REPORT

OF THE

CHIEF COMMISSIONER OF LANDS AND WORKS

OF THE PROVINCE OF

BRITISH COLUMBIA,

FOR THE

YEAR ENDING 31ST DECEMBER,

1890.

VICTORIA, B. C.:
Printed by RICHARD WOLFENDEN, Printer to the Queen's Most Excellent Majesty.

REPORT

OF THE

CHIEF COMMISSIONER OF LANDS AND WORKS,

1890.

To the Honourable HUGH NELSON, *Lieutenant-Governor of the Province of British Columbia.*

MAY IT PLEASE YOUR HONOUR:

Herewith I beg respectfully to submit the Annual Report of my Department, in compliance with the provisions of the "Public Works Act."

F. G. VERNON,

Chief Commissioner of Lands and Works.

Lands and Works Department,

Victoria, B. C., 31st December, 1890.

REPORT.

—o—

Victoria City District.

ADDITIONS AND ALTERATIONS TO THE TREASURY.

McKillican and Anderson, Contractors, $520.

Added a second story to the north-east wing of the building, the walls being formed of a framework of timber, filled in between with brick in conformity with the rest of the structure; carried the roof up in the form of a tower terminating in a metal finial; raised the chimney to an approved height; took down the old exterior wall in the Hon. Provincial Secretary's office; laid a new floor over the whole, and made good all defects, took out the old and built in a new fire grate in two rooms, put up a new oak mantle, and finished all work in the usual manner.

In addition to the contract, a new staircase was built and some other improvements were made. The old wood work has been repainted and varnished. The result of the expenditure is satisfactory, not only from the improved appearance of the building, but also for the additional room and convenience afforded.

PAINTING EXTERIOR OF THE LAW COURTS.

Robert Lettice, Contractor, $900.

Covered the whole of the exterior walls of the building with one coat of boiled linseed oil, then painted the same two coats of linseed oil and white lead, together with two coats of sand.

ROOF OF LAW COURTS.

McLennan and McFeeley, Contractors, $170.

Covered the roof in a thorough manner with one coat of mastic and sand.

STEAM HEATING, CENTRAL SCHOOL.

Braden and Stamford, Contractors, $6,067.20.

Furnished all plant, labour, and material required, made necessary excavations for boiler-house and for drains; built a brick boiler-house occupying the space between the High School and Girls' School buildings, roofed with galvanized iron; built a smoke stack, with 12-inch by 18-inch flue, carried up to ridge of Girls' School, the whole finished and painted to correspond with the adjacent building. The boiler-house also furnishes room for fuel storage; laid a 4-inch tile drain from floor of boiler house to discharge into street drain; furnished and built in a twenty (20) horse-power, horizontal tubular boiler, with 310 feet of heating surface in conformity with plans and specifications; furnished and placed in the school rooms cast iron sectional radiators with a capacity of two (2) square feet of heating surface to every one hundred (100) cubic feet of area, and fitted with automatic air valves and patent angle valves; connected the radiators with the boiler by suitable sized iron pipes upon the one pipe low pressure gravity system. Bronzed the radiators and exposed pipes, and painted the pipes in basement and boiler house with black japan.

Necessary but unimportant repairs have been made to Government House, to the Government buildings at James Bay, to the various public schools, and to the Provincial Gaol.

Victoria District.

NEW BRIDGE ON THE GORGE ROAD.

William Rockett, Contractor, $610.

Supplied all requisite material and labour, constructed a substantial new bridge at the site of the old one over a ravine on the Gorge road, at the City boundary, 150 feet long, composed of six spans of 25 feet each, having a carriage way 20 feet 6 inches wide, and a foot-walk on each side five feet wide. Raised the floor of the new bridge six feet higher than that of the old one. The approach at each end of the bridge has been filled in and macadamized, and the road gradients much improved.

CARRIAGE ROAD BETWEEN BEACON HILL AND ROSS BAY.

E. H. Henley, Contractor, $1,875.

Graded 5,000 feet, 40 feet wide, crowned 12 inches, and formed in accordance with profile and cross section.

Gravelled 5,000 feet, 30 feet wide, 8 inches deep at the centre, and 4 inches at the sides.

Put in 3 culverts of suitable size, re-formed the grade for a distance of 1,450 feet, gravelled the same 14 feet wide, 8 inches deep at the centre, and tapering to the sides. Grubbed out all brush and stumps on the sides of the road, cut down and removed overhanging trees and branches. In addition to the contract an ageement was made with Mr. Henley to build a new bridge at Ross Bay, 92 feet long, 20 feet wide, and two feet higher than the old bridge. Also to take out and remove the log jam which frequently took fire and endangered the old bridge; and, lastly, to construct a barrier to prevent drift logs from again accumulating at this place. For this extra work Mr. Henley was paid $351, as per agreement.

GRAVELLING THE WEST SAANICH ROAD.

W. H. Snider, Contractor, $275.

Gravelled 660 yards, 9 feet wide, and 7 inches deep, cleaned out ditches and water courses.

GRAVELLING THE BURNSIDE ROAD.

W. H. Snider, Contractor, $466.

Gravelled 675 yards, 9 feet wide, and 7 inches deep, filled up ruts and holes, cleaned out ditches, and repaired culverts.

EDMONTON ROAD.

Julius Brethour, Superintendent.

May—Graded 450 yards, 19 feet wide, and removed stones.

November—Gravelled 50 yards, 9 feet wide, 6 inches deep.

LAKE HILL ROAD.

Julius Brethour, Superintendent.

May, June, July and August.

Graded 1,000 yards, 40 feet wide.

Blasted rock at a cost of about $1,000.

Removed 1,500 yards of fence, and did considerable grubbing.

Made 2 culverts 40 feet long, 12 inches wide, and 12 inches deep—sawn timber.

„ 1 culvert 50 „ 18 „ „ 12 „ do.

„ 1 „ 40 „ 6 feet „ „ 4 feet deep—stone walls and cedar covering.

The whole of the work performed was of a heavy character; a great deal of cutting and filling was done to bring the road to a uniform grade.

GORGE ROAD.

Julius Brethour, Superintendent.

May—Filled in the approach to bridge.
September—Macadamized 67 yards, 17 feet wide, 16 inches deep.
Gravelled 440 „ 12 „ „ 6 „ „

CAREY'S ROAD.

Julius Brethour, Superintendent.

May—Repaired grade and cleaned ditches.

BELCHER STREET.

Julius Brethour, Superintendent.

May—Re-graded 1,000 yards, and filled holes with gravel.

MAIN SAANICH ROAD.

Julius Brethour, Superintendent.

June—Macadamized 550 yards, 12 feet wide, 8 inches deep.
Widened road-way near Hicks', and blasted rock for crusher.
July—Macadamized 1,000 yards, 12 feet wide, 9 inches deep.
August— „ 350 „ 12 „ 9 „ „

NEW WEST ROAD.

June—Graded 1,100 yards, 15 feet wide.
Gravelled 300 yards, 9 feet wide, 7 inches deep.

LIME-KILN ROAD.

June—Gravelled 260 yards, 8 feet wide, 8 inches deep.

WEST ROAD.

June—Gravelled 250 yards, 9 feet wide, 8 inches deep.

EAST ROAD.

June—Gravelled 720 yards, 9 feet wide, 7 inches deep.
Removed brush from sides of roadway.
July—Gravelled 2,450 yards, 9 feet wide, 6 inches deep.
Made culvert at junction of East and West Roads, 60 feet long, of 12-inch pipe.
August—Gravelled 750 yards, 9 feet wide, 7 inches deep.

TYNDALE AVENUE.

June—Graded 600 yards, 18 feet wide.

TELEGRAPH BAY ROAD.

June—Gravelled 300 yards, 9 feet wide, 6 inches deep.

CAVIN STREET.

September—Macadamized 63 yards, 10 feet wide, 9 inches deep.

BURNSIDE ROAD.

September—Repaired bridge.

CADBORO BAY ROAD.

October—Gravelled 50 yards, 12 feet wide, 9 inches deep.
Removed an old bridge and built a new one 10 feet long, 24 feet wide, 8 feet high, timbers 10 inches by 10 inches cedar, covered with 3-inch plank. Filled and gravelled approach at each end.

CEDAR HILL ROAD.

October—Broke rocks and filled ruts.
Made a bridge 8 feet long, 24 feet wide, and 8 feet high, cedar timbers, covered with 3-inch plank; filled approaches at each end.

MOUNT NEWTON CROSS ROAD.

October—Gravelled 200 yards, 8 feet wide, 6 inches deep, and filled ruts and holes.

MAIN SAANICH ROAD.

October—Repaired sidewalk, and laid an extra plank from the junction of Burnside Road to Boleskine Avenue.
Made repairs to Gorge Road sidewalk and Craigflower Bridge.
November—Raked in macadam and covered with earth from Swan Lake Bridge to Company's Hill.

EAST ROAD.

Repaired and renewed hand-rail on bridge, 32 feet long.
Removed fallen timber.

WEST ROAD.

Removed fallen timber and replaced culverts.

———o———

Esquimalt District.

SIDEWALKS ON ESQUIMALT ROADS.

Thos. Elliott, Contractor, 15 cents per foot.

Provided all labour and material, did all clearing and grading requisite, and laid 2,502 feet of sidewalk, three planks wide; planks 12 inches by 2 inches, sills 4 inches by 4 inches, and 4 feet long, laid 6 feet apart, extending to the Dock Yard gate.
Also laid 528 feet of walk on Esquimalt Main Street, four planks wide, at 20 cents per foot.

SIDEWALK ON CRAIGFLOWER ROAD.

Thos. Elliott, Contractor, 14 cents per foot.

Laid a sidewalk similar to the above, three planks wide, on the Craigflower Road, through Victoria West and beyond; distance 2,799 feet.

BEECHER BAY–SOOKE ROAD.

Joseph E. Gelley, Contractor, $493.

Forest cleared 1,471 yards, 20 feet wide.
Grubbed 1,471 yards, 16 feet wide.
Graded 1,471 ,, 12 ,,
Made three culverts.
Made side ditches and tail drains where necessary.

METCHOSIN ROAD.

John Cox, Contractor, $350.

Forest cleared 904 yards, 24 feet wide.
Grubbed 904 ,, 16 ,,
Graded 904 ,, 16 ,,
Crowned 12 inches.

Ditched on the upper side.
Made one culvert 20 feet by 2 feet by 2½ feet.
Did some blasting and gravelling.

OTTER POINT ROAD.

Clement O'Brien, Contractor, $390.

Grubbed	616	yards,	15	feet wide.	
Graded	616	,,	15	,,	
Grubbed	80	,,	19	,,	
Graded	80	,,	15	,,	
Ditched	160	,,	2	,,	15 inches deep.
Stoned	80	,,	10	,,	6 ,,
Gravelled	80	,,	10	,,	6 ,,

Made a bridge 36 feet by 12 feet by 8 feet.
Made a culvert 16 feet by 2 feet by 1½ feet.

SOOKE ROAD.

John Cox, Contractor, $540.

Forest cleared	2,332	yards,	20	feet wide.		
Grubbed	2,332	,,	from 12	feet to	16	feet wide.
Graded	2,332	,,	,, 12	,,	16	,,

Made two culverts 18 feet by 2 feet by 1½ feet.
Removed boulders and straightened bends in line of road.

MILLSTREAM ROAD.

W. H. Snider, Contractor, $150.

Grubbed	60	yards,	12	feet wide.	
Graded	200	,,	12	,,	to 15 feet wide.
Stoned	124	,,	10	,,	wide, 6 inches deep.
Gravelled	126	,,	10	,,	,, 6 ,,

Removed large rocks from roadway. Filled ruts with broken rock.

PARSON'S BRIDGE REPAIRS.

Wm. Rockett, Foreman.

Straightened up the trusses, and placed the bridge in as good condition as the decayed wooden members would permit of.

CRAIGFLOWER BRIDGE.

Wm. Clark, Foreman.

Replaced all defective piles and braces with new ones, re-laid the covering, repaired hand-railing.

VICTORIA AND ESQUIMALT TRUNK ROAD.

Wm. Graham, Foreman in charge of rock crusher.

Blasted out and crushed sufficient rock to complete the macadamizing of the road as far the Naval Canteen.

Thomas Anderson, Foreman.

Re-formed the grade and spread macadam on the road between the Mission and the Naval Canteen, and made sundry general repairs.

ESQUIMALT DISTRICT ROADS.

Samuel Morrow, Superintendent.

SOOKE ROAD.

January and March—Cut out trees between Cogan's and Otter Point Road.
Repaired 4 culverts.
April—Road from Burnt Timber to Morrow's pre-emption.
Made general repairs to road.
May—Road from Morrow's to Cogan's Swamp.
Made general repairs to road and repaired bridges.
June—Road near Cogan's Swamp.
Graded 225 yards, 15 feet wide.
Macadamized 100 yards, 10 feet wide, 6 inches deep.
Gravelled 140 yards, 10 feet wide, 6 inches deep.
Made general repairs at Naylor's Hill, and repaired 3 culverts.
Graded 44 yards, 15 feet wide, West of Naylor's Hill.

SOOKE ROAD, EAST OF STONEY CREEK.

July—Graded 420 yards, 15 feet wide.
Made 1 culvert 16 feet long, 2 feet wide, 1½ feet high.
Cedar logs, covered with split cedar.
Repaired flooring of small bridge.

SOOKE ROAD, WEST OF STONEY CREEK.

July—Graded 200 yards, 15 feet wide.
Cut down a hill, 36 feet long, 3 feet deep, 15 feet wide; the earth taken from the cut was filled in at the bottom of the hill, 60 feet long, 15 feet wide, 18 inches deep.

SOOKE ROAD, HILL WEST OF STONEY CREEK.

August—Graded 110 yards, 15 feet wide.
Macadamized 20 yards, 10 feet wide, 6 inches deep.
Gravelled 120 yards, 10 feet wide, 6 inches deep.
Filled in several holes near Jackson's road with beach gravel.
Laid out work on roads to be performed by contract.
September—Made general repairs to road from Goldstream Junction to Gravel Hill, west of Parson's Bridge.
Repaired with gravel the road between Craigflower and the junction of the Gorge Road.
October—Superintending contract work.
November—Superintending contract work.
Repaired a small bridge on the Happy Valley Road.

MILLSTREAM ROAD.

December—Graded 100 yards, 12 feet wide.
Filled ruts with broken stone.
Removed boulders and portions of bed-rock by blasting in several places.
Removed bed-rock and cement at the south approach to bridge by blasting.
Filled in a deep pit with rock; graded and made general repairs.

ALBERT HEAD ROAD.

December—Re-covered 1 bridge 60 feet long with sawn-plank.
" 1 " 66 " " hewn cedar.
Repaired 1 bridge with new hand-rail.
Filled in several bad holes with rock.
Removed 4 trees off road at Sangster's Plains.

SOOKE ROAD.

December—Repaired 3 culverts.
Removed a number of trees off the road between Hog-back Bridge and Sooke Bridge.
Carted timber from Victoria to Albert Head Bridges.

R. S. Cavin, Foreman.

RUSSELL STREET, VICTORIA WEST.

June—Graded 200 yards, 20 feet wide, and ditched on both sides.
Blasted and removed 25 yards of rock.

CATHERINE STREET, VICTORIA WEST.

July—Graded 300 yards, 22 feet wide.
Forest cleared 100 yards.
Ditched on both sides.
August—Made box-drain, 300 feet long.

FAIRVIEW ROAD.

August—Graded 400 yards, 20 feet wide.
Ditched on both sides.
Forest cleared 200 yards.
Gravelled 75 yards.
Made 3 culverts.

JAMES STREET.

August—Graded 125 yards, 20 feet wide.
Forest cleared 50 yards.

RUSSELL STREET, EAST END.

September—Graded 410 yards.
Ditched one side of roadway.
Made 2 culverts.
Laid 1,250 feet of sidewalk, 2 feet wide.

ESQUIMALT ROAD.

October—Made general repairs to road from Point Ellice Bridge to Esquimalt.
Repaired sidewalk from Russell's Station to Esquimalt.

GORGE ROAD.

October—Graded and ditched 200 yards.
Made general repairs to road.

CRAIGFLOWER ROAD.

December—Made general repairs to road.
Made 2 culverts.

ADMIRAL'S ROAD.

December—Repaired road-bed with gravel.
Repaired 1 culvert.

———o———

Cowichan District.

VICTORIA-NANAIMO TRUNK ROAD (diversion near Mr. S. H. Davie's, Somenos.)

James Norcross, Contractor, $205.

Forest cleared,	440 yards,	22 feet wide.		
Grubbed	440 ,,	16	,,	
Graded	440 ,,	16	,,	
Gravelled	440 ,,	9	,,	6 inches deep.

Ditched where necessary.
Made 2 culverts of cedar covered with 3-inch plank, each 18 feet by 3 feet by 2 feet, with sufficient tail drains.
Removed and re-erected snake fence on each side of road at a distance of 16 feet 6 inches from the centre of road.

SALT'S ROAD.

Thomas Colvin, Contractor, $84.

Forest cleared 1144 yards, 16 feet wide.
Close chopped 1144 ,, 14 ,,
Graded 1144 ,, 8 ,,
Ditched where necessary.
Made 3 culverts of cedar 14 feet by 2 feet by 1 foot, with sufficient tail drains.

QUAMICHAN BOUNDARY ROAD (Diversion between Robertson's or Keating's Flat and Mr. W. Waters'.)

William Waters, Contractor, $99.

Forest cleared 780 yards, 16 feet wide.
Grubbed 780 ,, 14 ,,
Graded 780 ,, 9 ,,
Made 2 culverts of cedar, 14 feet by 2 feet by 2 feet, with necessary ditches and tail drains.
Note.—Specification calls for road of 8 feet wide only.

VICTORIA-NANAIMO TRUNK ROAD (Bridges "A" and "B" over mouth of the Koksilah River to the north of the Flats, Koksilah Road.)

Robert Colvin, Contractor, $394.

Furnished all necessary materials and labour for both bridges.
Constructed Bridge "A," 108 feet 6 inches in length, 14 feet wide and 6 feet high, resting at either end on cedar mud sills 18 inches diameter, and composed of 5 spans with 4 bents, each of 4 posts (2 outer posts raking) gained into mud sills and caps. Bridge has 4 stringers of red fir 14 inches diameter, hewn on upper side and spotted on caps; is floored with 3-inch sawn plank, and has a substantial hand-rail 3 feet 6 inches high, braced every 9 feet.
Constructed Bridge "B," of the like dimensions, materials and details as Bridge "A,' except that the length thereof is 112 feet.
Note.—The above replace two old bridges, and have been raised 1 foot above the level of the former bridges.

VICTORIA-NANAIMO TRUNK ROAD (Widening and re-grading at Duncan's.)

George Lewis, Contractor, $240.

Forest cleared 450 yards, 33 feet wide.
Grubbed 450 ,, 33 ,,
Graded 450 ,, 18 ,,

BRIDGE PARTY.

James Boal, Foreman.

COWICHAN RIVER BRIDGE.

February and March—Put in sheer booms on the north and south sides of the river to protect the bridge from drift. The sheer boom on the north side is of 5 logs connected by toggles and chains (altogether 405 feet long), is chained to a tree on the bank and to a bunch of piles at the bridge end.
That on the south side is of one log 78 feet long, chained at the upper end to a tree on the bank.

FLATS, KOKSILAH ROAD.

February—Filled in approach to first bridge with brush and gravel.

COWICHAN WHARF.

April—Cut 42 piles of pine 28 feet and 38 feet in length, diameter 15 to 18 inches.
June—Drove 42 piles and bolted and spiked same to caps. Put in two hewn stringers, each 20 feet long by 12 inches by 14 inches.

VICTORIA-NANAIMO TRUNK ROAD (from Bridge at Mr. Pimbury's to Bridge at Mr. Corfield's).

May—Made general repairs.
June—Repaired with gravel all ruts and holes from Mrs. Marriner's to Mr. Maitland-Dougall's.

KOKSILAH BRIDGE, FLATS KOKSILAH ROAD.

May—Put in two new stringers of hewn fir, each 10 inches by 14 inches.

TRUNK ROAD WINTER PARTY.

John Greig, jr., Foreman.

VICTORIA-NANAIMO TRUNK ROAD (Thain's to Sooke Lake).

SILVER MINE ROAD.

April—Cut out fallen timber and cleared roads for traffic.

"A" ROAD PARTY.

Peter McLennan, Foreman.

January—Cut out fallen timber and cleared for traffic:—Mill Bay Road, Fischer's to Cobble Hill Road, and Mill Road.
March—Repaired bridge on Victoria-Nanaimo Trunk Road at hill near Cowichan wharf.
April—Repaired bridge on Trunk Road near Douglas', and cleared for traffic Taggart and Cameron's Road and Mill Road.

SILVERMINE ROAD.

June—Constructed addition to bridge over the Koksilah River, on the west bank, 18 feet long and 14 feet wide, having 3 fir stringers, flooring and hand-rail uniform with remainder of bridge. Made approach by a fill 9 yards long and 12 feet wide.
Made approach to the same bridge on the east bank by constructing a crib 50 feet long and 5 feet high; cut down hill and made a fill 30 yards long, 15 feet wide at base and 10 feet on top, and 5 feet 6 inches deep.

MILL BAY ROAD.

June—Gravelled 936 yards 9 feet wide, 6 inches deep. Cut and got out timbers for Gabourie's bridge.
October—Widened and re-graded 390 yards, 12 feet wide.
Ditched 390 ,, 3 feet by 1 foot by 1 foot.

TAGGART AND DOBSON'S ROAD.

September—Widened and re-graded 200 yards, 12 feet wide.

TAGGART AND CAMERON'S ROAD.

September—Forest cleared 100 yards, 20 feet wide.
Grubbed 100 ,, 10 ,,
Graded 100 ,, 10 ,,
Re-graded 390 ,, 10 ,,
Cut down hill 17 yards long, 10 feet wide, 2 feet deep.
,, ,, 27 ,, 10 ,, 18 inches deep.
Took out and removed roots and rocks and made general repairs to Cameron's (700 yds.)
October—Re-graded 250 yards, 10 feet wide.
Cut down hill 20 yards long, 10 feet wide and 18 inches deep, and filled in hollow.

WHISKEY POINT ROAD.

September—Grubbed and widened 980 yards, 10 feet wide.

MILL ROAD.

September—Grubbed and re-graded 240 yards, 12 feet wide.
Ditched 36 ,, 2 feet by 1 foot by 1 foot
Made a bridge 20 feet long, 14 feet wide and 5 feet high, having 4 cedar stringers 14 inches in diameter, and flooring of split cedar.
October—Gravelled 50 yards, 9 feet wide and 6 inches deep.
Made general repairs.

VERDIER AND HOY'S ROAD.

October—Gravelled 73 yards, 9 feet wide and 6 inches deep.

FISCHER'S TO COBBLE HILL ROAD.

October—Gravelled 109 yards, 9 feet wide, and 6 inches deep.
Ditched 52 ,, 3 feet by 1 foot by 1 foot.
Cut down a hill 40 yards long, 10 feet wide and 18 inches deep.
,, ,, 34 ,, 10 ,, 24 ,,
Made 2 culverts 15 feet by 18 inches by 12 inches.

"C" ROAD PARTY.

George Mark, Foreman.

KOKSILAH JUNCTION ROAD.

May—Rounded up road and made general repairs from Koksilah Railway station to McLay's.
Forest cleared 376 yards, 16 feet wide.
Grubbed 376 ,, 12 ,,
Graded 376 ,, 12 ,,
July—Forest cleared 200 yards, 16 feet wide.
Grubbed 200 ,, 12 ,,
Graded 200 ,, 12 ,,
August—Grubbed 480 ,, 14 ,,
Graded 480 ,, 14 ,,
Made a cutting under railway 20 yards long, 13 feet wide and 4 feet deep,
Made a post and board fence 30 yards long on each side of road under railway.

COWICHAN RIVER ROAD.

July—Cut down a hill 24 yards, 12 feet wide, 1 foot deep.
,, ,, 17 ,, 12 ,, 1½ ,,
,, ,, 15 ,, 12 ,, 1 ,,
,, ,, 15 ,, 12 ,, 1½ ,,
Made 8 lengths of corduroy, each 16 feet wide and 3 feet 6 inches long.
Grubbed, rounded up and re-graded 1560 yards.
August—Made a culvert 15 feet wide by 3 feet by 18 inches, with 80 yards of ditch on the upper side.

GLENORA ROAD (from Mr. Keating's bridge westward).

May—Gravelled 600 yards, 9 feet wide, 4 inches deep.
Lengthened 3 culverts from 12 feet to 16 feet.
Made 3 lengths of corduroy, each 16 feet wide and 3 feet long, of split cedar.
June—Gravelled 2244 yards, 9 feet wide, 4 inches deep.

QUAMICHAN BOUNDARY ROAD.

June—Gravelled 200 yards, 8 feet wide, 4 inches deep.

MARSHALL'S ROAD.

June—Cut down hill 15 yards long, 2 feet deep, and widened road by 2 feet.
Widened road at Brownell's Bank, 4 feet.
Gravelled 100 yards, 9 feet wide, 4 inches deep.

DEVINE'S ROAD.

September—Gravelled 50 yards, 9 feet wide, 6 inches deep.

"D" ROAD PARTY.

George Lewis, Foreman.

January—Cut out fallen timber and made general winter repairs on the Lakeside Road, Riverside Road and Bench (Corfield's to McPherson's) Road.

BEACH ROAD.

March and April—Filled in washouts with brush, rocks and clay.
Constructed a crib 160 feet long and 4 feet high, well land-tied and filled in as above.
Cleared out land slides and made general repairs.
July—Cleared out land slides and ditches and made general repairs with gravel.
August—Cleared out land slides and ditches and filled in washouts.
Widened road near Marshall's and gravelled same.

GLENORA ROAD (from Keating's Bridge, eastward).

May—Forest cleared	290 yards,	20 feet wide.	
Widened and re-graded	290 ,,	18 ,,	
Ditched	265 ,,	2 feet by 1 foot by 1 foot.	

Made a corduroy 29 yards long, 18 feet wide, of split cedar 6 to 9 inches thick.
Made 3 culverts 18 by 18 inches by 16 inches.
August—Gravelled 355 yards, 9 feet wide, 6 inches deep.

OLD KOKSILAH ROAD (Diversion to Keating's Bridge).

May and June—Forest cleared	560 yards,	25 feet wide.	
Grubbed	605 ,,	15 ,,	
Graded	605 ,,	15 ,,	

Made a culvert of split cedar 18 feet by 18 inches by 16 inches.

OLD KOKSILAH ROAD.

June—Gravelled 110 yards, 9 feet wide, 6 inches deep.
Made crib at end of bridge 45 feet long and 2 feet high, and raised bridge thereby.
August—Gravelled 135 yards, 9 feet wide and 6 inches deep.
Grubbed out several trees and repaired a culvert.
September—Gravelled 275 yards, 9 feet wide and 5 inches deep.
Repaired all holes and ruts with gravel from Robertson's to Ford's ($1\frac{1}{4}$ miles.)
Cleared out gravel slides and made a ford over creek at bottom of Tarlton's Hill.

