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**SOO LINE SOJOURNS
PART II**

WOODEN ORE CARS

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**DRESSER, WI: MORE THAN TRAP
ROCK -YESTERDAY AND TODAY**



Soo Line Train no. 85 with locomotive no. 18, a 4-4-0, and Train no. 62, with locomotive no. 716, 4-6-2, converge at Dresser Junction on March 20, 1941 —SLHTS Archives.

Dresser Junction, Next Stop!

**An Important Station on the M. St. P. & S. Ste. M. Ry.
and Home of the Dresser Trap Rock Co.**

By Larry E. Easton

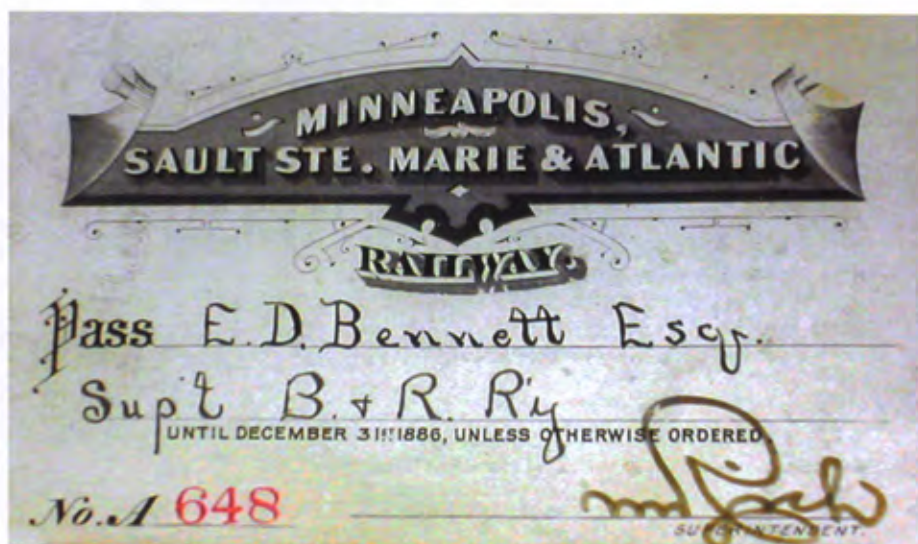
Construction on the Minneapolis, Sault Ste. Marie & Atlantic Railway was completed from Turtle Lake to Rhinelander by the end of 1886. Plans for the following year were to finish the railroad to Sault Ste. Marie, where a connection would be made with the Canadian Pacific, and also build the missing 74 miles of main line track between Minneapolis and Turtle Lake. Contractors were Henry & Balch Co. and R. B. Langdon & Co., both firms very familiar to the "Soo Line" management.

In mid-February, 1887, workers arrived in Turtle Lake to begin grading west towards Osceola. At the same time crews started working eastward from the Sandy Lake shops (Shoreham) towards the St. Croix River where a large iron swing bridge was to be built. By the middle of June the grading was sufficiently completed and rail laying commenced on June 20th. With a force of 185 men the

contractors were able to lay about a mile of track a day from Turtle Lake westward.

At 4:00 P.M. on August 17th the construction train, pulled by locomotive no. 11, reached the location of the

junction between the main line and the planned branch line to the village of St. Croix Falls. The *St. Croix Valley Standard* reported that the first train



Minneapolis, Sault Ste. Marie & Atlantic pass, signed by W. W. Rich, Chief Engineer, 1886 —SLHTS Archives.

carried boxcars of ties, rail on flat cars and the boarding cars previously located at Nye. A wye was constructed and the location was named Dresser Junction, for Samuel B. Dresser of Osceola, a prominent long-time resident of the county and a representative in the Wisconsin Assembly.

THE GAP IS CLOSED

By the afternoon of Sunday, August 21st track laying had reached Osceola. The construction train was pulled by engine no. 15. Three days later the first passenger car to reach Dresser Junction arrived. It was business car 222, "the private car of General Manager Underwood, who with Division Supt. Hamilton, occupied it. They came to inspect the work on the front."¹

On September 3rd the Cedar Bend bridge over the St. Croix River was completed and the rails connected,

