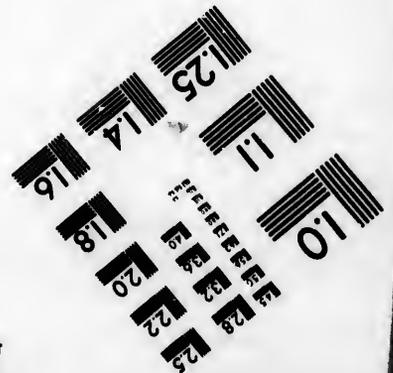
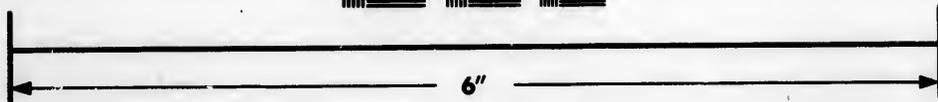
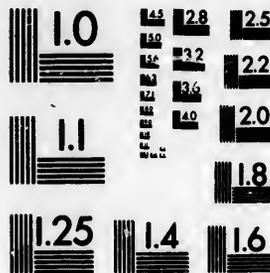


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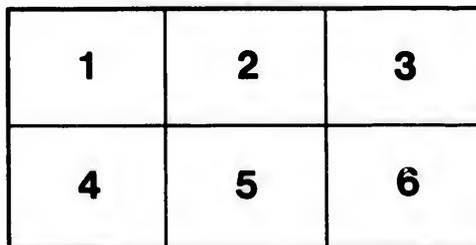
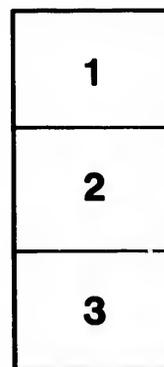
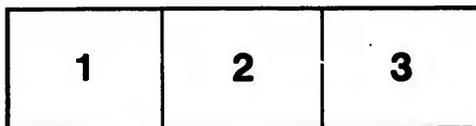
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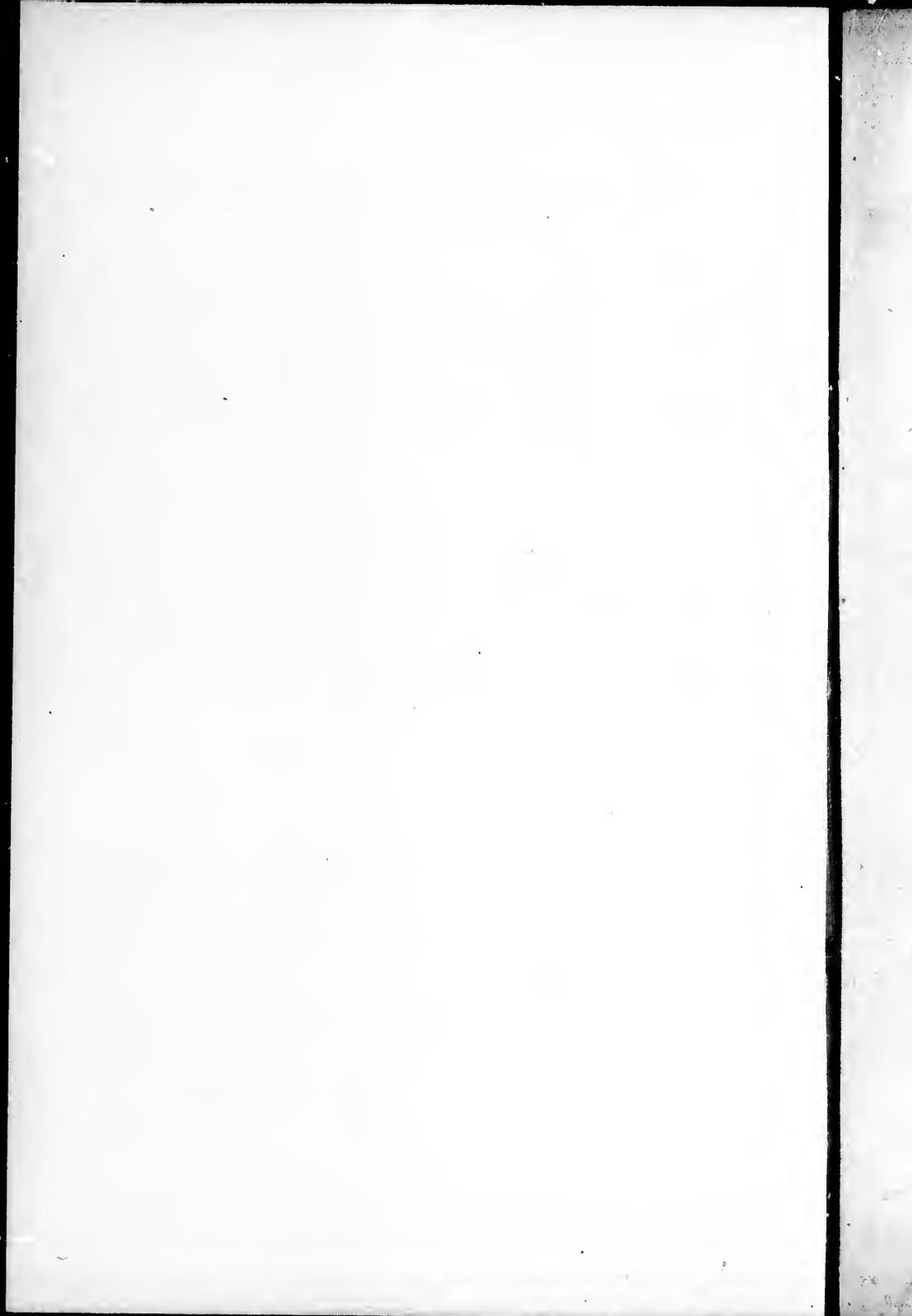
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ORIGIN AND PROGRESS
OF THE
GEOLOGICAL SURVEY
OF
CANADA.

