GRAND TRUNK WESTERN RAILWAY DIARY



C. H. RIFF

WRECKS. RMC

TRAINMEN KILLED . NEAR BATTLECREEK

A Head-on Collision Between G. T. R. Trains

Engineer and Fireman Were Fatally Injured

Battle Creek, Mich., Dcc. 25.—In an engine collision at Benton, six miles west of this city, Fngineer James Kerwin and Fireman Theodore Schlubatis of engine No. 1122 of the Grand Trunk road, were tonight instantly killed and Eugineer Brown and Fireman Burkhardt of engine No. 911 were perhaps fatally injured. The engines collided head-on while going at a speed of 50 miles an hour and the debris was piled high upon the track.

The west-bound train was a Grand Trunk freight and at Cassopolis it was found that the engine was unable to pull the load and Battle Creek was telegraphed for an additional engine. Two light engines were immediately coupled together and sent out to meet the incoming freight.

In some way the orders became mixed and at Benton the two light engines met the freight engines headon and the frightful wreck resulted. The debris of the engines was piled high upon the track and beneath it were buried the bodies of the engine crews. The focomotives were con-

verted into a mass of twisted steel.

Aid was immediately sent out from
Battle Creek and about 70 clock the
body of Fireman Schlubatis was recovered from the wreckage. Scarch
was continued for the body of Engineer Kerwin, but it was not recovcred tonight. These two men comprised the crew of one of the engines
sent out from Battle Creek to pull in
the freight. Kerwin was soon to have
married Miss Mattie Randall, who is
prostrated by the news of his death.
Schlubatis leaves a wife and family. Both men resided at Battle Creek.

The engineer and fireman of the freight engine are severely injured, and it is not known whether they will live. No other people were caught in the wreck.

December 26 1902. WINDSOR. Evening Record

REAR=END COLLISION Queent 25 1910 OCCURS NEAR DURAND

Grand Trunk Express Train Hits Standing Pullman—Sleep ing Passengers Killed in Their Berths—State Officials will Make Investigation.

Durand, Mich., August 25. Eight to 12 persons were killed and three or four injured ast night shortly after 11 o'clock when Grand Trunk passenger train No. 4. bound east, crashed into the rear end of train No. 14 on the main line track, four miles east, near Duffield.

No. 14 stopped for repairs, and No. 4, in charge of Conductor Swap and Engineer Spencer, plowed its way partly through the rear Pullman of No. 14. About 20 passengers were asleep in the car, and all are reported dead, injured or missing.

The wreckage caught fire soon after the colusion, and the shricks of the wounded, pinned in their berths, unable to escape the flames, could be heard afar. The torso of a man, taken from the ashes, was brought here. At least three others were burned beyond recognition.

The work of rescue was difficult, the rescuers, some sent from here being kept away from the ill-fated coaches by the flames.

It is reported that the crews of both trains, except the engine crews, were strike-breakers, held over from the recent strike.

A mass of charred bones, flesh and burned jewelry lies in a heap on a stretcher in Undertaker Mapes' rooms. The coroner believes that the pire represents at least four bodies, but identification is impossible. The bits of clothing have been searched a dozen times

in the hope of finding a bit of paper, a piece of jewelry that will help to establish the identity of the victims, but up to 10 o'clock this morning the search had been futile.

Word from the scene of the wreck is that of the estimated number 20 who were in the ill-fated coach, only seven have been accounted for. Their names could not be learned, but it is reported that they are, for the most part, badly injured.

"If the Grand Trunk had been a little more prompt in fulfilling its promises to its former employes the wreck would probably not have occurred," said R. M. Branton, president of the Brotherhood Trainmen in Detroit, "The Grand Trunk agreed to take back all of its old men within 90 days when the strike closed. It has re-employed a number of freight men, but a great many passenger crews are still idle, and it looks as if the road was delaying until the last minute to take them back.

"The crew of the wrecked passenger train was evidently inexperienced."

Lansing, Mich., August 25. Chairman Glasgow, of the state railway commission, said today that the Grand Trunk wreck near Durand will be made the subject of a rigid investigation.

An inspector is now at the scene of the wreck. He will return this after noon and make a report, which will be made public.

Great Enthusiasm Has
Been Displayed By Local
Lovers of Bowling Game

Windsor Evening Record. August 25 1910

Montreal, August 20 liminary investigation

two passenger trains near Durand, Mich., J Wednesday night, another official statement has been issued by the Grand

Trunk railway company.

All blame is placed on the engineer of the New York train, who failed to heed the signals. After the Montreal train was stopped, the flagman went back half a mile, signaled with his red lantern. placed the torpedoes and after they exploded had to hurry off the track to prevent his being run down. Passengers on the Montreal train say its rear lights were burning clearly. They also heard the torpedoes explode before the crash.

Lansing, Mich., August 26. Members of the state railway commission an nounced this morning, after a conference with the attorney general's department. that the commission will conduct an independent investigation into the Grand Trunk wreck near Durand late Wednesday night, when six persons were kidled

and eight injured.

Durand, Mich., Aug. 26.-Superintendent Sharke of the Grand Trunk Railway gave out a statement last night that six passengers were killed. five were injured and eight escaped without injury from the telescoped Pullman car in the Grand Trunk rearend collision, three miles east of here late Wednesday night, when the Pullman car Nebraska, in eastbound train No. 14, was demolished and set on fire by the locomotive passenger train No. 4.

The forward section of No. 14 had stopped because of an accident to the airbrakes and Engineer Mitchell had crawled under his engine to locate the trouble, and was still there when the

crash came. The locomotive of the section following, No. 2, plowed half way through the sleeper Nebraska, and the locomotive's firebox set fire to the car.

The passengers in the rear berths had not the slightest chance to escape and those not killed by the crashing timbers as the locomotive forged through the sleeper were burned to death in the fire that followed.

The cause of the wreck is veiled in mystery and an inquest will be held by Coroner Patchell. The State Railway Commission will also likely conduct an enquiry, as it is stated that former strikebreakers figured largely

in the crews of both trains.

If the Grand Trunk had been a little more prompt in fulfilling its promises to its former employes the wreck would probably not have occurred." of the brotherhoods of railroad trainmen locals. "The crew of the wrecked passenger train was evidently in-experienced."

The dead are:

James McBean, Chicago.

Mrs. Alma Woodward, en route Belfields, N.D., to Port Huron, Mich.

Nurse accompaning Mrs. Woodward from St. John's Hospital, Halifax. Mrs. Squires, residence unknown.

- Squires, 10 years old. Mrs. E. M. Gilpin, Chicago. The injured one:

Mrs. Leslie Dochlar, Tavistock. Albert B. Watts, Edmonton, Alta. Mrs. F. H. McBean, Chicago, mothbe of James McReso, who sees killed.

רטוונט זווכקטוים ביים. the passengers on No. 14, and while he escaped injury, he received a severe shock to his nerves.

Company's Statement.

Montreal, Aug. 26.-An official statement regarding the accident at Durand, Mich., Wednesday night, says:

As a result of preliminary investigation, it is shown that the flagman went back a little over half a mile and gave proper signals to stop the New York train. It was a clear night, and the lights and switch lights in and round the station at Durand coul l be seen plainly from where the Montreal train stood. The flagman gave stop signals with his red lamp continuously until the New York train ex-ploded the torpedo which he had put on the track, and the flagman had to get off the track to keep from being run over.

Further investigation is being made as to why the New York train did not respond to the signals. The markers on the rear of the Montreal train were properly displayed, and after the accident occurred the one on the lefthand side was found on the ground sitting upright and the light still burn-

ing brightly.

The conductor, who was standing at the rear of the Montreal train heard the torpedo explode and saw his flagman giving the stop signals. There were also passengers on the Montreal train who were standing on the ground and heard the torpedo explode and saw the stop signals given.

August 26 1910 Wondson Evening Record.

EACH TRAIN CREW BLAMES THE OTHER

G. T. R. Officials at Montreal However, Say Engineer of No. 4. is Responsible

Durand, Mich., August 26 .- Investigations of a whole day following the rearend collision on the Grand Trunk a short distance cast of here Wednesday night lead to the conclusion that but six of the passengers in the ill-fated Pullman coach lost their lives.

It has been established that there were 19 passengers in the coach at the time of the crash. Six bodies were taken out and are now in the morgue here, all identified. Five others were injured. This leaves eight more, and all of these, according to a statement given out by the Grand Trunk officials last evening. proceeded eastward on No. 14 after the

The statement of the Grand Trunk officials, sent to Superintendent Fitzhugh at Montreal, is as follows:

There were 19 passengers in the Nebraska, of whom six were killed, and the remains identified; five injured are in the hospital at Flint, one of whom is likely to die. Eight passengers continued their journey to their destination. having escaped from the forward end of the car uninjured. Engineer Mitchell. of train No. 14, is in Flint hospital seriously injured but will recover. The fireman of No. 4 is badly but not seri ously burned. Aside from the loss of the car by fire, the damage to the equipment will be slight.

Seven of the eight passengers who were in the wrecked Pullman on No 14 and e-caped uninjured, later proceeding on their way, are as follows: B. C. Bin ning, Listowell, Ont.; Harriet Hawtrey, Newmarket, Ont.; C. L. Hovey, Sher-brook, Que.; Lee Wormley, 77 W. Adelaide street, Toronto, W. G. Caran, To ronto: Kitty Sara, 11 Sacramento street, Montreal; Carl Hickey, 46 Cartwright street, London, Ont.

Who Is To Blame?

While this seems to settle the problem of the number of victims of the accreent. the matter of responsibility for the wreck is far from being settled. The question agitating the minds of the persons who were on the train, the residents of Durand and the whole locality is:

Who is at fault, the flagman of the wrecked train, or the engineer who-e train crashed into the sleeping car?

Engineer of No. 4 Is Blamed.

Montreal, August 26. After the preliminary investigation of the collision of two passenger trains near Durand, Mich., Wednesday night, another official statement has been issued by the Grand Trunk railway company.

All blame is placed on the engineer of the New York train, who failed to heed the signals. After the Montreal train was stopped the flagman went back lalf

Mrs. S. A. Shelfez, Chicago. Clinton A. Davis, Montreal, son of Mrs. Woodward, who was killed. George Nelson, fireman of the sec-

ond train, probably fatally scalded. Burt Mitchell, engineer of the for-

ward train; crushed; may die. Passengers who escaped the wreck at Durand, Mich., reached Toronto at

noon yesterday, and gave vivid ac-

counts of the catastrophe.

