DEPARTMENT OF THE INTERIOR
BUREAU OF EDUCATION

BULLETIN, 1919, No. 40

WORK OF THE BUREAU OF EDUCATION FOR THE NATIVES OF ALASKA, 1917-18

WASHINGTON
GOVERNMENT PRINTING OFFICE
1919

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REPORT OF THE WORK OF THE BUREAU OF EDUCATION FOR THE NATIVES OF ALASKA, 1917-18.

PART I. GENERAL SUMMARY.

During the year the field force of the Bureau of Education in Alaska consisted of 5 superintendents, 1 assistant superintendent, 116 teachers, 9 physicians, and 11 nurses. Sixty-nine schools were maintained, with an enrollment of 3,635.

School buildings were erected at White Mountain, whither the Eskimos had migrated from Council; at Elim, within a tract on Norton Sound which had been reserved by Executive order for the use of the Eskimos formerly inhabiting the village of Golovin; at Fort Yukon, to replace the school building which the erosion of the river bank had rendered unsafe; and at Tyonek, where the small log building hitherto used for school purposes had proved to be inadequate; at Metlakatla a residence was erected for occupancy by the principal teacher.

The wisdom of the policy of setting aside selected tracts within which the natives can readily obtain fish and game and advantageously conduct their own enterprises has again been demonstrated by the success of the colony at Noorvik, in Arctic Alaska. With their advancement in civilization, the Eskimos living at Deering, on the bleak sea coast, craved a new home. Lack of timber compelled them to live in the semiunderground hovels of their ancestors, while the killing off of the game animals made it increasingly difficult for them to obtain food. An uninhabited tract on the bank of the Kobuk River, 15 miles square, abounding in game, fish, and timber, was reserved by Executive order for these Eskimos, and thither they migrated with their household goods and herds of reindeer. On this tract, in the Arctic wilderness, the colonists under the leadership of the teachers, within two years have built a village with well laid-out streets, neat single-family houses, gardens, a mercantile company, a sawmill, an electric light plant, and a wireless telegraph station, which keeps them in touch with the outside world.

Affairs at Metlakatla, on Annette Island, have made satisfactory progress. The legality of the Annette Island Fishery Reserve has been established by the opinion of the Supreme Court of the United States, December 9, 1918, and plans for the development of the colony can now confidently be carried into effect. By a lease dated

April 30, 1917, the Secretary of the Interior, on behalf of the Metlakatlans, granted to the Annette Island Packing Co., of Seattle, fish-trapping privileges within the reserved waters adjacent to Annette Island and permission to erect and operate a cannery on Annette Island. For these privileges the lessee guaranteed the payment of not less than $4,000 during the season of 1917 and of not less than $6,000 per annum for five years beginning with 1918. It is expected that the revenues accruing from this lease will enable the Secretary of the Interior to take over, for the Metlakatlans, the property of the lessee within the reserve and to arrange for the operation of the cannery by the natives themselves.

The Annette Island Packing Co. expended during 1917 and 1918, including interest, $32,766.44 in the construction of cannery buildings; the royalties of those seasons amounted, with interest, to $17,330.71, leaving a balance of $15,435.73 to the credit of the company, December 31, 1918. The company packed 65,806 cases of salmon during the season of 1918.

In May, 1916, the representatives of the Bureau of Education succeeded in organizing among the natives the Metlakatla Commercial Co., with a capital of $2,295 and 30 shareholders, to conduct the mercantile business of the settlement. The auditing of the affairs of the company in January, 1919, showed a capital of $21,140 at that date and a net profit of $13,721. The number of stockholders had increased to 156. In addition, the company had rehabilitated and operated the sawmill and had furnished lumber for the cannery building and for other buildings in the village.

The returns to the natives of Metlakatla from the Annette Island Packing Co., for the season of 1918, amounted to $70,252.55, distributed as follows:

Erection of cannery buildings:		
Labor	$2,755.56	
Piling	619.81	
To Metlakatla Commercial Co.—		
For lumber	9,031.62	
For miscellaneous	49.00	
		$12,455.99
Operation of cannery:		
Fish royalties	$11,966.69	
Labor	1,869.19	
Trap fees	500.00	
Purse seiners (196,012 fish)	12,023.25	
To Metlakatla Commercial Co.—		
For labor contract	29,909.03	
For miscellaneous	1,528.35	
		57,796.56
Total		70,252.55

The income and wages resulting from the cannery lease, guaranteed through five successive years, and the prosperity of its commercial company assure the economic restoration of the Metlakatla colony.

Economic conditions among the natives of Alaska have been greatly affected by the war. The cost of food, clothing, and manufactured articles imported from the States has increased as much as 300 per cent. The Bureau of Education has, therefore, through the agency of its teachers, urged the natives to live, as much as possible, independently of imported articles and to depend upon native products, not only for their own benefit, but also for the assistance they can thereby render to the country in conserving its food supply. New impetus has been given to the endeavor of the Bureau of Education to train the natives in the raising of vegetables for their own use and for sale. Efforts in this direction have produced encouraging results, especially in the upper Yukon, Kuskokwim, and Kotzebue Sound regions.

In widely separated parts of Alaska the natives showed their gratitude to the Government, which has done so much for them, by zealously cooperating in activities which helped to win the war; they willingly complied with the requests of the Territorial food administrator, liberally purchased Liberty bonds and War Savings Stamps, organized branches of the Red Cross, formed knitting and sewing societies in many villages, and contributed toward the support of the "Alaska bed" in one of the American hospitals in France.

Congress appropriated $62,500 for the support of the medical work of the bureau among the natives of Alaska during the fiscal year 1917–18. Nine physicians and 11 nurses were employed; hospitals were in operation at Juneau, Nulato, Akiak, and Kanakanak; as heretofore, medical supplies were sent to teachers remote from a hospital, physician, or nurse, for use in relieving minor ailments.

During the year the building at Kanakanak, erected as a school building in 1909, was enlarged and remodeled for hospital purposes; the hospital building at Akiak, begun in 1917, was completed.

At the Juneau hospital the policy was inaugurated of receiving native girls for theoretical and practical training as nurses. This action will result in the training of a considerable number of girls who will render effective service in improving the health and in raising the standard of living in the native villages to which they return.

As the natives of Alaska advance in wealth and independence it is natural that they should wish to assume part of the expense of their medical service. The honor of taking the first step in this

direction belongs to the natives of Hoonah, who, during the latter part of the year, paid the salary of a physician and started a fund for the erection of a hospital in their village.

Pending the time when the congressional appropriations will permit the bureau to assume the entire expense of the medical care of the natives in southeast Alaska, the Commissioner of Education entered into an agreement with the woman's board of home missions of the Presbyterian Church by which the board assumed the entire responsibility for the medical work in the villages of Klawock and Hydaburg and agreed to rent to the bureau its hospital building at Haines for use as a tuberculosis sanitarium, the board also assisting in the maintenance of the sanitarium during the first year.

There were in Alaska June 30, 1918, approximately 120,000 reindeer. The reports from the reindeer stations for the fiscal year ended June 30, 1917, the latest complete information received, show a total of 98,582 reindeer, distributed among 98 herds. Of the 98,582 reindeer, 67,448, or 69 per cent, were owned by 1,568 natives; 3,046, or 3 per cent, were owned by the United States; 4,645, or 5 per cent, were owned by missions; and 23,443, or 23 per cent, were owned by Lapps and other whites. The total income of the natives from the reindeer industry during the fiscal year was $97,515. The total number of reindeer, 98,582, is a net increase of 20 per cent during the year, notwithstanding the fact that 13,144 reindeer were killed for meat and skins, or were lost.

Reindeer fairs, or conventions, were held during the winter at Igloo, on Seward Peninsula; at Unalakleet, in the Norton Sound region; at Noatak, in the Kotzebue Sound district; and at Noorvik, on the Kobuk River. These annual fairs have become a recognized feature of the reindeer industry; they bring together Eskimos from a large extent of country, who spend a week together thinking about and discussing not only subjects relating to the reindeer industry, but also matters of importance affecting the Eskimos as a race. The competitions and exhibits promote interest in the various phases of the work; comparison of methods result in increased efficiency; personal intercourse makes for good fellowship and develops leaders who are recognized as such by the Eskimos themselves. An important result of the fairs was the organizing in northwestern Alaska of the Eskimo Reindeer Men's Association, the object of which is to awaken the natives to their own responsibilities and to secure united sentiment and action in important matters affecting the Eskimo race.

LIST OF PERSONS IN THE ALASKA SCHOOL SERVICE, 1917-18.

William T. Lopp, superintendent of education of natives of Alaska, and chief of the Alaska Division, Seattle, Wash.

EMPLOYEES IN THE WASHINGTON OFFICE.

William Hamilton, acting chief of the Alaska Division, Pennsylvania.
David E. Thomas, accountant, Massachusetts.
Edward D. Carmack, stenographer and typewriter, Tennessee.

EMPLOYEES IN THE SUPPLY AND DISBURSING OFFICE, SEATTLE.

Harry C. Sinclair, supply agent, Maryland.
Chauncey C. Bestor, special disbursing agent, Washington.
Julius C. Helwig, assistant to superintendent of education, Indiana.
James O. Williams, clerk, Illinois.
Mrs. Iva M. Knox, stenographer and typewriter, Washington.

EMPLOYEES IN ALASKA.

District superintendents of schools.

Walter C. Shields, northwestern district, Nome.
Walter H. Johnson, western district, St. Michael.
George E. Boulter, upper Yukon district, Tanana, until October 27.
Mrs. George E. Boulter, acting superintendent, upper Yukon district, Tanana, from November 1, 1917, to May 31, 1918.
Frederick L. Forbes, upper Yukon district, Tanana, from June 1, 1918.
Arthur H. Miller, southwestern district, Anchorage.
Charles W. Hawkesworth, southeastern district, Juneau.

Physicians.

Emil Krulish, M. D., Public Health Service, on special detail.
William H. Chase, M. D., Cordova, from October 1, 1917.
Linus H. French, M. D., Kanakanak Hospital.
Elmer C. Gross, M. D., Ellamar, to January 15, 1918.
Gadsden E. Howe, M. D., Ellamar, from January 16, 1918.
Frank W. Lamb, M. D., Akiak Hospital.
James P. Moopey, M. D., Juneau Hospital.
Daniel S. Neuman, M. D., Nome.
William Ramsey, M. D., Council, from September 1, 1917.
Henry C. Randle, M. D., Nulato Hospital.
Curtis Welch, M. D., Candle, from December 1, 1917.

Nurses, and Teachers of Sanitation.

Miss Mamie Conley, Kanakanak Hospital.
Miss Frances Dwyer, Juneau Hospital.
Mrs. Lula A. Evans, Unalakleet.
Miss Esther Gibson, Southeastern district.
Mrs. Carrie W. Lamb, Akiak Hospital.
Miss Mabel Leroy, Juneau Hospital.
Miss Jessie Libby, Akiak Hospital.
Mrs. Martha Mooney, Juneau Hospital.
Mrs. Lucia Petrie, St. Michael.
Mrs. Agnes A. Randle, Nulato.
Miss Rhoda A. Ray, Juneau Hospital.
Miss Mary G. Riff, Juneau Hospital.

Teachers and school attendance, 1917-18.

NORTHWESTERN DISTRICT—ARCTIC OCEAN AND BERING SEA REGIONS AS FAR SOUTH AS THE KOYUK RIVER, INCLUDING ST. LAWRENCE ISLAND.

Schools.	Teachers.	Appointed from—	Average daily attendance.	Enrollment.
Barrow	Delbert W. Cram	Washington	64	72
	Mrs. Belle C. Cram	do		
	Roy Ahmaogak	Alaska		
Buckland	Mrs. Iva K. Taber	do	17	21
Diomede	Arthur E. Eide	California	16	23
Elim	Thos. W. Schultz	do	50	62
	Mary K. Westdahl	Alaska		
Gambell	Jean Dupertuis	Washington	60	70
	Mrs. Elizabeth Dupertuis	do		
	Miss Flora T. Oonaluk	Alaska		
Igloo	Ebenezer D. Evans	Washington	25	33
Kivalina	Harry D. Reese	Pennsylvania	31	55
	Mrs. Harry D. Reese	do		
Kotzebue	Chas. Menadelook	Alaska	39	50
Noatak	James H. Maguire	do	35	53
	Mrs. Lillian C. Abercrombie	do		
Nome	Arthur Shields	New York	17	88
	Charles Kituk	Alaska		
Noorvik	Charles N. Replogle	Washington	115	182
	Delbert E. Replogle	do		
	Mrs. May Replogle	do		
	Mrs. Lydia Orealuk	Alaska		
Selawik	Frank M. Jones	Washington	40	60
	Mrs. Lulu I. Jones	do		
Shishmaref	John P. Jones	Alaska	40	47
	Miss Mollie F. Jones	do		
Shungnak	Fred M. Sickler	Pennsylvania	31	49
Sinuk	Miss Lucy R. Howard	Alaska	20	34
Solomon	Garfield Sitarangok	do	16	35
Teller	Mrs. Clara H. Fosso	do	26	34
Wainright	Earle M. Forrest	Washington	40	52
	Mrs. Elizabeth Forrest	do		
Wales	Arthur Nagozuk	Alaska	77	90
	Charles Klegnea	do		
White Mountain	James V. Geary	do	51	77
	Miss Hannah A. Geary	do		
Total			810	1,137

WESTERN DISTRICT—BERING SEA REGION, BETWEEN KOYUK RIVER AND CAPE NEWENHAM.

Akiak	Miss May Wynne	Kansas	43	60
	Miss Marie D. Bienerth	Montana		
Akulurak	Miss Mary Laurentia	Alaska	52	62
Bethel	Rollen H. Drake	Washington	42	61
Goodnews Bay	Frank M. Gwin	do	17	37
	Mrs. Margaret M. Gwin	do		
Hamilton	Mrs. Martha A. Fuller	do	21	35
Holy Cross	Miss Mary Bernadette	Alaska	95	96
	Miss Mary Thecla	do		
Hooper Bay	Ralph K. Sullivan	Washington	39	48
Mountain Village	F. W. Cobb	Alaska	21	36
Nulato	Miss Mary W. Salley	do	24	41
	Miss Mary Noemi	do		
Pilot Station	Elmer M. Harnden	Washington	22	29
Quinhagak	A. B. Scheel	Alaska	41	45
Russian Mission	Mrs. Corinne Call	Washington	28	37
St. Michael	Harry V. Johnson	Minnesota	50	57
Shageluk	Walter E. Cochran	West Virginia	24	40
Shaktoolik	Misha Ivanoff	Alaska	20	28
Unalakleet	Samuel Anaruk	do	46	71
	T. L. Richardson	Washington		
	Miss Eva Rock	Alaska		
Total			505	755

Teachers and school attendance, 1917–18—Continued.

UPPER YUKON DISTRICT—VALLEY OF THE YUKON AND ITS TRIBUTARIES BETWEEN 141° AND 157°.

Schools.	Teachers.	Appointed from—	Average daily attendance.	Enrollment.
Circle	Miss Evelyn L. Carey	Alaska	13	20
Eagle	Everett P. Frohock	Washington	10	32
Fort Yukon	Miss Winifred Dalziel	New York	36	64
Louden	Miss Nora Dawson	Missouri	8	10
Rampart	Miss Lula Graves	Alaska	22	27
Tanana	Mrs. Alice A. Boulter	do	4	17
Total			93	170

SOUTHWESTERN DISTRICT—BERING SEA REGION SOUTH OF CAPE NEWENHAM AND NORTH PACIFIC COAST REGION WEST OF 141°.

Akhiok	Mrs. Kathryn D. Seller	Alaska	40	54
Atka	Frank Cassel	Washington	18	30
	Mrs. Edna M. Cassel	do		
	Mrs. Angeline Cassel	do		
Chignik	Mrs. Lura Olsen	Alaska	23	31
Chogiung	Preston H. Nash	Washington	48	56
	Mrs. Katherine Nash	do		
Copper Center	Thomas R. Glass	do	8	23
	Estaco Ewan	Alaska		
Iliamna	Fred M. Phillips	do	11	28
Kulukak	James G. Cox	do	33	38
Port Moller	Walter G. Culver	Oregon	7	11
Susitna	Miss Katherine Kane	Alaska	17	38
Tatitlek	Chesley W. Cook	Washington	57	62
	Mrs. Mary E. Cook	do		
Togiak	Walter H. Johnston	Alaska	17	29
Tyonek	David F. Dunagan	Washington	21	37
	Mrs. D. F. Dunagan	do		
Ugashik	Walter S. Craig	do	16	32
	Mrs. Edith Craig	do		
Unalaska	Joseph W. Coleman	do	61	74
	Mrs. Marie Coleman	do		
Total			377	545

SOUTHEASTERN DISTRICT—NORTH PACIFIC COAST REGION EAST OF 141°.

Douglas	Miss Hannah E. Breece	Oregon	18	60
Haines	Mrs. Nancy L. Alexander	Alaska	23	43
Hoonah	Fay R. Shaver	do	26	37
	Miss Rena Crinklaw	California		
Hydaburg	James P. Wells	Oregon	55	107
	Mrs. Maye B. Wells	do		
	Miss Grace Myers	do		
	Miss Lillian Pierce	do		
	Mrs. Edith C. Schell	do		
Juneau	Mrs. Isabel Gilman	Washington	28	62
Kake	Charles E. Sydnor	California	17	118
	Mrs. Cora A. Sydnor	do		
Killisnoo	Nellie Mae Taylor	Missouri	20	76
Klawock	Charles E. Hibbs	Washington	52	84
	Mrs. M. W. Hibbs	do		
	Miss Nellie G. Orr	Idaho		
	Miss Helen M. Sullivan	do		
	Miss Mary Maloney	Alaska		
Klukwan	Amos B. Carr	Washington	27	34
	Mrs. Ella D. Carr	do		
Metlakatla	William G. Beattie	do	102	188
	Miss Agnes Danforth	do		
	Miss Gertrude M. Kendall	Missouri		
	Miss Julia N. Kendall	do		
	Ernest Purvance	Oregon		
	Miss Frances C. Root	Alaska		
Sitka	Mrs. E. P. Grady	New York	23	74
	Miss Jeannette Wright	Washington		
Wrangell	Mrs. Sadie E. Edmunson	Idaho	13	29
Yakutat	Elof M. Axelson	Illinois	10	26
Total			414	988

Expenditures from the appropriation for "Education of Natives of Alaska, 1918."

Appropriation		$208,000.00
Salaries in Alaska	$108,411.39	
Equipment and supplies	24,598.38	
Fuel and light	21,765.27	
Local expenses	500.00	
Repairs and rent	4,332.00	
Buildings	22,679.03	
Destitution	2,852.20	
Commissioner's office salaries	5,023.33	
Seattle office salaries	8,400.00	
Commissioner's office expense	59.79	
Seattle office expenses	786.01	
Traveling expenses	8,519.49	
Contingencies	73.11	
Total		208,000.00

Expenditures from the appropriation for "Medical Relief in Alaska, 1918."

Appropriation		$62,500.00
Salaries in Alaska	$24,029.24	
Equipment and supplies	13,788.29	
Fuel and light	2,946.00	
Local expenses	2,200.00	
Buildings	14,308.97	
Destitution	2,708.78	
Traveling expenses	1,685.39	
Contingencies	743.33	
Total		62,500.00

Expenditures from the appropriation for "Reindeer for Alaska, 1918."

Appropriation		$5,000.00
Salaries of chief herders	$850.50	
Supplies	4,147.42	
Contingencies	2.08	
Total		5,000.00

Financial summary of native store companies of Alaska.

Companies.	Date of organization.	Paid-in capital, first year.	Date of last audit.	Stockholders.	Present paid-in capital.	Total net gain.	Total cash dividends on stock.	Total stock dividends on stock.	Total cash dividends on cash purchases.	Balance left in surplus.	Total capital, including stock dividends.
Metlakatla Commercial Co., Metlakatla	May 1, 1916	$2,295	Jan. 7, 1919	156	$19,817	$13,721	$5,208	$4,188	$2,116	$2,209	$21,140
Klawock Commercial Co., Bayview	Jan. 1, 1913	4,370	Feb. 1, 1919	93	8,538	11,379	5,614	5,362	.....	403	12,790
Hydaburg Trading Co., Hydaburg	Dec. 1, 1941	4,020	Dec. 31, 1918	172	12,593	29,825	9,559	8,461	10,848	657	19,578
Atka Island Native Store, Atka, via Unalaska	Sept. 1, 1913	[1] None	July 15, 1918	[1] None	(2)	3,358	.....	3,000	.....	358	3,000
Wainwright Native Store, Wainwright	May 1, 1916	1,380	Nov. 30, 1918	.....	1,575	2,329	141	.....	.....	2,188	1,575
Klukwan Mercantile Co., Klukwan, via Haines	1912	1,710	Mar. 24, 1919	31	2,980	[3] 3,000	2,159	.....	[4] 841	(5)	2,980
Eskimo Building and Loan Association, St. Lawrence Island.[6]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tyonek Native Cooperative Store Co., Tyonek, via Anchorage.	Mar. 2, 1917	950	Apr. 2, 1918	.....	950	397	.....	.....	.....	397	950
Wales Cooperative Store, Wales[6]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

[1] This store was started entirely on credit, the capital to be created by the profits of the store and to be given to the native patrons in proportion to their patronage.
[2] This amount does not include the loss of the last year as shown by deficit.
[3] Estimated.
[4] Deficit, $548.15, as a result of last year of business.
[5] No audit to date. Statement of June 1, 1918, gives net worth of $7,865.28. Has no accounts payable; a complete stock of merchandise for year 1918–19, and a cash reserve in Seattle of $5,179.47 on Dec. 5, 1918.
[6] No audit to date, and to date has not been supervised by Bureau of Education. Has no accounts payable in Seattle.

PART II.—DETAILED REPORTS.

SECTION 1.—REPORTS BY SUPERINTENDENTS.

REPORT OF WALTER C. SHIELDS, SUPERINTENDENT OF THE NORTHWESTERN DISTRICT.

In the 20 schools within this district the number of pupils enrolled was 1,088, and the entire population of the villages reached by these schools was 3,960. Twenty-five white teachers were under appointment and 13 native teachers; one of the latter received payment in reindeer instead of in money.

Inspection.—All of the schools were visited during the year except Shungnak, and several were visited twice. The trips of inspection covered 4,052 miles, 2,664 by water and 1,388 by land. I was absent from headquarters 127 days. During the past eight years I have traveled on tours of inspection 25,264 miles, of which 11,005 miles were behind reindeer.

For cross-country runs and for three-fourths of the winter travel necessary in this district deer are, to my mind, far superior to dogs. They insure comfort, economy, and safety. On trails that are hard, especially on the coast, and where feed is hard to get, a dog team makes better time and can be cared for more easily. After the middle of April it is very hard to get deer that are still in good enough condition to be driven.

I consider deer better than dogs for three-fourths of the traveling I have to do. I have found more *comfort* when traveling with deer. Your outfit is not limited, as you can hitch on another deer if necessary. Each man has his own sled and has plenty of room. He can ride or run as he wishes, and his sled is loaded with the idea that the man is to ride. Good deer, well trained, and with good sleds and harness, can be controlled better than an equally good dog team. This will be disputed by every dog driver, but I still contend that good deer driven by lines can always be better handled than good dogs driven by word of mouth, just as a good team of horses can be driven better than a good team of dogs. I have found a deer team more *economical* than dogs for two reasons: The question of feed for the deer is taken care of by the country, and you have no roadhouse bills for the team. The greatest argument for deer is that they insure a greater degree of *safety* in a country where winter travel always has its menace. I have already stated that we are not limited as to the size of the outfit, which means that a deer man always carries a lot of extra clothes. The camping outfit is more complete than can be carried on a dog sled. The deer outfit is seldom less than three sleds. And three sleds make a camp which will stand up against any storm that I have ever met. There is always the assurance that at the worst a man can eat one of his deer. And over most of the country there is always food for the animals. The dog driver, if storm bound, is always haunted by the fear of running out of food for his team. Deer do not freeze, and if there is feed (which is invariably found), there is no condition that can arise, except an accident to which men and animals are always liable, which will cause the driver any fear for his animal. Dogs in severe weather require constant attention. Flanks will freeze, and feet will bleed.

In all my winter traveling I know that I owe my comfort and safety to the devotion and efficiency of the Eskimos who guide me. Tautuk, Mukpeadeluk, and Orealuk are splendid fellows and deserve much more from the Government than they get and more from me personally than I can afford to give.

All the summer trips were made through the courtesy of the Coast Guard Service on the U. S. S. *Bear*. With the exception of Shishmaref, which is depopulated during the summer, the *Bear* touched at every station on the coast. The merchandise for the cooperative stores at Wainwright and Gambell were carried by the *Bear*, as were also the supplies for the teachers at these places and at Barrow. The school supplies for all points north of Kotzebue and for St. Lawrence were delivered by the *Bear*.

I wish to express my appreciation of the assistance and courtesy extended to me at all times by Capt. P. H. Uberroth and by all of his officers. Many times extra duties were performed by the officers and men of the *Bear*, which were often arduous and unpleasant. But at all times such assistance was rendered in a cheerful manner, and it was made plain that Capt. Uberroth believed in the work and wanted to do what was in his power to assist it. I was permitted to leave the ship for three days at Kotzebue to make the trip to Noorvik. First Lieut. J. F. Hahn accompanied me and made an inspection of the sawmill and electrical machinery at Noorvik. Mr. J. J. Dolan, electrician of the *Bear*, also made the trip and inspected the wireless plant. I wish to express my appreciation of the assistance and suggestions made by Lieut. Hahn and Mr. Dolan. Dr. Murray, of the *Bear*, in addition to the regular medical work, performed many special operations on the eyes of natives in the north who could not be brought to Dr. Neuman at Nome.