LAKESIDE ROAD.

June—Grubbed 1729 yards, 3 feet wide, and rounded up, graded and ditched same.
Gravelled 706 yards, 9 feet wide, 6 inches deep.
Cut down hill (near Forrest's) 2 feet and filled in hollow.
Made 7 culverts, each 18 feet by 16 inches by 1 foot.
July—Re-graded 280 yards.

Gravelled	280 ,,	9 feet wide, 6 inches deep.	
Grubbed	70 ,,	12 ,,	
Grubbed	70 ,,	12 ,,	

Made a culvert 18 feet by 18 inches by 18 inches.
Graded 80 yards, 12 feet wide, to connect with Bremner's Road.
September—Gravelled 450 yards, 9 feet wide, 6 inches deep.
October—Re-graded 200 yards near Little Shawnigan Lake.
Made general repairs.

OLD SCHOOL HOUSE ROAD OR TRAIL.

June—Forest cleared 3080 yards, 25 feet wide.

BENCH ROAD.

August—Gravelled 285 yards, 9 feet wide, 6 inches deep.
Cleared out ditches.

FLATS—KOKSILAH ROAD.

August—Grubbed out trees and stumps.
Moved back Indian fences 6 feet and re-erected same.
Repaired 2 bridges.
Made 2 culverts 18 feet by 18 inches by 16 inches.
Made general repairs ($1\frac{1}{4}$ mile).

HILLSIDE ROAD (McKennelley's and Doupe's Road).

August—Cut out brush and trees, grubbed, widened and roughly graded ($1\frac{3}{4}$ miles).
Made 2 culverts 18 feet by 18 inches by 16 inches.

PHIPPS' ROAD.

August—Filled holes and ruts with gravel and made general repairs ($1\frac{1}{4}$ miles).

RIVERSIDE ROAD.

July—Forest cleared 800 yards, 20 feet wide.
Grubbed, widened and graded 673 yards.
Cut down hills, widened and graded 476 yards.
Gravelled 476 yards, 9 feet wide, 6 inches deep.
Cleared out ditch near, and filled in north approach to, Hennessy's Bridge.
Made 2 culverts 18 feet by 18 inches by 18 inches.
October—Cleared out slides and widened road therewith.
Made general repairs to junction with Salts' Road.

BREMNER'S ROAD.

October—Made a corduroy, 210 yards long, 10 feet wide.
Gravelled 210 " 8 "
Ditched 250 " 3 feet by 1 foot by 1 foot.

OLD TRUNK ROAD.

October—Forest cleared 600 yards, 20 feet wide.
Grubbed and widened 300 " 10 "

"H" ROAD PARTY.

Thomas P. Windsor, Foreman.

VICTORIA-NANAIMO TRUNK ROAD (Chemainus to Mr. G. H. Davie's, Somenos.)

February and March—Cut out fallen timber and cleared road for traffic.
Made two culverts, 14 feet by 30 inches by 12 inches.
June—Gravelled 310 yards, 9 feet wide, 6 inches deep.
Cleaned out ditches, repaired a bridge and made general repairs north of Chemainus Railway Station.
Made 2 culverts, 14 feet by 3 feet by 2 feet.
1 " 20 " 6 " 4 "
Repaired two bridges north of Chemainus Prairie.
July—Gravelled 130 yards, 8 feet wide, 4 inches thick.
Repaired covering of 2 small bridges south of Chemainus River Bridge.
Cut down hill near Mrs. Greaves', 17 yards long, 2 feet deep, and filled in hollow.
Made a culvert 14 feet by 30 inches by 24 inches.
Repaired numerous holes and ruts with gravel.

N. W. Campbell, Foreman.

August—Re-constructed bridge near Mrs Greaves', 76 feet long, 14 feet wide, with 3 bents. Bridge has 3 cedar stringers 14 inches diameter, hewn on upper side; is covered with 3-inch plank and has substantial hand-rail.
Forest cleared 175 yards, 20 feet wide.
Gravelled 25 yards, 8 feet wide, 6 inches deep.
Widened and re-graded 30 yards, 12 feet wide.
Raised bridge, south of Mrs. Greaves, 10 inches, with a cedar mud sill.
Cut down hill and made a fill of 60 cubic feet at south approach to bridge.
Re-graded approaches at each end of bridge, 25 yards long, 14 feet wide.
Graded 75 yards, 18 feet wide.
Gravelled 75 ,, 8 ,, 6 inches deep.
Took out and removed rocks, filled holes and ruts with gravel, and made general repairs from Miller's swamp to Davie's.

September—Forest cleared 70 yards, 20 feet wide.
Ditched 30 ,, 2 feet by 1 foot by 1 foot.
Took out and removed roots and rocks from Railway Hill to Davie's.
Made 2 culverts, 16 feet by 18 inches by 12 inches.
Cut out windfalls and cleared road for traffic.
Made a bridge, 21 feet long, 14 feet wide, and 2 feet high, having 3 cedar stringers 13 inches in diameter and covering of split cedar.
Filled approach to bridge with gravel, 30 yards long, 14 feet wide, 1 foot deep.
Re-covered a culvert with split cedar, 18 feet by 2 feet.
Cut down trees and brush shading approach to Chemainus River Bridge.
Cut down or grubbed several trees and stumps, filled holes and ruts with gravel, and made several repairs from Mrs. Greaves' to Chemainus River.

October—Cut out fallen timber and cleared road for traffic.
Repaired hand-rail of bridge near Mrs. Greaves', broken by fallen tree.

"I" ROAD PARTY.

C. Jordan, Foreman.

COWICHAN LAKE ROAD.

January—Cut out fallen timber, cleared road for traffic and made general repairs.
February—The like.
April—Filled, with brush and gravel, holes and ruts and made general repairs from hotel to 13-mile post.
May—Filled, with brush and gravel, holes and ruts from 13 to 12-mile post.
Forest cleared 135 yards, 20 feet wide.
Grubbed 135 ,, 14 ,,
Graded 135 ,, 14 ,,
Constructed a bridge 10 feet long, 14 feet wide, having 4 cedar stringers and covered with split cedar.
Made a culvert 14 feet by 2 feet by 1 foot.

June—Grubbed 150 yards, 10 feet wide.
Graded 150 ,, 10 ,,
Re-graded 175 ,, 10 ,,
Widened and re-graded 150 ,, 10 ,,
Grubbed 170 ,, 12 ,,
Graded 170 ,, 12 ,,
and ditched same on upper side.
Constructed a bridge, 22 feet long, 12 feet wide and 4 feet high, having 3 stringers 14 inches in diameter and a covering of split cedar.
Made a fill, at approach to bridge, 12 feet by 12 feet by 2 feet deep.

Hugh Bell, Foreman.

June—Gravelled 168 yards, 8 feet wide, 6 inches deep.
Widened and re-graded 1,320 yards, 10 feet wide.

Grubbed out large trees and stumps, and made short diversions to cut off several corners.
Made 2 culverts, 14 feet by 2 feet by 1 foot.

July—(6 to 7-mile post).

Forest cleared, 170 yards, 20 feet wide.
Grubbed 170 ,, 12 ,,
Graded 170 ,, 12 ,,
Rounded up and re-graded 90 yards, 12 feet wide.
Filled hollow, 12 yards by 12 feet by 1 foot deep.
Took out and removed rocks, grubbed roots and filled ruts on 300 yards of road.
Made 2 culverts, 14 feet by 2 feet by 1 foot, with 37 yards of ditch on upper side.
,, 2 ,, 14 ,, 2 ,, 1 ,,
,, 1 ,, 14 ,, 4 ,, 2 ,,

8 to 9-mile post.

Forest graded, 88 yards, 20 feet wide.
Grubbed 88 ,, 10 ,,
Graded 88 ,, 10 ,,
Grubbed out roots, filled ruts, and made general repairs.

9 to 10-mile post.

Forest cleared, 233 yards, 20 feet wide.
Grubbed 233 ,, 10 ,,
Graded 233 ,, 10 ,,
Widened and re-graded 142 ,, 12 ,,
Gravelled 152 ,, 8 ,, 6 inches deep.
Cut down a hill, 10 yards by 10 feet by 1 foot deep.
Made, on upper side of road, 153 yards of ditch, 2 feet by 1 foot by 1 foot.
Made a culvert, 14 feet by 1 foot by 1 foot.
Made 4 culverts, 14 ,, 2 ,, 18 inches.
Made a bridge, 16 feet long, 14 feet wide, and 3 feet high.
Made a corduroy, 8 yards long, 12 feet wide.

10 to 11-mile post.

Grubbed 1,320 yards, 10 feet wide.
Widened and re-graded 1,320 ,, 10 ,,
Gravelled 40 ,, 8 ,, 6 inches deep.
Made a bridge, 10 feet long, 14 feet wide.
,, ,, 16 ,, 14 ,, and filled in approaches.
Made general repairs.

11 to 12-mile post.

Made a culvert, 10 feet by 7 feet by 2 feet, and filled in approaches.

11-mile post to Cowichan Lake Hotel.

August—Forest cleared, 90 yards, 18 feet wide.
Grubbed 90 ,, 14 ,,
Graded 90 ,, 14 ,,
Re-graded 90 ,, 10 ,,
Gravelled 224 ,, 8 ,, and 6 inches deep.
Made a corduroy, 22 yards long, 14 feet wide, and covered same with 6 inches of earth and gravel.
Made a bridge, 30 feet in length, 14 feet wide, and 7 feet high, resting on a crib at one end, and mud sill at the other. Bridge has 4 cedar stringers, 14 inches, and is covered with split cedar.
Made a bridge, 20 feet long, 14 feet wide, and 3 feet 6 inches high, resting on cedar sills at either end, having 4 cedar stringers, 12 inches diameter, and covering of split cedar.
Made a bridge, 14 feet long and 14 feet wide, of like construction as last named bridge, and filled approaches thereto to make uniform grade.
Cut out all projecting and overhanging trees, and made general repairs.

Hotel to McCallum's.

Filled holes and ruts, and made general repairs ($\frac{1}{2}$ mile).

Jordan's to Half-Way House.

Forest cleared, 30 yards, 18 feet wide.
Grubbed 20 ,, 8 ,,
Graded 20 ,, 8 ,,
Grubbed 30 ,, 9 ,,
Graded 30 ,, 9 ,,
Graded 50 ,, 12 ,,
Graded 30 ,, 10 ,,
Gravelled 20 ,, 8 ,, 6 inches deep.
Cut down a hill, 20 feet long, 8 feet wide, and 1 foot deep.
Cut down a hill, 30 feet long, 10 feet wide, and 1 foot deep.
Filled a hollow, 10 yards long, 12 feet wide, and 1 foot deep.
Filled with gravel a hollow, 18 feet long, 10 feet wide, and 1 foot deep.
Made 4 culverts, 14 feet by 3 feet by 2 feet.
,, 1 ,, 14 ,, 2 ,, 1 foot.
Made general repairs.

Half-Way House to mile post 0.

Grubbed 30 yards, 10 feet wide.
Graded 30 ,, 10 ,,
Re-graded 65 ,, 10 ,,
Cut down a hill, 20 feet long, 8 feet wide, and 1 foot deep; and another, 25 feet long, 8 feet wide, and 1 foot deep.
Made a culvert, 14 feet by 2 feet by 1 foot.
,, ,, 14 ,, 8 ,, 2 feet.
,, ,, 14 ,, 5 ,, 18 inches.
Made a corduroy, 8 yards long, 14 feet wide, and covered same with 8 inches of earth and gravel.
Made general repairs.

September—Forest cleared, 450 yards, 20 feet wide.
Grubbed 450 ,, 10 ,,
Graded 250 ,, 10 ,,
,, 100 ,, 14 ,,
Re-graded 150 ,, 12 ,,
Gravelled 215 ,, 8 ,, 6 inches deep.
Rounded up in centre 12 inches, 100 yards, 14 feet wide.
,, ,, 12 ,, 115 ,, 12 ,,
Constructed a bridge, 84 feet long, 14 feet wide, and 5 feet high, resting on mud sills at either end, and having in lieu of bents 5 large mud sills 16 feet long, Bridge has 4 cedar stringers, 12 inches in diameter, spotted on caps, and is floored with split cedar.
Made 5 culverts, 14 feet by 30 inches by 12 inches.

October—Forest cleared, 40 yards, 20 feet wide.
Grubbed 90 ,, 12 ,,
Graded 90 ,, 12 ,,
Grubbed 40 ,, 10 ,,
Graded 40 ,, 10 ,,
Gravelled 180 ,, 8 ,, 6 inches deep.
Made a corduroy, 13 yards long, and 12 feet wide.
Made a bridge, 37 feet long, and 14 feet wide, with 2 spans of 25 feet and 12 feet, respectively. Bridge has 4 cedar stringers, 12 inches thick, and is coaered with split cedar.

At 13-mile post.

Forest cleared, 130 yards, 20 feet wide.
Grubbed 30 ,, 10 ,,
Graded 30 ,, 10 ,,
Widened and re-graded, 100 ,, 12 ,,

Gravelled 125 yards, 8 feet wide, 6 inches deep.
Made 125 yards of ditch on upper side of road.
Made a culvert, 14 feet by 2 feet by 1 foot.

(NOTE.—Nearly all the grading on the Cowichan Lake Road consists of deviations to shorten and straighten the road.)

SAHTLAM ROAD.

March—Cut out fallen timber and cleared road for traffic.
September—Re-graded 100 yards (side hill), 10 feet wide.
Cut down hill, 45 feet long, 10 feet wide, and 16 inches deep.
Constructed a bridge, 63 feet long, 12 feet wide, and 7 feet high, having 2 spans of 28 feet. Bridge rests on a mud sill at each end, has 3 stringers 10 inches by 14 inches, and covering of split cedar.
Made general repairs from last named bridge to junction with Cowichan Lake Road (4 miles).

"L" ROAD PARTY.

Henry Evans, Foreman.

VICTORIA-NANAIMO TRUNK ROAD (Mr. H. Davies', Somenos, to Mr. Pimbury's bridge).

March—Made a culvert, 14 feet by three feet by 3 feet, near Holmesdale; deepened and widened ditch, and made sufficient tail drain.
Brushed and gravelled 30 yards long, 10 feet wide, and 6 inches deep.
May—Repaired a culvert and filled holes and ruts with gravel from Duncan's to Roman Catholic Church.
August—Cleared out land slides, ditches and culverts.
Gravelled low-lying parts of road near Holmesdale, filled all holes and ruts with gravel, and made general repairs from Mrs. A. Skinner's to Duncan's.
September and October—Rounded up and re-graded 130 yards, 30 feet wide.
Gravelled 130 yards, 9 feet wide, 6 inches deep.
Filled all holes and ruts with gravel, and made general repairs from Duncan's to Pimbury's ($3\frac{1}{2}$ miles).

"M" ROAD PARTY.

Charles Bayley, Foreman.

COWICHAN LAKE SOUTH SHORE ROAD.

May and June—Cut out and removed fallen timber and logs between Cowichan River and Sutton Creek ($\frac{1}{2}$ mile).
Made general improvements over 9 miles of road.
July—Cut out fallen trees and logs, and roughly graded 264 yards, 12 feet wide, west of Sutton's Creek.
Graded (roughly) 1,760 yards, 8 feet wide, east of Sutton's Creek.

———o———

Salt Spring Island.

Joel Broadwell, Foreman.

February and May—Prepared timbers for the Vesuvius Bay Wharf.

ROAD FROM VESUVIUS BAY WHARF TO MOUAT'S ROAD.

June—Dug out and removed stumps, trees, and rocks; graded and widened the roadway, dug ditches, and made general repairs

BURGOYNE BAY ROAD.

George Furness, Foreman.

June—Graded 600 yards, 5 yards wide.

BEAVER POINT ROAD.

Henry Ruckle, Foreman.

June—Graded 65 yards, 12 feet wide.
Made 1 culvert, 16 feet long, 4 feet wide, 2 feet deep.
August—Forest cleared, 583 yards, 20 feet wide.
Graded 950 ,, 12 ,,
Made a bridge, 42 feet long, 14 feet wide, 8 feet high, having 2 heavy stringers, covered with cedar logs, halved.
Made a culvert, 16 feet long, 4 feet wide, 2 feet deep.
November—Forest cleared, 571 yards, 25 feet wide.
Graded 591 ,, 14 ,,
Made 70 yards of corduroy, 12 feet wide.
Made 1 bridge, 42 feet long, 14 feet wide, 4 feet high.
,, 1 ,, 51 ,, 14 ,, 4½ ,,
,, 1 ,, 60 ,, 14 ,, 6 ,,
Stringers 20 inches diameter, well braced to prevent sagging, and covered with split cedar.

BURGOYNE BAY ROADS.

Charles Horel, Foreman.

August—Graded 454 yards, 12 feet wide.	Through Section	86.
Gravelled 350 ,, 7 ,, 6 inches deep.	,, ,,	86.
Repaired 3 bridges.	,, ,,	86.
Graded 200 yards, 12 feet wide.	,, ,,	78.
Pulled up corduroy.	,, ,,	10.
Graded 30 yards, 12 feet wide.		
September—Graded 240 yards, 12 feet wide.	,, ,,	79.
Gravelled 199 ,, 7 ,, 6 inches deep.	,, ,,	79.

VESUVIUS BAY ROADS.

Henry Stevens, Foreman.

October—Graded 80 feet by 60 feet at Vesuvius Bay Wharf.

BOOTH'S ROAD.

November—Gravelled 135 yards, 9 feet wide, 8 inches deep.
Removed land slide, 150 yards in length.
Made 1 culvert of split cedar, 15 feet by 2 feet by 18 inches.

ROAD BETWEEN WHARF AND LAKE.

Gravelled 154 yards, 9 feet wide, 8 inches deep.
Made 2 culverts, 14 feet by 2 feet by 2 feet.

TRUNK ROAD.

December—Forest cleared, 800 yards, 20 feet wide.
Gravelled 200 ,, 9 ,, 8 inches deep.

———o———

Nanaimo District.

PUBLIC SCHOOL-HOUSE, NORTH WELLINGTON.

James A. Carthew, Contractor, $2,750.

Furnished all plant, labour, and materials; erected and completed a frame building in the form of a cross, measuring 62 feet by 88 feet, containing four class-rooms, each large enough to seat from 45 to 65 pupils. The building has four gables, and is enclosed with rustic, lathed and plastered, wainscoted and painted throughout. The rooms are furnished with blackboard surface all around, and the entries, of which there is a separate one for each school-room, are fitted with cloak-hooks. The floors are double and sound-deadened. A suitable place for the storeage of fuel is furnished in the basement, and necessary out-buildings provided.

Jas. A. Carthew, contract for seating above described school-house, $360.

Furnished all plant, labour, and materials; erected, completed, stained and fastened in position 81 seats and desks of the usual design and plan for country school-houses.

Two acres of the school grounds were cleared of the timber, which was burned by John Robson at a cost of $200.

MOUNT BENSON ROAD.

F. Parks, Contractor, $800.

Furnished all plant, labour, and materials, and completed 1½ miles of road of the following dimensions:—

Forest cleared 1½ miles, 20 feet wide.

Graded 1½ miles, 13 feet; ditched where required.

Mr. Parks then threw up the contract, and Mr. James Craig then built 1¼ miles of the road out of the balance of the vote, and out of the subscription moneys raised by the citizens of Nanaimo to supplement the vote.

WHARF, N. W. BAY, BEAVER CREEK.

John Belyea, Contractor, $600.

Furnished all plant, labour, and materials; erected and completed a wharf 40 by 30 feet, with approach to same, 82 feet long by 14 feet wide; all built on piles and trestles, with caps and stringers bolted to same with iron drift bolts, and all covered with two-inch plank.

The road party (J. Love, superintendent) cut down the bank at end of approach to the wharf, and filled same in.

GABRIOLA ISLAND SCHOOL-HOUSE (SOUTH END).

John W. Lacy, Contractor, $712.50.

Furnished all plant, labour, and materials; erected and completed a frame building. 24 by 36 feet, in conformity with the general plan and specification for country school-houses. Provided seats and desks and out-buildings.

ADDITION TO EAST WELLINGTON SCHOOL-HOUSE.

James A. Carthew, Contractor, $650.

Furnished all plant, labour, and materials; erected and completed a frame addition, 24 by 30 feet, in conformity with the general plan and specification for country school-houses, and provided seats and desks for same.

REPAIRS TO GOVERNMENT BUILDINGS, NANAIMO.

Sundry repairs made to Gaol, Law Courts and grounds, Police Court and offices.

The Girls' School at Nanaimo has been furnished with 30 seats and desks of eastern manufacture, and the school buildings and fences have had sundry repairs, as needed.

ROAD TO SABISTON'S MINE, NO. 2 SLOPE.

J. Love, Foreman.

Forest cleared 200 yards, 20 feet wide.
Graded 950 ,, 12 ,,
Gravelled 700 ,, 10 ,, 6 inches deep.
Made 2 bridges, 21 feet and 27 feet long each, by 12 feet wide and 4 feet high; built with 3 stringers laid on mud sills, and covered with split cedar and finished with ribbon poles.
3 culverts, 14 feet long, 16 inches wide, and 12 inches deep.

WESTWOOD'S ROAD.

J. Love, Foreman.

Forest cleared 1,650 yards, 20 feet wide.
Graded 1,650 ,, 12 ,,

BADCOCK'S ROAD.

J. Love, Foreman.

Forest cleared 1,325 yards, 20 feet wide.
Graded 1,875 ,, 10 ,,
Built 2 bridges, 10 feet and 55 feet long, each 12 feet wide, with three stringers laid on mud sills and bents, covered with split cedar and finished with ribbon poles.

PERRY AND WADDINGTON'S ROAD.

J. Love, Foreman.

Forest cleared 650 yards, 20 feet wide.
Graded 650 ,, 10 ,,
Gravelled 75 ,, 10 ,, and 5 inches deep.
Made 55 feet of corduroy, 12 feet wide.
Built 1 bridge, 6 feet long, 12 feet wide, on 3 stringers, covered with split cedar,

ROSS'S ROAD.

J. Love, Foreman.

Forest cleared 1,420 yards, 20 feet wide.
Graded 1,420 ,, 10 ,,
Built 1 bridge, 32 feet long, 12 feet wide, and 3 feet high, with 3 stringers laid on mud sills, covered with split cedar and finished with ribbon poles.

SOUTH WELLINGTON SAW-MILL ROAD.

J. Love, Foreman.

Graded 570 yards, 16 feet wide, ditches on each side.
Gravelled 490 ,, 12 ,, 6 inches deep.

PEARSON'S AND MCGARRIGLE'S ROAD.

J. Love, Foreman.

Forest cleared 1,925 yards, 20 feet wide.
Graded 1,925 ,, 10 ,,
Built 1 bridge, 175 feet long, 12 feet wide, and 20 feet high, with three stringers laid on 7 bents and mud sills, covered with split cedar and finished with ribbon poles, and hand-railing put on.
Built 3 bridges, 30, 35, and 73 feet each, 12 feet wide and 3 feet high, with 3 stringers laid on mud sills, covered with split cedar and finished with ribbon poles.
Made 1 culvert 14 feet long, 12 inches wide, and 12 inches deep.

NORTH AND SOUTH WELLINGTON ROAD.

J. Love, Foreman.

Gravelled 625 yards, 10 feet wide and 5 inches deep.

VIPOND'S AND KILPATRICK'S ROAD,

J. Love, Foreman.

Forest cleared 1,300 yards, 20 feet wide.
Graded 1,300 ,, 10 ,,
Made 3 culverts 12 feet long, 12 inches wide, and 12 inches deep.

GODFREY'S ROAD.

J. Love, Foreman.

Forest cleared 475 yards, 20 feet wide.
Graded 475 ,, 10 ,,
Built 2 bridges, 12 and 15 feet long each, 12 feet wide and 3 feet high, with 3 stringers laid on mud sills, covered with split cedar and finished with ribbon poles.

WELLINGTON ROAD.

J. Love, Foreman.

Repairing Millstone Bridge, and filling up holes about same.

NANOOSE ROAD.

J. Love, Foreman.

Repairing bridges and culverts, and general repairs along line of road.

N. W. BAY AND BEAVER CREEK WHARF ROAD.

J. Love, Foreman.

Forest cleared 3,080 yards, 20 feet wide.
Graded 3,080 ,, 12 ,,
Built 1 bridge, 160 feet long, 12 feet wide, and 6 feet high.
,, 1 ,, 30 ,, 12 ,, 4 ,,
,, 1 ,, 22 ,, 12 ,, 4 ,,
With 3 stringers laid on mud sills, covered with split cedar, and finished with ribbon poles.
5 culverts, 14 feet long, 12 inches wide, 12 inches deep, with 200 yards of ditching.

N. W. BAY ROAD.

J. Love, Foreman.

Forest cleared 1,600 yards, 20 feet wide.
Graded 1,600 ,, 10 ,,

COMOX ROAD.

J. Love, Foreman.

Ditched 250 yards and made general repairs along line of road.

NANAIMO–ALBERNI TRUNK ROAD.

J. Love, Foreman.

Forest cleared 300 yards, 20 feet wide.
Graded 3½ miles, 12 feet wide, and cut out the timber along the line of the road.
Built 52 feet of corduroy, 12 feet wide.
Made 6 culverts, 14 feet long, 12 inches wide, and 12 inches deep.

McLAREN'S ROAD.

J. Love, Foreman.

Graded 1,100 yards, 9 feet wide.

HILLIER'S ROAD.

J. Love, Foreman.

Forest cleared 1,600 yards, 16 feet wide.
Graded 1,600 ,, 9 ,,
Made 1 culvert, 12 feet long, 12 inches wide, 12 inches deep.

R. CRAIG'S ROAD.

J. Love, Foreman.

Forest cleared 250 yards, 16 feet wide.
Graded 1,200 ,, 8 ,,

NANAIMO–VICTORIA TRUNK ROAD.

J. Cairns, Foreman.

Gravelled 230 yards, 10 feet wide and 6 inches deep.
General repairs made to bridges, culverts, and ditches, and cut out brush along line of road.
Built 1 bridge, 79 feet long, 14 feet wide, and 4 feet high, with 3 stringers laid on mud sills, covered with split cedar and finished with ribbon poles.

BRENTUM'S ROAD.

J. Cairns, Foreman.

Forest cleared 2½ miles, 20 feet wide.
Graded 2,155 yards, 10 feet wide.
Corduroyed 48 feet, 12 feet wide.
Built 1 bridge, 51 feet long, 14 feet wide, and 5 feet high.
,, 1 ,, 27 ,, 14 ,, 4 ,,
,, 1 ,, 9 ,, 14 ,, 4 ,,
With 3 stringers laid on mud sills, covered with split cedar, and finished with ribbon poles.
4 culverts, 14 feet long, 12 inches wide, and 12 inches deep.

CASSIDY'S ROAD.

J. Cairns, Foreman.

Widening and general repairs made along line of same.

BURNIE'S ROAD.

J. Cairns, Foreman.

Forest cleared 30 yards, 20 feet wide.
Graded 30 ,, 20 ,, around the turn-off.

STEWART'S AND PATERSON'S ROAD.

