

How the Switchman Keeps Wheels of Traffic Moving

ONE who travels in modern style as a rule gives little heed as to the details, of his traveling. It is enough to know that the fare is satisfactory, the time is reasonable and the accommodations such as meet with the taste or requirements of the patrons of the railroad. It rarely enters the head of such a one to inquire into the organization that has made possible the comfortable trips he makes between his starting point and his destination. Now and then the student gives some attention to the organization of the modern service of transportation, but rarely gets beyond certain conclusions that may be predicated on an array of figures grouped in well-appearing statistical tables and which convey to the boy mind little, if anything, more than would the arrangement of a similar number of bricks. These never get to the life that revolves around the great central idea contained in the problem.

There is a life, intense, strenuous life, involved in the modern systems of inter-communication between people and communities. One of the most interesting of all the complex features of modern existence, with its high manifestation of interdependence, is the transportation problem. Certain incidents of it are brought into the strong glare of the public calcium, such as the administrative officers, who figure in the daily newspaper accounts of the various moves made by the several great dispensers of existence in the financial world; or maybe the heroic engineer, who goes with his machine to destruction and certain death, and now and then the humble brakeman, who flags a train at the risk of his lantern, gets his name in the paper. The conductor is always to the front and the fireman is never heard of unless he is unlucky enough to get killed. These are the railroad men whose names get into print and whose pictures adorn the pages of the daily papers.

Basis of the Business.
Like everything else, the railroad business has a basis, and its base is noted in a class of workmen of whom very little is heard. "They also serve who only stand and wait." And while these are rather more active in their daily vocation than would warrant the thought that they merely wait, it is equally true that they are hardly more picturesque. They perform the prosaic necessities that make the spectacular hero possible.

If you come in contact with a business man who wants a shipment in or a shipment out, you will hardly find his remarks addressed to "a well known official," to a trusted conductor or to a skillful engineer.



CORNER OF THE JOBBING DISTRICT.

rarely if ever heard of. Maybe, when one makes a misstep and is ground to bits under a long string of cars, his name gets into the papers in connection with a brief statement of the fact.

Tragedy of the Yards.

Once a reporter in Omaha was sent down to the yards to get the details of an accident. He found the victim laid out on the platform of the freight depot, awaiting the arrival of the patrol wagon which was to take him to the hospital. Both his legs were crushed below the knee. He had run off

the end of a string of cars in the dark and fell under the wheels. About him were grouped his companions, silently waiting the coming of the



STOPS THE TRAINS.

wagon. Only one sound was heard. "Oh, my poor wife and babies!"

That was his only complaint. He had no thought of himself. It was his dear ones at home who were uppermost in his mind at that hour of supreme suffering. He was only a switchman, and as far as known, the business of the road never slackened because of the loss of his legs. That reporter has often wondered if the life in that home was ever restored to even a degree of the content it possessed before that husband and father made a misstep in the darkness.

One of the accompanying cuts shows a

chief of these forces. He gets his orders from the trainmaster and master of transportation. Through his office goes all the information as to the location and destination of every car in the yard and of every car that goes through the yard each day.

Every Day His Busy Day.

One of the other fundamental functions of railroad business, which belongs in the yardmaster's realm, yet does not properly classify as switching, is the work of the carchecker. All he has to do is to stand with his book and pencil and take down the number and initial of each car in the train as it comes rolling into the yard. This looks easy, but some day you stand alongside the track as a freight train is passing, say at the rate of seven or eight miles an hour, and merely say over the number and initial of each car as it goes by and you'll get a fair notion of what the carchecker's work is. And he must be accurate, for his record is the primary evidence that the car has been received. Each freight conductor hands in his bunch of waybills at the yardmaster's office on arrival and his count and the checker's count must tally. One of these busy men is shown at his work in an accompanying cut.

Another adjunct of the yards of whom the public sees a great deal and who is not a switchman is the grade-crossing flagman, who attends the gates and stops the impetuous driver as he hastens toward an inevitable collision with the moving freight trains. There is no poetry in his work, either; his part is one that simply requires him to be on duty all the time and work. He is usually a switchman who has contributed an arm or a leg to the Minotaur of the switch yards.

