

ected to membership in the American Water Works Association.

M. H. BAKER, B.A.Sc., formerly city engineer of Prince Albert, Sask., is now engaged with the Surveys Branch Department of the Interior, on the survey of roads and townsites in the Rocky Mountains and Yoho parks, in the vicinity of Banff.

SIR WILLIAM WILLCOCKS, who designed the Assuan Dam and similar regulation and irrigation works on the Nile River, Egypt, and who is now engaged upon a project to reclaim vast areas bordering on the Tigris and Euphrates rivers, is attending the National Drainage Congress at Savannah, Ga., this week, as one of the chief speakers.

ROBT. C. MUIR, until recently with Mackenzie, Mann and Co., has joined the staff of W. A. McLean, Provincial Highways Engineer for the Ontario Department of Public Works. Mr Muir, who has contributed several articles on road making to the reading columns of *The Canadian Engineer*, had a wide and varied experience in this work in Scotland, where he has held several important and responsible positions of a similar nature.

OBITUARY.

The death was reported on April 14th of SIR WILLIAM WHYTE, formerly vice-president and a director of the Canadian Pacific Railway, vice-president of the Winnipeg Electric Railway and prominent in financial affairs in Winnipeg and Western Canada. As one of the pioneers of railroading in Canada, the career of Sir William Whyte is well known to railway engineers throughout the Dominion. He was born in Scotland in 1843 and came to Canada at the age of 20. Twenty years were then spent in the service of the Grand Trunk Railway, during which he rose from the position of brakeman to that of Assistant Superintendent of the central division, extending from Kingston to Stratford.

One year after the last spike had been driven in the main line of the C.P.R., Mr. Whyte, who had entered its service several years previously, became general superintendent, and afterwards manager of all lines west of Lake Superior. He spent 11 years as general superintendent, 4 as manager of Western lines, 3 as assistant to the president, and 6 as second vice-president, with complete charge of the company's affairs between Lake Superior and the Pacific. For 1 year prior to his retirement in 1911, he was vice-president of the company.

Cement Industry in Japan.—The first Japanese cement works were established at Tokio in 1871, and the first rotary kiln was here installed about ten years ago. The plant has been extended until the output is now about 1,000,000 barrels a year.

Following the example of Quebec lumbermen and paper manufacturers, members of both trades in Ottawa district have taken steps towards the establishment of what will be known as the Canadian Forest Protective Association, a body which will be largely along the lines of that organized some years ago in the St. Maurice Valley for the protection of limits there. A committee has been appointed to proceed with a plan of organization. This will include the appointment of a manager, under whom will be four inspectors; and these in turn will direct a staff of rangers. On all commanding positions lookouts will be established to give warning in case of fire; and telephones will be installed throughout the different limits whose owners are members of the association. The railroad lines throughout the limits will also be patrolled and by all these means it is hoped to very greatly reduce the loss from forest fire, now so great.

BULGARIAN RAILWAY, BRIDGE AND HARBOR CONSTRUCTION.

An American consular report states that it is intended that Porto Lagos shall be the main harbor for Bulgarian trade in the Ægean. A railroad is to be built from Kaskovo across the Rodopo Mountains to this port, and surveys are to be begun forthwith. The Bulgarians desire to build a bridge over the Danube at Nikopoli or at Sistova, and it is hoped that a trunk line, starting from one or the other of these points and leading in an almost due southerly direction to Porto Lagos, will provide a natural outlet for Bulgaria, Roumania, southern Russia, and western Europe. This line would follow the route Nikopoli (or Sistova), Tirnovo, Stara Zagora, Mikhaelovo, Haskovo, Mastanli, Kirjali, Narli Keui, to Porto Lagos. The cost of the new section Mikhaelovo-Haskovo is estimated at \$6,000,000; the distance is 109 miles. The new line is to be built by contract in four sections, a separate bid being invited for each section. There will be two tunnels, 2,500 and 2,000 metres in length respectively. The cost of the bridge over the Danube is estimated at \$3,000,000, to be shared equally between Bulgaria and Roumania. It is hoped that Porto Lagos may become a Mediterranean port of the first class; \$4,000,000 will be expended, and construction will be opened with public bids. The harbor will be built somewhat east of the present town. The contracts will be allotted this spring, and it is hoped that the railroad and port will be completed in three years. When Porto Lagos will be opened to commerce Varna and Bourgas will decrease in importance. It is not improbable that a special loan will be floated to cover the above project, as favorable terms might be obtained for a productive enterprise of this nature. In regard to Dedeagatch, this port is not under the present circumstances considered of much importance, and instead of a harbor a small mole is to be constructed there to facilitate loading and unloading lighters. Dedeagatch will remain an open roadstead. It is probable that the following railway lines will be constructed in the near future in Bulgaria: Schumla to Karnovit; Radomir to Dubnitza-Dzumaga; Yamboli to Kizil Agatch.

Before reoccupation of Adrianople by the Turks an important project for canalization of the Maritsa River had been discussed. The scheme would have been costly, but it is believed that by confining the Maritsa to its natural bed a sufficient depth of water could have been obtained to enable ocean steamers to ascend the river as far as Adrianople and tugs and lighters even as far as Philippopolis. The reclamation and irrigation of the rich lands on either banks of the Maritsa would have given scope for growing tobacco, rice, and cotton on a large scale, and this would have amply compensated for the original outlay. The scheme does not appear to have been definitely abandoned, and it is possible that an agreement may yet be made with Turkey, whereby it may be carried out in a modified form.

Senor Iglesias, a Madrid electrician, has given a successful demonstration of an apparatus, of which he is the inventor, for condensing and utilizing atmospheric electricity. With the device, Senor Iglesias lighted and extinguished at will 15 electric bulbs placed at a distance of 600 yards. Experts expressed the opinion that the discovery has great possibilities with regard to cheap production of current for industrial purposes. Early last February, William Marconi succeeded in lighting an electric bulb at a distance of 6 miles by a wireless current supplied from a 100 horsepower engine.