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GEOLOGICAL SURVEY OF CANADA,

(Extracted from Scobie's Canadian Almanac for 1851.)

The origin, progress and results, up to the present time, of this interesting work are given in the following brief abstract drawn from the most authentic sources :—

In January, 1832, a petition from Dr. Rae, praying for pecuniary assistance in prosecution of a geological and statistical survey of the province was sent down by message to the legislative assembly, with a favourable recommendation from his Excellency Sir John Colborne, Lt. Gov. of Upper Canada. It was read and referred to the committee of supply, but not considered.

In December, 1832, a petition from the York Literary and Philosophical Society, praying that a sum of money might be granted to provide for an investigation of the geology, mineralogy, and natural history of the province, was presented to the legislative assembly of Upper Canada. It was read and referred to the committee of supply, but was not considered.

In February, 1836, on the motion of Mr. W. L. Mackenzie, seconded by Mr. Durand, Messrs. R. G. Dunlop, Gibson and C. Duncombe were named a select committee to consider and report on a plan for a geological survey of the province. Three hundred copies of this report were ordered to be printed, and it was referred to the committee of supply, but was not considered.

In November, 1836, Mr. R. G. Dunlop gave notice of a motion for leave to bring in a Bill for the purpose of instituting a geological examination of the province, but the bill was not proceeded with.

In November, 1836, on the motion of Mr. R. G. Dunlop, seconded by Col. Prince, the house went into a committee of the whole to consider the expediency of a geological survey, and, on their report being received, it was resolved that an address should be presented to His Excellency the Lt. Governor, (Sir F. B. Head,) to ascertain whether there were any means at his disposal to effect a geological survey of the province. The address was ordered to be drafted but was not reported.

In December, 1836, Mr. R. G. Dunlop gave notice that he would move an address to His Majesty for a grant of wild lands to defray the expense of a geological survey of the Province, but no address was presented.

To Lord Sydenham, who well appreciated the importance of an examination into the mineral resources of Canada, the country is indebted for the commencement of the geological survey which has been instituted.

