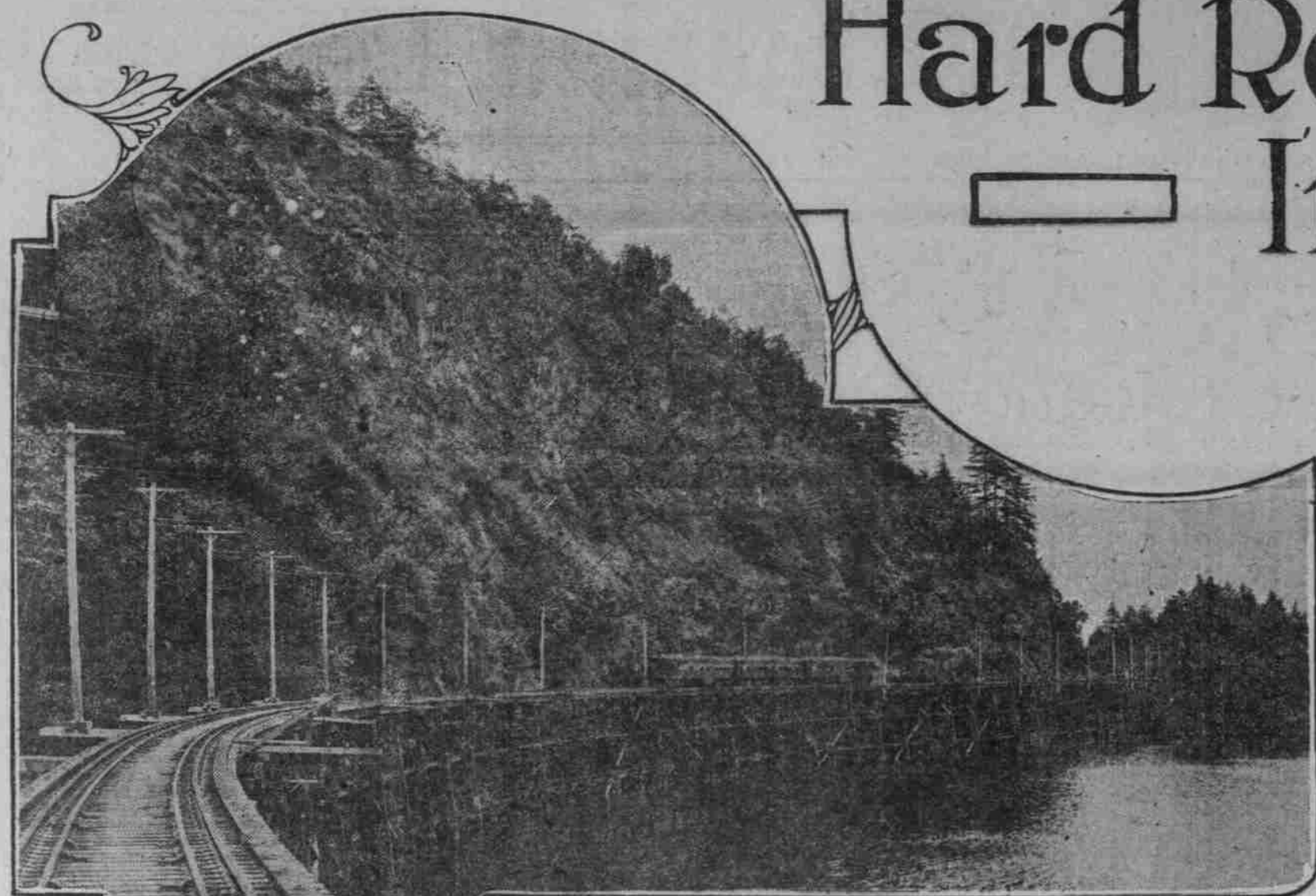


Hard Rock Gang Lives In Luxury

Only Known "Sea-Going Tunnel Crew" Working Near Portland



Night Shift Having Party in Main Saloon.

