

of Montreal. The gearing wheels were supplied by S. Morgan Smith.

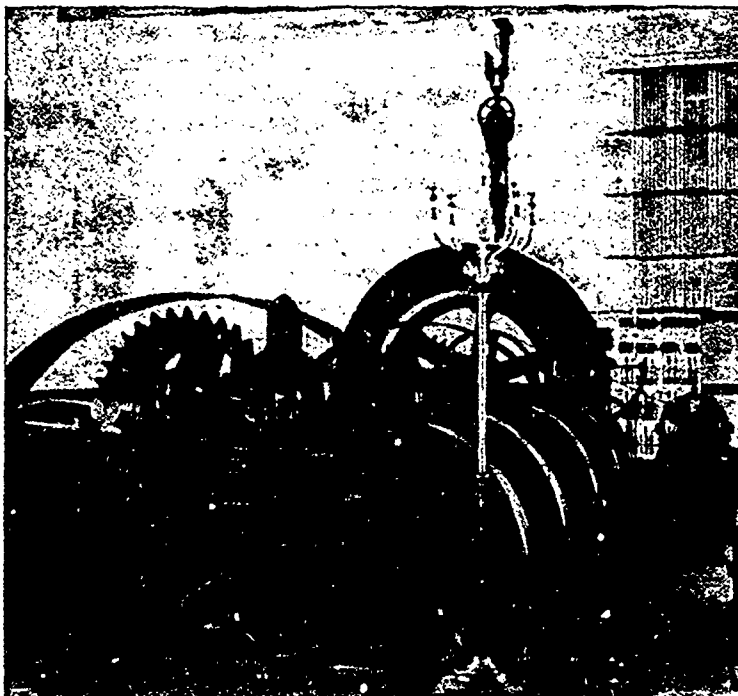
For the electrical plant, as has been stated, the three phase system of the Canadian General Electric Company was adopted, and a contract given to that company for two 400 kilowatt generators, the first of which has been installed and in satisfactory operation for about two months. The second machine will be in operation in the course of a few weeks. These genera-

slow armature speed, 200 revolutions per minute, which admits of direct coupling to the jack-shaft and of a consequent saving in power and floor space, and a generally increased simplicity in the entire installation. The armature, which is of what is known as the A. P. type, is of the multi-tooth style of construction, with distributed winding, and has in consequence a very low armature reaction, with a correspondingly close inherent regulation. The generator voltage, on account of the short distance over which the power is to be transmitted, has been fixed at 550 volts, thus admitting of the current's being used directly on the motors at that pressure without the use of step-down transformers. The motors are of the C. G. E. Co.'s standard induction type, varying in size from 50 to 100 h.p., and are, where a saving in floor space is desirable, of the inverted type, bolted to the ceiling. They are, of course, self-starting under full load, and as they are without collector rings or brushes, are especially suited for operation under the conditions favorable to combustion which exist in a cotton mill.

Altogether the plant is a model one, in every respect, and as the successful outcome of the first attempt on a large scale in Canada to secure increased economy by the use of electric power in the operation of a large industrial establishment, reflects the highest credit on Louis Simpson, the able and energetic general manager of the cotton company, and his foreman machinist,

Jas. Sparrow.

It might be added that the Montreal Cotton Company have now, as a result of the extension of their plant, a surplus of about 1,500 horse power, which they would be prepared to dispose of for manufacturing



tors, which are designated as A.P. 36-400-200, have 36 poles circumscribed within a steel yoke about the periphery of the revolving iron-clad armature, and represent the latest development in design and construction for machines of this type. A point to be noted is the very