

THAT GREAT LITTLE AUBURN VALLEY

THE STORY OF THE
SMALLEST COMMERCIAL RAILROAD IN THE WORLD

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Locomotive 402, with T. Clarence Marshall at the throttle, pulls away from West Yorklyn Station with a four-car train on a cold April day in 1961.

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So far as we know, there is not another railroad anywhere with less than one-foot track gauge carrying passengers on a regular basis, and open to the general public to enjoy. The conceiving, planning, building, and operating of all that goes into what you see and ride on is told here on these few pages. It is indeed a fascinating story.

The Auburn Valley R.R. was the dream of father and son, T. Clarence Marshall, and his son Tom. It was the genius and mechanical skill of the senior Marshall, however, that made this dream come true.

When young Tom was a toddler, his father, like many Dads of those days and since, bought him an electric train, and enjoyed it as much or more than his boy. Before long there were four or five locomotives, several switches, a dozen or more cars, and all that went with a "standard gauge" Lionel layout of the late twenties and early thirties. It frequently occupied all of one of the large rooms at "Auburn Heights", the Marshall home (now the grounds of the MAGIC AGE OF STEAM), much to the dismay of Mrs. Marshall. Mr. Marshall and Tom would often remark to one another: "Wouldn't it be nice if we could have an outdoor railroad around the lawn that we could ride on!"

T. Clarence Marshall loved steam, and used to take Tom down along the main line of a nearby railroad to watch those passenger limiteds race by, and the disease caught on; the younger Marshall to this day never tires of watching the side rods go

around on a steam locomotive. The high-driven passenger engines were always preferred: they LOOKED like speed.

But great as the desire was, some time passed before the elder Marshall really got into railroad building. Then, in 1941, on a trip to California, he heard of Martin S. Lewis, founder of LITTLE ENGINES, and found him in a boatyard at Wilmington, California. Lewis, a fine machinist himself, had completed drawings for two or three scale-model steam locomotives, possibly more, in $1/4$ ", $1/2$ " and $3/4$ " scale, and was beginning to sell rough castings from which to build these engines. To give a better idea of size, $1/4$ " scale is "0" gauge and live-steam locomotives were being built in this tiny size! Mr. Marshall decided on the largest size then available, and in 1943 began the construction of a 4-8-4 passenger engine, from Mr. Lewis' castings and drawings, this engine having a track gauge of $3\frac{1}{2}$ ". 2500 working hours later, the tiny locomotive was completed, but even before that, Mr. Marshall realized it would not be large enough to really carry passengers and be practical. Nevertheless, he pushed the project through to completion, and when Tom returned home after four years in the Army Air Force in World War II, his dad named this first locomotive for him. It was taken to many hobby shows where it operated on rollers, being powered by steam from the boiler of a Stanley car sitting outside the building where the display was located.

But this was not the answer to an outdoor railroad, and no track was ever laid for this little beauty (it is still on display in the Museum). By the end of the forties, Mr. Lewis, in the final years of his life, decided to go into $1\frac{1}{2}$ " scale, with track gauge $7\frac{1}{2}$ ", and designed and scaled down a number of locomotives for this larger sized railroad. Now the finished products were

spectacularly realistic! T. Clarence Marshall immediately ordered drawings and castings for another 4-8-4 passenger engine in this larger scale. Perhaps his railroad dream would come true at last. But, having restored some twenty Stanley cars in the interim, since building the little 3/4" scale engine during the war, and having become deeply interested in his newest acquisition, a Doble Steam Car, the railroad project was still put off for a while. Mr. Lewis passed away, but his widow continued to operate LITTLE ENGINES (Mrs. Lewis is still very much in business at this writing, 1971).

By the mid-fifties, other people had entered the "live steam" field, notably Lester Friend of Massachusetts, and could furnish much the same type of parts and drawings as could LITTLE ENGINES. These people were strictly STEAM, and their customers were mostly retired men, handy with machine tools, who undertook the building of a locomotive as a hobby. But they were scale model in every detail, and in this was their great fascination and appeal, even though most of the builders and would-be builders never got a railroad built on which to operate their pride and joy. This distinction is made here to contrast with small locomotives and trains built commercially to haul passengers in amusement parks, zoos, and similar places. While some of these latter products have been quite good over the years, they were not copies of big trains, they were built for practicability, with wider track gauge (seldom less than 15"), deep wheel flanges, purposely rough road beds (in some cases), and very few actually steam powered, although a great many were made to LOOK like a steam locomotive. To combine the detail of real scale models with the ability to carry passengers successfully was the real challenge, and this effort culminated in the present-day AUBURN VALLEY.

