

CANADA
DEPARTMENT OF MINES
HON. CHARLES STEWART, MINISTER; CHARLES CAMSELL, DEPUTY MINISTER

NATIONAL MUSEUM OF CANADA
W. H. COLLINS, ACTING DIRECTOR

BULLETIN No. 56

Annual Report for 1927

CONTENTS

	PAGE
GENERAL ACTIVITIES OF THE MUSEUM: W. H. COLLINS	1
NOTES ON THE BEOTHUK INDIANS OF NEWFOUNDLAND: D. JENNESS.....	36
PRELIMINARY REPORT ON FIELD WORK IN 1927: W. J. WINTENBERG.....	40
KITCHEN-MIDDENS OF THE PACIFIC COAST OF CANADA: H. I. SMITH.....	42
MATERIA MEDICA OF THE BELLA COOLA AND NEIGHBOURING TRIBES OF BRITISH COLUMBIA: H. I. SMITH.....	47
BIRDS AND MAMMALS OF THE MOUNT LOGAN EXPEDITION, 1925: H. M. LAING, R. M. ANDERSON, AND P. A. TAVERNER.....	69



OTTAWA
F. A. ACLAND
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1928

MATERIA MEDICA OF THE BELLA COOLA AND NEIGHBOURING TRIBES OF BRITISH COLUMBIA

By Harlan I. Smith

INTRODUCTION

This paper describes the materia medica of four tribes of British Columbia, the Bella Coola of Bella Coola valley, the Gitksan of Skeena river, the Carrier who live in the territory behind both of these tribes, and the Sikani of the headwaters of Peace river. Among the Bella Coola the medicines are largely family possessions known to a few individuals only, so that two families may have different remedies for the same specific complaint; but this is not the case among the other tribes. Everywhere magical practices enter largely into the treatment of disease, but are not touched upon in this report. It was impossible for the Indians to diagnose many of their maladies, so that the identifications given here are in many cases problematical.

Most of the information relating to the Bella Coola was given the writer in 1920-22, by Joshua Moody, apparently a full-blood Bella Coola Indian, born about 1868. As he did not speak English he gave the data in Chinook jargon, which has been interpreted and arranged in logical order. Joshua is an Indian scientist with great knowledge of the local plants and animals. He remembers when Mr. John Clayton was the only white man living in Bella Coola valley, and when the inhabitants saw only one other white man every year or two. Consequently he can recall the old Bella Coola material culture before it was much affected by European ideas.

Some of the information relating to the Bella Coola was given the writer in 1922-23 by the late Captain Schooner, also, apparently, a full-blood, born about 1848, who used the Chinook jargon. Alee Davis, Alexander Cleleman, Louie Hall, and other Bella Coola Indians likewise gave information and corroboration.

Most of the information relating to the Southern Carrier Indians of Ulkatcho was secured during 1920-1922 from Charlie West, alias Pretty

Charlie or Handsome Charlie, a native of that place, born about 1874. Charlie used the peculiar form of broken or pidgeon English commonly employed for communication between the whites and the Carrier and Chilcotin Indians of this region.

The information about the Sikani and the Northern Carriers of Hagwelget is from stray field notes kindly supplied by Mr. D. Jenness.

The information relating to the Gitksan was secured in 1925-26 from the late John Fowler and Abraham Fowler of Kitwanga, Luke Fowler and Bob Robinson of Hazelton, with additions and corroboration from a few others, all old Gitksan Indians, apparently full-blood. The information was secured mainly in English, although Abraham Fowler used also the Chinook jargon.

The method the writer employed was to submit specimens of the plants to his informants and question them concerning all their uses. Of the information thus obtained only the medicinal portion has been presented here. The plants were later identified by Mr. M. O. Malte, of the National Museum, Ottawa.

POLYPODIACEAE, FERN FAMILY

Polypodium vulgare L., POLYPODY, PARASITIC SWORD FERN

Bella Coola: Roots—sometimes mixed with leaves of the red cedar (*Thuja plicata* Donn) or with other medicinal roots which the informant had forgotten—boiled, and the warm decoction taken internally for pains in the stomach, but not for vomiting or diarrhoea. Neither an emetic nor a purgative.

Roots chewed for swollen sore throat.

Southern Carrier: Not used.

Asplenium cyclosorum Rupr., LADY FERN

Bella Coola: Little roots cleaned off, from five to ten centres, mixed at times with roots or branches of the currant (*Ribes laxiflorum* Pursh. var.), boiled strongly, but for a short time only, and the decoction used as a wash for sore eyes.

Southern Carrier: Not used.

Aspidium spinulosum Sw., SHIELD FERN

Bella Coola: Root eaten raw to neutralize poisoning from eating several kinds of shell-fish in the early part of the summer.

Fern, species uncertain

Northern Carrier: Root boiled and the decoction taken internally for worms.

Gitksan: The large, round, green root-stock, but not the rootlets, mashed with bark of balsam fir (*Abies grandis* Lindl.) and devil's club (*Oplopanax horridum*), a little gum of scrub pine (*Pinus contorta* Dougl.) or tideland spruce (*Picea sitchensis* Carr), and root of skunk cabbage (*Lysichiton kamtschaticense* Schott), warmed a little, and applied to a boil or ulcer, which it brought to a head. Also used for rheumatism, and as a plaster on the chest for hemorrhage of the lungs.

LYCOPODIACEAE, CLUB MOSS FAMILY

Lycopodium clavatum L., COMMON CLUB Moss

Southern Carrier: Inserted in the nose to cause bleeding and cure headache.

TAXACEAE, YEW FAMILY

Taxus brevifolia Nutt., YEW

Bella Coola: Branches with leaves boiled, and the decoction taken internally for the lungs. Neither a purgative nor an emetic.

CONIFERAE, PINE FAMILY

Juniperus communis L., JUNIPER

Bella Coola: Roots, leaves, branches, and bark boiled, and the decoction taken internally as often as desired for many ailments, including a cough from the lungs, and pain in the stomach. Neither a purgative nor an emetic.

Southern Carrier: Branches boiled, and the vapour inhaled for headache and pain in the chest.

Northern Carrier: Tips boiled, and the decoction taken internally as a purgative, also for a cough.