ONE OF the most interesting tunnel projects in the annals of contracting is now being carried forth just at Portland's boundaries. It is a job costing over a quarter of a million for the Southern Pacific through the mass of live rock at Elk Rock, on the Willamette valley branch of the electric interurban. Elk Rock is on the west side of the river just across from Milwaukie and few of the patrons of the red cars will forget the long trestle at that point that winds about the face of a cliff over 200 feet high. Far below this trestle, for it is some 60 feet high at places, lies the deepest portion of the Willamette river, a hole in excess of 100 feet in spots. This makes rather an interesting study, as with river hole, trestle and cliff combined there is nearly 400 feet of rock extending towards the sky from the bottom of the river.

There are patrons of the Southern Pacific who refuse to travel this route, and others who do so only by sheer holding of their nerve. As the cars crawl out on the trestle, which engineers pronounce as safe as the ordinary wooden structure of this type, many a ticket holder becomes squamish when they see the river way below and the towering cliffs hanging far above. It is just the combination of circumstances that makes it a fearful place, for the facts are, according to the men in charge of maintenance, that it is as safe as any of the rest of the line and they have had few accidents there. In any event there are two watchmen on duty at all times, one at each end of the long trestle.

Narrow Gauge Ran Here.

Few of the old-timers in Portland will forget the ancient narrow gauge that traversed this route to Oswego with its pepper-box locomotives and its few pieces of equipment, but this line was the predecessor of the fast modern trains that travel this way today. At one time the trains only went as far as Elk Rock and transferred their freight and passengers there to river boats that completed the remainder of the journey to upstream points. Then came the great improvement with the building of the trestle and through service. The Southern Pacific officials claim that this ambitious piece of costly engineering is merely another of their efforts in their striving for safety, they not wanting any of their patrons to fear at any time that their road is not of the safest and that they are not always on the lookout for means of improvement.

The project has any number of novel features from engineering and other angles of treatment. The tunnel proper will be 1235 feet long and the crew will move 30,000 yards of rock from its bore. It is a rush job and the contractors, the Hauser Construction company, have to turn over the job completed by November 1. The indications are that the regular trains will be running through by November 15. Scott E. Gordon is the railroad engineer in charge of the work and he has a full crew with him. Gordon was originally sent out to do the first location work and as it was green country and the cliffs difficult of access the crew had many hard jobs. In any event he knows his subject thoroughly and has had complete charge of the project since its inception. His assistant is F. A. Boss.

Excursion Steamer Chartered.

In moving in the construction crew the contractors were confronted with the problem of getting right on the job, and didn't want to lose any time in constructing a camp. They solved this difficulty by leasing the old excursion steamer T. J. Potter from the O. W. R. & N. company and towing to Elk Rock and converting it into a camp. They are paying a high rental for the old craft but they were able to move in several weeks before they would if it had been necessary to build a camp, and they have the best kind of accommodations for their crew. The Potter yet has all of its wonderful staterooms, cabins and saloons and these are being used by the hard-rock men, veterans of many a tough camp in the remote fastnesses of the mountains on the American continent. The experience is novel for them and they are having the time of their lives.

Kenneth Hauser is in charge of the contract crews on the job and his is the responsibility for making the time and getting through the bore on schedule or suffer heavy penalties. The time limit on the contract means that the crews must drive over seven feet of tunnel daily from each end. They are right on schedule, but are



Scott E. Gordon, S.P. Engineer, Kenneth Hauser and Their Lieutenants

expected to gain as the work progresses. At first it was thought that a 95-foot drift would have to be sent into the center of the tunnel from the river side so that the crews could work from four ends, but the present gangs are going ahead with their normal arrangements. Two big steam shovels were sent on the job at the start and took out the material near each portal and as far back as they could reach. Then two crews came on with their rock work and the rest of the job has been through drilling and well-placed shots.

Tunnel for Safety Only.

The tunnel is being built on a reverse curve, paralleling the trestle on the outside. It is also being built at a slant towards the south portal. This enables the crews to make use of different methods of driving at each end. On the south they "trap" out the material, running a narrow stop along the roof line and another large enough to care for the small construction cars along the bottom. Then they break the rock loose from the top and let it fall through traps into the cars as they come underneath. This is worked on the lower end of the tunnel that has plenty of drainage as the waters do not get a chance to back up and interfere with the crews. The railway does not shorten its line by the job.