In July, 1841, in the first united parliament, a petition from the Natural History Society of Montreal, praying for aid to carry out a systematic geological survey of the province, was presented by Mr. B. Holmes. It was referred to a select committee consisting of Messrs. Holmes, Neilson, Quesnel, Merrit, and the Hon. Mr. Killaly, but it was not reported on. A similar petition was presented by Mr. Black, from the Literary and Historical Society of Quebec, which was read. The government took up the matter, and on the motion of the Hon. S. B. Harrison, the sum of £1500 sterling for the purposes of a survey was introduced into the estimates.

In 1842, Sir Charles Bagot appointed two geologists, Mr. W. E. Logan F. G. S., principal, and Mr. A. Murray, assistant, to carry the survey into operation, and the investigation was commenced 1st May, 1843.

To Lord Metcalfe is due the credit of a more systematic continuance of the survey.

In March, 1845, under the administration of the Hon. Mr. Draper, Mr Attorney General Smith brought before parliament a bill, which was supported by all parties and passed into an act without a dissentient voice, (8 Vic. cap. 16,) making a provision of £2000 per annum for five years, for a complete examination of the rocks, soils, and minerals of the province. For the purpose of analyzing minerals, ores, mineral waters, and soils, a chemist was attached to the survey.

The area of Canada, according to Bouchette, is 331,280 square miles. It was not to be expected that three persons could examine the whole of this in the time which elapsed from the commencement of the survey to the expiration of the 8 Vic. cap 16, (March, 1850,) and Lord Elgin, who, from the circumstance of his own family estates being so extensively enriched with mineral deposits

must be well acquainted with the importance of geological investigations, was no doubt favourable to a continuation of the Canadian examination, and therefore well pleased that the present administration should renew the act, which they did (again without a dissentient voice being raised in the legislature,) during the last session of parliament, for five years more.

The districts examined according to the reports of progress that have been published, are as follows :—

The Canadian coast and islands of Lake Superior and two rivers on the north shore for distances of forty and sixty miles up.

The Canadian coast and islands on Lake Huron with distances of twenty to seventy miles up four principal tributary rivers on the north shore.

The coast of the lower part of Lake Erie and the upper part of Lake Ontario, as well as the country back from Toronto to the exit of Lake Simcoe and Matchedash Bay.

The Ottawa from its mouth near Montreal to the head of Lake Temiscamang, a distance of 400 miles, with many of its tributaries on the right bank for distances of twenty to forty miles up.

The Eastern Townships from the Richelieu to the Chaudière River.

The country between the Chaudière River and the Temiscouata Portage road.

The coast of the Gaspé peninsula from the Metis road round by Cape Gaspé and Isle Percé to the mouth of the Matapedia River a distance of about 800 miles, with several sections across the peninsula from the St. Lawrence to the Bay Chaleur.

From this it would appear that there still remain to be examined the following districts :—

The region on the south side of the St. Lawrence between the Temiscouata and Metis roads.

The whole of the north shore of the St. Lawrence, including the island of Anticosti, from Labrador to Quebec, with the exception of Murray Bay and Bay St. Paul.

The north shore of the St. Lawrence from Quebec to Montreal.

The same from the Cascades to Kingston, including various parts of the interior between the St. Lawrence and the Ottawa.

The country between Kingston and Lake Simcoe, extending back to the Mattawa.

The interior of the peninsula between Lakes Huron and Erie.

The whole of the region extending along the height of land separating Canada from the Hudson Bay Territory in the entire length of the Province.

A large and valuable collection of specimens has been made to illustrate the minerals, rocks and fossils of the districts examined, which is preserved at the office of the survey, for the present at No. 10, Little St. James-street, Montreal ;* a full suite of these specimens is intended to form the nucleus of a provincial museum, and the duplicates, after they have served the purposes of the survey, are to be distributed among such educational establishments of both sections of the province, as the government may determine.