D. F. Gillespie, of Elgin, Ill., was in the telescoped car, about the middle.

He was nearly burned in the debris, and nearly suffocated by steam, gas and heat. Breaking through a window he escaped with a few clothes. Ten were killed in the car.

Wm. Johnston of Edmonton, on his way to visit his brothers at Islington. says the collision came immediately after the torpedoes exploded, while F. J. Crofton said the wreck occurred 20 minutes after the train had been stalled. He was in a day coach, and was knocked out for a while.

'The engineer of our train was under his engine when the crash came. He was pulled out from the centre of the first coach, so far had the crash pushed the train. His scalp was completely torn off," said one of the Pullman porters.

According to Miss Kate Moxley of Auburn, N.Y., who was in the coach next to the one wrecked, the collision was not very violent, for she imagined that another car was being coupled

on.
"Presently a man came into the car and told us we were quite safe, but we had better get dressed and get out on the track as the car behind was on fire," said Miss Moxley.

"The most singular thing about the whole affair was that not a groan was heard, everything was as quiet as if nothing had happened, there were no agonizing groans heard at all.
"The hero of the hour appeared to

me to be a man who got off the train at West Toronto. He was in the illfated car and escaped in his pyjamas. but not waiting to dress, he ran into the wrecked car and succeeded in saving three women. I think he is J. E. Dade of Little Forks, Minn."
"There was a nurse, a Miss Harriet

Harby, the superintendent of St. Barnabas Hospital, Indiana, who deserved great credit, too. She at once went to work with the wounded engineer and fireman. The latter was so badly injured about the head that his brain was visible, and Miss Harby was most ocurageous and useful.

There were no groans heard at all after the first few minutes."

Dr. C. S. Dunham of Frankville, Ont., was another of the passengers

on the train.

Arthur B. Watts, who is reported to have had his face and hands burned, is editor of The Edmonton Daily Capital and Saturday News, and was for-merly editor of The Woodstock Sentinel-Review. He is a son of the late Sheriff Watt of Brantford, and is a graduate of Toronto University.

R. F. Park, secretary of the To-ronto Electric Light Co., was one of the passengers on No. 14, and while he escaped injury, he received a severe shock to his nerves.

Company's Statement.

Montreal, Aug. 26.—An official statement regarding the accident at Durand, Mich., Wednesday night, says:

Wundsor Evening Record. August 26 1910

FOUR KILLED, 27 HURT IN WRECK OF SPECIAL

Knight Templars' Train Jumps Tracks Coaches Telescope —Many Imprisoned.

Durand. Mich., June 6.—An investigation by the Michigan public utilities commission into the wreck of the Knight Templar Special on the Grand Trunk Railway near here yesterday in which four were killed and twenty-seven others injured, will be asked by county authorities, it was learned to-night. A spreading rail is believed to have caused the derailment of the special, bound from Grand Rapids to Flint and carrying 200 delegates to the state convention.

The dead are: Frank eParsoll, engineer, 40, Durand; H. J. Weldon, Ionia: Joseph Parker, fireman, 35, Durand; Jay Fanning, 45, news yendor, Grand Rapids.

The train is said to have been traveling forty miles an hour at the time of the accident. The engine went over one its side and ploughed into the ground. The steel baggage car snapped its couplings, one end of the car burying itself into the bank and the other telescoping the wooden passenger coach behind it. Fanning and Welding were in the passenger coach, as were most of the injured.

The engineer and fireman were buried beneath the wreckage, and could not be extricated for nearly three hours.

The passengers were thrown into a panic, and many escaped by a miracle. The wrecked coaches were so entangled with each other that rescuers made little headway at first. Acetylene torches were used to cut openings; through which the less seriously injured crawled to safety.

Scores imprisoned beneath the cars filed the air with their groans and cries of terror as wreckage suddenly burst into flames started by the torches. The rural fire department was called, and extinguished the fire before it had gained headway.

GET ENGINES IN U. S.

D. N. R. Orders 44 Locomotives From New York Firm.

New York. June 6.—The American Locomotive Company has received orders for 44 engines from the Candian National Railways, it was ansounced here yesterday. Twenty-our of the new locomotives, according to the announcement, are for use in the Central Vermont branch, while the remainder will go to the vestern division.

June 6 1923

KNIGHTS TEMPLAR KILLED IN WRECK

Four Members of Order, including Two of Crew, Die in Michigan Derailment.

THIRTY

OTHERS

INJURED

Cars Carrying Commanderies to the State Conclave Are

Telescoped.

1 (m.8) New York June 6 1923

DURAND, Mich., June 5 .- Four persons were killed and about thirty others, members of various Knights Templar commanderies of Western Michigan, were injured, when a special train on the Grand Trunk railread was derailed two miles west of here this morning. The train was made up at Grand Rapids and was carrying Knights Templar to the State convention at Flint.

The cause of the accident has not yet been determined. The dead are:

PEARSOLL, FRANK, Durand; engineer. PARKER, JOSEPH, Durand; fireman. WELDON, H. J., Ionia. FANNING, JAY Grand Rapids; newsboy.

Among the injured are W. H. Mc-Sween, Commander of Ionia Commandery; W. 3. Willoughby, Belding; Charles F. Gliden, Portland: J. F. Mc-Elroy, Ionia: William Fearce, Ionia, and Harry McLean, Ionia. All are being cared for here.

cared for here.

All of the dead were members of the order. Parker, a long-time employe of the railroad, was fireman for the day only, having been made a member of the crew so that the train would be entirely manned by Knights.

The Tampler special that Gound Bander.

enurely manned by Knights.

The Templar special left Grand Rapids at 7:30 o'clock this morning with about eighty Knights Templar aboard. Additional passengers were picked up at Jonia, St. Johns, Owosso and other points.

The train traveling at about 45 miles an hour, carried eight coaches besides the beggage car. Most of those injured were in the torward chach.

The locomotive toppled over on its side to the right of the track, while the baggage car and first coach, partially telescoped, were thrown around at right angles to the left of the rails and across to the tracks of the Ann Arbor Railroad, which, parallels the Grand Trunk at this point.

New York Times June 6 1923

BANDITS GRAB NEAR CHICAGO

Escape With Cash at Evergreen Park in City Suburbs

FLEE IN AUTOMOBILE

Gone Before Police Given Word; Loot May Reach Half-Million

By Associated Press

CHICAGO, Sept. 10 .- Four robbers seized mail of an estimated value of \$350,000 on a Grand Trunk Railway train near Chicago today and escaped.

The robbery occurred in the suburb of Evergreen Park on the far southwest side of the city. An automobile was in waiting for the mail robbers, who had fled before the police had even received notification of the robbery.

The exact amount of the loot is not yet known. Other estimates ranged from \$150,-000 to \$500,000.

MISS QUARTER-MILLION

THE train robbers missed \$250,-000 in their haste.

The bandits in some way concealed themselves on the train as it left Chicago and made their way to the mail car as the train entered Harvey. They overpowered the two mail

clerks, seized the mail pouches and leaped off the moving train.

An automobile was waiting for them with a confederate. They climbed in to the waiting automobile and were whirled away before the train could be stopped and an alarm sounded.

The train was Grand Trunk Number Ten, enroute from Chicago to Port Huron, Mich. The mail pouches contained money dispatched from the Federal Reserve Bank of Chicago and the First National Bank of Chicago to the First National Bank of Harvey. Postal Inspector Grant B. Miller announced the mail was valued at \$140,000, but Chicago police were notified the loot was worth \$350,000.

MAIL CLERK HELD

Postal Inspector Miller ordered Mail Clerk John H. Kelly removed from the train at South Bend, Ind...

September 10 1926.

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MAIL CLERK HELD

Postal Inspector Miller ordered Mail Clerk John H. Kelly removed from the train at South Bend, Ind., where he was held. He told authorities in South Bend that he had managed to conceal one mail pouch containing a quarter of a million dollars and this pouch has now been found on the train, police reported. This pouch, it was said, had been dispatched to a bank at Valpariso, Ind.

HEAD INTO CITY

So swiftly and quietly was the robbery executed that the perpetrators had vanished from the scene before the passengers knew what had happened.

The quartet apparently headed into the city and their trail was lost before detectives could reach the suburb. The train proceeded after a brief delay and not even a description of the robbers was obtained here.

Although the robbers selected two pouches, the mail cherks retrieved one in the confusion.

GREATEST SINCE 1924

The hold-up is the first mail robbery of importance since the Rondout, Ill., \$2,000,000 hold-up in 1924 was solved and the robbers, including William Fahey, who was a post-office inspector, were convicted of conspiracy and sent to prison. Fahey is serving 25 years in Atlanta penitentiary.

The Grand Trunk Railway in the United States, while preserving its identity, is part of the Canadian National Railways System.

GEM ROBBERS ON BOND

TIDRANA Ills. Sept. 10 .- The

2 Killed As Trains Crash

Grand Trunk Freight. . Running in Fog Rams Caboose

Trainman is Hurt

Quick Action of Agent Stops On-Coming Passenger

- 1929

OWOSSO, Aug. 19.-Two trainmen were killed and a third was critically injured at 6.30 a.m. yesterday at Morrice. 10 miles south of Owosso, when an eastbound Grand Trunk freight train, running through a dense fog. crashed into the caboose of another eastbound freight that had stopped to await a clear track.

A passenger train was saved from crashing into the wrecked freights by the Morrice agent's quick action.

ALL IN CAB

THE dead and injured were in the cab, of the locomotive of the moving train. A fourth trainman riding in the cab escaped inputy. He jumped

The dead were: Ernest Drew, 45 years eid, of Battle Creek, engineer, Walter S. Heatlie 22 of Battle Creek, fireman; James H. Whac 25 of Port Huron. brakeman, was injured

Twepty-two pure-bred Guernsey cattle, owned by Michigan State college. were in a car of the middle train. Nine

were killed and several hurt According to trainmen, eastbound freight. No. 500, had been ordered to sidetrack at Morrice to allow a following freight, No. 484, to pass. When 484 arrived at Morrice, No. 500 was backing ento the siding, but had not entirely cleared the main line. No. 484 stopped.

