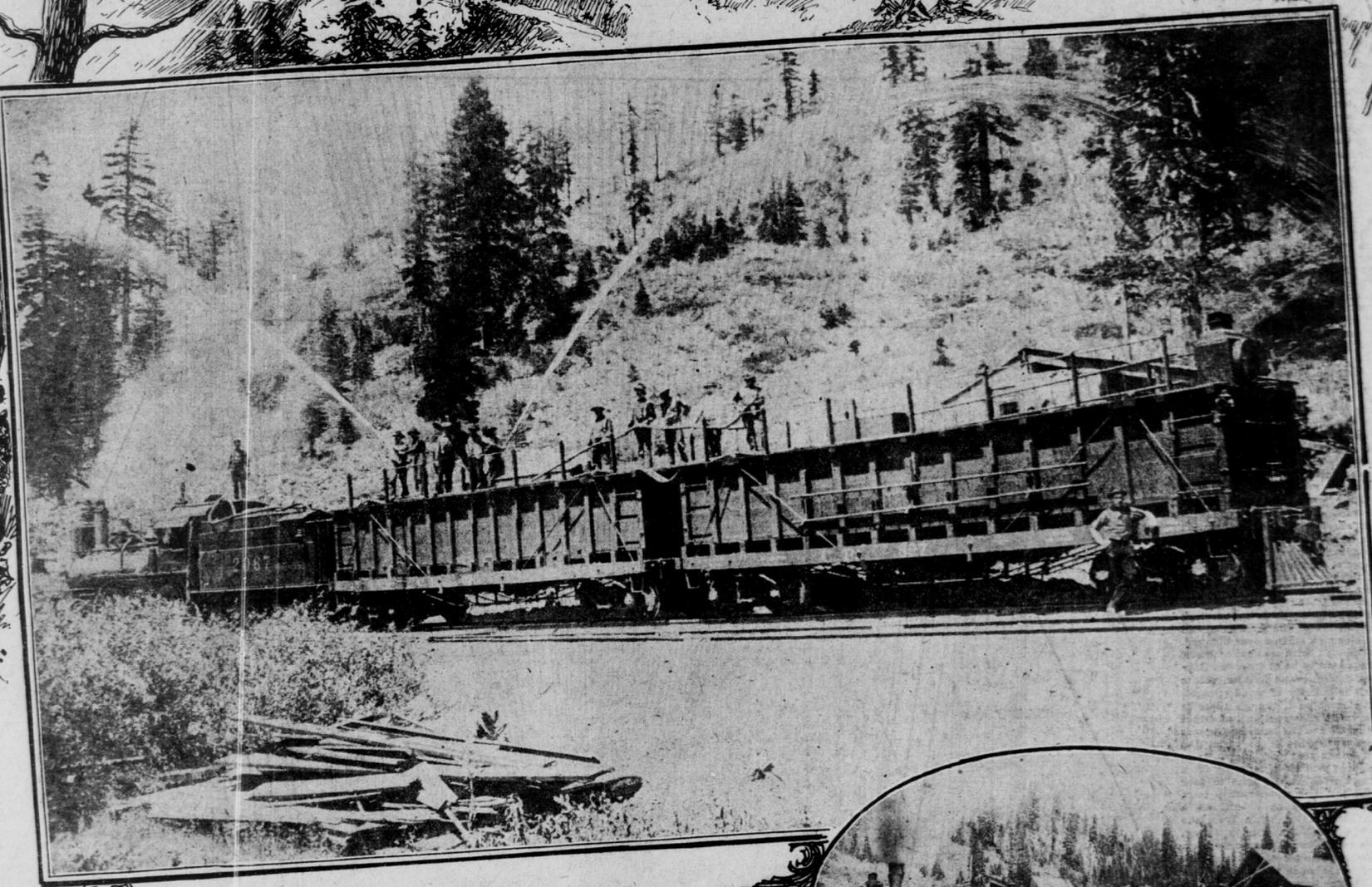


# FIGHTING FIRE IN THE SNOW-SHEDS



THE average passenger journeying over the Sierras usually utters a deep sigh of relief when his train emerges from the snowsheds. They have formed one bleak, uninteresting section of the journey, relieved only by a monotonous succession of tantalizing glimpses of striking scenery through the breaks and cracks in a dead wall of grimy timbers. The cars have filled with suffocating smoke and life has been made miserable for a time. It is natural, then, that but little of interest should attach to the snowsheds. The ordinary traveler detests them, and knows little and cares less about the system which protects this valuable part of the railroad equipment from destruction by fire. For dull and uninteresting as the sheds themselves may be, they are, nevertheless, an indispensable and necessary part of mountain railroad construction. Upon their maintenance depend the safety and security of the loads of passengers and freight which form the heavy traffic over the mountain division. Accordingly, the preservation and protection of the snowsheds from the ravages of fire forms one of the most interesting features of railroad administration in California.

The long line of snowsheds on the division between Sacramento and Sparks, Nev., begins at a point near Blue Canyon, and winds its tortuous way up the steep grades of the Sierra Nevada Mountains, over their summit, and down the eastern slope almost to Truckee. This stretch of forty miles of railroad is through the very heart of the Sierras, where the snows of winter fall to a great depth, varying from five to thirty feet, and accumulate in great drifts, blocking and burying out of sight the ordinary high-ways of travel. To protect the railroad from this danger of interruption of communication and blockade of traffic, the snowsheds were built over the track, forming a shelter for the trains. These sheds are not of temporary character, intended for one season only, to be replaced the next, but are strongly and substantially built, designed to withstand the fiercest onslaughts of nature's forces. The timbers are twelve and eighteen inches square, and the planks on the sides and roof are from two to four inches thick. The sheds are firmly braced and tied together, and anchored securely.

The original cost of the snowsheds stands a tidy sum on the books of the railroad company, and the annual expenditures for repairs and maintenance represents a small fortune. It was once stated by Leland Stanford that the sheds originally cost \$1,000,000. Last year the repairs and rebuilding of the sheds was a charge of over \$100,000. It is little wonder, then, that the line of sheds is carefully watched and protected from fire.