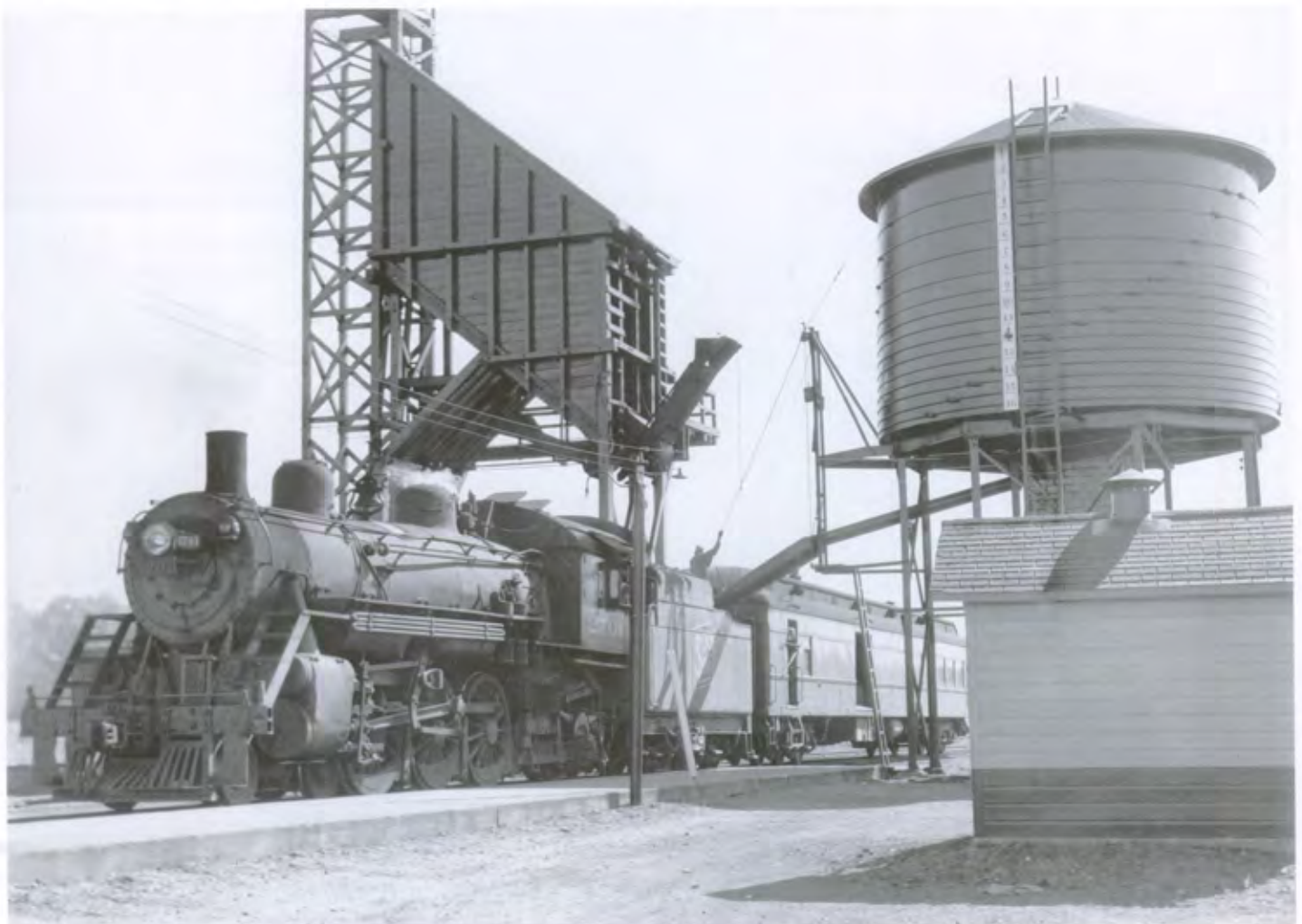
forming a through line from Minneapolis to Gagen, Wisconsin. A few days later the north leg of the wye track at Dresser Junction was extended the four miles into the village of St. Croix Falls.

On September 7th another inspection train traveled the entire distance from Minneapolis to Turtle Lake on the newly constructed track. On board official car 222 were "Gen. W. D. Washburn, president of the company; ex-governor J. S. Pillsbury; Hon. R. B. Langdon; Hon. H. E. Fletcher; F. D. Underwood, general manager; H. L. Shute, general traffic manager; and H. A. Hamilton, assistant superintendent, all of Minneapolis and Hon. T. E. Nash, superintendent of the railroad mail service of Washington."²

The first wreck on the new track occurred on Saturday, September 10th. The *Polk County Press* reported,

"Saturday night about 6 o'clock the construction train had a smashup at Horse Lake. The train had on a caboosse and about eighteen cars loaded with dirt going east to Turtle Lake, intending to leave the dirt at Big Lake. In going round a curve at Horse Lake the train ran into some dump cars belonging to the crew of Italians at work there. The result was that the caboosse and one flat car was thrown from the track and badly smashed, rolling over several times. Prof. Baker, two brakemen and the conductor were on top of the caboosse when the train struck. They jumped to the ground and were not injured. A wrecking crew cleared the track Sunday. The engine ran into the rear of the train pushing it. Engine number 15 had the train."

