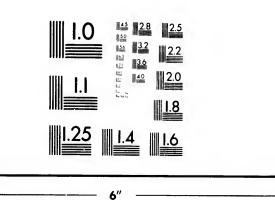


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U. S. Revenue Cutter "Bear" Communicating with Siberian Deermen.

From a photograph by Dr. S. I. Call.]

ALASKA AND THE REINDEER.

BY LIEUT, J. C. CANTWELL.



HE landing from the United States revenue cutter Bear, at Port Clarence, Alaska, during the month of July, 1892. of a herd of 180

domesticated reindeer purchased in Siberia, together with four native Siberian herders, marks the establishment of the first herd of the kind on the Western continent. This is an event of more than ordinary impor-If it is successful it will create throughout Northern and Central Alaska a new food supply in place of the walrus, whale, fish and fur-bearing land animals that are yearly becoming scarcer and more difficult to obtain.

Furnished a better and surer food supply, the native Eskimo population now decreasing in numbers may reasonably be expected to increase; and changing them from mere hunters to herdsmen will be the first upward

step toward their civilization. With the increase and civilization of the natives and the general introduction of domesticated reindeer herds throughout Alaska, the vast unknown interior of our northern province can be thoroughly explored. Lines of communication between distant settlements can be kept open during the long winter months and the frigid, bleak and now comparatively useless plains of that little known region will become a source of wealth and prosperity to the land.

The altimate necessity of the U.S. Government, either to feed the Eskiznos or provide some means by which they can feed themselves, has vearly been growing more apparent. In the past there was a large population of coast Eskimos, whose food supply was derived from the pursuit of the whale, walrus and hair seal. At Point Barrow, in 1828, Captain Beechew found Nuwuk a village of 1,000 people; in 1863, there were assa, while now there are not



Rev. Sheldon Jackson, U. S. General Agent of Education for Alaska.

more than 100. In 1826, Captain Beechey found a large population at Cape Franklyn; to-day it is without an inhabitant. The same authority states that at Schismareff Iulet there was a village having a population, in 1826, of from 1,500 to 2,000. It has now but three houses, and the total population does not exceed twenty-five. At the beginning of the century, the population of Point Hope was nearly 2,000; now it is less than 350. Mr. John W. Kelly, who has written a monograph on Alaska, says:

"The Kavea country is almost depopulated, owing to the scarcity of game, which has been killed or driven away. * * * The coast tribes between Point Hope and Point Barrow have been cut down in population so as to be almost obliterated. The Kook-pov-a-ros of Point Lay have only three huts 1.ft, the Oo-too-kas of Icy Cape one hut, the Koogamutes

have only three settlements of from one to four families, and Sezera, whose people were 'once as countless as the grains of sand,' cannot muster a hundred inhabitants.' Finally, in all Alaska, there are probably to-day not more than 25,000 Eskimos.

The extermination of these people has been largely effected by the advent of whalers into the Arctic Ocean. Fifty years ago, the great whaling fleets, then numbering more than five hundred sail, having nearly exhausted the supply in the Atlantic and South Pacific Oceans, found their way further and further north, destroying the whales by hundreds and thousands annually, until they were driven for refuge out of the Pacific into the Arctic Ocean, and thither the whalers followed. In this relentless hunt the

remnants of the once innumerable schools of whales have been driven still further into the inaccessible region around the North Pole, and are no longer within the reach of the natives.

As it was with the whale, so it has become with the walrus, which furnished not only food, but material for the construction of boats and houses for the natives. The work of killing



Native Pipe.

the animals for their tusks alone has been prosecuted with such vigor, during the last quarter century by the whaling fleet, that the walrus, as a food supply, is already practically extinct.

In the past the natives of the interior living along the banks of the many

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rivers flowing into Bering Sea and the Arctic Ocean, caught and cured for use during the long winter months, quantities of fish. But American canneries have already been located on many of the streams, and both carry food out of the country, and by their wasteful methods destroy the future supply. Five million cans of salmon annually are packed and exported from Alaska, and the business still in its infancy, means starvation for the natives who depend on this source of food.