COMES FROM FOG SUDDENLY

A third freight designated No. 486, was running five minutes behind No. was running five natures behind No. 484 and apparently received no warning that the line was blocked. So suddenly did the cabeose of No. 484 appear out, of the log that Driw, at the throttle of No. 486, barely had filme to apply the brakes before his locomotive plunged mino the train ahead, according to G. Warks, conductor of No. 486, fourth man in the cab.

White was pinned in the wreck so lightly that debris had to be cut away with an acetylene torch before he could be extricated. His left foot was crushed and the thumb of this right, hand was cut off. He was removed to the Durand hospital.

Durand hospital.

PASSENGER TRAIN STOPPED

Realizing a passenger train was following No. 486 hy about 10 minutes. Don Baces, Merrice station agent, ran to a telephone and ordered W. T. Lemon, the agent at Perry, to flag it. Lemon dropped the telephone and threw the station semaphore barely in time to halt the passenger.

Wrecking crews were rushed to the scene from Durand and Battle Creek, the latter crew bring accupanied by E. T. Crawford, division superintendent. He stated that an indury will be held in Battle Creek tonight.

August 19 1929 Windsor

O MEET DEATH

Engineer and Fireman Killed When Train Leaves Track

TORONTO

MEN

INJURED

Montreal-Chicago Train Derailed Near Flint, Mich. 1930

FLINT, Mich., May 28 .- (Canadian Press Dispatch.)-The engineer and fireman of the Grand Trunk Intercity Limited No. 17, bound from Montreal to Chicago, were killed and five members of the crew injured shortly before 4 p.m., to-day, when the train ran into an open switch at Belsay, five miles east of here.

The dead are: Engineer Arthur Morden, of Battle Creek, and Fireman

Pierce, addrese unknown.

The injured are John Dillon, Chicago, mail clerk, injured leg: Lawrence Parker, Port Huron, mail clerk, cuts and scalds: Fred M. Linton, Port Huron, mail clerk, cuts: Joseph Deshiahi, 48, Teronto, dining car cook, scalds; Howard Bellamy, 17, Toronto, dining car cook, cuts.

None of the passengers suffered serious injuries, although several were cut and shaken The locomotive and eight cars left the track.

LONDON Free Pross May 29 1930

rwo are killed FIVE INJURED

Engine Leaves Rails at Flint -Two Toronto Men

TORONTO Hurt G10b1-

SWITCH OPEN

BLAMED

(Associated Press Despatch.)

Flint, Mich., May 28.—The Montreal-Chicago Intercity Limited passenger train on the main line of the Canadian National Railways ran into an open switch at Belsay, five miles east of here. about 4 p.m. today while travelling between 60 and 65 miles an hour. The engineer and firemen were killed and five others injured. No passengers were hurt seriously.

The dead-Engineer Arthur Morden and Fireman Clyde Pierce, both of Battle Creek.

The injured-John Dillon, mail-elerk, Chicago, injured leg; Lawrence Parker, mail clerk, Port Huron, cuts and scalds: Fred M. Linton, mail clerk, Port Huron, cuts; Joseph Deshais, dining-car cook, Toronto, scalds; and Howard Bellamy, dining-car cook, also from Toronto, cuts.

Taken to Hospital.

The injured were taken to Flint Hospital, where their injuries were not considered serious.

The train ran into the open switch just after a freight engine had passed through. Engineer Morden is believed to have seen the switch and thrown on his emergency brakes, leaping from the cab. He was caught in the wreckage of the locomotive, and Fireman Pierce was crushed between the locomotive and the tender. Eight cars and the locomotive left the tracks. Witnesses said the huge locomotive appeared to leap into the air as it struck the switch, then toppled over, pulling eight cars with it. There were eleven cars on the train.

Saved by Empty Cars.

The passengers are believed to have (Continued on Page 2, Column 5.)

Toronto Globe

TWO ARE KILLED IN RAILWAY WRECK

(Continued from Page 1, Column 4.) been saved from injury by the presence of several empty coaches between the diner and the rest of the train. These coaches were cut into the train to take on members of the Flint High School band who were waiting at the station in Flint to start their trip to Lincoln. Neb., where they were to participate in a High School band contest.

It was not determined just how the switch came to be open but railway officials started an immediate investigation. A section gang was working near the switch shortly before the train arrived.

Wife Leaves for Flint.

Unseph Deshais in hospital at Flint Seriously injured I read an operator-to-operator message received last hight and forwarded on to Mrs. Deshais at 245 Logan Avenus. With this scant information Mrs. Deshais isft for Flint Mich. immediately to be beside her husband.

Joseph Desnaus is second cook on the diner of the International Limited of the Canadian National between Toronto and Chicago. He has been in the service for the past nine years. A curious feature is the fact that Deshaus, for the past three weeks has been laid up which a scalded foot and yesterday was his first run since convalescing He is in the Hursey Hospital at Plint Mich.

1 oranto Globe

MAY 29 1930

AS G.T.R. **EXPRESS**

Engineer and Fireman Fatally Scalded At Grand Bend, Indiana

BAGGAGE CAR LANDS ON TOP OF HOUSE

Two of Inmates Suffer Injuries; Cause of Accident Not Determined

SOUTH BEND, Ind., April 28. Engineer James Groves and Fireman Walter C. Schinning, both of Battle Creek, Mich., were scalded to death and two other persons were injured when the Maple Leaf passenger train, of the Grand Trunk Railroad, en route from Montreal to Chicago, was de-railed here today and one of its baggage cars plunged off a high elevation embankment on a house.

Apparently none of the train's pas sengers was injured and none of the conches overturned. Police and volunteer workers, however, searched the ruins of the house for other possible victims.

The two injured, neither seriously, were filve-year-old Marshall Bradburn and his father, who were askeep in the house.

The boy escaped death. He was in bed in the rear of the house, while his parents slept in front. The heavy his parents night in root. The newly baggage car almost completely demolished the rear part, and workers were compelled to fight their with through the wreckage to reach Marthall the wre shall. Mrs. Bradburn was not injured.

The bodies of both the engineer and fireman were found in the cab of the locomontive. Both had been scalded to death by escaping steam. CAUSE NOT KNOWN

The cause of the derailment could not be immediately ascertained and railroad officials were investigating. Conductor W. D. Mirfield, of Port Huron, Mich., said he was unable to explain it.

The train had slowed down in pass ing through the city and was near-ing the Union station, where it was scheduled to stop, when the locomo-tive suddenly left the rails and turned over. The baggage car, directly behind, uncoupled and hung over the embankment at a precarious angle.

The next baggage car, however, left the superstructure and plowed into the house, which adjoins it. Police and private ambulances were rushed to the scene in the belief that many of the passengers had been injured and worked for a half hour to extricate the boy from the wreckage.

Hospital attaches, however, said h suffered only cuts and bruises. The

father's injuries were also slight.

Of the nine cars in the train, only the two Pullmans and one day coact carrying the passengers remained or (Continued on Page Twenty-two)

LONDON Free Press April 28 1932

Train Hits Crowded Bus Killing Sixteen in Detroit

Detroit, Oct. 28 (AP). - Syctoon, persons were killed and more than a score injured, several critically, today when a Detreit Street Railways motorbus, jammed to its doors with school-children, office workers

with school-children, office workers and factory employees, was ripped in two by a penetrager train.

The has helied at the Caniff Avenue canaling of the Grand Trunk Western Relived to permit a north-bound freight train, to pass, then moved directly into the path of a soft bound passenger train.

The locomotive of the Chicago-Detroit train sliced through the rearend of the bus, hurled the front end

end of the bus, hurled the front end to one side, scattered bodies along the right of way for two blocks and ground to a stop a quarter-mile away with the bodies of six-youths mangled against the front of its

Suburban Hamtramck police took into custody for questioning the bus driver. William F. Clos, 25, who has been a regular motor coach operator for two years.

Fred A. Nolan, general manager of the municipally owned D.S.P. transportation system, said the acci-dent was the worst in the system's history. Mayor Jeffries ordered an

investigation.
Marie Giles, 21, a passenger seated directly behind the bus driver, told how standing riders obscured the latter's vision.

Inter's vision.
"There was a car ahead of the bus," she said. "When the freight train cleared, this car started across. The bus driver asked the people jammed against the front door if everything was clear. He could not use for himself; the bus was too see for himself; the bus was

see for himself; the bus was 100 crowded. The people said 'All clear' and he started across.

"All of a sudden I saw the train coming. Then there was a night mare. I don't know how I got out alive."

A graphic picture of the scene was given by Joseph Levinsky, watchman in a railroad tower at the intersection.

wateringan in a railroad tower as the intersection.

"The bus was westbound and had stopped for the red flasher signals." The said. The freight, northbound, cleared the crossing.

"The red flasher lights were still working. The passenger train was coming fast, southbound, with the engine whistic screaming. I saw the bus start up. I knew it would do no good, but I leaned out of the tower and yelled. The bus went right into the path of the train, and there was an awful spinntering crash, and then screams."

Some bodies were decapitated; limbs were severed from others; several were almost beyond identification.

several were almost oryond ideases ficution.

First dead to be identified were Jean Chelonik, 17. Hamtramck:
Nobert Turkowski, 25. Hamtramck.
Robert W. Beith, 17. Detroit: Pearl Jones. Hamtramck, and Mrs. Corinne.
Hankhead, 39. Hamtramck.

Tentatively identified as dead were Louis G. Bartlett, Roger Lalemun, Miss Clementine Gazda, June-Pershing, John Feschuk, Helene Chodianowicz, 16, and Miss H. Drake, all of Detroit.

More than twenty-five persons were admitted to hospitals for

treatment.
The accident occurred in auburban The accident occurred in suburban Hamtramck, so close to the Detroit city limits that the front end of the bus, tossed aside by the train, was hurled against a coal company office in Detroit. Most of the passengers killed had been riding in the rear of the bus. Torontro GLOBE October 9 1942

16 DEAD, 25 HURT AS TRAIN DEMOLISHES DETROIT BUS

Bodies and School-Books Are

Scattered Along Rail-

way Tracks

FREIGHT IN WAY

Detroit, Oct. 28-Sixteen persons were reported killed and at least 26 injured today when a Grand Trunk passenger train demolished heavily-loaded Detroit Railways bus at the eastern border of Detroit and Hamtramck.

