

Highballing at Sixty Below

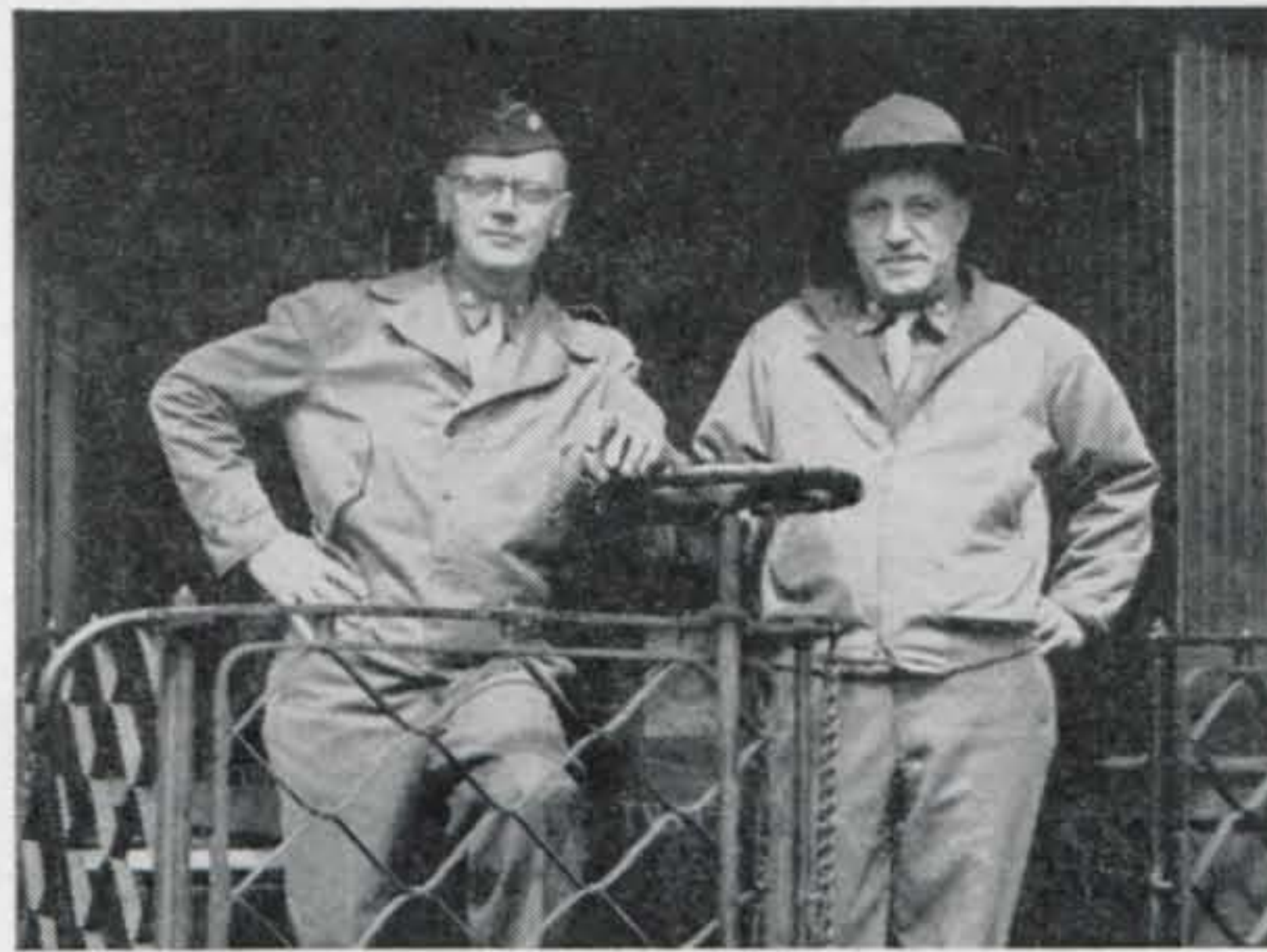
By Capt. RICHARD
L. NEUBERGER

Amid Alaskan blizzards too cold for a polar bear, the Army played Casey Jones to a vital stretch of railroad too steep for a goat.

