



LAPLAND FAMILY AND THEIR TENTS.



REPORT

ON

INTRODUCTION OF DOMESTIC REINDEER INTO ALASKA,

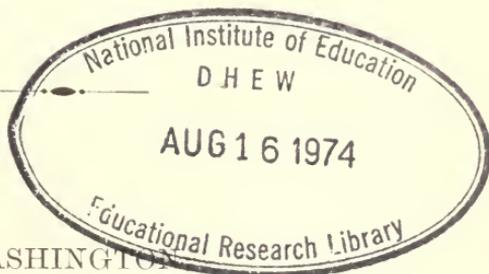
WITH

MAPS AND ILLUSTRATIONS,

BY

SHELDON JACKSON, LL. D.
GENERAL AGENT OF EDUCATION IN ALASKA.

1898.



WASHINGTON

GOVERNMENT PRINTING OFFICE.

1898.

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IN THE SENATE OF THE UNITED STATES,

December 6, 1898.

Resolved, That the Secretary of the Interior be directed to transmit to the Senate the report of Dr. Sheldon Jackson upon "The introduction of domestic reindeer into the district of Alaska" for 1898.

Attest:

WM. R. COX, *Secretary.*

LETTER OF TRANSMITTAL.

DEPARTMENT OF THE INTERIOR,
Washington, December 13, 1898.

SIR: I am in receipt of Senate resolution of the 6th instant—

That the Secretary of the Interior be directed to transmit to the Senate the report of Dr. Sheldon Jackson upon "The introduction of domestic reindeer into the district of Alaska" for 1898.

In response thereto, I have the honor to transmit herewith a copy of the report indicated in the foregoing resolution.

Very respectfully,

THOS. RYAN,
Acting Secretary.

The PRESIDENT OF THE SENATE.



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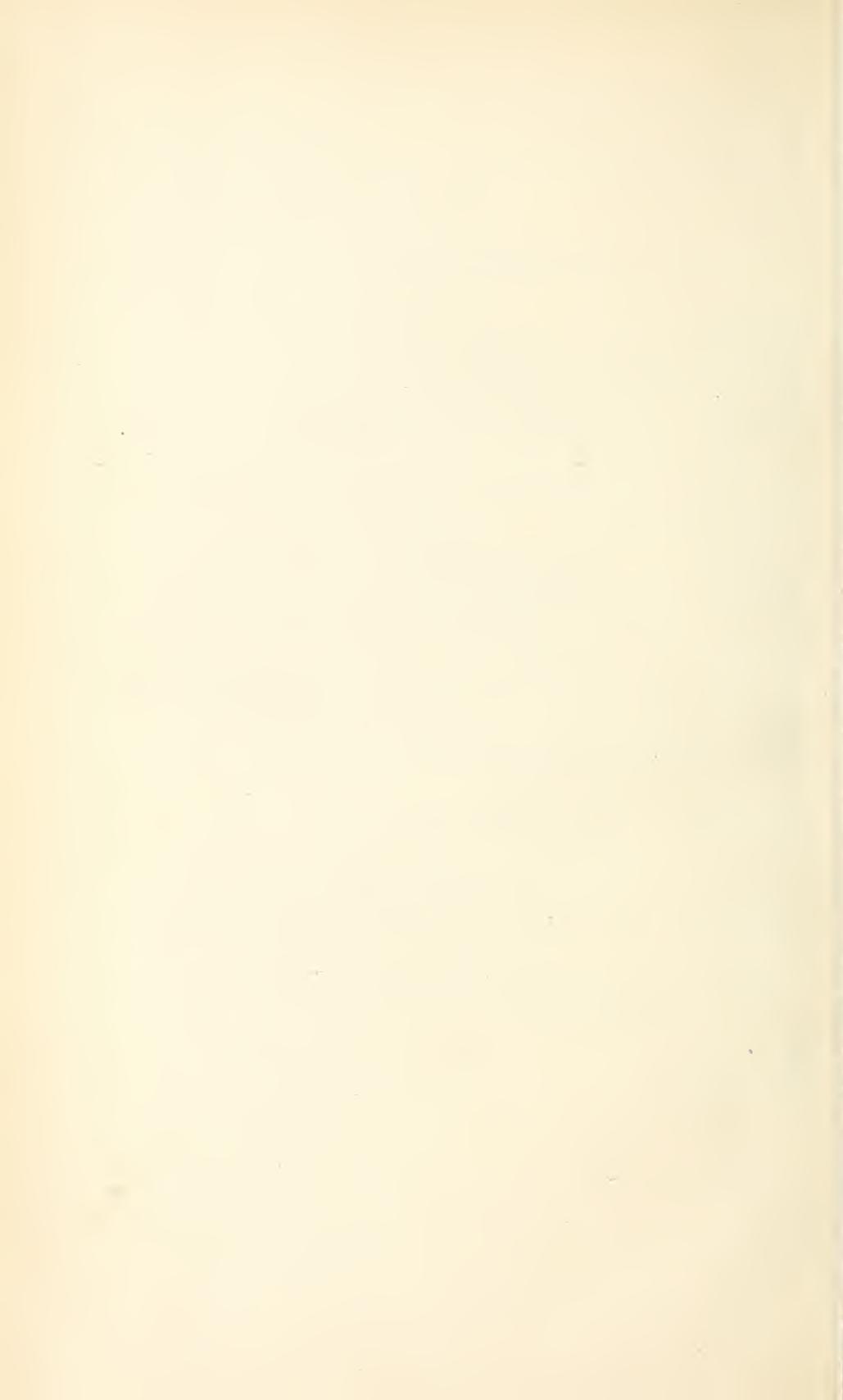
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EIGHTH ANNUAL REPORT
OF THE
INTRODUCTION OF DOMESTIC REINDEER INTO ALASKA.

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION, ALASKA DIVISION,
Washington, D. C., December 31, 1898.

SIR: I have the honor to submit to you my eighth annual report on "The introduction of domestic reindeer into Alaska."

The year just closed has been one of more than usual interest. It opened with the Government relief expedition, in charge of Lieut. D. H. Jarvis, of the United States Revenue-Cutter Service, to the whalers in the neighborhood of Point Barrow, Alaska, and with a Government commission to Lapland, Norway, for the procuring of a colony of Laplanders and the purchase of a herd of reindeer trained to harness, to be used in transporting relief to the destitute people in the mining regions of Alaska; also, the establishment of a new reindeer station in the neighborhood of Unalaklik, 60 miles north of St. Michael. It being necessary to send Mr. William A. Kjellmann, the superintendent of the reindeer stations in Alaska, to Norway in charge of four families of Lapps, whose term of service had expired and who according to contract were to be returned to Lapland, Dr. A. N. Kittilsen, the physician and assistant superintendent, was placed in charge of the herd at the Teller Reindeer Station, with Mr. T. L. Brevig as his assistant. Mr. Frederik Larsen (Lapp) was kept with the herd as overseer, and Messrs. John Tornensis and Mikkel Nakkila (Lapps) were kept at the station during the fall of 1897, repairing and making sleds and harness, preparatory to the removal of a portion of the herd to the new station near Unalaklik.

On the last of October Dr. Kittilsen made a trip to Cape Nome, where he received from Antisarlook 53 male, 65 female, and 3 fawn reindeer for the Government, which had previously been loaned and were now being returned. He also secured 4 females and 3 fawns belonging to Tatpan, of Golovin Bay.

In the middle of November a trip was made to Cape Prince of Wales, returning November 28 with 3 head of deer belonging to the Government.

As Tautook, Sekeoglook, and Wocksock (Eskimo) had served their apprenticeship of five years, it was proposed to establish them at the

Teller Station with a herd of their own when the Government herd should be taken to the new Eaton Station. Accordingly, on December 3 each of the three received, according to contract, 20 females, 3 males, and 2 sled deer. These, together with those previously owned by them and since born in their herds, gave Tautook 77 head, Sekeoglook 59, and Wocksock 50, making a herd of 186 between them. The apprentice Ojello, being quite sick, was left with his family at the Teller Station.

On December 19, leaving Mr. Brevig in charge of the Teller Station, Dr. Kittilsen, in charge of the Lapps and apprentices other than those mentioned as having been left at the Teller Station, started across the country for Unalaklik with 450 reindeer and 40 sleds, arriving at Golovin Bay on the 29th of December. There were 17 in the party, counting women and children. The 7 deer brought from Cape Nome for Tatpan, an apprentice above mentioned, were transferred to the herd at Golovin Bay, and 17 deer belonging to Martin, an apprentice at Unalaklik, were lassoed and taken into the Government herd to be driven to the Eaton Station.

On January 3 the journey was resumed, but two days later a snow-storm of unusual severity was encountered, and the party went into camp, the deer being returned to the neighborhood of Golovin Bay, where the pasturage was more accessible. While in camp, January 10, Lieutenant Jarvis and Dr. Call, of the relief party for the whalers, arrived from the south and asked for reindeer transportation to Port Clarence. Accordingly, on January 12 Dr. Kittilsen, taking two of the apprentices, drove back with Lieutenant Jarvis and Dr. Call to the Teller Reindeer Station, where they arrived on the 19th. Leaving Lieutenant Jarvis to push on to Cape Prince of Wales and Dr. Call to Cape Nome, Dr. Kittilsen, with the apprentices, on January 26, started on their return to Golovin Bay, reaching there February 9. During Dr. Kittilsen's absence Lieutenant Bertholf, also of the Point Barrow relief expedition, had arrived at the reindeer camp near Golovin Bay and induced Frederick Larsen to take five deer and sleds to help him across Kotzebue Sound with provisions for the relief party, claiming that it was impossible to get the goods across the country with dog teams. After arriving at Kotzebue Sound, Lieutenant Bertholf retained the reindeer teams for his further trip to Point Hope, returning Frederik Larsen to Golovin Bay.

On the 13th of March camp was broken and a start made for Unalaklik, which place was reached on the 21st. The spring was utilized in cutting and hauling several hundred logs for the erection of houses at the new station, located near Unalaklik and named "Eaton," in honor of Gen. John Eaton, ex-Commissioner of Education. After the logs had been hauled to their destination the herd was moved to the foot of the mountains southeast of Unalaklik, where a good fawning place was found.

In April an expedition was made to Golovin Bay to return some provisions which had been borrowed from the Swedish Mission Station during the detention of the herd in that neighborhood the previous winter.

PERSONNEL.

Mr. William A. Kjellmann was continued as superintendent of the stations in Alaska, but being detailed for special duty in returning Lapps to their native country and in procuring a new colony, he was absent from the field until July. Returning from Norway and reaching Eaton Station, he immediately utilized the temporary presence of the large colony of Lapps by dividing them into three parties, one to have charge of the herd, a second party to freight the supplies from the landing place on the coast to the station, and the third party to erect the necessary buildings. This enabled him to make rapid progress in getting the new station in order for winter. When the station was last heard from, arrangements were in progress, by which it was expected that a large number of the Lapps would be distributed along the Yukon River for the purpose of carrying the United States mail, and the smaller number kept in the service of the reindeer stations. During the absence of Mr. Kjellmann, Dr. A. N. Kittilsen was in charge at the Teller Station until December, when he went with the herd and took charge of the new station on the Unalaklik River until the arrival of Mr. Kjellmann. On the arrival of Mr. Kjellmann, Dr. Kittilsen resigned and left for the mines, his place as physician being taken by F. H. Gambell, M. D., of Iowa. Upon the departure of Dr. Kittilsen from the Teller Station, Rev. T. L. Brevig was placed in charge.

With the increase of stations and enlargement of the work, Mr. Hedley E. Redmeyer was also made an assistant superintendent.

Herders.—Messrs. Tornensis, Nakkila, and Larsen, the Lapps that remained in Alaska, continue in the service of the Government. During the trip of myself and Mr. Kjellmann to Norway we secured 113 Lapp, Norwegian, and Finn men, women, and children, who were removed to the Eaton Station, from which they are to be distributed to various localities where most needed.

At the closing of this report it has not been determined how many of them will remain in the service of this Bureau and how many will go into the postal service of the country.

Apprentices.—During the year three of the apprentices, namely, Tautook, Sekeoglook, and Woeksock, of the Teller Reindeer Station, have gone into business for themselves, having served as apprentices for five years (the full term), locating their herd in the neighborhood of the Teller Station. Electoona and Ahlook, from Point Hope, and Ojello, from Point Barrow, with their families, were sent to Points Hope and Barrow to take charge of the herd driven up for

the relief of the whalers, or of such portion as was not slaughtered for that purpose. To assist the Eskimo apprentices, Jacob Larsen Hatta, wife, and two children, and Mr. Lars Larsen Hatta (Lapps) were also sent.

This herd was to be divided into two equal portions, one of which was to be loaned to the Presbyterian Mission at Point Barrow, and the other to the Episcopal Mission at Point Hope. Ten of the former Eskimo apprentices have now herds of their own and are careful and diligent in increasing them. Their herds aggregate nearly 500 head.

BUILDINGS.

The Rev. T. L. Brevig, who arrived at the Teller Reindeer Station in 1894 as teacher, needing a year's vacation, returned to the States last fall. The care of the public buildings thus vacated was given to Dr. Brandon, who in return for the same agreed to care for the buildings and also counsel with the Eskimo herders in the neighborhood.

At Eaton Station substantial log buildings were erected for the superintendent, physician, and herders' families; also for the necessary storehouses.

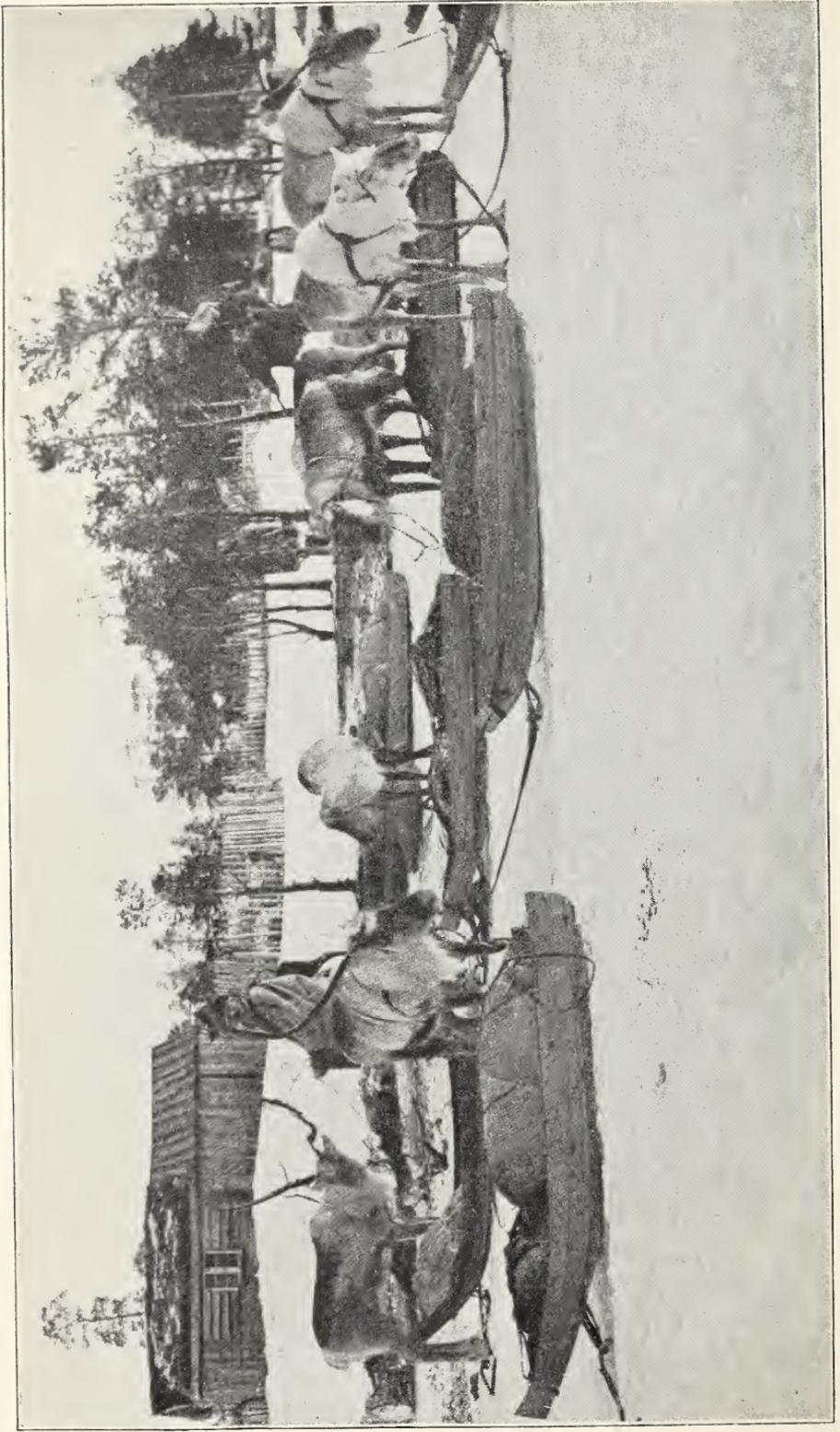
THE HERD.

The Government herd was driven during the winter from the Teller to the Eaton Station, a distance of about 300 miles.

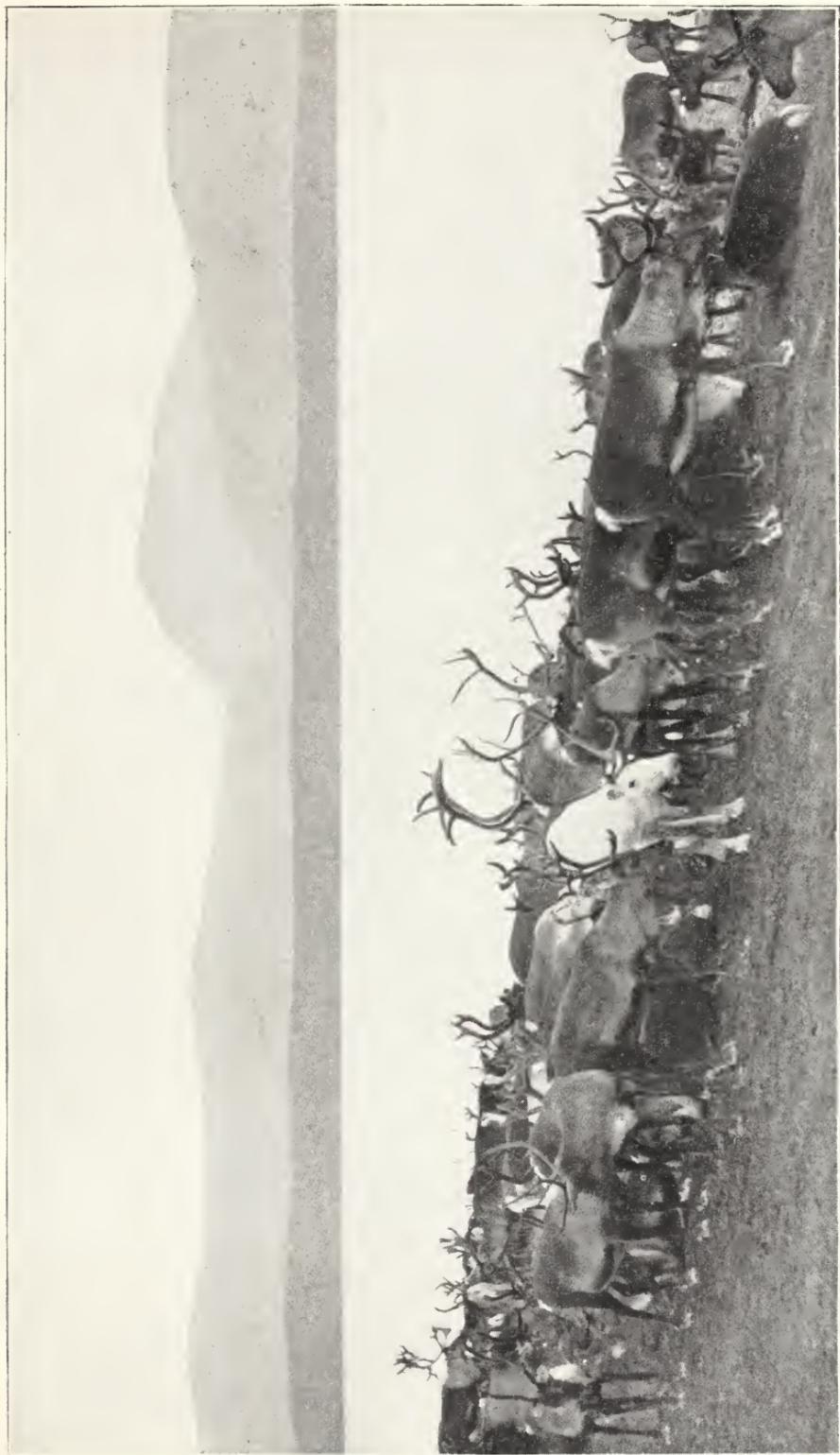
The 120 reindeer that had been loaned by the Government to Antisarlook in January, 1895, were returned by him last winter, he retaining 160, the same being the increase during the three years that the herd had been in his possession. Seventy-five deer were given by the Government to Tautook, Sekeoglook, and Wocksock, who had finished their term of apprenticeship, and in accordance with the terms of their contract, to enable them to commence an independent herd. One hundred and sixty deer belonging to Antisarlook's herd at Cape Nome and 301 deer belonging to the missionary and Eskimo herd at Cape Prince of Wales were borrowed by the Government, making a total of 461 reindeer for the relief of the ice-imprisoned whalers at Point Barrow. Of these, 260 males were slaughtered for food, the females being kept as a nucleus of a permanent herd at Point Barrow.

At Golovin Bay the union herd, belonging jointly to the Swedish Evangelical Union Mission and Episcopalians, was increased during the year by 99 fawns born. It is expected this winter that the herd will be divided, and the portion belonging to the Episcopalians will be driven across the country to Weare, at the mouth of the Tanana River.

Instructions were left at the Eaton Station to loan 100 head of reindeer to the Roman Catholic missions on the Yukon River, and send with the herd an experienced Lapp to take the oversight of the herd and instruct the native apprentices in its care and management.



TRAVELING WITH REINDEER.



HERD OF REINDEER BY THE SEASIDE.



Number and distribution of domestic reindeer in Alaska, 1898.

Location of herds.	Old deer.	Fawns.	Total.
Unalaklik:			
Government herd, Eaton Station	446	177	623
Electoona (apprentice)	7	4	11
Martin (apprentice)	16	10	26
Ahlook (apprentice)	7	4	11
Teller Reindeer Station:			
Government property	7	4	11
Tantook (former apprentice), Government herd	38	39	77
Sekeaglook (former apprentice), Government herd	32	27	59
Wocksock (former apprentice), Government herd	28	22	50
Cape Prince of Wales:			
Congregational Mission Station	216		216
Golovin Bay:			
Swedish Mission	101	49	150
Episcopal Mission	100	50	150
Okitkon (apprentice)	15	7	22
Tatpan (apprentice)	18	9	27
Moses (apprentice)	30	12	42
Constantine (apprentice)	2	2	4
Point Hope	29	19	48
Point Barrow:			
Presbyterian Mission	201	190	391
Circle City:			
Imported from Lapland	144		144
Total	1,437	625	2,062

Increase from 1892 to 1898.

	1892.	1893.	1894.	1895.	1896.	1897.	1898.
Total from previous year		143	323	492	743	1,000	1,132
Fawns surviving		79	145	276	357	466	625
Purchased during summer	171	124	120	123			161
Imported from Lapland							144
Total, October 1	171	346	588	891	1,100	1,466	2,062
Loss	28	23	96	148	100	<i>a</i> 334	
Carried forward	143	323	492	743	1,000	1,132	

a One hundred and eighty deer killed at Point Barrow for food; 66 lost or killed en route.

Of the above, the following are the property of the Government: At Unalaklik, 623; at Teller Station, 11; at Golovin Bay, 100; at Point Barrow, 118; at Point Hope, 48; at Circle City, 144, making a total of 1,044.

Expenditure of reindeer fund, 1897-98.

Amount appropriated	\$12,500.00
Supplies for stations	2,235.51
Barter goods for purchase of deer	4,378.17
Salaries of purchasing agents and herders	2,976.32
Freight on supplies and barter goods	2,497.13
Reprinting of report, 1,000 copies, at 29.9 cents	299.01
Copies of 38 electrotype illustrations, at 94.8 cents	36.00
Traveling expenses	75.00
Balance	2.86
	12,500.00

PURCHASING STATION IN SIBERIA.

From the commencement of the introduction of reindeer into Alaska in 1892 it has been my constant study to devise some method for procuring larger numbers of reindeer during the season. During the

experimental trip of 1891 two months were spent on the revenue cutter *Bear* in procuring 16 head. The following year 167 were secured, being the largest number purchased within any one year in Siberia. During 1893, 1894, and 1895 the very best that we were able to accomplish in a season was the purchase of from 120 to 125 head. In 1896 a partial agreement was effected with a private party to procure and bring over from Siberia to Alaska reindeer at a fixed price per head, which resulted in a total failure, not one being secured. In 1897, in continuation of the policy of trying different methods for procuring the reindeer, Mr. John W. Kelly, Mr. Conrad Siem, and Mr. A. St. Leger were sent to Siberia to remain during the winter. A small cheap frame house was erected and they were furnished with necessary barter goods required for the purchase of reindeer. During the fall their success was such as to encourage the hope that a practicable method had been found of procuring the reindeer in large numbers, several hundred of the deer being purchased and either delivered or placed in herds where they could be reached the following summer, during the few weeks that the ice allows the access of ships to the coast, when a vessel would be sent to transport them to Alaska. It appears, however, from the statements of the purchasing agents that during the winter jealousies and feuds broke out among the different native villages which precluded any further trading and so endangered their lives that the following July they felt compelled to go on board a whaler and leave the station.

Upon my visit to the place early in August I was able to trace and secure but 100 head of the several hundred which had been bought. After the employees had abandoned the station the natives seemed to have appropriated whatever they could lay their hands on, including the deer in the herd. Under the circumstances it was not thought expedient to carry this experiment further, and the station was closed. It is probable that the next method will be to try and arrange with some Siberian firm of standing and character to purchase deer for the Government. Possibly Russians will succeed better in bartering with the natives for deer than Americans. The 161 head of reindeer which I brought from Siberia in August were turned over to Mr. W. T. Lopp to replace in part those that the Government had borrowed for the Point Barrow relief expedition.

PRIVATE REINDEER ENTERPRISES.

The sudden influx of large numbers of miners into central Alaska, and the difficulty of procuring supplies and provisions at the mining camps, called public attention to the necessity of introducing the reindeer as a factor in freighting and transportation. During the years when the natives had occasion to travel from village to village their journeys were comparatively short and time was no object, consequently it made no difference whether they were a week or a month on the road, and dog teams served a useful purpose. So during the

days of the fur trade the few fur traders in the country with their homes on the river, supplied with provisions by an annual trip of a steamer, could manage to get along comfortably with dog transportation. But in the increased and more rapid development of the country the need of better transportation facilities was recognized. The experiments of the Government had already demonstrated the value of the reindeer, and three or four private enterprises were at once started, the details of which have been difficult to obtain. From newspaper reports I glean that a Mr. G. Lewis, of Montreal, acting in the interest of the Reindeer Transportation Company of Vancouver, shipped 42 reindeer from Norway on the steamship *Hecla*, reaching New York February 1, 1898. They were consigned to a Mr. J. G. Scroggs. Seven died on the trip across the ocean, and 29 in crossing the continent. But 6 lived to reach Skagway, and of those but 2 reached Dawson.

At Skagway I was informed that in November last Mr. David O'Neil, an Arizona miner, before going into the Yukon, visited Norway to procure a herd of reindeer for use at the mines. Not finding in eastern Lapland as large deer as he wanted, he continued up the coast to Tromsø, then traveled into the interior across Norway and Sweden to Archangel, Russia, on the White Sea; from thence 480 miles northeast to Petchora Bay, Arctic Russia, where he is said to have found reindeer weighing from 500 to 600 pounds, trained both to hauling and packing. He purchased a herd of 2,000 head, costing about \$12 apiece. With 34 selected deer he started for Hamburg, Germany, a journey of 1,800 miles across the country. Twenty-three days were consumed in crossing the Atlantic, during which time a number of them died; others died in crossing the continent, so that when Skagway was reached only 1 deer out of the 34 was left, and that one died before he could be gotten off the wharf.

The poor success in transporting the 34 deer so discouraged him that he telegraphed to Russia to sell the remainder of the 2,000 that he had purchased. It is to be regretted that these enterprises were not more successful, as the deer are so greatly needed in Alaska. The failure, however, was not due to any insuperable difficulties in the way of transporting them from Lapland or to any inability of the reindeer to endure long voyages, as was proven when, a month later than Mr. O'Neil's expedition, the United States commission to Lapland transported 539 reindeer from Lapland, twenty-six days at sea and across the continent to Seattle, with the loss of but one.

I have been informed that in the above private expeditions sufficient moss was not brought with the deer, but an attempt was made to accustom them to live on hay and grain while en route.

NO DOMESTIC REINDEER IN CANADA.

Last winter, while the Government and private parties were looking to Lapland for reindeer, a report was started and found credence in

some quarters that it was unnecessary to go to Lapland as the reindeer could be purchased better in Canada. Not having heard that there were any domestic reindeer in Canada, a letter was addressed to the Hon. George M. Dawson, LL. D., director of the geological survey of Canada, which elicited the following reply:

GEOLOGICAL SURVEY OF CANADA,
Ottawa, May 21, 1898.

MY DEAR SIR: I have your note of May 17, asking about supposed settlement of Lapps and domesticated reindeer in the vicinity of Hudson Bay. The report which has reached you is, however, quite erroneous, as nothing of the kind exists either there or on the Labrador coast, not even in connection with the Moravian missions of the last-named locality.

I am much obliged for the copy of your interesting report on the reindeer, duly received.

Yours, truly,

GEORGE M. DAWSON.

Rev. SHELDON JACKSON,
Alaskan Division, Bureau of Education,
Washington, D. C., U. S. A.

HOW REINDEER WILL SUPPLEMENT THE STEAMBOAT AND RAILROAD IN ALASKA.

The following quotation, which is a clear and concise statement of the value and extent of reindeer transportation, is from a circular prepared by Hon. W. T. Harris, Commissioner of Education. Dr. Harris writes:

Whatever may be the development of transportation by river or by railroad in Alaska, the reindeer will prove a useful auxiliary by rendering possible a ready distribution, even for long distances from the terminus. For instance, the steamers that visit the upper Yukon unload their goods at the terminal points. From these terminal points in the winter the reindeer can convey provisions and other supplies to the miners 20, 40, or 100 miles or more, as the case may be. If a railroad should be made from Skagway, or from Prince William Sound, or any other point, into the interior, at its terminal point various reindeer expresses make possible the distribution of the freight from the railroad to distant points in various directions from the terminus. They would likewise collect freight for the terminus. Meanwhile the reindeer can not be used as a substitute for the river or the railroad in the carrying of freight, any more than horses or oxen can be used for that purpose, because, while the amount of freight carried by the reindeer in the winter time is considerable, it would take 10,000 reindeer to carry 1,000 tons, while one freight train or one large steamboat might carry the entire amount. It is in the distribution from terminal points and the collection for terminal points that the reindeer will be useful.

Another point of great usefulness is the light work of carrying the mail. Great speed for small loads is the favorable condition. With relays of 25 miles each the possible speed in winter time of reindeer expresses, carrying a light load of mail, is 200 miles a day. If a route can be found, such as the Dalton trail is said to be, from Haines to Fort Selkirk or Circle City, the relays of reindeer could carry the mail in three days to Dawson City and in four days to Circle City. Return mail should be brought back in the same period. Supposing a railroad should be built to Dawson City or Circle City, the reindeer would not be useful in traversing the country over which the railroad passed, but he would be very useful in connecting the terminus of the railroad in the winter time with places down the Yukon River. Even the military camp at Weare, near the mouth of the Tanana, could



PUBLIC SCHOOL NO. 2 (NATIVE), JUNEAU, ALASKA.
Photograph by V. C. Gambell.



PRESBYTERIAN MISSION HOME, JUNEAU, ALASKA.
Photograph by V. C. Gambell.



RESIDENCE OF THE PHYSICIAN AT EATON REINDEER STATION, ALASKA.
Photograph by F. H. Gambell, M. D. (See page 12.)



METHODIST MISSION HOME, UNALASKA, ALASKA.
Photograph by S. J. Call, M. D.

be brought into communication with the War Department by reindeer express to Circle City, taking two days for round trip, and from the military camp near the mouth of the Tanana once a month to Point Barrow, requiring four days out and four days back, would keep the whole country in possession of the news regarding the fate of sailors caught in the Arctic seas and the missionaries who live in that remote region. A similar four-days express twice a month would bring the same news from Cape Prince of Wales and the missionary stations north and east of that point, and also those on the lines south and west and those on the Yukon. Another one three days out from the new military post at Weare would give the same information regarding St. Michael and numerous missionary posts south and southeast of that point. During the summer time the boats on the Yukon will bring the great bulk of freight up to the different distributing points.

ESTIMATES AND SUGGESTIONS FOR DISTRIBUTING REINDEER IN ALASKA,
AND INDUCEMENT FOR LAPLANDERS TO BECOME SETTLERS AND
HERD OWNERS.

The Lapps brought over from Lapland as teachers for the Eskimo apprentices, and also as the basis of the reindeer development in Alaska, are inquiring in what way they, as well as the Eskimo, can secure herds of their own. From the commencement of the instruction of the native men in the management of reindeer, the Bureau of Education has recognized the importance of securing the cooperation of the various missionary societies at work in Arctic and sub-Arctic Alaska.

Again I quote the Commissioner of Education:

It is evident that the missionary stations furnish the only safe centers for the location of herds and the establishment of schools of instruction in the rearing of the reindeer and in the training of them to harness.

As already mentioned, the missions ascertain the capable and teachable youth among the natives. They are able at any time to furnish a list of the natives in their vicinities noted for good character. At each of these stations 20 or 30 youth, selected from a village population of 300 or more, can be put in training as herdsmen and teamsters. No matter how large the Government appropriation should be, therefore, it would be necessary to connect the reindeer instruction and the establishment of permanent herds in northwest Alaska with these missionary stations.

Let small herds be loaned to each missionary station as a Government aid in the nature of an outfit of industrial apparatus. The report of the Indian Bureau shows that the United States Government furnished 10,000 head of stock for the period of 1890-96 for one Indian agency (the Blackfeet), and that seeds, implements, stock, wagons, harness, in large amounts, have been furnished to other agencies. These donations are certainly more justifiable than donations made to prevent the savage peoples from starving, for they are given, in the form of apparatus, for the instruction of these peoples in the industrial arts and in the practice of thrift. All these things prevent starvation. Just as in the agricultural colleges of the several States the Government money is used to pay for the stock of the model farm, which is used as the apparatus for the instruction of the pupils, so the reindeer herd is used as apparatus loaned to the missionary stations for the purpose of instruction of the natives. But an average of five years' apprenticeship is needed for the full training of apprentices in the management of reindeer.

Persons who have been brought up to the care of neat cattle and horses or sheep only have not thereby acquired the art of managing reindeer, for this requires

special apprenticeship. With the first herd (that of 1892) Siberian herdsmen were procured to give instruction in these arts; but the degree of success was so small that in 1894 five families of Laplanders were obtained to take their place. The Laplanders, being a civilized people and devoid of the superstitions which embarrass the Siberian natives, have attained a higher degree of skill in the management of this animal, and also show greater ability in teaching others what they know. Next after the obtaining of the reindeer the most important point, therefore, is the procurement of skilled herdsmen and teamsters from Norway and Sweden. It is of little use to give a herd of reindeer to a missionary station unless a skilled teacher goes with it.

The furnishing of the properly trained Laplander is one of the chief items of expense in the introduction of reindeer into northwestern Alaska. A salary of \$500 a year is necessary for each, and the distribution of the herd at the different points on the seacoast and in the interior is possible only in so far as the Government is able to send these experienced herdsmen and teamsters. In the course of eight or ten years there will grow up a supply of thoroughly educated natives, who will render it unnecessary to depend any longer upon Lapland and Finland for teachers. But it is hoped in the meanwhile that there will be some migration from Scandinavia of families of herdsmen and teamsters.

To best accomplish the above, I would respectfully recommend the following general plan, which embodies the suggestions made by Mr. William A. Kjellmann from his own personal experience in the work, both in Alaska and Lapland, in the latter of which he was born and brought up.

Loan each mission association 100 deer for five years on condition (1) that two Lapp families are kept in charge of the herd, the mission furnishing food, clothing, etc., and the Government paying the salaries for the Laplanders; (2) that at least four native men are kept and trained to the work; (3) that the mission receive 80 per cent of the net increase of the herd and the two Laplanders in charge 20 per cent, this 20 per cent to be held back by the Government in case the Laplanders should not become herders or teamsters; (4) that one of the Laplanders at each station occupied be appointed manager, so far as herding and breaking in and the movement of the herd is concerned, the Lapp manager to report yearly to the Government inspector on his visit about the increase and general condition, etc., the mission station also reporting to the inspector.

Estimate of increase from 100 deer in five years.

	Males.	Females.	Total.
Original number	20	80	100
First year's increase	36	36	72
Second year's increase	40	40	80
Third year's increase	60	56	116
Fourth year's increase	80	72	152
Fifth year's increase	104	104	208
Total	340	388	728
Losses during the period			50
Total left			678
Property of the Government			100
Net increase left			578
Eighty per cent goes to mission			462
Twenty per cent to Government or Lapps			116
			578

RELIEF OF THE WHALERS IMPRISONED IN THE ICE NEAR POINT BARROW.

While the relief of the whalers imprisoned in the ice at Point Barrow last winter was conducted under the auspices of the Treasury Department, yet as the principal means of relief were the reindeer herds taken from Prince of Wales and Cape Nome and driven over to Point Barrow, and as those herds were a part of the fruit of the work of the Interior Department in introducing domestic reindeer into Alaska, it seems proper that some account of that expedition should have a place in this report.

Through the courtesy of the Secretary of the Treasury and Capt. C. F. Shoemaker, chief of division of Revenue-Cutter Service, I have received copies of the original reports of the officers in command of the relief expedition. From these reports and from other reliable sources I have secured the following account of the situation of the whalers and their relief by the Government expedition in charge of Lieut. David H. Jarvis, of the Revenue-Cutter Service.

On the 8th of September, 1897, the steam whalers *Orca*, Capt. A. C. Sherman; *Jesse H. Freeman*, Captain Humphreys; *Belvedere*, Capt. M. B. V. Millard, and the schooner *Rosario*, Capt. Edwin Coffin, were caught in the slush ice to the eastward of Point Barrow, the northernmost point of the North American Continent.

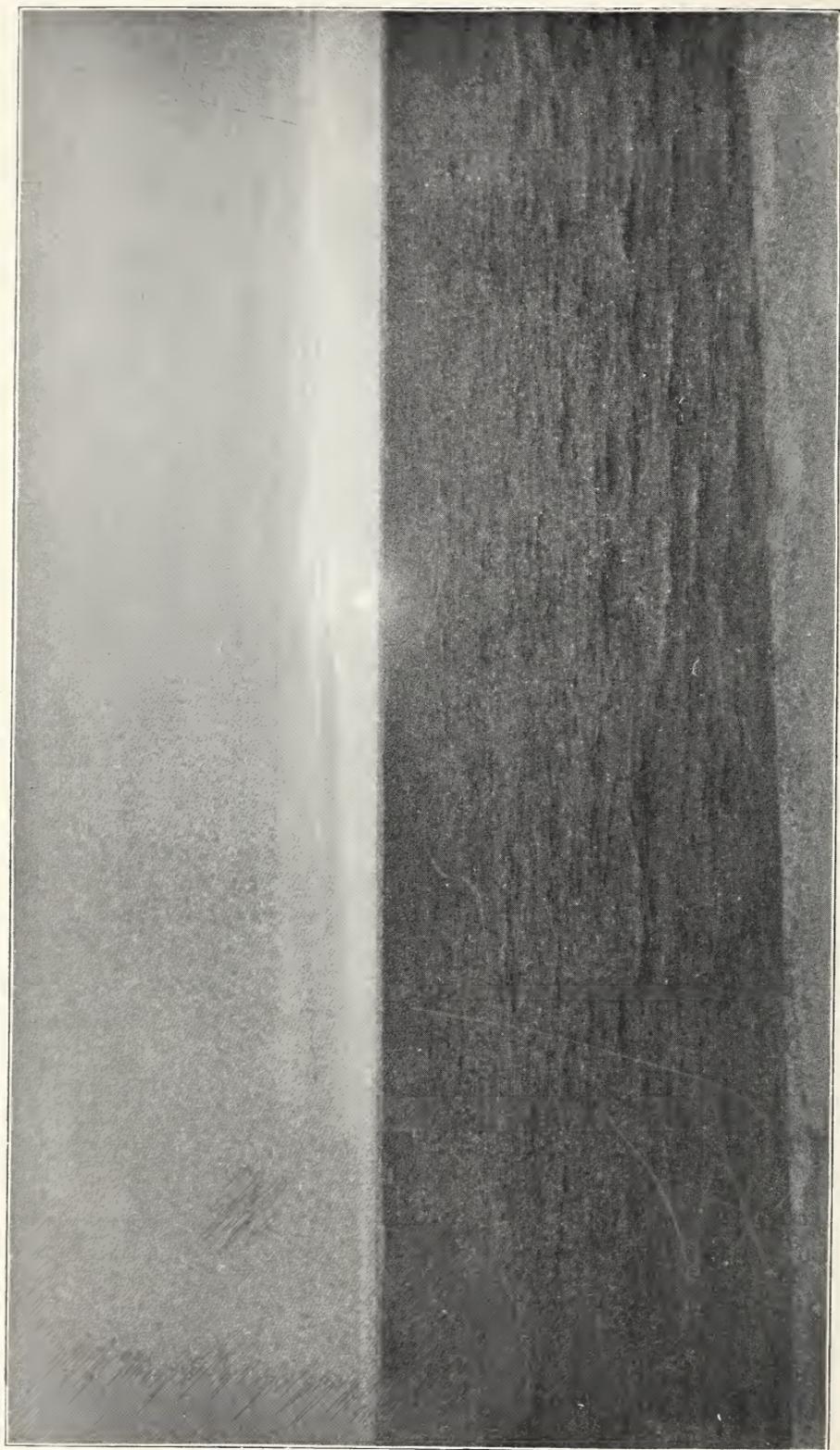
Early on the morning of the 9th the danger was so great that the captains of the four ships had a consultation as to the best method of working their vessels out of the ice. The young ice was forming fast and a heavy ridge of old ice remained along the coast. The only method of escape seemed to be by blasting a canal through the ice ridge, a distance of about a mile and a half. A portion of the crew was at once set at work making cartridges, weighing 5 pounds each, of blasting powder, gunpowder, and tonite powder, the latter of which was taken from the darting and shoulder bombs. These cartridges were placed on the ends of long poles, shoved under the ice, and exploded. A thousand pounds of powder were used and three days and nights consumed in making the canal. The remaining men of the crews were employed in sawing and poling the ice out of the canal. The fresh ice, however, formed so rapidly that the steamer *Orca*, in forcing its way through the canal, broke its rudder, and, becoming unmanageable, was taken in tow by the steamer *Freeman*. The captain of the schooner *Rosario* was afraid to attempt the passage through the canal, and hoped that the ice might open and afford the vessel a safe refuge in a lagoon near by. This hope, however, was not realized.

