

# THE SANDLEY LEGACY

The Sandley Light Railway Equipment Works, Inc. began building 15" gauge equipment as far back as the 1940's. Their locomotives and cars have run on many railroads across the US. No fewer than four lines are currently running their equipment. The story is somewhat bittersweet, but Grand Scale railroading is much richer for their work.

## THE EARLY YEARS

Elmer Sandley was said to have been the "inventive" Sandley. He had a great mechanical aptitude and a mind for business. His son Norman was a great lover of steam, and like his father was an engineer on the Chicago & North Western. Norman was a dreamer and enjoyed trains in a very romantic sort of way.

Their first steamer built was the 4-6-4 No. 4001, the only Sandley-built oil burner. All the others were coal. The No. 4001 was run in the late '40's and early '50's at Janesville, Wisconsin in Riverside Park. Thus, their railroad was named the Riverside & Great Northern.

In Janesville there were a number more engines built. The No. 1 "Tom Thumb" vertical boiler loco and the little "Bug", No. 348, four wheeled gas switcher came early. In 1948 engine No.128, an Atlantic, was completed. In 1952 No. 127, also a 4-4-2, was finished. These two engines were inspired by the Class D Atlantics of the Chicago & North Western. Rolling stock included various work cars and at least seven covered, open sided steel passenger coaches.

The 128 was to become the mainstay of the R&GN. Like the No. 4001, it had the unique Sandley rotary valve gear, which was replaced with Walschaerts after fourteen years of running. The 127 was unique in its own right, being built with outside Stephenson valve gear. This was later changed to Baker. These changes made the 128 preferred by the crews as the Walschaerts gear wasn't nearly as stiff to operate as the Baker.

Initially the Sandleys intended to focus on

the manufacturing of equipment more than operating a railway. The R&GN would serve as a demonstration platform to prove the value of their products, then perhaps later be sold. Ultimately the Sandleys would operate the R&GN for more than thirty years . . . but not in their first location.

## MOVING NORTH

Not all the residents near Riverside Park in Janesville shared the Sandleys' enthusiasm for the sights, smells, and sounds of steam trains. Some tended to be rather vocal about their opinions. The Sandleys learned that their lease on the land was not going to be renewed.

In a circumstance somewhat reminiscent of the Ravenglass & Eskdale line in England, a right-of-way formerly used by a "full size" railway would now host a 15" gauge line. In 1902, the Milwaukee Road had realigned their trackage to eliminate some curves. Sections of this original 1854 right-of-way, running northwest from Wisconsin Dells, were abandoned. The Sandleys purchased a portion of one section and began laying track.

Operations began at the Dells in 1953. Early on there were relatively few buildings, as Mike Decker's track diagrams show. But a lot was accomplished in those first buildings. American type 4-4-0 No. 98 was completed in 1953, having been started in Janesville. This engine's lines were inspired by the *General*, an engine of almost legenday status in the U.S. after it participated in "The Great Locomotive Chase" of the Civil War. The No.98 was sold to the "Hoot Toot & Whistle" line in Elgin, Illinois. Now, forty-six years after being built, the engine is still in service at the **Old Wakarusa Railroad** in Wakarusa Indiana.

Around this time a great deal of work was going into building more passenger coaches. The original coaches, along with the 4001 and the "Bug", were sold to run on the Lake Wales, Great

Masterpiece & Southern Railway in Florida. (*Where do they come up with some of these names?*). After running in Florida the 4001 was said to have gone to a museum in Delaware. It has since been rebuilt and regauged to 16" and resides at the **Panella Pacific** (see **GSQ** #5).

Another "Bug", No. 125, was built to replace the 348. It also had a Model A engine and transmission. And since there was only one low gear in reverse, the little locomotive was built with a hydraulic jack at the center of its underframe. No need for a wye or a turntable with this little unit. Just jack her up and spin her around.

In 1957 No. 82, the second American 4-4-0, was built. This engine was likewise inspired by the *General*. The Milwaukee Journal newspaper commissioned the engine, then donated it to the Milwaukee Zoo. It sat in the newspaper's lobby until the tracks were finished. This engine now resides at the R&GN. It was built originally with the same balloon stack as the 98, but was rebuilt in '73 after an accident. The replacement stack was of a simpler design.

In 1958 a "GP" style diesel, No. 8215 was built for the zoo to supplement No. 98. And it was a true diesel with a 40hp engine and a hydraulic drive with a motor on each of the four axles.

It was as also in 1958 that the Grand Scaler's "Old Testament" was published: **Little Railways of the World** by Frederic Shaw. Shaw devoted an entire chapter of his book to a glowing portrait of the Sandley Light Railway Equipment Works as it existed up to that point. I can remember thumbing through my father's autographed copy of this volume shortly after I learned to read. You can thank it for being partially responsible for the infatuation that led to the creation **GSQ**.