Juniperus sp.

Gitksan: Entire plant, including roots and berries, boiled for a day, and the decoction, when cool, taken internally for many ailments, including hemorrhage and kidney trouble. A purgative and diuretic.

Thuja plicata Donn, RED CEDAR

Bella Coola: Very soft bark used to bind up wounds, and to cover poultices of false bugbane (*Trautvetteria grandis* Nutt.) and of tall buttercup (*Ranunculus acris* L.).

Leaves, sometimes with the gum-coated cones, boiled, and the hot decoction taken internally for pain in the stomach. Neither an emetic nor a purgative.

Leaves powdered by pounding, mixed with a little cold water and taken internally for pain in the stomach, also externally for coughs and internal pains, as heart trouble, rheumatism, swollen neck, and pain in the stomach. See also Polypody.

Gitksan: Not used.

Chamaecyparis nootkatensis (Lamb) Spach, YELLOW CYPRESS, YELLOW CEDAR

Bella Coola: A little soft bark used to cover poultices of false bugbane (*Trautvetteria grandis* Nutt.) and of tall buttercup (*Ranunculus acris* L.).

Pinus contorta Dougl., SCRUB PINE, JACK PINE

Bella Coola: Gum applied to cuts.

Gum chewed and applied to broken skin.

Gum at the ends of branches, collected in November, December, and January, boiled and the decoction taken internally for "consumption."

Gum—like that of tideland spruce and western hemlock—mixed with the baked stems and leaves, or the dried and pulverized bulb, of false hellebore, and applied as a poultice (sometimes spread on red cedar bark) to the chest for heart trouble, and to the arms for rheumatism. Burned the skin within two or three days, but was sometimes left on as long as two weeks.

Southern Carrier: New shoots boiled, and the decoction taken internally for pain in the stomach. Resembled the decoction made from the bark of the aspen, or from the new shoots and bark of the tideland spruce, but the last-mentioned considered most efficacious.

Northern Carrier: Needle tips mixed with large needle tips of the "British Columbia pine" (*Pinus* sp.), the inside bark of the wild gooseberry (*Ribes* sp.), bark of the red-osier dogwood (*Cornus stolonifera* Michx.), the inside pulp of raspberry canes (*Rubus* sp.), stems of the "bearberry" (?black twin-berry, *Lonicera involucrata* Banks?), and the inner bark of the wild rose (*Rosa* sp.), placed in a vessel holding four gallons of water, boiled down to a thick decoction, strained, and bottled. About two tablespoonfuls taken, at sunrise and sunset, for constitutional weakness or paralysis, or if the body were covered with sores.

Gum obtained by heating a green piece of pine (sp.) painted on the eye to remove white scum and to cure snow-blindness.

Sikani: Pitch chewed and the saliva swallowed for a cough.

Gitksan: Inner bark (scraped from the trunk with a bone scraper after the outer bark had been removed) eaten both for food and as a blood purifier. Purged the body in from half an hour to an hour.

Shavings of the yellow resinous timber found after removal of the bark boiled, the decoction placed in oil, and taken internally as a purgative and diuretic for many serious ailments, including gonorrhoea. Said to produce beneficial results in "consumption."

Young needles plucked in June and eaten as a purgative and diuretic.

***Abies grandis* Lindl., WHITE FIR, BALSAM FIR**

Bella Coola: Bark of root or of stem boiled, and the decoction taken internally every day for tuberculosis and stomach trouble. Said to have cured many cases of tuberculosis.

Gum from bark blisters found on young trees warmed, mixed with mountain goat tallow, and taken internally for sore throat; also drawn on a hair across sore eyes.

Young, green leaves baked, mixed with fruit of skunk cabbage (*Lysichiton kamtschaticense* Schott.) gathered in October, or the buds gathered in April, split, dried on top of the house, roasted, mixed with a

small quantity of slightly roasted roots of the cow parsnip (*Heracleum lanatum* Michx.), one or two cupfuls of the gummy buds of the black cottonwood (*Populus trichocarpa* T. and G.), and four or five cupfuls of fresh eulachon oil, allowed to stand one day, then boiled and kept in a box for a hair perfume. Kitimat Indians said to be more expert in its preparation.

Southern Carrier: Tree used for medicine, but details not obtained.

Chilcotin: Not used.

Abies sp.

Northern Carrier: Bark boiled in water and the decoction taken internally as a purgative.

Gum used as an ointment on wounds, and especially on burns.

Sikani: Gum applied to wounds.

Gitksan: Juicy inner bark, scraped from the trunk of the tree, after removal of the outer bark, taken internally for constipation.

Gum from the bark blisters taken internally as a purgative and diuretic for "consumption," gonorrhoea, and many other serious ailments. Applied externally to cuts and sores, especially the sores of gonorrhoea.

The young cones, obtainable in August, sliced across, mashed, and used for the same purposes as the gum from the bark blisters.

***Pseudotsuga taxifolia* Britt., DOUGLAS FIR**

Bella Coola: Gum boiled and taken internally, while warm, as a diuretic for gonorrhoea.

Gum, spread on red cedar bark, applied to cuts. (One informant said that although gum of scrub pine, hemlock, and tideland spruce were good, Douglas fir gum made cuts worse.)

Gum mixed with dogfish (shark) oil or, if that were not available,

eulachon oil, taken, two spoonfuls at a time, with warm water, as an emetic and purgative for colds, rheumatism, gonorrhoea, constipation, intestinal pains, and diarrhoea.

Southern Carrier: Not used.

Gitksan: Not used.

***Tsuga heterophylla* (Raf.) Sarg., WESTERN HEMLOCK, AND
Tsuga Mertensiana Carr, MOUNTAIN HEMLOCK**

Bella Coola: Leaves chewed and applied to burns.

See also scrub pine .

Gum warmed and applied to cuts. Not boiled for a diuretic for gonorrhoea.

Burning twigs applied to the skin for various internal ailments.
Southern Carrier: Not used. *Gitksan*: Not used.