J. Cairns, Foreman.

Graded 1,110 yards, 12 feet wide.
2 culverts, 14 feet long, 12 inches wide, and 12 inches deep; and dug 80 yards of tail drains.

MCGREGOR'S ROAD.

J. Cairns, Foreman.

Widening out and general repairs along line of same.
1 culvert, 12 feet long, 12 inches wide, and 12 inches deep, and 20 yards of tail drain.

QUENNELL'S AND DOLAN'S ROAD.

J Cairns, Foreman.

Graded, ditched, and cornered up 580 yards, 16 feet wide.
Forest cleared 330 yards, 20 feet wide.

Gravelled 421 yards, 11 feet wide, and 6 inches deep.
Made 3 culverts, 18 feet long, 12 inches wide, and 12 inches deep.
Made general repairs along line of old road.

THOMAS' AND CORRIGAN'S ROAD.

J. Cairns, Foreman.

Graded out of side-hill 164 yards, and ditched same, and covered puncheon.
Made 1 bridge, 24 feet long, 14 feet wide, and 4 feet high, built with 3 stringers laid on mud sills, covered with split cedar and finished with ribbon poles.
Made 1 culvert, 16 feet long, 12 inches wide, and 12 inches deep.

GORDON'S AND CRAWFORD'S ROAD.

J. Cairns, Foreman.

Forest cleared 300 yards, 20 feet wide.
Graded 300 ,, 12 ,,
57 feet of corduroy, 14 feet wide.

FIDDICK'S ROAD.

J. Cairn's, Foreman.

Widening out and levelling off same along line of road.
Forest cleared 300 yards, 20 feet wide.
Graded 300 ,, 12 ,,
Built 1 bridge, 170 feet long, 14 feet wide, and 11 feet high, with 3 stringers laid on 5 bents, and covered with split cedar and finished with ribbon poles.

MALPASS' ROAD.

J. Cairns, Foreman.

General repairs in clearing out brush and logs, &c., from line of road.

STOCKING'S ROAD.

J. Cairns, Foreman.

Ditched and graded 35 yards, 16 feet wide, and repaired culverts.

BECK'S ROAD.

J. Cairns, Foreman.

Graded from side-hill and raised 18 inches 130 yards of road, 14 feet wide.
Put in 27 feet of corduroy, 14 feet wide, and cleared out ditches and brush from line of road.

STARK'S AND RICHARDSON'S ROAD.

J. Cairns, Foreman.

Cut out brush and logs and made general repairs along line of road.

GABRIOLA ISLAND ROADS, LOWER END.

J. Cairns, Foreman.

Gravelled 350 yards, 9 feet wide, and 4 inches deep.
Made 2 culverts, 14 feet long, 12 inches wide, and 12 inches deep.
Made general repairs along the line of roads, and repaired the bridges.

GABRIOLA ISLAND ROADS, UPPER END.

J. Cairns, Foreman.

Forest cleared 1,080 yards, 20 feet wide.
Graded 673 yards, 12 feet wide.
Repaired bridges and made general repairs to roads.

General repairs to 300 yards of ditch.
Made 3 culverts, 14 feet long, 12 inches wide, and 12 inches deep.

CENTRE ROAD, GABRIOLA ISLAND.

J. Cairns, Foreman.

Forest cleared 2 miles, 16 feet wide.

---o---

Alberni District.

BEAVER CREEK ROAD.

Wm. Thompson, Foreman.

General repairs extending over a distance of 8 miles.
Grading, widening, and ditching.
Gravelled 200 yards on lower end.

BEAVER CREEK ROAD (upper end).

Special grant of $600.

This amount is now being expended in repairing the upper end of the road—from the 8-mile post to the furthest settler, a distance of 12 miles from Steamboat Landing.

CAMERON'S ROAD.

Forest cleared 880 yards, 15 feet wide.
Graded 880 ,, 8 ,,

THOMPSON'S ROAD.

Forest cleared and slightly graded 1,000 yards.

RUSSELL AND SWANSON'S ROAD.

Widening and grading old road from Somas River to connect with the Beaver Creek Road.
1,760 yards forest cleared, 15 feet wide.
1,760 ,, roughly graded, 8 ,,

SPROAT AND McCOY LAKE ROAD.

Matthew Ward, Foreman.

General repairs, ditching and grading.
Re-covering 2 bridges, 50 feet long—cedar covering.
Corduroy 70 yards, 14 feet wide.

SPROAT LAKE ROAD.

Connection with Somas River Bridge.
Forest cleared 2,000 yards, 20 feet wide.
Graded 2,000 ,, 10 ,,

FABER'S ROAD.

Forest cleared 880 yards, 20 feet wide.
Grading 880 ,, 10 ,,

NEUK ROAD.

Roughly graded 1,000 yards, 10 feet wide.
Made 4 culverts covered with cedar.

LAKE SHORE ROAD.

Grading and clearing out fallen timber.

RIVER FRONT ROAD.

Built 2 small bridges.
Graded and gravelled 100 yards.

ROGER CREEK AND KITSUCKSIS VALLEY ROADS.

Wm. Leeson, Foreman.

Grading, ditching and general repairs.

DEBOUX ROAD.

Forest clearing 1,760 yards.

MOORE'S ROAD.

Grading and widening 2,000 yards of old road to connect with the present Kitsucksis Valley Road.

MILL ROAD.

Grading 880 yards, 10 feet wide.

NANAIMO-ALBERNI ROAD.

Grading and general repairs for a distance of 4 miles from landing.

SOMAS RIVER BRIDGE.

Robert Pinkerton, Contractor, $1,950.

Provided all necessary plant, labour, and material; erected and completed a bridge over the Somas River, at a point known as "The Rocks," formed by one Howe truss span of 110 feet, supported on strong crib abutments, and having a short approach at each end. The upper and lower chords of the truss are covered on the upper side with galvanized iron to shed the water and protect the timbers from decay.

———o———

Comox District.

TSOLUM RIVER ROAD.

Thos. Beckensell, Foreman.

Constructed 390 feet of crib work, 8 feet high, to form a protection to the road, where the river had been cutting into it, built with timber about 2 feet thick, dovetailed together, and filled in with rocks, covered with earth and gravelled, and about 50 yards of hill cutting to improve the road, at the same time furnish covering for the crib work.

TSOLUM RIVER ROAD.

John R. Berkeley, Superintendent.

One mile of road, forest cleared 12 feet wide.
One bridge, 30 feet by 14 feet, re-covered with 3-inch plank.
One bridge, 27 feet by 14 feet, re-covered with 3-inch plank, and one new stringer put in, bad holes filled in, and 10 loads of gravel put on.

COMOX WHARF AND APPROACH.

John R. Berkeley, Superintendent.

70 yards of hill cutting and grading, 20 feet wide, and 72 yards of gravel put on; 20 feet of crib work filled in with rocks and gravelled; 186 feet of new wharf built, mud sills

14 feet by 18 feet, round posts, 14-inch caps, and stringers 12 feet by 14 feet securely fastened with spikes, and drift bolts well tarred on top with coal tar, covered with 3-inch plank, ribbons 2 feet by 4 feet, hand-rail 4 feet by 4 feet.

ROAD FROM BAILEY'S TO CROSS ROAD.

John R. Berkeley, Superintendent.

Half-mile of new road, forest cleared 30 feet wide, in order to straighten the road, as there was only a winding sleigh trail at this place.

APPROACHES TO COURTENAY RIVER BRIDGE.

John R. Berkeley, Superintendent.

An approach 270 feet long, over the slough, built on mud sills, 14 feet by 18; posts, 12 inches by 14 inches diameter; caps and stringers, 12 feet by 14 feet, well tarred and covered with 3-inch plank; ribbons, 2 feet by 4 feet; rail, 4 feet by 4 feet; from this to bridge over the river, 153 yards of road made by filling in 6 feet high, 30 feet at base, and 20 feet on top, then putting 881 yards gravel, 60 feet of approach built on the east end of River bridge, making 330 feet of new bridge at this place; on the west side of river 400 feet of hill cutting, also 60 yards corduroy, made of cedar, covered with 6 inches of gravel, to connect with Union Mine road.

FROM POST OFFICE TO ANDERTON'S AND POINT HOLMES.

John R. Berkeley, Superintendent.

Road widened, roots and stones taken out, 500 feet of ditching.
One bridge 27 feet long, re-covered with 3-inch plank.
One mile graded, 12 feet wide.
One bridge 11 feet long, re-covered with 3-inch plank, and new stringers put in.

TRENT RIVER ROAD.

John R. Berkeley, Superintendent.

Eight new culverts put in.
One bridge 25 feet long, re-covered with 3-inch plank, and ditched where required, roots and rocks removed, road straightened, soft places filled in, and 200 loads of gravel put on.

ROAD LEADING SOUTH FROM TSOLUM RIVER.

John R. Berkeley, Superintendent.

Seven new culverts, 2 feet deep, ranging from 3 to 6 feet in length by 14 feet wide.
One bridge, 13 feet long, 12 feet wide, 4 feet high, roots and rocks removed, half mile of grading done, 290 yards turnpiked and gravelled, soft places filled with brush and gravelled.

SMITH'S ROAD.

John R. Berkeley, Superintendent.

120 yards turnpiked, gravelled, and ditched, made 2 log culverts, roots and rocks taken out from H. Grieve's to Smith's bridge.
30 yards corduroy, holes filled in with rocks and gravelled.

LONG BRIDGE.

John R. Berkeley, Superintendent.

Bridge repaired and made perfectly safe by 264 new 3 feet by 12 stringers, corbels and braces.
Two small bridges were replaced by filling in, about 100 feet long, 5 feet deep. The washout at junction of Courtenay and Tsolum rivers, 300 feet in length, filled in with rock, ditches deepened and turned up on road, making it 3 feet higher, to keep the river from flowing over. A considerable quantity of gravel put on various places on the main road.

MILLER'S ROAD TO GAGE'S.

Walter Gage, Contractor, $60.

1¼ mile forest cleared, sleigh road 10 feet wide.

CAMPBELL RIVER AND COMOX ROAD.

Section A.

Franklin Conliffe, Contractor, $714.

Six miles forest cleared, 15 feet wide.
Graded 10 feet wide.
One bridge over Campbell river slough, 75 feet long, 7 feet high.
One bridge 14 feet long on mud sills.
One bridge 6 feet high, 25 feet span.
One bridge, Willow point, 30 feet span; 116 feet corduroy.

Section B.

Joseph Stewart, Contractor, $650.

Five miles forest cleared, 15 feet wide, graded 10 feet.
Bridge at Stewart's Creek, 25 feet span, rests on mud sills. One bridge, 30 feet, rests on mud sills. 11 chains of rock cutting.

Section C.

Franklin Conliffe, Contractor, $805.

5¾ miles forest cleared, graded 10 feet wide, 200 feet corduroy; 1 bridge, 18 feet long, resting on mud sills.

———o———

Denman Island Roads.

T. H. Piercy, A. Pickles, and G. McFarlane, Road Commissioners.

D. PICKLES' ROAD.

D. Pickles, Contractor; $55.

Forest cleared, 40 chains, 12 feet wide.
Graded, 40 ,, 9 ,,
Corduroyed, 60 feet, 9 ,,
Gravelled, 60 ,, 9 ,, 6 inches deep.

BEADNELL'S ROAD (NORTH OF CROSS-ROAD).

Geo. W. McFarlane, Contractor; $60.

Made a new bridge 110 feet long, 16 feet wide.
Graded 3 chains, 9 feet wide.

MORRISON'S ROAD.

Hugh Morrison, Contractor, $34.

Graded 20 chains, 9 feet wide.

Wm. Baikie, Contractor $79.

Graded 36½ chains, 9 feet wide.
,, 2 ,, 16 ,,
,, side-hill, 3 chains.
Cleared ,, 2 ,, 16 feet wide.

Geo. McFarlane, Contractor, $53.25.

Cleared 18½ chains, 12 feet wide.
Graded 18½ ,, 9 ,,
,, 5½ ,, 16 ,,

Filled 9 yards, 12 inches deep.
Made a new culvert.
Repaired bridge.

CROSS ROAD REPAIRS.

R. Swan, Contractor, $61.

Cleared 6 chains, 22 feet wide.
Graded 6 ,, 16 ,,
Moved bridge into line of road.
Cut out fallen timber and filled hollows.

Thos. Kennaw, Contractor, $37.50.

Gravelled 20 yards, 8 feet wide, 6 inches deep.
Made general repairs over 1½ miles of road.
Did some side-hill grading near the wharf.

Albert Graham, Contractor, $20.

Cleared 4 chains, 22 feet wide.
Graded 4 ,, 16 ,,

PICKETT'S ROAD, SOUTH OF CROSS ROAD.

Wm. Baikie, Contractor, $95.

Forest cleared, 15 chains, 19 feet wide.
,, 15 ,, 12 ,,
Graded 15 ,, 16 ,,
,, 15 ,, 8 ,,
Gravelled 16 yards, 8 ,, 6 inches deep.
Made 6 new culverts, 16 feet by 2 feet by 1 foot.

A. PICKLES' ROAD (NORTH OF CROSS ROAD).

T. Nelson, Contractor, $110.

Forest cleared, 40 chains, 12 feet wide.
Graded, 40 ,, 9 ,,
Corduroyed, 20 feet, 9 ,,
Gravelled, 20 ,, 9 ,, 6 inches deep.
Made a new culvert.

Wm. Baikie, Contractor, $48.75.

Forest cleared, 23 chains, 12 feet wide.
Graded, 8 ,, 8 ,,
Corduroyed 30 feet, covered with brush and gravel.

Wm. Baikie, Contractor, $48.75.

Forest cleared, 23 chains, 12 feet wide.
Graded, 23 ,, 8 to 9 feet wide.
Corduroyed 30 feet, covered with brush and gravel.

———o———

Hornby Island.

George Heatherbell, Superintendent.

TRUNK ROAD, S. E. SIDE OF THE ISLAND—(GEO. BRABNER'S PARTY).

August—Made 30 feet of corduroy, 14 feet wide.
Made 1 culvert 14 feet long, 2 feet wide.
Did some ditching.

ROAD ACROSS S.W. ¼ OF SEC. X. TO GLADDING'S CORNER—(JNO. SCOTT'S PARTY).

August—Made 880 yards of sleigh road, 12 feet wide.
Made 1 culvert, 12 feet long, 2 feet wide.
„ 55 yards of ditching.

ROAD UP FORD'S MOUNTAIN, S. E. SIDE OF THE ISLAND.

John Ford, Contractor, price $330.

October—The work consisted of grading, cribbing, and blasting.
Graded 545 yards, 10 feet wide.
Cribbed 165 yards, 4 to 6 feet high.

BRIDGE OVER HOWES CREEK, S. E. SIDE OF ISLAND.

George Brabner, Contractor, price $90.

October—The bridge is 106 feet long, 14 feet wide, and 10 feet high, constructed with 10-inch cedar timbers.

ROAD FROM T. WILLIAM'S PICKET FENCE TO SUTTON AND GRAHAM'S LINE, N.W. SIDE OF ISLAND.

Albert Graham and Co., Contractors, price $90.

October—Made 1,760 yards of sleigh road, 12 feet wide.
Made a bridge 35 feet long, 14 feet wide, 8 feet high, cedar timber.

TRUNK ROAD—(W. FORD'S PARTY).

Graded, ditched, and made general repairs to culverts, &c., over a distance of 4,620 yards.

———o———

Mayne and Galiano Islands.

Made some needed repairs to the roads.
Repaired and maintained the wharf at Mayne Island.

———o———

New Westminster District.

COURT HOUSE.

Wm. Turnbull & Co., Contractors, $29,339.

Furnished all labour and material required for the erection and completion of a brick building upon a stone foundation, with slate roof, in conformity with plans, specifications, and details.

The building is erected upon the site formerly occupied by the Government Offices, which is central and well situated for the transaction of business. Upon the basement floor, provision has been made for the offices of the Government Agent, and of the Deputy Registrar of Titles, Births, Deaths, and Marriages, &c., &c.; also for vaults, furnace room, fuel store, and closets, &c.

On the first floor is situated the Court room, Judge's chambers, Registrar's office, Barristers' room, Sheriff's office, and Jury room, halls, vaults, and closets. The second floor will be left unfinished at present. The whole building will be heated by means of hot water.

Care has been taken in designing the building to keep in view the purposes for which it is to be used.

EAST END SCHOOL, VANCOUVER.

A. E. Carter, Contractor, $17,325.

Furnished all labour and material required for the erection of a two-story brick building upon a stone foundation.

The building is 70 feet by 75 feet, and consists of eight class rooms, four on each floor. Each room is 26 feet by 35 feet and 14 feet high, and is lighted by four large windows. The floors are double and sound deadened. The walls of the class-rooms are wainscoted all round to a height of 2 feet 8 inches, from which the blackboard of matched cedar extends up 4 feet high. Each floor has a hall 12 feet wide, extending from front to rear, fitted with cloak-hooks, lavatories, &c., &c. The second floor is reached by two separate staircases from the lower hall. A brick partition wall separates the class-rooms in front from those in the rear, and deadens the sound, so that the occupants of each room are not disturbed by noises in the adjacent one. The building throughout is heated by radiators, which are supplied with a circulation of hot water from two large-sized Gurney hot water heaters placed in the basement, where the fuel is stored, and also where improved sanitary closets are located.

The design is such that a large two-story wing can be built at each side when desirable.

GRADING GROUNDS AT CENTRAL SCHOOL, VANCOUVER.

John Johnson, Contractor, $344.

Removed stumps and roots, and graded the grounds to a uniform surface, in accordance with agreement.

FENCING CENTRAL SCHOOL GROUNDS, VANCOUVER.

Alexander Webster, Contractor, $575.

Furnished all material and built a neat picket fence round the school grounds, in conformity with plans and specifications.

WESTSIDE SCHOOL HOUSE, NEW WESTMINSTER.

W. Purdy, Contractor, $735.

Supplied all labour and material and built an addition to the old school-house, which doubles the capacity of the building.

SAPPERTON SCHOOL HOUSE.

Purdy & Williams, Contractors, $3,190.

Furnished all plant, labour, and materials; erected and completed a frame building, in the form of a cross, measuring 62 feet by 88 feet; containing four class rooms, each large enough to seat from forty-five to sixty-five pupils. The building has four gables, and is enclosed with rustic, lathed and plastered, wainscoted and painted throughout. The rooms are furnished with blackboard surface all around, and the entries, of which there is a separate one for each school-room, are fitted with cloak hooks. The floors are double and sound deadened. A suitable place for the storage of fuel is furnished in the basement, and necessary out-buildings provided.

BIGGER PRAIRIE SCHOOL.

D. R. Bigger, Contractor, $692.

Furnished all requisite materials and erected a building in conformity with the general plan for country school-houses.

ROSEDALE SCHOOL.

Patrick McGrath, Contractor, $598.

Erected a country school-house as above.

EAST CHILLIWHACK SCHOOL.

Ford & McKeever, Contractors, $694.

Erected a country school-house as above.

NICOMEN ISLAND SCHOOL.

Geo. Magar, Contractor $700.

Erected a country school-house as above.

SEA ISLAND SCHOOL.

Archibald Bros., Contractors, $740.

Erected a country school-house as above.

BELMONT SCHOOL.

John Matheson, Contractor, $677.

Erected a country school-house as above.

GLENWOOD SCHOOL.

Richard Steward, Contractor, $650.

Erected a country school-house as above.

LULU ISLAND SCHOOL.

Archibald Bros., Contractors, $695.

Erected a country school-house as above.

AGASSIZ SCHOOL.

Geo. Beebe, Contractor, $678.

Erected a country school-house as above.

CLAYTON SCHOOL.

J. E. Murchison, Contractor, $645.

Erected a country school-house as above.

SERPENTINE SCHOOL.

James Bothwell, Contractor, $700.

Erected a country school-house as above.

ANNIEDALE AND PORT KELLS SCHOOLS.

Samuel Edge, Contractor, $750 each.

Contracted to erect country school-houses as above.

HATZIC SLOUGH AND MISSION ROAD (extending from Wells' Landing westward to the Mission Station).

Ralph Burton, Foreman.

Forest cleared and brushed out 27 feet wide, graded 13 feet wide; 2 fills, 210 lineal feet; averaging 1 foot deep, 13 feet wide; 290 lineal feet corduroy, 3 inches thick, 12 feet long, 1 bridge 70 feet long, 12 feet high, 13 feet wide, 2 bents; timbers fastened with $\frac{3}{4}$-inch iron drift bolts; flooring, split cedar, 3 inches thick; 5 chains of ditch, 16x18 inches; 14 culverts, covered with split cedar.

5 chains of fencing, sawn cedar posts and sawn fir pickets; 3 gates; 30 chains of fencing, sawn cedar posts and 1x6 inch sawn fir boards; 17 fruit trees removed.

The fencing and removal of trees was agreed to in consideration of Mr. Bulwer's permission, in writing, to grant the right of way through his orchard, garden and cultivated land.

Distance of road about 2 miles.

Appropriation, $600.

IMPROVEMENT OF FARR ROAD, AGASSIZ SETTLEMENT (extending from Farr's east line along base of mountain to the railway crossing).

D. Robertson, Foreman.

30 chains of side-hill cutting, averaging 3 feet by four feet, mostly composed of loose rock; 189 lineal feet of fill, 2 feet by 10 feet; roots, stumps, brush and logs cut and removed; road made passable for teams; distance about 1¾ miles.
Amount, $375.

GALBRAITH ROAD, AGASSIZ SETTLEMENT.

D. Robertson, Foreman.

Cutting brush, removal of logs, and corduroy placed.
Amount, $50.

ASHTON ROAD, AGASSIZ SETTLEMENT (running west alongside the railway track).

Norman Cameron, Foreman.

Brush and logs cut 13 feet wide and removed.
Amount, $75.

HARRISON HOT SPRINGS ROAD.

D. Robertson, Foreman.

136 lineal feet of fill, 2 feet by 16 feet; 1½ miles gravelled, 12 feet wide and from 6 inches to 8 inches deep, and at other points along the road gravel dropped into holes.
Amount, $500.

SEMIAHMOO ROAD (from Elgin to Campbell Creek).

Thomas Dixon, Foreman.

For a width of 6 feet on each side of the road the standing timber and brush has been cut down, the logs removed, and the road in several places straightened, holes filled in with gravel and rocks removed, ditches and tail drains cleaned out; 260 lineal feet of corduroy, 3 inches thick and 12 feet long, placed and covered with earth and gravel; about 20 chains of road graded and gravelled 12 feet wide and 8 inches deep.
Flooring and rails of Campbell River bridge repaired; 3 culverts re-covered.
Amount expended, $436.

NICOMEKEL RIVER BRIDGE, ELGIN.

Repairs performed by A. Beaton.

Draw levelled, rods tightened, gear of draw overhauled, hand-railing and flooring repaired.
Cost of repairs about $39.

SERPENTINE RIVER BRIDGE, ELGIN.

Repairs performed by Thomas Dixon.

Sills of approaches levelled and blocked up; flooring and hand-rails repaired.

No. 1 BRIDGE, 44 feet long, near the Serpentine River.

Work performed by Thomas Dixon.

1 centre bent, 2 uprights; 2 lateral posts, 10 inches by 10 inches, 6 feet high, cap 10 inches by 10 inches; 4 sets hewn cedar stringers, 10 inches by 14 inches; timbers fastened with ¾-inch drift bolts; flooring 3 inches by 12 sawn fir planks, 16 feet long.

No. 2 BRIDGE, 33 feet long, near No. 1, Elgin.

Repairs performed by Thos. Dixon.

Stringers levelled and blocked up; re-covered with 3 inches by 12 inches sawn fir plank, 16 feet long.
Total cost of 3 bridges, about $140.

SCOTT ROAD.

General repairs. Robert Gray, Foreman.

16 chains graded, ditched and gravelled, 12 feet wide and 9 inches deep; 2 culverts replaced; ditches cleared out where required, brush and logs cut out and removed, roots and rocks removed from surface of road, and all bad holes along the entire distance of road filled in with gravel.

Amount expended	$415 00
Clearing off fallen timber	23 00
Total	$438 00

BRIDGE REBUILT ON SCOTT ROAD, length 84 feet.

Work performed by James Gunn.

4 spans, 21 feet each; 2 uprights and 2 lateral posts in each bent, 10 inches by 10 inches, resting on sills; corbels 10 inches by 10 inches, 6 feet long; 4 sets of stringers, 10 inches by 14 inches; 2 cribbed abutments, 6 feet high; flooring, 2 inches by 12 inches sawn fir plank; ribbons, hand-rails, and angle braces of sawn lumber; the timbers of hewn cedar; the whole structure secured with $\frac{3}{4}$-inch iron drift bolts and headed bolts, with nuts and washers.

Height of bridge, 15 feet. Cost about $265.

KIRKLAND ROAD.

Robert Gray, Foreman.

The brush overhanging the road cut and removed, logs removed and the bad holes along the road filled in with rock and gravel; the culverts and tail drains cleaned out, and several culverts re-covered.

Amount expended, $115.

HALL'S PRAIRIE ROAD.

Brushing and removal of logs, stumps and roots; widening out the road at different points, ditching and placing corduroy.

The work carried out by the Surrey Municipal Council. Appropriation, $200.

COQUITLAM AND PITT MEADOW ROADS.

Jesse Flint, Foreman.

About 2 miles has been forest cleared, logged and made passable, and for a distance of one mile all the stumps and roots have been removed and the road graded 14 feet wide. When this road is completed through to the Pittendrigh's ranch it will give an outlet to all the settlers on Pitt Meadows and on the eastern bank of the Coquitlam.

Appropriation, $600.

PITT RIVER ROAD (from the east bank of the Brunette to Pitt River).

James Gunn, Foreman.

Brush cut and logs removed.

Repairs to 3 bridges, and 1 bridge re-built, 40 feet long, 10 feet high, 14 feet wide; 2 spans, 4 sets of stringers; the whole structure fastened with $\frac{3}{4}$-inch iron drift bolts; flooring, 3-inch by 12-inch sawn fir plank; hand-rails and braces. Adjoining the bridge, where corduroy had been laid on stringers, a solid fill has been made 230 feet lineal, and, on an average, 3 feet high, 22 feet burm, and 14 feet wide, across surface of road.

32 chains ditched, graded, and gravelled, 12 feet wide, and 10 inches deep.

Culverts repaired and cleared out, and all bad holes along the road filled in with gravel.

Amount expended, about $540.

CAPILANO VALLEY ROAD (from the north shore of Burrard Inlet toward the head of the valley).

A. N. Beaton and Peter McMillan, Foremen.

Forest cleared, 22 feet wide; logs removed, 18 feet; and road graded an average width of 12 feet.

Bridge constructed, 26 feet long, 6 feet high, 13 feet wide; 4 sets of stringers, 12 inches by 12 inches, covered with split cedar.

112 feet of corduroy, placed 3 inches thick and 14 feet long.

Distance opened, about 1½ miles.

As this road commences at the outlet of a creek which is only navigable at half and high tides, and the channel being difficult to find, a line of tall posts has been placed along the banks of the channel to guide boats entering.

Amount expended, about $513.

PORT KELLS ROAD, SURREY.

Towards the construction of a bridge, fill, and cut.