Teachers.—There are two things that the superintendent of this district takes great pride in—the Eskimos among whom we work and the teachers who do the work.

The work in this district is in the hands of trained and capable men and women. The teachers in this district are experts, and most of them have been in the service a long time. This accounts for the success with which they are doing their work. I am proud of the fact that the standard of village work in this district is of the highest, and that through the work and influence of these teachers the Eskimos in this district are devoted to the Government. All of these representatives of the bureau do their work at out-of-the-way places.

The most hopeful thing that I have to report this year is the great success in school and village work attained by our Eskimo teachers. The entire work at Kotzebue, Wales, and Solomon was under the direction of Eskimo teachers. At other places Eskimo assistants were employed with great efficiency. Wales is one of our largest centers and largest schools. This entire work has been under the direction of Arthur Nagozruk, and has been most efficiently done. He has been mayor of one of the best councils any Eskimo village ever had. He organized the reindeer men into a local club that has done good work. Wales has a large church building, but has had no missionary for several years. Arthur Nagozruk and Warren Adlooat, with the assistance of a good church committee, managed the church themselves. The school, mission, and village work at Wales the past year was very successful. It shows what Eskimos can do under the leadership of one of their own race. I consider the work done at Wales by the Eskimos under the direction of Arthur Nagozruk the past year the very best "exhibit" that our service has to show in this district.

At Kotzebue the work was under the direction of Charles Menadelook. He was a stranger to that section, and even had to become accustomed to the change in the dialect. Kotzebue is not an easy place, with its choice assort-

ment of old-timers who pose as experts on everything connected with the natives. It has tried white teachers to the limit. Charles Menadelook took hold with considerable energy. He worked through the church and through the council and forced his personality on the entire village.

Both of these young men are a great credit to the service, and we should be proud of them. With such possibilities among the Eskimos there is every reason for us to look forward to the time when a great part of the work in this district (except the medical work) will be in the hands of Eskimo teachers. Both of these men, Nagozruk and Menadelook, are from Cape Prince of Wales, and received their early training under the present chief of this division, Mr. Lopp.

Population.—As I stated in the first paragraph of this report, the 20 schools in this district reach a population of 3,960. Outside of these villages the population is estimated to be about as follows: Barrow (the point), 50; Icy Cape, Point Lay, etc., 75; Point Hope and Lisburne, 325; Kiana and points below Shungnak, 75; Deering and Candle, 50; Point Wooley, Cripple, etc., 50; Cape Nome, 25; Koyuk, 75; King Island, 125; scattered, 50. Total population outside of villages with schools, 900. This would make a total Eskimo population for this district of 4,860. Last year I estimated the total population at about 5,000. Since that time Mr. D. W. Cram, of Barrow, reports that about 100 natives left Barrow for the eastward. Most of them, I presume, went over the boundary line. Noorvik is now the largest Eskimo village in this district, with a winter population of 403. Barrow is next with 354, and Wales with 348. Nine villages (including Point Hope) have a population of 200 or over. The average village would have a population of 200.

During the year in the 20 villages in which schools are situated there has been an increase of 49, being an increase of 1 per cent. There were 132 births and 83 deaths. Thus, as last year, the birth rate is about 3 to the 1,000, and the death rate 2 to the 1,000. Only 4 villages showed a net decrease in population: Diamede, Gambell, Solomon, and Wainwright.

General development.—Perhaps the most pronounced development among the natives is the great tendency to the increase of solidarity of the race. The fairs, the "Eskimo Magazine," their councils, and their Eskimo leaders are all bringing them closer together. They are feeling more pride in their race and are becoming more independent in their everyday life.

One of the most hopeful signs for industrial development for the Eskimos outside of the reindeer industry is the boom in herring and salmon fishing. A cannery has been operated at Kotzebue, employing native labor. A large herring packing plant is planned for Chinik this year, which will employ several hundred natives the great part of the summer. Fishing is work that appeals to an Eskmo in all of its different branches, and it is work at which the entire family can be employed. If these concerns that handle native labor for fishing can plan to develop their work along such lines that they can give natives a chance to own their own fishing outfits and then buy their fish; or if these concerns, after natives have been properly trained, will establish small fishing stations along the coast under the management of capable natives, and then work out some profit-sharing scheme for them; and if in connection with the fishing stations the concerns can arrange to pay for the native labor partly in supplies at a reasonable figure, then, under these conditions, I can see that the fishing industry furnishes a very fine chance for the Eskimos to obtain work for which they are specially adapted, and also gives them a chance to develop along independent lines.

I have never been able to become very enthusiastic over the future for Eskimos as wage workers. Some have been employed in mines with more or less success. But few Eskimos will stay with such steady labor, and in any case it puts them into competition with white labor, which always brings complications. However, the fishing industry is entirely different and to my mind offers the best industrial opportunity yet given the Eskimos outside of the reindeer industry.

The fur catch the past year was very good at places, especially Noatak, White Mountain, and Shishmaref. Lynxes were caught in great numbers up to Christmas and then left the country. The prices paid were the highest on record. There were several fur buyers who traveled over the country, bidding against one another and all paying cash.

Village government.—The village councils have developed more and more each year and have accomplished good work at each village. The councils have settled many problems and have strengthened the work of the school at each place. Among other notable things that have been done by village councils, I would report the action of the Shungnak council when a white man was brought into their village badly shot. The council met, commandeered the very best dogs in the village, irrespective of their owners, got the best driver, and sent the wounded white man across country to Selawik. That village, through its council, did the same thing, and relayed the patient to the hospital at Candle. The council at Wales became much worried when they heard the results of a survey of the prevalence of tuberculosis in their village. They met and passed a law that no one having tuberculosis could attend the big dances in the Kozge. This is something that Bureau of Education representatives have talked of, but which we all deemed impossible of accomplishment. The native council did it in a few minutes and made it hold.

War service.—The natives at White Mountain, Nome, and Igloo made cash contributions to the Red Cross. White Mountain gave over $150, much of it their new fund for the purchase of a sawmill. All the villages from Wales to Barrow collected elder down for the Red Cross. Over 1,000 pounds were collected. This represents quite a valuable cash contribution.

I believe every Eskimo man from Golovin to Point Hope wishes that he had a chance to help in the war. I do not refer to the sentiment along this line north of Point Hope, because I had no chance to talk with the people. The report was circulated that Eskimos would be expected to register. At once each teacher and official was approached by Eskimo men all eager to be taken as soldiers.

It is true that the Eskimos are few and that their race is barely on the increase; but we all know that almost every village has a surplus of men and not enough women. It would not harm the race for a part of them to go to war. On the other hand I can see great benefits to come from the use of Eskimos as soldiers. The race could receive an impetus that would advance it very rapidly. The young men who would return with the experience they would gain in the Army and with their knowledge of the power of concerted action would become the leaders of their people.

The Eskimo.—The little magazine started by Mr. E. D. Evans and myself two years ago has almost completed its second volume. It is still working along the same lines originally planned for it and is achieving the ends we had hoped for it. Through this magazine we have given the Eskimos a common meeting ground; we have brought them all closer together; we have interested them all in one another; we have given them something that makes even the most academic side of their education of actual use to them, for the magazine

gives them something to read that is of direct interest to them. And all of this has been done without one cent of Government money. The paper does not as yet pay its own way, but those of us who are backing it feel that it furnishes us a very good way to make a direct contribution to the cause.

THE REINDEER SERVICE.

District supervision.—Most of the herds between Nome and Point Hope have been visited by the superintendent during the winter. Those that were not visited, with the exception of Shungnak, were fully covered by a visit to the station and meetings with the herders there. Through our paper, the *Eskimo*, and an extensive correspondence the Nome office has kept in touch with every herd and with many of the individual herders. The annual fairs furnish the best way to get into touch with each local situation. The fact that we have built up a system of supervision through the Eskimo head herders and the local reindeer clubs also furnishes an excellent substitute for the detailed personal work that used to be required of the superintendent.

Local supervision.—I can not overemphasize the need of the appointment of special men to take charge of the reindeer work over large districts. It is impossible to expect a teacher to do all the work that should be done. The demand upon each teacher increases each year as the work becomes more complex. It is very hard to get men who are qualified by training and temperament to study both Eskimos and reindeer. For our general educational work we must emphasize the former, but for our specialized reindeer work we should soon begin to emphasize the latter.

Diseases and breeding.—There has again been considerable hoof and joint disease in some of the herds. It will be hard to eradicate this without proper range control and expert supervision. Our campaign against the warble fly, which was encouraged by the *Eskimo*, did considerable good in arousing interest, but I question whether it did much to exterminate the fly.

The herds at Noatak, Kivalina, Selawik, and Buckland reported the presence of large caribou bulls during the rutting season. In several cases the bulls were unusually large and stayed through the entire season. This is our best chance to secure new blood, and we look for excellent results.

By care in selecting bulls from good stock and, as Mr. Lopp has pointed out, by making sure that the females are grazed on the best ground, we will be able to do a great deal to improve conditions in each herd. However, the fact still remains that we do certainly need a large supply of new blood. After the war it is to be hoped that some arrangement can be made under careful inspection to secure several hundred Tunguse bulls from northern Siberia for distribution.

Reindeer fairs.—The two fairs, at Igloo and at Noatak, surpassed anything that we had ever had before. The weather before the Igloo fair was very bad, and there was a deep fall of snow at Noatak. In consequence, the racing events at both fairs were made in slower time than before.

There is considerable similarity in all the fairs, yet each proves more interesting than the one before it. The way the Eskimos have taken hold, especially the head herders, is a continual revelation to all of us.

The Noatak fair grounds were located along a little creek bed in the foothills. Thick spruce timber surrounded the tents. The racing course was located on a small plateau, from which there was a splendid lookout over the entire course. A brief description of the outstanding features of the Noatak fair will give some idea of the work and of thought that Mr. Maguire put into it.

As we drove out to the grounds, 8 miles from the village of Noatak, we soon came to the upper end of the race course, which, through its entire distance, was outlined by neatly trimmed stakes, set at intervals of 200 yards; from the top of each stake fluttered a red, white, and blue pennant, the work of the sewing class of the school. On the plateau, where the races started, we were met by the crowd of delegates, who were lined up there ready to give us a cheer. On the plateau was a tent over which floated a large American flag, also a "reindee flag," the pride of the Noatak herders. This flag had a red reindeer on a white field with a blue border; this flag was about 10 feet square. The tent had a good stove in it, and it was reserved for the judges and secretaries, giving them a place where they could figure out the winners of the different events without freezing their fingers.

After this reception we were escorted down the little creek bed, and as we turned a bend we saw the main camp before us. A large WELCOME sign was posted high on a tree whose branches had been trimmed. A blue and gilt pennant of large size, with NOATAK in big letters, with trees on each side (the Noatak symbol), floated over the main tent. Between two trees was hung another big reindeer flag, and on the most conspicuous tree floated the largest American flag that could be procured. The Eskimo delegates lived in the big tent, and visitors camped in their own tents all around. The Eskimo delegates had their mess and the white delegates had theirs. The cooking class of the Noatak school cooked and served our meals and were awarded the blue ribbon as cooks.

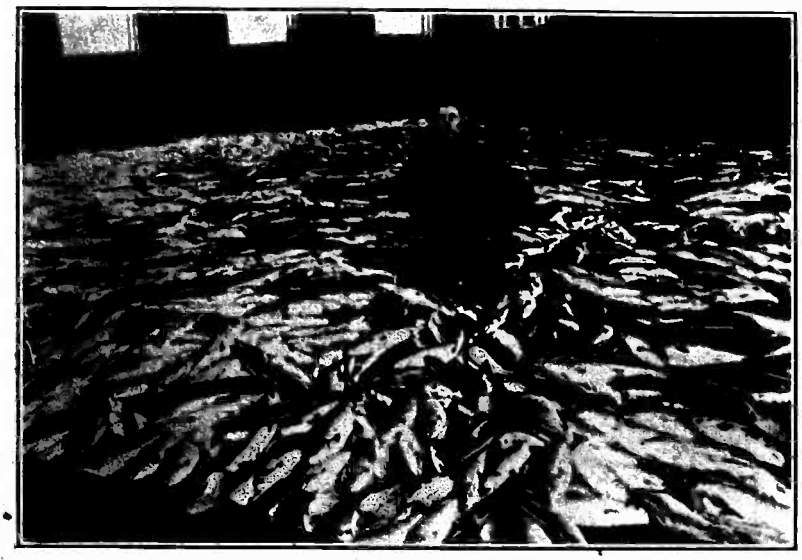
The most impressive thing connected with the fair was the salute to the flag each evening. This was arranged by Mr. Maguire. At the beginning of the evening meeting in the big tent Mr. Maguire played a bugle call on the organ; then he began to play "My Country, 'tis of Thee." From the back of the tent came a procession. In front marched two of the most prominent head herders, each carrying a 30–30 rifle. Next marched an old Eskimo carrying the flag. He was followed by two of the younger reindeer men with rifles. They lined up in front of the audience and then all sang the first verse of "My Country, 'tis of Thee." During the entire verse the audience stood and held the right hand rigidly at salute. It was exceedingly impressive to see old, decrepit Eskimos, men and women, struggle to their feet and hold that salute. I noticed some of the old folks, who did not thoroughly understand the salute, holding their hand over their eyes, and I saw their lips move, as in prayer. There are no people who love and honor the Government more than do the Eskimos.

At both fairs this year we organized the Reindeer Men's Association on an experimental basis. Each station is to organize a local club. Their rules for admission are to be very strict. At the fair every two years (for we plan to hold only one fair a year in this district) each local club will send its delegates to what we called the District Meeting. At this district meeting the local clubs, through their delegates, will elect a board of head herders to supervise their work for the two years. We would like to see each reindeer station in both the northwestern and the western districts organize such local clubs. Then we should be able to arrange for delegates from even the most remote districts to attend each fair. This would tend to bind all the districts together, and would pave the way for our final plan—the election of a board of head herders for all the reindeer men in Alaska, two of these men to receive salaries from the association.

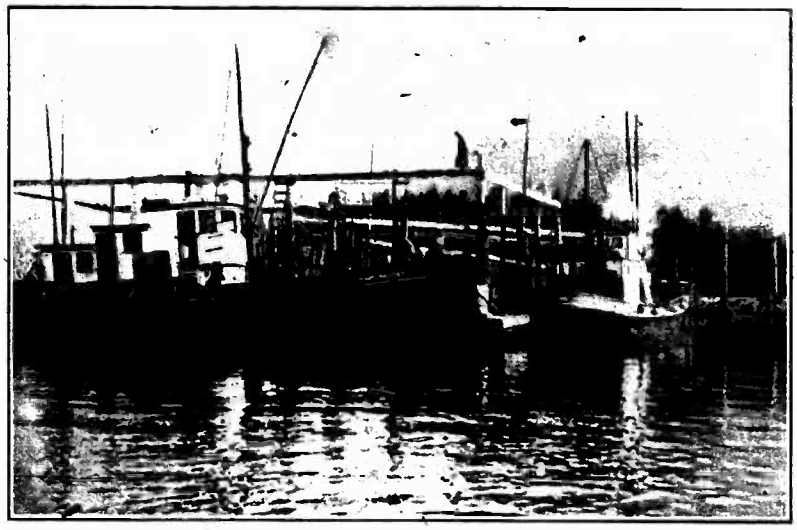
Each member of a local club is to pay annual dues of $2.50. Of this the local club is to keep $1 toward local affairs (erection of a club house, etc.) and 50 cents is to be sent to the treasurer of the district for district expenses, including

NATIVE RED CROSS CHAPTER, JUNEAU.

A. NEW CANNERY BUILDINGS AT METLAKATLA.



B. SALMON READY FOR CLEANING AND CANNING, METLAKATLA CANNERY.



A. AT A FISH TRAP NEAR METLAKATLA.

B. A PILE DRIVER NEAR METLAKATLA.

A. NURSES AT JUNEAU HOSPITAL (CENTER) AND NATIVE GIRLS IN TRAINING AS NURSES.

B. MAY POLE AT METLAKATLA SCHOOL.

aluminum ear markers for the deer belonging to the association. The dollar that remains is to be sent to the *Eskimo* for each member's subscription. It is our intention, eventually, to make the paper the property of the association.

Each member also has to pay an initiation fee, in female deer, to the association. In this way the association, in several years, will have a large herd to draw from and should be able to raise quite a fund for its work. Having deer in each herd belonging to the association will make it easy for the Eskimos to make transfers to each other, over long distances, as a man can turn over a deer to the association at one herd, and the man he is doing business with can take a deer at the other herd.

It will take several years to work out this plan, so that it will be uniform and efficient; but I believe that in two years it can be fairly well organized in this district, and I trust work along the same line can be pushed in the western district.

There is much work to be done by some one for the reindeer stock itself, but this association, and the regular work through the fairs and the *Eskimo* will go a long way to do the needed work for the Eskimo personnel. And that is properly the work of this bureau.

The Eskimo.—During the year our little paper has published many articles by reindeer men on subjects of direct interest to all of them. They have shown their appreciation of the paper by allotting $1 of each man's dues to their local club for his subscription to the paper.

Reindeer owned by white men.—Lomen & Co. have done three things during the year that promise well for the industry and have benefited the native herds indirectly: (1) They have developed an outside market for all the meat that they can ship. Most of their meat goes to Minneapolis. During the year they have shipped about 624 carcasses. As far as I know, this is the first time such a large shipment has been made. (2) They have commenced to buy steers on the hoof for shipment to the States. The price paid is only $10 per head, which is all the company claim they can pay, with the risk of losing the deer before he can be butchered. Where there is a local market the Eskimo can retail his deer for more than that, but the local market is becoming very limited at present. So the chance of selling steers on the hoof, even at $10, has been welcomed by many herders. We have especially encouraged the large owners to sell their steers by this method, for in this way they leave the local market for the smaller owners. One herder has twice sold lots of 100 at this rate. (3) The company has made large drives of its steers from its various herds. Some of the drives have been clear across Seward Peninsula. This has been taken advantage of by the herders to get choice bulls out of other herds for mixing in their own herds.

The company has positively stated officially that they do not intend to make any attempt to purchase deer from native owners and have refused several offers to purchase deer from white men who secured herds for their children. However, there is always a possibility that there may eventually be friction between the native herds and the white herds. This may come on account of the mixture of native deer and deer belonging to the white owners. It is more likely to come over the question of grazing grounds. Some of the more shiftless herders enter the employ of white herds for wages and then lose their interest in the industry as reindeer owners. Possibly this will develop a class of professional reindeer herders, but there is a chance that some of these men will cease becoming reindeer owners, which will be a serious loss.

As long as Lomen & Co. and other white owners continue their present policy and as long as none of them enlarge their holdings by encroaching upon

the deer that are held directly or indirectly by the natives, I believe that our work for the Eskimos is in no danger. Personally I am strongly of the opinion that the time has now come when we must look to the leaders of the Eskimos to do their part to hold their own people together. The Eskimos must understand that the time has come when as reindeer producers they must "make good." I believe that they will.

REPORT OF WALTER H. JOHNSON, SUPERINTENDENT OF THE WESTERN DISTRICT.

Travel and inspection.—It is reasonable to presume that each superintendent of schools has at some time arrived at a decision that his particular district was harder and more difficult to travel over than any other district in Alaska. Undoubtedly he has come to this conclusion after months of travel, probably at the end of an extremely hard run. It is necessary for superintendents to travel vast distances; it is only when weather and trail conditions exhaust man and beast so that it is impossible to proceed that camp is made before the goal is reached. If forced to camp where there is no fuel or shelter, an experienced superintendent manages in some way to build a fairly comfortable camp, and after satisfying his appetite from a larder containing food prepared for just such an emergency he lays out a plan of campaign for the morrow.

The extent of the district makes it imperative that, while traveling on his tour of inspection, the superintendent must take advantage of every opportunity for covering ground; upon arriving at a school or reindeer camp he must first of all see that his instructions regarding the preparations for continuing the journey are carried out, and that all is in readiness for an immediate start whenever he has completed his work at that particular place. Frequently it is necessary to make a run of only a dozen miles in the evening and then make camp, rather than stay all night at the station, for the next day's run may be over an unsheltered barren section 40 or 50 miles in length. On holidays and on Sundays, in rain or snow, from daylight often far into the night, until his destination is reached, the pace must be kept up.

Mountain ranges must be traversed, valleys crossed, ravines and rocky areas skirted, shortest distances through brush and timber ascertained, and a continual alertness exercised so that every natural condition be taken advantage of. At all times the strain on one's vitality is great, and he who can forget the trials and tribulations and take advantage of the occasional stretches of good trail and fine weather to recuperate is indeed fortunate. At the schools and reindeer stations the superintendent must settle questions of dispute, doing justice to all; he must supervise and inspect the work of the teachers, giving suggestions and corrections in such a way that all are encouraged; instill the feeling that their work is noble and uplifting, and has to do with the welfare of a people that is in dire need and well worth any effort that may be put forth to uplift them. He can not delay but must hurry away, even though a day's visit might help to cheer the teacher and bring about a fraternal feeling and result in closer cooperation, which is so necessary in this work.

During the fall and through the greater part of the winter very little snow fell; consequently travel was extremely difficult. For miles the ground would be almost free from snow, and what little was encountered in the gullies and grass was mixed with sand and dirt. The rivers and lakes were covered with glare ice frozen to a depth of over 6 feet; there were many overflows; shallow streams were frozen to the bottom. Not until the latter part of January did

snow fall in any quantity. January 27 a warm spell, almost a thaw, seemed to bring on the snow, and thereafter it continued to snow nearly every day for a month. The warm spell continued for about a week, and the tundra was covered with a foot of slushy, sticky snow. Unfortunately, much of my journey after this period was through a heavily timbered section.

After plunging through snow waist deep for several days we finally had to give up part of our trip. In the deepest snow we took turns snowshoeing ahead of the train of reindeer. Unless you have snowshoed in soft snow in a heavily timbered country you have no idea of the skill and labor that is attached to this kind of travel. The past winter I have traveled with sled over barren ground, glare ice, rough sea ice, in water a foot deep on the tide-swept flats near Hooper Bay, on sloughs filled with snow mixed with sand, in swamps where the grass was 5 or 6 feet long, over "nigger-heads" where the ground was worn away from them to a depth of 3 to 5 feet, in mud, on gravel banks, over rocks, in fact on almost every known kind of trail, but never have I experienced such difficulty in making headway as in the deep snow found in sheltered timbered valleys. In such a place snow must be packed down, deer staked out on the top of some ridge where the snow is not too deep for feeding, and the frozen tent carefully unrolled and set up. In cold weather the vapor from cooking and breathing forms a coat of ice in the tent that requires a day to thoroughly remove; then, unless you have food cooked in advance, it will take nearly an hour to cook the all-satisfying mulligan. I think that our outfit is the best available and that we have the camping system down to its *n*th power; still it behooves us to start our fire at about 4.30 a. m. if we would properly dry our clothing and be ready to leave at the break of day. This makes a 16-hour day, for it is seldom that work is laid aside before 8.30 p. m. These long, hard days are necessary if the itinerary is to be completed before travel becomes impossible, which happens directly after the April thaw and before the rivers are open for navigation. This year the ice did not leave St. Michael Bay until the last of June, consequently there was no travel during the latter part of the fiscal year.

Teachers and schools.—The teachers of the Alaska school service are, without a doubt, a most loyal and conscientious body of workers. They love the work and labor with the realization that they are working for the betterment of a class of people that needs uplifting and aid, mentally, morally, and physically. They teach with a definite aim, and every subject taught is put into practical use. The practical lesson is often passed on from native to native until all in the community are receiving the benefit of the teacher's work.

Many of the schools and villages worked for the Red Cross. Some picked the down from waterfowl and made pillows, which were sent to the hospitals. One village alone sent over 50 pillows; another sent 30 pillows and various knitted articles. Several schools and villages gave money. Many native young men requested permission to register for the draft, but were refused this privilege. I trust that they soon may have the opportunity to serve their country by being drafted and stationed in various posts of Alaska. The pamphlets issued by the Food Administration were sent to all of the schools. The teachers took advantage of this opportunity for much practical work. Many dishes were prepared by the cooking classes and meals served to children and parents. The regulations of the Food Administration were complied with as near as possible. A special effort was made to utilize and save the products of the country.

Medical aid.—It is extremely necessary that every section of this district should receive the aid of trained medical workers. Nurses who were stationed

at Unalakleet, St. Michael, and Holy Cross cared for the patients of the immediate vicinities. The great number of cases successfully treated speaks well for the invaluable work done by them. In connection with the hospitals at Akiak and Uulato tubercular camps were maintained. As soon as possible arrangements will be made to enlarge these camps in order to care for more of the great number of consumptives scattered throughout the district. The doctors and nurses made trips to villages, the former traveling for weeks at a time, and yet they were unable to visit more than a small portion of the population. The surgeon at Fort St. Michael gave free medical aid to those who could not pay.

General conditions.—The Western District is blessed with natural resources that could care for many times the number of natives now living in it. The rivers teem with fish—salmon in the summer, while trout, eels, white fish, and various other varieties are caught during the winter. At almost no time during the year are the natives without fresh fish.

The tundras is covered with many kinds of berries that are easily preserved for winter use; it is simply necessary to store them in a cool place until winter and then let them freeze. The hills are covered with reindeer moss sufficient to supply for an indefinite time a hundred thousand reindeer. The only work necessary to preserve the herds is to keep watch, so that the deer do not stray away. Fur-bearing animals are found in sufficient numbers to pay for more than the amount of supplies that should be purchased from the stores. There are mink, ermine, muskrat, land otter, white, red, silver, and cross foxes, with an occasional black one. Marten and beaver are quite plentiful in certain localities. Black and brown bears, a few caribou, and an occasional moose are killed annually. The streams flowing into the Yukon River drain valleys that would supply lumber of fair quality, so that every native could have a good warm house and enough fuel to last for ages. But the native does not know how to utilize all that nature has given him; it is the duty of our Government to teach him how to reap the fullest benefit from what is so lavishly supplied him by a generous Creator; he must be trained and educated to utilize his own environment. It is a mistake to take a native out of the country for any purpose whatsoever. This is an argument for the establishment of vocational training schools in each district.

