



photography/JOHN ALLEN

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THE DECEMBER 1980 ISSUE.

Remembering the Gorre & Daphetid

Part 2: The large yard at Great Divide and the extensive locomotive servicing facilities located there provide the nucleus for an overview of John Allen's approach to the hobby, including the clever use of mirrors/**Jim Findley**

In the first segment of this series in the December 1980 RMC, we reviewed photographs of the finished product—the areas of the last Gorre & Daphetid layout that were virtually complete and, to John Allen's way of thinking, ready for the camera. His tendency to submit little or no "how-to" material to the hobby press that actually showed the G&D under construction probably gave rise to the widespread belief that John was unwilling to divulge, and was even secretive about, his methods and techniques.

Nothing could have been further from the truth—he was invariably candid and completely forthright in answering questions about how he did things on his railroad. A more accurate characterization would have been that John was an inveterate showman and wanted the show to be as good as possible. He also assumed as a matter of course that everyone already knew these things anyway!

Those of us who are in the process of building a layout, or even just contemplating the undertaking, are always intensely interested in how the other person did things on his or her railroad. In this series about the Gorre & Daphetid, we'll thus include some "progress" photos that John might not have selected for print to satisfy this curiosity. We believe they will also serve as learning aids for beginner and veteran alike.

By using some of his second layout (which included the first layout—see Fig. 1.13 in December 1980 RMC) as sort of a heart transplant to provide a running start at his last railroad, the G&D followed a practice as old as the hobby itself—and as new as the person who decides that the loop of track he or she got for Christmas needs a passing siding. With minimal operations re-established, the next priority in his planning was to install the main yard at Great Divide, the division point according to his enlarged concept. In his choice of the name for the principle city, John purposely elected to retain the initials GD to match the name of his railroad, the Gorre & Daphetid.

This road name (a play on the words "gory" and "defeated") was one of those ideas that wore thinner every time John had to explain

it and give the correct pronunciation to some visitor. He entertained the hope of somehow changing the name of the line at this juncture, but the first priority was to get into the actual building process. This interested him far more than re-decating his equipment. By the time he could have changed the name, the layout was so well known that, as he remarked once, he would have then had the equivalent hassle of explaining why he had switched names—this on top of the original questions about the genesis of the original road name.

Despite appearances in Fig. 2.1, which shows the entire length of the yard, and Fig. 2.22, which includes engine servicing facilities, the Great Divide yard area was smaller than you'd expect on a layout the size of the G&D. In its last years the railroad was host for over 160 cars, but an overwhelming majority of these were in other areas and/or spotted at the hundred or so industries or on sidings along the right-of-way.

The yard tracks were divided according to utilization, with the freight section in front and the passenger car storage area in the back. One track, the one nearest the wall, was operated as an industrial spur serving warehouses, a bakery, freight house, etc., all built as three-dimensional flats along the wall. In addition to his other duties, the yard operator at Great Divide was responsible for switching this long spur.

Although yard capacity was relatively modest, the appearance to visitors was deceptively otherwise. One of the five largest mirrors on the railroad was set at the stub end of the yard trackage, and it very effectively "opened up" the north wall, doubling the apparent length of the yard while making it appear double-ended.

In Fig. 2.8, this mirror is easily detected in the early stages of construction; later it fooled nearly everyone. An elevated pedestrian walk concealed the top edge of the mirror, with half of the walkway built up and the other half a reflection only—including the pedestrians.

In the use of mirrors on his layout, John developed a number of rigid rules regarding their installation, and these rules applied to