***Picea sitchensis* Carr., TIDELAND SPRUCE**

Bella Coola: Tips of small, but not of large, spruces mixed with blue currant (*Ribes brocteosum* Dougl.), young juneberry (*Amelanchier florida* Lindl.), and crushed branches (leaves and stems) of garden snowberry (*Symphoricarpus racemosa* Michx.), boiled and taken internally for gonorrhoea.

Sap from the peeled trunk taken in doses of from half a cup to a cupful as a laxative from May to August.

Ripe cones boiled, and the decoction taken internally for a pain. Neither an emetic nor a laxative. A bed consisting of a sack of ripe cones, placed on top of hot stones, used by rheumatics. Cones also burned to fumigate rheumatics.

A piece of the bark 5 feet long by 2 feet wide used as a mat in a hot bath for rheumatism. Many stones were heated, a little sand strewn over them, the bark spread above with the inside uppermost, and the patient, naked, lay on the bark, covering himself with one or more

blankets. A similar bed, but with the bark covered with a few leaves of devil's club (*Oplopanax horridum.*), used for chronic backache.

Gum applied to small cuts, broken skin, and suppurating sores. Branches used to whip a burned arm or leg until the blood came. Gum boiled and taken internally while hot as a diuretic for gonorrhoea.

See also scrub pine.

For use with fern..

The buds or new shoots, with the gum sometimes found around the outside when they are about half an inch long, boiled in water, and the decoction taken internally for tuberculosis.

Southern Carrier: New shoots and bark of small branches boiled for about two hours, and the decoction taken internally, one or two cupfuls at a time, for pain in the stomach, but not for vomiting, diarrhoea, or constipation. Said to effect a cure in one day, and preferred to the decoction made of scrub pine or aspen.

Gum from new shoots and small branches, scraped out with a little stick, placed in the eyes for snow-blindness.

Sikani: Inside bark scraped and chewed for a cough.

Needles chewed, and the saliva applied to external sores.

Gum, obtained by splitting the tops, applied with a stick to white spots on the eye.

The "flower" boiled and the decoction taken internally for pain in the chest.

Gitksan: Gum extracted from the wood by boiling in water, added to eulachon oil, salmon oil, bear grease, ground-hog fat, lard, etc., and taken internally before meals for consumption.

Twigs bearing both leaves and bark boiled with entire roots of soapollie (*Shepherdia canadensis* Nutt.); one cupful of the strong decoction taken internally three times a day for rheumatism.

ARACEAE, ARUM FAMILY

Lysichiton kamtschaticense Schott., SKUNK CABBAGE, YELLOW ARUM

Bella Coola: Roots used with oil as a hair tonic.

Roots boiled, and the sweet decoction taken internally for stomach trouble.

See also white fir.

Gitksan: Root well mashed with water and applied externally for blood poison and boils. Said to bring boils to a head. For use with a fern

Smoke from the burning roots inhaled for bad dreams, influenza, and rheumatism (a remedy avoided by medicine men, lest it destroy their magical power). Roots themselves considered poisonous.

Leaves used to sit or lie on when taking a sweat bath for rheumatism; also spread over the afflicted parts.

Calla palustris L., WATER ARUM

Gitksan: Roots well boiled and the decoction taken internally for cleaning the eyes of the blind, for hemorrhage, for short breath, and influenza.

LILIACEAE, LILY FAMILY

Clintonia uniflora Kunth., QUEENS CUP

Bella Coola: Boiled and used to wash the body. One leaf toasted and applied as a poultice to eyes or wounds.

Southern Carrier: Not used.

Gitksan: Not used.

Smilacina racemosa L., FALSE SOLOMON'S SEAL

Bella Coola: Not used.

Southern Carrier: Not used.

Gitksan: Roots boiled and decoction taken internally as a very strong medicine for rheumatism, sore back, and kidney trouble. A purgative. Bark and leaves useless. Roots mashed and bound on cuts.

Veratrum viride Ait., FALSE HELLEBORE

Bella Coola: Small bulbs or scrapings of large bulbs, boiled, and one cupful or less of the decoction, according to the strength of the patient, taken internally for chronic cough, gonorrhoea, constipation, pain in the stomach, and many illnesses. Two or three cupfuls acted as an emetic. Said to be poisonous if eaten raw.

Small pieces of the raw root swallowed with a little cold water as an emetic for pains in the stomach. More water taken if all the pieces not vomited. Overdose considered fatal.

See also scrub pine.

Southern Carrier: Entire roots dried in the sun, and powdered by rubbing on a stone. About a dessertspoonful of the powder taken in hot water as an emetic for sickness. Too strong a decoction considered fatal.¹

SALICACEAE, WILLOW FAMILY

Salix lasiandra Benth., WILLOW

Bella Coola: Six sticks about a foot long charred, and pulverized on a stone. A teaspoonful of the powder taken in a cupful of cold water for diarrhoea. Said to effect a cure in two or three hours.

A piece of the inner bark folded once and the folded edge inserted into a knife cut; other edges then separated and flattened down, and the wound covered with eagle down. Thought to make the pus come out. Same process used to heal incisions in the abdomen made by those who

¹ The late Dr. C. F. Newcombe informed the writer that this plant seems to be used by every tribe in whose territory it grows.

tried to cure pain in the stomach.

Southern Carrier: Not used.

Gitksan: Not used.

Salix Scouleriana Hook., WILLOW

Bella Coola: Folded inner bark used like that of *Salix lasiandra* Benth. for cuts; but charcoal from the stick not used for diarrhoea.

Southern Carrier: Not used.

Gitksan: Not used.

Salix sp., WILLOW

Sikani: Young willow chewed and the saliva applied to external sores.

White powdery tops chewed for a cough.

Populus tremuloides Michx., ASPEN, TREMBLING POPLAR

Bella Coola: A quantity of bark from the roots boiled, and the decoction taken internally from seven to ten times a day for gonorrhoea with hemorrhage from the urethra. A very bitter decoction, said to be a good remedy that stopped the hemorrhage.

Southern Carrier: Bark used instead of tideland spruce bark to make a decoction for pain in the stomach. Considered inferior to the spruce bark.

Sikani: Bark pulverized by pounding, moistened with water, and applied as a paste to wounds.

Bark scraped, scrapings steeped in hot water, and the decoction taken internally for worms. Caused a stool immediately.