Vocational school.—A vocational school for the Western District should be located on the lower Yukon River, somewhere within a radius of 50 miles from Pilot Station. Suitable ground for buildings, fresh water, large areas for agriculture, good grazing ground for reindeer, timber, and fishing sites are all found in this area. It is also centrally located. In this school each industry of value to the natives can be taught. The youth of both sexes could learn by actual experience the best method of doing their chosen work. A reimbursable fund of $50,000 would start a cooperative store; it would also suffice for establishing a small cannery, where all kinds of food would be put up for local needs and for exportation; it would start a sawmill that would soon pay for itself by furnishing lumber to natives and whites; it would pay for the power boat that is an absolute necessity. At the reindeer herd methods for the improvement of the stock could be tested; the by-products, such as skins, hoofs, horns, tongues, fat, sinew, bones, and offal could be disposed of to the best advantage; study of diseases and parasites peculiar to reindeer could be made, and undoubtedly thousands of dollars yearly would be saved. Food for supplying a fox farm could be derived from cannery waste and the offal from reindeer carcasses. The older boys and girls could make a trip to the nearest sealing grounds and in a short time secure enough seal, oogruk, and walrus to supply the whole school with oil, fat, and skins. The doctor and nurse in charge of

the hospital would teach sanitation and give lessons in first aid. In connection with this training school, adopted for the natives, would also be a church, hall, and wireless plant, all placed within the limits of a reservation of suitable dimensions to give room for expansion.

When we realize that the work of the average teacher embraces practically all of the above some idea of the magnitude of his task can be understood. As the teacher can only give a little time to each subject, progress is necessarily slow, and the pupil who is anxious to proceed along certain lines can receive but little more attention than the others. If a training school were located in the district the teachers could select suitable pupils and assist them in preparing for entrance to the vocational school. In a very short time pupils from every section of the district would be in attendance and the plant running to full capacity.

Reindeer.—As the number of natives owning reindeer increases the work of the representatives of the Bureau of Education becomes harder and requires more time. It will be many years before the natives will be able to properly manage their business affairs, and the reindeer that they own is the greatest business that they can possibly have. Therefore the Government should not relax its vigilance over owners who do not yet fully realize the great value that the deer are to them and the benefits that their posterity will derive from this industry. Up to the present time the bureau has concentrated its efforts in the training of men to care for deer and the introduction of deer into new sections of the country. The time is now at hand when these men must be trained in the management of their business affairs and taught to plan for the future development of the industry along well-established business methods.

It is to be deplored that some of the missions were so short-sighted as to overlook the future possibilities of this great material work by giving out the deer placed in their hands without placing any restrictions or regulations relative to their future care. These same missions sold the deer that were put in their charge for distribution, without regard for the moral obligation that they had with the Government. It is needless to say that most of the natives that received deer from them are following their example and are disposing of practically the only productive asset they have.

A few of the Eskimos who own large numbers of reindeer are beginning to realize how much there is to the industry, and come for aid and instructions at every available opportunity. These men have advanced far enough to see that there is much for them to learn. They are the hope and pride of the community, and if all restrictions were removed as to the sale of female deer to whites, they would not sell. It is only when practically all of the Eskimos have advanced to this stage that the bureau can relax its vigilance and feel secure that its work of many years will stand the test of self-management.

The Government herds at Hooper Bay and Pilot Station have been moved, the former toward the Yukon River, while the latter is now located at Shageluk.

Lomen & Co. purchased two large herds at Unalakleet, and occupy the ground formerly grazed over by the mission deer, and by the Lapps. Mr. Twitchell, of Iditarod, increased his herd by purchasing a large number from the Lapps located near Akiak. Mr. Kell and Mr. Williams also purchased several hundred deer, the former herding his deer near Ruby, while the latter has his herd near the Melozi River. With deer at Iditarod, Shageluk, Ruby, and Melozi, the eastward trend is now a reality. Plans are now in progress for driving the Goodnews Bay herd to Akiak and joining it with the Kalkag herd. Then this large herd will be driven to Copper Center, and the Indians of interior Alaska will have an opportunity of learning the industry.

The lack of snow during the winter made travel so difficult that the reindeer men did not hold the annual fair at Akiak. The fair at Shaktoolik was postponed, and finally a fair was held at Unalakleet. The interest shown and the work done was of a nature to speak volumes for the good accomplished at the gathering. The natives were encouraged to appoint their own committees and manage their affairs. Several meetings were in their charge, and only reindeer men were allowed to take part. The bureau's representatives outlined the work to be done, gave them a start, and then left them to carry out the plan, assisting only when some problem arose that had to do with the Government and the Alaskan code. These fairs are a wonderful stimulus for the industry and are invaluable as training schools and should be continued.

All meat offered for sale brought good prices, the lowest price paid being 20 cents a pound at St. Michael.

REPORT OF JOHN H. KILBUCK, ASSISTANT SUPERINTENDENT OF SCHOOLS IN THE WESTERN DISTRICT.

With the exception of the principal teacher in Akiak, the teachers in the four schools in the Kuskokwim region were new to the work among the Eskimos in Alaska. Although much handicapped on account of strange conditions of climate and of people, it is a pleasure to know that all of the teachers resolutely coped with drawbacks. The village work was especially well attended to, and in this way the new teachers quickly won the respect and affection of the natives. The teachers who remain are now in a position to gain greater results, both in the classrooms and in the homes of the people. The general feeling among the natives is in favor of the schools, and for this reason the usual rule is good attendance and good application on the part of the children. The Eskimo child is as eager for learning as are other children, and it learns quickly from a successful teacher.

The teachers at Bethel had to contend against the white man's dance. This form of amusement has taken a strong hold of the natives; the white men foster it and do everything to encourage it. The natives do not realize as yet that they are paying dearly for the pleasure they get out of these dances. This dancing craze has just come to Akiak, but the sentiment among the older people against dancing is strong enough, we believe, to prevent it from taking hold of the people to any great extent. After the teachers had emphatically set forth the dangers that go with dancing, the natives themselves placed themselves on record as being opposed to its introduction into their village.

At Quinhagak a number of miners and prospectors had for years been spending their winters. Here the missionaries and the teachers have forehandedly looked after the social part of the village life by furnishing harmless amusements for the entire community. Among the communities composed of natives and whites, Quninhagak must be given the credit of being the best-behaved.

There is another dance that must be taken into serious consideration, and that is the native dance called Kuvgagyagak, a dance in the nature of a potlatch. The more advanced of the natives are giving up this dance, but it is doubtful if it will become obsolete in the near future. One village invites one or more of the other villages to its dance, and besides entertaining the visitors, it will, as requested by the visitors, turn over to them any piece of personal property they request. Usually the hosts not only dance to the limit of their wealth, but draw on their credit as well. It is supposed that the visitors will give away stuff to equal or even excel the value of what they received from their hosts, but this seldom happens.

Quigillingok furnishes a good example of the evil of this play or dance. The Quigillingok natives had made a good catch of fish in the summer, and in the fall after the ice had formed they further increased their food supply with a record catch of tomcod. The previous sealing season had been good, and the catch of fur greater than it had ever been. The people were never better off in their lives, and being so well off they wanted to make their reputation. Accordingly they invited several villages to a play. Each individual wanted to outdo some rival in giving. The visitors went away well off, taking even the guns and traps of the hunter. Before the play was over a storm set in and lasted a long time. During all this time the hosts fed their guests and their dogs.

Before the sealing season set in the natives of Quigillingok were short of food and many were at the point of starvation. The season was backward, and if relief had not been obtained from the missionary and his wife almost the entire village would have succumbed to hunger. Rumors of their condition reached me. I deemed it wise to send a relief party with reindeer meat and what other provisions I could get. Three fat deer were butchered, which, with 100 pounds of flour, the same amount of beans, and 25 pounds of prunes, were dispatched in two dog sleds May 3. On June 15 I accompanied the missionary, Mr. Drebert, from Bethel in his motor boat to Quigillingok. From the store at Bethel I obtained 500 pounds of flour, 8 cans Eagle milk, 3 cans lard, and 100 pounds corn meal. We found 32 people at Quigillingok; the rest had either gone up to the fishing camp or were still at the sealing camps. These people were the worst off, and to them we gave the above provisions, which would tide them over to fishing time. We found one woman who had been left by her sister and brother to die. She was unable to stand, and as she was in a hut that had no roof, water and slime were all around her. She just had a dry spot her size; no food, not even water to drink. She said that she was waiting for the end, for there was nothing else to do. We made provision for her care, and on our return up the coast we looked for and finally located the brother and sister. I made it plain to the young man that something not very pleasant would happen to him if he did not at once go to his sister and take care of her. He went, and the woman is now getting well fast.

It is reported that children were allowed to starve, which may be true, for the people became dehumanized by hunger. I took one man who was far gone and managed to get him to the hospital. Dr. Lamb worked heroically with him, but we could not save him; he died July 14. Up to the time of my visit 23 had died at Quigillingok and 18 in the surrounding villages as a direct result from this shortage of food. Since then, I learned, 5 or 6 more have died. Quigillingok had a population of 300, and another village, Tshalin, had 200. Food conditions were unusually bad in the entire Kuskowin Valley, but these two villages suffered the most. The stores at Bethel, Akiak, and Quinhagak were sold out early in the spring; so that even miners and prospectors could not get a pound of flour. Mrs. Carrie W. Lamb donated the flour and beans sent to Quigillingok in May, and the Rev. Mr. Butzin the prunes; Mr. Butzin placed the dog team at my disposal, and later the launch, all free of cost. Much credit is due the missionaries, the Rev. Mr. Drebert and his wife, for the way they took hold of the situation, giving their own provisions and even cooking for as many as 180 people. It was no easy task to feed starving folks who wanted more than was good for them. Now that the people have recovered, they are loud in their appreciation of this unselfish couple.

The lesson of the whole matter is this: There was no occasion for this starvation; it was brought about by that play. Other people who did not have

so great a supply of food weathered the adverse conditions of the spring in good shape. Quigillingok natives will have to work hard for years before they will get over the effects of this starvation. The dogs are all gone, nearly all of the huts have been burned. There are many widows with children who will have to be helped by somebody. This is a good time for either the Territorial or the Federal Government to prohibit these potlatches.

The work of the Bureau of Education is commanding the respect of the people of the Kuskokwim Valley by the establishment of the Government Hospital for Natives of Akiak. This hospital is a boon to the whole valley. Patients from the Yukon, from the headwaters of the Kuskokwim, from the mouth of the river, and from the bay as far as Goodnews have already taken advantage of this boon. To us old-timers it is a great privilege to see so many of these patients return home cured. The building is a credit to the builder who, virtually single handed, stayed with his job and did such conscientious work. The Kuskowin people, both white and native, are proud of their hospital.

And now what do we need more on the Kuskokwim? First and always more money, to put up modern schoolhouses at Bethel, Akiak, Quinhagak, and Eek, and to establish new schools. Every school should have a gymnasium.

REPORT OF ARTHUR H. MILLER, SUPERINTENDENT OF THE SOUTHWESTERN DISTRICT.

During the fiscal year ended June 30, 1918, I have traveled by boat, train, automobile, dog team, snowshoe-mushing, and on foot 10,098 miles on tours of inspection of schools and native villages and attending to other official business in connection with the superintendent's office. These tours have occupied 245 days, the remainder of the year being spent in the office at headquarters, Anchorage, Alaska. Anchorage has not only proved a practical working center for the administering of the affairs of the district, but has made possible giving special attention to the natives of the Cook Inlet region. In this rapidly developing section the resources of the country are being utilized for commercial purposes. Inadequate provision is made for the native during the readjustment and special attention must therefore be given him.

All of our attempts to reach the school at Akhiok have thus far been unsuccessful. This is partly due to its inaccessible location, and partly to trying to include it in our itinerary when en route to other schools, and do so without excessive expenditure of the travel authorization. From the information I was able to obtain while on Kodiak Island, there is a population of 50 or 75 natives at Kariuk who are without school privileges. There also appears to be a need for more effective medical relief for the natives of Akhiok.

In Knik and its vicinity is a native population of more than 100. Nearly all of the white residents of Knik have moved away from there since the coming of the railroad. The Territory having maintained a school at Knik, the writer discussed with the Territorial commissioner the advisability of arranging a transfer of the school building belonging to the Territory to the Bureau of Education.

There is also great need for a school at Perry. This village is practically isolated from civilized life, except as the natives, numbering about 100, visit the canneries at Chignik, more than 60 miles up the peninsula. When we visited Perry last May we were agreeably surprised when the natives hoisted the American flag as the steamer *Dora* approached their village. These natives

have taken excellent care of the houses built for them by the Government in 1912, when they were brought as refugees from the Katmai volcanic eruption to this excellent hunting and trapping region as their future home. Many of the 22 houses visited by the writer were well kept and clean. The building now occupied by the trader would answer as a temporary living quarters for a teacher and as a schoolroom until a school building can be built.

The income of these natives last year was $1,100. This was derived exclusively from the sale of furs. If these furs had been sold at auction in Seattle they would have brought three times that amount, and $500 expended last year for the relief of destitution among these natives would have been saved. Between 30 and 40 children at this village have no school privileges or civilizing influence. I recommend that a school be established at Perry during the fiscal year 1918–19.

The need of a more clearly defined policy.—There appears to be a lack of well-defined understanding as to the responsibility for the care and education of certain classes of natives on the part of the Territory. In several instances the United States district judge for this district, who is custodian of the Indigent fund, has referred calls for medical aid and assistance to breed natives to this office, for whom it is our understanding that the Bureau of Education can not be held responsible. We therefore feel the need for a more clearly defined policy establishing the responsibility of this bureau before the Territorial officials and the public in cases of this kind.

There is also a large number of communities in the Southwestern District, and very likely some in the other districts, where the Territorial schools have a small enrollment and native children are living in the same community, but not in sufficient numbers to justify the establishment of a native school. These native children are permitted to attend the Territorial school only in rare instances, and then at the option of the local school board. Where schools are already established it appears to be impracticable to compel the parents of white children to place their children in the same schoolroom with natives. It appears theoretically plausible, but it is, I believe, impracticable. However, in communities where all the patrons of the school petition for a school for mixed races permission should be granted accordingly. Evidence that this matter is receiving consideration in the Territory is shown by the following letter to me from Gov. Riggs, June 20, 1918:

> I have your letter of June 12, concerning the establishment of a school at Chitina, and I am glad to note that you see the necessity of such a school, and trust that some plan may be evolved whereby the native children can be given a measure of relief. The question of schooling of native children with the whites is a matter that we should endeavor to correct by legislation during the coming session. I think that where a school district applies for permision to establish a school for mixed races they should be given authority to do so. For instance, on the Koyukuk we have an application for the establishment of a school district at Wiseman, which we are unable to grant owing to the fact that 4 of the 10 children of school are are not of the white race. I should be very glad indeed to have your suggestions concerning proposed legislation.

Morals of the natives.—There is less immorality and debauching of natives living in this district at the present time than for many years. There is still far too much. The "dry law," which went into effect throughout Alaska on January 1, 1918, is one of the best measures for the protection of the native.

Patriotic activities of natives.—The natives of the Southwestern District are not only intensely interested in learning the facts concerning the present war, but they have everywhere shown their appreciation of the assistance rendered them by their benefactor, the United States Government, by doing what they can to help to win the war. The more prosperous villages have contributed cash

donations to the Red Cross work, and in the villages where they were unable to give cash they have voluntarily made articles to be sold, and part or all of the proceeds from such sales have been given to the Red Cross Society. Reports show that not less than $500 has been given to Red Cross work by natives of this district, and after the fishing season more will be contributed by them.

Home guard organizations for military drill among natives at the different schools are in process of formation.

Many of the articles shown at the Anchorage Industrial Fair will be sold and the proceeds used to help finance the campaign against "Kaiserism."

Health, sanitation, and economic conditions.—There has been no serious epidemic during the year. About one-half of the school reports show about an equal number of births and deaths. The Copper River and Cook Inlet regions have had a slightly greater number of deaths than of births.

The villages of Koggiung and Akhiok have had considerable sickness. Considering the long and unusually severe winter, health conditions have been good. Monthly reports of the teachers indicate conscientious and faithful work on their part in rendering medical assistance to the natives during sickness. I have personal knowledge of teachers having nursed the sick through long periods of illness in a very efficient manner.

At those schools where water was obtained from swampy ground the endeavor has been made to improve the source of supply by driving of sand points that were sent by the Supply and Disbursing Office. These well points have thus far not been in all cases a success, and the villages of Unalaska and Tatitlek should have a gravity water system to supply the schools and villages. The water supply at Tyonek should also be piped from higher ground to the school building and village.

The great exodus from Alaska on account of the war is creating a scarcity of labor, and we are making every effort to induce employers to at least try native labor and give them an opportunity to earn their living. For the first time the Alaska Road Commission is employing about 25 natives of the Copper River to do road work on the Valdez-Fairbanks trail. The superintendent of the Copper River Railroad and the engineer in charge of railroad construction for the Alaskan engineering commission kindly consented to employ native labor and report their work quite satisfactory. About 25 of the English Bay natives have been employed at the iron mine at Port Chatham. This action, we hope, will reduce the destitution in the Copper River and Cook Inlet regions.

The Tyonek Native Cooperative Store is an evidence of the improved economic conditions at this village. This enterprise was started on but $950 capital stock, $950 loaned the store by the teacher, and on credit. Five hundred pairs of first-quality snow shoes were made by the natives and sold in Anchorage for $3.15 per pair. A net profit of $397.14 was made the first year, from sales amounting to $3,740.05. This spring $1,100 more was subscribed by the natives to the capital stock of the store. With a successful fishing season they would have been able to pay in this amount, but the king salmon run has been almost a failure, and unless the red salmon run is good most of this amount can not be paid in before another year.

Economic progress at Tetilek is in part shown by the fleet of 15 power boats, which is the principal factor in enabling the natives of that village to earn $25,000 per year fishing for the canneries and towing timbers to the mines and canneries. Five years ago these natives had no boats except dories.

In 1916 the Copper River Indians, through the extensive cannery fishing in the Copper River, were made almost destitute wards of the Bureau of Education, necessitating the sending of large quantities of supplies each year since

that time. It was deemed bad policy to give the native these supplies outright if he was well and able to work. A building was needed in which to store these supplies, or to be used as a store building in case the natives ever became prosperous enough to start a store of their own. The labor in construction of this building was given by the Copper River Indians in return for destitution supplies. Most of the material was also obtained by their labor from the timber adjacent to the school building. The logs were cut, hauled, and peeled by the natives. The door and window frames and rafters were whipsawed from the logs, entirely by the natives. These natives do not expect aid from the Government without giving something in return.

The work of the schools in the Southwestern District shows steady advancement. The teachers, without exception, have rendered conscientious service. Teachers who succeed in their work among natives at isolated stations in Alaska deserve high commendation. They must be self-generating dynamos of energy. Theirs is a work for humanity; and the uplifter of humanity, though as a rule not highly paid in dollars and cents, has many rewards.

I desire to acknowledge the service rendered the Bureau of Education by the U. S. S. *Bear* in transporting the teachers and myself and supplies from Unalaska to Atka Island, and the courtesy and kindness of Capt. Uberroth in doing so much for our comfort and convenience during the voyage.

REPORT OF CHARLES W. HAWKESWORTH, SUPERINTENDENT OF THE SOUTHEASTERN DISTRICT.

This year special endeavor has been made to secure confidence in the children just beginning their school life. Those of us who have spent several years in teaching the native children of Alaska have been handicapped by having pupils in the upper grades who had not received proper training when they first went to school. To assist in giving the youngest pupils the right start we experimented in two schools with kindergarten methods and material. In Metlakatla the success we anticipated was fully realized, while in Klawock the teacher, on account of sickness, had to give up her work and return to her home in the States.

Another important aim has been to create in the parents an interest in the work their children are doing. Experience teaches that children will not get full value from their school unless their parents see the need of education. By the means of monthly bulletins sent to the 13 teachers in the district, showing exactly the progress made, we have created a local pride in each school and in each town to have the school as near the 100 per cent mark as possible. Usually what has been successful in one native village becomes well advertised in the others and each wants the same work. Thus by creating a good-natured rivalry between the towns in the district all are feeling the benefit of progressive education.

Another incentive we have introduced in the district this year is graduation exercises. The calls from the canneries usually come to the natives just before school closes, and one by one the families pack up their belongings and sail away for their summer work, leaving only a few pupils to complete the school year. That has meant that the interest dragged, and the last day of the school was without the meaning that it has for white children. To Metlakatla belongs the credit of introducing into the schools of southeast Alaska the first com-

mencement exercises, two girls graduating from the eighth grade. Hydaburg has even more in the eighth grade than did Metlakatla, but the boys had to leave school before the year ended, so only four were there for the examinations.

The examinations at both Metlakatla and at Hydaburg were those prepared by the Territorial commissioner of education, Mr. L. D. Henderson, for the children of the white schools of the Territory, and our children had no knowledge of the nature of the examinations they were to get. They all did exceedingly well, showing that as we get more intensive work in the earlier grades and keep the children for the full term of school we shall be able to graduate boys and girls from the eighth grade who are as well prepared as are the boys and girls in the white schools.

The introduction of the school fair in the district has without doubt been of far-reaching value to the towns of southeast Alaska. The first fair was held at Metlakatla in the spring of 1917. Exhibits were forwarded to it from about two-thirds of the schools and visitors came from neighboring towns. The second fair was held at Hydaburg the first week in March, 1918. Exhibits were forwarded from many of the schools; about 40 people sailed to Hydaburg from Metlakatla, while 100 of the Klawock people came for the fair.

The second fair was the first real awakening of the people to the value of neighboring towns getting together to see what their children could do and what the children from other schools were doing. Fathers and mothers are very proud of their children, and it hurts them to see their children spelled down, when, if they had attended school regularly, they might have won the contests.

Not only do the children derive great benefit from these fairs; the parents are also benefited. One man at the Hydaburg fair made the remark that at the first fair almost none of the delegates ventured to stand upon their feet and talk out their ideas in the English language, but that at the second fair all the speakers spoke in English, and they talked with conviction.

These annual fairs promote civic improvements. The Klawock people built a sidewalk through their town, from one end to the other, when they knew that the fair was to be held in Klawock. Natives are apt to be careless about keeping up their houses and sheds, but when they know that people from neighboring towns are coming to visit them then they hasten to make their surroundings presentable.

As soon as school started last fall I adopted the policy of sending out monthly bulletins to all the teachers in the district. These bulletins contained suggestions for civic improvement, a summary of the monthly report cards in order that each teacher might see the percentage of attendance his school had made in comparison with others, and make a special effort to raise the average attendance of his school. The bulletins also contained statements of the Red Cross work of the schools in the district. The natives of southeast Alaska have been most loyal in their support of every patriotic move presented to them. Practically all the sewing of the schools has been for the Red Cross, and little children have made their socks for the soldiers. I am forwarding a list by schools of the money contributed by the schools and townspeople, as well as of the work done.

For the first time natives of Alaska are subscribing for local newspapers. One editor agreed to give us three columns of his paper, if we needed it, for the native news of the schools of the district. I instructed each of the teachers to have the advanced pupils write the items of interest in their towns, edit the articles, and forward them to the paper for publication. However, as this was

a new departure, it did not meet with the success we expected. About 50 natives have subscribed for papers in order to get the Alaskan news as well as the news of the world war, in which they are very greatly interested. Many of the younger native men feel that an injustice has been done them in that they were not included in the selective-draft law for Alaska. They want to do everything in their power to assist democracy in this World War, not only in giving their money and the work of their hands but even their lives that "government by the people shall not perish from the earth."

The native people have at last begun to take a vital interest in securing the certificates of citizenship. The act of the Territorial legislature, "To define and establish the political status of certain native Indians within the Territory of Alaska," became a law April 27, 1915, but during the following two years only four men have taken advantage of the right granted. Their reason was that they were born on American soil and needed no certificate to prove their citizenship.

This matter dragged along until the Secretary of the Interior on December 15, 1917, ruled that "Indians or native Alaskan occupants (of land) who have secured certificates of citizenship under the Territorial laws of Alaska, shall be treated in all respects like white citizenship occupants." From the time this regulation of the Secretary became known in the district the natives have been most anxious to secure the certificates.

In order to facilitate the examinations which our teachers are required to give to applicants, this office has prepared a list of 35 questions on the fundamentals of our Government which an applicant for citizenship must answer and understand before the teacher will make favorable recommendation to the district judge upon the application of the native.

Statistical report of the Red Cross and other patriotic work of natives in the 13 villages in southeast Alaska.