WHEN the soldiers of the 770th Railway Operating Battalion came down the gangplank in Skagway's rocky fiord, they had looked with disbelief at the old Robert W. Service couplet that hung painted on a spruce plank over the counter at the Pack Train:

*This is the Law of the Yukon, that only
the Strong shall thrive;
That surely the Weak shall perish, and
only the Fit survive.*

A few months later, with the thermometer on the station platform at Whitehorse registering sixty-eight degrees below zero and the snow piled forty feet deep on the uplands at Fraser Loop, they scoffed no more. They had been sure that the aggregate of their careers included all there could be possibly to railroading. Now they knew what the old-timers and sourdoughs had meant who told them they were up against "the toughest 110 miles of track in the world."



Frostbitten G. I. railroaders: Lt. Col. H. C. Baughn, left, and Lt. Col. W. P. Wilson.

In civilian life, some of the soldiers of the 770th—a unit of the Military Railway Service of the Transportation Corps—had highballed Southern Pacific trains through the high Sierras, where snow can choke a pass between nightfall and dawn.

Others had brought New York Central fliers down the Mohawk Valley in the fiercest blizzards of the Eastern seaboard. Still others had stoked freight engines of the Great Northern across the Montana Rockies or braked the Milwaukee's gaudy orange Olympian down the twisting switchbacks of the Bitter Roots.

They had been recruited from seventeen major railroads in the United States. Their experience ran the whole gamut of American railroading. Sgt. James Jordan, decorated with the Soldier's Medal for muffling a fire in his cab, had pulled the throttle of a little humpbacked switch engine at a Chicago steel mill. Capt. Joe Winters had fired the big Union Pacific mountain locomotives which snaked the Spokane Limited up the Columbia River gorge. But none of them had ever seen anything to match the 110 narrow-gauge miles of the White Pass and Yukon.

"That line's too steep for a goat and too cold for a polar bear," said Pvt. Howard Foley, from the Long Island Railroad, in New York, after his first jolting journey over the 110 miles.

Yet those 110 miles were vital to the American war effort, and for that reason the 770th had been activated and shipped northward by Army transport up the mountain-barricaded waters of the Inside Passage. The White Pass and Yukon afforded the only access to the sub-Arctic solitudes along the 1630-mile route of the Alaska Highway between Dawson Creek, British Columbia, and Fairbanks, Alaska. It also was the one link between the highway and the sea. It was the one place where troops might work on the historic road other than at the terminals; it offered the only chance to complete the highway on schedule.

Furthermore, the White Pass and Yukon ended squarely in the center of the chain of strategic airports at Watson Lake, Whitehorse and Northway which tie Alaska by air to the Canadian plains. These airports required vast expansion. In addition to all this, the American Army had under way the immense Canol project, entailing 640 miles of wilderness pipeline to bring the product of the Norman Wells oil fields on the Mackenzie River to the military bases and airports of the North Pacific theater of war.

This meant that thousands of tons of cement, endless piles of pipe, innumerable bulldozers and huge quantities of supplementary (Continued on Page 109)



Sample of the scenery along the White Pass and Yukon, toughest 110 miles of railroad on the continent, where water tanks turn to solid ice and wheels freeze to the tracks.

U. S. ARMY SIGNAL CORPS PHOTOS

MAN WITH A BACK-YARD JUNGLE

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Photographing them isn't easy, either. Like small boys, they usually want to do something else when the man with the camera comes around. It's difficult to make them sit still in the proper background, and magnifying lenses magnify movement too. Sometimes day insects must be photographed at night, and night insects in the daytime; a particularly recalcitrant subject is likely to find itself sentenced to a term in the refrigerator, where the chill will stiffen it up temporarily and slow its movements. If all these things fail, Teale has several little tricks of his own about which he is naturally reticent. With some insects he can achieve a degree of familiarity. There is a clan of wasps in a box near the barn which have learned slowly, through several generations, to let him pry into their family life without getting their back hair up.

