



SPECIAL SWITCHBOARD FOR HANDLING 10,000 H. P. AT 12,500 VOLTS

From the machines the electricity is conveyed to another building, which is known as the terminal house, where the junction is made between the underground cable and the overhead lines, which carry the power into the receiving station at the Royal works in Montreal, a distance of sixteen and a half miles. What impressed the visitors most was the simplicity and solidity of the whole structure. Although three of the huge generators were working at the time there was not the slightest vibration, a fact which, as Mr. Brown explained, shows how perfect the machinery is. Another interesting feature which was explained to the visitors was the precaution that is taken against lightning storms. In addition to the transmission wires, a set of barbed wires are used and form a shield over the

transmission wires. Each of the barbed wires is connected with a wire running to the earth. This arrangement allows the electricity in the air to accumulate on the barbed wires and to escape into the earth. Lightning arresters are also connected with the copper wires and afford another means of escape. Even during the remarkable electrical storms that have occurred during the last couple of years the company had not the slightest accident. All the visitors were greatly impressed with the fine machinery and the perfection of all the arrangements.

For the benefit of those of our readers and the shareholders of the company who have not had an opportunity of visiting the works of the company, we give a description of the works at Chambly, accompanied with a few illustrations which, with

the limited time at our disposal, we have been able to make. This description, which is taken from the *Electrical World*, gives but a very faint idea of the magnitude of the undertaking.

Perhaps the finest installation for the development and transmission of the power of falling water extant is that of the Chambly Manufacturing Company, at Richelieu Village, Quebec.

At this point, about 25 miles distant from Montreal, the Richelieu River falls through a long series of rapids. From early days a wooden dam between Richelieu Village on the one side of the river and Chambly on the other has been in existence, supplying power to a few small mills. The new structure which takes its place is one of the finest examples of hydraulic engineering