Regular trains started running on Monday, September 12, 1887 from



Soo (WC-series) no. 2701 is at Dresser, WI with No. 62 on July 17, 1953. This image shows the modern facilities, with the water tank going into service during 1941, and the coaling tower a few years later in 1945 — SLHTS Archives collection.



A few folks are waiting at Dresser for no. 63 as she readies to stop "on the advertised" at the platform. It looks to have been a cool spring day in April 1946 when this picture was taken —E. Bruce Miller / SLHTS Archives.

Minneapolis to Gagen, 231 miles. According to the timetable that day, the eastbound train left the Minneapolis & Pacific depot, corner of Second Street and Fourth Avenue North, at 8:00 A.M., arriving at Gagen at 6:35 P.M. The westbound train left Gagen at 8:30 A.M. and arrived at Minneapolis at 6:55 P.M. The St. Croix Falls passenger train left St. Croix Falls at 6:30 A.M., arriving in Minneapolis at 9:15 A.M. Returning, the train left Minneapolis at 4:00 P.M., arriving at St. Croix Falls at 6:55 P.M. The first train out of St. Croix Falls "consisted of No. 16 M. & P. passenger locomotive driven by Engineer Robert Staley, and fired by F. B. Newberg; an elegant new passenger coach and a combination car. S. M. Hanley, recently of the Winona and St. Peter R'y was conductor, B. R. Johnson, brakeman, and Frank Flautt, baggageman."³

RAILROAD IMPROVEMENTS AT DRESSER JUNCTION

Buildings immediately began to appear around Dresser Junction shortly after the first trains started running. The depot and a grain elevator were

under construction by mid-September. Company records show the cost of the depot as \$1,553.99. In Fall, 1907 a 24' diameter x 16' high water tank, on a wooden underframe, was dismantled at Osceola and rebuilt a few yards west of the depot. A frame, brick-veneered two-stall engine house, 32' x 48' x 90', was built inside the wye in 1912. Unfortunately this building burned down in 1922, but was immediately replaced with an identical structure, even using the bricks from the old engine house in typical Soo frugality.

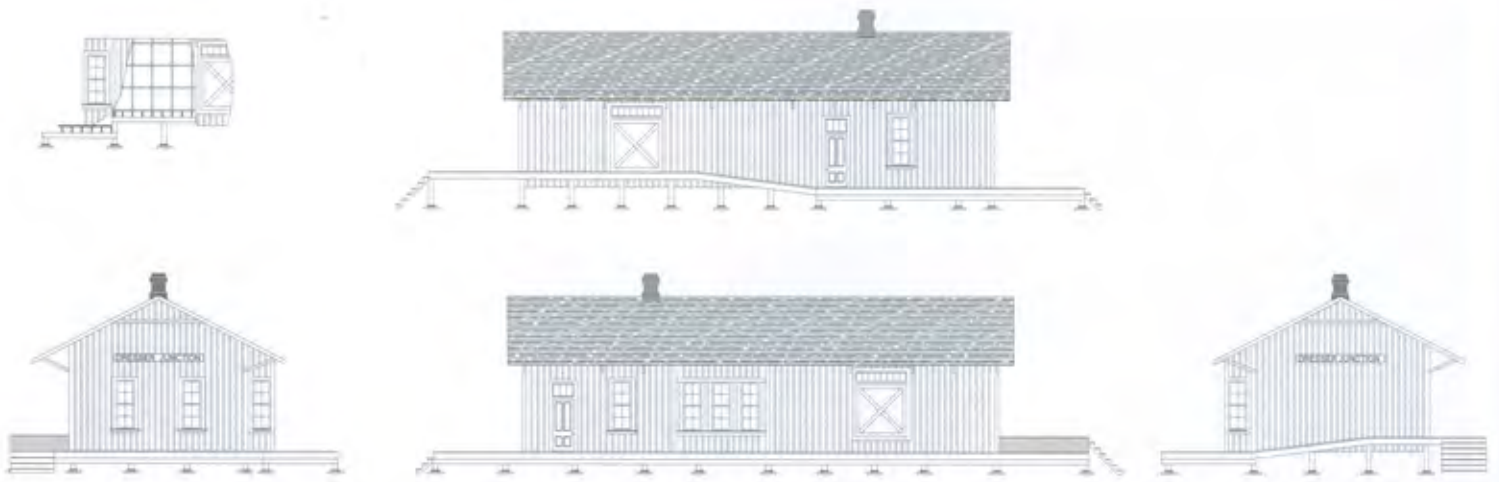
In 1901 the railroad completed construction of an extension of the St. Croix Falls branch to Frederic. A junction switch 2.3 miles from Dresser Junction was the starting point for the new line. The new junction was named Summit. The rest of the trackage into St. Croix Falls became a spur. Gravel for the new roadbed was taken from a pit just east of the junction. In 1912 the line was extended from Frederic to Superior, and on August 1, 1912, passenger service from Minneapolis to Duluth-Superior was initiated. On the main line "East and

westbound trains stopped in Dresser Junction at all hours of the day and night in 1912. Ten passenger trains a day came through Dresser Junction; one went as far east as Sault Ste. Marie and came back the next day. There were twelve freights a day."⁴