He likes to handle his insects. He has tried to milk aphids, the cows of the ants, but there was something faulty about his technique and he was no more successful than the amateur milker usually is. For a full season he had a pet mantis which

was allowed the run of the house, and liked to sit meditatively watching his typewriter. It was five inches long and had the disconcerting habit—which only the mantis seems to possess—of turning its head to keep you in its line of vision. It also had an appetite so voracious that Teale decided its characteristic praying attitude was a constant supplication for more. It ate so many things, including other insects that had been killed with ammonia or cyanide and dipped in denatured alcohol and shellac, that scientists were much interested in it. It accompanied Teale to a meeting of the Brooklyn Entomological Society and gave the scholars in the audience stare for stare. It even made a radio appearance and, being a silent creature unable to croon or play any known instrument, had the announcer a little perplexed until Teale put it on the microphone. Once there, it ran around inquisitively, and the small tapping of its feet went out over the air as a kind of mantis clog.

It was, Teale thinks, the most interesting insect that he ever knew. He isn't sure that it will continue to hold its own in that pleasant position. It is estimated that there are 625,000 species of insects on this earth and, although he has been most industrious in his efforts to get acquainted with them, he's only dented the surface of the thing so far.

HIGHBALLING AT SIXTY BELOW

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supplies had to be hauled from Skagway on the Alaskan coast to Whitehorse at the head of navigation on the Yukon River system. The need still exists, for construction on the airfields and the Canol pipe lines will continue for some time.

Lt. Gen. Brehon Somervell, commanding the Army Service Forces, flew to the Far North a year ago and saw for himself the strategic importance to all these undertakings of the White Pass and Yukon Railroad. He drove on the Alaska Highway in a command car and skimmed the trestles and eerie ledges of the White Pass and Yukon in a 1927 sedan fitted with flanged wheels. With him in his plane when he returned to Washington was George Benedict, the veteran master mechanic of the W. P. & Y., who also is the mayor of Skagway. General Somervell had decided that immeasurably increased tonnage on the 110 spectacular miles from Skagway to Whitehorse was indispensable to the successful construction of the Alaska Highway, the airfields and associated projects. In General Somervell's office, plans were made to lease the White Pass and Yukon, first railroad ever built on Alaskan soil, from its owners by the Government. The lease was to be for the duration of the war and one year thereafter.

Normal traffic over the line was 15,000 tons of cargo for the five months from May to November. In the savage Arctic winter, operations dwindled to two trains a week and frequently none at all. General Somervell and Brig. Gen. James A. (Patsy) O'Connor, commander of the

Alaska Highway and the Northwest Service Command, wanted 15,000 tons every two weeks. This was the job of the G. I.—which means Government Issue, and is a colloquialism for anything pertaining to soldiers—railroaders of the 770th who disembarked at Skagway just as winter's winds were beginning to ice the W. P. & Y.

Their commanding officer, Lt. Col. William P. Wilson, of Denver, had been superintendent of the Burlington's lines in the Rocky Mountains. "Narrow-gauge railroading was my business for fifteen years," he told Col. K. B. Bush, chief of staff of the Northwest Service Command. "We'll get along all right. There'll be nothing to it."

Bush looked sympathetically at Wilson. "Colonel," he said, "you've never seen a railroad like this one, wide gauge, narrow gauge or meter gauge."

A week later Wilson was back in Bush's office. He held his hat humbly in his hand. "Colonel," he began, "I apologize. I'll say I hadn't seen anything yet. This isn't only a railroad. It's an airway too. We need dirigibles and cargo planes as much as we need locomotives."