Dallying with Death.

Among the many pleasant ways of courting death in the switchyard is that of "flipping the running board." In this, the switchman has for some one of a myriad of possible reasons found himself in advance of the oncoming engine. He doesn't bother to step to one side. The engineer sees him, but makes no effort to stop. On comes the big machine, and it is soon fairly on top of the switchman. Just at the right moment he lifts his left foot, extends his left hand. The foot touches the running board and the hand grasps the rail and the running board has been "flipped." It's easy if you know how to do it, but life insurance or accident companies won't bother with your risk while you're learning. In the meantime the engineer, apparently unconcerned as to the fate of the switchman, has been watching him like a hawk. For that engineer knows if the foot misses the footboard there will be a fall and unless he takes prompt action there will be a dead man. And so he has shut off steam and holds his reverse lever on "center" that he may make the quickest possible emergency stop. It isn't always possible to stop in time, though, and "flipping the running board"

is a practice that has always tended to keep down the supply of switchmen.

Any old thing that will afford a foothold will do for the switchman though. In one of the cuts you will notice one pulling the lever to unloosen a coupling. His left foot is on the "grease box" and his right on the first step. It is a singular fact that the expert nearly always starts to get on the cars by stepping first on the "grease box." This practice goes almost hand in hand with the deadly "frog" in affording work for the surgeons and the makers of artificial limbs.

Modern Methods Help Some.

Modern methods have done much to ameliorate the life of the switchman. To the patent coupler he is indebted for a reasonable degree of safety to his fingers. Air brakes aid him very materially in escaping some of the drudgery that once fell to his lot and improvements in construction of tracks and switches have done a great deal to mitigate both the danger and the toil. Oldtimers, who can recall the conditions under which men worked a decade ago, know what these changes mean better than can be explained to an outsider. Even with the improvements the switchman has not been admitted to the preferred class by life underwriters.

One feature of the oldtime switchman's life which safety couplers and air brakes have eliminated was the pulling of pins. Until a very few years ago the freight cars were coupled by pins in heavy iron castings called drawbars or drawheads. These were of varying designs and sizes, each individual road having its own as a rule. When a freight train entered a switching yard at a division terminal the first duty of the switching crew was to dispose of the cars according to their destination. With the bills turned over by the conductor the foreman of the crew hastily made up a switching list and the work went ahead rapidly.

The switch engine pulled the whole train out clear of the tracks that were to be used and then a series of signals, apparently wild gesticulations, but really fraught with much meaning, began. One man stood by a three-throw or a four-throw switch and as the foreman signaled he turned the oncoming cars from track to track.

Down the line the train rumbled with all the speed the "pony" engine could summon. Faster and faster sped the wheels, and bumping and jumping over the frogs and switch-tongues went the heavily loaded box-cars. All this time a switchman has been standing apparently idle, merely watching the cars. In reality he has been counting them.

He had received a signal from the foreman to cut off at such a number. When that number had passed this apparently idle switchman dashed to what would seem to an onlooker certain death. He sprang between the cars, his left hand on the end of the car in front of him, his right grasping the pin that held the coupling, and then he ran, regardless of the fact that he had to skip ties, rails, frogs, switch-bars and dozens of other obstacles at a time when to trip was to fall under the wheels and be ground to atoms. He pulled the pin, his left arm swung downward, the engineer reversed his engine and part of the train sped on down the track, while the other jerked and rattled and slacked up and finally stopped under the heaving pull of the engine until at last its motion was reversed, and slowly it rolled back over the switches to the starting point, and the operation was resumed.

Further down in the yards was a fourth member of the crew. He was waiting for the string of cars rushing along under the impetus of the "kick" given by the switch engine. He knew about where that string of cars should stand when it was at rest, and his business it was to "catch" them. Grasping the rounds on the side of the first car to reach him he ran nimbly to its top and by a skillful application of the handbrakes brought the string to a standstill within a few feet of the place designated. By this time the others of the

crew had launched another lot at him, and he must hustle back to catch them.

Never Minds the Weather.