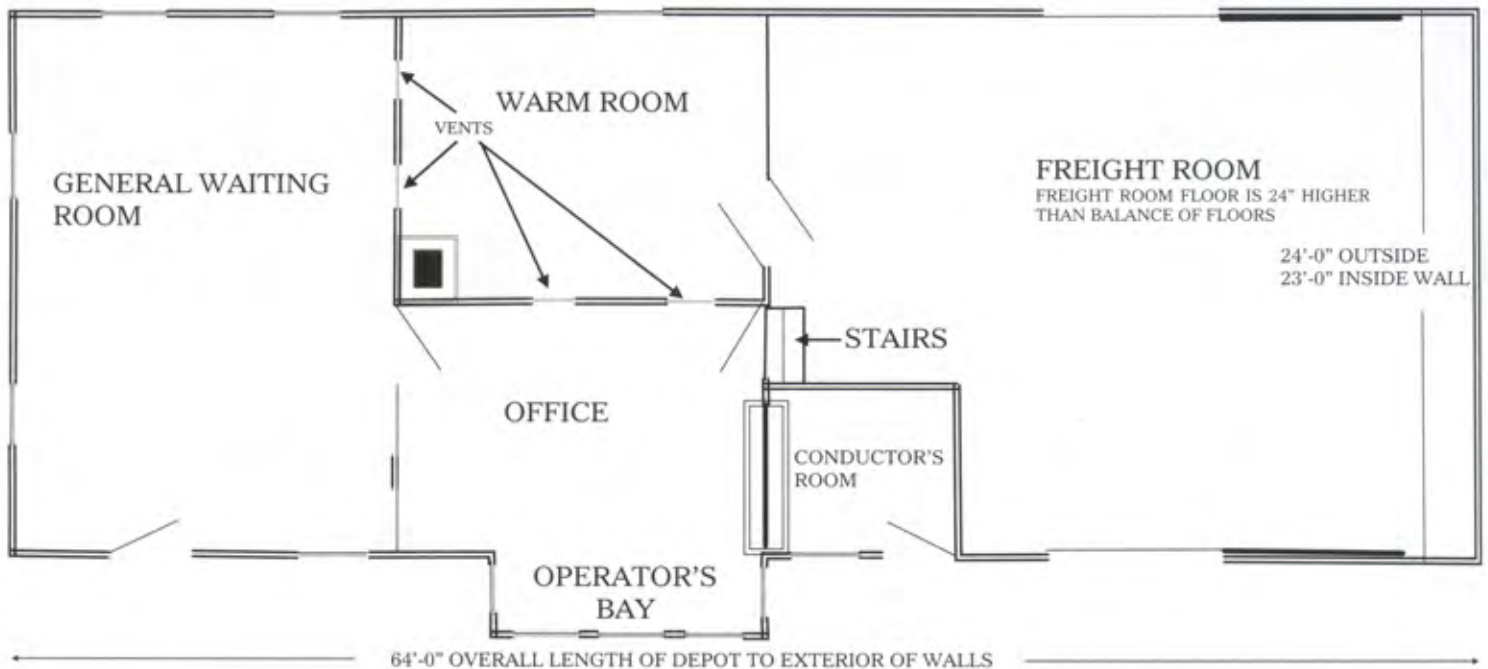
A new 50,000 gallon water tank, on a steel underframe, replaced the old one in 1941. This was mainly due to the larger locomotives being used by the Soo by that time. In 1944 work was begun on a 50-ton Fairbanks-Morse coaling station opposite the main line from the water tank. The new coaling station was put into service in November 1945. This made it possible for the railroad to retire the McHenry coaling plant at Amery and the bucket type plant at Luck.

THE DIESEL LOCOMOTIVE ARRIVES

After the Second World War diesel locomotives gradually displaced the less efficient steam locomotives on the Soo Line. The last steam excursion through Dresser was on Sunday, June 21, 1959. All of the facilities necessary to service the old steam engines



Above: The original depot was of board and batten construction with living quarters. The Soo Line remodeled the depot in 1915, changing some window and door locations while increasing the size of the freight and waiting room by eliminating the living quarters —*Rick Johnson*. **Below:** Not to scale, but showing the interior layout after remodeling. This floor plan of the depot carried through the Soo, WC, and CN years. Blueprints are available from the SLHTS Archives —*Mark Preussler*.



were no longer needed and the railroad gradually retired them. At Dresser the water and coal facilities were taken down in April 1960 by R. H. Emory who purchased them for scrap value. In 1962 the two-stall engine house was sold to the Dresser Oil Co. for \$100.00 and used as a warehouse. However, none of this affected the freight business on the railroad and in Dresser, that mainly consisted of the shipment of trap rock.