About 1956, Mr. Marshall undertook the building of his 1½" scale 4-8-4 in earnest. Instead of 2500 hours, the time consumed in building the first model, this one was more like 7500 hours! By 1959, as completion was drawing near, Mr. Marshall and Tom began to plan a railroad on which to run this new beauty. One day in March, 1960, with snow still on the ground, Tom and Everett B. Hollingsworth laid out the first "version" of the 7½"-gauge loop around the grounds of Auburn Heights. Aluminum alloy rail and redwood ties were furnished by LITTLE ENGINES, as well as tiny spikes (these were given up as not practical), splice bars, and other appurtenances. There were a few hitches: considerable grading had to be done to eliminate some of the rough grades around the hillside grounds, and the contour of a steep bank in the rear of the property demanded a much sharper curve than the 70' radius, the minimum curve for which the 4-8-4 was designed. But modification of front and rear engine trucks and the spreading of the gauge about 1/4" on a 55-foot radius curve, overcame the most formidable obstacle, and Mr. Hollingsworth completed the original line, including its turntable and a single track into the "engine house" (actually the basement of Mr. Marshall's shop) in mid-summer of 1960. On Mr. Marshall's 75th birthday, August 5, 1960, guests at his birthday party became the first passengers to ride the little railroad, even though a heavy thunder shower just before almost drowned out the occasion. The trips were a great success- now all the railroad needed was a name!

AUBURN was the name of Yorklyn until the Wilmington and Western Rail Road changed it in 1872. In 1897, Israel W. Marshall named his new home "Auburn Heights" (now the Magic Age of Steam). The "Auburn Special" was a feature on the trapshooting program at the Yorklyn Gun Club for many years. And since the words seemed to sound all right together, the

tiny railroad became the AUBURN VALLEY, and prepared to carry happy passengers.

Several hundred people rode the Auburn Valley's one train, pulled by T. Clarence Marshall's masterpiece, Locomotive #401, during the Fall of 1960. Two of the original passenger cars used had come from the old Tolchester Amusement Park on the Eastern Shore of Maryland (they were cut down from 12½" track gauge). Four other cars were built of similar design, and all were brightly painted in "circus train" colors. But bigger and better things were yet to come.

Historic Red Clay Valley, Inc. had been incorporated in 1960 to undertake certain historic and restoration projects in the area, the most elaborate of which was the re-activation of steam passenger service on the Landenberg Branch of the B & O Railroad, and Tom Marshall was its president. The organization had many enthusiastic people who became members, but it needed funds. One of its most enthusiastic organizers, T. Clarence Marshall, agreed to "lease" the Auburn Valley to this new organization if its members would man it, and all proceeds would be turned over to HRCV. It was realized that another train would soon be needed. Marshall, Sr. was already working on his "second" engine, but this time he did not have to build it from scratch. He had the good fortune to purchase the mate to #401 from Mrs. Lewis of LITTLE ENGINES, this latter locomotive being the prototype her late husband had 3/4 completed at the time of his death. This engine was rushed through by Mr. Marshall, becoming #402, and entering service in April, 1961. Some flat cars with removable seats were also added, and two-four-car trains were now a reality.

Tom Marshall, with the help of HRCV members, built stub switches and two passing tracks, one

at West Yorklyn Station and the other a "low grade" near Summit (this latter trackage has now been abandoned). The two trains could run in opposite directions and pass at either place. The 1961 schedule advertised that the railroad, and the museum, would be open the last Saturday and Sunday in each month, from April through October. It was a question as to whether the public would respond.

The April week-end was cold and wet. Attendance both days was below 300. Finally, on May 28, a nice balmy Spring day came along, and 490 passengers were carried in $3\frac{1}{2}$ hours. The workers were elated, and especially T. Clarence Marshall. His dream, perhaps thirty years old by now, had come true. Here were hundreds of people, young and old, enjoying rides on his outdoor railroad, and it had two all important requirements: it was built to scale, and even more significant, it was steam powered, with the tiny coal burning locomotives proving themselves highly successful as testimony to the time and skill that went into their building. Word spread, and attendance picked up. On October 29, 1961, 1068 passengers enjoyed the fall sunshine and rode the Auburn Valley. Only on one date, October 27, 1963, was this number surpassed, when 1159 passengers, an all-time record for HRCV days on the Auburn Valley, were counted.

In 1962, six-car trains became regular consists, and the siding at West Yorklyn was lengthened to accommodate these longer trains. By 1964, a third passing track had been added near Table Junction, and three trains were operated on quite a complicated schedule during that year. The third locomotive in service was a 2-6-4 English type engine, which pulled tiny cars with leather seats, and was recommended for only small children. This engine also presented quite a challenge for those who operated it on a regular schedule. In 1965, it was retired from service on the Auburn Valley and sold to

C. V. Fowler of Edgewood, Maryland.

In July, 1965, Historic Red Clay Valley, Inc. finally negotiated a lease with the B & O Railroad for operation on the Landenberg Branch, and as the manpower of the organization was shifted to prepare the equipment for that operation, the Auburn Valley was closed down. In 70 operating days over a 5-year period, the tiny Line had carried over 33,000 passengers, and had earned (together with Museum admissions) nearly \$15,000 for HRCV. That year, however, T. Clarence Marshall completed another locomotive for use on the Line, a 4-6-2 Pacific-type, which was never fired up until 1971. He had also bought a completed LITTLE ENGINES Civil War type locomotive, and although this had been tested on the Auburn Valley, it was considered too light to pull a train load of passengers. Another 4-4-0 American-type locomotive, formerly an amusement in Florida, was cut down from 9" track gauge by Mr. Marshall to run on the Auburn Valley. As of 1971, this locomotive has not been used on this railroad. A third 4-8-4 type, identical to #s 401 and 402, except an oil burner, is on display in the Museum, and will be used as an operating display in winter months and during the week when the outside activities are not operating. In all, the Auburn Valley R.R. now has six steam locomotives, and 18 cars, 16 of which carry passengers.

