.



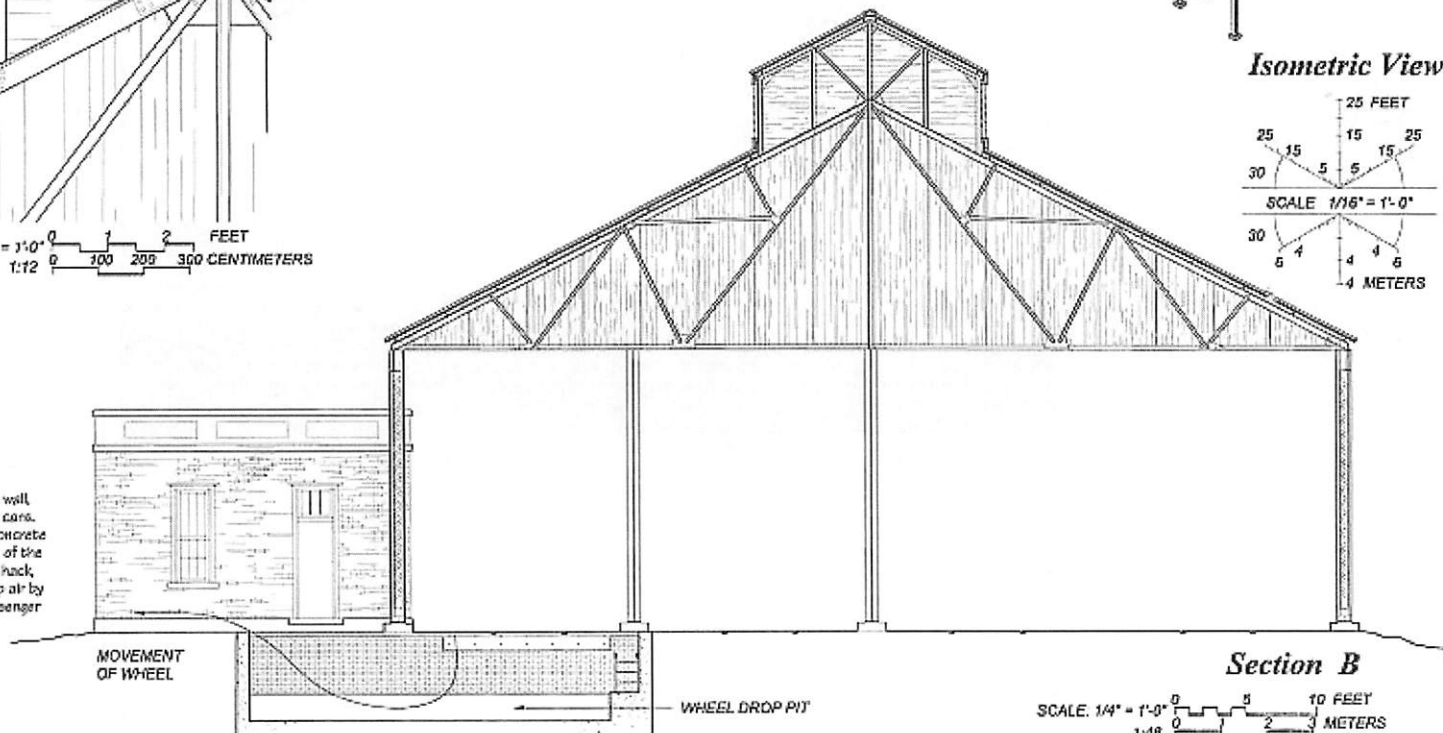
Isometric View



Clerestory Detail



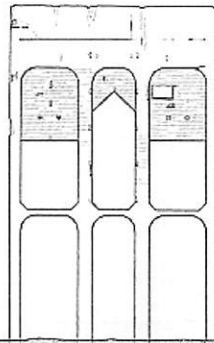
The Car Shed's wheel drop, along the northwest wall, enabled carmen to change wheels on passenger cars. The wheel pit consisted of a 5' x 25' brick and concrete trench, oriented perpendicular to the centerline of the shed. Carmen used a 16" x 5' air cylinder lifting jack, carried on four 8" wheels and supplied with shop air by 60' of 1" rubber hose, to remove and install passenger car wheels.



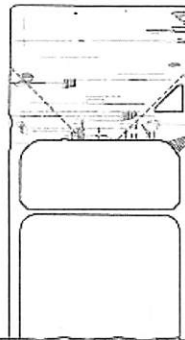
Section B



West Elevation

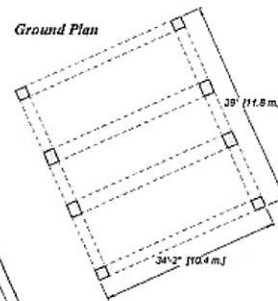


South Elevation

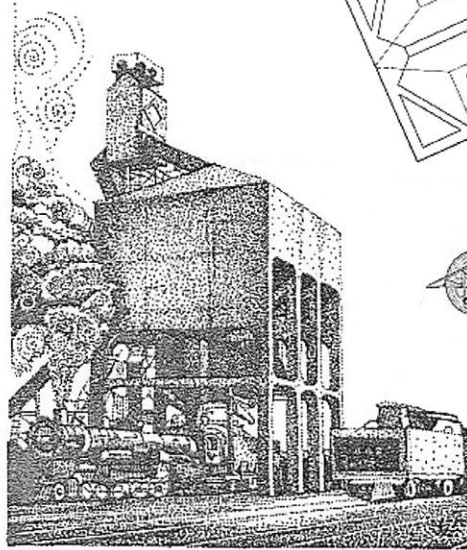
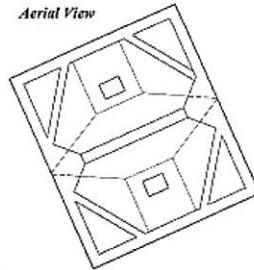


SCALE: 1/8" = 1'-0" $\frac{0}{1}$ $\frac{5}{10}$ 20 FEET
1:85 0 1 2 4 METERS

Ground Plan



Aerial View



Coaling Tower

The concrete coaling tower, built in 1913 by Roberts & Schaeffer of Chicago, is approximately forty-feet square and sixty-feet high. Straddling the tracks at the northern end of the shop complex, the coaling tower worked in concert with the adjacent coal pile and choker pits to service engines leaving and entering the complex.

Until 1913, coaling operations were performed by frequently malfunctioning equipment. The new tower replaced previous wooden versions, reducing expenses seven cents per ton of coal in addition to adding higher capacity. The tower is typical of mid-sized shutes built by Roberts & Schaeffer, with a coal lifting mechanism and a pit in which the lift was anchored. The WORA station selected a 600-ton capacity and relied solely upon city electricity to operate its General Electric Industrial lift and Götter Hammer Type-B controller.

The tower received 164 coal from a 18' x 22' x 8.0' deep pit with 18' walls, pit constructed on the station's eastern side. Camshell buckets lifted coal from the pit to the top of the tower, as the pit was further replenished by the shops' massive coal pits that extended from the chute to the roundhouse.

W of A Coaling Tower- illustrated from a photograph by Richard Prince

DRAWN BY: ELSA BETH COHEN, 1989
WESTERN OF ALABAMA RAIL SHOPS
RECORDING PROJECT

WESTERN RAILWAY OF ALABAMA MONTGOMERY SHOPS (1900-1913)
701 NORTH FERRY STREET
MONTGOMERY COUNTY

ALABAMA

16 of 14

HISTORIC AMERICAN
ENGINEERING RECORD
AL-186