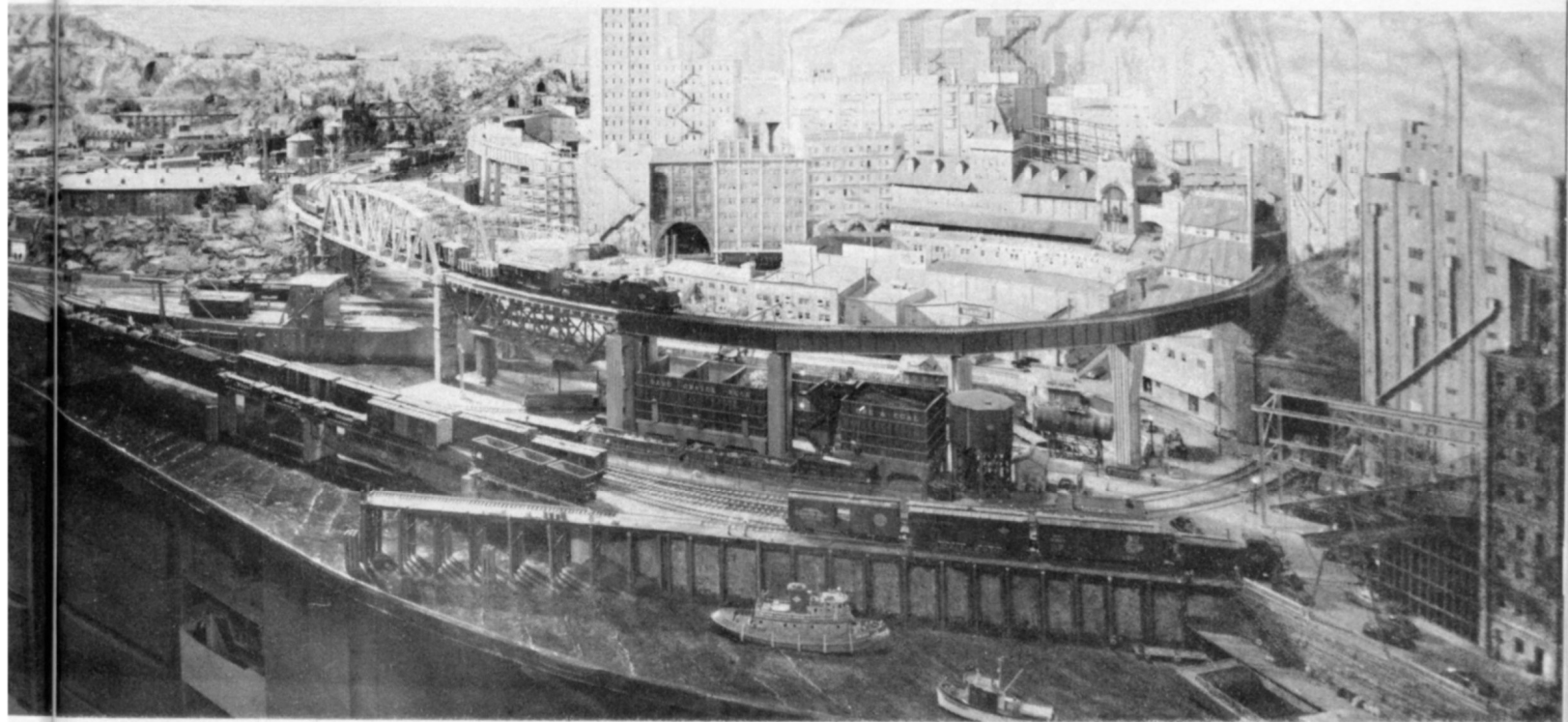
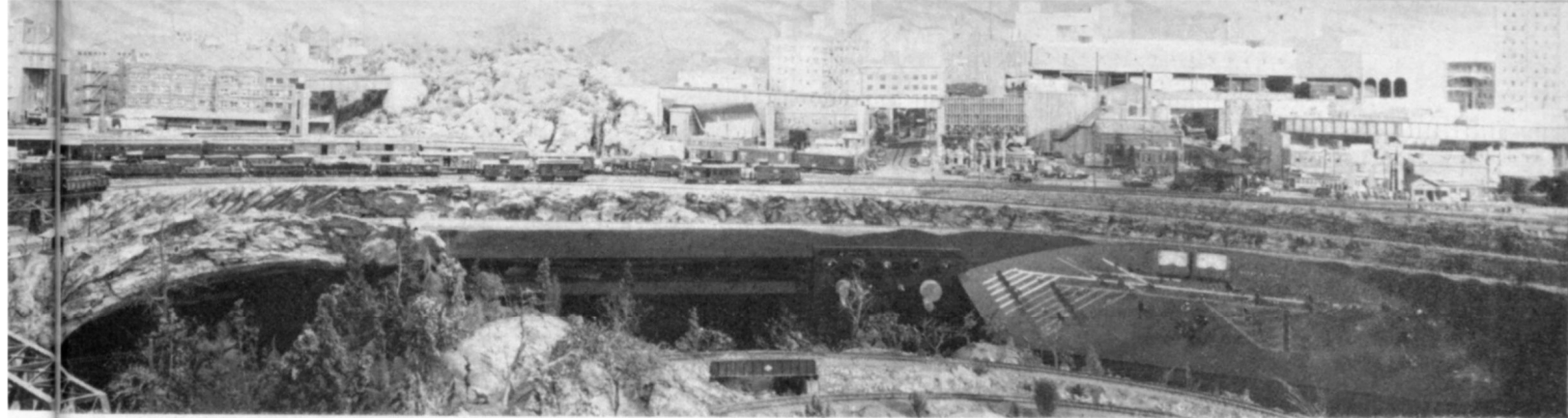


Fig. 2.1 ▲

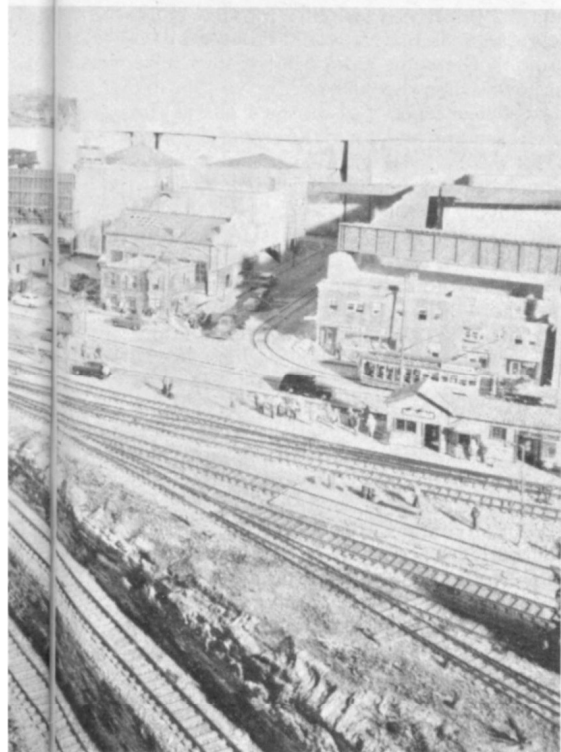


Fig. 2.2 ▲





▼ Fig. 2.3



These two views of the Great Divide-Port area of the Gorre & Daphetid (Fig. 2.1-2.2) show how John visually combined the two cities in some ways and kept them separated in others. Note that Port actually involves only the lower loop of track and adjacent trackage visible in front of the Great Divide roundhouse in Fig. 2.2; upper loop on bridge came out of Great Divide. Real water planned for Port was wisely cancelled, but evidence of concept lingered in form of overly-deep harbor walls and car ferry. An early view of downtown Great Divide is shown in Fig. 2.3. Experiments with mirrors (Fig. 2.4) led to their use on last two G&Ds.