After getting through the canal the three steamers lay to until the *Orca* had repaired its rudder, and then steamed south 45 miles through increasingly heavy ice to the neighborhood of Sea Horse Islands, which were reached September 22. On that date the steamer *Orca*, which was in the lead during the breaking and forcing of the ice, was caught

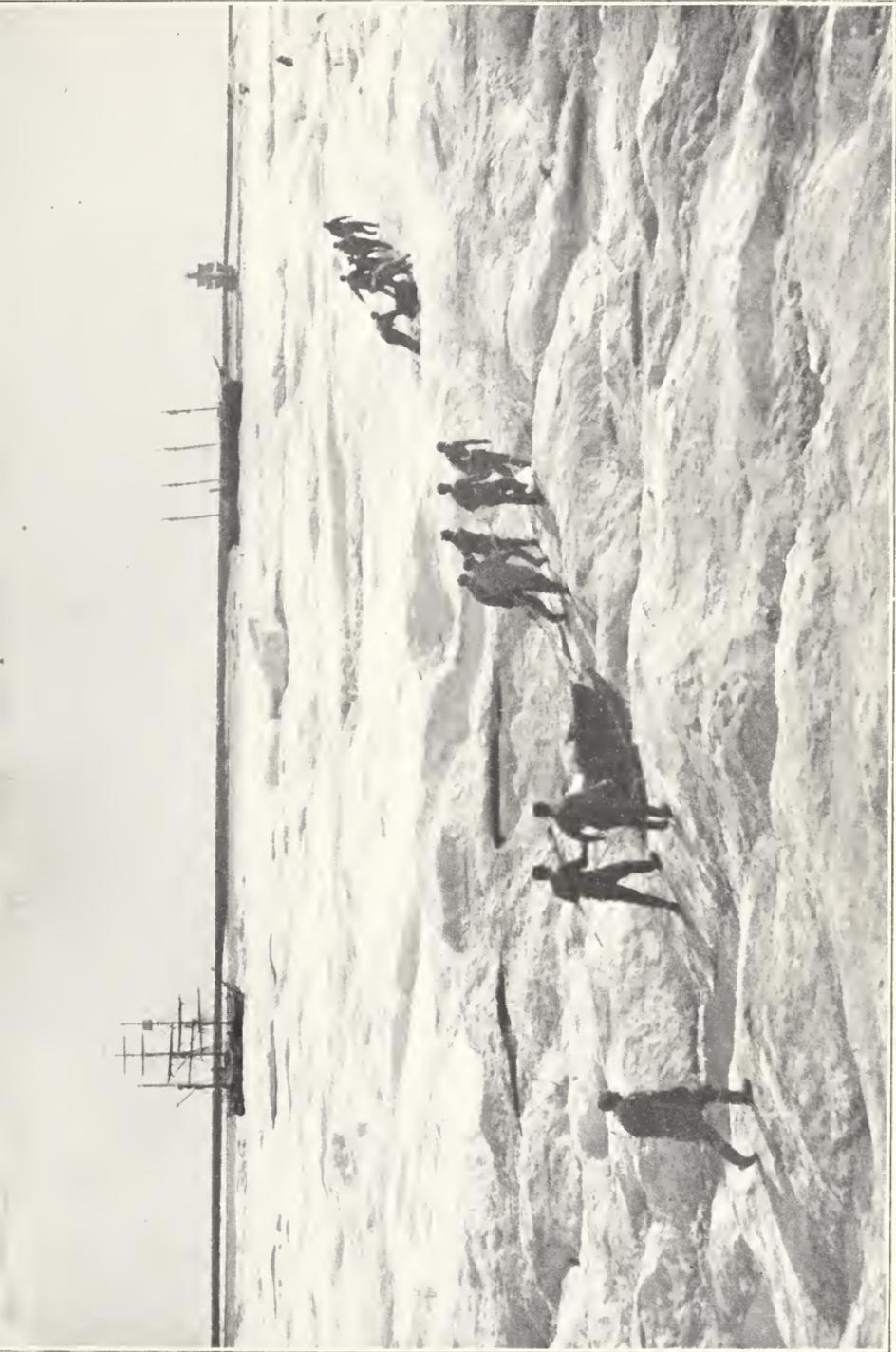
between two immense ice floes, which wrenched the sternpost and steering gear completely out of place and hurled the wheel through the pilot house, the officers and crew taking to the ice for safety. Many of the officers and crew passed over the ice to the steamer *Freeman*. Shortly after the *Freeman* herself was caught in the ice jam and all on board took refuge on the ice. The steamer *Belvedere*, which had reached open water, immediately steamed back into the ice and rescued the officers and crew of both vessels. The wind blowing a gale from the westward forced both the young and old ice landward, and nothing was left for the *Belvedere* but to move with it, doing which the ship succeeded in getting into Pearl Bay, the heavy ice grounding outside and making a refuge behind it.

The *Belvedere* now had its own crew of 45 men, the 43 men from the *Orca*, and the 49 from the *Freeman*. Abandoning all hope of getting out of the ice, on the 23d of September the sailors commenced sledging provisions from the ship over the ice to the Sea Horse Islands, a distance of 3 miles. The water was pumped out of the casks to lighten the ship, and the bulkheads were torn down for the purpose of making houses on shore. The blacksmith commenced making cooking stoves from the coal-oil drums, and others were set to work cutting a canal through the ice to enable the ship to get in behind the islands for greater safety, all the arrangements being made to winter at that spot. While these arrangements for camping on shore were going on, Mr. Charles H. Walker, fifth mate of the steam whaler *Orca*, volunteered, with a couple of natives, to go across the ice to the steamer *Orca* and save all the provisions they could, agreeing to make a signal upon his safe arrival at the vessel. The *Orca* was lying 12 miles away, with the ice between the two ships full of holes and the pressure of the heavy ice constantly making large cracks in the new ice.

On the 29th of September, failing to see any signals from the *Orca*, Mr. George F. Tilton, with four natives, was sent to learn the fate of Mr. Walker and his companions. After six hours hard work the ship was reached and Mr. Walker and his men were found well and busy saving provisions. The ship was nearly full of water, and the provisions had to be fished out with long-handled bow hooks. In the meantime both ship and ice were drifting all the time. While engaged in securing the provisions a peculiar tremor was felt, the ship careened slowly over on its side and gradually slid under the ice floe and was soon completely hidden from sight. The men, having escaped to the ice, at once commenced sledging the provisions they had saved to the south sand spit of the Sea Horse Islands, which were about 3 miles to the westward. The moving of the provisions consumed two days. Some Eskimo were secured in the neighborhood with two teams of dogs, and on the sixth day all the food saved from the *Orca* was safely put on the steamer *Belvedere*. While the work of saving provisions from the steamer *Orca* was going on, some Eskimos boarded the steamer *Freeman* to help themselves to the provisions



MIDNIGHT SUN, POINT BARROW, ALASKA.
Photograph by Assistant Engineer H. N. Wood.



WRECKED WHALERS DRAWING SUPPLIES ON THE ICE, POINT BARROW.

Photograph by Assistant Engineer H. N. Wood. (See page 30.)

which had been left in that vessel when the sailors took to the ice. While engaged in looting the ship they accidentally dropped a lighted lamp, which set fire to the vessel, and it burned to the water's edge.

On the 3d of October Captains Millard, Porter, and Sherman after consultation determined to send to Point Barrow for help. Stephen Cottle, second mate of the *Belvedere*, and the four or five men of the steamer *Freeman* volunteered to go. It was a trip of 65 miles on foot, and it took three nights and two days to make it.

Mr. Charles D. Brower, superintendent of the Liebes Whaling Station, at once dispatched his assistant, Alfred Hopson, with six dog teams to the rescue of the whalers, arriving at the steamer *Belvedere* on October 7. Forty men with provisions were immediately sent to Point Barrow, some of the men being so sick and feeble that they had to ride the entire distance. The trip was made in four days.

Returning to the *Belvedere* on October 13, Mr. Hopson made the trip in twenty-two hours. On the second trip he took 64 men and some provisions to Point Barrow. On the 15th of October the captains reached Point Barrow for a consultation.

Inventories of all the provisions on the *Belvedere*, at Point Barrow, and on the four whalers which were in the ice to the eastward of Point Barrow were made and placed before them. These were carefully gone over, and it was decided that by allowing each man two scant meals a day the provisions could be made to hold out until the 1st of July following. At Point Barrow the officers of the first-named vessels learned that the steamers *Fearless*, Capt. James McKenna, and *Newport*, Capt. G. B. Leabett, were in heavy ice, 5 miles off shore, and about 60 miles to the eastward of the point. The steam tender *Jeanie*, Capt. P. H. Mason, was about 75 miles east of the point, and the bark *Wanderer* was about 360 miles east of the point, being within 90 miles of Herschel Island.

During the conference at Point Barrow it was decided to make an effort to send word to San Francisco, and volunteers were called for. Mr. George F. Tilton, third mate of the steam whaler *Belvedere*, and Mr. Charles F. Walker, fifth mate of the steam whaler *Orca*, were accepted for the trip. After every provision was made for their comfort, at noon on October 22, both expeditions left for the States, Mr. Tilton following the coast south of St. Michael and Shelikoff Straits, and Mr. Walker by the way of Herschel Island and up the Mackenzie River by way of the Hudson Bay Fur Company's posts to Edmonton, on the Canadian Pacific Railway, from whence he reached civilization.

Mr. Tilton was accompanied by two Eskimo runners, who had agreed to accompany him as far as Point Hope, which place they expected to reach in about fifteen days. It was on the 3d of January, when between Unalaklik and St. Michael, on Norton Sound, that Mr. Tilton met Lieutenant Jarvis and party on their way north to relieve the whalers, the news of the disaster to the fleet having been previously

communicated to them. St. Michael was reached on January 6. Leaving St. Michael on the 16th, a trip of 320 miles, crossing mountain ranges, through a storm that destroyed some of their dogs, brought the party to Andreafski on the Yukon River. In the winter of 1897 William A. Kjellmann, superintendent of the Government reindeer stations, made the same trip over the same mountains in the same kind of a storm with reindeer without any loss.

Securing fresh dogs at Andreafski, the journey was continued 180 miles across the portage to the Kuskokwim River. At that point, needing a fresh team of dogs, the traders at the place asked Mr. Tilton \$1,000 for them. This would have prevented any further progress of the expedition had not the Rev. John H. Kilbuck, Moravian missionary at that place, loaned Mr. Tilton 13 dogs, provided provisions, and accompanied him as guide for 350 miles on his way to the next Moravian station, which was at Carmel, on the Nushagak River, arriving there on the 22d of February. At this point Rev. John Schoechert, missionary, supplied a fresh team of dogs and accompanied him as guide to Katmai, on Shelikoff Strait, a distance of 400 miles. These unpaid services of the missionaries are instances of the ready help extended to people in similar extremity everywhere by the missionaries. At Katmai an old dory was secured and mended up, in which a passage was made across the dangerous Shelikoff Straits to Kadiak Island. From Kadiak Island passage was secured on the steamer *Albion*, reaching Portland, Oreg., April 8.

While these events were transpiring in the far North it began to be noised abroad that a portion of the whale fleet had been caught and imprisoned in the arctic ice.

On the 3d of November Captain Tilton, of the steam whaler *Alexander*, reached San Francisco and reported that eight whalers were fast in the ice east and west of Point Barrow, and not being provisioned for so long a stay, the crews were in danger of starvation. This news was confirmed on November 5 by the arrival of the whaling vessels *Jeannette*, *Karluk*, *Gayhead*, and *Alice Knowles*. The attention of the President was called to the danger of the whalers, and at a Cabinet meeting held on the 8th of November it was decided to send a relief party at once, and the revenue cutter *Bear*, that had just returned from its usual summer arctic cruise, was ordered to make the necessary preparations and proceed as soon as possible to Bering Sea. It was the purpose that the *Bear* should proceed north until it reached the ice and then land a party that should go to Point Barrow and take control of the whalers. As no practical plan could be devised to enable the relief party to take provisions with them, it was determined to borrow a herd of reindeer owned by the Eskimo at Cape Nome and a second herd owned by the American Missionary Association at Bering Straits. These reindeer were to be taken by the relief expedition to Point Barrow and, so far as needed, slaughtered for

food. The trip being one of great hardship and danger, the Department called for volunteers to man the ship, and finally selected the following officers: Capt. Francis Tuttle, in command of the *Bear*; First Lieuts. D. H. Jarvis and J. H. Brown; Second Lieuts. E. P. Bertholf, C. S. Cochrane, J. G. Berry, B. H. Camden, and H. G. Hamlet; Chief Engineer H. W. Spear; First Asst. Engineer H. N. Wood; Second Asst. Engineers H. R. Spencer and J. I. Bryan, and Surgs. S. J. Call and E. H. Woodruff. Lieutenants Jarvis and Bertholf and Dr. Call were designated for the overland trip. Lieutenant Jarvis, who had made eight trips into the Arctic Ocean and was acquainted with the native population along the whole coast, was placed in command.

On the 29th of November the *Bear*, bidding adieu to civilization, steamed out of the harbor of Port Townsend in a blinding snowstorm on its perilous voyage. After a rough passage Unalaska was reached, in a thick snowstorm, December 9. The extra supplies for the whalers that would not be needed until the following summer were sent ashore. Taking on coal and water at Dutch Harbor at 1.35 a. m. December 11, the *Bear* headed north into Bering Sea, in a storm of hail, rain, and snow, its objective point being Sledge Island, where it was hoped the overland party could be put ashore. On the morning of the 13th St. Lawrence Island was passed, but soon after the ship entered mush ice and a little later the floe ice, which was so rapidly solidifying under the influence of the severe cold that at 5 p. m., when within 75 miles of Sledge Island, fearing the vessel would become permanently fast in the ice, the effort to reach Sledge Island was given up and the vessel headed toward Nunivak Island, with a hope of being able to reach Cape Vancouver. This would increase the length of the overland journey 800 miles, but it seemed to be the only point where a landing could be made. Cape Vancouver came in sight on the morning of the 15th, but was surrounded with young ice as far as the eye could see from the crow's-nest of the ship. After working slowly through the ice until the middle of the afternoon, it was found that the village shown on the chart did not exist. It was rapidly growing dark, and just as the attempt was about to be given up for the day a village was dimly made out farther up the bay. On the morning of the 16th the ship got under way and made an anchorage near the village of Tununok. The local trader, Alexis Kalenin, and a party of natives were soon on board. They informed Lieutenant Jarvis that they expected to start soon themselves for St. Michael and would pilot his party. Accordingly arrangements were immediately made for landing the expedition and their supplies. This was accomplished with great difficulty, as the ice was running heavily between the ship and shore. Having landed the party, the *Bear* returned to Dutch Harbor, Unalaska, for the winter.

The expedition consisted of Lieutenants Jarvis and Bertholf, Dr. Call, and Mr. F. Koltchoff. The latter was engaged as a guide and to drive the dog teams. Upon reaching the house of the trader it was decided not to start for St. Michael until the 18th, the intervening time being employed in getting everything ready. The start was made early on Saturday morning, the 18th, with four teams and Alexis for guide.

On the evening of the 20th they arrived at Kiyiligamute. At that point, two of the dog teams having given out, the party was divided, Lieutenant Jarvis and Dr. Call pressing ahead, while Lieutenant Bertholf and Alexis and Koltchoff were to wait until they could get fresh teams. Lieutenant Jarvis reached Andreefski on the 24th and St. Michael on the 30th. The second party left on the 22d, and reached St. Michael on New Year's Day, two hours after Lieutenant Jarvis had left for the north. Before leaving Lieutenant Jarvis left instructions for Lieutenant Bertholf to proceed to the head of Norton Sound and transport the provisions across to Kotzebue Sound, while he and Dr. Call went to Cape Nome and Cape Prince of Wales to procure the herds of reindeer at those places. At St. Michael Mr. Koltchoff was discharged, and soon after engaged as guide for Mate Tilton on his return to the States. Great difficulty was met in procuring a sufficient number of sled dogs to enable the party to reach the reindeer. After many hardships, on January 10 Lieutenant Jarvis reached the Government herd en route between Port Clarence and Unalaklik. The next morning arrangements were completed and the party started with reindeer teams from the Government herd for Tsuynok, where Antisarlook and his friends had a herd of domestic deer. After refreshments and rest Lieutenant Jarvis commenced negotiating for the herd of reindeer at that point. The herd represented to the Eskimo the living of a whole village, and if the herd departed it might mean starvation to themselves before spring, so that there was much point as well as pathos in the answer of Antisarlook's wife when she said: "Tell Mr. Jarvis we are sorry for the people at Point Barrow and we want to help them, but we hate to see our deer go, because we are poor and our people in the village are poor, and in the winter when we can not get seals we kill a deer, and this helps us through the hard times. If we let our deer go, what are we to do? Antisarlook and I have not enough without them to live upon."

It seemed like reducing these people to starvation in order to save others, and in giving up their herd of deer for the sake of others it was like giving up their own lives; yet, after consultation among themselves, it was finally agreed to, and Antisarlook was employed to go with his herd. At this place were 138 deer, 22 belonging to the herders. In making the arrangements, as there were 100 cows, Antisarlook was allowed an increase of 85, so that it would require 220 deer to be delivered to him next year to make good the promise of

the United States Government to return him a herd of equal size, three having been killed for food for Antisarlook's family.

Having given Antisarlook's wife an order on neighboring stores for food supplies, and leaving Dr. Call to take charge of Antisarlook's herd and drive them up to the Teller Reindeer Station, Lieutenant Jarvis pushed forward to Cape Prince of Wales to get the second herd. While Dr. Call and his party were on their way to the Teller Station they encountered a blizzard so severe that the deer, blinded by the flying snow, turned and trampled over the drivers—however, without serious damage. They were compelled to retreat for three hours, when they found an old fishing hut and climbed in at the window. There they were held by the storm for three days, with only food sufficient for two days and a long trip still before them.

On the 25th they made another start, and reached the station on the 27th, just as a fresh blizzard was commencing. Lieutenant Jarvis reached Cape Prince of Wales on the 24th of January. On delivering to Mr. Lopp his mail, and explaining to him the necessity and object of the expedition, he had no difficulty in securing the herd of 301 deer at that place, with the agreement that 432 deer should be returned to them by the Government the following season. It was also agreed that Mr. Lopp and his herders should accompany the expedition, in charge of the reindeer. Arrangements had been made, and it was proposed that Mrs. Lopp and the children should go to the Teller Reindeer Station, from 60 to 75 miles distant, to remain with the Rev. and Mrs. Brevig; but the discomforts of the trip were so great, and she had such entire confidence in the affection of the Eskimos, that she concluded to remain at home, being with her children the only English-speaking persons in a community of 500 Eskimos.

On the 29th of January Dr. Call and party left the Teller Station and crossed the mountains, where they expected to form a junction with Lieutenant Jarvis and the reindeer herd from Cape Prince of Wales. The weather was thick and unpleasant, the barometer sinking rapidly, but, being in need of haste, the party pressed on through the storm and the mountains as best they could. Passing over the mountain range they were met by a storm so severe that they had to go into camp, and no sooner was the tent erected and covered with sleds to hold down the canvas, than it was drifted over with snow so deep that the following day it took them two hours to dig their way out. In the meantime the deer were scattered by the storm, and it was noon of February 1 before they were able to gather the herd together again. In the afternoon of February 2 a junction was made with Lieutenant Jarvis and the herd. The following day a start was made with 435 reindeer, of which 18 were broken to harness and reserved for transportation purposes.

On February 6 Lieutenant Jarvis and Dr. Call pushed on ahead for

Sineraget, a village on the coast, en route for Point Hope, leaving instructions for Mr. Lopp to follow with the herd and meet him at Pitmegea, just north of Cape Lisbon. The route lay along the northern part of Cape Prince of Wales peninsula, about 15 miles from the coast, where deer moss was plentiful, to Cape Espenburg.

On the 12th of February Lieutenant Jarvis and Dr. Call reached Cape Espenburg, and although the ice on Kotzebue Sound was broken and piled up in a manner to deter an effort to cross it, they concluded to make the attempt, and succeeded in crossing the sound to Cape Blossom, 50 miles away. Near Cape Blossom was the missionary station of the Friends, occupied by Mr. and Mrs. Robert Samms and Miss Hunnicutt. Here Lieutenant Jarvis met Lieutenant Bertholf, who had crossed from Norton Sound with 1,000 pounds of provisions, reaching the mission station on the 10th of February. After resting a few days Lieutenant Jarvis and Dr. Call left on the 15th for Point Hope, leaving Lieutenant Bertholf to await the arrival of Mr. Lopp and the herd and then to follow northward.

On February 16 Mr. Lopp, with the deer, reached Cape Espenburg and held a consultation with reference to the possibility of driving the deer and taking the sleds across the broken ice covering an arm of the Arctic Ocean from Cape Espenburg 40 miles to Cape Krusenstern. After much hesitation it was decided to make the attempt. During the first day the reindeer made 30 miles; in many places the attendants had to cut a road over hummocks of broken ice. The second day food gave out for the drivers, and of course there was no moss for the deer on the ice. The reindeer, remembering that they had left fields of moss behind them, continually broke loose to return over the ice. This made it very difficult driving, and they were out the second day and all the second night without food before reaching land again at Cape Krusenstern. There, receiving a letter from Lieutenant Jarvis, informing him that Lieutenant Bertholf with supplies was at Cape Blossom, Mr. Lopp, leaving the herd, went to meet Lieutenant Bertholf.

Loading the supplies on reindeer and dog teams, a start was made for the herd at Aneyok village, which was reached on the 19th. The deer having rested, a start was made on the 21st, following along the coast as far as the mouth of the Kevuleek River, where Mr. Lopp with the deer was to proceed inland, leaving Point Hope to the westward. Lieutenant Bertholf, taking a team, proceeded direct to Point Hope, reaching there on March 2. Finding a considerable store of provisions at Point Hope, Lieutenant Jarvis instructed Lieutenant Bertholf to remain there and take charge of any whalers that might be sent down during the winter. Lieutenant Jarvis and Dr. Call, having made all necessary arrangements at Point Hope, left on March 4 for Point Barrow. Lieutenant Jarvis had instructed Mr. Lopp to meet him at Petmegia, just north of Cape Lisbon. When Lieutenant Jarvis reached the place of meeting all that was visible above the snow was a wooden

cross with this inscription: "Letter between boards; arrived here March 7th; look out for the train." Just below the board, stuck in the snow, was a second board, on which was written: "Deer meat here."

On the 13th of March they reached the camp vacated by the herd that morning, and on another cross found a note reading: "Will try to find better moss on the inside of the lagoon. Leave here March 13." During the 14th a storm of unusual severity raged, thermometer registering 40 degrees below zero. The same storm continued through the 15th and was worse on the 16th. To add to the distress and danger of Lieutenant Jarvis, his dog teams had nothing to eat. About noon on the 17th a party of natives were discovered, who brought a note from Mr. Lopp stating that he had left there that morning, and soon after the herd was seen on the horizon, moving over the rolling white hills. Lieutenant Jarvis pushed his team ahead to overtake the deer 10 miles away. Arrangements were made to meet Mr. Lopp at Icy Cape. Arriving there on the 22d in a fearful storm nothing was seen of the herd, which during the storm had passed within a mile of the camp. On the next day a board was found with the message: "Arrived here 1 p. m. Tuesday, March 22. Think we are passing Icy Cape. Find meat in the mouth of the cache. Think sledge deer will hold out. Find better moss on the inside of the lagoon." This was welcome news to Lieutenant Jarvis, for it meant that he could save his dog teams from starvation.

At noon on March 26 Lieutenant Jarvis, looking over the ice, exclaimed: "There is the first of the imprisoned fleet!" as he caught sight of the tall mast of the *Belvedere*, 12 miles away.

Point Barrow was reached by Lieutenant Jarvis on March 29, and the herd of reindeer arrived on the 30th, safe and sound.

Thus successfully ended a trip of 2,000 miles through the desolations of an arctic wilderness in midwinter, over an unknown region, and among many wild tribes. The narrative of the trip is a story of bravery, good generalship, heroic endurance, and interpositions of Divine Providence—a trip only equaled by that of Mates Tilton and Walker, who went out with the news, and the return trip of Mr. Lopp to his home at Bering Straits.

Turning over the herd to Lieutenant Jarvis at Point Barrow, Mr. W. T. Lopp, taking a dog team, started on his return trip to his own home at Cape Prince of Wales. As provisions had been left for himself and the dogs in caches along the way, he was able to travel light. On his return trip he reached Point Hope April 19, left on the 23d, and reached Cape Prince of Wales on May 5, thus having, together with his herders, driven a herd of reindeer over the bad roads of snow and ice, through a country but little known, in the middle of winter, dragging all his provisions with him, a distance of 700 miles, and returning to his home the same distance, in the remarkably short time of three months and two days.

It has frequently been said during the efforts to introduce domestic reindeer into Alaska that the Eskimos could not be taught their care and management, and that they would never take to herding reindeer but on this remarkable trip it must be remembered that the herders and drivers were all Eskimos who had learned their business as apprentices at the Government training station for reindeer, and that without this herd of reindeer food could not have been taken to the whalers, and without the trained Eskimo the reindeer could not have been driven across the country. This striking object lesson should forever set at rest the false assertion that the Eskimos will not take to the raising of reindeer if a chance is given them.

From Cape Prince of Wales to Point Barrow the expedition found abundant pasturage for the reindeer. It passed through numerous villages of natives, who were greatly interested in the herd of reindeer, not only as a matter of curiosity, but because they appreciated the benefit that a herd of domestic reindeer would be to them and their people. Wherever they went the natives questioned Lieutenant Jarvis with regard to the possibility of their securing some reindeer for themselves and their children. If the deer were to be had in sufficient numbers, hundreds of the Eskimo men would gladly serve an apprenticeship of five years in order to get a start in reindeer raising.

In this connection it is appropriate to call public attention to the influence of the mission schools in making arctic Alaska safe for the transit of white men. In 1890, when the Congregational Mission was established at Cape Prince of Wales, no whaler had dared drop anchor in the neighborhood of that village for ten years; and the placing of missionaries there was considered by the captains of the whalers as a foolhardy undertaking. The missionaries were placed there, and now ships can anchor and their crews go on shore with safety.

When, in 1881-1883, Lieutenant Ray, United States Army, was placed in charge of the international polar expedition at Point Barrow, a turret was built at one corner of his house and armed with cannon to protect his party from the natives. Now the Presbyterian Mission has so civilized the natives that no fortified habitation is necessary. Under the influence of the Presbyterian missionary the natives not only provided the shipwrecked sailors with food from their own scanty supply, but also with necessary fur clothing. The influence of the missions made possible Lieutenant Jarvis's heroic trip unarmed.

After the departure of Mr. George F. Tilton, October 22, to carry the news to the States, Dr. H. R. Marsh, Presbyterian missionary at Point Barrow; Mr. Charles D. Brower, agent of the Liebes Whaling Company, and Mr. McIlhenny, a scientist making an arctic collection, the three leading white residents of the point, immediately set themselves to provide for the welfare of the shipwrecked whalers that had been thrown upon their hands. Mr. Brower at once arranged to issue



REINDEER TEAMS FOR POINT BARROW EXPEDITION.

Photograph by S. J. Call, M. D. (See page 25.)



PRESBYTERIAN MISSION HOUSES, POINT BARROW, ALASKA, IN WHICH WERE SHELTERED
WRECKED WHALERS.

Photograph by S. J. Call, M. D. (See page 23.)



DOCTOR AND MRS. H. RICHMOND MARSH, POINT BARROW.

Photograph by S. J. Call, M. D.

rations from his stores to the men; the Eskimos were sent into the surrounding country to get wild game, both for themselves and the suffering whalers; Dr. Marsh gave his time and medical services to saving the men from scurvy and other diseases that would otherwise have caused the loss of many lives; all the houses in the place were put at the disposal of the wrecked men, each one taking into his own home all that could be accommodated.

During the latter part of November, when it seemed that starvation awaited them, small herds of wild deer were seen on the rolling hills to the south of the village, a thing that had not been known for many years so that the natives were able to procure for the use of the community 12,604 pounds of deer meat, 8,692 pounds of fish, and 2,506 pounds of wild fowl, with some 2,500 to 3,000 pounds or more of meat in the country, which was afterwards brought in by the deer men and sledges, under the direction of Lieutenant Jarvis. Some of this meat was hauled a distance of 230 miles. This unusual and providential supply of deer meat doubtless kept the party alive until the arrival of Lieutenant Jarvis with his herd of domestic reindeer. During the remainder of the winter 180 deer were killed from the domestic herd.

On the 29th of July, 1897, the steam whaler *Navarch* was caught in the ice about 2 miles west of Point Barrow and carried by the ice pack to the northwestward. On August 3 the ship was abandoned, the crew taking to three boats, which were dragged for three days over the ice and then abandoned, each man taking such bread as he could carry. After going a little farther they met with open water, and were finally compelled to return to the ship, 18 miles distant.

On the 11th of August 29 of the crew deserted the vessel for the shore. On the evening of the eighth day from the ship coming to the pack they got upon a small cake of ice, which drifted them inshore for three days, and on the 22d of August they were seen and picked up by the steamer *Thrasher*, having had nothing to eat for eight days but ice and boot soles, only 16 of the 29 living to be rescued.

On the 14th of August Captain Whitesides and his wife and six of the crew left the vessel, dragging a small canvas canoe with them. After many dangers and great hardships they succeeded in reaching the shore, and three days later were discovered and picked up by the revenue cutter *Bear*. Nine of the vessel's crew refused to leave the whaler, deeming it safer to remain on board than to risk the journey over the ice; seven of these, however, later made the attempt to reach the shore and were saved. Two of the sailors refused to leave the vessel and have never been heard from. Very strangely, however, the *Navarch*, which had been caught in the ice in July and abandoned, after making a trip by itself into the far north drifted back into the neighborhood of Point Barrow four different times, the last time to within $2\frac{1}{2}$ miles of the shore and was caught and held firmly by

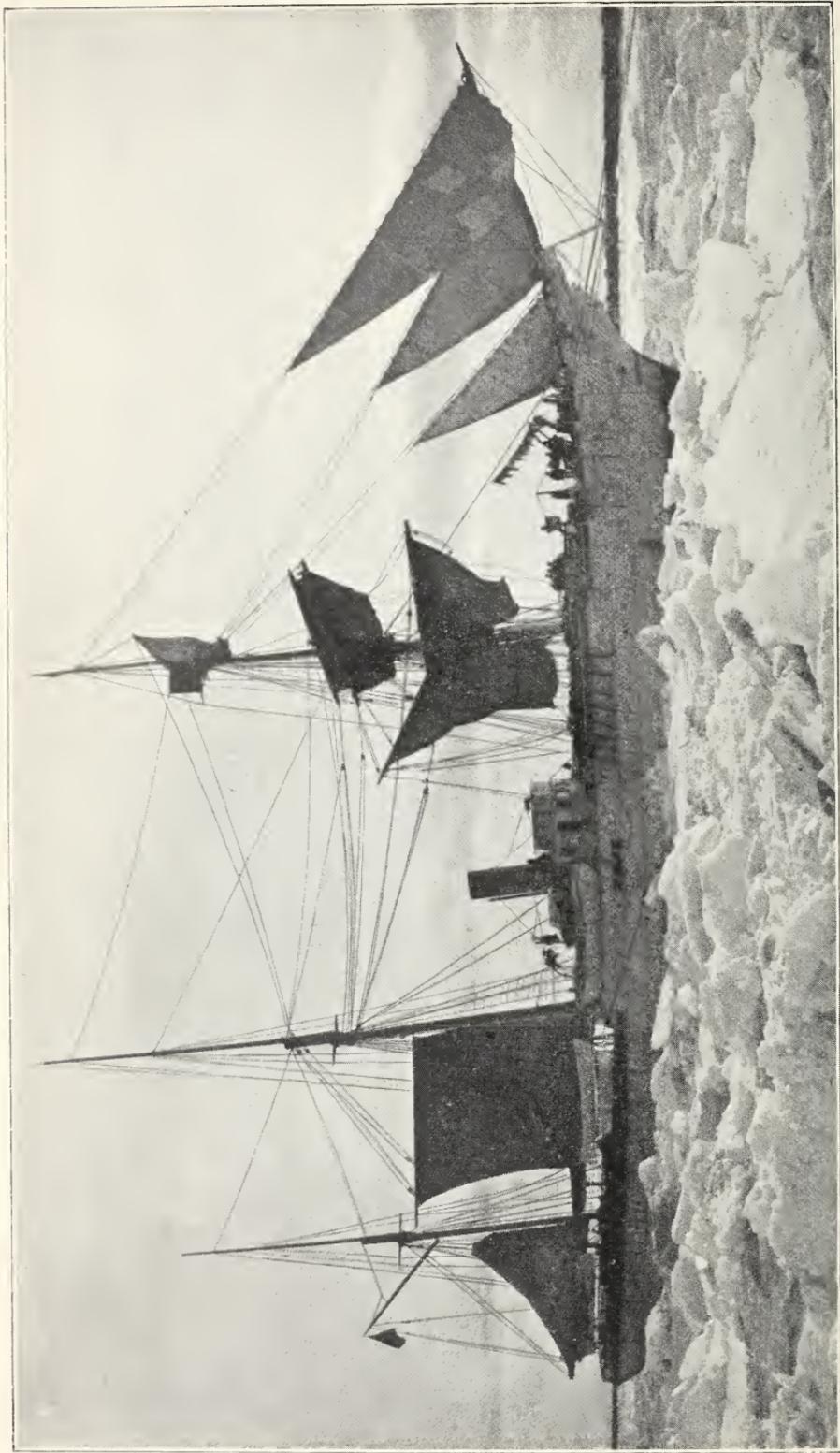
the ice. Each time that she approached the village, wrecking parties were sent across the ice to secure the coal and provisions which had been left on the steamer when she was abandoned six months previously. This coal was of the utmost service during the winter, as the driftwood along the shore had been used up and the coal supply was very short. After all the provisions and nearly all the coal had been removed, about 4 o'clock on the evening of September 3, the vessel was seen to be in flames and burned to the water's edge, the fire having been started by two of the sailors, who received their punishment later, when during the winter there was not fuel enough to keep them comfortable.

Upon his arrival Lieutenant Jarvis made a tour of inspection and found that there were 100 men quartered at the village, 76 of whom were crowded in the old building formerly occupied by the Pacific Steam Whaling Company. At the request of Lieutenant Jarvis, Dr. Marsh, Professor McIlhenny, and Mr. Brower consented to an increase of the number already quartered upon them; in the meantime a store-room had been sufficiently emptied of provisions so that a number of them could be placed in that. This made them more comfortable. There being much suffering on account of scanty and insufficient clothing, Lieutenant Jarvis secured a large amount of furs from the Eskimos, which was freely contributed from their stores for the use of the men. Lieutenant Jarvis took command of the station, issued rations, communicated with the various ships, sent out parties of native hunters, which brought in supplies of wild meat, and so controlled matters that when the *Bear* was finally able to reach the place and take off the men they were found in much more comfortable circumstances and healthier condition than could have been expected.

The schooner *Rosario*, after wintering safely, was crushed in the ice July 2. Captain Neuth, of the *Jeannette*, who was sick, was brought down on the *Bear*. A petty officer of the *Orca* had committed suicide by drowning early in the spring. In June Phil Mann, of the whaler *Jesse Freeman*, had dropped dead of heart failure. Gray, of the steamer *Jeanie*, had died of the dropsy. A Siberian and Japanese attached to the fleet had also died.

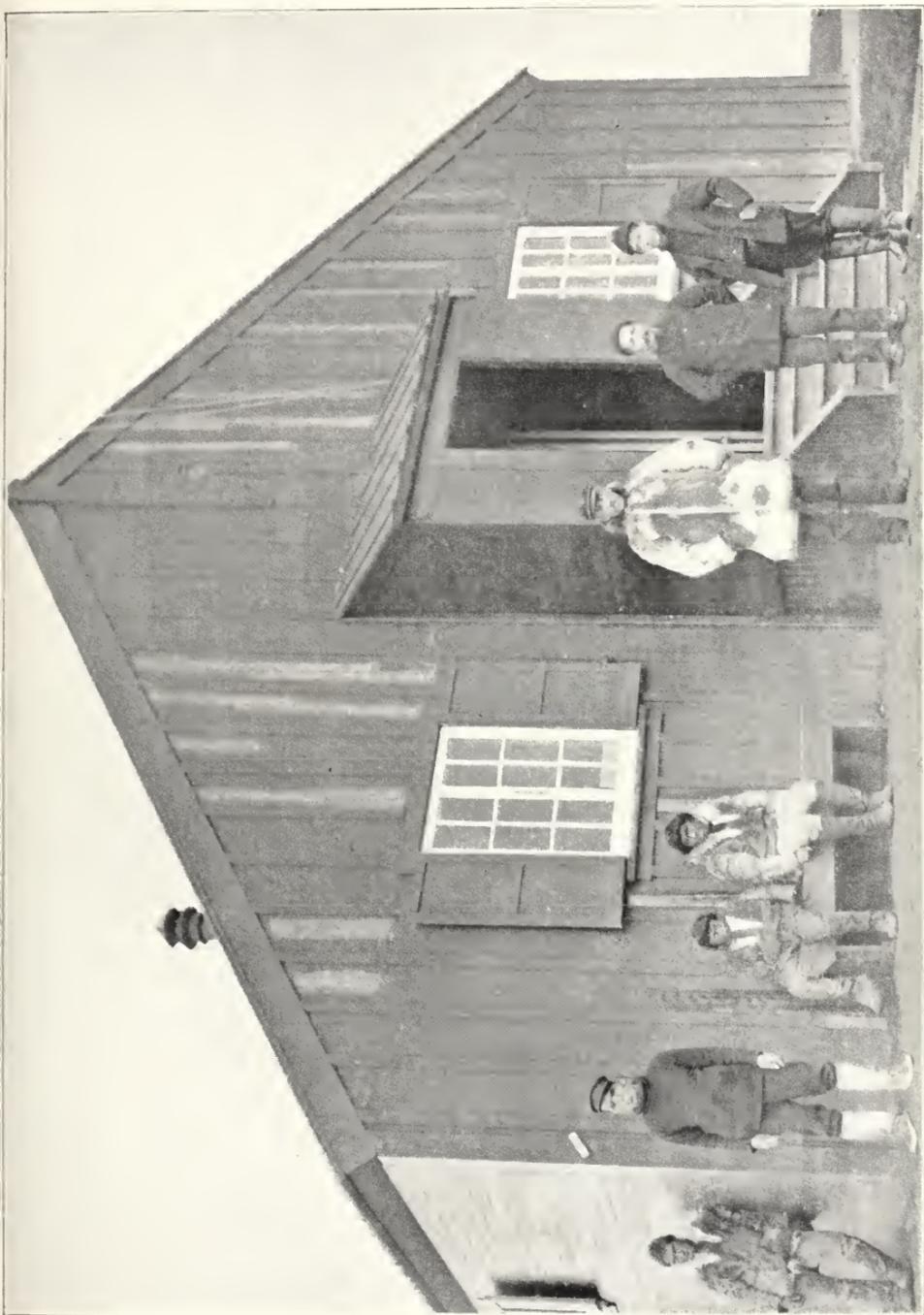
There being indications that the ice was breaking up in Bering Sea, the cutter *Bear* left its winter quarters at Unalaska and Dutch Harbor on the 14th of June, and sailed north for Point Barrow.

On the 19th, to the north of St. Lawrence Island, heavy ice was encountered, slowly working its way through which the ship reached St. Lawrence Bay, Siberia, on the 22d, and the following day reached Cape Prince of Wales, where an interview was had with the missionary, W. T. Lopp, who gave the captain a full account of the condition at Point Barrow while he was there. Learning that there was a scarcity of clothing among the whalers, Captain Tuttle turned back and steamed over to St. Michael, where a supply was laid in. Return-



CUTTER "BEAR" FAST IN THE ICE, POINT BARROW, ALASKA, AUGUST 3-17, 1898.

Photograph by Assistant Engineer H. N. Wood, R. C. S. (See Page 31.)



LIEUTENANT D. H. JARVIS, R. C. S., AT RELIEF STATION, POINT BARROW, ALASKA.

Photograph by S. J. Cull, M. D. (See page 37.)

ing to Bering Straits and passing into the Arctic Ocean, Point Hope was reached July 15 and Point Lay on the evening of the 18th. Off Icy Cape the heavy drift ice prevented further progress northward and compelled the *Bear* to anchor off Point Lay. Another fruitless effort was made on the 22d, and also on the 23d, to force the vessel through the ice. On the 25th, the ice opening a little, an effort was made to reach Wainwright Inlet, but before doing so the fog shut down so thick as to compel the ship to anchor.

On the 27th another start was made, and by pushing through the heavy drift out to sea they were able to reach the station at Cape Smyth on the morning of the 28th. On the 29th 93 officers and sailors were taken on board.

While waiting for the crew of the *Rosario*, which was 8 miles away, the *Bear* was subjected to a terrible ice jam and nearly crushed. There was a high ridge of shore ice between the cutter and the shore, behind which, in open waters, the three whaling vessels—*Fearless*, *Newport*, and *Jeanie*—were safely at anchor, but all access to which was closed by the ice, so that the *Bear* could not get in. A strong southwester had set in, drifting the ice floes with great force against the *Bear*, which was caught between them and the ridge of shore ice, and the staunch vessel came near being cut to pieces. A sharp ledge of ice under water abreast the engine room pushed in the sides of the vessel until the floor of the engine room was bent up fully 6 inches. In this jam the cutter was kept for two weeks, until August 17, when it got out by blasting through two ship's lengths of ice.

Getting afloat, sufficient coal and provisions were given the whalers to enable them to reach other supplies, and the *Bear* started on its return to civilization. A stop was made at Point Hope on the 20th, where it was found that the schooner *Louise J. Kenney* had been forced on the beach by the ice on the previous day. Her officers and crew were taken on board.

After making several stops the *Bear* arrived at St. Michael on the 25th of August, and reached Seattle on the 13th of September, where a congratulatory telegram was received from the Secretary of the Treasury extending thanks to the officers and crew for the successful issue of the work of the overland expedition for the relief of the ice-bound whalers.

It remains for a grateful country, that rewarded the heroes of Manila and Santiago with promotions, to see that Lieutenant Jarvis be not forgotten. Had not the events of the Cuban war distracted the attention of the nation, this wonderful trip of 2,000 miles overland, north of the arctic circle in midwinter, would have filled the columns of the newspapers on this continent and in Europe. Because occurring at a time when other events claimed the attention of the public, it is no less deserving of its reward.

COMMISSION TO LAPLAND.

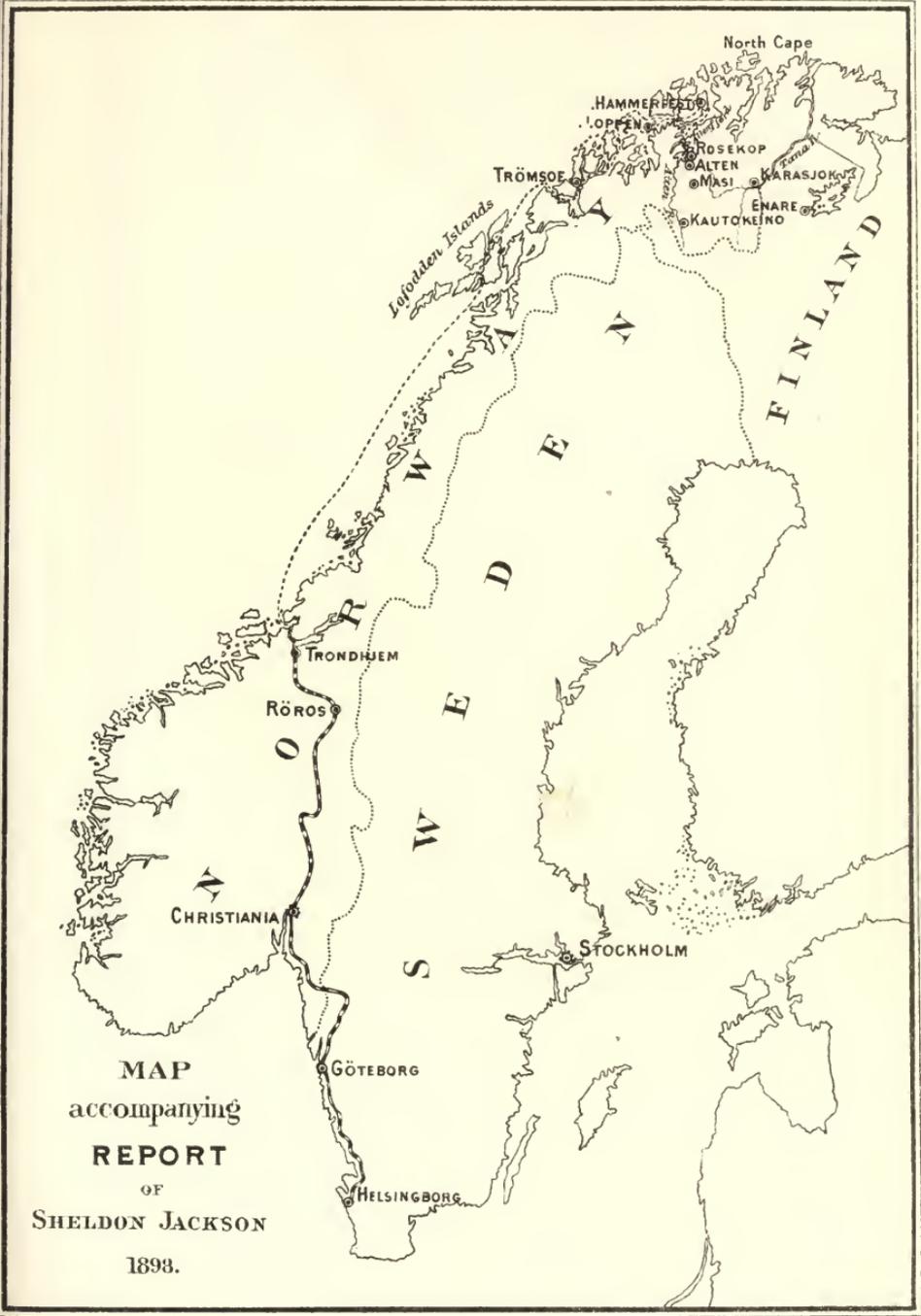
On the 23d of December, 1897, I was directed by the Secretary of the Interior to report to the Secretary of War for temporary duty in connection with the duties enjoined by the act of Congress approved the 18th of December, entitled "An act authorizing the Secretary of War, in his discretion, to purchase subsistence stores, supplies, and materials for the relief of people who are in the Yukon River country, to provide means for their transportation and distribution, and making an appropriation therefor;" and on the same date (December 23) I received written instructions from the Secretary of War to proceed at once to Norway and Sweden and purchase 500 reindeer, broken to harness, with sleds, harness, and drivers for hauling supplies into the Yukon Valley and transport the same to the United States.

