THE BRITISH COLUMBIA HISTORICAL QUARTERLY

APRIL, 1940

The
BRITISH COLUMBIA HISTORICAL QUARTERLY

Published by the Archives of British Columbia
in co-operation with the
British Columbia Historical Association.

Editorial communications should be addressed to the Editor, Provincial Archives, Parliament Buildings, Victoria, B.C.

Subscriptions should be sent to the Provincial Archives, Parliament Buildings, Victoria, B.C. Price, 50c. the copy, or $2 the year. Members of the British Columbia Historical Association in good standing receive the *Quarterly* without further charge.

The
BRITISH COLUMBIA HISTORICAL QUARTERLY

"Any country worthy of a future should be interested in its past."

VOL. IV. VICTORIA, B.C., APRIL, 1940. NO. 2

CONTENTS.

THE ASTRONOMY OF THE EXPLORERS.*

The task of tracing the early history of the use of astronomy in British Columbia is not easy. The writers who have essayed to give the history of the early explorations have had in general little knowledge of astronomy and assumed, correctly enough probably, that their readers would be more interested in a general account of the explorers than in how their positions were obtained and their maps constructed. The details of the instruments used and the methods employed are generally lacking in their accounts, and have been obtained in unexpected places or are tentatively given from a knowledge of those in use at the time.

It is desirable at the beginning to give a general idea of how astronomy was used in the early explorations in the Province. In order to determine our position on the earth, given in latitude and longitude, we must measure by suitable instruments the altitudes of, or the angular distances between, some of the heavenly bodies. In the sky or on the celestial sphere, positions are given in declination, equivalent to latitude on the earth, and right ascension, equivalent to longitude. Thus the equator on the earth, with latitude zero, produced to the sky becomes the celestial equator with declination zero, and the altitude of the celestial pole, or the declination of the zenith, is the latitude of the place. The longitude of a place on the earth is usually expressed as the number of degrees it is distant from the standard of longitude, the meridian of Greenwich being universally accepted as the standard with longitude zero. Or the longitude may also be expressed by the difference in time between the local time of the place and the time of Greenwich. As the earth revolves once, or 360 degrees, in twenty-four hours, it is obvious that one hour of time corresponds to 15 degrees and 1 degree to four minutes of time. Hence it is only necessary to determine both Greenwich and local time, their difference being the longitude of the place.

The latitude can be readily obtained as stated above from the altitude of the Celestial Pole and this can be easily derived from

* The first part of the presidential address to the British Columbia Historical Association, October 13, 1939.

the altitude of Polaris, which is only slightly more than a degree from the true Pole. Or it can be obtained from a single altitude of a star if the local time is known, or both time and latitude can be obtained from the times of equal altitudes of the same star east and west of the meridian. Local time can be obtained by equal altitudes, as above, or by a single altitude when the latitude is known. Latitudes have been obtained with fair accuracy for some centuries. Columbus for example placed his discovery correctly on the map so far as latitude was concerned.

Longitude, however, is much more difficult to obtain accurately and it was not until after the middle of the eighteenth century that any methods were developed which enabled it to be even approximately determined. This was a vital matter to navigators who frequently had no idea how far in an east or west direction they were from land, and in chart-making such distances were frequently guessed at, with grotesque distortions of the resulting map. For example, as late as 1741, Anson, in the course of one of the last great voyages made before improved methods of obtaining longitudes were available, when approaching the South American Coast came upon Cape Noir when he thought he was still 350 nautical miles to the west of it. A quotation from his account is most illuminating, ascribing the discrepancy to easterly currents: "It was indeed most wonderful, that the currents should have driven us to the eastward with such strength; for the whole squadron esteemed themselves upwards of ten degrees more westerly than this land, so that in running down by our account about nineteen degrees of longitude, we had not really advanced above half that distance."

The difficulty in obtaining accurate longitudes, which as stated above are simply the differences between local and Greenwich times, lies wholly in the determination of Greenwich time. Local time could be obtained as simply and accurately as the latitude, but until well on into the eighteenth century there was no known method for getting Greenwich time. So important did this appear that in 1714 the British Government offered a reward of £10,000 for a method of obtaining longitudes accurate to 1 degree, corresponding to nearly 70 miles on the equator and 35 miles at latitude 60 degrees. This reward would be increased to £20,000 if the longitudes were accurate to half a degree.

Although it is perhaps doubtful whether the offered reward was wholly responsible for the advance, it is interesting to note that two entirely independent methods of obtaining the Greenwich time, and hence the longitude, were developed during the period 1730–1770.

(1.) *By astronomical observations.*—Two kinds of observation were used, either the measurement of the angular distance between the moon and some of the brighter fixed stars, or the local time of the eclipses of Jupiter's satellites. For the measurement of lunar distances, an instrument which could be held in the hands by an explorer or on a moving ship's deck was essential, and this was provided by the invention of the sextant by John Hadley about 1730, which developed into much the same form as we have it to-day about 1750. For the eclipses of Jupiter's satellites a good telescope and a watch were all that was necessary, but in general the method of lunar distances gave more accurate values. From Bayly's and Cook's observations, on Cook's famous third voyage, the method of lunar distances gave a probable deviation of between one and two minutes of time, some 12 to 25 miles. The eclipses of Jupiter's satellites gave an error about half as much again, or 20 to 40 miles. It may well be asked how the measurement of the angle between the moon and a star could give Greenwich time. The answer is obvious when it is remembered that owing to its revolution around the earth the moon moves among the stars about 13 degrees a day, and if we have tables giving the accurate position of the moon among the stars for suitable intervals of Greenwich time, the Greenwich time and hence the longitude can be determined for any given lunar distance. Similarly tables giving the Greenwich time of the eclipses of Jupiter's satellites, when compared with the observed local times, immediately give the longitude.

From the foregoing it appears that accurate measurements of lunar distances or of the eclipses of Jupiter's satellites is only half the battle and would be quite useless to obtain Greenwich time or determine longitudes without accurate tables giving the position of the moon at sufficiently short equal intervals of Greenwich time. From these tables, with suitable interpolations, the Greenwich time corresponding to the measured lunar distance and hence the longitude can be computed. Similarly tables giving

the Greenwich times of the eclipses of Jupiter's satellites would give the longitude directly from the observed local times. Such tables of fair accuracy were first published in 1763, while the *Nautical Almanac* first appeared in 1767.

(2.) *By chronometer.*—Greenwich time could be obtained from a timekeeper of high accuracy and reliability and of sufficient portability to be carried on board ship or across unknown lands. A pendulum clock, while fulfilling the first conditions, must be used in a fixed position on land; and only an enlarged and refined form of watch or chronometer could fulfil both requirements of accuracy and portability. John Harrison, a native of Yorkshire, after a lifetime of work, produced a number of chronometers with radical advances in the movements and escapements. His famous No. 4 chronometer, finished in 1759, was first tested publicly in 1761 on a voyage to Jamaica; and again in 1764 on a trip to Barbados. These tests showed that the chronometer came within the required half a degree of accuracy in determining longitudes, thus fulfilling the Admiralty requirements for the reward of £20,000 offered in 1714. After innumerable delays and postponements, apparently inevitable in Government affairs, Harrison finally received the full award.

All these developments are of particular interest to us because they occurred only shortly before serious British explorations of the Pacific Coast began. Cook's second voyage offered one of the first opportunities to test thoroughly the two methods of determining longitudes. He took with him a chronometer made by Larcum Kendall — a copy of Harrison's famous No. 4 — also another of Kendall's own design, which did not behave nearly as well. Also observers were sent along by the Board of Longitude to make astronomical observations by the first method, to check the accuracy of the chronometers. This procedure was repeated in the third voyage, during which Cook came to the coasts of British Columbia. The Kendall chronometer, a copy of Harrison's No. 4, proved highly accurate and was enthusiastically praised by Cook. The general method used in these tests was to establish stations both on the ship and the shore, and to take a very large number of observations to check the longitude as indicated by the chronometer, and over a long enough interval to ascertain the rate of variation of the chronometer.

The instruments used in the earliest reliable surveys of the North Pacific Coast, on Captain Cook's third voyage, are fortunately tabulated by W. Bayly, of the *Discovery,* in the printed record of the observations made by Captain Cook and himself. This list includes the chronometer by Kendall just mentioned, one of the first made; an astronomical clock for stations on shore; a quadrant of 1-foot radius; two telescopes for observing Jupiter's satellites; two night telescopes; two sextants, one by Dolland, one by Ramsden, reading to 15 seconds, for measuring angles; a marine dipping needle; an azimuth compass; two variation compasses; artificial horizon, barometers, thermometers, etc. It was from Bayly's *Observations* that the probable deviations in the determinations of longitude given above were obtained and from the same source it was found that the probable deviation of a good set of observations for latitude was about half a minute of arc, equivalent to slightly over half a mile.

This description of the astronomical methods used and the instruments employed in the early surveys of the irregular coast-line and in the preliminary mapping of the Interior of British Columbia forms a necessary introduction to an account of the astronomy of the early explorers. I shall have to confine myself to Cook and Vancouver on the Coast, and Mackenzie, Fraser, and Thompson in the Interior. Captain Cook, one of the most famous of British navigators and explorers, on his third voyage sailed up the West Coast of the continent in 1778, entirely missing the Strait of Fuca, and landed at Nootka, carefully determining its position. He then followed the West Coast right up through Bering Strait into the Arctic Ocean, reaching north latitude 69° 36′. The island-studded and estuary-indented coast-line was carefully examined for the famous North-west Passage, for the discovery of which the Admiralty had offered a reward of £20,000. Cook took observations at many points, but did not attempt to make the complete and detailed survey that Vancouver carried out a few years later. In making his exploration and survey of this uncharted and dangerous coast, Cook followed a method, later extensively used by Vancouver, of sailing his ships as close to land as safety permitted and then sending out boat parties to explore and survey the neighbouring territory. The

last inlet explored was named Cook's River, while the farthest north point in the Arctic he named Icy Cape.

Vancouver, however, made a much more complete and extensive survey of the coastal waters, the islands and inlets of Vancouver Island and the mainland as far north as Cook's River or Inlet, in the years 1792 to 1794. In his instructions from the Admiralty, before starting on his voyage on April 1, 1791, with his ships *Discovery* and *Chatham*, he was ordered to proceed to Nootka " to receive back in form a restitution of the territories the Spaniards had seized, and also to make an accurate survey of the coast from the 30th degree of north latitude north-westward to Cook's River." Perhaps the main purpose of this survey in the minds of the Admiralty officers was to settle once and for all the question of the fabulous North-west Passage, for the discovery of which the reward of £20,000 still stood. That Vancouver was the man to carry out the second part of the instructions was obvious from his training with Captain Cook, and from his extraordinary preoccupation with his chronometers, astronomical instruments, and his observations during the long years he was to spend in exploration. It is interesting to note that Vancouver had with him the Kendall chronometer which Cook had used on his second and third voyages and praised highly. He also had two chronometers made by John Arnold, one of the best-known instrument-makers of the time. Owing to his well-known capacity in surveying and navigation, it was not considered necessary to carry observers on this voyage. He took the greatest pains to get positions as accurately as possible. As many as 199 sets of observations at one place and time were noted, the mean being accepted as the final result. Notwithstanding this great care, the limitations of the method of lunar distances, depending finally on the accuracy of the moon's tables, which were uncertain in the eighteenth century, made occasional errors of as much as 20 minutes of arc, 12 to 15 miles, possible. Vancouver became a great scientific navigator, advancing the science by demonstrating the value of new methods such as chronometer longitudes, then in its infancy.

Vancouver's method of surveying followed the same plan as mentioned above, of anchoring his vessels as close to the land as was safe and then sending out boat parties to survey the coast-

line under his lieutenants, Whidbey, Baker, Puget, Broughton, Hanson, and Johnstone, familiar names, given characteristically by Vancouver to coastal features of British Columbia. From information supplied by F. C. Swannell and others, it seems likely that Vancouver's method was to keep his ship in one spot for a sufficient time to determine the latitude and longitude with some accuracy. In the meantime he sent out his boats to map the coast in detail. As soon as the ship's position was well determined, he moved on to a new station and once again determined its position with the greatest possible accuracy. When the boats caught up, their outline of the coast, which under the circumstances could not be highly accurate, was expanded or contracted sufficiently to make it fit the distance between the two positions. The most likely way the boat crews worked was to determine as well as possible the distance and direction of prominent features of the coast, and then fill in the coast between by sketching in the general contour. The distance might be obtained by basing it on the time taken in rowing, subject to considerable errors from unknown currents, or perhaps by timing the echo of a musket-shot. Direction would be obtained by compass, probably not an azimuth compass, as there is no evidence that a sufficient number were carried to supply all the boats. Inaccuracies were bound to occur from time to time, but Vancouver's work compares exceedingly well with that of later surveys, and at times actually surpasses them in accuracy. At Kwatna Inlet, for example, he gave the distance across the neck of the peninsula as about 1 mile, which is correct, whereas the Admiralty chart based upon the work of Captain Richards, who surveyed the same area some seventy years later than Vancouver, is badly distorted and places the distance at more than 4 miles.

Vancouver fulfilled his instructions literally by surveying the coast-line from latitude 30° north in lower California to Cook's River at latitude 61° 29′ north, taking the summer seasons 1792, 1793, and 1794. In approaching the British Columbia coast from the south he failed to notice the Columbia River, and sailed into the Straits of Fuca early in May, 1792. He thoroughly surveyed the south shore and the intricate coast-line of Puget Sound, and, although inexplicably missing the mouth of the Fraser River, he explored Burrard Inlet where the city named after him now

stands. Proceeding northward he surveyed the whole intricate, island-studded and fiord-embedded coast-line and came out into the Pacific through Queen Charlotte Sound, thus proving the insularity of the island that bears his name. During the season of 1793, Vancouver continued his survey up the coast as far as the north end of Prince of Wales Island, while in March, 1794, he pushed his way north directly to Cook's River—the limit of his instructions.

He thoroughly explored and mapped the whole of this inlet, under most difficult conditions, being greatly hampered by ice and snow, fixing its northern extent in latitude 61° 29′ and longitude 152° 17′ W., hence proving conclusively there was no river and no North-west Passage here. The ships proceeded southward on May 7, completing the survey in July, 1794, in a harbour he named Port Conclusion. Here they held a celebration, signalized by an extra allowance of grog to the men of the two boats, with mutual congratulations upon the explorations and surveys successfully completed. Vancouver tells that when the question of a passage from the Atlantic to this coast was thus finally settled, " no small portion of mirth passed among the seamen in consequence of our having sailed from old England on the first of April for the purpose of discovering a North-West Passage, by following up the discoveries of De Fuca, De Fuentes and a numerous train of hypothetical navigators."

Although success in the discovery of a North-west Passage meant a prize of £20,000, Vancouver apparently found as much satisfaction in showing the fallacy of the strange charts and stories of these old voyagers as if he had found it and enriched himself. The geographical significance of Vancouver's work, and the steadfastness with which he pursued the main objective—namely, the close examination of the intricate continental shores for an opening linking the Pacific and Atlantic—was so thorough that there could never more be fairy-tales of other mariners where Vancouver's boats had penetrated. A glance at his Great Chart, upon which his tortuous course is indicated, cannot fail to rouse admiration for the man under whose leadership it was prepared and whose enduring monument it remains. This Chart was the sole authority for the western coast of North America for over a century.

Before leaving the maritime explorers, it will be interesting to interpolate an account of the first triangulation made, so far as known, on the Pacific Coast. In July, 1786, La Pérouse spent a considerable time in the bay he named "Port des Français"—now Lituya Bay, Alaska—securing fresh water, wood, etc., and refitting his ships generally. He spent the time apparently in making a plan of the bay itself, evidently by triangulation, including observations from a shore station, which is amazingly accurate even by modern standards. Two short quotations from La Pérouse are of interest in this connection: (*a*) The list of instruments taken with the expedition included "Four theodolites or graphometers, with and without telescopes, for measuring angles on shore and taking plans." (Vol. 1, p. 186.) (*b*) The reference to the plan of Lituya Bay reads as follows: "The plan of Messrs. Monneron and Bernizet was finished as well as the measure of the base taken by M. Blondelas which had served . . . to measure the height of the mountains trigonometrically." (Vol. 1, p. 376.)

Turning now to land explorations, we shall begin with Sir Alexander Mackenzie—perhaps the greatest of the three. His journey down the river named after him to the Arctic need only be referred to, because he then felt strongly the need of means to determine his position and plot his course, being able to determine only the latitude. As he said: "In this voyage, I was not only without the necessary books and instruments, but also felt myself deficient in the science of astronomy and navigation. I did not hesitate therefore to undertake a winter's voyage to procure the one and acquire the other." In preparation then for his long-dreamed-of journey overland to the Pacific, he sailed to England in the fall of 1791, where he studied assiduously to acquire a sufficient knowledge of mathematics and astronomy to determine his position with the accuracy attainable at that time. He purchased the necessary instruments and practised their use until proficient, and when satisfied sailed for Montreal in the spring of 1792.

His plans met with discouragement and opposition from his partners, who were much more interested in trading furs than exploring, and had belittled his successful exploration of the

Mackenzie River, but that did not deter him from his projected journey to the Pacific. Immediately upon his return to Fort Chipewyan, men were sent up the Peace River to prepare winter quarters in preparation for an early start in the spring. He left Fort Chipewyan in October, 1792, and travelled up the Peace to 6 miles beyond its junction with the Smoky River, the post being called Forks Fort. From several observations its position was fixed at latitude 56° 9′ N. and longitude 117° 35′ 15″ W.

It is interesting to note that in spite of the fact that Mackenzie had made a special trip to England to secure the astronomical knowledge he thought necessary to make his great journey to the Pacific, he still seems to have distrusted his skill as an observer and to have trusted his dead reckoning rather than his observations, whereas in actual fact the latter were considerably more accurate. Mackenzie had few instruments, merely a sextant, a compass, a chronometer of sorts, and a large telescope for observing the eclipses of Jupiter's satellites on which he depended for longitudes. The sextant was of an obsolete pattern, as on June 22 he could not observe the sun, as its altitude was too great for his instrument. The compass he used for taking rough bearings of his courses on the waterways was probably not graduated in degrees, as his field-notes use the terms "south west by west" and "south south-east" and he apparently neglected the variation. Observations for latitude were made repeatedly on his arduous and dangerous journey, but for longitude much less frequently, on account of the greater difficulty and the longer time required for reduction. When we consider the circumstances under which these observations were made, the raging torrents, the difficult portages, the hostile Indians, and the discontent and clamour of the men to return, the wonder is that he could find time for any observations and their reduction, and that they were so relatively accurate. Only a man of his indomitable energy and determination could have overcome these difficulties and finally reached his goal, the waters of the Pacific.

Mackenzie and his crew of ten men left Forks Fort on the evening of Thursday, May 9, 1793, and after innumerable difficulties and dangers finally reached salt water at the mouth of the Bella Coola River, emptying into Bentinck Arm, on July 19. On

the next day they were so much troubled by hostile Indians that the men urged Mackenzie to commence the return journey immediately, but this he would not do until he had determined his position. So they sought a place that could be defended, and where an uninterrupted view over water of several miles would enable the artificial horizon to be checked. Landing at what is now known as Mackenzie's Rock in Dean Channel, they prepared for defence and camped for the night of July 21. The morning of July 22 fortunately being fine, Mackenzie commenced observations, and still being seriously threatened by Indians and urged by his men to commence the return journey, continued them until satisfied, conceding to his men, however, that they could load the canoe while he was observing. One can imagine his feelings of anxiety during the observations, with the Indians crowding around examining his instruments, but persisting, nevertheless, until complete. Most of us, under such circumstances, could not have made very dependable observations.

Mackenzie took several observations and finally fixed the position of his Rock as 52° 20′ 48″ north latitude and 128° 2′ west longitude. In his journal he says: "I had now determined my situation which is the most fortunate circumstance as a few cloudy days would have prevented my obtaining the longitude of it." The exact position of Mackenzie's Rock was for long unknown, and was finally identified by Captain R. P. Bishop, of Victoria, who made a special expedition for the purpose in 1923, and by careful and thorough work found the identical rock. Captain Bishop found that Mackenzie's longitude was 40 minutes of arc in error, nearly 30 miles, and the latitude about a mile and a half. Even without considering the trying circumstances under which the observations were made, these are very good results for the time and place. Thus ended this memorable journey, the first crossing of the American Continent north of Mexico—even though the American historian, John Fiske, states the first crossing was by Lewis and Clark in 1805, twelve years later.