JOHN WUNDER FORMS THE TRAP-ROCK COMPANY

Trap rock mining in the St. Croix valley started in 1913 when a stock company was formed to open a quarry at Taylor Falls, Minnesota. The site

proved to be too close to the village, creating much complaining from residents about the noise of blasting and flying debris. Operations were suspended before a rock crusher could be installed. John Wunder, the owner of Gopher Sand and Gravel Company of Minneapolis, in conjunction with his

concrete-building business, became interested in trap rock when he discovered that crushed trap rock strengthened the concrete. Trap rock is hardened lava formed millions of years ago. It is one of the hardest, almost indestructible rocks in the world. Wunder purchased a majority

100 Beekman Street.

185 Dearborn Street.



OSGOOD DREDGE COMPANY,
JAMES H. BLESSING, Pres. JAMES CLARK, Vice Pres. JOHN K. HOWE, Sec'y and Treas.
BUILDERS OF THE
PATENT OSGOOD BOOM DREDGES,
—STEAM EXCAVATORS, DITCHING MACHINES.

COMBINED STEAM EXCAVATOR AND DERRICK CAR.
NO. 1, WEIGHT 40 TONS. NO. 2, WEIGHT 28 TONS.
Capacity 6 Cubic Yds per Minute. Capacity 4 Cubic Yds. per Minute.
These Excavators have proved very efficient and durable in the hardest hard-pan.

OFFICES: 37 State St. ALBANY, N. Y. 112 Potter Building, NEW YORK CITY. 501 Nelson Building, KANSAS CITY, MO.

An Osgood Shovel ad circa 1910 —*Larry E. Easton collection*.



Above: The Dresser depot was in need of some paint, but was still manned in this image from Bill O'Gara from July 10, 1971 —*SLHTS Archives*. **Below:** A nice overall view of the Dresser Junction yard tracks and mainline to Superior. The 2-stall enginehouse was still the property of the Soo Line at this date, August 18, 1957 —*Stuart J. Nelson*.



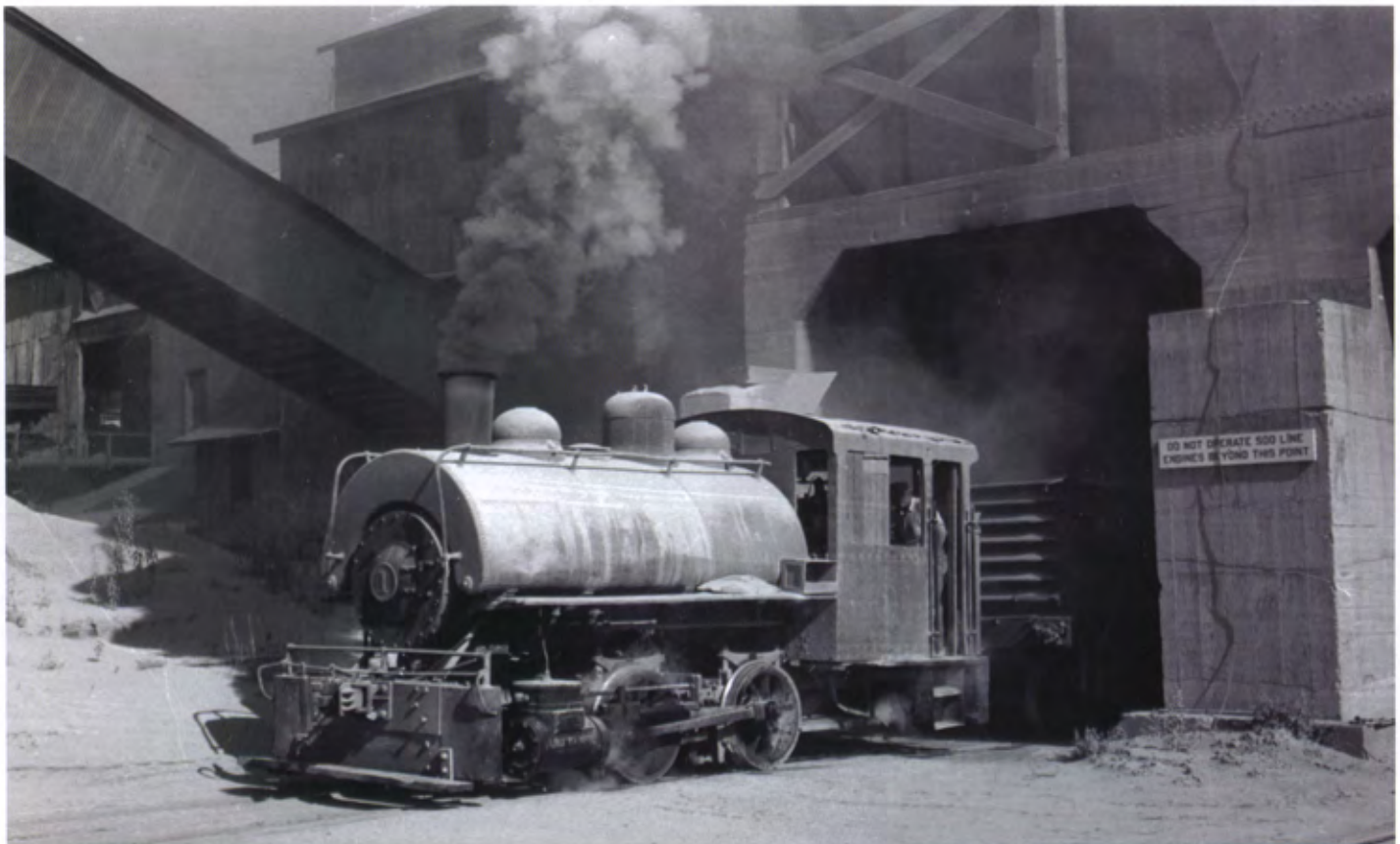
interest in the Taylor Falls operation and began searching for a more suitable location to mine trap rock. He chose an outcropping a mile north of Dresser Junction and started building the plant on 640 acres in 1914. It was not until 1916 that everything was ready for regular production to begin. Wunder called his new operation the Trap-Rock Company.