Gitksan: Bark of roots chewed or mashed and put on cuts.

Bark alone boiled, and the decoction taken internally as a purgative. Not an emetic.

Populus trichocarpa T. and G., BLACK COTTONWOOD

Bella Coola: Leaves, ten to fifteen years old, from the lower layers lying rotting on the ground, boiled, and the decoction used as a bath, the patient sitting in it up to his neck for about two hours to cure pain in the body, not rheumatism. A hot stone added from time to time, and the bath repeated the next day.

The buds with their resin boiled and the decoction used as a hair wash. See also white fir.

Half a cupful of buds, picked some time between December and March, mixed with two roots of cow parsnip (*Heracleum lanatum* Michx.), a half cupful of buds of mountain alder (*Alnus tenuifolia* Nutt.), and a little water, mashed, and applied warm, but uncooked, as a poultice for pains in the lungs or hips like rheumatism. Said to effect a cure in two days, but harmful if left on longer. See also western dock.

Southern Carrier: Buds with their resin boiled for one or two hours, and the decoction taken internally for coughs and lung affections.

Resin from the buds applied to the face as a cosmetic, or, with the addition of oil, to repel mosquitoes, black flies, and gadflies.

Roots and bark not used; buds not boiled to make a hair wash.

Northern Carrier: Green roots chewed to a pulp and applied to wounds to stop bleeding.

Inside bark boiled and the decoction used as an eye-wash.

Gitksan: Gummy buds boiled and the resin mixed with bear grease for a hair perfume.

Roots, leaves, and seeds not used.

MYRICACAE

Myrica Gale L., SWEET GALE

Bella Coola: Branches, secured at any time of the year, pounded with their bark, boiled, and the decoction taken internally for gonorrhoea. A diuretic. The decoction, which was kept in a box made of red cedar wood with a little cover to keep out the dust, soured in two or three days and became useless.

Southern Carrier: Not used.

BETULACEAE, BIRCH FAMILY

Alnus sitchensis (Reg.) Sarg., GREEN ALDER

Bella Coola: Cones used as a remedy for some unspecified complaint.

Ainus tenuifolia Nutt., MOUNTAIN ALDER

Bella Coola: Cones used as a remedy for some unspecified complaint.

See also black cottonwood.

Southern Carrier: Not used.

Gitksan: Pistillate catkins crushed, and the mass eaten raw as a laxative.

Pistillate catkins and shavings eaten raw, or else boiled in water and the decoction taken internally three times a day, as a diuretic for gonorrhoea. Said to effect a cure in one week.²

Alnus rubra Bong., RED ALDER

Bella Coola: Bark boiled, and a cupful of the decoction taken internally as a purgative.

Southern Carrier: Sap applied to cuts. Not used for a medicinal

² A Gitksan informant stated that the Tsimshian of the coast made a decoction of this tree which acted as an emetic, purgative, and diuretic, and was used for poisoning caused by eating sea-urchins.

decoction.

Northern Carrier: Inside bark ground, steeped in water, and injected with a syringe made from the crop of a bird, for biliousness.

Gitksan: Bark and roots boiled for about six hours and the decoction drunk in the morning for a cough.

Bark from the stem, but not from the roots, scraped, mixed with water, and the infusion taken internally, as an emetic and purgative, for headache and many other maladies.

URTICACEAE, NETTLE FAMILY

***Urtica Lyallii* Wats., WESTERN NETTLE**

Bella Coola: Used for a form of paralysis where the patient had been unable to walk for a long time. Limbs stung daily, causing sores and gradual revival of sensation. In one case said to have effected a cure in ten days.

See also western dock.

Southern Carrier: Not used.

Gitksan: Entire plant boiled, and the decoction taken internally for many illnesses, including hemorrhage and bladder troubles.

Stinging not used.

ARISTOLOCHIACEAE, BIRTHWORT FAMILY

***Asarum caudatum* Lindl., WILD GINGER**

Bella Coola: Boiled, and the decoction taken internally for pain in the stomach, but not for diarrhoea or vomiting.

Boiled, and applied externally for headache, intestinal pains, and pain in the knees.

Southern Carrier: Not used.

POLYGONACEAE, BUCKWHEAT FAMILY

Rumex occidentalis Wats., WESTERN DOCK

Bella Coola: Roots roasted for a short time in a hole in the earth among the ashes of a fire, covered with earth, mashed, and applied in quantity as a poultice for boils. Both leaves and roots used, according to another informant, and the poultice applied to wounds as well as boils.

Leaves used for a sweat bath for pains similar to rheumatism all over the body. Stones were heated, a little cold sand spread over them, and leaves spread on the sand; or else the leaves were spread on hot ashes. The patient sat or lay naked directly on the leaves, and was covered with blankets. Western Nettles (*Urtica Lyallii* Wats.), small branches of black cottonwood (*Populus trichocarpa* T. and G.) with the leaves on them, or the small kelp found on rocks were sometimes used when leaves of the western dock could not be obtained.

Southern Carrier: Not used.

LORANTHACEAE, MISTLETOE FAMILY

Arceuthobium americanum Nutt., SMALL MISTLETOE

Bella Coola: Boiled, and decoction taken as a potent medicine for hemorrhage of the lungs.

Southern Carrier: Boiled, and decoction taken freely for hemorrhage from the mouth, tuberculosis of the lungs, and emaciation.

NYMPHACEAE, WATER-LILY FAMILY

Nuphar polysepala (Engelm.) Greene, YELLOW POND-LILY

Bella Coola, old custom: Used in a magical way for pain in all parts of the body. A root in many cases as large as a man's leg was cut free from the bed of a pool with a hemlock pole sharpened like a shovel. A hollow was made in it, water placed in the receptacle, and hot stones added. The stones were changed four times, after which the patient drank one or two cupfuls of the water. He repeated the dose each day for four days.

To be effective the root had to be thrown back into the water, not on the ground.

Present custom: Root boiled twelve hours, and decoction taken internally for pain in any part of the body, such as “consumption”, rheumatism, heart disease, and gonorrhoea. Considered good for the blood. Not used as a diuretic, or for diarrhoea, constipation, or vomiting.