The front end of the bus, driven by William F. Cles, cleared the tracks, but the locomotive smashed through the vehicle at its middle along the railroad right-of-way for doors, cutting it in two. Mary Alla, 12, who escaped with slight injuries. said: "I was in the front end of the under-carriage of the passenger the bus. There was a crash and coaches of the train, which ground then I fell down and then somebody cut through a piece of wood and packed me out.

bus were killed. They didn't have appear to see the southbound passome of them beyond recognition."

Sergt. William A. Nowicki said that school books strewn in the senger train bound from Chicago to wreckage indicated that some of Detroit. the bus passengers were school

DEATH NOTICES

In Today's Star

Aitken, Thomas Baker, Prof. Alfred Barry, John Barton, Elizabeth Boyd, Susanna Burke, Cant, Henry Gain, Sarah Gake, Charles Clarke, Lula Growder, Phyllis Dobie. Annie Dolman, Catherine Fisher, Charlie Godson, Frederick Halls, Henry Hanson, Rose Hicks, Ann Hogarth, Margaret Huffman, Robert Jones, Annie Kent, Minerva Kinsinger, Frank

Lawrence, Samuel Minett, Mary Mollin Eva Morse, Norman McCallum, Augusta Oxton, Samuel Pearcey, George Phillips, Harry Rae, Jessie Rea, Mrs. Elizabeth Sandercock, Frank Sharples, Frederick Stokes, Arthur Stutt, Minnie Svetkeff, Jeanette Tate, F.O. John Taylor, Clara Thompson, William Thompson, Robert Watson, Percy Wharram, Edgar Williams, Eleanor Williams. infant Willoughby, Earle

See Notices of Deaths on Page 181

nearly two blocks.

Several victims were caught in to a halt 14-mile past the crossing.

'As soon as a freight train clear-Patrolman John Kudlo said "All started to cross," said Joseph Levinthe passengers in the back of the ski, tower watchman. "He did not a chance. They were just crushed, senger train until it was on top of him."

Arthur Curtis, in a car alongside. Police headquarters said "Bodies up as the freight train cleared. 1 the bus, said. "I saw the bus start, were strewn all along the right-of- caught a glimpse of the approach-Patrolman Edward Van Gordon hands over my eyes and the next said wreekage of the bus was strewn thing I heard was an awful crash."

Two Die

(Continued from Page One)

the rails or upright. Three baggagemen were in the third baggage car, directly behind the one that hurtled off the embankment. Although their car was derailed and turned on its side, they were only shaken up. Railroad, officials here declined to divulge their names.

The division superintendent at Battle Creek was notified and planned to come here at once. Trainmen said an open or split switch or a faulty flange on the locomotive could have been possible causes of derailment.

PASSENGERS FROM LONDON

As far as could be ascertained, no Lendoners were passengers on Canadian National Railways train No. 5, which was wrecked at South Bend, Indiana, on the Grand Trunk Western line, early today.

The train passed through London at \$.59 o'clock last night, and three tickets for passage as far as Chicago were sold just before the train left. One was to a St. Louis man who was returning home, and the other two to a Kincardine man and his wife, according to the recollections of the ticket clerk on duty at that time.

Local railway officials knew no details of the wreck, as their territory extends only to the border. None of today's trains from Cheago were delayed in arrival here, as they pass through South Bend before No. 5 arrives there. Train No. 6, which arrived here on time at noon, passed through South Bend just prior to the accident. Whether train No. 4, the next, due here at 7.10 p. m., will arrive on time had not been ascertained at press time.

April 28 1932

In a rear collision of eastbound passenger trains on the Grand Tunk, two miles east of Durand, Mich., on the night of August 4 about 11 o'clock, six or eight passengers were killed and five tasengers and two trainmen were injured. The wreck took fire and some of the passengers were burned to death. The leading and some of the passengers were burned to death. The leading trin was No. 14. It had been stopped on account of the brakes taking, and the engineman and fireman of that train, who were taking, and the engineman and fireman of that train, who were taking, which leaves Chicago 45 minutes behind No. 14. The tase car of No. 14 was the sleeping car and in this were most in the victims. This car was totally destroyed by fire. The result indicate that the flagman went back a sufficient distance, it that his light and his torpedoes were both disregarded.

September 2 1910 Railway Age

Report on Durand Derailment

The Interstate Commerce Commission has issued a report on the derailment on the Grand Trunk Western, near Durand, Mich., on June 5, when five persons were killed. An eastbound special passenger train, consisting of locomotive 5030 with one baggage car and eight coaches ran off the track, on a straight line, while moving at from 25 to 50 miles an hour, and the locomotive was overturned. The first two cars were destroyed. Two passengers, one musician, the engineman and the fireman were killed and 25 passengers and two employees were injured. The report is dated July 7. It is accompanied by photographs showing that the track of this railroad at this point was in very poor condition; and hat is given as the cause of the derailment. The immediate ailure was an overturned rail. The inspector found a large numer of broken, defective and rail-cut ties, and many low joints, oose spikes and braced rails. The ballast was poor, and in

September 8 1933

Railway Age

Train Robbery at 94th Street, Chicago

Over \$132,000 in currency, destined for a Harvey (III.) bank, was taken from a mail car on an eastbound Grand Trunk train at 94th street, Chicago, on September 10. Two bandits entered the car near the outskirts of the city, bound and gagged the two clerks, and threw the money off the train at a point where another companion was waiting in an automobile. As the train slowed down at Evergreen Park station, the bandits jumped off and disappeared in another automobile. The money stolen, which had been mailed at Chicago, was for the payrolls of three manufacturers in Harvey.

September 1 18,1926

Railway age

GRAND TRUNK WESTERN.—A contract for the construction of a bridge over the St. Joseph river at South Bend, Ind. has been let to Foley Bros., St. Paul, Minn. The bridge will also span Lincoln highway and the East and North Shore boulevard. This contract also covers the construction of an arch bridge over Mishawaka avenue in South Bend. All of this work is part of a diversion program which will remove the Grand Trunk tracks from Division street in South Bend while the railroad will gain entrance to the new union station over the New York Central track elevation. A contract for the con-

October 6, 1928 Railway age

Grand Trunk Western, Flushing, Mich., July 8. 12:25 p.m.—A northbound special train, consisting of 28 freight and 7 passenger cars, carrying a circus, moving on a descending grade at about 12 or 15 miles an hour, was derailed, and three coaches fell down a bank; 16 circus employees injured. The cause of the derailment is given as buckling of the track under the train, due to high solar heat and the poor condition of the track. The rails were 60-lb. section, laid in 1888, on soft wood ties, with gravel and cinder ballast about 8 in. deep. The track was not in good surface and the ties were found cut by the rails from one-half-inch to one inch. The introduction recently of heavy locomotives has been followed by considerable creeping of the rails.

December 15, 1928 Railway age

Grand Trunk Western, Morrice, Mich., August 18, 5:41 a. m.—Eastbound freight train 484, second section, moving at 35 to 45 miles an hour, ran into the rear of eastbound freight train No. 486 which had been stopped because of delay to a preceding freight; one locomotive, one caboose and ten cars were wrecked. The engineman and fireman were killed and one brakeman injured. The collision occurred in a dense fog within one or two minutes after the leading train had been stopped. It was primarily due to second 484 being run at excessive speed, considering the weather conditions. The report contains a long statement as to what was done with fusees but the evidence is conflicting, the men on the following train maintaining that they did not see any fusees where the other crew said that fusees had been thrown off. This road has automatic block signals on its line (double track) between Chicago and Battle Creek and the report expresses the belief that, in view of the average daily train movement, 36 trains a day, "there is justification for a recommendation that steps be taken toward providing block signal protection" on this part of the road. The train dispatcher testified that in extreme cases of inclement weather, and where conditions warrant it, trains are blocked one station apart but, apparently, the fog on this day was not classed as extreme inclement weather.

April 26, 1930 Railway Age

Grand Trunk, Battle Creek, Mich., February 7 12:45 p. m.—Westbound passenger train No. 9, moving at about 20 or 30 miles an hour, ran over a misplace switch and collided with a yard engine standing on : side track. One car was completely wrecked and mucl other damage done; 11 persons injured. The switch had been set for the side track immediately in front o the approaching passenger train, the switch tender hav ing been informed by telephone that a freight train wa to come ahead of the passenger train. This information had been given by an operator who heard, or thought he heard, on the telephone line, the statement that th freight had passed Bellevue, when as a matter of fac the statement (it is claimed) was not that the freigh train was "by," but that it had "arrived." The operato who repeated this information had not been instructed to do so; and, says the report, if he wanted to voluntee information he should have obtained it from the prope authority. The switch tender is censured for opening a main line switch without definitely ascertaining tha the approaching train was the one which he intended to head into the yard. An automatic block signal 3,000 ft. east of the switch indicated "proceed" when the train passed it; the railroad has promised to improve the connection between this signal and the switch, but, say: the report, steps should also be taken to prevent information from being communicated in the irregular man ner disclosed in this instance. June 13, 1931

Railwayage

1

Grand Trunk, Battle Creek, Mich., February ? 12:45 p. m.—Westbound passenger train No. 9, moving at about 20 or 30 miles an hour, ran over a misplace switch and collided with a yard engine standing on a side track. One car was completely wrecked and mucl other damage done; 11 persons injured. The switch had been set for the side track immediately in front o the approaching passenger train, the switch tender hav ing been informed by telephone that a freight train wa to come ahead of the passenger train. This information had been given by an operator who heard, or thought he heard, on the telephone line, the statement that th freight had passed Bellevue, when as a matter of fac the statement (it is claimed) was not that the freigh train was "by," but that it had "arrived." The operato who repeated this information had not been instructed to do so; and, says the report, if he wanted to voluntee information he should have obtained it from the prope authority. The switch tender is censured for opening a main line switch without definitely ascertaining tha the approaching train was the one which he intended to head into the yard. An automatic block signal 3,00 ft. east of the switch indicated "proceed" when the train passed it; the railroad has promised to improve the connection between this signal and the switch, but, say the report, steps should also be taken to prevent infor mation from being communicated in the irregular man ner disclosed in this instance.