It being impossible to understand the true bearing and relation of geological facts as parts of a whole, unless their geographical position is accurately ascertained, and so large a portion of Canada being still unsurveyed topographically, it has been necessary for the geologists to measure extensive lines of exploration, and the maps resulting from these topographical admeasurements have proved of great value to the Crown Land Department. To this collateral work on the geological survey we are indebted for the chief part of what we know of the interior of the peninsula of Gaspé, where six rivers have been measured,—the Matanne, the Chat, the St. Ann, the St. John, the Bonaventure, and the Great Cascapedia. From it also we have the course of the Kamanistiquia and the Michipicoten rivers on Lake Superior ; the Thessalon, the Mississague, the Spanish and the French rivers on Lake Huron ; in addition to 150 miles of the Ottawa, and forty miles (the whole of its length) of the Mattawa. These measurements have been effected by Rochon's micrometer, an instrument by which much time is saved ; and, as showing how far it may be depended on, it may be mentioned that the Mattawa having been re-surveyed by Mr. Sinclair, a provincial surveyor, by the chain, by order of the late Commissioner of Crown Lands, Mr. D. B. Papineau, the map resulting from the re-survey is almost a complete counterpart of the other. The map of the Ottawa is used in the Crown Land Office for the distribution of timber limits, for that part of the river represented by it.

* Now removed to No. 5, St. Gabriel Street.

Mr. Hunt, the chemist attached to the survey, was appointed three years since, and as the results of his labours, in addition to the analysis of a great multitude of useful metallic ores and other minerals, we have those of thirty valuable mineral springs, and, by the last report of progress, it will be perceived that a commencement has been made upon the soils of the country; with great diligence eighteen soils were completed last winter.

It would extend our notices of the geological survey to too great length for the limits of this publication, were we to attempt a description of the geographical distribution of the formations of the province as far as ascertained, and show how these formations present concentric zones, encircling the great coal fields spread out in the middle and western states of the American Union on the one hand, and our sister provinces on the other, with a wider and wider sweep in their range as they descend in the order in which they are placed upon one another, the whole being arranged after the manner of a nest of weights or of irregularly rimmed but close fitting dishes, the edges of which constitute the geographic surface; the edges of the lower dishes only strike through Canada, and thus leave it without coal. To make this perfectly intelligible would require such a model of the forms as has been constructed by Mr. Logan, and was exhibited here to the members of the legislature during the last session. In preference we give below, * as containing much information in a small space, a catalogue of some of the minerals and deposits of the province, capable of useful application, prepared by Mr. Logan, for the purpose of promoting a collection of native specimens to be sent to the Grand Industrial Exhibition in London, in May, 1851, and appended to the last report of progress, that for 1849—50.

We would first, however, wish to show the importance attached to geological examinations, by giving a few facts connected with that of the State of New York. The area of New York is 46,200 square miles, and on the geological survey there instituted, four principal geologists and four assistants were employed, besides a chemist and a palæontologist, to examine and describe fossil organic remains. The examination of the geographic distribution of the rocks required five years. The act establishing the geo-

* See Appendix to Report of progress for 1849—50.

logical survey, comprehended also a general examination of the natural history of the State, including a description of its quadrupeds, birds, fishes, shells, insects and plants, and naturalists were appointed for all the separate branches. The works resulting from all these investigations, of which a copy in fifteen volumes, was presented by the state to the library of the provincial legislature and unfortunately burned in Montreal, are too well known to require mention. Though the examination of the geographical distribution of the rocks was so far completed in five years as to permit the publication of a geological map of the state, the fossils belonging to them (which are of great importance as affording brands or marks by means of which to follow out the formations, and therefore the useful materials associated with them,) required farther investigation, and five years more have been bestowed on them and on the examination and analysis of soils. The works connected with these branches are beginning to appear; one volume on each branch has been published, and several more are to follow. Up to the termination of the year 1849, the sum which had been expended by the State on these investigations exceeded \$300,000, and it was stated to be the intention of the government to propose a further outlay of \$125,000, the only debate being whether \$100,000 should be voted at once, and \$25,000 more when that should be exhausted, or an annual sum of \$25,000 for five successive years.

