on an independent line from the power house. At 5:00 a.m. the War Eagle hoist is taken from the power circuit and put on an independent line to the power house, and the remaining power load is coupled in with the lighting load and carried on the second line to the

power house. The voltmeter curve, therefore, from 5:00 a.m. to 6:45 p.m., shows the regulation of the plant when all power with the exception of that for the War Eagle hoist is in parallel with the day lighting load. The chart given is that for an ordinary day, and, indeed, the charts run so evenly from day to day that each almost duplicates the other. The day in question there were in operation from 5:00 a.m. to 6:45 p.m. three 100 horse power synchronous motors with an average load of 280 horse power on compressor work; five 50 horse power induction motors with an average load of 210 horse power on the same, three of which were on hoists; three 30 horse power induction motors with an average load of 76 horse power, and one 40 horse power induction motor carrying an average load of 32 horse power. The lighting load

consisted of 300 horse power, which is high in proportion to the night lighting load because of the heavy 24-hour load carried. The report from the generating station for the same day shows that the variation reached 108 amperes at 110 volts, or an approximate variation of 205 horse power, considering which the regulation is remarkably good. The secret of this is

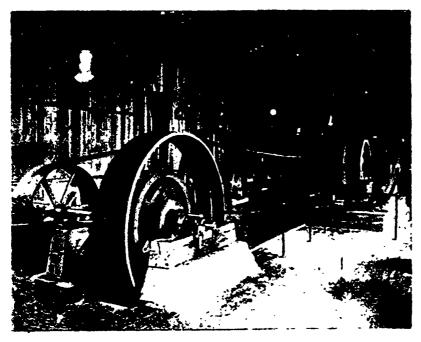


Fig. 17.-100 Horse Power Synchronous Motor, Driving Seven-Drill Compressor at the Big Three Minf.

stated to lie in always maintaining a high voltage in relation to the motor ratings, with ample generator and wheel capacity.

The construction of electric railways in Chatham and Sarnia, Ont., is being advocated.

THE CANADIAN ELECTRICAL ASSOCIATION.

UNDER the direction of the new president, Mr. A. A. Dion, a meeting of the Executive of the above Association was held at the Russell House, Ottawa, on Sep-

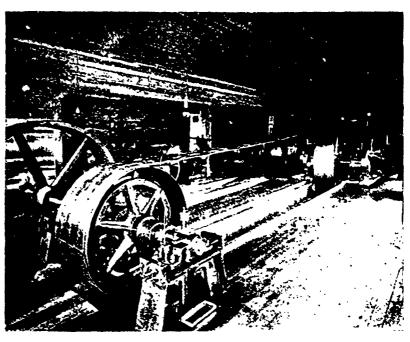


Fig. 16. Stanley 100 Horse Power Synchronous Motor, Driving 10-Drill Compressor at the Iron Mask Mine.

tember 14th. Besides closing up satisfactorily all matters in connection with the last annual convention, the committee discussed at some length the work which should engage the attention of the Association during the present Association year. This work has been allotted to various committees, which will be called together at an early date.

The Committee on Meters has been requested to devise some satisfactory scheme for the reinspection of meters which will entail less expense upon lighting companies than is imposed by the existing regulations. The Government Inspection Department is understood to be desirous of meeting the wishes of the companies in this regard, if a satisfactory scheme can be propounded. The view urged by the Association, as representing the companies, is that the present inspection fees should cover the cost of re-inspection during the period for which the meters are sealed, or that if a second fee be necessary, it should be for a nominal amount. Experience is said to have demonstrated that watt meters do not accumulate as much dust and consequently are less liable to disarrangement with the alternating as

with the direct current.

A public meeting was held in the village of Erin, Ont., recently to discuss the question of installing an electric plant, for lighting the streets. A committee was appointed to ascertain, the cost of lighting in other places.