The condition of the natives on the Siberian side or Bering Straits, subject to the same climatic conditions and with almost identical environment, is so much better than that of the Alaskan Eskimos that it is apparent to the most casual observer. When the Rev. Sheldon Jackson, General Agent of Education in Alaska, visited the country in 1890 for the purpose of locating suitable sites for native

ing ascertained the cause of distress among the Eskimos he set about with characteristic energy to devise a remedy.

In the Arctic and sub-Arctic regions of Lapland and Siberia the domesticated reindeer is food, clothing, house. furniture and transportation to the people. Its milk and flesh furnish food, its marrow and tongue are considered choice delicacies, and its blood mixed with the contents of the stomach is made into a favorite dish called in Siberia, manyalla. Its intestines are cleaned, filled with tallow and eaten as a sausage. Its skin is made into clothes, bedding, tent covers, harness, ropes, cords and fish lines, and the hard skin of the fore-legs makes an excellent covering for snowshoes. Its sinews are dried and pounded into strong and lasting thread. Its bones are soaked in seal oil and used as fuel, and its horns are made into various kinds of household



Herd of Domesticated Reindeer, and Temporary Village of Siberian Deermen.

schools, he did not fail to observe and comment on this difference. "What was the reason?" he asked; and hay-

implement, and weapons, a used in the manufacture of sleds. I Central and Northern Alaska are vast rolling



Temporary Village of Siberian Deermen, Northwest Coast of Siberia.

plains of moss- and grass-covered land that are especially adapted by nature for the grazing of reindeer, and are practically useless for any other purpose. In the corresponding regions of Lapland, Arctic Norway, Sweden and Russia are 27,000 people (about the same in number as the Alaskan Eskimos) supporting themselves and procuring their food and clothing



Prof. Charles H. Townsend, Naturalist, U. S. Fish Commission.

largely from their 400,000 domesticated reindeer, besides paying to their respective Governments the annual sum of \$400,000, or \$1 per head, as a tax on their herds.* Also in the corresponding region of Siberia, with similar climate and soil and only forty miles distant at the straits, there are thousands of Tchukchees, Koraks and other tribes of deermen fed and clothed and housed by their herds of tens of thousands of domesticated reindeer.

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With a knowledge of these facts. Dr. Jackson asked Captain Healy, the commander of the Bear, who has been for a number of years on the Arctic Station of the Revenue Cutter Service. if it would not be a practical solution of the Eskimo food problem to purchase herds of reindeer from the Siberians, transport them across the straits, and, under certain restrictions. introduce the system of herding them in Alaska for the benefit of the natives. Captain Healy's answer to this query was that he not only considered the project perfectly feasible, but that he knew of no better one for the amelioration of the condition of the Eskimos and the ultimate development of the country. He had recommended the measure in several of his reports to the Treasury Department at Washington, and in fact. Prof. Charles H. Townsend, the wellknown naturalist of the United States Fish Commission, had accompanied an expedition sent out from the revenue cutter Corwin in the year 1885 for the exploration of a part of

^{*} Paul Du Chaillu. Land of the Midnight Sun. Vol. 2, pp. 167-168.

Northern Alaska, under the command of Lieutenant J. C. Cantwell. He had examined the subject very carefully, and was the first person ever to suggest the scheme. Prof. Townsend's plan* met with the full approval and endorsement of Captain Healy, at that time in command of the Corwin, and was submitted to the authorities in Washington. But Alaska is a long distance from headquarters and governments move slowly. The duties of the revenue cutters in the Arctic were already so multifarious and exacting that the Chief of that service could not see his way clear to a successful handling of so comprehensive a scheme, and the matter was left to grow musty with age in the safe seclusion of a governmental pigeon-hole.