In the United States the geology of about 500,000 square miles of territory has been placed before the world by the investigations of about seventy geologists in a period of twenty years; and the exact knowledge of the mineral resources of the States which these investigations, and the publications connected with them, have produced in foreign countries, has been instrumental in introducing a great amount of capital to make them available. The investigations have been of vast importance, not only in showing where useful materials do exist, but also in marking where they do not; pointing out where capital may be profitably employed in the one case, and saved in the other by preventing useless search. The negative results are of value chiefly in regard to coal; upwards of half a million dollars were expended in the State of New York, a large part in the valley of the Mohawk, in researches for coal in black bituminous shales, which, shortly after the geological survey

commenced, were shown to run a long way below it ; and the eminent geologist Sir. R. I. Murchison, computes that the money expended in England alone, before geology was understood, in searching for coal where it would now be considered madness to expect it, would be sufficient to effect a correct general geological examination of the whole crust of the globe.

GEOLOGICAL SURVEY OF CANADA,

(Extract from the Pilot Newspaper, 2nd January, 1851.)

The commission appointed for this work by the provincial parliament, has already been for six or seven years engaged in its explorations, and has from year to year submitted to his Excellency the Governor General, reports of the progress annually made in its labors. As, however, but limited numbers of these reports have been printed, and only for distribution among the members of the parliament, the results of the geological exploration, and almost even the existence of a commission for the purpose, are unknown to many who would, if acquainted with it, take an interest in its progress. As the government have at the late session of parliament renewed the act for the Survey, (thus authorising its continuation for a further term of five years,) it may not be uninteresting to the public to be presented with a very brief outline of the objects, plans, modes of investigation, and results of the commission.

Although its ostensible object is only geological investigation, the nature of the country, and the various questions which necessarily arise in connection with the work, have made it in addition, a topographical, geographical, and mineralogical survey, and have superadded to it a chemical department, with a well arranged laboratory. In a country which has already been explored, and whose geography is well known, the labor of a geological survey is comparatively easy; but in the course of the investigations in this province, the officers have found it necessary to make voyages of weeks and months through forests never before traversed but by the hunter, to ascend rivers and scale mountains, which had never been marked upon any chart; and thus to examine regions which would have otherwise remained for years unknown to civilised man.

A correct geological delineation of the country must be based upon reliable and accurate maps and charts; and hence it has been found necessary at the same time with the geological ex-

aminations, to make careful topographical and geographical surveys of all these unexplored regions. The information thus obtained, important as it has been to the immediate objects of the commission, has been perhaps still more important to the country at large; for the accurate surveys of the principal rivers of the peninsula of Gaspé, and the tributaries upon the north shores of Lakes Huron and Superior, as well as the Mattawa, and 150 miles of the Ottawa,—all of which were before unsurveyed,—have been adopted by the Crown Lands Department, for the purposes of laying out the lands and disposing of the timber upon their courses; and thus, works which, if undertaken expressly, would have cost the province a large sum, have been performed incidentally by the Geological Survey, without any additional expense. In the same way, the character of these regions as to timber, the capabilities of the soil, and their general geographical features, have been developed; almost all that is known of the interior of the peninsula of Gaspé, will be found in the reports of the geological commission.

It was to Gaspé that the first explorations were directed, as one of the questions which the government were most anxious to have determined, was that of the presence or absence of coal in the province, and the general structure of the country pointed to that extremity of the province as the one in which the most recent formations were developed, and where, consequently, there would be the best prospect of meeting with that mineral. But the labors of Messrs. Logan and Murray in that district, during two years, have shown that even these rocks are more ancient than the coal-bearing rocks of New Brunswick, and dip beneath them, so that there is little reason to hope that this mineral will ever be numbered among our resources.

Immediately after these examinations, the attention of the public having been drawn to the metallic ores discovered upon the north shores of Lake Superior and Lake Huron, a careful geological survey of these was made, with especial reference to the economical mineralogy; and the results, although confirming the opinion that we have there valuable mines of copper, and other metals, were such as would, if attended to, have repressed the unguarded enterprises of ill-informed and misguided speculators,

and prevented very much of the disappointment and loss which have thus resulted.

