

WORK ON TRANSCONTINENTAL RAILWAY

Great Progress Being Made on the Winnipeg-Fort William Section of the National Highway—This is Known as the McArthur Contract and is the Biggest Ever Taken in Canada—Time is the Essence of the Contract and Operations are Being Rushed.

THROUGHOUT the whole of the past winter, active work has been pushed on the section of the National Transcontinental railway between Winnipeg and Fort William, known as the McArthur contract. This contract, which is considered one of the biggest of the kind ever taken in Canada, if not in the world, runs through a most difficult country, a country of rock and muskeg, the rock of the hardest kind of granite, and the muskeg seemingly bottomless in some places.

When the engineers laid out their line from Winnipeg east, a straight route, a short one, and minimum grades were the first consideration. If a small lake was encountered it was either to be bridged or an embankment constructed across it. If huge rock ledges were encountered, either a cutting or a tunnel was run through. Enormous work was entailed in these plans, but when completed, though the cost will be great, the road will be one of the finest possible through such a country. It makes possible the first consideration of the traffic manager, a maximum amount of freight hauled with a minimum expenditure of energy. The quality of the roadbed being constructed will also permit of the use of the heaviest types of locomotives, hauling huge trains.

Time is the essential phase of this contract. Conditions in the west are such that at the present time no effort can be spared which has for its aim the improvement or expansion of the transportation facilities west of the great lakes.

The existing railroads cannot take care of the business offered them, and it is forecasted that by the time the new transcontinental route is ready for operation there will be sufficient business waiting for it to keep it busy to capacity. With this fact in evidence no time can be lost. One year lost, and it could easily be lost on such a contract, means many thousands of dollars of business diverted to other lines, and, even more important, it means the retarding of the growth of the west by just that much.

J. D. McArthur secured the

work was divided up into sections of from a couple of miles to ten miles in length, and these were sublet to smaller contractors. In this way a tremendous amount of work has been accomplished, though the unsatisfactory condition of the labor market has been a hard thing to contend with.

Starting at Rennie, where the G.T.P. crosses the main line of the C.P.R., work is being pushed ahead all the way through to Fort William. Winter has offered no great hindrance to the work, in fact in some cases it has been a decided benefit. The country through which the line runs is wholly unorganized, and much of it was an entirely unknown quantity till the advent of the location engineers.

There were neither roads nor trails, the only means of communication ever used being the water routes through the system of lakes and rivers which cut it at all angles. An occasional trapper or prospector might have made his way along the canoe route, but there were no areas of land suitable for farming, or timber to tempt the lumberman, hence the country has never been opened up.

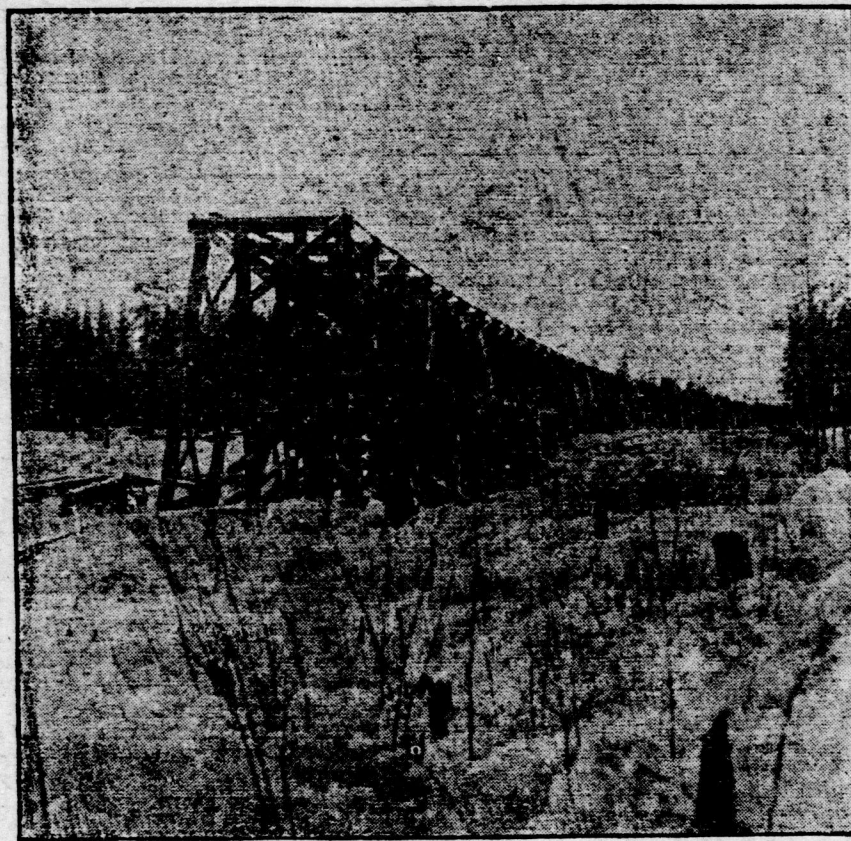
It was through a country of this character that the contractor was compelled to take in his supplies and plant. The nearest railroad station was many miles away and he was separated from his work by many miles of rock ridge and muskeg. In a case of this kind winter weather was a great advantage, and during the past season thousands of dollars worth of supplies have been hauled in over trails which could not be negotiated during the summer months. Heavy machinery and provisions have been stored in anticipation of the summer work, as well as material for the permanent camps, and all the time gangs of men have been pounding away on the heavy rock work.