Gitksan: Infusion of scrapings of toasted root (or according to another informant, heart of root, boiled) taken internally for hemorrhage of the lungs and as a contraceptive.

RANUNCULACEAE, BUTTERCUP FAMILY

***Anemone globosa* Nutt. (*A. multifida* Poir.), WIND-FLOWER**

Bella Coola: Not used.

Southern Carrier: Plant, except roots, boiled and decoction taken internally for any sickness. Aroma of crushed leaves inhaled for cold in the head or lungs; for this purpose leaves sometimes placed in water and heated.

Gitksan: Handfuls eaten in sweat bath for rheumatism. A decoction of the plant sometimes used for the same purpose.

***Trautvetteria grandis* Nutt., FALSE BUGBANE**

Bella Coola: Roots pounded in a little water, and the resulting mass, covered with a little soft bark of the red or yellow cedar, applied as a poultice to boils and left on for half a day or a day. Said to promote suppuration and opening of the boil, but to cause such intense burning that it could not be applied to children. Considered less strong than the tall buttercup, but, like it, preferred to the cow parsnip, which was used in the same way.

***Thalictrum occidentale* Gray, MEADOW RUE**

Gitksan: A small piece of the root chewed, and some of the juice swallowed, for headache, eye trouble, and sore legs. Loosened phlegm and possibly accelerated the circulation of the blood.

Ranunculus arcis L., TALL BUTTERCUP

Bella Coola: Roots used as a poultice for boils in the same way as those of the false bugbane, but considered stronger and better.

CRUCIFERAE, MUSTARD FAMILY

Sisymbrium incisum Eng., A HEDGE MUSTARD

Gitksan: Mashed and applied to bad cuts.

CRASSULACEAE, ORPINE FAMILY

Sedum spathulifolium Hook., STONECROP

Bella Coola: Leaves of the plant before it blossomed eaten to start the flow of milk. Said to take effect in one day. Leaves warmed and applied externally for the same purpose.

SAXIFRAGACEAE, SAXIFRAGE FAMILY

Ribes bracteosum Dougl., BLUE CURRANT

Bella Coola: See tideland spruce.

Ribes laxiflorum Pursh. var., CURRANT

Bella Coola: Roots boiled in a very small box with hot stones and the weak decoction used each day for washing the eyes when filled with matter.

See also lady fern.

Southern Carrier: Not used.

Ribes lacustre Poir., SWAMP GOOSEBERRY

Bella Coola: Roots boiled and the decoction taken internally many times a day to cure constipation.

Leaves chewed and cud tied on sores caused by the pricklers of the plant; if leaves unobtainable the bark substituted after singeing off the pricklers.

Southern Carrier: Not used.

Gitksan: Bark boiled and used as a remedy for some unspecified malady.

Ribes divaricatum Dougl., COMMON GOOSEBERRY

Bella Coola: Bark or roots, sometimes mixed with those of the wild crab apple (*Pyrus diversifolia* Bong.), boiled, and the decoction used as an eye-wash three times a day for soreness and approaching blindness.

Southern Carrier: Not used.

Ribes sp., GOOSEBERRY

Northern Carrier: See scrub pine.

Saxifraga Bongardi Prest., SAXIFRAGE

Bella Coola: Roots and leaves gathered in the autumn, placed in a very small box with a very little water, and boiled. Decoction taken cold, or preferably hot, in quantity to cure strangulation of the bladder. Said to effect a cure in one day.

Southern Carrier: Not used.

ROSACEAE, ROSE FAMILY

Prunus emarginata Dougl., WILD CHERRY

Bella Coola: Roots and inside bark boiled with much water and the decoction taken in quantity daily for heart trouble.

Southern Carrier: Not used.

Gitksan: Not used.

Rubus spectabilis Pursh., SALMON BERRY

Bella Coola: Bark of roots boiled and taken internally for certain stomach troubles, but not for diarrhoea or vomiting.

Southern Carrier: Not used.

Gitksan: Not used.

Rubus sp., RASPBERRY

Northern Carrier: See scrub pine.

Fragaria bracteata Heller., STRAWBERRY

Bella Coola: Not used, but said to be used by Haida of Queen Charlotte islands to cure vomiting.

Southern Carrier: Not used.

Gitksan: Not used.

Rosa sp., WILD ROSE

Bella Coola: Roots and branches boiled, and the decoction taken internally, even ten cupfuls a day if desired, as a purgative for pain in the stomach.

Southern Carrier: Not used.

Northern Carrier: See scrub pine.

Sikani: Roots crushed, steeped in water, and the decoction used as an eye-wash.

Gitksan: Not used.

Physocarpus opulifolius (L.), Maxim., NINE-BARK

Bella Coola: Inner bark boiled for two hours, and two to four cupfuls of the decoction at blood heat taken internally as an emetic for persons

dizzy with pain. Four or five cupfuls of lukewarm water then taken as a cleansing emetic and repeated about five times.

Inner bark boiled a long time (when it ceased to have emetic properties), one cupful of the hot decoction taken internally, and thereafter applied externally as a wash twice a day for gonorrhoea and scrofulous glands in the neck. Said to be a laxative that caused the glands to break, discharge fully, and heal, A cupful taken internally daily in advanced cases.

Southern Carrier: Bark (gathered near the coast) boiled for two hours, and two cupfuls of the decoction taken as an emetic, or one cupful as a purgative. Said to act in half an hour, and to be an excellent remedy, but fatal in too large a dose.

Aruncus Sylvester Kost., GOAT'S BEARD

Bella Coola: Roots boiled, and one or two cupfuls of the decoction (or as much as desired) taken internally for pain in the stomach and gonorrhoea. A diuretic, but neither a laxative nor an emetic.

Roots boiled in grease of mountain goat (*Oreamnos montanus* Ord.) for a day and the decoction taken internally for smallpox.

Southern Carrier: Not used.

Gitksan: Not used.

Geum macrophyllum Willd., LARGE-LEAVED YELLOW AVENS

Bella Coola: Roots boiled, and decoction taken internally for pain in the stomach, but not for diarrhoea, or vomiting. Leaves, usually chewed but sometimes bruised, applied to boils.