On the other end of the tunnel, the end towards the city, they are working with a series of three benches towards the head. The batteries of Ingersoll-Rand drills work on the upper bench and break away the rock from the roof and then the teams behind shoot down the remainder as the top crew drives through. The waste material from the two lower benches is handled by a steam shovel working under pneumatic pressure from a great air compressor on the outside. It would be impossible to have a shovel working inside under its own power on account of the vapor and gas. As the crews move into the tunnel they are followed by mechanics who string in electric wires and air hose so that there is always ample light and plenty of fresh air. It is imperative that the men have every possible aid in their drive for time in construction.

Men Live as Favored Guests.

But the startling thing about the work is the men's quarters. It is doubtful if any construction crew ever had such palatial accommodations. Each man has a cabin all his own with running water and electric light. They have the whole boat to themselves and anyone who made any of the great excursion trips on the old Potter in the days when she was the queen of the river knew what a fine old craft she is. It is a startling thing to come aboard and go into the first-class saloon and see a rough, unkempt crowd of toll-stained workmen sprawled about on the plush seats of the easy chairs while one of



Pneumatic Drills on Top Bench of Tunnel Heading.

their number plays on the great grand piano and gets help from those who take their violins and other musical instruments out to complete an orchestra. It is the first sea-going tunnel crew so far as known and their boat has all of the machinery yet in its hold to start out on a trip.

D. A. McDonald acts as timekeeper on the craft, though most of the men address him as purser. Kenneth Hauser ranks as skipper and the other most important man of the crew is Fred Leonard, the chef. Leonard has a fine workroom, the pride of the great river fleet in the old days, and the crew certainly get the best the market affords. The boat is piped with Bull Run water from the city mains, coupling onto the old service pipes in the craft, and the same system has been adhered to in putting in electric lights. This means that the men staying aboard have every convenience except that they cannot go for a cruise; there is no fuel for the engines. Even the old lifeboats swing from their davits and the rockmen have become expert at boat drill, taking the small boats away for fishing and bathing expeditions. It's a great life and the men certainly appreciate it.

Vacation Life Brings Pleasure.

One of the old characters on the crew is a real hoary powder man, who has been shooting rock for several decades. As a general rule he is rather radical and puts over plenty

of kicks, but he was heard telling a comrade, in all seriousness, that it was worth paying for to work on this kind of a job, instead of getting paid for it. McDonald keeps the "ship's log" in the purser's office and has all of the ancient annunciator system right at hand. He has a habit of asking the newcomers to "register," shaving out a book for that purpose and then wants to know if they desire a stateroom "with or without." They always take it "with," no one knows what it means, and McDonald then tells them to "ring if they want anything." It never does any good to ring, for the bells are disconnected, but it helps materially to add a great deal of tone to the establishment.

The material that is being taken from the north portal of the tunnel is being dumped directly into the river. There is plenty of room there for it without it hampering, in any way, navigation, on account of the great pool, but permission had to be given by the United States engineers before it could be done. The rock from the south end is being loaded into great 40-yard "battleship" gondolas, part of the equipment built for the great Salt Lake-Lucien cut-off, and hauled into Portland, where it is being used on the Jefferson street fill. The engineers say that the hill here is the result of a great lava flow and that the basalt is porous and heavily seamed with lime.

This causes fissures and as the air shakes the lime off much of the material drops off in dangerous fashion. The exact measurements of the tunnel bore, which is exceedingly large for a single track, is 13x34 feet. This is done for the reason that both steam and electric trains are to be operated through it and have to have ample clearance.

Each Man Has Stateroom.

Off the Potter there is quite a summer settlement where some of the married members of the crew have their families. There is ample accommodation for 150 or more men aboard the great boat, but there are only about 100 on the job at present, there being ample margin for expansion later if necessary. Two shifts are worked, as it does not make a great deal of difference whether it is day or night when men are working in a tunnel. The food supplies for the crew are brought to the Potter daily by a river steamer and landed right at the chef's back door. Rock gangs of this character are nearly always well fed, as the nature of their work makes it necessary that they be in perfect condition, but the food on this job is far above the average.