Rock work, while difficult, is not the task that the name might imply, and laborers who have had

posed the drillers are set to work.

Three men constitute a drilling gang, two to swing the sledges and the third to hold the drill. The men take turns in this latter work, giving some variation to the day. The line of drill holes having been decided upon, the gang sets to work. The first drill used is about a foot in length. It is of tempered steel, and as soon as it has been forced down so that there is not sufficient room left for the drill-holder to grasp it, a longer one is substituted, and so on, till the required depth has been reached. This may be anywhere from a couple of feet to 20 or 30 feet down in the rock.

Finally after several days of drilling the whole battery of holes have been completed. It is then that the experienced rockman comes into play. He has studied the formation of the rock

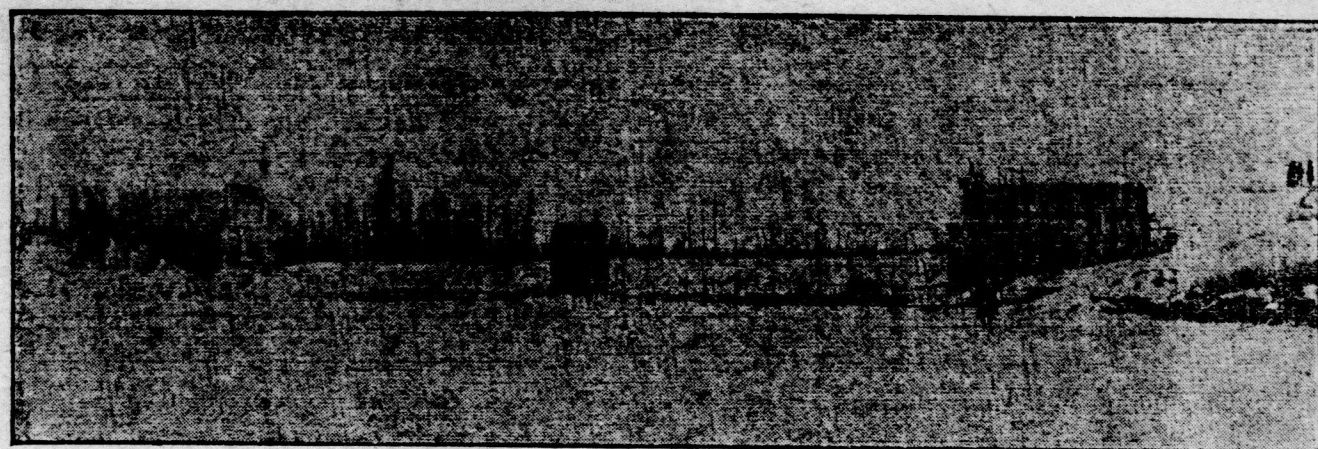


Timber Trestle on Contractor Kert's Section of the G. T. P. Construction, Near Rennie.

before laying out the holes, and now that they have been completed he must figure out the exact amount of powder (dynamite) necessary to shatter the rock so that it may be readily handled. If

hours or after the men have stopped work for the day. Two methods are used. In one a time fuse is employed, the foreman going along the line of holes touch-

pressor plants or boilers to run power-driven drills. These drills do the work of several gangs of men and effect a great saving in time and labor.



Where the G. T. P. Crosses the Whitemouth River, Showing Piers Which Will Be Connected by a Steel Superstructure.