June 13 1931

Railway age

Grand Trunk, Belsay, Mich., May 28, 2:20 p. m.-Westbound passenger train No. 17, moving at high speed, ran over a misplaced switch and the engine, tender and first car were overturned. The engineman and fireman were killed and nine passengers and four employees were injured. The switch that was in the wrong position had been last used by a lineman operating a track motor car with two trailers. The lineman is held responsible and the report says also that neither he nor the laborer, to whom he delegated certain duties, took sufficient precaution to know that the switch was left in proper position and locked. This laborer stated that he had seen that the rails were in the right position before he left; but later, when the government inspectors appeared, he could not be found. This and several other switches at this point have red targets to indicate when they are open but the report recommends that they be arranged so as to be more visible from approaching trains. Automatic signals are being introduced on this road and would soon have been installed at Belsay. The laborer at fault had been in the service three years but later was out of service and had been re-employed only one week before the occurrence of this derailment.

MARCH 28

Railway age

Buckled Track Derails Train

WHEN the track on which his gang was renewing ties buckled, a section foreman on the Grand Trunk Western at Ionia, Mich., ran back to flag a passenger train that was then due. but although his signal was acknowledged at a distance of 1,445 ft. from the defect in the track, an emergency brake application failed to stop the train short of the kink, and three employees were injured in the resulting derailment, one of them fatally.

According to the testimony of the foreman, as reported by the Bureau of Safety of the Interstate Commerce Commission, the gang had renewed ties on the morning of the day that The work the accident occurred. was done in conjunction with a surface.lift of 7/8 in. but he did not consider that this called for flag pro-Immediately after lunch, tection. while the gang was tamping and spiking the ties, he noticed a slight kink, and when his men attempted to line this out, the track suddenly jumped from 8 to 10 in. out of line, forming a letter "S."

The track was laid with 90-lb. rail on hardwood ties, fully tie plated, equipped with rail anchors and ballasted with washed gravel; it was well maintained. According to thermometer readings taken at Ionia on May 3, temperatures on the day of the accident were moderate. It was 60 deg. F. at 9 a.m., and 75 deg. at 1 p.m., for which reason, according to the report, it could not be stated definitely what caused the kink.

December 1937 Railway Age

Nineteen Killed When Bus Runs in Front of Train

Nineteen persons, including school pupils, were killed on October 28, when a crowded Detroit Street Railways bus ran in front of a passenger train of the Grand Trunk Western at Caniff avenue. According to reports, the driver had stopped while a northbound freight train passed and although flashing light signals were still operating and the whistle of the locomotive of the passenger train was still sounding, proceeded across the tracks in front of the southbound passenger train. The front end of the bus cleared the tracks but the force of the impact at the middle of the bus cut it in two, demolishing the rear end.

October 31

1942

Railway Age

Grand Trunk Western—A second section of train No.

1947..40,738

1946..49,979

from Elsdon yard, Chicago, at 8:25 p.m., picking up traffic at Blue Island, Ill., South Bend, Ind., Battle Creek, Mich., and Durand, arriving at Port Huron at 7:30 a.m., for early morning delivery to the Canadian National. Overnight freight service on both carload and l.c.l. traffic is generally rendered between all G.T.W. stations.

Railway Age

Grand Trunk Western.—This company has awarded a contract to the Ogle Construction Company, Chicago, for the construction of a 500-ton concrete coaling station at Battle Creek, Mich.; a 350-ton concrete coaling station at Durand, Mich., and a 300-ton concrete coaling station at Grand Haven, Mich.

August 9 1924 Railway age

GRAND TRUNK WESTERN.—A contract for the grading of the Pontiac Belt Line and for the grading in connection with the extension of the yards at Pontiac, Mich., has been let to the Jones Contracting Company, Cleveland, Ohio. The total amount of excavation involved in this work is about 200,000 cu. yd.

June 25 1927 Railway age

GRAND TRUNK.—The Interstate Com-February Commission on merce made public a proposed report by Examiner Haskell C. Davis recommending that the commission issue a certificate authorizing the construction by Detroit, Grand Haven & Milwaukee, the Pontiac, Oxford & Northern, and the Michigan Air Line, subsidiaries of the Grand Trunk Western system, of a belt line of 6.63 miles around a part of the city of Pontiac, Mich., and that it deny the application of the Pere Marquette for a certificate for a belt line around Pontiac and the extension from Wixom to Pontiac and a belt line around the city. "The two proposed routes," the report says, "cross, recross, encroach upon and conflict with each other to such an extent that construction of both lines, as now located, would be practically impossible. Either of the proposed belt lines would provide further industrial sites at Pontiac and serve for some interplant movement, but the Grand Trunk Belt is also needed to facilitate the operation of its system lines that now converge at Pontiac, to divert their traffic from the center of the city and to enable the Grand Trunk to cut the air line at Saginaw street. The Pere Marquette project, which would cost four times as much, would give Pontiac competitive service, but would have no other substantial advantage. While railroad competition might be desirable for a city of the importance of Pontiac, it is notable that Pontiac's rapid industrial expansion has taken place while it was served by a single railway system. So far as the rival railway systems are concerned, the Grand Trunk lines appear to have a greater need for the traffic, and their routes for hauling it would probably be more economical."

1927 Railway age

TO CONNECT WITH G. T. R.

The New Road From Toledo to Detroit.

Toledo, O., April 20.—Official announcement was made here today that in the near future the Clover Leaf will run trains through to Detroit. The contract has been let to W. E. Strang for the construction of the road between Trenton and Delray, and, when this road is completed, a commention with Grand Trunk will be had at Delray. This very materially changes the

Instead of meing the Michigan Central terminal, as originally planned, the independent connection will be built, and it is also stated that instead of the Grand Trunk running passenger trains into Toledo its business will be taken care of by the Clover Leaf, which will operate the Detroit & Doledo shore line.

April 21 1903 Wundsor Record Evening Record

MINATORIAL

The Grand Trank Still Making

New York, June 18.—It is reported that the Toledo, St. Louis & Western railroad had been purchhased by the Grand Trunk. Taken in connection with the recent movements of the Canadian company there is considerable guessing as to what this last play protends. The Toledo, St. Louis & Western will give the Grand Trunk a short line from Toledo to the Mississippi river at East St. Louis. The road has 451 miles of track and the Grand Trunk makes connection with the Toledo line through the Detroit & Toledo Shore line, which was purchased by the Grand Trunk and the "Clover Leaf" jointly in December, 1902. This connecting line is 39 miles long and has a double track the entire distance. The close association between the two lines, which are now reported to be practically amaigamated, gives color to the latest rumor.

The report that the Grand Trunk railway of Canada has purchased the Toledo, St. Louis & Western is denied by officers of the Grand Trunk, who do not wish, however, to be quoted personally in the matter. These officers say that for some time past the freight traffic of the "Clover Leaf' has been dominated by Grand Trunk interests. While the Grand Trunk is the most important interest in the "Clover Leaf," it is not the only interest and at the present time it does not appear to be the policy of either the Grand Trunk or the Vanderbilt or the Wabash interests to make any considerable investment in 'Clover Leaf's stock.

July 17 1903

RAILWAY NEWS.

Over the Wabash.

A. B. Atwater, assistant to the president of the Grand Trunk Western road, said yesterday that the Grand Trunk will for the present, lay its rails only as far as the Rouge river bridge of the Wabash road, and that from there to West Detroit the tracks of the Wabash will be temporarily used by the Grand Trunk. The work of laying rails from Trenton towards, Detroit began yesterday, but was brought to a standstill by the persistent rain.

The Wabash railroad is now accepting all freight except perishable for St. Louis, and East St. Louis, or via those points. Flood conditions have been largely overcome. The Chicago & Alton also gives notice that it can handle all sneight consigned to southwestern spoints.

Matthew A. Fitzsimons, for twenty years with the G. I. R., Detroit, has resigned to accept a position with the Barry like of steamers.

Supervising bear of the Pere Marquette Grand Rapids, has resigned to take charge of a bank.

Locos of the Grand Trunk Western by Jim Boyd

Owned by the sprawling Canadian National, the Grand Trunk Western is actually the western end of the CN's Toronto-Chicago mainline. The GTW endeared itself with railfans as one of the last big U.S. roads to retain the classic look of the great days of steam railroading: modest power, dignified and reserved equipment. Today there's a new look as the GTW emerges with the parent's snappy red, white, and blue.



When you look up the Grand Trunk Western RR in the index of the OFFI-CIAL GUIDE, it says "see Canadian National". That pretty well sums up the GTW; it is owned by the CN and it looks and acts much like its big Canadian parent. The GTW is actually the west end of a CN main line from Toronto to Chicago. It is one of four railroads in the US controlled by the Canadian Government-owned CN; the others are the Central Vermont and the Grand Trunk, both in New England; and Duluth, Winnepeg & Pacific in Minnesota.

The GTW has acquired the CN's positive approach to the passenger business and operates a pair of fine trains between Chicago and Toronto; the daytime Maple Leaf, and the overnight International; along with a snappy Chicago to Detroit businessman's train, the Mohawk-which is a possible candidate for Turbotrain equipment. There is also a Detroit to Durand connection with the Maple Leaf, as well as extensive Detroit area commuter service.

Picture yourself at the passenger station in Port Huron, Michigan, the eastern end of the GTW; to the west is a sizable freight yard and some imposing overhead structures that once supported canternary for the electric engines that were once used in the tunnel. The tunnel? Oh yes, to the east of the station the railroad drops sharply into a cut and RAILROAD MODEL CRAFTSMAN

▲Afternoon commuter rush at Birmingham, Michigan, typified by a boiler Geep and a string of beautiful green, black, and gold monitor roof coaches.

▼Freight Geep in old green and yellow paint scheme. All GTW Geeps operate long nose first. Note high mounted bell, gum ball machine amber light atop cab.







