

charged with electricity at the time, as they served for lighting purposes. The whole space between the live wire and those at which Lepitre was working was about fifteen inches, and having come in contact with the current, he was killed. The court held that the company must be held responsible as having been guilty of negligence in not properly insulating the wires when work was being done under such dangerous circumstances.

ACCORDING to the financial statement presented to the shareholders of the H, G & B Electric Railway at their last quarterly meeting held recently, the railway is making money. For the months of July, August and September there was an increase of \$3,125.93 in passenger receipts, \$342 in freight and \$1,033 in express receipts over those of the corresponding quarter last year. The total receipts for the quarter were \$16,913.87, as against \$12,430.91 for July, August and September of 1896. In August of 1896, 29,192 passengers were carried, and in August of this year, 47,700; in September, 1896, 19,647, and September, 1897, 26,776. The expenditure for the quarter ending Sept 30th, this year, was \$2,715 or less than for the same quarter last year.

Personal

WE are much pleased to hear of the restoration to health of Sir Casimir Gzowski, C.E.

H. A. J. McLEOD, C.E., will be the Government engineer in charge of the Drummond Counties Railway.

A. R. MACDONALD has been appointed superintendent of the Intercolonial Railway between Montreal and Levis, Que.

R. J. REED, the well known contractor, Montreal, who has been ill at his home in Montreal, left for California recently in a private car.

AT the International Geographical Congress held at St. Petersburg a short time ago, Mgr. Laflamme, rector of Laval University was elected one of the vice-presidents.

JOHN CHISHOLM MACNAB, a member of the Red River expedition, civil engineer at Chatham, Ont., died at the home of his father, 111 Elgin street, Hamilton, recently. He was 46 years of age.

THE Toronto Technical School Board has appointed H. P. Elliott, a graduate of Toronto University and of the School of Practical Science, to the position of teacher of electricity and the steam engine.

GEO. H. FROST, of the *Engineering News*, New York, was a fellow student of Dr. Robt. Bell of the Geological Survey, in civil engineering at McGill University, and graduated only a short time before Dr. Bell.

THE death is announced at Jersey City Heights, recently, of Wm. Moore, a former citizen of Quebec. He was engaged as city surveyor during the introduction of the first Quebec water works. Subsequently he was first manager of the old Quebec Street Railway, when he became manager of the Quebec Steamship Company, of which, in late years, he has been New York manager.

S. J. TURKINGTON died recently in his 73rd year. The greater part of a very useful life was spent in railroad contracting. When the Grand Trunk Railway was building through the eastern portion of Ontario he superintended the construction of a large section for three years. He afterwards built a portion of the R.W. & O.R.R., the Lake Shore, the Midland, and also railroads in New Brunswick and the Southern States. On retiring from active contracting he settled in Mallorytown, Ont., and for five years discharged the duties of customs' officer, being relieved of office some three years ago.

THE death occurred at Montreal, November 14th, of Frederick Fairman, president of the Dominion Barb Wire Company. The sad event was the outcome of a cold contracted the previous week while superintending the construction of some new houses, and which developed into pneumonia. Mr. Fairman was born and received his early education in Gananoque, Ont., and graduated with considerable distinction from Victoria University, Cobourg. He entered the machinery and manufacturing firm of D. S. Abbott, Gananoque, and subsequently acquired an interest in the business, which he carried on until 1874. He was then for five years with the Montreal firm of Moreland, Watson & Co., when he bought a retail business in Waterloo, Ont. In 1882 Mr. Fairman returned to Montreal and entered into the partnership of Cooper & Fairman, which was dissolved three years later. It was at this time that Mr. Fairman accepted the presidency of the Dominion Barb Wire Company. He was also for a time connected with the Dominion Bridge Company.

INK that will adhere to glass is produced in the following way: Twenty parts of brown lacquer are dissolved in 150 parts of alcohol and mixed with a solution of thirty-five parts of borax in 250 parts of distilled water. The mixing should be done slowly, one part of methyl-violet being added. The ink thus produced is very lasting, and can be used to advantage instead of labels on glass bottles.