Fig. 2.4

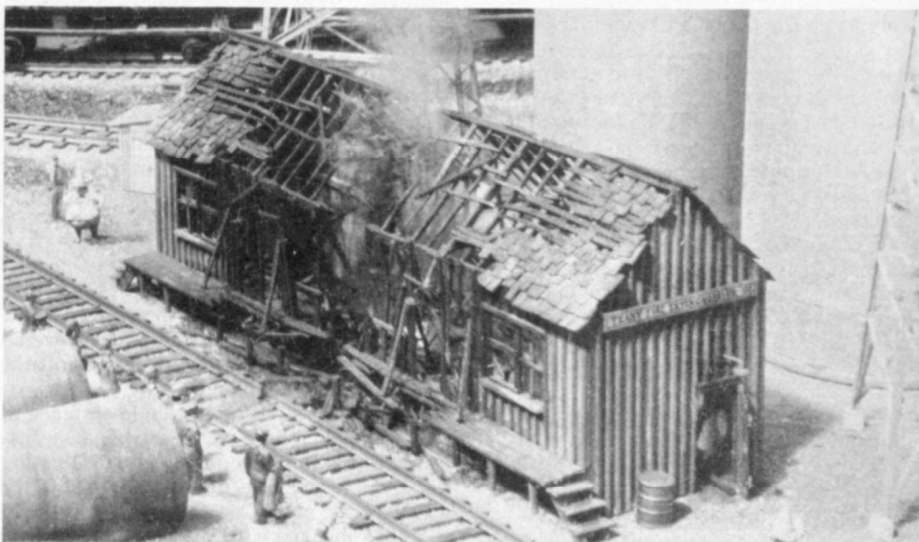




Fig. 2.5



Fig. 2.6

Buildings mysteriously changed locales, a bit of photographic sleight of hand John often employed when setting up advertising photos for Varney: Oil tanks in Fig. 2.6 should be visible behind the

icing platform in Fig. 2.5, but aren't; obviously, structures were rearranged to show off Varney's reefers and tank cars, not to mention the Dockside, 4-6-0 and EMD F3 diesel.

all mirrors regardless of size. Mirrors were never located where visitors could see their own reflection from anywhere on the layout. Tracks, such as those in the yard, that ended at the mirror surface had the rails at an exact 90° angle to the mirror. This included curved trackage, since any variation from the rule resulted in a visual kink in the curve at the mirror. The top edge of the mirror had to be hidden in some plausible fashion to minimize the chance of detection by an observer. Signs that could be seen in the mirror were kept to a minimum, and those that were used had the lettering reversed so the reflection was normal and readable—thus “proving” to a suspicious viewer that there was no mirror. Where possible, figures that could be seen directly as well as in the mirror were painted differently on the side to appear in the mirror to become a different figure entirely.

All of this added to the illusion of depth and, when carried out with the consummate artistry of John Allen, was insidious and bedeviling to even a careful observer. The use of mirrors had seldom been handled as effectively as on the Gorre & Daphetid.

As in the prototype, the yard at Great Divide was one of the keystones to the operational concept. A brief examination of how and why trains ran on the G&D will give you a better understanding of both the railroad and the responsibilities of individual operators.

All traffic fitted into a master schedule, and most of it originated and ended at the main yard. The exceptions on the main line were the two peddlers, each of which worked half of the main, and neither of which ever actually went into the main yard. The peddlers “met” at Port insofar as it was the dividing line between their areas of responsibility (refer to the trackplan, Fig. 1.13, in the December issue). This made trains emanating at the Great Divide yard “through” trains by definition, whether they were passenger or freight.

Passenger trains came in two species: express and local. Express passenger trains were operated, generally speaking, as “unit trains” with only the head-end cars (baggage and express reefers) ordained to be switched at such major stops as Gorre and Port. The local passenger train made all stops and did not change in consist.

Freight trains originating at Great Divide included blocks of cars for the major switching points (Gorre and Port) with further blocking to sort cars by whether they were for destinations actually in the switching areas, or were for transfer to other trains (such as the peddlers) for onward movement to way destinations not served by through trains. This may be an over simplification but, by and large, it covers the concept stripped to its essentials and without the nuances of local rules, speed restrictions and a dozen other variables that added interest and complexity to the game.

Under the overall operations planning, the yard operator was charged with the making up and breaking down of trains. His primary concern was blocking each consist according to destination as well having the trains ready to depart on schedule. Switching the industries in his area was also his responsibility, but here he had a certain amount of flexibility and could attend to this between trains.

The control panel at the Great Divide yard could comfortably accommodate two operators: the main yard man and the engine hostler. Two experienced men could work as a team in helping each other, since the wiring allowed the hostler to take the yard goat into the storage tracks; and the yard, or even a main-line, cab could take an engine all the way into the roundhouse.

To help the engine hostler keep track of motive power, there was a card nearby listing the maximum tonnage (consist) rating for each locomotive and its top allowable speed on the main line. If he were a prudent man, he checked with the operators at Port

and Gorre to determine how many cars they would add to the train (less those they would be receiving). With this information, there was no reason for main line traffic to encounter a situation where everything ground to a halt with a main line train stalled on a grade for lack of tractive effort.

The railroad was wired for versatility to allow the yard operator to give the main or yard lead to main line cabs. This afforded a nice prototypical touch: The main line engineers had their trains from the start to the finish of each run.

Yard tracks were selected at the panel with an in-line gang switch salvaged from an old jukebox. Pushing the desired button automatically aligned switches for that track (today, a diode matrix would be used to accomplish the same thing, but diodes were unknown when the yard wiring was put in). The caboose track was at the front of the freight section, and it and the rest of the yard tracks were served with mechanical uncoupling ramps, all activated with a single push-button switch.

There was a double-slip switch at the yard throat, but on a track adjacent to the main. John elected to keep that turnout in a location where any troublesome misbehavior in that intricate trackwork would have a minimal effect on the overall operations. It was installed early in the life of the G&D when double-slip switches were rare indeed on any layout, and all of them had to be hand-made.