We seem to know less about the astronomical competence of Simon Fraser than about the other two land explorers, although it is certain he made observations for latitude, probably with a sextant. He started the descent of the river named after him on May 28, 1808, believing he was on the Columbia, which he had

been sent to explore. It was only finally when the mouth was reached and he observed the latitude to be nearly 49°—actually some minutes north of 49°, while the mouth of the Columbia was known to be at 46° 20′—that he realized that the impracticable and tumultuous waterway he had descended with such difficulty and danger was not the Columbia River. In connection with this misconception of Fraser, and also of Mackenzie, it is curious that at the very time Fraser was struggling down the raging torrent he thought was the Columbia, David Thompson—the astronomer and explorer *par excellence* of the early days in Western Canada —was paddling up the true Columbia without knowing it! It may be wondered how they could make such mistakes; but it must be remembered that they had no maps, and all that had been discovered was the upper waters of an unknown river and the mouth of the Columbia.

David Thompson had a good training in mathematics at school and had a gift for astronomy and surveying. Apparently he commenced trading in furs, his business, and surveying, his hobby and pleasure, in the Northwest Territories in 1789 when he was 19 years old, and in British Columbia in 1807. That year he travelled from Rocky Mountain House over the divide through what is now called Howse Pass, though Howse did not begin to use it till two years later. In 1811, Thompson travelled down the Columbia to Astoria and back to the source, surveying and mapping as he went.

The instruments he carried are given in his Journal, and consisted of a 10-inch Dolland sextant reading to 15 seconds; an achromatic telescope of high power for astronomical phenomena, mainly the eclipse of Jupiter's moons; one of the same for general use; a Mercury artificial horizon for double altitudes; an azimuth compass; thermometers and other minor articles. With these simple instruments he obtained geographical positions that were of a different order from his predecessors, and would put to shame some recent determinations with modern instruments. Thus in the longitudes of ten places taken at random in the west, using lunar distances, his determinations are remarkably close to modern ones, the average difference being only about 5 minutes of arc, not much more than 3 miles, while his latitudes are less than a mile out. His surveys were not merely rough sketches

sufficient to give some general knowledge of the country, but were careful traverses made by a master in the art, short courses being taken by compass, the variation being constantly checked, the distances carefully determined; and the whole checked by numerous observations for latitude and longitude.

He not only accurately mapped his course, but recorded the height of the mountains, the length of the rivers, the extent of the plains, and the general topography of the country he explored. Mackenzie and Fraser devoted all their time and energy to the one object of accomplishing their explorations and surveys, and then turned to other work. Though Thompson's business was trading in furs, surveying was his chief pleasure, and he spent all his spare time in exploring, surveying, and mapping the features of the country in which he was living or travelling. The quality and quantity of his work is accounted for largely by his passion for it, and his systematic continuation of it for twenty-seven years. A fine tribute to Thompson's work was paid by J. B. Tyrrell, who wrote his life: "Between the years 1883 and 1888, while engaged on the staff of the Geological Survey of Canada, it fell to my lot to carry out explorations in canoes, on horseback, or on foot, over many of the routes which had been surveyed and explored by David Thompson a century before, to survey the rivers he had surveyed, to measure the portages he had carried, to cross the plains and mountains on the trails which he had travelled, to camp on his old camping grounds, and to take astronomical observations where he had taken them. Everywhere his work was found to be of the very highest order, considering the means and facilities at his disposal, and as my knowledge of his achievements widened my admiration for this fur-trading geographer increased."

These eulogistic remarks by Dr. Tyrrell of David Thompson's skill as an observer and surveyor have been subjected in a recent article by W. M. Stewart to a critical analysis. He admits that Thompson's observations for latitude and longitude were in general remarkably good, his latitudes being mostly within a mile and his longitudes on the average mostly within 2 miles, except in isolated cases. Mr. Stewart's main criticism is directed at the track surveys used to fill in between his astronomical positions. Thompson's directions were obtained by a compass apparently

graduated only to five degrees, and Mr. Stewart states that his magnetic bearings will include errors up to two and a half degrees, perhaps more. Thompson's distances were in most cases underestimated; that is, his mile was actually on the average one and four-tenths miles. Nevertheless Mr. Stewart finally concludes his article by stating: "To have entered the unmapped region of the Northwest, and to have fixed the location of the main topographical features of so vast an area as closely as he did, has established David Thompson as the greatest of American geographers."

The final, practical astronomical event in British Columbia to be discussed is the Survey of the International Boundary between British Columbia and the United States. The treaty was made in 1846, but it was not until 1858 that work was started. Captain Hawkins was the British, and Archibald Campbell the United States Commissioner, while Captain Haig was Chief, and Captain Darrell Assistant Astronomer, in the British party. At first there was some disagreement, mainly on methods of marking the Boundary, between the two Commissioners; but later these differences were ironed out and the work was concluded amicably. The method of determining the Boundary, the 49th parallel, was to choose suitable stations a few miles apart, as near the Boundary as possible, and to determine repeatedly and with the utmost care the latitude of these stations. The instruments used by the British astronomers were a 12-inch, and —wherever it could be handled—a 15-inch theodolite. Also, somewhat later, a zenith telescope which seemed to give somewhat better results. After considerable discussion the final latitude of the station was taken as the mean of British and American results. The average differences were of the order of one second of arc, slightly over 100 feet, the smallest being 38 feet and the largest 860 feet. The large differences were ascribed to observations being made at different times and temperatures and with different stars.

These stations were sometimes as much as 3 miles distant from the 49th parallel, and this distance had to be accurately measured along a meridian, directly north or south. As it was a rough and mountainous country often heavily timbered, this was difficult and slow work. These points along the parallel had

to be joined along its curve and a path cut through the forest and marked by monuments. Iron monuments were provided west of the Cascades and stone cairns between the Cascades and the Rockies. So great were the difficulties of transport and supply in this rough and unsettled country that the survey and marking were not completed until the end of the third season, November, 1861, and the final maps and description until 1869. A resurvey and remarking were carried out early in the present century under Dr. W. F. King, H.M. Commissioner, and O. H. Tittman, U.S. Commissioner.

J. S. PLASKETT.

VICTORIA, B.C.

BIBLIOGRAPHY.

ANSON, GEORGE.
Voyage Round the World in the years 1741–2–3–4. London, 1748.

BAYLY, WILLIAM.
The Original Astronomical Observations made in the course of a Voyage to the Northern Pacific Ocean. London, 1782.

BISHOP, R. P.
Mackenzie's Rock. (Historic Site Series, no. 6.) Ottawa, 1924 (?).

COOK, JAMES.
A Voyage towards the South Pole and Round the World, performed in . . . the Resolution and Adventure in the years 1772, 1773, 1774 and 1775. London, 1777. 2 vols.

COOK, JAMES.
A Voyage to the Pacific Ocean . . . performed . . . in . . . the Resolution and Discovery. London, 1784. 3 vols. and atlas.

FRASER, SIMON.
Journal of a Voyage from the Rocky mountains to the Pacific Coast, 1808. (In Masson, L. F. R., *Les bourgeois de la compagnie du Nord-Ouest.* Quebec, 1889, vol. I.)

GOULD, RUPERT T.
The Marine Chronometer: its history and development. London, 1923.

KLOTZ, OTTO.
The History of the Forty-ninth Parallel Survey west of the Rocky Mountains. (Reprinted from the *Geographical Review*, May, 1917.)

LA PEROUSE, J. F. GALAUP, COMTE DE.
A Voyage Round the World performed in the years 1785, 1786, 1787 and 1788. London, 1799. 2 vols. and atlas.

MACKENZIE, SIR ALEXANDER.
Voyages from Montreal . . . to the frozen and Pacific oceans in the years 1789 and 1793. London, 1801.

STEWART, W. M.
David Thompson's surveys in the North-West. (In *Canadian Historical Review*, September, 1936.)

SWANNELL, F. C.
Mackenzie's Expedition to the Pacific Ocean in 1793. (In British Columbia Historical Association, *Fourth Report and Proceedings.* Victoria, 1929.)

THOMPSON, DAVID.
David Thompson's Narrative of his Explorations in Western America, 1784–1812; edited by J. B. Tyrrell. Toronto, 1916.

VANCOUVER, GEORGE.
A Voyage of Discovery to the North Pacific Ocean and Round the World. London, 1798. 3 vols. and atlas.

"EMPRESS TO THE ORIENT."

II.

In the shipping world reputations are rarely made in a day, but fame and popularity seem to have come the way of the *Empresses* almost with their maiden voyages. No doubt this was due in part to the fact that they were the largest and fastest steamers trading across the Pacific. Even in 1891 size and speed made a strong appeal. But, in addition, the graceful appearance of the vessels, and their very names, seem to have caught the imagination of the travelling public.

The consequence was that they immediately captured a large share of the first-class passenger trade. In 1890 the old chartered liners had landed 279 saloon passengers at Victoria and Vancouver. In 1892, the first complete year they were in service, the three *Empresses* landed 993.[1] In 1897 Van Horne could state that they were carrying " 60 per cent. of all the first-class travel across the Pacific notwithstanding that there are 18 steamships competing for the business."[2]

Then, as now, the traffic was seasonal. In April, May, and June the *Empresses* almost always arrived with their saloon accommodation well filled. Outward voyages to the Orient were busiest in September, October, and November. The fluctuation in passenger lists in the course of the year was often startling. In 1897, for example, the number of first-class passengers carried eastbound varied from 14 to 130. Four sailings in the rush season handled more than half the saloon passengers booked during the whole year.

Steerage travel fluctuated less violently. The chief seasonal influence was the Chinese New Year, to celebrate which many Celestials made a round trip to the Orient, thereby swelling westbound passenger lists just before, and eastbound lists just after, the great event. During the nineties most of the steerage passengers were Chinese. When the head tax imposed on Chinese immigrants entering Canada was increased from $50 to $100 in

(1) *See* appendix for details and the source of these figures.

(2) Vancouver *News-Advertiser*, October 20, 1897.

1901, and finally to $500 at the beginning of 1904, this traffic was naturally affected, but substantial numbers continued to be carried. In later years many of the Oriental passengers were bound for distant destinations, notably the West Indies. In attracting this trade the *Empresses* benefited greatly from their close association with a transcontinental railway.

After the turn of the century the number of Japanese carried increased sharply, and in 1905 Hindu immigrants appeared on the passenger lists. The peak was reached in 1907 and 1908, when as many as 700 Hindus landed from a single ship. This trade ended abruptly when a "gentleman's agreement" was concluded with Japan, and steps were taken to bar Hindu immigration.

In view of the many factors involved, it is surprising that the total number of steerage passengers carried did not fluctuate more widely. In 1892 the eastbound total was 4,312. In 1897 it was 5,341, and it seems to have remained thereabouts for a good many years. In the six-year period 1908–13, for example, it averaged 5,630. Westbound steerage traffic in the same period averaged 3,690. The average total movement in both directions was thus 9,320.[3]

In November, 1891, T. G. (later Baron) Shaughnessy, then Vice-President of the Canadian Pacific, sailed from Vancouver in the *Empress of Japan* with instructions "to look into matters generally and to make such arrangements for conducting the company's business in China and Japan as he may find necessary."[4] This commission he carried out so effectively that the *Empresses* continued to sail with well-filled holds, even during the depression years of 1892–95.

Homeward-bound the most important items in their cargoes were silk and tea. Speed was of cardinal importance in the transport of raw silk, and, since they offered the fastest schedule, the *Empresses* captured a large proportion of this trade. Million-dollar shipments were carried from time to time. Even this figure was surpassed in 1902 when, within forty days, Canadian Pacific steamers landed four silk cargoes in Vancouver valued at

(3) *See* traffic statistics in appendix.

(4) Quoted in J. Murray Gibbon, *Steel of Empire*, Toronto, 1935, p. 336.

$5,941,000.[5] Tea shipments came mostly from Japan. Extra ships were chartered occasionally at the peak of the season if more cargo offered than the *Empresses* could handle. The sailing-vessels *J. B. Walker* and *Benjamin Sewell* landed 5,500 tons measurement of tea at Vancouver in 1891, and the steamer *Hupeh* made a voyage for the Company in 1896 and another in 1897.

Opium shipments arrived on almost every steamer for some years. Rice was also carried in large quantities. Curios and a small assortment of miscellaneous packages completed the usual inward cargoes of the *Empresses*.

For many years the most important items in their outward cargoes were flour and cotton goods. At first almost all the flour carried came from Portland, Oregon. Its usual destination was either China or New South Wales. The latter trade continued even after the establishment of a direct line of steamers between British Columbia and Australia, in 1893. Efforts were made later to develop a market for Canadian flour in Japan.[6] Other important cargo items were machinery and a variey of manufactured goods. In common with other lines, the Canadian Pacific found that the volume of freight loaded for the Orient was substantially lower, on the average, than that carried inward. Nevertheless the *Empresses* frequently sailed with capacity cargoes, and sometimes were even compelled to leave freight on the dock.

The annual reports of the Company show that even in 1891, when their reputations were still in the making, the three steamers "cleared their working expenses and the interest on their cost, without taking into account the value of the business contributed to the railway itself."[7] Shareholders were informed in the report for 1893 that the *Empresses* had "shown a healthy increase in profits each year since the line was established."[8] A year later the directors reported that these profits had risen by $80,467 in 1894, in spite of the prevailing depression.[9] In 1895,

(5) Vancouver *Province*, November 12, 1902.

(6) The first large shipment was made in 1903. *See* Vancouver *Province*, August 20, 1903.

(7) *Annual Report*, Canadian Pacific Railway, 1891, p. 9.

(8) *Ibid.*, 1893, p. 10.

(9) *Ibid.*, 1894, p. 11.

though hard times continued, profits fell by only $3,000.[10] Though mentioned quite casually in the annual report, this fact was actually of vital importance to the Company, for it was the revenue derived from the *Empresses*, together with the through traffic they brought for the railway, which "helped to save the Canadian Pacific from the disaster which sunk a hundred and fifty-six American railroads in the depression of 1893–95 and might well have overwhelmed a new railway through Canada depending for its existence on local business."[11]

Freight traffic grew so rapidly that the Canadian Pacific was contemplating additions to its trans-Pacific fleet only two years after the *Empresses* were completed. "The experience of the Company in this trade indicates the need of a more frequent freight service," the report to the shareholders for 1893 stated, "and your authority will be asked for the building at the discretion of the Board and at such time as the general conditions of trade may warrant, two freight steamships to supplement the three passenger steamships now in the line."[12] The authority asked for was duly given, but the project was dropped, owing to the depression of 1893–95.

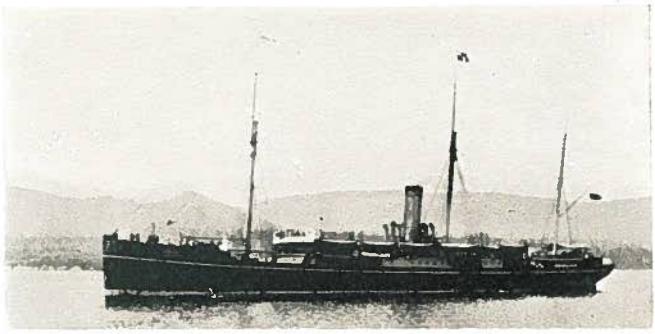
When reinforcements for the Pacific fleet finally arrived, they came from an unexpected quarter. The gold-rush to the Klondyke, which caused immense excitement in 1897, induced the Canadian Pacific to enter the coastal trade. Late in the year the Company purchased the steamers *Athenian* and *Tartar* from the old Union Line, and announced that they would be placed on the run from Vancouver to Skagway the following spring. Captain Archibald, commander of the *Empress of China*, was sent to England to bring out the *Tartar*, which sailed from Southampton on February 5, 1898. Travelling by way of Cape Horn, she arrived in Vancouver on April 1. Her cargo included a submarine telegraph cable which the *Tartar* herself laid between English Bay and Departure Bay—that is to say, between Vancouver and Nanaimo, on Vancouver Island—on April 6.[13] On

(10) *Ibid.*, 1895, p. 9.

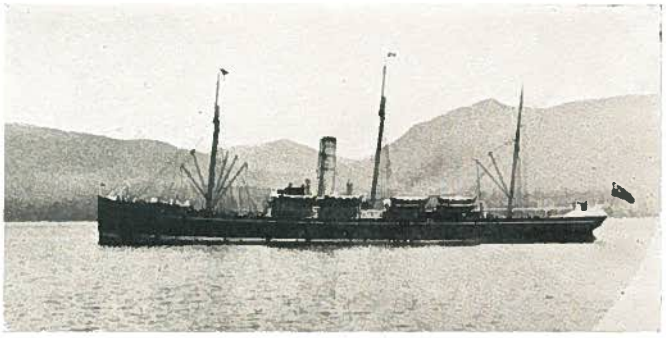
(11) Gibbon, *op. cit.*, p. 336.

(12) *Annual Report*, Canadian Pacific Railway, 1893, pp. 10–11.

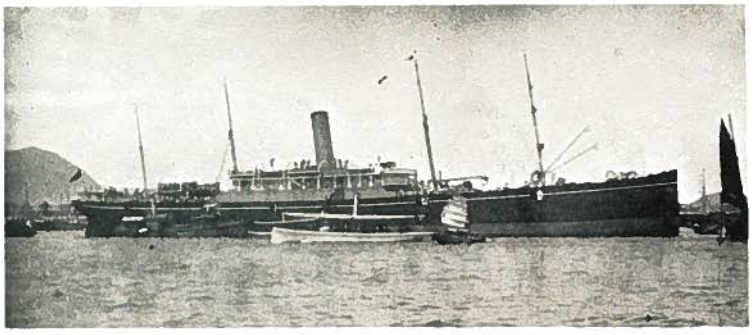
(13) The distance in a direct line was 32 miles, but 40 miles of cable were required. Laying commenced at 5 a.m. and was completed about 10.30 p.m.



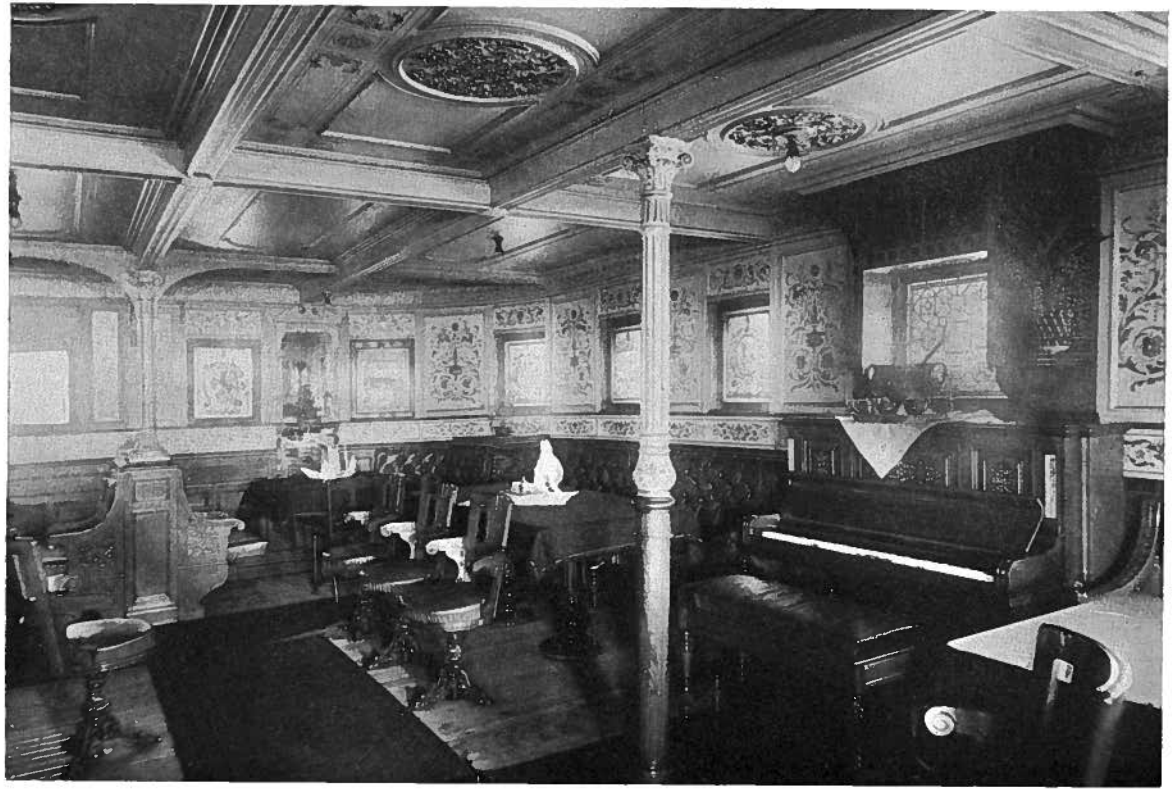
S.S. *Tartar.*



S.S. *Athenian.*



S.S. *Monteagle.*



A corner of the dining saloon, *Empress of India.*

Interior views of the old *Empress* liners are now difficult to find. The photograph reproduced above is from a plate presented to the Provincial Archives by Captain Samuel Robinson.

the 12th the *Athenian* arrived, under the command of Captain H. Mowatt, formerly Second Officer of the *Empress of India.* Captain Mowatt remained in the *Athenian* for some years, but Captain Archibald resumed command of the *Empress of China* and was succeeded in the *Tartar* by Captain Henry Pybus.