Villages.	Red Cross members.	Liberty bonds.	War savings stamps.	Entertainments.	Other sources.	Total war-relief funds raised.	Sweaters made.	Socks.	Wristlets.	Gunwipes.	Scarfs.	Bed socks.	Hospital garments.	Operating leggings.	Moccasins.
Metlakatla	133	$2,000	$25.00	.....	$173.90	$2,198.90	2	23	.....	.....	.....	66	24	18	.....
Hydaburg	84	100	54.00	96.25	152.45	312.70	13	1	13	20	13	.....	.....	.....	.....
Klawock	142	3,450	75.70	26.05	76.00	3,627.75	....	4	12	200	9	.....	.....	.....	.....
Wrangell[1]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Kake[1]	98	.....	50.00	130.00	225.75	405.75	....	.....	.....	.....	.....	.....	.....	.....	.....
Juneau	100	450	.....	59.00	100.00	609.00	1	100	24	.....	.....	.....	.....	.....	.....
Douglas[1]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Haines	91	450	50.00	130.00	191.00	821.00	....	102	5	.....	.....	.....	.....	.....	.....
Klukwan	100	.....	.....	101.00	.....	101.00	....	35	42	.....	8	.....	.....	.....	.....
Hoonah	262	400	.....	90.50	143.70	634.30	....	37	13	.....	.....	.....	.....	.....	.....
Killisnoo	145	.....	10.00	.....	168.00	178.00	....	26	4	.....	.....	.....	.....	.....	.....
Sitka	148	2,850	19.00	304.45	.....	3,173.45	....	.....	.....	.....	.....	.....	.....	.....	12
Yakutat	.....	.....	.....	259.00	.....	259.00	....	.....	.....	.....	.....	.....	.....	.....	.....
Total	1,303	9,700	233.70	1,106.85	1,230.80	12,320.85	16	328	113	220	30	.....	.....	.....	12

[1] No report.
[2] No material for making garments was received until after school closed.

SECTION 2.—REPORTS BY PHYSICIANS.

REPORT BY DR. JAMES P. MOONEY, IN CHARGE OF HOSPITAL AT JUNEAU.

The hospital at Juneau has continued to increase in popularity, and as the natives learn more of what can be done for them they will continue to patronize the institution in increasing numbers.

I have felt encouraged with the work because this year I have had more of the acute cases—those cases where more can be hoped for on account of an early operation. It shows that they are becoming educated to the advantages of modern medicine and surgery. Even their medicine man or witch doctor came for treatment and was much pleased with the results.

I find that there is still much superstition among the natives, and I believe it will take many more years to eradicate it; perhaps it never will be entirely eradicated. During the year I have come in contact with two cases where their belief in witches had very nearly caused the death of two people. The intent was to kill, no doubt, but fortunately it did not succeed. Recently I visited a case where an old man was allowed to suffer from neglect for the reason that he was accused of being a witch doctor. However, even though there is still this superstition to contend with, the hospital work is extending its area of usefulness. I find that all parts of this district have been reached by the hospital and even some places beyond its limits. We had one case from British Columbia and another from Copper Center. This man from Copper Center was sent to us because at the time he could not reach the hospital in his district.

About half of the cases admitted into the hospital were from the two towns of Juneau and Douglas. The greater number of the surgical cases have been from other towns and villages. Sitka comes first, Killisnoo second, Hoonah third, with 18, 16, and 11, respectively, and the remaining 47 from Yakutat at the westward to Hydaburg on the south, almost every town and village having been represented. We have had patients from Skagway, Haines, Klukwan, Funter Bay, Chatham, Gambier Bay, Hawk Inlet, Auk Bay, Kake, Karheen, Klawak, Metlakatla, Ketchikan, and Wrangell.

The total admissions from July 1, 1917, to May 31, 1918, were 165, representing 3,086½ days' treatment.

During the month of May our admissions showed a marked decrease, and much of that was due to the general condition of affairs, state of health, and early fishing season. Some one has said, "The native hasn't time to be sick in the summer." In a sense that is true, for they are exceedingly busy at that time preparing for the fishing season.

The past winter has been a rather trying one on everybody, more especially the natives in the villages of Douglas and Juneau. There is so much snow that they have been shut in more than usual. But even so, I think the general health has been comparatively good. The most important factor has been the uniformity of weather. It is the sudden changes that play havoc with most of us. The weather this spring being ideal helped to ameliorate the otherwise unfavorable conditions. The snow disappeared rapidly.

One of the important things that has occurred this year was the inauguration of a training school for native nurses. We have only one pupil nurse, but she has made splendid progress. Miss Scott is a young woman of unusual qualities and very capable. There have been several who made application for training,

but with one exception they were too young or not suitable in other respects, in the judgment of the management.

Thus we have carried into effect one of the long planned policies of the Bureau of Education, and one that is expected to develop into a great good to the native. We have endeavored to give the nurse in training a course of study, as well as practical training, so that she might have a better understanding of her work.

The general class or kind of work this year has been very similar to that of last year. I have not had quite so many major operations this year, but some of them were more serious, Unfortunately there were several cases that had waited too long, which made their chance of recovery slight.

A résumé of the work follows: Laparotomies, 23; gall bladder cases, 1; hernias, 4; nephrectomy, 1; cancer, 3; amputations, 5; cystotomy, 1; bone cases, 4; adenitis, 2; circumcisions, 3; perineorrhaphy, 5; curetages, 5; ethmoiditis and polypus, 1; hemorrhoids, 1; anal fistula, 1; tonsil cases, 19; deliveries in the hospital, 10. I have attended several deliveries in the villages during the year.

Aside from two or three cases of influenza we have had no contagious diseases. There were a few cases of pneumonia, about evenly divided between the adults and children. There have been a number of cases of tuberculosis that came to the clinic, which needed hospital care and attention.

We have made a few repairs and improvements on our hospital building, which make it much more comfortable and efficient. Since the weather has permitted we have been endeavoring to make the grounds about the building more attractive and sanitary. But there is much to be done before the grounds will be in keeping with our building.

ANNUAL REPORT OF DR. FRANK W. LAMB, IN CHARGE OF HOSPITAL AT AKIAK.

The hospital which was under construction when I arrived was finished the middle of January, and the first patient was admitted on the 26th of that month.

Patients have been admitted to the hospital from McGrath, Salmon River, Marshall, Anvik, Bethel, Quinhagak, Iditarod, and Quigillink. This proves that the hospital is centrally located and a good field for work.

The following is the number of cases treated during the year: Hospital cases, 33, number of days treatment, 639; out patients, 377, number of treatments, 2,327; surgical cases, 14, number of treatments, 233; obstretical cases, 11 number of treatments, 69.

Natives were treated in the following villages which I visited during the year: Anvik, Bennetts, Marshall, Russian Mission, Tundra villages, and all settlements along the Kuskokwim River from Bethel to McGrath.

Some of the tubercular cases have been treated in tents. The natives have been instructed in regard to tuberculosis, that it can be prevented and cured, but not by the way they are now living. A slide was made from a tuberculous gland and placed under the microscope, and all of the natives both young and old were brought to see it. It seemed to make quite an impression. They were also shown pictures of the diseased conditions caused by tuberculosis.

There are only three or four cabins in the village that are clean and fairly well ventilated; the rest are dirty and insanitary and poorly ventilated. We expect these natives to build in a short time. It is not much work to get the

natives to put in ventilators, but it is a problem to prevent them from closing the opening with cloths.

This spring the hospital grounds were cleaned and drained. Brush was piled and burned. Several large holes that had been old igloos were partly filled with dirt. These holes have been used for a dumping ground and were very insanitary. The burying ground, which was a short distance back of the hospital, has been closed. The problem of closing up the old council hall was solved this spring by the high water caving it in. All the pools of stagnant water were drained.

The natives all put in gardens this spring. They are all good gardeners.

There were 42 deaths on the lower Kuskokwim River, from Quigillink down for 60 miles. The failure of the seal hunt on account of the heavy ice in the bay and a large potlatch that was held was the cause of their shortage of food.

ANNUAL REPORT OF DR. ELMER C. GROSS, ELLAMAR, IN SOUTHWESTERN ALASKA.

The work was conducted in the same manner as for the preceding year. Two regular visits a week were made to the village of Tatitlek. On one visit the children were seen in the schoolroom and special attention given to eyes, teeth, and throats. The children were questioned by the teacher as to the health of those at home, and any case of sickness reported was given attention. On the other weekly visit special attention was given to the adults and children not of school age.

Among the eye diseases of children gonorrhoea played the chief rôle. This I think is due to the fact that adults are very slow to report the existence of the disease, and being very insanitary in their habits about the homes the disease is contracted by the children largely through the use of towels and bedclothes. It seems impossible to convey to the adults the idea of infection and the danger of transmitting a disease from one to another through the use of dirty dishes, towels, and bedclothes. Ten separate cases of gonorrheal eye infection were treated, and two of these had reinfection.

Through the valuable assistance of Mrs. Cook, the teacher, in giving routine treatment daily in certain cases, the results in nearly all were very satisfactory. In no case was the eyesight lost. I made it a routine procedure to protect the eyes of the newborn by the use of silver nitrate or argyrol. I had only one case of gonorrheal eyes in the newborn and this was one we missed in the prophylactic treatment.

Bad teeth are a source of much trouble among the children. Practically all of them have bad teeth. There were many cases of abscesses due to decayed teeth, and many cases of ill health were undoubtedly accounted for by the condition of the mouth. It is a well-known fact that dental caries is the sole cause of many serious and distressing conditions of ill health, such as rheumatic conditions, gastric catarrh, and probably also appendicitis and ulcer of the stomach and bowel, indirectly. The adults as a rule have good teeth, and I am at a loss to account for such a universal presence of bad teeth among the children. They eat much cheap candy and usually that of the colored variety. They take no care of the teeth as a rule. Both the temporary and permanent teeth are extensively affected, and it seems certain that a large proportion of the younger generation will be almost toothless at the age of 25 or 30. It would be a great boom to the health and welfare of these children, if they could be cared for by a good dentist at least two or three times a year.

Syphilis was not as prevalent as might be expected, although inherited syphilis may be quite a factor in the condition of the teeth among the children. Four cases of chronic syphilis were treated during the six months. I did not see a case of primary or early secondary syphilis. The syphilitics were treated by neosalvarsan and mercury; the former given intravenously.

Tuberculosis continues to be the great plague for the native of this district. Six deaths were directly due to this disease, and in several children or infants this was probably an indirect cause. Irregular and poor nourishment part of the time, together with ignorance of cleanliness and sanitation, account largely for the prevalence of this disease and the difficulty in combating it. In one of the more progressive families, where the father and one child were tubercular, it was surprising how much better they got along than in the families where all instructions were disregarded and no attention given to proper food or fresh air in crowded rooms. The child, a little girl of 10, had both lungs affected, and examination of the sputum showed it teaming with tubercular bacilli. When I saw her last she had gained in weight and was looking splendid. I believe she will get well. The greatest difficulty in combating disease among the children is that the ignorant and conscienceless parents do not give them half a chance. I believe that as the younger generation grows up the work of the conscientious teachers in the schools will begin to manifest itself in the homes, and when the home conditions are better, great things can be accomplished in the schools for the physical, mental, and moral good of these people.

ANNUAL REPORT OF MRS. L. G. PETRIE, NURSE AT ST. MICHAEL, IN WESTERN ALASKA.

During the fiscal year 1917–18 I have had 1,912 cases, have visited 803 village patients, treated 773 bed patients, given 5,934 treatments, and made 3,377 house visits. This includes visits and treatments given on the following trips out of St. Michaels, Sourdough and Stebbins, July 30, 1917; all the fish camps on the coast of St. Michael Island and on the canal, December 10, 1917, January 15, 1918, and February 28, 1918; Egg Island, May 15, and Klikitarik, May 30, 1918.

There have been 13 deaths here at St. Michael. Most of these were advanced cases of tuberculosis, whose vitality had been lowered by an epidemic of tonsilitis which swept the village. There were six deaths at Sourdough.

There were many abscess cases this year. Most of these were cervical and axillary abscesses and otitis media. There was one lumbar abscess treated for eight months, and one inguinal treated for six-months and still under treatment.

The daily clinic plan has been followed. The patients and others present are shown how to make dressings and are given talks on the care of the eyes, ears, nose, and general health; also on the necessity for good ventilation in their homes and the need of individual cups, towels, etc., where there are members of the family who have contagious diseases. I have distributed sputum cups and taught them how to use them properly, and have cautioned them to be careful always for fear of their disease spreading to others. I have encouraged the reducing of the number living in small houses, and shown them why only one family should live together.

I visit each house every Saturday to see that the weekly scrubbing and cleaning of the cabins have been done. At first a good number of them had not been scrubbed when I came; now nearly every one scrubs regularly on Saturday. Every family has a wash day once a week. Some of the cleaner ones

wash twice each week. Several nsked to have their houses fumignted after the denth of some member of the family who died of tuberculosis, several also nsked for chloride of lime for disinfecting drains, holes, etc., outside of their cabins. This is encouraging, as heretofore they have had to be forced to do this.

Once each week all the school children were thoroughly examined for cleanliness and symptoms of disease and disorders. During this examination they were lectured on the necessity of cleanliness. Record of each child's comparative neatness and cleanliness was kept on a blackboard where all could see. The one having the highest record was awarded a prize.

The larger school girls were taught bandaging and minor dressings. They were allowed to assist in the dressing of eyes, noses, and throats. They were instructed in the absolute necessity of cleanliness in surgical dressings and shown how to sterilize instruments.

The villages of Sourdough and Stebbins are cleaner than they have been any previous year but they are far from sanitary. The people there insist upon placing their dead upon the ground several feet back of their houses instead of burying them. I have tried to show them how dangerous this practice is, but they are reluctant to give up the old traditional custom. If it is not discontinued this summer, however, I shall notify the authorities here and ask them to compel the natives to bury their dead.

Many of my patients during the summer are natives from the coast all the way from Unalakleet to Hooper Bay and many from up the Yukon. Many of these have been in need of medical attention all winter, and so are advanced and chronic cases.

The village clean-up here at St. Michael was a very thorough one. All the garbage and waste were carried down on the ice or burned. The yards were all raked and set in order. The beach above the tide line was also cleaned. After the clean-up Dr. H. C. Miller, of the United States Medical Corps, inspected it and declared it sanitary. The village in general looks much cleaner and more orderly than any previous year.

SECTION 3.—REPORTS BY TEACHERS.

ANNUAL REPORT OF THE UNITED STATES PUBLIC SCHOOL AT WAINWRIGHT, IN ARCTIC ALASKA.

By EARLE M. FORREST, Teacher.

This is an isolated community, our only white visitors last year, with the exception of the boats in August and September, being Archdeacon Stuck, in February, on his way from Fort Yukon to Herschel Island, thence back to Fort Yukon, and in May our nearest neighbor on the south, Mr. Thomas, the Episcopal missionary from Point Hope. For 10 months we are icebound, having water communication only 2 months of the year, during which time the ground thaws to a depth of 5 or 6 inches, the ground willows bud, and a profusion of wild flowers appear on the tundra. There are no native berries, and it is impossible to raise vegetables and flowers except in window boxes indoors, transplanting to cold frames outside for a short time. By this method we have had plenty of fine lettuce for three summers while the nasturtiums in our window box grew 4 feet high last summer and were covered with blossoms for weeks.

After three months, without communication with the outside world, the first ship of the year, the gas steamer *Herman*, reached here on July 23, bucking her way northward through the thickly drifting ice. We paddled out in an oomiak, portaging over stationary ice en route, to where she had tied up to a big cake caught on the bar, and we received a cordial welcome from Capt. Pedersen, our first news of the United States being at war with Germany, and our first taste of fresh fruit for 10 months.

On the 10th of August the Coast Guard Cutter *Bear* arrived, bringing our personal supplies, the greater part of the goods for the native cooperative store, and Supt. Shields on his summer trip of inspection. It is of inestimable value to us in this far northern section to receive this yearly visit from Supt. Shields, with its opportunities for settling troublesome questions and obtaining advice and encouragement. The *Bear* returned from Barrow early on the 12th, and we spent a delightful and extremely busy day, discussing business matters with Mr. Shields, consulting with the ship's doctor in regard to difficult cases, closing the mail with its shipment of furs from the native store, and visiting, with the outgoing Barrow teachers, Capt. Uberroth, of the *Bear*, and others who spent the day on shore.

In the schoolroom.—School opened in September, as usual, and the school work was continued along the same lines as last year. Special mention might be made of the drills in diacritical markings and phonetics. They were found to be a great help in overcoming the tendency to confuse *p* with *b* and similar errors of pronunciation common among the Eskimos. All classes above the first were sent to the board frequently and given a list of words to mark. They then exchanged places and corrected one another's work.

Another helpful exercise was to require each one to find 10 words with each marking of a designated vowel. They would invariably begin to look through the entire dictionary for 10 of one particular marking first, passing by any number of the other required markings until its turn came. This same singleness of purpose and inability to concentrate on more than one object at a time is shown by the reindeer men in lassoing. It seems impossible to teach them that when they start out to lasso four sled deer it makes no difference in what order they are caught. They start after a certain deer and one of the others can literally run over them without one making an attempt to catch it.

During the mathematics period a good deal of work was given in connection with the native store; use of the scales was taught, bills were made out, and practical problems given. The reindeer apprentices and older boys worked reindeer problems and were taught to make out the annual statistical report. They learned the latter so well that the No. 2 Herd report was made out without a single error by one of the apprentices at that herd this spring.

Industrial work.—Two days a week were devoted to industrial work, besides a period each of the other three spent in drawing or painting. We found this plan of taking two entire days much more satisfactory than half of each, particularly in the classes in cooking, sewing, and woodwork. The kindergarten classes were an exception to this, having both lessons and busy work during each session daily. At least one baking of yeast bread was made each Tuesday and Thursday, often two or three, the pupils bringing their own flour or that of some family who wished bread made. We furnished the dried potatoes and other ingredients for the yeast as an inducement to them to make yeast bread, baking powder biscuits, and a sort of unsweetened doughnut fried in seal oil being the popular forms of bread here.

Besides bread, rolls, biscuits, dumplings, cookies, doughnuts, cinnamon rolls, and several kinds of candy were made frequently by the class. Instruction

was also given in the preparation of dried fruits, beans, split peas, rice, macaroni, and other staple foods.

Ten aprons, 19 dresses, 15 boy's shirts, 4 baby's dresses, 3 baby's skirts, 4 bibs, 6 rompers, 22 snow shirts, with fancy trimming, and 8 pairs of curtains were made by the older members of the sewing class, while the little girls pieced patches for a quilt, hemmed handkerchiefs and tea towels, made themselves workbags, and learned feather stitching and crocheting. A special effort was made to teach the women and girls to finish their snow shirts neatly and make them to fit the artige over which they were to be worn. All of the boys did some simple sewing, darned socks, and knit mittens, some of them even making themselves shirts. Twenty-one pairs of gloves and mittens, a child's sweater, three pairs of wristlets, and three pairs of child's stockings were knit, and a belt and a number of edgings crocheted. Two mattresses, filled with reindeer hair, were made, and a large cloth doll was stuffed with hair and dressed in native style.

The class in woodwork was particularly instructed in the proper use of the various tools, and repeated one piece of work over and over until they could do it neatly. They made themselves boxes with lids, put handles on knives, built ventilators and a Christmas tree, designed a variety of good, original patterns, which they worked out in table mats; and, besides working on a number of personal effects, did the necessary repair work about the schoolhouse and grounds. We were barred from other woodwork by lack of material.

The schoolroom was used as a workshop by village men outside of school hours almost every day, sleds, stoves, stovepipe, spears, knives, etc., being made. There was a great demand at first for hammers and hatchets, and I was interested in seeing the use to which they were put. The hammer head was cut V-shaped, the head of the ax was cut off across the top of the hole for the handle, and the hammer head fitted into this and riveted, thus making a small edze, which is the native's favorite tool and is used in all kinds of work.

Sanitation and health.—This has been one of the bad years in point of number of deaths. As against two deaths last year, both due to tuberculosis, we had eight this year, nearly all due to the same cause. Tuberculosis of the lungs is the worst evil here. Other contagious diseases are few, but almost every home has at least one tubercular man, woman, or child. It is pitiful to see them succumb to this disease. We have given the question a great deal of thought, and, aside from simple measures of prevention, can find no solution for the problem of checking the spread of tuberculosis in this locality. It is not at all feasible to consider isolating those subject to it, as in some instances as many as three members of one family already have it, and all may linger for years, while some of the oldest cases are men who are the best hunters in the village, men who kill more seal and oogrook a year than anyone else, and keep their families well provided for. To thing of having them live in tents the year round is also out of the question in this climate. Snowhouses in winter would not serve as substitutes, since new ones have no more ventilation than seal igloos, and old ones are too cold.

There have been daily calls for medical attendance for all sorts of ailments, a number of cases requiring daily visits to the igloo, and the preparation of a diet for several days in each case. In addition to medical aid given, we have tried at all times to improve the health and surroundings of the approximately 200 people directly or indirectly under our care by friendly suggestions and criticisms made on visits to the homes, by public talks, by preventing the overcrowding of igloos, by urging their moving into tents as early as possible in the spring, and by whatever other means seemed best suited to cases as they arose.

The usual summer clean-up took place last July as soon as the snow was melted, but on account of the daily arrival of boatloads of walrus meat, blubber, and skins, it was difficult to keep it clean throughout the summer.

The village council is performing its duties this summer with increased zeal, and heavier fines will be imposed for disobedience of the rules. Sixty-five sacks of coal have been collected as fines for loose dogs, uncleanliness, and other offenses; the coal bin for school and residence has been kept filled; a splendid snow hallway to the schoolhouse was built last fall; and a variety of other matters were attended to throughout the year by the five members of the village council.

At the close of our third year at Wainwright we feel there are a number of conditions which combine to make this an unusually desirable village in which to work. The natives are of a very peaceable disposition, exceptionally honest, and sincere Christians. There has not been a case of stealing or a quarrel among them during our residence here. Disagreements that occur are taken either to the village council or to the teacher for settlement and their decisions abided by without question.

The School Republic was conducted after the plan introduced last year, and those elected fortnightly for the purpose performed the duties of fireman, janitor, bell ringer, primary monitor, etc.

In connection with both the School Republic and the village council, it must be remembered that most of the time the teachers are the only ones here who talk English. The natives do not hear English spoken as they do at practically all other villages, and have never seen white men living together, obeying certain laws, and governed by certain of their number; so they have greater difficulty, both in trying to grasp the idea of self-government and in acquiring the use of English, than other natives would.

Resources.—In the matter of income the past year has been a very satisfactory one from most points of view. The native store has accepted coal all winter in payment for goods, so there has been no shortage of fuel here, all that was necessary when anyone was out of tea, sugar, or other staple foods, being to drive 6 miles to the nearest coal mine and bring back four or five sacks of coal.

The ice cellars were well filled with meat last summer, 140 walruses and 13 polar bears being killed in the month of July alone. The ice broke up on the 8th of July, but there were ice fields in sight until the 8th of August, and herds of walruses were numerous on this drifting ice. The boats went out daily, invariably returning loaded with meat. It was an unforgettable sight to see the great creatures piled one upon another on a small cake of ice, pushing it several inches below the surface of the water with their weight, continually emitting their peculiar grunting bellow, while other parts of the herd could be seen scattered about on the pack in all directions.

There is no summer fishing here, but several kinds of ducks and geese are plentiful, numbers of them nesting in the vicinity. Ptarmigan can be seen at most seasons of the year, some years in abundance, but during our stay they have been scarce. We also have a ground squirrel, the skin of which is much used for light-weight artiges.

The fall fishing, about 25 miles up the Kuk River, was very successful and each ice cellar contained a generous supply of "ahkaluech," an excellent white-meated fish about a foot long. This summer there has been exceptionally good seal hunting on the ice. Sled loads of meat are brought in daily and the women are all busy skinning and putting the meat in oil in sealskin pokes to pickle.

Last winter there were fewer foxes caught than in either of the two preceding years, only 140 white and 6 red, but these skins brought in returns equivalent to that obtained from many times their number in past years. As high as $32 was paid locally for a white fox, and goods were sold very reasonably. This was due to the influence of the native cooperative store here.

Cooperative store.—The greatest disadvantages which the native store has had to contend with so far have been its small stock and the fact that we are unable to fill shortages that occur in the stock during the year. There is only one time each year when we can receive supplies from Seattle and perhaps purchase a few from the freight boat.

Very little credit has been given, and that for only short periods. This is another innovation to these Eskimos, who have been in the habit of receiving credit from traders for an almost unlimited length of time, and of being allowed to go hundreds of dollars in debt. At the close of our second year of business there are no "Accounts receivable" on our books, no "Bills payable," and after the furs on hand are sold and the books balanced a good dividend can be paid. The native store has made an excellent beginning, and as all of the natives come to see the benefit which it is to them, and as the stock increases to meet their wants, it will undoubtedly fulfill in every way the purpose for which it was established.

Coal.—Coal can be picked from the faces of banks or dug from the ground in a great number of places in this vicinity, and in the summer and fall washes up on the ocean beach in such quantities that sacks may be filled in a short time. The natives have mined coal for the Bureau of Education for several years. At first they did not take kindly to the work and various means of persuasion were resorted to by the teachers in charge in order to get them to mine. They have finally come to realize what a great benefit it is to them to be able to procure food and clothing so easily at any time, and in the last few years have come to depend upon the fuel supplies for a large share of their groceries and dry goods.

Reindeer.—We feel much encouraged over the improvement shown in the two Wainwright herds and the Icy Cape herd. A large per cent of the deformed deer and inferior stock has been eliminated—these being butchered at the most advantageous season. Every effort has been made to impress upon the reindeer men that herd improvement can be obtained only through selecting the best stock to reserve for breeding purposes, and literally every deer butchered during the past three years has been made a case in point. No fawns have been butchered—a measure we felt it necessary to enforce temporarily, as the herds had been practically stripped of steers and male fawns. Herding grounds have been selected with care, and the herds moved frequently, the herders living in tents during the summer and in snowhouses and igloos built the preceding fall at good feeding grounds during the winter. I have kept continually in touch with affairs at the herds by visits, correspondence, and herders' diaries, and feel sure that most of our reindeer men are above the average in length of time spent with their deer, obedience to the rules, and general honesty and care of the deer under their charge.

Conditions are not as favorable here to the reindeer business as farther south. Most of the fawns are born in May and June. Snowstorms and wet weather, followed by a severe freeze, are common in June, both hard on fawns; and snow begins to fall again in September, which does not give them long to make a start in life. Moss, too, is scarcer. But, despite a large decrease of fawns due to unfavorable weather conditions during two fawning seasons, and an epidemic of dysentery another, there are 1,709 reindeer owned by Wainwright

natives at present, as compared with 1,070 in 1915, and the number of natives owning deer has increased from 39 to 58.