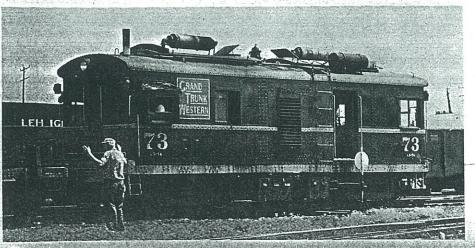
disappears into the ground-this is St. Clair Tunnel, built in 1890, which crosses under the St. Clair River to Sarnia, Ontario on the other side. The St. Clair River is part of a connecting link between Lake Huron and Lake Erie and is one of the busier shipping lanes on the Great Lakes. A bridge was impractical due to the heavy ship traffic, so for years the railroads used expensive and time-consuming carferry transfers; the tunnel, an engineering masterpiece of its day, solved the problem of getting the trains across the busy waterway. In the days of steam, boxy electric locomotives shuttled trains through the tunnel between the GTW and CN. Today the electrics are gone and diesels operate through the tunnel thanks to big blowers that ventilate it. Due to differences in inspection and regulation, US (GTW) engines can operate into Canada.

but Canadian (CN) engines cannot operate in the US unless they have ICC inspection certificates. The passenger engines, all GTW Geeps, run all the way through from Chicago to Toronto, but the freight trains stop at the border. Trains are shuttled through the tunnel by GTW units or specially ICC certified CN units; these engines are referred to

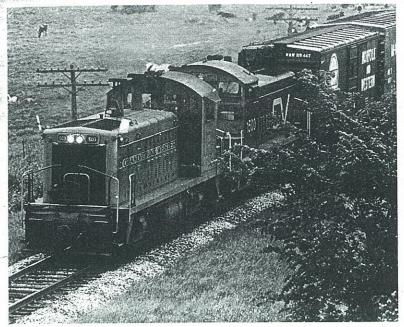
locally as the "Tunnel Motors".

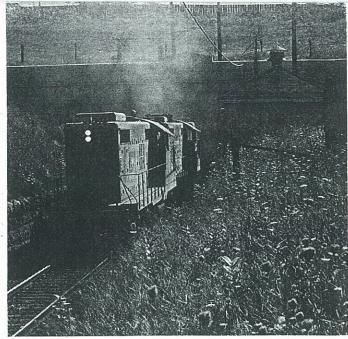
At about 12:15 PM a familiar rumble is heard and a pair of red-nosed Geeps growl out of the tunnel with train #159, the Maple Leaf. It's a pretty good sized train: 2 Geeps, an assortment of mail and baggage cars, a half dozen streamlined coaches and a diner. Let's get aboard and see what the GTW looks like. The train is shiny on the outside, colorful on the inside, and clean throughout. You've waited until you were on the train to have lunch, and you find the diner unlike any you've seen before; the styling is modern, crisp, and colorful; tasteful abstract paintings adorn the walls (no faded tinted photograph); the crew is friendly and the food is good ... you come away with the feeling "now THIS is railroading!". Outside your window the fields, forrests, and towns of Michigan sweep by and soon you're pulling alongside the imposing





8099, above, is an Alco S-2 switcher working Elsdon Yard in Chicago with snappy red and black paint. Although units were built in USA by Alco, class symbol on cab MS 10a reflects Montreal Alco Switcher 1000 hp a (first order) Canadian classification . . . Passenger Geep 4913 GP-9 in new black and red paint and CN style 'noodle herald. Air tanks are on top to make room for water tank alongside fuel tank. Note boiler stacks on short hood . . . Below, St. Clair Tunnel Co. 707 in a rare view from the collection of Howard Ameling. Electrics were used to haul trains through the tunnel in pre-diesel era. This motor appears to have line car modifications and is trolley pole equipped rather than normal StCTC pantographs. Taken August 1954 . . . Russ Porter caught the old riveted-side boxcab 73 500 hp. diesel switcher were caught the old riveted-side boxcab 73 500 hp. diesel switcher working the GTW carferry yard in Milwaukee in 1957, where the old Brill spent her entire lifetime.





GTW SW-1200 Nos. 1503 and CV 1500 team up on a CV freight south of St. Albans, Vermont, in June 1968. Engine 1503 is a mystery engine as author Boyd could not find her listed in his roster sources . . . Above right, a trio of GTW Geeps snarl upgrade clear of the Michigan end of the St. Clair Tunnel with a CN transfer. US units can run into Canada but only certain ICC inspected CN Geeps venture into the US.

station at Durand where the GTW's Detroit to Muskegon line and the Ann Arbor RR cross the GTW main. A Geep adds a coach which came over from Detroit on a connecting train to the rear of the Maple Leaf. At 2:15 on the dot you leave Durand behind and roll southwest over splendid double track; near Charlotte, Michigan, train #158, the east-bound Maple Leaf slams by.

On to Battle Creek, home of your

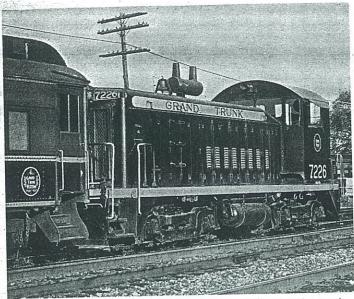
breakfast food and of the GTW's shops and most important yard which does all freight classification for all mainline freights. Leaving the sprawling yards and tall grain elevators of Battle Creek behind—not to mention the 4-8-4 on display across from the depot-the Maple Leaf crosses into Indiana, past Notre Dame University in South Bend and westward to the railroad complex of the south side of Chicago. Heading north to Elsdon Yard at 49th St. the train makes an unexpected turn and heads back east for what seems like quite a distance, finally the C&WI roundhouse swings by and you're headed north again on C&WI iron to the fabulous 21st St. Interlocking where the Maple Leaf then zig-zags into Dearborn Station which it shares with such notables as the Super Chief and Blue Bird.

The Maple Leaf, International, and Mohawk are only part of the GTW story; it runs a thriving freight business on its main line and its web of secondary lines that cover central Michigan. Since its terrain is relatively flat, most freights can make good time with only two or three Geeps or F-3's. Currently, GP-18's are the most modern power on the line, and the GTW looks like a road that the second-generation diesel salesmen forgot. The interesting variety in the GTW's diesels comes in it's EMD and Alco switchers, including some SW-1200's on Flexi-Coil road trucks used on local and

Classically elegant depot at Durand holds the Detroit Division offices on its second floor. Hand operated gates still protect Chicago-Port Huron main from Detroit-Muskegon line. Shanty is for crossing watchman.



RAILROAD MODEL CRAFTSMAN



Grand Trunk, not Grand Trunk Western, SW-9 working commuter coach yards in Pontiac, Michigan. GT is another CN line with trackage in Maine, N.H.

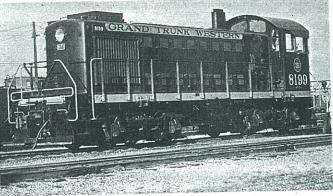


Passenger GP-18 4950 in new paint. Class GRG 18b under number on cab indicates <u>GM_Road_Generator</u> (steam) <u>18</u>00 hp <u>b</u> (second order). RF on frame indicates Right Front, RB is Right Back, LB Left Back, LF is Left Front.

Alco S-4 switcher 8199 in black and yellow paint shown working the Port Huron Yard. Unit is not equipped for MU operation. Older color scheme had a subdued elegance associated with steam era. New paint is vivid, modern.



7265 SW-900 in standard switcher paint scheme with round maple leaf herald on cab. Unit is black with yellow trim. Note cab heater box and unusual spark arrester plus all-weather cab window. GTW winters get mighty cold.



GTW's RS-1's 1950, 1951 are unique in many ways, such as overhanging lip at end of hood, cab window box, warning light, dual multiple air horns. These were last domestic RS-1's produced; served Pontiac, Durand.



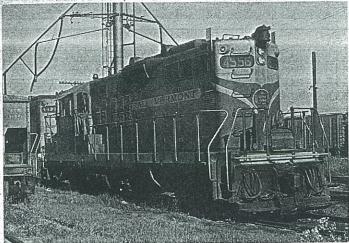
Complete as of March 1968.

		X CONTRACTOR	的影響的	建 图 10 10 10 10 10 10 10 10 10 10 10 10 10
NUMBER	BUILDER	HP	MODEL	REMARKS
73	Brill	500	Box cab	Used in Milwaukee carferry yard, Scrapped in 1960
78, 79 7227-7232,	EMD	600	SW/	Scrapped 1959, 1963
7262-7268 7900-7914.	EMD	900	SW-900	
7966-7974	EMD	1000	NW-2	Control of the Contro
7010-7016	EMD	1200	SW-9	
7017-7019 8091-8092	EMD	1200	SW-1200	
8096-8111 8034-8035,	Alco	1000	S-2	
8082-8090, 8196-8204	Alco	1000	S-4	
1501, 1512- 1519	EMD	1200	SW-1200	Flexi-Coil road trucks.
1950-1951	Alco	1000	RS-1	Built Oct. 1957; last RS-1's built. Originally had boilers, since removed.
9006-9027 4427-4441,	EMD	1500	F-3A	Many modified with F-7 grilles.
4539-4546, 4134-4139 4900-4901,	EMD	1750	GP-9	Markovita da de de la composição de la comp
4900-4901,		+ 10		Carlos Andrews
4930-4933	EMD	1750	GP-9	Boiler equipped.
4700-4707	EMD	1800	GP-18	
4950-4952	EMD	1800	GP-18	Boiler equipped.









All part of the family, the GTW often plays host to its eastern cousins and these Central Vermont Geeps are a common sight on the GTW. CV Geeps have dynamic brakes and big cylindrical spark arrestors. Although CV and GT units are used on GTW, CN units are rare as they lack ICC inspection cards.

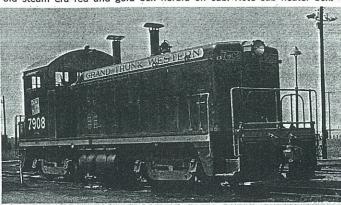


Freight GP-18 4703 with high hood in handsome old olive green and yellow paint of parent Canadian National, on run between Port Huron, Sarnia.

Russ Porter caught F-3 9021 modified F-3 with a sister F-3 in yellow-green and black on a freight rumbling through Durand, Mich., in 1958.



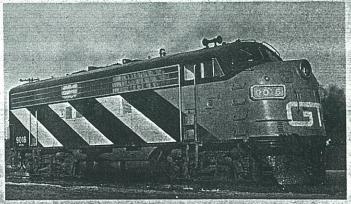
NW-2 switcher 7908 in the very old black with yellow stripe paint with old steam era red and gold box herald on cab. Note cab heater box.