This work undertaken and now being carried out by the Surrey Municipal Council.

Amount appropriated, $250.

IMPROVEMENT OF LYNN TRAIL AND SEYMOUR VALLEY AND HOWE SOUND TRAIL.

Peter McMillan, Foreman.

Brushed out 14 feet wide, and logs removed, 10 feet.

160 feet corduroy placed.

2 bridges rebuilt, 17 feet and 26 feet, respectively; 3 sets of stringers in each bridge; covering, 2½-inch split cedar.

2 bridges repaired.

12 chains of side hill graded.

Total distance made passable for pack animals or sleds, 3 miles.

Amount expended, $300.

GORDON ROAD (known and described as the Clover Valley Road), north to Fraser River.

Alex. J. Gordon, by agreement.

Forest cleared and logged 33 feet wide.

Knolls graded down and hollows filled in, and the road made passable for sleds.

Distance opened, 40 chains.

The settlers intend putting considerable voluntary labour on it this winter, to extend and improve the road. When constructed through to the Yale Road, it will be the direct outlet to the river for the settlers of Clover Valley and Serpentine Flats.

Amount appropriated, $150.

SKINNER ROAD (commencing at the ¼ Section post between Sections 24 and 25, Township 14, and extending to the river).

Work performed by Thomas Chester and J. O. Manzer.

Forest cleared 26 feet wide; roots and stumps cut close, 12 feet wide.

1,160 lineal feet of corduroy placed 2½ inches thick, 10 feet long, and covered with clay.

About 30 chains of ditch dug, 2 feet by 2 feet 6 inches.

2 culverts.

4 bridges about 4 feet high, 12, 16, 18, and 26 feet, all loaded with clay.

Distance, about 1½ miles.

Total cost, about $300.

BIGGER ROAD, LANGLEY.

Thos. Bigger, Sr., Foreman.

Cutting down timber and brush; removing roots, stumps, and logs; grading, ditching, and laying corduroy.

Distance, about 3½ miles.

Appropriation, $300.

RINN ROAD, LANGLEY (from Yale Road south, between Sections 35 and 36, Township 7).

Joseph Rinn, Foreman.

Forest cleared, brushed, and logs removed, 33 feet wide; stumps and roots removed, 12 feet wide; 69 feet of corduroy placed; hill cut down 3 feet 9 inches for a distance of 110 feet; about 10 chains gravelled 12 feet wide, and 6 inches deep.

Distance opened, 1½ miles.

Appropriation, $200.

Amount expended, $209.

TEBBS ROAD (between Sections 3, 4, 9, 10, 15, and 22, Township 11, to intersect with the Town Line Road to Langley Fort).

T. W. Graham, Foreman for the extension and improvement of the section of road opened last season.

Forest clearing, brushing, and removal of logs, and for a distance of about 16 chains the road to be graded to a width of 9 feet along the face of a gulch.

This work not completed.

Appropriation, $150.

BEATON ROAD, LANGLEY, north from the Yale Road, between Sections 34 and 35, Township 10.

A. Beaton, Sr., in charge.

To assist in opening the road, the work to be done during the present winter by the settlers, they having agreed amongst themselves to construct a bridge and make the road passable by voluntary labour.

Appropriation, $100.

ROAD FROM THE YALE ROAD NEAR YORK'S TO THE BOUNDARY LINE, SUMAS.

William Russell, Sr., Foreman.

Removal of roots, stumps, and logs; straightening and widening the road; ditching, grading, and corduroying.

Appropriation, $200.

ACKERMAN ROAD, SUMAS.

William Russell, Sr., Foreman.

Forest cleared, brushed, and logs removed; grading, ditching, and placing corduroy.

Appropriation, $150.

MOUNT LEHMAN ROAD (from Yale Road to the river landing).

Alexander McCallum, Foreman.

Brush, some overhanging trees, and logs cut and removed; roots and stumps grubbed out; and at different points the road has been widened and straightened; about 80 chains graded and ditched; 260 lineal feet of corduroy placed; 2 bridges repaired; 3 new culverts and tail drains.

On the Landing hill the road has been widened out at different places, wash-outs filled in, slides removed, and the grade at one part reduced 2 feet 6 inches.

The ditches and culverts cleaned out and deepened; a box culvert, 2 feet square and 22 feet long, placed across the road to carry off the hill water.

Amount expended, about $430.

MCDOUGALL AND BURGESS ROAD, MOUNT LEHMAN.

Alexander McCallum, Foreman.

Road forest cleared and brushed out 20 feet wide, and roots and stumps cut close to the ground 10 feet wide; knolls graded down; 46 lineal feet of corduroy placed; 1 bridge, 12 feet long, covered with split cedar.

Distance opened, 40 chains.

Appropriation, $40.

MARSH AND CRAIG ROAD, MOUNT LEHMAN.

William Marsh, Foreman

Extending this road from Marsh and Craig's to intersect the King Road, thereby giving the settlers a direct outlet to the Landing.

Forest cleared and brushed, 22 feet wide; logs removed, 16 feet; roots and stumps cut down close to the ground and 14 feet wide; hillocks graded down and hollows filled, and along the face of a deep ravine for a distance of 22 chains the road has been built up and graded 12 feet wide; 2 bridges, 26 and 45 feet, respectively, 12 feet wide, covered with split cedar; 90 lineal feet of corduroy placed.

Distance opened, 80 chains.

Appropriation, $150.

MORRISON ROAD, MOUNT LEHMAN.

Money expended by Wm. Morrison.

Forest clearing and brushing, 14 feet wide; 150 lineal feet of corduroy placed.

Distance, 38 chains.

Appropriation, $50.

PHILLIPS AND WHITE ROAD (Township line, Mount Lehman).

H. R. Phillips, Foreman.

Forest cleared and brushed 18 feet wide; logs removed, 14 feet wide, and, along the face of a gully, the road has been graded for a distance of about 9 chains to a width of 9 feet.

The work performed on this road includes about forty days' voluntary labour given by the settlers who will be benefited.

Distance, 69 chains, made passable for ox waggon or sled.

Appropriation, $80.

COGHLAN AND NICHOLSON ROAD, MOUNT LEHMAN.

M. Nicholson, Foreman.

Brushed out and logs removed, grades on several of the hills reduced, stumps and roots removed, and about 60 lineal feet of corduroy placed; distance repaired, 1½ miles.

Appropriation, $50.

CONTINUATION OF ROAD THROUGH FRENCH SETTLEMENT, HATZIC VALLEY, TOWARD STAVE LAKE.

L. Thompson, Foreman.

Forest cleared and brushed 20 feet wide, logs removed 16 feet wide, roots and stumps removed or cut down level with the ground; 2 bridges, 18 feet and 36 feet respectively, covered with split cedar; about 26 chains graded, 12 feet wide, along the face of a ravine; for a distance of about 10 chains the road has been cut and built up to a width of 10 feet; about 200 lineal feet of corduroy placed.

Distance constructed this season, 1¼ miles.

Appropriation, $500.

IMPROVEMENT OF ROAD ALONG THE EAST SIDE OF MOUNTAIN, HATZIC PRAIRIE.

Work performed by Albert Dion.

Brush and logs on both sides of road cut and removed, and along the bluffs the road graded, and widened to 12 feet.

Bridges repaired, new ditches cut, and old ditches cleaned out.

Distance repaired, 1¾ miles.

Appropriation, $100.

IMPROVEMENT OF TRAIL FROM BREELEY AND THOMPSON'S ALONG THE WEST SIDE OF THE VALLEY, NORTH.

L. Thompson, Foreman.

Brushed out, and fallen trees removed, corduroy placed over soft spots, rocks and roots removed.

Distance repaired, about 1 mile.

Appropriation, $60.

GERMAIN ROAD (rear of Chilliwhack).

James Germain, Foreman.

To improve and extend the road built last season.

This work will not be begun before the end of December.

Appropriation, $100.

NICOMIN ISLAND ROAD (extending from S. McDonald's Landing to the westerly end of the Island, at a point opposite Prestley's store and Post Office, Johnson's Landing).

For a distance of about 1¼ miles the road has been forest cleared, brushed out, and logs removed, 33 feet wide.

The above was let to S. McDonald for $140, and for a further sum of $260 the following work has been let to S. McDonald, and is now being carried out, viz., to remove stumps and roots for a width of 20 feet, to plough and round up the road 14 feet wide.

1 fill, 210 lineal feet, 16 feet burm, 14 feet surface, 2 feet high.

1 fill, 528 ,, 16 ,, 14 ,, 3 ,,

4 bridges, 14 feet, 48 feet, 20 feet, and 11 feet, respectively.

3 sets of stringers, and covered with 3-inch split cedar, width of bridges, 13 feet.

The distance of 1¼ miles to be harrowed and seeded down with grass and timothy.

Total distance of road from McDonald's Landing to the westerly end of the Island, 4½ miles.

Appropriation, $400.

ABERCROMBIE ROAD (from St. Mary's Mission North).

John R. Wren, Foreman.

Brushing out, removing logs, placing corduroy, repairs to culverts, ditching and filling up holes on road, and changing the line of road for a distance of 15 chains, which has been forest cleared, brushed, and logged, 30 feet wide, and graded 14 feet wide. Distance about 3 miles.

Appropriation, $200.

THOMPSON AND BREELEY TRAIL (from Abercrombie Road to Hatzic Prairie).

L. Thompson in charge.

Brush cut, and logs removed, and soft spots overlaid with corduroy. Distance about 2½ miles.

Appropriation, $100.

CONSTRUCTION OF A BRIDGE ACROSS A SWALE ON THE NEWTON ROAD, JOHNSON'S LANDING.

Work performed by Geo. Newton.

Length 150 feet, height 4 feet, width 13 feet, 3 sets of stringers resting on cribs and mud sills, covered with split cedar 4 inches thick, loaded with clay 2 feet deep.

Appropriation, $50.

ALTERATIONS TO LILLOET BRIDGE, MAPLE RIDGE.

William Murray, Foreman.

The superstructure raised entire 2 feet by means of jack screws, and two courses of timbers added to height of abutments, the structure lowered into position and bolted down. It was also found necessary to add 75 feet to the length of the approaches, viz., 3 bents

resting on mud sills, 4 sets of stringers, floor covered with 2-inch by 12-inch sawn fir plank, angle braces, and hand-rails of sawn lumber, the whole secured with $\frac{3}{4}$-inch iron drift bolts, and 6-inch spikes.

Cost of alterations, $453.52.

WALWORTH ROAD, Glenwood Settlement.

C. Walworth in charge.

Brushing out and removing logs, and grading a new piece of road along the face of two bluffs for a distance of about 14 chains, also extending the road further east.

Distance of road now open and passable for teams, 3 miles.

Appropriation, $100.

MCRAE SETTLEMENT ROAD (formerly known as Trail running North from Wren road).

John R. Wren, Foreman.

The trail widened out to 22 feet, roots and stumps removed, knolls graded down, and hollows filled in, and about 200 lineal feet of corduroy placed.

This trail has been converted into a fairly passable road for a distance of $3\frac{1}{2}$ miles.

Appropriation, $150.

WHARNOCK SETTLEMENT ROADS.

Forest clearing, brushing, and grading, and constructing bridges.

Appropriation, $500.

The above work carried out by the Maple Ridge Municipal Council.

TRUNK ROAD (from Jackman's Corner, on the Yale road, Aldergrove, and extending North to the Fraser River at McLennan's Landing).

J. Sherlock, Foreman.

Road brushed out, and logs and fallen timber removed, roots and stumps removed, knolls graded down, and holes filled in, old corduroy repaired, 80 lineal feet new corduroy placed.

1 bridge built, 47 feet long, covered with split cedar.

Appropriation $250

Clearing off fallen timber, 15. Total, $265.

WALKER TRAIL (from Jackman's Corner South toward the Boundary line).

P. Jackman, Foreman.

Brushed out, logs removed, stumps and roots removed, and holes filled in with brush and covered with gravel, culverts and bridges repaired.

Distance about 3 miles.

Appropriation, $150.

ALLPORT AND ROB ROAD, ALDERGROVE.

J. Robb in charge.

Logs and stumps removed, 30 feet wide, and the road ditched and graded for a distance of about 36 chains, and general repairs to about 1 mile of old road.

A large proportion of the above work has been done by voluntary labour, this being the first Government money expended on this road.

There are about eight settlers who use the road, and it is one of the best in the whole settlement.

Appropriation, $100.

ROAD FROM SHORTREED'S CORNER, SOUTH TOWARD THE BOUNDARY LINE, ALDERGROVE.

B. Haines, Foreman.

Forest cleared and brushed 30 feet wide, stumps and roots removed, ditching and grading about 60 chains, 12 feet wide.

Brush cut and logs removed on section previously constructed.

This road is now open to within about 45 chains of the International Boundary Line.

Appropriation, $200.

SPROTT AND KIRBY ROAD (on the line between Townships 7 and 10).

C. F. Sprott in charge.

Forest cleared and brushed out, 26 feet wide, logs removed 18 feet wide, knolls graded down, and holes filled in, 160 lineal feet of corduroy placed, road made passable for ox team or sled.

Distance opened $\frac{3}{4}$ mile.

Appropriation, $100.

BUTCHARD AND ANNAND ROAD, GLENWOOD SETTLEMENT.

George Annand, in charge.

Forest cleared and brushed out 22 feet wide; logs removed 16 feet wide; several stumps grubbed out; about 120 lineal feet of corduroy placed; 1 bridge, 24 feet long; about 4 chains of side hill graded 12 feet wide; several hillocks graded down and holes filled in.

Distance constructed 80 chains.

Appropriation, $150.

REPAIRS TO NORTH ARM ROAD (from the junction of the Richmond and Vancouver Trunk Road westward to Henry Mole's).

James Gunn, Foreman.

Brush on both sides of road cut and removed; logs and fallen timber removed outside the ditches; holes filled in with gravel; about 10 chains of ditch dug; 166 lineal feet of corduroy placed; 15 chains gravelled, 12 feet wide, 10 inches deep; bridges repaired.

Amount expended about $200.

NEW WESTMINSTER AND NORTH ARM TRAIL (extending from the western boundary of New Westminster City to William Rowling's, North Arm).

Work performed by James Gunn.

Cutting brush and logs, repairing corduroy, and grading the trail along the face of a ravine.

Amount expended about $36.

NEW WESTMINSTER AND HASTINGS ROAD.

T. H. Cudlip, Foreman.

From New Westminster City boundary to Hastings the road has been thoroughly brushed out, the logs and fallen timber removed, ditches at different points cleaned out, culverts repaired, the worst holes on road filled in, 100 lineal feet of corduroy placed, tail drains cleaned out, and 4 bridges repaired. Distance 7 miles.

Amount expended, $393.

PORT MOODY ROAD (from the Brunette River to Port Moody Hill).

T. H. Cudlip, Foreman.

Where required the brush has been cut, the logs and fallen timber removed, 3 washouts filled in, 3 culverts re-covered, and two new culverts constructed and the worst holes along the road filled in with gravel.

About 8 chains of ditch dug, and ditches and tail drains at different points cleaned out and deepened.

Distance about $3\frac{3}{4}$ miles.

Amount expended about $150.

NEW WESTMINSTER, HOPE AND YALE TRUNK ROAD, SECTION 1.

William Murray, Foreman.

Change of grade on Murray's Hill, distance about 20 chains.

Partly forest cleared; roots and stumps removed; 100 lineal feet of corduroy placed, 4 inches thick, 16 feet long; 1 culvert, 9 feet by 3 feet, covered with plank 16 feet long; the road ditched and graded 16 feet wide; about 4 chains gravelled 10 inches deep, 13 feet wide.

West of Murray's Hill, towards Bovill's Saw-mill, road ditched, holes filled with rock, graded and covered with gravel of the best quality at hand; near Murchison's farm, about 100 loads of rock hauled and a washout along the side of road filled in; about 6 chains of the road graded and ditched and 1 box culvert constructed.
Amount expended, $1,027.78.

SECTION TWO.

Robert Coghlan, Foreman.

For a distance of about 2 miles the brush and logs cut and removed; about 100 lineal feet of corduroy placed at different points and some of the worst holes filled in.
Bridges repaired and rebuilt.

SUMAS CREEK BRIDGE.

Centre pier and abutments levelled and partly rebuilt; flooring of bridge and approaches repaired; new hand-rail and ribbons.
Covering of 2 small bridges repaired and loaded with additional earth.
Repairs to timbers and flooring of 3 bridges.

ROSCOE'S BRIDGE.

Abutments levelled and part rebuilt and a portion of the covering renewed.
4 bridges rebuilt, 60 feet, 82 feet, 81 feet, and 108 feet, respectively. Timbers, hewn red fir and cedar; 4 sets of stringers to each bridge, 12 inches by 14 inches; split cedar covering 3 inches thick; ribbons, hand-rails and braces.
Amount expended about $643.

REPAIRS TO HOPE AND YALE ROAD (from Popcum to Shannon Mountain).

John Ryder, Foreman.

A portion of the old road brushed out, logs and roots removed and holes filled in with brush and earth; culverts repaired, and along Shannon Mountain a new piece of road has been partly opened up through Lots 374, 336 and a portion of 334, G. 2.
Forest cleared, logs and roots removed and a roadway 18 feet wide formed, ditched on both sides. This piece of road will require to be graded and gravelled before it is fit for traffic.
Amount expended about $1,380.

DELTA TRUNK ROAD.

Gravelling and other repairs.
Work carried out by the Delta Municipal Council.
Appropriation, $1,000.

CONSTRUCTION OF A BRIDGE across a slough on the Passingham Road, Agassiz.

D. Robertson, in charge.

Length 72 feet; 2 bents; 4 sets of stringers; covering 4-inch split cedar; ribbons, hand-rails and braces.
Cost of construction about $50.

REPAIRS TO NORTH ROAD, PORT MOODY.

T. H. Cudlip, Foreman.

Removal of fallen timber, filling up washouts and ruts; about 26 chains of ditch dug; rocks and roots removed from surface of road; corduroy repaired.
Amount expended about $96.

NEW WESTMINSTER AND VANCOUVER TRUNK ROAD.

This road has been kept in very good condition during the past season by the section-man in charge. The following extra repairs have also been carried out, viz.:
30 chains gravelled 8 inches deep, 13 feet wide; distance of haul, $3\frac{3}{4}$ miles.

3 bridges—110, 66, 68 feet respectively—re-covered with fir plank 3 inches by 12 inches, by 18 feet.
For about 3 miles on both sides of road the timber has been cut down fully 100 feet back from sides of road.
3 new culverts constructed.
Appropriation, $1,000.

VANCOUVER AND RICHMOND TRUNK ROAD (extending from the southern boundary of Vancouver City to the Sea Island bridge).

James Gunn, Foreman.

20 chains forest cleared 66 feet wide; stumps and roots removed 22 feet wide; road graded 20 feet wide, ditched on both sides.
240 feet of cut, 2 feet by 24 feet.
1750 feet of rock foundation, 10 inches deep, 14 feet wide.
4 miles graded, and gravelled to an average depth of 6 inches and 14 feet wide.
Ditches deepened and widened to 18 inches by 24 inches. Tail drains dug from 60 to 200 feet long.
360 feet of corduroy placed, 4½ inches thick, 20 feet long.

Government appropriation	$3,000 00
C. P. R. grant	2,000 00
Total amount	$5,000 00

McLAREN ROAD (from Barnett Station to the North Road, Port Moody).

A. N. Beaton, Foreman.

Forest cleared to an average width of 33 feet; stumps and roots removed; 18 feet graded 13 feet; about 80 chains of side hill cutting averaging 2 by 8 feet; 100 lineal feet of corduroy placed; 4 chains gravelled; 6 culverts, averaging 5 feet wide; 20 bridges, averaging 20 feet each in length, 12 feet wide; 4 sets of stringers; covering of split cedar, 3 inches thick.
Distance about 1¾ miles.
Appropriation, $2,000.

McLENNAN ROAD, SURREY.

Repairs near Clover Vallay Railway Crossing.
About 15 chains ditched, graded, and corduroy placed.
Work carried out by Surrey Council.
Appropriation, $150.

VANCOUVER AND NORTH ARM TRUNK ROAD (from the Cemetery, south to the Fraser River).

James Rea, Foreman.

Bridge, 80 feet long, partly rebuilt, viz.: 2 bents, 4 sets of stringers, and the whole structure re-covered with fir plank 3 inches by 12 inches, 18 feet long; new ribbons, rails and braces.
Repairs to road; 26 chains of corduroy placed, 4 inches thick and 14 feet long, covered with 3 inches of earth; ditches and tail drains cleaned out; about 3 chains of road gravelled; fallen timber cut and removed.
Amount expended on bridge:

Repairs	$137 56
Repairs to road	320 00
Total	$457 56

SUMAS AND CHILLIWHACK TRUNK ROAD.

For general repairs and laying on gravel.
Appropriation, $400.
Work to be carried out by the Municipal Council.

Yale-Cariboo Waggon Road.

MAIN TRUNK ROAD, SECTIONS 1 AND 2—EMORY TO SAVONA.

Arthur Stevenson, Superintendent.

EMORY TO YALE—4½ MILES.

W. L. Flood, Contractor, $120.

Made new cribbing along Emory Creek, 95 feet long, 5½ feet high; built 30 feet of rock wall, 4 feet high, and made good defective places in the road.

SPUZZUM TO 15-MILE HOUSE—5 MILES.

Cleared out fallen timber, slide rock; repaired the crib work and bridges, and made the road passable.

SUSPENSION BRIDGE.

Neil Black, Contractor, $75.

Made general repairs, re-fastened the guys, and painted the cables with white lead.

JACKASS MOUNTAIN TO SPENCE'S BRIDGE—38 MILES.

A trail has been kept open.

SPENCE'S BRIDGE TO SAVONA—43 MILES.

The road has been thoroughly cleaned out, culverts repaired, and ruts filled.
The branch road from Cornwall's to Ashcroft has been kept in good repair.
Tightened up all the bolts in Savona Bridge, replaced planks on piers, and painted the entire superstructure with a good coat of mineral paint.

DEADMAN CREEK BRIDGE.

Built a new bridge across the creek in place of the old one. Length, 175 feet; main span, 64 feet, with straining beam truss; width, 15 feet in the clear; two abutments and three bents, four stringers on each span; flooring, 3 by 12 inches by 16 feet; hand-rail posts, 3 by 4 inches; guard rail posts, 3 by 5 inches; centre rail posts, 1½ by 6 inches; fence rail post, 2 by 4 inches; top rail posts, 2 by 5 inches.

ASHCROFT BRIDGE.

Tightened all bolts, painted superstructure, re-planked floor with 2-inch plank on top of old plank, re-constructed hand-rail, lengthened posts and made hand-rail 10 inches higher than it was.

NICOLA BRIDGE.

Bolts have been all tightened, and superstructure painted.

SECTIONS 3 AND 4—CACHE CREEK TO SODA CREEK—157 MILES.

James Robertson, Foreman. Salary, $130 per month.

	Men.	Days.	Rate per Day.
February, March, and April—Guarding against melting snow; diverting snow-water; filling in ruts; removing rocks; cutting out snow drifts	5	72	$2.50
May—Light repairs, Clinton to Soda Creek, throwing out rocks, moving slides, &c.; graded 850 yards, 6 feet wide; 450 yards, 4 feet wide; covered one bridge 30 feet long, 18 feet wide; one bridge, 21 feet long, 18 feet wide, covered with fir, hewed on top, 10 inches in diameter	7	161	2.50 to 2.75
June—Made 300 yards new road, 12 feet wide; clearing out loose rocks; removing brush; graded 948 yards, 5 feet wide; 800 yards, 4 feet wide; 750 yards, 3 feet wide; gravelled 350 yards, 15 feet wide, 10 inches deep; 450 yards, 12 feet wide, 8 inches deep; one bridge, 18 feet long, 18 feet wide, 4 feet high;			

	Men.	Days.	Rate per Day.
one bridge, 60 feet long, 18 feet wide, 6 feet high; one bridge 30 feet long, 12 feet wide, 4 feet high, all covered with hewn timber on top side; one new bridge 30 feet long, 12 feet wide, 4 feet high; two culverts, 18 feet long, 3 feet wide, 2 feet high; 5 culverts, 18 feet long, 5 feet wide, 3 feet high; sills, 6 inches in diameter and hewn on top	7	144	2.50 to 2.75
July—Clearing out section 4, Bridge Creek to Soda Creek, of rocks and slides; cutting out water-courses; cleaning out culverts, &c.; clearing section 3, Cache Creek to 124-Mile House, of rocks and slides; filling in ruts, &c.; forest cleared 1,800 yards, 25 feet wide; graded 570 yards, 3 feet wide; 300 yards, 5 feet wide; gravelled 225 yards, 15 feet wide, 10 inches deep; 300 yards, 12 feet wide, 8 inches deep; covered two bridges, No. 1, 24 feet long, 18 feet wide; No. 2, 40 feet long, 18 feet wide; two culverts, each 18 feet long, 4 feet wide, 3 feet high	12	247	2.50 to 2.75
August—Gravelling, grading, and forest clearing; removing rocks; clearing water-courses and culverts, &c., &c.; forest cleared 1,760 yards, 30 feet wide; graded 1,200 yards, 5 feet wide, and 500 yards, 6 feet wide; gravelled 800 yards, 14 feet wide, 12 inches deep; 200 yards, 14 feet wide, 15 inches deep; 1 bridge, 10 feet long, 18 feet wide, 3 feet high; 2 culverts, each 18 feet long, 4 feet wide, 2 feet high	8	171	2.50 to 2.75
September—Work principally consisted of gravelling, grading, removing large boulders; cutting out brush and clearing out loose rock; forest cleared 3,000 yards, 30 feet wide; graded 500 yards, 4 feet wide; 1,800 yards, 6 feet wide; gravelled 500 yards, 12 feet wide, 8 inches deep; 800 yards 15 feet wide, 9 inches deep; 300 yards, 14 feet wide, 18 inches deep; 3 culverts, each 18 feet long, 4 feet wide, 3 feet deep; sills 18-inch, stringers 10 inches, cover 10 inches hewed on top	13	289	2.50 to 2.75
October—Section 4, repaired throughout and cleared off loose rocks, slides, &c.; section 3, work consisted principally of grading, opening water-courses and constructing 400 yards ditching; forest cleared 1,760 yards, 30 feet wide; 800 yards, 20 feet wide; graded 760 yards, 4 feet wide; 900 yards, 3 feet wide; 300 yards, 6 feet wide; gravelled 900 yards, 16 feet wide, 12 inches deep; 785 yards, 14 feet wide, 14 inches deep; one bridge, 10 feet, 18 feet wide, 3 feet high; 1 bridge, 27 feet long, 18 feet wide, 5 feet high; 1 culvert, 3 feet wide, 18 feet long, 3 feet deep; 1 culvert, 4 feet wide, 18 feet long, 2 deep; 1 culvert, 4 feet wide, 20 feet long, 2 feet deep; 1 culvert, 4 feet wide, 20 feet long, 2 feet deep; fir timber, all barked, covering hewed on top side	13	337	2.50 to 2.75
November—Work done on the north end of section 4 in repairing bridges and making new culverts; clearing out rock and slides and opening water-courses on sections 3 and 4; one bridge, 21 feet long, 18 feet wide, 4 feet high; one bridge, 24 feet long, 18 feet wide, 5 feet high; 1 bridge, 12 feet long, 18 feet wide, 3 feet high; 1 bridge, 21 feet long, 18 feet wide, 5 feet high; 2 culverts, each 6 feet wide, 18 feet long, 3 feet deep; 8 culverts, each 4 feet wide, 18 feet long, 3 feet deep; fir timber, barked; sills, 14 to 18 inches; covering hewed on top, 8 to 10-inch face	10	77	2.50 to 2.75

SECTION 4, SODA CREEK BRIDGE.