The service to Skagway called for a departure every Thursday. The first sailing was taken by the *Tartar* on April 28, 1898. Unfortunately, it soon became apparent that traffic was quite insufficient to give profitable employment to such large steamers and they were withdrawn in July, after each vessel had made but six round voyages. The last trip of the *Tartar* is of interest because she arrived at Skagway just after the death of the notorious " Soapy " Smith. As a result she had the doubtful honour of carrying away his accomplices and henchmen, who were forced to flee the country.[14]

After swinging idly at anchor for several months in Vancouver Harbour, the *Athenian* and *Tartar* entered the trans-Pacific trade. The *Athenian* sailed in October for Vladivostock, carrying a heavy cargo which had been loaded at Portland. She was then laid up at Hong Kong for a time and did not return to Vancouver until April, 1899. After a trip to San Francisco she made a second voyage to the Orient, in the course of which she rode out a great storm at Kobe. Meanwhile, in December, the *Tartar* had entered service, and on her first homeward passage carried 600 Japanese to Hawaii. Her call at Honolulu was the first to be made there by a Canadian Pacific steamer. The *Tartar* made two more trips to the Orient, but both she and the *Athenian* were employed somewhat spasmodically, and no attempt was made to place them on a regular schedule or relate their sailings to those of the *Empresses.*

As early as June, 1898, when the Spanish-American war was in progress, the United States Government had wished to charter the *Athenian* and *Tartar* for its transport service. The offer had

(14) " We arrived at the Skagway dock just in time to receive the gang of murderers—men and women—as the citizens rounded them up, after the shooting. . . . The crowd were driven into our ship with rifles behind them, with no money, the men working in the bunkers to make enough money to get a meal when they got ashore in Vancouver." (Letter from Walter Lewin, who was an engineer in the *Tartar*, to J. A. Heritage, January 25, 1940.)

been refused because the Canadian Pacific would have preferred to sell the vessels at that time. Early in 1899 the United States found itself faced with an insurrection in the Philippines, and a little later, when the offer of a charter was repeated, it was accepted by the Company. The *Tartar* was taken over for six months, as from July 4, 1899. This was later extended to nine months, and she was not turned back to her owners until April, 1900. The *Athenian* was chartered later in July, 1899, and served for a similar period. The vessels were employed in carrying troops, horses, and supplies from Pacific Coast ports to Manila. The *Athenian* proved so satisfactory, and Captain Mowatt was so popular with the United States Army officers, that she was taken over a second time in July, 1900, when the Boxer Rebellion made further troop movements necessary, and retained until February, 1901. These charters were in effect practically continuous, for in the brief interval between them she made a special voyage for the United States Army to St. Michael, Alaska.

The *Tartar* returned to the ordinary trans-Pacific trade in May of 1900, and was joined by the *Athenian* the following year. In the autumn of 1901 it was at last determined to operate the vessels on a regular schedule, and thus establish an intermediate service which would supplement the express service maintained by the *Empresses*. The first sailing was taken by the *Tartar* from Vancouver in September, 1901. Thereafter regular Canadian Pacific departures increased from fifteen to twenty-four or twenty-five per annum.

The *Tartar* and *Athenian* were not ideal additions to the trans-Pacific fleet, but they were soundly-built ships and useful traders. Moreover, their capital charges were low, as they had cost the Company no more than $297,000.[15] Both were iron, single-screw steamers, designed to run in the mail service of the Union Line between England and South Africa. The *Athenian* was of 3,882 tons gross, and was built at Whiteinch, near Glasgow, in 1882. The *Tartar* was a little larger, registered 4,425 tons, and came from the same yard in 1883.

For more than a decade the three original *Empresses* were beyond dispute the premier ships in the trans-Pacific trade. So

(15) To be exact, $297,336.28. (*Annual Report*, Canadian Pacific Railway, 1897, p. 26.)

far as saloon passengers were concerned, their only serious rival was the Fairfield-built Pacific Mail liner *China,* which sailed out of San Francisco. On the northern route the Upton Line, which attempted to establish a service from Portland to the Orient, soon collapsed, and for a time the only competition came from the old *Victoria* and *Tacoma* (formerly the *Parthia* and *Batavia*) and a few chartered steamers, all of which were sailing from Tacoma in connection with the Northern Pacific Railway. Though of little importance as competitors for the saloon trade, these vessels were popular with the Chinese, and in later years handled much more freight than the *Empresses.*

Presently a new and more aggressive rival appeared on the scene in the person of James J. Hill, President of the Great Northern Railway. In 1896 he concluded a working agreement with the Nippon Yusen Kaisha, which led to the establishment of the first Japanese steamer line across the Pacific. The pioneer ship of the service arrived in Seattle on August 31, and monthly sailings were maintained thereafter. In a few years the N.Y.K. was able to assign larger ships to the Seattle line, and by 1901 the vessels employed exceeded the *Empresses* in size. The *Kaga Maru,* for example, was of 6,301 tons gross, and when she reached Victoria on July 9, 1901, she was the largest ship which had ever used the port. But much more startling developments were in store, for by that date it was known that Hill was not satisfied with the improved N.Y.K. service. He was planning to organize a steamer line of his own, and to build and operate several monster ships of 20,000 tons in the trans-Pacific trade.

Meanwhile new rivals had appeared, or were in prospect, on the southern route. A second Japanese trans-Pacific line had been started by the Toyo Kisen Kaisha, and the company's first vessel, the *Nippon Maru,* arrived in San Francisco in January, 1899. She and her two sister ships slightly exceeded the Canadian Pacific liners in size, and imitated their appearance so obviously, with their twin funnels and clipper bows, that the crews of the Canadian ships immediately dubbed them the "tin *Empresses.*" As they were operated on different routes, their relative capabilities were rarely put to a test, but the *Empresses* were undoubtedly superior in speed. The story goes that upon one occasion the *Nippon Maru* undertook to race the *Empress of*

India between two Oriental ports. Despite the fact that her boilers were forced to such an extent that she burned the paint off her funnels, she dropped far astern.[16] On the San Francisco run, however, the *Nippon Maru* and her sisters could outstrip any of their competitors, with the possible exception of the *China*. Fortunately for the Pacific Mail Company, its financial resources were sufficient to meet the situation, and before the end of 1899 it was able to order two new steamers, intended to be the largest and fastest on the Pacific.

In the midst of all this competition, actual or impending, the Canadian Pacific seems to have remained curiously unperturbed. When paying a visit to Vancouver in 1897 Van Horne told newspapermen that "trade and traffic" with the Orient were

> outgrowing the present service. That service must be made more frequent and quicker, and we hope some day to be able to substitute larger steamships for the *Empresses* of the China line, and establish a fortnightly service. . . .[17]

How soon this would be done, however, he could not say. Four years later, in August, 1901, action on the matter was evidently contemplated, as the directors reported that

> The growth of the Company's traffic on the Pacific Ocean suggests the importance of providing at an early date an additional steamship, somewhat larger and faster than the [present] Pacific Steamships of the Company.[18]

The shareholders subsequently authorized the issue of bonds to cover the cost of construction, but no order for a new steamer was placed.

This left the three pioneer *Empresses*, supported after a fashion by the *Athenian* and *Tartar*, to meet the intense competition which now developed in the trans-Pacific trade. In July, 1902, the first of the new Pacific Mail liners, the *Korea*, entered service. On her second homeward voyage she sailed from Yokohama with orders to omit the usual call at Honolulu and to do her best to capture the Pacific record. She arrived in San Francisco on October 28, having covered 4,537 miles in only 10 days 15 hours and 15 minutes, at an average speed of 17.8 knots. So far as average speed was concerned this passage broke all records, as it surpassed the 17.14 knots which the *Empress of Japan* had

(16) Captain A. W. Davison described this incident to the writer.

(17) Vancouver *News-Advertiser*, October 20, 1897, which quotes his statement at some length.

(18) *Annual Report*, Canadian Pacific Railway, 1901, p. 8.

(Photo courtesy Canadian Pacific Railway.)

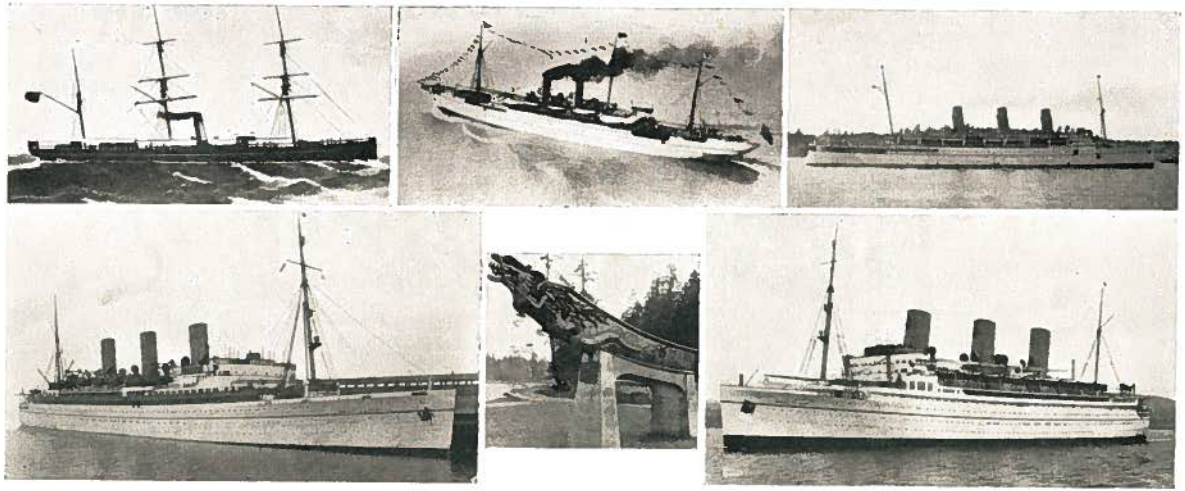
Officers of the *Empress of India*, 1894.

Back row, left to right: Wm. Carfrae, 6th engineer; Thos. Proctor, electrician; — Wetherall, 3rd officer; Daniel Crocket, 5th engineer; Captain E. Beetham, 2nd officer; J. A. Heritage, 8th engineer; Basil Hoch, purser; Wm. Milne, 10th engineer; Stanley Menhinick, 9th engineer; Walter Lewin, 4th engineer; James McGown, 3rd engineer.

Middle row, left to right: Hedley T. Richardson, 2nd engineer; Captain Henry Pybus, chief officer; Captain O. P. Marshall, master; James Adamson, chief engineer.

Front row, left to right: Andrew T. Roy, 7th engineer; — Galway, 4th officer; S. C. Binns, assistant purser; — Peyton, 5th officer; Jack McPherson, boiler maker.

(The original photograph is in the possession of J. A. Heritage, of Victoria, B.C.)



(Photo courtesy Canadian Pacific Railway.)

The Trans-Pacific Fleet of To-day and Yesterday.

Parthia.

3,431 tons.

One of the three chartered steamërs that commenced the service in 1887.

Empress of Japan.

5,940 tons.

One of the three original *Empresses* which entered service in 1891.

Below: The figurehead of the *Empress of Japan*, now preserved in Stanley Park, Vancouver.

Empress of Russia.

16,810 tons.

With her sister ship, *Empress of Asia*, entered service in 1913.

Empress of Canada.

21,517 tons.

Completed in 1922.

New *Empress of Japan.*

26,032 tons.

The present Queen of the Pacific. Completed in 1930.

maintained on her famous voyage in 1897. If the *Korea* had been travelling on the shorter northern route, she would, of course, have broken the time record as well. Even on a course 300 miles longer than that to Victoria, she was only 5 hours and 15 minutes behind the *Empress of Japan's* fastest homeward passage of 10 days 10 hours.

The *Korea* was joined by her sister ship, the *Siberia*, early in 1903. Together they cost the Pacific Mail Company almost $4,000,000.[19] The *Siberia* registered 11,284 tons gross—8 tons more than the *Korea*—and by this narrow margin was the largest ship on the Pacific. She did not hold the distinction for long, for about the time she entered service the Pacific Mail purchased two still larger steamers, which were building for the trans-Atlantic trade, and renamed them *Manchuria* and *Mongolia*. They registered 13,639 tons gross and were completed in 1904. Within three years the Pacific Mail thus acquired four new liners totalling almost 50,000 tons, the average size of which was more than twice that of the old *Empresses*.

Developments of equal interest were taking place on the northern route, for James J. Hill and his Great Northern Steamship Company had proceeded with his grandiose plan for the construction of two big liners to run between Seattle and the Orient. The *Minnesota* and *Dakota* were monster vessels for their day, had a gross tonnage of 20,718 tons, and could each carry the fantastic total of 22,740 tons of cargo. Their weakness lay in their slow speed, and, in addition, they proved to be singularly unlucky ships. Nevertheless, for a time Hill made a formidable showing in the North Pacific. He arranged to have the big freighters *Shamut* and *Fremont*, which were owned by the Boston Steamship Company, run opposite the *Minnesota* and *Dakota*. Three smaller vessels of the Boston Company's fleet maintained a second service in co-operation with three N.Y.K. liners. By 1906 Hill thus had ten steamers operating in connection with the Great Northern Railway, including the two largest ships on the Pacific, and might well feel that he was leaving all competitors far behind.

---

(19) The exact sum was $3,979,114.37. *Annual Report of the Pacific Mail Steamship Co. for the year ending April 30th, 1903*, p. 8.

In spite of this the Canadian Pacific continued to rely upon the now ageing *Empresses* to maintain its prestige in the trans-Pacific trade. Early in 1903 the Company had extended its shipping interests to the Atlantic by purchasing the fleet of the Beaver Line, and its neglect of the Pacific was undoubtedly largely due to its preoccupation with this new venture.

In 1906 a modest improvement was made in the Oriental service when the former Beaver Line steamer *Monteagle* was transferred from the Atlantic to the Pacific. She was a sturdy twin-screw vessel of 6,163 tons gross and was completed in 1899. She was one of a very successful series of freight and cattle boats, and had seen service as a transport during the South African War. Originally she was intended to carry only six cabin passengers. Before she left for the Pacific, however, she was refitted at Liverpool to carry 97 cabin class and as many as a thousand Orientals in the steerage. She then loaded a full cargo of Welsh coal for the Admiralty at Newport, and proceeded to Hong Kong by way of Teneriffe and Durban. She sailed from Hong Kong on her first trans-Pacific voyage on May 2, 1906, and arrived in Vancouver on the 26th. One of the newspapers remarked at the time that there was "nothing remarkable about the *Monteagle*."[20] In a sense this was true; yet in the course of a few years she acquired an excellent reputation. She was noted for her steadiness and, although her accommodation was far from elaborate, at least one of her captains remembers her as the only ship he ever commanded in which he never received a complaint from a passenger.

The *Monteagle* was brought out by Captain H. Parry, of the trans-Atlantic fleet, who handed her over at Vancouver to Captain Samuel Robinson, formerly commander of the *Athenian*. Her Chief Engineer was J. B. Penty, who came ashore after a few voyages and took over the post of Engineer of the new Empress Hotel, then under construction in Victoria.

Disaster almost overtook the *Monteagle* after she had completed only two round trips across the Pacific, for she was caught in Hong Kong by the great typhoon of September 18, 1906. The *Empress of Japan*, which was also in port, rode out the storm successfully, but the *Monteagle* was driven ashore and damaged

(20) Victoria *Times*, May 26, 1906.

her stern-post. As a new one had to be forged in England, she was laid up all winter and did not resume service until March, 1907.

A few months later, early in August, it was announced that the *Athenian* and *Tartar* had been sold to Japanese purchasers. On the 22nd the *Athenian* sailed from Vancouver for the last time, under the command of Captain A. O. Cooper. Her final voyage was made without incident, but the career of the *Tartar* had a more exciting conclusion. She sailed from Vancouver on October 17, 1907, with Captain A. H. Reed, now Harbour Master of Vancouver, on her bridge. Outside the Narrows she encountered fog, and presently collided with the coastal steamer *Charmer*. The *Tartar* was badly holed and was beached in English Bay, where she lay for some days. She was repaired in the old Esquimalt dry-dock, but various small misfortunes caused further delays, and it was not until December 15 that she finally reached Yokohama.

Neither the *Tartar* nor the *Athenian* was operated by their new owners for long, and both went to the ship-breakers in 1908.

Such traffic statistics as are available indicate that the old *Empresses* retained their popularity to a surprising degree throughout these exciting times. The reason is not far to seek. Though surpassed in size and speed, they still offered the fastest regular schedule across the Pacific, and the reliability of their service remained proverbial. These were considerations of great importance to the silk and tea trades, and it was because they could meet these specialized demands that the prosperity of the *Empresses* continued.

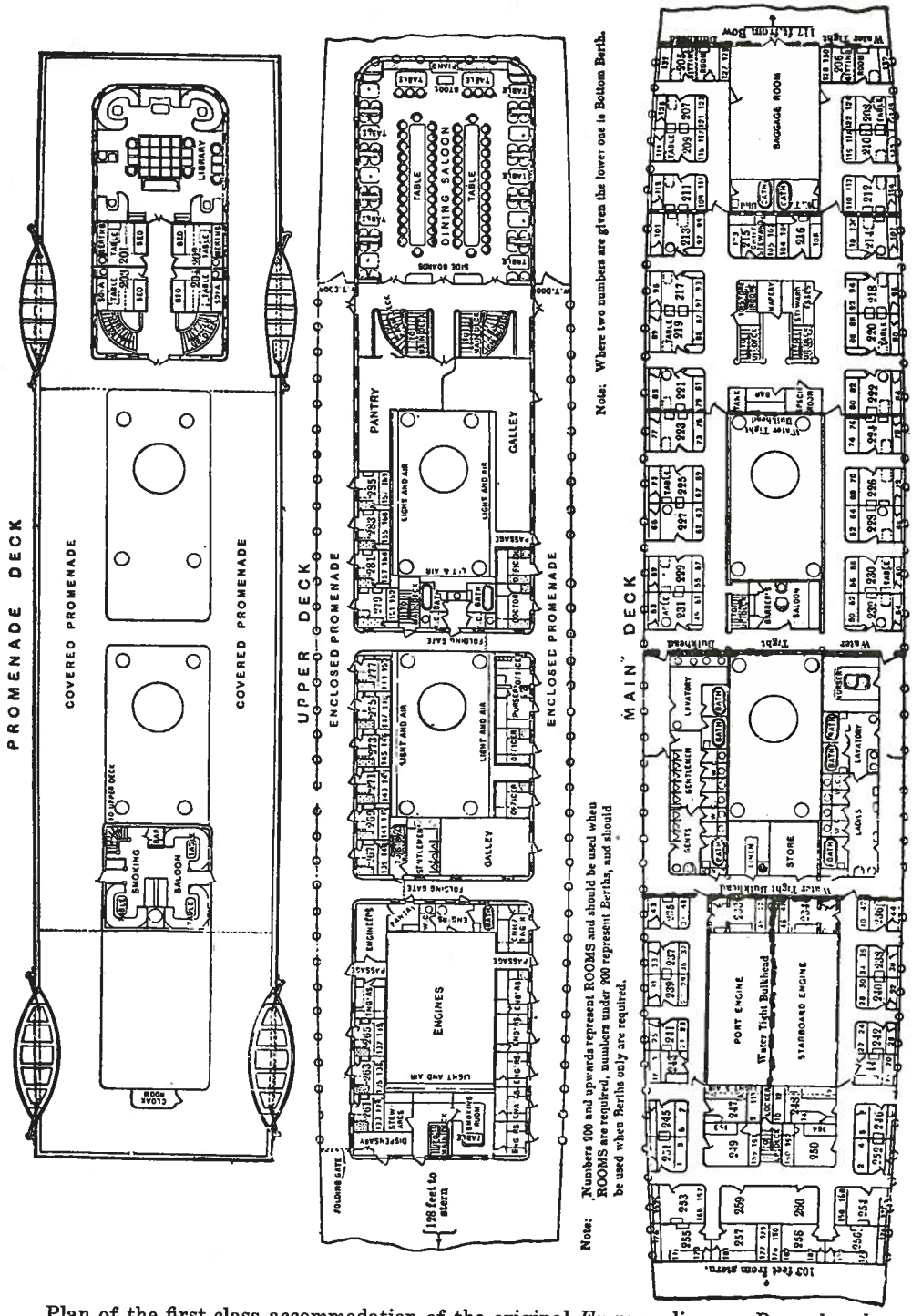
Their success in attracting first-class passengers is more difficult to explain. Their faster schedule accounts for it in part, and they benefited greatly from through bookings to and from the Canadian Pacific Railway. But there is no doubt that the yacht-like lines which had caught the imagination of the travelling public when they first entered service, together with the reputation they had established in the intervening years, were important factors. For, considered objectively and stripped of the glamour which surrounds their memory, the old *Empresses* cannot be said to have been specially attractive ships in some

Canadian Pacific Railway Company's Royal Mail Steamship Line

— JAPAN AND CHINA —

CABIN PLAN

"EMPRESS OF INDIA," "EMPRESS OF CHINA," "EMPRESS OF JAPAN."