Lieut. D. B. Devore, U. S. A., was appointed to accompany me as disbursing officer.

On the evening of the same day I left for New York, and on the following day held conferences with the managers of the several trans-Atlantic steamship companies centering in that city with reference to the transportation of the reindeer and Lapps to the United States.

In the spring of 1894, acting for the Bureau of Education, I had brought to the United States seven Lapp families to take charge of the domestic reindeer that the Government had commenced introducing into Alaska from Siberia and to teach the natives the management of the same. These families came under a three years' contract, at the expiration of which they were to be returned to Lapland, if they so desired. The limit having been reached last fall, four families asked to be returned to their homes, which was done, and Mr. William A. Kjellmann, superintendent of the reindeer stations in Alaska, was sent in charge of them, with the double purpose of not only conveying them safely to their native country, but also to procure a number of Lapps who would come to the United States with the expectation of making it their permanent home and engage in the raising and training of reindeer in Alaska. Consequently, when this unexpected demand of the Government for reindeer and Lapps arose, in accordance with the directions of the Secretary of War, I telegraphed Mr. Kjellmann from New York of the changed conditions, and instructed him to engage and send out all the assistants he could use to expedite the purchase of reindeer and the securing of Lapp colonists.

On the evening of December 24 Lieutenant Devore and myself took passage on the steamship *Lucania*, of the Cunard Line, and early Christmas morning were on our way to Liverpool, which we reached at noon December 31. Upon the arrival of the steamer we were met by representatives of the White Star Line, who wished to bid for the transportation of the reindeer. After a conference with them we took the train to London. On New Year's morning I received a telegram from Mr. William A. Kjellmann, agent of the Department of



MAP
accompanying
REPORT
OF
SHELDON JACKSON
1898.





12° Longitude

the Interior, who had reached Norway, asking for funds. This was in answer to the telegrams from the Secretary of War to proceed at once to purchase reindeer.

The Lapps, who alone have the reindeer for sale, are a semicivilized people, unaccustomed to commercial methods. They have no confidence in a "promise to pay." A would-be buyer must show his money, and at least make a partial payment at the time of purchase. Hence Mr. Kjellmann could accomplish but little until he had funds in hand.

Although it was New Year's Day, we found that the banks would be open during the forenoon, and Lieutenant Devore and myself proceeded to visit the leading bankers and telegraph companies of London, but, strangely, no one could suggest any method of getting money to Mr. Kjellmann sooner than by sending a check by mail. As there was a prospect of considerable delay in chartering a steamship, we decided in the afternoon that Lieutenant Devore should remain in London and secure a steamer and that I should push on to Lapland with money for Mr. Kjellmann.

January 3 I learned at the office of the Atlantic Transport Steamship Company that the department of agriculture of the English Government, to protect English cattle from the foot-rot which had broken out in southern Sweden among some of the cattle, had recently issued a circular forbidding the introduction into England of any stock from Norway and Sweden. Not only was stock of all kinds forbidden to land in England, but ships carrying such stock to other countries were to be quarantined twenty-one days before being allowed to load other cattle to return to England. As this threatened to greatly increase the expense and the difficulty of chartering a ship, I proceeded to the American embassy, where it was suggested that I visit the British department of agriculture and talk over the matter unofficially with the officer in charge and find out if any official action would be necessary. I found that the officer wanted was the first assistant secretary of agriculture. He took much interest in the proposal to procure reindeer to relieve the destitute miners in the Yukon, and suggested that we secure a steamer not engaged in the cattle trade and take the reindeer direct from Lapland to America, which suggestion was afterwards carried out.

Leaving London on the evening of January 3, I reached Christiania, Norway, on the morning of the 6th.

At 10 a. m. I presented the American consul, Mr. Henry Bordewich, of Minnesota, a letter from Secretary Sherman to American officials in Sweden, Norway, and Denmark, to render all possible aid in securing reindeer. In company with the consul, a call was made upon the secretary of the interior of the Norwegian Government, who gave me a circular letter to the Norwegian officials in Lapland requesting them to extend all assistance in the enterprise.



MAP
OF
NORTHERN LAPLAND
ACCOMPANYING
REPORT
OF
Dr. Sheldon Jackson
1898.



Longitude 12° 13° East from 14° 15° Greenwich.

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On the morning of January 7 I took the train for Trondhjem. After leaving Hamar the train crosses over from the vicinity of Lake Mjosen to the valley of the celebrated River Glommen, along whose winding banks it gradually ascends until the high mountain levels are reached in the neighborhood of Roros, on a dreary and inclement plateau, 2,060 feet above the water. This is a famous region for reindeer moss.

At midnight I reached Trondhjem, and taking an omnibus was soon settled at the Grand Hotel. On January 8, as soon as the banks were opened, I made a deposit of \$1,000 for Mr. Kjellmann, which was telegraphed to Alten, Lapland, to his credit.

Owing to its nearness and accessibility by rail with the mountain plateaus, Trondhjem is one of the best markets in Norway for procuring reindeer moss. A few weeks previous Mr. Kjellmann, while en route to Lapland, visited the traders and farmers in the neighborhood and arranged for several hundred tons of moss to be delivered at Trondhjem. I now completed that purchase of moss, and arranged with Mr. E. A. Tonseth's commission house for its reception and shipment upon the steamer that was to be chartered to carry the reindeer and which would call at that harbor for the moss.

At midnight, upon the arrival of the train and mail from Christiania, the steamer *Vesteraalen* sailed for Tromsøe.

At 5 a. m. January 11 I reached Tromsøe, and, transferring from the steamer *Vesteraalen* to that of the *Sigurd Jarl*, at 7 a. m. the steamer was on its way to Hammerfest, which place we expected to reach the same evening, but the sea was so rough and the snow squalls so blinding that we did not get there until 2 o'clock the following day.

About 2 o'clock in the afternoon of January 12 we dropped anchor in the harbor of Hammerfest, the most northern city in the world. At this season of the year the sun is not visible from November 18 to January 23. The city is lighted with electric lights. It carries on a busy trade with Russia and also with Spitzbergen.

As soon as the ship dropped anchor I was transferred by rowboat directly to the steamer *Nor*. This was one of the small steamers which makes side trips up the fiords, the special route of the *Nor* being the Alten Fiord, at the head of which lies the village of Bosekop, which was my destination.

Soon after my arrival I was handed a number of telegrams with reference to the work in hand.

On Sunday morning, January 16, Mr. Kjellmann arrived from the interior, having been delayed two days on the mountains, where he was lost in a blizzard, riding nearly all Friday and Saturday nights and the intervening day without sleep. He reported the welcome information that the 500 trained reindeer that had been ordered, together with sleds, harness, and 50 drivers, had been secured. He had sailed from New York December 1, 1897, and reached Bosekop, Lapland, on the 23d.

While passing through Washington, November 30, he had a conference with the Commissioner of Education and the general agent of education for Alaska, at which time he was informed that possibly Congress would make an appropriation for the relief of the miners in the Yukon Valley, and if so he might be called upon to purchase reindeer and procure drivers for the same; in view of which he was directed while en route to make such inquiries that if telegraphed to procure deer he could do so with but little delay. Therefore, on his arrival, December 12, at Aalesund, the first port reached in Norway, he telegraphed to various centers where it was thought reindeer moss could be had in quantity, the replies to be sent to him at Trondhjem, which place he reached the next day. Arriving at Trondhjem, he found that the only place where the moss could be had in abundance was at Roros. Accordingly, on the 14th he took the train to Roros, and on the 15th went around among the farmers investigating the supply. Finding that a sufficient quantity of moss could be had, he arranged with Mr. A. Skjerdingsstad, a local merchant, to procure and ship 250 tons, if it should be wanted. On the 16th he returned to Trondhjem, and on the 18th took the mail steamer *Vesteraalen* for Tromsøe, where he arrived on the 21st. Transferring to the connecting steamer, Hammerfest was reached on the 22d. At Hammerfest he received a cablegram of December 22, from the Secretary of War, asking if 600 reindeer could be purchased. Leaving Hammerfest on the morning of the 23d of December, that evening brought him to Bosekop, at the head of Alten Fiord, which was to be his headquarters.

Upon arriving at Bosekop he received the cablegram of December 23 from the Secretary of War, directing him to purchase 500 reindeer, etc. On the morning of December 25, before leaving New York, according to instructions from the Secretary of War, I cabled him to hire all the help he needed to expedite matters and to send out in different directions. Consequently, borrowing 1,000 kroners, on December 29 he hired Mr. Per Rist and sent him to Kautokeino, 112 miles over the mountains, and on the 31st Mr. Samuel Kemi (both Lapps, returned from Alaska), who was sent to Enare, Finland, 265 miles distant, and Mr. Carl Suhr to Sjus Javre, 101 miles, to bargain for trained reindeer, sleds, and harness. The same day he wrote Mr. A. Paulsen, a merchant at Karasjok, and arranged with Mr. O. Kjeldsberg, another merchant, to advance money for the purchase of moss. Having set matters in motion, he was compelled to wait at Bosekop for funds. While thus waiting he closed by telegraph a contract with Mr. A. Skjerdingsstad to deliver 900 horse loads of reindeer moss at the Roros depot—500 loads at 7 kroner per load and 400 loads at 8 kroner per load—to be delivered to me or to my order.

Upon arriving at Trondhjem, January 8, I arranged that the moss should be shipped to Mr. E. A. Tønseth, commission merchant, at

Trondhjem. I have already referred to the unsuccessful efforts made in London to forward money to Mr. Kjellmann, and that it was not until I reached Trondhjem, January 8, that I succeeded. Receiving this money on the morning of January 9, Mr. Kjellmann left the same forenoon with reindeer team for Kautokeino to meet and receive the reports of the several men that had been sent in advance to make contracts. Reaching Kautokeino on the 11th, he found his lieutenants waiting for him with the welcome news that the whole number of reindeer, sleds, and harness were secured. On the 12th Mr. Kjellmann signed contracts with 23 Laplanders as drivers and on the 13th started on his return to Bosekop to report progress to me and secure additional funds for further payments. Encountering a blizzard in crossing the mountains and losing his way, he did not reach Bosekop until the 16th. Securing from me additional funds, on the 18th Mr. M. Kjeldsberg and Mr. Per Rist were sent to Maci and Kautokeino to complete payments and bring the reindeer, sleds, and harness, with the drivers and their families, to Bosekop for shipment. On the 19th Mr. Kjellmann left for Sjus Javre to do the same thing for that section. On the 21st Mr. Carl Suhr was dispatched from Sjus Javre to Bautajok, 162 miles, and Mr. Samuel Kemi to Enare, to assemble and move to Bosekop the reindeer, drivers, etc., procured at those places.

Having started his lieutenants, Mr. Kjellmann himself left Sjus Javre on the 21st for Karasjok, where, on the 24th, he contracted with the drivers and paid for the reindeer which had been secured by Mr. A. Paulsen.

Final settlements having been completed, Mr. Kjellmann started on the 25th to return to the coast, reaching Bosekop on the 28th, in the midst of a furious storm, the most severe of the winter. That storm, which had been raging almost without cessation for three weeks, piling the snow in great banks along the fences, filling lanes full above the fence tops, and obliterating all evidences of roads or tracks in the open country, had been gradually increasing in severity until on the 26th, 27th, and 28th of January it had turned into a blizzard, culminating on the 28th in the worst day of the season. The hotel at Bosekop, a strong log building with a substantial stone foundation, in a sheltered spot, trembled under the furious blasts of wind and snow. At mid-day houses a block away could not be seen through the driving snow. All traffic was suspended in the street; and yet on the mountains, where the cold was much greater and the wind swept with the force of a hurricane, were four herds of reindeer, and between one and two hundred men, women, and children in open sleds, facing the blizzard as, on different roads and widely separated sections, they were centering into Bosekop. While anxious lest they should be detained by the storm and perhaps some of the children perish, I received a call from the mayor (landsman) of the village. Inquiring what were the



MEN EMPLOYED BY THE GOVERNMENT IN CONNECTION WITH THE LAPLAND REINDEER EXPEDITION.
Photograph by La Roche. (See pages 89, 105, and 106.)



WIVES AND CHILDREN OF THE MEN EMPLOYED IN CONNECTION WITH THE LAPLAND REINDEER EXPEDITION.
Photograph by La Roche. (See pages 89, 105, and 106.)

prospects of the Lapps getting through, he shook his head, saying that nothing could face that storm for any length of time and live. And I doubt whether any other race than the Lapp, that was cradled in the snow and inured from childhood to hardship, could have done so, or any other animal than the reindeer have brought them safely over the storm-swept and trackless mountains.

About noon, going to a window and with a knife scraping off the frost in order to get sight of a thermometer hanging outside, I saw faintly through the whirling snow a solitary reindeer coming up the street, and soon after could make out a sled with a man incased in ice and snow. It was Mr. Kjellmann, his great fur coat covered with snow and his face and whiskers incased in a mask of ice.

Toward evening a Lapp arrived, announcing that Mr. Mathis Rira, with a band of 90 deer, had arrived from Maci, and gone into camp in the mountains back of the village. And on the afternoon of January 31 we were cheered by the safe arrival of the other three bands. Driving out with reindeer teams 7 miles to the crossing of Alten River, we met Mr. Carl Suhr and Mr. Samuel Kemi, with 4 men and 114 head of deer, from Bautajok, 165 miles distant. They were sent into camp on the east side of Alten River. Returning to Bosekop, we were met by a messenger announcing that Mr. M. Kjeldsberg and Mr. Per Rist, from Kautokeino, with 44 Lapps and 252 head of deer, had arrived and gone into camp.

While we were rejoicing in their safe arrival another messenger came with the news that Mr. A. Paulsen, with 29 Lapps and 90 deer, from Karasjok, had also arrived and gone into camp outside of the village. The three parties, starting from places a hundred miles apart and journeying by different routes, had reached the rendezvous within a few hours of one another.

On February 1 the little village of Bosekop awoke from its Arctic night to unusual stir and activity as the Lapps and deer came pouring in long lines over the hill into the village, filling up Market Square. The hundreds of Lapps, in their bright-colored, picturesque national dress, those that were going away and those that had come to see them off, greeting old friends and meeting new ones, the unpacking of sleds and preparations for embarkation, all made a picture never to be forgotten. All was bustle and excitement. By night everything was ready for the arrival of the steamship, and the first part of the expedition—the purchase of reindeer, sleds, and harness, together with the securing of competent drivers—was an accomplished success. The greatness and extent of this success is heightened by the environment.

First. If we had not needed deer trained to harness we could have bought a whole herd, and thus secured over 500 head in one transaction; but needing only trained ones, they had to be picked up in small lots of three and four out of a herd—perhaps four from the first

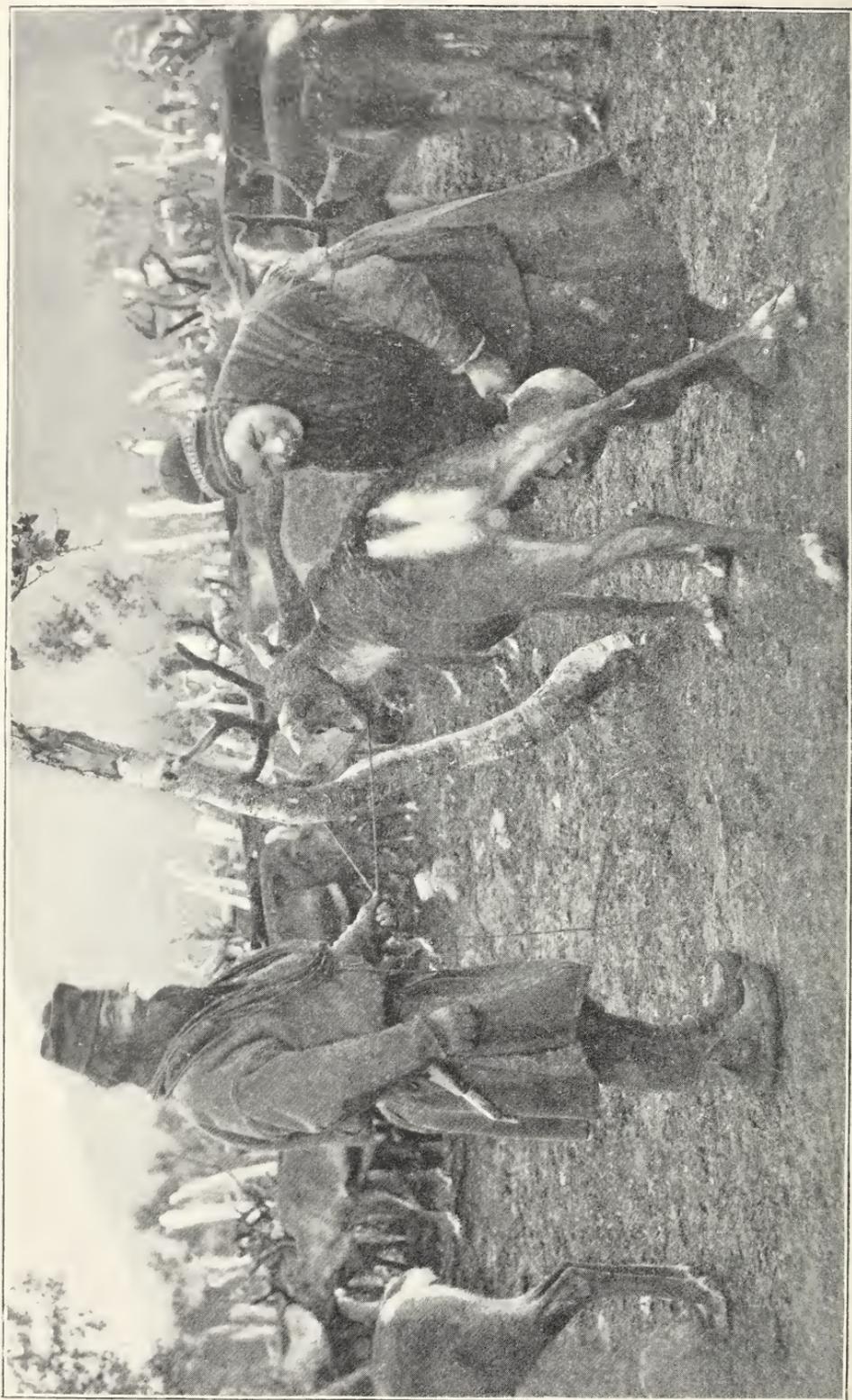
herd visited, then five or six out of the second herd, 15 or 20 miles away, and then two or three from a third herd located on an almost inaccessible mountain off the usual line of travel. The seven men that have been out buying have ranged from the ocean eastward across northern Norway to the edge of Russian Finland. This has aggregated 3,000 miles of reindeer travel.

Second. This 3,000 miles of reindeer sledding had been made in a region from 3 to 4 degrees of latitude north of the arctic circle and during the arctic night, when the sun does not appear above the horizon from November 18 to January 23; 3,000 miles of sledding through long reaches of unsettled forests, over storm-swept mountains, and along the edge of dizzy precipices in the darkness of night.

Third. This 3,000 miles of travel had been made in the middle of the arctic winter, when fearful storms are of frequent occurrence. The mountain passes crossed and recrossed during January are as difficult and dangerous as the Chilcat Pass of Alaska.

Fourth. The hindrance arising from heredity and the custom of centuries. If we had gone into wide-awake and intelligent New England and proposed to a laboring man to break up his home, settle his affairs, and start in two weeks with his family to travel in midwinter, in an open sled, from 100 to 200 miles to take a railroad to Alaska, he would have said to us "the time is too short." Much more, then, is the time considered too short when we come to the nonprogressive Lapps, whose ancestors have occupied the same country from the beginning of their history, whose young people have never been found among the emigrants flocking from all nations to America, who beyond all other nationalities have clung to their ancestral homes, and ask them to break up their homes, dispose of their property, settle their affairs, visit parents or other near relatives perhaps for the last time on earth, and be ready in two weeks to start for the end of the earth. And all this has been accomplished within a month from the time the appropriation was made by Congress.

In the meantime Lieut. D. B. Devore had chartered the transport steamer *Manitoban*, of the Allan Line, Glasgow. Sailing from Greenock, Scotland, January 16, she arrived at Trondhjem January 23 for the purpose of loading up the moss which had been gathered there for the use of the reindeer herd. A severe storm detained the vessel at Trondhjem until the 29th, when she sailed, reaching Bosekop on February 2. Learning that the steamship had arrived, I went on board and arrangements were quickly consummated for loading the Lapland reindeer. A large barge was taken over to the ship, upon which was built a platform, from which a gangway was erected to the ship. The reindeer were brought over from the shore to the barge in rowboats, and from the rowboats led up the gang plank directly into the ship. That the deer might be loaded more compactly and to prevent their being injured during the trip, their horns were sawed off



MILKING A REINDEER.



A LAPLANDER FAMILY LIVING IN A DIRT HUT.

within an inch of the flesh. During the first day 300 deer, 200 sleds, and considerable baled moss were loaded on the steamer. The work was pushed vigorously all day until 7 p. m., when the tired men refused to work longer, even for extra pay.

On the morning of February 3 work was resumed at 6.30 o'clock. The day was bitter cold, with a light wind blowing from the mountains. By 10 o'clock all the deer that were in the place had been sent off to the ship, but there was still a herd of 140 that had not come in from the mountains, where it was awaiting the arrival of the ship. Extra men were sent to assist in lassoing them, and as fast as they were brought to the barge their horns were sawed off and they were rushed aboard the ship. By 6 p. m. the deer were all on board, the balance of the sleds were sent aboard, and also the harness packed in large casks. The drivers and their families went on board during the evening. About midnight I removed from the hotel to the ship, and at 4 a. m. on Friday, February 4, the anchor was hoisted and we were off for New York.

The officers of the steamship *Manitoba* were Capt. Andrew E. Braes, Chief Officer James Buchanan, Second Officer Charles S. Cheeper, Third Officer Robert M. McMaster, Fourth Officer D. O. Hagan, Chief Engineer John Stett, Second Engineer Mr. Day, Surgeon Wolf. We had on board 539 reindeer that cost on an average \$10 each, 418 sleds at \$3.60 each, 511 sets of harness at \$2.50 each. There were also on board 43 men, 16 women, and 19 children, Lapps; 15 men, 3 women, and 7 children, Norwegians; and 10 men, Finns; making 78 Lapps, 25 Norwegians, and 10 Finns, or 113 emigrants. Of the women, 16 were married, 6 of them recently. Among the Lapp men was a Mr. Samuel Johannesen Balto, who accompanied Nansen in his famous trip across Greenland, for which he received a silver medal from Oscar II, King of Sweden and Norway. There was also in the company Johan Petter Stalogargo, a Finn, who has the distinction of being the northernmost mail carrier in the world, having for eight years carried the mail on his back to North Cape, Norway, traveling on skees (Norwegian snowshoes). Among the 68 men were 13 who had had experience in carrying the mail with reindeer teams across the mountains and canyons and plains of arctic Lapland. (For a detailed list of colonists see Appendix, pp. 105, 106.)

Mr. Kjellmann and myself were the only cabin passengers. Lieutenant Devore returned to the United States by way of Trondhjem and London. The first two days out we had a fair wind and smooth sea, but on February 8, when off the coast of Ireland, we encountered a heavy head wind, which lasted for nine days, increasing in violence from day to day until on February 15 it had reached the proportions of a gale. On the 14th one of the lifeboats was wrenched from the davits and so badly stove in on deck that it had to be broken up. Some of the 2-inch plank bolted together around the cattle pens on

the hurricane deck were wrenched apart and broken in pieces, and the 130 reindeer in pens on that deck were drenched with the seas that broke over them, and for nine days and nights they were not dry once.

On the 15th the ship's figurehead was torn from the iron prow and swept out to sea, and heavy iron stanchions broken off, while sea after sea swept the deck. The danger of being washed overboard was so great that the men were not allowed on deck, and the reindeer were of necessity left without food. Toward evening, there being a lull in the storm, the deer were fed. Captain Braes, who has been at sea for forty-two years, and his first officer, twenty-four years, testify that in all their experience they never encountered anything worse. The deer proved to be good sea travelers, learning to balance themselves with the rolling of the ship, and to rest by lying down the same as if they had been on their native pasture. The loss of one deer by death out of 539 was a very small thing; that death, however, was not due to the sea voyage, but to injuries received in fighting. The same might have occurred if they had been running at large on land. Whenever during the journey we encountered a snowstorm, the snow was carefully gathered from the deck by the Lapps in pails and carried to the pens for the use of the reindeer, and they ate it with avidity. The men were organized into gangs, with overseers, for the feeding and care of the deer upon the trip.

On February 27 our eyes were gladdened with the welcome sight of land off New England, and that evening we dropped anchor inside of Sandy Hook.

February 28, after the visit of the quarantine officers, the ship slowly steamed up to the cattle yards of the Pennsylvania Railroad in Jersey City, where the deer were immediately unloaded from the ship, and the following day loaded into cars that were waiting for them, and on the afternoon of March 1, in two sections, were started across the continent by way of the Pennsylvania, Wisconsin Central, and Great Northern railways to Seattle. At New York they were placed in charge of Lieutenant Devore, U. S. A., who accompanied them to Seattle, while I returned to Washington, D. C.

On the 10th of March I was detailed by the Commissioner of Education, under instructions from the Secretary of the Interior, to proceed to the Pacific coast and resume charge of the Lapps and the reindeer, which would be turned over to me by the officers of the Army in charge.

Leaving Washington on March 11, I overtook the reindeer herd at Seattle, Wash., on the 16th of March, where they were being loaded under direction of Maj. W. R. Abercrombie, U. S. A., on the bark *Seminole*. They had been in Seattle nine days while awaiting transportation to Alaska. To save the moss brought over from Lapland for the sea voyage from Seattle to Alaska the deer were taken to one

of the city parks of Seattle and placed on grass. As the result of the change of diet four died while there and eight others after leaving Seattle.

In accordance with a telegram from the Secretary of War to Brigadier-General Merriam of March 16, 1898, 40 of the Lapps, mainly women and children, were left at the Fort Townsend Barracks, to be sent later by sea to Alaska via the Aleutian Islands and St. Michael. Mr. Regnor Dahl, a Norwegian, acquainted with the Lapp language, was placed in charge of this colony, subject to the authority of Capt. William W. Robinson, jr., U. S. A. Mrs. Dahl was made matron and Dr. F. H. Gambell physician. The remaining 57 men, in charge of Mr. William A. Kjellmann, superintendent of the Government reindeer stations in Alaska, were sent on the *Seminole* with the reindeer, to drive the portion of the herd turned over by the Secretary of War to the Secretary of the Interior overland from Haines Mission into the Yukon Valley. As sickness in his family would prevent Mr. Kjellmann from accompanying the party longer than to see them started from Haines Mission inland, Mr. Hedley E. Redmeyer was appointed superintendent of the overland party. As some of the Lapps were sick with measles, Dr. Hermon F. Titus, a physician of Seattle, was employed to accompany the party as far as Haines, Alaska, at an expense of \$300.

The *Seminole* left Seattle at midnight, March 10, in tow of the steam tug *Sea Lion*, and reached Haines Mission on the afternoon of the 27th. There were no barges at that place, and Captain Brainard, U. S. A., went to Dyea and returned with a barge, upon which the reindeer, sleds, and moss were landed on the beach during the 28th. Brigadier-General Merriam, commanding the Department of the Columbia, had sent instructions to the commanding officer at Dyea for tents and camping outfit, to be in readiness for the Lapp drivers who were expected to proceed from Haines, on the coast, to Circle City, on the Yukon, a distance of over 1,000 miles, the longer portion of the way through an unknown region. Owing to the irregularity and unreliability of the mails in that section, the instructions, which were mailed at Skagway, did not reach the officer at Dyea, 6 miles distant, for nearly a week after they were due. This compelled the holding of the reindeer at Haines Mission for a week, and as there was no moss at that point they were fed on dried alfalfa (the only forage to be had), which weakened them.

On March 29, two days after the arrival of the herd at Haines, an unusually early thaw set in, taking the ice out of the Chilkat River, rendering the trail to the moss fields on the head waters of the Thleheena (a tributary of the Chilkat River), where it was proposed to pasture the reindeer preparatory to driving them across the country to the Yukon Valley, for the time being impracticable. If transportation had been ready at Seattle as expected, thus saving the nine days' time lost at that point, and the necessary provisions for the Lapp

drivers had been waiting their arrival at Haines, the reindeer herd could have been driven without any great loss either to Dawson or Circle City. But the above delays were disastrous. With unsuitable food, the deer grew weaker and weaker, until, on March 31, three days after the arrival, they commenced dying. On March 31, two died; April 1, four; April 2, three; and April 4, three.

On the 3d of April the Lapp attendants found some moss above timber line on a mountain on the peninsula 12 miles south of Haines, and on April 15 the whole herd was driven to pasturage, reaching it on the 6th, ten days after their arrival at Haines. Eight died on the road, being five on the 5th and three on the 6th.

On the 4th of April, in accordance with instructions from the Secretary of War to the commanding general of the Department of the Columbia, Capt. B. Eldridge, U. S. A., divided the herd, reserving 200 head for the War Department, and turning over 326 head to the Interior Department. The herd, however, was by this time in such a weakened condition that it was not separated, and later on so many died that the 140 head that survived were left in charge of the Interior Department.

After driving the herd to temporary pasturage on the mountain the Lapps returned to Haines and proceeded to make up their rations and supplies—which had at length been received—into bundles of the proper size for packing, it being the plan to remove the camp from the beach 50 miles inland to the commencement of the moss pastures of the interior.

On the 8th of April, with a portion of the supplies loaded into native canoes and the balance strapped to the backs of the Lapps, they started up the Chilkat River, reaching Klukwan village at 11 o'clock Saturday night, where they remained in camp over Easter Sunday. On Monday morning, the 11th, they took up their march for the mouth of the Thleheena River, where the supplies were left in a temporary camp.

As many of the reindeer had died and more were dying from the effects of the starvation at Haines, it was concluded to be unnecessary to send as many men as was originally intended to Circle City. Accordingly 15 were detailed for the overland trip and left with their supplies at the camp on the Thleheena. The remainder returned with Mr. Kjellmann down the Chilkat River to Haines, arriving at noon on the 12th. They were immediately sent to round-up the herd and start them for the Chilkat Valley to the moss pasturage at the head of Thleheena River.

While on pasture 1 deer died on the 7th of April, 6 each on the 8th and 9th, and 5 on the 10th. As the small pasture that had been found soon gave out, the death rate increased to 10 on the 11th.

On the 12th the herd was gathered together and an effort made to drive them slowly north up the Chilkat Valley toward the abundant and permanent moss fields at the head of the river. They were so

weak, however, that many lagged behind, and the herd became scattered along the 12 miles between the camp and Haines.

On the 13th the strongest deer reached camp opposite Haines, and Mr. Kjellmann received instructions from Captain Eldridge and Captain Abercrombie to keep the whole herd there until it should be determined whether any portion of the herd was in condition to accompany the military expeditions. Accordingly they were detained at that point until the 15th, during which days 14 died on the 12th, 22 on the 13th, 26 on the 14th, 28 on the 15th, and 34 on the 16th. On the night of the 15th the military expeditions sailed from Haines for Prince William Sound without waiting further on the reindeer.

Permission being granted, on the 16th of April the Lapps commenced collecting the herd and driving them northward. During the day a second band of deer overtook the first. Uniting the bands, the Lapps, with the second band, were returned to gather up more of the stragglers.

On the morning of the 18th, while en route, a little moss was found on a steep mountain side. Camp was immediately made and all hands sent to pack the moss down in sacks to the deer.

On the 19th Mr. Kjellmann returned to the peninsula south of Haines, where the balance of the herd left on the 15th had remained. Finding that they were still too weak to be moved, he took a few of the stronger ones and on the 20th he overtook the first party on the Chilkat River. Joining the two parts of the herd into one, he sent back to the peninsula five men to care for the weak animals that had been left there and to try to move them slowly to the top of the mountain. The balance of the men were employed in cutting trees, gathering moss from the trees and rocks and carrying it to the main herd on the Chilkat River.

On the 24th, taking an Indian guide and 30 of the men, each pulling a sled loaded with rations, Mr. Kjellmann proceeded up the Thleheena Valley. He found the snow soft and deep and the weather rainy, so that very slow progress was made.

On the 27th he reached the moss fields on the north summit of the Chilkat or Thleheena Pass, about 50 miles from Haines. The moss was in great abundance and of the best quality. The rations were soon unloaded, the sleds reloaded with moss, and a start was made to return to the herd. When about 10 miles from the summit the moss was unloaded and a man sent down the valley to start the herd at once to the moss, the sleds returning to the summit for a second load. The men were now divided into two gangs, one drawing moss for the herd and the other pulling the sleds loaded with the rations for the men that were to make the overland journey.

On the 6th of May the 185 reindeer reached the north summit and were turned loose in the moss field to recover their strength. Forty-three deer were still left in the Chilkat Peninsula, making 228 alive at that date, out of 526 that were loaded at Haines.

The death roll from starvation was as follows:

Date.	Number.	Date.	Number.	Date.	Number.	Date.	Number.
Mar. 31.....	2	Apr. 10.....	5	Apr. 20.....	8	Apr. 30.....	2
Apr. 1.....	4	11.....	10	21.....	9	May 1.....	1
2.....	3	12.....	14	22.....	11	2.....	2
3.....	0	13.....	22	23.....	9	3.....	1
4.....	3	14.....	26	24.....	5	4.....	1
5.....	5	15.....	28	25.....	3	5.....	0
6.....	3	16.....	34	26.....	2	6.....	0
7.....	1	17.....	25	27.....	3		
8.....	6	18.....	28	28.....	1	Total ..	296
9.....	6	19.....	10	29.....	3		

As the herd would need to remain for some time at that point, and the care of the same was assumed by Mr. Redmeyer, Mr. Kjellmann, taking 43 of the men, returned to Haines, where he securely stored the sleds, and on the 15th of May embarked for Port Townsend, reaching that point on the evening of the 18th. Telegraphing to Vancouver Barracks for orders, he received instructions from Assistant Adjutant-General Davis to take his party to Fort Townsend, which he did, and left them in charge of Mr. Regnor Dahl.

After the departure of the men on the 8th of April for the Chilkat Pass, there being nothing further that I could do at that end of the line, I took boat on April 10 at Skagway, Alaska, reaching Seattle on the 15th, and Washington, D. C., on the 23d of April.

After the departure of Mr. Kjellmann from Mountain Camp, May 6, Mr. Redmeyer attempted to move the herd, but upon going 3 miles found they were too weak to travel any farther, when he again went into camp, which he named "Camp Pleasant," and where he remained until May 22. He then had 164 reindeer, which were all that had survived of the 185 that had reached Mountain Camp May 6; and of these a number were so weak that they could not digest the food, which was abundant around them. This still further reduced the number, until on September 1 there were 144 left, all of which, except three, had recovered their strength and health and were in good condition.

On May 22, Camp Pleasant, 53 miles from Haines, was left for the north. The snow was melting and was very soft, so that they could only travel at night when there was a crust. This necessitated so many delays that Mr. Redmeyer was forced to the conclusion that he would be unable to reach Circle City until late in the fall, and that the rations which he had with him would not suffice for the whole party for so long a time. He therefore again divided his men, sending 8 of them in charge of Mr. O. Paulsen south to Seattle to join the others at Fort Townsend and be sent by steamer around by sea to St. Michael. He retained 6 with himself. The overland party then consisted of Hedley E. Redmeyer, Per Johannessen Hatta, Per Nilsen Siri, Klemet Persen Boini, Anders Aslaksen Bahr, Hans Andersen Siri, Emil Kjeldberg.

On September 27 the herd had reached the neighborhood of Hutchie Valley, at which time there was probably sufficient snow to enable them to again use sleds, after which Mr. Redmeyer expected to make more rapid progress on their way to Circle City. At Circle City Mr. P. C. Richardson, the contractor for carrying the United States mails up and down the Yukon Valley, expected to purchase the deer and employ them for carrying the mail.

On May 17 I left Washington on my return to the Pacific coast to look after the transportation of the Lapps from Fort Townsend to the reindeer headquarters near Unalaklik, Alaska, reaching Seattle, Wash., June 3.

On the 26th of May, 1898, the Secretary of War advised the commanding general of subsistence, at Vancouver Barracks, Wash., that, under instructions from the Secretary of the Interior, I would take charge of the reindeer recently bought in Lapland and turned over to the Department of the Interior by the War Department, conduct them to Alaska, and receipt for transportation and supplies for the herders, and supervise the payment of the salaries of the latter from the relief fund through the War Department. Accordingly, upon my arrival in Seattle, my first attention was given to securing transportation for the Lapps and their supplies. There was so great a demand for vessels to carry the large number of miners wishing to go to Alaska, together with the unusual quantities of freight, necessitated by the large emigration, that much difficulty was encountered in securing transportation.

However, on the 7th of June, after receiving bids as low as \$9.75 per ton for freight on sailing vessels, an agreement was made with Mr. T. F. Townsley by which the rations for the Lapps were to be taken from Seattle to Unalaklik, Alaska, on the steamship *Del Norte*, at the rate of \$16 per ton, ship measurement, the usual rate for the same on well-established lines being from \$50 to \$60 per ton. Previous to signing the agreement I ascertained from the marine insurance agencies that the steamer was seaworthy. The steamer was to have sailed June 17, but, owing to various complications in which the Government was not interested, did not finally get away until June 28. It being necessary to take a few of the Lapps to a part of the coast of Alaska only reached by the *Del Norte*, 12 of them, including the 8 which had arrived from Haines Mission, were taken on board the steamer with a passage rate to Alaska of \$40 each.

On June 8 I received word from Mr. Dahl, in charge of the Lapps at Fort Townsend, accompanied by the certificate of the visiting physician, that the two children of Johan Olesen Pulk, who were among those who had been sick with the measles while crossing the Atlantic, had developed a scrofulous affection that would very soon necessitate their being kept separate from the rest of the party, thereby destroying the service that their parents might otherwise render the Government. Under the circumstances it seemed

best to return them to Lapland, and arrangements were made by which they started on the 10th of June on their return trip.

On the 12th of June, in compliance with telegraphic instructions from Major-General Merriam, dated June 5, 1898, Lieut. Henry C. Cabell, First Lieutenant, Fourteenth United States Infantry, shipped to me from Dyea, Alaska, per steamship *Utopia*, all the relief supplies remaining unsold. The larger portion of these supplies was used by Major-General Merriam in rationing the Lapps to the 31st of January, 1899, and the excess of butter and bacon from the relief supplies over and above the amount required for the rations was subsequently (July 8) by direction of the War Department turned over to the Interior Department for the use of the Lapps. The Dalton sleds belonging to the relief expedition not being needed were not received by me, but were retained by General Merriam.

Arrangements were made with the Seattle Hardware Company for shipping the remainder of the Lapps on the schooner *Louise J. Kenney*, at the rate of \$30 each for second-cabin passage, the Lapps furnishing their own provisions.

On the 21st of June the Laplanders were loaded on the schooner, when it was found that, unknown to myself, the purser had taken on board 35 miners, which overcrowded the vessel and rendered it liable to seizure by the United States authorities for disregard of the emigration laws.

Going over to Port Townsend from Seattle, I removed from the vessel 30 Lapps with 6 children, and brought them to Seattle, where I secured a \$30 rate (the same as paid on the *Kenney*) for them on the steamship *Navarro*, leaving 27 Lapps and 8 children on board of the schooner *Kenney*, which sailed on the evening of June 22 for Alaska.

On the *Navarro* Dr. C. P. Dolan was engaged as physician for the Lapps for the trip at a cost of \$43, and on the steamer *Del Norte* Dr. William J. Toussant was employed as physician for the Lapps during the trip at an expense of \$5. On the schooner *Louise J. Kenney* medical attention was given the Lapps by Dr. F. H. Gambell, their regular physician.

The steamship *Navarro* reached St. Michael on July 27. A day or two afterwards the same place was reached by the steamer *Del Norte*. The Lapps on the *Navarro* were transferred to the *Del Norte*, and on July 30 were landed at Unalaklik in the immediate vicinity of the reindeer station, the schooner *Louise J. Kenney*, with the first party of Lapps, having arrived on the 29th. Arrangements are in progress with the United States mail contractor for the Yukon Valley by which it is hoped the larger number of the Lapps will be distributed along the Yukon Valley as they shall be needed, for the purpose of carrying the United States mail.

NATURALIZATION OF THE LAPPS.

As an evidence of the purpose of the Norwegians and Lapps recently brought over from Lapland to become permanent citizens, the follow-

ing persons have taken out their first naturalization papers: Magnusi Kjeldsberg, Johan Eira, Wilhelm Basi, Lauritz Stephansen, Johan Hilmar Hansen, Karl Johan Sacariasen, Ole M. Rapp, Alfred Hermansen, Ole Olsen Bar, Jeremias Abrahamsen, Isak Johannesen Hatta, Isak Salamonsen Nakkila, Per Andersen, Samuel Johannesen Balto, Nils Persen Sara, Nils Klemetsen, Lauritz Larsen, Otto M. Leinan, Hans Samuelsen, Ole G. Berg, Thoralf Kjeldberg, Peder Berg, Ole Johansen Stenfjeld, Karl Ove Suhr, Japeth Lindeberg, Ole Krogh, and Johan Petter Stalogargo.

The Lapps are well satisfied with their new home, and promise to make a very valuable and important addition to the population of Alaska and the development of its resources.

In my estimation, next to the discovery of gold, the most important event, commercially, in the history of Alaska during this year is the importation of this colony of Lapps. Experience is rapidly demonstrating that the only possible efficient transportation service in Alaska must be through the use of reindeer, and this necessitates the trained and expert drivers of reindeer found among the civilized Lapps and Finns. The 68 men that were brought over by this expedition are all picked men and expect to be permanent settlers of Alaska. They hope ultimately to have herds of their own and raise and train reindeer to sell to the transportation companies. Their success will naturally attract others of their people and render permanent the establishment of the reindeer industry in Alaska.

In this connection I make acknowledgments of the assistance rendered in the movement of the Lapps and reindeer by Brig. Gen. Henry C. Merriam, U. S. A., commanding the Department of the Columbia; also to Capt. W. W. Robinson, jr., U. S. A., at Seattle; Capt. B. Eldridge, U. S. A.; Capt. D. L. Brainard, U. S. A.; Capt. William R. Abercrombie, U. S. A.; Lieut. W. S. Graves, U. S. A., and especially to my associate, Capt. D. B. Devore, U. S. A., who shared with me in the perplexities, difficulties, and hardships encountered in Lapland.

TRIP TO SIBERIA.

Having landed the Laplanders with their rations on the beach a mile and a half below the village of Unalaklik, the steamer *Del Norte* raised anchor and sailed for Golovin Bay on the evening of August 1. Entering the bay on the morning of the 2d about 8 o'clock, the steamer went aground. Here we remained for twenty-four hours. Taking a small boat, a visit was made to the village and Swede Mission Station, and arrangements were made for landing the supplies for the mission and reindeer stations, which was successfully accomplished that afternoon.

Getting afloat about midday on the 3d, a start was made for the Teller Reindeer Station, which was reached on the morning of the 4th. The station was visited and inspected and we pushed on to St. Lawrence Bay, Siberia, which was reached on the morning of the 6th.