J. H. St. Laurent, Superintendent.

Owing to the unsafe condition of the high bridge across Soda Creek, a new one was put in on the lower level near Collins' mill, and the high sand hill on the south side piped away, making a good approach thereto.

The cost of this work was, approximately, $2,000.

(N.B.—Although not on his section, the above work was performed by Mr. St. Laurent by special request).

SECTION 5, SODA CREEK TO QUESNELLE—56 MILES.

J. H. St. Laurent, Superintendent.

Sixteen piles were driven under the north pier of the Quesnelle River bridge, the old piles having been washed away.

Re-built 3 bridges: one 60 feet long, 18 feet wide; one 42 feet long, 18 feet wide; and one 37 feet long, 18 feet wide.

Re-covered 230 feet of bridging, 20 feet wide; also repaired 4 smaller bridges.

Put in 8 culverts, 4 feet wide, and 18 feet long.

Distributed along the road, for use, 4,000 feet of cribbing.
Put in 972 feet of cribbing, 4 to 10 feet high.
Gravelled 3,601 yards of road, 8 to 10 feet wide, and from 6 to 10 inches deep.
Cut 4,050 yards of ditching, 12 to 18 inches deep.
Cleared brush 9 miles along sides of road, from 10 to 50 feet wide, and other general repairs.
The Howe truss in the Quesnelle River bridge beginning to show weakness, Mr. Rocket, at the request of the road superintendent, was sent up to inspect it, upon which, it is presumed, Mr. Rocket will report

SECTION 6, QUESNELLE TO BARKERVILLE—60 MILES.

J. H. St. Laurent, Superintendent.

Gravelled 7,116 yards of road, 8 feet wide, 6 to 10 inches deep.
Put in 59 new culverts.
Built 4 new bridges: one 25 feet long, and 25 feet high; one 15 feet long, and 8 feet high; two 12 feet long, and 6 feet high.
Cleared brush 12 miles along sides of road.
Put in 3,500 feet of cribbing, 4 to 8 feet high.
Repaired abutments and approaches to Cottonwood River bridge, and made other general repairs between Quesnelle and Richfield.
On the new road between Stanley and Barkerville, *via* Slough Creek, the road has been widened in places from 2 to 8 feet, which necessitated a great amount of rock blasting.

———o———

Yale District.

NICOLA SECTION—37 MILES.

Arthur Stevenson, Superintendent.

This section was seriously damaged by a heavy rain storm in February last, washing the road away in many places, and in other places completely filling the road up with gravel and mud slides, consequently the expenditure was much heavier during the months of March, April, and May than the preceding year. All slides and washouts were cleaned out and repaired, ruts filled in, and the road placed in thorough good order early in the season.

NICOLA ROAD IMPROVEMENT (new work).

Changed the line of the road at three of the steep hills, the first and second about 20 miles from Spence's Bridge, the third about 27 miles. The distance of the new road at the first and second hills is about 2½ miles; width of road, 15 feet. A considerable portion of this was heavy side hill cutting. The change has almost made a level road.
1 bridge, 15 feet long, 6 feet high, 16 feet wide.
1 ,, 18 ,, 10 ,, 16 ,,
1 ,, 20 ,, 6 ,, 16 ,,
About 400 lineal feet of cribbing, 5 feet high.
At hill No. 3, where the road ran over a high point, and thence down the river again, a new road, for a distance of half a mile, was made just a little above high water on a level grade. This was a heavy piece of side hill cutting and blasting.
Rock blasting, 325 cubic yards.
Cribbing, 500 lineal feet, 7 feet high.

BRITANNY AND CLOVER VALLEY.

Arthur Stevenson, Superintendent.

Labour in October, 237½ days, $455.96.

Made a new road, from 8 to 9 feet wide, commencing about two miles north of the Thompson, and running in an easterly direction to McKay and Loring's, Clover Valley; distance, 5 miles. The work was light side hill grading nearly the whole distance.

ASHCROFT TO BARNES' FLATS.

Philip Park, Contractor, $600.

Arthur Stevenson, Superintendent.

Made a new road, commencing near Ashcroft, and running into Barnes' upper flat; distance, $\frac{7}{8}$ of a mile.

LILLOOET TRAIL.

Thoroughly cleaned out from Lytton to Foster's Bar; distance, 23 miles.

All fallen timber cut out and removed; gravel slides shovelled out, and all necessary repairs made.

HOPE TO POPCUM—23 MILES.

Wm. Bristol, Foreman.

Made general repairs, and kept the road in condition for traffic.

HOPE-NICOLA TRAIL—80 MILES.

Wm. Bristol, Foreman.

Cut out fallen timber, repaired bridges and cribbing, and kept the trail in good order all season.

HOPE TO KEREMEOS—110 MILES.

Wm. Bristol, Foreman.

Cleaned out loose rock and earth slides, repaired culverts, built one new bridge, cut out fallen timber, and made general repairs.

———o———

Kamloops District.

KAMLOOPS TO A. J. VENN'S (North Thompson, west side), 18 miles.

Arthur Stevenson, Superintendent.

Road cleaned out thoroughly; slides removed, holes filled, all bridges and culverts repaired.

Built 1 bridge, 25 feet long, 14 feet wide, covering 3-inch plank.
,, 2 culverts, 4 ,, 14 ,, ,, ,,
,, 1 bridge, 30 ,, 14 ,, ,, flattened logs.

KAMLOOPS TO KNOUFF'S (North Thompson, west side), 20 miles.

Made general repairs; constructed new bridge across slough on Indian reserve 75 feet long, 14 feet wide, 10 feet high; main span, 45 feet; approaches, 16 feet and 14 feet; stringers, 3 to each span, 10 inches by 14 inches; flooring, 3 inches by 12 inches by 14 feet; guard rail, 3 inches by 5 inches.

1 bridge, 20 feet long, 16 feet wide; covering, 3-inch by 12-inch plank.

3 new culverts, 3 feet long, 2 feet deep, 14 feet wide.

LOUIS CREEK TRAIL.

A good trail has been constructed from Adams' to Louis Creek, North Thompson River, a distance of 10 miles.

KAMLOOPS TO TRANQUILLE—9 miles.

General repairs made throughout. Holes and ruts filled, culverts cleaned.

THOMPSON RIVER BRIDGE.

The turning gear, which was slightly damaged last fall by the steamer running against the pier, has been repaired and is now in good working order.

KAMLOOPS TO SAVONA—30 miles.

Road cleared entire length; rocks and slides removed; culverts opened; ditches cleaned out.
Total cost of labour, $196.53.

KAMLOOPS TO SHUSWAP—35 miles.

Made general repairs; mud slides removed; washouts filled; culverts built and repaired.
1 new culvert, near Shuswap, 5 feet long, 14 feet wide, 2 feet deep.
1 corduroy bridge, 30 feet long, 14 feet wide.
1 bridge, 20 feet long, 14 feet wide; covering, 3x12x14-inch plank.
2 culverts.

DUCK'S TO SALMON RIVER, GRAND PRAIRIE, 39 miles.

All necessary repairs made throughout; slides and fallen timber removed, ruts filled.
1 new culvert, 3 feet long, 14 feet wide.
1 „ 8 „ 14 „
1 bridge, 20 „ 14 „
1 culvert, 3 „ 14 „
Also a number of old culverts repaired.

TRAIL FROM GRAND PRAIRIE TO DOUGLAS LAKE.

Removed all fallen timber.
Cost of labour and material on the afore-mentioned roads and trails, viz.: Kamloops to Shuswap, Duck's to Salmon River, and trail from Grand Prairie to Douglas Lake, $410.50.

NICOLA, KAMLOOPS AND DOUGLAS LAKE ROADS.

These roads have been cleared and repaired the entire length, from Woodward's to Kamloops, and from Nicola Lake to Douglas Lake.
Rocks and slides removed, ruts filled, ditches re-opened.
Turnpiked 600 yards of alkali ground; altered road a distance of 300 yards from alkali ground to solid bank.
4 culverts, 4 feet long, 18 feet wide, 2 feet deep.
1 „ 3 „ 14 „ 2 „
1 „ 2 „ 14 „ 2 „
Gravelled 300 yards, 10 feet wide, 8 inches deep.
Covered bridge 15 feet long with 3 inch plank.
„ 23 „ 3 „
Cribbing 50 feet long, 6 feet high.
Widened road near Coutlie's for a distance of 2 miles; side cut, average depth 4 feet.
Cost of labour and material, $737.16.

SALMON ARM ROAD (west side of valley).

1 culvert, 2 feet long, 14 feet wide, 1 foot deep.
Ditching 75 yards, 2 feet deep; repaired corduroy.
Cost of labour, $25.

MAMIT LAKE ROAD (from Schwartz's to Mamit Lake.)

Length, 11 miles; width, 10 feet.
Graded entire length.
Cost of labour and material, $1067.12.

COLDWATER ROAD.

Graded 9 miles, 8 feet wide.
Culverts and ditches placed where necessary.
Cost of labour and material, $498.89.

CAMPBELL CREEK ROAD.

Graded 5 miles, 14 feet wide; built 300 lineal feet of cribbing, average height 6 feet.
The portion built last year has been repaired, widened and gravelled wherever necessary. This road is now completed from South Thompson River to Newman's. Road to Buse's has been generally repaired.
Cost of labour and material, $3,334.54.

MARTIN'S ROAD (Leading south from Thompson River to a valley lying between the said river and Grand Prairie).

Length 5½ miles; made passable for waggons.
Cost of labour, $324.22.

SALMON ARM ROAD (Commencing near the C. P. R. Station at Salmon Arm, running up the east side of the valley and connecting with old trail leading to Spallumcheen).

Constructed 4 miles passable for waggons, and cleared 2 miles more wide enough for a sleigh road.
Cost of labour and team hire, $495.

ADDITION TO KAMLOOPS SCHOOL HOUSE.

McGregor & Co., Contractors.
Frame building 20x30, with porch or cloak room 8x8, provided with hooks; covered with rustic; ceiled with tongued and grooved V ceiling; double floor, lined with paper; painted throughout, two coats, and finished.
Total cost of building, $684.

KAMLOOPS PRISON LABOUR.

River Street graded and repaired a distance of 1500 feet.
Victoria Street graded, ditched and gravelled, cleared off all loose rock and all box drains re-opened. Length about 1 mile.
Church Street graded and ditched east to Second Avenue, 750 feet by 66 feet wide. Dry rock wall on north side; length 250 feet, average height about 4 feet.
Second Avenue graded and ditched 500 feet by 60 feet; average cut and fill 2 feet.
Third Avenue graded, ditched and gravelled 256 feet by 60 feet wide.
Abbott Street graded, ditched and gravelled 1320 feet by 60 feet; gravel about 8 inches in depth. Built box drain 66 feet long, 2 inches by 1½ inch; material furnished by the C. P. Railway Co.
Road to C. P. Railway Station graded and ditched 600 feet long by 60 wide.
Sidewalks raised and widened to 10 feet by 300 feet in length. Built one culvert at west end of Station, 6 feet by 3 feet by 4 feet; material furnished by C. P. Railway Co.

KAMLOOPS GAOL.

Built division fence in Gaol yard, 37 feet long by 16 feet in height; box drain 38 feet long, 4 inches by 6 inches.
Constructed one new cell, 9 feet by 7 feet; walls made of scantling 2 inches by 4 inches; lined throughout with V ceiling; double floor; grating placed over window.

———o———

Osoyoos District.

William Bailey, Foreman.

The Government team commenced work on April 14th with one man filling in ruts, repairing culverts; put in new ones where required on Main Trunk Road to O'Keefe's and the Pleasant Valley road; gravelled portions of the Vernon road and rounded it up.

Cleared out and repaired road from Salmon River bridge to O'Keefe's; cleared out slides, &c., at Pelley's Hill, on the main road from O'Keefe's to Spallumcheen. When not used for moving camp at White Valley, the team has been employed during the summer gravelling the bad places along the Pleasant Valley road from Mr. Donald Graham's ranch to Spallumcheen.

OKANAGAN MISSION ROAD.

Donald Nicolson, foreman.

Gravelled that portion of Okanagan Mission road from the Post Office to the school-house; rounded up and ditched the road on both sides three-quarters of a mile, 12 feet wide and 9 inches deep.

MAIN TRUNK ROAD (from Enderby to Deep Creek).

Frederick Heathcote, Foreman.

Gravelled where required and rounded up road from Enderby to Deep Creek, 2 miles; gravelled 8 feet wide, 3 inches thick; graded Deep Creek and Salmon River road, new grade, 400 yards, 16 feet wide; grades cleared out on Mill road 450 yards; 12 to 18 feet cuts made in the Mill grades for teams to pass.

Gravelled piece of road from Enderby to Mountain, 400 yards, 8 feet wide and 3 inches deep.

Gravelled road half a mile from Deep Creek to Enderby, 8 feet wide, 3 inches deep; also gravelled by George Wallace's house, Deep Creek road, 200 yards, 8 feet wide, 4 to 6 inches deep.

PLEASANT VALLEY ROAD.

Frederick Heathcote, Foreman.

Brush cut out on either side of road, 5 miles, 4 feet wide; hills graded and cleared out where required; total length, 300 feet; 250 yards was ditched on either side of road.

SALMON RIVER AND ENDERBY ROAD.

Frederick Heathcote, Foreman.

Heavy grading 350 yards, 9 feet, the face of grade averaging 5½ feet; 300 yards, 9 feet, averaging 4 feet; 4 culverts, 18 feet long, width, 2½ feet, depth, 1 foot; ditching on either side of culvert, 100 feet; fir logs, and covered with 3-inch planking well spiked down.

VERNON TO CHERRY CREEK.

Louis Christien, Foreman.

General repairs from Vernon to Coldstream; graded, 500 yards, 15 feet wide; graded 2 miles, 2 to 15 feet wide; constructed bridge, 15 feet long, 16 feet wide, 5 feet high; stringers, 12 inches; planking, 4 inches; culvert, 12 feet long, 16 feet wide, 3 feet deep.

SLACK'S TO BISSETT'S NEW ROAD, WHITE VALLEY.

Forest cleared, 600 yards, 40 feet wide; graded 700 yards, 15 feet wide; grading from 6 inches to 7 feet, and from 12 feet to 16 feet wide; hauled earth with team 100 yards to widen the road; timber slashed down and hauled out 600 yards; two men of the gang employed clearing out Cherry Creek road.

Forest cleared 100 yards, 20 feet wide; graded 1,400 yards, 12 to 15 feet wide; depth of grades, from 1 to 4 feet in height; width of road, from 12 to 15 feet; forest cleared 580 yards, 40 feet wide; graded, 675 yards, 15 feet wide; forest cleared 400 yards, 40 feet wide; corduroyed 40 feet; 6 bridges, from 36 to 12 feet long; width, 16 feet; height from 9 to 2 feet; this work put on new laid out road to James Phillip's farm to admit settlers getting into their pre-emptions.

SUNNY PLAINS ROAD.

Donald Nicolson, Foreman.

Cleared out brush, timber, and graded the first section of the road, and getting out bridge timber; forest cleared one mile, 40 feet wide; graded 300 yards, 16 feet wide; one bridge, 50 feet long, 14 feet wide, 8 feet high; 6 small bridges, 18 feet long, 14 feet wide, and from 2 to 5 feet in height; culverts, 5, five feet long, 14 feet wide, and from 1 to 2 feet in depth; total length of road, 2½ miles.

KETTLE RIVER AND ROCK CREEK.

These roads and trails were put in order under the supervision of Mr. C. A. R. Lambly.

SICAMOUSE AND ENDERBY ROAD.

Peter Pickering, Foreman.

Change of road between the town of Enderby and Mr. Lawe's, at a cost of $250.

SPALLUMCHEEN AND SHUSWAP RIVER ROAD.

Louis J. Goodchap in charge.

Graded a portion of this road, and removed stumps, to admit settlers on the river to get in their supplies. $200.

SHUSWAP RIVER SLEIGH ROAD.

Charles Ashton in charge.

Graded, removed roots and stumps, blasted rock where required; built two bridges, and put the road in a passable condition for the settlers, at a cost of $250.

SPALLUMCHEEN ROAD.

Frank Hassard in charge.

Constructed a new road from the Enderby road to the back of Messrs. Lumby & Bennett's to enable the settlers to get on to the Main Trunk Road, at a cost of $250.

TRAIL ON THE WEST SIDE OF OKANAGAN LAKE.

Thomas McK. Lambly in charge.

Cleared out and graded where required from the head of Okanagan Lake to Trout Creek, at a cost of $250.

OKANAGAN MISSION BRIDGE.

Messrs. Barnes & Morand, Contractors.

Constructed bridge according to contract, at a cost of $1,450.

———o———

Lillooet District.

DISTRICT ROADS AND TRAILS.

James Robertson, Foreman.

May—Graded 3,000 yards, 5 feet wide, on Lillooet-Clinton Waggon Road. General repairs to Marble Canyon Road; cleaned out slides and rocks; made 500 yards ditch. General repairs to Chadwick Road and part of Alkali Lake Road.

June—Empire Valley Road completed; 675 feet long, 5 feet deep by 10 feet wide. Constructed 700 yards new road to Miller's; 5 foot cutting; 1 bridge 30 feet long and 12 feet wide and 10 feet deep. Repairing road from Kelly's to Canoe Creek, also Burnett Road, 14 miles. Cleaning out, repairing, cutting out brush. Widening the Big Bar Road; graded 850 yards by 5 feet wide; 765 yards, 4 feet wide; 950 yards, 3 feet wide. Gravelled 550 yards by 14 feet by 8 inches; 800 yards, 10 feet by 6 inches. One bridge 30 feet by 12 feet by 10 feet high, hewed timber, cover 8 inches diameter.

July—Repaired Marble Canyon Road by filling in ruts and removing slides, rocks and brush. Cleaned out Dog Creek Road in similar manner from Kelly's to Alkali Lake. Repaired Lillooet-Clinton Road by removing rocks and slides, building cribbing and general repairs. Extended Chadwick Road by grading 868 yards by 10 feet, 1850 yards by 10 feet. Repaired 4 bridges, 14 feet by 14 feet by 4 feet; 10 culverts, each 15 feet by 4 feet by 3 feet; 57 feet cribbing by 8 feet high; 130 feet stone wall by 3½ feet high.

August—Empire Valley new road: constructed 650 feet by 10 feet wide, inside bank 4 feet deep. Repaired trail from Lillooet towards Lytton, 14 miles. Repaired portion of trail Lillooet to Chilcotin. Marble Canyon Road repaired throughout. General repairs to Big Bar, Burnett's and Dog Creek roads, by cutting out brush, removing rocks, sand slides, etc. Trails—1000 yards by 3½ feet wide. Rock wall, 300 yards by 2 feet wide and 5 feet high.

September—Empire Valley new road—540 yards, 10 feet wide, inside bank 2½ feet. Repaired trail west side of Fraser, from St. Mary's Creek to McEwen's; 1200 yards graded 3½ feet wide; cleaned out rock, brush and slides. Cleaned out Lillooet-Lytton trail throughout, 14 miles. Repaired road from Canoe Creek crossing to Canoe Creek, 8 miles. Repaired Big Bar Road.

November—Cleaned out gravel slide, Kelly's Lake, repairing break on Pavilion Mountain. Gravelled 170 yards. Ditch 300 yards, and general repairs to road from Clinton to north foot of Pavilion Mountain. Gravelled 170 yards by 15 feet by 14 inches.

FRASER RIVER BRIDGE, LILLOOET.

This structure was overhauled and had one coat of paint in the early spring, and is in first class condition.

CAYOOSH CREEK ROAD.

R. Terry, Contractor, $1950.

A further extension of two miles of this road was let by contract as above in August last and finished according to specifications.

NORTH BONAPARTE ROAD.

A grant of $200 was made to the settlers residing in the valley of the North Bonaparte to aid them in the construction of a waggon road to their locations. The road has been finished satisfactorily to all concerned.

COURT HOUSE, CLINTON.

Has been overhauled this year, newly papered and painted, and is in complete order.

Cutting out snow drifts, diverting snow water and minor repairs to roads, bridges, culverts and ditches throughout the district have been made when required.

Cariboo District.

Joseph St. Laurent, Superintendent.

QUESNELLE AND OMINECA TRAIL.

Fallen timber cut out and removed.

HIXON CREEK TRAIL.

The old trail was cleared of fallen timber in the spring. Later in the summer a new trail (on the line of Mr. Allen's survey for waggon road), was cut out and made passable for pack trains.

Roads leading to the ranches on the west side of the Fraser River, between Quesnelle and Soda Creek, were further improved by grading and widening.

ALEXANDER AND BEAVER LAKE TRAIL.

Timber cut out and trail changed a mile or more in one place to shorten distance of travel.

CHILCOTIN ROAD.

Between Soda Creek and Riskie's Creek the road has been improved by the removal of slides, fallen timber and rocks.

A bridge was constructed across Riskie's Creek, and a new winter road cut through the timber from the head of Riskie's Creek, to connect with the road to Hanceville.

SODA CREEK TO HAWKE'S.

This road has been improved by the re-covering of a bridge 77 feet long, and the removal of slides and rocks from the road.

The roads from Williams Lake leading to St. Peter's Spring, Chimney Creek, etc., have each received the necessary attention by cleaning out fallen timber, removing slides and rock, including the making of 4 miles of new road.

Work done on trails in the Keithley Division under the superintendence of Mr. Wm. Stephenson :—

In the Spring, the trail from the 150-Mile House to Forks of Quesnelle, Keithley, Harvey, and Snowshoe Creeks were cleared of fallen timber and made passable, as also the trail to Horsefly River, Beaver Lake, and Soda Creek ; after which general repairs were made where most required. About half a mile of new trail was made up Keithley Creek. A new bridge constructed over Four Mile Creek, which necessitated considerable blasting and a large amount of crib work.

3½ miles of new trail were made up the hill on the south side of the Quesnelle River, thereby much improving the grades on this precipitous hill. This new piece of trail is much needed in consequence of the extensive hydraulic mining now under way near the Forks of Quesnelle.

BARKERVILLE DIVISION.

The various trails in this Division have received the necessary attention, but the work being confined to repairs, such as clearing off brush and fallen timber, replacing broken culverts and corduroy, and grading side hills where actually required, the following being the trails upon which such work was done :

From Barkerville to Grouse, Upper and Lower Antler, Cunningham and Harvey Creeks ; also between Antler and Snowshoe ; the road from Barkerville to Mosquito Creek and the trail continuing to Hardscrabble and Sugar Creeks ; the Bear Lake trail, and the trail between Beaver Pass and Rushon Creek. There was also half a mile of new road made to the quartz claims on Island Mountain, and the road to the mines on Burnes Mountain put in good repair.

Kootenay District—(Eastern Division).

EAST KOOTENAY WAGGON ROAD.

Archibald Cameron, Foreman.

The East Kootenay Waggon Road was constructed for a further distance of about 15 miles down the Columbia Valley to a place known as Haye's Landing on the Columbia River.

Parties were employed throughout the whole length of the road from Fort Steele repairing and improving where needed.

Cameron's Party.

April—Repairing road from Windermere to Vermillion Creek, a distance of about 25 miles.

May—Clearing, repairing, ditching, and corduroying, including one mile of forest clearing on new road.

June—Building new road between Umphrey's Ranch and Galena. Forest cleared 1 mile 70 chains. Side hill grading, 156 chains.

July—Building road between Galena and Umphrey's. Forest cleared 2 miles 20 chains, heavy timber, underbrush, and fallen trees. Side hill grading, 108 chains. 1 bridge, 16 feet long, and one culvert.

August—Building road from McRae's Tie Camp to Hayes' Landing, heavy timber, thick brush; grading 4 miles 10 chains. One 18 feet bridge, and 1 culvert.

September—Building road, clearing heavy timber, and grading. Clearing 75 chains, grading 23 chains.

The Waggon Road connecting Fish Lakes with Fort Steele was completed.

A short road was built by F. P. Armstrong, and gravelled throughout, to connect the new landing and warehouse of the Kootenay Mail line of steamers at Windermere Point with the East Kootenay Waggon Road.

The old trail up the Blue Water was chopped out to a width of 8 feet and graded, making an excellent trail up the Blue Water for about 11 miles from Donald.

CARBONATE MOUNTAIN, OR MCMURDO TRAIL.

William Bott, Foreman.

This trail has for various reasons given much trouble and entailed considerable expense during this year. Owing to the extremely wet season, and the large amount of traffic over the trail, innumerable mud holes kept springing up which had to be corduroyed. In many places the trail had to be diverted to more solid ground. Windfalls were continually blocking it up, forest fires having prevailed along it during the previous season. A temporary bridge was built over the North Fork of the Spillemcheen, the former bridge having been burnt out.

A temporary bridge was built over the canal at Canal Flat, the Waggon Road bridge at that point having been carried away by a flood caused by the breaking of the banks of the Kootenay Valley Company's Canal.

A new trail was built up Wild Horse Creek for a distance of about 25 miles.

The various other trails of the district were cleared out and repaired where needed.

BUILDINGS.

New Government Building, Donald.

W. S. Ruttan, Contractor, $2,640.

Building two stories, frame structure, cedar siding and ceiling, varnished, 45 feet by 26 feet. On lower floor, Government Agent's Office, 28 feet by 26 feet. Constable's room, 12 feet by 12 feet, two cells, hall and passage, two flights of stairs leading to upper floor. Court room, 34 feet by 26 feet. Judge's room, 10 feet by 12 feet, and Jury room, 10 feet by 12 feet.

PUBLIC SCHOOL HOUSE, GOLDEN.

R. A. Kimpton, Contractor, $825.

Supplied all necessary material, and erected a building in accordance with the general plan for country school houses.

———o———

Kootenay District—(Western Division.)

BIG BEND TRAIL.

Trail widened and rocks and fallen timber removed from Revelstoke to French Creek; culverts and pieces of corduroy road repaired; a bridge constructed at 22-Mile Creek, 120 feet long, 5 feet wide; bridge at Downie Creek strengthened with piles and bolts; also a bridge at creek four miles above Downie, 22 feet long, 5 feet wide.

ROAD FROM REVELSTOKE TO RAILWAY STATION.

Slide on side hill shovelled out; about 40 feet of swampy ground corduroyed.

ALBERT CANYON ROAD.

2 heavy stringers replaced in second bridge, and covering taken off to prevent injury from snow-slides.

COLUMBIA-NELSON TRAIL.

Trail kept free from fallen timber.

NELSON-TOAD MOUNTAIN WAGGON ROAD.

Road constructed 3¼ miles long, 12 feet wide.