An interesting sidelight on the yard: The main line ducked under the yard tracks on the way to Cross Junction (Fig. 1.13), and for years John confided that this section of track was the least accessible of any on the railroad. Around 1970, he accidentally discovered that he had put in a lift-out access hatch for that trackwork when it was originally built and then had promptly forgotten it in the press of other priorities. Instead of being overjoyed at finding the access hatch again, he went around for days muttering morosely that his mind was failing him.

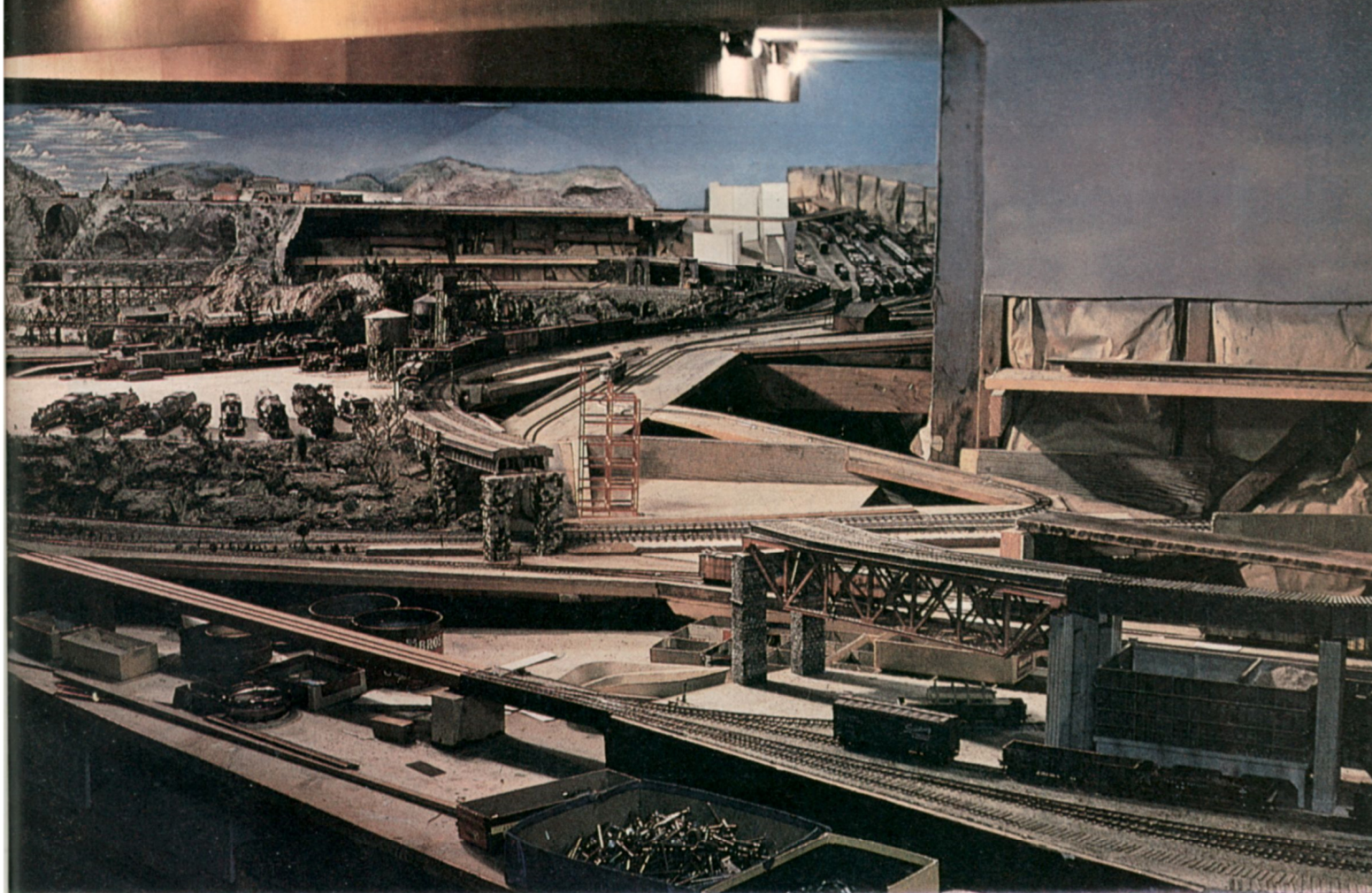
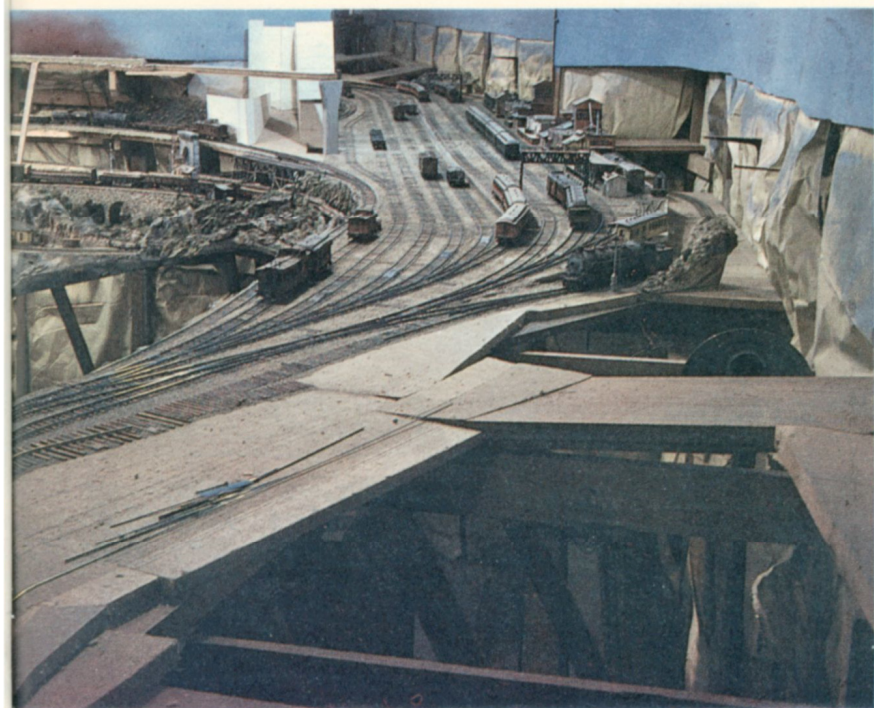


