Calculus, Spherical Trigonometry; Physics Hydrostatics, Optics, Magnetism, Electricity; Experimental Physics Heat. Use of the Cathetometer, Dividing Engine, and Spherometer, Thermometry and Calorimetry; Drawing Subjects of the first year continued, Coloring and Shading applied in construction drawing, Descriptive Geometry in its application to solids bounded by curved surfaces, the various projections of the sphere, Machines and Structures, (Drawings made from both copies and original notes; Engineering Statics and Dynamics, (Pure and Applied), Theory of Mechanism, Strength and Elasticity of Materials, Materials of Construction, Methods and Processes, Experimental work in Engineering Laboratory; Chemistry Theoretical Chemistry, Practical Chemistry, Applied Chemistry, Combustion, Fuel and Furnaces, Metallurgy of Iron and Steel. The subjects of the third year are: Experimental Physics Acoustics, Electrical Measurements and Testing, Drawing—Subjects of the previous years continued, Descriptive Geometry. Shades and Shadows, Stone Cutting, Perspective Projection, Original Designs Engine and Machine Design, Engineering—Subjects of previous years continued, Applied Mechanics. Mechanics of Machinery, Machine Design, Thermodynamics and Theory of the Steam Engine, Hydraulics, Electricity—Dynamos and Motors, Application of Principles to Practical Problems connected with the design, construction and testing of various Prime Motors and Machines, Experimental work in Engineering Laboratory, Chemistry (Applied) Artificial Lighting, Photography, Explosives, Preservation of Wood, Iron and Stone, Metallurgy.

In addition to taking the course of instruction in the school and passing the requisite examinations, a candidate for the diploma in Mechanical Engineering will be required to present satisfactory evidence of having had at least one year's good practical experience in one of the principal occupations connected with mechanical work, such as machinist, pattern-maker, moulder, steam engineer, etc. There is no restriction as to the place where the candidate may have gained such practical experience.

In order to provide advanced work in the various departments and also to enable students to carry on experimental work in the laboratories with less interruption from attendance at lectures and other causes than is possible in the ordinary three years' course, it has been decided to establish a sessional course of instruction in each department to be known as the Fourth Year.

The subjects of study in the fourth year in the Department of Mechanical and Electrical Engineering are: Method of Least Squares, Theory of Observations, Strength and Elasticity of Materials, Hydraulics, Thermodynamics, Electricity, Engine and Machine Design. A great part of the work in connection with these subjects will be done in the engineering laboratory. The time of the candidates will be principally devoted to tests in connection with boilers, engines, dynamos and electric motors.

The expenses of a regular course are approximately as follows:

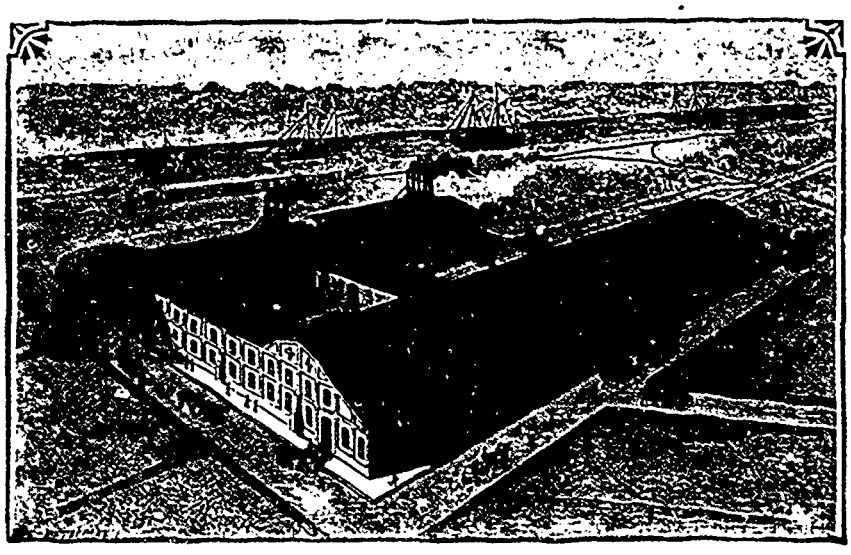
Sessional Fees	$120 00
Books, instruments, drawing materials, laboratory fees, etc., about as follows: 1st year, $60.00; 2nd Year, $40.00; 3rd Year, $30.00	130 00
Total for Regular Course	$250 00