Plan of the first-class accommodation of the original *Empress* liners. Reproduced from an advertising booklet issued in 1906.

respects. They were speedy and safe, but wet and very uncomfortable in a rough sea. They could roll and pitch in an astonishing way, and upon occasion threw the clinometer beyond 45 degrees. They were fitted with bilge-keels in 1901, which reduced their rolling considerably, but there is no doubt that the *Monteagle* was the comfort ship of the old fleet.

It is interesting to recall some details of their passenger accommodation. Even by the standards of 1908 it was becoming antiquated. The largest of the three public rooms for first-class passengers was the dining saloon, which was at the forward end of the upper deck. The two long tables down the centre of the room, and the dozen smaller tables along the walls, could seat a total of 104 persons. The style of decoration used is well illustrated in the accompanying photograph. The saloon measured about 36 by 48 feet, and its dome occupied the centre of the library, or lounge, which was on the promenade-deck above. This was a smaller room, about 30 feet square, decorated in a similar style. The smoking-room, which occupied the traditional position farther aft, was smaller still. All the furniture in all three rooms was either built-in or screwed down, which was just as well, in view of the lively way the *Empresses* behaved at sea.

The first-class cabins were mostly outside rooms, and were well fitted for their day. Almost all of them had three berths. There was no such thing as a private bath on board, and the " special suites of staterooms " referred to proudly in the early handbooks were nothing more than four larger cabins on the promenade-deck, which boasted real bedsteads and sofa berths. About 160 first-class passengers could be carried, and cabins for another 40 persons were provided aft in what was sometimes called second class, and at other times intermediate. Accommodation in the steerage varied in extent, for as much 'tween-deck space as was required could be fitted up at short notice if an exceptionally large number of Orientals booked passage.

Two other important reasons for the success of the *Empresses* must not be overlooked. In the first place, they were kept in good condition. Upkeep was never stinted and they were thoroughly overhauled at Hong Kong each year. In the second place, they were well run, and had the good fortune to attract a large number of efficient and popular officers.

Of the three original commanders, Captain O. P. Marshall of the *Empress of India* was easily the favourite. He was popular with both crew and passengers, and took such care of his ship that she was referred to humorously by those in the service as "Marshall's private yacht." She was his last command, for he remained in her until May, 1905, when he resigned to become an Elder Brother of Trinity House. It is said that he received this appointment, for which he was admirably qualified, through the good offices of the Prince of Wales, later King George V., who, as Duke of York, had visited British Columbia in 1901. The Royal party travelled from Vancouver to Victoria in the *Empress of India* on October 1 and returned in her on the 3rd. The Duke was much impressed, both by the smartness with which the liner was handled and by the personality of her commander. Captain Marshall retired some years ago, and died as recently as December, 1939.

The first Chief Engineer of the *Empress of India*, F. A. Wood, died at sea in 1892 and was succeeded by James Adamson, the Second Engineer. Adamson was as capable and careful an engineer as Marshall was a commander, and together they made a team which became famous in the *Empress* service. The *India* was undoubtedly the most economically run of the three pioneers, and her fuel consumption was consistently lower than that of her sisters. This result was obtained by good management and not by slower speed, and Adamson always regarded the records held by the *Empress of Japan* a little ruefully. He served as Chief in the *India* for twenty years and left her in 1912 to join the new *Empress of Russia.*

As noted previously, Captain Tillett, first commander of the *Empress of China,* left her in 1892 to become Marine Superintendent for the Canadian Pacific at Hong Kong. He was succeeded by Captain Rupert Archibald, formerly Chief Officer of the *Empress of India.* Although the *Empress of China* was the unlucky ship of the three, every one agreed that this was not the fault of her popular skipper. Captain Archibald commanded her for over nineteen years—the longest term any *Empress* captain has ever served in a single ship. He seems to have looked back with some regret to the days of sail, for he made much more use

of the canvas with which all the *Empresses* were originally equipped than did his brother officers.

Ill-health compelled Captain George A. Lee of the *Empress of Japan* to resign in August, 1900, and he spent the rest of his life in retirement in England. His successor was Captain Henry Pybus, one of the most prominent figures in the history of the old *Empresses*. Captain Pybus came to the Pacific as Chief Officer of the *Empress of China*, and in 1892 became Chief of the *India* and relieving captain for the fleet. Though somewhat of a martinet, Pybus was an able navigator, and when he was on the bridge things were likely to happen. Thus it was while he was relieving in the *Empress of India* that she had her adventure with the cruiser *Olympia*, in 1896, and he was in the *Empress of Japan* when she made her record run in 1897. His first permanent command was the *Tartar*, in 1898, and from her he was promoted to the *Empress of Japan* in 1900. He retired in January, 1911, and lived in Vancouver until his death in July, 1938.

The last of the original officers of the *Empresses* to receive a command was Edward Beetham, who came out as Fourth Officer in the *Empress of Japan*, in 1891. His promotion was rapid, and within a few years he was next in seniority to Captain Pybus. As a consequence he succeeded Pybus as commander of the *Tartar* when the latter moved on to the *Empress of Japan* in 1900, and in 1905 Captain Beetham himself took over the *Empress of India* upon the resignation of Captain Marshall. In 1913 he moved on to the new *Empress of Russia*, and in 1914 came ashore in Vancouver as Marine Superintendent.

Three other *Empress* captains who were very well known in later years received their first commands while the old liners still headed the trans-Pacific fleet. Captain Samuel Robinson joined the *Empress of Japan* as a junior officer in 1895, and became Chief Officer of the *Empress of China* in 1899. In February, 1903, he was appointed Captain of the *Athenian*, and it will be recalled that he took over the *Monteagle* when she came to the Pacific in 1906. Upon the retirement of Captain Pybus, in 1911, he moved to the *Empress of Japan*. He was in her only two years, as he was sent to the Clyde to join the new *Empress of Asia* in March, 1913.

The early careers of Captain A. W. Davison and Captain A. J. Hailey closely paralleled that of Captain Robinson, for they were taking successive steps up the same ladder. Captain Davison joined the *Empress of China* as a junior in 1895, and after serving as Chief Officer in the *India* was appointed to his first command, the *Tartar*, in 1905. He succeeded Captain Robinson in the *Monteagle*, and in 1913 was promoted to the *Empress of India*, which he left early in 1914 to take over the *Empress of Russia*. Captain Hailey entered the service as Fourth Officer of the *Empress of Japan* in 1900, and after a spell in the *Athenian* returned to the *Japan* as her Chief Officer in 1905. His first permanent command was the *Monteagle*, but both before and after this appointment he made voyages as relief captain in the *Empress of India*. In 1914 he became her regular skipper and remained in her as long as she was in the Canadian Pacific service. It is interesting to note that Captain Hailey grew up across Morecambe Bay, within sight of Barrow-in-Furness, and well remembers the days when the old *Empresses* were taking shape in the shipyard there.

Analysis of these biographical notes shows that the three pioneers had remarkably few captains, considering their length of service. Though they sailed the seas for the Canadian Pacific for a total of seventy-five years, they had no more than twelve regular commanders between them. For purposes of record the following tabulation will be of interest:—

COMMANDERS OF THE OLD "EMPRESSES."

Empress of India: O. P. Marshall 1891–1905; Edward Beetham, 1905–13; A. W. Davison, 1913–14; A. J. Hailey, 1914–15.

Empress of Japan: George A. Lee, 1891–1900; Henry Pybus, 1900–11; Samuel Robinson, 1911–13; W. Dixon Hopcraft, 1913–21; A. V. R. Lovegrove, 1921–22; A. J. Holland, 1922.

Empress of China: A. Tillett, 1891–92; Rupert Archibald, 1892–1911.

A similar tabulation of the Chief Engineers of the old liners would not be of much greater length, and a few of the names which would appear should be mentioned here. The record of James Adamson, in the *Empress of India*, has already been noted. In the *Empress of Japan*, Thomas Tod was succeeded after a brief period by E. O. Murphy, who was Chief when she made her

fastest passage in 1897. Murphy retired to go into business in Hong Kong in 1899, and his post was taken by William Auld, who was in the *Japan* for some fourteen years and was then promoted to the new *Empress of Asia*. James Fowler, first Chief Engineer of the *Empress of China*, resigned about 1900 to become a Lloyd's Surveyor. H. T. Richardson succeeded him, but after a time was appointed Superintendent Engineer for the Company at Vancouver. The next Chief of the *China* was James McGown, who served in her until 1902, when Richardson was promoted to the post of Superintendent at Hong Kong and McGown came ashore to take over his duties at Vancouver. James Neish then became Chief of the *China*, and in 1907 was succeeded by D. H. Mathieson, who served in the *Empress* until the end of her days.

Although small delays and misfortunes inevitably came their way, the *Empresses* suffered remarkably few serious accidents. One such occurred about 2.40 a.m. on the morning of November 6, 1900, when the steel barque *Abby Palmer* collided with the outward-bound *Empress of Japan*. The liner was struck on the port side, well forward, and suffered considerable damage. Fortunately this was all above the water-line. A lookout-man on the bow of the *Abby Palmer* jumped aboard the *Empress* as the vessels met, and it is amusing to note that he stayed with the ship and joined the crew. Captain Pybus contended that the lights of the *Abby Palmer* were improper, but the court of inquiry found the steamship to blame.

After the accident the *Empress* returned to Victoria for temporary repairs, and although she was nearly six days late in sailing, she managed to land her mails at Hong Kong within the contract time.[21]

Some three years later the *Empress of India* was involved in a much more serious collision. When darkness fell on August 17, 1903, she was steaming between Shanghai and Hong Kong. Shortly before midnight the officer on watch realized suddenly that she was coming up with another vessel, later found to be the

(21) For an account of the accident *see* Victoria *Times*, November 7, 1900. The finding of the Admiralty Court is printed in full in the *Times*, April 20, 1901.

small Chinese cruiser *Huang-Tai*, travelling on a parallel course. Exactly what happened in the next few minutes is still not entirely clear, but a press dispatch based upon Captain Marshall's report to his owners reads as follows:—

> When the Chinese gunboat was off the *Empress'* starboard bow, the captain of the cruiser suddenly starboarded his helm and turning to port attempted to cross the bows of the liner. The *Empress* immediately reversed her engines, trying to avoid being rammed broadsides by the cruiser. The liner sheered off sufficiently to catch a glancing blow from the bows of the cruiser instead of receiving the direct impact of the war vessel, which would probably have cut her in two. The cruiser struck the *Empress* near the starboard side of the bridge and in sliding off carried away some of the upper works of the liner. As she drifted back, the steamer was still working her engines to stop, and still steering to sheer off from the warship. The result was that the starboard propellor of the *Empress* smashed the side of the warship as the latter passed her stern.[22]

It turned out later that the *Empress* had suffered relatively little damage, but the *Huang-Tai* was so badly holed that she sank. About 150 of her crew were rescued, but a group of officers refused to leave the ship and went down with her.

The sudden change of course made by the *Huang-Tai* has never been explained satisfactorily. Various stories have gone the rounds, one of which suggests that the collision was due to the mistaken interpretation of an order shouted to the helmsman on the bridge of the *Empress*, while another insists that the cruiser was making a deliberate attempt to sink the liner, because she was carrying Chinese political refugees.

A curious misfortune befell the *Empress of China* late in October, 1907, while she was tied up at the Canadian Pacific dock in Vancouver. About 6 p.m. a longshoreman on board made the startling discovery that the vessel was sinking. Fire-pumps were rushed to the dock, but lack of proper hose connections made them ineffective and by midnight the *Empress* was down by the stern and resting on the bottom. For a time she was in grave danger of rolling over into deeper water. Fortunately the coal hulk *Robert Kerr* was lashed alongside and held her upright. It was known that the trouble was due to an open condenser discharge, through which water had poured into the engine-room when the loading of cargo and coal brought it below the water-line, and a diver was hurried to the scene to close the

(22) Vancouver *Province*, August 18, 1903.

offending valve. Early next morning the salvage steamer *Salvor* came alongside and her pumps had the *Empress* safely afloat in a few hours. Thanks to the heroic efforts of all concerned, she was able to sail from Vancouver on time, but dynamo trouble made it necessary to hold her overnight at Victoria.[23]

Fourteen months later, in February, 1909, the *Empress of China* was again in difficulty, this time in the Inland Sea of Japan. A shifting current carried her off her course and she ran ashore. Though she struck heavily, she was able to get off under her own steam three hours later. The damage suffered extended for a hundred feet of her length, but she was able to complete her voyage to Vancouver before going to Hong Kong for repairs.

In the autumn of 1906 the schedule of the *Empresses* was altered for the first time since 1891. Henceforth the vessels were expected to travel from Vancouver to Hong Kong in nineteen days, instead of twenty-one. This change was due to developments on the Atlantic, where the Canadian Pacific had recently placed in service the first *Empress of Britain* and the *Empress of Ireland*. These vessels were the largest and fastest in the Canadian trade. By speeding up the trans-Pacific liners, the Company hoped to be able to carry mails from Liverpool to Hong Kong in as little as twenty-nine days.

This was asking much of steamers which had been running for sixteen years, and the old *Empresses* were taxed to the limit by the new schedule. It left practically no margin for contingencies, and assumed that the mails would always reach Vancouver at least approximately on time. For a few months all went well, but early in 1907 the line incurred its first penalty for the late arrival of an *Empress* at Hong Kong. To add a touch of irony to the incident, it was the queen of the fleet, the *Empress of Japan*, which fell behind the contract time. The fault was not really hers, for the English mails were over four days late in arriving in Vancouver, and it was obviously impos-

(23) The *Empress's* own water-soaked dynamo could not be repaired in time for her sailing, and the substitute secured had proven unequal to its task by the time the liner reached Victoria. The *Tartar* was in Esquimalt dry-dock, after her collision with the *Charmer*, and her dynamo was hastily installed in the *Empress* overnight.

sible for her to complete the voyage to Hong Kong in only fourteen days.

It was evident that new tonnage was needed on the Pacific if the faster schedule were to be maintained satisfactorily. In January, 1907, D. E. Brown, an official of the Company, stated that two new *Empresses* would be built at once, but no order was actually placed.[24] In July it was announced, on the much better authority of Arthur Piers, General Manager of the Canadian Pacific steamships, that plans for one new Pacific *Empress* were in preparation.[25] A month later, shareholders found the following paragraph in the report submitted at the annual meeting of the Company:—

> The subsidy that is now being paid to your Company for the carriage of the mails between Liverpool and Hong Kong will expire in April of next year, and it is not improbable that a faster and more frequent service will be made a condition of its continuance. In view of this fact your Directors recommend that they be authorized to arrange for the acquisition or construction of two steamships to meet the requirements of your Pacific trade, or to build two larger and faster boats for the Atlantic service and transfer the *Empress of Britain* and *Empress of Ireland* to the route between Vancouver and Hong Kong.[26]

But matters do not seem to have worked out quite as anticipated. Though the new contract signed in October, 1908, covered the carriage of mails all the way from Liverpool to Hong Kong, the service required was slower than that the Canadian Pacific was already maintaining.[27] Moreover the amount of the subsidy was reduced from £60,000 to £45,000 per annum.

No doubt these circumstances account for the fact that nothing more was heard about new *Empresses* for several years. Meanwhile the old steamers carried on with remarkable regularity and success. Competition ebbed and flowed in a curious way. On the San Francisco route the Toyo Kisen Kaisha placed in service two fine new turbine steamers, which were the fastest and most modern ships on the Pacific. On the northern route, James J. Hill's formidable merchant fleet dwindled rapidly. The *Dakota* was wrecked, the Boston Steamship Company's steamers

---

(24) Victoria *Times*, January 23, 1907.

(25) *Ibid.*, July 25, 1907.

(26) *Annual Report*, Canadian Pacific Railway, 1907, p. 8.

(27) The contract time from Liverpool to Hong Kong, via Quebec or Rimouski, was 818 hours; via Halifax or St. John, 853 hours.

were withdrawn, and only the ships of the Nippon Yusen Kaisha and the single American liner *Minnesota* remained. Through it all the *Empresses* continued to offer the shortest route to the Orient. Though they were equipped with wireless in 1909,[28] no great attempt was made to bring their passenger accommodation up to date. But if their deficiencies were apparent, so were their low capital and maintenance charges.

In the summer of 1911 it was announced at long last that two new *Empresses* had been ordered from the Fairfield Shipbuilding Company, builders of the *Empress of Britain* and *Empress of Ireland.* The assumption was that the new liners and two of the old steamers would maintain a fortnightly service to the Orient. This gave rise to some speculation as to the fate of the third old *Empress,* but this ended a few weeks later when the *Empress of China* was wrecked on the Japanese coast.

The unlucky ship of the fleet met this final misfortune of her career on July 27, 1911. She had just come safely through a typhoon, and was proceeding cautiously through a fog-bank, when she struck Mera Reef, off the entrance of Tokyo Bay. The engines were put astern, but she was found to be hard aground. All the passengers and most of the crew were soon taken off by small craft which came out from shore. No one was injured. The official inquiry found that the accident was due to the fact that the *Empress* had been carried 18 miles off her course " by a strong and unusual current, of the existence of which the master had no knowledge and no means of knowing, and to the mistiness and obscurity which left him in ignorance of his proximity to the shore."[29]

The *Empress of China* was so firmly embedded on the reef that salvage operations proved difficult and costly. It was not until December 12 that she was floated and taken to Uraga for docking. Several months later it was decided to abandon her

(28) The first *Empress* to arrive with wireless was the *Empress of China,* which reached Victoria on May 29, 1909. R. L. Stevens was her first operator. *See* Victoria *Times,* March 12 and May 31, 1909.

(29) The finding is quoted in the Victoria *Colonist,* September 6, 1911.

to the underwriters. They, in turn, disposed of her to ship-breakers. The price is said to have been $65,500.[30]

Captain Archibald stood by his ship until illness compelled him to leave her, shortly before she was floated. In March, 1913, he succeeded J. A. Fullerton, who had held the post since 1888, as ship's husband at Vancouver. He retired in 1914 and lived in North Vancouver until his death in May, 1936, at the age of 82.

The interval between the loss of the *Empress of China* and the completion of the new *Empresses* was a difficult one for the Canadian Pacific. The *Monteagle* had to be pressed into the mail service, for which she was too slow and inadequately fitted. It is significant that first-class bookings fell off 60 per cent. in 1912 as compared with 1911. No wonder every one in the service looked forward to 1913 and the arrival of the new steamers.

The story of the *Empress of Russia* and *Empress of Asia* lies outside the scope of this article, which is concerned with the older units of the fleet, but their chief characteristics may be stated briefly. Their length over all is 592 feet and their gross tonnage 16,900 tons. In 1913 they were exceeded in size on the Pacific only by Hill's lonely giant, the 20,718-ton *Minnesota.* Their construction aroused considerable interest, for they were the first large steamers to have cruiser sterns. This novelty in design, together with their three large funnels, gave them a distinctive appearance which was much admired, and which has been copied in all later *Empresses.* Their turbine engines, driving quadruple screws, enabled both sisters to exceed 21 knots on trial. As their passenger accommodation was luxuriously furnished, it is not surprising that the two vessels cost the Company slightly over $5,000,000.[31]

The *Empress of Russia* was completed first and sailed from Liverpool in April, 1913, under command of Captain Beetham. Her maiden voyage ended at Vancouver on June 7. On the last leg of her long journey she travelled from Yokohama to William Head in the record time of 9 days 5 hours 29 minutes. Like the

(30) Frank C. Bowen, *History of the Canadian Pacific Line,* London, 1928, p. 113.

(31) Entries in the reports of the Company for 1912, 1913, and 1914, indicate that the cost of the two liners was $5,005,738.84.

Empress of India before her, the *Russia* thus ended her first passage Queen of the Pacific. She was joined presently by the *Empress of Asia,* Captain Samuel Robinson, which arrived in Vancouver on August 31.

Experience was to prove that the *Empress of Russia* and *Empress of Asia* were indeed the fine, soundly-built vessels which they appeared to be. In particular, the years were to show that their builders had anticipated the subsequent trend of liner design to an astonishing extent. The result is that they are much the most modern-looking ships of their age now afloat. When new, in 1913, they immediately restored the old prestige of the *Empress* line, for they were beyond dispute the fastest and best-equipped steamers in the trans-Pacific trade.