Fig. 2.7 ▲

▼ Fig. 2.8

Fig. 2.9 ▼



A careful study of these two views of the under-construction yard at Great Divide (Figs. 2.7-2.8) clearly shows that the yard tracks stub ended at a large mirror mounted precisely at right angles to the tracks. It was also arranged to prevent operators from seeing themselves in the mirror. The cardstock structures John used to get a feel for the ways his initial plans were going to look in three-dimensions are also evident near the left end of the yard. The backdrop-corner-hiding skyscraper at Port (Fig. 2.9) was built from sections in modular form; others later used this same mold.

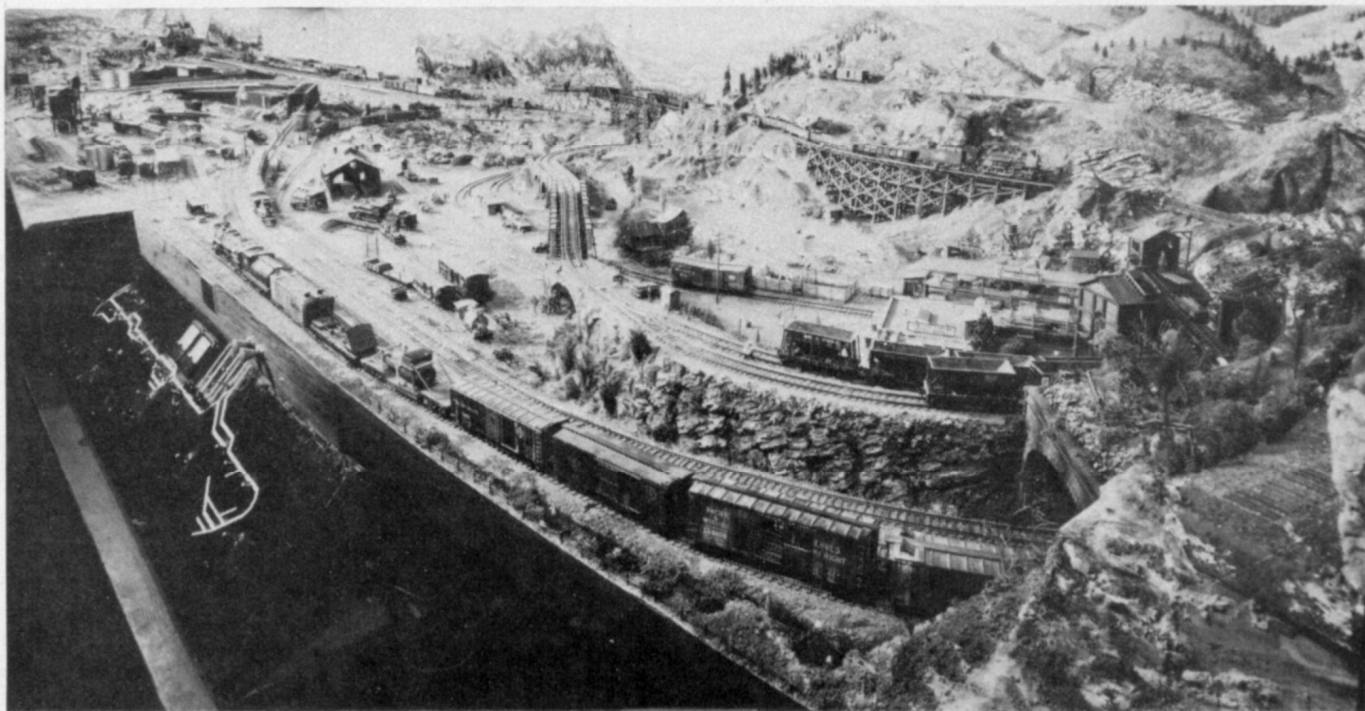


Fig. 2.10

The second Gorre & Daphetid



Fig. 2.11

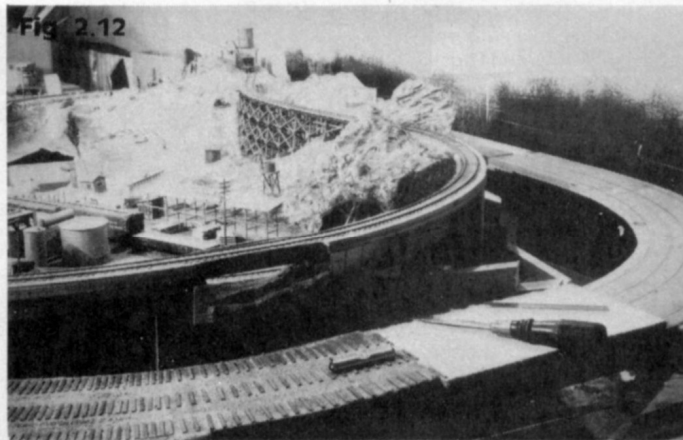


Fig. 2.12

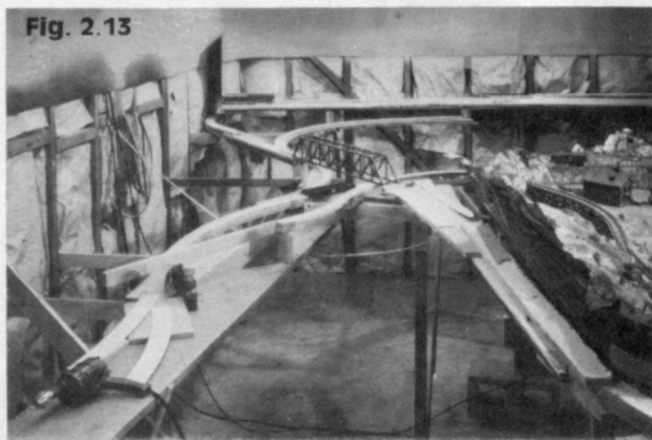


Fig. 2.13

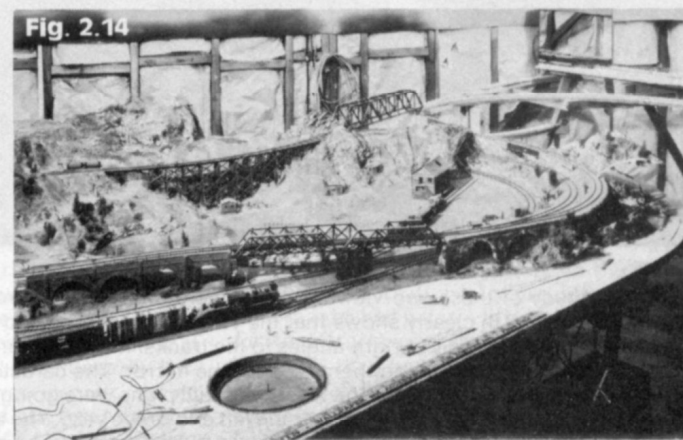


Fig. 2.14

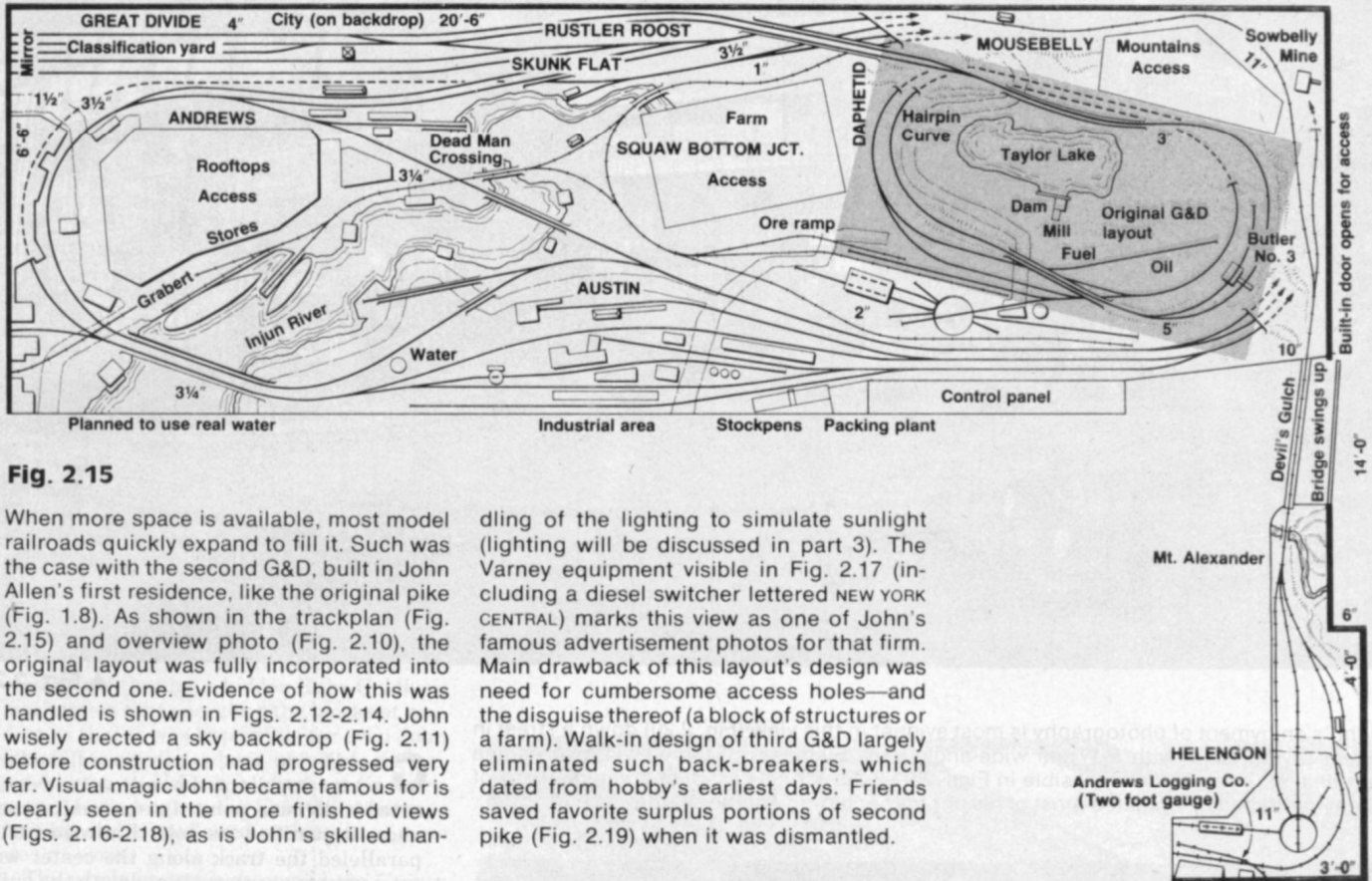
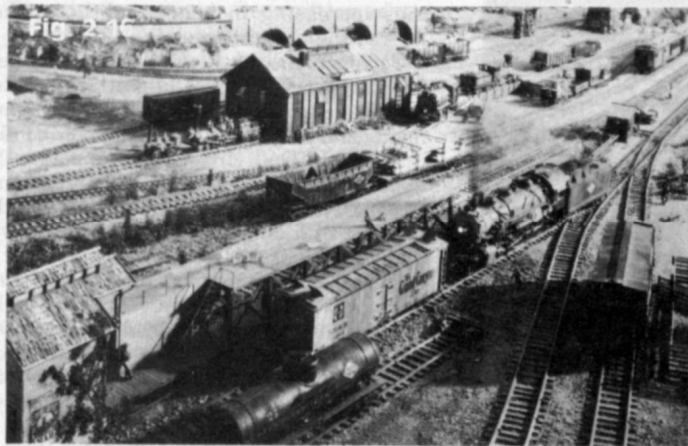