Additions and improvements are in progress in connection with the institution. Many of them are now sufficiently advanced to enable a large amount of new work to be done next season.

DOMINION WIRE MFG. CO.

THE Dominion Wire Manufacturing Co., whose works are now situated at Lachine, and cover about 5 acres of ground, commenced operations under the style of the "Dominion Barb Wire Co." in 1880, in a small building on Foundling Street, Montreal. The business at that time amounted to only about $28,000 per year, being for barbed wire only. Since that date by judicious advertising and pushing the business, they were obliged to increase their factory, and finally decided to remove to Lachine, where they could get plenty of room for their works. Accordingly, in 1884, the company erected large works at Lachine, and having decided to draw and galvanize their own wire, and also add other industries which consumed wire, they changed the name of the company to "The Dominion Wire Mfg. Co.," under which title it is known to-day.

The main building at Lachine is 300 ft. x 100 ft., with two wings 150 ft. x 60 ft., running to the north of the main building, and two wings to the south 100 ft. x 60 ft., two large rod sheds capable of holding from 3,000 to 4,000 tons of rods; one large warehouse to the west, 100 ft. x 50 ft.; also Hunt's automatic elevator, situated on the banks of the canal, which takes their coal and rods from the barge and delivers them where required at the works. Detached from this main building is the screw and wire rope factory. The building is 50 ft. x 150 ft., with one wing 60 ft. x 60 ft., and a warehouse 30 ft. x 40 ft. All these main buildings are built in the most substantial manner, of brick and stone foundations, and are virtually fire-proof. They have nine steam engines in operation; the largest is about 400 horse power, compound condensing. The machinery throughout is of the latest and most improved design, most of the machinery and processes being covered by patents.



WORKS OF THE DOMINION WIRE MFG. CO., LACHINE, QUE.

The company is now manufacturing all kinds of steel and iron wire, bright, annealed, oiled and annealed, galvanized, tinned, coppered, BB, and extra BB telephone and telegraph wire, nail and rivet wire, tinned mattress and broom wire. Their capacity for iron and steel wire, as above mentioned, is about 50 tons per day. They also have a further capacity of about 10 tons per day for copper, both for commercial and electrical purposes, and brass. The company has recently gone into the manufacture of copper and brass, having put down a plant which cost them about $35,000, and which is sufficiently large to cover all the increase in this trade that is likely to occur in the next ten years.

In addition to barbed wire, a capacity of about 10 tons per day, they have added to their manufacture wire nails, wood screws, hay-bale ties, and Jack-chain.

The present plant and machinery has cost the company over $250,000, and if they were able to keep the works running full time could produce over $1,000,000 worth of goods per year. No doubt, however, with the rapid development of our North West territories, in time they may be able to keep the works going steadily. They employ about 350 men, besides a large staff of office hands, the pay roll being about $10,000 per month.

The specifications for the lighting of the city of Kingston by electricity stipulate that arc lights shall be supplied at from 1,000 to 2,000 candle power. The number of lamps required will be from 87 to 100, and a number equivalent if incandescents are adopted. It is also provided that should the corporation consider it necessary during the continuance of the contract, all or any portion of the wires shall be placed underground by the contractor. This work shall be done under the supervision of the city engineer. The cost will be decided by arbitration. At the termination of the contract the city will have the option of purchasing the plant at a price to be fixed by the arbitrators.