

MR. J. F. B. VANDELEUR, accompanied by H. O. Sideley, of the Lancashire Dynamo and Motor Co., of Trefford Park, Manchester, England, sailed for England on the steamship Empress of Britain to-day.

MR. W. G. SWAN, B.A.Sc., formerly of the Canadian Northern Railway engineering staff in British Columbia has now charge of a party for the London and North-Western Railway in Western Ontario.

MR. WILLIAM MARSHALL, who has been connected with the Canadian Pacific Railway Company's telegraph service for the past twenty-three years, has been appointed superintendent of the Ontario division of C.P.R. Telegraph line.

MR. A. K. GRIMMER, B.A.I., formerly City Engineer of Fredericton, N.B., has been appointed Lecturer in Civil Engineering in the University of Manitoba, as assistant to Professor E. Brydone-Jack, head of the Engineering Department, of the University.

Mr. Grimmer is a native of St. Andrews, N.B., and graduated as civil engineer from the University of New Brunswick in 1905. He won two prizes at the university, for the best summer thesis on engineering subjects. For a short time he acted as assistant professor at the New Brunswick University, and later received the appointment of City Engineer at Fredericton, N.B. From this position he comes to take the position of Lecturer in Civil Engineering at the University of Manitoba. Mr. Grimmer had a distinguished career and has had considerable experience in railway work, and will undoubtedly be a valuable acquisition to the engineering staff of the Manitoba University.

MR. WILLIAM WHYTE, second vice-president of the Canadian Pacific Railway, and executive head of their western lines, has almost reached the age at which his retirement might be expected, but so valuable have been his services, so highly is he esteemed by the company, and so popular and universally respected is he, particularly in the West where he is best known, that his term of office has been extended for two years.

Mr. Whyte was born in Charleston, Fifeshire, Scotland, September 15th, 1843. He was educated in the schools of his native town, and in 1861 entered the employment of the North British Railway Company. In 1863 he emigrated to Canada, and in 1865 he received the appointment of freight clerk on the G.T.R. at Cobourg, Ontario. In the same year he was transferred to the company's freight office in Toronto, occupying a similar position till the early part of 1867, when he became freight foreman of the sheds. He afterwards occupied the position of yardmaster at Toronto, and in 1870, was appointed night station agent at the same city. A year later, in 1871, he was at Stratford, occupying the double position of freight and station agent.

He held the appointment until 1874, when he was promoted to similar appointments at London, remaining there until 1881, when he was recalled to Toronto to take charge of the freight offices in that city. Before the end of the year, he was again promoted, this time to be assistant superintendent of the central division, extending from Kingston to Stratford, and including the Galt and Waterloo branches. In May, 1883, he left the service of the G.T.R., to accept the position of general superintendent of the Credit Valley Railway, in succession to James Ross, C.E. In October of the same year, the Credit Valley Railway and Toronto, Grey and Bruce Railway became portions of the Ontario and Quebec system, afterwards designated as the Ontario division of the Canadian Pacific Railway. The management of the united road, and also of the Ontario and Quebec Railway, when completed, fell under Mr. Whyte's direction, and he became an official of the Canadian Pacific Railway, with the position of general superintendent of all C.P.R. lines in Ontario west of Smith's Falls. In May, 1885, the eastern division, extending to Quebec in the east and Port Arthur in the west, was added to his jurisdiction. In October, 1886, he was appointed to be general superintendent of the western division, with headquarters at Winnipeg. In May, 1897, he was again promoted, being appointed manager of all the Canadian Pacific lines be-

tween Lake Superior and the Pacific Coast. In 1901, he was appointed assistant to the president and relieved from all routine work in order to look after the extension of the system in the West. In furtherance of this duty, he in 1901 made a trip through Russia over the newly constructed Trans-Siberian Railway, and in 1903 he was appointed second vice-president of the C.P.R. Mr. Whyte is vice-president of the Winnipeg Street Railway, vice-president of the Standard Trust Company, a director of the Confederation Life Association, and a director of the British Columbia Southern Railway.

LATE CONSTRUCTION NEWS.

Ontario.

NAPANEE.—A new bridge with concrete abutments and a steel superstructure is suggested by F. F. Miller, C.E., to replace the old covered bridge here. An 18 foot roadway is proposed, with a 4 foot walk on each side. The plan will likely be carried out this fall at a cost of several thousand dollars.

SAULT STE. MARIE.—The Lake Superior Corporation will commence the work of building their new blast furnaces and merchant mill next week. When completed the work will represent an expenditure of \$50,000 and will require from one to two years for completion. The H. E. Talbot Company, of Dapton, Ohio, are the contractors.

WINNIPEG.—The Brodesser Elevator and Manufacturing Company, of Milwaukee, are making arrangements to establish a branch in Western Canada. They will form a Canadian Company and build a large warehouse in Winnipeg, which they expect to have in operation some time this fall. The Brodesser Company have installed a large number of elevators in Winnipeg, as well as at points throughout the West, and now find their business in Canada increasing to such an extent that it is necessary to establish an up-to-date plant here.

(Continued from Page 171.)

of air explosions are the presence of an explosive mixture and an air temperature sufficiently high to ignite the mixture. These are sub-divided into many parts:—(1) Too high inlet temperature; (2) inefficient inter-cooling system; (3) defective cylinder jacketing; (4) failure of a too high initial temperature of circulating water; (5) inferior lubricant; (6) dust (particularly coal dust) entering cylinder with the air; (7) leaky outlet valves; (8) failure to clean inter-coolers, receivers, pipes, etc., at reasonable intervals.

As five of the eight contributory causes also affect the mechanical efficiency of the plant, and the others affect the maintenance costs, they should all be absent from well-operated plants. The installation of efficient pre-coolers, the increase in cooling surface of inter-coolers, the ample supply of cold circulation water, and the use of a high-grade lubricant, would remove practically all the causes of explosions, and would, at the same time, tend to greatly increase the capacity and efficiency of the plant. Air should go to low-pressure cylinders many degrees below outdoor shade temperature, and should not go to high-pressure cylinders at above atmospheric temperature, otherwise there is grave danger of excessive temperatures being reached at termination of compression.

In conclusion I would state that the intelligent consideration of the various problems connected with air compression must tend to higher efficiencies, a decrease of the liability to explosions, and the production of a more sanitary air for use in underground workings. It should also tend to reduce the worries of the resident engineer, who suffers because he has not the necessary equipment.

MARKET CONDITIONS.

Toronto, August 12th, 1909.
A cablegram of Monday last from Glasgow stated that orders for large quantities of fire-clay bricks for the erection of additional iron furnaces in America and Canada have been given out to Scottish makers. This was interpreted to mean a boom in the "American" iron and steel