

was that the Boche had tunnelled out from the cellar of a near by building, placed his charges and concealed his work by boarding up the cellar walls. The civilians remarked afterwards that for a long time the Boche would permit no one to go in sight of the building. This of course was when the tunnelling was going on and the excavated material was being got rid of. The delay to train operation was 30 hours, which amply justified the expense and painstaking in setting the mine.

In a large material yard at Sassignies, which contained several thousand tons of track material, which it was necessary to leave behind in his great retreat, the "pigs" were again used to great advantage in the destruction of the material. A few "pigs" placed under a pile of rails, a pile of frogs and switches, or a pile of ties, generally twisted the material out of shape, or otherwise destroyed it, as well as scattered it all over the neighborhood. Fortunately no "pigs" remained "alive" when we got there. They had all "gone up."

The enemy were certainly masters of the art as far as destruction goes and we have doubtless learned many a lesson from the many devices they used. In blowing up rails in the track, latterly they used a very simple but effective device for fuse lighting, and one which rendered possible the blowing up of miles of track in a single day. The explosive was placed at every second rail joint, as before stated. Ordinary caps and rubber covered fuse, similar to that in Canada were used, but instead of using matches or a torch for lighting the fuse, they employed a little copper cap that clipped over the end of the fuse. The copper cap, of course, had a mechanical lighting device inside it, and all that was necessary was to pull the string to start the fuse burning. In this way, once the charges were set, a man walking along the track could easily light and blow up at least 6 or 8 miles of track a day.

During the last days of the war, desperate days for the enemy, he attained even greater refinement in his work of destruction. Not being content with the blowing up of bridges as he had done it in the past, he very carefully conceived a most effective means of delaying us in the reconstruction of them. The most striking example of this was at Maubeuge. Before blowing up a very important bridge over the river there, they placed a train of cars on the bridge. The ruined cars, bridge, car wheels, axles, etc., literally filled the stream, and prevented us driving piles, which would have been the more speedy method of rebuilding the bridge.

During the two months preceding the signing of the armistice a great many mines were taken out before they had gone their time and thus before they had done their damage. The enemy were very careful to conceal all traces of their mining, but some heavy rains told the tale, and surface settlements in the road-bed showed disturbances that indicated where they had sunk shafts or driven tunnels for the placing of the charges. Tunnelling companies and miners were set to work to remove them. This was a most hazardous occupation and one that could not exactly be relished, but still in was done.

After the signing of the armistice, the Germans indicated the positions of some mines to us and as these had gone too close to their time to permit us to dig them out with any possible degree of

safety, they were "sprung" by surface charges exploded immediately over them, this process in itself being sufficiently hazardous for those engaged in the operation. The "springing" proved successful, the acid having eaten so far into the wire holding back the plunger in the fuses that the shock of the surface charges finished it.

There were other minor devices in the way of mechanical devices, infernal machines, etc., used by the enemy in connection with their mines and delayed action mines, but with the exception of the "surfaces" or "road mine" the principle features are covered above. The "road mine" was made up of an explosive encased in a metallic container, about the

size of an ordinary bake pan, and which was set into the surface of the road or highway, to be exploded by being struck with a horse's hoof, wagon or automobile, or anything passing along the road. They made a nasty little crater in the road, rendering traffic more difficult and caused some destruction, and loss of life, to the first traffic on the road after they were set, but we did not see a great deal of damage done by them.

Enough has no doubt been said to show that the Boches were past masters when it came to the art of destruction. We will take off our hats to him, when it comes to the doing of such work. He, however, has taken his hat off to us, the allies, as the winners of the war, many times since the signing of the armistice.