Southern Carrier: Leaves boiled and the decoction taken internally for any sickness.

Leaves boiled and applied to bruises.

Pyrus sitchensis (Roem.) Piper., MOUNTAIN ASH

Bella Coola: Bark of the roots, and sometimes the inner bark of the stem, collected at any time of the year, boiled for an hour, and the hot decoction, weak or strong, preferably the latter, taken internally for the stomach or rheumatism. Said to effect a cure in from one to seven days. Not taken for diarrhoea, or vomiting; and for rheumatism sometimes poured into a large box and used as a bath. Used also as an eye-wash.

Southern Carrier: Bark chewed for colds.

Gitksan: Fresh fruit crushed and eaten raw as a strong purgative.

Pyrus diversifolia Bong., CRAB APPLE

Bella Coola: See common gooseberry.

Gitksan: Juice, scraped from peeled trunk, used as an eye medicine.

Trunk and branches, or scrapings from inside of bark, boiled until thick, and the decoction taken internally over a period of from four to six months for "consumption" and rheumatism. Said to be a fattening medicine, both laxative and diuretic.

Amelanchier florida Lindl., JUNEBOB, SASKATOON

Bella Coola: See tideland spruce.

EMPETRACEAE, CROWBERRY FAMILY

Empetrum nigrum L., CROWBERRY

Bella Coola: Green leaves, with or without berries, boiled, and the decoction taken internally as a purgative.

VIOLACEAE, VIOLET FAMILY

Viola adunca Sm. var. **glabra** Brain., VIOLET

Bella Coola: Not used.

Southern Carrier: Entire plant boiled and one or many cupfuls of the decoction taken internally for pain in the stomach, but not for diarrhoea or vomiting.

Gitksan: Not used.

ELAEAGNACEAE, OLEASTER FAMILY

Shepherdia canadensis Nutt., SOAPOLALLIE

Bella Coola: Not used.

Southern Carrier: Not used.

Northern Carrier: Root boiled in water and the decoction taken internally as a purgative.

Gitksan: Roots, stem, and branches boiled, and the decoction used as a wash for gonorrhoea.

Bark, branches, and leaves without roots boiled, and the decoction taken internally for chronic cough.

See also tideland spruce.

ONAGRACEAE, EVENING PRIMROSE FAMILY

Epilobium angustifolium L., FIRE WEED

Bella Coola: Root roasted in ashes, mashed between hands or stones, and applied to boils.

Southern Carrier: Not used.

Gitksan: Not used.

UMBELLIFERAE, PARSLEY FAMILY

Osmorrhiza sp., SWEET CICELY

Bella Coola: Ten to fifteen little pieces of root, as large as the end joint of

the thumb, ground by rubbing on a stone; two cupfuls placed in water warmed to blood heat, and two cupfuls of the decoction (according to the strength of the patient) taken internally as an emetic. Decoction acted (sometimes as a purgative instead of an emetic) within five or ten minutes, but lost its power if heated too much. Warm water taken afterwards until the patient vomited four or five times and the stomach was entirely cleaned. Used also for pneumonia.

Southern Carrier: Not used.

Heracleum lanatum Michx., COW PARSNIP

Bella Coola: Roots crushed, baked (or boiled in a box with hot stones), and applied as a poultice for boils. If too hot a poultice injured the skin.

Raw, uncrushed root inserted in an opened boil and left from half a day to a day. Pus said to come away with the root.

See also white fir, balsam fir, black cottonwood, and false bugbane.

Southern Carrier: Blossoms steeped in eulachon or other oil and the mixture rubbed on the body to keep off flies and mosquitoes.

Northern Carrier: Roots applied to swellings and bruises.

Sikani: Roots mashed and applied to swellings of neuralgia or rheumatism.

Gitksan: Roots mashed and applied to boils, rheumatic and other swellings.

Angelica genuflexa Nutt.

Bella Coola: Roots boiled and decoction taken internally as a purgative. Not an emetic. Sometimes used raw, but never roasted.

Gitksan: Roots well boiled with twigs of squashberry (*Viburnum pauciflorum* Raf.) from which the bark had not been removed, and decoction taken internally for headache and weak eyes.

Ligusticum scothicum L., LOVAGE

Bella Coola: Leaves spread over a hot stone or stones and used as a medicinal bed for the sick.

Southern Carrier: Not used.

Cicuta Douglasii (DC.) C. and R., WATER HEMLOCK

Bella Coola: Roots used as a purgative.

Southern Carrier: Not used.

ARALIACEAE, GINSENG FAMILY

Aralia nudicaulis L., SARSAPARILLA

Bella Coola: Roots boiled in a box with hot stones, and decoction taken internally as often as desired for pain in the stomach, or merely as a beverage. Nowadays sweetened with a little sugar. Stem, or its bark, not used.

Southern Carrier: Not used.

Gitksan: Not used.

Fatsia (Oplopanax) horrida Sm. (B. and H.), DEVIL'S CLUB

Bella Coola: Bark of roots chewed, and juice swallowed with a little water as a powerful purgative.

Bark of roots and stems boiled, and three or four cupfuls of the decoction taken internally as a purgative; or one cupful, three times a day for a week or two, to cure rheumatism.

Southern Carrier: Bark boiled, and one or two cupfuls of the decoction taken internally before and after childbirth as a purgative.

Northern Carrier: Inside layer of the inner bark rolled into pills and swallowed for cramps in the stomach and bowels, especially after a purgative. Acted also as a purgative, especially if much hot water taken

with it.

Gitksan: A decoction used as a purgative in the treatment of gonorrhoea. Believed to assist the knitting of broken bones if taken continually.

Boiled, together with entire plant of squashberry (*Viburnum pauciflorum* Raf.), and the decoction taken internally as a diuretic and purgative, for strangury or any sickness. Used continuously for rupture.

For use with a fern.

CORNACEAE, DOGWOOD FAMILY

Cornus canadensis L., BUNCHBERRY, DOGWOOD, DWARF CORNELL. PIGEONBERRY

Bella Coola: Not used.

Southern Carrier: Whole plant, without berries, boiled, and the strong decoction used as an eye-wash.

