GEOLOGICAL SURVEY OF CANADA. REPORT OF PROGRESS FOR 1871-72

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649476084

Geological Survey of Canada. Report of Progress for 1871-72 by Various

Except for use in any review, the reproduction or utilisation of this work in whole or in part in any form by any electronic, mechanical or other means, now known or hereafter invented, including xerography, photocopying and recording, or in any information storage or retrieval system, is forbidden without the permission of the publisher, Trieste Publishing Pty Ltd, PO Box 1576 Collingwood, Victoria 3066 Australia.

All rights reserved.

Edited by Trieste Publishing Pty Ltd. Cover @ 2017

This book is sold subject to the condition that it shall not, by way of trade or otherwise, be lent, re-sold, hired out, or otherwise circulated without the publisher's prior consent in any form or binding or cover other than that in which it is published and without a similar condition including this condition being imposed on the subsequent purchaser.

www.triestepublishing.com

VARIOUS

GEOLOGICAL SURVEY OF CANADA. REPORT OF PROGRESS FOR 1871-72



Presented to

Rof I & Whitney By the Director of the

GEOLOGICAL SURVEY.

On behalf of the Government of the Dominion of Canada.

J. D. WHITNEY.

HARVARD UNIVERSITY.



WHITNEY LIBRARY,

MUSEUM OF COMPARATIVE ZOÖLOGY.

This Report and all the other publications of the Geological Survey may be ordered either from the publishers direct, or through any Bookseller in the Dominion.

ALSO THROUGH

SAMPSON, LOW & CO., 188 Fleet street, London.

F. A. BROCKHAUS, LEIPSIC, and

B. WESTERMANN & CO., 471 Broadway, New York.

GEOLOGICAL SURVEY OF CANADA.

ALFRED R. C. SELWYN, F.G.S., DIRECTOR.

REPORT OF PROGRESS

1871-72.



Monteal:
DAWSON BROTHERS.
• 1872.

MOSTREAL: JOHN LOVELL, PRINTER.

TABLE OF CONTENTS.

I.	
INTRODUCTORY REPORT BY MR. SELWYN. Survey of Springhill Coal-field. Mr. Lowe's work Map of the Eastern Townships Investigations of Mr. Billings. Palseontological collections Dr. Dawson's gratuitous labors Dr. Hunt's work.	PAGE 11-15 12 14 14 14 14 15
и.	-
JOURNAL AND REPORT ON BRITISH COLUMBIA BY MR. SELWYN. Instructions from Ottawa Difficulty in obtaining means of transport. JOURNAL OF EXPEDITION. Journey from Montreal to Victoria Selection of route; camp equipments Character of the country in the Fraser Valley. Kamloops, and navigation on Kamloops Lake!. Valley of the Thompson as far as Clearwater. Pass between the Valley of the Thompson and Lake La Hache Character of Raft River Glacier in the Thompson Valley. Supposed sources of Mad and Raft Rivers. Valley of Bice River Autumnal rains; absence of wind; Limestone River. Albreds Lake. Nature of the country around Oranberry Lake. Selwyn River and Tête Jaune Cache Moose Lake; forest trees. Robson's Peak; preparations for return to Kamloops. Flats suitable for cultivation Distances from Kamloops; elevations.	16 18 18 20 25 24 25 26 27 28 30 31 34 37
GEOGRAPHICAL FEATURES Boundaries, mountains, &c. Drainage GEOLOGICAL STRUCTURE Rocks of Vancouver Island Gold on Leech River; glacial action	49 49 60 61 62 53
SOPERFICIAL DEPOSITS. Terraces and their origin. Gold and gold mining in the Lower Fraser Valley. The Volcanto Series : The Coal and Lowers Group of the Main-Land;	54 55 56
THE COAL ROCKS OF VANCOUVER RELAYS. Character of Rocks; Copper and Silver Ores; Eureka mine	56 57

56 57

CONTENTS.

ĭ .	PAGE
Fossiliferous beds; section at Quesnel Month	58
Vapour emissions; fossil plants from Quesnel Mouth	59
JACKASS MOUSTAIN CONGLOWERATE GROUP	60
Sandstone, shales and conglomerates	60
UPPER CACHE CREEK GROUP	60
Limestones and shales ; Marble Canon	60
Supposed Cretaceous fossils	61
LOWER CACHE CREEK GROUP	61
Character of the rocks; fossils	61
ANDERSON RIVER AND BOSTON BAR GROUP, AND UPPER ROCKS OF LEATHER	
- Pass and Moose Lake	62
Shales and calcareous sandstones	62
Leather Pass, Slate Mountain and Moose Lake	63
CASCADE MOUNTAINS AND VANCOUVER ISLAND CRYSTALLINE SERIES	63
Gnelss holding epidots; crystalline limestone	63
Quartz veins; porphyry; feldspathic veins; building-stone	64
Granite, Grees and Mica-Schiet Series	64
Characters of the rocks	64
Limestone River and Albreda Lake	65
Gold indications	66
REPORT BY DR. T. STERRY HUNT	66
Silver ore from Bureka mine; coal from Nicola River; lignites	66
Volcanic Rocks; indurated clay	67
CHARACTER OF THE LAND, &c	67
Soil of Central Plateau; crops	67
Sowing time and hervest; prices at Cariboo; irrigation	68
Vegetation, fruits, &c	69
Valley of the North Thompson	70
Indians ; game	71
Fisherias and mines; future of the Alpine Province	72
III.	
REPORT ON THE COAL-FIELDS OF VANCOUVER ISLAND BY MR.	
RICHARDSON	73
Preliminary investigations on the main-land	73
Measurement of roads, &c.	74
COAL DEPOSITS OF VANCOUVER ISLAND	75
Trough containing the coal-seams	76
Section of the coal-measures	77
Beaufort and Baynes Sound Coal Mines	78
Section at the Baynes Sound Mines.	78
Two distinct basins; productive area; quantity of coal	80
Fossils; nine-feet and four-feet seams	82
Section of the coal-measures on Newcastle Island	83
Flag-stones and building materials	84
Six-feet seam at Napaimo; section	85
Area of the Nanaimo field; Valdes and other islands	87
Fossils; synclinals	88
Thickness of Nanaimo coal-measures; salt-springs,	89
CRYSTALLINE ROCKS	89
Diorite; ayenite; epidote; crystalline limestone, &c	90
Copper pyrites; quartzite	91
Supposed Passing columns	0.2