MINING AND CRUSHING TRAP ROCK

The key component in Wunder's plan to processing trap rock was the huge crusher, which weighed 220 tons, with a 40-ton swinging jaw. The *Osceola Sun* reported that it "will crush rock that is 6 x 7 feet into pieces as small as 12 inches, and from there the rock is conveyed in iron buckets to a smaller crusher which weighs 70 tons." The smaller crusher would



Top: A view from the edge of the quarry. Both shovels are at work filling the cars while the locomotives move the cars into position. The date is July 18, 1960, the author's first visit to Dresser Trap Rock. **Bottom:** The crusher building was large and multi-levelled. A fire on November 4, 1993 destroyed the building. However, the crusher and storage facilities still operate. This image was captured on Larry's second trip on November 3, 1960 —both photos Larry Easton.



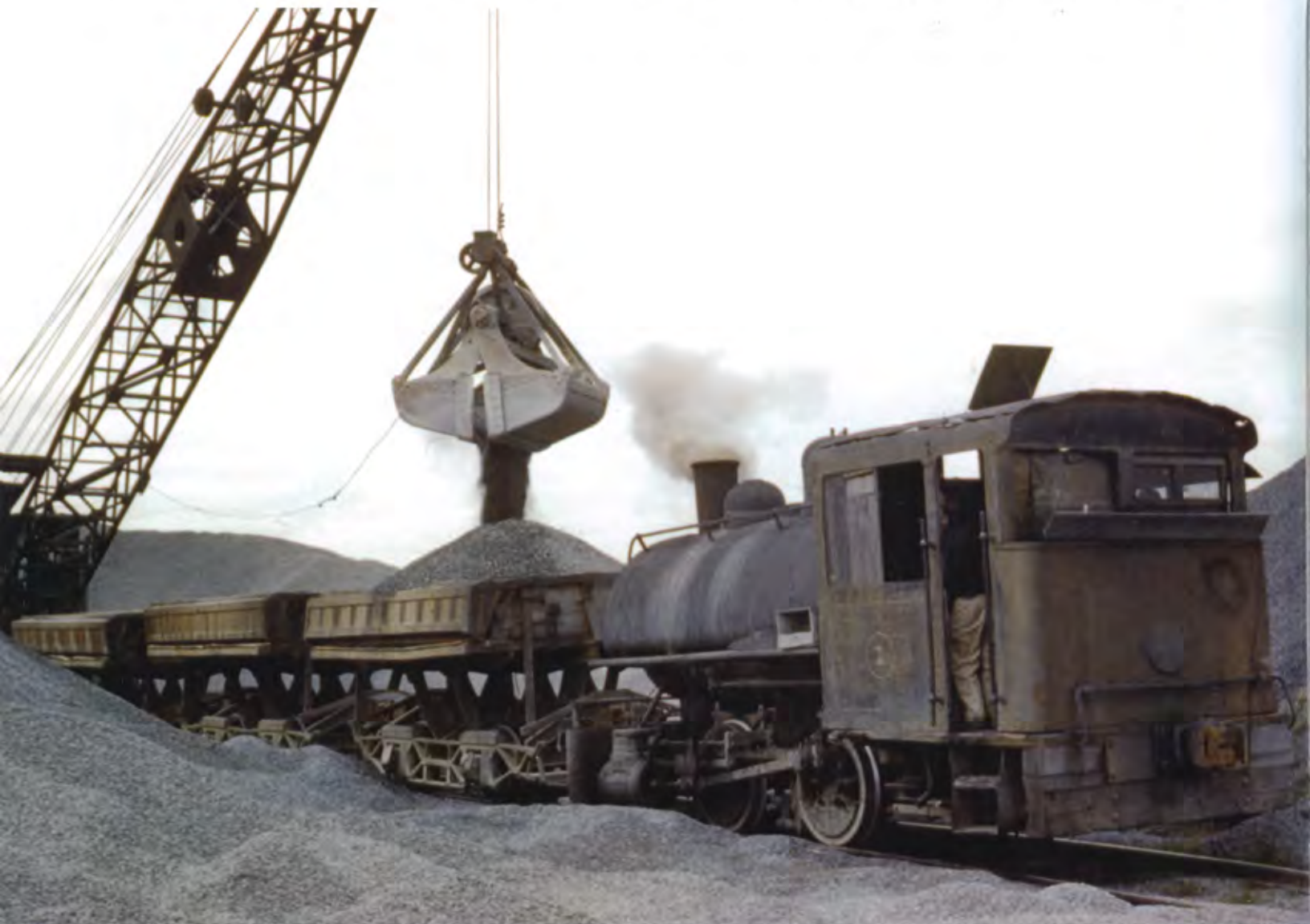
DTR No. 1 is ready to spot an empty composite gondola under the loading bin on July 18, 1960. It looks to be equipped with drop-bottom doors, which would make it ideal for this service. The loading area is a dusty place, and it makes an interesting place to study patterns for weathering models, as clearly shown in the bottom photo. The accumulation of dust, coupled with rain and soot from the stack, have made a wash of weathering down the sides of the saddle tank on little no. 1 —Larry Easton.

break the rock up as coarse as 3 inches and "as fine as dust." The rock was blasted from the 90-foot high face of the quarry about every two years through a system of tunnels. Into the tunnels 30 to 60 tons of dynamite was packed and exploded. Later this method was replaced by drilling down from the top of the rock formation. Getting the rock from the pit to the crusher was accomplished with a 5-mile network of standard gauge railway tracks. Steam shovels loaded the rock into dump cars and these were

pushed up the grade to the mill by small steam locomotives. The rock was screened and conveyed to piles on the ground or tanks near the crusher. "Three steel tanks 44 feet in diameter and 40 feet high could each hold 1,800 yards of crushed rock; other concrete tanks had a capacity of 6,000 yards of crushed rock each. Altogether, the tanks could hold the equivalent of 1,185 carloads of rock."⁵ Rock was loaded directly from the tanks into railroad cars. For rock stored in piles a steam crane loaded the desired size

