WORK of construction has been commenced on the car and power houses for the Guelph, Ont., electric railway. The new line will be built at once.

The Richelien and Ontario Navigation Co has ordered five Robb-Armstrong engines for electric lighting purposes on their steamships.

HUNTINGDON, Que., proposes to have the electric light, and an offer was made through W. E. Forbes to supply 25 50-candle incandescent lamps at \$25 per lamp per year.

AHEARN & SOVER will have 30 miles of street railway in operation in and around Ottawa by the end of this year. It will be the longest in proportion to population of any street railway system in Canada, or perhaps the whole continent, as it is now considered the best managed.

At the next convention of the street railway men of America, to be held in Montreal from Oct. 15th to 18th inclusive, about 2,000 delegates and others interested in street railways are expected. There will be an exhibition of street railway appliances at the Victoria Rink during the convention.

THE Canadian General Electric Co has ordered three toohorse-power Robb-Armstrong engines, with extension base and outboard bearing for direct connected dynamos. One of these is to be placed in the building of The T Eaten Co, and the others in the Union Station of the G.T R., Toronto.

The St. John Street Railway Company is now in formal possession of the Gas and Electric Light Company's works of that city. Geo. R. Ellis, manager of the Gas Company, and H. P. Brown, electrical engineer of the Gas and Electric Light Company, are to continue in their respective positions under the new management Both are good, competent men—Sun.

One of the largest contracts ever given in Quebec city for the supplies for a private telephone system has been given to the Mechanics Supply Co. Over a carload of wire will be used in its construction. The order includes five standard switchboards, which, together with the telephones, are being made for them by John Starr & Sons of Halifax, N.S.

THE Ingersoll Rock Drill Company have started an electric branch to their works at St. Henry. Montreal, and are manufacturing overhead material and electric railway specialties under the Canadian patents of Albert & J. M. Anderson, of Boston The Andersons are perhaps the largest manufacturers and designers of this class of material in the States, and we are glad to see that our Canadian electric lines can now secure in Montreal all the latest and best designs.

The first electric lighting plant of importance in England operated by water power was recently opened at Worcester. The plant also contains an auxiliary steam plant for use in times of drouth, when the supply of water is not sufficient to operate the dynamos. This station has been erected at a cost of some \$200,000. The water power, which is of from 300 to 400 horse-power during the most of the year, is located some two miles from the town. The alternating current system is used. There are 4,000 incandescent lamps, 27 are lamps, and a number of motors operated by this station. The power-house is a substantial structure, two stories high, and built over the stream. The turbines are of the Victo type, and are located in the lower story.

THE engineer of the Montreal Park and Island Railway Company are making surveys for the company's new line between Montreal and St. Laurent. The line will comprise the following route Park Avenue to Montreal Annex, up to Van Horne avenue (Outremont side), then following the C.P.R. track to a point near the lower end of Cote des Neige, road, through what is known as Brother Charest's village, near C.P.R. yards at Outremont, and then cross the C.P.R. at Cote des Neiges and proceed directly towards the village of St. Laurent, which will be crossed in its entire length to join the town of St. Laurent, and from there proceed directly to Cartierville and La Bord a Plousie. extensions that will be carried out this summer by this company are summarized below. From Park avenue, Mont real, to the village of St. Laurent, thence to Cote Vertue, Boisfranc and Cartierville (Bord-a-Plousse) a distance of 71/2 miles; from the present terminus of the Cote des Neiges branch round the mountain to Cote Ste. Antoine, 21/2 miles; from Cote Ste. Antoine to Lachine, 7 miles, and from Sault au Recollet to St. Vincent de Paul, 215 miles. These extensions will make about 35 miles of zingle track, as all these branches will be double tracked.

## Brief, but Interesting.

A DROP of nitric acid placed on forged iron gives a white stain, on steel a brown stain, and on cast iron a rough, dirty stain. These are easy tests.

In several parts of the States barbed wire fences are being utilized as telephone wires, and in Webster, Iowa, a company has been incorporated who make it a business to attend wholly to the "barbed wire telephone."

IN New York there is now in operation a plant for producing calcium carbide which gives what is said to be a gas of high illuminating power. It is claimed that the gas can be produced at a cost of 5c per thousand feet, and the calcium carbide can be manufactured for \$5 per ton.

A NEW substance called "cryotase" has been discovered by a German chemist, which has the singular property of becoming solid when heated and remaining liquid at a temperature below zero. It is made by mixing equal quantities of phenol, camphor and saponine together with a smaller amount of turpentine.

A New solvent for gold has been discovered, which is obtained by adding to a solution of potassium cyanide a small quantity of bromide of cyanogen. The inventor of the new process claims that the latter salt can be manufactured at about 35c. per pound. The new solvent is likely to prove an important factor in the treatment of gold ores.

A TUBULAR boiler 1, Soo years old has been discovered at Pompeii. It is made of sheet metal, probably copper, in the shape of a large amphora or two-handled jar, with a hollow space running half way up the centre of the jar. In this space was placed a cylindrical fire-box, resting on five fire-bars, which are tubes three-quarters of an inch in diameter, connecting with the water space. The fuel seems to have been charcoal.

The wonderful durability of Douglas fir is well shown by a piece that the Victoria city engineer now has in his possession. It is a part of one of the old wooden water pipes which were put in thirty-one years ago by Coe & Martin to bring down a water supply from Spring Ridge. When the contractors were excavating in front of the Delmonico on Government street, they came across the old pipe. The piece in question is entirely free from any signs of decay, the wood being as fresh in appearance as if it were just newly cut from a tree.—B. C. Commercial Journal.

## Personal

- H. HOLGATE has been appointed general manager of the Montreal Park and Island Railway.
- A. G. Wells, formerly of Guelph, Ont., is now general superintendent of the Atlantic and Pacific Railroad.
- H. Can't has retired from the firm of Can't Bros. & Co. of Galt, but the business will be continued under the old style.
- W. S. KINNEAR, divisional engineer of the M.C.R., has been appointed chief engineer of the Toronto, Hamilton and Buffalo Railway
- B H. TEARLES, of the department of Railways and Canals, is dead at the age of 51 He was one of the founders of the Ottawa Y.M.C.A.

JAMES CARR, late of Kingston, Ont., is now superintendent of the air brake works of the Missouri and Pacific R. R., situated at Little Rock, Ark.

ED. TINSLEY, G.T R. locomotive engineer, of Hamilton, has been appointed Head Game Warden of Ontario, in place of the Mayor of Hamilton.

JOHN C. INNES, formerly city engineer of Kingston, has been missing from his home since the 21st April. He had been feeble in body and mind for some time

H G. Percharbhas been appointed secretary treasurer of the Standard Drain Pipe Company, St. John's, in the place of J. L. Whatley. Nothing has been heard of Mr. Whatley's whereabouts.

ALANSON H. BALDWIN, a pioneer lumberman of the Ottawa district, is dead. Mr. Baldwin retired from business several years ago, his place being taken by his son W. H. Baldwin, formerly proprietor of the Baldwin foundry and planing-mill, and now mechanical superintendent of the Ottawa Electric Railway.