Fig. 2.15

When more space is available, most model railroads quickly expand to fill it. Such was the case with the second G&D, built in John Allen's first residence, like the original pike (Fig. 1.8). As shown in the trackplan (Fig. 2.15) and overview photo (Fig. 2.10), the original layout was fully incorporated into the second one. Evidence of how this was handled is shown in Figs. 2.12-2.14. John wisely erected a sky backdrop (Fig. 2.11) before construction had progressed very far. Visual magic John became famous for is clearly seen in the more finished views (Figs. 2.16-2.18), as is John's skilled han-

dling of the lighting to simulate sunlight (lighting will be discussed in part 3). The Varney equipment visible in Fig. 2.17 (including a diesel switcher lettered NEW YORK CENTRAL) marks this view as one of John's famous advertisement photos for that firm. Main drawback of this layout's design was need for cumbersome access holes—and the disguise thereof (a block of structures or a farm). Walk-in design of third G&D largely eliminated such back-breakers, which dated from hobby's earliest days. Friends saved favorite surplus portions of second pike (Fig. 2.19) when it was dismantled.





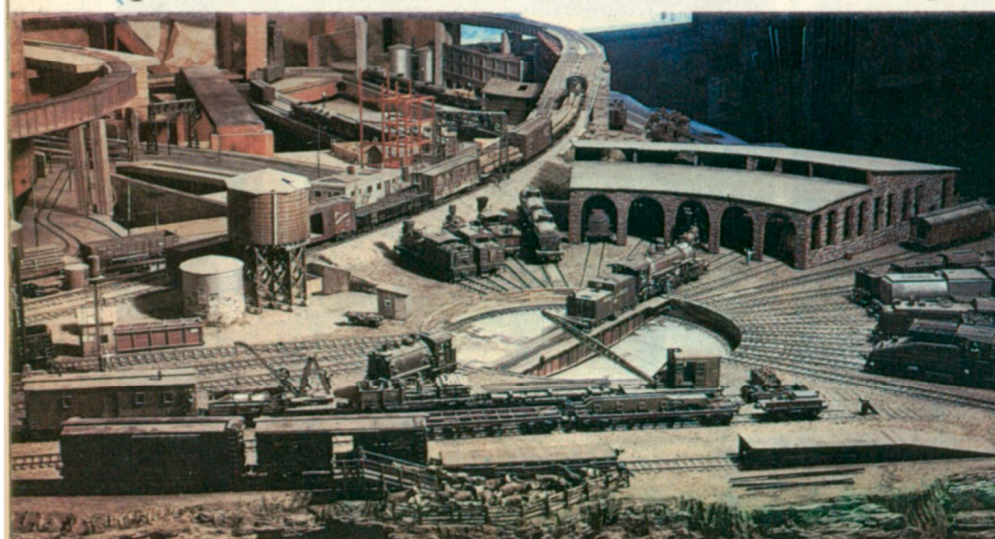
▲ Fig. 2.20

John's enjoyment of photography is most evident in this view (Fig. 2.20) down a street in Great Divide taken with a 17mm wide-angle lens. Elements of the well-known engine terminal at Great Divide are visible in Figs. 2.21-2.22. John's cast of characters, many of them hand-made, populated most of his photos, including another Varney ad (Fig. 2.23).



Fig. 2.21 ▲

▼ Fig. 2.22



Great Divide was, as mentioned, the largest metropolis on the railroad and designated a division point. In size and appearance, it justified its role. Railroad Street paralleled the track along the center with cross streets at intervals and with the buildings increasing in height subtly as they neared the backdrop.

To reach the downtown section and perform any work, a large access pit was located there, effectively disguised by hotels, apartments and office buildings. The room configuration left an inset corner near the hypothetical dividing line between Port and Great Divide, and anyone who has had the problem of hiding such an incongruity will know that it taxes the builder's ingenuity to come up with something plausible. John's solution was "Whit's Tower," an office building that rose exactly to the ceiling. Fig. 2.9 is this impressive skyscraper from the Port side, made of dozens of plaster castings of a scratchbuilt basic module three windows wide and one floor high. It was designed to interlock horizontally and vertically and provide no clue that the building wall was not a single whole part of the finished structure. This technique worked out so satisfactorily that John used it for several other large buildings and even sent castings of the module to friends for them to duplicate for their own purposes.

In talking about Great Divide, the city, it might be noted that John had an almost uncanny ability to make overall scenes look logical and therefore believable. His transition from the commercial buildings downtown to those of an industrial nature down the yard a ways is an example. The transition from city-scape to open country in a very limited space at Cross Junction is another.