Going ashore, I found that the station had been abandoned by the party in charge on the 3d of July. A conference was had with the natives and notice was sent to the owners of reindeer herds to drive their animals to the coast convenient for the ship. Then taking up anchor, we sailed out of St. Lawrence Bay around to the south side of South Cape. On Sunday, the floating ice coming in so thickly as to endanger the safety of the vessel, the captain shifted his anchorage inside of the bay. The following days were consumed in securing 100 reindeer which had been previously purchased by the party in charge, and 61 which were purchased on the spot.

Having secured all the deer that was possible at the time, and taken on board the furniture from the station, and placed the houses in charge of one of the natives, the ship sailed for Cape Prince of Wales, reaching there on the night of the 10th of August. The surf being too rough for landing the deer, the vessel continued on her course into Port Clarence, where they were landed on the 11th at Teller Reindeer Station and placed in charge of Frederik Larsen, a Lapp herder, who was directed to drive them across the country and turn them over to Mr. W. T. Lopp, in charge of the American Missionary Association Station at Cape Prince of Wales. These deer were for the purpose of returning, in part, those which had been previously borrowed from that station by the Government and sent overland to Point Barrow to be slaughtered for food for the whalers that were imprisoned in the ice and out of provisions. The Rev. T. L. Brevig, who was in charge of the buildings, being desirous of spending the winter in the States, the custody of the buildings was given to Dr. Brandon, a physician and miner who intended wintering at that place. Mr. Brevig and family coming on board of the steamer, we sailed on the night of the 12th for St. Lawrence Island, reaching there on the night of the 13th. The fog was so dense, however, that we were unable to find the village until the following morning.

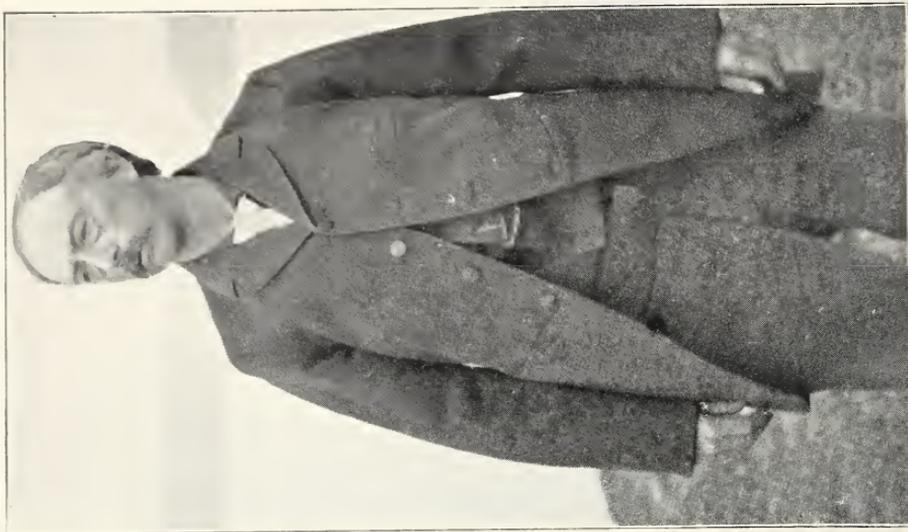
On the 14th Mr. W. F. Doty, who had agreed to take for one year the school previously taught by Mr. V. C. Gambell (who was lost at sea while returning to his station in May), together with his annual supplies, was landed on the beach, and in the evening the steamer sailed for Unalaklik, which was reached on the 16th. Two days were spent in unloading supplies and arranging the affairs of the Eaton Reindeer Station. On the night of the 18th the *Del Norte* sailed for St. Michael, reaching there early in the morning of the 19th. On the 21st I was able to go on board the steamer *Roanoke* and start for Seattle, reaching there August 30. Leaving next day on the railway, Washington was reached on the 6th of September, 1898, thus closing a trip of 31,801 miles since the 23d of December, 1897.

Very respectfully, yours,

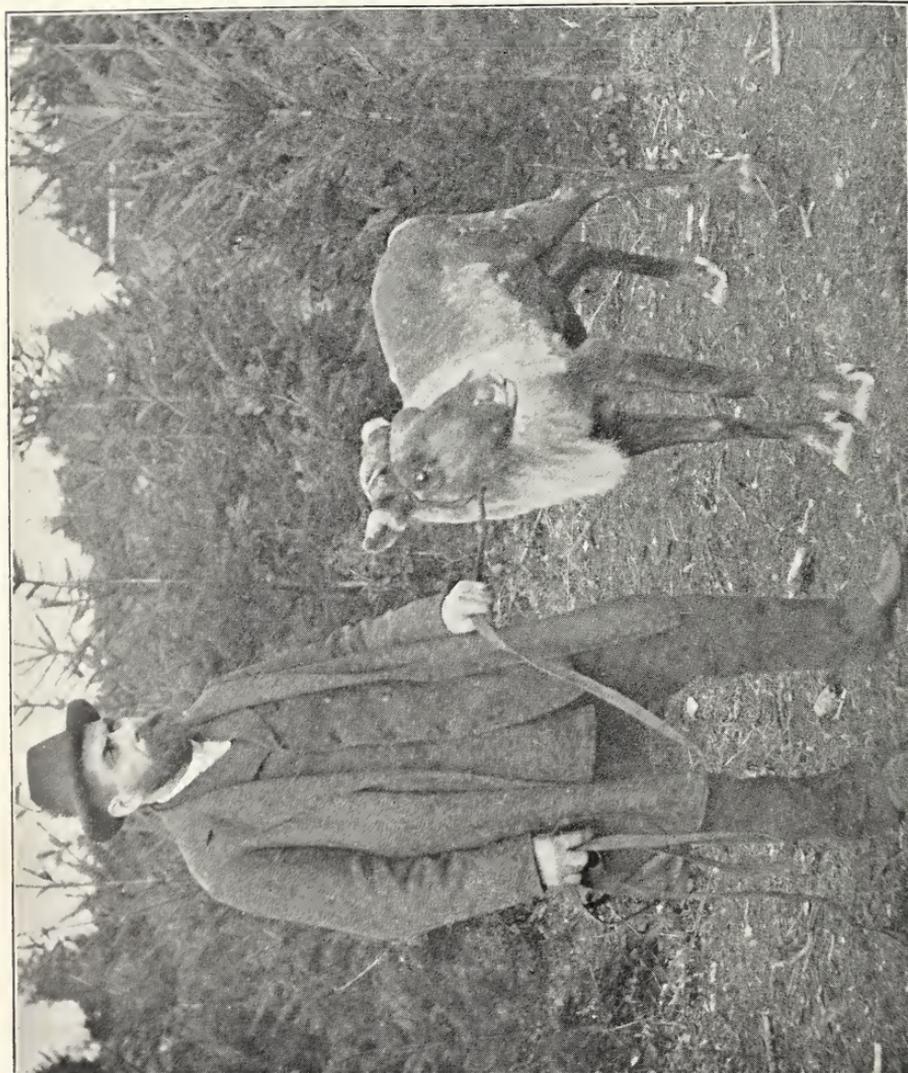
SHELDON JACKSON,

United States General Agent of Education in Alaska.

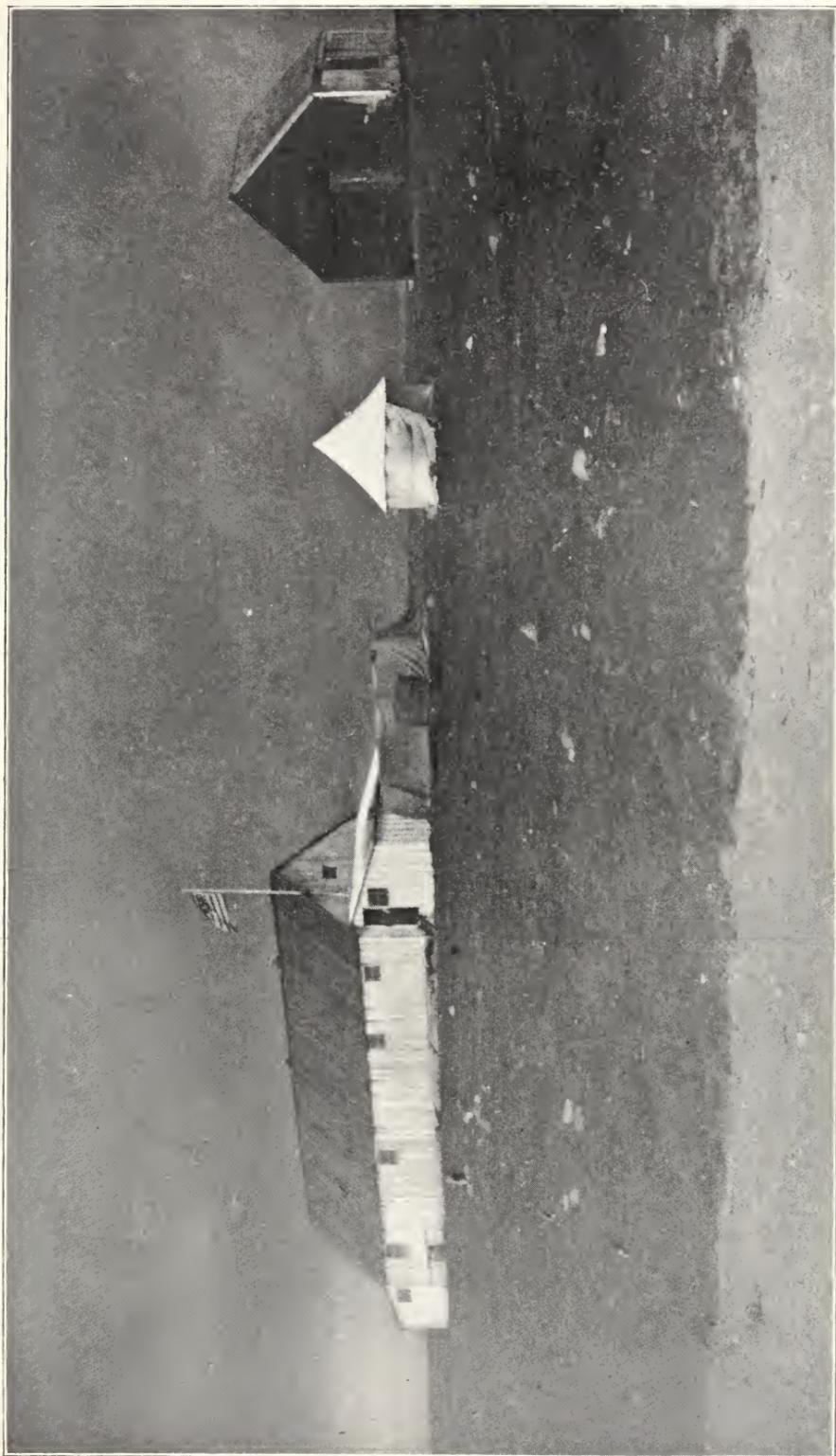
THE COMMISSIONER OF EDUCATION.



JOHN W. KELLY.
Photograph by C. Siem. (See page 14.)



WILLIAM A. KJELLMANN AND REINDEER. (DEHORNED.)
Photograph by La Roche. (See page 11.)



PURCHASING STATION, SAINT LAWRENCE BAY, SIBERIA.

Photograph by John W. Kelly. (See page 14.)



APPENDIX.

ANNUAL REPORT OF THE EATON REINDEER STATION FOR 1898.

By A. N. KITILSEN, M. D.

UNALAKLIK, ALASKA, *June 30, 1898.*

SIR: I have the honor to submit for your consideration the annual report of the United States reindeer stations in Alaska.

As usual, there was a large number of whaling and trading vessels at Port Clarence during the month of July.

Captain Tuttle, of the United States revenue cutter *Bear*, brought the first news of the great gold finds in the Klondike district. Had the Klondike been nearer, I am afraid the excitement would have carried me to the diggings. Two ignorant sailors on being informed by a companion that it was only 35 miles to the gold fields deserted their vessel and started on foot to the new Eldorado. They were two sorry looking specimens of humanity when they returned about ten days later.

The schooner *Volant*, our provision vessel, arrived at Port Clarence August 5. Such provisions as were needed at the Teller Station were discharged, while such goods on land as were not needed here were sent aboard to be taken to Unalaklik.

Having decided to go with the vessel to Unalaklik, I was taken on board August 8. The *Volant* anchored outside of Golovin Bay August 12, and Rev. P. H. Anderson, a teacher for the Swedish Mission School, was taken ashore. August 13 the anchor was dropped about 5 miles southwest of Unalaklik. A storm was raging, which made it impossible for me to land. On August 16, although the storm was still quite severe, we sighted a boat coming toward us from the village. Rev. A. E. Karlson and some natives were in the boat. I went on shore with them and made preparation for the landing of our goods. The next day we had fine weather and the work of discharging began. I employed all the natives in the village; still it took three days to get the goods on shore. It is a very bad harbor. A vessel can not come nearer the shore than 3 miles on account of shallow water. The same number of hands that were employed here would have discharged the same amount of goods at Teller Station in half a day. If the reindeer station is to be permanently located here, it

will be absolutely necessary to purchase a steam launch and two barges.

After housing the goods, I went with the *Volant* to St. Michael, where I awaited your arrival from the Klondike.

September 15 I went aboard the revenue cutter *Bear* and was taken back to Port Clarence.

During the summer of 1897 the deer herd was kept on the south side of Port Clarence, in the vicinity of Point Riley. The herd was moved quite frequently, as that is the only preventive we know of for that dread disease "hoof rot," as some call it. For my part, I believe it to be anthrax. I know of no medicament that is of any benefit. Prophylaxis in the shape of frequent moves during the summer months helps materially. The number that have succumbed to the disease this last year is small compared to previous years.

In my opinion, the very best place to keep the deer during the summer months is a region where they could roam about over a large area. There is such a point about 35 miles north of Unalaklik, and we intend, if possible, to keep the deer there during the coming summer.

Frederick Larsen was kept at the herd as overseer and John Tornensis and Mikkel Nakkila were kept at the station repairing and making sleds and harness. We were severely handicapped on account of lack of suitable sled material.

October 4 I started for Cape Prince of Wales in a whaleboat, and arrived there the next day. Mr. Lopp and the herders were not willing to sell their surplus male deer at \$15 per head, and as that was the highest price you authorized me to pay, I could not get them.

October 25 two Lapps, an Eskimo, and myself started for the Cape Nome herd for the purpose of bringing back with me the deer in that herd belonging to the Government. We arrived at Charley's place October 27, and after a good deal of work succeeded in getting the deer we wanted. We picked out 52 males, 65 females, and 3 fawns for the Government, and 4 females and 3 fawns for Tatpan, of Golovin Bay. Returned to Port Clarence November 1.

One Lapp and myself went out to the herd November 8 and drove it across Grantly Harbor and placed it about 4 miles southeast of Teller Station, where the herders were ordered to build a pen.

November 17 two Lapps, an Eskimo, and myself started for Cape Prince of Wales for the purpose of bringing back with me 3 deer belonging to the Government, and also some of their surplus sled deer that I was to dispose of when a market was found. We returned to Port Clarence November 28, bringing with us the 3 deer belonging to the Government and 49 deer belonging to the Cape Prince of Wales herd.

November 23 some dogs, presumably from Nook, attacked the herd and killed one deer. This happened at night when no one was with

the herd. When the ground is covered with snow no night watchers are kept, as the deer do not roam about much then, and if any have strayed they are easily tracked. By making a circuit in the morning around the place where the deer have been during the night it is easily ascertained whether any have strayed or not.

December 3rd; deer were marked and given to Tautook, Sekeoglook, and Wocksock. Tautook received 20 females, 3 bulls, and 2 sled deer, besides the 12 females, 10 fawns, and 4 sled deer previously belonging to him. Sekeoglook received 20 females, 3 bulls, and 2 sled deer, besides the 6 females, 4 fawns, 1 sled deer, and 1 bull previously belonging to him. Wocksock received 20 females, 2 bulls, and 3 sled deer, besides the 3 females, 2 fawns, and 1 sled deer previously belonging to him. Nine lame females belonging to the Government herd were also left.

Packing up was now the order of the day. Mr. W. T. Lopp asked permission to send one of his herders with me, which was granted, and as a consequence Keok arrived a few days before we started. Rev. T. L. Brevig will turn over to you the accounts of Teller Station.

December 16 we bade good-bye to the good people of Port Clarence and turned our faces toward Unalaklik. We went to the deer camp, which was then situated about 6 miles southeast of Teller Station. The following day the herders lassoed the sled deer we were to use. Mr. Brevig came out to the camp during the day. Ojello was quite sick; consequently we decided that it was better to leave him at Port Clarence.

December 19 we broke camp. There were 17 of us, counting women and children. We had 40 sleds. The party was divided into two sections. One part had the herd to look after and the other part had the caravan to take care of. We went along very nicely where traveling was easy, but had more or less trouble when deep snow or woods were encountered. The herd was always kept ahead of the caravan. At night we simply tied an extra piece of rope to the halter of the sled deer and let them run loose in the herd. They were very easily caught in the morning. We had fair traveling as far as Golovin Bay, where we arrived December 29. I had a pleasant visit at Golovin Bay. I then first heard of the detachment of soldiers at St. Michael, and that the surrounding country had been declared a military reservation.

Tatpan wanted to go with us to Unalaklik, but I could not take him, as Mr. Hultberg and Ohitson were away at the time. We then transferred the 7 deer taken from Charley for Tatpan to the Golovin herd. The deer belonging to Martin Jacobson were lassoed and taken into the Government herd.

January 3, 1898, we left Golovin Bay, and on January 5 encountered snow so deep and soft that we were unable to get any farther. The moss was so thickly covered with snow that the deer could not get at it. We talked the situation over and decided to send the deer back

toward Golovin Bay, where grazing ground could be found. Three herders, with one tent, were sent back with the deer, while the rest of the party pitched tents and remained where the deep snow was encountered. Two herders were sent forward on skees to ascertain the condition of the snow and the prospects for deer food. They returned two days later, reporting deep and soft snow as far as they had been, and also that deer food was not to be found north of Norton Bay. I did not like the delay, but it could not be helped. We thought that a storm, accompanied with cold weather, would improve the traveling so that we would be able to proceed.

January 10 Lieutenant Jarvis and Dr. Call, of the United States Revenue-Cutter Service, arrived at our camp and told us about the distress at Point Barrow. We had suspected something of the kind, as very few vessels had been seen going down through the Straits in the fall. Lieutenant Jarvis made me acquainted with his mission and handed me an order from the commanding officer at Fort St. Michael requesting me to give them (Jarvis and Call) such deer as they might need on their trip to Point Barrow.

I asked if he had any instructions for me from Washington. He thought so, but was unable to find any. After considering the matter I told them that it was useless to give them deer, because they would be unable to do anything with them, but that we would take them to Port Clarence. As our provisions were getting low, I decided to send Ahlook, Nuclak, Sandlock, and Kakiernak to Unalaklik with the dog sleds that had brought the Point Barrow party. I then made arrangements with the Swedish Mission to furnish me such goods as we might need, and I promised to replace the same in the spring.

December 12 Mikkil, Lieutenant Jarvis, Dr. Call, Keok, and myself started for Port Clarence, where we arrived a week later. After another week's rest we started back toward Golovin Bay, where we arrived February 9. There I was told that Lieutenant Bertholf, of the Point Barrow relief expedition, had come a few days before my return and induced Fredrik Larsen to take five deer and sleds to help him across to Kotzebue Sound with some provisions. The route was such, he had claimed, that it was impossible to get the goods across with dog teams.

The road was now easy, but two of the herders were quite sick, consequently we had to wait for them to get well. A few days later soft weather set in again and traveling was as bad as before I went to Port Clarence.

February 16 a copy of a telegram from Hon. W. T. Harris to W. A. Kjellmann was brought to me by a native coming from St. Michael. This telegram asked Kjellmann to get together all the sled deer in Alaska, together with sled harness and drivers, and report to the commanding officer at Fort St. Michael. Besides this, there was an

order from Colonel Randall requesting me to report with sleds and deer, also drivers, at Fort St. Michael with the least possible delay. I then made an attempt to go ahead, but turned back, as it was plain that a large number if not all of the deer would perish before food could be reached.

March 6 Lient. E. S. Walker arrived from Fort St. Michael with orders to proceed without delay. I informed him how matters were, and advised him to wait for cold weather to go on, but that all risks would have to be taken by him. He decided to wait for a change of weather.

March 13 cold weather at last set in, and we started for Unalaklik, where we arrived March 21.

Fredrik Larsen returned from Kotzebue Sound a few days before we left Golovin Bay. The Point Barrow party took his deer, consequently he was compelled to walk back.

Lieutenant Walker had orders to go up the Yukon River. I turned over to him deer, sleds, and two drivers. They soon encountered deep and soft snow, consequently were compelled to return. A good place for the herd was found about 4 miles up the Unalaklik River, and the hauling of lumber, etc., up to the building place was commenced. March 28 Lieutenant Walker, one Lapp, and myself started for St. Michael, where we arrived in due time. We were given a kind reception and thoroughly enjoyed being in the civilized world again. Colonel Randall had asked for 25 deer and 25 sleds, with drivers, to come and stay at St. Michael, in case there should be any use for them. When I returned to Unalaklik I started the deer, sleds, and drivers asked for toward St. Michael, but received a message in the evening of the day the deer were sent stating that the deer were not wanted; so I sent the messenger after them.

When all the building material had been hauled up the river the herd was moved to the foot of the mountains southeast of Unalaklik, where a good fawning place was found.

On account of the lateness of the season and the amount of extra labor we had been called upon to perform I made arrangements with Stephen Ivanhoff to bring 300 logs to the building place.

April 12 we went back to Golovin Bay with provisions to replace those we had received during the winter, and returned to Unalaklik May 5.

Three prairie fires raged in this vicinity last summer. These fires completely destroy the moss. It is a punishable offense in Lapland to set fire to moss, whether on purpose or through negligence. I thought something could also be done here, consequently I started for St. Michael to consult Colonel Randall. He immediately saw the need of action in the matter, and sent Lieutenant Walker back with me to inform the natives that setting fire to moss is a crime. Lieu-

tenant Walker having orders to go through to Golovin Bay, I sent Johan Tornensis with him as driver.

About the middle of May the deer were moved down to the Unalaklik River just opposite the proposed building site, where they stayed about one month. The mosquitoes drove the deer and people toward the seashore, about 2 miles south of Unalaklik, where they are at present located.

We have this spring ear-marked all the deer and fawns. A record of number is on file at the station.

The fawning season passed off successfully. Out of 213 fawns born 18 were lost. Stillborn fawns have been included in the 18 lost. Nine deer have been butchered during the year, 6 have come to their death through accidental injuries, 1 was killed by dogs, and 17 succumbed to the hoof disease. Taking it all in all, I think that is comparatively a favorable showing. Nine lame females belonging to the Government were left at Port Clarence and 9 sled deer were left at Golovin Bay. Five sled deer were taken by Lieutenant Jarvis of the Point Barrow relief expedition.

The apprentices have all been obedient and contented during the whole year. The Lapps have also acquitted themselves favorably.

I was very glad to hear that the deer taken to Point Barrow were not needed for food. Being composed mostly of females, that whole coast will soon be supplied with deer.

There are some recommendations I would have offered, but as I am not to be connected with the Government any longer, I will not introduce them.

I wish to thank Rev. T. L. Brevig and Rev. A. C. Karlsen for assistance given me during the year.

Hoping that the reindeer enterprise will continue to prosper, which I am positive it will, if properly handled, I am,

Your obedient servant,

A. N. KITILSEN, M. D.,
Acting Superintendent.

Dr. SHELDON JACKSON,
General Agent of Education for Alaska.

Table showing ownership of deer in herd to-day.

	Grown deer.		Fawns.		Total.
	Male.	Female.	Male.	Female.	
Eaton Station	211	235	94	83	623
Elektoona	2	5		4	11
Martin Jacobson	3	13	4	6	26
Ahlook	3	4	3	1	11
Total					671

Account of deer lost during the year 1897-98.

Date.	Males.	Females.	How lost.	Date.	Males.	Females.	How lost.
1897.				1897.			
July 14	1	-----	Internal disease.	Dec. 8	-----	1	Internal disease.
15	1	-----	Accidental injury.	9	1	-----	Butchered.
22	-----	1	Foot disease.	10	-----	1	Killed fighting.
23	-----	1	Internal disease.	13	-----	1	Butchered.
24	1	-----	Accidental injury.	14	1	-----	Internal disease.
Aug. 17	-----	1	Internal disease.				
26	1	-----	Do.	1898.			
Sept. 13	1	-----	Foot disease.	Jan. 1	1	-----	Butchered.
19	1	-----	Butchered.	11	1	-----	Do.
25	2	-----	Internal disease.	Feb. 26	-----	1	Accidental injury.
Oct. 1	-----	1	Foot disease.	Mar. 10	-----	1	Internal disease.
12	-----	1	Accidental injury.	18	-----	1	Butchered.
18	-----	1	Internal disease.	Apr. 6	2	-----	Do.
20	-----	-----	Do.	June 25	1	-----	Internal disease.
27	1	-----	Do.	27	1	-----	Accidental injury.
Nov. 2	2	-----	Butchered.	Total.	21	12	
23	1	-----	Killed by dogs.				

List of Eskimos at station.

Wocksock, wife, and three children.
 Sekeoglook and wife.
 Tautook, wife, and one child.
 Ojello, wife, and two children.

Ahlook, wife, and child.
 Dunnak, wife, and one child.
 Elektroona.
 Martin Jacobson.

List of Laplanders at the station.

Mikkel J. Nakkila.
 Beret Anne Nakkila.
 Johan S. Tornensis.
 Margrette Tornensis.

Beret Tornensis.
 Inger Anne Tornensis.
 Fredrik Larsen and wife.

ANNUAL REPORT OF TELLER REINDEER STATION FOR 1898.

By Rev. T. L. BREVIG.

TELLER REINDEER STATION,
Port Clarence, June 30, 1898.

HONORED SIR: In accordance with your instructions, I acted as Dr. Kittilsen's assistant until December 16, 1897, when he left for Eaton Station with the herd and employees of the station, and I assumed control of Teller Reindeer Station. The school was kept open as much as possible, but at times other duties made it necessary to close for a whole day or part of a day; however, at least two hours were generally spent in the schoolhouse. As fuel was scarce and the schoolhouse cold, after Christmas school was kept in the room formerly used by the Kjellmanns as a kitchen. The three Eskimo families left here have been with the herd all winter, during the coldest months at winter quarters on the Ahgeepuk, and during fawning season, on the north side of the big lake, as the deep snow on the south side made it difficult to get at the moss. At present they are encamped near Nook.

Wocksock's oldest boy attended school during the winter. Tautook left here January to go with the United States relief expedition to Point Barrow. He took two of his own sled deer along, which he disposed of to the expedition. He returned to the station May 7, having, with Mr. W. T. Lopp, made the return trip in thirty days, of which twenty were actual traveling days with a dog team.

When the herd left here, eight sick females were left, and about January 10 a female deer strayed into the herd and was, by Wocksock and Sekeoglook, recognized as belonging to the Government. Four have had fawns that are living, making the total number belonging to the Government in this herd 11.

The apprentices have lost the following deer:

Tautook: One female, internal disease; 2 males, 1 disabled by being bitten by natives' dogs in January and killed in May because wounds would not heal; 1 deer in May from internal disease. Total, 3 grown deer; also 3 fawns died.

Sekeoglook: One male deer; 2 fawns.



Coogidlore.

Tumasock.

Lablok.
Esanetuck.

Anneeabuck.

Kokleluk.

ESKIMO CHILDREN FROM BERING STRAITS. BROUGHT TO CARLISLE INDIAN SCHOOL BY DR. SHELDON JACKSON, OCTOBER, 1897.



Tumasock.

Coogandore,
Esanetuck.

Kokleuk,
Ameebuck.

Lablok.

THE SAME CHILDREN OCTOBER 1898



Woeksock: One male, scared by dogs and broke away from the driver, got entangled in some brush and strangled; 1 fawn.

Total belonging to apprentices: Males, 4; females, 1; fawns, 6. Belonging to the Government, males, 2; females, 2; total in herd, 15.

From the reports brought in, 80 fawns have been born. I have not been able to ascertain how many belong to each apprentice, but, as each knows his own deer, they have an understanding among themselves.

On January 21, 1898 (the coldest day we had, -38°), Lieut. D. Jarvis arrived on his trip to Point Barrow, in company with Dr. A. N. Kittilsen and Mikkel Nakkila, with deer from Golovin Bay, and left for Cape Prince of Wales with a dog team on the 23d of January. Dr. Call arrived with Charley's herd on the 27th of January and left at noon the 29th of January. Dr. Kittilsen and Mikkel Nakkila visited us from January 21 to January 29, 1898. Mr. John Dexter made a trading visit from March 22 to March 25, 1898. Mr. D. Libby visited his old friends from May 5 to 7, 1898, and renewed acquaintances made in the years 1866 and 1867, when he was here in the service of the American-Russian Telegraph Company (Western Union). Mr. N. O. Hultberg, from Golovin Bay, accompanied him.

Mr. T. Kjellmann, W. A. Kjellmann's father, who has been confined to his bed for a year by rheumatism, died May 27, 1898, and was buried May 29.

Ojello complained of not being well when the herd was removed, and, as he was just recovering from an attack of pneumonia, it was on consultation deemed best to let him remain at this station, as if he should have a relapse on the trip he would retard the movements of the whole party and have small chance of recovery. With his wife and daughter he has occupied the rooms vacated by Johan Tornensis.

The summer catch of salmon was small, owing to the attraction of the ships during the best fishing season; contrary weather also interfered to a small degree. As the tomed, an important source of winter food for the natives, failed entirely to appear here after cold weather set in and has not come yet, scarcity of food has been prevailing. Seal have been caught by those that took the trouble to go far enough out to get them, and two families that diligently fished during the summer have had fish all winter. About January 1 the staple food fish was consumed, and if this station had not been here many would have suffered and probably starved. Work was given to those needing assistance and willing to work; those able to work but not willing to do so received no help. Only in two instances did I find it necessary to render considerable assistance without any return in work. Occasional help was given to many. All assistance was rendered from my private supplies. The demands of the United States Relief Expedition and the need of the natives exhausted the supplies of wheat flour, rye flour, corn meal, and shorts early in April, leaving only beans and

navy bread. When the supply of navy bread was very small only beans were traded. To my knowledge no actual suffering existed in this country, but many were hard pinched. One family complained of having eaten only seal thong for two days, although I had in that time given them over 100 biscuits in pay for work. Where there was no station where white man's food could be procured the natives suffered. Grouse were abundant in the Eaton River region during the winter and to some extent relieved the want.

The health of the employees has been good, and the number has been increased in Sekeoglook's family by a little girl.

Respectfully,

T. L. BREVIG.

Dr. SHELDON JACKSON,

General Agent of Education for Alaska.

Reindeer report from December 6, 1897, to July 1, 1898.

Date.	Reindeer.	DR.				CR.			
		Females.	Males.	Fawns.	Total.	Females.	Males.	Fawns.	Total.
1897. Dec. 6	Government.....					8			8
	Tautook.....					34	9	10	53
	Sekeoglook.....					26	7	4	37
	Wocksock.....					23	6	2	31
	Total.....					91	22	16	129
1898. Jan. 1	Deer.....					a 1			
Mar. 31	Government.....	2			2				
	Tautook, sold to relief expedition.....	1	3		4				
	Sekeoglook.....		1		1				
	Total.....	3	4		7	89	18	16	123
Apr. 1	Balance.....					89	18	16	
June 30	Tautook.....		1	3	4				29
	Wocksock.....		1	1	2				20
	Sekeoglook.....			2	2				23
	Government.....								4
	Total.....		2	6	8	89	16	92	197
July 1	Government.....					7		4	11
	Tautook.....					33	5	39	77
	Sekeoglook.....					26	6	27	59
	Wocksock.....					23	5	22	50
	Total.....					89	16	92	197

a Strayed into herd.

ANNUAL REPORT OF THE GOLOVIN BAY REINDEER STATION FOR 1898.

By N. O. HULTBERG.

GOLOVIN BAY, *July 1, 1898.*

SIR: I have the honor to report our herd to be in the very best condition. It has yielded an increase of 132 fawns, of which 1 was still-born and 3 died after being born, leaving at present date 128 alive. We have been practicing every branch belonging to reindeer industry, such as driving, breaking, milking, moving the herd, making harness, sleds, and pulks; all with the best success. Our herders are the same as were here last year, and are all worthy of the best commendation in every respect. We have experienced no difficulty or trouble whatever with the herd this year.

We have done as much traveling as circumstances permitted. Two sled deer were used in the relief expedition, which deer were not returned. The present number of deer in the herd is seen by the following table.

Respectfully,

N. O. HULTBERG.

Dr. SHELDON JACKSON.

Reindeer account.

Date.		Males.	Females.	Fawns.	Total.
1897.					
June 30	Total in herd	62	125	106	293
Dec. —	Brought by Government for Tatpan		4	3	7
	Total	62	129	109	300
	Taken by Government for Martin	3	9	5	17
	Remainder	59	120	104	283
	Died during the half year	4	1	9	14
	Remainder	55	119	95	269
1898.					
June 30	Number of old deer	107	160		267
	Born this year			132	132
	Total	107	160	132	399
	Fawns died during calving season			4	4
	Total	107	160	118	395
	Belong to each individual:				
	Fort Adams and Golovin Bay	80	122	98	300
	Okitkon	7	8	7	22
	Tatpan	7	11	9	27
	Moses	13	17	12	42
	Constantine		2	2	4
	Total	107	160	128	395

TELLER REINDEER STATION LOG BOOK, 1897-98.

By T. L. BREVIG.

July 1, 1897: Clear, with a very strong northeast wind. The *Jeanette* and *Karluk* came over from the anchorage. Captain McGregor and wife and Captain Newth visited on shore. The fish party returned at 6 p. m. with 18 salmon, having spent the night at the deer camp. Dr. Kittilsen visited on board the *Karluk* in the evening. Provisions were issued to the Lapps.

July 2: Clear and calm. Mrs. McGregor spent the day on shore. The captains called in the afternoon. Dr. Kittilsen and the Brevigs had supper and spent the evening on board the *Karluk*.

July 3: Mrs. and Captain McGregor and Newth spent the forenoon on shore. The *Karluk* and *Alexander* left for the anchorage shortly after noon. The *Jeanette* tried to beat out with sails, but failed to make it, and anchored off toward Cape Riley. Ojello, Sekeoglook, and Wocksock came in after provisions, but could not leave again, as the high surf made it impossible to launch the boat. Very strong south-southwest wind in the afternoon.

July 4: Cloudy, with strong south-southwest wind. The flag was hoisted early in the morning and salutes fired in the evening.

July 5: Cloudy, with a little rain. Strong south-southwest wind. Preparations were made for a fishing trip up Eaton River.

July 6: Cloudy, with a little rain. Strong south-southwest wind.

July 7: Cloudy and rainy. Strong south-southwest wind. At 6 p. m. Johan, Mikkel and wife left for the fishing ground, taking Wocksock's mother and son and some of the provisions with them. Ojello, with the rest of the provisions, will follow when the wind abates. The *Bear* came in at 11 p. m.

July 8: Cloudy, rainy, and stormy.

July 9: Cloudy, with the south-southwest "perpetuum molilis" in full force. Early in the morning the *Bear* took on board all the arms and ammunition left at the station last year. Capt. F. Tuttle also landed a sheep, to be kept in the herd till in the fall, and left for the anchorage at 7 a. m.

July 10: Partly overcast and calm. Fredrik and Ahlook had come in from the herd during the night and reported 2 deer and 1 fawn

dead. They left again in the afternoon and took Ojello and his provisions along. Two vessels left the anchorage.

July 11: Clear, with a medium strong north wind. The *Narwhal* and *Beluga* came in and anchored outside the station. Several vessels left the anchorage. The fishing party returned with $3\frac{1}{2}$ barrels of salmon.

July 12: In the morning Mr. Bruce came in, and with Mrs. Bruce visited on shore. Captain Larson took supper on shore.

July 13: Partly overcast, with strong northwest wind. Dr. Kittilsen and Brevig called on Captain Tilton in the evening. Aslak and Ahlook came in from the herd.

July 14: Overcast, with strong northwest wind. Captain Larson took dinner on shore, and in the evening Dr. Kittilsen called on board Bruce's vessel. Ahlook went out to the herd in the evening. The *Thrasher* anchored outside Point Jackson in the morning.

July 15: Clear, with strong northwest to north wind. Captain Bodfish was on shore in the morning. The *H. D. Peters* had arrived during the night. The doctor went over to see if there was any mail. The *Bear* anchored at the spit at 5 p. m.

July 16: Light clouds, with strong south-southwest wind. The *Bear* came over to the station early in the morning. Dr. Kittilsen came over with them. After landing the Doctor, the *Bear* proceeded to the watering place beyond Cape Riley. Rumor states that two deserters are at the deer camp.

July 17: Light southwest wind; overcast, with a little rain. The *Bear* came in about noon and after a short stop went over to the anchorage. Dunnak went over in the *Bear* to see his father.

July 18: Partly overcast, with light west wind in the afternoon. Sunday service. Charley came over from the spit in the evening; also Dunnak and his father and family.

July 19: Partly overcast. At 12.30 p. m. Brevig, Johan, Per, and Dunnak went over to the spit in the whaleboat.

July 20: Clear, with light north wind. In the afternoon the *Bear* anchored outside the station and Brevig and party landed. Dr. Call and Lieutenant Cochran called on shore during the afternoon. Dr. Kittilsen spent the evening on board the *Bear*. Mikkel and Fredrik returned from the fishing ground and Aslak came in from the herd late in the evening.

July 21: Cloudy, with medium strong south wind. The *Bear* left at 11 a. m. for the anchorage. A three-masted schooner anchored at the spit at 6 p. m. Many Kings Islanders and Diomedes are encamped on the beach.

July 22: Partly overcast, with a strong northwest wind. The *Volant* came in after dinner, landed Brevig's provisions, and proceeded to the sand spit again. The *Narwhal* and *Thrasher* anchored outside the station.

July 23: Cloudy, with very strong northwest wind. The *Thrasher* went over to the anchorage. Captain Tilton visited on shore in the afternoon. Mathis had a fainting spell in the evening, but soon recovered. The first snow appeared on the mountains in the morning.

July 24: Strong northwest wind and cloudy in the forenoon. Clearing, with lighter wind in the afternoon. At 4 a. m. the *Narwhal* steamed over to the anchorage. Dr. Kittilsen went along to see if the *Jeanie*, which had arrived, had brought any mail. Aslak and Per went out to the herd early in the morning. Fredrik and the Doctor returned after dinner, having received one letter each. The *Bear*, *Balena*, and *Volant* left the anchorage.

July 25: Clear, with light west wind until evening, when a strong southwest wind set in. Dr. and Mrs. Marsh, the missionaries for Point Barrow, called at the station in the afternoon. Fredrik went to the herd.

July 26: Cloudy, with strong southwest wind. The goods to be sent to Unalaklik were packed and marked.

July 27: Clear, with light east wind in the forenoon and west wind in the afternoon. Continued packing and marking of goods for Unalaklik. The herd was moved beyond Cape Riley.

July 28: Overcast, with some rain. Strong south-southwest wind all day.

July 29: Overcast and raining all day, with strong south-southwest wind. Brevig issued rations to the Lapps.

July 30: Clear, with light, variable winds. Per, Aslak, Tautook and wife, Ojello and wife, and Electoona came in for the monthly rations. Johan and Dunnak brought grass for shoe filling. Letters were received from Mr. Lopp.

July 31: Clear in the forenoon, overcast in the afternoon. Aslak reported 3 fawns and 2 deer dead from internal disease and hurts received in lassoing. The herders left with their provisions at 10 a. m.

August 1: Overcast, with light southwest wind. Services in the afternoon.

August 2: Cloudy, with misty rain. Strong southwest wind. Brevig and Dunnak cleaned the store. Johan and Mikkel boxed up some seal oil to take to Unalaklik.

August 3: Overcast, with light, variable winds. Fredrik and Ahlook came in from the herd, reporting all well. Some of the goods to be shipped to Unalaklik were brought down to the beach.

August 4: Cloudy and raining all the afternoon; strong northeast wind during the night. During the afternoon two famished strangers arrived and were fed and housed. A door was put into the main entrance.

August 5: Cloudy, with rain during the forenoon. At 6.30 p. m. the *Volant* anchored outside the station, and Captain Hanson, Rev. and

Mrs. Hanna, Mr. Woods, and Miss Alice came on shore. Rev. Hanna and wife are returning to the States. At 8 p. m. the *Volant* began discharging cargo for the station and receiving cargo for Unalaklik. At 2 a. m. she was through. All the goods were pushed up to the station. Per, Electoona, and Sekeoglook came in from the herd to help.

August 6: Cloudy and raining, with a strong south-southwest wind. The surf was too high to launch a boat. Dr. Kittilsen and Brevig worked checking off goods until 4.30 a. m., rested till 6.30 a. m., and finished the work during the forenoon.

August 7: Cloudy and rain all day and night, with a strong south-southwest wind.

August 8: Medium strong south-southwest wind, with rain all day and night. In the morning the Doctor and Brevig boarded the *Volant* and settled the freight matter. Dr. Kittilsen left for Unalaklik. The two strangers were also on board when she left.

August 9: Clear and calm. The *Volant* was seen moving about around the spit all day, disappearing at 7 p. m. Two boat crews were paid off. Johan, Mikkel, Mathis, and Aslak went after wood in the whaleboat.

August 10: Clear, with a light northeast wind. Per, Electoona, and Sekeoglook went to the herd. Johan and Mikkel went after the canoe to bring it home. Some trading was done and cleaning up around the station.

August 11: Clear, with very light northeast wind. Johan, Mikkel, and Mathis returned with the canoe at 6 p. m., and report fish scarce on the fishing ground. Fixing up accounts has been the order of the day.

August 12: Cloudy, with some rain. Medium strong south wind. Some fish and oil were bought.

August 13: Overcast, with heavy rain all night and forenoon. Strong south-southwest wind, abating toward evening.

August 14: Strong southwest wind, with rain all night and day.

August 15: Ditto. The last of the hull of the *Meyer* went on the beach during the storm.

August 16: Clear, with strong northwest wind. Wood was brought by natives.

August 17: Clear, with medium strong south-southeast to southwest wind. Fredrik and Sandlock came in from the herd in the evening, reporting 1 fawn dead from internal disease and 3 deer slightly troubled with the hoof disease.

August 18: Clear, with light, variable winds. Window lights were put in where broken and the kitchen pipe fixed in T. Kjellmann's room.

August 19: Fair, with light southeast to west wind. Fredrik and Sandlock left for the herd in the morning. Johan and Mikkel took

away the small building added to the lean-to. Brevig painted the door to the main entrance. All the Lapps went hunting in the afternoon.

August 20: Overcast, with strong west wind. A leak in the roof was fixed and the extra pipe holes on the wing were blocked up.

August 21: Cloudy, with strong southwest wind. The pipe in Brevig's kitchen was fixed and the old store fixed up and cleaned out.

August 22: Cloudy, with a very strong northwest wind. Services in the forenoon.

August 23: Partly overcast, with very strong north-northeast wind. The roof on the lean-to was fixed and some painting done around the eaves.

August 24: Fair, with a gale from north-northeast. Wood was brought in the whaleboat. Two canoes arrived from the cape bringing letters from Mr. Lopp. Considerable fish was traded.

August 25: Fair, with light west wind in the afternoon. Four cape canoes arrived, and at 6 p. m. Miner Bruce's vessel anchored outside the station and took on board some of the lumber left on the beach. Captain Larson was on shore in the evening.

August 26: Light southwest wind. Bruce transacted some business with the natives during the day. Mr. Bryan visited at the station. After supper Mr. and Mrs. Brevig called on board. Per, Fredrik, Elektoona, and Ojello came in from the herd, reporting 1 fawn dead and 3 deer sick.

August 27: Clear, with light northeast wind. Mr. Bruce left in the morning; Elektoona and Ojello left for the herd with provisions at noon. The Lapps were out hunting. In the evening two trading canoes came in, and a brisk trade followed in deer legs.

August 28: A fair day, with strong north-northwest wind in the afternoon. Johan, Mikkel, and Fredrik brought home the whaleboat from the herd. Considerable trading was done in the morning.

August 29: A clear, very nice day. Services in the forenoon. Samuel Kemi's infant daughter was baptized "Inger Maria." Light northeast wind. The visiting canoes left for the fishing ground in the forenoon.

August 30: Clear, nice day, with very light east wind. Dagny Brevig is a little sick. Preparations for leaving for Lapland are indulged in.

August 31: Overcast; in the afternoon calm. Johan, Mikkel, and Fredrik went out hunting. Continued packing.