The new liners inevitably overshadowed the old *Empress of India* and *Empress of Japan.* Though admired as much as ever by ship-lovers, to most people they seemed all at once to be small in size and antiquated in equipment. Nevertheless they were still sufficiently fast to run in conjunction with the *Empress of Russia* and *Empress of Asia,* and the four vessels enabled the Canadian Pacific to inaugurate a fortnightly service to the Orient. It took the old liners all their time to make the trip from Vancouver to Hong Kong, but the superior speed of the newer *Empresses* left them with a few days in hand. In June, 1914, it was therefore possible to extend the run of the *Russia* and *Asia* to Manila. Only two calls had been made there, however, before the whole schedule was disrupted by the declaration of war.

The *Empress of India* sailed from Yokohama just before the outbreak, and arrived at Victoria on August 14. She had made the crossing to William Head in 11 days 18 hours, which was the fastest time made by an old *Empress* in some years.[32] When she left for the Orient on August 22 it was realized that perils and adventures probably lay ahead, but few can have suspected that the famous pioneer of the *Empress* line was leaving Vancouver and Victoria for the last time. Officially, the voyage was number 120, outward; actually, it was her 238th trans-Pacific crossing. Captain A. J. Hailey was in command.

(32) Victoria *Times,* August 15, 1914.

When the *Empress of India* reached Hong Kong she was ordered to Bombay, there to await orders from the Admiralty. She proceeded thither via Singapore. No lights were shown after she passed through Malacca Strait, as the German cruiser *Emden* was still at large in the Indian Ocean. At Bombay the *Empress* was examined by the Director of the Indian Marine, who informed Captain Hailey that his ship would be fitted out as a hospital ship, under the patronage of certain Indian royalty. The work of conversion was started at once and took about two months to complete. Meanwhile, in December, it was announced in London that the *Empress* had been sold to the Maharajah of Gwalior, who proposed to equip and maintain her as a hospital ship, at his own expense, as a contribution to the war effort of the Empire.[33] The price paid was £85,000.[34] In keeping with her new purpose, she was christened *Loyalty* at Bombay on January 19, 1915.

Shortly after this she was ordered to the Persian Gulf. Then, when two days out at sea she was directed to proceed to Karachi. From there she sailed for Southampton, where she picked up sick and wounded Indian troops. In March she was back at Bombay. All this time she had retained her Canadian Pacific officers and crew. Upon her return to Bombay, however, Captain Hailey handed her over to the Indian Marine, and the last link with her original owners was broken.[35]

Her subsequent career as a hospital ship was a busy one. Press reports state that by the end of the war she had made forty-one voyages and carried a total of 15,406 patients. These included British, Indian, Chinese, East African, West African, and West Indian troops, and a number of German, Turkish, and Arab prisoners.

After the Armistice the *Loyalty* served briefly as a troopship. Then in March, 1919, she was sold to the Scindia Steam Navigation Company, of Bombay, which proposed to operate her between Indian ports, the Mediterranean, and Great Britain. She was refitted as a passenger ship, and a sketch furnished by

(33) *Ibid.*, December 16, 1914.

(34) *Annual Report*, Canadian Pacific Railway, 1915, p. 11.

(35) Most of the details given in this and the preceding paragraph were given to the writer by Captain Hailey.

the Company indicates that some minor changes were made in her superstructure. Her period of service proved to be brief, for she was laid up at Bombay in March, 1921, after making only a few voyages to Marseilles and London. For two years she lay at anchor, neglected and rusting. Finally she was sold for scrap to Messrs. Maneckchand, Jivray & Co., late in February, 1923.[36] The records of *Lloyd's Register of Shipping* show that the actual work of breaking her up commenced in June.

Very different were both the war record and the subsequent career of the old *Empress of Japan.* She had sailed from Vancouver on July 23, 1914, and was nearing Yokohama when war was declared. She hurried on to Hong Kong, where she was at once fitted out as an auxiliary cruiser. She was stripped of movable fittings, but her passenger accommodation was not otherwise interfered with. Her armament consisted of eight old 4.7-inch guns, platforms for which had been provided at the time she was built. Some difficulty was experienced in securing a crew, but in spite of this she was prepared for sea in remarkably short order. When commissioned she joined the squadron under Rear-Admiral Jerram which was protecting the Eastern and Australian trade routes. While on war service she had a naval commander, but her regular skipper, Captain W. Dixon Hopcraft, stayed with her as navigator.

Her first cruise took her to Singapore, and then to Batavia, Macassar, and Sandakar. On October 8 she was back in Hong Kong. For ten days she had had the honour of serving as flagship of Admiral Jerram, while H.M.S. *Minotaur* was detached on special duty. In addition, she had convoyed several captured enemy ships to Singapore. Her chief concern was the cruiser *Emden,* then at the height of her career as a commerce raider. Later the *Empress* was to have the satisfaction of retaking the British steamer *Exford,* which the *Emden* had seized and placed in charge of a prize crew.

From Hong Kong the *Empress of Japan* proceeded to Columbo, where she remained about three weeks. Her next cruise took her to the Red Sea, where she assisted the *Empress of Asia* and *Empress of Russia* in bombarding Turkish batteries and

(36) Scindia Steam Navigation Co. to the writer, November 4, 1939.

capturing armed dhows. When her services were no longer needed there, she was ordered to Bombay, where she was dry-docked, overhauled, and finally released by the British Admiralty.

As Captain Hopcraft was ill at the time, the *Empress* was taken to Hong Kong by her Chief Officer, Captain A. J. Holland. There another two months were spent refitting her for her regular run across the Pacific. It is amusing to note that while she served as an auxiliary cruiser the *Empress* retained her white hull and yellow funnels. When turned back to her owners, however, she was painted grey as a precautionary measure. As events turned out, she never regained her familiar colouring, for the hulls of the *Empresses* were all painted black for some years after the Great War.[37]

The *Empress of Japan* sailed from Hong Kong on December 1, 1915, and arrived in Vancouver on the 21st. As the *Empress of Russia* and *Empress of Asia* also returned to their regular run in the spring of 1916, the Canadian Pacific service reverted for a time more or less to normal. Later, however, the two big ships were again commandeered, and only the *Empress of Japan* and *Monteagle* were left on the Pacific. Even so, many war-time duties came their way. The *Empress* carried thousands of Chinese labourers, who were either bound for France or returning home, and in 1919 she brought many of the British and Canadian troops in the Siberian Expeditionary Force back from Vladivostock.

When she finally returned to her normal trade it was clear that her remarkable career was nearing its end. True, she was still sound and trim, and lovely to look upon. But she was nearly 30 years old, and was obviously too small to be retained longer than necessary. In the Fairfield yard the new *Empress of Canada* was already taking shape, and presently it was announced that the German liner *Tirpitz* had been acquired and would come to the Pacific as the *Empress of Australia.*

The *Empress of Canada* was expected to be ready for service in 1921, but her completion was delayed, and the *Empress of Japan* was reprieved for another year. In the interval Captain

(37) On the war service of the *Empress of Japan see* the illustrated article, based on data secured from Captain Hopcraft, in the Victoria *Colonist,* December 23, 1915.

Hopcraft, who had been her commander since 1913, was succeeded by Captain A. V. R. Lovegrove. He remained in her for only three voyages, after which she was taken to Hong Kong by her Chief Officer, Captain P. Sinclair, and there turned over to Captain A. J. Holland, in April, 1922.

On June 1 she sailed for the Orient on her 158th and final round trip. On her return she passed through the First Narrows and tied up at Vancouver for the last time, on July 18. The next day the proud new *Empress of Australia* arrived from England to take her place in the sailing schedule.

Few ships have served their owners as well, and caused them as little anxiety, as the old *Empress of Japan.* From first to last she was in commission for over thirty-one years. For twenty-two of them she held the Pacific record. She crossed the Pacific no less than 315 times, yet the collision with the *Abby Palmer,* in 1900, was the only serious accident in which she was ever involved. She steamed in all a total of over 2,000,000 miles, 62,000 miles of which she covered while in the service of the Admiralty as an auxiliary cruiser.

During the longshore strike of 1923 the old *Empress* was used as a floating hotel for stevedores. Except for this interlude she swung at anchor in Vancouver Harbour for almost four years. Finally, in the spring of 1926, she was sold to Victor Lamken, who acted on behalf of R. A. Mahaffay, of the Railway Equipment Company, of Tacoma. It was said at the time that she would be dismantled and the empty hull sold as a barge. Actually, however, she was broken up by slow degrees in North Vancouver by R. J. Christian, a local contractor.

Two relics remain in Vancouver to recall the memory of the beautiful old liner. Her bell was purchased by F. H. Clendenning and presented to the Merchants Exchange, where it hangs to-day. Her dragon figurehead was acquired by the Vancouver *Daily Province,* and has been erected in Stanley Park, not far from the First Narrows, through which the *Empress* passed so many times.

In conclusion, a word should be said about the later years of the *Monteagle.* She was in Vancouver when war was declared and was held in port for a time as a precautionary measure. She finally got away to the Orient on August 19. In September

she was taken over by the Admiralty at Hong Kong. She was released early in 1915, but was taken up again in 1918 and for a time in 1919. Most of her time was spent in the Pacific, though upon occasion she travelled as far afield as Suez. She carried many coolies from North China, and in 1919 called several times at Vladivostock to repatriate prisoners of war from Russia.

One of the few exciting incidents in the career of the *Monteagle* came in 1921, when she rescued the survivors of the French steamer *Hsin-Tien* under conditions of great difficulty. The gallantry of her crew was suitably recognized by the French Government.

Upon the arrival of the new *Empress of Canada* and *Empress of Australia* in the summer of 1922, the *Monteagle* was withdrawn from service and laid up in Vancouver Harbour. In September it was decided to send her to the Atlantic. She loaded a full cargo of lumber and sailed for St. John, New Brunswick, on the last day of the month. There she lay idle for a second time, after which she crossed the Atlantic to London.

Her last days have been described by Frank C. Bowen. It seems that she was laid up in the East India Dock during most of 1923, and was then taken down the Thames to Southend, where she swung at anchor for another two years. She was retained all this time because the Canadian Pacific had intended to rebuild her as a modern cargo-carrier and rename her *Belton*. Owing to rising costs and low freight rates the plan was abandoned. In the spring of 1926—about the same time her old running mate, the *Empress of Japan*, was sold—the *Monteagle* was disposed of to Messrs. Hughes Bolckow, of Middlesbrough. The purchase price was £10,750. Subsequently she was towed to Blyth, where many great liners have met their end, and broken up.[38]

So passed a famous generation of ships from the Pacific.

W. KAYE LAMB.

PROVINCIAL LIBRARY AND ARCHIVES,
VICTORIA, B.C.

(38) Bowen, *op. cit.*, pp. 186–187.

ACKNOWLEDGMENTS.

Many persons have assisted most generously in the work of gathering the material for this history of the old *Empresses*. Mr. M. McD. Duff, Assistant to the Chairman, Canadian Pacific Steamships, not only talked over old times, but very kindly answered a number of inquiries by mail. Captain E. Aikman, General Superintendent, Vancouver, placed all available records of the old *Empresses* at my disposal. More recently Captain R. J. Hickey, Assistant Marine Superintendent, kindly checked a number of points. I am indebted to Mr. J. Murray Gibbon, General Publicity Agent, Montreal, for the loan of two of the photographs used to illustrate this article.

I am also greatly indebted to a number of retired commanders and former officers who served in the original *Empresses*, all of whom have contributed reminiscences and have enabled me to clear up innumerable points which would otherwise remain in doubt. They include Captain Samuel Robinson, Captain A. W. Davison, Captain A. J. Hailey, and Mr. H. L. Radermacher, all of Vancouver; Mr. J. B. Penty, of Victoria; and Mr. J. E. Macrae, of New York City. I also had the good fortune to spend an afternoon with the late Captain Henry Pybus, in 1936, and my files include letters from two other pioneer *Empress* captains who have passed on, Captain Rupert Archibald and Captain O. P. Marshall.

The Secretary of Lloyd's Register of Shipping, London, and the Manager of the Scindia Steam Navigation Company, of Bombay, both searched their records and contributed a number of details to the narrative.

Finally, I am specially indebted to two friends. One is Mr. John Haskell Kemble, of Pomona College, an authority on the history of trans-Pacific shipping, who contributed various notes and suggestions. The other is Mr. J. A. Heritage, of Victoria, who served for several years as an engineer in the *Empress of India* before he joined the B.C. Coast Service, of which he was senior engineer at the time of his retirement. If the story is found to be technically correct as well as historically interesting, the credit will be very largely his.

W. K. L.

APPENDIX.

1. SPECIFICATIONS OF THE ATHENIAN, TARTAR, AND MONTEAGLE.

The *Athenian* was built in 1882 by Messrs. Aitken & Mansel, at Whiteinch, near Glasgow, for the mail service of the Union Line between England and South Africa. She was an iron, single-screw steamer, and was fitted originally with compound engines of some 3,200 indicated horse-power, which gave her a speed on trial of slightly over 13 knots. In 1887 she was given new boilers and triple-expansion engines, which developed 4,600 horse-power and increased her speed on trial to 14.76 knots. The new engines were so much more economical than the old that her fuel consumption was lower than before, in spite of the marked increase in both power and speed. When first she came to the Pacific the *Athenian* had very high topmasts, but these were cut down later to the height shown in the accompanying photograph.

The *Tartar* was built in the same yard, and for the same service, in 1883. She, too, was an iron, single-screw steamer, and her original compound machinery was likewise removed and replaced by triple-expansion engines. Captain A. W. Davison, whose first command she was, in 1905, recalls that she was an exceptionally well-built ship, with solid teak deck-rails and elaborate brass fittings. He states that upon one occasion she was used as a royal yacht by Queen Victoria, and that when she came to the Pacific the furniture in one of her rooms still bore the royal arms.

The *Monteagle* was a steel ship, and was completed in March, 1899, by the Palmers' Company, of Newcastle. She was built for the Beaver Line, and, as stated elsewhere, was one of a very successful series of cattle and freight steamers built by the line in the decade 1897–1907. Her regular run was from Bristol to Montreal, though she made voyages to various ports in the United States as well. While on the Atlantic she became noted for the consistency of her performance, and her ability to keep strictly to schedule, in fair weather and foul. Her three double-ended Scotch boilers had a heating surface of 11,721 square feet and a grate area of 363 square feet. Her triple-expansion engines drove twin screws. The *Monteagle* was the first vessel in the Canadian Pacific trans-Pacific fleet to have refrigerated cargo space. Its capacity was 24,785 cubic feet.

The principal dimensions of the three steamers were as follows:—

	Length.	Width.	Depth.	Tons Gross.	Tons Net.
Athenian	365.0	45.8	29.0	3,882	2,440
Tartar	376.5	47.2	30.3	4,425	2,768
Monteagle	445.0	52.2	27.7*	6,163	3,953

* Depth moulded, 30 feet 10 inches.

2. WESTBOUND TRAFFIC STATISTICS, 1892 AND 1897.

Careful search has so far failed to reveal any official record of the traffic handled by the *Empresses* during the nineties. It has therefore been necessary to turn to the newspapers of the time for the statistics set forth in the two tables which follow. The arrival of practically every *Empress* was described at some length in early days. As the tables themselves suggest, the ship reporters frequently secured from the purser a detailed return of the passengers carried. However, at other times they were content with estimates or round figures, and it must therefore be emphasized that *too much reliance must not be placed upon the totals given.* It can be said with confidence that they are not very wide of the mark, but on the other hand it is equally certain that they are not entirely accurate.

Oddly enough, much less attention was given by the press to the sailings of the *Empresses* than to their arrivals, and it has proven quite impossible to compile any corresponding tables for their outward voyages.

Canadian Pacific Trans-Pacific Steamships.

(a.) Passengers carried, Inward Voyages, 1892.

Arrival Date.	1st Class.	2nd Class.	Steerage.	Total.
January 26	13	8	191	212
February 22	18	1	240	259
March 22	36	22	300	358
April 19	81	22	530	633
May 7	82	8	450	540
May 28	120	11	552	683
June 18	136	.....	416	552
July 8	151	.....	286	437
July 29	109	18	198	325
August 25	48	13	145	206
September 9	47	14	104	165
September 30	35	8	144	187
October 30	52	18	249	319
November 22	40	7	178	225
December 20	25	6	329	360
Totals	993	156	4,312	5,461

(b.) Passengers and Cargo carried, Inward Voyages, 1897.

Arrival Date.	1st Class.	2nd Class.	Steerage.	Total.	Cargo (Tons Measurements).
January 13	14	24	248	286	2,772
February 11	23	1	289	313	1,895
March 10	27	.....	343	370	2,341
April 8	41	12	790	843	1,600
April 27	110	.....	687	797	1,898
May 19	130	13	487	630	2,200
June 9	127	24	376	527	1,853
June 30	91	19	373	483	2,134
July 20	61	.....	375	436	2,265
August 11	62	9	223	294	1,929
September 1	64	8	210	282	2,438
September 21	38	14	271	323	1,500
October 20	28	8	307	343	2,200
November 17	22	11	212	245	2,000
December 15	22	.....	150	172	2,074
Totals	860	143	5,341	6,344	31,099

3. TRAFFIC STATISTICS, 1908–1913.

Official returns of the traffic handled by the trans-Pacific steamers are available for the years 1908 to 1913. These are included in the report on subsidized steamship services which is found in the annual report of the Department of Trade and Commerce. The tables which follow have been compiled from this source.

Canadian Pacific Trans-Pacific Steamships.

Traffic Statistics, 1908–1913.

(a.) Passengers.

	1st Class.	3rd Class.	4th Class (Steerage).	Total.
Inward voyages—				
1908	706	622	6,242	7,570
1909	583	607	4,868	6,058
1910	955	772	6,086	7,813
1911	697	565	4,846	6,108
1912	394	969	5,610	6,973
1913	970	752	6,128	7,850
Outward voyages—				
1908	576	245	3,943	4,764
1909	523	160	3,371	4,054
1910	623	170	3,889	4,682
1911	429	176	2,184	2,789
1912	255	361	4,059	4,675
1913	660	368	4,693	5,721
Inward and outward—				
1908	1,282	867	10,185	12,334
1909	1,106	767	8,239	10,112
1910	1,578	942	9,975	12,495
1911	1,126	741	7,030	8,897
1912	649	1,330	9,669	11,648
1913	1,630	1,120	10,821	13,571

(b.) Freight.

	Tons Weight.	Tons Measurement.
Inward voyages—		
1908	12,256	29,018
1909	12,659	———
1910	2,205	54,368
1911	———	23,434
1912	19,050	———
1913	26,377	———
Outward voyages—		
1908	9,040	13,092
1909	14,053	———
1910	8,747	18,170
1911	———	14,878
1912	28,183	———
1913	31,937	———
Inward and outward—		
1908	21,296	42,110
1909	26,712	———
1910	10,952	72,538
1911	———	40,332
1912	47,233	———
1913	58,314	———

HELMCKEN'S DIARY OF THE CONFEDERATION NEGOTIATIONS, 1870.

On May 10, 1870, a delegation of unusual importance left Victoria for San Francisco, *en route* to Ottawa. It was composed of three of the leaders of the political life of the colony of British Columbia: the Hon. J. W. Trutch, Chief Commissioner of Lands and Works; the Hon. R. W. W. Carrall and the Hon. J. S. Helmcken, elected members of the Legislative Council for Cariboo and Victoria City, respectively. To them Governor Anthony Musgrave had entrusted the task of negotiating with the Canadian Government suitable terms for the entry of the Pacific colony into the newly federated Dominion of Canada.

Federation with Canada had been mooted in the colony since 1867, but the supine administration of Governor Frederick Seymour had done little to secure its accomplishment. It remained for his successor to initiate the official action which alone could bring the matter to a successful issue. Upon the opening of the regular session of the Legislative Council on February 15, 1870, Governor Musgrave, referring to the projected union with Canada, had said:—

> For my part I am convinced that on certain terms which I believe it would not be difficult to arrange, this Colony may derive substantial benefit from such an union. But the only manner in which it can be ascertained whether Canada will agree to such arrangements as will suit us, is to propose such as we would be ready to accept.[1]

Consequently the Governor, after consultation with his Executive Council, had drawn up a series of proposals for presentation to the Legislative Council. Long and careful consideration by that body resulted in certain amendments to the terms and the addition of some supplementary recommendations. Thus armed, the three delegates travelled to Ottawa to sound out the Canadian Government.

Hitherto a veil of secrecy has shrouded the negotiations which followed. The various occasions upon which the delegates met with representatives of the Canadian Cabinet were, of course,

(1) Victoria *Daily British Colonist*, February 16, 1870.

noted in the press; but no details whatever of the proceedings were made public, either then or later. Moreover, careful search in the Archives of the Dominion, and in other collections, has failed to produce any minutes or memoranda, and after a lapse of almost seventy years it still appeared that not one of the participants had left any record of the discussions which took place.