The sheds are peculiarly liable to destruction by fire. The passing locomotives emit sparks which lodge in the

timbers that are as dry as crackling, and this is a frequent source of disastrous fires. Besides this, forest fires and burning brush often ignite the sheds. The pine lumber of which the sheds are built is fat with pitch and thoroughly dried by the combined heat of the passing locomotives inside and the rays of the summer sun without. This makes excellent fuel for the flames. And when they are once started they spread with lightning-like rapidity along the line of sheds, as if it were a train of powder. The long line of sheds acts as a huge chimney with a powerful draft, and not much time is required for a small blaze to develop into a fire of ugly proportions.

The protection of the sheds from the ravages of fire is a matter of prime importance. The sheds must be kept intact, for otherwise the line of travel would be hopelessly blockaded in the winter season. And here, as elsewhere in the gigantic corporation, system and organization are necessary. A fire in the sheds is a costly blaze and one of the things most dreaded in railway circles, because of the danger to life and property involved and the interruption of traffic. The organization of the fire brigade must be as highly efficient and as thoroughly trained as any company in a metropolitan fire department.

The system which secures this protection consists of two parts: first, the fire patrol, and second, the fire trains and their crews.

The fire patrol keeps the closest watch for any outbreak of fire through the track walkers and the lookouts. Eternal vigilance is the price of safety in the snowsheds, and herein is demonstrated the efficiency of the patrol. The track walkers are men constantly patrolling the track, before and after trains pass through the sheds to inspect the condition of the track and to see that obstructions are removed to prevent accidents. Their beat is usually three miles in length. One of their most important duties is the detection of fire in the sheds. At short intervals along the line, about three-fourths of a mile apart, there are signal boxes, connected with the stations where the fire trains are located. When a track walker discovers a fire he turns in the alarm at the nearest signal box, and the alarm is registered at Summit, Blue Canyon and Truckee. The fact that fire has been discovered and an alarm turned in is at once reported to the superintendent of the division at division headquarters in Sacramento.