September 1: Overcast, with light southeast to east wind and light rain in the afternoon. Continued packing.

September 2: Overcast and calm, with light rain. The *Bear* looked for in vain.

September 3: Clear, with variable winds. At 10 a. m. Brevig left for the herd in the whaleboat, with Mikkel as master, Johan, Per, and Mathis as crew, and Mrs. Brevig and daughter, Mrs. Nakkila, and

Brevig's native girl as cabin passengers. At the herd all was well. Six deer were sick, but could follow the herd. The party returned via Nook at 9 p. m. a little cold. Mrs. Nakkila suffered some from seasickness.

September 4: Clear and calm. Letters arrived from Mr. Lopp. A brisk trade with Kings Island and Diomedes people for deer legs, deerskins, etc. Tautook and wife and Ahlook came in from the herd.

September 5: Partly overcast. Sunday school in the afternoon. A light frost during the night.

September 6: Fredrik, Ahlook, and Tautook and wife went to the herd at noon. Overcast and stormy from northeast to east. Considerable fish traded.

September 7: Cloudy and raining; a strong gale from northeast during the night, abating at noon and changing to southwest.

September 8: Partly overcast, with variable wind.

September 9: Overcast, with a gale from the north all night and day. The coal was carried in.

September 10: Overcast, with a strong north to northwest wind and snow flurries.

September 11: Overcast, with a northwest gale. During the night Fredrik, Wocksock, Sekeoglook and wife, and Mrs. Ojello had come in walking. Natives had ferried them across at Nook. Fredrik reports 2 deer very sick. Rations were issued to the herders.

September 12: Overcast, with light northwest wind. Snow covered the ground in the morning. Mikkel, Johan, Mathis, and Dunnak left for the camp with the herders and their provisions.

September 13: Overcast, with light east wind. In the afternoon the whaleboat returned. The skin of a male deer that had died lately was brought in; one more is very sick. Considerable fish was traded.

September 14: Clear, with medium strong east wind, growing stronger.

September 15: Clear, with a strong northeast wind. Very quiet. The *Bear's* nonarrival is filling many breasts with visions of another winter in Alaska.

September 16: Cloudy, with strong north wind. Johan and Fredrik went out hunting. Samuel, Mathis, Aslak, and Dunnak brought wood.

September 17: Cloudy, with medium strong north wind. Johan, Mikkel, Per, and Fredrik brought wood. Dunnak built a fish rack. Aslak and Mathis gathered "shoe grass."

September 18: Partly overcast, calm. Samuel, Mathis, Aslak, and Dunnak brought wood, and Johan, Fredrik, Per, and Mikkel gathered "shoe grass." Late in the evening the *Bear* anchored out in the bay and W. A. Kjellmann and Dr. Kittilsen came on shore.

September 19: Overcast and calm. Dr. Jackson spent the day on shore settling accounts. During the afternoon Capt. F. Tuttle and

several of the officers of the *Bear* called at the station. A deer was killed by order of Dr. Sheldon Jackson to procure a specimen for the Omaha Exposition.

September 20: Partly overcast, with light northwest wind. Dr. S. Jackson came on shore in the morning, and about noon Mr. W. A. Kjellmann, Aslak, Somby and family, Samuel J. Kemi and family, Mathis Eira and family, and Per Rist boarded the *Bear* to go back to Lapland. Dr. Jackson also took five girls and one boy with him to the Carlisle School. The *Bear* left shortly after dinner.

September 21: Overcast, with medium strong northwest wind. Some trading done.

September 22: Clear, with light northeast wind. Letters arrived from Mr. Lopp. In the afternoon Johan, Mikkel, and Dr. Kittilsen went up into the lakes.

September 23: Clear, with occasional snow flurries, light, variable winds. Many canoes left in the morning. One canoe arrived from the cape with letters from Mr. Lopp with requisitions for supplies for his herders. Dunnak repaired the storehouse.

September 24: Partly overcast and calm. Dunnak commenced repairing sleds. Some trading done.

September 25: Overcast and calm, snowing and thawing all day. At noon Wocksock, Tautook and wife, and Sandlock came in from the herd for their provisions and reported 2 male deer dead from internal diseases. Moss is laid up.

September 26: Partly overcast, thawing a little. The herders left in the afternoon. At 4 p. m. Charley arrived.

September 27: Partly overcast. Dunnak repaired sleds. Two boat loads of wood were brought in.

September 28: Overcast, with strong northeast wind. In the afternoon Charley sold 12 deer to the station. The doctor and party returned in the evening.

September 29: Clear, with very strong northeast wind, and cold. Johan and Mikkel started making sleds.

September 30: Clear and nice, with light northeast wind. Charley left in the morning. Several fishing canoes came in. T. Kjellmann moved into Kummuk's house.

October 1: Clear, with a medium east strong wind. Fredrik and Elektoona came in from the herd late last night, reporting 1 old female deer dead from the foot disease. Elektoona is sick from diarrhea. Th. Kjellmann was moved into Kummuk's old cabin in the evening.

October 2: Clear, with a medium strong east wind. Fredrik and Elektoona left for the camp at noon. All hands are busy making and fixing sleds and preparing the house for winter.

October 3: Clear, with northeast to east wind. Th. Kjellmann received the sacrament in the afternoon.

October 4: Clear, with strong northeast to north wind. At 8 a. m. Dr. Kittilsen, Mrs. Brevig, Mikkel, Dunnak, and Tautook left for Cape Prince of Wales in the whaleboat. Some wood was bought.

October 5: Clear, with strong north-northeast wind.

October 6: Clear, with strong northeast wind. Double windows were put in. Johan is making sleds.

October 7: Partly overcast, with very strong north-northeast wind. Sled making.

October 8: Overcast, with light east to northeast wind. Some snow had fallen during the night; raining in the evening.

October 9: Overcast, with very light east wind. Raining hard all day.

October 10: Overcast, with light north wind. At 6 p. m. the Doctor and party arrived from the cape, having left there yesterday at noon.

October 11: Overcast, with a medium strong north wind. Dunnak and Tautook left for the herd in the whaleboat.

October 12: Overcast, with light rain in the afternoon. At noon Fredrik, Dunnak, Ahlook, Elektoona, Nootahk, and Ahgelena came in from the herd. In the evening Fredrik and Ahgelena, and Ahlook and Nootahk were married, and a "spread" given them in the superintendent's office. One fawn was reported dead from the loss of a hoof some time ago.

October 13: Overcast and raining nearly all day. A light north wind in the evening. At noon Fredrik and wife, Ahlook and wife, and Elektoona left for the herd with part of the month's rations.

October 14: Sleet and snow, with a strong north wind in the evening.

October 15: Snow flurries, with strong northwest wind. At 4.30 p. m. Wocksock, Tautook, Sekeoglook and wife came in from the herd with both boats, having started yesterday.

October 16: Overcast, with medium strong northwest wind. In the morning Dr. Kittilsen, Johan, Mikkel, and Dunnak left for Point Spencer to get sled material. At noon Wocksock, Tautook, and Sekeoglook left for the herd with their food.

October 17: Clear, with light southeast wind in the afternoon.

October 18: Overcast, with strong north wind. The Doctor and party returned at 11 a. m.

October 19: Overcast, with strong north wind and snow flurries. Sled making all over. The Doctor started in making a sled.

October 20: Overcast, with strong north wind and snow flurries.

October 21: Overcast; calm, with a little snow. A thin layer of ice had formed on the bay, but was broken up by a light north wind in the evening. Fredrik and Ahlook came in from the herd with deer, having crossed Grantley Harbor on the ice.

October 22: Overcast and snowing all day, with a brisk north wind. Fredrik and Ahlook left for the herd in the morning. The Doctor finished his sled in the afternoon.

October 23: Clear, with a light east wind.

October 24: Overcast, with light east to north wind.

October 25: Overcast, with light northeast wind and snow flurries. Late last night Ahlook, Sekeoglook, and Elektoona came in with 5

deer, and this morning at 10 a. m. the Doctor, Mikkel, and Johan left for the herd on the way to Charley's place to get the deer in his herd that belong to the Government. Tautook will go with them from the herd. The three herders went back with them.

October 26: Overcast, with medium strong east wind.

October 27: Clear, with strong east wind during the night, medium during the day. Early in the morning the mother of the twins now with Bruce died.

October 28: Clear, with strong north-northeast wind, very strong in the evening. At 7 p. m. Fredrik and Sandlock came in with the carcass of a male deer that was hurt in training and killed the 27th. They also brought the skin of a bull that had died from the foot disease.

October 29: Clear, with a gale from north-northeast all night and day. Rations were issued to the Lapps.

October 30: Overcast, with medium strong north wind. Fredrik and Sandlock left for the herd at 10 a. m. A young man who had sometimes attended school died in the farther village during the night.

October 31: Overcast, with medium strong northwest wind. Some sickness prevails among the natives.

November 1: Overcast, with light east wind. Three sleds came down from the lakes with whitefish to trade.

November 2: Clear, with light east to northeast wind. In the afternoon the Doctor and party returned with Ahlook and Wocksock to take the deer back. The herd from Charley's is now with the main herd.

November 3: Cloudy, with very strong north-northeast to north wind; cold and blustering.

November 4: Cloudy, with strong northeast wind during the night and forenoon; calm in the afternoon. Snowing all day.

November 5: Cloudy, with light southeast to southwest wind; a gale during the night. The sick people in the village are getting better.

November 6: Cloudy, with light southeast to southwest wind; strong gale during the night. Dunnak's wife is sick.

November 7: Partly overcast, with light variable winds. Dunnak's wife is very sick. Late in the evening Ahlook came in from the herd to get the Doctor, as Ojello and Wocksock's wife were sick.

November 8: Partly overcast; very light northeast wind. At noon Dunnak's wife died. Dunnak's father arrived at dark. At 6 p. m. the Doctor arrived, having moved the herd across the ice to the north side of Grantley Harbor. Sekeoglook came in.

November 9: Partly overcast, with light northeast wind. A coffin was made and the body put in it to-day. A picket fence is being made to put around the grave. Elektoona came in from the herd reporting all well. The bay was frozen over this morning.

November 10: Strong northeast wind. Clear. Dunnak's wife was

buried in the morning. The coffin was placed about a foot above ground with a fence around it. The Doctor is finishing a new sled.

November 11: Overcast. Johan and Brevig left for the winter camp at 10 a. m., and arrived there at 9 p. m. through a heavy snowstorm. The next day was so bad, raining and snowing, that they did not venture to return, but spent the day in camp.

November 13: Clear and calm. Johan and Brevig arrived at 3.30 p. m., having left the camp at 7.30 a. m. Dr. Kittilsen issued rations to the native herders. Ojello and Sekeoglook are at the station under the Doctor's care. The herders' wives are making tents for the winter's trip with the herd to Unalaklik. The storm yesterday had broken up the ice on the bay.

November 14: Cloudy, with strong southeast to southwest wind; mild.

November 15: Cloudy, calm, mild. Tent making the order of the day.

November 16: Overcast, with slush and mist; coughing is the rule.

November 17: Cloudy, with snow flurries. In the evening the Doctor, Johan, Mikkell, Tautook, and Ahlook left for Cape Prince of Wales with a herd of deer to get the deer from the mission herd that belonged to Charley and Kummuk and had been bought by the station. Charley arrived just after the Doctor had left. Fredrik went back to the herd.

November 18: Clear, with a very light northeast wind. Ahlook came back at noon, claiming to be too sick to go to the cape. The tents are about ready.

November 19: Overcast and snowing. Elektoona came in from the herd sick. Ahlook went out to the herd.

November 20: Cloudy, with a strong southeast wind; rain and sleet. Some fish were traded. The sick are the same.

November 21: Strong southeast wind, with rain all night and day. The bay is nearly clear of ice. Sekeoglook and Tautook's wife and Wooksock's mother left for the herd in the morning.

November 22: Overcast, with rain and sleet all day. The sick are the same. It seems that a relative of la grippe is making a professional call.

November 23: Clear, with a medium strong east-northeast wind. The ice is loose from the shore. Charley left in the morning, having sold 2 deer.

November 24: Fair, with strong east to northeast wind. The bay is about cleared of ice. Fredrik and Wooksock came in from the herd, reporting 1 sled deer killed by stray dogs Monday night. Elektoona had left the station last night, and is now stopping in an Eskimo house. Samuel's dog was shot, as he was seen among the pack that killed the deer.

November 25: Overcast, with a gale from east-northeast all night

and day. The sick are getting better. The day was observed by hoisting the flag and eating a good dinner.

November 26: Cloudy and mild, with strong east wind. The Lapps received their rations and some fish was traded.

November 27: Clear and calm. Two sleds arrived from the lakes.

November 28: Clear and calm until in the afternoon, when a strong north-northeast wind cleared the bay from ice. Some natives brought in the small boat from Cape Riley.

November 29: Clear, with a strong north-northeast gale all night and day. The Doctor and party returned with the deer at 6.30 p. m. Bad weather had made the outward trip last one week. The return trip was made in two days.

November 30: Clear, with light northeast to east wind. Tautook went out to the herd and came back in the evening. Fredrik was in after fish.

December 1: Clear, with a light east wind. At dusk the Doctor, Johan, Mikkel, Dunnak, Mrs. Wocksock, and two sons went out to the herd to divide the herd to be given to Wocksock, Tautook, and Sekeoglook from the main herd. Four sleds arrived from the cape.

December 2: Clear, with a northeast gale all night and day. Tautook was in and got clothing to go to Ahgeopuk. Some deerskins were traded.

December 3: Partly overcast, with strong north-northeast wind. Early in the morning Brevig went out to the herd to help tally the deer divided off. Each apprentice was loaned 25 deer, making, with the deer earned as herders, for Wocksock 31, Sekeoglook 37, and Tautook 51, a total of 119 deer; 8 disabled female deer that were unable to make the long trip with the main herd were left. Brevig, the Doctor, Johan, and Mikkel returned to the station at 4 p. m.

December 4: Calm, partly overcast. Johan and Mikkel went up toward the mountains after harness wood.

December 5: Partly overcast, with strong northeast wind. A deer was reported dead some days ago. The Lapps had supper with Brevig.

December 6: Clear, with strong northwest wind.

December 7: Overcast, with strong north wind and light snow all day. Charley's brother came in late last night.

December 8: Cloudy, with a strong north wind; snowing and drifting. Tautook came in from the winter camp, reporting 1 of the station deer dead from internal disease.

December 9: Clear and calm. Fredrik received six weeks' rations. Dunnak cut his hand, so he can not work to-day. All hands are busy making harnesses. Three of Mr. Lopp's herders arrived at dusk with 5 deer. Keok is going to Eaton Station with the herd to practice driving. Fredrik left for the herd.

December 10: Overcast and mild. Fredrik came in with the car-

case of a deer that had broken its leg running and been butchered. Th. Kjellmann bought the carcass. One fawn had died.

December 11: Clear, with light northeast wind. Two months' rations were issued to the natives, and a general bustle of preparation is going on.

December 12: Overcast, with an east-northeast gale and blizzard.

December 13: Overcast, with southeast wind; heavy snow during the night. Ojello and family were sent to the herd ready for the trip. All hands are busy preparing for the journey to Unalaklik. Open spaces between the floes of ice on the bay.

December 14: Overcast and mild, with light south-southeast to south wind. In the morning Mr. Lopp's two herders left for home. Continued packing of sleds and preparing for the start.

December 15: Fredrik and Ahlook came in with deer and took loaded sleds out to the camp. Dunnak, Elektoona, and Keok left for the camp with their belongings.

December 16: Overcast, with gusts of wind from northeast. At 3 p. m. the emigrants left for the camp, intending to leave there on Friday for the new station at Unalaklik, and solitude reigns where "Sami Gela" (Lapp language) held court before.

December 17: Overcast, with southeast to east wind. Brevig went out to the herd with some papers needed; also to see if anything was needed out there. On consultation it was found best to leave Ojello, wife, and child at the station, as he had complained of being sick and unable to do any walking. It was feared that he would get worse and be an incumbrance on the rest. Two deer died recently from injuries received in the herd.

December 18: Overcast, with strong east to southwest wind all day and night. Some snow falling. Ahlook brought in Ojello, wife, and child, who were put in the house vacated by Johan. Th. Kjellmann's servant left him; scarcity of food was given as the cause. The bay still open in spots.

December 19: Calm and foggy; very mild. A long, lonesome day.

December 20: Clear in the afternoon, with medium strong north wind and some drifting. Colder; -5° at dark.

December 21: Clear, calm, cold; -8° to -10° .

December 22: Ditto.

December 23: Ditto. Food is becoming scarce, as the tomcod fishing is a failure.

December 24: Ditto. Some nuts, fruit, and knickknacks were given to the children in the schoolhouse.

December 25: Strong north wind; clear and cold. Drifting some. Very quiet.

December 26: Cloudy, calm, cold.

December 27: Clear, with strong north wind and drifting.

December 28: Clear, calm, cold; -20° to -23° .

December 29: Overcast, with light east wind; —20° to —25°.

December 30: Overcast and mild; snow during the night.

December 31: Cloudy, calm, mild; +10° to +22°. Good-bye 1897!

January 1, 1898: Cloudy, calm, and mild. Rumor of the theft of a saw, an ax, and sleeping bag from the camp of the moving party is freely circulated, giving the names of three parties as the culprits. A man and wife were in, telling about something they had seen sailing toward the sky with two men in it, describing the balloon.

January 2: Overcast and calm. Snowing during the night.

January 3: Partly overcast and calm; growing colder.

January 4: Overcast, with a little snow, and light southeast wind. At 4 p. m. Tautook and Sekeoglook came in with ten loads of moss. They reported a Government female deer dead from internal disease and swollen feet.

January 5: Partly overcast and mild.

January 6: North-northeast gale during the night and forenoon. Overcast, with a little snow; calm in the afternoon. Tautook and Sekeoglook left for the herd in the evening with their provisions.

January 7: Clear in the afternoon; strong northeast wind with some drifting.

January 8: A northeast gale during the night and day. Several natives have left for the sealing ground.

January 9. Partly overcast with a heavy northeast gale all night and day.

January 10: Partly overcast, with strong northwest wind with some snow. Natives complain of heavy snow to travel in. Letters arrived from Mr. Lopp in the morning.

January 11: Clear and cold. Medium strong northeast wind. A few seals are reported shot.

January 12: Clear; light northeast wind. Wocksock and eldest son, Sekeoglook and wife came in at 8 p. m. Wocksock reports one female belonging to the Government strayed into the herd a few days ago, probably a deserter from the main herd.

January 13: Clear, with a medium strong northeast wind. The herders left in the morning.

January 14: Clear and cold, with medium strong northeast wind; —24°.

January 15: Clear and cold; —25°. The first seal was brought in to-day. Medium strong northeast wind.

January 16: Ditto; another seal.

January 17: Partly overcast, with strong northwest wind; —25° all day. Letters arrived from Dr. Kittilsen, dated December 21, 1897. A native said he had seen a male deer with a bell on up near the upper village on the Ko vee rock, but had not traced it.

January 18: Partly overcast, with a gale from the north; —26° to —30°. Two sleds left for up the lakes.

January 19: Overcast, with very light north wind; -15° to -25° .

January 20: Calm, clear, cold; -25° to -31° .

January 21: Clear, calm, cold; -35° to -38° . At 11.30 a. m. Lieut. D. H. Jarvis, Dr. Kittilsen, and Mikkel arrived. Lieutenant Jarvis is on the way to Point Barrow to relieve the wrecked seamen at that place. The Cape Nome herd is following, in charge of Dr. Call, and he will take the cape herd also. He will proceed from here with dogs to Cape Prince of Wales, to make arrangements with Mr. Lopp.

January 22: Strong east to southeast wind; cold, but growing milder. Lieut. Jarvis had made all preparations for an early start, but the natives would not go in the storm.

January 23: Variable winds; -20° to -7° . Lieutenant Jarvis left at 8 a. m. with 1 sled and 12 dogs with 2 natives.

January 24: Clear, with strong north wind and drifting; -26° to -18° . Mikkel is making a stove for the return trip.

January 25: Clear, calm, cold; -22° to -26° . Tautook came in from the herd with 3 deer and 2 sleds to take out 2 deer that the doctor will leave in this herd. Tautook reports one of the Government females very sick.

January 26: Clear, cold, calm. Kummak arrived with letters from Lieutenant Jarvis.

January 27: Lieutenant Jarvis having requested to take Tautook with him to Point Barrow, Tautook left for the herd to bring his family into the station; -31° to -15° ; clouding over in the evening. At 4 p. m. Dr. Call arrived with Charley's herd. A storm had scattered the deer, and he had had a severe trip.

January 28: Overcast, with gale from the northeast. Dr. Call made preparations to leave with the herd in the morning.

January 29: Cloudy and calm; mild. Dr. Call and party left with the herd shortly after noon, and Dr. Kittilsen and Mikkel left for Golovin Bay at 3 p. m.

January 30: Cloudy with southeast wind. Tautook and wife and Sekeglook arrived at noon. Tautook left for the cape at 2 p. m., but returned at dusk, as he had forgot his extra-heavy artega. Three sleds arrived from the cape with orders for barter goods from Lieut. D. Jarvis.

January 31: Overcast, with a gale from the south; snow and slush. Tautook left early in the morning. All day was occupied in filling orders from Lieutenant Jarvis, brought by Cape Prince of Wales natives. Some seals were bought.

February 1: Calm; foggy in the morning, snowing in the afternoon. Sekeglook left for the herd with 6 deer in the morning. Several orders were received from Lieutenant Jarvis.

February 2: Overcast with a strong north-northeast wind and drifting.

February 3: Calm, cloudy, with some snow. Rumors of distilling liquor by the Eskimos were in circulation late last night.

February 4: Cloudy, calm, mild; + 28°.

February 5: Clear, calm all day.

February 6: Overcast, with strong north wind, and drifting. Charley's brother, Kummuk, and the dog team from here that went up with the herd had arrived during the night with letters from Lieutenant Jarvis, telling that the herd would start from the deer camp February 3. Reports of distilling and of several parties being drunk in the village is circulating.

February 7: Overcast, with strong northwest wind, and drifting all day and night. Goods on Lieutenant Jarvis's order were delivered to Kummak, Akla, and Charley's brother. Wocksock and wife came in very hungry and cold, having been storm bound two days on the way with nothing to eat.

February 8: Overcast and storming from northwest; very cold.

February 9: Clear, calm, very cold; —26° to —30°. Charley's brother left for home with a load of flour. Several sleds arrived from the cape with orders and to trade.

February 10: Clear, cold, and calm, and swarming with cape natives with orders from Lieutenant Jarvis; —26° to —30°.

February 11: Clear and cold; —24° to —28°. Light north to north-northeast wind; only one sled from the cape.

February 12: Clear, calm, cold; —17° to —27°.

February 13: Ditto; everything.

February 14: Medium strong north to northwest wind, partly overcast; —14° to —21°.

February 15: Overcast, clearing in the evening. Light north wind; —21°.

February 16: Clear, with medium northeast wind; —21° to —31°.

February 17: Clear, calm, cold; —24° to —33°.

February 18: Clear, calm, and cold; —26° to —34°. Four sleds arrived from Kotzebue Sound with orders and letters from Lieutenant Jarvis, dated up to February 11. Some trading was done with them.

February 20: Clear, with light east wind. Akla, one of the most promising schoolboys, died in the morning. He was buried in a coffin with his Bible.

February 21: Clear, with light northeast wind. An old woman died in the village in the morning. Mary had arrived for her goods and prepared to leave in the morning.

February 22: Overcast, with strong east wind and snowing all day.

February 23: Overcast, mild and calm in the forenoon; clearing up, with a north wind and colder in the evening. Mary left in the morning.

February 24: Overcast, with strong north to northeast wind; cold, —18° to —20°.

February 25: Overcast, with strong southeast wind; —18° to —24°.

February 26: Cloudy, with light east wind and snowing; milder.

February 27: Clearing in the forenoon; -15° . Three sleds arrived from the cape with letters from Mrs. Lopp and news from the expedition.

February 28: Overcast, with strong southeast wind and drifting; mild.

March 1: Overcast, with a gale from south-southeast all night and day.

March 2: Clear and calm until evening, when a heavy gust of wind from southeast, lasting two hours, enlivened things.

March 3: Calm and nearly clear; very fine day.

March 4: Calm, cloudy, mild; $+27^{\circ}$ to $+36^{\circ}$.

March 5: Overcast, with light north wind; a little snow.

March 6: Overcast, with a gale from north-northeast; drifting; cold.

March 7: Cloudy, with a very strong gale from north-northeast during the night; drifting.

March 8: Cloudy, with a very strong north-northeast wind twenty-four hours.

March 9: Cloudy and snowing; a gale from the north. Blizzard.

March 10: Clearing in the evening, with a strong north wind.

March 11: Clear, with a gale from the northeast night and day; drifting badly. Wocksock came in from the herd, reporting all well. Letters arrived from Mrs. Lopp.

March 12: Clear in the morning; clouding over, with a northeast gale in the evening. Wocksock and son left for the herd.

March 13: Clear, with a light northwest wind in the forenoon; a gale in the afternoon.

March 14: Overcast, with strong northeast wind. A trader from Mr. J. Dexter visits in the village.

March 15: Snowing, with strong north to north-northeast wind.

March 16: Snowing, with a medium strong south wind all day.

March 17: Calm and snowing.

March 18: Overcast; light westerly winds.

March 19: Overcast, with strong east wind. Sekeoglook came in for seal. Tautook's wife and brother went out to the herd to stay during fawning season.

March 20: Cloudy, snowing, mild, calm.

March 21: Partly overcast, mild, calm.

March 22: Cloudy, calm, mild. At 6 p. m. Dexter, with two men and two sleds, arrived on a trading expedition.

March 23: Overcast, with a strong southeast wind in the afternoon and night; drifting badly. Letters arrived from Mrs. Lopp.

March 24: Overcast in the forenoon; clear in the afternoon, calm and mild.

March 25: Partly overcast, calm and mild. Netaxite left for the cape in the morning, and Dexter left about 10 a. m.

March 26: Overcast and mild, with a very strong southeast wind.

March 27: Overcast, with strong southeast wind in the night; abating.

March 28: Overcast, calm, mild.

March 29: Overcast, snowing and blowing from the north in the afternoon.

March 30: Overcast, strong northwest wind; drifting badly.

March 31: Clear and calm in the forenoon; strong north wind in the afternoon. Letters arrived from Mrs. Lopp.

April 1: Clear and cold, with a medium strong north wind.

April 2: Clear, with a strong north wind all night and day.

April 3: Partly overcast, strong north wind; drifting.

April 4: Fair and calm, with a light snow during the night.

April 5: Partly overcast, with strong north wind. Sekeoglook and wife and Tautook and wife came in from the camp for provisions, reporting all well.

April 6: Clear, with strong north wind, and drifting. Sekeoglook and party left for the camp at noon. Two male deer were reported dead—one of Tautook's and one of Sekeoglook's. Internal disease was the cause.

April 7: Clear and nearly calm. The flour supply is just enough for the herders. The scarcity of food makes the demand for flour and biscuits great.

April 8: Clear, with light east wind.

April 9: Clear and calm; several sleds arrived from the cape, and letters from Mrs. Lopp.

April 10: Clear and calm.

April 11: Clear, with a light southeast wind in the afternoon.

April 12: Clear, with a strong north-northeast wind at sunset.

April 13: Clear, with very strong northeast wind all night and day; drifting badly. Soqueena arrived from the cape for supplies at 4.30 p. m., making the trip after 7 a. m. News of the expedition was listened to.

April 14: Overcast in the afternoon, with a strong northeast wind in the forenoon. In the evening southeast wind and clear. Soqueena left at 5 a. m.

April 15: Clear, fine day, with a strong northeast wind in the afternoon. At noon Wocksock arrived with 4 deer for oil and seal. He had left with 5 deer, but had been attacked by dogs, and 1 was chased away, caught in the halter, and strangled. The deer was his own. Two fawns born.

April 16: Overcast, with a light snow in the afternoon.

April 17: Overcast and calm, with a trace of snow.

April 18: Ditto.

April 19: Overcast and snowing in the afternoon; light east to southeast wind. A sled arrived from Golovin Bay.

April 20: Partly overcast, with strong variable winds.

April 21: Clear in the forenoon; overcast in the afternoon; calm. Some sleds came in from the lakes.

April 22: Clear, with medium strong northwest wind.

April 23: Clear and calm. A sled arrived from up the coast. A young man died in Nook.

April 24: Snowing all day. The toothache prevails.

April 25: Overcast and calm.

April 26: Light clouds. Light north-northeast wind. Cold. The kitchen pipe was bandaged.

April 27: Partly overcast, with a very strong north-northeast wind in the afternoon; drifting badly.

April 28: Clear, with strong northeast wind in the afternoon; drifting badly. Sekeoglook came in late last night and left this morning. He reports many fawns born and 2 dead.

April 29: Clear, with a strong northeast wind; cold.

April 30: Clear; strong north-northeast wind during the night and forenoon; calm in the afternoon; -5° .

May 1: Bright and calm, but cold; -12° to $+15^{\circ}$.

May 2: Overcast, calm, cold; -8° to $+20^{\circ}$.

May 3: Clear, with a brisk east wind in the afternoon. Wocksock came in in the morning, reporting 71 fawns born and 3 dead. At noon he left for the camp. Brevig also went out to the herd.

May 4: Arrived at the camp in the morning, and the day was spent looking over the herd. The deer were all well. Three more fawns were born while there.

May 5: Calm and clear. About midnight Mr. N. O. Hultberg and D. Libby came into the camp from a prospecting trip. Gold had been discovered and claims staked out. In the morning they and Brevig with Sekeoglook proceeded to the station, where they arrived at 8 p. m.

May 6: Clear and calm. The day was spent in trading and preparing for a trip to Golovin Bay.

May 7: Clear and calm. Tautook arrived here at 4 p. m. from his Point Barrow trip and reports all well and that the deer will not be killed. He left for the camp at 7 p. m., Netaxite going with him. Mr. Libby, N. O. Hultberg, and Brevig also left for the herd at the same time, Brevig taking the mail from the north to be forwarded to Golovin Bay, as there were stringent instructions that it must reach St. Michael before June 22. Netaxite brought the news of Kummuk's drowning.

May 8: Clear, with a light northeast wind.

May 9: Overcast, with a strong northeast wind; drifting all day.

May 10: Snowstorm, with very strong northeast wind.

May 11: The same storm, but milder. Mr. Hultberg's deer was found dead in the morning. It was brought into the station and skinned.

May 12: Storm continues. Everything is weighed down with snow.

May 13: Clear, with a strong northeast wind. Ojello is fixing his umiak.

May 14: Partly overcast, with a strong north wind; thawing.

May 15: Clear, with a strong north wind. Antisarlook returned from Golovin Bay, and a sled arrived from Mary for provisions.

May 16: Clear and mild; thawing a little in the sun. The snow was shoveled from the roof. Th. Kjellmann is sinking fast.

May 17: Overcast and mild.

May 18: Overcast, snowing and blowing. Some snow shoveling was done. Nearly all the natives have abandoned their winter houses and are moving toward the sand spit.

May 19: Overcast, with a cold northeast wind.

May 20: Clear and calm; a feint at thawing.

May 21: Partly clear; calm.

May 22: Partly overcast, with a strong northeast wind. Brevig and Sekeoglook returned at 10.30 a. m., having made the trip from Golovin Bay with dogs in five and one-half days, stopping eighteen hours at Charley's place.

May 23: Clear, with a light north wind; a faint endeavor at thawing. Sekeoglook and Ojello went out to the herd in the morning. Charley's sled also left for home. A little trading was done.

May 24: Partly overcast; thawing a little. Mr. Lopp's dog team and one herder came down in the morning and left in the evening. Ojello also returned toward evening.

May 25: Partly overcast and thawing.

May 26: Clear and calm; thawing. Th. Kjellmann seems to be drawing near his end, being unconscious all day and unable to speak.

May 27: Overcast, with a strong northeast wind during the night. At 5 p. m. Th. Kjellmann died, and was washed and dressed. The last days he had taken no food, and the last two days he had not been able to speak.

May 28: Clear and calm and very warm. The water is commencing to flow in the rivers. Tautook and Awklahrahook came in early in the morning. Tautook was kept at the station to help bury the old man. Ojello made a coffin. Three fawns were reported born since I visited the herd, making 77 in all. No fish caught yet.

May 29: Overcast and calm; a light rain in the evening.

May 30: Calm; at times overcast. Th. Kjellmann was buried in the afternoon. Tautook left for the herd late in the evening with a month's provisions.

May 31: Overcast and calm; rain during the night.

June 1: Overcast and calm, with a light frost. Ojello has fixed up his umiak in good shape. Only some old women, young children, and an old man are encamped on the beach.

June 2: Overcast and calm. Brevig and Ojello went out hunting in the evening and returned at 10.30 p. m. with 14 birds.

June 3: Cloudy, with strong south-southwest wind all night and day; snowing in the evening.

June 4: Cloudy, with south-southeast wind all night and day.

June 5: Light clouds; calm.

June 6: Clear, calm, nice day.

June 7: Clear and calm. Brevig and Ojello went out hunting in the morning, but Brevig had to return in the afternoon as Wocksock's youngest son was sick and sent for medicines. The herd is now encamped near Nook, on the south side of Grantley Harbor.

June 8: Clear and calm; a heavy fog in the evening and night. Ojello and Neelauk returned in the evening.

June 9: Clear, calm, warm.

June 10: Partly overcast, with light south wind, changing to strong northeast in the afternoon, with a light rain. Packing all day.

June 11: Light clouds, with light northeast winds. Continued packing.

June 12: Clear and calm; $+87^{\circ}$ in the sun.

June 13: Clear, with light west wind. Sekeoglook had come in from the herd during the night and reports 3 fawns dead and 3 born, 1 of his own a stillborn and 2 of Tautook's. Ojello went out hunting.

June 14: Clear, with a gale from the north-northeast in the evening; calm in the forenoon; packing and cleaning.

June 15: Clear and calm; packing and cleaning up. Wocksock was in from the herd and reports all well. The ice is loose from the shore.

June 16: Partly overcast, with fog at times. Cleaning, clearing, packing, etc. The ice is moving around with the tide.

June 17: Clear and calm. Nets were overhauled; but little ice in sight.

June 18: Clear and calm; but little snow left before the house. The ice is moving in the bay.

June 19: Clear and calm.

June 20: Clear, with a strong north-northeast wind during the day. Wocksock, wife, son, and daughter came in from the herd at noon and report all well. A general clearing up. The ice has gone to sea; only a small floe is seen hugging the south shore.

June 21: Partly overcast; light west wind. The ice has almost vanished.

June 22: Partly overcast, with a very strong northeast wind in the afternoon. The herring net was set in the evening.

June 23: Partly overcast, with a very strong northeast wind. No ice in sight. Clearing.

June 24: Clear and calm. A two-masted schooner anchored outside the spit.

June 25: Clear, with a light west wind. A small sloop, with three miners on board, came in in the forenoon bringing tidings from Klondike and of the war with Spain.

June 26: Clear, with light west wind. The miners left at 10 a. m. A two-masted steamer and a three-masted sailing vessel anchored at the anchorage.

June 27: Clear and calm. Sekeoglook came in from the herd, reporting all well at the herd and requested nets. Wocksock and family went out with him in the whaleboat. A two-masted steamer and a brig anchored at the spit—5 vessels in all.

June 28: Clear and calm. Several boats came in from the anchorage with miners, some landing their provisions and all going prospecting. Some news was gathered.

June 29: Partly overcast, with calms and gusts of wind. A steam launch and several boats went into the lake region to prospect. The *W. Bayliss* anchored at the spit. Many of the miners booked for Kotzebue Sound seem to have settled on this region to prospect in.

June 30: Partly overcast; calms and variable winds. Some 50 to 60 miners went into the lake region to prospect. Mrs. Captain McGregor came in from the spit in a native canoe to visit Mrs. Brevig.

POINT BARROW RELIEF EXPEDITION.

REPORT OF CAPTAIN TUTTLE, REVENUE-CUTTER SERVICE, TO THE
SECRETARY OF THE TREASURY.

UNITED STATES STEAMER BEAR,
Seattle, Wash., September 15, 1898.

SIR: I have the honor to report the arrival of the U. S. S. *Bear* at Seattle, Wash., at 11 a. m. September 13, 1898, from Point Barrow, Alaska, with the members of the overland relief expedition and the officers and seamen from the wrecked whalers *Orca*, *Jesse H. Freeman*, *Rosario*, *Nararch*, and schooner *L. J. Kenney*, of Seattle, wrecked at Point Hope, Alaska, August 19, 1898, and I respectfully submit the following report of the movements of the *Bear* since my letter of June 23, dated at St. Michael.

Such articles as Lieutenant Jarvis had mentioned as being indispensable were, so far as obtainable, procured at St. Michael, and Rev. Father Barnum, of the Catholic Mission, came on board at that place for passage as my guest. Having information that the mail was to be delayed at Unalaska for an indefinite time, I concluded to start for the north, and left St. Michael at 4.50 p. m. July 7.

On the 8th a short stop was made at Kings Island, where the natives were found in good condition. From Kings Island proceeded to Port Clarence, which was reached at 5.50 a. m. July 9. Four vessels of the whaling fleet and three for Kotzebue Sound that were found at anchor here were boarded and examined.

On the 10th, while on the way to the watering place, a stop was made at the reindeer station. Rev. Mr. Brevig had given out so much of his provisions on orders of the overland expedition that he was now short himself. I gave him 500 pounds of flour and 5 pounds of tea, credit for which will be given to his bill against the overland expedition. From the reindeer station proceeded to the watering place to the south of Cape Riley, reaching there at 11.30 a. m. The boiler was blown down and watering ship commenced. Boiler was refilled and fresh-water tanks full on the morning of the 12th. Steam was raised, and at 2.05 p. m. got under way for Point Spencer, anchoring there at 4.25 p. m.

During our absence at the watering place the steamer *Thrasher*, from San Francisco, with supplies for the whalers in the north, and, schooner *Bonanza*, with supplies for H. Liebes's trading stations in

the north, had arrived. Mr. Koltchoff, who was landed with the overland expedition at Cape Vancouver, came up on the *Thrasher* and came on board the *Bear* to report. I had heard incidentally while at St. Michael that Lieutenant Bertholf, in obedience to orders from Lieutenant Jarvis, had discharged Koltchoff at St. Michael January 1. Instead of reporting at the reindeer station at Unalaklik, as ordered, he had gone overland with Mr. Tilton, who came down from the wrecked whalers.

Koltchoff said Lieutenant Bertholf had given him a paper—he claimed to be ignorant of its contents—which he had given to Lieutenant-Colonel Randall, U. S. A., commanding at Fort St. Michael, and that Lieutenant-Colonel Randall, with Mr. Shepherd, agent of the North American Trading and Transportation Company at Fort Get There, had sent him to assist Mr. Tilton to carry out the mail. I told Mr. Koltchoff that he had better go to the Port Clarence Reindeer Station and await the arrival of Dr. Jackson, who was daily expected.

On the *Bonanza* were the two natives of Point Hope who had accompanied Mr. Tilton from Point Hope to San Francisco. H. Liebes & Co. had provided for them after their arrival at San Francisco and sent them back on the schooner *Bonanza*. As the ice might prevent the *Bonanza* from getting to Point Hope for some time, transportation was given them on the *Bear*.

At 11.30 p. m., July 12, got under way and stood for Cape Prince of Wales. Anchor was let go off the cape at 5.15 a. m., July 13. Rev. Mr. Lopp and natives came on board. Delivered to them such articles as we had been able to procure at St. Michael. An account of all articles purchased or delivered from the ship's stores, also of what is now due to people in the north on account of services rendered the overland expedition, is being prepared by Lieutenant Jarvis. It can not be finished until Lieutenant Jarvis confers with H. Liebes & Co. at San Francisco in regard to prices. The Liebes & Co. agent at Point Barrow had instructions not to set any prices. That would be done at San Francisco when his account of expenditures to the shipwrecked men reached the office.

At 9.10 a. m., July 13, got under way and stood into Bering Straits. At noon stood to the eastward for Kotzebue Sound, which place was reached and an anchorage made off Cape Blossom at 2.20 p. m. Three barks at the anchorage were boarded and examined. They were loaded with prospectors and their supplies bound for the rivers flowing into Hotham Inlet. A native presented an order from Lieutenant Jarvis, which was filled. I could not learn that there were any more natives on board who had orders, but heard some ashore had them. As it was about 10 miles to the village, I could not wait for them to come off. At 6.20 p. m. got under way and stood for Point Hope. At 6.20 p. m., July 15, anchored off Nelson's trading station, between Cape Thompson and Point Hope. Lieutenant Bertholf reported on

board. He had made Nelson's house his headquarters since his arrival at the station. The two natives brought from Port Clarence were also landed here. Lieutenant Bertholf had carried out his instructions in a manner which met my entire approbation. In addition to caring for the strayed deer, he had destroyed the stills used by the natives in manufacturing liquor, and his presence prevented any of the white residents from entering into the manufacture of it.

At 9.05 a. m., July 16, got under way and steamed for Point Hope, and at 11.05 a. m. anchored off the village. Communicated with Rev. Dr. Briggs, in charge of Episcopal mission. No whales having been taken during the spring whaling, the natives would be very short of food during the coming winter, and nearly all of them had gone down the coast to endeavor to catch a supply of salmon for winter use. At 4.25 p. m. steamed to the Liebes station and anchored for the night.

At 9.45 a. m., July 17, steamed to Nelson's station. Took on board a native who asked to be taken to Point Barrow. At 1.35 p. m. steamed to northward around Point Hope. At 11.16 p. m. passed Cape Lisburne and sighted the first drift ice seen in the Arctic. Laid course to make the land between Point Lay and Cape Beaufort in order to meet any boats Lieutenant Jarvis might have sent from Point Barrow. At 2 p. m., July 18, made land to southward of Point Lay. Steamed along the land in sight of the beach, keeping a good lookout for signals or boat. At 4.20 p. m. anchored off a native village to southward of Point Lay. Natives came on board and reported no white men had passed by.

At 2.15 a. m., July 19, under way to northward. At 6 a. m. sighted a native boat coming off the ice. It came alongside at 6.30. It contained a party from Point Barrow, sent by Lieutenant Jarvis, in charge of Capt. A. C. Sherman of the wrecked steamer *Orea*. The party was taken on board with their boat and the vessel proceeded to within 5 miles of Icy Cape where we come to anchor at 2.35 p. m. on account of heavy ice ahead.

Lieutenant Jarvis informed me that the schooner *Rosario* had been crushed by the ice on July 2; crew all saved. His last information from the vessels to the eastward of Point Barrow was on June 19. At that time they were all right. The *Belvedere* was all right on July 10, but short of provisions, and Lieutenant Jarvis hoped I could get some to her where she lay, at the Sea Horse Islands, some 80 miles from Icy Cape. The men at Point Barrow were all right with provisions to last until August 15. If the *Bear* did not arrive by August 1, he thought it best to start some of them down the coast to meet the vessel.

At 4.35 a. m. July 20, made an attempt to get through the ice to the northwestward. Worked until 2.20 p. m., when the attempt was given up. Stood to the southward until 10 p. m. before getting clear of the ice. At 11.40 p. m. anchored to the southward of Point Lay.

On the 21st fresh northerly winds and drift ice outside of us kept us at anchor throughout the day. At 8.30 a. m., July 22, worked through drift ice to Icy Cape, anchoring there at 12.55 p. m. Ice still heavy to northward and westward. On July 23 there appearing to be little or no change in the ice, concluded to send Lieutenant Hamlet in the native boat to carry provisions to the *Belvedere* and then to proceed to Point Barrow and communicate with Lieutenant Jarvis. At 9.55 a. m. Lieutenant Hamlet started with 400 pounds flour, 96 pounds corned beef, 85 pounds beans for the *Belvedere* and some small stores for Lieutenant Jarvis.

Remained at anchor off Icy Cape until July 26, the ice frequently compelling us to shift anchorage to keep clear. At 4.25 a. m., July 26, the ice appearing to have opened, stood around Blossom Shoals and at noon laid course for Point Belcher. At 6.20 p. m. a dense fog setting in and the water shoaling, came to anchor. At 11 p. m., the fog lifting, found we were off Wainwright Inlet. Got under way and stood along the coast, blowing at intervals. At 2.55 a. m., July 27, off Point Belcher, went behind the ground ice and anchored to await the drifting by of the floe ice. At 6.40 p. m., the ice looking more favorable, stood for Point Barrow, outside of the ground ice. We passed through fields of heavy ice until 11 p. m., then found comparatively open water. Saw the *Belvedere* in Pearl Bay. The ice would not allow us to approach nearer than about 10 miles of her, therefore did not stop. At 5 a. m., July 28, sighted relief station at Point Barrow. Heavy ground ice, with open water inside, extended from Point Shedden to Point Barrow. There being no opening through it, at 8 a. m. made fast on the outside at a point about a mile to the southward of the station, the *Bear* being the first vessel to arrive this season.