Such a record has now finally come to light. Amongst the papers belonging to the late Dr. J. S. Helmcken, recently transferred to the Provincial Archives by the heirs of his daughter, Mrs. Edith L. Higgins, is a concise, day-to-day account of the eventful negotiations between the British Columbian and Canadian delegates. The diary was kept in an ordinary exercise-book. When Dr. Helmcken refused a senatorship and retired from politics in 1871, he seems to have placed it in a drawer of his secretaire and ignored it thereafter. Possibly he regarded it as a personal and confidential document, as no reference to it has been noticed in any of the reminiscences he contributed in later years to the press.

The historical importance of the diary is obvious. Though relatively brief, it reveals clearly both the general course of the negotiations and the questions upon which discussion centred. Two points are of special interest. The sincerity of Canada's desire to secure the adherence of British Columbia was made patent by the generosity of the final terms offered by the Dominion. Helmcken's journal makes the interesting suggestion that the concessions Canada was prepared to make were limited only by the necessity of carrying the terms through the federal parliament. The reader cannot but be struck by the number of times this matter is referred to in the diary. In the second place, the journal enables us, with some degree of certainty, to account for some of the most important differences between the proposals which the delegates took to Ottawa and the terms of union offered later by the Dominion. It is not necessary here to detail all the changes made, but Helmcken's notes throw much light upon three of the most important alterations—those in the terms relating to subsidies, to communications, and to the form of government. For the sake of clarity these are reproduced in full.

BRITISH COLUMBIA'S PROPOSAL.[2]	FINAL TERMS OF UNION.[3]
Subsidies.	
3. The following sums shall be annually paid by Canada to British Columbia, for the support of the Local Government and Legislature, to wit:— An annual grant of $35,000, and a further sum equal to 80 cents a head per annum of the population, both payable half-yearly in advance, the population of British Columbia being estimated as aforesaid at 120,000. Such grant equal to 80 cents a head to be augmented in proportion to the increase of population, when such may be shown, until the population amounts to 400,000, at which rate such grant shall thereafter remain. (Amendment proposed by the Legislative Council:— That the Governor be respectfully requested to strike out figures "$35,000," and insert in lieu therof "$75,000." That the figures "400,000" be altered to "1,000,000.")	3. The following sums shall be paid by Canada to British Columbia for the support of its Government and Legislature, to wit, an annual subsidy of 35,000 dollars, and an annual grant equal to 80 cents per head of the said population of 60,000, both half-yearly in advance; such grant of 80 cents per head to be augmented in proportion to the increase of population, as may be shown by each subsequent decennial census, until the population, amounts to 400,000, at which rate such grant shall thereafter remain, it being understood that the first census be taken in the year 1881.
Communications.	
8. Inasmuch as no real Union can subsist between this Colony and Canada without the speedy establishment of communication across the Rocky Mountains by Coach Road and Railway, the Dominion shall, within three years from the date of Union, construct and open for traffic such Coach Road, from some point on the line of the Main Trunk Road of this Colony to Fort Garry, of similar character to the said Main Trunk	11. The Government of the Dominion undertake to secure the commencement simultaneously, within two years from the date of the Union, of the construction of a Railway from the Pacific towards the Rocky Mountains, and from such point as may be selected, east of the Rocky Mountains, towards the Pacific, to connect the seaboard of British Columbia with the railway system of Canada, and further, to secure the completion of such

(2) British Columbia, Legislative Council, *Debate on the subject of Confederation with Canada*, Victoria, 1913, pp. 162–164.

(3) Howay and Scholefield, *British Columbia*, Vancouver, 1914, II., pp. 696–697.

Road; and shall further engage to use all means in her power to complete such Railway communication at the earliest practicable date, and that Surveys to determine the proper line for such Railway shall be at once commenced; and that a sum of not less than one million dollars shall be expended in every year, from and after three years from the date of Union, in actually constructing the initial sections of such Railway from the Seaboard of British Columbia, to connect with the Railway system of Canada.

(Amendment proposed by the Legislative Council:

That the word "and," between "construct" and "open," be erased, and words "and maintain" be inserted after "traffic". That this Section be altered so that the section of the Main Trunk Road between Yale and New Westminster may be included in the Coach Road which the Dominion Government is to be asked to construct within three years from the date of Union.)

Railway within ten years from the date of the Union.

And the Government of British Columbia agree to convey to the Dominion Government, in trust, to be appropriated in such manner as the Dominion Government may deem advisable in the furtherance of the construction of the said Railway, a similar extent of public lands along the line of Railway, throughout its entire length in British Columbia, (not to exceed, however, Twenty (20) Miles on each side of the said line,) as may be appropriated for the same purpose by the Dominion Government from the public lands in the North-West Territories and the Province of Manitoba. Provided, that the quantity of lands which may be held under pre-emption right or by Crown grant within the limits of the tract of land in British Columbia to be so conveyed to the Dominion Government shall be made good to the Dominion from contiguous public lands; and, provided, further, that until the commencement within two years, as aforesaid, from the date of the Union, of the construction of the said Railway, the Government of British Columbia shall not sell or alienate any further portions of the public lands of British Columbia in any other way than under right of pre-emption, requiring actual residence of the pre-empter on the land claimed by him. In consideration of the land to be so conveyed in aid of the construction of the said Railway, the Dominion Government agree to pay to British Columbia, from the date of the Union, the sum of 100,000 dollars per annum in half-yearly payments in advance.

Form of government.

15. The constitution of the Executive authority and of the Legislature of British Columbia shall, subject to the provisions of "The British North America Act, 1867", continue as existing at the time of Union until altered under the authority of the said Act.

14. The constitution of the Executive Authority and of the Legislature of British Columbia shall, subject to the provisions of the "British North America Act, 1867", continue as existing at the time of Union until altered under the authority of the said Act, it being at the same time understood that the Government of the Dominion will readily consent to the introduction of Responsible Government when desired by the inhabitants of British Columbia, and it being likewise understood that it is the intention of the Government of British Columbia under the authority of the Secretary of State for the Colonies, to amend the existing constitution of the Legislature by providing that a majority of its members shall be elective.

It is now generally conceded that the inclusion of the guarantee of responsible government in the terms was largely the work of H. E. Seelye, the diligent special correspondent of the Victoria *Daily British Colonist*.[4]

WILLARD E. IRELAND.

NEW WESTMINSTER, B.C.

(4) *See* Harkin, W. A. (ed.), *Political Reminiscences of the Right Honorable Sir Charles Tupper*, London, 1914, p. 128.

DIARY OF THE CONFEDERATION NEGOTIATIONS, 1870.

Friday, June 3rd.[5]

We arrived at Ottawa City at 1 o'clock to day from Prescott; would have been in yesterday had we not missed the train.[6] Mr. Trutch sent in a note stating we had arrived. The Governor General summoned us to his presence at 3 o'clock.[7] We were received courteously; after a few minutes Sir G[eorge] Cartier made his appearance and we were introduced to him and very shortly after conducted and inducted by him to the Privy Council and presented to all the Members—a Council being at that time held.[8] After an ordinary conversation, we were informed that we should be made acquainted with the time when our presence would be required and then the Hon. J[oseph] Howe [President of the Privy Council] volunteered to shew us the City. He did so and we dined with him in the evening, Sir F[rancis] Hincks [Minister of Finance] being present and Honble. Mr. Tilley [Minister of Customs]. We subsequently learned that on Monday next we were required to meet the P[rivy] Council at 2 P.M.

Monday. [*June 6.*]

According to appointment we proceeded to the Govt. Buildings and met Sir G. Cartier, whom we found in his shirt sleeves, hard at work. He, as usual, was exceedingly pleasant, gave us sherry, and introduced us into the Privy Council, Mr. Trutch

(5) Contrary to the general acceptance of June 4th as the date for the arrival of the delegates (*see* Howay and Scholefield, *op. cit.*, II., p. 293), the date here mentioned is correct. Compare telegraphic message in the Victoria *Daily British Colonist*, June 5, 1870.

(6) The Toronto *Globe*, June 10, 1870, states quite definitely that the delegates arrived in Ottawa on the 28th of May, and H. E. Seelye, special correspondent of the Victoria *Colonist*, in Toronto on the 27th. Presumably they made a short visit out of the capital before undertaking to contact the Government, for this same issue of the newspaper quotes at length from a speech made by Dr. Helmcken at a dinner in honour of R. W. W. Carrall, in his native city of Woodstock, Ontario.

(7) Sir John Young, later Baron Lisgar, Governor-General of Canada, 1868–72.

(8) The reference here is to a meeting of the cabinet. It is to be remembered that the Prime Minister, Sir John A. Macdonald, was seriously ill at the time. Consequently the responsibility for the negotiations fell upon Sir George Cartier, Minister of Militia and Defence, the acting prime minister.

being told to occupy the Gov. General [*sic*] seat, I upon his right and Carrall the left.[9] We were informed that the Council had agreed to appoint a deputation from their body to confer with the delegates and discuss the various points submitted by/from the Govt. of B.C. Mr. Tilley explained to the Council, that the Delegates considered they were here to give every information and explanation required or desired, 2nd to support the terms of their own Govt., 3rd That they had no power whatever to bind the Colony to any terms, but that the terms as agreed upon would be submitted to the people as proposed and already determined upon by the Governor of B[ritish] Columbia. From the remarks of various members of Council, it appeared as tho the Govt. of Canada would grant everything they possibly could or that they could get the parliament to agree to. Sir Francis Hincks thought the 120,000 population clause a very ingenious manipulation of figures, and advised that we should bring all the information upon which it was based. After conversing generally and pleasantly it was agreed that we should meet the committee at 3 o'clock to-morrow to proceed to business. The Committee being Sir George Cartier, Honble. Mr. Tilley, and Sir Francis Hincks. We have every reason to be pleased with our reception—the cordial feeling exhibited towards us—the plainness & simplicity of manner and the studied endeavour to be agreeable and to conduct the business in a fair, plain and upright manner.

Tuesday. [*June 7.*]

We attended at 3 o'clock but found Sir G. Cartier engaged and continued so for half an hour longer. He then excused himself in a most merry way, took us to wine and himself to a sandwich likewise, he not having had time to take anything before. It is astounding how Sir G. works—morning, noon, night, brings no cessation. Of course the first thing entered upon in Council

(9) This was in reality the first business meeting of the negotiation. An endorsation by Sir John Young on the dispatch of Governor Musgrave introducing the delegates reads: "6 June, 1870. Acknowledge receipt and say I have placed these gentlemen in communication with the Council of the Dominion. They are to have their first meeting this morning." Musgrave to Young, May 7, 1870. *Canada Public Letters Received, G series, no. 1493* (Public Archives, Ottawa).

was the 120,000 population. The ministry knew of course this to be a fictitious number and stated they could not propose it to parliament,[10] but Sir Francis Hincks observed that he saw that we must have the $150,000. Yet the puzzle was how to get it. It could not be done by real population and real debt even supposing the allowance for the debt to be increased. We made no objection to our population being put down at its real number provided that the money could be obtained. We consented to [*sic;* too] that our Tariff should remain in force, but suggested that it might be improved for B[ritish] Columbia as well as themselves. Sir F. Hincks believed that under present circumstances the tariff could be different in the two countries for some time to come at all events. Tilley differed, but bowed to Sir F. Hincks. They both saw that if they did not maintain the B.C. Tariff the income of the Dominion would not be the same as that set down. However much they could get over our fictitious population they could not support our mode of calculating the debt.[11] It was not logical and could not go down. When we were at a non-plus as to how it was to be done, viz., the money we demanded, obtained, Sir George conceived the brilliant idea of our giving up lands for the Railway and for the Govt. to compensate the colony therefore and in this way make up the sum

(10) Governor Musgrave explained the method of computing the population at 120,000 as follows: "It is proposed therefore that for the purposes of an arrangement with Canada our Population should be estimated from the amount of Revenue contributed to the general fund of the Dominion, from the sources which would be transferred. On a moderate computation the Customs and Excise duties are estimated for this year at $350,000. This sum is more than is raised from 120,000 of the population of Canada, . . . British Columbia claims accordingly to come into the Union with the privileges, as she relinquishes the Revenues, of 120,000 of the population of the Dominion." Musgrave to Young, 20 February, 1870, *Canada Public Letters Received, G series,* no. 1359.

(11) The debt clause of the terms proposed by British Columbia read as follows: "British Columbia not having incurred debts equal to those of other Provinces, now constituting the Dominion, shall be entitled to receive, by half-yearly payments in advance from the General Government, interest at the rate of 5 per cent. per annum on the difference between the actual amount of its indebtedness at the date of Union and the proportion of the Public Debt of Canada for 120,000 of the population of Canada at the time of Union." British Columbia, Legislative Council, *Debate on the subject of Confederation,* p. 162.

specified. Every one was taken by surprise and all conceived the idea to be good. The ruling idea was however that they must obtain as much money from the B.C. tariff as B.C. now does, that they could not go to Parliament without that, because all the other Provinces would oppose or all would require to be put upon the same footing as B[ritish] Columbia. They could understand our wish to gain as much as we could, but at the same time it must be recollected that they could not give us more than parliament would allow. They would give us everything they could possibly ask of parliament.

Wednesday. [*June 8.*]

I saw Sir F. Hincks to-day upon the subject of the Tariff and recommended that our tariff should be altered so that Silks, Satins and such articles should be admitted duty free. He replied that there would be a loss of Revenue and what they had granted had been granted upon the condition of our Tariff being maintained. He asked would we allow our duty upon Sugar to be increased equal to that of Canada? I told him that a reduction of from 12 down to 5 per cent. would not be a loss to the Govt., because the trade in those articles with foreign parts would increase to that extent. He did not believe it. I told him, if he would allow us to alter our tariff to that extent, we could then go in under that tariff. He would not go in for Free Trade in V[ancouver] I[sland][12] because in the first place the same amount of Revenue could not be obtained from direct taxation; secondly, smuggling could not be prevented; thirdly, it was doubtful whether people wanted it. I pointed out to him that the B.C. tariff and and (*sic*) the Dominion Excise Laws could not go on together, that if we kept our Tariff we could not have the Dominion Excise at the same time, that it would be increasing our taxation and giving apparently a larger revenue than we proposed, but at the same time it would not be really so because the introduction of the Excise Laws would prevent

(12) At the time of the union of the colonies of Vancouver Island and British Columbia in 1866, Victoria had lost the free port privileges granted to her by proclamation in 1860. The restoration of that system was frequently mooted and assumed considerable proportions in the editorial discussions of the Victoria *Daily British Colonist* during February and March, 1870.

brewing altogether and ruin the Brewers and react upon the farmers. It is true that more beer might be imported but that would not be beneficial to the country. Sir F. Hincks would maintain that my proposition would diminish the revenue. He did not believe in the increase by increased trade. He would think over the matter. Other people came in to see see (*sic*) Sir Francis and then I had to leave.

Wednesday afternoon. [*June 8.*]

Had to wait as usual for half an hour. The ministers seem overworked.[13] Sir G. said the same thing occurred with every province, but the peculiarity of our case was that our tariff was in reality higher than theirs. After due consideration there seemed to them two simple courses to pursue, either to take the Canadian Customs Act and Excise or to keep our own Act and Excise. To make a special tariff for B.C. would look very bad and indeed they could hardly face the Commons with it, because each province would then want something for itself specially and lead to great trouble, besides they could hardly propose a diminution of the revenue, because our whole scheme was based upon possessing so much revenue. After some general debate, the conclusion come to, seemed to be, to allow our own tariff to continue until the Railway was built or until the legislature petitioned for the adoption of the Canadian Tariff and Excise. With regard to the Railway the Committee the committee (*sic*) were enthusiastically in favor thereof. They do not consider that they can hold the country without it. It was a condition of union with the provinces[14] and they could not see any reason why if agreed upon it should not be made a condition with us. They agreed that a railway was necessary to Red River, ours or that of B.C. would only be an extension of the Railway from Red River. The Committee seemed to agree to put the railway in as part of the

(13) It should be remembered that the Red River difficulties were approaching a crisis at this time. The expeditionary force under Colonel Wolseley sent to suppress Riel and his associates was *en route* to Fort Garry.

(14) The idea here conveyed is that as the Intercolonial Railway had been a *sine qua non* of union between the Maritimes and Canada, so the Pacific Railway should be the *sine qua non* for the admission of British Columbia.

terms. They then had a long conversation about the Railway and country and Mr. Trutch proposed a plan for advertising, so as to obtain tenders for the construction of the road. With regard to the Dry Dock[15] [at Esquimalt] they did not see much difficulty in that, it was to guarantee interest upon a certain sum. It was a purely local work and Quebec and Ontario would object, but in such a case a similar guarantee might be given to those provinces for a similar work. The Committee thought they now had all the information required and they would report to the Privy Council. In the meantime we were to go to Montreal to see the Prince installed into various orders,[16] having received an invitation from the Gov[ernor] General so to do. Mr. Tilley said he would go with us by steamer down the St. Lawrence to Montreal, and probably we would be asked to go to Quebec.

[Negotiations were not resumed until June 25, and in the interval the delegates visited Montreal and Quebec. The following paragraph in the dispatch by H. E. Seelye which was printed in the Victoria *Colonist* for July 8, 1870, is of interest:—

" At the investiture of the Prince at Montreal our Delegates were honored with seats among the Cabinet Ministers of the Dominion. Hon Mr Trutch dined with the Prince, and in the evening the three Delegates attended a party given by His Royal Highness, by whom they were treated with marked attention, the Prince assuring them that he would visit Victoria as soon as the railroad was completed to the Pacific over British soil."

Presumably the Canadian Cabinet next proceeded to consider the question of union in the light of the information garnered from the discussions with the representatives of British Columbia. The visit made meanwhile by the delegates themselves to Montreal and Quebec seems to have assumed the character of a " stumping tour " in the interests of confederation and the construction of the transcontinental railroad.

The two paragraphs which immediately follow are clearly an interjection into the regular diary. Upon his return to Ottawa, Dr. Helmcken evidently jotted down, in the notes which follow, his recollections of certain conversations relating to the question of union which he had had in the course of the journey.]

Proceeded to-day by steamer to Montreal, Mr. Tilley and Mr. Mitchell [Minister of Marine and Fisheries] accompanying. We had long conversations upon the subject of our mission. Mr.

(15) The fourth term proposed by B.C. asked the guarantee of 5 per cent. on a loan of £100,000 to build a dry-dock at Esquimalt.

(16) H.R.H. Prince Arthur of Connaught, third son of Queen Victoria, was then serving in Canada. The ceremony mentioned was his investiture as K.C.M.G.

Tilley said the Govt. wished to grant all they possibly could, but we must recollect that they had the Parliament to deal with and that they could only grant such things as they were able to carry through the House. He spoke very favorably about steamboat communication with Puget Sound,[17] but he could not advise to allow the Govt. of B.C. to alter the tariff. He made various enquiries about the colony. Mr. Mitchell said that he would do all he could to promote our wishes. At Montreal we saw various Senators, Governors and other influential people to whom we talked railway and confederation. All appeared to be impressed with the necessity of a Railway to connect the Colonies.

From Montreal we went to Quebec and there saw many influential people likewise. The general character of our conversation was the same, and the wishes and desires of the people there in regard to Railways and other matters seemed to be about the same.

[The narrative diary resumes.]

Saturday. [*June 25.*]

Met the Council to-day. The Honble. Mr. Tilley read over the draught of the Resolutions which the Government were prepared to adopt. The population to be 60,000, they could not give the 120,000 for reasons before asked. The debt to be allowed to be at the rate of $27.77 per head, 5 per cent to be allowed upon the smaller amount of indebtedness of the Colony.

The Council would not agree to increase the rate of $35,000. If they did the other colonies or provinces would require the same, besides we, they conceived, had a very good bargain without, always remembering that we were to have $100,000 per annum for roads.

The Council would not accede to the desire to increase the 400,000 to 1,000,000 people. There was no reason why they should do so, if they did the other provinces would complain, and the Govt. could not probably carry it through the house.

With regard to the Dry Dock, they did not wish to grant it, because it was purely a local work. If they granted it to B.C. every other province would require the same thing. It was not

(17) Assistance in maintaining communication with Puget Sound and San Francisco was another of the requests included in the proposed Terms of Union.

the amount they dreaded so much as facing parliament with so unusual a demand. They understood the whole subject of the benefit to be conferred upon the Colony and through it upon the Dominion. After long argument on both sides and cold determination on ours, a modification of the clause was agreed to, making the limit of the guarantee ten years, and that being considered preferable to the indefinite period " the completion of the Railway."

Court of Appeal was struck out because the Judges must be paid by the General Government, but the local Government establishes the Court.

A very long discussion took place about the Telegraph service but Sir George Cartier decided it, by saying the Telegraph would be valuable and fall in with the plan of the Govt to build a Telegraph to Red River, from there to B.C. would follow, so the Telegraph was taken over.

With regard to Steamboats we reminded them that they had previously agreed to allow us mail communication with Puget Sound; so they consented to put it in altho at the same time demurring very much.