All this was very nice when the weather was good and the tracks were clear and there was plenty of good daylight. Even at night a man learned to trust to his lantern and to his own knowledge of the ground and tracks over which he worked. But the demands of business are inexorable and the dispatch of trains cannot be delayed on account of any weather whose stress can be controlled or defied by man. So the making up of trains must go on, despite snow and sleet and rain. Wet or dry, slippery or safe, the man who pulled the pin must dash between the cars, break the coupling, signal the engineer and spring away from danger, while the man who held them up must "mount the deck" no matter what its condition. It so happened in one of the main yards of an Iowa road something like a score of years ago that the unusual heavy snowfall of the winter had accumulated in the yards in the form of ice until the surface of the yards was actually two or three inches



TAKING NUMBER

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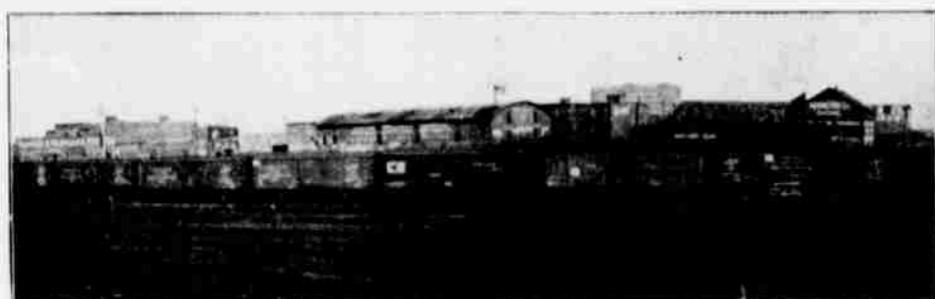
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GLIMPSE OF THE ELKHORN YARD.

He will more likely be directing his conversation to a switchman. It is the shipper who knows this. Here is where the great functions of railroad life meet. The shippers' dollars pay for the spectacular display of the traveler's magnificence, and the switchman's labor make possible the heroic engineer's opportunity to exhibit his skill and daring, and all combine to add lustre to the glittering "brass collar," who presides over all from behind a highly polished desk.

It is life in the switch yards with which this article intends to deal. It will be of the men who daily flirt with death that the vans of commerce may not be delayed in their flight from one center of trade to another, who hourly risk life and limb to keep the business of the road moving steadily, who depend for their safety on their quick brains; clear eyes, strong limbs and nimble hands and feet. These men go about through mazes of tracks and wildernesses of boxcars, threading labyrinths of switches, crossings, turnout and cut-offs almost hand in hand with the Grim Destroyer, day by day and night by night. Their life is one of unceasing toil, unrelieved by the glamour that surrounds the railroad man who comes directly in touch with the world at large. Columns are written of men who run engines and men who run trains, but the men who work in the yards are

crew coming to work in the morning. Five men go with each engine, besides the engineer and firemen. These are the foreman and four assistants. They receive trains on their arrival and break them up, setting the cars on the tracks where they are to be unloaded or making them up into other trains, to be sent forward to some more distant destination. They take cars from warehouse and factory and elevator, and assort them into proper classes and arrange them in order for the long trains that are made up in the local yards. That is all. There's no poetry in their work, no romance, only "grief" and danger; and these they know full well.

The yardmaster is the commander-in-



AROUND THE UNION PACIFIC FREIGHT HOUSE.



GREAT GATEWAY ON THE LINE

above the tops of the rails. Over this highly unsafe footing the switchmen daily pursued their dangerous calling with as much nonchalance as though they were playing tag on a school ground. One day a man who was "pulling pins" jumped beneath the cars when the string was moving at the rate of about ten miles an hour. He pulled the pin, flung out his left arm to signal

which he had fallen to his body nicely. The signal, and before he reached him, when he had to seize the brake or go under it and was reversed and train momentarily, with the coolness of advantage of the full under the cars, unsuited "switching" as though man takes.

Under the new order necessary for the switching the cars to couple or of the accompanying switchman swinging to he pulls the lever that Evolution of the Engine. People who have not the evolution of the "shunter," as around the yards loom a machine that pushes the realize the great place in its development decade. In the first engine was usually a or decrepit and relegated considered mental work "pony," the little four-sorted and puffed about the yards. But bigger and bigger, and grow, too. So now