Lieutenant Jarvis and a large party came across the ice to the vessel. He had issued rations to the wrecked men until July 30. As we were not entirely prepared to receive such a large party, I directed most of them to remain where they were ashore until the rations were consumed. Twenty-six could be immediately provided for, and they came on board.

On the 29th the steam whaler *Jeannette* arrived and made fast to the ice to the southward of us. The steamers *Fearless* and *Newport* appeared to the eastward of Point Barrow, but could not get around the point on account of the ice. Received news from the *Newport* that she was leaking badly and needed oakum, spikes, and nails to make repairs. These articles were furnished immediately. Nothing was heard of the *Jeanie*, still to the eastward. If it had been known she was out of danger, the wrecked men could have been taken on board and the *Bear* could have started on the return trip at once. As it was, I thought it would not be prudent to leave until I was assured of her safety. On July 30, 66 more of the shipwrecked men came on

board, increasing the number to 97. In the afternoon of the 30th there were large pieces of ice drifting along with the current. Fearing they might strike the vessel and part the mooring lines, got under way and steamed into an indentation in the ground ice, where the steamer *Jeannette* was made fast. A suitable place was found and the vessel moored to ground ice. On the 30th Lieutenant Hamlet arrived. He had delivered the supplies to the *Belvedere* and reported that as soon as a southwest wind came to clear away the ice she would start for Port Clarence for coal. The vessel was in good condition.

On the 1st and 2d loose ice kept drifting in and packed around the vessel where she lay in the indentation in the ice. As there was only a trifling pressure, no danger was anticipated.

At 2 p. m., August 3, came a sudden pressure of the ice; the four forward fasts were carried away and the vessel was forced astern about 5 feet. The pressure then coming against the starboard side, forced the port side against the grounded ice. A point of ice under water abreast the engine room, the weakest place in the vessel, as there are no athwartship timbers there, forced the port side in sufficiently to buckle the engine room floor plates. Men were immediately sent with ice chisels and the ice cut away. As soon as the ice was removed the pressure at that point ceased and the floor plates dropped back into place. The after section of the rudder was sprung about an eighth of an inch. The ice was cut from around the rudder and the pressure on that removed. So far as can be seen (while the vessel is in the water) no material damage was done by the nip. A vessel less strongly constructed would have been crushed at once. When the weather cleared up, it could be seen that the pack had swung in upon the ground ice. Being in the indentation was the only thing that saved the *Jeannette* and *Bear*. Knowing that if a southwest gale sprung up the pack would again move and nothing could save the vessel, I had a large quantity of provisions brought on deck and placed so they could readily be passed to the ground ice in the event of another nip. The ship's papers and books were also packed ready for removal. From the 3d until the 14th of August we remained in suspense. On the morning of the 3d the *Jeanie* came in sight to the eastward of Point Barrow. During the forenoon the *Jeanie*, *Fearless*, and *Newport* got around Point Barrow and came down inside the ground ice to abreast where we were. These vessels were all short of provisions—the *Newport* and *Fearless* short of coal. They were supplied with such quantities of these as could be spared from the *Bear*. Bills for the same have already been sent to their owners. Several days were spent dragging the articles over very rough ice on sleds.

On the 5th, 391 reindeer were transferred to Dr. Marsh, Government school-teacher, who also represented the Presbyterian Mission. As

he was without provisions to maintain the herders, and the camp equipage being worn out, no provision having been made for their support by the mission, the following articles were given from the ship's stores: 1,000 primers, 100 cartridges (.45-.70), 12½ pounds powder, 2 brooms, 50 pounds soap, 2 axes, 1 shovel, a box copper rivets, 1 tent, 1 camp stove, 200 pounds pork, 36 pounds coffee, 176 pounds beans, and 140 pounds sugar.

On the 7th an attempt was made to blast a channel through the ground ice to the clear water inside. After expending 150 pounds of powder (100 pounds borrowed from the *Newport*), the attempt was given up. The effect upon the ice, which averaged 30 feet in thickness, was so slight that sufficient powder could not be procured to blast out a channel. While the blasting was going on, Captain McKenna, of the *Fearless*, got his vessel under way and endeavored to help by ramming the ice. His efforts were, however, useless.

On the 14th the ice off shore commenced to move rapidly to the northward. On the morning of the 15th commenced using small blasts of powder to remove spur pieces of ice near the ship. During the morning a lead broke through the ground ice to the south of us. In the afternoon the ice off shore commenced to disappear, and the pressure on the vessel diminished considerably. There was still several hundred yards of heavily packed ice between us and clear water. A strong northeast wind coming up, all sail was made and thrown aback to help press the vessel off. At 6.15 p. m. the *Fearless* and *Newport* got under way, steamed out through the lead, and came down abreast of us with the intention of pulling out the pieces of ice until we got free. Just as they were commencing a dense fog came up and large quantities of heavy drift ice commenced to come in, obliging them to stop and seek shelter from the ice.

The morning of the 16th the fog lifted, showing clear water about 250 yards distant, and blasting was commenced to clear away the ice. Lieutenant Jarvis and Dr. Call came on board with the part of the *Belvedere's* crew that had been at the station. At 7.25 the *Jeannette* was clear of the ice and steamed to the south. I was surprised to see her leave without offering to assist us. I afterwards learned from Captain Newth that he was ill in his bunk at the time. When informed that the *Jeannette* was clear, he had asked the mate about the *Bear* and had been told by him that she would be clear in fifteen minutes. Under these circumstances he told the mate to take the *Jeannette* to a safe place.

The *Newport* was at anchor off Wallapi, 8 miles distant. When at 10 o'clock Captain Leavit saw that the *Bear* had not moved, he got his vessel under way to come to our assistance. He arrived in time to make fast to one piece of ice, and when that was out of the way the *Bear* was free, and steamed to an anchorage off Refuge Inlet, which was reached at 1.55 p. m. Here the *Fearless* came alongside and was

given 15 tons of coal. Captain Newth, of the *Jeannette*, being too ill to continue with his vessel, was taken on board for passage home. Mr. C. D. Brower, Liebes's agent at Point Barrow, desiring to accompany Lieutenant Jarvis to San Francisco to satisfactorily adjust the claims on account of the shipwrecked men, was also given passage. The deer herders who accompanied Mr. Lopp were also given passage to their homes. The *Fearless* having been north several years, some of her crew desired to exchange with the shipwrecked men who were willing to remain. This they were allowed to do.

At 9.25 a. m. August 17 got under way and stood toward Sea Horse Islands. Fog set in and much drift ice was met. At 4 p. m. stood to south to make the land. At 7 the fog lifted and at 7.06 sighted the whaling fleet at anchor to the eastward of Sea Horse Islands. At 8.55 anchored near the fleet, consisting of the *Alexander*, *Belvedere*, *Bowhead*, *Karluk*, *William Bayliss*, *Fearless*, and *Newport*. The men of the crew of the *Belvedere* brought by us from Point Barrow were put on board their vessel. Six of the shipwrecked men left to join whaling vessels. The *Bear* remained to give the people on the ships an opportunity to prepare mail. On the morning of the 18th two sick seamen were received from the *Belvedere* for transportation to a hospital. At 12.10 p. m. got under way and stood to westward. At 12.40 anchored near schooner *Bonanza*, supply vessel for Mr. C. D. Brower's station. Finding there was an ample supply of potatoes on the schooner, and the supply on the *Bear* being exhausted, I purchased 25 boxes for the crew and shipwrecked men. They will be included in H. Liebes's bill. At 1.55 got under way and stood for Blossom Shoals. At 7 a. m., being around the shoals, laid course for Point Hope, which was reached at 8.30 a. m. the 20th. Communicated with the shore and learned that on the previous day the schooner *Louise J. Kenney*, of Seattle, was in a dangerous position in the breakers near Cooper's Station, 8 miles east of Point Hope. Started immediately for the place. Upon arrival there found the vessel broadside on the beach and in a position where the *Bear* could be of no assistance on account of shoal water. The master of the vessel came on board and said the vessel was full of water and the cargo ruined. He requested passage for himself and crew to Seattle. Boats were lowered and sent ashore for them and their effects. A nasty surf was running and it was with considerable difficulty that they were taken off. Two natives came on board with a communication from Dr. Sheldon Jackson, addressed to whoever had charge of the reindeer at or near Point Hope, directing that the deer be turned over to the two natives, who were Government herders. Got under way and steamed to Nelson's Whaling Station. Lieutenant Bertholf went ashore and directed that the deer be delivered according to Dr. Jackson's request. The three herders who had been in charge of the deer were taken on board for transportation to their homes.

The master of the wrecked schooner informed me that the year's supplies for the three missionaries at Cape Blossom, Kotzebue Sound, were lost with the rest of the cargo of the vessel. As they could not live through the winter without supplies, I deemed it my duty to call at Cape Blossom to inform them of their loss and offer them a passage to St. Michael or elsewhere. Accordingly, the vessel was headed for Cape Blossom, which place was reached at 12.20 p. m. of the 21st. Lieutenant Bertholf, knowing where the mission was situated, was sent ashore to proffer aid to them. The barks *Haydn Brown* and *Northern Light* were at anchor off the cape. Captain Whitesides, of the *Northern Light*, informed me that he was waiting for passengers, and had nearly the full number engaged. That the Kotzebue Sound gold rush was a failure. He had been in the sound a couple of months and had not heard of any gold strikes. He estimated that at least three-quarters of the 2,000 people who were there, many of them with two years' provisions, would return. There were five barks at the southern end of Kotzebue Sound, taking in ballast preparatory to taking passengers from Cape Blossom. In that case there will be no lack of transportation for those who desire to return.

The schooner *Etna*, of San Francisco, having lost her anchor, was loaned a 500-pound kedge, the owners at San Francisco to replace it on board the *Bear* upon her arrival. At 11.45 p. m. Lieutenant Bertholf returned on board. The missionaries, having obtained supplies from returning miners, were going to remain at their station during the winter. Some articles needed by Lieutenant Jarvis to pay off natives at Cape Prince of Wales for services in the overland expedition were purchased from Captain Whitesides, of the bark *Northern Light*. Lieutenant Bertholf reported that he had met a number of men ashore who claimed to be stranded miners, and who wished a passage on the *Bear*. As the vessel was already overcrowded and there were other means of transportation at hand, their request could not be granted.

At 1.20 a. m., 22d, under way for Cape Prince of Wales, which was reached at 10 p. m. same day. Rev. W. T. Lopp came on board to settle accounts of the reindeer portion of the overland expedition. Mr. Lopp said that by the terms of the agreement with Lieutenant Jarvis the Treasury Department was responsible for the return of the reindeer he drove to Point Barrow. If Lieutenant Jarvis had not made the agreement he would not have given up the deer or gone with them. Without the reindeer and the assistance of Mr. Lopp the relief expedition would have gone no farther; so Lieutenant Jarvis was obliged to accept the terms.

As but 156 deer had been returned to him by the Interior Department agent, and there was no prospect of receiving any more from that source, he requested that the deer remaining at Point Barrow and Point Hope be returned to him and Charlie Antisarlook—220

head—being due Charlie. The captain of a whaling steamer that was to leave in a few days for Point Barrow had agreed to carry Mr. Lopp's herders to Point Barrow. I accordingly sent directions to Dr. Marsh to turn over the herd to Mr. Lopp's herders, who will start them south as soon as the weather is favorable. Mr. Lopp expects to be reimbursed for the expense of driving the deer back to his mission. The herders at Point Hope were sent orders similar to those sent to Dr. Marsh.

At 6.45 a. m., 23d, got under way for Port Clarence, which was reached at 1 p. m. Found steamers *Jeanie*, *Newport*, and *Thrasher* and bark *J. D. Peters* anchored in the bay. Captain Sherman, of the wrecked whaler *Orca*, came on board from the *Newport* for passage down; also Antone Roderick, from the *Newport*. At 9.25 got under way for St. Michael. On the way a call was made at Kings Island and at Point Rodney to land Charlie Antisarlook. St. Michael was reached at 3.45 a. m. on the 25th. The vessels in port were boarded and examined. Lieutenant Jarvis and Lieutenant Bertholf went ashore to arrange the bills owed by the overland expedition to the North American Trading and Transportation Company and the Alaska Commercial Company. Eight of the shipwrecked whalers, having obtained employment ashore, left the vessel. The business ashore being finished at 11.15 p. m. August 26, got under way for Unalaska, which was reached after a rather rough passage at 1.05 p. m. August 31. H. M. S. *Pheasant* was found in port, and on the 2d of September H. M. SS. *Amphion* and *Icarus* arrived. The usual courtesies were exchanged with each.

The boiler was blown down and preparations were made for coaling and watering ship. At 1.15 p. m. September 3, having finished coaling and watering, and all preparations completed, cast off from the wharf and steamed out of the harbor. At 4.55 p. m., being through Unalga Pass, set course for Cape Flattery. Rough weather was experienced the first four days out; after that, moderate and foggy. Waddah Island was sighted at 2.15 p. m. September 12, and a stop made to communicate with the Department by telegraph. Port Townsend was reached at 2 a. m. 13th. A dense fog and thick smoke compelled us to anchor until 6 a. m. Then, the fog partly lifting, got under way for Seattle, which was reached at 11 a. m. September 13, after an absence of nine months and sixteen days, most of the time spent in a dreary country and very inclement weather. The officers and crew bore the monotonous isolation with the greatest patience, complaints being almost unheard of.

The courage, fortitude, and perseverance shown by the members of the Overland Relief Expedition is deserving of the highest commendation. Starting over a route never before traveled even by dog sleds, with a herd of over 400 reindeer to drive and care for, they pushed their way through what at times seemed impassable obstacles, across frozen seas and over snow-clad mountains, with tireless energy,

until Point Barrow was reached and the object of the expedition successfully accomplished.

I respectfully recommend that the heroic services of First Lieut. D. H. Jarvis, Second Lieut. E. P. Bertholf, and Surg. S. J. Call should meet with such recognition as the Department sees fit to bestow.

As mentioned in my letter of June 23, 1898, Mr. W. T. Lopp and Charlie Antisarlook, who gave up their herds of reindeer, left their families, and accompanied the expedition to Point Barrow, are deserving of substantial reward for the sacrifices they made and the hardships they endured.

Respectfully, yours,
F. TUTTLE,
Captain, Revenue-Cutter Service,
Commanding U. S. S. Bear.

The SECRETARY OF THE TREASURY,
Washington, D. C.

REPORT OF LIEUT. D. H. JARVIS, REVENUE-CUTTER SERVICE, TO
 SECRETARY OF THE TREASURY.

OVERLAND RELIEF EXPEDITION,
Fort St. Michael, Alaska, December 31, 1897.

SIR: I respectfully report the arrival of Surgeon Call and myself at this place last evening, after six days travel from Andreafski, on the Yukon River. The teams that have brought us this far I will drop here, and I have engaged Mr. Edwin Engelstadt, a trader at Unalaklik, to furnish such transportation as will be required as far as Golovin Bay. We are compelled to remain over to-day to make such preparations as are necessary for the journey to Cape Prince of Wales, and will leave for that place to-morrow morning.

Upon consideration I have decided to send two or three sled-loads of provisions from this place through to Kotzebue Sound, direct across the portage from Norton Bay to the Buckland River, to meet the party when we arrive at Cape Blossom with the herd of reindeer on the way to Point Barrow. I will do this because I feel certain there are not enough provisions at Cape Prince of Wales to fit out such a party as will be required to drive the herd of reindeer. In going from Cape Prince of Wales to Point Barrow the deer will necessarily have to be driven some little distance back from the coast, and the party will not be able to communicate with villages along the coast. They will have to depend upon their own resources to carry them through to the end of the trip, which possibly may take two or three months. But with such supplies as I will send to Kotzebue Sound to meet me at Cape Blossom the party will be independent of any intermediate

places and be able to select its own route to Point Barrow, or the one best adapted for the deer.

The reindeer herd from Port Clarence has not yet arrived at Unalaklik, but I think it possible I may meet them on the road. In that case Lieutenant-Colonel Randall, U. S. A., has placed at my disposal such number of teams as I may need to transport my party to Cape Prince of Wales; otherwise I will have to depend wholly upon dog teams, and I fear the journey will be rather long for them, as the ice in the sound is as yet much broken up and moving.

Second Lieutenant Bertholf and his party have not yet arrived, but I will leave such orders and arrangements to further his progress as it is possible for me to make.

The services of F. Koltchoff will be no longer required with the expedition, and I will leave orders directing him to report to Lieutenant-Colonel Randall, U. S. A., for duty at the reindeer station, as directed in Department orders.

I am much indebted to Lieutenant-Colonel Randall, U. S. A., commanding Fort St. Michael, and to the North American Transportation and Trading Company and the Alaska Commercial Company, for kindness and assistance in providing for the trip northward from here.

The health of the party is excellent, and there have been no accidents or mishaps of any kind.

Very respectfully,
 D. H. JARVIS,
*First Lieutenant, Revenue-Cutter Service,
 Commanding Overland Relief Expedition.*

The SECRETARY OF THE TREASURY,
 Washington, D. C.

OVERLAND RELIEF EXPEDITION,
Norton Sound, Alaska, January 3, 1898.

SIR: To-day on the ice I met Mr. G. F. Tilton, third mate of whaling steamer *Belvedere*, one of the vessels at Point Barrow, bound out by way of St. Michael and Katmai with mail and news of the position and condition of the vessels north for which the relief expedition was sent. On account of the situation, I opened such mail as I supposed would give me any information that might assist me in the purpose of the expedition. From all I could learn, the following is the condition there: The steamer *Orca* was wrecked trying to get out, September 22, 1897, a total loss, near Sea Horse Islands, and the same day, about four hours later, the steamer *Jessie H. Freeman* was wrecked also about the same place. The *Belvedere* was nearly out, but turned back to save the crews of the wrecked vessels and was caught by the ice. There is a probability of her coming out all right. The schooner *Rosario* is just around Point Barrow to the west, and there seems a

small chance for her safety. The steamer *Newport* and Norwegian steamer *Fearless* are about 55 miles east of Point Barrow; the steamer *Jeanie*, about 85 miles east of Point Barrow. The bark *Wanderer* was last seen about 60 miles west of Herschel Island, and had not been heard of at Point Barrow when Mr. Tilton left, October 17, 1897. It seems probable that all the vessels east of Point Barrow will be crushed by the ice.

The steamer *Mary D. Hume* is wintering at Herschel Island, and it is probable the crew of the *Wanderer* will make for her and be cared for. The crews of the other vessels are safe at Point Barrow, except a few who are camping on the shore near the ships to look out for them. The supply of provisions has been taken in charge and apportioned out to last until July next. It is not large, but will be sufficient to last, with the reindeer I will drive there; but there will be needed there as many provisions as can be taken when the ice opens. All the natives have been sent off into the interior to hunt, and, I think, can care for themselves. I hope to get the deer there by April, sooner if possible, but I think they will be there by that time, when the worst shortage will be. The steamer *Navarch*, caught in the ice last summer, drifted in to the east of Point Barrow in September and seven men were taken from her, two others refusing to leave. There are in all about 304 men on the ships, including those from the *Navarch* and those on the *Wanderer*, and I should say that transportation will be needed for about 250 when the ice opens. The part of the road the expedition is traveling over now is probably the worst to be encountered on the trip, but we are taking advantage of every opportunity and going ahead all the time, even if progress is not as rapid as we would like. I see no reason to change the general plans of the Department, and will do my utmost to carry them out to a successful end.

Mr. Tilton has been over the road from the north, and agrees with me thoroughly in the utter impossibility of carrying anything there by sledges, and that the only possible way is to drive the reindeer. Dogs are scarce and require food. Men have not been sent to Point Hope, where there are provisions, because of the lack of means of transportation.

We are in good health and have had no mishaps so far, and no time will be lost that can be taken advantage of.

Very respectfully,

D. H. JARVIS,
First Lieutenant, Revenue-Cutter Service,
Commanding Overland Relief Expedition.

THE SECRETARY OF THE TREASURY,
 Washington, D. C.

REPORT OF LIEUT. D. H. JARVIS, REVENUE-CUTTER SERVICE, TO
CAPT. F. TUTTLE, REVENUE-CUTTER SERVICE.

UNITED STATES REVENUE-CUTTER SERVICE,
OVERLAND RELIEF EXPEDITION,
Cape Prince of Wales, Alaska, January 25, 1898.

SIR: I respectfully report my arrival at this place on the 24th instant. Upon delivering to Mr. Lopp his mail and explaining to him the necessity and object of the expedition, and that the Government was particularly desirous that he should join it, he has consented to go and take his reindeer herd and herders.

The herd is the property of the American Missionary Association, and the herders, together with several individual natives at this place, and is given with the understanding contained in Department order of November, 1897, that it will be returned next summer, together with the average number of fawns that will be born to it the coming spring.

There are now in the herd 301 deer; 9 of these I had to buy from a native, Kummuk, at \$15 per head, San Francisco prices, giving him an order on you for such articles as he desired; the remaining 292 should have 140 living fawns in April, making 432 deer to be returned to the American Missionary Association and the people here through Mr Lopp as their representative. This is the number that should be returned the coming summer, but if for any reason this can not be done, the natural increase of the herd that would follow the next spring, had the herd not been disturbed, will have to be taken into consideration upon fulfilling the contract on the part of the Government. I have also agreed that it shall be the option of the American Missionary Association or the people here owning deer, to sell to the Government a limited number of those given to the use of the expedition at the ruling price in any neighboring market in this section.

I have engaged Mr. Lopp and the herders at the following salaries for their services: Mr. Lopp, \$150 per month; the herders, \$30 per month, and that the money can be invested in San Francisco and the articles will be brought to them by the *Bear*. The herders engaged are Artisarlook, Point Rodney; and Sakwenna, Ootema, Netaxite, Kiveatzruk, Stuk, and Keok, of Cape Prince of Wales, Alaska; and Tautook, of Port Clarence, Alaska. The latter has two deer that he has brought, and will either sell or exchange for females if the deer are returned the coming summer.

Respectfully, yours,

D. H. JARVIS,
First Lieutenant, Revenue-Cutter Service,
Commanding Overland Relief Expedition.

Capt. F. TUTTLE,
Commanding Revenue Cutter Bear.

REPORT OF LIEUT. D. H. JARVIS, REVENUE-CUTTER SERVICE, TO
CAPT. F. TUTTLE, REVENUE-CUTTER SERVICE.OVERLAND RELIEF EXPEDITION,
Point Hope, Alaska, March 5, 1898.

SIR: I respectfully report the arrival of Surg. S. J. Call and myself at this place February 20. Upon our arrival I learned that the people on the vessels at Point Barrow were all right, and would be until May, and hearing from Mr. Lopp that he had arrived at Cape Krusenstern on the morning of February 17, I proceeded to meet them at Kevuleek River. After making all arrangements for their progress and supplying them with necessary clothing, they were started across from Kevalina on the second instant, and expect to come out on the coast about the mouth of the Pitmagea River.

I have made all preparations to leave here to-day with Surgeon Call for Point Barrow. Second Lieut. E. P. Bertholf will remain here and care for any of the men who may be sent down from Point Barrow in the spring.

The health of the expedition has been good, and no accidents or mishaps have occurred.

All the expenses of the expedition in this region will be assumed by Mr. Nelson, of H. Liebes & Co.'s whaling station.

Respectfully, yours,

D. H. JARVIS,
*First Lieutenant Revenue-Cutter Service,
Commanding Overland Relief Expedition.*

Capt. F. TUTTLE,
Commanding Revenue Cutter Bear.

REPORT OF LIEUT. D. H. JARVIS, REVENUE-CUTTER SERVICE, TO
CAPT. F. TUTTLE, REVENUE-CUTTER SERVICE.UNITED STATES REVENUE-CUTTER SERVICE,
STEAMER BEAR,
Port of Point Barrow, Alaska, August 16, 1898.

SIR: I respectfully report that upon the arrival of the overland relief expedition at this place, March 29, 1898, there were quartered on shore 100 officers and men of the wrecked vessels *Orca*, *Jessie H. Freeman*, and *Navarch*, and of the steamer *Belvedere*. Upon consultation, the situation was found to be such that I deemed it necessary to take charge and establish myself at the Cape Smyth Whaling Company's station, where nearly all the provisions were held. The available stock of provisions had already been rationed to last until the latter part of August, and, though there was no distress, the allowance was necessarily small. I immediately communicated with the masters of the schooner *Rosario* and steamers *Newport*, *Fearless*, and *Jeanie*, and received assurances from them that they thought they would be able to carry their crews through until August, but on greatly reduced rations. The vessels were distributed over a distance of 150 miles

and, as far as the difficulties and possibilities of hauling would permit, the provisions had been equitably divided between all the vessels and the people on shore. I was constantly in communication with the vessels and visited them all to ascertain their position and condition, and, from the point of control over the whole situation, worked with the masters for such good order and distribution of food as would keep all on the same allowance as far as possible and secure a final good outcome.

On the day of arrival I was presented with a petition from the members of the crews quartered here, asking that their condition be looked into. They—76 men—were at that time living in the old building of the Pacific Steam Whaling Company. Their quarters were immediately inspected and found to be in a bad condition. The building, 22 by 55 feet, was old and leaky. It had been abandoned and was fitted up in October, 1897, to accommodate these men. The only heat was from the cooking range in the center, and the steam from this caused drippings that kept the floor and sides constantly wet and full of ice. In most of the berths the bedclothes were never dry. The accumulation of dirt and filth was such that only the cold weather prevented serious sickness of all hands. The clothes and persons of the men were in most cases filthy, due to seal oil lamps that were used in the endeavor to keep warm, and a change of quarters and habits was necessary immediately. Scurvy had made its appearance. There were two well-developed cases and indications of others. Twenty-five of the men were placed in the refuge station, where the officers were already quartered, making 40 in all there; 23 in the schoolroom of the Presbyterian Mission, now occupied by Dr. and Mrs. H. R. Marsh, who kindly gave its use, and 28 in a building of the Cape Smyth Whaling Company, formerly used as a storehouse. To fit up and to heat these extra quarters the old building was torn down and used for firewood, there being scarcely enough coal on hand to do the cooking. Clothing was the next consideration, and a collection was made of all that could be found, the natives contributing the greater part, and it was issued to such men as most needed it. The allowance of soap was increased and the men were required to keep their clothing and persons clean. A daily inspection of quarters, clothing, and men was instituted, and a radical and gratifying change was soon apparent in the health and appearance of all. The scurvy patients were soon well, and from that time until your arrival there was no serious illness. June 8 Philip Mann, age 46 years, native of New York City, seaman of the steamer *Jessie H. Freeman*, while walking along the beach, dropped dead from heart disease. He had been complaining all winter and had a short time before been relieved from all heavy work. The body was given an appropriate burial and the grave marked by a headstone with name and identity.

The allowance of meat at all points was short and inadequate and

wholly dependent upon the success of the hunters and the possibilities of hauling from the distant stations. Hunters were kept out for deer as late as June 1, and for ducks and eggs when they arrived, the last of May. This stock was too short and too precarious and was increased by killing 180 of the reindeer brought by the expedition. The daily allowance was increased from one-half pound to $1\frac{1}{4}$ pounds per man, which made a comfortable and sufficient ration. One pound of flour per day was issued, and the few small stores on hand were distributed to give some little variety to the food and prevent scurvy.

All danger of serious shortage was now removed, the tension under which everyone had been during the winter was relieved, and it only remained to keep everything well in hand and the men and natives under good control. Such authority as was necessary was used, though, considering the situation with nearly 300 men and 500 natives, the general good order was remarkable; after our arrival there was no occasion for the exercise of severe measures.

On April 22 a sled arrived from Herschel Island bringing news of the arrival back there of the bark *Wanderer* on September 8. The steamer *Mary D. Hume* was wintering there with two years' supplies on board, so all anxiety on the *Wanderer's* account was relieved.

On July 2, during a heavy southwest gale, the schooner *Rosario* was crushed by the ice. Being near the shore, her crew got out safely and saved all their provisions. Nine of her crew were subsequently brought to Cape Smyth, the master and officers remaining camped on the shore by the wreck.

The reindeer herd was kept at a distance of from 10 to 15 miles from Cape Smyth ready for any calls upon it. Artisarlook and Utenna, herders from Point Rodney and Cape Prince of Wales, were kept to care for the deer, and four native boys were engaged to assist them. The feed was good, and but one death occurred from natural causes, though there was a large proportion of deaths among the fawns born due to the hard travel of the mothers so near the calving time.

The situation last fall upon the vessels first being caught was a most precarious one and looked gloomy and serious. Its final good outcome seems providential. Everyone turned to and worked to his utmost to obtain what was possible in the country, and the natives, recognizing the seriousness of the situation, gave invaluable aid and denied themselves such food as was required for the white people. On shore Mr. C. D. Brower, manager of the Cape Smyth Whaling Company, gave up everything in his station except his personal supplies, and these he shared with as many as he could accommodate in his house. He controlled the situation ashore and furnished most of the native hunters, teams, clothing, and other necessaries for the care of the men. His arrangements were excellent, and upon our arrival the whole resources of his station were placed at our disposal and he gave his knowledge and help in all matters. Mr. E. A. McIlhenny, in

charge of the Pacific Steam Whaling Company's buildings, and Dr. H. R. Marsh also gave material aid.

The arrival of the overland expedition, when things were again taking a serious turn, was most timely. Your orders and the orders of the Department were fully carried out and nothing was left undone. The difficulties and dangers of travel in an arctic winter were met and overcome without accident or mishap. There was never any let down in the work from beginning to end, and the highest commendation is due Second Lieut. E. P. Bertholf, Revenue-Cutter Service, Surg. S. J. Call, and Mr. W. T. Lopp in making this successful outcome of a trying and difficult expedition, which contributed so much to the relief of the serious situation found. The native herders who gave up their deer so cheerfully and then drove them to Point Barrow I hope will not only be reimbursed, but also rewarded for their valuable aid.

I beg to be allowed to submit later data and particulars necessarily omitted here.

Respectfully, yours,

D. H. JARVIS,

*First Lieutenant, Revenue-Cutter Service,
Commanding Overland Relief Expedition.*

Capt. F. TUTTLE,

Commanding Revenue-Cutter Bear.

Reindeer account, Point Barrow relief expedition.

Received from Artisarlook.....	133
Bought at Port Rodney.....	5
Received from Mr. W. T. Lopp et al.....	292
Bought at Cape Prince of Wales.....	9
Received from Tautook.....	2
Received from Tautook Government herd.....	5
Received from Tautook Golovin Bay herd.....	2
	448
Lost and killed en route.....	66
Killed for food at Point Barrow.....	180
Died at Point Barrow.....	1
	247
	201
Fawns born at Point Barrow.....	254
Fawns died at Point Barrow.....	64
	190
Remaining at Point Barrow.....	391
Recovered at Point Barrow.....	34
Killed for food.....	5
	29
Fawns born at Point Hope.....	25
Fawns died at Point Hope.....	6
	19
Remaining at Point Hope.....	48
Total deer remaining at Point Barrow and Point Hope.....	439

REPORT OF LIEUT. E. P. BERTHOLF, R. C. S., TO CAPT. F. TUTTLE,
R. C. S.

UNITED STATES REVENUE-CUTTER SERVICE,

Point Hope, Alaska, July 15, 1898.

SIR: In accordance with the instructions of Lieutenant Jarvis, Revenue-Cutter Service, commanding the overland relief expedition, under date of March 5, 1898, a copy of which is hereby inclosed, I respectfully submit the following report.

The plans referred to for the return of Mr. W. T. Lopp related principally to the transportation of provisions up the coast to the mouth of the Pitmegea River. This was done as directed, and Mr. Lopp left here on the 23d of April, leaving behind one deer herder to care for the deer that had strayed from the main herd while en route to Point Barrow.

When Mr. Lopp and myself left Aneyok (near Cape Krusenstern) with the deer herd, on the 21st of February, it had been decided to send back to their homes four of the native herders then with the herd, and these were consequently left behind at that place, provision having been made for their return travel.

Having accompanied Mr. Lopp and the herd along the coast as far as the place where he was to strike across the lagoons for the Kevuleek River, I parted company with him on the 27th of February and proceeded to this place, in accordance with previous orders from Lieutenant Jarvis.

Here I received word, on March 21, that some of the deer were at Aneyok, in charge of two of the herders. I sent word to him to drive the deer up here, and on April 21 they reached this place, in charge of Ituk and Keok. It appears that somewhere between Aneyok and the Kevuleek River these deer, 34 in number, had strayed from the main herd, and a native who had acted as a guide for Mr. Lopp had discovered them on his return to Aneyok. As the herders had not yet started on their return trip, they went after the deer and drove them back to the village, after which they all returned to their homes, except Ituk and Keok, who then drove the herd here. Three deer had been killed for food on the way, so that when they arrived here there were 31 in the herd, 26 of them being females. I gave the herders my tent and camp gear, employed three young natives to help them, and sent them with the deer several miles back in the hills, where the moss was good and they would not be troubled by the dogs from the villages. There the camp was established and the deer cared for. From time to time I have supplied these four natives with such clothing and provisions as were deemed necessary, and also tobacco, cartridges, shot, lead, and powder. All these articles I obtained from Mr. Rustan Nelson, manager of Liebes & Co.'s whaling station at Point Hope, and charged the same to the account of the overland relief expedition. Up to the present time 2 of the old deer have been killed for food, and

25 fawns have been born, 6 of which have died, thus leaving 29 old deer and 19 fawns in the herd, and apparently well cared for and attended to.

With regard to the illicit distilling of spirituous liquor by the natives, I have made several trips to the different villages and visited and searched all the native houses from Cape Thompson to Point Hope, discovering and destroying 6 stills and about 10 gallons of mash nearly fermented. On two of these trips I have been assisted by Capt. Peter Bayne and Mr. Henry Koenig (commonly known as Cooper), who have whaling stations on the Point, and I have been most materially assisted by Mr. Nelson, who has accompanied me on several of the trips. When I visited the native village at Point Hope, Mr. Nelson and myself searched several of the houses there, but finding no trace of what we were looking for, I concluded to talk to the natives and try persuasions, Mr. Nelson acting as interpreter. After telling them about the bad effects of whisky I recited instances where whole villages had been depopulated by indulgence in the liquor, thus being rendered incapable of procuring the necessary food supplies for the winter. The natives appeared very much impressed by what had been said, and they soon showed us many places where the stills had been hidden, buried in the snow, and in a short time we had destroyed 9 stills which had been concealed in all sorts of snow banks, where it would have been almost impossible for us to have discovered them. The following day a native woman came all the way down here from Point Hope and gave me 5 still pipes, the tubs of which she said had been broken up. This makes in all 20 stills that have been destroyed.

There remain, I believe, many other stills in this vicinity, which I have been unable to discover; but even if they were all destroyed, the natives could easily make others, and I am convinced that this illicit distilling can not be stopped unless the whites are prevented from trading molasses to the natives or the molasses is diluted by some article that will prevent fermentation. In this connection I will state that I have been asked by several natives, who seemed to be very intelligent, the very pertinent question why the white men are allowed to trade molasses, if it is wrong for the natives to make whisky, and why the ships are allowed to trade whisky to the natives. I can not speak too highly of the aid given me by Mr. Nelson in this matter, whereas it is an open secret that there have been times when white men on Point Hope have encouraged this illicit distilling by buying and drinking the concoction after it had been brewed by the natives.

The circumstances of the murder of the native Washok by the other natives last fall are as follows: About 11 o'clock in the forenoon on the 17th of November, 1897, Mr. Rustan Nelson was sitting in his house reading, and Messrs. Charles Sandbourne and George F. Tilden were working in one of the other rooms of the house, when they all

heard two rifle shots in quick succession, followed soon after by four others. Mr. Nelson put his revolver in his pocket and ran outside, and there saw close by the house the two natives Avulik and Shukurana, each with a smoking rifle, standing over the body of Washok, who was dead, with six bullet holes in his body. Washok's wife was close by, and several other natives were running to the scene of the firing. Sandbourne and Tilden ran out soon after Nelson, and after ascertaining that Washok was beyond help they all returned to the house. Soon the body was buried after the usual native fashion. It appears that Washok and his wife were returning to the village with a load of wood, when the two above-named natives concealed themselves and committed the murder.

There was probably only one actual witness to the affair except the murderers, and that was Washok's wife, all the other natives in the village being out of sight. Subsequent inquiry developed the fact that the other natives in the village knew the shooting was to take place. The natives give as a reason for the killing that Washok was a bad character, having threatened the life of an old man in the village, and having shot at two men the night before he was killed. After the killing the two murderers left this place, Shukurana going to Tarpkwa, on the north side of the Cape Prince of Wales peninsula, and Avulik going to another village near Cape Thompson. Avulik came back here this spring to work for Mr. Nelson during the whaling season, and it had been my intention to take him on board the *Bear* with me when I reported and turn him over to you. I had planned to do this without exciting the natives' suspicion, for it seemed quite unnecessary and impracticable for me to seize him and hold him here a prisoner, as there is no place to shut him up securely. It has been the custom of the natives to remain at the whaling stations until the ships arrive in the spring, so as to get their pay, and I could easily have taken him on board the *Bear* without exciting his suspicion. But this spring no whales were caught and no pay was coming to the natives, and they have been gradually leaving for the eastward to catch their fish for the winter. Avulik seemed in no hurry to leave, and said he was going to wait for the ships; but when I returned on the 10th of July, after a trip to Point Hope, I found that Avulik and his brother had departed in their canoe for the Kevuleek River, where they are going to live this winter. He probably went to the eastward to fish, as seal is very scarce here now, and I am sure he had no idea of my intentions toward him, as I had spoken to no one about him but to Mr. Nelson, and neither he nor I have ever talked of the matter in the presence of anyone else.

Avulik can be found at or near the mouth of the Kevuleek River, and Shukurana is somewhere on the south side of Kotzebue Sound. The witnesses to the affair can be found here, except Mr. Tilden, who is probably in San Francisco.

On or about the 27th of May another native murder occurred. A native named Animeah shot and killed his former wife because she refused to return and live with him and his other wife. I would have endeavored to bring him on board the *Bear*, but he died July 10 from some affection of the chest.

Very respectfully,

E. P. BERTHOLF,

Second Lieutenant, Revenue-Cutter Service

Capt. FRANCIS TUTTLE,

Commanding Revenue Steamer Bear.

DR. SHELDON JACKSON DIRECTED TO REPORT TO THE SECRETARY OF WAR FOR INSTRUCTIONS.

DEPARTMENT OF THE INTERIOR,

Washington, December 23, 1897.

SIR: In compliance with the request of the Secretary of War, dated to-day, you are hereby directed to report to him for temporary duty in connection with the duties enjoined by the act of Congress approved on the 18th instant, entitled "An act authorizing the Secretary of War, in his discretion, to purchase subsistence stores, supplies, and materials for the relief of people who are in the Yukon River country, to provide means for their transportation and distribution, and making an appropriation therefor."

Very respectfully,

C. N. BLISS, *Secretary.*

Dr. SHELDON JACKSON,

General Agent of Education in Alaska,

Office of Education.

DR. SHELDON JACKSON SENT TO LAPLAND FOR REINDEER.

WAR DEPARTMENT,

Washington, December 23, 1897.

DEAR SIR: You are hereby instructed to proceed at once, in company with Lieut. D. B. Devore, United States Army, to Norway and Sweden, to purchase 500 reindeer broken to harness, together with full outfit for hauling or carrying supplies to the Yukon Valley, and also to provide such means as may be necessary for shipment to this country as soon as purchased, remembering that it is essential that they should be landed here at the furthest by the 15th of February. These instructions are also to cover the employment and bringing into this country of reindeer drivers.

Lieutenant Devore, of the Army, will accompany you as disbursing agent and will provide the necessary funds for all expenses and purchases in connection with the procurement and shipment of the rein-

deer. I wish you and Lieutenant Devore to confer on all matters pertaining to the purchase of these reindeer and the shipping of them.

These instructions are for Lieutenant Devore, as well as yourself.

Very respectfully,

R. A. ALGER,
Secretary of War.

DR. SHELDON JACKSON,
Special Agent, Department of the Interior,
Washington, D. C.

DR. SHELDON JACKSON COMMENDED TO THE DIPLOMATIC AND CONSULAR OFFICERS OF THE UNITED STATES IN ENGLAND, DENMARK, SWEDEN AND NORWAY.

DEPARTMENT OF STATE,
Washington, December 21, 1897.

To the Diplomatic and Consular Officers of the United States.

GENTLEMEN: At the instance of the Secretary of War, it gives me pleasure to herewith introduce Dr. Sheldon Jackson, who is about visiting England, Denmark, and Sweden and Norway for the purpose of securing reindeer in accordance with the instructions of the Secretary of War, in pursuance of the authorization of Congress appropriating the sum of \$200,000 for the purchase of subsistence stores, supplies, and materials for the relief of people who are in the Yukon River country or other mining regions of Alaska, and to purchase transportation and to provide means for the distribution of such stores and supplies.

Dr. Jackson is the general agent of education under the Department of the Interior for Alaska, and is in every way familiar with that country. The Department hopes that you will extend to Dr. Jackson every possible assistance he may ask in the execution of his instructions.

Respectfully, yours,

JOHN SHERMAN, *Secretary.*

NORWEGIAN OFFICIALS REQUESTED TO AID DR. JACKSON.

[Aabent brev.]

FRA DEN KONGELIGE NORSKE REGJERINGENS
DEPARTEMENT FOR DET INDRE.

Gjennem de amerikanske Myndigheder har Departementet modtage Meddelelse om, at Dr. Sheldon Jackson, der er ansat under Indredepartementet i Alaska, har faaet i Opdrag at sørge for Transport af Levnetsmidler m.V. til de Guldgravere, der overvintre i Klondike, og at han i denne Anledning bl.A. vil besøge Norge for at indkjøbe Rensdyr til saadan Transport.

I denne Anledning skal Departementet anmode de offentlige Funktionærer, til hvem han i saadant Oiemed maatte henvende sig, om paa beste Maada at bistaa ham med Raad og Veiledning til at udføre sit Hverve.

Kristiania den 6 Januar, 1898.

OLAJ OLSEN.
C. B. KIRLLAND.

[Translation.]

[Open letter.]

THE ROYAL DEPARTMENT OF THE INTERIOR OF NORWAY.

Our department has received information through American authorities that Dr. Sheldon Jackson, who occupies an official position in Alaska under the Interior Department, United States of America, has been commissioned to provide for the transportation of provisions for the gold diggers, who winter at the Klondike mines, and that he for this purpose, among other things, will visit Norway to buy reindeer for transporting the provisions.

This department will instruct the official functionaries, to whom he may address himself with this end in view, to assist him with council and advice in order that he may be better able to accomplish his undertaking.

Christiania, January 6, 1898.

OLAJ OLSEN.
C. B. KIRLLAND.

List of reindeer drivers and others in the Lapland-Yukon relief expedition of January and February, 1898.

FROM KAUTOKEINO.

Names.	Age.	Sex.	Names.	Age.	Sex.
	<i>Yrs. Mos.</i>			<i>Yrs. Mos.</i>	
Johan Olsen Pulk, 3 years <i>a</i>	42	Male.	Isak Salamonsen Nakkila.....	28	Male.
Karen (his wife).....	50	Female.	Nils Persen Bals.....	41	Do.
Inger Karen (child).....	15	6 Do.	Elen Marie (his wife).....	23	Female.
Berret Inga (child).....	10	Do.	Ingra Bals (child).....	18	Do.
Aslak Johnsen Bals, 4 years <i>a</i>	46	Male.	Per (child).....	15	Male.
Susanna (his wife).....	40	Female.	Merit (child).....	11	Female.
Susanna (child).....	7	Do.	Per Mathisen Spein.....	27	Male.
Mikkel Aslak (child).....	5	Male.	Ole Klemetsen Hatta.....	25	Do.
Johan Petter Persen Rista <i>b</i>	26	6 Do.	Aslak Aslaksen Gaup.....	27	Do.
Berret Anna (his wife).....	23	4 Female.	Kjersten (his wife) <i>a</i>	23	Female.
Nils Persen Sara.....	40	Male.	Ole Johannesen Pulk.....	20	Male.
Marie (his wife).....	40	8 Female.	Isak Mikkelsen Tornensis <i>a</i>	40	Do.
Ellen (child).....	15	Do.	Per Johannesen Hatta <i>a</i>	26	Do.
Mikkel (child).....	12	Male.	Nils Klemetsen <i>a</i>	28	Do.
Morten (child).....	6	Do.	Ole Olson Bar <i>a</i>	36	Do.
Klemet (child).....	4	Do.	Inger (his wife).....	35	Female.
Mathias (child).....	2	Do.	Inger Anna (child).....	3	Do.
Johan Isaksen Tornensis.....	40	Do.	Klemet (child).....	1	3 Male.
Berret (his wife) <i>a</i>	39	Female.	Isak Andersen Bango <i>a</i>	30	Do.
Jacob Larsen Hatta.....	29	6 Male.	Per Nilsen Siri <i>a</i>	24	Do.
Berret (his wife).....	50	Female.	Ida Johansdatter Hatta.....	23	Female.
Mikkel (child).....	16	Male.	Beret Niilsdatter Eira.....	21	Do.
Berret Anne (child).....	6	Female.	Lars Larsen Hatta <i>a</i>	26	Male.
Ida Johansdatter.....	8	Do.	Klemet Nilsen.....	44	Do.
Isak Johanssen Hatta <i>a</i>	26	Male.	Anders Persen Utzi.....	36	Do.

a Recently married.

b Mail carrier.