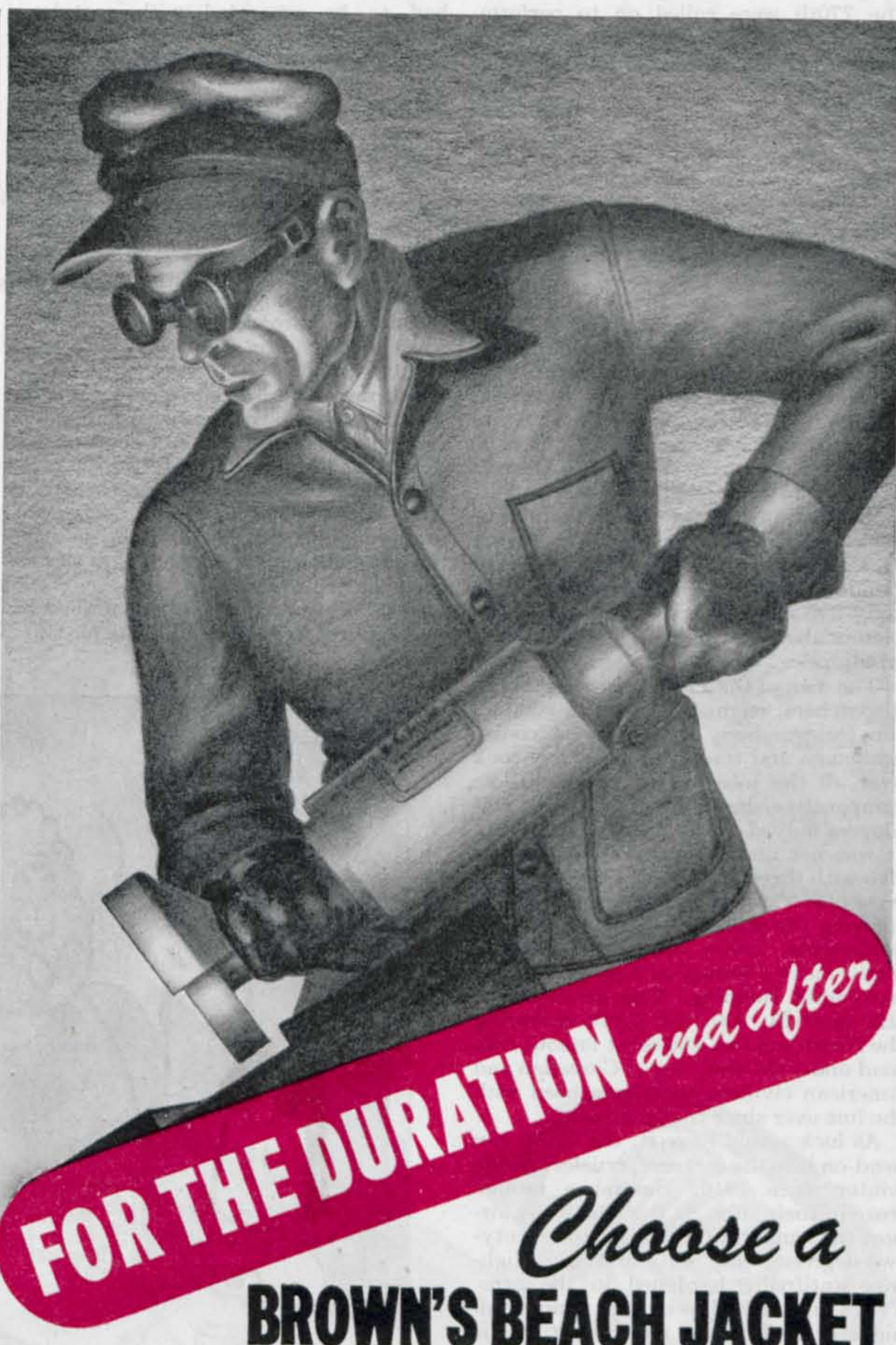
Up out of Skagway the White Pass and Yukon ascends 2900 feet in nineteen miles. Much of the grade is 4 per cent. The lead engine of a train is frequently thirty feet higher on the mountain wall

than the caboose. Curves are so sharp that trains rounding them are curled up like a cowpuncher's lariat. Overhanging precipices frown down on the thirty-six-inch tracks, and below the ties the cliff falls away 1200 sheer feet to the turbulent waters of the Skagway River. The railroad follows the heartbreaking trail of the '98ers over White Pass, a trail beset by blizzards, avalanches and incredible temperatures.

This was the setting in which the G. I. railroaders of

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the 770th were called on to perform. Approximately 1000 tons a week were going over the bleak summit of White Pass. They had to multiply this figure at least seven times. Some of the personnel of the 770th came straight from cold-weather lines like the Northern Pacific, Delaware and Hudson and the New York Central. But others had had their blood thinned by many years in the sun. Sgt. R. R. Chastain had been the Seaboard's yard conductor in Miami's golden air. Sgt. Cecil Brock had been an engineer on the Alabama and Western Florida. Lt. J. W. Rogers was from the Southern Railway in Mississippi. And Colonel Wilson's right-hand aide, Lt. Col. Herman C. Baughn, had been Santa Fe trainmaster at Needles, California, where 115 degrees in the shade is the rule rather than the exception.

Swathed in a parka and quivering like aspic, Baughn looked at the thermometer at Carcross, in the heart of the Jack London country, and found that at sixty-five degrees below zero even complaints about the weather freeze in one's windpipe.