rock into gondola or hopper cars. Empty cars were moved into position by a small steam locomotive. Loaded cars were switched to a siding where Soo Line trains picked them up.

John Wunder died in 1939, but the company continued in operation as a family-owned corporation. In 1949, when the Wunder family talked about closing the plant, several Dresser businessmen formed a new corporation named Dresser Trap Rock Company and purchased the property. Operation continued as usual through



Above: Crane no. 3 loads crushed stone into quarry cars which engine no. 1 will take back to the crusher for refining. The date is May 25, 1961. **Following page: Top:** No. 1 moves quarry cars of crushed stone into position at the crusher. Some of the stone was stockpiled for loading as needed by the Soo Line. **Bottom:** It looks like in this case, the stone from the stockpile is being loaded into a Soo gondola. The switcher would then move the car to a track in the yard for a pick-up later in the day. The gondola itself is interesting, one of 250 composite gondolas built by Pullman in 1923 for the Soo, of which 143 were rebuilt by the Soo Line in the years following with steel sides, fixed ends, and a steel floor like no. 7285 pictured here —Larry Easton.





An interesting sequence caught by Larry standing near the edge of the quarry as DTR no. 3 leaves the shovel behind to make the final run of the day with five loaded cars of stone to run to the crusher. Proceeding past Larry, no. 3 is working hard on its half-mile trip to the crusher. The date is July 18, 1960. Steam operations would only continue for another few years —Larry Easton.

the 1960 season. In late 1960 the company was sold again, to W. L. and Charles Bryan, Shakopee, MN. The next year Bryan proceeded to remodel the plant, scrapped or sold all of the old steam-powered equipment, tore up the rails and brought in diesel-powered machinery and trucks, reducing the number of employees by about a third.