When Dr. Jackson finished his duties in the Arctic and returned to Washington, one of his first acts was

to place the matter of introducing reindeer into Alaska before Congress, in the form of a bill for aid from the National Government. In the course of the investigation of the subject which followed, the project seemed almost doomed to defeat and failure on account of the objections and adverse criticisms with which it was greeted from a score of sources. Some of the people who did all they could to influence public opinion against the measure, had only to express their views in print in order to show their entire ignorance of the subject. But when George Kennan, the famous Siberian traveler, asserted that the natives on one side of the straits would never be induced to sell live reindeer to foreigners on account of their deep-rooted superst tions, and when Ivan Petroff, the Alaskan census-taker, declared with equal force that the Eskimo would never give up his roving hunter's life to become a mere herdsman, and further that the reindeer if introduced would be speedily worried to death and the herds destroyed by native dogs, the Committee of Congressmen having the bill in charge were disheartened, and, although it passed the Senate without opposition, it died without action in the Lower House. Meanwhile the friends and believers in the scheme did not despair. Finding that Congress was not disposed to act promptly in the matter, an appeal for aid was made to the philanthropic public through the medium of the press of the Eastern and Middle States. Among the papers which took the matter up, the New York Mail and Express, Boston Transcript, Philadelphia Ledger, Chicago Inter-Ocean and Washington Star



^{*}Report of the Cruise of the Revenue Cutter Corwin in the Arctic Ocean, p. 83 United States Government Printing Office, Washington, 1885.

were prominent, and by their efforts the sum of two thousand dollars was raised in the course of a few weeks from private subscriptions for the purpose of starting the work. From the heads of departments in Washington came substantial aid and encouragement. The Secretary of State obtained official leave from the Russian Minister for Dr. Jackson to visit any part of N. W. Siberia for the purpose of purchasing reindeer from the natives, and the Secretary of the Treasury furnished transportation to the far-away land on the revenue cutter Bear, and issued instructions to Captain Healy to render all possible aid to Dr. Jackson which would not interfere with the regular duties of the vessel. Early in the spring of 1891 the Bear left San Francisco, having on board a supply of trade goods, consisting of axes,

hatchets, knives, steel traps, cotton cloth, beads, tobacco, flour, molasses, powder, lead and caps, and a few breechloading fire-arms for the purpose of barter with the Tchuckchee deermen. It is not difficult to imagine the mingled feelings of hope and fear with which the friends of this new form of charity waved a last goodbye to the *Bear* as she passed out through the Golden Gate and once more turned her prow northward toward the Frozen Ocean. It was not until nearly three months later that the *Bear*, after weeks of battling with the ice, succeeded in approaching close enough to the Siberian shore to communicate with the natives. A party of deermen were found encamped during the month of August on the shores of Chaun Bay with a herd of a thousand reindeer quietly grazing near a temporary village.



Capt. M. A. Healy, U. S. R. M., Commanding U. S. Revenue Cutter "Bear."

The time for negotiations had arrived,

With the perfect knowledge of the peculiar dispositions of these people, which Captain Healy has acquired by long years of study and close observation, it is not strange that he should now take the utmost precautions to prevent the natives from breaking their promise made to him a year before, to sell Dr. Jackson a few live reindeer to be taken to Alaska should be again visit the country. The natives were invited on board the ship, and allowed to trade their furs as is customary with visiting ships, and then a party of the officers visited the shore to partake of the native hospitality. It having been decided to kill a reindeer to furnish a feast for the visitors, one was selected from the herd and caught by throwing a lasso over its horns. It was then

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quietly led off to some distance from the rest of the animals and preparations for slaughtering it were made as follows: The family of the owner of the animal seated themselves in a circle around the deer, and while one young man held it securely by the horns another stood near by armed with a large knife ready to give the fatal blow when the proper time had arrived. The head of the family, a patriarchallooking old man, now advanced, and bowing profoundly toward the East. began a sort of incantation or prayer. This was repeated three times, and at the final ending the native executioner plunged his knife into the heart of the reindeer, and it sank down on the ground almost without a struggle. The old man now advanced and plucking out some of the hair of the dying deer, he moistened it with its blood and blew it toward the four points of the compass. The ceremony was brought to an end by a repetition of the prayer uttered, with the face turned toward the East. All the first day of the Bear's visit was spent in feasting. Captain Healy provided unlimited quantities of the ship's "hard bread" of which the natives are very fond, and by a judicious distribution of small presents put everybody in good humor. Of course the natives knew perfectly well that the special object of the Bear's visit to this particular point was to obtain reindeer alive for transportation to Alaska, and sooner or later the subject would be discussed. But as undue haste would undoubtedly have rendered the natives suspicious and intractable, Captain Healy made no mention of his desires until the next day. The principal men of the village were then called together by Captain Healy, who told them that the Bear would sail away the next day, but before going Dr. Jackson wished to buy a few live reindeer to take with him to Alaska. He argued to the natives that they had more deer than they could possibly use, while each year the herds grew larger and had to be driven further for