Last week the reports showed that about 200 feet of the tunnel was completed and the men are going their hardest. The class of men who work on jobs of this character follow their specialty all their lives, as

a general rule. They are the highest paid construction men on any job and usually work on a yardage basis. The interior of the tunnel is being timbered with white or Port Orford cedar, one of the most fragrant and lasting woods where there is water from seepage. The portals will be concrete and concrete will also be placed in the bore wherever there appears to be any danger of falling rocks.

Far on the top of Elk Rock are located some of the most elaborate estates in the city and the tunnel men have been at their best to prevent the jar traveling through the hill to these homes. To date they have not even cracked the bottom of a goldfish pond, of which there are

several just a few yards through the hill from their work. It calls for some very exact blasting so as not to do any injury. The gang is an exception; are on their best manners both on and off the job, do a great stint in the tunnel, eat largely, and never forget to take off their hats when they step in the women's cabin on the Potter. It is a briny crew, and they have entered into the novel spirit of their camp with their salty phrases. The work is one of the most interesting contracts under way in the state at present, and there are so many angles to make it out of the ordinary. It is a real rush job in every sense of the word, and is getting the most expeditious treatment possible.

PRINCESS OF SOUTH SEAS VOLUPTUOUS MERMAID

Tahitian Beauty in Native Bathing Costume Is Idyll, Travelers Into Far Distant Isles Declare.

THE Princess of Noanoa Tlare, (Fragrance of the Jasmine), although a Marquesan, was a half-European product. She had known London and Paris. In his new book, "Mythic Isles of the South Seas," Frederick O'Brien tells of an excursion he made with the princess to the falls of Fautaua.

I knew a moment of squamishness, echo of the immorality of my acquaintance and my race conventions. I felt almost aguish at finding myself alone with that magnificent creature in such a paradisaical spot. I wondered what thoughts might come to me. I had danced with her, I had talked with her under the stars, but what might she expect me not to do? And what was an accidental, a city man before her? She retired behind a bird's nest fern, on the long, large, celadon leaves of which were the shells of the mountain snail. At her feet was the bastard canna, the pungent root of which makes Chinese curry.

When she emerged, she was an amazing and enchanting personage. She had removed her gown and wore a pareu of muslin, with huge scarlet leaves upon white. She was tall and voluptuously formed, but she had made the loin-cloth, two yards long and a yard wide, cover her in a manner that was modest, though revealing. It was the art of her ancestors, for this was the shape of their common garment of tapa, a native cloth. With a knot or two she arranged the pareu so that it was like a chemise, coming to a foot above her knees and covering her bosom.

Her black, glossy hair was loose and hung below her waist, and upon

it she had placed a wreath she had quickly made of small ferns. That was their general custom, to adorn themselves when happy and at the bath.

The eyes of Fragrance of the Jasmine were very large, deep brown, her skin a coppery-cinnamon, with a touch of red in the cheeks, and her nose and mouth were large and well formed. Her teeth were as the meat of the coconut, brilliant and strong. Her limbs were rounded, soft, the flesh glowing with health and power. She was of that line of Tahitian women who sent back the first European navigators, the English, to rave about an island of Junos, the French to call Tahiti, the new Isle of Venus.

I had but to tie up my own pareu of red calico with white leaves in the manner Lovania had shown me to have an imitation of our usual swimming trunks.

"Allons!" cried the princess, and running toward the waterfall, she climbed up the cliff to a height of a dozen feet and threw herself, wreathed as she was, with a loud "Aue!" into the pool.

Giving a Demonstration.

Last winter I was at a large skating pond. There were crowds of boys and girls there. I had just learned to skate backwards, so I thought I would give a demonstration. After I had attracted the attention of every one and was feeling exceedingly pleased with myself, down I went. I had not been watching where I was going and had stumbled over a small boy, who hollered: "Help! I'm smashed!"

—A. D. L.