The main fire lookout is located on the top of Red Mountain, a high peak of the Sierras near Cisco. Red Mountain is about 8000 feet high. From its summit almost the entire line of snowsheds is

visible. A more suitable watch tower than this lofty peak, rearing its head into the clear Sierra sky, could hardly be found anywhere. The exceedingly dry, clear atmosphere makes it possible to see distinctly for great distances. The fire lookout is maintained day and night, and from this excellent point of vantage the first outbreak of fire can be located. With telescopes and field glasses trained on the sinuous line of sheds winding in and out among the mountains the lookout commands the situation absolutely. An incessant, unrelaxing vigil guards the line of travel from the attacks of the ravaging flames. The instant a fire is detected by the watchers on Red Mountain the alarm is sent to the stations where the fire trains are held in waiting.

In the fire patrol, besides the track walkers and the main lookout on Red Mountain, the company also has special watchmen stationed at other points of long range of vision, such as Tunnel No. Six, Lakeview, Shed Twenty-nine and Tunnel No. Five.

On the portion of the Sacramento division where the snowsheds are located there are three fire trains, one stationed at Summit, one at Cisco and one at Blue Canyon. Each train is made up of a fire engine, which is a locomotive equipped with a powerful pump throwing three streams of water, a tender, and two water cars. The trains are also equipped with telegraph and telephone outfits. The cars have tanks capable of holding 18,500 gallons of water. They are fully equipped with fire hose, some of it on reels and some laid out on top of the cars, also ladders, axes, saws, ropes and pike poles. Around the top of the cars, on which the crew rides, runs a stout railing to keep the men from being pitched off when rounding curves on the way to the fire.

The regular crew of the fire train consists of engineer, fireman and brakeman, who devote their whole time to the fire train. When an alarm is received in their duties are added a telegrapher, line men, section men, and all others working for the company around the station who are not actually needed at home.

It is a time of genuine excitement at a station when an alarm is received. The alarm, "Fire in the sheds," electrifies the air around the station. Where all was quiet before, relieved only by the throb of the engine of the fire train at measured intervals, now the scene is one of bustling activity. The shrill blasts of the locomotive whistle summon the crew, who come rushing from all quarters. The fireman crowds on steam in the engine, which is kept fired constantly, ready to make an instant start. The engineer rushes to the office of the station agent

or operator, and from the register of arrival and departure of trains and the timetables determines the exact location of all trains in the vicinity of the reported fire and between the fire and his station. It is a time for quick decisions. He must map out his plan of action. He must know where the sidings are at which to pass the regular trains. He must not forget the extras and specials that may be on the road. He must think of a multitude of things in a brief period of time. He is rapidly sizing up the situation as with feverish haste he fingers the pages of the time table and register. It is a scene of intense dramatic action taking place in the little office of the operator, with the engineer as the chief figure.

The engineer checks the train register to see what trains due have not arrived. The superintendent in Sacramento gives him running orders and train rights. Sometimes, however, the telegraph wires are down and communication is impossible. In such event the engineer proceeds to the fire by "blocking" from station to station by use of the telephone. If the telephone wires should also be down, he sends a man ahead of the train on foot or on a gravity car to protect the fire train from opposing trains.

Meantime the crew, consisting of about a dozen men, have clambered on the train, some on top of the water car, some on the rear pilot, and all await the start. Having received orders which give him the absolute right of way over all other trains, and the track being cleared, the engineer pulls open the throttle and the wild ride begins. In less than three minutes after the receipt of the alarm the train is speeding away to the scene of danger. Every pound of steam that can be safely crowded on is applied in the race with the flames. The engine and cars sway from side to side as they swing around the sharp curves, and the train flashes past the stations and block-houses. It is a thrilling and dangerous ride. The speed attained on these runs of the fire train often exceeds a mile per minute, and some of the stretches of road are not built especially for such exhibitions of record-breaking time. Occasional reports of his progress guide the train in such a meteoric flight.