The further results of the Survey have been the examination of the Ottawa, for a distance of 400 miles, of the whole of the shores and islands of Lake Huron, of the western portions of the province between the great lakes, the whole of the Eastern Townships, and the region south of the St. Lawrence generally. These explorations have consisted in carefully determining the nature of the different rock formations, with their actual and relative positions, and their *strike* and *dip*, or their direction and inclination; forming thus an assemblage of facts which, when reduced to form, upon proper charts, give a minute knowledge of the arrangement and disposition of the rocks throughout the district. Care has also been taken to determine, as far as possible, the peculiar minerals present in the various rocks, and especially those which are of economical importance.

Large collections have been made of specimens, illustrating the rocks and minerals of all the regions examined. In addition to these, a large portion of the rocks are distinguished by containing the remains of ancient, and now extinct, forms of animal and vegetable life, which are preserved in the slate and limestone rocks, and often in a state of great beauty and perfection. The study of these has within a few years become a subject of great importance, not only from the views which they afford of the laws of life and of development, but from the fact that each set of rocks is marked by certain peculiar and characteristic fossils, so that often by a few shells or corals, a geologist is able to recognise a formation and identify a rock met with in one place, with another at a great distance. In this way, Mr. Logan has been enabled by a few fossils to determine the nature and geological age of the limestones of Lake St. John and of the island of Anticosti without ever having visited the regions, and to institute comparisons between the rocks of Canada and those of other parts of the world.

So important is palæontology, as this branch of study is called, deemed, that three or four years since, M. de Verneuil, one of the most eminent men in this department in Europe, visited this country solely for the purpose of studying its fossils. The collections of fossils made by the geological commission are very

large and precious, and we understand that Mr. Logan, who visits England this winter, carries with him a selection from them, which he proposes to lay before the Geological Society of London, and some of the principal geologists of France.

The results of the examinations in the Eastern Townships have been highly important in a scientific point of view, as they have furnished the key to a question which had hitherto been an enigma to the American geologists. The labors of Mr. Logan have proved that these rocks, so far from being as was formerly supposed, *primary*, are in reality of a more recent geological age than those of the island of Montreal, and that they have been changed, by agencies probably simultaneous with those which elevated them into mountain ridges, so as entirely to have lost their original character. The influence of this discovery upon the theory of the science will be very great indeed. These researches have shown that the rocks which in the Eastern part of the province are found to contain gold, are the same with the auriferous rocks of the Southern States and Brazil, and probably also with those of California.

The collections of rocks, minerals and fossils which have been made, embrace great numbers of duplicates, and we believe that it was contemplated, in instituting the Survey, to eventually form of them several collections, to be placed in the principal institutions of the province, with a view to promoting the study of those branches of natural history. The rooms at present occupied by the geological commission are so small, that it is not possible to expose the tenth part of their collections, but it is to be hoped that in another year the Government will place some larger building at their disposal, and enable them to exhibit to the public the large and valuable collections.

The labors in the field, which are under the direction of W. E. Logan, Esq., F. G. S., and A. Murray, Esq., are of course interrupted during the winter season, which is devoted to the task of putting into form the observations of the summer. It is necessary to carefully collate and to compare all the various facts observed, and prepare maps, charts, and sections; to examine and compare specimens of rocks and fossils: and to get in readiness the annual report for the ensuing spring.

The chemical and mineralogical departments are under the

direction of T. S. Hunt, Esq., who was appointed to the post about four years since. Under his direction, the laboratory has been furnished with instruments, apparatus, and reagents, sufficient for all the ordinary investigations of mineral chemistry. A balance in this department, made to Mr. Hunt's order by Deleuil of Paris, is without doubt the finest instrument of the kind in the country, and perhaps not surpassed in America. Its accuracy is such, that with a load of 200 grammes on each side, it is able to determine with ease the one two-thousandth of a gramme, or one four hundred-thousandth part of the weight. Such an instrument as this is requisite in the more delicate processes of analysis, where the matters which are to be determined constitute perhaps only a ten-thousandth part of the substance examined.