Brief, but Interesting.

THE Schwarz aluminum air ship, fitted with a benzine motor, was tested last month in Berlin, Germany, in the presence of a number of generals and others. The air ship rose to a great height, floated in the air for 12 minutes, and, at first, obeyed the man steering it, but later he was unable to steer it against the strong wind which prevailed. The experiment was considered to be partly successful.

The oldest piece of gold wire of which the world has any knowledge is a specimen made in Nineveh some 800 years B.C. Solid gold drawn wire is now, states *Science Siftings*, practically unknown in the trade. However, gold wire is made in the following manner: Silver rods are coated with gold in the proportion of 2 per cent. of gold to the weight of silver to be manipulated. When the gilding is performed the rods are about $1\frac{1}{4}$ inches in diameter by 2 feet 6 inches long, and weigh about 400 ounces each. The two metals are then drawn down together, first through steel dies, and afterward through drilled rubies or diamonds. The process of drilling the germs is kept a secret. A better idea of the minuteness of some of these borings may, however, be learned from the fact that the holes cannot be discerned by the naked eye, and only by the aid of a magnifying glass can one be convinced that they really exist. For the manufacture of silver and silver-gilt wires the silver is sometimes bored out and internal copper rods are inserted, and they are then drawn together. Wires as fine as a human hair, for example, .003 inch in diameter and even finer, can be gauged by instruments termed "micrometers." The scales for weighing the gold coin at the mint are so exquisitely fine that they can detect the most minute particle added to either side of the balance. There are fine woven wire gauzes and cloth, some of which are made with as many as 40,000 meshes to the square inch. The more delicate classes of wire find application in scientific instruments. So fine are these that it is difficult to get them measured; but the task has been accomplished, and platinum wire has been drawn $\frac{1}{1000}$ of an inch, and to even greater fineness. Aluminum wire has been drawn as fine as 10,500 yards to the ounce, a size too fine to be practically measured by any gauge or instrument.

Industrial Notes.

THE new flour mill at Goderich, Ont., is now in operation.

A START has been made in erecting the new flour mill at Wolfville, N.S.

A NEW \$10,000 school building is to be built at once at Sacreville, N.B.

A SEWAGE system for Pembroke, Ont., to cost \$16,000, is under consideration.

AN engine is being placed in the Granby, Que., Rubber Co.'s machine shops.

THE E. B. Eddy Co., Hull, Que., is spending \$20,000 in perfecting its fire protection system.

THE plant of the Vulcan Iron Works Co., Winnipeg, has been bought by John McKechnie.

JOHN BERTRAM & SONS, Dundas, are very busy building heavy machinery for shipping abroad.

THE Boys' Home, Montreal, has received donations amounting to \$8,000 to be expended in building.

FAVORABLE progress is being made on the piers for the Saskatchewan bridge at Edmonton, N.W.T.

J. HONEYMAN and E. J. WATSON, architects, are employed on the new school building, Rossland, B.C.

A BRIDGE to cost about \$10,000 is proposed to connect Sydney, Cape Breton, with the Intercolonial pier.

AMONG the busy Hamilton concerns is the machine shop of Charles James, who is now turning out, among other work, 2,000 shoes for seed drills for the North-West. This firm has just put in a new 30-inch drilling machine from the well-known tool makers, John Bertram & Sons, Dundas, Ont.

THE Cappison Pipe and Boiler Covering Co. have recently supplied their Standard Abestos Magnesia sectional covering to various concerns, the orders aggregating nearly 12,000 feet. Among the mills so fitted up are the new mills of the Holland & Emery Lumber Co., who have recently removed from Michigan and built two large saw mills at Byng Inlet, on the site of the mills of the Georgian Bay Lumber Co., burnt some time ago. The new mills are fitted with band saws, circular saws, lath and shingle saws.