Shaw mentioned the Sandleys' admiration for the **Romney Hythe & Dymchurch** (15", New Romney, England) and that they began building their engines with plate frames according to the British practice. The book says also that they cast their wheels with 20 spokes instead of the common American practice of 16. But many of the photos clearly show 18 spokes in the Sandley wheels. Perhaps

this was a typo. Maybe one of our readers can shed some more light on the subject.

The book also mentioned plans regarding the expansion of the R&GN into town and up to Stand Rock, even mapping the tracks as already being there. There was talk of an Indian village and an old-time Victorian town. Sadly, none of these plans came to fruition.

Even years later Norman had hoped that if this villiage were some day built, the patronage for the nightly shows would require trains to be run in sections, like so many of the famous name trains of yore that would have two or three trains operating under the same schedule. A helper would have been needed at the west end of the line to bring the trains back up to the level of the right-of-way. It would have been quite an operation.

It has also been speculated that running east into the downtown area would have perhaps made all the difference for the R&GN. And this may very well have been the case. Any operator that caters to the public, especially the tourists, will agree that the three most important things are location, location, location.

It seems that almost by definition Grand Scale railroaders are big dreamers. Some are just more vocal about their dreams. Some have had enough hard business experience that those dreams are a bit tempered. But I've yet to meet one that doesn't at times succumb to flights of fancy.

Shop work, however, did continue. In 1961 the second steamer was built for the zoo. The 82 worked diligently, but proved too light to pull long trains. No. 1916 was an Atlantic similar to 128 and 127. A heavier engine than the 82, it was able to haul much longer trains. She was delivered with the Sandley rotary valve gear, but was converted to Walschaerts after about a year.

Elmer and Norman had very different personalities and very different management styles. In 1963 it was decided that Elmer would sell his portion of the operation to his son. Eventually Elmer moved back to Janesville, but would come visit often.

## **OPERATIONS**

(Continued on page 8)

Having been in operation for decades, the R&GN treated countless thousands of “children of all ages” to the treat of riding behind a genuine steam locomotive. But the railroad was certainly more than a contrived tourist attraction. It had (and has) character and spirit. Many folks speak of it with more than merely enjoyment, but a truly emotional attachment.

Much of this may have been due to the fact that the operation was not a “train ride”. It was a miniature **railroad** and was operated as such. The whistles, the hand signals, and all the rules that governed the workers were just how “the big boys” did things. Mike Decker worked for the Sandleys for fifteen years as an engineer and a draftsman. To this day he credits his experience on the R&GN as the best preparation he had for his career as an engineer on the Burlington.

Every ride was a treat, and some were even exciting. With a portion of the line adjacent to the Milwaukee Road mainline, the temptation was great to have a little “race” between the small train and the big one. If the full size freight was laboring with a heavy load, and if the R&GN hoghead was a fearless soul, sometimes the race would be pretty close. This made the trip truly thrilling for the passengers.

As with any railway, there are moments when things don't go as well as expected. A potentially tragic event, that ultimately came out all right, involved the 128. The air pump was out on the engine. There were no brakes. When it came time to turn the engine on the Hyde Park turntable, there was a block of wood to secure the wheels. Well, the block was too big to effectively hold the wheels. The turntable wasn't perfectly level. Part way through the turn the 128 began to roll. It went right off the end, down the slope, and into the parking lot. The damage was mostly cosmetic. It was made sure that engines stayed securely on the turntable after that.

## THE LATER YEARS

The expansion that came about between '63 and '65 are clear when looking at the track plans. And the name of the railroad's main terminus was changed from East Station to Hyde

Park. This too was owing to Norman's fondness for England's Great Northern Railway, their main shops being the Hyde Park Works. Some have assumed that was called after the Chicago neighborhood of the same name, but the true answer lies across the Atlantic.

In the mid 1960's a 15" gauge railway was built in Quincy, Illinois. An unused CB&Q (Chicago Burlington & Quincy) railroad bridge was pressed into service to take the new line to Quinsippi Island in the Mississippi River. The No. 127 was sold to this operation along with nine passenger coaches and a new wooden gondola.

In 1970 a new diesel was built for the Quinsippi Central RR. The No. 940 was very similar in appearance to the 8215 made for the Milwaukee Zoo. Yet when its construction had begun back in 1960, it certainly had a unique drive system. A gas engine drove an automatic transmission which in turn drove an overhead line shaft that ran the length of the engine's interior. “V” belts with a 90E turn were used to drive the axles. Later it was converted to a more conventional hydrostatic drive.

Within the last ten years the equipment of the Quinsippi Central was put up for auction. It is believed to be owned by a private individual in the area.

