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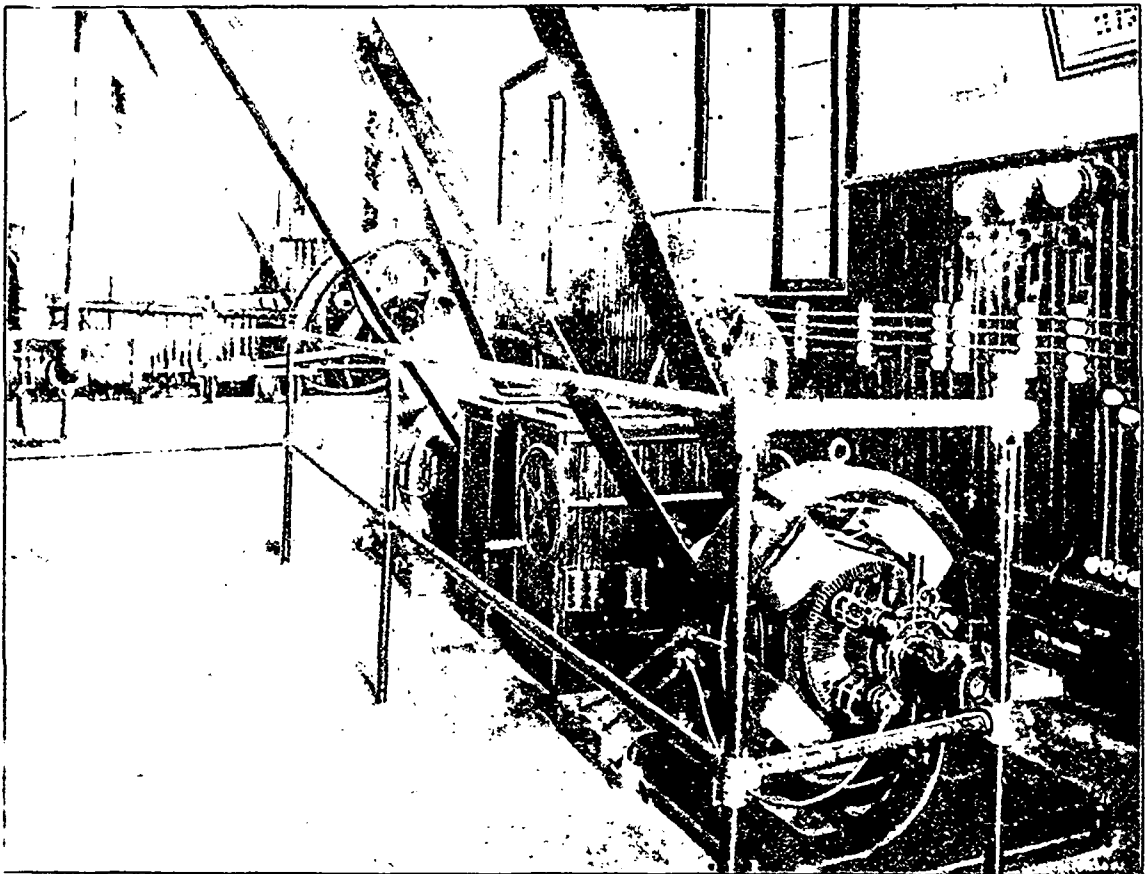
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**ELECTRICAL PLANT AT THE BEAUPORT
INSANE ASYLUM.**

JUST outside the city of Quebec, at the Beauport Insane Asylum (L'Asile d'aliénés de Beauport) an unusually complete electrical plant of small size has recently been installed, a description of which may interest some of our readers. The Beauport Asylum grounds cover an area of about 140 acres, upon which there are fourteen different buildings, eleven of these being supplied with electric light. The boiler house, a part of which

which is at an altitude of 300 feet above the grounds upon which the buildings of the institution are located. This pipe is eight inches in diameter for the first two miles and six inches for the remaining distance, and was never intended for any other purpose than an ordinary household water supply, the question of power other than for fire purposes never having been taken into consideration. But upon the advent of the present engineer, he, having had considerable experience in hydraulic work, at once realized the power in store, and in a



ELECTRICAL PLANT AT THE BEAUPORT INSANE ASYLUM—DYNAMO ROOM.

forms the dynamo room, is in the centre of the buildings, the most advantageous position.

A noteworthy feature of the installation is the extreme flexibility of the generating plant, which renders the lighting system practically infallible, a point which has very great significance in an institution where lunatics have to be dealt with.

The generating plant is operated by water power, and is in duplicate throughout, with the exception of the steam engine, which is held in reserve as an auxiliary and at the same time is used as a "booster" during the heavy load, the water supply being limited and inadequate for driving the machines under full load. This water power is brought through an underground iron pipe for a distance of four miles, from a large lake

short time had all the steam power used in the machine shops, laundries, etc., replaced by water power.

The water wheels are of the Pelton type, designed and built on the premises to suit the local conditions. On account of the success attained with these wheels, the management of the institution was led to ask for an engineer's report on the practicability of utilizing this power to light the various buildings on the grounds with electric light. The coal gas system in use was in need of costly repairs, and was also accompanied by a considerable amount of danger in an institution of this sort.

The illustration on this page is a view of the dynamo room, showing the arrangement of the dynamos, water-wheels and the engine. The dynamos are of the slow-