During the summer season Mr. Hunt not unfrequently accompanies Mr. Logan on his surveys, particularly when in a country of mineralogical interest, or else is engaged independently in making observations upon subjects connected with his department. Since his connection with the commission, he has devoted a large portion of time to an examination of the mineral springs which abound in various parts of the province, and which were supposed to be of interest, not only because of their medicinal virtues, but in their relation to science, as throwing light upon the nature of the various strata of the earth through which they rise, and also as furnishing the means for instituting a comparison between the mineral waters of Canada and those of Europe. With these views, a great many springs, both in Eastern and Western Canada, have been visited, their waters collected and submitted to qualitative and often minute quantitative analysis. The results of the labors of two entire seasons thus employed, have been the analysis of about thirty different springs, the composition of many of which presents peculiarities of high interest to the physician and the naturalist. With many of these analyses the public have been made acquainted; the others will be found in Mr. Hunt's reports, which, appended to those of Messrs. Logan and Murray, have been for the last three years presented to His Excellency.

Much labor has also been bestowed in this department upon the analysis of the various metallic ores which the country has afforded during the progress of the Survey; among these may be mentioned the long series of assays made upon the copper and silver

ores of Lake Superior, and those in connection with Mr. Logan's labored and valuable survey of the Bruce Mines, the assaying of the samples from which alone occupied several weeks. An important application of chemical analysis has also been made in the examination of the metamorphic rocks of the Eastern Townships, to which allusion has been already made. Minute analysis pointed out in many of the unchanged rocks, the presence of ingredients in a latent condition, which in other parts were developed in a crystalline form in rocks whose appearance was so far changed that it was only on stratigraphical and chemical grounds that their connection with the former could be made out.

In the last report will be found some important contributions to the science of agricultural chemistry, with particular reference to the soils of this province. Many districts have been visited with the object of collecting information upon the subject of agriculture, as to the plans of cultivation, the systems of rotation, and of manuring, &c. For the purpose of determining the nature of the soils, chemically considered, specimens of characteristic soils have been collected, and a large number of them analyzed. The results of these are given in the report for 1849-50; and the author observes that they are but the commencement of a series of researches of the kind, which he has in view. In no department of chemistry, perhaps, have the labors and theories of the man of science been presented to the public in a manner so popular and so tangible, as in its applications to agriculture. The researches and writings of Strecker, Mulder, Liebig, Johnson, and Boussingault are in the hands of all, and every farmer and *dilettante* thinks himself capable to discuss the most abstruse questions of vegetable chemistry and physiology. Let us hope that the researches of Mr. Hunt will put our agriculturists in a condition to apply these principles to their own fields, and realize for themselves the results which they find so clear and so beautiful in theory. We understand that in the next report, something farther on this subject may be looked for; but, meanwhile, the elaboration of such results as will really be beneficial to the practical man, is a slow and laborious process, the complete analysis of a single soil requiring weeks.

The department of scientific mineralogy has not been neglected: many new localities of minerals, and some new and rare

species, have been discovered, which are of great interest to the mineralogist. We believe that Mr. Hunt has been for some time past engaged in an elaborate series of analyses of a number of our minerals, the results of which will soon appear.

It is the design of the Survey, in accordance with the act of parliament authorising the investigation, to publish an elaborate report upon the geology of the province, with the collateral subjects, embracing all that has appeared in the annual reports, with very much additional matter, and illustrated with proper maps, charts and engravings. The preparation of this will probably require a considerable time after the completion of the Survey, and we hope that in carrying out a great work like this, which will be an honour to the province, the liberal and enlightened spirit with which, under successive administrations, all parties have fostered this important undertaking, will still be maintained. In no way can a people do themselves a greater service than in promoting scientific investigations like the present.

RESOLUTIONS AND ACTS

OF THE

PROVINCIAL PARLIAMENT MAKING PROVISION FOR A GEOLOGICAL SURVEY OF CANADA.

Resolution passed in the Estimates, 10th September, 1841.

81. *Resolved*,—That a sum of money not exceeding one thousand five hundred pounds sterling, be granted to Her Majesty to defray the probable expense in causing a Geological Survey of the Province of Canada.

ANNO OCTAVO

VICTORIÆ REGINÆ.

CAP. XVI.

An Act to make provision for a Geological Survey for this Province.

[17th March, 1845.]