Birthdays of Transportation Men in October

Many happy returns of the day to:
 A. Aitken, Assistant Superintendent, Toronto Terminals, C.P.R., Toronto, born at Decewsville, Ont., Oct. 12, 1872.
 E. W. Beatty, K.C., President, C.P.R., Montreal, born at Thorold, Ont., Oct. 16, 1877.
 Major Graham A. Bell, C.M.G., Deputy Minister of Railways and Canals, Ottawa, Ont., born at Perth, Ont., Oct. 13, 1874.
 L. S. Brown, General Superintendent, Maritime District, Canadian National Rys., Moncton, N.B., born at Nelson, N. B., Oct. 19, 1864.
 John Burns, Works Manager, Angus shops, C.P.R., Montreal, born there, Oct. 14, 1877.
 F. F. Busted, formerly Engineer in charge of C.P.R. revision and second tracking, west of Calgary, Kamloops, B.C., born at Battery Point, Que., Oct. 10, 1858.
 J. M. S. Carroll, Sales Manager, Canadian Consolidated Rubber Co., Montreal, born at Ballarat, Australia, Oct. 22, 1875.
 C. E. Cartwright, ex-Division Engineer, C.P.R., Vancouver, B.C., born at Toronto, Oct. 13, 1864.
 A. F. Dion, Traffic Manager, Quebec Harbor Commission, Quebec, born at L'Islet, Que., Oct. 1, 1871.
 H. A. Dixon, Chief Engineer, Western Lines, Canadian National Rys., Winnipeg, born at Sand Hill, Ont., Oct. 7, 1878.
 J. W. Doyle, General Manager, Cape Breton Ry., St. Peters, N.S., born at Summerside, P.E.I., Oct. 12, 1872.
 L. V. Druce, Division Freight Agent, Grand Trunk Pacific Ry., Edmonton, Alta., born at London, Eng., Oct. 20, 1873.
 R. G. Edwards, Assistant Superintendent, Windsor Division, Ontario District, C.P.R., London, Ont., born at Maitland, Ont., Oct. 10, 1883.
 A. C. Egan, Assistant to Comptroller, Canadian National Rys., Toronto, born at Winnipeg, Oct. 6, 1883.
 C. E. Friend, Comptroller, Canadian National Rys., Winnipeg, born at Brighton, Eng., Oct. 12, 1871.
 W. P. Fitzsimmons, Commissioner of Industries, G.T.R., Montreal, born at Detroit, Mich., Oct. 27, 1868.
 C. N. Ham, Secretary, Express Traffic Association of Canada, Montreal, born at Winnipeg, Oct. 21, 1884.
 G. Hodge, Assistant to Vice President, C.P.R., Montreal, born there, Oct. 2, 1874.
 J. H. Hughes, Assistant Superintendent, Ottawa Division, Quebec District, C.P.R., Ottawa, Ont., born at Charlotte-

town, P.E.I., Oct. 7, 1865.

H. Irwin, Consulting Right of Way and Lease Agent, C.P.R., Montreal, born at Newgrove, County Down, Ireland, Oct. 27, 1847.

W. B. Johnson, Master Mechanic, Halifax Division, Maritime District, Canadian National Rys., Truro, N.S., born there, Oct. 8, 1872.

W. B. Lanigan, Freight Traffic Manager, C.P.R., Montreal, born at Three Rivers, Que., Oct. 12, 1861.

O. M. Lavoie, Superintendent, Laurentian Division, Quebec District, C.P.R., Montreal, born at St. Cyril de Wendover, Que., Oct. 16, 1884.

A. E. McMaster, Treasurer, Whalen Pulp & Paper Mills Ltd., Vancouver, B.C., born at Perth, Ont., Oct. 22, 1885.

Sir William Mackenzie, President, Toronto Ry., Toronto, born at Kirkfield, Ont., Oct. 30, 1849.

C. Malcolm, chief clerk, Auditor of Stores and Mechanical Accounts, Alberta District, C.P.R., Calgary, Alta., born at Tatamagouche, N.S., Oct. 18, 1881.

W. T. Marlow, General Freight Agent, Canadian Pacific Ocean Services, Ltd., Montreal, born at Limerick, Ireland, Oct. 25, 1872.

R. Marpole, General Executive Assistant, C.P.R., Vancouver, B.C., born in Montgomeryshire, Wales, Oct. 9, 1850.

C. R. Moore, Assistant to Vice President in charge of operation, G.T.R., Montreal, born at Hamilton, Ont., Oct. 12, 1867.

Hugh Paton, President, Shedden Forwarding Co., Montreal, born at Johnstone, Renfrew, Scotland, Oct. 5, 1852.

J. W. Porter, Chief Engineer, Hudson Bay Ry., Pas, Man., born at Aberdeen, Scotland, Oct. 15, 1877.

T. F. Rahilly, ex-Superintendent, Algoma Eastern Ry., now of Marquette, Mich., born at Diorite, Mich., Oct. 6, 1892.

H. G. Reid, General Master Mechanic, Western Lines, Canadian National Rys., Winnipeg, born at Pembroke, Ont., Oct. 27, 1863.

W. S. Rollo, agent, G.T.R., St. Johns, Que., born at Dundee, Scotland, Oct. 8, 1852.

O. J. Rowe, Local Freight Agent, Grand Trunk Pacific Ry., Edmonton, Alta., born at Binghamton, N.Y., Oct. 11, 1879.

J. K. Savage, Assistant General Superintendent, Ontario District, C.P.R., Toronto, born at Forreston, Ill., Oct. 5, 1876.

Lord Shaughnessy, K.C.V.O., Chairman, C.P.R., Montreal, born at Milwaukee, Wis., Oct. 6, 1853.

T. Duff Smith, Fuel Agent, Grand