Appendix (W.)

fit for manufactures or manures; or of new minerals; or to make collections of specimens to be placed in 27th January. public institutions for the elucidation of the whole subject.

> It would materially assist the attainment of a rapid reconnaissance, if answers could be obtained to the following questions, from as great a number of persons in the country as are likely to have observed the facts to which they relate.

## QUESTIONS.

What is the locality of any limestone in your neighbourhood, or other place that you are aware of, in regard to some known river or lot of land, and over what extent of country does it spread?

Is it divided into beds?

Do the beds lie flat, or to what point of the compass do they slope, and at what inclination to the horizontal plane?

Are there any organic remains or shells in it?

What is its color and texture?

Does it make good lime?

Will the lime set in water?

Where is there any sandstone in your neighbourhood, or that you know of?

Are the beds flat, or to what point of the compass do they dip or slope, and at what inclination to the horizon?

27th Janua

Appendiction (W.)

Is it a freestone?

Is it fine or coarse grained, or are there any pebbles enclosed in it, and of what size are the pebbles?

Can you state the exact locality of any plaster or gypsum beds, or of any salt springs?

What kind of rocks are near them, and how near

Can you state the locality of any iron ore?

Is it bog or mountain ore?

Do you know the locality of any veins of lead or copper ore?

What is their thickness, and in what direction do they run?

Do you know the locality of any coal in the coun-

Are there any great masses of rock in your neighbourhood, and what is the locality and quality of

Can you procure specimens of ores or rocks or fossils, and state the locality whence they come?

## PRELIMINARY REPORT,

Addressed to RAWSON W. RAWSON, Esquire, Civil Secretary to His Excellency the Governor General.

MONTREAL, 6th December, 1842.

SIR.

Unfulfilled professional engagements, contracted in Britain previous to my undertaking a Geological Survey of this Province, rendering it necessary that I should avail myself of the permission accorded by His Excellency, the Governor General, to pass the winter on the other side of the Atlantic, I am desirous, before my departure to state, for the information of His Excellency, in how far it may be considered the Survey in question has been advanced by my present visit to Canada.

This visit I am disposed to regard merely as preliminary, and preparatory to a vigorous and systematic entrance upon the duties of my task next season, after a mature consideration of the information and materials now collected shall have enabled me to recommend for adoption such a plan of investigation as may promise to lead to the most speedy and economical development of the mineral riches of the country; and when attention is given to the wide expanse of surface to be examined, which, stretching from the North Western shore of Lake Superior to the mouth of the Great River that unwaters the whole area, spreads across twenty five degrees of longitude and ten of latitude, and comprises in the mere narrow strip partially settled along the River and its Lakes upwards of 60,000 square miles, the advantage and absolute necessity of a judicious and systematic plan

of operations, so as to attain a satisfactory result in a reasonable time, are too obvious to be insisted on.

In forming such a plan, my presence in Britain will, I am persuaded, be of essential service to the Survey, as it will give me an opportunity of ascertaining the cpinions of some of her leading geologists on the subject. Among others, I shall have pleasure in addressing myself to Sir Henry T. De la Beche, who so ably directs the Ordnance Geological Survey of that country, and who, taking a deep interest in the investigation instituted in Canada, has in the handsomest manner offered to make the scientific force of his staff available in the analysis of Canadian minerals and the comparison of Canadian fossils, should any difficulty arise in their examination here. I hope also to obtain the suggestions of Mr. Lyoll, whose recent visit to the New World having given him an opportunity of closely studying the results arrived at in the Geological Surveys appointed by their Legislatures in various States of the American Union, and of subsequently comparing these with the labours of Dr. Gesner and others in New Brunswick and Nova Scotia, will give his opinions a peculiar value in regard to the structure of both extremes of the Province, while these opinions will still further be enhanced by the personal inspection he bestowed on several points in Canada itself during his rapid transit through it. With a view to the formation of a systematic plan of operations, my efforts on my arrival here were directed not so much to personal examination as to the collection of such information as might already exist in the