It takes about one hour to fire up 401 or 402. An air hose is applied to the blower line, giving the fire a forced draft, and cedar shingles get the fire started. As the shingles get burning well, charcoal brickettes are sometimes used to bridge the gap between wood and coal. Pea coal, a grade of anthracite, works best, as there is no smoke to choke the tiny boiler flues or to get in the eyes of the engineer. But pea

coal must be kept hot to stay alive in the firebox, and these little engines steam best when kept busy, without long delays at the station. Occasionally a little soft coal is added to aid steaming and add flavor.

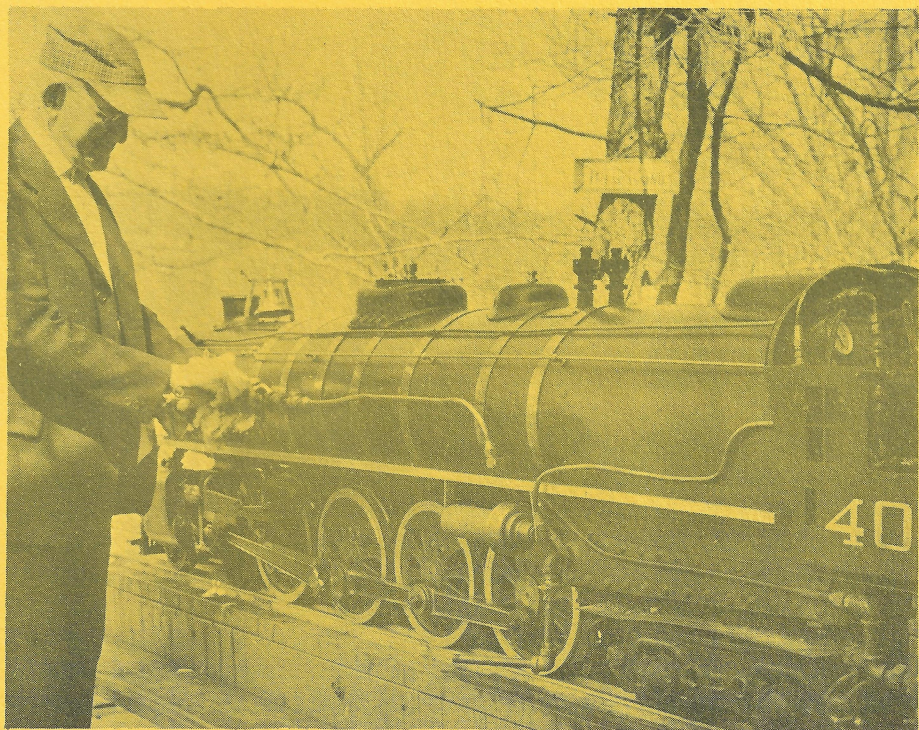
Tiny injectors or inspirators force water from the tender tank (which holds 45 gallons on the 401 and 402) into the boiler when needed. These locomotives, with tender full of water and coal, weigh about one ton each. They usually travel about 10 m.p.h., which is equivalent to 80 m.p.h. as they are 1/8 actual size. The driving wheels are 10" in diameter, and they are copied from real Union Pacific 4-8-4's, the pride of the U.P.'s passenger fleet in the forties. The tenders usually have to be filled from the wooden water tower once during an operating afternoon.

The railroad itself is about 1/2 original Auburn Valley Line built in 1960, and the remainder new in 1971. From Table Junction behind the Museum, past Auburn Mills, and up to West Yorklyn on the "high line" is all single tracked original. But the double-tracked main across the steel trestle, through the new West Yorklyn Station area, around through Steamhill Tunnel, across the lake embankment, and back to Table Junction is all new location. In all, there is approximately 4000 feet of trackage (3/4 mile) with 13,500 ties, 54,000 spikes, 1600 splice bars, 3200 track bolts and nuts, 5 spring switches, 2 stub switches, a double-tracked tunnel 90 feet long, a double-tracked trestle 95 feet long, a single tracked trestle 75 feet long, an operating turntable, and 4 grade crossings.

T. Clarence Marshall died in 1969. Within a few months his son, Tom, had laid plans for the Magic Age of Steam, and had engaged the services of Weldin V. Stumpf, an old hand at steam-powered vehicles, as mechanical director.

In February, 1970, work began to prepare the grounds of the deceased Marshall's home to better handle the public, including the construction of a new boiler room, public rest rooms, a snack bar, parking lot, and complete renovation of the Steam Car Museum.

And both Stumpf and Tom Marshall turned their efforts to making the Auburn Valley even better, a living tribute to the man who conceived it and built it originally, the late T. Clarence Marshall.



The late T. Clarence Marshall tightens a boiler check on Engine 402 at Table Junction before the day's run.