The men of the 770th were mechanics, dispatchers, engineers, firemen, conductors, telegraphers, section hands, cooks, brakemen and track walkers. They took over all the jobs on the railroad. The comparative handful of civilian employees stayed on to instruct and help. It was not uncommon to see a locomotive with three men in the cab—the G. I. crew plus a veteran civilian as a "rider" showing the soldiers the curves and embankments where too much throttle might mean a plunge as high as the Empire State Building. This arrangement still prevails, with the 770th operating the North's oldest and most famous railroad under the coaching of Canadian and American civilians who have been with the line ever since the gold rush.

As luck would have it, the 770th ran head-on into the meanest, cruelest Arctic winter since 1910. Snowshoe rabbits froze in their lairs. At the Northway airport the temperature dropped to seventy-two degrees below. On the Alaska Highway antifreeze hardened in the cans. Truck motors had to be kept running all night or they would never start in the morning.

A trapper found a lynx dead from the cold. Ice floes the size of grand pianos choked the Yukon River at Whitehorse. The Mounties put aside their boots and wore mukluks with four pairs of wool socks.

When White Pass trains stopped to take on water, the locomotive wheels froze to the rails. Often they were not broken loose until another engine was summoned by wire to give the train a shattering bump. In the yards at Skagway, Whitehorse and Carcross—which Jack London shortened from Caribou Crossing—engines were moved every ten minutes to keep them from freezing to the track. Drifting, wind-blown snow plugged the line at innumerable points. Indians on snowshoes risked their lives to bring emergency rations to passengers in stalled trains.

When Winter Did its Worst

Sourdoughs who remembered Service and London and Rex Beach in person had never experienced a winter like it. But Colonel Wilson determined to keep the line open. General Somervell and General O'Connor wanted tonnage, and he was going to give it to them. That was when the big storm hit.

The wind howling across the height of land and whistling down the canyons sounded like the *loup-garou*, the dreaded werewolf of the Canadian trappers. The mercury plummeted out of sight. Colonel Wilson, out on the line supervising operations, saw the clutching cold do weird things to the limited equipment at his disposal. Couplings that were wet

had to be separated with acetylene torches. Metal became brittle and draw-bars snapped under the loads. Fire doors in snorting, straining locomotives were coated with half an inch of frost. Exhaust steam, pouring back into engine cabs, froze the overalls of the G. I. crews as stiff as planks. Only one injector could be used, the second being turned into the water tank to keep the water from freezing.