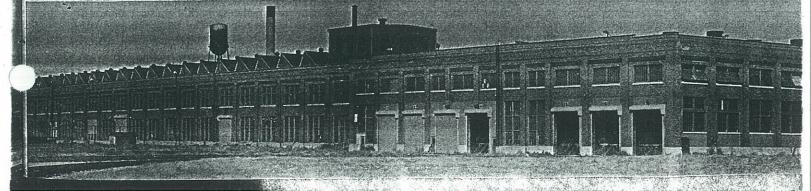


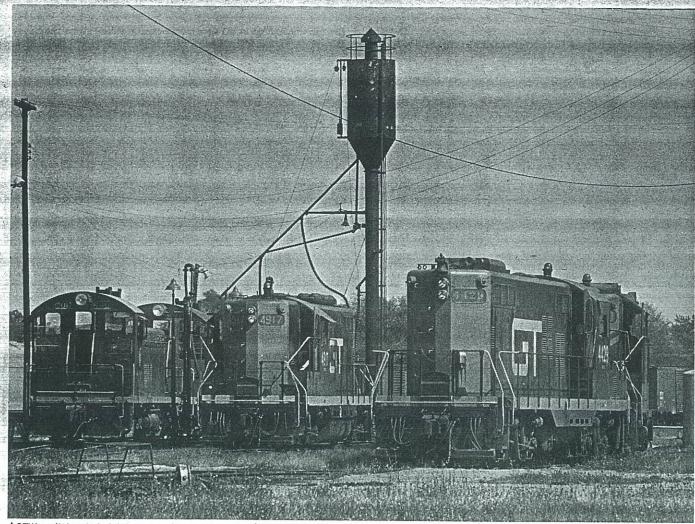
F-3 9014 in handsome olive green and yellow paint scheme shows extensive modification to carbody sides with new vents and chicken wire grills. Positioning of bell, roof grab irons, front grabs, is unusual.

Would you believe that this psychedelic paint scheme on Eng. 9016 is an F-3, despite the F-7 grills and carbody louvres? Unit is in the new Canadian National red, black, and white zebra paint. Note hood light.



GTW locomotive servicing headquarters at Battle Creek, Michigan, in a photo by Geletze and Lab. All diesels get their major work done here. Doors at right are for modern diesel servicing pit; rest of building is backshop.





AGTW switchers, freight Geeps, and a passenger Geep off the Detroit connection share the engine terminal at Durand, Michigan. Author used a telephoto lens on this view, resulting in foreshortening of the equipment. Note bell over light on 4429.

▼SW-1200's in the 1500 series have Flexi-Coil trucks and are considered road units as evidenced by the olive green and yellow freight paint scheme. Units are equipped for MU; are used on branches, main line peddlers, and in transfer service.

branch jobs, and the last domestic RS-1's built in 1957. There is also a sprinkling of power borrowed from the other CN-controlled US roads, like GT switchers and CV Geeps.

Commuters are a big business for the GTW between Detroit and Pontiac, Michigan. The trains consist of a Geep and standard coaches which are kept clean and neat, but most of which retain the old black-green-&-gold paint. The line from downtown to Detroit's fashionable western suburbs is hilly and runs through some beautiful countryside; it is easy to see why this line was a railfan favorite in the last years of steam.

The GTW of a decade ago was one of the last roads in the US to operate steam, and the entire railroad at the time was a classic leftover from the era of standard railroading: its power was modest, its trains were long, its passenger equipment was dark and dignified, and its structures were 100% railroad. It's maple leaf herald was a railroad classic. Then came the CN's NEW LOOK: red-white-&-blue paint, wormin-convulsions herald, and dynamic public eye appeal. The GTW followed suit, much to the dismay of many railfans, and the treasured black-green-&-gold paint was redone in dramatic blackwhite-&-red, and the classic maroon & yellow depots got light grey paint with jazzy red and blue doors. Once the initial shock wore off, the NEW LOOK looked good, and the GTW emerged back into the 20th century. 🖘



tion, who could not for their lives differentiate the offices

a semaphore and a bridge tickler!

The lack of dignity in this incident is not unimportant. Hasty and unjust critics, among whom have been the Mayor and the District Attorney, are encouraged by it, and we may reasonably expect that they and the public officers of other communities along the line will plainly see and use their power to put the directors "on the run" whenever the inevitable accidents in railroading

The sum of it is that ignorant control, lack of back bone and hopelessness among under officers of promotion for merit are the causes for the present batred of the public and lack of loyalty among the officers and em-SOLON.

The Miller Locomotive Cab Signal.

TO THE EDITOR OF THE RAILROAD GAZETTE.

A seeker after information has read with a great deal of interest the article published on page 128, of the issue of Feb. 21, on the subject of the Miller locomotive cab signal. The S. A. I. confesses that he is not clear on some points, nor could be find an explanation of them in the article; but as they no doubt have been considered by the promoters he begs to state a few of his difficulties seeks to have them removed.

The article says: "The current from the roadside battery runs first to a rail of the track, thence to a wheel of the locomotive, thence to the engine apparatus, thence by a wire to the tender, which is insulated from the engine, and through the tender wheels and another section of track back to the roadside battery." Does this not mean that for convenience the front wheels of the engine would be used, and does it not follow that this pair of wheels must be insulated from the truck or engine and from the boiler? Considering the weight carried on the wheels of modern engines is this not rather a difficult proposition? Again, on a suburban engine, where there are no engine trucks and the tank is carried on the engine frame, how would the insulation between the front driving wheels and the tender be arranged in such a case? It is to be presumed that such insulation has been effected, but has it proved a practical and effective method and what are its details? Mention is made further on that the tender is insulated from the engine by raw-hide. It is not clear to the writer just how this is done even at considerable expense, and it seems that while the difficulty might not be insurmountable it would be a very expensive process both in first cost and in main-

A weak point would appear to be the short section of track which is insulated for the purpose of changing the cab signal, according to the condition of the block. The engine is supposed to make the connection with the insulated section, but if the rails of this insulated section happen to be covered over with sand, thus preventing the engine from making proper contact with these in-sulated rails, would not the result be that the engine would continue with the same light displayed regardless of the condition of the block?

Mention is made of the battery power for the cab lights being carried on the engine. Will not the motion engine prevent this battery from doing its duty properly? The writer thinks it will, from the fact that has had considerable experience in the use of wet batteries for annunciators in passenger cars and has found them very undesirable for the purpose, so much so that he is now using dry batteries. As these, however, are designed for open circuit work only it does not appear to him that they would be satisfactory when used for closed circuit work, such as would be used when lighting the cab signal. The idea of using the power furnished from a headlight dynamo would seem a more feasible providing all went well. Of course a failure of the headlight dynamo would mean that the engine would have neither headlight nor cab signals and would have to proceed without or against signals; and as we all know, oftener trainmen and enginemen are permitted to disregard a red or danger signal the less regard they have for the signals; consequently it is only a matter of time until the signals will be of doubtful value.

In diagrams Nos. 1 and 2 instruments are suggested for

the purpose of allowing the engineer to test the signal when it shows white, in order to ascertain whether it is really a bona fide white signal. If, after a test has been made, the engineer finds that as a result of such test he now has a red signal shown in place of the former white one, will be not have to continue to the next block against a dauger signal in his engine cab? Relays designed for track circuit purposes are neces-

sarily very sensitive, owing to the current used in the track section being very light. I have a case in mind where the box containing the track relay was put on the side of a river bridge. The vibration of the bridge caused by a passing train closed the contact of the relay, with the result that the circuit of the signal battery was losed and a clear signal given while a train was in the block. Might not this happen with the relay in the cab of the engine for the "Miller" signal, thus giving a false signal to the engineer? The relay carried in the cab of the engine will certainly be subjected to very

rough usage, owing to the movement of the engine.

It would be interesting to know what provision is made for side tracks. Is it understood that all side tracks are to be equipped with track circuit instruments, so that the engineer will know the condition of those tracks on entering them? What arrangements are made

for engines passing over long crossovers or railroad

Experience has shown that the fireman on a modern locomotive has about all that he can attend to in patting in coal, one shovelful at a time, and has not much time to be looking after lights and signals. If this view is correct, is not the engineer the only one of the train who knows anything about the position of the blocks? Should an engine meet with an accident, and have its cab smashed, what indication, it any, would there be to show whether the engine at the time of the accident was running with a red or a white light in the cab?

This letter is not intended in any way as a criticism of the Miller signal apparatus, but merely sets forth some points which occurred to the writer on reading the article, and which seemed to require elucidation. A system of this kind naturally excites interest and comment among railroad men, and there has been not a little criticism of the scheme by engineers and others who are operating trains under a block system. Many of the points overheard during discussions by the operating committee around the roundhouse stove and in the bunk room anteroom, are embodied with others in this

Work of the Past Year in and Around Chicago.

Much work of special interest to maintenance of way officers has been done in Chicago and vicinity during the past year by many of the roads entering the city, large nums having been spent in improvements. The largest and most important undertaking and one that has affected nearly all roads, either directly or indirectly, is the elevation of tracks in compliance with city ordinances. work is well under way on many of the lines, sufficiently so to give an idea of its magnitude, and of the difficulties

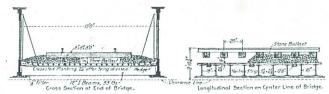
are under way, among which is a fine new passenger terinal. A number of good-sized interlocking plants have been installed, and yards and terminals have been enlarged. The most important and interesting work re-

Atchison, Topcka & Santa Fe and Chicago & Alton.— The Atchison, Topcka & Santa Fe has devoted its attention principally to track elevation, being jointly concerned with the Chicago & Alton and the Illinois Central's Chiengo, Madison & Northern line. The work is practically completed from Halsted to Lock street. A novel and interesting feature in connection with this work is in the floor design of the bridges over subways, an illustration of which we show herewith. The flooring is of creosoted planking, instead of the usual steel plates, which latter require that periodically the stone ballast must be dug out

and the metal painted to prevent corrosion.