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pasture; that there was plenty of good pasture in Alaska, and the deer would be well cared for, and furthermore, that as much would be given for one live reindeer as could be obtained for twenty of their skins. Why not sell Dr. Jackson a few while he was here. and ready to give such good prices for them? To these words of Captain Healy, which were translated to the Siberians, Ran-en-ka, a grav-haired and shrewd old deerman, after a long debate with his comrades, replied that he had listened to Captain Healy and his words were true. What he said was good, and the natives all believed him and trusted him because he had always done as he had promised to do with them. Had he not brought presents of guns and flour to the Siberians who found the lost sailor from the whale ship and kept him for two years? And did he not also bring plenty of presents of guns, knives, hatchets, flour and tobacco to the Tchukchees at St. Lawrence Bay who fed the sailors when their ship was burned?* Furthermore, had not Captain Healy's doctor caused the pain in Ran-en-ka's shoulder to go when the Shaman (native doctor) had tried and failed? Last year, he, Ran-en-ka had promised Captain Healy to let him take away some reindeer alive, and now he would not run away. There among the herd on shore he owned a hundred. Let Captain Healy and Dr. Jackson choose which ones they wanted, and Ran-en-ka's young men would bring them down and put

them into the boat.
Ran-en-ka had hardly ceased speaking when Katie-cha, another influential native, arose and said he had fifty reindeer.
Let Captain Healy take his choice.



Native Boots.

Others would have followed the

^{*} U. S. Steamer Rodgers burned at St. Lawrence Bay in 1882. Officers and crew cared for by natives until rescued.

example of these two had it been desirable to purchase any more reindeer at this place, but both Dr. Jackson and Captain Healy thought it more advisable to visit other parts of the coast and purchase a small number of the animals at different settlements with a view of creating among the deermen a general desire to engage in the traffic. After the first lot of deer had been safely taken on board the Bear; not the slightest difficulty was experienced in purchasing the animals at any of the settlements visited. It was not the intention of Dr. Jackson, however, to transport a large number of reindeer to Alaska the first year, as there were still many points to be considered, and the manner of handling the matter was still in its experimental stage. Among the reasons advanced by some of the would-be experts in reindeer propagation as to why the animals could never be successfully transplanted into Alaska, were the statements often repeated that the reindeer would not eat food that was not fresh. or had been handled, and that they could not, for this reason and for others too numerous to mention, endure a sea voyage, and finally that the character of the mossy plains of Siberia was entirely different from that in Alaska, in consequence of which the transported animals would starve. In order to test the correctness of these surmises and opinions it was decided to bring only a very few reindeer over the first year, and to subject these to the hardest conditions for existence that they would probably ever have to endure in Alaska. In accordance with this idea a band of sixteen reindeer were purchased and transported in the revenue cutter Bear, from Siberia to the Aleutian Islands, necessitating a journey by sea of fully a thousand miles. They were safely landed on Unalaska Island, and turned loose to shift for themselves near a native village where there were a half hundred idle dogs, left entirely to their own devices and presumably with no scruples about worrying or killing deer.

When the deer were landed from the ship they were in excellent condition. and although left absolutely unattended and unprovided for over a year, everyone of the little band wintered successfully, and when seen by the writer in the mouth of August, 1892, they were in superb condition. While hunting on a small island in Captain's Bay, a harbor of Unalaska Island. the writer, accompanied by Captain A. M. Brown, U. S. A., saw nine of the reindeer quietly feeding in a little glade not a quarter of a mile from the native village of Illiliuk. They were very tame, and allowed us to approach them, and even stroke their sleek sides without the slightest evidence of uneasiness.