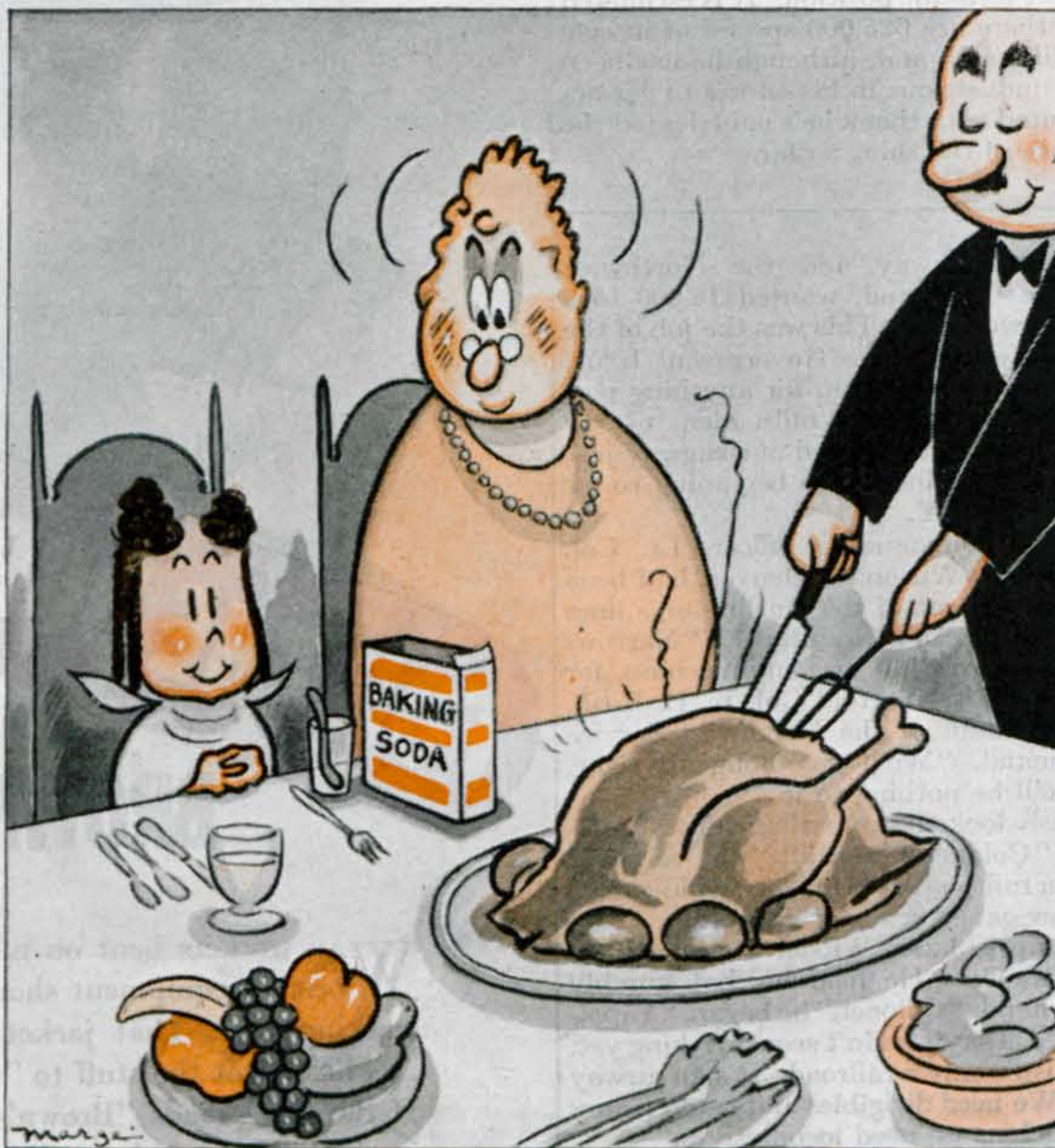
One by one, the desperately puffing narrow-gauge engines quit. Flesh and blood were abroad in the storm, but it was more than iron and steel could stand. Rotaries stalled. On the wind-swept basalt near Fraser Loop, Colonel Wilson and twenty-two soldiers with him shoveled snow into the tanks of engines No. 81 and 62 to maintain water in the boilers; the water towers along the track were frozen as hard as granite. The coal in the tenders ran out and the soldiers began to chop up stacks of spare ties to keep the engines alive.

When 81 and 62 at last succumbed to the blizzard, Colonel Wilson and his G. I.

On the fifth day, Colonel Wilson received word by telegraph, the only mechanical facility functioning in the storm, that 66 and 69 were frozen fast on the mountainside, midway between Skagway and Fraser. The next blow was to the solar plexus. The storm was preying on them at sea as well as on the land. Wilson and his men learned that the barge en route from Prince Rupert had become overloaded with ice and that No. 253 was at the bottom of the bay near Chilkoot Barracks.

At this juncture the colonel wrote in his report, "Situation at Fraser Loop serious." All qualifications had been removed.

From Carcross a D-4 cat bucked high winds across the frozen surface of Lake Bennett, ascended the pass and got through to the cabin with a load of food. "That bulldozer," said Wilson, "looked to us like six regiments with colors flying." The hungry G. I. railroaders crowded around the cat driver, and soon bacon and beans and fried potatoes were on the fire in the cabin at Fraser Loop.



LITTLE LULU

railroaders were marooned. They took refuge in a tiny cabin near the line. "Except that it was unbelievably cold instead of ghastly hot," Wilson said later, "our retreat was a fair replica of the Black Hole of Calcutta. Twenty-three of us slept on the floor of a shack built to house six people at the most. We were piled in there like cordwood. But it had a stove and we could chop up ties for fuel, and so at least we didn't freeze."