The return of the Wainwright delegates from the Noatak fair created an added interest in the reindeer. The men were full of enthusiasm over the fair, with its opportunities for mingling with other reindeer men, for seeing other deer, and for learning improved methods of handling and caring for them. On their return they held a meeting and told the people what they had seen and learned, explained the Reindeer Men's Association, and sang the reindeer songs they had learned at the fair. Notwithstanding the fact that our men must be absent six or seven weeks to make the trip, there have been several each year willing to leave their families and their trapping to attend. There is no doubt but that the fairs are a great benefit to the reindeer men, and will tend to create more interest in the business than any other one thing could. Last Christmas 14 female deer were given as presents, chiefly by parents to their children.

ANNUAL REPORT OF THE UNITED STATES PUBLIC SCHOOL AT NOATAK, IN ARCTIC ALASKA.

By JAMES H. MAGUIRE, Teacher.

The United States Government school at Noatak village, on the Noatak River, is located in an air line, 80 miles north of Kotzebue, but on account of the devious course of the lower river through low-lying silt deposits, the distance traveled by water is not less than 110 miles. The village is inland from the Arctic coast probably 60 miles, and the elevation is 400 feet above sea level. The site is admirable, being on a tree-covered glacial bluff 60 feet above mean river flow. There is an abundance of timber for fuel and cabin construction. The soil is rich and apparently adaptable to the cultivation of garden truck. The river teems with salmon and trout. The surrounding country is rich in fur, and the upper reaches of the river are the present range of big herds of caribou. There is no poverty. Hunger is something unknown to the Noatak Eskimo.

This village was founded 10 years ago when the Alaska school service representatives gathered the scattered families of Eskimos from the lower and upper river valleys to this carefully and well-chosen site. The lower-river people were known as Nebaktutmeuts or timber natives (Nebaktut is Eskimo for trees). The upper-river people were called Noatakmeuts or Noatak River people, and they lived in the caribou country far above the big timber, the only woods being willow and small alder. These upper-river people had little or no intercourse with other people, even of their own race, and most of the children had never seen white people until the establishment of the Government school. This gathering together of people from so widely scattered communities was an experiment without any too much promise of success, but that it was a wise move is demonstrated to-day in this well-ordered village of 152 people.

Taken as a body, physically, the Noaktak Eskimos are undoubtedly superior to any native Alaskans we have worked with, and the Noatakmeuts or upper-river people are distinctly a class by themselves. They are large of stature, with enormous chest development, and are exceptionally robust. There is not a case of venereal disease in the community, but, unfortunately, there are seven hopeless cripples. Two of these are recent arrivals from a coast village.

four are lower-river people, and one is upper-river and is tubercular. The remaining 145 are exceptional types.

Much comment has been made upon the inaccessibility of Noatak village, the great danger encountered in navigating the river and the desirability of moving the Government plant to some point nearer to Kotzebue on slower running water. Our observation of the transportation feature is as follows: The first 90 miles of the river between Kotzebue and Noatak are easy of navigation for power and even sailing boats. The current is sluggish, the water deep, and the river wide enough for tacking when necessary. But the remaining 20 miles are comparatively hard to travel. The water is very swift and in places shallow, necessitating towing and poling. This unusual and apparently dangerous method of propulsion is disconcerting to the new-coming teacher, but after one or two trips the method is only tedious. The danger is negligible.

After studying this village situation from its every angle we believe the present location is positively the most desirable from the economic standpoint of any site on the entire river. The great question of food is here provided for by the reason that fresh fish in large numbers can be taken every day in the year. the lower river is frozen to a great depth for eight months, making winter fishing impossible. Food supply is paramount; so this is the logical site.

School work.—Classes were organized October 8, 1917, and continued until April 26, 1918, when the annual migration to the sealing grounds completely depopulated the village. During the school term of 123 days the enrollment reached 53 and the attendance averaged 42. There was no truancy, very little tardiness, and 15 pupils recorded perfect attendance.

The following subjects were handled in regular classes: Arithmetic, reading, spelling, writing, drawing, history, geography, and chart and kindergarten work. Special attention was devoted to the use of English and to composition and correspondence. Neatness and cleanliness were insisted upon, both of person and in every department of school work. The results obtained were in many cases suprising. Much time was given to music and our patriotic songs were explained and always sung with vigor. Competitive spelling and mental arithmetic were used as relaxation and were always popular.

Domestic science.—The assistant teacher, Mrs. L. C. Abercrombie, gave housework, sewing, knitting, and cooking extra attention and was enthusiastic for this work. The cooking classes baked: 811 loaves of light yeast bread; 775 light yeast biscuits; 553 baking powder biscuits; and 256 fish cakes.

The sewing classes made 15 pairs of mittens, 15 pairs of wristlets, 18 shirts, 4 dresses, 100 flags, 22 pennant streamer, and 4 reindeer banners. Both boys and girls were keen for knitting and did equally well.

Native homes.—There are but two of the old-style Eskimo innies in Noatak. One is occupied by an aged woman, who still prefers that style of architecture. The other by a newly arrived family from Tigara (Point Hope), who built hurriedly with the only material available. The remaining 32 homes are substantial, hewn-log cabins, well ventilated and lighted. The majority of windows are of sash and glass, although some native windows are still in use. There are no stone lamps or stoves in service. There is no dearth of fuel, as this is a well-timbered country.

Health and sanitation.—The health of the Noatak Eskimos is good. There is no indication of venereal disease or trace of its prevalence at an earlier period. There are two pronounced cases of tuberculosis and one probable. Medical assistance was rendered 1,205 times averaging less than 5 calls a day. Most treatment was for colds, stomach trouble, rheumatism, snow-blindness, cuts, and such minor ailments. A fair percentage of treatment was given in the

homes whenever assistance was asked for. Forty-seven teeth were extracted, and 18 permanent fillings were placed. One male child of 2 years died of constitutional weakness and probable maternal neglect. An aged woman died in a tent on the trail to the sealing grounds. One young married woman was accidentally killed by being crushed under a whaleboat while transporting the same to the whaling station at Point Hope. There were 4 births, all normal—1 male and 3 female.

We attribute the freedom from serious sickness to the general use of fresh, clean food; improved living quarters; very little, if any, consumption of tobacco; and a tendency by reason of the trapping activity to much outdoor life. Furthermore, there is no clubhouse or kosga, with its attendant polluted air, filth, and irregularities.

Native support.—As this is a timbered country it is naturally fur-bearing to a marked degree, the trapping range extending to the limits of the timber, and probably more than 200 miles beyond this reservation into the upper reaches of the river.

Fur brought exceptionally high prices during the past winter, the revenue from this source alone ran close to $6,000. The following sales were reported:

57 lynxes, at $10	$570.00
1 wolf	15.00
5 wolverenes, at $30	150.00
13 white foxes, at $23	299.00
190 red foxes, at $18	3,420.00
13 cross foxes, at $35	455.00
1 silver fox	280.00
59 minks, at $5	295.00
275 ermines, at $1.25	343.75
	5,747.75

Sealing will bring returns for oil, and dry salmon will add to the revenue of the village.

A few carcasses of reindeer were sold during the winter, but each year shows a marked decrease in the white population and a necessary limiting of the Kotzebue market's demand for deer meat. This loss of market is permitting the native to use much more deer meat for his own food; consequently he has fewer marketable steers—a situation which, while improving the health of the Eskimo deerman, reduces his stock of steers for market, provided a market be discovered or suddenly established through rehabilitated mining activity. But, as we understand the situation, the reindeer was imported to replace the vanished caribou and to aid in sustaining life in the native Alaskan, wherefore the Eskimo deer man is now living very well indeed, better than either he or his progenitors ever did before.

Village council.—A reorganization meeting of the Noatak native council was held early in November by the village electorate. Seven men were chosen to conduct and adjust native affairs, differences, and disputes; and again we affirm that a native village without a governing council is not progressive. These men met at stated periods and listened carefully to suggestions, and then did not hesitate to put measures of improvement into operation.

All dogs were chained, even half-grown puppies, which have been known to gnaw sled lashings and otherwise damage property. Worthless, stray, and stunted, inferior sled dogs were destroyed. Old people were urged to make wills to avoid disagreements among their relatives after their deaths. Younger men were sent into the timberland to secure fuel logs for old women and for

families whose adult members were on the trapping grounds. After a fire had destroyed one village home, the council made periodic examinations of each and every flue and chimney, with the result that no other fires occurred. We have seen just as efficient councils at other places, and firmly believe they are organizations spelling advancement.

Agriculture.—No attempt has been made heretofore to cultivate the Noatak soil. Last summer we were so impressed with the house gardens at Kotzebue, Noorvik, and Kiana that we have several garden plats set to potatoes, turnips, radishes, and other vegetables, the success of which venture will mean much to Noatak. The soil is apparently as fertile as Noorvik, but slower to warm to depth. It may be that the season is backward this year, but we are willing to make every effort to make potatoes grow on the Noatak.

Migration.—The Noatak Eskimo is not a homesteader or stay at home in any sense of the term. We are familiar with the Eskimo from Barrow to Unalakleet, the islanders and the Siberian native; but the Noatak native is probably the most restless wanderer of them all. Early in April he begins overhauling his sealing gear, boats, spears, nets, etc., and by May 1 he, his family, his dogs, tents, household goods, practically everything he possesses, with the sole exception of his cabin, is sledded along the ancient trail to the sealing grounds. He makes two relay camps en route, and in the course of 10 days or 2 weeks reaches his mecca, the haunt of the Eskimos' best friend, natchuk, the seal. With the breaking of the Arctice ice in June, sealing is finished and the pilgrimage is resumed by easy sailing, beach towing, and camping at will. Any time before July 4th will do for Kortzebue, which is 75 miles from the Noatak sealing camp. The summer spent at Kotzebue, and autumn at hand, the Noataker turns homeward by way of the river, stopping at will to fish, gather berries, and to hunt birds. Eventually he reaches his village and goes into camp on the sandbars at the foot of his village site. There fishing and fish drying are resumed in earnest. His racks are red with salmon sides drying in the fast-shortening days. He remains in his tents until the frost has dried out his rain-soaked cabin, which is repaired, windows replaced, and made comfortable for the winter. Early in December he sets out for his favorite trapping camp ground, and beyond a trip or two back to the village for food, to sell skins, or for the Christmas festival, he spends the most of his winter 100 or 200 miles from home. Sometimes his wife and a child or two are taken along, but in most cases the children are left in the village with neighbors or relations so they can attend school. Trapping finished, the April movement to the sealing ground occurs again in due order. The same grand swing around the circle which has been as regular as the transit of Mercury for centuries past is in operation and will not be stopped; and why should it? One of our predecessors designated the Noatak people "the Arabs of the North." At that time, several years ago, we wondered at the term. Now we understand. We have seen these people at Kotzebue, at Shushaluk hunting the shushuk beluga or whitewhale, at sealing camp, and in the trapping field, as well as in their comfortable village cabins, and we are satisfied that home is any place that an Eskimo of the Noatak River happens to be.

Teachers' travel.—Acting upon instructions from the district superintendent, we made four trips to Kotzebue during the winter to assist the native teacher at that place. We rendered medical assistance as required, carried dental tools, and filled and extracted teeth as necessary both for whites and natives. No charges were made for any of this service to anyone. We were more than pleased to report favorably upon the good work being accomplished by the teacher, Charles Menadelook, whom we have known for many years at Diomede

Island, at Nome, and at his old home and birthplace, Cape Prince of Wales. His Kotzebue school was well ordered, and the attendance exceedingly healthy. We take this opportunity to express our confidence in this young native's natural ability as a teacher, which trait is rare indeed among the Eskimos.

The January trip was made by Mrs. Abercrombie and her husband, both of whom stood the Arctic midwinter travel remarkably well. They were both very much impressed by Menadelook's teaching ability and his methods of working with his own people.

The final trip was made late in May and the route followed was the old trail over the mountains to the Noatak sealing camp, then along the Arctic coast to Kotzebue. On account of the lateness of the season the return trip was made the same way, as rotting ice in the river made that trail hazardous. The native instinct which caused the detour was true to tradition. The river broke the day of our arrival at the village.

Reindeer.—There is a herd of approximately 800 deer attached to this station, and its stock is owned by representatives of every family in the village. During the winter numbers of caribou mingled with this herd, and during the rutting season one mighty bull became very tame, but later on returned to the hills. However, our deermen anticipate an improvement of stock due to the infusion of new blood. This herd has shown some deterioration from inbreeding for some years. During the early winter a small pack of wolves bothered the deer, but did not kill many. Two of the wolves were killed and the rest driven off. We learned that other deer herds were molested by wolves, and some wolves were destroyed. The depredations ceased in the Noatak herd early in December.

In March the annual reindeer fair was held about 8 miles north of this village. Delegations attended from as far north as Wainwright. Government representatives came from Nome, Noorvik, Selawik, Kotzebue, Kivalina, and other visitors from Kiana, Point Hope, Wales, Buckland, and Shishmaref. We believe the reindeer fair is a great get-together factor and should be perpetuated, but a date at least two weeks earlier is recommended.

Religious work.—The Friends Missionary Organization maintains representatives at this village who supervise that branch of endeavor. The mission residence was destroyed by fire October 29.

Recommendations.—In view of the inadequate and worn-out condition of the school plant here we recommend an entirely new series of buildings—sanitary, as modern as possible, and of construction to eliminate fire danger to the minimum. To this end all buildings should be detached. In the present small plant there are six small stoves and five smokestacks. These stacks are constantly choking from the accumulation of creosote, which burns out at intervals, causing a fire menace.

If, however, an entirely new plant is not feasible at this time, we recommend that the Government representatives be provided with a detached log residence, insuring some comfort, a little privacy, and less danger from fire. The present space utilized as residence can be used as a classroom, a bathroom, and a cooking room. The new residence might be considered in the light of a nucleus for a model group of school buildings for this place. Logs are available in any quantity at a very low cost. Doors, windows, flooring, roofing, and finishings only need be imported. A wireless receiving and sending plant is hoped for, and a sawmill, with a 10 to 15 horsepower engine, would go far to completing the station equipment.

Notes.—District Supt. Shields inspected our classes April 5. Although suffering from his recent accident, he did much to stimulate teachers and the village generally. His visit is an epoch. The coldest weather recorded was

49 below zero, March 2. The total eclipse of the moon was visible at all stages December 27. Deepest snow was 2 feet and 4 inches on the level. The ice in the river broke May 28. Great numbers of eastern robins appeared May 9.

In closing we wish to state that we believe the Noatak school children will average higher in deportment and obedience than any other Alaskans we have taught, but their misconception is woefully apparent on account of their isolation and lack of comparative material.

ANNUAL REPORT OF THE UNITED STATES PUBLIC SCHOOL AT SELAWIK, IN ARCTIC ALASKA.

By FRANK M. JONES, Teacher.

The Eskimos have seemed very proud of their school this year and very loyal in its support. The average attendance for the year has been the largest since the school was started, in spite of the fact that many of the large boys left school and engaged in trapping. When Mrs. Jones and I look at the number of youngsters ready to begin school next year (and the following year) we wonder where can we put them. Nearly all the trappers made arrangements whereby they could leave their families in the village while they were away.

Arithmetic.—The usual number work was done in the primary grade. In the upper grades the multiplication tables, addition, subtraction, and division were carried out as in the preceding year. I had the older children cut the labels off canned goods and mounted on cardboard. Then we would "play store," after the little folks were dismissed. Two boys were storekeepers, and they kept a book account and bought skins and sold goods. The other children cut out miniature mink, weasel, fox, and otter from paper; then took them to the store to sell. The educational toy money sent to every school was used to make change. The children were told to pay for everything they bought and not to ask for credit. The children became so interested that they forgot they were learning arithmetic but they learned it nevertheless. A few of the oldest pupils were given catalogues and shown how to order things from the States. They learned to use the index, write the order, foot it up, include postage, and address the letter. This was done in ink so that they had practice in penmanship as well as in business methods. The comparison of outside prices and Alaska prices was obvious.

Reading.—It is a problem to find suitable reading material for the children. Their reading is likely to become the mere pronouncing of words. Their idea of the outside world is as vague as is the outside child's idea of Alaska. Lessons that they could understand were taken from the different texts; some Bible stories were told, and the *Eskimo* newspaper was used. The whole idea was suitability to the child's conception. The Selawik children read very well, but are backward in talking English. The Friday play hours helped to overcome this.

Geography.—Children of other lands and their country seemed to be most valuable as geographical training. The Eskimo child likes to learn about other children who live differently. From this as a basis, map work and coloring follow. The foods shipped to Alaska, such as the Eskimos use, and their places of preparation were used as subjects. The capitals of countries, the war zone, Alaskan towns, etc., were used for map finding and globe work.

Manual training—The work in manual training included instruction in making furniture and in the tanning of leather. In the fall several of the boys gathered willows with which to make chairs as Christmas presents for their younger brothers and sisters. Mr. Chance gave the boys several lessons in making these small chairs. After Christmas I set them at work making full-sized chairs of willow. The pattern of ordinary chairs was used, and the chairs mortised and glued. Some of the willow split badly. For the next furniture I would recommend birch. It is easily obtained and should make excellent material. It should be cut in the spring or fall and well seasoned before working. During the working period names of the new terms used in making furniture were written on the board and the boys learned to pronounce and spell them. Fourteen chairs were made.

Just before fair time several of the village people donated deer skins to the school, in order that the children might dehair and tan them. The dehairing was done at the children's homes, but the tanning was done at the school. Alder and willow bark was used for tanning material. The leather was softened by working it with the hands and pulling it over a piece of wood. Articles were then made for the Selawik fair exhibit. While the tanning and sewing of the skins was not done as well as older people could have done it, the children still got the experience of working with leather. Proud, indeed, were the boys and girls with the red, white, and blue ribbons which came back from the reindeer fair for their leather work.

Composition work.—Especial stress was put on composition work this year. The older pupils kept diaries for several weeks and wrote everything of interest to them in their books, as well as songs, poems, etc. One period a week was given to current events. I wrote these on the blackboard in the form of an outline, and the pupils filled in the details. However, the best original work done in composition was that which discussed the life and characteristics of the animals with which they were familiar.

Wireless dispatches were included in the current events, after being simplified so that the children could understand them. Sometimes a period was given over to subjects such as railways, steamships, etc., and pictures pasted in the books.

No night school was held this winter, but every Friday night was open house for the children and young folks. On alternate Fridays I gave talks on the following subjects: Body structure, canals of the body and their uses, food and its preparation, the war and why we entered it, submarines, aeroplanes, and geographical talks. These talks were attended by old and young and were interpreted. They were often illustrated by models, charts, and drawings. The purpose of these talks was to give the people information concerning themselves and the outside world. The large attendance was indicative of the interest of the people.

Alternate Fridays were given over as play evenings in the schoolroom. Mr. Chance had charge, and he was helped by his wife, Mrs. Jones, and myself. While games were played the boys and girls were led to use English, and in playing they forgot their bashfulness in using the new language. The children played simple games, such as are commonly played by children in the States.

The school music received its share of attention this year. It is of value in the teaching of English and as memory work. The usual program was given by the children at Christmas.

The articles in the *Eskimo* have appealed greatly to the young people who could read, and they have been of much value. To a people who have just learned the English language this paper is an interesting textbook. To the

reindeer men it gives advice and help, to the school children it is a reader, to the teachers an encouragement.

Industrial life and village improvement.—The natives have been well supplied with food and clothing the past winter. Skins were plentiful and prices high. Village pride seems to be growing and showing itself in cleanliness and a "work together" spirit. Lumber for several new floors was put in during the past winter. A few of the men made chairs for their cabins, being encouraged by the boys making furniture in school. The men are clever with tools and can easily make furniture for their cabins. Every cabin has its table, but chairs are sadly lacking.

Several hundred dollars were earned by dog-team freighting last winter. Of course, this is much smaller than the amount earned by the Selawik boats freighting in the summer. Matoolik's launch made considerable money for its owner last summer. As far as I know this is the only power boat owned by a native north of Nome. Selawik Jim Ikik made a new 45-foot schooner last summer. He sent out to Mr. Lopp for the lumber, but used native wood for the ribs and keel. The lumber was well seasoned, and now Jim has an excellent boat, strong and seaworthy. This is the third boat he has built. He has had many offers for it, the best one being $1,200, half cash; but he was wise and refused. He intends putting in an engine. Yokup sold his 48-foot schooner to Kivalina and Point Hope people last summer for $1,200. Like a wise man he took the most of his pay in reindeer. These two men could build up quite a trade making boats, as they build the largest and best boats in this part of the country.

Health and sanitation.—The health in the village has been very good during the past year. There have been no epidemics and but few deaths. Only one child has died, and she was a cripple 4 years old. Four adult deaths have occurred: Three from old age and one from tuberculosis. Twelve births are recorded, all the babies being alive at present. Mrs. Jones gave three talks to the women on obstetrics and nursing. The women discussed these subjects with her. The older women, who act as midwives, were anxious to learn, and especial attention was given them. They are largely responsible for the treatment of confinement cases and can remedy many of the mistakes formerly made by the Eskimos. During my trip to Noatak, Mrs. Jones attended to considerable medical work, twice closing school to attend to serious cases. I gave one talk to boys of adolescent age. The women named a committee on house inspection, washing of floors, and clothes. A weekly inspection was made of the houses. Two large panels of photographs of the village and school children were made, and the cleanest house and igloo, respectively, received the panels. The panels were kept one week and then awarded to another place. This created much rivalry, and at the end of a stated period the panels became the property of the place winning them the most times. We found this plan quite successful, and deciding between cabins was often very difficult. Some of the delegates, upon returning from the fair, said that our village was the cleanest of any they had visited.

Four men and three women constituted the village council elected on October 1. The form used last year was again used, and the officers performed their duties very well. The usual questions and difficulties of an Eskimo village were dealt with by them. When Martin Moran was shot at Shungnak and was rushed through Selawik to the doctor at Candle, it was the village council which secured fresh dogs to speed him on his way.

Acting upon the appeal of the Red Cross at Nome for feathers to send to the war hospitals, the Selawik women collected over 68 pounds to be forwarded.

Over $25 was sent to the relief of a former Selawik teacher whose cabin was burned.

Wireless.—Last summer I sent out for some receiving instruments and in the fall constructed a receiving station. The native men set up two 58-foot aerial poles, and I had the set in working order in November. The Government station at Noorvik, in charge of Delbert Replogle, has been of great assistance to me, sending slowly in order that I might learn the code. Noorvik is 40 miles from Selawik; Nulato, 150 miles; and Nome, 225 miles. All these stations have been heard. Through one message alone the natives saved over $500 by hearing of an increase in the price of furs. I would recommend a small sending and receiving station for Selawik in connection with electric lights. Unless one has been in the Alaska service he can hardly appreciate what a wireless means to an isolated village in the Arctic; one important message may be worth the whole monetary value of a set. Over 60 messages have been received from the station at Noorvik in the past seven months. Six official messages have been received.

Reindeer.—The fawning season was hindered by very cold weather and many fawns died. However, I expect the record of last year to about approximate the one for this year. The reindeer boys watched the herds faithfully during the fawning season. In the fall a large caribou joined Herd No. 1 and this spring the boys report several half-breed fawns. This is a good thing, as the strength of the deer is increased and the effect of inbreeding overcome. Three years ago another caribou ran with the herd, and several fawns were born which are now some of the best deer.

I made the trip to Nontak fair again this year with the Selawik delegates. Nontak is too far for the boys to drive deer and race them, so their efforts were confined to exhibits. Selawik got first and third prizes for the best birch racing sleds and many prizes for harness and leather work. Reindeer sausage was also exhibited for the first time. This affords a good method of putting up reindeer meat so that it will keep indefinitely. The judges pronounced it excellent.

The reindeer men are anxious to move the herds as soon as the new reservation is established, as the herding grounds there are better and the fawning grounds more sheltered.

ANNUAL REPORT OF THE UNITED STATES PUBLIC SCHOOL AT WALES, ON BERING STRAIT.

By ARTHUR NAGOZRUK, Teacher.

This was the first time that no white teachers and missionaries were sent to this place for 27 years, and all the work was carried on by the native teachers during the year.

School.—The school term began October 22, 1917, with an enrollment of 57, which gradually increased to 73 during the month. The term ended May 31, 1918. Days school were held, 141; total enrollment, 90; average attendance, 70.

School work.—The school was opened when our people came back from different places. Since there was no assistant at the time, I divided the classes into two divisions; the advanced classes in the morning session and primary classes in the afternoon. All the children wanted to come to school at both sessions, especially the larger children; so I talked about this to the larger boys in school, that if they would only help me a little in the primary classes,

they could come in both sessions. Several boys promised that they would help me until the assistant is appointed. On November mail we heard that Antoine Ereheruk was appointed as my assistant, but he was absent from the village for three months. In the meantime Charlie Klomea and another boy had helped me. Charlie Klomea was appointed as assistant teacher later and did good work.

In general, school work, reading, writing, arithmetic, history, spelling, drawing, composition, and language were taught. All the pupils in advanced classes were taught arithmetic work individually. Each pupil works and gets as much as possible, without waiting for others. This individual work has proved to be much help for each pupil. The arithmetics were taken home on Friday afternoon and brought back to school on Monday. All the smaller children in primary classes did finely in all the work.

Attendance.—The school was well attended all through the term, and there was very little tardiness. Seven pupils in the advanced and 10 in the primary classes came to school every school day during the school term. This had never happened during my continuous work for 9 years in this school. The smaller children came regularly, unless stormy weather prevented them. Often their parents, brothers, and sisters in school brought them on stormy days.