In addition to this work, the Chicago & Alton has installed at its Brighton Park roundhouse a small direct-current electric lighting plant for lighting the roundhouse and car yards and for furnishing current to a storage bat-tery plant to be used for charging the limited trains. The improvements at this point also include the installation of a small machine shop in the roundhouse, the erection of a good-sized ice house, and the contemplated construction of a concrete-lined drop pit, having a portable air-operated jack, for use in the car yards. Also the main line from Chicago to Mazonia, about 62 miles, is being equipped with Hall automatic, electric block signals.

Chicago & Western Indiana.—The tracks and pas-senger terminal of the Chicago & Western Indiana are used by the Chicago & Eric; Chicago & Eastern Illinois; Chicago, Indianapolis & Louisville; Grand Trunk, and Wabash roads. The Chicago & Western Indiana is engaged on track elevation and has the concrete retaining walls in place from Forty-ninth street to Seventy-third street. An old iron bridge on its belt line, over the Chicago, Burlington & Quincy tracks, has been replaced



Chicago Track Elevation-Floor Design for Subway Bridges, A., T. & S. F., C. & A., and C., M. & N. Joint Track.

involved. Wherever yards are within the limits prescribed by the elevation ordinances, these yards have been, or are to be, raised along with other portions of the line. order to give a better idea of the extent of the undertaking involved in this track elevation scheme, we have prepared a table giving the miles of track elevated, the number of grade crossings eliminated, the number of subways built, and the estimated cost of the work, as made by the de-partment of track elevation of the City of Chicago, and covered by ordinances to date. Some of this work has been completed, some is under way, while some has not yet been begun.

The building improvements include freight houses and suburban passenger stations; other stations and buildings

with one of steel construction, costing \$14,000. A small interlocking plant, by the Standard Signal Co., having 14-lever tower, has been installed at 112th street for controlling a junction of two portions of the com-

The freight vards and terminals of the Chicago & Eric are at present quite crowded and in order to handle its business without serious interference, when elevation of these tracks and yards is begun, the company is making plans for an outside yard. The engineering department is at the present time principally concerned in the reduc-tion of grades and increasing the terminal facilities of the road.

The Chicago & Eastern Illinois has recently com-

 	1	 min the state of		740	78 (100)	
		 	 			-

	Tra	ick.		NS. 158	Estimated Cost.			
	First Main. Miles.	Total.	Subways.	Grade Cross'gs Eliminated,				
Atchison, Topeka & Santa Fe Thicago & Alton	5.0 4.52	11.43 22.10	32	39	709,500 1,000,000	18th St. to So. Kedzie Ave. 15th St. to California Ave.		
hleago & North Western; Chicago Avenne Division Galena Division Wisconsin Division Milwaukee Division Rockwell Street Division Mayfair Brauch Lotal Chicago & North Western.	3,00 4,75 4,50 4,50 19,25 4,79 19,25	29.80 39.99 15.78 11.85 106.26 15.63 106.26	25 16 27 21 110 17 110	32 16 32 28 19 17 129	1.200,500 1.100,000 1.000,000 900,000 600,000 843,000 5,030,000	Chicago Ave. to Diversey Bivd. Ada St. to 40th Ave. Wood St. to 44th Court. Wrightwood Ave. to Bryn Mnwr Av Ogden Ave. to Fullon St. Kinzle St. to Irving Park Bivd.		
Chicago & Western Indiana	9.57	68.68	63	63	2,211,000	1 22d St. to 73 St. 1 Jackson Blvd. to Grand Ave.		
Chicago, Burlington & Quincy	2.30	9.46	17	24	500,000	Western Ave. to City Limits.		
Thicago Junction	1.75	3.00	11	11	. 345,000	III. & Mich. Canal to 40th St.		
Chicago, Milwaukee & St. Paul	11.90	58.42	54	63	3,195,000	(Western Ave. to Montrose Blvd. Ellston Ave. to Marshfield Ave. Kimbell Ave. to 51st Ave.		
Chicago, Pasiand & Pacific	7.10	51.26	47	54	2,300,000	Van Buren St. to 78th St. (42d Ave. to C. & N. W. Ry.		
hicago Terminal Transfer	5.90	11.62	. 35	35	1,200,000	III. & Mich. Canal to 52d St. Irving Park Blvd. to 52d Ave. Ogden Ave. to California St.		
rand Trunk	2.75		27	27		Western Ave. to Green St.		
llinois Central: Main Line Chicago, Madison & Northern St. Charles Air Line	3.00 5.61 1.60	28.70 10.07 4.66	13 21 9	17 21 10	2,000,000 699,500	47th St. to 71st St. 18th St. to St. Louis Ave. I. C. R. R. to Stewart Ave.		
otal Illinois Central	10.21 7.80	43.43 64.97	43 42	48 43	2,000,000	Van Buren St. to 75th St.		
Main Line	2.75 3.80 0.70 5.75	2.94 18.72 1.18 22.84	14 28 6 42	14 28 6 42	*343.000 1.000.000 300,000 1.643.000	III. & Mich. Canal to 52d St. Ogden Ave. to Ada St. P. F. W. & C. R. R. to Green St.		
otal P., C., C. & St. L	8.7	79.26	56	58	2,775,000	22d St. to 75th St.		
Grand Total	108.59	567.04	622	679	\$27,295,500			

*Partial estimate.

TRACK DEPRESSION.

			1 ianuers.	
Atchison, Topeka & Santa Fc	0.40 0.40 .30 5.75	2.50 3.77 0.61 81.90	1	 15th St. to 18th St. 15th St. to 18th St. Under L. S. & M. S. and I. C. tracks. Randolph St. to 47th St.

:h a railway and 24 buses were reported as operated retition with railways over 304 route miles.

Central Eastern regoin, 60 buses are operated competitors over aggregate routes of 1,224 miles. the Pocahontas region, 18 buses were reported as mpeting with the railways over routes aggregating 9 miles in length. One railway in the Southern region ported two buses operated in connection with it in minal service, while 80 buses were reported as in mpetition with the railways in line service over 1,293

iles of route. Short lines in the Northwestern region reported 33 ises operating in competition with them over routes gregating 692 miles in length. In the Central Westn region, 48 buses, with total route mileages of 398, ere reported as in operation in connection with the railays, while 293 buses were reported as operating in impetition with them over 3,214 miles of route. Short nes in the Southwestern region reported 14 buses opating in connection with them in terminal service and 7 buses operating in competition with them in line ervice covering 2,176 miles of route.

Few Short Lines Operating Trucks

Only one motor truck was reported as being owned y a short line railroad. With respect to trucks operted, one was reported as being operated in terminal ervice by a railroad and two in line service by a sub-idiary. The one truck operated in terminal service was eported by the Bristol Railroad in the New England egion, roads in the Great Lakes, Central Eastern, Pocaiontas, Southern, Northwestern, Central Western and vestern regions replying that they were not enin the operation of motor trucks either in terninal or line service. In the Central Western region, wo motor trucks were reported as operated by a subsidiary of the San Joaquin & Eastern, with a route mileage of 11 miles, no trucks being operated by subsidiaries of short lines in the New England, Great Lakes, Central Eastern, Pocahontas, Southern, Northwestern and Southwestern regions.

Trucks Operated by Independents

Thirteen trucks were reported by the short lines as being operated by motor transport companies and individuals in terminal service and 545 trucks by such companies in line service, these latter having an aggregate truck route mileage of 9,134.

In the New England region, one truck was reported as being operated in connection with a railway in line service, while 32 trucks were reported as being operated in competition with the railways over 476 miles of

routes. In the Great Lakes region, one truck in terminal service and three in line service, with a route mileage of 40 miles, operate in connection with the railways, while 54 trucks with 336 miles of routes operate in competition with them.

In the Central Eastern region, the short lines reported 203 trucks operating in competition with them in line service, with aggreate route mileages of 1,596. Short lines in the Southern region reported eight trucks operated in connection with them in terminal service and one

in line service, while they reported 32 trucks operated in competition with them in line service, over

502 miles of route. Two trucks with route mileages totaling 74 miles were reported as operating in connection with short lines in the Northwestern region, and 23 trucks, with aggregate route mileages of 441, were reported as operating in competition with the railways. In the Central Western region, 33 trucks, with aggregate route mileages of 984,

operate in connection with short line rallways, while (4) trucks operating over 2,233 miles of routes compete with them. In the Southwestern region the short lines reported four trucks operated in connection with them in terminal service and 101 trucks operating in line servi ice in competition with them, these latter having an aggregate route mileage of 2,444.

Electric Railways' Report

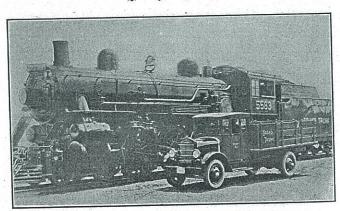
Electric railways coming under the jurisdiction of the Interstate Commerce Commission reported ownership of 255 buses with an additional 75 owned by their subsidiaries. Electric lines reported that they operate 591 buses in terminal service and 756 in line service. A number of the 118 electric railways whose replies were included in the commission's summary are subsidiaries of steam railways.

A Wheel for Heavy Buses and Trucks

N design, the Budd dual wheel, manufactured by the Budd Wheel Company, Detroit, Mich., remains the same as heretofore, with some minor improvements in the parts that make up the complete assembly. The major improvement is what is termed the double cap nut method of mounting dual rear wheels. method of mounting was by a single nut through which both the inner and outer wheels were driven. By this design the inner wheel of a dual assembly was in reality driven by the friction or clamp action between the outer wheel and the hub flange. With the double cap nut method of driving, each of the dual rear wheels is driven by an individual set of nuts. The need for such a method of mounting and driving dual wheels became evident with the advent of the larger and heavier buses, requiring up to 7 in. and 8 in. size tires to carry the load.

The principle of the Budd driving wheels remains unchanged from the original design. The wheel stud holes are larger than the studs themselves, and, furthermore, are counterbored cup shape. Into the counterbore fits the ball face of the cap nut. This design provides the nut with a large area of contact against the wheel. Right and left hand studs applied on the opposite sides of the vehicle contribute to keeping the nuts tight after they have been properly drawn up. Elimination of worn holes and sheared or broken studs, is said to have been effected by this type of mounting. The disc and the rim of the dual wheel are integral which insures easy handl-

ing and a true running wheel.



A Reo Speedwagon in the Service of the Grand Trunk Stores Department