2	bridges	90	feet long,	14	feet wide, covered with	3 inch planking.
1	,,	30	,,	14	,, ,,	flatted timber.
1	,,	52	,,	19	,, ,,	,,
1	,,	64	,,	19	,, ,,	,,
1	,,	40	,,	20	,, ,,	,,
1	,,	35	,,	20	,, ,,	,,
1	,,	28	,,	18	,, ,,	,,

17 culverts of an aggregate length of 33 feet, 12 feet wide.

HOT SPRINGS WAGGON ROAD.

Road constructed 3 miles long, 9 feet wide.

About 3,500 yards of cribbing, 4 feet high; 35 culverts, averaging 16 inches, 9 feet wide.

TRAIL FROM SPROAT TO TRAIL CREEK.

Timber cut out of trail.

TRAIL FROM ILLECILLEWAET TO GOLD HILL.

5½ miles of trail graded from 1 to 1½ feet along side hill; 2 bridges, 30 feet long, 4 feet wide; 1 bridge, 25 feet long, 4 feet wide; 5 culverts, average length 12 feet, 4 feet wide.

PUBLIC SCHOOL, REVELSTOKE.

Jas. McDonald, Contractor, $2,675.

Provided all plant, labour and material requisite; erected and completed a frame building containing two school-rooms, each 26 feet by 36 feet, and having separate side entrances and cloak rooms. The frame is enclosed with rough boards, over which building paper is laid and then covered with rustic siding. The floors are double and have building paper between. The inside walls, partitions and ceilings are put up with V jointed cedar. A bell tower surmounts the apex. The design, when completed, will form a building containing four school-rooms in the form of a Maltese cross.

ARTESIAN WELLS.

In the spring of 1888 Mr. E. B. McKay, C.E., was employed by the Government to make an examination of the topographical and geological features of the Yale District with a view to reporting upon the probabilities of water for agricultural purposes being obtained by sinking Artesian wells. Mr. McKay's report was, on the whole, a favourable one, and it was determined to sink an experimental bore. The site chosen for the experiment was selected in compliance with the prayer of a petition from residents on the South Thompson River. Mr. McKay was instructed to overhaul the stock of old boring tools in the Government store house at Victoria, to have them placed in order and shipped to Duck's Station on the C. P. Railway. He was then to select the most likely place to find water and to sink a test bore. Mr. McKay struck solid rock at a depth of 87 feet, and continued drilling until the bore had reached a depth of 116 feet. The tools being ill adapted for successfully carrying on the work, and the season being well advanced, it was decided to stop work.

Next year notices were published inviting persons who were experienced in well drilling to submit proposals for sinking one or more experimental Artesian wells in Yale District. The proposal of Mr. Hugh Ross was accepted, and a contract was entered into with him to sink wells at a stated price per foot, the Government to furnish the necessary well boring rig. A complete set of modern boring tools, together with a steam engine and boiler, was ordered from Petrolea, Ontario, but arrived at Duck's Station too late (in the opinion of Mr. Ross) to warrant work being commenced that season. When the spring arrived Mr. Ross was reluctant to go on with the work, and finally threw up his contract. Mr. William Morrison, of Owen Sound, an experienced driller, was then employed to carry on the work. He tested the bore put in by Mr. McKay, but decided to start in a fresh place a few feet distant. Accordingly a commencement was again made, and the work was pushed forward intelligently, rapidly and economically. At a depth of 512 feet water was struck, which flowed over the top of the casing. Mr. Morrison continued drilling with a hope of obtaining a stronger flow of water but without any further success. He extended the bore to a depth of over 1,000 feet and then discontinued the work. Mr. Morrison displayed commendable skill and good management while in charge.

The well has continued to flow steadily ever since water was struck, thus proving this first experiment to be an undoubted success.

TENDERS RECEIVED AND CONTRACTS AWARDED

DURING THE YEAR 1890.

NATURE OF WORK.	NAME OF TENDERER.	AMOUNT.	AWARD.
VICTORIA CITY DISTRICT.			
Steam Heating Plant, Central Schools	Braden & Stamford	$ 6,067 20	Awarded.
	Colbert & Warner	8,900 00	
Addition to Treasury	McKillican & Anderson	520 00	Awarded.
	John McDowell	522 00	
	Henry E. Munday	825 00	
	A. J. Woodward	845 00	
Painting Law Courts	Robert Lettice	900 00	
	F. Sturdy & Son	1,100 00	
VICTORIA DISTRICT.			
Bridge on Gorge Road	Wm. Rockett	610 00	Awarded.
	D. F. Adams	632 00	
	W. H. Snider	649 00	
	J. C. Blackett	745 00	
	Williams, West & Co.	848 00	
	John McDowell	1,115 00	
Beacon Hill-Ross Bay Carriage Road	E. H. Henley	1,875 00	Awarded.
	William Innis	1,877 00	
	Frank Lakin	2,327 00	
	John Cox	1,899 00	
	W. H. Snider	2,395 00	
	James Baker	2,763 00	
	John Haggerty	2,975 00	
	Chas. Williams	3,760 00	
Gravelling on West Saanich Road	W. H. Snider	275 00	Awarded.
	Thos. J. Lindsay	300 00	
	Geo. Lindsay, Jr.	725 00	
Gravelling on Burnside Road	W. H. Snider	466 00	Awarded.
ESQUIMALT DISTRICT.			
Sidewalk on Esquimalt Road	Thos. Elliott	15 cents per foot.	Awarded.
	W. H. Eastwood	17 ,, ,,	
	Williams, West & Co.	$1 22 ,,	
	James Williams	30 ,, ,,	
	Thomas Anderson	30 ,, ,,	
Sidewalk on Craigflower Road	Thos. Elliott	14 ,, ,,	Awarded.
	W. H. Eastwood	17 ,, ,,	
	Williams, West & Co.	1 22 ,,	
	Thomas Anderson	30 ,, ,,	
Beecher Bay and Sooke Road	Joseph E. Gelly	$ 493 00	Awarded.
	Joseph Dales	700 00	
	Arthur H. Peatt	603 00	
Change in the Metchosin Road	John Cox	350 00	Awarded.
	Alexander Fulton	450 00	
Otter Point Road	Clement O'Brien	390 00	Awarded.
	William Phillips	475 00	
	John Cox	490 00	
	W. H. Snider	763 00	

Nature of Work.	Name of Tenderer.	Amount.	Award.
Esquimalt District.—*Continued.*			
Millstream Road	W. H. Snider	$ 150 00	Awarded.
	Arthur H. Peatt	347 00	
Sooke Road	John Cox	540 00	Awarded.
	Chas. Beasley	744 00	
	William Phillips	775 00	
Nanaimo District.			
Wellington School-house	James Carthew	2,750 00	Awarded.
	Henry Cunliffe	3,277 00	
	Robert Sanderson	3,300 00	
	Thomas Walls	3,460 00	
	J. H. Pashley	3,484 00	
	Charles Wilson	3,477 00	
	John Michael	3,510 00	
Gabriola Island School-house	John Michael	775 00	Not accepted
	Henry Cunliffe	1,385 00	
	John A. Coulson	1,525 00	
Gabriola Inland School-house	John W. Lacy	712 50	Awarded.
	M. Morrison	725 00	
	John A. Coulson	1,310 00	
Wharf at Beaver Creek	John Belyea	600 00	Awarded.
	G. T. Parks	620 00	
Road to Mount Benson	Frank Parks	5 miles, $3,000	Awarded.
	John A. Coulson	5 ,, 4,000	
	Samuel Price	5 ,, & a fraction, 3,577	
	Robert Aitken	5 ,, ,, 3,806	
	C. McCutcheon	3 ,, 3,540	
	Robert Treethy	2 ,, 1,440	
Alberni District.			
Somas River Bridge	Robert Pinkerton	$1,950 00	Awarded.
	Wm. Rockett	2,390 00	
	Williams, West & Co.	3,485 00	
	R. McIntosh and J. C. Blackett	6,511 00	
	D. F. Adams	7,250 00	
Comox District.			
		North. / South.	
Roads on Hornby Island	Wm. Ford	$175 00 / $125 00	Awarded.
	G. Heatherbell	400 00	
	J. Rowan	300 00 / 150 00	
	J. F. Cunliffe	660 00 / 310 00	
		Sec. A. / Sec. B. / Sec. C.	
Campbell River Road	F. Cunliffe	$714 / $699 / $805	Aw'ded A & C
	J. A. Fitzgerald	750 / 749 / 833	
	Joseph Stuart	640	Awarded B.
Union Mines School-house	Alexander Grant	$ 1,494 00	Awarded.
New Westminster District.			
Court House, New Westminster	W. Turnbull & Co	29,338 93	Awarded.
	R. B. Bell	30,900 00	
	Egerton Burns	32,000 00	
	Saul & Waite	33,270 00	
	H. F. Keefer	40,500 00	
Agassiz School-house	Geo. W. Beebe	1,076 50	Not awarded
	J. R. Barton	1,150 42	
	Wm. Moffat	1,200 00	

NATURE OF WORK.	NAME OF TENDERER.	AMOUNT.	AWARD.
NEW WESTMINSTER DISTRICT.—*Continued.*			
Rosedale School-house	Patrick McGrath	$ 598 00	Awarded.
	Nevens & Bruce	673 50	
	Samuel J. Turner	726 00	
	E. A. Kipp	833 00	
Fence around Central School ground, Vancouver	Alex. Webster	575 00	Awarded.
	A. Cruickshank and R. B. Bell	617 00	
	Lane & Abbott	685 00	
	Duncan McRae	695 00	
	Geo. M. Gagen	710 00	
Grading Central grounds, Vancouver	John Johnson	344 00	Awarded.
	Arthur Bolbswill	345 00	
	W. C. Muir	475 00	
	Urquhart & Morris	495 00	
	A. G. Robinson	500 00	
East Chilliwhack School-house	J. Ford & G. W. McKeever	694 00	Awarded.
	Andrew Smith	695 00	
	S. J. Turner	718 00	
	James Bailey	790 00	
Addition to West End School-house, New Westminster	W. D. Purdy	735 00	Awarded.
	E. Disney	811 00	
	Wm. H. Menzies	870 00	
	S. G. Tidy	925 00	
	Alfred Cederberg	990 00	
Nicomin Island School-house	G. Magar and C. Gardner	700 00	Awarded.
	B. S. Bradshaw & Son	785 00	
	Sloan & McIntosh	975 00	
School-house, Vancouver	Henry A. Bell	21,840 00	Not awarded
	F. H. Matthew & Co.	25,743 00	,,
	H. F. Keefer	26,434 29	,,
	Saul & Wait	26,476 00	,,
	E. Cook	26,580 00	,,
	W. H. and D. M. Fraser	19,664 00	,,
	T. H. Matthew	20,500 00	,,
	W. T. Jackson	21,034 00	,,
	Saul & Wait	24,628 00	,,
	McGhie & McLuckie	24,600 00	,,
	Robertson & Hackett	26,300 00	,,
	E. Cook	26,350 00	,,
	H. F. Keefer	23,961 04	,,
	H. A. Bell	21,441 00	,,
	A. E. Carter	17,325 00	Awarded.
	Thos. H. Matthew	17,995 00	
	W. H. & D. M. Fraser	18,000 00	
	H. H. Macdonald	18,600 00	
	Saul & Waite	20,543 00	
	H. A. Bell	18,585 00	
	H. F. Keefer	21,259 65	
	McGhie & McLuckie	21,653 00	
	E. Cook	23,174 00	
Wharf on Westham Island	G. W. Gilley & Co.	1,200 00	Not awarded
	J. E. Simmons, H. A. Thompson, and D. C. Burpee	1,490 00	
	D. A. McDonald & Co.	1,350 00	
School-house at Sapperton	W. D. Purdy & H. J. Williams	3,190 00	Awarded.
	T. H. Matthew	4,511 00	

NATURE OF WORK.	NAME OF TENDERER.	AMOUNT.	AWARD.
NEW WESTMINSTER DISTRICT.—*Continued.*			
School-house at Sea Island	Archibald Bros	$ 740 00	Awarded.
	W. D. Purdy & H. J. Williams	768 00	
	J. R. Park	964 00	
Belmont School-house	John Matheson	677 00	Awarded.
Glenwood School-house	Richard Steward	650 00	Awarded
	Henry S. Fielding	700 00	
	H. T. Thrift & M. A. Smith	864 00	
Anniedale School-house	Samuel Edge	750 00	Awarded.
	George L. Boyd	780 00	
	Peter Thomson	790 00	
	Robt. W. Lyness	1,150 00	
Lulu Island School-house	Archibald Bros	695 00	Awarded.
	Robert Gordon	675 00	
Port Kells School-house	Samuel Edge	750 00	Awarded.
	John Yeomans	1,272 00	
Agassiz School-house	Geo. W. Beebe	678 00	Awarded.
	Patrick McGrath	725 00	
Clayton School-house	J. E. Murchison	645 00	Awarded.
	Wilfred Cookson	655 00	
	John Matheson	677 00	
KAMLOOPS DISTRICT.			
Waggon road from Ashcroft to Barnes	Phillip Parke	600 00	Awarded.
	Chas. McNicholl	1,000 00	
	I. W. Strout	750 00	
Addition to School-house, Kamloops	McGregor & Co	660 00	Awarded.
	W. A. Simmons	671 00	
	David H. Campbell	725 00	
LILLOOET DISTRICT.			
Two miles of waggon road up Cayoosh Creek	Richard Terry	1,950 00	Awarded.
	Joseph Watkinson	2,100 00	
	Roderick Chisholm	2,200 00	
OSOYOOS DISTRICT.			
Mission Creek bridge, Okanagan	Morand & Barnes	1,450 00	Awarded.
	Henry Maloney	1,480 00	
	Thomas Hereron	1,600 00	
Bridge over North Fork of Kettle River	Jas. McConnell	950 00	Awarded.
	J. M. Lynch & J. McLennan	1,375 00	
	Thos. Hereron & H. Maloney	1,600 00	
Bridge across Kettle River at Ingram's	J. M. Lynch & J. McLennan	1,450 00	Awarded.
	T. Hereron & H. Maloney	1,800 00	
	F. H. Barnes & E. L. Morand	4,400 00	
Bridge over Narrows, Osoyoos Lake, at Kruger's	Henry Rose	2,300 00	Awarded.
	Henry Maloney	2,700 00	
	F. H. Barnes & E. L. Morand	3,250 00	

NATURE OF WORK.	NAME OF TENDERER.	AMOUNT.	AWARD.
KOOTENAY DISTRICT.			
Government Buildings, Donald	W. S. Ruttan	$ 2,640 00	Awarded.
	James McDonald	2,750 00	
	R. A. Kimpton	2,765 00	
	J. C. Steen	3,500 00	
School-house at Golden	R. A. Kimpton	835 00	Awarded.
	Geo. E. Manuel	889 00	
School-house at Revelstoke	James McDonald	2,675 00	Awarded.
	James Smart	2,700 00	
	Robert Howson	3,450 00	

TIMBER INSPECTOR'S REPORT.

SIR,—I have the honour to submit for your information the accompanying statement, which shows that, at the present date, there are in the Province of British Columbia—

41 Saw Mills, now built or in course of construction;
45 Timber Leases, comprising 225,526 acres, yielding an annual rental of $15,614.03.

That during the past year the amount of timber cut by or for the respective saw mills, as per statement rendered by them, has been—

From Crown Lands	15,496,169	feet.
„ Patented Lands		
„ Timber Leaseholds	16,337,365	„
„ Timber Limits	26,584,252	„
„ Private Property	20,759,270	„

and that the revenue received from timber royalty is $29,677.71.

That the revenue from timber royalty is less than the amount estimated is due to the fact that some of the larger mills, notably the McLaren-Ross Co., the probable output from which was included in the amount so estimated, have not been in operation during the past year, and further to the fact that the quantity of timber cut from Dominion Government Lands and private property, on which no royalty is payable to the Province, has been unusually great.

You will notice that the cut from timber leaseholds is small, some mills which hold leases of large acreages of timber lands not having cut any timber from such lands.

There have been issued during the past year—

Timber Licenses—Special	21
„ „ General	68

Respectfully submitted,

R. J. SKINNER.

Timber Inspector.

To the Honourable
The Chief Commissioner of Lands and Works.

FORESTRY INSPECTOR'S REPORT.

TIMBER STATISTICS.

Saw Mills.			Timber Leases.					Quantity of Timber Cut From						Royalty.	Remarks.
Name and Owners.	Number, and where situate.	Daily Capacity. Feet.	Location.	Date.	Term of Years.	Acreage.	Rental.	Crown Lands. Feet.	Patented Lands. Feet.	Timber Leases. Feet.	Timber Limits. Feet.	Private Property. Feet.	Total. Feet.		
Brunette Saw-Mill Company	1, New Westminster City	65,000	New Westminster District	19th July, 1889	21	1,612	$ 161 20	482,845			1,080,143		1,562,988	$ 781 47	
Moodyville Saw-Mill Company	1, New Westminster District	105,000	,, ,,					3,115,619		113,252	420,052	9,230,257	14,212,294	2,151 03	
			,, ,,	11th January, 1875	21	10,162	101 62			566,541					
			,, ,,	28th November, 1884	20	1,947	97 35			766,593					
			,, ,,	6th Feb uary, 1886	21	7,825	391 25								
			,, ,,	10th January, 1888	21	1,433	71 65								
			,, ,,	16th March, 1888	21	800	40 00								
			Coast and Sayward ,,	16th January, 1889	21	2,669	266 90								
			New Westminster ,,	12th February, 1889	21	2,872	287 20								
			,, and Coast Districts	7th October, 1889	21	3,707	370 70								
Hastings Saw-Mill Company	1, Vancouver	150,000	Coast District	15th March, 1886	21	8,216	410 80	2,762,661		8,937,180	1,437,346	4,412,074	17,549,261	6,590 42	
			New Westminster District	30th November, 1886	5	3,220	322 00								
			Coast and Sayward ,,	10th June, 1887	21	2,301	115 05								
			Sayward ,,	8th February, 1888	21	1,360	68 00								
			New Westminster ,,	16th March, 1888	21	1,467	73 35								
			Coast and Sayward ,,	7th October, 1889	21	2,239	223 90								
Leamy & Kyle	1, Vancouver	50,000	Coast ,,	18th June, 1887	21	2,500	125 00	775,579			85,519	1,580,952	3,102,729	760 85	
			Coast and Sayward ,,	3rd February, 1888	21	3,749	187 45			660,679					
			,, ,, ,,	16th January, 1889	21	1,882	188 20								
Royal City Planing Mills Company	1, Vancouver	30,000	Sayward ,,	6th February, 1886	21	6,971	348 55	884,734			3,698,699		4,583,733	2,291 80	
	2, New Westminster	110,000	Coast and Sayward ,,	10th June, 1886	21	3,652	182 60				654,959		654,959	327 47	
			,, & New West'r ,,	10th November, 1887	21	8,353	417 65								
			Sayward ,,	27th January, 1888	21	1,482	74 10								
			,, ,,	2nd May, 1889	30	18,210	1,821 00								
			New Westminster ,,	27th November, 1889	21	1,690	169 00								
			Sayward ,,	22nd August, 1890	30	27,600	2,760 00								
W. P. Sayward	1, Victoria City	40,000	Coast ,,	18th June, 1885	21	1,380	69 00	454,128			9,240,316	1,163,553	10,857,997	4,847 16	
				18th March, 1890	10	500	50 00								
Hughitt & McIntyre	1, Cowichan District		Cowichan ,,	9th January, 1879	20	7,069	70 69					400,502	400,502		Mill being rebuilt and enlarged; lease not subject to royalty.
J. Martin & Son	1, New Westminster District	25,000	Harrison Lake, New Westminster District	1st February, 1886	21	787	7 87								Not subject to royalty; have cut on Dominion Lands only.
			,, ,, ,,	7th October, 1889	21	906	90 60								
Andrew Haslam	1, Nanaimo	70,000	Sayward District	16th March, 1888	21	8,312	415 60	738,754		5,779,589	740,034	9,776	7,268,153	3,629 18	
				22nd August, 1890	21	410	41 00								
Knight Brothers	1, New Westminster District	25,000													Cut on Dominion Lands only.
McLaren-Ross Lumber Company	1, New Westminster	200,000	Sayward District	3rd Febuary, 1888	21	23,600	1,180 00								Mill recently completed; have not cut any timber from Provincial Lands.
			New Westminster District	10th August, 1889	30	9,280	928 00								
Shuswap Milling Company	2, Yale District	32,000													Cut on Dominion Lands only.
Muir Brothers	1, Sooke ,,	12,000													Not in operation.
Port Moody Saw-Mill Company	1, Port Moody	15,000													Cut on Dominion Lands only.
Reid & Johnston	1, Cariboo District	20,000						103,721					103,721	51 86	
I. B. Nason	1, ,, ,,	7,000						31,000					31,000	15 50	
N. Hanson	1, Kootenay ,,	4,000													
G. O. Buchanan	1, ,, ,,	6,000									474,500		474,500	237 25	
M. S. Davys	1, ,, ,,	8,000						400,000						200 00	
Ginnell Brothers	2, ,, ,,	12,000													
Indian Mission	1, Gardiner's Inlet	4,000						1,000,000						500 00	
Indians	1, Alert Bay	5,000						16,000						8 00	
	1, Malcolm Island	4,000													Building.
Cunningham Company	1, Port Essington	8,000						956,000						478 00	
G. Williscroft	1, Georgetown	12,000						1,220,000					1,220,000	610 00	
Indians	1, Kincolith	3,000													
Victoria Saw-Mill Company	1, Rivers Inlet	5,000						559,129				77,407	636,536	279 53	
Sayward & Davies	1, Kootenay	6,000													
Vancouver Saw-Mill Company	1, Vancouver	50,000	New Westminster and Coast Districts	22nd August, 1890	30	1,364	136 40	1,850,572			3,666,454	1,842,248	7,359,274	2,758 42	
			Sayward and Coast ,,	22nd August, 1890	21	1,791	179 10								
Victoria Lumber and Manufacturing Co.	1, Chemainus	50,000	New Westminster District	16th March, 1888	21	1,413	70 65	588,940				320,182	909,122	294 46	Are building a new mill of 150,000 daily capacity.
			Sayward ,,	18th March, 1890	21	14,159	1,415 90								
			Sayward and Coast ,,	22nd August, 1890	10	921	92 10								
North Pacific Lumber Company	1, Burrard Inlet	125,000	Sayward ,,	3rd February, 1890	19	4,800	240 00								Mill approaching completion.
				13th May, 1889	30	10,150	1,015 00								
G. F. Slater	1, Vancouver	30,000	New Westminster ,,	24th March, 1890	20	740	74 00				230,700	268,624	499,324	115 35	
Ernest Buse	1, Hastings	10,000						80,009				388,000	468,000	40 00	
West Bay Saw-Mill Company	1, Gambier Island	25,000									462,725		462,725	231 36	
H. R. Morse	1, Vancouver	75,000	New Westminster District	23rd June, 1890	21	4,184	418 40	357,497		113,521	4,356,825	725,384	5,553,227	2,413 88	
			,, and Coast Districts	22nd August, 1890	30	1,646	164 60								
Laidlaw & Co.			Coast, New West'r, and Sayward Districts	18th March, 1890	21	4,397	439 70								
Vancouver Manufacturing & Trading Co.								129,000					129,000	64 50	
Mechanics' Milling Company	1, New Westminster City	25,000													Cut on Dominion and Private Lands.
Delta Saw-Mill Company	1, New Westminster District	20,000													Do. do. do.
Total	41					225,526	$15,614 03	15,496,169		16,337,355	26,584,252	20,759,279	79,177,055	$29,677 71	

Victoria, B.C.,

December 31st, 1890.

R. J. SKINNER,

Forestry Inspector.

LAND RETURN.

Return showing Land Transactions for the Year ending 31st December, 1890.

	Records Issued for the District of														
	Victoria.	Esquimalt.	Cowichan.	Nanaimo	Comox.	Coast.	New Westminster.	Yale.	Kamloops.	Osoyoos.	Lillooet.	Kootenay.	Cariboo.	Cassiar	Total.
Pre-emption Records.....	45	37	27	6	1	7	228	.....	25	158	22	46	14	.....	616
Certificates of improvement	3	9	21	8	1	4	82	.....	9	19	5	4	3	1	169
,, Purchase...	45	23	52	17	.....	16	331	1	36	84	27	183	14	.....	829
Crown Grants....	70	18	53	16	.....	21	221	.....	34	41	11	99	8	1	573
Timber Cutting Licenses .	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	21
,, General..	.....	..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	68
Coal Prospecting Licenses.	1	.....	.....	.....	.....	.....	.....		.....	3	.....	.....	.....	.....	4

SUMMARY.

	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.
Pre-emption Records.....	77	200	308	345	311	303	548	496	616
Certificates of Improvement	29	60	77	82	69	73	157	132	169
,, Purchase	201	328	604	305	369	351	355	587	829
Crown Grants	129	274	406	306	274	320	332	481	573
Total Acreage Deeded.....	23,609	54,637	146,197	128,811	50,472	73,950	94,278	134,169	99,334 33
Acreage Leased for Timber Cutting....	.....	35,000	1,947	1,380	23,012	16,805	58,566	55,217	57,716
Acreage covered by Coal Prospecting Licenses	.....	.....	.....	.....	.....	8,960	90	.....	5,280
Letters received	1,617	2,463	3,357	3,260	3,485	3,079	3,141	3,326	4,168

SURVEYS.

CHILCOTIN EXPLORATORY SURVEY.

VICTORIA, December 19th, 1890.

SIR,—In the first week of May of this year I had instructions from the Hon. Commissioner of Lands and Works to undertake a trip to Chilcotin. After a conversation with the Surveyor-General, it was decided that I should proceed to Bute Inlet with a small party, and from there cross the Coast Range by the Homalko River.

I was also instructed to study the possibilities of building a road through that Pass; of exploring thoroughly and track survey the Chilcotin country proper; to study the geology and the flora of the country surveyed, and to get as much information as practicable about the soil, timber, mines, water-power, and the facilities offered for roads and ways of communication.

On the 15th of May I left Victoria, accompanied by three men and one volunteer (Lieut. Martin), and we reached Bute Inlet on the 18th.

Before entering into the particulars of the trip, I wish to give an idea of the system adopted through the survey.

A complete instrumental survey of the hundreds of streams, lakes, trails, &c., &c., in the country mentioned would have required the expenditure of an enormous sum of money, so it was decided that a mere track survey would answer the purpose.

Instead of using the chain, the pedometer and the odograph were used; the courses were taken with the prismatic compass, and every opportunity was taken to get series of rough triangulations with the compass and box sextant from mountain tops and other points. Observations for variation and latitude were taken almost every night. In the latter the marine sextant and artificial horizon were used. A series of barometric readings were also made at every point of importance, using two aneroids, and profiting sometimes of old bench-marks of the railway surveys, some of which still exist.

The temperature was taken daily, and the climate of the country was ascertained as carefully as possible by its flora, its insects, information from the natives, and the temperature of the great lakes.

The courses given in this report always refer to the true meridian.

The Indian names have been written as close as possible, according to the rule recommended to the Domininion Land Surveyors, and taken from a system recommended by the Smithsonian Institute.