Of course the Railway had been previously agreed upon by the Govt., who still seem enthusiastic upon the matter. The resolution was drawn up by Mr. Trutch to-day, and was considered the best that could be had under the circumstances.

The Waggon road could not be allowed, could not be carried either in the Council or the House. Having granted the Railway the other must be considered a local work. We should not attempt to press the govt. too much.

The erection of Lunatic Asylums did not belong to the Dominion, but they had no objection to a ward of the hospital being appropriated thereto if found advisable, but with regard to the Marine Hospital they did not wish to stipulate to build one specially, as the organic act[18] provided for it. They might put their seamen in an ordinary hospital and pay for them. We told them this was the very thing we did not want, but exactly vice versa and moreover we wished to establish a Med[ical] and Surgical school in connection therewith. It was promised that a resolution should be drafted conveying the obligation to build.

(18) That is, the British North America Act, 1867.

The penitentiary was also in a similar category. They had to build it in accordance with the terms of [the] Organic Act and no doubt would do so.

Coast mail service, after various explanations, granted.

Sec[tion] 11 not considered applicable to B.C. altho it was to Newfoundland, therefore expunged.[19]

12. The Govt. had nothing to do with immigration, but the Provinces had, the clause must be expunged.[20]

With regard to Senators, it was agreed that they might be taken from any place or places in B.C. With regard to the qualifications of members of the Commons it was left to the local Govt., because the General Govt. had no law upon the subject.

Clause about volunteers considered unnecessary.

With regard to Tariff the draught was read and thought to answer, it being in accordance with the Terms previously agreed upon, but it was decided that all domestic productions must be admitted duty free.

The Fishery laws of the Dominion would not apply to B.C. until made to do so by an order in Council.[21]

The laws in force in B.C. would continue until altered by the Govt of [the] Dominion.

The subject of tariff I broached again but there is an evident reluctance to grant the request.

Mr. Tilley now informed us that the Council would privately consider the resolutions arrived at. On Monday we should be furnished with a clear copy and probably on that day we should be called together and the government or rather privy Council (*sic*) would make a minute upon their journal of the whole transaction.

---

(19) This clause asked that the Dominion Government extend "in similar proportion to British Columbia" whatever "encouragement, advantages, and protection" it afforded to the fisheries of any of its Provinces.

(20) A similar request that British Columbia should participate in any measures or funds appropriated by the Dominion for the encouragement of immigration.

(21) The final Terms of Union stated that Canada would "assume and defray the charges for" certain stated services, including "Protection and encouragement of fisheries." No attempt was made to define either Dominion or Provincial responsibility or jurisdiction, and fisheries questions have since been taken to the Privy Council at least twice.

The Council have sat four hours then adjourned, but not before the subject of Govt. Resp[onsibility; i.e., Responsible Government] had been talked over, but we were obliged to wait for telegram from Governor.[22]

With regard to the million dollars for the Railway. The Govt. did not intend to do the work so could not agree to the item, as they could hardly make a contract to that effect even with contractors. The Government of [the] Dom[inion] was quite as much interested in this question and as anxious for the completion of [the] Railway as the Delegates, as something must be trusted to their honor.

With regard to material guarantee of money. The Delegates thought that the first thing to be kept in remembrance was to have the Railway commenced from B[ritish] Columbia. Whilst the agreement considered it would be a breach of honor and of the agreement not to carry it out, if not carried out the people of B.C. had just cause of complaint, even for asking separation, and no doubt the Dominion Govt. would do something for them in compensation for the injury resulting from the non-commencement of the Railway. On the other hand to put in a forfeiture, which, however, the Govt. would not agree to, was to offer an inducement not to commence the road on the Pacific coast, at all events it might so happen that a few thousand dollars forfeiture per annum would be rather borne than carry out the agreement. On the other hand it would be very easy to commence the work on the Pacific and do very little. What is a commencement and continuous working. It might mean anything. Considering then that the first object to be held in view was the commencement of [the] Railway on [the] Pacific, we considered it more advisable to rely upon the honor of [the] Govt to fulfill the treaty and secondly if for some cause it was not, to leave it to the people of the time to decide for themselves what demand they would make or what steps take in the matter.

June 27th. [*Monday.*]

Met the council at 4 o'clock. The subject of Railway and Dry Dock was again gone over and Railway and Dock resolutions finally agreed to. Of course much of the old ground was gone

(22) No explanation of this reference seems to be available.

over again. The Govt. wanted to diminish the amount for dry dock but had to give in, which they gracefully did but considered that it was the hardest thing they had to swallow as it would open so many questions in the House.

The whole of the Resolutions were gone over again. Clause 5. The District Judges would be paid by Govt but their services would be also utilized in other ways, probably as Indian agents and so forth. With regard to Court of Appeal the Council promised not to oppose a Bill to that effect in any way.

A promise was made to build the Marine Hospital at Victoria and to admit other patients upon making reasonable allowance. Langevin could not make any stipulation as to the time. He would probably visit Victoria beforehand.[23]

With regard to penitentiary. The Govt. could not take in prisoners sentenced for short periods. It had been tried and people had very much complained that small criminals should be mixed up with great ones. Such had been the case in Nova Scotia, where the Govt. had now to build a penitentiary or make arrangements with the local government. We must remember that the local govt. could oblige the Dominion to build a penitentiary, because when there were any prisoners sentenced for long periods the general govt. must have a place to keep them in and therefore the local government could if it thought fit compel them to do so.

Lunatic Asylums the Govt. has nothing to do with.

With regard to Pensions.[24] The resolution was agreed to, but the ministry said they meant to make such arrangements as would suit and be agreed to by Gov[ernor] Musgrave. Perhaps give them appointments or get appointments for them from H.M. Govt. With regard to Attorney General [the Hon. H. P. P. Crease] he might be made a judge and thus settle [the question of a] court of appeal and an official at once. Pensions they did

(23) The reference is to H. L. Langevin, Minister of Public Works. He visited British Columbia in 1872 and his *Report* appears in the *Canada Sessional Papers*, 1872, V., no. 6, paper 10.

(24) Under the terms proposed by British Columbia, pensions were to be provided for those executive officials of the colony whose services were dispensed with as a result of confederation. The inclusion of this clause had influenced not a little the change in attitude of the officials towards the question of confederation.

not like to go before parliament with, they did not like them and were afraid of them. As few officials as possible would be interfered with.

With regard to the Addresses to be presented to the Queen,[25] the forms would be found in the journals of the House of Commons, copies of which would be sent to Victoria.

The section about Responsible Govt. would be put in and speaks for itself. The Govt. are not particularly anxious about Responsible Govt. but will put no objection in its way. It would perhaps be advisable to let confederation come first and settle the responsible govt. afterwards.

The clause about Indians was very fully discussed. The Ministers thought our system better than theirs in some respects, but what system would be adopted remained for the future to determine. I asked about Indian Wars and Sir G. Cartier said that it depended upon the severity, as a rule the expense would have to be borne by the Dominion Govt.

The Laws of B[ritish] Columbia would remain in force until altered by the Dominion Parliament.

There was some probability of a Reciprocity Treaty,[26] in which case B[ritish] Columbia would have to be included. This was considered certain.

It was likewise determined that all produce and manufacture of the Dominion or of B[ritish] Columbia should be admitted free from Customs Dues, each being a portion of the same country. It was decided that the clause mean this.

Mr. Tilley likewise said that if the Governor determined to or desired the Tariff to be slightly modified, if he would show the alterations, the Dominion Govt. would consider and most likely agree to them, but the Dominion could not invite such a request.[27]

(25) The reference is to the Addresses necessary in the admission of a new Province as laid down in the British North America Act, 1867.

(26) The original reciprocity treaty of 1854 had been abrogated in 1866 although considerable opinion favourable to the negotiation of a new treaty existed. The signs were particularly hopeful at the close of 1869 and during the early months of 1870. *See* Shippee, L. B., *Canadian-American Relations, 1849–1874*, New Haven, 1939, pp. 304–321.

(27) Such a request for tariff adjustment was made early in 1871 (*see* Musgrave to Lisgar, February 10, 1871, *Canada Public Letters Received, G series*, no. 1879), but it was not acceded to, for it was considered inadvisable to make any changes prior to the consummation of the union.

The Council desired the Resolutions to be kept quiet until the Governor choose to make them public,[28] the fact being that a Minister was about to proceed to Ontario to get lands there for the Railway and if Sand[field] McDonald [Premier of Ontario] got wind of it beforehand, he would not give up the lands.[29] This was understood to be the reason.

Sir G. Cartier considered that Lower Canada and B.C. would be the most important of the divisions of the Dominion, that the former would be the manufacturing part of the Dominion, B.C. had a great commercial future before it. That in the Dominion Parl[iamen]t the Maritime Members of the Atlantic would always be with the B.C. Members in matters relating to shipping, &c., whilst the interior would also have a policy for its own interest supported by its own Members. That the Dominion would ever act kindly by B[ritish] Columbia and that her Members would be as much listened to as those from other places. That all the provinces would act for the public good and the greatest goodwill existed among all.

I am to tell from Sir George Cartier that it is necessary to be Anti-Yankee. That we have to oppose their damned system—that we can and will build up a northern power, which they cannot do with their principles, that the Govt. of Ontario or rather of the Dominion is determined to do it.

---

(28) The reference is to Governor Musgrave. A postscript marked private to Young to Granville, July 5, 1870, reads as follows: "Sir G. Cartier desires me to add that it was understood between the Canadian ministers and the delegates from British Columbia that the publication of the terms of the agreement should first be made by Governor Musgrave in British Columbia." *C.O. 42/687.*

(29) The terms were made public in British Columbia on August 31, 1870. It is interesting to note that the Toronto *Leader*, July 7, 1870, mentions the arrival of a deputation of the Canadian Privy Council, composed of the Hon. Sir Francis Hincks, the Hon. Alexander Morris, and the Hon. J. C. Aikins, to wait on Sandfield McDonald to secure his assistance in building the Pacific railroad, a scheme which is heartily endorsed by the newspaper. From a previous article on July 4, 1870, it is apparent that while the newspaper was aware that British Columbia was making a grant of land, it did not know of the indemnity awarded for that grant.

NOTES AND COMMENTS.

BRITISH COLUMBIA HISTORICAL ASSOCIATION.

VICTORIA SECTION.

No less than four meetings of the Section have been held since the last number of the *Quarterly* went to press. The first of these was held in the Provincial Library on January 29, 1940, when the Section was addressed by its President, Mr. B. A. McKelvie, who chose as his subject *Facts and Fancies of our Historical Beginnings.* Mr. McKelvie believes that North America was discovered by castaways and explorers from Asia, a thousand years before Columbus crossed the Atlantic, and devoted the greater part of his fascinating address to a review of some of the manuscripts that support this contention which have been found in archives in China. These indicate that the Chinese visited the Pacific Coast frequently during the years 458–566 A.D. Mr. McKelvie has had new translations made of certain passages in these documents, and he feels that these new versions clear up certain puzzling points quite satisfactorily and go far to establish the authenticity of the originals. Turning to a later period, he next discussed certain new evidence that suggests that the story of Juan de Fuca may, after all, be authentic, and concluded his remarks by describing how he and Mr. W. M. Halliday had uncovered certain relics of the visit to this coast of James Strange, who presumably buried them under a tree in 1786.

On February 19 the Section was addressed by Dr. J. A. Pearce, of the Dominion Astrophysical Observatory, who spoke on *Early Postal Communications in British Columbia.* Dr. Pearce devoted special attention to the old express companies, and explained the very important part they played in the postal service, as well as in general communications, in colonial days. His address was illustrated with a remarkable series of slides, which traced the history of the postal service from the letters and reports carried by the servants and brigades of the North West Company and the Hudson's Bay Company to the present day. Dr. Pearce, who is an authority on the postal history of the Province and has a large and valuable collection of Crown Colony stamps and covers, brought many of his original documents with him to the meeting in order that they might be examined by those present. His interesting and authoritative account of the gradual improvement in communications, and his explanation of the significance of many of the "covers" treasured by collectors were much enjoyed by the large number of members who were in attendance.

In view of the approaching retirement in May of the Chief Justice of British Columbia, the Honourable Archer Martin, Dr. Lamb, who presided in the absence of the President, suggested that a vote of congratulation should be sent to His Lordship upon the consummation of a long and successful term of office. This was duly moved by Mr. Beaumont Boggs, seconded by Dr. Rickard, and passed unanimously amid applause. It will

be recalled that the Chief Justice is a charter member of the Association, and that he has been known for many years as an historian and collector of Northwest Americana.

Some time ago His Honour the Lieutenant-Governor and Mrs. Hamber graciously extended an invitation to the Section to hold the annual observance of Blanshard Day at Government House, and the members will long remember the gathering held on March 11. The programme commenced with a brief address by Mr. McKelvie, who explained the significance of the anniversary of the reading of his commission by Governor Blanshard in 1850, and thanked His Honour and Mrs. Hamber for their great kindness in entertaining the Society. Dr. Kaye Lamb next outlined the life and career of Richard Blanshard and sketched the historical setting of the one-act play, entitled *His Excellency Requests the Pleasure*, which followed. This play, which was written by Mr. A. M. D. Fairbairn, and produced under the direction of the author and Mr. H. S. Hurn, enabled those present to meet Blanshard in person, as it depicted a reception held by the Governor in the cramped quarters of the first Government House "on the afternoon of the eighteenth day of November, A.D. 1850." The incident is apocryphal, but the deftness of the playwright and the skill of the large cast, which was headed by Mr. W. H. Brimblecombe, in the rôle of His Excellency the Governor, gave it all the vividness of actuality. It is to be hoped that the text of the play will be made available to amateurs elsewhere, for it is not only dramatic in itself, but a most interesting re-creation of an important episode in the early history of the Province as well.

Following the play, Dr. T. A. Rickard outlined the history of the British Columbia Historical Association since its organization in 1922, and suggested ways in which members might further its work and the cause of historical knowledge in the Province.

The second part of the programme consisted of a series of *Tableaux Vivants*—living pictures depicting the Governors and Lieutenant-Governors of what is now British Columbia from 1851 to 1900. Many members and friends had loaned family heirlooms and treasured costumes for the occasion, and the representations were both artistic and authentic. During the presentation of the pictures Mrs. Arthur Cree gave a résumé of the personalities and lives of the respective Governors, Lieutenant-Governors, and their Chatelaines. Those taking part were as follows:—

Before Confederation:		Played by
MR. JAMES DOUGLAS	(1851–1864)	Mr. John Goldie.
MRS. DOUGLAS		Mrs. E. Heddle.
(Afterwards Sir and Lady)		
LT.-COL. R. C. MOODY, R.E.	(1858–1863)	Mr. L. Duke.
MRS. MOODY		Mrs. L. A. Genge.
MR. A. E. KENNEDY	(1864–1866)	Mr. Douglas Bullen.
MRS. KENNEDY		Mrs. D. Doig.
MR. FREDERICK SEYMOUR	(1864–1869)	Mr. R. H. Palmer.
MRS. SEYMOUR		Mrs. Elkington.

MR. ANTHONY MUSGRAVE	(1869–1871)	Mr. Logan Mayhew.
MRS. MUSGRAVE		Miss Wolfenden.
(Afterwards Sir and Lady)		
After Confederation:		
MR. JOSEPH TRUTCH	(1871–1876)	Mr. H. W. Walker.
MRS. TRUTCH		Mrs. John O'Reilly.
(Afterwards Sir and Lady)		
MR. A. N. RICHARDS	(1876–1881)	Major H. C. Holmes.
MRS. RICHARDS		Mrs. McKinnon.
MR. F. C. CORNWALL	(1881–1887)	Mr. J. A. Duff Robertson.
MRS. CORNWALL		Miss Helen Cornwall.
MR. HUGH NELSON	(1887–1892)	Mr. G. H. Harman.
MRS. NELSON		Mrs. Douglas Bullen.
MR. EDGAR DEWDNEY	(1892–1897)	Col. J. H. Goodland.
MRS. DEWDNEY		Miss Yolande Langworthy.
MR. T. R. MCINNES	(1897–1900)	Capt. J. U. Copeman.
MRS. MCINNES		Miss Anne Gardiner.
SIR HENRI JOLY DE LOTBINIERE	(1900–1906)	Mr. Neil Perry.
LADY LOTBINIERE		Mrs. W. K. Lamb.

At the conclusion of the series, His Honour and Mrs. Hamber graciously consented to complete the picture by posing for a moment in the large frame, and were greeted with hearty applause by all present.

The costuming and arrangement of the *tableaux* were under the direction of Mesdames Fitzherbert Bullen (convener), Curtis Sampson, L. A. Genge, T. A. Rickard, and Arthur Cree. It is interesting to note that several of those who posed in pictures were related to one or other of the Governors represented. These included Mrs. E. Heddle, Mr. Douglas Bullen, and Mrs. Douglas Bullen, greatgrandchildren of Sir James Douglas; Mrs. McKinnon, a granddaughter of Lieutenant-Governor Richards; Miss Helen Cornwall, a granddaughter of Lieutenant-Governor Cornwall, and Mrs. John O'Reilly, who is a niece-in-law of Sir Joseph Trutch.

The programme concluded with the singing of the National Anthem, after which refreshments and a social hour brought the memorable evening to a close.

The fourth meeting of the Section was held in the Provincial Library on April 8. The speaker was Mr. A. G. Harvey, of Vancouver, who had chosen as his subject *Douglas of the Fir.* Mr. Harvey is the leading authority on Douglas's life, and his most interesting account of the man and his work was much enjoyed by all present.

VANCOUVER SECTION.

David Douglas, a Scottish botanist, whose name was later given to the outstanding commercial tree of British Columbia, was the subject of Mr. A. G. Harvey's address at the February meeting of the Section.

A native of Scone, near Perth, where he was born in 1799, Douglas obtained much of his early training in botany as an apprentice on the

estate of the Earl of Mansfield, where he spent seven years. He eventually succeeded in gaining admission to the Botanic Garden at Glasgow, where he made the acquaintance of Professor W. J. Hooker, under whose influence he was recommended to the Horticultural Society as a Botanical Collector.

His first expedition to North America was a short one in the spring of 1823, to the United States, where he procured a fine collection of trees. This led to his being sent, through the Hudson's Bay Company, to North-west America the following year on a similar mission.

Douglas spent four interesting and profitable years collecting plants in Oregon and northern California, returning to England overland by way of York Factory and Hudson Bay in the late summer of 1827.

In 1830 he again came to Fort Vancouver and from there he explored and collected, this time penetrating to New Caledonia.

The speaker sketched a vivid picture of Douglas's arrival at Fort St. James in June, 1833, with the annual brigade. He was the most unusual visitor Fort St. James had ever had. Hitherto the trading-post had only received Hudson's Bay Company employees, Indian trappers, and such like, but here was a man laden with boxes of botanical specimens and astronomical instruments, at whose heels trotted a faithful terrier.

A cherished plan to continue his explorations northward beyond New Caledonia into Alaska, and to return home by way of Siberia and Russia, had to be abandoned after hearing reports of bad weather and ravages of intermittent fever amongst the natives. Whilst descending the Fraser River on his return to Fort Vancouver, Douglas was unfortunate enough to lose his Journal and his botanical specimens when his canoe capsized at "Stoney Islands," his astronomical instruments alone were saved.

Having been attracted to the Hawaiian Islands, he accordingly left the Columbia in October, 1833, for the last time, and met his disastrous and untimely death there the following July.

Douglas found his work in Oregon and New Caledonia both interesting and disheartening. The extremes of climate and the hostility of the Indians did much to try his patience and perseverance. But, in spite of his dangerous and uncomfortable journeys, he diligently kept Journals, which, with his letters to Professor Hooker, show him to have been remarkable as a naturalist and traveller.

In summing up David Douglas's contribution, Mr. Harvey said: "To no single individual is modern horticulture more indebted than to Douglas. He was the pioneer botanist of North-west America, and made two hundred and fifty-four plants known to the world. He died young in years but old in achievement."

In moving a vote of thanks to the speaker, Mr. E. S. Robinson referred to the tremendous amount of research which Mr. Harvey had put into his study of David Douglas, and emphasized the value of the *British Columbia Historical Quarterly* as a medium for the publication of such studies.

Dr. M. Y. Williams, Head of the Department of Geography and Geology of the University of British Columbia, was the speaker at the meeting of

the Section which was held on March 4. His topic was entitled *The History and Development of the Peace River Area of British Columbia.*

Dr. Williams outlined the close relationship between geology and human development, and compared the strata to the leaves of a book. Sir Alexander Mackenzie's Journal is remarkably accurate according to Dr. Williams, who has made many trips through the country which the explorer described. At one point Mackenzie referred to smoke issuing from a rock: at the present time a coal-seam is burning underground and there are places where the rock is too hot to touch. There are curious quirks of nature to be noted: regularly arranged rows of timber trees on the south side of the river, while the north side is bare; cactus growing on the banks of the river in some places, seed of which must have been carried by the buffaloes in the fur of their coats.