Northern Carrier: Used as a medicine for some unspecified malady.

Gitksan: Not used.

Cornus stolonifera Michx., RED-OSIER DOGWOOD, RED WILLOW

Bella Coola: Not used.

Southern Carrier: Not used.

Northern Carrier: See scrub pine.

Gitksan: Not used.

ERICACEAE, HEATH FAMILY

Pyrola secunda L., WINTERGREEN

Bella Coola: Not used.

Southern Carrier: Roots, gathered at any time of the year, boiled, and the strong decoction used as an eye-wash.

Pyrola bracteata Hook., WINTERGREEN

Bella Coola: Not used.

Southern Carrier: Leaves boiled, and the decoction used as an eye-wash.

Pyrola asarifolia Michx., WINTERGREEN

Bella Coola: Not used.

Southern Carrier: Leaves and roots, gathered at any time of the year, boiled for about two hours, and the warm decoction used as an eye-wash.

Gitksan: Not used.

Ledum groenlandicum Oeder, LABRADOR TEA

Bella Coola: Leaves boiled, and the decoction used as a simple coverage, or for pain in the stomach, but not for diarrhoea or vomiting. Neither an emetic nor a purgative.

Southern Carrier: Not used formerly, now as a beverage only.

Gitksan: Leaves boiled, and the decoction used as a diuretic, or merely as a beverage.

Gaultheria shallon Pursh, SALAL

Bella Coola: Leaves toasted, pulverized by robbing, and applied to cuts.

Southern Carrier: Not used.

LABIATAE, MINT FAMILY

Prunella vulgaris L., HEAL-ALL

Bella Coola: Roots, leaves, and blossoms washed, boiled, and a cupful of the weak decoction taken internally for the heart. Not used for diarrhoea or vomiting.

Southern Carrier: Not used.

Gitksan: Not used.

Mentha canadensis (M. arvensis) L., MINT

Bella Coola: Entire plant boiled, and the decoction taken internally, as often as desired, for pain in the stomach. Not used for vomiting, constipation, or diarrhoea.

Southern Carrier: Entire plant boiled, and a cupful of the decoction taken internally for the stomach, colds, lung affections, and various ailments.

Gitksan: Not used.

SCROPHULARIACEAE, FIGWORT FAMILY

Castilleja miniata Dougl., PAINT-BRUSH

Bella Coola: Not used.

Southern Carrier: Not used.

Gitksan: Entire plant boiled, and the decoction taken internally for bleeding, stiff lungs, sore eyes, and lame back, possibly caused by kidney trouble. A purgative and diuretic.

Seeds boiled and the decoction taken internally for coughs.

CAPRIFOLIACEAE, HONEYSUCKLE FAMILY

Lonicera involucrata Banks., BLACK TWIN-BERRY

Bella Coola: Leaves chewed and cud applied for itch. Leaves chewed and applied to boils, after they were cut open, to draw out the poison.

Leaves crushed and applied to burns and sores of gonorrhoea. Bark toasted, pulverized, and applied to sores of gonorrhoea. Bark boiled and decoction taken internally for cough.

Southern Carrier: Bark boiled for five hours, and the decoction used daily as an eye-wash. Roots, leaves, and berries not used.

Northern Carrier: See scrub pine.

Gitksan: Fresh juice of berries used in sore eyes. Inner bark (when berries not available) soaked in water, and the milky solution used in the eyes.

Symphoricarpus racemosa Michx., GARDEN SNOWBERRY

Bella Coola: Branches, large and small, with the bark left on, boiled, and the decoction taken internally daily as the best cure for gonorrhoea. A diuretic. Roots, blossoms, and berries not used for medicine, unless, as one informant stated, the berries were used with the branches.

See also tideland spruce.

Southern Carrier: Juice of ripe berries used in sore eyes.

Gitksan: Not used.

Sambucus racemosa L., RED-FRUITED ELDER

Bella Coola: Bark of the roots placed in water, a few hot stones added until water reached blood heat, and decoction used as a powerful emetic and purgative for pain in the stomach.

Bark of the roots peeled with the teeth, chewed, preferably with a little cool water, and juice swallowed as an emetic and purgative. Said to

act within half an hour.

Southern Carrier: Roots boiled, and two cupfuls of the warm decoction taken internally twice a day as a purgative.

Northern Carrier: Roots brewed, the first water discarded and the second taken internally as a purgative.

Sikani: Bark boiled, and the decoction taken internally as a purgative.

Gitksan: Bark of roots scraped off, water added to the bark, and the infusion taken internally as an emetic and purgative.

Viburnum pauciflorum Raf., SQUASHBERRY

Bella Coola: Bark chewed, and the juice swallowed for whooping cough and cold on the lungs.

Southern Carrier: Not used.

Northern Carrier: Inside bark crushed, steeped in cold water until the water turned green, and one cupful of the infusion taken internally as a purgative and for dysentery.

Gitksan: Bark and twigs boiled, and one cupful of the decoction taken internally in the morning for coughs and “consumption”. Said to be always taken in conjunction with devil's club. See also *Angelica genuflexa* Nutt..

VALERIANACEAE, VALERIAN FAMILY

Valeriana septentrionalis Rydb., VALERIAN

Bella Coola: Not used.

Southern Carrier: Roots, mixed with grease, used for perfume.

Northern Carrier: Valerian? blossoms crushed, and the oil, often mixed with fat from a black bear hide, applied as a hair tonic. Believed to make the hair smooth and shiny, to help its growth, and to give it a fragrance.

Gitksan: Entire plant steeped in bear grease and the grease applied to hair and face as a perfume.

Valeriana sitchensis Bong., VALERIAN

Southern Carrier: Leaves mixed with grease used as a perfume for the hair.

COMPOSITAE, COMPOSITE FAMILY

Achillea Millefolium L., YARROW

Bella Coola: Leaves chewed and applied to burns.

Southern Carrier: Entire plant, except the roots, boiled, and the decoction taken internally at frequent intervals for colds. Leaves chewed and applied to sprains and swellings.

Gitksan: The young plant, except the roots, gathered between June 1 and July 15, boiled, and the decoction gargled for sore throat.