In giving the general description of the country, it has been judged best to describe the rivers and trails in their geographical order, instead of following the course taken in the survey, which had often to be modified by circumstances.

THE HOMALKO RIVER.

After taking a day to engage Indians and procure canoes at the Indian village on Waddington harbour, the party left Bute Inlet on the way up the river.

Bute Inlet is one of those numerous indentations which cut their way deep into the range of mountains. Its end, called Waddington harbour, is a good and safe anchorage.

Two rivers fall into the Inlet at that point, the largest being the Homalko, and the second, which is a middle size mountain stream, called the Southgate, besides a couple of inferior creeks.

The valley of the Homalko is much over one mile wide at its mouth; the ground is low, level, and well timbered.

Like other mountain streams, the Homalko gets at its highest level during the hottest days of summer. Even at the date we left, the stream was already very high; the demarcation of its muddy water being easily seen 12 to 15 miles down the Inlet, with its lines of driftwood.

The navigation by canoes, after the first half dozen miles, became extremely difficult; the loads had to be very light, and for the greater part of the time the canoes had to be pulled from the shores with ropes, leaving two men in the canoes to steer and prevent capsizing.

The tide is felt for about five miles from the Inlet. The valley is about one mile in average; the river winds through it in long curves, but generally keeps its general course of N. 30° W. The side hills are but poorly timbered with Douglas fir, but the valley itself is covered with a good growth of cedar *(Thuja gigantea)*, Engelman spruce, birch, alder, balsam-poplars, a few soft maple, crab apples, &c., &c.

About the eighth mile from the mouth there are several hundred acres of meadow land, slightly covered with underbrush, on the east bank, which could be cultivated.

After that point, the valley gets much narrower, the river more rapid and often obstructed by bars, generally covered with driftwood.

To the 18th mile the river is much the same, but always getting more rapid; its general direction changes to about N. 15°E., the mountains much higher and snow-clad. Small glaciers are very common, and glacial streams come from each side almost at every mile. The river is also much more obstructed with benches and islands, and in some places divided in several channels. The canoes have now to be pulled altogether from the shore, except when the river has to be crossed.

It keeps much the same up to the thirtieth mile, where canoeing has to be abandoned altogether. During the last few miles, the valley proper has nearly disappeared, the mountains closing on the river.

At this point, just before getting into the great canyon, there is a stretch of ground, on the west side, of a very pleasing aspect; it is of two or three hundred acres of level land, richly timbered,—cedar of fine dimensions, Engelman spruce, white birch, Douglas fir, a few white pines, and a very rich and thick undergrowth shows the good qualities of the soil.

The Homalko then enters into a canyon of 1½ miles in length; the high perpendicular rocks close on the river, and its width is only 30 feet in some places.

Waddington Canyon.

From that point packing had to be done, and so we made a start to go around the Wad dington Canyon. A trail of nearly six miles had to be cut over the mountain, which brought us out at the head of the canyon. Although we confined ourselves to the strictest necessaries, we had to make several trips over the mountain.

From the first canyon to the great torrent coming from Tiedeman Glacier to the north-west—a distance of about ten miles—we had to surmount all kinds of difficulties. The river is very narrow, the mountains close on it, and in several places we had to take the loads down great heights with ropes.

Tiedeman Glacier.

The Tiedeman Glacier lies about two miles west of the Homalko. It is one of the grandest glaciers we have in British Columbia, or, perhaps, I might say, one of the grandest in the world.

The front of it is about 50 chains wide and elevated about 800 feet from the level; afterwards its width increases gradually to about five miles, and its total length, by rough triangulation, is about 16 miles. It is surrounded by high snow-clad mountains. From the front it keeps increasing in height gradually, and the first few miles are covered with mounds of boulders of granite, diorite, syenite. After those stones comes a large area of the purest blue ice, and beyond that a half circular belt of *nevée* extending to the foot of the high range. From three tunnels on its front come streams joining together a short distance below. The moraines are about 150 feet high and very well demarked. This forms a torrent which at the hot season must be a couple of hundred yards wide. At the season we reached it, it was over a hundred feet wide and very deep. We employed three days in bridging it.

Once across the Tiedeman stream, we are at the forks of the Homalko.

It was decided to take a few days to explore the east branch and then come back to the west branch to follow it to the plateau.

West Branch.

After that we kept on the main west branch. From that point to Twist Lake, about 30 miles from the Forks, it was nothing else but a succession of canyons where we had to fight

our way. Sometimes, at very great heights, cuts in the rocks had to be crossed almost every day with ropes. For several nights we could not get enough level ground to put up our tent, and every one had to pick out a place for himself on the sidehill.

Glacier streams came almost at every mile. Some we managed to cross on temporary bridges, and others we had to walk up as much as ten miles to find a place fit to cross. The hardest of all was two swamps of a couple of miles each we had to cross in the ice water to our waist.

Twist Lake.

In reaching Twist Lake the country appears to change for the best. The vegetation showed a much drier climate. Cedar is replaced by black pine *(pinus contorta)*, devil's club *(echinopannax horida)* has entirely disappeared. The geological aspect changes also; the crystalline series are left behind to enter into the mesozoic, the mountains do not close on the river so abruptly, and the general aspect of the country tells that we are getting on the north-east slope.

Traces of human travels, which we had not seen since leaving the first canyon, began to be plentiful; old camping places, traps and blazes were in numbers.

The glacial streams, though as numerous as ever, seem to be coming from much greater distances, and the vegetation, which had been very stunted and poor, owing to the absence of vegetable soil, was getting much richer.

Fir of good size grows along Twist Lake; the banks of the river are fringed with balsam-poplar *(populus balsamifera)*, small birch *(betula glandulosa)*, red alder *(alnus rubra)*, high bush cranberries *(veburnum pauciflorum,)* Wild gooseberries and currants of several species are very plentiful. The lower sidehills are covered with trailing juniper *(juniperus sabina)* Oregon grapes *(berberis aquifolium)*, and a list of plants too long to mention, all now in bloom, giving the whole country a very pleasing aspect after the dreariness of the long canyons.

Twist Lake—which is a very inappropriate name—is a fine sheet of water of about 100 chains in length and one-third of a mile in width, through which the river flows. Its height above the sea is about 2,540 feet.

The distance between Twist Lake and Middle Lake is about nine miles; the valley between the two has an average width of about 60 chains. This is formed of bottom land, very little elevated from the river and in great part exposed to overflow. The river is very sinuous and not very rapid; the water has lost its muddy colour, and is now of a deep blue tint; trout of large size are plentiful.

The low bottom land is covered with a thick underbrush almost impassable to the traveller. The foothills are partly wooded, but rock slides, from the crumbling porphirite of the side hills, are very numerous, and would present a great obstacle in making a trail.

Middle Lake.

Middle Lake is of a very pleasing aspect; its length is about three miles, with a width of six chains, and it runs in a N. 40° E. direction. Its height from the sea is about 2,830 feet. The west shore of the lake is not very abrupt, and is very well timbered with Douglas fir; in some open places bunch grass was seen for the first time. The distance between Twist Lake and Middle Lake is about ten miles; the valley is over one mile and a half in width. Along the river, which is now about forty feet in width, there is a belt of low swampy ground and hay meadows, and the rest of the valley to the foothills is composed of low, gently rolling hills of a very light and gravelly soil. The country is very open; a few stunted Douglas fir of small size, and some jack pines *(pinus contorta)*, growing far apart, are the only timber.

This would make a rich pasture in summer. The appearance of a very old and very neglected Indian trail gave us an opportunity of making good headway from Middle Lake.

Bluff Lake.

Bluff Lake is about two miles in length and of a very irregular shape; its height is over 2,900 feet. The valley at the south end of it, for about 2,000 acres, is very level and of a rich soil. It is overgrown with aspen *(populus tremuloides)*, red alder *(alnus rubra)*, balsam-poplar *(populus balsamfera)*.

At the upper end of Bluff Lake, two creeks of about equal size flow in. One comes from a course N. 30° E, and takes its source some ten miles up in a series of small lakes; the other one, running nearly due north, is the one the trail follows. It expands into several small lakes, the smallest of which is Hargreaves Lake. A third creek, coming from N. 20°W., falls into the

second at half a mile from Bluff Lake. The trail keeps on the ridge between those last creeks and a succession of small lakes and meadows can be seen right and left.

The country here is nearly open, only a very few small jack pines growing.

Summit.

We get to the summit, at nine miles from Bluff Lake, in a manner almost imperceptible. The two little lakes, right and left of the trail, may be called the sources of the West Homalko. Here the mountains are ending.

From the summit we kept on a course N. 30° E. for about six miles to the west end of Tatla Lake, through a lovely open country. There are several small lakes or ponds, without outlet, where a small quantity of alkali may be detected. Meadows of rich hay are common, and the grazing in the open country is of the best quality.

At last we were out of the chain of the Cascades completely. The opening in the mountains could clearly be seen a few miles further east. A second opening, marking the place where the East branch of the Homalko takes its sources, was in full view.

Those two gates are the only break in the high wall of snow-clad mountains visible from the plateau.

East Branch.

The East branch was explored afterwards, and an attempt was made to strike a trail from Chilco Lake to the Southgate River. This branch, although of a very hard access, would be a much better route for a railway or a pack trail.

As for railway construction, I do not believe there would be any extraordinary difficulties in running a line from Waddington harbour to the plateau. It would require a great deal of small tunnels, trestle work and bridging. I would compare this to the crossing of the Gold Range on the Canadian Pacific Railway, with the difference in favour of the Bute Inlet route that snow sheds would not be required. But I believe that a pack trail would cost quite a large sum of money, owing to the number of rock slides and the large number of glacial streams to be crossed.

CHILCOTIN PLATEAU.

The Chilcotin plateau and the country north of it, including the Blackwater valley, the Nechaco valley, all covered by the present exploration, form the greatest part of the region discovered by Sir Alexander McKenzie one hundred years ago, and named by himself New Caledonia. Geographically it answers to the interior plateau of Idaho, Nevada and Utah. Its general elevation above the sea level may be taken as an average of 3,000 feet, though several valleys are much lower.

The part covered by the present exploration and lying between the Fraser River and the Cascade Range, is watered by three principal rivers, running from west to east and falling into the Fraser. First, the Chilcotin to the south, then the Blackwater or Westroad, and, last, the Nechaco.

Besides these, several rivers take their sources on the edge of the plateau and run their courses through the Cascade Range to the Pacific Ocean, amongst which are the two Homalkos, the Kle-na-klene, the Bella-Coola, the Salmon River, and branches of the Skeena.

This year's exploration, besides the course of the Homalko, includes the area comprised between the Cascade Range to the south, or 51°50′ of latitude North; the Cascade Range to the west, or from 125° to 127° in longitude west, the Fraser River east, answering nearly to the meridian of 123°30′ of longitude, and to the 54°30′ of latitude north—an extent of over thirty thousand square miles.

To render the description as clear as possible, I will begin to give the particularities of the main rivers, following each with the description of their affluents.

TATLA LAKE.

Tatla Lake is the source of one of the principal branches of the Chilcotin River, the name of which is the Chilanco. The length of the lake is about 20 miles, with a width of over one mile, except at the eastern end, where it gets to be river-like and very narrow. The lake is rather deep at its western extremity, but the other end is shallow, and in low water several meadow-like patches are left uncovered.

At the west end of Tatla Lake, Messrs. Martin and Franklin have started a cattle ranch on a small scale. They have a very fine hay meadow, and they have also located a fine piece of land on a creek falling into Tatla Lake five miles from its western end, where they intend to cut hay and build a small saw-mill.

Mr. Franklin, after some very hard work, cut a waggon road himself as far as the Indian village of Anahim. Of course, it is far from being a perfect road, but to its maker it is worth much more than the old pack trail, and I believe a few hundred dollars of the public funds could not be better employed than in finishing that road properly and in building it as far as the Bella-Coola River, where it would help in opening a rather large quantity of good grazing land.

The height of Tatla Lake above the sea is about 2,980 feet. Grain, I am afraid, could not be cultivated there on account of summer frost; nevertheless, Mr. Martin informs me that a few potatoes, turnips, carrots, radishes and lettuce he planted came on very well.

The grazing land, which includes all the northern bank of the lake, a narrow strip on the southern shore, and that large extent which joins to the two heads of the Homalko, and, farther west, the source of the Kle-na-klene and the Bella-Coola, where pieces of bunch grass and an extent of hay meadows are plentiful, is quite considerable.

The grass, like in the rest of the Chilcotin valley, is very luxuriant; the bunch grass is thick and long; the principal grasses belong to the *triticum dasystachyum*, *bromus*, *kalynii-poas*, &c., &c., mixed up with bunches of willow herb *(epilobium augustifolium*, *artica gracilis)*, cow parsnip *(heracleum lanatum)*, sage *(artemesia frigidi)*, wild onions. A very stunted prickly pear is also sometimes seen on the sidehills.

The shore near the lake is fringed with small poplars, willows *(Saliæ longifolia)*, and service berries *(Amalanchier Canadensis.)*

The bank to the south rises steeply as a rule. The bunch grass covers the sidehills, but the top, which is almost level, is covered with a scattered growth of black pines, mixed with a few small balsam poplars.

The north shore rises much more gradually, and offers a wide belt of open land in some parts. The top hills are covered with the same growth of black pine, but mixed up with a much larger amount of poplars, which denotes the better quality of the soil. Pea vines and other grasses are very abundant in the open wood and promise a good grazing.

The only drawback to be expected in that part, as far as cattle raising is concerned, will be the quantity of snow in winter. This will be ascertained only by experience.

The extent of ground from the south of Tatla Lake towards the east branch of the Homalko is covered with numerous lakes—Eagle Lake, Cochin, Buckhorns.

Although not quite as open as the fine ground lying between Tatla and the head of the upper West Homalko, it offers a large amount of grazing land. The limit of the bunch grass is Tatlayoco Lake.

CHILANCO RIVER.

The Chilanco River is not more than 30 feet in width and one foot in depth in July. Where it comes out of Tatla Lake there is a succssion of lake-like expansions for a distance of 10 or 12 miles. Besides a few riffles, the river is not rapid.

The valley, for nearly the whole way to the junction with the Chilcotin proper, a distance of 28 miles by the trail, is of a very uniform appearance. To the south the ground is generally covered with small black pine; to the north, the valley varies in width from a few chains to about half a mile. The country in the valley resembles very much Tatla Lake. There are several places, especially near a point known as the Red Bluff, where good farms could be made.

The up hills, though partly wooded, offer good summer grazing, and there is a large number of ponds, some of which could be utilized to irrigate the low lands at points where it would be too costly to irrigate from the Chilanco.

At the junction of the Chilanco with the main branch of the Chilcotin coming from the north, there is also a very desirable spot for a fine farm of large extent, and the water could be got in abundance.

THE CHILCOTIN RIVER.

Clusko River.

The Chilcotin proper takes its source in a chain of small lakes on the high volcanic plateau to the north, at a distrnce of about 55 miles from its junction with the Chilanco, and at an altitude of 4,600 feet. The old Canadian Pacific Railway survey, generally known as the "Chezicut survey," follows its course nearly all the way, passing by Lake Puntzee. The upper part of the river, very improperly called Clusko River, from Lake Chezicut up to the source, is really a part of the Chilcotin and should be called accordingly.

From the junction with the Chilanco to Chezicut Lake, a distance of about twenty-five miles, the river is much like the Chilanco. The width is over half a mile; the sides, in terraces, are generally covered with luxuriant grass; the bottom land is hay meadows, or low land, partly covered with willows, easy to clear.

Chezicut Lake.

Chezicut Lake is a fine sheet of water of 3½ miles in length, at an altitude of 3,290 feet. From this lake to the sources of the Clusko the valley gets much narrower; the bunch grass is not so common, but meadows are in abundance. Several ranches could be made on the river. A little farming may be done in its lowest part—at least the hardiest vegetables could be raised —but it may be considered more as a cattle country than anything else.

Several feeders fall into the upper Chilcotin, amongst which can be mentioned the Clinchinampan, coming from Lake Temapho to the east, and the Puntzee, coming from the lake of the same name, to the west.

The course of the latter, about nine miles before reaching the lake, shows much good grazing land and meadows.

Puntzee Lake.

Puntzee Lake (or Pen-zene) is a fine water stretch of over six miles in length and very wide. Its shores, especially the north, offer very good grazing and several meadows. It would be one of the best situations for a cattle ranch of middle size.

Ten miles from the junction of the Chilanco and Chilcotin the Chilco River falls into the Chilcotin from the south-west. That part of the Chilcotin valley is much like the upper part just below the Chilanco. Messrs. Lee and Bailiff have a flourishing small cattle ranch here. Farther down the grazing is very good, but there is not much land good for cultivation.

Nine miles farther, Alexis Creek comes from the north, and for a distance of over 40 miles, where the Chilcotin falls into the Fraser, there is no stream of any importance coming in.

At the mouth of Alexis Creek, Messrs. Hewer and Nightingale have a garden, where they grow all kinds of vegetables. Further down, on the south side of the river, there are several ranches where all sorts of farm produce are grown. The valley of the river, although not getting very much wider, gets to be of a greater value, as several plots of good land, mostly all taken, cover the valley. At one point, known as "Anahim Flats," the Indians have a reserve of several thousand acres of the very best land, and they utilize a good portion of it in farming.

The upper plateau, sometimes at a height of nearly 4,000 feet, is formed of lovely prairies, on which large bands of cattle are already feeding.

Messrs. Drummond and Beaumont, near Risky Creek, have a large cattle ranch; they also raise grain on a 300 acre farm.

The trail leaves the river before getting to Risky Creek, passes over the high plateau, and follows the Fraser River at a distance to Soda Creek. Along the trail there are a few fine farms.

THE CHILCO RIVER.

This river, of a large volume, 100 feet in width and very deep, takes its source into Chilco Lake, an immense expanse of water in the heart of the Cascade Range, of which the lowest part only was surveyed. The total length of the river is about 50 miles. It has one feeder from the west, the Choelquoit, coming from a twelve mile lake of the same name in the foothills; and the Taseko, a mountain stream coming from the south-east. Near Chilco Lake there is a little bunch grass and several meadows which could be utilized. A small valley from a creek falling into Chilco Lake, and a small stream into the Taseko, named the Na-â-ma valley, offer also very good grazing land. At the point where the Chilco falls into the Chilcotin, there are about 2,000 acres of very desirable farming land.

ALEXIS CREEK.

This creek is very small, about 20 feet by 8 inches in summer. It takes its source in the interior, at a distance of 20 miles, and within a gunshot from the sources of the Nasco. One of the railway surveys followed its course. For the first six miles from the Chilcotin there is hardly any valley; the ground is very broken and covered with black pine. At this distance it gets much wider and bunch grass appears; there are also some good meadows.

Messrs. Hewer and Nightingale have here a good cattle ranch. The upper part of the river is narrow, but with some good grazing in places and several meadows.

The amount of land fit for culture in the Chilcotin valley and not yet taken would come up to about 6,000 acres.

THE FRASER RIVER.

From the point where the Chilcotin enters the Fraser to where the second big affluent comes in—the Blackwater—there is a distance of about 130 miles by the river. Several feeders from the west side fall into it in that distance, but none of any extent.

From the mouth of the Blackwater to the mouth of the Nechaco the distance is about 50 miles.

On the east bank of the Fraser River there are some establishments, as Soda Creek, Alexandria, Quesnelle. On the west shore there are only a few farms, and some Chinamen doing a little hydraulic mining. Several thousand acres of land could be utilized, especially above Quesnelle. Most of it would have to be cleared; but the timber on the low lands being nearly all poplars it would be easy work. The soil is very rich, and everything can be grown, even tomatoes. Ten to fifteen thousand acres would be fit for first class farms.

PUNTATAENENT RIVER, OR BAKER'S CREEK.

This creek is of small size, and falls into the Fraser opposite Quesnelle. It takes its source from lakes in the interior. Nearly all its course is wooded and very little land could be utilized.

BLACKWATER, OR WEST ROAD.

This stream in its low stage in summer is on an average of 70 feet wide and two feet deep, and not very rapid as a rule. From its mouth to the canyon, at the bridge, a distance of about 22 miles, the valley is narrow and elevated about 300 feet above the level of the water. The banks form wonderful terraces,—in some points as many as eight of them can be distinctly counted There are several parts of the lowest terraces which would be fit for cultivation. The south shore, as a rule, is quite wooded, but the north, being more exposed to the sun, is more open and prairie-like.

From the first canyon to the second, about 16 miles, the aspect of the country is much the same as the lower part. At this point the Eu-chi-ni-co River falls into the Blackwater. From there to the junction with the Nasco there is a distance of ten miles. From the mouth of the Nasco to 18 miles further up, at the foot of Lake Klacoil, the river keeps its first appearance of a stream slow and winding between high terraces; still there are a large number of riffles and small falls. The grazing is also very good, especially on the north side. From Lake Klacoil to nearly the head of the river, over 80 miles, near the foothills of the Cascades and the head waters of the Nechaco, the river is much less rapid. It is mostly a succession of lake-like expansions. Amongst the principal of these come the Eu-chi-ni-co, eight miles long, the Cash-ya, six miles long, the Tsa-cha, ten miles long, and several others of smaller size.

A large amount of small streams, coming generally from lakes, feed the main river from the south. One of the particularities of the Blackwater is that it drains hardly any country from the north. At the first canyon, the source of one branch of the Chilacco is half a mile from the Blackwater.

Near Lake Euchinico, a ridge of 1½ miles separates this lake from Lake Kuy-a-kuz, falling into the Nechaco. The ground seems to decline towards the north immediately after passing the upper terraces.

The river preserves its well developed terraces all the way, but on a smaller scale. The grazing is good all the way, with an abundance of hay meadow.

Although there is no large tract of land lying together fit to make large settlements, almost all along the river ranches or farms could be established.

The upper benches are covered with a growth of black pine *(Pinus contorta)*, but at certain places, like where the river crosses the telegraph range, Douglas fir of good quality could be had.

NASCO RIVER.

The Nasco takes its source near the head of Alexis Creek, and runs almost due north. It is one of the rivers where the terraces are the best preserved. Its current is rapid, especially in its lower part. Though generally wooded with black pine and balsam-poplars, there are several good spots for grazing. The bottom of the valley offers also a large quantity of hay, and several of the lower benches could be used for farming or raising hay.

Eight thousand acres is about the quantity of land fit for farming.

EUCHINICO, OR IS-CUL-TAESSI.

This branch of the Blackwater, of a width of 50 feet and a depth of 2 feet, is not very rapid as a rule. Although there are lots of riffles, it has exactly the same character as the upper part of the Blackwater, but on a smaller scale. The lake-like expansions are not so large, and the terraces are lower and closer apart. It takes its source in Lake Choo-tambi, near Granite mountain.

Between the Euchinico to the north, the Blackwater to the south, and the McMillan mountains to the west there is a wide plateau of an average elevation of 2,800 feet. The northern part of that plateau is generally broken and timbered; but a great portion of the southern part, 150 miles in area, I estimate, forms a splendid grazing ground. It is a gently rolling, park-like country, covered with bunch grass and quantities of other rich food plants. The only trees are scattered balsam-poplars *(P. balsamifera)* of middle size. The lowest part of the plateau—75 miles, perhaps—might be cultivated.

In conjunction with the flat lands along the Blackwater, it will some day make a fine ranching country. It is cut up by small creeks, ponds and meadows.

The Euchinico has numerous small feeders coming from the north, the largest of which is the Natanico. All these streams drain a large tract of country, extending to the north. It is all wooded with black pine, spruce (*albis nigra*), and along the streams and lakes, which form a perfect net-work, there are innumerable hay meadows. The grazing along the Euchinico is much similar to the upper part of the Blackwater.

BA-ZE-CO RIVER.

This river rises near the head of the Chilcotin, runs north-easterly, and falls into the Blackwater, after a course of about fifty miles. The valley is very narrow, the terraces more broken than on the other rivers, and also more timbered. Some grazing hills could be utilized for cattle raising, and hay meadows in the valley are quite numerous.

BETWEEN CHILCOTIN AND BLACKWATER.

This vast extent of country, from the Fraser River to the head of the Chilcotin River, forms a vast timbered plateau; it is in general very level, and its average height would reach about 3,500 feet. Black pine of small size forms the forest, and on some ridges Douglas fir of a middle quality. Further west, for about 25 miles, the plateau gets much higher and more broken, and vegetation on the volcanic ground gets very scant.

That volcanic plateau rises in a chain of mountains running westerly towards the Cascades, and divided in three distinct groups—first, the Itcha Range; second, the Il-ga-chuz; third, the Tsi-tsult. Those mountains rise to an altitude of 7,000 feet, and are barren, except some parts which would give a very fine summer grazing ground. Caribou is very plentiful in these mountains.

THE NECHACO RIVER AND VALLEY.

The Nechaco is the biggest river explored this season. It falls into the Fraser at Fort George, in latitude north 53° 55′. It is a noble stream of about 300 feet wide, very deep and not very rapid at its mouth. For a distance of about 75 miles it flows into a deep depression in the general level of the country, which seems to follow the 54° of latitude. This depression continues to the head water of a branch of the Skeena, and forms the valley of the big lakes Fraser and Français.

The upper Nechaco takes its source near the head of the Blackwater, at the foot-hills of the Cascades, runs north-easterly for over a hundred miles, where it strikes the depression above mentioned, near the discharge of Fraser Lake, and adapts its course to it.

From its mouth to the Chillacco, a distance of 14 miles by the river, the Nechaco flows between very high banks, very well wooded. The vegetation here shows a great change in the climate, and proves that irrigation is no more necessary. Douglas fir, engelman spruce, balsam spruce (*albies lesiocarpa*), birch (*bitula papyracea*), all grow to a great size. Devil's club (*echinopannax horida*) makes its first appearance.

From the mouth of the Chillacco to Chinlac, the junction of the Stuart River, the banks get much lower, and fine low terraces of good land begin to appear. The soil, called "white silts" by Mr. Dawson in his exploration of the country, is very rich.

From Chinlac to the discharge of Fraser Lake, nearly fifty miles by the river, the banks are generally low and very rich. The general level of the land is from 2,300 to 2,500 feet above the sea. There are large extents of prairies and meadows, and the rest is partly open, the vegetation being composed of thickets of small aspen poplars and balsam poplars; the grazing is also very rich. *Triticum dasystachium*, *artica gracilis*, *bromus ciliatus*, *poas*, *kalmii*, and several other varieties, form the forage plants. From Fort Fraser the Nechaco keeps its course through rich country for about 20 miles; after that the banks get higher and more wooded. Some of the spruce is of good quality, but Douglas fir disappears. For a distance of about 40 miles by the river, the course of the Nechaco is much the same—rapid, and the banks very wooded. At this point a stream comes from the north, draining the water of Lake Cheslata.

Cheslata Lake.

This lake, of a length of 25 miles, is generally wooded, but offers fine grazing along some parts of its north banks, and a few thousand acres of land fit for culture, and now covered with poplars.

Great Lakes.