Seated in the midst of his men on the floor of the cabin, Colonel Wilson kept an account for General O'Connor of their experiences. On the fourth day of the incarceration by the blizzard, with food nearly gone, he wrote, "Situation at Fraser Loop beginning to look serious." Of course there still was hope. Engines 66 and 69 might be shoved through the storm to the rescue from the shops at Skagway. And there always was new locomotive No. 253, being brought up the Inside Passage by barge from Prince Rupert, 400 miles down the seacoast. Perhaps 253 could be unloaded on the double-quick and, like the old blue-coated cavalry, arrive in the nick of time with bugles blowing.

On the eleventh day the siege at last was lifted. Engine 71 got through from Skagway with the rotary, and the line was reopened. Wilson and his twenty-two soldier railroaders got their first full meal and warm sleep in nearly two weeks.

That was the critical period in the Arctic saga of the 770th. From then on, freight totals began to soar. Four thousand tons a week were achieved. Soldier engineers—men like Sgt. Edward Canfield, from the Erie Railroad, and Corp. Jimmy Di Thomas, from the Pennsylvania—stuck to the throttle for twelve hours a day. Capt. Joe Winters sat for fifteen hours in the oily water of the roundhouse pit at Whitehorse, when the weather was fifty-four degrees below, to weld the broken "wishbone" of No. 69.

New locomotives were barged in; these were the standard United Nations type which British soldiers call the Austerity and Americans the Gypsy Rose Lee, because the locomotives are stripped to essentials.

On one memorable day the soldier railroaders shoved thirty-four trains with more than 2000 tons of pay load over the hump of White Pass. This was

up to the highest expectations of General Somervell and General O'Connor. Twenty-four hours of operations were now accomplishing what two weeks had done before. The arrival of this cargo in Whitehorse not only meant that the Alaska Highway would be completed ahead of schedule but that new runways and hangars could be added to the vital airports along the road.

Not long ago Gen. Henry H. Arnold, commanding our Army Air Forces, said, "Never has a road been so important to airmen as the Alaska Highway." Supplies hauled over the White Pass and Yukon by the 770th have been essential to this development.

On the North's Roll of Honor

Today, the tonnage of the W. P. & Y. hovers around 10,000 tons a week. Mrs. E. A. Warren has lived at the way station of Log Cabin since it was the Royal Mounted post where gold seekers were checked in as they crossed the international boundary. "I see more trains at Log Cabin each day now," she recently remarked, "than I used to see in a whole month."

And Clifford Rogers, veteran gray-haired president of the White Pass and Yukon, has added, "The soldiers had a lot of difficulty when they first started. They didn't believe that this was 'the toughest one hundred and ten miles of track in the world.' And they didn't know what an Arctic winter could be like. But today they are doing a remarkable job. I venture to say that the Seven Hundred and Seventieth will occupy a place in the history of the Yukon right alongside Klondike Mike, the Mounties, Ma Pullen and Dan McGrew; and that's some place indeed."

Freight has not been the only cargo shoved through this frigid zone by the soldier railroaders. In a few months the White Pass and Yukon transported approximately 22,000 troops and civilian construction workers to Whitehorse, from where they journeyed on the Alaska Highway to airfields and other projects. Half the old parlor cars of the line were commandeered and benches installed for this purpose. The other half were emptied of their chairs and used as living quarters for several hundred members of the 770th. They hung their clothing from the luggage racks and moved in canvas cots. Nor were the chairs allowed to go to waste. General O'Connor eagerly grabbed them for the headquarters of the farthest-north Service Command ever established by the American Army.

"Those chairs," said Colonel Bush, General O'Connor's chief of staff, "were our only seats for nearly five months."

Railroaders in the north, both G. I. and civilian, knock on wood when they note that the 770th has achieved its phenomenal tonnage record without a serious accident. "The Lord has had us by the hand" is General O'Connor's explanation.

Once a train derailed on a bridge spanning a mountain torrent 215 feet below. The soldiers worked with one leg hanging over thin air, but the most serious injury was a lacerated finger. On another occasion a bulky piece of machinery for the new oil refinery at Whitehorse refused to go around a hairpin curve. The G. I. railroaders chipped away a slice of cliff and proceeded merrily on their way.

As a result of this G. I. conquest of the north's most rugged transportation route, seventeen railroads in the United States are going to have, after the war, some hardened veterans who are ready for anything. Their chief, Colonel Wilson, expressed it in a special order when he said, "After this war is won and you return to your respective railroads, you will all be better railroad men, and the experience you are getting here will be of great value to you in future years."