In a few minutes the train has reached the scene of the fire. Then comes the real work of the run. The engineer usually takes charge of the situation and directs the forces in the fight with the fire. The crew work together with rapidity and precision. The hose is detached from the car and attached to the pump on the engine, and powerful streams are soon playing on the burning sheds. The water supply is in the tanks on the

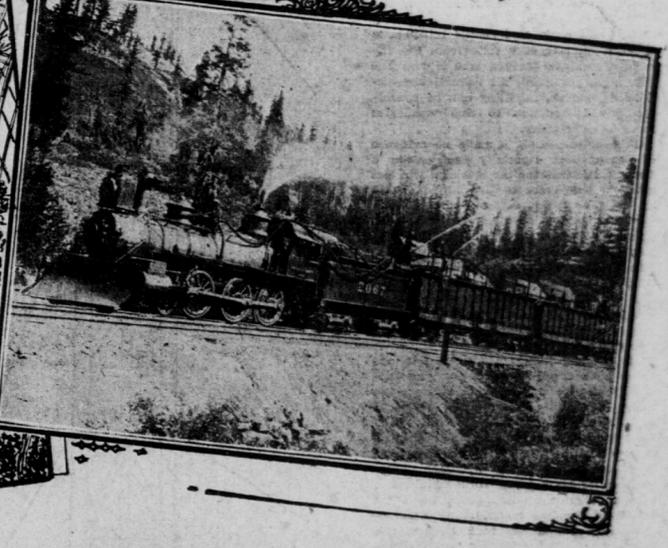
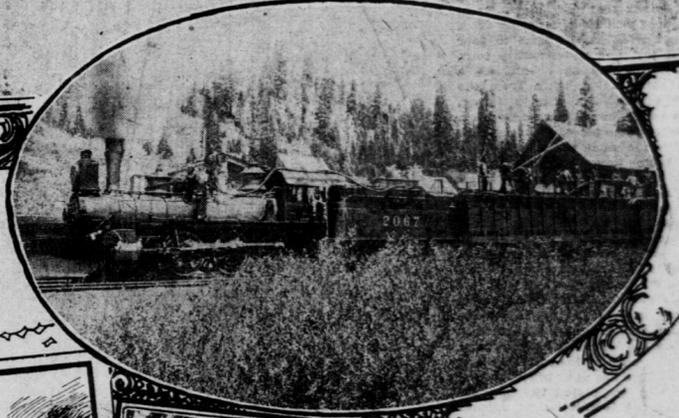
cars which are a part of the train. If the fire is well under way and has assumed dangerous proportions, a second train may be sent from another station and the two crews work from both sides of the fire. But for ordinary fires one train only is sent out.

Fighting fire in the sheds is sometimes an ugly piece of work, as the heat becomes intense, owing to the highly inflammable character of the material of which the sheds are built, and the sur-

rounding brush and trees easily ignite and add to the extent of the trouble. The blistering heat frequently causes the heavy steel rails to warp and twist, rendering it necessary to lay new track before trains can pass over the burned stretches.

The heavy loss entailed by destructive fires in the sheds which occur every year makes this branch of railroad maintenance a vital part in the economy of administration. The fire train and crew

are most important factors in the various branches of railroad service. And although they are brought into prominence only on extraordinary occasions, and therefore are little known to the public at large, yet their discipline and efficiency are constantly cultivated. The test comes when emergency calls them into action to protect the line of communication between California and the East. It is then that they demonstrate their value.



## OPPORTUNITY VS. HANDICAPS--A Fable for the Foolish

BY NICHOLAS NEMO

IT WAS the fixed belief of all of the members of the Dubb family that Percy was an "it," with an adult I. In the first place he was the last of the lot to arrive on the scene, a sort of an encore. As though that were not enough, his parents had immediately loaded him down with the polite but invidious appellation of Percy. It is a well-known fact that a boy named Percy has about as much chance of arriving at ultimate, or any other kind, of greatness as a Massachusetts Republican has of carrying the solid South in a Presidential campaign.

Another obstacle that Percy was up against from the start was the fact that he was the youngest son. Youngest sons are usually regarded as more or less surplusage, a reserve force in the family stable, so to speak. If he runs well, everybody is surprised and mildly happy, but no one puts his money on him. The

eldest sons are the favorites every time and they are the ones who receive the greatest attention from the trainer. Besides the youngest son has so many marks to live up to. The first boy on the scene has no previous performances staring him in the face. If he goes wrong and lands in jail, every one pities him and calls attention to the fact that he got all his bad traits from his father, who was just like him when he was a boy. If a younger offspring lands in the clutches of the law, before his elder brothers are apprehended, every one wonders how a boy with such model relatives could manage to strike the wrong road.