Eighteen miles further the Nechaco passes through the lower end of Lake Natalkuz. That lake runs north-west, and is nearly 20 miles in length. A very short creek joins it to Lake Ootsabunkut, of a length of over 40 miles, but narrow. There are no large plots of good land along those lakes, but numerous small plots of 2,000 or 3,000 acres, which in the aggregate would form over 100,000 acres of good land, very fertile and partly open, poplars and dwarf birch being the only growth.

The Nechaco to its source, under the name of Entiaco or Keslachie River, offers only detached plots of good land or good grazing, the larger part being timbered and composed of light soil.

Another large stream falls into Natalkuz Lake, draining a long chain of lakes extending far into the Cascade Range. Very little good land is found in that direction.

THE CHILLACCO OR MUD RIVER.

This stream has a width of 60 feet, and a depth of 15 inches at low water. From its mouth for about 35 miles it flows nearly due north; its valley is from a half to one mile in width, and very rich. The low lands are covered with rich meadows, and the river is fringed with splendid cottonwood and engelman spruce. Fifteen square miles of the richest land could be used for farming, and irrigation would not be required.

From that point the main branch of the Chillacco comes from a lake named Totuk, on the other slope of the Telegraph Range, at a distance of over 50 miles. There are some fine meadows and some good grazing land on that part east of the Coast Range. The upper part is through a narrow pass.

THE STUART RIVER.

This river, the largest feeder of the Nechaco, drains the lake of the same name, distant about 50 miles northwest. The current is not very rapid, the level of Stuart Lake being only 2,200 feet above the sea. The banks of the river are rather high and timbered, but in the valley several spots of low land, very open, could be used for farming.

LAC DES FRANCAIS AND FRASER LAKE.

Nautly Creek.

At the point where the Nechaco River enters into the great depression, Nautly Creek joins the Nechaco. The length of this creek is only one mile. It empties Fraser Lake or Nautly.

Fort Fraser.

Fort Fraser is on the north bank of Nautly Creek, and there is also a considerable Indian village.

The elevation of Fraser Lake is 2,225 feet; its length is about twelve miles, and its width about three. The ground on both shores is low and partly open although broken here and there by hills too high for cultivation. A good amount of low land would make fine farms; the upper lands would make good grazing ground as they are, but would be much improved if the timber was burnt.

Stellako.

The Stellako River, six miles long and rapid, brings the water of Lac des Français into Fraser Lake. The first three miles are rather level, and are formed of good land; the upper part is running through hills of 200 feet in height, but good for grazing.

Lac des Français or Nito.

Lac des Français is 59 miles long, 3 to 4 miles in width, and very deep; its height is 2,375 feet. There is a fine piece of rich and partly open land at its east end; further up the hills get to be 300 or 400 feet in height, but offer everywhere good grazing. The upper 30 miles on the south shore present a very pleasant appearance. It is a low, undulating country, covered with a short growth of small poplar, dwarf birch, juniper of large size (*j. virginiana*), high bush cranberry (*vibuernum pauciflorum*). The grass is composed of all the varieties found on the Nechaco, mixed up with willow herb (*epilobeum augustifolium*), cow parsnip (*heracleum lanatum*), and a few tufts of sage (*artemisia frigida, tridenta*). The north shore is much the same, only more broken by high hills near the lake.

There are numerous islands in the lake, and several long, low points of rich soil, and fringed with cottonwood and birch (*betula glandulosa, betula papyracea*). The whole makes a very grand view. The climate, according to all authorities, is much better than in any other part explored this summer; by the vegetation, the autumn came three weeks later here than in the Blackwater Valley.

At the west end of the lake there is a river called the Nadinako; it takes its source at the foot of an isolated mountain called Nadina, at a distance of 20 miles. Immediately beyond this mountain, which closes the great depression, a stream falling into the Skeena takes its source.

I estimate that there are 400 miles in area, fit for culture, from Fort Fraser to the Nadina Mountain.

ENDAKO.

This rather sluggish river takes its source in a chain of lakes, the first of which, Burns Lake, is 30 miles distant.

Burns Lake has a length of eleven miles, and two miles further up is Decker Lake, seven miles long. The river falls into the Stellako at the Indian village of Stella, one mile further up than the west end of Fraser Lake. Along this stream there is a large quantity of low land, partly open, very good for agriculture.

COUNTRY BETWEEN BLACKWATER AND NECHACO.

The extent of country between the Blackwater and the Nechaco, the Fraser River to the east and the Telegraph Range to the west, is very broken in its eastern part, or east of the Chillacco. It is generally wooded. From the Chillacco to the range, the general appearance of the country is much more level. The north part of it, traversed by several small streams falling into the Nechaco, and having several fine lakes scattered through it—like E-len-ta-leza, La Fourche, Tsinkut, Noolki, Tachic—is low, generally composed of white silts, and very rich. One thousand miles in area of this could be utilized for farming.

TELEGRAPH RANGE.

This range, about 5,000 feet at its highest, begins near the head of Baker's Creek and finishes opposite Lake Tachic. West of the Telegraph Range, and as far as the Fawnie Mountains to the north and the McMillans to the south, the country is rather low and wooded, and covered with a net-work of small creeks, ponds, and wet meadows.

FAWNIES AND MCMILLANS.

Those two groups of mountains attain 6,000 feet in their greatest height. The flanks are generally wooded, but on their summits there is some fine summer grazing, with a wealth of Alpine plants.

Quanchus Mountains.

West of these mountains there is a very extensive forest plateau watered by the Kes-la-chic and the upper part of a branch of the Salmon River, it extends as far as the Cascade Range. Further north, immediately south of the great lake Ootsa, the Quanchus Range, much similar to the Fawnies, and elevated 5,800 feet, and with good grazing on the tops, is the last range of hills examined this summer.

Between the Quanchus and Lac des Français there is an undulating plateau of a height from 2,700 to 3,000, slightly timbered, and with a large quantity of good land in its northern part.

TRAILS.

The principal trails in the extent of country explored, are the Chilcotin trail from Tatla Lake to Soda Creek. This trail can now be used for waggon by taking only light loads.

The trail from Soda Creek to Quesnelle following the Fraser River.

The Palmer trail from Quesnelle to the sea by the Bella-coola; this trail is very little used.

The trail from the mouth of the Chillacco to Chilco Lake.

The old C. P. R. trail along the upper Chilcotin. The trail from the Chilcotin River to Cluscus Lakes, by Alexis Creek, the Nasco, and across the volcanic plateau to Cluscus Lake. The Telegraph trail from Quesnelle to the Nechaco, Fraser Lake, the Endako River, and on to the forks of the Skeena. The Blackwater trail, from the crossing of the Blackwater by the Telegraph trail, along the Blackwater to its source, then to the sea by the Salmon Rivers. The Chillacco trail from the crossing of the Blackwater to the Nechaco along the Chillaco. The trail from Blackwater crossing to Fort George and the mouth of the Blackwater. The trail to Fort George from Tsin-kut Lake. The trail to Fort St. James on Stuart Lake from Stony Creek on the Nechaco. The trail to Stuart Lake from Fort Fraser. The trail to Cheslata and Ootsa from Fort Fraser. The construction of roads in almost any direction presents very little difficulties; the report of the Chief Engineer of the C. P. R. in 1877 gives a large amount of information which need not be mentioned here.

GEOLOGICAL NOTES.

The geology of the country explored this summer has been reported by Messrs. Selwyn and Dawson, who made extensive examination of nearly the whole region. Only the main leading parts will be given here, with the localities of the different minerals collected.

The route through the Cascade Mountains was nearly all through "Cascades Cryslallines series." Around Tallayoco Lake and the upper part of the two branches of the Homalko, the formation is called by Mr. Dawson, "Porphyrite group" (*Mezozoic*). The formation towards the north is in general all formed of tertiary, chiefly volcanic, and often overlaid with basalt, which seems to come from some great *vents* near the Tsitsult Mountains.

Lignites.

The Telegraph Range—the neighbourhood of the Stuart River—the lowest part of the Blackwater, and several other places, are classified as "Lower Cache Creek Group," and are rich in limestone. Lignite in drift and sometimes in very large quantity has been observed in numerous places. Lignite in place, of good quality, has been found on the Nasco, on the upper Neehaco at three different places. South of Lake Tanyabunkut, on a small stream falling into the Salmon River, two beds of lignite of great thickness and good quality have been found; also iron nodules much similar to the Skidigate iron.

On the Fraser River, between Fort George and Quesnelle, lignite in places is also seen.

It is very possible that in some of the rocks of the lower Cache Creek group, of the section explored, better quality of coal may yet be found ; it is the opinion of Mr. Dawson, based on the discovery of some anthracite-like matter near the bridge on the Black Water.

Copper.

Copper ore in small veins has been found on the west branch of the Homalko in three different places. Four different veins of the same, and small pieces of native copper have been found on Lac des Français.

Cinnabar, Quartz, Alum, Arsenic.

Pure cinnabar in small quantity has been found on the two branches of the Homalko. Quartz bearing free gold and sulphurets was discovered on the west branch of the Homalko, and on the Chillacco river. On the lower Chilcotin and on the Fraser River, alum shale and " feather alum " were found in large deposits ; also native arsenic.

Galena, Limestone, Tuff, Base for Porcelain.

Two veins of galena were located on the Chilcotin River. Limestone of good quality is found on the Lower Chilcotin. On the Nasco there is a bed of calcarious tuff, called travertine (holding nitre) by Mr. Dawson, which would make good lime. Limestone is also found in numerous other places. Some of the volcanic tuff near the Fawnies Mountains and the McMillans would very likely be useful as a base for hydraulic cement. A tuff on Lac des Français, found in large quantity, is supposed by Mr. Dawson to be fit for the manufacture of porcelain. A few experiments made with it seem to corroborate his opinion.

Placers.

Gold washing was tried on every stream. Though colours were found almost everywhere, the only place where the result seems to be promising, was on a small creek falling into the Chilco River from the south-west ; on the Chillacco or mud river, and several of the small streams falling into it, where coarse gold was found ; but little time could be spared for that work

TIMBER.

There is no part of the country explored where timber for exportation will ever be found ; but enough Douglas fir could be cut for local wants, should a railway be built there. Some of the spruce *(Engleman)* would answer very well for bridge or trustle building ; in some parts the black pine *(P. contorta)* grows big enough to be used for ties. Cedar can be found on the Salmon River, Bella-Coola and Klenaklin ; also on the upper parts of the Fraser. The small black pine answers very well for fencing. Small balsam and aspen poplars could be used later on to make wood pulp. Some of the juniper on Lac des Français, where they grow sometimes to a diameter of 15 inches, might be employed for divers purposes.

ROADS OF ACCESS.

There would be no extraordinary difficulties in building a railroad or waggon road into the country from Bute Inlet by the Homalko, or from Bella-Coola or Bentinck Arm, by the Bella-Coola and Salmon Rivers. A route to Lac des Français was also found practicable by the C. P. R. engineers from Dean Channel and the Skeena, but, I believe the route by Bute Inlet and the East Homalko to be the most practicable.

A waggon road from opposite Quesnelle and following the present Telegraph trail, would, I believe, be the first needed to open the rich valley of the Nechaco ; it would not be costly. The actual trail follows the best and cheapest route which could be followed.

INDIANS.

The Indians inhabiting the territory explored this season, belong to the Tinneh (or Dénés). This nation is sub-divided into several tribes ; two of them, the " Carriers or Porteurs" and the " Chilcotins," live in the extent of country traversed this year.

The Carriers (or Porteurs), according to Rev. Father Morice, have been so named from an old custom amongst them that, when a man would die, his bones, after cremation, had to be carried by his widow for a year. These Indians seem very intelligent and good natured ; they can all read and write their own language, and several of them can read and write English or

French. They all belong to the Roman Catholic Church, have chapels in every village, and seem to be most religiously inclined. Chinook is unknown amongst them ; but they all speak French, if not of the purest, can at least be easily understood. Their principal villages are near Fort St. James (Narcosti), near Fraser River (Nautly). On the Stellako River they have the big fishing village of Stella, near Fort George, at Chinlak, on the upper Euchinico, and Black Water they also have small villages. They do very little farming, and their principal food is salmon, which they get in abundance.

The other tribe, the Chilcotins, occupy the valley of the same name ; they have a language of their own, but cannot read or write as a rule ; in intelligence they do not come up to the Carriers, nor in good disposition.

Their houses are not so good, but they do much more farming, and several of them own cattle. They have villages on Risky Creek—the main Chilcotin river, where their chief Anahim resides—on Puntzee—Chilco and Cluscus lakes. They are dying off much more rapidly than their northern neighbours. The Chilco Lake Indians often trade at Bute Inlet, crossing the high range of mountains to the Southgate River.

GENERAL CONCLUSIONS.

Taking the compact tract of good land on the Nechaco valley, Fraser and Nito Lakes, and the numerous tracts mentioned in the course of this report, there are about (3,000,000) three million acres fit for agricultural purposes. Of that, one-third, perhaps, is in prairie, or so open that it may be classed as such in practice ; the rest is nearly all composed of level benches, partly covered with a small growth of poplars.

The soil all over, is of the richest loam with clay subsoil. In some parts, at high elevation, summer frosts may do a little damage at first, as the Indians say ; but, I believe, that if the seeds were put in as early there as they should be, and if there was any clearing done, that the danger would be over. The Indians take advantge of little openings to plant their potatoes, without paying any attention to sunshine or elevation and without cultivation, so frost in several parts is the result.

The Nechaco valley seems to be free of that danger. It is remarkable that everywhere on the black pine plateau, where the fire has passed two or three years in succession, the forest gives place to fine pasture. I have reason to think, and it is also the belief of Dr. Dawson that, later on, the whole of that plateau, which covers millions of acres, will some day become useful for cattle raising ; even the high plateau on the local mountains, like the It-cha, Il-ga-churz, Quanchus, Fawnies, offers rich summer pasture on their summits, where the fire has passed.

The first thing needed to open this country, is a waggon road from Quesnelle. No doubt the country will be thoroughly settled only when there is a railroad, but I think a waggon road would open the Nechaco valley in the mean time.

There is room for thousands of settlers, and with its good land, abundance of water, fire-wood, abundance of game and fish, a rather large population of miners and Indians at short distances, making a local market for produce for the first years, I believe no other place in the in the interior, in the North-West territories, or in British Columbia, offers better promises of success for the farmer or cattleman.

(Signed) A. L. POUDRIER. D.L.S.

To the Honourable
the Chief Commissioner of Lands and Works.

———o———

NITINAT VALLEY SURVEY.

VICTORIA, B.C., January, 1891.

SIR,—I have the honour to submit my report of the survey conducted by me during the season of 1890 in the valley of the Nitinat River.

Having received your letter of advice and instruction of the 19th May, notifying me that the Hon. the Chief Commissioner of Lands and Works had been pleased to approve of my appointment to take charge of a party for the purpose of surveying Crown lands in the Nitinat Valley, I began at once the organization of my party as directed, and also the collection of the necessary supplies.

On Friday, the 23rd of May, I left Victoria with my party for the scene of operations, going in, as suggested in your letter, by way of Cowichan Lake. I arrived at the foot of the lake on the evening of Saturday, the 24th May, but owing to the absence of the necessary boats, and the difficulty of getting our stores forward as rapidly as I had expected, I was unable to proceed to the head of Cowichan Lake until the following Tuesday morning, when I took everything forward, and spent a few days in establishing a *cache*, and building a store-house, whence I might subsequently draw supplies as they were needed.

Leaving the larger part of my party at this point in charge of the principal chainman, for the purpose just named, I proceeded with the balance, and the Indian guide and packers whom I had engaged, across the trail to the Nitinat River. This trail I found very rough, and in many places so obstructed as to be scarcely distinguishable. There was, moreover, little evidence of any cultivable land until we struck the valley of a large creek flowing into the Nitinat River, and which I have in my notes and plan distinguished as Vernon Creek. I spent some time in looking over the valley where we struck it, and finding, above Vernon Creek on the Nitinat, where a couple of prospectors had given notice of their intention to pre-empt land, I determined to begin my survey nearly at the confluence of the Nitinat River and the creek already referred to.

At this point the land is fairly level and good, with a growth of very fine timber, and presents a fine situation for building purposes, and a good water power with an ample supply at all seasons for lumber or other manufacturing purposes, and a large quantity of good timber. The country in this vicinity, as well as elsewhere on the Nitinat, had been well looked over by the representatives of H. R. Morse, as posts set by them were met with at all stages of my survey.

From the junction of Vernon Creek and the Nitinat River as a starting point, I continued the survey up the latter river as far as good or fairly good land was met with, but the belt of land suitable for settlement seemed to narrow very considerably as the upper part of the river was reached. At places it may have been somewhat over a mile in width, while in others the mountains on each side approached the banks of the river so as to leave very little cultivable land on either side of the river.

The earlier part of the season, and up to the month of July, was very wet, and the continuous rains interfered very materially with the progress of the work.

Early in the month of July, I learned that a considerable number of applications were being made for the purchase and pre-emption of lands near the mouth of the river. I therefore applied for and obtained permission to discontinue work where I was then prosecuting it, and to begin anew at the point where the Nitinat enters the Inlet or so-called Nitinat Lake, a salt water lagoon extending from the ocean some nine or ten miles inland.

Thenceforward my survey was continued up the river, and embraced all the lands suitable for cultivation on either side, and extending from the banks back to the mountains and up their sides, until further progress prevented either by the character of the ground, or for other reasons it seemed undesirable or unnecessary to carry the section lines any further.

Before finishing the season's work, however, I was able to make connection with the work done in the earlier part of the season, and thus present both portions as a connected whole, covering all the lands on the river which seemed to me to be embraced by my instructions as being suitable for settlement, into townships, sections, &c., &c.

These lands on the Nitinat, while not of great width nor very extensive, are very rich and productive. They are also readily accessible from the sea, and thus offer many inducements to prospective settlers. The soil is a sandy loam of considerable depth and richness, and apparently very productive. In the lower lands there is a considerable growth of timber of various kinds, but the spruces are the largest and much the most valuable. Some of them are of unusual size and of the best quality.

Much of the agricultural land in the Nitinat Valley has already been applied for or pre-empted, but there is still, I think, sufficient remaining to furnish a number of good ranches to those willing, for a time at least, to give the necessary labour to bring them under cultivation.

On the mountain sides, which rise abruptly from the lower or flat lands, there is not unfrequently a growth of very fine fir and cedar, which is not unlikely to attract the attention of those seeking timber lands, as it could be driven to the lake at no very great cost of clearing out the obstructions from the river's bed.

The Nitinat River, in the season, furnishes an abundant supply of various species of salmon, and affords no small portion of the winter food supply of the Indians who live on its banks, as well as of those at the mouth.

As has already been said, the early part of the season was exceedingly wet and unpleasant for field work. The latter part was not prolific of rain, and the rapid rise in the river showed, on more than one occasion, what was, I was informed, its chief pecularity. Owing to the facility with which the various tributaries drain into the main river, the rises are very considerable within very short periods.

Game is also said to be abundant during some seasons in the vicinity of the Nitinat, but we did not meet with it while there, although it may be said with propriety that it was not very diligently searched for.

As has been previously intimated, the Nitinat is most readily reached by way of the sea and the salt water lagoon into which it empties, yet a road might be constructed from the head of Cowichan Lake to the Falls of the Nitinat at no very great expense. It was my intention to have made an exploratory survey of this road, but the almost continuous rains during the month of October precluded.

I have, &c.,

(Signed) S. P. TUCK.

W. S. Gore, Esq.,
Surveyor-General.

———o———

SAN JUAN VALLEY SURVEY.

DECEMBER, 24th, 1890.

SIR,—We have the honour to submit the following report on our survey of the valleys of the San Juan and Gordon Rivers during the season of 1890.

In township number ten, San Juan Valley, with the exception of sections six and seven, the soil in the lands surveyed is a rich clay loam, highly suitable for agricultural purposes. It is fairly well drained by small creeks emptying into the San Juan River. In sections six and seven the soil is sandy. The land is uniformly level, with the exception of a rocky ridge extending through part of section eight, and through sections nine, ten, eleven and fourteen. The valley is heavily timbered with spruce and hemlock, with considerable alder, maple and crabapple along the banks of the San Juan River and its tributaries. The spruce will average about five feet in diameter; hemlock, about two feet. Considerable cedar is found on the side of the mountains in sections two, three, four, and five, some of this cedar being rather large, averaging from fifteen to seventeen feet in diameter, but the greater part of it will not exceed five feet in diameter; although not of the best quality, it is still marketable. On the south side of the ridge extending through sections eight, nine, ten and eleven there is considerable Douglas fir, which will average about five feet in diameter. No more Douglas fir of any consequence is found in this township. The side of the mountains on the north side of the valley is timbered principally with hemlock, with a few scattered Douglas fir and cedar. The entire valley is covered with a dense growth of underbrush and fallen timber, the underbrush is principally salmonberry and scrub crabapple. It is almost impossible to travel through the valley without first cutting a trail. The average width of the valley in this township is about one and three-quarter miles. In township eleven (Gordon River Valley), the quantity of land is very limited. With the exception of the north-east quarter of section eleven, the north-west quarter of section twelve, the south-west and part of north-west quarter of section fourteen, and the north-east quarter of section fifteen, there is no more land of any consequence. The soil is a clay loam. The timber is principally hemlock, with scattered spruce and cedar. The underbrush is very thick, and similar to that in township number ten. In townships twelve and thirteen there is only a narrow strip of bench land in the north halves of sections thirty-one and thirty-six. Along the north boundary of section thirty-six the soil is a clay loam. The remainder of the land surveyed in these townships is sandy. The timber is principally hemlock, with scattered cedar. There is considerable fallen timber and dense underbrush.

In township fourteen, the soil in section eighteen and the north half of section seven, is a clay loam; the remaining portion of the land surveyed in this township is sandy and gravelly. The bottom land comes to an end in section eight. The balance of the land is hilly. There is considerable Douglas fir in the north halves of sections seventeen and eighteen, and on the south halves of sections nineteen and twenty. The remaining portion of the township is timbered principally with hemlock, with scattered spruce and cedar.

We estimate the amount of land suitable for settlement in the San Juan valley to be about 8,500 acres. In Gordon River valley, about 800 acres. The San Juan River is not navigable except for small craft with a draught of four or five feet, and then only in high tide, when if the jam in section eight were removed they could go about three or four miles up from the mouth. The river after this point becomes a series of short stretches of quiet water and rapids.

The jam in the river in section eight is a serious obstacle to the settlement of the valley. It is about four hundred yards long, and extends entirely across the river. The Indians have made several attempts to remove it by setting it on fire, but with very little success. In the rainy season this jam backs up an enormous quantity of water and floods a great deal of the valley. It would not be necessary to remove the entire jam, as a channel could be cleared on the north side of the river of a sufficient width to allow the surplus water to escape.

Gordon River is only navigable for a short distance from the mouth, and is very rapid. Both the San Juan and Gordon Rivers are subject to very heavy freshets in the rainy season, and it would be advisable for settlers to build their houses as far back from the banks of the rivers as possible. We left Victoria on the 29th of May and arrived back on the 25th of October. We had to wait a week after the completion of the survey for the steamer. The survey thus occupied about five months, but the months of June and October were so wet that a good deal of time was lost. We have, &c.,

To the Honourable (Signed) T. S. GORE & Co.

the Chief Commissioner of Lands and Works, Victoria.

WEST BOUNDARY OF E. & N. RAILWAY BELT.

To the Hon. Chief Commissioner of Lands and Works:—

SIR,—I received instructions from the Surveyor-General to survey the western boundary of the Esquimalt and Nanaimo Railway Company's land grant, known as the Island Railway Belt, running in a straight line from the mouth of Muir Creek, on Juan de Fuca Straits, to the top of Crown Mountain. I herewith beg to submit the following report of progress:—

It was first necessary to make some calculations for latitude and longitude of Crown Mountain and Muir Creek; the course and distance between them.

On July 8th I proceeded to Cape Mudge and Quathiaski Cove, on Discovery Passage, from which places Crown Mountain is plainly visible. The mountain is easily identified there, from its position on the Admiralty chart. There is no other conspicuous mountain near it. Its top, or peak, has three round points or knobs, which somewhat resemble a crown. It was covered with snow in July last.

I measured a base line on the shore of Vancouver Island, and by triangulation and calculation found the true course and distance from Observatory Spot, on the south end of Grouse Island, to the peak of Crown Mountain. Observatory Spot is an astronomical station used by the Admiralty surveyors in their survey of the sea-coast, and its latitude and longitude are given in their tables. From these observations and calculations I ascertained the latitude and longitude of Crown Mountain, founded upon that of Observatory Spot. Latitude of Crown Mountain, 49° 56′ 42″; longitude, 125° 50′ 26″. The latitude and longitude of Muir Creek I took from the Admiralty chart. Latitude of Muir Creek, 48° 22′ 35″; longitude, 123° 52′ 30″. The calculated course from Muir Creek to Crown Mountain makes an angle N. 38° 36′ W. with the meridian of Muir Creek, and an angle of N. 40° 5′ W. with that of Crown Mountain. The distance is 140.5 miles. These courses and distances agree very closely with the Admiralty chart.

On August 1st I proceeded to the mouth of Muir Creek, with a party of four axemen, two chainmen, one cook, and six packers. We blazed the line well, and planted mile and half-mile posts, made bearing trees, &c.

I did not observe any good land as far as I have gone, that is fit for agricultural purposes. From the Jordan River onward the country is very mountainous. The bed-rock, for the first three miles from the sea-shore, is sandstone, shale, and conglomerate; then comes six miles of trap; then ten miles of slate, with small quartz veins; then trap again. The timber is chiefly hemlock, small fir, and cedar. On every elevated place, 1,200 feet or more above the sea, there is an abundance of yellow cedar. Deer are not plentiful, except in one place, between the rivers Jordan and San Juan, on an elevated plateau of about 1,200 acres, containing patches of meadow, ponds of water, and scattering timber.

I experienced great difficulty in getting supplies to camp, as we had many high and precipitous mountains and deep ravines to cross. I commenced to return on September 22nd, after completing 23 miles. Our provisions were about consumed, and it would take some time to get a new supply by way of Cowichan Lake.

I ran the line with the solar compass, an instrument which requires the sun to be shining. At this time of the year the sun does not rise so high above the horizon, and for many hours in the forenoon and afternoon it is hidden from view by the trees and mountains. The best time of the year to use it is between April 1st and October 1st, and it is well adapted for running this line.

When the line is continued next year, about April 1st, the party, with a large supply of provisions, can go by way of Duncan's Station and Cowichan Lake.

I have, &c.,

(Signed) WILLIAM RALPH.

Victoria, B. C., October 16th, 1890.

———o———

LILLOOET RIVER.

Wm. Allen, D. L. S.

Lands situated in the valley of Lillooet River, extending northward from the Pemberton Meadows for a distance of some 18 to 20 miles, have been surveyed, and will be thrown open to pre-emption at an early date.

PITT RIVER.

Captain Jemmett, D. L. S.

In consequence of representations that a large area of arable land existed in the valley of the inlet to Pitt Lake, an exploratory survey was made, but as the result failed to confirm the reports received as to extent or fertility, it was not considered advisable to undertake the expense of actual survey.

VICTORIA, B. C.
Printed by RICHARD WOLFENDEN, Printer to the Queen's Most Excellent Majest