106 INTRODUCTION OF DOMESTIC REINDEER INTO ALASKA.

List of reindeer drivers and others in the Lapland-Yukon relief expedition of January and February, 1898—Continued.

FROM KARASJOK.

Names.	Age.	Sex.	Names.	Age.	Sex.
Per Andersen	42	Male.	Berret Nilsdatter Eira.....	21	Female.
Sofie (his wife).....	46	Female.	Johan Petter Johannesen		
Sofie (child).....	11	Do.	Nango	30	Male.
Anders Klemetsen Biti <i>a</i>	36	Male.	Kirsten (his wife).....	36	Female.
Marit (his wife).....	22	Female.	Per (child).....	1	6
Anders Johnsen	24	Male.	Samuel Johannesen Balto <i>a</i>	36	Do.
Klemet Bersen Boini.....	23	Do.	Lars Larsen Anthi <i>a</i>	26	Do.
Per Larsen Anthi.....	39	Do.	Johannes Aslaksen Raur		
John Andersen.....	36	Do.	Rauna	33	Do.
Amund Hansen.....	22	Do.	Ole Krogh.....	40	Do.
Ole Olsen.....	20	Do.	Iver Persen Vestad	25	Do.
Anders Aslaksen Bar	25	Do.	Per Josefsen Porsanger.....	41	Do.
Anders Johannesen Balto	33	Do.	Pathias Klemetsen Nil-		
Marit (his wife).....	30	Female.	lokka	20	Do.
Marie (child).....	7	Do.	Hans Andersen Siri.....	22	Do.
Johan Eriksen Eira <i>a</i>	30	Male.	Ole Johansen Stenfjeld		
Marit (his wife).....	34	Female.	Roros (fr. Rörös).....	24	Do.

FROM BOSEKOP.

Ole M. Rapp.....	21	Male.	Ole G. Berg.....	40	Male.
Lauritz Stefansen.....	21	Do.	Peder Berg	20	Do.
Johan Hilmar Hansen	23	Do.	Lauritz Larsen.....	30	Do.
Johan Johannesen Tverelo.....	21	Do.	Rolf Wiig.....	18	Do.

FROM KAAFJORD.

Ola Paulsen (prize rifleman).....	31	Male.	Hilda (his wife).....	25	Female.
Birgithe (his wife).....	30	Female.	Harald (child).....	8	Male.
Kristian (child).....	7	Male.	Ragnvald (child).....	4	Do.
Margit (child).....	5	Female.	Oswald (child).....	3	Do.
Alfhild (child).....	4	Do.	Alice (child).....	6	Female.
Magnus Kjeldberg.....	22	Male.	Karl Johan Sacariasen.....	23	Male.
Emil Kjeldberg.....	26	Do.	Jafeth Lindeberg.....	24	Do.
Thoralf Kjeldberg.....	22	Do.	Wm. A. Kjellmann.....	36	Do.
Otto M. Leinan.....	33	Do.	Gunharda Thomasen.....	18	Female.

FINLANDERS.

Alfred Salamonsen Nilima.....	21	4	Male.	Peder Johannesen (fr. Saxelo).....	24	Male.
Wilhelm Basi (fr. Langfjord).....	28		Do.	Samiul Josefsen (fr. Saxelo).....	25	Do.
Jeremias Abrahamson (fr. Langfjord).....	25		Do.	Otto Greiner (fr. Saxelo).....	25	Do.
Karl Ove Suhr (fr. Elvebakken).....	28		Do.	Hans Samuelsen (fr. Saxelo).....	26	Do.
Alfred Hermansen (fr. Alten).....	21		Do.	Johan Petter Stalogargo <i>b</i>	33	Do.

a Recently married.

b Carried mail on skees to North Cape eight years.

Lapps from Kautokeino.....	47
- Karasjok.....	30
- Roros.....	1
Norwegians from Bosekop.....	8
- Kaafjord.....	16
Finns.....	10
- from Hammerfest.....	1
Total.....	113

CONTRACT WITH THE LAPLANDERS.

[Translation.]

All the undersigned admit and make known by these presents that they have hired themselves reindeer herders, drivers, tamers, and to teach the Eskimo in Alaska in reindeer raising in all its details, and furthermore, to carry out such work as our superiors put over us by United States Government may require; also to look out for the reindeer during transportation to Alaska. Furthermore, we bind ourselves to behave ourselves orderly and decently and to show discipline, and also to depart from our houses the 29th of January next, from which date this contract goes into effect.

For the service and work above referred to, the undersigned, Dr. Sheldon Jackson, acting for the War Department, binds himself on behalf of United States Government to cause to be paid to every one of the undersigned the monthly salary attached to our names and all necessary and required food and clothes (tobacco not herein counted) and free transportation to Alaska. Should any of the undersigned, after two years' service, desire his salary to be paid with reindeer instead of money, such payment shall take place. The price for reindeer shall then be counted according to the price at that certain time prevailing or which is paid in the common market. Even so shall every one of the hired men, if he is deemed qualified by appointed Government officials, have the right to a loan of 100 reindeer for three or five years, as will be later determined, without lease or rent, in such way that only the original number shall be returned to the Government, and all offspring or surplus belongs to the leaser, all other things, as with reference to residence, etc., in accordance with and under such conditions as may be stipulated in the contracts of lease. Such loan of reindeer can, however, not take place before or after two years' period.

Also the hired men shall have free nursing and medicine in case of illness and also the salary shall be paid during the illness, and free schooling for their children, and they shall be free from taxes as long as this contract is binding.

Time of notice of end of service is put mutually to six months, but no notice of end of service can take place from the side of the hired men before after two years' period.

This contract is signed by all and every one of the undersigned, but duplicates are to be made and to be signed for and by each one separately. Also each one of the hired men shall be free from military service and have free lighting and heating, washing and mending of clothes, and all other things that are connected with and necessary for existence. The hired men shall also be free from work on Sundays except with reference to work absolutely necessary. The hides and furs of all the wild deer which are caught or shot shall belong to the man who has got hold of the deer and can be sold by him to whomever

he likes and the money shall be his private property. To those of the undersigned who are married and have their wives with them, the provisions shall be given out once a month and be prepared and cooked by the wife. The others who are not married shall, according to their own wish, have their provisions dealt out every month and have their food prepared by a cook appointed for such service.

Should any of the undersigned after the end of the time of service desire to return home, he shall then be at liberty to select between paying his own journey home or that the Government pay such journey provided that the respective man for such expense serve six months without salary.

The 24th of January, 1898.

Witness:

A. PAULSEN.

WM. A. KJELLMANN.

Nils Sara, \$22.33; Isak Tornensis, \$22.33; Jacob Hatta, \$22.33; Lars Larsen Hatta, \$22.33; Otto Greiner, \$22.33; A. Klemetsen Biti, \$22.33; John Eriksen Eira, \$22.33; Per Mathisen Spein, \$22.33; Aslak Johnsen Bals, \$22.33; Per Larsen Anti, \$22.33; Hans Sanuelson, \$22.33; Per Josefsen Porsanger, \$22.33; Nils Klemetsen, \$22.33; Ole Olesen Bahr, \$22.33; Carl Sakariasen, \$22.33; Ole Krogh, \$22.33; Jeremias Abrahamsen, \$22.33; Rolf Wiig, \$22.33; Th. Kjeldsberg, \$33.50; Alfred Hermansen, \$22.33; Ole Rapp, \$22.33; Wilhelm Basi, \$22.33; Karl O. Suhr, \$28.95; Ole G. Berg, \$22.33; Magnus Kjeldsberg, \$33.50; Ole Johnsen Stensfjeld, \$22.33; Jafet Lindeberg, \$31.26; Heilmar Hansen, \$22.33; John M. Johansen, \$22.33; Lauritz E. Larsen, \$22.33; Isak Andersen Bangs, \$22.33; Beret Eira, \$4.46; Ida J. Hatta, \$4.46; Sofia Andersen, \$4.46; Marit Persdatter Biti, \$4.46; Per Andersen, \$22.33; Samuel J. Balto, \$26.80; Otto M. Leinan, \$22.33; Anders Balto, \$22.33; Johan Peter Persen Rista, \$22.33; Aslak Aslaksen Gaup, \$22.33; Amund Hansen, \$22.33; Ole Olesen, \$22.33; Johan Peter Johannesen Nango, \$22.33; Peder Johannesen, \$22.33; Samuel Josefsen, \$22.33; Anders Johnsen, \$22.33; Iver Persen Vest, \$22.33; Johannes Aslaksen Rauna, \$22.33; Johan Olsen Pulk, \$22.33; Lars Larsen Anti, \$22.33; Ole Johannessen Pulk, \$22.33; Lauritz Stefansen, \$22.33; Peder Berg, \$22.33; O. Paulsen, \$40.20; John Andersen, \$22.33; Mathis Klemetsen, \$22.33; Ole Klemetsen Hatta, \$22.33; Alfred Nilima, \$22.33; Nils Persen Bals, \$26.80; Anders Persen Utzi, \$22.33; Klemet Nilsen, \$22.33; J. P. Johannesen Stalogargo, \$22.33; Per Johannessen Hatta, \$22.33; Per Nilsen Siri, \$22.33; Klemet Persen Boini, \$22.33; Anders Aslaksen Bar, \$22.33; Hans Andersen Siri, \$22.33; Emil Kjeldberg, \$33.50; Johan I. Tornensis, \$26.80; Isak J. Hatta, \$22.33.

DR. SHELDON JACKSON DETAILED TO TAKE CHARGE OF THE LAPPS
AND REINDEER EN ROUTE TO ALASKA.DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
Washington, D. C., March 10, 1898.

MY DEAR SIR: By the direction of the honorable the Secretary of the Interior, you are hereby detailed for special duty in the district of Alaska. The details of his instructions are as follows:

Dr. Jackson will at once proceed to Dyea, in Alaska, and confer with the officer of the War Department in charge of the Alaskan relief expedition for the care of the reindeer across the country to Circle City and their care near that place until they shall be turned over to him in May, of 1898; thereafter, he will proceed to sell them as seems best for the interests of this Department, and with the proceeds arrange to purchase does to replace those borrowed from the herds in Alaska belonging to private parties and used during the past winter for the relief of destitute miners and whalers in that section.

His traveling expenses, including subsistence, will be paid by the War Department out of the relief fund.

Very truly, yours,

W. T. HARRIS, *Commissioner.*

Dr. SHELDON JACKSON,

United States General Agent of Education in Alaska.

TELEGRAMS CONNECTED WITH THE COMMISSION TO LAPLAND.

NEW YORK, *November 22, 1897.*

SHELDON JACKSON, *Bureau of Education:*

Our company cables through rate reindeer, Tromsø New York, £4 15s. sterling per head, including attendants, if 500 carried at once, but excluding charges caused by detainment Christiansand; shippers to furnish food and stables. Our Mr. Johnson will be in Washington to-morrow morning. When and where can he meet you?

A. E. JOHNSON & Co.

SHELDON JACKSON, *Bureau of Education:*

Our company cables in continuance with our yesterday cable, "Add, freight prepaid. Ship not responsible for sickness or death."

A. E. JOHNSON & Co.

[W. H. Root, importer, exporter, and dealer in living wild animals. Cable address, "Deer."]

LARAMIE, WYO., *November 19, 1897.*

SHELDON JACKSON, *Washington, D. C.*

DEAR SIR: Referring to yours of November 16, we will deliver 1,000 reindeer at Dyea or any other regular steamer landing on the Pacific coast for \$150,000; fifty Lapps, as stated, at \$2,500. Can deliver at any time in about ninety days after contract is made.

Yours, truly,

W. H. ROOT.

P. S.—Prices are subject to change at any time without notice until such time as contract is signed.

WASHINGTON, D. C., *December 22, 1897.*WM. A. KJELLMANN, *Alten, Norway:*

How soon and at what price can you purchase 600 No. 1 reindeer, trained to harness, and ship the same with drivers? Answer.

R. A. ALGER, *Secretary of War.*ALTEN, NORWAY, *December 22, 1897.*SECRETARY OF WAR, *Washington, D. C.:*

Can probably ship 500 reindeer February 15.

KJELLMANN.

WASHINGTON, *December 23, 1897.*WM. A. KJELLMANN, *Alten, Norway:*

We want, at once, 500 extra good reindeer, trained to harness, with harness, sleds, and drivers. Dr. Sheldon Jackson sails Saturday to assist you. Telegraph him Cecil Hotel, London, December 31, how many you have secured, and long it will take to purchase the remainder, and he will cable you further what to do.

G. D. MEIKLEJOHN,
*Acting Secretary of War.*WASHINGTON, D. C., *December 24, 1897.*WM. A. KJELLMANN, *Alten, Norway:*

No use unless they can be shipped by January 20. Dr. Jackson and Lieutenant Devore sail to-morrow for Alten. In the meantime make every possible effort to assemble the reindeer for shipment.

R. A. ALGER, *Secretary of War.*NEW YORK, *December 25, 1897.*WM. A. KJELLMANN, *Alten, Norway:*

Hire all men you need to help you get reindeer. Pay extra prices if necessary; get good deer in time.

SHELDON JACKSON.

ALTEN, NORWAY, *December 31, 1897.*

SHELDON JACKSON,

Cecil Hotel, London, England:

Five men purchasing reindeer. Not reported yet. Moss on hand Roros. Vessel must sail direct Alten America. Transshipping dangerous. Situation entangled. Where can I draw money at once per telegraph? Leave for mountains Monday. Bring one new twenty-dollar gold piece. Call Bretania Hotel, Trondhjem.

KJELLMANN.

CORN EXCHANGE, *Liverpool, January 1, 1898.*

Hon. SHELDON JACKSON,

Hotel Cecil, London:

Owing New Year holiday to-day, fear unable say anything definite before Monday.

ISMAY.

LONDON, ENGLAND, *January 1, 1898.*

WM. A. KJELLMANN, *Alten, Norway:*

What is the trouble? Will telegraph funds if possible to-morrow. Leave Thursday for Alten.

JACKSON.

LONDON, ENGLAND, *January 3, 1898.*

WM. A. KJELLMANN, *Alten, Norway:*

Telegraph Dr. Jackson at Trondhjem Thursday number deer with drivers and outfit you can have ready by 15th. He is on the way; could not telegraph him.

DEVORE.

LONDON, ENGLAND, *January 3, 1898.*

WM. A. KJELLMANN, *Alten, Norway:*

Wire if safe to send *Mississippi* to Alten for reindeer; also if clear of ice during winter.

LERUM.

ALTEN, NORWAY, *January 3, 1898.*

LERUM, *London, England:*

Alten safe and clear for any ships. Too early yet to send vessel.

KJELLMANN.

ALTEN, *January 3, 1898.*

SHELDON JACKSON, *Cecil Hotel, London:*

Trouble is brewing holding moss, reindeer, without funds. Prospects fair. Telegraph funds. Am waiting.

KJELLMANN.

LONDON, ENGLAND, *January 3, 1898.*

Dr. JACKSON, *Hotel Cecil, London:*

Have splendid steamer offered. Three pounds ten shillings. Please come see us quick.

ABDICATE.

LONDON, *January 3, 1898.*

Hon. SHELDON JACKSON,

Hotel Cecil, London:

Hoyland & Co., 8 Great St. Helens, London, offer steamer *Grafton* reindeer Tromsø to Liverpool. It may possibly be helpful if you see them.

ISMAY.

LONDON, *January 3, 1898.*

Hon. SHELDON JACKSON,

Hotel Cecil, London:

Sutherlands, 38 Sandhill, Newcastle-on-Tyne, offer *North Anglia*, now at Nyborg Lump sum, thousand pounds, Tromsø to Liverpool, five days loading, discharging. Steamer 1,359 tons net. Has between decks.

ISMAY.

WASHINGTON, D. C., *January 3, 1898.*

SHELDON JACKSON, *Alten, Norway:*

Secure sufficient moss to last reindeer sixty days after reaching Dyea. Answer.

R. A. ALGER, *Secretary of War.*

ALTEN, NORWAY, *January 3, 1898.*SECRETARY OF WAR, *Washington, D. C.:*

Will try. Jackson not arrived. Repeated to Jackson, Trondhjem.

KJELLMANN.

ALTEN, NORWAY, *January 4, 1898.*

SHELDON JACKSON,

Grand Hotel, Trondhjem, Norway:

When in Trondhjem, you must kindly deposit 8,000 or 10,000 kroner in Nordenfeldske Kreditbank as guaranty and successive pay to Mr. A. Skjerdingsstad Røros, with whom I have bargained for 900 loads moss. Also arrange about shipping the moss to Trondhjem by rail. Store in open air with cover. Recommending Backes as agents. Probably leave Devore few days. Trondhjem attend this matter. Moss scarce here.

KJELLMANN.

ALTEN, NORWAY, *January 5, 1898.*

SHELDON JACKSON,

Grand Hotel, Trondhjem:

Can not ship reindeer January 15. Don't send vessel too early. Secretary Alger telegraphed yesterday following: "Secure sufficient moss to last reindeer sixty days after reaching Dyea." I answered, "Will try." From our agent, Mr. Skjerdingsstad Røros, probably few hundred loads can be had in addition to what is bargained. Notify Skjerdingsstad at once per telegraph where to draw funds. Telegraph me necessary funds pay reindeer.

KJELLMANN.

WASHINGTON, D. C., *January 6, 1898.*WM. A. KJELLMANN, *Alten, Norway:*

Are the reindeer dehorned?

GEO. D. MEIKLEJOHN,
*Acting Secretary of War.*ALTEN, NORWAY, *January 6, 1898.*SECRETARY OF WAR, *Washington, D. C.:*

Not yet.

KJELLMANN.

WASHINGTON, D. C., *January 7, 1898.*W. A. KJELLMANN, *Alten, Norway:*

Dehorn reindeer if practicable. Answer.

MEIKLEJOHN, *Acting Secretary of War.*ALTEN, NORWAY, *January 7, 1898.*MEIKLEJOHN, *Acting Secretary of War:*

Will dehorn some.

KJELLMANN.

TRONDHJEM, *January 8, 1898.*KJELLMANN, *Bosekop:*

Send ikke ponge tu Skjerdingsstad for unsmosen. Jeg har beardul ham send den tu Tonseth Trondhjem som vil bebale ham ved modtagelsen Sammel rennum lappum ete i Alten fardig tie endstibning.

JACKSON,

LONDON, *January 6, 1898.*W. A. KJELLMANN, *Alten, Norway:*

Wire me under address Abdicate, London, how many reindeer you can guarantee by the 15th.

DEVORE.

ALTEN, NORWAY, *January 7, 1898.*LIEUTENANT DEVORE, *Cecil Hotel, London, England:*

January 15, none. February 15, 500, with sleds, drivers, and 250 tons moss.

KJELLMANN.

TRONDHJEM, *January 8, 1898.*W. A. KJELLMANN, *Alten, Norway:*

You can write checks on Nordenfjeldske Kreditbank, Trondhjem, for 3,500 kroner. I leave to-night for Alten. Telegraph me, Grand Hotel, how many deer you have.

JACKSON.

ALTEN, NORWAY, *January 8, 1898.*SHELDON JACKSON, *Grand Hotel, Thjem:*

Two hundred bargained. Leave for Kautokeino to-morrow if Kreditbank telegraph money to-day. Will meet you Alten.

KJELLMANN.

TRONDHJEM, *January 8, 1898.*LIEUTENANT DEVORE, *Cecil Hotel, London:*

E. A. Tonseth, Trondhjem, Norway, will secure reindeer moss. Mail Monday, without fail, check payable to his order for £470. I did not bring sufficient pay for moss. Have steamship call at Trondhjem for 400 tons moss. Local steamers too small to carry it to Alten. I leave to-night; reach Alten Friday. Can telegraph me Tromsø Monday. Hammerfest Tuesday en route. Will not be ready for steamship before.

JACKSON.

WASHINGTON, D. C., *January 8, 1898.*SHELDON JACKSON, *Alten, Norway:*

Advise number, when shipped, and number dehorned.

MEIKLEJOHN, *Acting Secretary of War.*LONDON, *January 8, 1898.*W. A. KJELLMANN, *Alten, Norway:**Manitoba* will be Trondhjem about 15th. Is moss there or Alten. Leave here to-morrow. Address Allan Bros., shippers, Glasgow.

DEVORE.

ALTEN, NORWAY, *January 8, 1898.*

LIEUTENANT DEVORE,

Care Allan Bros., Glasgow, Scotland:

Moss mainly at Trondhjem.

KJELLMANN.

JANUARY 10, 1898.

Lieutenant DEVORE, *Cecil Hotel, London:*

Buying delayed for funds. Mail check immediately for \$3,000 to Nordenfjeldske Kreditbank, Trondhjem, Norway, payable to their order, and ask them telegraph me the money at Alten. Can be done.

JACKSON.

TRONDHJEM, *January 17, 1898.*SHELDON JACKSON, *Alten, Norway:*

Funds to your credit.

DEVORE.

CHRISTIANIA, NORWAY, *January 11, 1898.*SHELDON JACKSON, *Alten, Norway:*

Have you chartered steamer for your reindeer for New York, or can you use for part thereof steamer *Tjome* that has about 105,000 cubic feet at disposal? Could be Trondhjem or Finmarken first half February. Kindly telegraph.

OTTOTHER.

GLASGOW, *January 11, 1898.*Dr. JACKSON, *Hammerfest, Norway:*

Ship arranged. Hitch animals as cattle. Drivers accordingly. Leave via Newcastle for Trondhjem to-day. Jansen wires possibly all can be loaded by 22d.

DEVORE, *Central Hotel.*TRONDHJEM, NORWAY, *January 16, 1898.*SHELDON JACKSON, *Alten, Norway:*

What is situation?

DEVORE.

JANUARY 17, 1898.

Lieutenant DEVORE, *care Tonseth, Trondhjem:*

Kjellmann has bought 500 selected trained reindeer; sleds; 50 drivers. Ready for shipment January 29. January 3 Alger cabled Kjellmann for 500 tons moss extra. Therefore bring 700 tons moss from Trondhjem. Load cool part of ship. Funds where?

JACKSON.

TRONDHJEM, *January 17, 1898.*Dr. JACKSON, *Alten, Norway:*

Funds Alten's Sparebank.

DEVORE.

ALTEN, NORWAY, *January 17, 1898.*SECRETARY OF WAR, *Washington, D. C.:*

Kjellmann arrived from interior. Bought 500 choice reindeer. All horns removed. Secured sleds and drivers. Steamship loading moss Trondhjem.

JACKSON.

TRONDHJEM, NORWAY, *January 17, 1898.*Dr. JACKSON, *Alten, Norway:*

Steamer here about 19th. Alten about 25th. Be ready, if possible, Demurrage if delay.

DEVORE.

TRONDHJEM, *January 17, 1898.*

Dr. JACKSON, *Alten, Norway:*

Lapp here well recommended. Want any more? What terms? Perhaps 70 deer here; want them? Want any more moss than what is here and there?

DEVORE, *Grand Hotel.*

TRONDHJEM, *January 17, 1898.*

Dr. JACKSON, *Alten:*

Did Kjellmann send following telegram from Alten? "January 8. Devore, Abdiccate, London, England: January 15, none: February 15, 500, with sleds, drivers, 250 tons moss. Kjellmann. Answer. Haste."

DEVORE, *Grand Hotel.*

ALTEN, *January 18, 1898.*

Lieutenant DEVORE, *Grand Hotel, Trondhjem:*

Kjellmann sent telegram quoted. The moss mentioned was at Rörös. Alger afterwards enlarged order to between 600 and 700 tons in all. Only 20 tons here. Bring rest from Trondhjem. Five hundred reindeer bought; no more wanted. Kjellmann promised Lapp Kjeldsberg. Bring him. If another well recommended, bring him also. Will receive same as others. Contracts made here.

JACKSON.

TRONDHJEM, *January 18, 1898.*

Dr. JACKSON, *Alten, Norway:*

Plenty moss here. Has Sivertsen bought reindeer for Jansen there? How many? Am waiting answer last night's telegram.

DEVORE.

ALTEN, *January 17, 1898.*

SIVERTSEN, *Mosjöen, Norway:*

If Bosekop moss for me, notify agent turn it over to me. Discontinue buying. Will not receive it Tromsøe or elsewhere.

JACKSON.

ALTEN, *January 17, 1898.*

Lieutenant DEVORE, *Trondhjem, Norway:*

Be on guard against Tonseth and Jansen. Both worked against Kjellmann and are fleeing us. Sivertsen now buying moss here in competition with me, raising the price and shipping to Tromsøe. Notify Jansen we not receive this unless turned over to me here. To-day's advices: Plenty of moss to be had Rörös. Sivertsen, since notified to help me, has wired here for deer in opposition.

Before leaving, inquire post-office for letters.

JACKSON.

TRONDHJEM, NORWAY, *January 18, 1898.*

Dr. JACKSON, *Alten, Norway:*

Jansen has just telegraphed Nelsen and Sivertsen deliver you about 60 tons moss, for which he has advanced 1,800 kroner on our account.

DEVORE.

WASHINGTON, D. C., *January 18, 1898.*

SHELDON JACKSON, *Alten, Norway:*

Cable number attendants. Have any families?

MEIKLEJOHN, *Acting Secretary of War.*

MEIKLEJOHN,

War Department, Washington, D. C.:

Probably 15 out of 50 attendants have families. Will cable definitely before sailing. Reindeer men needed permanently in Alaska. Families important. Have not agreed to return any to Lapland.

ALTEN, NORWAY, *January 19, 1898.*

JACKSON.

WASHINGTON, D. C., *January 19, 1898.*

Dr. JACKSON, *Alten, Norway:*

Inquire how many deer can be shipped in cars 8 by 36.

MEIKLEJOHN.

ALTEN, NORWAY, *January 20, 1898.*

GEORGE D. MEIKLEJOHN,

Acting Secretary of War, Washington, D. C.:

Eighteen or twenty. Same space as Mexican burro.

JACKSON.

TRONDHJEM, *January 19, 1898.*

Dr. JACKSON, *Alten:*

Are reindeer all secure and ready?

DEVORE.

ALTEN, NORWAY, *January 19, 1898.*

Lieutenant DEVORE,

Cecil Hotel, Trondhjem, Norway:

Reindeer secure. Being driven in from interior. Not ready for shipment before 29th.

JACKSON.

ALTEN, *January 18, 1898.*

Lieutenant DEVORE, *Trondhjem, Norway:*

Sivertsen tried to get reindeer here last week, but failed. Yesterday's telegrams answered. Kjellmann contracted R ros moss 7 and 8 kroner load. January 8 I advanced Tonseth on moss 5,600 kroner.

JACKSON.

ALTEN, NORWAY, *January 19, 1898.*

Lieutenant DEVORE, *Grand, Trondhjem:*

Nilson bought Sivertsen and delivered me 80 loads moss at total cost 1,240 kroner. He received from them only 800 kroner, 440 still due. Friend of Jansen wrote here, if they got deer, make good thing out of us.

JACKSON.

TRONDHJEM, *January 20, 1898.*

Dr. JACKSON, *Alten, Norway:*

Plenty moss; do not take more except at low price.

DEVORE.

ALTEN, NORWAY, *January 20, 1898.*

Lieutenant DEVORE, *Trondhjem, Norway:*

Shall I buy 10 kroner, load?

JACKSON.

TRONDHJEM, *January 21, 1898.*

Dr. JACKSON, *Alten, Norway:*

About 700 tons here, do as you think best.

DEVORE.

TRONDHJEM, *January 21, 1898.*

Dr. JACKSON, *Alten, Norway:*

Three men used to handling reindeer want employment. Do you want them? Steamer not yet arrived.

DEVORE.

TROMSOE, NORWAY, *January 21, 1898.*

Dr. JACKSON, *Alten, Norway:*

After order from Mocatta, Jansen, London, is for your account of me in Sweden, bought 500 reindeer, which come to Skibotten Monday, January 24. Telegram from Jansen to-day. You are the receiver. What is to do? Telegraph immediately.

SIVERTSEN.

ALTEN, NORWAY, *January 21, 1898.*

SIVERTSEN, *Tromsøe, Norway:*

I did not order reindeer, and refuse to receive them.

JACKSON.

TRONDHJEM, *January 22, 1898.*

Dr. JACKSON, *Alten, Norway:*

What is your outlay for moss and reindeer?

DEVORE.

ALTEN, NORWAY, *January 22, 1898.*

Lieutenant DEVORE, *Trondhjem, Norway:*

Paid so far, moss and reindeer, 23,875 kroner; much more to be paid. Alten bank unable to furnish money until Monday next. Jansen telegraphs you ordered him to get reindeer. Did you order? If so, how many?

JACKSON.

TRONDHJEM, *January 22, 1898.*

Dr. JACKSON, *Alten, Norway:*

Gave no order to buy any independent of you. Jansen has given me untold trouble.

DEVORE.

ALTEN, *January 22, 1898.*

Lieutenant DEVORE, *Grand, Trondhjem:*

Sivertsen telegraphs that upon Jansen's order he bought 500 reindeer for us and that Jansen now telegraphs him to deliver them to me. I replied that I did not order reindeer and refuse to receive them. Better inform American consul, Trondhjem. No telling what Jansen may try after you leave.

JACKSON.

ALTEN, *January 22, 1898.*

Lieutenant DEVORE, *Grand, Trondhjem:*

Compel settlement with Jansen while you have consul, Trondhjem, to assist you. Remember Jansen paid only 800 kroner here for moss.

JACKSON.

ALTEN, *January 22, 1898.*

Lieutenant DEVORE, *Grand, Trondhjem, Norway:*

See ship's papers custom-house, Trondhjem, are straight. Allow taking cargo Alten and sailing direct America. No custom office here. Telegraph sailing.

JACKSON.

WASHINGTON, D. C., *January 22, 1898.*

Dr. JACKSON, *Alten, Norway:*

Is harness provided?

MEIKLEJOHN.

ALTEN, NORWAY, *January 22, 1898.*

GEORGE D. MEIKLEJOHN,

Acting Secretary of War, Washington, D. C.:

Harness and sleds all provided.

JACKSON.

TRONDHJEM, *January 24, 1898.*

Dr. JACKSON, *Alten, Norway:*

Ship here fear won't hold all moss. How many Lapps go? Have you sufficient funds?

DEVORE.

ALTEN, NORWAY, *January 24, 1898.*

Lieutenant DEVORE, *Trondhjem, Norway:*

Probably sufficient funds. About 80 to 100 people and grown children. If ship won't hold moss, place 200 tons with commission house for sale; 500 tons sufficient for us. Take, however, all you have room for. Perhaps better pack some ice with moss.

JACKSON.

TRONDHJEM, *January 24, 1898.*

Dr. JACKSON, *Alten, Norway:*

Ship could not come to wharf. Loading by lighter. Moss broken up; not sacked; can't take all. Ice impracticable. Kjeldsberg not reported.

DEVORE.

TRONDHJEM, *January 26, 1898.*

Dr. JACKSON, *Alten, Norway:*

Loading delayed by rough water. Probably leave here to-morrow morning. Is Treasury check taken there?

DEVORE.

ALTEN, NORWAY, *January 26, 1898.*

Lieutenant DEVORE, *Trondhjem, Norway:*

Treasury checks taken if bank has sufficient money.

JACKSON.

TRONDHJEM, *January 27, 1898.*

Dr. JACKSON, *Alten, Norway:*

Storm stopped loading. Has bank sufficient money?

DEVORE.

Lieutenant DEVORE, *Grand, Trondhjem:*
Bring 3,700 kroner.

ALTEN, *January 27, 1898.*

JACKSON.

Lieutenant DEVORE:

JANUARY 28, 1898.

A few Lapps backed out. If three or four well recommended, used to reindeer, bring them. Salary 1,000 kroner year, with food and clothing.

JACKSON.

Dr. JACKSON, *Alten:*

TRONDHJEM, *January 28, 1898.*

Leave for Alten to-night. Be ready.

DEVORE.

Dr. JACKSON, *Alten:*

HAMMERFEST, *January 29, 1898.*

When is *Manitoban* expected? Will she go direct to sea when leaving Alten or via another seaport in Norway? Do you wish the vessel cleared northward without calling at Hammerfest? In that case I will send an officer at the expense of the steamer.

DERICKSON, *Custom-House Inspector.*

TOLDBODEN, *Hammerfest:*

ALTEN, NORWAY, *January 29, 1898.*

Expected Tuesday. Will consult captain. Let you know after arrival.

JACKSON.

SHELDON JACKSON, *Alten, Norway:*

WASHINGTON, D. C., *February 2, 1898.*

You sail when?

MEIKLEJOHN.

GEORGE D. MEIKLEJOHN,

ALTEN, NORWAY, *February 3, 1898.*

Acting Secretary of War:

Ship delayed by storms. Expect to sail to-morrow morning. Will cable again.

JACKSON.

SECRETARY OF WAR, *Washington, D. C.:*

ALTEN, NORWAY, *February 3, 1898.*

Manitoban sails to-day with 530 reindeer and 87 Lapps, men and women.

JACKSON.

MR. H. E. REDMEYER GIVEN CHARGE OF REINDEER EN ROUTE TO
CIRCLE CITY.

SEATTLE, WASH., *March 16, 1898.*

SIR: You are hereby appointed to take charge of a herd of reindeer and a party of drivers and convey them across from Haines to Circle City, where you will await further instructions.

Your salary until February 1, 1899, will be \$75 per month and rations, to be paid from the Alaska relief fund.

After February 1, 1899, your salary will be at the rate of \$900 a year, without rations, to be paid from the reindeer fund.

SHELDON JACKSON,
United States General Agent of Education in Alaska,
Special Agent of War Department.

Mr. HEDLEY E. REDMEYER.

OFFICERS OF THE ARMY TO ASSIST DR. SHELDON JACKSON.

HEADQUARTERS DEPARTMENT OF THE COLUMBIA,
Vancouver Barracks, Wash., March 17, 1898.
Commanding Officer, Fort St. Michael, Alaska.

SIR: By direction of the Assistant Secretary of War you are instructed to cooperate with Dr. Sheldon Jackson, agent for the Interior Department, and extend to him every facility at your command in connection with his mission of introducing reindeer into Alaska not incompatible with the duty to which you have been assigned, the execution of which is paramount to all other considerations.

By command of Brigadier-General Merriam:

THOMAS H. BARRY,
Assistant Adjutant-General.

FORT ST. MICHAEL, ALASKA, *July 12, 1898.*

Official copy respectfully furnished Dr. Sheldon Jackson for his information.

EDWARD BELL,
Second Lieutenant, Eighth Infantry, Adjutant.

MR. H. E. REDMEYER COMMENDED TO MERCHANTS.

WASHINGTON, D. C., *April 6, 1898.*
To the agents of the North American Trading and Transportation Company or Alaska Commercial Company, Yukon River, Alaska.

SIRS: This will introduce to you Mr. Hedley E. Redmeyer, who is in charge of a herd of Government reindeer with the attendant drivers.

If he and his party should by accident lose their provisions, or be in urgent need of more supplies, you are hereby authorized to furnish the same and send bill in triplicate, duly signed, to me, Bureau of Education, Washington, D. C.

Very truly, yours,

SHELDON JACKSON,
United States General Agent of Education in Alaska.

MR. H. E. REDMEYER COMMENDED TO TRANSPORTATION COMPANIES.

WASHINGTON, D. C., *April 6, 1898.**To the transportation companies on the Yukon River, Alaska.*

SIRS: You are hereby authorized to furnish second-class passage for Mr. Hedley E. Redmeyer and such reindeer drivers as he may have with him to St. Michael. The bill for the same will be made out in triplicate and mailed to me, Bureau of Education, Washington, D. C., for payment.

If he should have reindeer for transportation, you are authorized to take them down the river to Nulato, or a point where the trail goes overland to Unalaklik and St. Michael.

Very truly, yours,

SHELDON JACKSON,
United States General Agent of Education in Alaska.

INSTRUCTIONS TO WILLIAM A. KJELLMANN.

HAINES, ALASKA, *April 9, 1898.*

SIR: When you have placed the reindeer on good pasturage in the neighborhood of the summit on the Dalton trail, and assisted in getting the supplies up to the reindeer, so that Mr. Redmeyer and his party can continue their journey, without further assistance, across the country to the moss hills back of Circle City, you will take the balance of the party, together with the supplies, to Fort Townsend to await the time when they can be sent to Unalaklik.

Before leaving Haines you will settle all bills, so far as you can, and where they can not be paid for want of funds, procure the bills in writing to be settled hereafter, and send both receipts and bills to me at Washington. You will also pile up in a neat manner any sleds that may be left. Extra harness, together with supplies, will be sent to Fort Townsend, to be taken afterwards to Eaton Reindeer Station, near Unalaklik. Mark everything "U. S. R. S." or "Reindeer," Fort Townsend, Wash. On your way down the coast write me a full account of the herd and your success and adventures in reaching the summit. Also send a list of the men sent in with Mr. Redmeyer.

Very truly, yours,

SHELDON JACKSON,
Special Agent, War Department.

Mr. WILLIAM A. KJELLMANN.

INSTRUCTIONS TO H. E. REDMEYER.

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION, ALASKA DIVISION,
Washington, D. C., April 9, 1898.

SIR: When Mr. William A. Kjellmann returns to the States you, as assistant superintendent of reindeer Government stations in Alaska, will assume the control of and be responsible for the safe care and transportation of 275 reindeer, with sleds, harness, and other property of the Government, from Chilkat to pasturage near Circle City or Fort Cuddahy, on American soil. When you reach such pasturage you will camp for the summer, or until further instructions. Mr. Kjellmann can direct you to good pasturage on the hills back of Circle City. Unless they arrive before you start inland, while you are in camp near Circle City, it is expected that 200 head of reindeer will be sold to Mr. P. C. Richardson, who has secured the carrying of the mail from Juneau via Dawson and Circle City to the mouth of the Tanana; but you will not deliver them to him or anyone else without a written order from myself or Mr. Kjellmann, which order must specify the number of deer, sleds, and harness that is to be turned over to Mr. Richardson or his agent, also the drivers, by name, that are to go into Mr. Richardson's employ.

It is also expected that another 100 head of deer will be sold to the Klondike, Yukon and Copper River Company, and you will deliver to them or their authorized agent only upon a written order from me or Mr. Kjellmann, specifying number of deer, sleds, harness, etc., also, by name, the drivers.

After the above 200 are taken from the herd you are authorized to sell the remaining reindeer in lots of 10, at \$125 each. You must in every instance collect the pay before delivering the animals and deposit it to my credit with the nearest agent of the North American Trading and Transportation Company, taking his receipt for the same. You can allow one driver to accompany each lot of 10 sold to private parties. If all the deer in your charge should be sold, you will then take passage down the river to St. Michael and then up the coast to Eaton Reindeer Station, near Unalaklik, bringing with you such drivers as you may have left, also the Government property in your hands.

I give you an order on the transportation companies for passage down the river.

The rations that you take in with you are expected to last until August 31, by which time you will be able to reach the Eaton Reindeer Station, where the balance of the rations will be sent.

You will constantly keep before you that while it is desirable that Military Expedition No. 1, Captain Brainard commanding, and United States Interior Department herd, in charge of yourself, should cross the country together from Chilkat to Circle City, yet yours is an independent command—that you are not under orders from Captain

Brainard. The Secretary of the Interior will hold you personally responsible for the safety of the reindeer and other property intrusted to your care.

If the military officers wish to go down to Dawson City, you will not take the herd in your care down into the valley, but will remain on pasturage on the hills until they go down and return.

While you are entirely independent of the military expedition, yet I wish you to render it such assistance in crossing the country as you can without injuring or overworking the deer in your charge.

The harness belonging to the sleds you will, if you can, take with you after the sleds are left.

If the snow gives out entirely before you reach Circle City, you will cache your sleds and make a note of the location, so that they can be recovered next fall. You will take with you a board to place by the sleds, upon which is painted "These sleds are the property of the United States."

While in camp drill the men in speaking English. Encourage them to try and use the English they may learn. Use it yourself as far as possible in conversing with them.

You will from time to time send a man to Circle City for the mail, which will be sent to that post-office on the steamers that will arrive from the middle of July onward.

If by any chance you are overtaken with disaster and lose your rations, you can apply to either the North American Trading and Transportation Company or the Alaska Commercial Company, and have the charge made to the United States Bureau of Education, in triplicate, and mailed to me at Washington.

Very truly, yours,

SHELDON JACKSON,

United States General Agent of Education in Alaska.

MR. HEDLEY E. REDMEYER.

REINDEER CAN BE SOLD AT COST.

DEPARTMENT OF THE INTERIOR,

Washington, April 25, 1898.

SIR: Referring to your verbal report of even date regarding the reindeer in Alaska turned over to you by the War Department, I have to state that authority is hereby granted you to sell said reindeer at such prices per capita as in your judgment may be proper. In no case, however, shall they be sold at a less price than what they cost the Government per head.

Very respectfully,

C. N. BLISS, *Secretary.*

Dr. SHELDON JACKSON,

General Agent Education in Alaska.

REPORT FROM H. E. REDMEYER.

MOUNTAIN CAMP, *May 31, 1898.*

DEAR SIR: When you receive this letter Mr. Paulsen will be in Seattle and can give you the necessary information in regard to us and our reindeer. There is no chance whatever to use the sleds, as the snow is all gone. We had only one night hard crust since you left us, and then we went about 3 miles and the deer were all tired out, being still weak from the effects of starvation. Seeing that it might take two months before we can reach White River, and then be without provision, I decided to send eight men down to Seattle and from there take a steamboat for St. Michael and further on to Circle City. We are preparing ourselves for a hard and long travel. We are making pack saddles for the deer and will probably be ready to start from here the 10th of June and cross the White River about the 10th of July. We have provisions for seven men until October, or last of October, so I think we shall be able to go through all right. It would perhaps be well to send Paulsen and his men to Circle City about the last of August, with four or five months' provisions, to wait for us, or in the last of September start out to meet us. Well, it remains for you to decide what to do. All I can say is that I'll push it through all right, so you need not fear; you can depend on me. My best regards to Dr. Jackson.

Yours, very truly,

HEDLEY E. REDMEYER.

Mr. W. A. KJELLMANN.

INSTRUCTIONS TO O. PAULSEN.

MOUNTAIN CAMP, *May 31, 1898.*

SIR: On the 1st of June you will take control of and be responsible for the care and transportation of seven Laplanders. You will return with them to Haines Mission and there immediately secure tickets for them and for yourself on a passenger steamer for Seattle. On arriving at Seattle, telegraph to Mr. Kjellmann and find out whether he has gone to St. Michael or not. If he is in the States, you will then, either by telegraph or mail, communicate with him and explain why you were sent back, and he will then take charge of you and your men. If, however, Mr. Kjellmann has gone to Alaska, you will then immediately secure tickets for yourself and your men on a passenger steamer for St. Michael. After you reach St. Michael, secure ticket for your men and yourself on a Yukon River steamboat and continue your journey to Circle City, where you will stay and await orders from Mr. Kjellmann, who will be there by that time.

Respectfully, yours,

HEDLEY E. REDMEYER,

In Charge of Government Reindeer Expedition, Alaska.

The following Laplanders will be in your charge: Ole Klemetsen Hatta, Alfred Salamonsen Nilima, Mathis Klemetsen Niloka, John Andersen, Klemet Nilsen, Anders Persen Utzi, and Johan Pettersen Stalogargo.

Mr. O. PAULSEN.

RELIEF SUPPLIES SHIPPED TO DR. SHELDON JACKSON.