When the Bear reached Unalaska early in June last, on her way North, Dr. J ckson, who was again a passenger (. board, was rejoiced to find the reindeer at this place in such good condition, and it was with greatly increased feel ngs of confidence and encouragement that the second season's work among the Tchukchees and Eskimos of the far North was taken up. The space allotted for this article will not permit of a detailed description of this year's work in purchasing the reindeer required to start an experimental station on American soil. Let it suffice to say that the northwest coast of Siberia was again visited by the Bear, and everywhere the vessel touched she was warmly welcomed. Reindeer were offered for sale without reserve by the Tchukchees, now eager to engage in the trade. The news of the sale of the small band of deer the previous season had spread with astonishing quickness over the country, and seeing that no harm befell their fellow-herdsmen who first sold deer, the natives were all anxious to sell. The price of reindeer fell under the influence of competition from \$10.00 to as low as \$4.25, each in a single season, and had it been desirable to purchase all that were offered thousands could have been obtained at an average cost of

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\$4. As it was, the time which the *Bear* might devote to this special work was limited, and Dr. Jackson was compelled to be satisfied with the purchase of 185 choice animals. Of this number, 180 were safely landed at Port Clarence, just south of Bering Strait, and three were placed on St. Paul Island, one of the Pribylof group, to ascertain the possibility of the animals living and breeding there. The two remaining animals were killed to furnish a supply of fresh

meat, which at the present time cannot be obtained by ships anywhere in this part of Alaska.

The history of this great philanthropic and economic measure would not be complete without some allusion to the manner in which it is

mauner in which it is proposed to put the reindeer into the possession of the Eskimos. To one who is acquainted with

To one who is acquainted with the roving, improvident nature of

these people, it would seem at hirst glance impossible that they could be brought to a realizing sense of the important bearing the introduction of reindeer in their midst would, have upon their lives, and the necessity of guarding the valuable herds from destruction. It is more than likely that unless some system of protection was introduced along with the deer, they would soon fall victims either to the rapacity of roving hunting parties, or become scattered and destroyed

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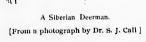
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by dogs or wild animals. Dr. Jackson's long experience as a missionary among the Indians stoca him in good stead at this juncture. He saw the necessity of making individual natives more or less responsible for the deer left in their vicinity, and with that end in view a scheme was evolved which, so far as human judgment can foresee, promises to be successful in all its features.

On the north shore of Port Clarence, a spacious harbor about seventy-five miles south of Bering Straits, a comfortable house was erected last sum mer and furnished with all necessary supplies to maintain its occupants for one year. At this station Mr. Minor W. Bruce, a gentleman who has had

considerable experience among our western Indians, accompanied by another white man, has been left in charge. With Mr. Bruce are four Siberian deermen, who, at the solicitation of Captain Healy, were induced to leave their

homes on the western side of the straits and give their services to the station for one year. The herd of reindeer will be under the care of the Siberians and native Eskimos who will be selected from among the brightest and most reliable natives living near the station. The herders are divided into first and second classes. The herders of the first-class are the four Siberians whose business it will be to teach the Eskimos the proper manner of herding and caring for the animals, and they will receive in payment for their services fifty dollars per annum each, with board, shelter and a sufficient quantity of native clothing free. The second-



Native Deer-skin Clothing.

class herders, twelve in number, will be under the instruction of the Siberians while on duty with the herd, and will receive in paymen their board, food and clothing as long as they remain in the employ of the Service. Each of the first-class Siberian herders will have under his immediate

charge and instruction, at all times, three of the native Eskimos, the second-class herders. The watches are so arranged that the herd will never be left unattended by less than four men. In case of sickness of either of the Siberians, his place will be temporarily filled by a rearrangement of the hours of watch, each of the other Siberians taking his proportionate share of the work until their comrade returns to duty. Mr. Bruce is empowered to employ additional native help if it is necessary, and to discharge any



Alaskan Sled.

one found lacking in interest, insubordinate or otherwise unfitted for the work, but he is especially charged to act in all cases of needed discipline with the utmost leniency consistent with a firm administration of justice. Dr. Jackson concludes his instructions to the superintendent of the station in these words:

"The Siberians being away from their homes and friends among a strange, and at times, jealous and suspicious people, need your especial care and protection. Take pains to make them feel that you have a fatherly interest in their welfare. I hope their treatment will be such that they will choose to remain permanently in our service."