Life in one of the construction camps furnishes an excellent field for character study.

There men are gathered from all quarters of the globe, giving an opportunity of comparing national characteristics at close range. There is a peculiar charm about railroad work, and the confirmed railroader is in a class by himself. So true is this that it has given rise to the statement that "once a railroader always a railroader." From timekeeper to waterboy, each has his allotted work and each is buoyed up by the hope that in time he may be in a position to take up a small contract of his own.

In the camp life is carried along with almost military precision. The men are called at 6.30 a.m. in the summer and after a hearty breakfast are on their work at 7 o'clock. In winter the call is given a half hour later. At noon an hour is given for dinner, and after a dip in cold water the men sit down to a bountiful spread. Here may be seen one of the most marked improvements in the lot of the laboring man. A few years ago a construction crew was fed on the coarsest of fare, salt meats, potatoes and bread being most in evidence. Now this has been changed and the cooks of some of the camps are paid better salaries than those employed in the medium-priced hotels of the city.

The menu provided is most varied, and unless there is a plentiful supply of fresh meat there is trouble. Competition in camp fare has become so keen that it is difficult to keep a crew unless the food provided is of the best.

Butter, preserved fruits, condensed milk and cream, cakes, pies and similar accessories are found in all of the best camps, and with a bush appetite it is easy to conclude that full justice is done daily. It might be supposed that food of this class would have the effect of inducing the men to eat more than they would of the coarser provisions provided in the past. This is not the case, as contractors state that not only do the men seem to require less of the varied ration, but that they keep in better health and are consequently able to do more and better work.

Hours of rest are variously spent about the camps. Dinner occupies but a few minutes and the balance of the noon hour is usually filled up with a smoke or a nap. After supper various

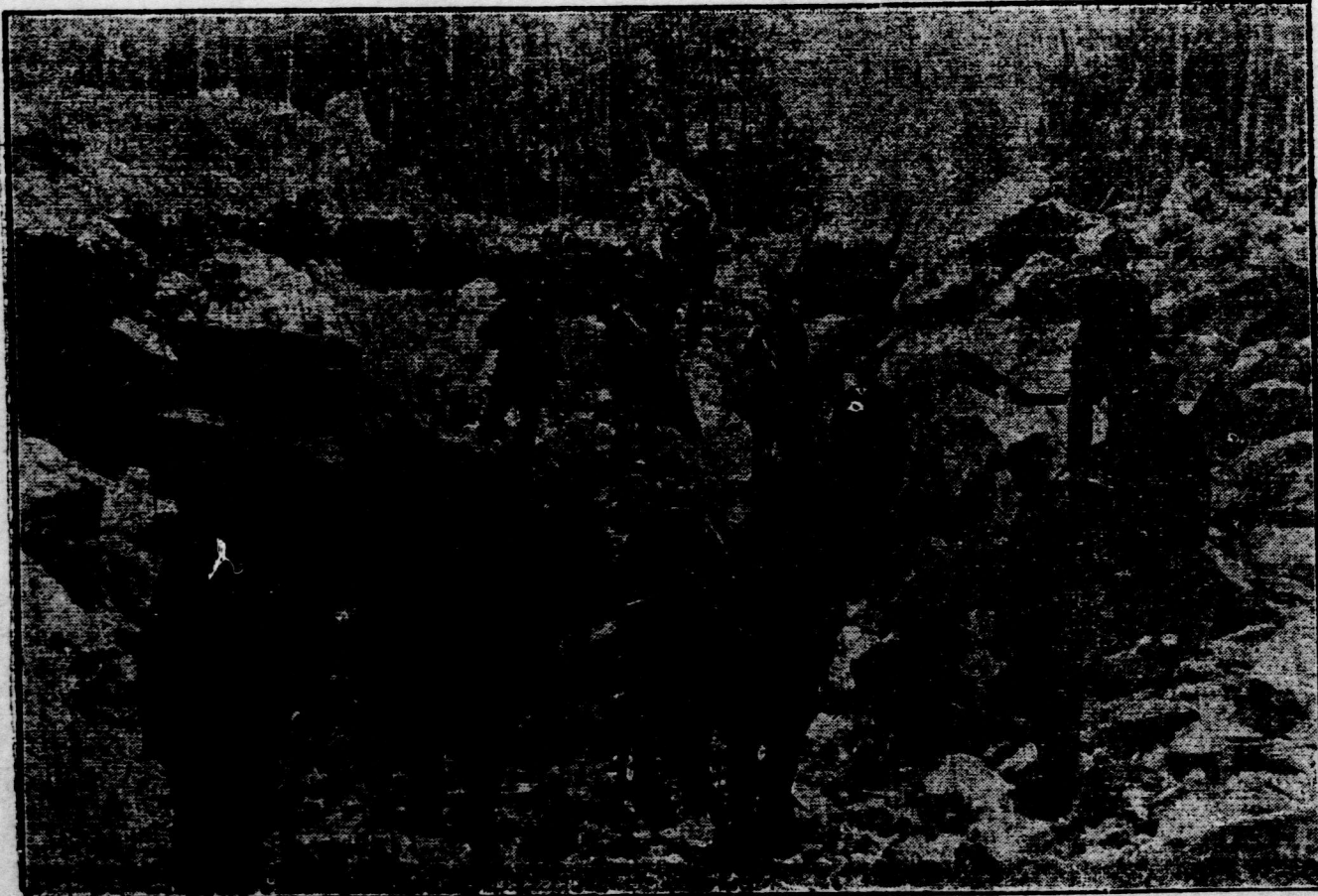
games or small concerts are the order of the day, and by 9.30 o'clock everyone is in the land of nod. Sunday morning the call is not given till 8 o'clock, after which the day is variously spent, and here the national characteristics are most strongly in evidence. The Galician will busy himself with some form of work, such as patching or mending. The Swede will be found trying to