School Republic.—The School Republic was started as usual at the opening of the school. The care of the school room and halls were in the hands of the officers, who were elected by the pupils. One officer writes the names of the sweepers on the blackboard every day, and other officers see that the coal hods are filled and kindling ready for the next morning. Every pupil takes care of his desk and sees that it is clean and that his books are in proper condition, as a citizen in a city keeps his home in good condition, and everything that belongs to him. The School Republic has proved to be a great help to the teachers in every way, as well as to the pupils.

Domestic science.—This branch of school work was under the supervision of Mrs. Nagozruk, who for two years did the same work at Shishmaref, although she was not appointed for this work. She was very much interested in this school, as well as I, in order to help our people in every way we can. The following were made during the term: Twelve aprons, 15 dozen plain handkerchiefs, 16 pairs knitted and crocheted wristlets, 9 pairs knitted and crocheted gloves, 18 pairs knitted and crocheted mittens, 3 crocheted hoods, 1 crocheted cap, 6 pairs crocheted bootees, 2 pairs knitted child's stockings, 16 baby's dresses, 4 women's dresses, 1 boy's shirt, and 20 crash towels. Some of the above work was sent to the Igloo and Noatak fairs and got prizes. Also 390 doughnuts and 1,660 biscuits were baked during the term, and the cooking was carried on all along the winter. More work would have been done in sewing and cooking if Mrs. Nagozruk had not been sick for some time. This branch of work was carried on daily in May and the first part of June to make up for the time lost in the winter. The sewing class consists of 15 girls, from 9 to 16 years old, and they are doing a fine work. At Thanksgiving Day we had a joyous dinner. Some of our young men contributed flour, sugar, tea, and deer meat for the Thanksgiving dinner. The cooking class was busy for two days, and baked biscuits and doughnuts. Before Christmas the sewing class made handkerchiefs for every child in the village.

An entertainment was given by the school at Christmas. The parents take a great pride in the ability of their children to speak in public, although some may not understand a word spoken. Even children 5 years old had verses to say which they learned in school, and that greatly encouraged their parents to send them to school.

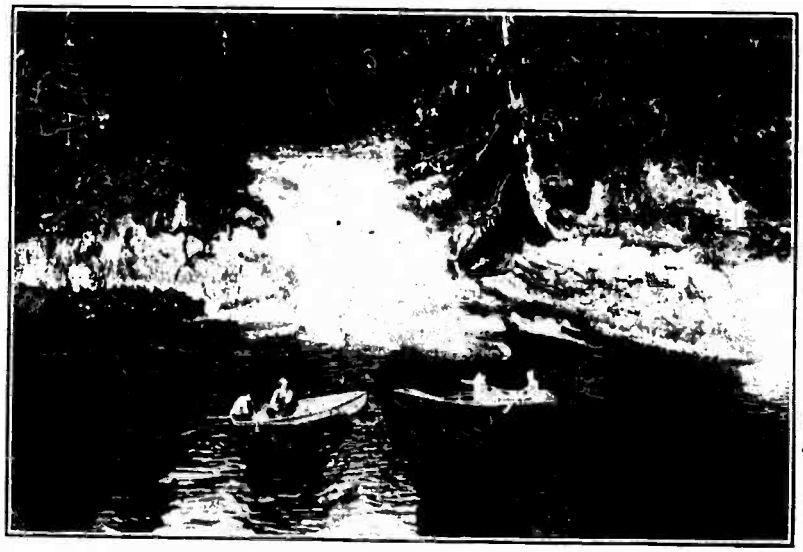
A. SUPERINTENDENT OF NORTHWESTERN DISTRICT AND DRIVERS.

B. FIRST GRADUATES, METLAKATLA SCHOOL.
One is a nurse in training at Juneau; the other is a student in the Seattle High School.

A. ESKIMOS AT CAPE PRINCE OF WALES STARTING ON A WHALE HUNT.

B. CUTTING UP A WHALE.

A. THE CAPE PRINCE OF WALES DELEGATION AT THE IGLOO REINDEER FAIR.



B. SUMMER FISHING SCENE, SOUTHEASTERN ALASKA.

A. PART OF THE WORKSHOP, SELAWIK SCHOOL, ARCTIC ALASKA.

B. FIVE OF THE LEADING OWNERS OF REINDEER IN NORTHWESTERN ALASKA.

Shop work.—No carpenter work was done in school, owing to the lack of materials to work with. Of course, some repairing was done in the shop and school building before school began. The shop was a great help to the people, as well as to the school. When the people came back from summer fishing and trading many stoves and stove pipes were made out of sheet iron. The sheet iron was brought from Nome and Teller and made into stoves here, which saved a little money. Sleds and boats were made and repaired, also many things which they could not make in their homes were made in shop. A new forge is needed in order to be of more help in making stoves, and many other things which they could make themselves instead of buying them.

Health.—The general health of the village has been especially good. There were 7 deaths and 15 births; 3 children died and 3 women. One man was smothered to death under a bank of snow by a mountain slide on March 14, and his body was found on July 16. Our baby died in December, just before Christmas.

All the houses and inns in the village were measured in cubic feet, to find the number of cubic feet for each person to breathe. The number of persons in each house or inn, the windows, the skylights, and the ventilators were counted. Only two inns were found without ventilators. Persons who have tuberculosis of the lungs were examined, and the persons who are liable to have it, by the request of Supt. Shields. There were about 40 or more consumptives, and many of them have been affected once and have been cured. After the report was made out the town council called a special meeting for all the people in the village and ordered all who are affected with tuberculosis of the lungs not to take any active part in native dances of any kind, or visit the dances if they are affected seriously. Also they were ordered to go and see the teacher for instructions how they would take care of themselves. The instructions in "How to Keep Well" were explained to them, and sputum cups were furnished, with full instructions how they should dispose of them. They were further instructed to be very careful about their children who were in school; towels and soap were furnished to school children who have homes affected with such disease, so that they could keep their hands, faces, and their clothes clean.

Town council.—The council has held its monthly meetings regularly throughout the year and they were well attended; many special meetings were called. The council work has proved to be a great help to the people as well as to the Government. The local petty troubles and differences were settled with fairness and satisfaction. The early marriage of the young people was discontinued by order of the council, and it has started marriage according to the Territorial law. Several marriage licenses in proper form were secured from the United States commissioner at Teller for young people of proper age and older people. According to the old custom of Eskimos, often girls, even young men, were forced to marry the one they did not love, which caused much family trouble. The council has ordered that no such thing will be allowed in the village any more, and that any couple who wish to get married should obtain a proper marriage license first.

Another thing taken up by the council was that when a man died his brothers and relatives usually took nearly all his property and left almost nothing for his wife and children. This was a very old custom, which has not been practiced that I know of for the last 10 years, but it may happen sometime; so council ordered that no such thing will be allowed. Everything that a man owns should be given to his wife and children.

Dances were regulated and a fixed time was allowed. As it was, dances were sometimes very late and school children were tardy; therefore the council ordered that all school children should not be allowed in such dances later than 9 o'clock in the evenings; and they plan not to allow them at all the coming school year.

The annual village cleaning has been done; each able-bodied male adult has contributed two days' labor or paid $2 to the village fund. The water supply has been kept opened by order of the council all winter by those who were absent at the time of village cleaning last year.

Sanitation.—Care has at all times been exercised in looking after the cleanliness of all the school children who came to school. The children came to school with clean faces, hands, ears, necks, and with the hair combed. The health officers of the School Republic inspected the children at the opening of school every morning, and if a child was found with dirty hands, face, ears, and neck it was sent home to clean up.

The sanitary condition of the village has much improved in every way. Soap was used in washing clothes of all the people. Everything liable to decay was buried and all ponds of water drained. The water supply has been kept in sanitary condition.

Reindeer.—I left here November 13 for the herds, to attend to the annual counting and separating the deer, and arrived at the corral on the 14th. Four herds came near the corral the following day, and the herds were kept separate. The counting and separating was done in a week. In the evenings meetings were held, discussing the reindeer matters, and disputes were settled. I came back to the village November 23 and made the reindeer reports.

A full delegation was sent to the Igloo fair from this station, but I could not go with them as my wife was not well at the time. The boys came from the fair with full satisfaction. Mr. Arthur Shields visited us in April and stayed with us nearly a week. While he was here we had a reindeer meeting, discussing the Reindeer Men's Association, which was organized at the fair and the local clubs which are to be organized at each station. On the first part of May the rules and regulations were sent, and on May 10 they were explained to the reindeer men and owners who were invited to the meeting. The election was held at the same meeting for the officers of the local reindeer club. The membership increased at the next meeting, several owners joining the club.

Native support.—Hunting for seals and walrus and fishing are the principal means of support. Seal hunting was successful all through the winter, and about 24 polar bears were killed. One whale was bombed and killed, but on account of a sudden change of wind the ice drifted before they could cut it up and only the fluke was secured. The walrus catch was far shorter than usual and the long-continued stormy weather prevented the spring hunting. Less than 40 walrus were secured. The necessary amount of meat has not been stored away for the winter in the village. The fur trapping was fair, but no complete record of number and income was reported. The reindeer furnished clothing and food; the surplus skins were sold. The sale of deer meat was smaller than usual; 167 white foxes, 60 red foxes, 2 cross foxes, 2 miuks, and 10 lynxes sold for $4,690. No report of fur catch was received from one herd. I am sure that the boys in five herds must have earned by trapping alone more than $5,000.

Mission.—No missionary has taken charge of the mission work. Fuel and light has been sent in for the church. Seven of the members were elected as the church committee and took charge of the janitor work and selected the leaders for the meetings. Two services were held every week and well attended.

Village improvements.—Last year the Wales Cooperative Store was started with a small stock. Former stores failed because they were not managed right. Many meetings were held in order to explain the main object of starting a store as follows: First, there has always been shortage of flour, sugar, and other articles of food. Second, much time has been lost by going to Teller, Nome, and other places to buy a sack of flour, sugar, or other articles; often from 7 to 10 days of good hunting. The time would have been saved for hunting if such food could be bought from the local store. Third, the store would be a great help for the village as well as to the stockholders by handling furs, seal skins, mukluks, and everything that the store can sell for cash.

The old mission building was repaired at the expense of the store. The building was raised and a new foundation built; new roofing paper put on one side, windows repaired; outside was painted and the signs were printed in front; a partition was put inside and painted. One side was used as a storeroom for the mission. Also a counter and shelves were made. The store has been successful for the first year. We should now have a cold-storage plant.

Many improvements of homes would have been made if building materials were obtainable. Some of our young men have earned enough to build better homes, but with the high cost of lumber and freight it is impossible for them to get the materials. Wood is hard to get here at the present time and to get a sled of wood is a day's work, from 6 to 10 miles, which does not last a week for fuel. Often for several days, even for a week, it is too storming to go to get wood.

King Island.—Last February 13 of our men drifted off on the ice and got to land at King Island. Eleven of them walked back from the island and two were left there, who were not feeling well and could not keep up with the others. The 11 men walked about more than 50 miles in a day and night; the ice was rough and the snow was soft and deep all the way. Nearly all the men have families and while they were away some of their families were short of food and were cared for from the school's destitution supplies until they came back.

In about the middle of June 17 men from King Island were drifted here by the storm. They were hunting walrus out from the island, and the fog came before they went back. They missed the island on the way back. There were 6 kyacks and 11 men in an oomiak. They tried to locate the island for two days and nights, and they had to come over to this side on the ice with their kyacks and oomiak. Many of the men visited our schoolhouse during their stay here about two weeks and saw our schoolroom, desks, books, and other things that we used for the education of the children. They strongly wish that a school be established on the island, as their children are growing up uneducated. Several of them came over to the schoolhouse and made many inquiries. They know their people well, and they told me that on King Island there are 34 men, 32 women, and 57 children; total, 123. Out of 57 children about 40 were of school age, 17 under school age, and some of them will be old enough to come to school in a year or two. Two of our men stayed there for nearly four months and reported that the people there have kept the days of the weeks and months right during their stay, also they have held meetings every Sunday. But the only question is about the location of the building. As to the water, they said that there is a stream or spring near by, where they get water which is open until December or January. They said that if a tank or box were set in, it would keep open much longer.

ANNUAL REPORT OF THE UNITED STATES PUBLIC SCHOOL AT PORT MOLLER, ON THE ALASKA PENINSULA.

By WALTER G. CULVER, Teacher.

This spring sees the close of the second term of school at this station. Reviewing this year's school work we note with satisfaction that the children have made better progress along all lines than in the year previous.

This place is an ideal location for a large native village. The excellent supply of salmon, seal, game birds, caribou, and other native foods, also the large demand for native labor at the canneries during canning season, combine to make this locality a more desirable home for them than the cities of the north, where the influence of the whites is not for their betterment.

The past year's income from labor, fishing, sewing, and trapping amounted to an average of about $275 to a family. One large, new, four-room frame house was built this year. At present all houses are frame and above ground. Both men and women are industrious. All natives with the exception of one blind man and his little adopted girls are self-supporting. While those men trapping near the village did not have large catches, those who trapped up Nelson River did real well, catching as many as 38 or 40 red foxes. A trader, coming from Nome by dog team, paid as high as $20 for their skins. The men are slowly getting clear of debt with the local trader, who, by keeping them under obligations to him, has been forcing them to sell their furs to him at his own price. Since coming to this locality I have constantly advised them to get out of debt in order that they may dispose of their furs to people who will pay them more money. This year I am taking the catches of two men to the Seattle office to be sold. As these natives know I am not returning to this station it shows that I have won their confidence, as the money from the sale will be returned to them through other channels. Another thing I have been trying to interest these people in is a cooperative store, and a third thing is their salting salmon for the market. Last fall a few of the younger men put their money together, and believing that the price of provisions was bound to rise, bought up nearly $100 worth, afterward selling same at a slight raise in price and realizing about $17 profit. This little experiment worked out so well that they are anxious to start a store of their own. They are also anxious to salt salmon for the market.

Sanitation and hygiene.—The condition of both village and people is very good. As all houses are frame, they are much drier and more easily kept clean. Although we have had to send children home a number of times because of dirty clothing, their general appearance has been very good. I have made it a point to visit each house often, and as the women do not like to have the teacher sit down in a dirty house, they have made special efforts to keep them clean and neat. They have also been encouraged to visit the school room and teacher's dwelling. Mrs. Culver and I have tried to set them a good example on the care of their houses both inside and out. Last fall a number of holes were dug, and during the winter the garbage was thrown into them. This subject has been taught in the school room and at the village gatherings. I gave each child a toothbrush, and brushing of the teeth was made a part of the daily program. Both young and old thoroughly understand the different ways in which disease is spread. All houses have an opening for ventilation.

Medical aid.—There was not the sickness in this locality that there was last year. Medical attention was given 203 times. An epidemic of itch broke out, but yielded readily to proper treatment. There were three deaths and four births this last year.

Manual training.—The class in manual training was composed of four boys. This class was one of the most important of all. Only practical instruction was given. Each boy was allowed to choose what he wished to make, and after selection was made I saw to it that the tools employed were used in the proper way. The principle employed in the teaching of this class was for each pupil to learn the correct use of the different tools. In this way, when they wish to make any particular thing, they are able to go ahead and do it. Each was taught to solder. Sleds, skils, boats, kiaks, stoves, box traps, kites, bows, and arrows were made. Two boys made little power boats. This was done by making a toy boat and by taking an old alarm clock and soldering on a shaft and propeller for motor power. Great interest was taken in this class at all times, to the extent that they worked ofttimes on Saturday of their own accord.

Sewing.—Forty articles were made in the sewing class, including handkerchiefs, underskirts, with waists, bloomers, towels, work aprons, fancy aprons, holders (for use around the stove), caps for wear in the cooking class, fancy aprons, and a small pieced quilt. Two pairs of yarn mittens were crocheted and one wool cap. Six towels were made for school use. The girls did very well in sewing, considering their ages. They learned to do very nice feather stitching, and this was used much as trimming for the other garments made. They also did darning and patching.

Cooking.—Much interest was taken in the cooking class. Bread, biscuits, steamed oatmeal, fried oatmeal, dried fruits, beans, rice, pie, and eggless cake, as well as tea and coffee, were made. The children often get cake and pies in the summer time at the canneries and wanted very much to learn how to make them. In their own homes they use little butter, and no fresh or canned eggs in winter, so recipes were made up that contained no eggs, in order that they might be able to make these things at home. They succeeded very well. Cook books were made containing the recipes they learned to use.

Reading.—Reading has been taught slowly and thoroughly. Eskimo children learn to read very quickly, but a teacher has to be careful or the pupils will not learn the meaning of the words and sentences they study. I have found that by translating English to Eskimo and Eskimo to English is the most effective way of teaching this study.

Spelling.—No textbook was used. Each lesson was made a spelling lesson. The old-fashioned "spelling-down" matches were very much enjoyed by the pupils and had the desired effect.

Arithmetic.—This subject seems to be a stumbling block to the native children for the first year or so, but patience and tact on the teacher's part in order to keep the children from becoming discouraged will eventually overcome the difficulty. Once the fundamentals are grasped, they make good progress. The only advanced pupil finished division and multiplication to 9, also practical problems in addition and subtraction. The toy money sent with our supplies was very helpful and practical in teaching this subject.

Writing, drawing and painting.—These three subjects come naturally easy to the native children. Although their first efforts are very crude, their perseverance in this line of work makes them quite efficient. They are quick to copy anything they see. The work along this line compares favorably with the average white child.

Geography.—The Eskimos composing this village have migrated from all parts of the north, and therefore the children are interested in studying and locating the different places their parents came from. Much interest is taken in this

World War, and they never tire of studying the different maps of Europe showing the seat of the great conflict. Many excellent maps of Alaska, North America, and Europe have been drawn.

History.—Owing to the fact that there was only one advanced pupil, this subject received less attention. The history of Alaska and the United States was taught, and maps of Alaska, North America, and Europe were drawn.

English talking.—The English language only was used in and around the schoolhouse except for explanation purposes. The children all became very efficient; in fact, during the last two months of school I did not know of one word of Eskimo being used except at my request. This result was largely due to a contest I started among the children. In this contest the pupil using the least Eskimo in and around the school was to receive 50 cents; the second least, 25 cents; and the third least, 15 cents. These rewards were given at the end of the term. Each time a child used Eskimo one point was marked against him. It is a strange fact that the pupil who was dullest in her studies received the first prize. It was no uncommon thing to hear the children using English in their playing after school and on Saturdays and Sundays. Although the contest is closed and the rewards given, the spirit of the contest still lives and they are trying to pick up new words which they hear, as well as using the ones they have learned.

School Republic.—Although this was the first year of the School Republic, the rule of the children in the classroom was a success from the beginning. The officers consisted of a president, vice president, secretary, and policeman. The president was also judge, and the policeman, truant officer. The morning opening exercises were presided over by the president. Election of officers was held every month, in order that all might have the experience of holding office. This method of governing the classroom is by far the best of any I have ever known. The making and executing of their own laws taught them the why and wherefore of the democratic form of government. When any of the school laws were broken, the defendant was arrested by the policeman, brought before the judge, witnesses were called, and the case was tried. Punishment for minor offenses was usually standing in the corner. In no case was authority taken advantage of, and all business was attended to with seriousness. In only one case was the ruling of the court disobeyed, and the offending pupil was suspended until such time as she was willing to cooperate with the student body. The pupil truant officer was the solution of the problem of tardiness and delinquency.

Red Cross.—As a result of an explanation of the Red Cross work by Supt. Miller, our village paid into the Red Cross fund the sum of $27. Many natives had not returned from their winter trapping grounds, or doubtless the amount would have been much larger. The remark of one native showed the appreciation we have been striving to make them feel; it was: "Government help us. He send school teacher. We want help Government fighting man if he sick."

Work with adults.—A special effort has been made to understand the thoughts and ways of these people. Four hundred and thirty-eight visits were made to homes.

After the schooner *Eunice* brought the Government freight last fall (Oct. 3, 1917), a combined carpenter shop, storehouse, and coal house 20 by 24 feet was built. The carpenter shop was open at all times except Sundays and during the manual training periods to the adults of the village. This opportunity was taken advantage of by all, and much work was done on ivory carving, sleds, stoves, kiaks, etc.

Village gatherings.—Exercises appropriate to the occasion were held in the schoolroom Christmas eve by the children. Adults and children alike enjoyed the Christmas tree, the Santa Claus, and the program very much.

Village gatherings were held in the schoolroom once a week. At these gatherings I gave talks regarding the leading of better lives, the progress of the war, the duty of each person to his country, conservation of food, native industries, sanitation and hygiene, principles of citizenship, science and invention, and other topics helpful and interesting to the natives.

I am sorry to report that the natives this year revived their old-time dances. When I first heard of their plans for these I did my very best to discourage the old expensive custom which they have done without for so many years. My efforts met with hostility, and some of the natives became really angry. I say "expensive" because at these dances a native must give away anything and everything he owns, if it is requested of him. For weeks before these dances were held the natives gathered together every night to practice their songs and dances, thus losing much valuable time from their trap lines and keeping the children up until the small hours of the morning, leaving them unfit for school work. For weeks before the big dances took place, the children could think and talk of nothing but *dance*.

Agriculture.—At my request both seeds and plants were sent from the Alaska Agricultural Experiment Station, at Sitka, and by my father in Oregon. The plants, with the exception of one Himalaya blackberry plant, died in transit. The garden we planted was a failure because of the cold, wet summer.

Observance of law.—We still have the problem of liquor getting into the hands of our natives. One white trader in this locality, in spite of the new prohibition law, distributes liquor for trade purposes. On Thanksgiving Day one native became intoxicated, and had it not been for the quick work of the chief herder, sent here to take charge of the expected reindeer herd, a murder would have been committed. It seems to me that it is time that an efficient officer was sent here to stop the distribution of liquor in this locality.

It has been reported to me from a number of sources which I hold to be reliable that both natives and whites are slaughtering caribou by the dozens, in the fall, for the purpose of bait for trapping. Also that certain parties on the Pacific side in Balboa Bay are killing caribou by the boat load and selling the carcasses at Sand Point and Unga. This wanton destruction of meat will, in a short time, put an end to the supply of meat here, which is so important to the natives.

Doing their bit.—Because of scarcity of dog feed, the natives this spring have been feeding their dogs on flour. When the shortage of flour, as well as other foodstuffs, was explained to them, they agreed that only the heads of families should keep a dog team. The single men and boys gave their best dogs to the married men, and all the old and lazy dogs were killed. Up to March 20 more than 20 dogs were killed. This shows that these people are willing to do their duty as they have it explained to them.

In reviewing our work of the last three years, Mrs. Culver and I can see a great change in the appearance of the village and people. We can also see much improvement in the habits, morals, health, sanitary and hygienic conditions of both old and young. It must be remembered that the process of raising these people from their old habits and customs is a slow one, and any improvement, especially among the older people, is very encouraging. The hope of the future rests with the younger generation.

It is not without regret that we are leaving this field of work, and we hope that through our efforts we have been able to establish a good foundation.

ANNUAL REPORT OF THE UNITED STATES PUBLIC SCHOOL AT KAKE, IN SOUTHEASTERN ALASKA.

By CHARLES E. SYDNOR, Teacher.

Kake is a prosperous looking village. The first impression one receives on landing here is the town's tidiness. The houses are plain, but clean. there are no "ramshackle huts," and "lean-tos," only substantial homes. Out in the bay, lying at anchor, are the natives' boats, varying in size from the small 18-foot trolling launches to the large 50-foot seining boats. Drawn up on the beach are numerous rowboats, skiffs, and native canoes. These canoes are still liked and used, for they are light and swift. They are made by hollowing out a tree, then springing its sides out to shape. In the old days they made them large enough to hold as many as 50 warriors.

Taking a walk along the boardwalk that runs the length of the town one will meet well-dressed men and women, dressed the same as you or I. Some of the older people still cling to the old customs of dress and habits, but the younger generation is fast growing away from the tribal traditions and conforming to the new conditions in which they find themselves.

The village has a population of more than 300, but has an average of about 200 for the five months October to February. By the 1st of June the town is deserted, and remains so until the last of August, when a few of the old people return; the younger ones do not get back until October.

The occupations vary; trolling for king salmon begins in May, and at that time gardens are planted. The town is so situated that there is not much tillable land around the houses; so most of the gardens are planted along the shores of Rocky Pass. Each family has its plat of ground and uses it year after year.

The 1st of July starts the seining; at this time one will hear of nothing but fish. They dream fish, they think fish, they see fish, and the best of all, they catch fish by the thousands. Most of the men work on the boats, a few in the cannery. The women work in the cannery for the most part, but a few hand-troll while the men seine. The women who work at the cannery make from $100 to $300 for the summer's work. The men make from $300 to $1,500.

Usually the work in the canneries is finished by the last of August, and the natives spend the first part of September in putting up their own supply of smoked fish. The last few years there have been a number who have "mild cured" salmon for their own use, but as a rule they prefer the old time smoked salmon. They string this smoked salmon and have it hanging on the rafters of their homes. Every day or so in winter the housewife gets down several pieces and carries them down to the beach. Their favorite place is on a large reef just off from the schoolhouse. When the tide is out they find a little hollow in the rocks and put the fish in it, then pile stones on top. A day or two later they come down and uncover their fish; the ocean water has given it just the right amount of salt and soaked it up nicely. After the winter supply of fish has been stored away, they gather their garden truck, mostly potatoes and rutabagas, a few carrots, turnips, and onions. By this time it is the first of October and the people are beginning to return to the village. Years ago a missionary here started the idea that they should clean up around their houses before the snow fell—a custom which has been continued, though he left here many years ago. From the middle of October to the middle of November, building and repairing houses occupy their time. This year new houses were built. The teacher sent for a number of plans of two and three room houses, and showed them with good result. In place of the square barn-like house, a more

modern structure appeared, much to the gratification of the owners, as they say "it look like picture." Early in the fall the natives got together and ordered lumber from Juneau. It totaled $2,000 for lumber alone; windows, doors, etc., were extra. Of all the new houses built, not one was a tribal affair.