THE END OF DRESSER TRAP ROCK STEAM OPERATIONS

In the summer of 1960 I was in graduate school at the University of Minnesota and learned about this all-steam operated quarry when I attended a meeting of the Minnesota Railfans Association. John Winters told me I just had to see it! So, after class on Monday afternoon, July 18th I drove from Minneapolis to Dresser to





Above: Dresser Trap Rock no. 4 pushes six cars of stone up the three percent grade to the crusher on July 18, 1960. The smaller old car on the left is filled with coal, ready to be hauled to the quarry to fuel the steam-powered shovels —Larry Easton. **Below:** A Soo Line Dresser Turn was captured by Steve Glischinski on June 7, 1992. In a little over a year, much of the facility would be damaged by fire, but the operation was rebuilt and updated —Steve Glischinski / Larry Easton collection.



see for myself what this company was all about.

I was overwhelmed! There were no fences; everyone was very friendly, “Just watch out for the trains and don’t get too close to the shovels!” What a sight I found: Two antique steam shovels were scooping up stone and loading four-wheeled quarry cars pulled by small saddle-tank locomotives. All signaling was done with whistles. I was free to wander around as I pleased – and I did! What little of the afternoon was left slipped by quickly and I made a promise to myself that I would come back again soon for a full day of photography. Well, it didn’t happen. It was early November before I made another visit to Dresser Trap Rock and by then the



Top: Steam shovels were used to scoop up the large pieces of trap rock and load them into the small dump cars. These ancient machines required a fireman and an operator. Water for the boiler was piped down from a tank high up on the hillside. **Bottom:** No. 4's train crew is assisting the fireman in hauling coal up to the shovel's boiler while one of the cars is being loaded. All train and shovel movements were signaled with whistles! *Both photos, July 18, 1960 —Larry Easton.*



Top: Dresser Trap Rock nos. 3 and 5 are tied up for the day near the enginehouse. These 0-4-0 saddle tank locomotives had seen better days when photographed on July 18, 1960. **Bottom:** Dresser Trap Rock no. 4 gets a drink of water before its last trip of the day. The sand domes had long been disconnected, but made a handy seat for the engineer while he filled the tank. *Both photos - Larry Easton.*

quarry work was done for the year.

The steam shovels were parked near the shop building. They were never used again. Only the steam crane and locomotive no. 1 were working at filling gondola cars from stock piles. I made a final visit on June 3, 1961 only to find the quarry was not being worked, but 0-4-0 no. 1 and the steam crane were still loading cars from the reserve piles. The company typically tried to keep about 1500 car loads of stone stock-piled to fill orders during the off season.

In 1963 the four locomotives were advertised for sale at \$1,250 each. Nos. 1 and 4 were purchased by the Iron Horse Central Museum, Chisago, MN; while nos. 3 and 5 went to the Western Minnesota Steam Threshers' operation at Rollag, MN. The all-steam operation of the Dresser Trap Rock Company had come to an end.

Dresser Trap Rock continues to this day with Canadian Pacific trains haul-

ing the crushed trap rock. The 1887 depot is still in operation by the Minnesota Transportation Museum, but that's going to make a great subject for our "Restored Soo" column.

FOOTNOTES

1. *St. Croix Valley Standard*, Thursday, August 25, 1887
2. *Osceola Sun*, Thursday, May 22, 1930
3. *St. Croix Valley Standard*, Thursday, September 15, 1887
4. *The Dallas Visitor*, Summer 1987
5. *St. Croix Tales and Trails*, Rosemarie Vezina Braatz, 2005, p. 195

REFERENCES

1. *Next Stop Dresser Junction*, Janice Ward, 1976
2. *St. Croix Tales and Trails*, Rosemarie Vezina Braatz, 2005
3. *Hard, Harder, Hardest*, Rodney E. Garrett, *Pit and Quarry Magazine*, April 2007

4. *Coyote-Hole primary blasting*, Dresser Trap Rock Co., L. G. Marshall, January 1, 1959

5. *Polk County Press* newspaper

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Today, the Canadian Pacific still loads trains of rock at Dresser. The modernized operation has done away with shuttling cars between the quarry and crusher with all work done by massive dump trucks and conveyors. Any type of motive power can show up here as illustrated. Crushed rock is dispensed from the modern silo, and today it looks like two loads of rip-rap are loaded in the side dump cars right behind the trailing locomotive —*Bob Rivard*.