The modern Peace River area belongs to Alberta in everything except politics. In 1922 a few settlers were to be found near Fort St. John, but there were probably not a thousand settlers in the British Columbia section. When the Pacific Great Eastern Railway survey was made in 1929, the population was increasing and good wheat was being grown near Rolla and Dawson Creek.

Coal is one of the greatest assets of the area, but transportation has, to date, been an almost insurmountable problem. In an area possessing vast reserves of coal, that produce is being imported from Alberta and Pennsylvania at $30 per ton! In recent years river transportation has fallen off, but aeroplane service is excellent.

Dr. Williams referred to his appointment as leader of a Provincial survey party to investigate the possibilities of oil resources in the Peace River area. He said that the oil-seepings are very small and that it is the general character of the country that makes geologists expect to find petroleum there. The only reason that wells have not already been drilled is that the land has been closed to private enterprise. The location the party has chosen for investigation is 85 miles west of Dawson Creek, and nearer to the coast than any other known field. There are no concessions to cross and, provided the geologists' opinions are proved to be correct, British Columbia may yet develop into a rival to Turner Valley.

The annual dinner is to be held on April 19, at the Hotel Georgia, when Dr. W. N. Sage, of the University of British Columbia, will speak on *Sir James Douglas, the Father of British Columbia.*

NEW WESTMINSTER AND FRASER VALLEY SECTION.

The annual meeting of the Section was held on April 10, 1940, when the following officers were elected for the current year:—

Honorary President	Judge F. W. Howay.
President	E. M. Cotton.
Vice-President	Mrs. E. G. Pearson.
Secretary	Mrs. C. D. Peele.
Treasurer	E. H. Sands.

Members of the Council:

D. E. MacKenzie. Otway Wilkie.
H. Norman Lidster. Mrs. J. Burr.
A. W. Petapiece. S. L. Speck.
G. A. Mercer.

The Section has had a most promising first season, at the end of which the local membership was forty. A drive for additional members is planned for the near future.

The guest speaker of the evening was Mr. J. W. Sinclair, who gave a most interesting address on the old days of the Hudson's Bay Company. Later, other members spoke on the early days of New Westminster.

EARLY LOCOMOTIVES ON VANCOUVER ISLAND.

BY I. E. BARR.

Due to fortunate preservation and a certain amount of publicity, the locomotive *Countess of Dufferin*, now on exhibition in a small park in front of the Canadian Pacific station in Winnipeg, has become widely known as the first locomotive in Western Canada, and similarly the *Curly*, now preserved in Hastings Park in Vancouver, bears a plate stating that it was the first in British Columbia. Actually, however, there were several earlier locomotives on Vancouver Island and one of them, the *Pioneer*, was at work nearly fifteen years before the *Countess of Dufferin* arrived at St. Boniface on the deck of a scow.

The Vancouver Coal Company commenced mining operations in the vicinity of Nanaimo in the early sixties and in 1863 they imported from England the small standard-gauge locomotive *Pioneer*. It was built at Staleybridge, near Manchester, and the manufacturers sent out Harry Cooper and Thomas E. Peck with the engine to set it up, and they became the first engineer and fireman west of Ontario. The *Pioneer* was a saddle-tank engine, outside connected, cylinders 8 by 10, 36-inch drivers; the throttle was a slide-valve, the safety-valve was spring-loaded and the pressure carried was 115 lb. The pump was operated by an eccentric on the main axle. The weight in running order was about 10 tons. In 1903 it was reconditioned by the late William H. Hall, Master Mechanic of the New Vancouver Coal Company, and sold to a contractor for construction-work near New Westminster.

The second to arrive was the *Euclataw*, and it was landed in 1866. It also was built at Staleybridge and was similar to the *Pioneer* but somewhat smaller. At its arrival a number of Indians gathered around, saying that ten of them could hold it from moving, so the Euclataw tribe, being the smallest on the island, felt proud of the locomotive being named after them. It was a saddle-tank engine, inside connected, cylinders 6 by 8, drivers 30-inch, and the water-feed pump was operated from the wrist-pin. The *Euclataw* was used principally to take ballast from the ships. It was sold in 1903 to the Joseph Dobeson Foundry at Nanaimo, and broken up several years later.

The next to appear was the *Nanaimo*, in 1874. It was built by Boiling & Low, of Leeds, and was generally similar to the *Pioneer* and *Euclataw*. It was a 0–4–0 saddle-tank engine with cylinders 8 by 10, 36-inch drivers, and weighed about 10 tons. After many years service it was sold to the Dobeson Foundry, rebuilt, and then sold to John W. Coburn, who used it in his lumbering operations near South Wellington. Later it was sold to the Pacific Great Eastern Railway for laying track during construction, and finally it was scrapped about 1908.

The *London*, built by Manning & Wardle, of Leeds, came out in 1884. It was a 0–6–0 side-tank locomotive, inside connected, with 10 by 12 cylinders, 54-inch drivers, and it weighed about 20 tons. In 1918 it was sold to a junk-dealer in Vancouver and scrapped.

In 1891 the Vancouver Coal Company purchased its first modern locomotive from the Baldwin Locomotive Works; it was called the *San Francisco*, later No. 5; it was 0–6–0 type with 15 by 22 cylinders, 48-inch drivers, and it weighed about 35 tons. It gave good service, and another, No. 6, was bought in 1896, and still later Nos. 7 and 8. With the old locomotives it was hard to ship 2,000 tons of coal in twelve hours, but shortly after No. 6 was put to work 5,800 tons were put aboard the steamer *Titania* in ten and one-half hours, which at that time was a world record.

The Vancouver Coal Company became the New Vancouver Coal Company, then the Western Fuel Company, and is now the Canadian Collieries (Dunsmuir), Ltd., and controls most of the large mines on Vancouver Island.

When Robert Dunsmuir opened the Wellington Colliery he built a 5-mile line from Wellington to Departure Bay, using fir rails, 4 by 4 inches, topped with strap-iron. The gauge originally was 2 feet 6 inches, but later was widened to 3 feet. It was a gravity-operated cable railway and the loaded cars in descending pulled the empties back. In 1874 Mr. Diggle, one of the partners, bought two traction-engines from the Admiralty in London which, on arrival, were changed to locomotives by the application of flanged wheels. They each had one cylinder mounted on the top of the boiler, a fly-wheel 6 feet in diameter, and a chain gear to the drivers. One of these engines was used for shunting at the mine and the other at the Departure Bay wharf, each one replacing six horses.

In 1878 these rebuilt traction-engines were replaced by two small 0–6–0 saddle-tank engines, the *Duke* and *Duchess*, products of the Baldwin Locomotive Works. The *Duke* was built in 1876 and was exhibited at the American Centennial Exhibition, where Mr. Dunsmuir saw it and liked it so well that he bought it and ordered another just like it; they arrived at Nanaimo in 1878. These locomotives had 10 by 12-inch cylinders, 42-inch drivers, and originally were 2 feet 6 inch gauge, but later were altered to 3-feet gauge. The *Duke* worked around the mines until 1909, when it was scrapped, but the *Duchess* had a much more interesting career. At the time of the Yukon gold rush, Captain John Irving, manager of the Canadian Pacific Navigation Company, went north to build steamboats on the northern lakes. The route from Skagway to Atlin City was by the White Pass &

Yukon Railway to Bennett Lake, by boat across to Taku Arm, then across a portage to Scotia Bay on Atlin Lake, and then by boat to Atlin City. Atlin Lake was 40 feet higher than Taku Arm, and the distance across was 2½ miles, so the Atlin Southern Railway was built across the portage. This little "gold rush" railway was one of the smallest and most expensive in the world, and the passenger fare was $2 for the 2½ miles. At first it was operated by horse-power, but in 1899 the *Duchess* was bought and sent north on the steamer *Danube*. At Wellington it had been a coal-burner, but when it went north it was converted into a wood-burner, and somewhat later into an oil-burner. The cars were flat cars with seats along the sides facing inwards; freight and baggage were loaded between the seats and in many cases the passengers had to get out and walk and push to help the *Duchess* over the grade. The Atlin Southern became part of the White Pass & Yukon and a few years ago the *Duchess* was spurred off at Taku City and a more modern locomotive assigned to this run. It is still there.

Following the *Duke* and *Duchess*, Mr. Dunsmuir purchased three more Baldwin engines which were of the same type but a little larger. They were the *Robert Dunsmuir* in 1883, the *Departure Bay* in 1887, and the *Victoria* in 1889. They were later rebuilt to standard gauge and worked around the mines for many years.

Going back a few years, a Mr. Chandler, from San Francisco, opened a mine at East Wellington, and he brought in three Baldwin locomotives which were the same as the later Dunsmuir engines. They were the *Premier*, built in 1878, and the *East Wellington* and *San Francisco*, both built in 1883; the *Premier* was second-hand, as they all arrived in 1883. They were 0–6–0 saddle-tank engines with 10 by 20-inch cylinders and 30-inch drivers. A short time later the mine was closed because of a threatened strike and the locomotives were then purchased by Mr. Dunsmuir, and eventually were altered to standard gauge. In 1905 the *Premier* was transferred to the Esquimalt & Nanaimo Railway for switching purposes, and finally scrapped in 1912.

CONTRIBUTORS TO THIS ISSUE.

Dr. J. S. Plaskett, C.B.E., F.R.S., was Director of the Dominion Astrophysical Observatory until his retirement some years ago. He has contributed many papers to the proceedings of learned societies, and is one of Canada's most distinguished scientists.

Mr. I. E. Barr has been a member of the staff of the Esquimalt & Nanaimo Railway for many years. The account of early locomotives on Vancouver Island which he contributes to this issue appeared originally in the *Bulletin* of the Canadian Railroad Historical Association, and is here reprinted by kind permission of the association and the author.

THE NORTHWEST BOOKSHELF.

ALFRED WADDINGTON'S "THE NECESSITY OF REFORM."

Historians and bibliographers both will be interested to learn that a copy of this long-lost pamphlet has at last been located. Oddly enough it has turned up many miles from home, in the Library of Acadia University, at Wolfville, Nova Scotia. The University recently published a catalogue of the Eric C. Dennis Collection of Canadiana, and the entry caught the ever-watchful eye of Dr. Robie L. Reid. Dr. Reid immediately wrote to the librarian of Acadia, who very kindly permitted a photostat copy of the pamphlet to be made for the Provincial Archives.

The name of the author nowhere appears, but there is little doubt that Bancroft was correct in attributing the booklet to Alfred Waddington (*History of British Columbia*, 1887, p. 769). To ascribe it to Amer de Cosmos would appear to be the only alternative, and certain statements in the text seem to rule out this possibility. It is true that certain passages resemble paragraphs in editorials in the Victoria *Colonist*, of which de Cosmos was editor, but it is entirely possible that Waddington was a contributor to that journal. On the other hand, it is almost inconceivable that de Cosmos, who was born in Nova Scotia, could have written the paragraph in the pamphlet which includes a disparaging reference to persons whose "only knowledge" of British institutions was "derived from their native soil, in Nova Scotia or other parts of the Canadas."

A brief note in the *Colonist* for February 19, 1859, indicates that the intended publication date of the booklet was February 22. A week later, on the 26th, the *Colonist* announced that "A little work on Reform, just issued from this office, may be found at all the bookstores in town to-day."

Some indication of the contents of the pamphlet will be of interest. It considers first the general principles which should guide political reform in Vancouver Island, and refers frequently to the reform movement which at the time was sweeping Great Britain. The author, though an ardent democrat, was no extremist, and comes out strongly in opposition to anything approaching an unrestricted franchise, as the following passages show:—

"Universal suffrage, however, is a bug-bear. Those of us who have resided in the United States, and observed the working of the principle, can afford to smile at the notion of taking for a model an American election, or appealing to the sacredness of the ballot. . . . The British people cannot adopt the American custom; they consider that the safety of reform is in 'the manly virtue of the enfranchisement,' and they know that personal liberty and safety are better assured, and that public opinion is more faithfully represented, and acts with a better regulated power, than in the United States."

And again:—

"What measures may be brought forward . . . is not known; but we may be satisfied it will not be either universal suffrage or vote by ballot, after San Francisco fashion; neither will the House adopt the Chartist principle of manhood suffrage."

The outline of the political abuses in Vancouver Island which it is hoped to correct forms the most interesting part of the pamphlet. The principal charge is that the House of Assembly, as then constituted, made no true representation possible; and it is evident that the writer must have agreed with most of the hard things that de Cosmos had to say in the *Colonist* about what he termed the Company-Family Compact. The following excerpts are typical:—

"The present restricted Franchise deprives a large number of our fellow-countrymen of their just Electoral rights; entails on the Colony bad Legislation and an irresponsible policy; and demands a radical reform in the Representation and the Representatives of the people."

"The present system is a monopoly—an iniquity. The great Supreme has given to man intellect and intelligence, and he who obstructs, by anti-deluvian ideas, the exercise of those powers can be no friend of the human family."

"The people want to see an infusion of new and popular materials into the Executive Council, which has hitherto been composed of 'three Chief Factors' of the Hudson Bay Company. They want a reform that will give them twenty members instead of seven, that will bring nearer to a balance those who advocate open, wide-spread legislation, and take cognisance of their general interests, to weigh down the monopolists whose actions are selfish and exclusive."

Later the author indicates certain matters which it is most desirable should be "agitated," and devotes a vigorous paragraph to the £50,000 which Fort Rupert is said to have cost, and which the Hudson's Bay Company contended was chargeable against the Colony.

In a postscript, prompted by the introduction of a proposed franchise bill sponsored by J. W. McKay, the writer finally reduces his general demands to specific proposals, and asks for a £10 household franchise, an assembly of fixed duration, and the abolition of the property qualification for members.

Bancroft dismissed *The Necessity of Reform* as being "merely a tirade against the restricted franchise, and the petty infelicities of the day." The stricture was unduly severe, and students will find that it is of some interest; but it is not a document of any great importance.

W. K. L.

A SECOND CHECKLIST OF CROWN COLONY IMPRINTS.

Being a supplement to the checklist printed in the *Quarterly* in October, 1937, pp. 263–271.

39. [Waddington, Alfred Penderill, 1801–1872.]

The Necessity of Reform. A tract for the times; addressed to the Colonists of Vancouver Island by one of the people. Victoria, Printed at the British Colonist Office, 1859.

12p.O.

The only known copy is in the Eric C. Dennis Collection of Canadiana in the Library of Acadia University, Wolfville, Nova Scotia. Photostat copy in the Provincial Library and Archives. Attributed to Waddington by Bancroft (*History of British Columbia*, San Francisco, 1887, p. 769).

40. Waddington, Alfred Penderill, 1801–1872.

Judicial Murder. Victoria, n.pub., 1860.

[4]p.sq.Q.

No imprint.

A protest against " the mockery of a trial " and the alleged prejudice which had resulted in the execution for murder of a young Indian in Victoria. Dated August 27, 1860.

41. [British Columbia]—Immigration Board.

Assisted Immigration. N.p.n.pub. 1870.

[4]p.F.

Three blank pages, no imprint.

Gives notice of " a scheme of Assisted Immigration, on an extended scale . . ." Dated at Victoria, August 12, 1870.

42. [British Columbia—Legislative Assembly.]

Rules and Regulations, issued in conformity with the Gold Field Act, 1859. Victoria, V.I. Printed at the British Colonist Office, 1860.

cover-title, 12p.T.

Commercial reprint of a government document. Judging by its small size it was intended to slip into a miner's pocket.

43. British Columbia and Victoria Steam Navigation Company.

Act of incorporation of the British Columbia and Victoria Steam Navigation Company Limited. Incorporated February, 1860. Victoria, V.I. Printed at the British Colonist Office, Wharf Street, 1860.

11p.O.

Printed cover.

44. Colonial Bank of British Columbia.

The Colonial Bank of British Columbia. [Prospectus.] N.p.n.pub. [1862].
[4]F.

No imprint.

Signed by Henry Holbrook, John Cooper, and F. G. Claudet, members of the "Provisional Managing Committee." The project was never carried further.

45. Cridge, Edward, 1817–1913.

"*Spiritualism:*" *or Modern Necromancy.* A sermon, with preface and notes, by Edward Cridge, B.A., St. Peter's College, Cambridge, Dean of Christ Church, Victoria, Vancouver Island. Printed by request. Victoria, B.C. Printed by David W. Higgins, 1870.
cover-title, 12p.O.

Dedication dated July 5, 1870.

46. Hibben & Carswell.

Dictionary of Indian Tongues, containing most of the words and terms used in the Tsimpsean, Hydah, & Chinook, with their meaning or equivalent in the English language. Published by Hibben & Carswell, Victoria, V.I. Printed at the office of the Daily Chronicle, Government Street, 1862.
[2] 15p.D.

47. Hibben & Carswell.

Dictionary of Indian Tongues, containing most of the words and terms used in the Tshimpean, Hydah, and Chinook with their meaning or equivalent in the English language. Published by Hibben & Carswell, Victoria, V.I. Printed at the British Colonist Office, 1865.
cover-title, 14p.sq.D.

48. Hibben & Company.

A Dictionary of the Chinook Jargon, or Indian trade language, of the North Pacific Coast. Published by T. N. Hibben & Co. Victoria, B.C. Colonist print, Victoria, B.C. [1871?]
cover-title, 29p.O.

None of the three dictionaries listed above is in the Provincial Library and Archives. The entries have been copied from J. C. Pilling, *Bibliography of the Chinookan Language* (Washington, 1893).

49. Naval Club, Esquimalt.

Rules of the Naval Club, Esquimalt, V.I., established 1867. Victoria, V.I., Higgins, Long & Co., 1867.
10p.S.

Rear-Admiral Hastings was Patron of the Club, and Captain R. Dawkins, of H.M.S. *Zealous,* its first President.

50. New Westminster Public Library.

Rules and Regulations for the management of the Public Library, New Westminster.

N.p.n.pub.n.d.

[4]p.sq.O.

Has two blank pages. No imprint.

Probably issued in 1864.

Marginal notes and corrections; apparently a proof copy.

51. Parsons, Robert Mann.

Abstract of meteorological observations taken at the Royal Engineer Camp during the year 1862. . . . New Westminster, Royal Engineer Press [1863].

[4]p.illus.(map)sq.Q.

The tinted map indicates the gold regions.

52. [Parsons, Robert Mann.]

[*Report of a journey from New Westminster to Lake la Hache.* New Westminster, B.C. Printed at the Royal Engineer Press, 1862.]

8p.fold.pl.2 maps,Q.

Covers and title-page wanting.

Includes an interesting tinted profile of the entire route.

53. [Shotbolt, Thomas.]

An Account of the Establishment and subsequent progress of Freemasonry in the Colony of British Columbia, from its origin in 1859 to 1871. Victoria, B.C. Printed at the British Colonist Office, 1871.

cover-title, 18p.O.

Signed by Thomas Shotbolt, District Grand Secretary. Dated Victoria, April 24, 1871. Contains letters and documents relating to the founding of a Grand Lodge in British Columbia.

A very rare pamphlet. One of the few copies known was secured recently for the Provincial Archives through the kind offices of Dr. Robie L. Reid. Much of the contents was reprinted in the *Report* of the Grand Lodge of British Columbia for 1937.

VICTORIA, B.C.:
Printed by CHARLES F. BANFIELD, Printer to the King's Most Excellent Majesty.
1940.

600-340-4302

The BRITISH COLUMBIA HISTORICAL ASSOCIATION

Organized October 31st, 1922.

PATRON.

His Honour ERIC W. HAMBER, *Lieutenant-Governor of British Columbia.*

OFFICERS, 1939–40.

Hon. G. M. WEIR	*Honorary President.*
T. A. RICKARD	*President.*
KENNETH A. WAITES	*1st Vice-President.*
B. A. MCKELVIE	*2nd Vice-President.*
G. H. HARMAN	*Honorary Treasurer.*
MURIEL R. CREE	*Honorary Secretary.*
ROBIE L. REID	*Archivist.*

MEMBERS OF THE COUNCIL.

F. W. HOWAY J. M. COADY H. T. NATION

J. C. GOODFELLOW HELEN R. BOUTILIER

B. A. MCKELVIE (Victoria Section). J. R. V. DUNLOP (Vancouver Section).

W. N. DRAPER (New Westminster and Fraser Valley Section).

OBJECTS.

To encourage historical research and stimulate public interest in history; to promote the preservation and marking of historic sites, buildings, relics, natural features, and other objects and places of historical interest, and to publish historical sketches, studies, and documents.

MEMBERSHIP.

Ordinary members pay a fee of $2 annually in advance. The fiscal year commences on the first day of October. All members in good standing receive the *British Columbia Historical Quarterly* without further charge.

All correspondence and fees should be addressed in care of the Secretary, Provincial Archives, Parliament Buildings, Victoria, B.C.