Roots, marked by the dead stalks, dug out at other seasons and used instead.

Artemisia discolor Dougl., SAGEBRUSH, GREEN WORMWOOD

Bella Coola: Used for medicine.

Southern Carrier: Chewed and applied to sprains and swellings.

Northern Carrier: Sagebrush (sp. ?) steeped in water and the hot decoction taken internally for headache.

Antennaria Howellii Greene, EVERLASTING

Bella Coola: Leaves boiled, and the decoction taken internally for pains in the body, but not for pains in the limbs. Not used for colds.

Southern Carrier: Not used.

Gitksan: Not used.

Taraxacum officinale Weber., COMMON DANDELION introduced

Bella Coola: Roots boiled, and the decoction taken internally for pain in the stomach, but not for diarrhoea or vomiting. Remedy said to have been learned from white men.

Gitksan: Not used.

Lactuca spicata (Lam.) Hitchc., TALL LETTUCE

Bella Coola: Roots boiled, and many cups of the decoction taken internally for heart trouble, hemorrhage, pains in the body (but not in the limbs), for vomiting, or for diarrhoea. Neither an emetic nor a purgative. Milky juice not used.

Gitksan: Not used.

Prenanthes alata (Hook.) Gray, RATTLESNAKE ROOT

Bella Coola: Roots boiled, two or three cupfuls of the decoction taken internally daily for colds. For a baby only a small spoonful given three or four times a day.

Chewed, and applied to burns or to any painful part of the body.

Boiled, and two or three cupfuls of the decoction taken internally daily.

MISCELLANEOUS

Mnium affine Bland, Moss

Southern Carrier: Entire plant, except the “roots”, boiled, and two or three cupfuls of the decoction used to bathe a swollen face.

Fomes Laricis (Jacq.), more generally known as **Polyporus officinalis** Fries, A SHELF FUNGUS

Bella Coola: This (?) fungus ground, steeped in water, and the decoction taken internally for gonorrhoea.

Southern Carrier: If found on the Douglas fir tree, dried, powdered, a handful steeped in boiling water and the hot decoction taken internally as an emetic and purgative. Said to act within an hour. Not used if found on any other tree.

(According to Dr. John Dearness, this is a medical polypore, perhaps the only fungus used by pharmacists. Park, Davis, and Company make a fluid extract and a triturate which is prescribed for the relief of night sweats in tuberculosis. The fungus is a cathartic in large doses. Its medicinal virtues have long been known in the old world.)

Bovista pila B. and C., PUFF BALL

Bella Coola: Spores dusted on wounds, sores of gonorrhoea, and suppurating sores other than boils.

LICHEN

Bella Coola: A certain long, white lichen, if found on the red alder tree, warmed, and applied to a broken boil or suppurating sore.

Sticta sp., LICHEN

Bella Coola: Entire plant, if from red-osier dogwood (*Cornus stolonifera* Michx.) or crab apple (*Pyrus diversifolia* Bong.), but not from willow (*Salix* sp.), boiled, and five cupfuls of the hot decoction taken internally daily for pain in the stomach, but not for diarrhoea, constipation, or vomiting. Neither a purgative nor an astringent.

Entire plant boiled and the decoction used as an eye-wash.

Entire plant pulverized and applied to skin.

Southern Carrier: Not used.

KELP

Bella Coola: A small kelp found on the rocks sometimes used for a sweat bath. See western dock.

WOOD SAP

Bella Coola: The sap that oozes from any kind of wood when burning considered a good remedy for sores.

MOUNTAIN GOAT

Oreamnos Montanus, Ord., MOUNTAIN GOAT

Bella Coola: Mountain goat fat boiled with droppings of geese that had fed on roots, and the mixture given to babies once or twice a day for colds.

Goat meat with droppings of the bushy-tailed woodrat, commonly called packrat (*Neotoma cinerea*), taken internally with water as a remedy for nursing babies when they had colds.

SKUNK

Spilogale, SPOTTED SKUNK, or **Mephitis**, STRIPED SKUNK

Bella Coola: Oil not used as a remedy.

Southern Carrier: Oil warmed, and a cupful taken as a purgative for worms.

HARE

Lepus americanus columbiensis Rhoads, THE BRITISH COLUMBIA VARYING HARE

Northern Carrier: Hare opened, ruminating stomach containing something like the white of an egg removed, and the liquid applied to a foot blistered by frost-bite. Considered a sure cure.

RED SQUIRREL

Sciurus hudsonicus Erxleben

Bella Coola: Opened along the under side and applied as a remedy to

badly broken chancres in the groin.

GIANT SLUG

Bella Coola: Slug made to crawl into a baby's mouth to cure loss of skin on the inside of its mouth.

Slug opened, and bound tightly over large cut.

SEA CUCUMBER

Bella Coola: Decoction of the water in which the sea cucumber was boiled, taken internally as a specific against heartburn. Not a purgative.

SPITTLE INSECT

Cercopidae, SPITTLE INSECT, FROG HOPPER

Bella Coola: "Fly spit," i.e., the material surrounding a nymph of a spittle insect, applied to sores.

Southern Carrier: Not used.

WOODWORMS

Gitksan: Pulverized and applied to cuts.

COPPER

Bella Coola: Fine particles scraped from clean copper (but not from a weathered green surface) placed in sore eyes.

Gitksan: Copper ground, poured into a vessel of cold water, first water poured off, and second water taken internally as a harmless contraceptive.

CHARCOAL

Northern Carrier: Charcoal daubed under the eyes to prevent snow-blindness.

FIRE

Bella Coola: Burning twigs of very dry hemlock used to sear the skin for all kinds of internal ailments.

Northern Carrier: Hot coals used as a blister for a bad pain in the leg before applying an ointment.

CAUTERY

Gitksan: Fungus taken from a birch (or sometimes a hemlock), set alight, and used to sear a rheumatic person.

STEAM

Northern Carrier: Red hot stones placed in a dish of cold water, the head covered with a cloth and the throat steamed for a bad cough.

ICE-COLD WATER

Northern Carrier: A hole made in the ice and the feet soaked in the ice-cold water when they were frozen.

SEA WATER

Bella Coola: Sea water used as an emetic.