perfect his knowledge of the English language or looking over his earnings and marking it in his time book. The old countryman spends his day in "swapping" long-winded stories, playing cards, or hunting the adjoining country for game. Fruitlessly, it might be added.

First among the contractors to finish their section has been Mr. Kert, who had six miles a short distance east from Rennie. The work has been completed and Mr. Kert is now waiting for suitable weather when he will move his outfit to a point near Fort William, where he has secured another section. Other contractors are rapidly approaching completion. One notable camp has been Peterson's, north of Kenora. Several most enjoyable concerts have been held there during the past winter, and talent of no mean order has been developed or unearthed. Dances too, have been given at some of the camps, invitations being extended to all within reach, the contractor willingly putting up a large share of the expenses as such entertainments had a tendency to make the men better satisfied with their work. With the labor market in the condition of last winter no trouble was too great.

Many of the contractors have gone to considerable expense to secure laborers. Agencies have been established in many parts of the old country and men shipped out to work. Others have been secured in like manner from Norway, Sweden and various of the countries of Northern Europe; at least one camp has been made up almost entirely of Italians. Despite these measures there has only been about one-fifth of the necessary numbers available, and work has been greatly retarded in consequence. Some improvement has been noted with the start of the immigration movement, which began in March, but it is doubtful if any of the work will be completed within the contract time.

Track laying on this line will not begin for some time. A short stretch may be carried east from Rennie, but nothing can be done on Mr. McArthur's section till the link between Superior Junction and Fort William has been tied in. Several miles of this are now ready for the steel, but portions of it are through exceedingly heavy country and will take some time to finish. Neither east nor west from Winnipeg does the line look promising to fulfill the prediction of the president that a portion of the crop of 1907 would be handled over the G.T.P.



Taking Away the Rock After Firing a Blast in a Cutting on the G. T. P. Construction, East of Winnipeg.

contract for the construction of this section of the national highway a year ago. It would have been impossible for any one single contractor or firm of contractors to handle a piece of work of such magnitude within the time specified. Accordingly the

experience prefer it to many kinds of earth work. When a contractor has taken over his work and prepared his camp, the first step is to clear his section. Trees, stumps and brush are removed and earth hauled away. When the face of the rock is ex-

posed the man knows his work he can save the contractor many dollars in powder, for if the holes be underloaded a second shot is necessary, and if they are overloaded there is a waste, each of which calls for extra expenditure. Firing is usually done at meal

time. To accomplish this an electric battery and different style of fuse is used. Instead of attaching a time fuse to the detonator an electric battery is used, and the insulated wires all carried to a central battery. When everything is in readiness a single turn of the handle does the trick. The time fuse method is usually employed where it is merely desired to break up the rock, which will be removed in small fragments later. The electric battery is used where it is impossible to move a large section of the cutting with the one discharge, and thus save handling the rock afterwards.