have we seen a suggestion offered as to what changes are desired. It would be a wise move on the part of those who are most interested in the section of country most affected by the regulations, and who have practical knowledge of such matters, if they were to meet together and formulate their complaints and forward them in a businesslike and proper manner to the Minister of the Interior, pointing out to him the objectionable clauses and the nature of the modifications wished for. Such a communication would doubtless be carefully considered by the authorities at Ottawa and acted on.

DISTINGUISHED VISITORS.

Vice-Regal Excursion

TO THE

RIVIERE DU LIEVRE PHOSPHATE DISTRICTS.

On Monday morning, the 12th inst., His Excellency the Governor-General and suite, accompanied by Dr. J. A. Grant, left the Union Station, Ottawa, on the 8.30 train for Buckingham, and on arrival there found carriages awaiting them to convey the party to the village. Without loss of time they proceeded to the wharf on the Riviere du Lievre, where the *Rocket* was in readiness to receive the distinguished passengers.

Shortly afterwards the tidy little steam yacht, owned by Mr. W. A. Allan, of Ottawa, and used by him in connection with his phosphate mining, steamed off on her journey up the river.

The weather, fortunately, was all that could be desired for such an auspicious occasion, and all being in the best of spirits the voyage was indeed an enjoyable one. The natural beauties of the winding river, with its bold and wild scenery, gained frequent bursts of admiration from the entire party. Indeed, with every turn or bend in the river, a new vista was opened up, the effect being quite panoramic.

As the little craft sped on up the stream, time seemed to fly, and soon a point was reached where the miners were at work, and here the occasional blasts had a curious meaning, sounding indeed as a royal salute, though we are not prepared to say we actually counted 21 explosions.

Though told that dynamite was used in this district, it did not appear at all to terrify the guests of the day.

As the yacht crept up the river still higher the scenery became more imposing, and when High Falls appeared in sight, only those who have been fortunate enough to have seen them, can well imagine how His Excellency and party were impressed.

Here a delay was made in order to allow the tourists ample opportunity of viewing the Falls and admiring the whole scenery, here so grand. The *Rocket* was started on her return trip, and with the current, seemed to fly down the river. In due time Buckingham was reached and the party proceeded to Ottawa by C.P.R. train, arriving at the station at 6.30 p.m.

His Excellency and party thoroughly enjoyed the trip, and were loud in their expressions of gratitude to all those who were instrumental in rendering the whole day such a delightful one, and the object of the trip so successful. We are quite sure it will be long remembered.

Mr. Baker, Superintendent of the C.P.R., kindly placed the President's private car at the disposal of His Excellency for the occasion, and provided a special train from Buckingham.

Mr. McLaren and Mr. Benardin, of Buckingham, very kindly provided the carriages used to convey the party to and from the Buckingham station.

Mr. G. Smith, Manager of Mr. Allan's *Rapids* Mine, acted as skipper of the *Rocket* on the auspicious occasion. His Excellency's only regret was that time did not permit of his landing at some point on the river and witnessing some of the phosphate mines in actual operation. A second trip with such an object in view will be a pleasant anticipation.

Mr. Childers, of the British House of Commons, has computed the gold coinage of England, since 1817, at £300,000,000.

Gold was first discovered in California in 1848, and during the eight years following, that State and the colony of Australia sent $800,000,000 in gold to Europe.

During the past fiscal year Canada imported coal and coke valued at $6,389,804 and manufactures of iron and steel to the value of $13,714,636, the largest items in her imports.

THE ROYAL SOCIETY OF CANADA.

Some Interesting Papers Read at the Recent Meeting.

This Society, founded by the Marquis of Lorne, held its third meeting at Ottawa during the present month. Some of the prominent members who were unable to be present forwarded papers which were read during the meeting, and a large number of contributions came from outside sources.

The Marquis of Lansdowne accepted the position of patron and honorary president, and the officers elected for the ensuing year were as follows:—President, Dr. T. Sterry Hunt; Vice-President, Dr. D. Wilson; Honorary Secretary, John George Bourinot (re-elected); Honorary Treasurer, Dr J. A. Grant (re-elected).

Dr. T. Sterry Hunt read an interesting paper, "The origin of Crystalline Rocks." He remarked that the problem of the origin of those rocks, both stratified and unstratified, which are made up chiefly of crystalline silicates, is essentially a chemical one, and traced their origin, elements and processes of decay and disintegration.

Professor E. J. Chapman laid two papers on the table, "Contributions to our knowledge of the Iron Ores of Ontario," and "Some deposits of Titaniferous Iron Ores in the Counties of Haliburton and Hastings." Some portions of these papers corroborated many of the statements made in a *continued* article in the *January, February* and *March* numbers of the REVIEW entitled "The Iron Deposits of Central Canada."

A paper of Mr. Edwin Gilpin, of Halifax, "The Manganese Ores of Nova Scotia," was read, in which the author, after remarking on the localities yielding the more common variety of manganese ore, takes up the best known of the manganese ores, prolusite. He states that Hants, Pictou, Colchester and Cape Breton Counties seem to yield it most abundantly, and minutely describes its occurrence at Tenny Cape. The writer also gives analyses of the ores of these localities as well as of those of the Cape Breton and Magdalen Island deposits.

As the result of his surveys and investigations, Mr. Gilpin gives it as his opinion that the manganese ores of Nova Scotia occur low down in the carboniferous limestone, below the gypsum deposits characterizing that horizon, and that they are connected with limestones frequently manganiferous and usually so magnesian as to approach dolomites in composition, and submits several analyses of these limestones. The paper forms the first detailed description of the manganese ores of Nova Scotia, which are of unusual purity, and is of practical value to those engaged in mining them, as the writer points out the geological horizon carrying them most abundantly.

NORTH CAROLINA PHOSPHATE.

Much importance is now being attached to the comparatively recent discoveries of phosphate rock in North Carolina, and, notwithstanding the low grade of the mineral itself and the peculiar nature of the beds, as compared with our Canadian apatite deposits, these discoveries are looked upon as of the greatest value to that State. The New York *Engineering and Mining Journal*, quoting from a report of Dr. Charles W. Dabney, Jr., Doctor of the Agricultural Experiment Station at Raleigh, says: "Dr. Dabney states that the phosphatic rock is found in two different relations in this field, the lower country yielding worn nodules imbedded in comminuted shells, forming a conglomerate; while in the upper country it is found in larger nodules, cakes, or slabs imbedded in sand. In the former district, the conglomerate crops out in places, while in other localities it is covered by limestone, the thickness of the phosphatic bed reaching four feet. Analyses of samples of the nodules yielded from 14 to 42 per cent. of phosphate of lime, equivalent to about from 6·25 to 19.25 per cent. of phosphoric acid. It has been suggested that a good plan to treat the conglomerate rock would be to burn it, so as to slack the lime and thus reduce it to powder, while the nodules remain comparatively unaffected, so that they can be screened out. In the up-country, embracing Sampson, Duplin, and Onslow counties, the rock, which occurs in a horizontal bed from 6 to 20 inches thick, is covered by marl and sand sometimes to the depth of 20 feet. This rock yields, according to a number of analyses made, from 32·5 to 50·5 per cent. of phosphate of lime. From a test pit near Warsaw, three-quarters of a mile from the railroad, 46 tons of workable phosphate, running nearly 40