The course of instruction of native Eskimos is at present designed to continue two years. If at the end of that time they have proved diligent and capable, each of them will be given a herd of ten reindeer as a start in life. The natives in the vicinity of the station have been warned, and have promised to keep their dogs away from the deer herds; and while no difficulty is expected in this quarter, it is perfectly understood, on both sides, that any strange dogs found molesting the deer will be shot down, and the owner will be suitably renunerated for his loss. Contrary to the generally expressed opinion, the Eskimos hail with delight the introduction of the reindeer, and [From

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without exception are only awaiting the time when reindeer will be plentiful enough in Alaska, to kill their dogs and substitute the deer as a means of transportation. Many of the natives have begged to be supplied with small bands of imported reindeer which they will herd themselves. But as one or two failures of such private enterprises would doubtless cause the Eskimos to lose faith in the work of the station, it has been decided to delay any more general introduction of the animals until the knowledge of the proper

quarters are located in the center of the mining district of central Alaska.

We have now seen how and why the domesticated reindeer were purchased, where they have been landed in Alaska and where the next station will most likely be established. Now let us briefly glance at the country into which it is proposed to introduce this new factor of existence, which is destined to have an influence in its development, utterly beyond the comprehension of the public of the United States, whose knowledge of Alaska is



Siberian Deermen Brought to Alaska with the First Herd.

[From a photograph by Dr. S. J. Call.]

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manner of caring for them has become widely disseminated in the regular manner.

If the work of the Port Clarence station prospers, other stations will be built next year at points along the coast to be hereafter determined. Government schools are already established and in operation at Cape Prince of Wales, Point Hope and Point Barrow in Arctic Alaska; and it is more than likely that in order to avoid unnecessary expense for new buildings the next herds will be located at these points. A small herd will also be brought over and sent up the Yukon River next season for use of the employees of the Northwest Trading and Transportation Company, whose headconfined to that comparatively small area covered by tourist routes, and chiefly remarkable for its scenic wonders.

Alaska, as generally known to the reading public, is comprised in a narrow strip of territory lying north of Vancouver Island and west of British Columbia; a region of glacier-girt shores and timbered forests, of inaccessible snow-clad peaks and rich stores of mineral wealth-a land of perpetual interest—but by comparison with that Greater Alaska of which we write it bears about the same relation in point of size and importance as Florida does to the whole United The natives of southeast States. Alaska are not Eskimos, but belong



Ko-har-ra, the Richest Native in N. E. Siberia. [From a photograph by Dr. S. J. Call.]

to a distinct race descended in all probability from the Southern aborigines. Their condition in life is not especially hard, nor will they ever suffer for the simple necessities of life. The sea adjacent to their homes, tempered by the warm Japan current, is free from ice all the year and furnishes them an abundance of fish. The forests supply them with material for the construction of houses and boats and for fuel, and it abounds with game. Surrounded by a rapidly increasing white population, many of the natives find ready employment at remunerative wages, and the summer tourists, gazing. for the first time on these "untutored

children of nature," peddling their stock of San Francisco-made curios. fall ready victims to their wiles. Back of this narrow strip of country, separating it from Greater Alaska on the north, rugged ranges of ice-covered mountains set their cold shoulders against the sky, and oppose an almost impassable barrier to the explorer.

What is beyond?

Following the lead of salt water through narrow channels and into deep fiords as far north as a ship may go, a few hardy explorers and prospecting miners have reached the head of Lynn Channel, and from thence found their way over the mountains through the Chilcat, or Chilcoot passes and so reached the headwaters of the mighty Yukon. But the effort to reach this point has been so great that further endeavors to explore the unknown interior with no other means of transportation than those available in the past, have invariably met with defeat and sometimes resulted in death.