Some of this can be attributed to his practice of initially using cardboard mockups to get the general proportions right before de-

tailoring the buildings. These were for the most part three-dimensional flats, and the mockups are evident in Fig. 2.7 at the far end of the yard. These were changed and rearranged during construction until they looked right and remained simply white cardboard cutouts until he was satisfied. The access opening for downtown Great Divide is evident at the right in this photo near the foreground, but he managed to make this disappear in the city not too long after. In contrast with the larger canvas he had to work with on the new G&D, he must have been grateful not to be faced with the restrictions of the small industrial switching areas such as those seen in Fig. 2.16 on the first (Fig. 1.8) and second (Fig. 2.15) layouts.

Great Divide had a supposed population large enough to support its own transportation system which was all John needed to put in a trolley line, the tracks of which followed some of the downtown streets. Having both an overhead wire and two rails to work with, he used the overhead to furnish an early version of constant lighting and conventionally powered the motor with the rails.

A novel feature of the trolley line was a series of stopping blocks at street corners to add realism. These short stopping blocks were wired through a hidden Rube Goldberg mechanism that energized the blocks at random so that it was impossible for even John himself to predict where or when the car would stop to pick up or discharge passengers. At one point on the line, the street was torn up and a good-sized maintenance crew was at work.

The whole system was named the Cooper Electric Company in recognition of Dave Cooper, an electric railways buff who worked side by side with John during construction of this eye-catching feature (Fig. 2.20).

Engine servicing facilities held a fascination for John, just as they do for a lot of us. His initial efforts on the first two layouts only sharpened his interest, not that they needed sharpening as Fig. 2.17 demonstrates. Now he had room to stretch his imaginative mind.

The enginehouse/turntable/servicing facilities were on a slightly raised section of benchwork to the right of the yard throat. There were 18 storage tracks to the right of the turntable with only five of them actually in the roundhouse. These storage tracks were reached via an inbound and outbound pair of tracks and across the nearly automatic turntable itself.

Those tracks not in the roundhouse were lavishly detailed with an intricate fan of overhead piping to furnish steam and air to each track. There were even lights at each "stall" courtesy of a grain-of-wheat lamp on the piping support frames, plus the usual junk found around an engine storage area.

In addition to the inbound/outbound tracks, there were three more spurs down a ladder track—one a rip track, the second for the G&D wreck train, the last for the gas-electric when it was not out on a scheduled run. Most of this is identifiable in Fig. 2.22, taken before the area was anywhere near completely detailed.

The roundhouse was built using a technique John also employed in making stone arch bridges (see Malcolm Furlow's review of

this topic in November 1980 RMC), retaining walls and even stone station platforms. With a piece of what he called "ship linoleum," he simply carved the mortar lines for either stone courses or random stones with a sharp knife. Block printing uses the same technique. He could turn out an extensive piece of work in an astonishingly short time, much to the envy of anyone who watched him temporarily turn stone mason.

Once the roundhouse was basically up, he left it for other chores, and it stood for more than a decade with no windows or further details. Then he cajoled an itinerant handyman to glaze the windows, add smokestacks and put in lighting while he was putting in the cranes, boiler flue rack, benches and machinery. Up till then, he had been careful not to let his camera get too close to the building.

In addition to all of the rusting drivers, air pumps, brake rigging, pilot assemblies and valve gear linkage you'd expect to find around an enginehouse, there was a liberal sprinkling of workers in denims and overalls to bring the whole scene to life and give it purpose. Nor was the area overlooked in the operations, either—the hostler was charged with using the yard goat to pick up and de-

nance or fiddling with for years at a time. John once commented that a turntable that performed well had about the same level of difficulty as 50 finely tuned turnouts—the reason why there aren't all that many around on model railroads.

An aspect of the G&D that went a long way toward bringing it to life was the generous, almost lavish, use of figures. As long as 30 years ago, John authored an article on making your own figures by using wire and beeswax, a technique that had much merit in a time when there were precious few figures available commercially. His own figures were distinctive, and his use of them to spark up a scene was unparalleled at the time. We all were dazzled by his people as they appeared in those old Varney advertisements. Fig. 2.23 offers a sample of his work in this sometimes neglected aspect of the hobby.

The population of the G&D was in a sense mobile. For photographs, John would gather an appropriate population of figures, and they would stay there until he decided to use them somewhere else. Some particularly memorable characters literally wandered all over the railroad.

From the questions asked by his many vis-



liver cars to a number of locations including junk-filled gondolas for the rip track, coal hoppers to the boilerhouse and gons to the ash pit.

Indicative of the intense detailing was a white residue along the inbound track left by boiler compound where the hostler used his boiler blowdowns after dropping the locomotive fires at the ashpit (Fig. 2.21). Careful attention to touches such as this was a trademark of the Gorre & Daphetid and provided an unending source of ideas for visitors or those who knew it only through the photos that appeared in the hobby press during those years.

One last comment on that 90-foot turntable: It was indexed electrically instead of mechanically, and after looking at the home-made lashup under the layout that accomplished this, you'd have bet good money that it wouldn't work. It did work, not only reliably but requiring virtually no mainte-

itors, we can assume that a great many more articles of a "how-to-do-it" nature would have been welcomed by fellow hobbyists. John simply didn't enjoy doing this type of material for publication. It was also probable that he would have found it difficult to put into words something that fell somewhere between art and voodoo.

That covers the basics of the main yard and city at Great Divide; as with most areas of the G&D, an examination in greater depth would take much more space than is readily available. When we next get together for reminiscing about the Gorre & Daphetid in the April 1981 issue of RAILROAD MODEL CRAFTSMAN, we'll discuss at some length the lighting on the layout, one of the several major areas in which John Allen excelled—one that had the potential to vastly improve, or utterly ruin, the overall effect of this or any other model railroad.