By the 1st of October school was well underway. Games were introduced, such as hand-ball, shinny, jump-for-down, new games of marbles, beckons wanted, run-sheep-run, and many other games that boys in the States commonly play. Football made a big hit; the teacher coached the school team and a former Clemawa man coached the town team. Two games were played, the school inning the first game, 14–0. The town team, composed of men, did not take their defeat any too gracefully, and as a result, the marshal refereed the second fray. The men outweighed the boys, and it told in the last quarter, when they finally got a touchdown. The schoolboys depended on trick plays and forward passes, while the town team attempted nothing but line plunges, except for a few disastrous forward passes. The game ended with the teacher laid out, and the score standing 7–0 in favor of the town team. The native has yet to learn to be a sportsman, also the value of "team play." Not alone in athletics, but in all matters; they are too independent, and until they learn to act as a unit their progress will be slow. The teacher is using every available means to bring about cooperation in all their affairs, and considers games the quickest and surest means of bringing this truth to the younger generation.

With the interest in games, came a greater registration enrollment, the greatest registration that this school has ever had—a total of 115. There were not enough seats to go round, so old benches were used; when these gave out, night school was started for the older ones. But night school was not the solution to the problem, as they are just like other children, they do not wish to come at night. What is needed is another room, more seats, and another teacher.

Geography, arithmetic, and reading were the most popular subjects. Spelling came out with a bound when the method of allowing the children to correct each other's work was started. Before this it had been a drudgery. After the novelty of this had worn off the system of prizes was instituted. The district superintendent had sent down some Perry pictures to be given away. In place of just giving them away the teacher required that the student get 100 per cent for three consecutive days in spelling, and then a small picture was given him. For one week's correct spelling a large picture was given. Never were papers more zealously corrected. Undotted i's, uncrossed t's, and dots missing after abbreviations constituted irretrievable mistakes, while scrawly letters that might be taken for almost anything were utterly hopeless. The year ended with only a very few who did not possess at least one small picture, while others had quite a gallery of them.

The teacher's efforts this year were chiefly to inculcate into the minds of the children that school and studying were to be pleasures and not drudgeries; that happiness, goodness, and fun were all to be found in school work if they choose to look for it. Geography was made a game, one of the children being the teacher, and so expert did the older ones become in this that the teacher was able to conduct another recitation, while the third and fourth grades had their geography.

Arithmetic seems to have a kind of fascination for them; they look upon it as something of a trick, especially so, with division. The native method of dividing was to give one dollar or one fish, or whatever had to be divided, at a time to the number who were to receive. This was long and tedious; to divide the number of dollars by the number of men and get the correct amount in a very

few minutes was wonderful, too wonderful to believe until they proved it in their native fashion.

An organ was sent this year, and every morning for 20 minutes we had singing. The reason for having it first was that it brought all the children to school in time, as they did not wish to miss any of the music. "Long, Long Ago" and "Old Black Joe" vied with each other in popularity, and had to be sung each morning. The lighter and faster pieces, such as "Dixie," were liked by a few, but most of them preferred the slower and rather melancholy type of song.

Thanksgiving Day is a regular town reunion. Families who have been out all summer and part of the fall return in time for the day. The women busy themselves in the morning cooking and the men in preparing the tables in the church or Salvation Army hall. Everyone is invited who happens to be in town. A special table is set for the white people, at which knives, forks, and spoons are provided; the others are supposed to bring their own. This they do, and after the meal is done they fill the flour sacks which they have brought with the fragments of the meal. It was about this time that Mr. Hoover's appeal to save food reached us, with Food Administration cards. After a canvass of the village and explaining the purpose of these cards, there was not a home which did not agree to the conditions, and it was a little amusing in some cases to see a Food Administration card next to a totam in the window of the same house.

The day before Thanksgiving snow fell, and it was not until the last day of April that we saw the ground again. It is during this period that the natives have their parties and get-together meetings; the rest of the year they are scattered.

Natives do things by seasons; they eat clams at only certain times of the year; they attend church during the winter, give parties in certain months, and so on. Music seems to appeal to them in winter, and they have maintained a brass band for years. This winter an orchestra was started, which was very creditable. The teacher started a men's glee club; some of the natives have very good voices.

At Christmas the town decided to have a tree, as usual. Heretofore there has always been some feeling that someone was "left out"; so this year, to avoid that, the teacher took a careful census of every man, woman, and child in the village. A meeting was held in one of the houses; it was dragging and evidently only the usual $75 or $80 was going to be raised. So the teacher decided to stir things up, which he did by a vigorous speech and as large a contribution as he could afford. As soon as the interpreter made them understand what the teacher had said they responded splendidly, and in a few minutes we had piled on the table $354. Previously $97 was the high-water mark, of which $40 was given by the whites. We had a great Christmas; the tree was brought into town on the shoulders of the young fellows, followed by the band, with the rest of the town forming a procession and taking it to church. Then it was put up, the tree decorated, and loaded with presents. The committee bought chiefly useful presents, such as shirts, ties, handkerchiefs, socks, stockings, dress goods, and a few toys, apples, nuts, oranges, and candies. We have no destitute in the village, but there are a few who find it hard to make ends meet, and these were especially remembered with presents. Everyone agreed it was the best Christmas they had ever had. No ill feeling was to be seen anywhere, and it was truly, "Peace on earth and good will to men" in our little town.

Very few of the natives went out to trap this winter, as they had done well at fishing the previous summer. But the last of February found a number of

them going out to get piles. Over $10,000 in piles was contracted for by the Kake natives. This meant a great deal to them, as it meant new engines and better boats and new boats. There are but very few families who do not have a power boat of some kind, ranging in value from $100 to $3,000.

There are several men who are exceedingly skillful in building boats. One of them, Edmund Ketchtiyet, who had ordered lumber from Seattle to build a 50-foot boat, found that he could only get a little of what he wanted. No material for the ribs or bow or stern was sent. He shouldered his axe and went into the woods, and at nightfall he had found a tree with the proper curve for the bow and two for the stern. For ribs he chose some good yellow cedar and split it by hand. Few white men would have had the patience to do what that Indian did.

It was in the last part of February that the teacher took charge of the Red Cross work. Up to this time there were only 16 members, and of these only one or two were natives. As the people were leaving rapidly, something had to be done, and so a mass meeting was held with a patriotic program. An effort was made to make the natives understand just what the Red Cross is endeavoring to do. On the third night following this a meeting was held at the schoolhouse, $135 was raised and 50 new members were added. Enough interest was aroused by this time so that another meeting was called a little later and an organization perfected as an auxiliary to the Juneau chapter. Yarn was sent for and knitting classes started, with the result that many pairs of socks have already been sent to Juneau. We were a bit handicapped in getting money, as the women had just taken in $320 at a basket social, which they are going to spend for civic improvements, but they gave $25 of it to the Red Cross. The younger men also sent $11.50 for a baseball fund to the boys at the front.

Late in December the teacher invited the town council to supper at the schoolhouse. It was the first time in the history of the town that its representatives had ever eaten at the Government teacher's table. It was only after six dozen biscuits, gallons of soup, and other edibles had been consumed that they lost their formality and a very pleasant evening was spent with the 12 council members. Village improvements and the natives' welfare were discussed and games were played.

Several years ago a few of the men started a store, but it was not under the supervision of the teacher, and as it had no regular storekeeper it soon fell behind. At the beginning of this year the teacher got these men together and suggested that they straighten up the business. The books were gone over and accounts cleaned up, and the collections made seemed quite encouraging. Then an inventory was taken, more stock was sold, and the store continued its business. At a stockholder's meeting held the last of February a 3 per cent dividend was declared. This shows that with a very little help they can make a very creditable showing in business.

During the winter when the weather was so bad that it was impossible to do anything but stay indoors, the young fellows began to hang around a poolroom that was opened this year, and many of them began to use tobacco and gamble. The teacher said nothing, but ordered several games, such as ping-pong, Mrs. Wiggins, finch, dominoes, etc., gathered together a number of magazines and books, and asked the boys to come up and spend the evenings. A few came and they told the others, and soon it took three of us to keep things going, for the house was full. The teacher believes that this was the greatest good done. It was impossible to have them oftener than once a week. A room for games and reading should be open each night for them, with proper lighting and heating facilities.

The work among the women was carried on principally through the woman's organization. The teacher's wife showed many who took interest in the work how to cut out patterns and loaned many to them. In school the girls were taught the rudiments of sewing, making handkerchiefs, aprons, etc. The sewing machine sent this year is much appreciated; more than 100 garments have been made with its help. The natives are buying their own machines now and many homes have them.

Instruction in manual training for the boys was impossible, as the school does not boast enough usable tools. Perhaps it is just as well, for the boys receive much practical training in helping their fathers build boats and houses. If it were possible to give them a complete course it would be different, but a mere smattering is a waste of time under the conditions here. In place of actual manual training, book work was given, showing the more advanced ones how to lay out plans, read drawings, figure dimensions, etc., and I have seen good results in actual work.

In the spring, with the natives coming and going, it was very hard to do any more Red Cross work, but we held a basket social during the week devoted to the Red Cross drive, at which we took in $226; $61.75 was added in contributions, and later in the week $217 was collected at the cannery, making the total for Red Cross week $504.75. In the meantime the membership has been swelling slowly, and now we have 125 members.

The teacher and missionary were appointed to sell War Saving certificates and to date have sold $2,625. None of the first or second Liberty bonds were brought here, but $350 worth was taken in the third. Counting all the various patriotic enterprises undertaken by our little town, something over $3,616.25 has been given or subscribed. This amount, in proportion to the population, would put to shame many a large city. At one of our mass meetings a letter was sent to President Wilson, assuring him of our loyal support. Several weeks later an acknowledgement came; the natives appreciated very much being recognized by the highest official of our Nation.

ANNUAL REPORT OF THE UNITED STATES PUBLIC SCHOOL AT SITKA, IN SOUTHEASTERN ALASKA.

By Mrs. Elizabeth P. Brady, Teacher.

School work.—Great stress has been laid upon the study of local geography. Every house in the village has been located upon an outline map. This was followed by a map of the town of Sitka, which resulted in a study of interdependence, comparison of surroundings, and emphasized needed improvements. English is now much better understood and spoken much more correctly. Stories are reproduced in a lighter way and with pleasure. Questions are asked that show an eagerness for broadening information. Kipling's "Just So Stories," parts of "Alice in Wonderland," and "Red Cross Stories" have been enjoyed. Stories of Greek mythology have brought out some Thlingit myths.

In arithmetic, problem work has improved, all work is done more neatly, and drill work has become more rapid and accurate.

In reading, understanding of the text has improved, and this results in better expression. Dramatization has been a great factor in this.

Study of hygiene has given immediate results in personal cleanliness and better habits. The latest gain was the appearance of pocket combs after lessons on care of the hair and danger of disease from use of a common comb.

Spelling has become interesting, and dictionary work was taken up in the third and fourth grades, with the following contribution from an 11-year-old boy. He set aside a page in his blank book for words beginning with each letter of the alphabet.

Nature study has been stimulated by contribution of material by the pupils.

There has been little weather suitable for outdoor games. Folk dances and games have been used indoors. Baskets were put up in one of the schoolrooms, and basket ball was played at the noon hour and after school. A folding pool table loaned by one of the pupils for two weeks was set up in the other schoolroom. We need a pavilion fitted with playground apparatus, where the children may play in the fresh air and yet be protected from rain and snow.

The children have been greatly interested in the history and authors of some of our patriotic songs. They have learned America, the Star Spangled Banner, Columbia, the Gem of the Ocean, Loyalty, Over There, and the Battle Hymn of the Republic. The negro plantation melodies find a responsive chord in the hearts of these school children.

Industrial work.—For all the industrial classes an effort was made to formulate courses that could be worked out with the present equipment and result in the most practical benefit in the homes. Notebooks were kept by the pupils in which were recorded the steps taken.

In cooking, yeast white bread, rye, rolled-oat bread, corn bread, rice bread, ginger cookies, rolled-oat cookies, war-time cake, puffed-rice candy, cranberry jam, gooseberry conserve, cocoa, and tea were made. Practical applications of the housekeeping lessons were made in the care of the school kitchen, sewing room, and classrooms. Most of the lessons in cooking were given at the home of the teacher, for the oven at the schoolhouse is not dependable.

Agriculture has been largely theoretical. A few potatoes were left in the school garden, and these were dug in October. Seeds were distributed, preparation of soils and ways of planting were studied, but school closed before planting time.

Health.—There has been no epidemic, but there were several very painful illnesses and nine deaths. Miss Gibson's visit was timely, for she was here to attend to several critical cases. During her treatment of those cases it was realized most fully that a small hospital was needed in this village. The people appreciate what the Bureau of Education is doing in its medical work and they wish to cooperate. As soon as something definite regarding cost of building, equipment, and plans is placed before them they will act upon this matter.

Community work.—There has been an effort to extend the usefulness of the school as much as possible. Much house-to-house visiting has been done. A trained nurse who was visiting in Sitka kindly consented to talk to the mothers on the care of babies. She emphasized the need of cleanliness, care of eyes, ears, nose, throat, and teeth, and of regular and properly prepared meals.

Parents have not taken kindly to industrial work. They wanted their children taught what is in books. To overcome this the mothers were invited to the schoolhouse, and while refreshments prepared by the girls were being served the plans for sewing, cooking, and woodwork were outlined.

The conservation-of-food campaign that was held in the autumn, the school was able to fill a need in the village. The problem of using substitutes and getting satisfactory results was a serious one. The women were invited to come to the schoolhouse. The making of war breads and cakes was demonstrated; receipts and directions were distributed.

The school has endeavored to foster patriotism. On Alaska Day an evening meeting was held. Patriotic songs were sung. The relation of Alaska to the world struggle was the theme of the talk by the mayor of the town. At this meeting was aroused the interest in bonds, which the natives bought so freely.

Junior Red Cross.—A Junior Red Cross was organized in the school. The pupils elected officers from their own number and had their first experience in conducting meetings. They made two layettes, both boys and girls doing the sewing.

Red Cross, War Savings, Bonds.—The native people responded well when they were asked to organize a Red Cross auxiliary, 148 becoming members; of these 28 subscribed for the Red Cross Magazine. From membership fees and entertainments they raised $480. When a request came from Juneau for moccasins, the women gathered in the sewing room of the schoolhouse and made them. The natives have been generous contributors whenever a Red Cross call has been presented to them. During the drive $100 was the result of house-to-house visits in the native village. No one was ungracious to the collectors. They gave a dance which netted over $100, and they spent their money freely at the carnival which closed the week's drive. They have pledged $50 per month to the fund while they are engaged in the summer fishing, which takes many of them away from the town. Two thousand eight hundred and fifty dollars worth of bonds have been purchased. One is owned by a pupil of the school; two have War Savings certificates; and 17 Thrift Stamps have been purchased, with the hope of adding as the money shall be earned.

The sewing room of the school was used by the native Red Cross auxiliary for their workroom. The schoolhouse was thrown open one day after school closed for an ice-cream sale given by the native missionary society.

A night school was organized for the purpose of holding classes in English and civil government. The attendance was small, but the time was well spent in that those who were able to come really felt a need.

The dramitization of Cinderella and the Three Bears at Christmas time was a great success. The Alaska Native Brotherhood furnished a treat for the children that was in keeping with war-time regulations.

On Washington's birthday all the schools in the town united in giving a patriotic program. A little play, "Washington's Birthday," was given very successfully by the native children.

The Alaska Native Brotherhood has constructed a fine hall on the water front near the center of the village, and it is here that cottagers and the people of the village assemble for their meetings and good times.

The large communal houses in the village are almost invariably tribal, and as such are open to one and all of the tribe, all sharing the expense or ignoring it, as the case may be. In many of the homes one finds as many as five families. The main floor is generally used only for celebrations, the second floor being divided into sleeping quarters, while narrow lean-to sections are provided for the cooking and storerooms. If the village town site could be properly surveyed with reference to improvement along cottage lines, and the land blocked out for the various families as nearly as possible in the sections where the tribal houses now stand, and this plan submitted to the village through a representative group of the people, it would give them some basis on which to work. The natives are extremely responsive to suggestion, and when they see the advantage they themselves will gain are eager to secure the desired object.

Many of our natives received large returns for their labor last summer. Some have been frugal and saved by investing in Liberty bonds; others have

bought gas engines and paid old debts. With the increased means some former luxuries have come to be necessities. The great advance in the cost of food and clothing has consumed much of the large earnings.

It is encouraging to see the new life that has come to Sitka during the past year. It means work and progress for the natives. The Sitka sawmill has been working almost continuously all winter and spring, the first time it has been operated in over two years. The principal labor is native, the foreman being Peter Simpson, a cottager. The Booth Fisheries doubled the size of their cold-storage plant, and that has given employment to a number of natives. This spring the Pyramid Packing Co. put up a one-line cannery on a very complete and well-built scale. Many of the workmen were natives. They will also fish for the cannery during the coming fishing season, while many of the women will work in the cannery. Many of the natives are under agreement to return to other canneries which have advanced them money for engines and boats.

A clam and other sea-food cannery was started here on a smaller scale. This has given employment to several men and women rather regularly all winter. About 10 new fishing boats have been constructed here by natives this season, and this year 10 large seine boats will go from Sitka and about 65 smaller craft. All these activities emphasize the need for industrial training. Trained carpenters, masons, blacksmiths, and mechanics receive better wages; the natives see this and want the necessary training.

ANNUAL REPORT OF THE UNITED STATES PUBLIC SCHOOL AT JUNEAU, IN SOUTHEASTERN ALASKA.

By Mrs. Isabel A. Gilman, Teacher.

General conditions.—The natives of Juneau are prosperous, there being abundant opportunity for work in the vicinity. In winter the mines offer employdant at $90 a month; in summer the numerous canneries and packing outfits in southeast Alaska use native help that includes entire families. There are several good carpenters and boat builders in the village whose services are in demand. The women and girls make considerable revenue from the sale of beadwork and baskets. As a whole the natives of Juneau are industrious, healthy, comfortably housed, and fairly well versed in the ways of civilization. They are also thoroughly alive to the needs of their village. The village, being pile-built, is underswept by tides twice a day. This affords easy means of securing fuel. Logs are drifted home and left safely anchored on a sandy beach at low tide; here they are sawed and split into stove wood. There is also safe and easy anchorage for boats of all sizes. About 21 feet of snow fell during the winter. When all city streets were obstructed and dangerous for a period of several months, the native town and the main avenue before it were comparatively clean.

The greatest needs of the people at present are a city drinking water supply, a public hall for athletic sports, and literary meetings during the severe weather.

Course of instruction.—Four grades have been maintained throughout the year, and the following subjects taught: Reading, spelling, oral and written language, and elementary grammar, penmanship, tables, and measures and fundamental drill in elementary rules of arithmetic, practical hygiene, and sanitation, elements of history and geography, citizenship and government, thrift and economy, war finance and patriotism, Red Cross knitting, patriotic songs

and flag drills, personal cleanliness, neatness, good health, industry, general knowledge, and current events.

Regular and persistent instruction has been followed in matters of food conservation, elimination of waste, war savings, and self-denial in order that our soldiers may have food. Specialized instruction in war geography and history by the aid of maps, magazines, and daily newspapers, has awakened the natives to a better understanding of the demands made by the Government upon all people in the United States and Alaska. The natives have responded to calls made by the teacher for public meetings for discussion of these topics and readily pledged themselves to obey the Government. Some of the men have offered themselves for military duty whenever called upon to serve, and a feeling of regret has been several times expressed that the natives of Alaska were exempt, as a class, from conscription.

Red Cross work.—The Juneau native school was the first in the Territory to comply with President Wilson's suggestion and organize a junior auxiliary. Thirty pupils paid their dues. Knitting was taught to all the girls, and five pairs of wristlets for the soldiers were finished and turned in to the local chapter of the Red Cross before it was known that juniors were expected to work for the Belgian children. By this time many mothers had visited the school to watch the girls knit. Enthusiasm spread. A native auxiliary of women was organized at the schoolhouse with 35 active workers. Red Cross directions were followed, and the two auxiliaries became a happy family that filled the schoolhouse every Tuesday evening from 1 to 5 o'clock. The juniors preferred to continue knitting for the soldiers, and in this work their mothers kept them constant company. Many white visitors came to watch them at work. A large display of knitted work was made in a down-town store window, together with a photograph of the knitters. This attracted the attention of hundreds of white people and won many words of praise from the local press. Altogether, at this writing 100 pairs of knitted socks, 14 pairs of wristlets, 24 scarfs, two shirts, and 18 knitted wash cloths have been finished and accepted as perfect work by the Red Cross.

Health conditions.—With the exception of a few cases of measles among half breeds residing in the native village and attending the white schools, the natives have been comparatively free from sickness. The children are clean, healthy, well dressed, happy, and some of them are very bright intellectually. By order of the mayor and the city council, as the native section lies within the city limits, District Supt. Hawkesworth closed the school one week as a preventive measure during an epidemic of diphtheria among the white people. There were no cases among the natives, and the school resumed work one week earlier than the city schools.

During the interim the teacher visited the homes, cheered the people, conducted a class in citizenship, and compiled the property report which accompanies [illegible] annual report. Regular attendance of mothers at the Red Cross meetings in the schoolhouse, at which all workers have been persuaded to wear white cover-all aprons, and the remand of the teacher that cleanliness be strictly adhered to, together with a few tea parties for social intercourse, have brought about a feeling of sanitary pride and cheerfulness. Cooperation and harmony are now thoroughly established, and a considerable part of the credit is due to Supt. Hawkesworth and Mrs. Hawkesworth.

Publicity.—Perhaps the most important work done by the teacher this past year has been conducting a campaign of publicity for the adjustment of certain erroneous ideas concerning the natives which were prevalent among the white population of the vicinity. This campaign was conducted through the medium

of local newspapers and magazines. Hitherto the local press has recorded all the delinquencies of these people and has given much space to their criminal records, thereby placing more than half of the native population in a wrong light before the general public. When the Native Brotherhood held its convention in Juneau, the teacher found an excellent opportunity of placing before the reading public some of the good things accomplished by the order, and some of the hopes and ambitions of the future. This brought forth an editorial in the Alaska Daily Empire, which was widely copied by other papers both inside and outside the Territory. The newspapers were glad to print anything of interest that was properly written. The natives themselves were quick to profit by the publicity given them and evinced a desire to live up to the ideals expressed. Competitive patriotism, through reading of their own good work and that of their neighbors, resulted in much mental enlightenment in the Juneau native village. The success of the scheme has been far-reaching and remarkable. White people came to the school to see with their own eyes what was being done; others attended native meetings and were interested readers of native items. At this writing many of the native miners are regular subscribers to one, and sometimes two, daily newspapers; one man has been appointed "four-minute" speaker at church and at other public gatherings in the native village to inform his fellows on the progress of the war, explain to them the nature of the Liberty bonds, and other Government measures, including world knowledge.

Four natives have taken instructions and have applied for certificates of citizenship according to the territorial law, two of the members for the express purpose of having their daughters eligible to enter the fifth grade in the city schools in September—a precedent having been established the previous year. Altogether the outlook for Juneau is very encouraging. The present trend is toward the elimination of racial prejudice.

Library.—The school library has been extensively used and enjoyed by the more advanced pupils, also the magazines furnished by the teacher. Pupils have read the newspapers in school and then reread them to their parents with good results.

PART III—EXTRACTS FROM THE REPORT OF THE GOVERNOR OF ALASKA, 1918.

NATIVES OF ALASKA.

I have been devoting considerable time to the study of the various problems confronting the natives, but the tribes are so widely scattered and the conditions under which they live are so varied that at the present time I do not feel justified in going into the subject at length.

The Bureau of Education is doing splendid work, especially among the Eskimos who have been taught the value of reindeer herding. As a result many natives have become comparatively wealthy.

The various missionary bodies have been requested for reports on their activities, but to date only partial replies have been received and so can not be fully commented on. I have, however, visited a number of the mission schools and can testify as to the excellence of their endeavors and to the really constructive results accomplished.

ALASKA NATIVE SCHOOL SERVICE.

The schools for native children in Alaska are under the supervision of the Bureau of Education of the Interior Department, being directly supervised by five district superintendents in Alaska, responsible to the chief of the Alaska Division of the Bureau of Education, with headquarters in Seattle. For the past year these schools numbered 71, two of which were summer schools, having a total enrollment of approximately 3,500.

The majority of these schools are located in native villages, each of which is usually in charge of a man and wife. On account of the variety of the work in connection with a native school the Bureau of Education finds it advantageous to appoint married people. Not only must these Federal employees be capable of teaching school, but they must also possess practical abilities which will enable them to promote native industries, domestic arts, personal hygiene, social welfare, and in general improve the living conditions of the adult as well as the school population of the village and the vicinity.

The schoolroom and living quarters of the employees are usually under one roof, forming a center from which quite often there issues the only uplifting and civilizing influence in that community.

There has been and still is an attitude of aloofness toward the native population by the white people of Alaska which is not conducive to rapid advancement by the former race. Quite often the bureau employees and the missionaries are the only whites who seem to have any interest in the natives' welfare. Until a tolerant and sympathetic attitude is generally exhibited by the white race, the natives will be constantly handicapped in their efforts to reach a higher plane of civilization. The natives of Alaska are unquestionably an asset to the Territory, and the intelligent development and improvement of this asset will be remunerative to Alaska in many ways. These native Alaskans are self-reliant, law-abiding, and honest, and the only help they have had from the Federal Government is the establishment of schools in the larger villages.

a little medical relief, and the introduction of reindeer among the northern and western tribes. This assistance has been given them though the organization of the Alaska Division of the Bureau of Education.

