PERSONAL

H. H. VAUGHAN, who has been in charge of the locomotive and car department of the Canadian Pacific Railway Co., has resigned in order to devote his entire services to the management of the Montreal Ammunition Co., of which he is president. He will continue, however, to act as consulting engineer in the above capacity.

WILLIAM E. WOODHOUSE, who has been superintendent of motive power and car departments, eastern lines of the C.P.R., succeeds Mr. H. H. Vaughan as chief mechanical engineer of the Canadian Pacific Railway. He entered the service of the company in 1891.

D. T. MAIN succeeds Mr. William E. Woodhouse as superintendent of motive power, eastern lines of the C.P.R. He has been in the service of the company since 1904, and was for some time in charge of the mechanical department at Toronto and also at Vancouver.

Dr. J. W. S. McCULLOUGH, chief officer of health for the Province of Ontario, has been appointed sanitary expert for Ontario on the International Joint Commission in connection with its investigation of the pollution of boundary waters.

ROBSON BLACK succeeds Mr. James Lawler as

secretary of the Canadian Forestry Association.

H. OSBORNE has been appointed works manager of the Angus shops of the C.P.R. The Angus shops district has been operated as a separate unit, but will henceforth form a part of the eastern lines.

C. A. ABLETT, general manager of the Siemens Company of Canada, Limited, has resigned and has sailed for England to obtain a commission in an English regiment. Mr. W. Hoult succeeds Mr. Ablett as general manager.

VANCOUVER BRANCH, CANADIAN SOCIETY OF CIVIL ENGINEERS.

At a meeting of the Branch on April 15th Messrs. J. P. Napier and J. McHugh gave illustrated lectures on the remedial works that are being carried on by the Dominion and Provincial Governments in the Fraser River in order to protect and foster the salmon fishing industry which for a time was seriously threatened by the partial blockade of the canyon through railway construction operations and subsequent slides. Mr. Napier, as assistant engineer of the provincial public works department, dealt with the preliminary work which was done by the province in 1913, and Mr. McHugh, engineer to the Dominion Department of Marine and Fisheries, discussed in detail the main scheme undertaken by the federal authorities later. Mr. G. R. G. Conway, president of the Branch, occupied the chair.

According to Mr. McHugh's paper, the work was carried out in the face of the most adverse physical disadvantages. The place where the big slide occurred in February, 1914, which had upset all previous calculations, was near the narrowest part of the Fraser River Canyon, Hell's Gate, where water foams through a restricted passage with terrific velocity. The sides of the chasm are precipitous cliffs, affording no foothold for the workmen. How the operations were conducted formed an interesting story of scientific method, ingenious scheming, painstaking endeavor and courageous effort on the part of engineers and workers alike.

While the masses of rock were being blasted away temporary steps were taken to alleviate the congestion of salmon. Thousands of fish were caught in nets and transferred up the cliffs in baskets and across the most turbulent section of the torrent, and released again. A flume was then built to divert the salmon to the upper reaches. The building of this facility entailed great physical discomfort to the workmen, who had in some places to be suspended by ropes over the sides of the precipitous chasm, and there drenched in icy spray, and often had to pursue their activities beneath the waters.

The work, which was started on March 21, 1914, was completed on March 9, this year. In all, 60,000 cubic yards of rock were taken out, 40,000 being removed from

Hell's Gate. The operations cost \$108,718.

OBITUARY.

An automobile accident on April 22nd caused the instantaneous death of Mr. Benjamin F. Law, contractor.

The death occurred in Toronto on April 21st of Mr. John A Culverwell in his 49th year. Mr. Culverwell was at one time Canadian representative of the Edison Co. Later he was actively associated with the development of the Trent Canal. In connection with the Northumberland and Durham Power Company and the Central Ontario Power Company he did much towards the development of electric power in centre and eastern Ontario after the Government had undertaken to extend the canal. He was a life member of the Engineers' Club, Toronto, and a member of the Deep Waterways Association of America.

The death occurred in Toronto last week of Mr. James F. Markey, master mechanic for Ontario of the Grand Trunk Railway. He had been in the employ of

the company for twenty-five years.

The death occurred on April 10th of Mr. M. A. Viele, of Viele, Blackwell and Buck, New York City. In addition to his numerous connections with public utility corporations in the United States, Mr. Viele was vice-president of the Northern Ontario Light and Power Co., and of the Northern Canada Power Co.

NEW AMMUNITION COMPANY.

The Montreal Ammunition Co., of which Mr. H. H. Vaughan is president and Mr. G. H. Duggan vice-president, is a newly organized concern that will manufacture brass cases for shrapnel and high explosive shells. Heretofore these cases have not been manufactured in Canada, but orders were being filled in Detroit and other cities of the United States. The new company will use a part of the plant of the Dominion Bridge Co. for its work. Mr. Duggan is general manager of the latter company, while Mr. Vaughan resigned his position as chief mechanical engineer of the C.P.R. to devote his time to the new concern.

BRITISH SHIPBUILDERS WANT CANADIAN MACHINISTS.

Vickers, Sons and Maxim, the largest shipbuilders in England, located at Barrow-in-Furness, are asking that 1,000 Canadian machinists come over to work on the submarines and battleships that are being gotten ready on the order of the Government. The men are guaranteed six months' work and their passage both ways.