The last 15" gauge engine built by Sandley was a Pacific, No. 1924, also built for the Milwaukee Zoo. This engine broke from the style that had been held by the Sandley shops for most their of engines, namely 4½" x 6" cylinders with 20½" drivers. This Pacific, designed by Mike Decker, is the heaviest 15" gauge engine built in the shops and was inspired by the USRA heavy Pacifics [Note: during WWI, the US federal government took control of the nation's railroads. Incredibly, some of the finest locomotive and equipment designs came out of this government “committee”, the US Railway Administration.] With 6" x 8" cylinders the 1924 is a real work horse. And she was able to run for seventeen years of hard service before needing a major overhaul. She still serves the zoo, pulling thousands of happy folks every year.

One of the best customers the Sandleys had was Mr. Elliott Donnelley. He purchased the 127 and the rolling stock for the Quinsippi

Central. He personally owned both a 14" gauge and a 24" gauge line on his property. And he had a very benevolent feeling toward Norman. Donnelley had the Sandley Light Railway Equipment Works build some 14" rolling stock for his personal use, and at one point he also had the "Tom Thumb" on his estate (after Mr. Donnelley passed away the "Tom Thumb" came back to the R&GN and was again set to 15" gauge).

In addition to this 14" gauge equipment a good deal of work was done in 24" gauge as well. Two passenger coaches and one baggage car were built for Donnelley's home line. At one point the baggage car made it to an amusement park near Golden Colorado and may still be there.

Mr. Donnelley also had a benevolent feeling toward the Brookfield Zoo near Chicago. A 24" gauge German 0-8-0T was reboilered and rebuilt into a 2-8-0 with a tender. Then it went to the Brookfield Zoo. Oddly enough, some time later it was relieved of the pony truck and returned to an 0-8-0 configuration because of a tracking problem.

A completely new 2-4-2 was also built for the Brookfield Zoo, and another identical 2-4-2 was begun. It was during the construction of this second 24" gauge engine that Norman reached the end of his financial rope. Just before then Elmer had passed away, and this was the darkest time of the Sandley legacy.

Some time before the 1982 World's Fair in Knoxville, Tennessee, Norman did make arrangements with another man to run a 15" gauge railway at the fair. The No. 128, the remaining coaches, and 125 "Bug" were shipped to Knoxville. Yet even before the fair opened someone ran the little steamer too fast around a turn and rolled her on her side, causing considerable damage. The engine was repaired, but the resulting mechanical bills lost the 128 to Sandley ownership for good. She later went to the Knoxville Zoo, and was later still seen for sale by an amusement equipment dealer in yet another part of the country. She is now owned by a private individual, but remains out of service. We haven't been able to learn of whatever happened to the little 125.

Eventually the bank foreclosed on the

property. The Sandley shops as well as the Riverside & Great Northern sat quiet.

## THE FIRE IS RELIT

There were a great many people who had very fond memories of the R&GN. It was known that the trackage and shops sat derelict for the better part of a decade. In the late 1980's a few determined folks started talking, and a movement built momentum.

A call of support was sent out to the faithful. The bank was approached and arrangements were made. A large number of initial members each donated \$1000 or more to get the project on its feet. The bank gave terms that were more than fair, giving the fledgling organization a chance to establish itself.

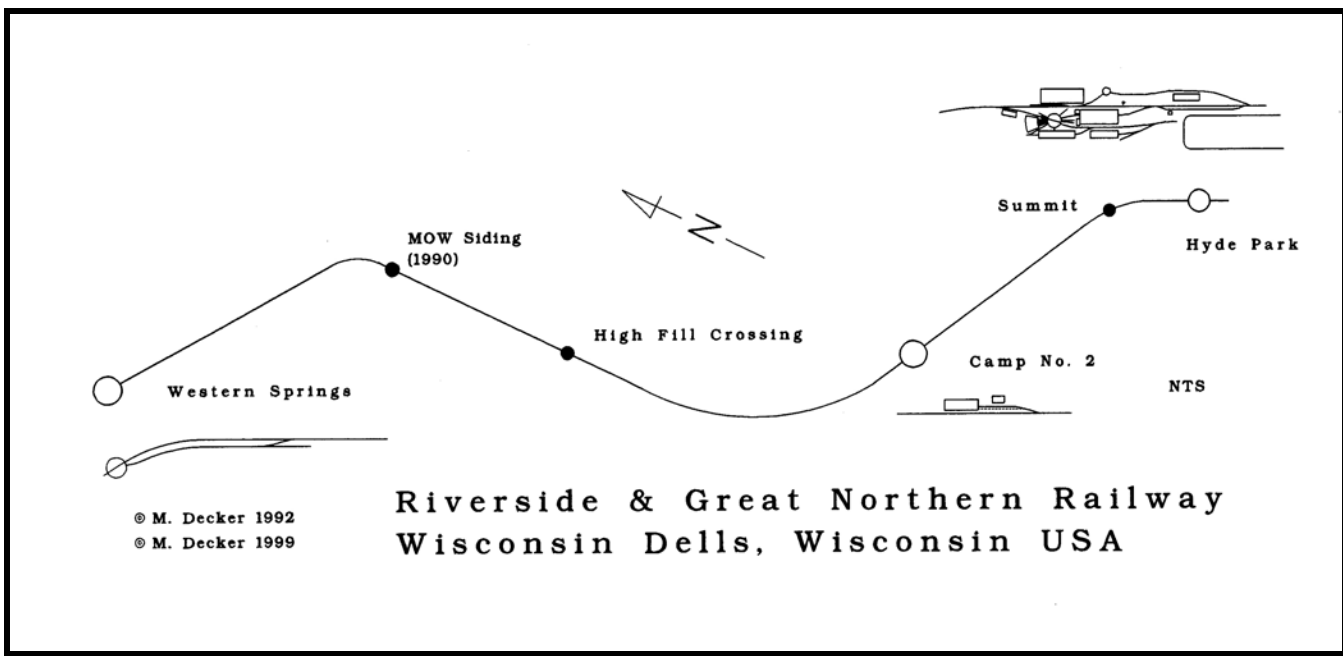
The buildings required a great deal of repair. The shops still had many of the large machine tools, but needed to be restocked with the myriad requisite smaller items. And every single tie (sleeper) needed to be replaced along the 1½ mile route.