Because of the fact that the native population is very scattered and the villages have rarely over 200 or 300 inhabitants, and generally much less than that, the bureau's educational efforts have been rather hampered. Were the natives located in large settlements of 500 or more, their education, medical relief, and industrial advancement would be simplified considerably. To this end the bureau has gradually been working toward attracting the natives to selected sections of land which have been reserved for the exclusive use of the natives and the bureau. These reserves are not to be confused with the Indian reservations of the States, as they in no way interfere with the liberties and freedom of the native inhabitants thereon. By establishing industries on these reserves which will give the natives work the year around, schools that have more than the elementary grades, and by placing the care of their physical welfare in the hands of trained medical employees, the bureau will be able to secure maximum benefits to the natives. As long as the bureau's work is confined to numerous small villages, only minimum results can be expected at a heavy cost per capita. At the present time the small schools do not justify grammar grades, and it has been customary for advanced native children to enter the Indian schools of the States. This usually results in physical breakdowns, due to the change of climate, environment, and absence from home. It should be possible for native children to advance as far along educational lines as they desire without the necessity of leaving home. This can come only when the natives are persuaded to live in larger communities which will justify the establishment of larger and more complete schools. The concentration of the bureau's work on large villages, made possible through the favorable conditions of the reserves, will hasten the arrival of the day when the native of Alaska will take his place along with his white brother in the affairs of the Territory.

That the natives are loyal to the United States has been especially proved the past year through the work which the natives have contributed for the Red Cross and the purchases they have made of Liberty bonds and War Savings Stamps. Through the agency of the teachers, Red Cross auxiliaries have been established in many native villages, and the zealous and untiring work of these native organizations is a great credit to them. The work done in knitting, sewing, etc., for the Red Cross is equal to the best work done by white organizations.

The purchase of bonds and stamps has not lagged behind the Red Cross work, and while complete statistics of the Bureau of Education are not yet available on this subject, the reports from 11 native villages in southeastern Alaska show that $12,320.85 was contributed toward war-relief funds and that $9,700 worth of Liberty bonds and $288.70 worth of stamps were purchased. In these villages there are 1,303 Red Cross members, and during the year 16 sweaters, 328 socks, 113 wristlets, 220 gun wipes, 30 scarfs, and 12 moccasins were made for the Red Cross. It has been very gratifying to hear the numerous expressions of regret by natives throughout the Territory that they should have been exempted from the operations of the draft law, and it is hoped that the matter will be adjusted so as to allow the natives to share in this as well. Their participation will be a credit to the Territory, as have been their other war activities.

The need of a power boat for the bureau's work has been especially emphasized this year. The schools have been supplied this season with the

greatest difficulty, and the shipments to the various stations have been necessarily haphazard and unsatisfactory. A notable example of the difficulties encountered is the shipment of hospital supplies and subsistence stores for teachers and a physician into Bristol Bay, which were to have been sent in by the August trip of the *Dora*. This trip, the last of the season for that section, was suddenly canceled and no other means was available. Since the supplies were imperatively needed by the stations in Bristol Bay; arrangements were finally made with the Pacific American Fisheries to carry them to King Cove, from which place the Coast Guard cutter *Unalga* is expected to have taken them to Unalaska, where they are to be transshipped to Bristol Bay via the *Admiral Watson*. Whether the needed supplies reached their destination is still a matter of conjecture. With a boat of its own, the bureau would have its shipping problems very much simplified. Such a boat would be used during the summer for the shipment of supplies and transportation of employees, who now must quite often be sent in small gas boats and vessels of doubtful seaworthiness. The bureau should not have to be placed in the position of asking its employees, who are self-sacrificing enough to enter its service, to risk their lives and property in reaching their stations. After completing the summer's shipping, the boat would be available as a training ship at the bureau's stations in southern and southeastern Alaska, where navigation is open throughout the year. Thus the boat would be put to useful service the year around. It is to be hoped that Congress will promptly make possible such a boat for the bureau.

To a considerable extent, the questions arising in connection with the fishing industry of the Territory involve the consideration of the natives' welfare. The native people of Alaska are primarily fishermen. They are an important factor in the industry, and fishing to them is essentially a means of livelihood. The elimination of fish from the natives' diet means the omission of the greater part of his natural food, resulting in actual want and serious illness. Consequently, the question of commercial fishing in the rivers of Alaska is of vital interest to the natives. The past year has seen the partial closing of the Copper River to commercial fishing. Whether the regulations issued are sufficient to result in reestablishing the food supply of the Copper River Indians will be ascertained after they have been in force a reasonable length of time. The establishment of a cannery at Andreafsky, on the lower Yukon, brings up a similar question. While one or two canneries would probably not seriously interfere with the supply of fish for the upper Yukon, it is very probable that the number of canneries would increase each year until the river would become overfished, as was done in the Copper River. If commercial fishing must be permitted in rivers, a policy of limited fishing is the only one that will safeguard the food supply of the natives.

ALASKA NATIVE MEDICAL SERVICE.

In the list of duties for the teacher of a native school there appears that of medical relief, which assumes considerable proportions if the village is of good size. Some of the more important centers of native population are provided with trained nurses, but at the majority of villages the teacher must attend to the physical welfare of the inhabitants. Each school is provided with a very complete standard medical set, consisting of the more common medicines and medical equipment, with a view toward enabling the teacher to relieve the less serious ailments and afford temporary relief in cases requiring the attention of a physician. Each station is also provided with a medical book written especially for use in connection with the medical equipment fur-

nished the schools. Through necessity some of the teachers become quite expert in this phase of their work. In this they are aided materially by the fact that the natives have marvelous recuperative power and quite often only a little medical assistance is necessary to bring them back to health.

During the past year the Bureau of Education also operated a very complete 20-bed hospital for natives at Juneau, which was kept filled the greater part of the year. The hospital at Kanakanak, on Bristol Bay, was enlarged and completely equipped for 11 beds capacity. A modern hospital was erected and placed in operation at Akiak, on the Kuskokwim. Its capacity is also 11 beds, together with comfortable quarters for the staff. A small hospital, in charge of a physician and nurse, was also maintained at Nulato, on the Yukon. In addition to the hospitals, physicians were stationed at Nome and Cordova, and contracts were had with resident physicians at Eliamar, Candle, and Council to care for cases in their localities. Besides a traveling nurse for southeastern Alaska, nurses were appointed at St. Michael, Unalakleet, and Metlakatla.

In view of the thousands to be reached and the vast territory to be covered, it is readily apparent that the above means of meeting the medical needs of the natives is wholly inadequate. The bureau's appropriation of $62,500 is just half of the minimum amount needed during normal times to make an effective beginning. On account of the great advance in prices of drugs, etc., not less than $150,000 should be appropriated for this year. Educational advantages are of little benefit to the native if he is not assisted at the same time in keeping his body healthy, so as to enable him to make the best possible use of that which his mind acquires. The appropriations for education and medical relief of the natives must necessarily go hand in hand and the proper equilibrium maintained between them.

This fall the bureau plans to open a tubercular sanitarium at Haines, establishing the same in the building formerly occupied by the Presbyterian Mission Hospital. To avoid a duplication of work in southeastern Alaska the mission board has turned this building over to the Bureau of Education for its use in maintaining a sanitarium, and the bureau has relinquished its medical work at Hydaburg and Klawock, where the mission board will be in exclusive charge of the medical work among the natives. The arrangement should be mutually advantageous. The establishment of a tubercular sanitarium has been planned for several years and will fill a long-felt need in southern and southeastern Alaska. In the past tuberculosis, which is quite prevalent among the natives, has been very hard to combat since isolation of the cases was impossible. The spread of the disease was therefore unavoidable. However, with a sanitarium at hand, to which the patients can be sent for proper diet, treatment, and instructions, a long step will be made toward checking the disease in the section which the Haines establishment will serve.

With a hospital at Juneau for the surgical cases, and a sanitarium at Haines for tubercular patients, southeastern Alaska will be served very effectively. It is to be hoped that Congress will soon enable the Bureau of Education to make similar provisions for the other sections of Alaska, which are equally in need of medical assistance.

ALASKA REINDEER SERVICE.

In 1892, and continuing for 10 years, 1,280 reindeer were imported into Alaska from Siberia. From this nucleus there are to-day in Alaska over 110,000 reindeer, distributed over all of western Alaska from the Alaska Peninsula on the south to Point Barro on the north. On account of the

unavoidable delays in securing reports from all the herds, complete statistics for the year are not yet available. The Bureau of Education report for the year ended June 30, 1917, shows a total of 98,582 deer in Alaska, distributed among 98 herds; 67,448, or 69 per cent, were owned by natives; 23,443, or 23 per cent, by Lapps and whites; 4,645, or 5 per cent, by missions; and 3,046, or 3 per cent, still remain Government property. The ownership of the native deer was divided among 1,568 natives, of whom 170 were apprentices and 1,398 owners and trained herders. An income from their deer amounting to $97,515 was realized by them. The income accruing to owners other than natives amounted to $35,002, making a total income realized from the reindeer industry of $122,517.

Reindeer were introduced into Alaska by the Government in order to insure a food supply and economic independence for all the natives of Alaska living in sections where deer could be propagated. The industry is now firmly established, the widespread distribution of the deer being the result of a system of apprenticeship whereby the most likely natives are taken on as apprentices by the herders for four years, receiving during that time 6, 8, 10, and 10 deer for the first, second, third, and fourth years, respectively. If at the end of the fourth year the apprentice has served satisfactorily, he becomes a herder, assuming charge of his deer. He in turn is required by the rules and regulations to take on apprentices in the same manner that he served as apprentice. The perpetual distribution among the natives is thereby assured.

Since the deer were imported for the benefit of the natives, the industry has been restricted to them as much as possible. No native is allowed to sell female deer except to another native or the Government. Until 1914 no white men had acquired deer, except the Laplanders, who had been brought to Alaska at the time of the introduction of reindeer into Alaska for the purpose of teaching the natives the art of herding. For their services the Lapps were given reindeer without restrictions as to future sales of female deer. By this means it was possible for Lomen & Co., of Nome, to acquire 1,200 deer in 1914. The next two years this company made additional purchases from the missions at Golovin and Teller, the latter of which has since been the subject of litigation by the Department of Justice at the request of the Interior Department. The case is based on alleged violation of contract by the Teller mission, which, in common with other missions in Alaska, received deer from the Government for the purpose of assisting in the distribution of deer among the natives. All missions have always been held by the department to be under the same restrictions as native owners. The final outcome of the Teller case will determine the department's action regarding the Golovin sale, which is similar to the Teller case, except that the Golovin contract appears to have been an oral one made in the early days of the industry, the exact terms of which can not be definitely established. The decision in the Teller case will also have an important bearing on all deer now owned by the missions. The details of the above have appeared in previous issues of the annual report of this office. Up until the present the industry has been supervised by local representatives of the Bureau of Education, but it has now grown to such proportions that a scientific management is imperative. At least two or three experienced stockmen should be placed in the field to give their entire time to the study of the problems of the industry. Diseases of the deer should have careful attention, as well as scientific herding, breeding, butchering, and marketing. The reindeer of Alaska represent an immense food supply, not only for the Territory, but for the entire country. The economical and permanent entry of reindeer meat upon the market of the country is a problem that will require much study and careful

management. The present high prices of beef, pork, and mutton make this an opportune time to take up this subject energetically. It is important to the country, as well as to the Territory, that the increased appropriation asked for by the Bureau of Education be allowed by Congress in order to make possible the employment of the experts mentioned. Undoubtedly the white owners of herds will cooperate.

Reindeer are cursed with warble flies, which were evidently brought to Alaska with the original herd. If the warble pest could be eliminated there is no reason why a glove industry equal to that of Sweden could not be established right in Alaska.

The following table shows what a financial success this phase of Government enterprise has been during the 25 years since its inception:

Valuation of 67,448 reindeer owned by natives in 1917, at $25 each	$1,686,200
Total income of natives from reindeer, 1893–1917 (25 years)	568,352
Valuation of 31,134 reindeer owned by missions, Laplanders and other whites, and Government, 1917	778,350
Total income of missions and Laplanders and other whites from reindeer, 1893–1917	214,443
Total valuation and income	3,247,345
Total Government appropriations, 1893–1917	317,000
Gain (926 per cent for 25 years, or an average annual gain of 37 per cent)	2,930,345

Perhaps the attitude of the Bureau of Education is somewhat at variance with my own, but I believe that where the reindeer industry can be encouraged among the whites without detriment to the natives every assistance should be offered, as it is only through the white owners and shippers that it will be possible to add to the food supply of the country at large. With the herds scattered over such a large extent of territory, and with such great distances to travel to reach the few shipping points on our west coast, it will soon become necessary to establish cold-storage plants at certain points in order to preserve the meat of the surplus deer. In this the whites interested in the industry can be of greatest service to the native deer men. The Government has no funds with which to create a market, nor with which to preserve the meat for the market, so that this particular branch of the industry must naturally fall to the whites.

APPENDIX.

LAPPS AND REINDEER IN SWEDEN AND NORWAY.

INFORMATION FURNISHED BY MR. HJALMAR LUNDBOHM,
Delegate of the Royal Swedish Government.

Most of the figures and some of the information in regard to Sweden were gathered by a commission which at present is negotiating with a Norwegian commission in order to settle the difficulties which are always to be found when Swedish Lapps migrate into Norway. The figures are furnished by the forester, Mr. Arvid Montell, who is a member of the commission.

The Norwegian data were mostly taken from a lecture given by the inspector of reindeer and Lapps in Norway, Mr. Kristian Nissen, as published in the year book of the Norwegian Geographical Society (Det Norske Geografiske Selskabs aarsbok, 1914–15). This pamphlet gives a very good view of the whole Lapp situation in Norway, historical notes about the Lapps, and many other things of value to those who are interested in these people.

The total number of Lapps is not very great. The latest official reports give the following figures: Norway, about 20,000; Sweden, 6,000 to 7,000; Russia, about 1,700; Finland, about 1,500; total 30,200.

The total here given may, however, be a little low. The whole number might be estimated at about 40,000.

There is only a comparatively small percentage of Lapps who live on the reindeer; a large number, especially in Norway, getting their livelihood from agriculture and from fishing.

The agricultural Lapps are probably in most cases descendants of the Nomads, or "reindeer Lapps," who have decided to settle down and do farming instead of nomadizing. There may be several reasons for this, but one is no doubt that in certain districts there has been a lack of food for the reindeer, and consequently it has been easier to make a living, even if very simple and poor, by agriculture. In other cases the Government or other interested parties have induced the Lapps to settle as agriculturists, as especially during a certain period of time, it was thought to be very desirable to have the land settled and farmed. In this respect it has often not been realized that agriculture gives a very much smaller revenue than the reindeer service, and thus a part of the population has been induced to live a poor life, without the possibility of utilizing the opportunities of nature. The Swedish Government has, however, always, but especially in the later years, realized the importance of giving the Lapps the protection which makes it possible to continue their original life.

The fishing Lapps, in most cases, originate from the Nomads, having preferred to get their living in a comparatively lazy life as fishers, instead of in the more strenuous life as nomads. In many cases poverty seems to be the real reason for the transition into the fisher's life. It is, however, not improbable that some of the fisher Lapps in Norway have ancestors who came to the country earlier than the Nomads.

If you divide the Lapps into groups, according to their chief livelihood, of reindeer service, agriculture, and fishery, you will find that the nomad Lapps, or "reindeer Lapps," are very much fewer than the others.

In Norway there are only about 1,260, or one-sixteenth of the whole number living exclusively on the reindeer.

In Sweden we distinguish between nomadizing Lapps and forest Lapps, the latter generally live in houses, but at any rate get their livelihood chiefly from reindeer. The reindeer, however, do not migrate as those belonging to the nomadizing Lapps. The reindeer of the forest Lapps are a little different from the other, being somewhat larger, and the year around these deer rove about in the neighboring woods.

The latest statistics are as follows: Sweden—Nomadizing Lapps, 2,791; forest Lapps, 465; total, 3,256. These Lapps live exclusively by the reindeer service. Finland—Reindeer Lapps in 1900, about 300. Russia, unknown.

One can, however, with certainty estimate the whole number of nomads in Sweden, Norway, Finland, and Russia to be between 5,000 and 6,000.

According to statistics collected during 1911 to 1915, the number of reindeer in Norway was 141,755. In this case, calves younger than 1 year are not counted. Nissen has expressed the opinion, however, that this figure is a little too low, and suggests that there are at least 150,000.

According to statistics made in 1909–1911, the number of migrating reindeer, or as they are called, "mountain-reindeer," was, in Sweden, 233,177; and forest-reindeer, 41,488; making a total of 274,625.

In Norway the nomadizing Lapps live chiefly in the northernmost Province, Finnmarken; residing in the summer along the coast of the Atlantic Ocean, and in the woods nearer the Swedish border in the winter, especially in the two parishes of Koutokeino and Karasjok. Smaller in number are the reindeer herds in the parishes of Polmak and Sydvaranger. Farther south there are reindeer Lapps in several sections of Tromso, Nordlands, and Troidhjems amt, but there the number of reindeer is much smaller.

In the southern part of the Kingdom a number of efforts have been made to utilize the vast high mountains for reindeer service. The first time, as far as known, about 1780, in the district called "Hardangervidden," these experiments did not show any good results, but they were renewed again several times later in a number of places in the Kristians amt and the Buskerude amt. The manner in which these experiments were carried out was generally the forming of small companies by farmers and others owning the herd, sometimes consisting of a couple of thousand animals. Most of these small companies have failed, but after a while new companies have been formed and the business started again. During the years 1880 to 1910, there was great prosperity; the chief reason, however, being that young Lapps were engaged to keep the herds owned by the small companies, whose shareholders usually were farmers of the district. During this period the number of reindeer continued to grow, and probably went as high as up to 40,000. Since then, there has been a decline, and the number of reindeer in the southern part of Norway, outside of the old reindeer district, is at present estimated at about 15,500. The reason for this decline in the reindeer service is, by K. Nissen, supposed to be that there is not sufficient food; the reindeer moss, which is the chief winter food, occurring in a comparatively small amount. Another very important reason, Nissen says, is that there are numerous wild reindeer in the district, and it is impossible to keep tame deer where the wild animals are in abundance. The wild reindeer in many ways spoil the tame, and further, very often the antagonism between the hunters and reindeer owners causes great difficulties.

In Sweden the reindeer nomads live in all the parishes along the boundary between Sweden and Norway from Finland in the north to Idre in the province of Darlecarlia—a distance of about 600 English miles, or more than half the whole length of the country.

Lapland, the northernmost of the Swedish provinces, reaches from latitude 64 degrees to nearly 69 degrees and comprises about one-fourth of the total area of Sweden, which area is about 173,000 square miles. Most of the Lapps live in this province, but even in the provinces, Vesterbotten, Jamtland, Harjelalen, and Darlecarlia there are some Lapps.

In all the provinces the Lapps are, of course, in a great minority; only in one parish, in the northernmost part of Sweden, do they amount to more than half of the whole population.

The mountain Lapps, or nomads, do not live in any particular place, but divide into tribes migrating in certain districts. For instance, in the two northernmost parishes in Sweden, where the Lapps are most numerous, they migrate in the forest region south of the Norwegian border the whole winter; in the spring they move over the frontier and continue slowly down from the high mountains to the Norwegian coast, from where some of the reindeer herds, amounting to many thousands of animals, swim over the fjords out to some of the big islands, where they are pastured the whole summer. In the fall they move back to the high mountains and from there down again to the forest region. The distance which some of the Lapps move twice a year is in certain cases 100 to 150 miles, and in this way they have gone on moving and moving for hundreds or perhaps for thousands of years.

From the southern part of Lapland, the Lapps only move 20 to 30 miles into Norway, but there, and in provinces south of Lapland, they usually go down into the forest region in Sweden, sometimes as far as to the coast of the Baltic Sea. Thus the whole northern half of Sweden is inhabited by migratory Lapps during a part of the year.

The forest Lapps are found chiefly in some small districts situated between the Baltic and up to 100 miles therefrom.

The nomads, as a rule, live in huts all the year around, moving with the reindeer herds. This, many times, especially in the winter, makes an extremely hard life, but still, it is very healthful. In the later years there has been a certain tendency among some of them to build houses or more substantial huts of wood, and to keep their families there. This has a very bad influence upon the reindeer service as well as on the health of the Lapps. It has been observed that tuberculosis is much more prevalent among the families that live in houses than among those who keep to their old mode of living in huts made of cloth.

The Swedish Lapps, however, as mentioned before, have many difficulties to deal with. The farming settlers in Sweden have gradually gone farther north in the district, where the Lapps formerly were alone, and as the reindeer sometimes spoil the hay belonging to the farmers, conflicts very often arise in which the Lapps, who commonly are held responsible for the damage, are the sufferers. Still worse is it in Norway, where both the officials and private people to a certain degree work against the Lapps.

At present there is a Swedish-Norwegian commission working on the solution of these problems, and trying to establish rules which can make the existence of the Lapps safer. It is also worth making it safe. The big mountains along the frontier can not be advantageously utilized by other people than the nomads, and to the whole country the reindeer service is a very important and useful industry.

It is very often said that the Lapps are dying out, but experience does not prove this. Of course, as soon as railways are built through the country and

the Lapps get in touch with another kind of culture than their own some of them will be lost, but, as a rule, they try to preserve their own mode of living and to avoid mixing with other people.

The value of the whole reindeer stock in Sweden might be estimated at more than kr. 5,000,000 (about $1,850,000).

The average value of the reindeer was, before the war, estimated at—for cow, kr. 24; for ox, kr. 33; for calf, kr. 15; for calf born in the year, kr. 10. Now the prices are, of course, much higher, and may be estimated in the four groups at 45 to 50, 60 to 80, 25, and 10 crowns, respectively.

The following data about the sale of reindeer meat, hides, hoofs, and horns may be interesting:

The reindeer meat is of course used as food by a great number of people. Many consider it better than cattle meat. The steak is used either fresh, dried, salted, or smoked. This is the part of the reindeer meat which is most largely exported to the southern part of the country. Other parts of the animal, i. e., ribs and legs, are generally dried in the air and slightly smoked in the opening of the hut and used by the Lapps themselves. This is an excellent food, very concentrated, and very easy to carry on the long wanderings and travels. It is eaten either dried and cold, or roasted.

The hide, immediately after being taken off the killed animal, is put on wooden stretchers and dried in the open air, and as soon as it is properly dried it can be either sold for export or used for the Lapps' own purposes. It has manifold uses. The Lapps, as well as other people living in the woods in the northern part of Sweden, use it for bedding, and it is for this purposes very adaptable, being very warm and easily transported, the weight of the hides being only four to six pounds.

The Lapps themselves, and even the tanners, prepare the hides for making shoes, gloves, etc. In other words, it has the same use as the skin of cattle or calves. It is to a great extent even exported for such purposes. The hides of the calves, which are killed in the fall, are used by the Lapps, as well as by the settlers in the district, as winter clothing, with the fur on the outer side; these furs are very warm and comfortable. The hair, however, has a great tendency to shed. A fine fur coat of reindeer skin would cost about kr. 60 to kr. 90 ($16 to $24). The hides from the head and limbs of the reindeer are used for shoes. The hair is used for a number of purposes and is highly valued as an export article. It is used for upholstery purposes, and on account of the air channel in each hair it is also used in large quantities for manufacturing life preservers.

The horns were formerly used mostly for manufacturing glue, but now, the large beautiful horns are also used for decorative purposes, and making knife handles and shields for knives, etc.

The sinews from the legs of the reindeer will always be saved. When the animal is killed they are taken out and dried, and in this shape they can be kept for a long time. The Lapps are exceedingly clever in making thread of these sinews, which are used for sewing of clothes as well as shoes. They are very strong and stand water very well. They are also exported to a great extent to Norway.

The use of reindeer for transporting purposes is not so great as it was before roads were built in Lapland. Along the Finnish frontier the mail, however, is still to a certain extent carried by reindeer between Muonionalusta and Karesuando, a distance of about 60 miles otherwise it is used for transporting mail only when the conditions of the roads are such that horses can not be used.

As long as the settlement of the forest and mountain districts of northern Sweden had not progressed very far, cattle raising was entirely dependent upon the fodder crops in fields around and in swamps and brooks, which were often situated far away from the farms. Before the swamps had frozen over it was impossible to go over the ground with horses, and later in the winter the deep snow made it impossible to bring anything home from the meadows. With the reindeer one can get over the ground as soon as there is snow on the ground, and for this reason the reindeer was the only suitable animal for transporting purposes.

The abundant supply of reindeer moss furnishes these animals with plenty of fodder around the farms without any expense or trouble for the owners. On the other hand, the fodder supply for horses around the farms was often very scarce, and this constituted another obstacle, the more so as one had very little other use for horses. Besides the bringing home of fodder, one can also use the reindeer to convey food supplies from the trading centers and for the transport of game and fish and reindeer meat, which are the chief nutriment in these districts. Further, the reindeer were used to a large degree for the transport of merchant goods from the coast cities to the market places in the interior of the country. In the beginning of the last century iron ore was also transported from the mines in Lapland to the furnaces along the coast.

When the use of wood was started in a large scale up in the river valleys, and the roads to the river where the timber was floated were not completed, reindeer were used in a large degree, especially in certain parts of Norrbottenslan.

As the settling continued and the number of people increased the game and the fish decreased. The settlers were, therefore, obliged to engage in a little more intensive farming and the keeping of horses became a necessity.

At the same time the abundance of reindeer moss around the meadows and farms also began to diminish, due to forest fires, increase in reindeer, the use of the moss as fodder for the cattle, and other similar causes. As a result the use of reindeer for transport has become less and less prevalent, and they are now used, with the exception of those used by the nomad Lapps on their wanderings, only on the most distant farm land for sending the products of the reindeer industry to the town where it is sold.

(Signed) HJALMAR LUNDBOHM.