

Personal

W. J. Harkom, Montreal, is appointed assistant to the mechanical superintendent of the C. P. R.

The death of Captain Campbell occurred on the S.S. "Lake Ontario" on Saturday, April 2.

Geo. Booth, Toronto, was elected treasurer of the Canadian Manufacturers' Association at the recent annual meeting.

D. J. Macdonald, B.C. Provincial Mine Inspector, resigned his position on April 10. He has taken a position with a mining company and will reside in Rossland.

James Warren, C.E., Walkerton, Ont., has been appointed town engineer for Waterloo, Ont. The town is without a map, and the first thing Mr. Warren will have to do is to make one.

The Chatham city council has appointed Charles Topp, C.E., of Bracebridge, city engineer. The salary will be \$1,000, and the present waterworks engineer's services will be dispensed with, it is said.

At London, Ont., April 11th, Miss Mary Rolston was married to Samuel Break, general manager of the London Electrical Construction Company, and formerly superintendent of the London Street Railway.

J. A. Sheedy, of the Illinois Bridge Works, Chicago, Ill., has been appointed master of bridges and buildings on the Grand Trunk Railway system, in place of William Crawford, of London, Ont., resigned.

T. E. McLellan, manager of the Berlin and Waterloo Street Railway, has resigned his position to go to the Klondyke. He will be succeeded by Hedley H. Hilborn, of Montreal, who has been in the service of the Montreal Street Railway.

H. B. Spencer has been appointed superintendent of the Eastern division of the C. P. R. and the Montreal-Ottawa line, with headquarters at Ottawa. J. E. A. Robillard, the former superintendent, will have charge of the Labelle and St. Jerome branch of the C. P. R.

P. A. Dickson, aged 40, died at Brantford, April 24th. He was for a number of years electrician for the Brantford Electric Power Company, leaving there last summer for British Columbia, where he contracted a severe cold, which resulted in his death.

Mons. Ephrem Valiquet, who has just been elected president of L'Association De Secours Mutuels des Ingenieurs Mecaniciens, was presented by W. Rutherford & Sons with a handsome silver jug as a token of respect on the occasion of his leaving their employ to become foreman for Lyburner & Mathews, of Montreal.

William Wilson, engineer of the S.S. "Alert," died suddenly a short time ago, he having, up to the hour of his death, been in perfect health. He was a native of Glasgow, Scotland, and came to St. John's, Nfld., 37 years ago, as engineer to Baine Johnstone & Co.; since then he has been with Bowring Bros., in the Tug Co., and for the past 11 years an employee of Job Bros.

Prof. Hugh L. Callendar, F.R.S., of McGill University, has been appointed to the Quain professorship of physics at University College, London, vacated by the resignation of Professor Carey-Foster. The friends of Professor Callendar cannot but be pleased at his appointment to what is considered a leading professorship in England, but there is not so much rejoicing at McGill, where his talents will be greatly missed. When accepting Prof. Callendar's resignation the McGill Faculties of Arts and Applied Science unanimously passed a resolution of regret in which they expressed their appreciation of his great merit and ability.

John Watson, the well-known stationary engineer, died recently at his home in Montreal. Mr. Watson was born in Edinburgh, Scotland, seventy-eight years ago, and came to Montreal when about twenty-six years of age. He was for a number of years employed by the Grand Trunk Railway, and had the distinction of making one of the party that accompanied the first engine run over the line to Lachine. Afterwards he went into business for himself as a machinist on Chenneville street, and later was in partnership with his brother, the late Thomas Watson. When the new post-office was built he accepted the position of engineer there, where he was up till about four years ago.

The harbor master of Montreal, Captain Thos. Howard, who died recently at his home in that city, was born at Shinroan, Queen's County, Ireland, on September 15, 1826, and came to Canada in 1842. For a time after his arrival he was in the employ of the late Hon. John Hamilton, and later on entered the service of the Richelieu & Ontario Navigation Company. For some years he commanded the "Banshee," "St. Lawrence," and other vessels of the company plying between Montreal and Western ports, and was subsequently appointed manager of the Ontario division of the company. In March, 1881, he was appointed harbor master at Montreal, a position which he held until the day of his death.