WHEREAS a Geological Survey of this Province of Canada has been instituted for ascertaining the Mineral Resources thereof; And whereas the sum of fifteen hundred pounds, already granted to Her Majesty to defray the probable expenses of the same, has been found inadequate for the effectual investigation of so extensive a territory as is comprised within the limits of the Province; And whereas it is expedient that the said Survey should be continued to a completion: Be it therefore enacted by the Queen's Most Excellent Majesty, by and with the advice and consent of the Legislative Council and of the Legislative Assembly of the Province of Canada, constituted and assembled by virtue of and under the authority of an Act passed in the Parliament of the United Kingdom of Great Britain and Ireland, and intituled, *An Act to Re-unite the Provinces of Upper and Lower Canada, and for the Government of Canada*, and it is hereby enacted by the authority of the same, That it shall and may be lawful for the Governor of this Province, in Council, to employ a suitable number of competent persons whose duty it shall be, under the direction of the Governor in Council, to make an accurate and complete Geological Survey of this Province, and furnish a full and scientific description of its Rocks, Soils and Minerals, which shall be accompanied with proper Maps, Diagrams, and Drawings together with a collection of Specimens to illustrate the same; which Maps, Diagrams, Drawings and Specimens shall be deposited in some suitable

place which the Governor in Council shall appoint, and shall serve as a Provincial collection, and duplicates of the same, after they have served the purposes of the Survey, shall be deposited in such of the Literary and Educational Institutions of the Eastern and Western divisions of the Province, as by the same authority shall be deemed most advantageous.

II. And be it enacted, That from the unappropriated public monies of the Province, a sum not exceeding two thousand pounds, shall be annually applied, for a term of years not exceeding five years from the passing of this Act, to defray the expenses of the said Survey, or any arrears of expenditure already incurred, which sum shall be paid at such times and in such manner as the Governor in Council may direct.

III. And be it enacted, That the person or persons employed by the Governor in Council for the purposes mentioned in the first section of this Act, shall make a report to the Governor of this Province on or before the first day of May in each year, setting forth generally the progress made in the Survey hereby authorized.

IV. And be it enacted, That the words "Governor in Council," where-soever they occur in this Act, shall be understood to mean the Governor, Lieutenant Governor, or person administering the Government of this Province, acting by and with the advice of the Executive Council thereof.

V. And be it enacted, That the due application of the monies hereby appropriated shall be accounted for to Her Majesty, Her Heirs and Successors, through the Lords Commissioners of Her Majesty's Treasury, in such manner and form as Her Majesty, Her Heirs and Successors shall direct; and an account thereof shall be laid before the Provincial Legislature at the then next Session thereof.

ANNO OCTAVO

VICTORIÆ REGINÆ

CAP. XII.

An Act to revive and continue for a limited time the Act making provision for a Geological Survey of this Province.

[24th July, 1850.]

WHEREAS the period limited in the second section of the Act herein-
after cited as that during which the sum of money therein men-
tioned should be annually applied to defray the expenses of the Geological
Survey directed by the said Act, hath expired, and it is expedient to revive
and continue the said appropriation and the said Survey: Be it therefore
enacted by the Queen's most Excellent Majesty, by and with the advice
and consent of the Legislative Council and of the Legislative Assembly
of the Province of Canada, constituted and assembled by virtue of and
under the authority of an Act passed in the Parliament of the United Kingdom
of Great Britain and Ireland, and intituled, *An Act to re-unite the Provinces
of Upper and Lower Canada, and for the Government of Canada*, and it is
hereby enacted by the authority of the same, That for and notwithstanding
any thing in the second section of the Act passed in the eighth year of Her
Majesty's Reign, and intituled, *An Act to make provision for a Geological
Survey of this Province*, the annual appropriation made by the said section
for the purposes of the said Act shall be and is hereby revived, and shall
continue during five years from the passing of this Act, and thence until the
end of the then next Session of the Provincial Parliament, and shall be held
to have been so continued from the expiration of the period of five years
mentioned in the said section. and all the provisions of the said Act shall be
revived, and shall apply to the said appropriation as hereby continued.