If we draw a line from east to west through the mountain range which separates the headwaters of the Yukon from salt water on the south, that portion of the great territory of Alaska lying north of this line, with its western shores washed by the waters of Bering Sea and stretching away northward to the Arctic Ocean, occupies an area equal to the combined areas of all the New England and Middle States, together with Ohio, Indiana and Illinois. Here is a country of undulating, moss-covered plains,

diversified here and there by forests of spruce and pine, white birch and cedar trees, with warm valleys clothed in verdure and sheltered from the cold winds by low ranges of mountains, none more than 3,000 feet high.



Earrings.

Westward from the junction of the Tan-nen-nah and the Yukon rivers to Bering Sea, and northward to the Arctic Ocean, the country is, so far

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as known, of the same general character. There are in this region between 300,000 and 400,000 square miles of comparatively level moss- and grass-covered plains, dotted by innumerable lakes and drained by hundreds of rivers, forming an ideal grazing country for countless herds of reindeer. At the present time this vast territory is terra incognita except from reports furnished by the natives. The difficulties of travel and transportation have been so great in the past that it has remained unexplored. It is impossible to make any progress over the soft, spongy tundra during the summer, and during the winter months, the distances between the few scattered settlements are so great that dog teams are inadequate for purposes of travel by sleds. According to the most reliable census, there are in this portion of Alaska between 20,000 and 25,000 natives. It is to these people, gradually but certainly being exterminated by starvation, and in this region so little known, that the importation and propagation of the domesticated reindeer will open up a new and prosperous future. In order to appreciate the full significance of the new scheme and its influence on the future development of Alaska, it will only be necessary to state the relative working efficiency of a dog team and that of a reindeer team. A dog team, in addition to the ordinary load on the sled, must carry its own supply of food for the trip. Under the best conditions, dogs can make about forty miles per day, carrying a weight of

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Holsting in a Reindeer on Board the "Bear."

[From a photograph by Assistant Engineer, A. L. Broadbent, U. S. R. M.]

about fifty pounds for each dog em-

ployed.

Under like conditions each reindeer will carry a weight of one hundred and fifty pounds, and the team will easily cover one hundred and fifty miles a day. Besides, the reindeer's only food is the moss and lichens which grow everywhere and can be obtained by the animals at all seasons of the year without difficulty.

Dogs, and especially the breed of dogs at present used by the Alaskan natives, are quarrelsome, become fretful and unmanageable when tired, and frequently are dangerous to their owners on account of attacks of hydrophobia. The reindeer, on the other hand, are the most tractable and docile beasts of burden known to man.

The initial steps in this humane measure have already been taken, and success for its larger development demonstrated by private aid. It now rests with the Government to carry on the good work and extend the system to its legitimate limits.* If it is a sound public policy to bore artesian wells and build water-storage reservoirs by which thousands of aridacres can be reclaimed from barrenness and made fruitful, it is equally a

sound public policy to stock the plains of Alaska with herds of domesticated reindeer, and cause those vast, dreary, desolate and now useless regions to minister to the wealth, happiness, comfort and well-being of man.

W th the establishment of reindeer stations at Point Barrow, Point Hope, Port Clarence and on the Yukon River next year, it will be possible to send a letter from St. Michaels, at the mouth of the Yukon, to the Refuge station at Point Barrow in mid-winter. and receive an answer in less than three weeks; and with the extension of the system by the establishment of relay stations at three points on the coast south of St. Michaels, a Christmas greeting can be sent from San Francisco by way of Kodiak Island and across the Alaskan peninsula to the most northern point on the Western Continent-Point Barrow-in less than thirty days. When one stops to consider that the same point is at present closed to communication by ice during ten months of the year. and that there are seasons, even during the two months that it is free from ice. when neither news nor relief may reach the weary watchers and toilers in this remote field, any project which has for its end the lifting of their burdens, will be hailed with joy by every true lover of mankind.



A bill is now pending before the House of Representatives, having passed the Senate last year, apprinting the sum of \$15,000 for the establishment of experimental stations in Alaska for the propagation of reindeer.

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