DYEA, ALASKA, *June 12, 1898.*

SIR: In compliance with telegraphic instructions from Major-General Merriam, dated June 5, 1898, I have the honor to inform you that I have this day shipped to you per steamship *Utopia* all the relief supplies remaining unsold. Inclosed are invoices and receipts for the same. Kindly sign duplicate receipts and return them to me.

Very respectfully,

HENRY C. CABELL,

*First Lieutenant, Fourteenth Infantry,
A. G. M. and C. S., Alaska Relief Expedition.*

Eight inclosures.

Dr. SHELDON JACKSON, *Seattle, Wash.*

CLOTHING AND SUBSISTENCE FOR LAPPS, NORWEGIANS, FINNS, ETC.

WAR DEPARTMENT,

Washington, June 18, 1898.

DEAR SIR: In response to your letter of 6th instant, in which you ask that the commanding general, Department of the Columbia, be authorized and directed to furnish the Lapps, Norwegians, Finns, etc., clothing as well as subsistence, in accordance with contract, and that permission be granted you to turn over to the Interior Department such subsistence received from this Department and remaining on hand at the expiration of this Department's contract with the Lapps, January 31, 1899, I beg to inform you that under date of 13th instant the Quartermaster-General was directed to advise the chief quartermaster, Department of the Columbia, by wire, to furnish you clothing for the Lapps in that Department, under your charge, according to the terms and conditions of the contract between the said Lapps and the United States Government, and that officer reported, under date of the 15th instant, as follows:

Respectfully returned to the honorable the Secretary of War with report that telegraphic directions have this day been sent to the chief quartermaster, Department of the Columbia, to carry out the foregoing instructions of the Secretary of War, and, further, to forward by mail a report of the action taken.

The question of granting you authority to turn over to the Interior Department such subsistence stores as may be on hand January 31,

1899, is now receiving consideration as to the legal question involved, the outcome of which will be transmitted to you by further letter at an early day.

Very respectfully,

G. D. MEIKLEJOHN,
Acting Secretary of War.

Dr. SHELDON JACKSON,
St. Michael, Alaska, via Seattle, Wash.

REINDEER FURNISHED THE MAIL CONTRACTOR.

SEATTLE, *June 27, 1898.*

SIR: You are hereby authorized to turn over to Mr. S. D. I. Emerson or his order as many reindeer as he may require for the postal service, upon the payment for the same, by certified check made out to my order, at the rate of \$125 for each animal.

You will remain with the balance of the deer unsold until further orders, retaining a sufficient number of Lapps to care for the deer. The other Lapps can be given to Mr. Emerson, and perhaps he will leave them all together for the present.

Very truly, yours,

SHELDON JACKSON.

Mr. H. E. REDMEYER,
In Charge of the Reindeer.

DISPOSITION OF ALASKAN RELIEF EXPEDITION SUPPLIES.

WAR DEPARTMENT,
Washington, July 8, 1898.

DEAR SIR: As supplemental to Department letter of 18th ultimo, you are informed that your request of June 6, for permission to turn over from the War Department to the Interior Department any excess of butter and bacon from the relief supplies which may be on hand January 31, 1899, is granted.

Very respectfully,

G. D. MEIKLEJOHN,
Acting Secretary of War.

Dr. SHELDON JACKSON,
St. Michael, Alaska, via Seattle, Wash.

REINDEER TO BE RETURNED TO CAPE PRINCE OF WALES AND POINT RODNEY.

UNITED STATES STEAMER BEAR,
Off Cape Prince of Wales, Alaska, July 13, 1898.

MY DEAR SIR: Mr. Jarvis informs me he promised Mr. Lopp and Charlie that the deer taken from Cape Prince of Wales and Point

Rodney should be returned this season. Under this promise the deer were delivered to him.

I earnestly hope nothing will be allowed to interfere with the delivery of the deer to Mr. Lopp at the earliest possible moment.

I understand that Mr. Kelly has about 1,000 deer at St. Lawrence Bay.

Respectfully, yours,
F. TUTTLE,
Captain, Commanding Relief Expedition.

Dr. SHELDON JACKSON,
Agent Education for Alaska.

REINDEER HERD AT POINT BARROW.

HOTEL HEALY,
St. Michael Island, July 15, 1898.

DEAR SIR: Learning that the domestic reindeer sent to Point Barrow for the relief of the whalers were not all needed this spring, I have sent some herders with provisions to take charge of them.

It is my plan to keep the herd together this coming year. But in the summer of 1899 I hope to be able to make arrangements by which a herd can be set aside for your mission and another for the Episcopal Mission at Point Hope. In the meantime the herd will be kept on suitable pasturage between Point Hope and Point Barrow.

You are hereby authorized and directed to turn over the herd to the Laplander who brings you this letter.

Very truly, yours,
SHELDON JACKSON,
*United States General Agent of Education in Alaska
and Superintendent of Government Reindeer.*

Dr. H. RICHMOND MARSH,
Point Barrow.

REINDEER HERD AT POINT HOPE.

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION, ALASKA DIVISION,
St. Michael, July 15, 1898.

SIR: You are hereby directed to turn over any reindeer in your charge to Electroona and Ahlook, Government herders, who will drive them into the main herd between Point Hope and Point Barrow.

Very truly, yours,
SHELDON JACKSON,
Superintendent of Reindeer.

Dr. DRIGGS, *Episcopal Mission*
(or whoever is in charge of domestic reindeer in the vicinity of
Point Barrow.)

MR. N. V. HENDRICKS TAKES OVERSIGHT OF REINDEER BELONGING TO THE EPISCOPAL MISSION.

ST. MICHAEL, ALASKA, *July 22, 1898.*

SIR: I have the honor to acknowledge the receipt of your letter of the 21st with reference to your taking the herd of reindeer belonging to the St. James Episcopal Mission, Rev. J. L. Prevost in charge.

In reply permit me to say that on the part of the Government I see no objections to your doing so, provided you assume the same obligations that were assumed by Mr. Prevost and carry out the letter and spirit of the purpose for which said deer were loaned by the Government, to wit, the introduction of domestic reindeer among the natives and the training of some of their young men to the management and care of the deer. When a native, after an apprenticeship of five years, has learned the business he is to be given 18 female and 2 buck deer as a starter for his private herd. Any time after five years from the date of the original loan the Government can call for 50 head.

I hope you may be able to make satisfactory arrangements with Mr. Prevost, as I judge you will give more time to the development of the herd than the missionaries will be able to do.

If you complete your arrangement, you will have Bishop Rowe or Mr. Prevost address a letter to Mr. William A. Kjellmann, requesting him to send the Episcopal herd now at Golovin Bay overland to St. James Mission, and turn them over to your care. Also arrange with Mr. Kjellmann for two Lapps. Until the deer loaned by the Government are returned, the herd will be open to the inspection of the Government agent.

Truly, yours,

SHELDON JACKSON.

Mr. N. V. HENDRICKS,

Anvik, Alaska.

SUPPLIES RECEIVED BY DR. H. R. MARSH.

UNITED STATES STEAMER BEAR,
Point Barrow, Alaska, August 4, 1898.

Received from Capt. F. Tuttle, Revenue-Cutter Service, commanding U. S. S. *Bear*, commanding United States relief expedition, 391 reindeer, and the following articles, viz, one hundred 45/70 cartridges; 12½ pounds powder; 1,000 primers, No. 2; 50 pounds soap; 1 barrel pork, 200 pounds; 1 box coffee, 36 pounds; 1 tent and stove; 2 sacks beans, 176 pounds; one-half barrel sugar, 140 pounds; 20 sacks flour, 1,000 pounds; 7 sleds; 8 harnesses, on account of the Board of Home Missions of the Presbyterian Church of the United States.

H. R. MARSH, M. D.

SIBERIAN REINDEER ISSUED TO CAPE PRINCE OF WALES.

TELLER REINDEER STATION, *August 12, 1898.*

DEAR SIR: I regret to say that I have only secured 173 or 174 reindeer for you this season, many of them fawns. That will be all for this year.

When I reached Siberia Mr. Kelly and assistants had left, leaving no word of who had the deer in charge or how many they had. The result was I had to take the word of the natives, and only found 100 head as the result of Mr. Kelly's work. I am very sorry not to be able to replace the whole herd this season. I hope to do better next. The steamer *Del Norte* was near your place about 11 o'clock last night, but as it was too rough to land the deer we came here. We attempted to swim the deer ashore and lost 13. Sorry not to see you even for a few minutes. I leave some blank books, and papers, and magazines for you at this station in charge of a miner, Dr. Brandon, who will live in station house this winter. •

Your friend,

SHELDON JACKSON.

W. T. LOPP, Esq.,
Cape Prince of Wales.

DR. BRANDON PLACED IN CHARGE OF TELLER REINDEER STATION

TELLER REINDEER STATION, *August 12, 1898.*

SIR: You are hereby requested to take charge of the Government buildings and other property at this station and see that the same are not injured by natives or whites during your sojourn in this place, in return for which you are given the use of the buildings free of rent.

If circumstances cause you to remove before some one arrives next season to look after the property, you will kindly leave the key with Ku to ke na, and ask him to look after the property for the Government.

Very truly, yours,

SHELDON JACKSON,
United States General Agent.

Dr. BRANDON, *Port Clarence, Alaska.*

A LOAN OF REINDEER OFFERED TO THE ROMAN CATHOLICS.

HOTEL HEALY, *St. Michael, August 20, 1898.*

MADAM: The Government is now ready to loan to your order 100 head of reindeer (the Swedish Mission at Golovin Bay received but 50; also the Episcopal Mission at the mouth of the Tanana 50) under the following conditions, which are the same as given to the other societies, to wit:

First. The herd is to be kept for five years in the neighborhood of Nulato, the priest there taking the oversight of them for you.

Second. At the end of five years, the same proportion of male and female deer are to be returned to the Government, your society keeping all over and above the 100 deer to be returned to the Government.

Third. The Government will pay the salary of a Lapp and his family, who will take charge of the herd and teach your young men the business. It is expected that in five years some of your young men will have so mastered the business of raising reindeer that you can dispense with the further services of a Lapp.

Fourth. Your society will be expected to furnish the Lapp and his family food and clothing while in your employ. Mr. Kjellmann can furnish you an unmarried Lapp if you prefer.

Fifth. If these terms are agreeable to you, you will mail to me, Bureau of Education, Washington, D. C., a written acceptance of them, and inclose a copy of the same to William A. Kjellmann, superintendent of reindeer station at Unalaklik, via St. Michael, with the request that he send the deer for you to the priest at Nulato.

Sixth. Mr. Kjellmann will then drive them up to Nulato for you.

We specify their being kept for the first five years in the vicinity of Nulato for important public interests that I will mention to the priest when I see him.

Hoping you may find the herd a help in your mission work and in time an unfailing supply of fresh meat for your table, I remain,

Very respectfully, yours,

SHELDON JACKSON,

United States Agent of Education in Alaska.

The MOTHER SUPERIOR, HOLY CROSS MISSION,

Yukon River, Alaska.

LOAN OF REINDEER ACCEPTED BY ROMAN CATHOLICS.

ST. MICHAEL, ALASKA, *September 15, 1898.*

DEAR SIR: Please find inclosed a written acceptance, on behalf of the Catholic Mission at Nulato, of your proposal, dated August 20, 1898. After the conversation I had with you on the subject I referred it directly to Very Rev. Fr. Perre, and so also did the mother superior in Holy Cross Mission. I am now authorized by him to accept it in the terms here inclosed. A copy of the same acceptance shall be forwarded to Mr. Kjellmann, together with the substance of the following observations: First. We have not found as yet at or about Nulato the desired spot where to locate the herd. We should, therefore, if it be sent this year, leave it almost midway between Holy Cross and Nulato, on the Shageluk River, where it will have an abundant supply of food for the winter. Second. We prefer to have a married Lapp with his family. Third. We consider it most important for the success and good working of the plan that the deer be delivered over to us in excellent condition, and we would insist much more on quality than

on number, and would prefer 50 good ones to 100 in a rather poor condition.

Yours, truly,

JULIUS JETTÉ, S. J.

Dr. SHELDON JACKSON,

United States Agent of Education in Alaska.

ST. MICHAEL, ALASKA TERRITORY,

September 15, 1898.

The proposal made by Dr. Sheldon Jackson to intrust the Catholic Mission at Nulato with the charge of 100 head of reindeer having been handed to me through Very Rev. Father J. B. René, S. J., prefect apostolic of Alaska, I hereby declare that I accept it as it stands and under the conditions stated in the letter of Dr. Jackson, dated August 20, 1898. This acceptance is on behalf of the Catholic Mission at Nulato.

JULIUS JETTÉ, S. J.,

In charge of the Nulato Mission.

REPORT OF H. E. REDMEYER.

LAKE KLUKSHU, NORTHWEST TERRITORY,

September 1, 1898.

DEAR SIR: I thought that I had better report our whereabouts to you or to the Department of the Interior, the cause of our delay, also the condition of the reindeer. When we left the pasturage near Pleasant Camp, May 22, we had 164 reindeer, which was all that recovered from the starving condition they were in; the rest died of starvation or disease caused by starvation. These 164 were alive, but there were many that could just follow the herd which I knew would die later on. The number has been considerably reduced, so the total number of reindeer in our herd is at the present date 144. Three of those are sickly yet and do not look good, but the rest are in a splendid condition and are fat and healthy.

Of the 20 deer that died, the majority died from not having enough strength to digest the food, while some died of a disease which the Laplanders call in their language "sloopo;" it rots the hoof away. Three died from accidental causes.

In regard to our travel I must say that I have had nothing but hard luck. I shall only in a brief letter indicate the details.

As before stated, I left Pleasant Camp, May 22, after the deer had gained a little strength. It was too late in the spring, and the snow was melting away fast. We could do nothing as long as the snow was soft, so we had to wait for cold nights and then travel at night.

Seeing that I could make hardly any progress and that it might take us all summer to reach Circle City and our provisions would last us only to the 31st of July, I decided at once to let eight of my men go down to Haines Mission, and take a steamer for Seattle, and then find out if Mr. Kjellmann was in the States or not. If he had gone

to Alaska, I instructed them to secure passage via St. Michael to Circle City, where they would meet Mr. Kjellmann. I made out orders to steamboat companies, restaurants, and lodging houses at Seattle, payable by you, similar to those orders you had given me. There were seven Laplanders, with Mr. O. Paulsen in charge of them; the remaining seven of us continued to travel and went about 43 miles, when we found that the snow was all gone. Our only chance to travel was to abandon our toboggans and commence packing our provisions on the deer; but as the deer were in such a poor condition, we had to wait until they gained more strength, as it is harder for an animal to pack than to pull. In the meantime we made pack saddles and divided our provisions into 25-pound packages or sacks. This was not all that detained us; we could not follow the Dalton trail on account of the brush and underwood, as we would surely have lost some of our deer. So we had to stick to the mountain, which is nothing but needle points. We crossed the valley from one side to the other in order to find more level ground or a good mountain to travel on. That is the way we have been doing, until now we are in such a range of mountains that it is impossible to travel. I therefore left the deer in charge of Mr. Kjeldsberg on this mountain and went about 40 miles alone on the Dalton trail. After I came back I decided to take the Dalton trail from here to Hutchie village, as there is not so much brush or underwood.

Before going, I wanted to report to you, as I have done now; also go down to Dalton Post, which is about 30 miles from here, and try to secure one month's provisions. We have provisions to last us to the 28th of October, but it might take a longer time to reach Circle City, and we want to be sure. I shall try to get it from Dalton. I will save the Government from buying shoes if I can get a green cowhide, as the Laplanders can make their own shoes or moccasins of that. I'll make the order payable by the War Department or by you. No disease has been among my men, as they, as well as myself, have had hard work, and our provisions are limited. I will only say this much: The deer will be brought in safety to Circle City if no unforeseen mishap occur. After the journey is at an end I shall send you my diary, also the report in full. It is hard to tell when I will be in Circle City. I don't believe that I will reach the Hutchie Valley before the last of this month, and by that time we will have snow sufficient to use the sleds, which we shall have to make then. It won't take a long time to drive in there after we get the snow. Hoping you believe me faithful to what I am intrusted with, I remain,

Yours, very truly,

HEDLEY E. REDMEYER,

In charge of the United States Government

Reindeer Expedition, Alaska.

DR. SHELDON JACKSON,

Washington, D. C.

AGRICULTURE IN THE YUKON VALLEY.

WASHINGTON, D. C., *December 31, 1897.*

SIR: On the 30th of April last I had the honor to receive through you a request from the honorable the Secretary of Agriculture that I should secure, during my expected tour of Alaska, such items as I could with reference to the agricultural and horticultural possibilities of the region adjacent to the Yukon River. In compliance with that request, I beg permission to submit herewith the following report to the honorable the Secretary of Agriculture:

Leaving Washington on the 1st of June, I embarked at Seattle on the steamship *Portland* on the 12th, reaching Unalaska on the 21st and St. Michael, 60 miles above the mouth of the Yukon River, on the 26th. Taking passage on the river steamer *P. B. Weare*, I left St. Michael July 5, entering the north channel of the Yukon delta, a distance of 72 miles, that same forenoon. The trip was continued the entire length of the Yukon River through Alaska into the Northwest Territory of Canada to Dawson (Klondike), a distance of 1,652 miles. I reached Dawson July 25, and, after remaining there two days, left for my return trip down the river, reaching St. Michael August 24, having spent nearly two months in inspecting the river region and one month at St. Michael.

While the Yukon Valley will never be an agricultural section in the same sense in which that term is understood in the Mississippi Valley, yet it has agricultural capacities much in advance of the public sentiment of the country.

With reference to climate, soil, and natural productions, the Yukon Valley can be divided into three sections.

First. The delta and mouth of the river, the climate of which is affected by its proximity to the ocean. In this section may also be properly included the shores of Norton Sound.

Second. The Middle Yukon Valley from Ikogmute (315 miles from the mouth of the river) 582 miles to the mouth of the Tanana.

Third. The Upper Yukon Valley, extending from the ramparts to the mouth of the Pelly, a distance of 900 miles. The Upper Yukon is differentiated from the middle district mainly by the difference of altitude and climate.

THE DELTA DISTRICT.

The plants of this region are the dwarf willow and birch in the ravines and on the flats, with dwarf pines back from the ocean. During the summer season many kinds of wild flowers abound. This is equally true of the whole length of the river and its tributaries. Wild onions are found in sandy places near the ocean beaches, but not much used by the natives. Salmonberries and blueberries are found on short bushes in the moss on the tundra. These ripen about the 1st of September. They are gathered by the natives and preserved in fish or seal oil. Thus preserved they are considered a great delicacy. The most characteristic of all the natural productions are the mosses and lichens, especially the *Cladonia rangiferina*, which is the native food of the reindeer. There are also several kinds of grass suitable for forage, the largest and most abundant of which is a species of red-top, growing from 2 to 4 feet high. Both the *Cladonia rangiferina* and the red-top are found throughout the whole valley from the head to the mouth of the river, a distance of over 2,000 miles. The snow leaves the ground bare about June 1, and returns early in October. Hard frosts may be expected the last of September. The extreme lowest temperature (Fahrenheit) in winter is from -36° to -40° and the highest in summer 87° . The average for June and July is 48° . The frost never wholly leaves the ground, which thaws out to a depth of from 1 to 4 feet, according to exposure. The snow seldom exceeds 2 feet in depth. June and July are the rainy months. In 1897, an unusually dry season, the cloudy days exceeded the fair. In August the fair days exceeded the cloudy.

The soil is of a loose clay, mixed with gravel covered with moss, and in some places with peat and moss. The beaches on the ocean and first terrace back of the beach consist of gravel. The delta is composed of silt brought down and deposited by the river.

In preparing the ground for cultivation, the peat and moss on the surface are usually carted away; sometimes it is dried and burned. In other cases it is cut up and mixed with the soil. On the coast seaweed is gathered and mixed with the soil to enrich it. When well pulverized, the ground is thrown up into high ridges, both for drainage and exposure to air and sun. There are large areas available for such cultivation, but the expense and labor are so great that practically only small areas will be cultivated for home use. The missionaries of the Swedish Evangelical Union at Unalaklik and at Golovin Bay, and also the traders at both places, are raising good potatoes, turnips, rutabagas, beets, lettuce, and radishes. The soil is ridged up. The potatoes are kept in a deep cellar. Goats and cattle have been tried at the mission stations and at the trading station, St. Michael. The goats are usually killed by Eskimo dogs. The cattle do well in summer, but have a hard time during the long winter. The only domestic animal suited to the climate, that thrives and

proves profitable for raising, is the reindeer. It will be valuable for milk, cheese, meat, transportation, and clothing. Cattle are kept housed up all winter. The reindeer are pastured alike in summer and winter, thrive without any shelter other than that afforded by the valleys among the mountains, and require no other food than the moss, which they procure for themselves. No other stock raising is practicable or profitable.

Botanical specimens from this district were prepared and forwarded to me by Rev. T. L. Brevig, of Port Clarence, and by the missionaries of the Swedish Evangelical Union at Unalaklik. These I have sent to the Department of Agriculture.

THE MIDDLE YUKON DISTRICT.

The plants of this district are the larch, fir, birch, and cottonwood trees, alder, willow, and various wild berry bushes enumerated under the head of berries. Of edible roots there is a sour dock, or wild rhubarb, the leaves of which make excellent greens. The natives prepare it for winter use by salting down the leaves in barrels and then sinking the barrels in the frozen ground to keep the contents cool. There is also a native root called quaetloi, which is well liked by the natives. Along the rivers is a rush resembling the common horsetail rush that bears black tubers the size of a pea, also a species of wild rice and two herbs and a fungus growing upon the birch which are used for tea. Wild berries abound. These are a kind of whortleberry, salmonberry, bearberry, blueberry, blackberry, cranberry, redberry, currants (red and black), crowberry, raspberry, a sort of strawberry (very fragrant), the juniper berry, on the rocky hills, and the roseberry.

Grasses are abundant for forage, especially the redtop, which grows in places from 5 to 6 feet high. There is also a species of purslane and chamomile, of which the cattle are very fond. *Marshallia augustifolia*, *nasturtium*, *equisetum*, larkspur, crowfeet, bulrushes in swamps, white and yellow water lilies, some lycopodiaceae, and several kinds of mosses and lichens, mostly on the hills, including the reindeer moss, are found.

In ascending the Yukon the left (north) bank is hilly and furnishes many good spots for cultivation. The right, or south, is flat, at least to the mouth of the Tanana, and covered with forests and marshes. The same is, to a considerable extent, true of the valleys of the tributaries to the Yukon. The bottom lands are subject to overflow.

The hillsides with a southern exposure are most favorable for raising vegetables. The ground is usually free from snow about the 1st of June, though in sheltered places it remains until the last of June. Lettuce and radish seeds have germinated as early as May 26. In 1895 the first wild-currant blossoms made their appearance May 30. The season of 1896 was a late one. The ice broke up in the river May

28, and for a week afterwards the lowlands were flooded. Hard frosts are expected in the latter part of September. In 1888, at Anvik, the first killing frost was August 26; 1889, September 20, and 1896, September 23. At Nulato, on August 25, the thermometer registered 25°.

At Koserefski, for the years 1894-1897, the maximum cold in January and February varied from -50° to -59°. For the growing months of May, June, July, August, and September the temperature was as follows:

Date.	Maximum.	Minimum.	Mean.
May—	°	°	°
1894.....	59 (30th)	1.5 (6th)	42
1895.....	65 (31st)	22 (2d)	36.7
1896.....	60	-3.7	-----
1897.....	65	21.5	-----
June—			
1894.....	70 (30th)	32 (5th)	-----
1895.....	67 (25th)	34 (13th)	50
1896.....	75	30.9	51.6
1897.....	81	34 (6th)	-----
July—			
1895.....	73 (24th)	40	56
1896.....	70	35	53
1897.....	70	35	53
August—			
1898.....	61	31.3	-----
September—			
1894.....	64 (12th)	29 (19th)	-----

The snow covers the ground from the beginning of October until the end of May, and often reaches 4 feet in depth. There is usually a heavy fall of snow in the latter part of the winter. The summers are usually rainy, but the proportion of bright and cloudy days is difficult to state, for the reason that the seasons vary greatly. For instance, 1896 was cloudy and rain fell for forty days in succession, while 1897 has been so dry that vegetable gardens have had to be watered by hand.

The following table for the summer months was furnished me by the Roman Catholic missionaries at Koserefski, and shows the proportion of cloudy and bright days, also the rainfall. They also kindly furnished the preceding table on temperature at the same place:

Date.	Clear.	Fair.	Cloudy.	Rainy days.	Rainfall.	
					Total.	Mean.
May:						
1895.....	10	13	3	6	0.37	0.012
1896.....	11	10	9	1	.12	.004
1897.....	-----	-----	-----	-----	-----	-----
June:						
1895.....	4	20	9	9	.99	.033
1896.....	8	11	11	11	1.91	.057
1897.....	-----	-----	-----	-----	-----	-----
July:						
1895.....	7	14	10	11	2.19	.07
1896.....	1	5	25	17	2.63	.085
1897.....	-----	-----	-----	-----	-----	-----
August:						
1895.....	8	9	14	16	2.65	.085
1896.....	-----	-----	-----	-----	-----	-----
1897.....	-----	-----	-----	-----	-----	-----
September:						
1895.....	9	10	11	18	1.71	.057

In the above table some of the days being partly clear and partly cloudy have been counted twice, so that in several instances the total is more than a calendar month.

The soil of the Yukon Valley is a rich loam, formed from the falling leaves of the forests, with a sandy subsoil. Sometimes the river banks that have been cut down by the floods or ice will show alternate layers of muck and sand 15 feet thick. Owing to the frozen subsoil the roots of trees do not go down deep, but spread out along the ice and are therefore easily removed. If there is a thick layer of moss that also is usually removed in preparing land for cultivation. The land is then well spaded up and left exposed to the action of the sun. If stable manure is to be had, and is spaded into the soil, it greatly helps in the preparation. The second season a crop can be raised. The area for cultivation is greatly curtailed by the liability of the river bottom to annual inundations, but there is still a sufficiency of good land for the raising of all the hardy vegetables needed for the home market. The areas for pasturage are more extensive, but the climate, the eight to nine months of feeding under shelter, and the torment of the mosquitoes will probably prevent cattle raising. The pasturage for reindeer is practically limitless, and the raising of reindeer will yet be a large and profitable industry.

At Koserefski, 338 miles from the mouth of the river, and at Anvik, 358 miles, I found gardens kept by the Roman Catholic Mission at the former place and the Protestant Episcopal Mission at the latter place, in which were successfully grown the following vegetables: Potatoes, turnips, cauliflower, radishes, lettuce, cabbage, carrots, beets, and pease. I saw potatoes about 7 or 8 inches long and 3 inches in diameter, and turnips weighing 10 pounds. The surest crop is the early turnip, the early Flat Duck growing to over 10 pounds weight. Potatoes are of an inferior quality, being frequently watery. Pease propagate themselves. Radishes, lettuce, cabbages, cauliflower, and the Egyptian blood beet do well; carrots do well in some places; beans have so far been a failure. In a few of the places where vegetables have been tried, the cabbages have been kept frozen; the potatoes in the cellars under the houses; turnips, beets, and carrots have not kept well. In course of time improved root cellars will be constructed, which will secure much better results.

The Roman Catholic missionaries at Koserefski have tried to raise cattle, sheep, and goats. The native dogs killed the goats, and the sheep and cattle died. They are now making their second experiment with cattle. There is abundant grass, especially redtop, both for pasture and cutting, but the uncertainty of good weather for curing hay makes it difficult to secure it in sufficient quantities. This, however, could be remedied by the introduction of silos. However, another and almost insuperable difficulty in making hay is the plague of mosquitoes, which makes the life of the haymaker almost unbearable.

After all, the animal which God has created for this region is the reindeer. He is native to it, and consequently thrives where other animals are kept in existence only by the utmost care.

Since the coming of miners into this region, their willingness to pay high prices for fresh vegetables will probably in the next few years give a marked impetus to gardening.

The Episcopal missionaries at Anvik and Fort Adams and the Roman Catholic missionaries at Koserefski have made collections of grasses, fruits, and vegetables, which I have forwarded to the Department of Agriculture.

THE UPPER YUKON DISTRICT.

The conditions are very similar to those existing in the middle Yukon, with the increased severity of the winters, due to the higher elevation and greater distance from the sea.

The plants characteristic of this region are such as would grow in a low, marshy, country having spells of extremely hot weather during the three months when the ground is free of snow. Several varieties of moss, coarse rank grasses and rushes, low berry bushes, willow, juniper, and alder bushes, fir, birch, and poplar trees are found. The edible roots are the wild parsnip and rhubarb, both used only by the Indians. The wild berries are the high and low bush cranberry, blueberry, salmon berry, raspberry, currant, salal-berry, and rosebuds, the two last named being used only by the Indians. With the exception of the high-bush cranberry and the blueberry, the others are not plentiful, but are eagerly sought for by both whites and Indians. Jellies and preserves are made from them, and the cranberries keep well when frozen.

Bunch grass, swamp grass, wild pease, goose grass, and a few kinds of wild grains, timothy, rye, etc., are suitable for forage. There is also a great abundance of reindeer moss.

The ground is not bare of snow until June 1. Hard frosts usually come during the last week of August, the ground being frozen hard by September 15. The months of December, January, and February average about 30° below zero, the temperature falling as low as 75° and 80° in an ordinary winter. March, April, and May average about zero; June, July, and August average about 65° above zero, June being the warmest month, when 96° in the sun is common; September, October, and November average about zero.

The rainfall and snowfall are light, an average year having about $2\frac{1}{2}$ feet of snow and $2\frac{1}{2}$ inches of rain. During the three summer months about three-fifths of the days are bright, June being almost entirely cloudless.

The general nature of the soil is peat and clay, a mass of black dirt mixed with decayed vegetable matter, moss, and roots, to a depth of from 18 inches to $2\frac{1}{2}$ feet, when solid blue ice is found extending down,

no one knows how far. Sometimes a layer of yellow clay is found between the ice and dirt. The ice is too near the surface of the ground for vegetables and grains to grow, unless deep trenches, very close together, are dug, thus draining the ground as the heat of the sun penetrates it. Even were this plan practicable, the results would hardly warrant the great expense of time, labor, and money required. The ground does not thaw out more than a foot below the surface, in spite of the long and hot summer days. Eight miles from Circle City, back in the foothills along Birch Creek, is a large, sandy tract of ground where some man has an experimental garden this year, and it could not turn out better than it has, so far. No ice is met, and the earth seems to be warm. The potato vines are large, and already in blossom, having been planted but fifty days. The garden truck sent to Circle City so far, is first-class.

At Fort Cudahy, 1,522 miles from the mouth of the river, on the edge of the Canadian boundary, I found a good garden kept by the N. A. T. and T. Company. Pease, beans, beets, radishes, lettuce, and cabbage seemed to be thriving in the garden, which was planted in May. At Circle City, and perhaps other places, lettuce, radishes, onions, turnips, and pease for early use are sown on the roofs of the houses, the log cabins being covered with dirt roofs, and the warmth of the houses probably conveying heat to the soil on the roofs. Six miles below Circle City Mr. R. Wilson, who furnishes cordwood for the steamers, is accustomed, when an opening is made in the woods sufficiently large to let the sun reach the ground, to loosen the soil between the roots and stumps and sow turnip seed. In 1896 he marketed 3,000 pounds of turnips, receiving 15 cents a pound for the same.

A large vegetable garden has been established on the Canadian side opposite Dawson, the capital of the Klondike mining region.

Mr. Jack McQueston, an old-time fur trader at Forty Mile Creek, prepared some ground, plowing it with a team of dogs. Afterwards he trained a pair of young moose to the harness and plowed with them. He succeeded well with the vegetables already enumerated as being raised at other places.

At Fort Selkirk Mr. Harper, another of the old fur traders, raised good potatoes by irrigation, as well as cabbage, beets, parsnips, and carrots. Barley matured well; oats and wheat only tolerably well. From a small keg of potatoes for seed Mr. Harper raised 1,900 pounds, many of the potatoes being too large for a single meal.

The only domestic animals in this district are the cats, which scare away the mice, and the dogs, which do the drawing and packing. A few horses have been tried at the mines, but have not done well.

The possibility of raising vegetables has been proven, and the high prices at the mines will, no doubt, greatly stimulate their production.

For the facts concerning the Upper Yukon district I am largely indebted to Miss Anna Fulcomer, teacher at Circle City. She also gathered the botanical specimens that have been sent to the Department of Agriculture.

To sum up the matter, it has been proved that potatoes, rutabagas, turnips, radishes, lettuce, cabbage, pease, cauliflower, carrots, beets, rhubarb, barley, and the smaller fruits, such as currants, cranberries, raspberries, huckleberries, blackberries, strawberries, and other varieties, can and are being raised successfully in the Yukon Valley.

With the establishment of an experimental station and the patient, intelligent testing of other vegetables, I have no doubt that the above list could be largely increased. With the high prices prevailing at the mines, vegetable farms should prove very remunerative in spite of the disadvantages of the country and climate.

Mr. William Ogilvie, who is connected with the land survey of the Dominion of Canada and has spent many months in the Upper Yukon Valley, estimated that there are 460,000 acres of land along the Yukon and its tributaries that can be made available for agriculture.

It is not probable, however, that it will prove a profitable country for cattle, horses, and sheep. The winter climate is so rigorous that they will require warm housing and feeding for eight or nine months of the year. In summer the mosquitoes so worry the animals that they receive no benefit from the abundant pasturage. Last winter some of the horses that were taken into the Klondike, when traveling, had to be kept in a tent at night, with a good fire. When turned out to graze, the torment of the mosquitoes reduced them to skin and bone.

The only two domestic animals that are native to the country and can live upon its products are dogs and reindeer. The dogs require the catching and preparing of fish for their maintenance, while the reindeer thrives on the moss, which is abundant over large areas of Alaska.

All of which is respectfully submitted.

Very truly, your obedient servant,

SHELDON JACKSON,

Special Agent, etc.

Hon. W. T. HARRIS,

Commissioner of Education.



LAPP MOTHER AND HER BABE.



V. C. GAMBELL, WIFE AND CHILD.

While returning to their school at Saint Lawrence Island, Alaska, they were lost at sea by the sinking of the schooner Jane Grey, May 22, 1898.



ERNEST L. WEBER AND FAMILY.

While returning to their school on the Kuskokwim River, Alaska, the parents and middle child were lost at sea off the coast of Nunivak Island, between June 27 and 30, 1898.

NOTES WITH REGARD TO THE ST. LAWRENCE ISLAND ESKIMO.

By V. C. GAMBELL.

ORIGIN.

There is no tradition that they crossed from Siberia. In ancient times they used only small kayaks, and they had no intercourse with that side.

LANGUAGE.

Similar to that of Indian Point and Plover Bay, Siberia, though it differs in some respects. Very guttural, and has a number of sounds not in the English.

VILLAGES.

This village, Sē vōō kūk, and one near the southwest extremity, on the south side, Pōw'ōēlŭk, are at present the only ones. The former has about 330 inhabitants in 32 houses and the latter 35 in 6. In July they scatter along the eastern shore of the island and return to the villages in September, though there are two families who do not return till much later from a lagoon 15 miles east of here.

HOUSES.

The houses vary from oval to nearly round in shape. They are built of pieces of wreckage and driftwood about 6 feet long, placed on end in a shallow trench in the ground and fastened to a pole at the top. Two posts, 6 to 10 feet apart and 15 to 18 feet high, support a ridge piece, which in turn supports a series of rafters about 1 by 3 inches and long enough to reach from the edge of the wall to 2 to 4 feet past the ridge piece. The rafters are about 2 feet apart at the walls and are supported in the middle by a row of upright pieces. Walrus skins are placed over these and carefully tied with rawhide ropes and weighted with rock, iron wreckage, etc. Sod is put over the edges of the skins to exclude the snow. The peak of the roof is nearer the west than the east end. The door is on the west end, as all the hard winds are from an easterly direction—mostly northeast. The living room is at the east end, 7 feet wide and from 10 to 30 feet long, depending on the number living in it. It is made of heavy deer-skins sewed together on the top and sides, with a walrus-skin floor.

The front edge is not fastened at the bottom, which allows it to be used as a door. It is heated by means of seal-oil lamps and ventilated by an opening in front, near the top, 4 to 5 inches in diameter. Other rooms partitioned off by means of walrus skins are used to store meat, boxes, etc. Hunting gear is stacked in the main inclosed part. They lived, till thirty years ago, in underground houses, some of which have been built over, to be used as storehouses for their meat. The walrus-skin cover is taken off and during July and August used in constructing a summer tent.

CLOTHING.

Their clothing is made of deerskin, which they get from Siberia, seal skin, bird skin, and dogskin, and rain coats made from the intestines and stomachs of the seal and walrus. They use a great deal of calico to make an outside coat to protect their clothing from snow and dirt. They are very fond of woolen underclothing and mittens.

FOOD.

Their food consists principally of seal, walrus, and whale meat. They get but few fish, small catfish, and cod, in August and September, when the sea is not too rough. The village near the southwest extremity gets salmon in a lagoon near there. In the winter they get crabs, which, in case seals are very scarce, form an important addition to their larder. They get few berries, but gather large quantities of a short, fleshy herb, a stone crop, something like the old-fashioned garden live-for-ever. Ducks and other sea birds also form a large part of their food from June till September. They are very fond of flour, hard bread, and molasses, which they procure from the ships.

TOBACCO, ETC.

Tobacco is used by all. Few smoke; those who do, draw the smoke into their lungs and cough it out. It is usually held in the cheek and the saliva swallowed. When not in use, a plug of chewing tobacco is carried behind the ear. Rum is used by all who can get it. They have learned to make an intoxicating liquor here during the past year. They take flour alone, molasses alone, or mix them in the proportion of 5 to 3, allowing them to ferment five days, and then distill. Five quarts of flour and 3 of molasses make about a quart of liquor.

HUNTING GEAR.

Of native make they use the harpoon, poke, and canoe. They have breech-loading rifles and whaling gear. They handle a whaleboat well, but prefer to use paddles or short, light oars. They are poor marksmen and won't attack a whale unless there are several boats at hand, and if they have any choice will always strike a small whale. Sea quail and sea pigeons (small puffin?) they catch in nets like huge butterfly nets with handles 15 feet long.

CUSTOMS—MARRIAGE.

Several men have two wives, though the women all seem opposed to it. Some have an old and a young wife, but some are near the same age, both young or both old. Children are selected for each other as young as 8 or 10 years of age. However, they often change before they are married, and even after they have been married a year, or even after several years and children have been born, wives are exchanged. Such apparently are as good as anyone in the community, though the others talk about it.

BIRTH.

Good care is taken of a woman at the birth of a child. Labor is easy. The child is born while the mother is on her hands and knees. The mother soon sits up, but keeps the same place five days, then goes outside and works the same as any other woman. One woman has seven children alive, five and six are not uncommon, and three or four is a fair average.

DEATHS.

Formerly the dead were interred near the houses. Later they were placed in a cave or old house, of which there are three or more now partly filled with bones. Now when a death occurs the body is wrapped in deer skins, a pole a little longer than the body is placed lengthwise on top and all wrapped up with thongs. Thongs about 4 feet long are tied on and serve as handles, and from four to ten men drag it over the ground about a mile to a rocky bluff 600 feet high. Children are placed at the foot and important persons near the top, while those of low degree are stationed midway. Thongs, deerskins, clothing, etc., are cut and scattered around and the body left completely naked. Tobacco and hard bread are placed at the head. The ravens, foxes, and dogs soon tear the body to pieces.

RELIGION.

They have none. Some headless men with shark-like mouths made the mainland of Siberia. A big bird became seasick and vomited up the islands. Whales, seals, and bears are endowed with human attributes and are fed, given drink and tobacco when killed. Their fathers and grandfathers and any dead of near kin are fed about the 1st of July. A family goes near the bluff, makes a little fire, calls out the name of some relative and throws him a piece of meat. Some take a crowd along and feed everybody. The devil, or some devil, causes sickness. Some males claim to have some power over evil spirits, and to protect against sickness or the return of it when a person is convalescent. Departed spirits are said to return and sing and dance; numbers claim to have seen them. The spirits are always near where they were laid or where their skeleton is scattered, ready

to harm any one who touches their bones or anything which is left with them. Of other superstitions there is no end. From whaling to cutting hair, everything must be done in a regular way or evil consequences will follow. Some are as follows: A child must keep a close-fitting deerskin hood on its head for the first two years of its life, or its head will grow too large. A man must not cut his hair while his wife is pregnant or some harm will happen to her. If a stone is moved in winter, a storm will follow. If whaleskin is cooked, all whales will disappear. Neither will they come if any wood belonging to a dead person is burned. If anything hot is put on the snow, so as to make a steam, the walrus will keep away from the island.

AMUSEMENTS.

In the winter they dance and sing in nice weather. A man invites another and all his friends one day, who in turn with all his friends dances at the other man's house the next. At these meetings they trade. A man dances with a woman and gives her something, as a piece of calico. She in turn must dance with him, or her husband must dance with his wife and return something of equal value. On pleasant days the men run races, wrestle, jump, etc. In the summer they play ball, jump the rope, toss each other in walrus skins, etc.

DISEASES.

Nearly all are afflicted with skin diseases. Bleeding at the nose and lungs is very prevalent. Pulmonary diseases are nearly always fatal. When very sick, the patient is strangled. Little grief is shown at the death of anyone. Ringworm prevails.

CLEANLINESS.

Fur clothing is never washed and cloth seldom. In a warm room they are very offensive. They are infested with lice.

CHARACTER.

They have not the slightest regard for truth, and if caught in a lie are not the least bit ashamed. They steal anything they think will not be found out. They steal lumber, make boxes and bring them to be painted. They have come in the house when the door was left unlocked and taken canned goods, etc. They broke the lock to the storehouse one stormy night and took at least 1,000 primers. They are very friendly, always smiling, but always backbiting each other. "A man may smile and smile and be a villain" must have been spoken particularly of these islanders. That they are so bad may be because those who were not allowed to live at Indian Point or Plover Bay have come here. They have no regard for promises made.

RECOMMENDATIONS WITH REGARD TO THE DISPOSITION OF LAPPS AND REINDEER.

WAR DEPARTMENT, *Washington, March 3, 1898.*

SIR: In accordance with your request of yesterday that I should give you an approximate statement of cost of reindeer upon arrival at New York, and also suggestions as to their present disposal, I have the honor to report that:

First. The approximate cost per deer at New York is \$68 (537 deer at \$68 makes \$36,516), sleds at \$3.50 (418 sleds at \$3.50 equals \$1,463), and harness \$3 (516 sets harness at \$3 makes \$1,533).

Second. As to what disposition to now make of them, in view of the fact that they are no longer needed to carry food to the Yukon Valley, permit me to suggest:

(a) That the 17 women and the 20 to 25 children of the party be left on Puget Sound, and in June be sent by sea via St. Michael to Yukon River.

(b) That the men, reindeer, sleds, and harness be taken through to Pyramid Harbor at the head of Lynn Canal, and from there, in charge of William A. Kjellmann, superintendent of Government reindeer stations in Alaska, be moved across the country along or in the general neighborhood of the Dalton trail, and then along the table-lands on the south side of the Yukon Valley to good grazing grounds in the neighborhood of the junction of the Yukon and Tanana rivers. Reaching that point the herd can be left until you determine what shall ultimately be done with them.

The herd at the mouth of the Tanana will then be in a central position for any exploring expeditions you may wish to make during the summer. Then if during the summer you establish a military post in the Yukon country, you will need a portion of the herd for the use of the commanding officer in the moving of troops on official work. Then if you conclude to sell a portion of them, the mail contractor would like the privilege of buying.

Again, if you should see it to be for the interest of the Government to establish a military mail service from a proposed military post in the Yukon Valley to the coast in the neighborhood of Prince William Sound, some reindeer will be needed for that service.

With regard to the drivers, I would suggest that a portion of them be retained for the use of the commanding officers as reindeer drivers in the movement of troops, another portion be turned over to the Department of the Interior for the use of the Bureau of Education, and, if a portion of the deer are sold to the mail contractor, that he be allowed to have a portion of the drivers for their care and use.

I have the honor to be, very respectfully, your obedient servant,

SHELDON JACKSON,

Special Agent for Purchase of Reindeer.

The honorable the SECRETARY OF WAR.

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ALASKA

TO ACCOMPANY REINDEER REPORT BY
SHILTON JACKSON
GENERAL AGENT OF EDUCATION IN ALASKA
1901

Scale 1:100,000



Notes:
 1. The map is based on the latest available data.
 2. The scale is 1:100,000.
 3. The map is intended for general reference and is not to be used for navigation.



Surveying the field