In addition, the newly created Riverside & Great Northern Preservation Society had no passenger hauling rolling stock. And the only steamer was the inoperative Tom Thumb, which wasn't designed to pull a string of full size coaches in revenue service (according to the Society's web site, she is capable of pulling quite a few people in gondolas!)

It wasn't long until arrangements were made with the Milwaukee Zoo for the No. 82. She'd sat unused for quite some time. The zoo leased the engine and five cars to the society for a modest sum. Eventually the club built a "diesel" that the zoo was willing to take in a trade. With the Tom Thumb rebuilt the Society now owns two working Sandley steamers.

In addition to the cars leased from the Zoo, three unfinished wooden cars were found at a cabinetmaker's shop. Norman had contracted for the woodworking to be done by an outside company, but financial problems left them incomplete for years. A member of the society bought the cars, finished them and is leasing them to the railway for one dollar a year.

Like all organizations, the R&GN Preservation Society has had its ups and downs, but



mostly “ups”. Some years have been better money makers than others (the last few have been good). Some members haven’t always agreed with others (but a great deal of work has been accomplished). There was a fire (but it wasn’t so bad as it could have been).

This last point got quite a bit of press in the American live steam press. It was July 2, 1995. A suspicious fire started around midnight on the outside of the Boiler Shop near the turntable. Fortunately the fire department responded quickly. More fortunately still, a Society member who was spending the night on the premises had 15 years of experience in a volunteer fire department. He was able to provide information he knew would be valuable in putting out the fire. Some wood patterns were lost, and there was much smoke and water damage. Yet the fire was confined to a relatively small portion of the older wooden building. Amazingly, the fire was minor compared to what could have been lost.

A happier note is that for the last few years the R&GN has owned a nice little “diesel” switch engine. This replica of an EMD (Electro Motive Division) switcher is powered with a 23hp Kohler gasoline engine and has a hydrostatic drive. Built by former president Tom Artzberger and others, it serves the railway very well.

The R&GN is more certain now of a long and successful future than it has been in decades. The railroad gift shop often gets kudos for having one of the best selections in the area, especially of the ever popular “Thomas the Tank Engine”. Also located on the property is the Dells Live Steamers and Model

Engineers Club with its 7½” gauge track.

There are active members of this society all over the United States and Canada. If you would like to know more about the Riverside & Great Northern, or better yet, if you would like to become a member and help carry on the Sandley Legacy, contact **The R&GN Preservation Society, N115 County Road N, Wisconsin Dells, WI 53965-9124, USA**. You can also visit their site on the Internet at [www.midplains.net/~randgn](http://www.midplains.net/~randgn).

We certainly hope you’ve enjoyed this trip into the past with us, looking at the Sandley Legacy.

For the photos, materials, diagrams, and hours on the phone, we’d like to give a special thanks to Mike Decker, Ken Davis, Joe Chmura, Jim Hagen, and Darrell Klompmaker.

Many of our readers are familiar with the Sandleys’ history. We invite you to please write to us regarding any mistakes or omissions in this article. We would be happy to write a follow up article to fill in some of the blanks.

*[The next four pages are a Sandley sales brochure from the 60’s (collection Greg Robinson) with all of the creative marketing one would expect in an advertisement. Page 15 has more R&GN photos.]*