

ALMONTE, ONT., 12th April, 1897.

MCLEOD STEWART, Esq.,
Ottawa.

DEAR SIR,—Referring to our conversation last week about the water power available from the Ottawa River, the following information may be of some use :—

When I was instructed in 1872 to make the survey for the construction of the Carillon dam and new canal there it was necessary to ascertain the flow of the river. Mr. T. C. Clark, in his report of his survey for the Ottawa Ship Canal, gave the flow at Carillon in high water as 130,000 cubic feet per second, and low at 30,000 cubic feet per second. I was not satisfied with that, knowing that Mr. Clark had not time to extend his observations and measurements through more than one or two years. I at once began measurements of the flow, and continued them during ten years. I made extreme high water 200,000 cubic feet per second, and extreme low water 25,000 cubic feet per second—ordinary low water 30,000 to 35,000 cubic feet per second.

That would give for extreme low water, allowing 20 per cent. off for loss, friction, &c, a power, when the river was at its lowest, of 2,270 horse power per foot fall—and in ordinary low water from 2,700 to 3,300 horse power per foot fall.

When the Ottawa and Georgian Bay Canal is constructed, as it must be in the near future, it will be necessary to regulate the flow of the river, that is to retain some of the surplus water of flood time for use during low water seasons.

It is certainly a low estimate and well within the possibilities, to say that the flow of the river will then be maintained at such a height that it will never be lower at its very lowest stage than will give 42,000 cubic feet per second at any place between Ottawa and Mattawa. That would give, allowing 20 per cent for waste, &c., 4,000 horse power per foot fall to be depended upon all the year round.