Prof. C. A. Carus-Wilson has announced his intention of resigning the chair of Electrical Engineering at McGill University on September 1. He came to Montreal in 1890, having been previously on the staff of the Royal College of Engineering, Cooper's Hill, England. His resignation will be a great loss to McGill College. His future permanent address will be "Hanover Lodge, Kensington Park, London W., England." During May, Prof. Carus-Wilson will give the Cantor lectures on electric locomotives at the Society of Arts, London, and throughout the summer he proposes to devote special attention to electric railways, a subject of great and increasing importance in England now. The volume on electro-dynamics which he has written for Messrs. Longmans, Green & Co. (London and New York), will be published at once.

Chauncey M. Depew retired from the presidency of the New York Central on April 20th and was succeeded by S. R. Callaway. Mr. Callaway is a Canadian, entering the office of Mr. Hickson at Montreal in 1863, when 13 years of age. In 1865 he went as secretary to Gilman Cheney, manager of the Canadian Express Company, and left there in 1869 to enter the service of the Great Western Railway under W. Wallace, the superintendent at London, and subsequently private secretary to W. K. Muir at Hamilton. Mr. Callaway retired from the Great Western to enter the service of the Detroit and Milwaukee, of which road he was superintendent from 1875 to 1878. Upon the absorption of the D. & M. Railway by the Great Western Mr. Callaway was appointed general superintendent of the Detroit and Bay City Railway, and in 1880 general manager of the Chicago and Grand Trunk and president of the Western Indiana railways. In 1884 Mr. Callaway accepted the position of vice-president and general manager of the Union Pacific Railway and the allied lines of nearly 6,000 miles. In 1887 he was elected president of the Toledo, St. Louis and Kansas City Railway, and since then he left that road to accept the presidency of the Lake Shore and Michigan Southern Railway.

FIRES OF THE MONTH.

April 1st.—The Sine Creamery, Sine P.O., Ont., destroyed.—April 2nd.—Geo. H. Hees, Sons & Co., window shade factory, Davenport Road, Toronto. Loss, \$40,000, being rebuilt.—April 8th.—G. W. Green's wood-working factory, Ashburnham, Ont. Loss, \$8,000; insurance, \$4,500.—April 8th.—Lebel & Wilson's Lead Works, London, Ont. Loss, \$4,000.—April 11th.—Chadwick Bros., Hamilton, metal spinning shop. Damages about \$200.—April 13th.—F. Routhier & Sons, foundry, Vankleek Hill, Ont. Loss, \$3,000; insurance, \$1,000.—April 13th.—Small saw mill, Newbury Junction, N.B. (Jas. Carr, Woodstock, N.B., proprietor). Loss, \$2,000.—April 19th.—Doan's tannery, Clinton, fire starting in the boiler room. Total loss.—April 19th.—Ore house at the Payne mine, Nelson, B.C. Loss, \$10,000.—April 19th.—Gaw's planing mill, Place D'Armes, Kingston, Ont. Loss, \$12,000; insurance, \$5,000.—April 23rd.—The cupola of Wortman & Ward's foundry, London, Ont. Damages, \$500.—April 30th.—The Rathbun Co.'s terra cotta works, at Deseronto, Ont., plant destroyed. Loss about \$100,000; partially insured.—May 1st.—Jas. McLatchie's machine shop, Cardinal, Ont. Loss about \$5,000.

IMPULSE WATER WHEELS.*

By J. T. FARMER, M.A.E.

The development of power by means of impulse water wheels, has been receiving considerable attention during the past ten years. Water power is to be met with under varying conditions and in various surroundings; and the means best adapted for the utilization of the power vary with those conditions and surroundings.

Among the means devised by man at different times before the advent of the impulse wheel for utilizing the water power that was going to waste around him, one has easily taken the foremost place, and, indeed, has, by a process of the survival of the fittest, practically ousted all other methods from a position of being worthy of serious consideration. The turbine has at the present day almost entirely taken the place of the earlier devices in use, which have either been consigned to museums as curiosities or are regarded as picturesque additions to the landscape.

The impulse water wheel probably differs as much from the various forms of turbine in construction and in action as the turbine does from an overshot or breast water wheel. The previous statement with regard to the turbine must therefore be further modified so far as it is found that the impulse motor is finding favor with those who utilize water power.

*From a Paper read before the Canadian Society of Civil Engineers.