Thus it will be seen that Percy was up against it from the time the curtain rose on his little act. His other brothers, who had been given good, useful names, like John Henry, William or Charles Edward, names that are guaranteed not to rip, ravel or run down at the heel, were already well established in the favor of

their parents. One of them had a half interest in a shoe store down on the corner with a fighting chance to be chased into the board of aldermen the next time that the rascals were to be turned out. Another brother was holding the steering gear of a coal shovel on a freight train, and a third had a steady job instructing the young idea in various forms of intellectual marksmanship.

When he was not busy gathering in a rich harvest of these valuable beasts he was drawing plans and specifications of the left hind legs of bullfrogs or the upper right antennae of the common or garden culex anopheles. There is no doubt that Percy could draw things of this sort in a manner that would have made Sargent sit up and take notice, but when it came to drawing useful things like salaries or extra pay for overtime he was all to the bad and no help in sight.

When he broke into the happy family circle one night and announced that it was him to the State University as soon as

he could find an unoccupied freight car going in that direction his parents threw up their hands in disgust. You can see from that how sick they were of Percy. His father told him that henceforth he was to be called "Handicap." He wept into a perfectly clean handkerchief and inquired between sniffs what he meant by his base ingratitude. At this lavish exhibition of parental sympathy and affection Percy retired still further into his shell and plugged up the hole.

He saw that it was to be a game of freeze-out and that he had to make good or retire from the game for keeps. There were no more chips coming to him from the parental bank.

At this point Percy rose to the occasion and stood on it with both feet, demonstrating for the first time in human history that whatever a rose might do under an alias, at least one Percy was man enough to live down his name. To trace his progress through the State University would be a tedious matter, and, besides, the trail is cold by this time.

The simplest plan is to wait outside until Percy emerges with his sheepskin under his arm and his cerebellum wrapped in chamois skin. It might be suggested, however, that he supported himself for four years by acting as valet in chief to a Jersey cow and a family horse of large appetite and no designs on speed or ordnances. He also continued his pursuit of the bug that fleth by night and the caterpillar that creepeth by day, and wrote two or three highly interesting and lavishly illustrated articles on the reason why a grasshopper hops and the voltage of a firefly's lighting plant, for which he received great praise from his professors.

Occasional reports of his progress reached his sorrowing relatives at home and only confirmed their gloomy forebodings. As one of his loving brothers put it, there was no money in bugs—except goldbugs, and that variety was extremely wary and hard to land. The shoe store brother had by this time acquired full control of the plant and was chairman of the aldermanic committee on

street crossings and sewers. The fireman had been promoted to the proud post of engineer of a switch engine and the school teacher had had his salary raised twice in four years and was meditating matrimony when he could find a woman who could stretch a five-dollar bill to cover as many articles as a horse blanket would.

About this time Percy blossomed out with a thesis on the commercial value of chinich bugs, and on the strength of it the United States Department of Bugs and Their Uses appointed him special commissioner in the field and sent him to Germany for two years to study the German insect on his native heath. His imperial Majesty, Hoch der Kaiser, made him a special speech all for himself, and conferred on him the decoration of the Red and Green Suspender in recognition of his efforts in behalf of the human race. On the strength of the speech and the decoration, Percy contracted matrimonial obligations with the daughter of the Herr Professor

Fleischkaugel, who was known as the most famous authority in the world on the ways of the pestiferous but more or less persistent mosquito. He was also the possessor of an independent income of a hundred thousand marks per annum. As far as Percy was concerned they were easy marks.

At the present writing Percy is the head of the Government Bug Department, and the business manager and general passenger agent of a red automobile, with a record of forty miles an hour and three arrests on one trip. His brother's shoe store has been sold to pay taxes; the switch engine blew up and eliminated the engineer, and the school teacher is still looking for a woman with a sufficient knowledge of the elastic qualities of five-dollar bills.

All of which goes to show that while a child may be the father to the man, it's a wise child that knows its own father. It also shows that great things from small bug-binnings grow.

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