



From Photo. by W. Ogilvie.

Presbyterian Mission, Anvik, Lower Yukon, Alaska.

bestows on it is to see that it avoids rocks, trees and other obstacles along the beach, and in rounding points he has to manipulate the boat to keep her away from the point. This is by far the easier mode of taking a boat up stream. Two men hauling on a line on a fair beach will walk from $2\frac{1}{2}$ to 3 miles per hour, if they so desire, and haul the boat up bad places with comparative ease. I have seen a boat taken up a pretty steep rapids in this way at a good smart rate. After the pair on the line have kept up this gait for half-an-hour or an hour they become warm and somewhat tired. With a party of four the two in the boat change places with those on the line, taking a similar spell as it is called, and those on the line take their places in the boat. When the last two become tired and warm they take a spell in the boat again, and so on. Thus between hauling and resting, they can keep up a good smart gait without fatiguing themselves very much. Four lively, good men, along a fair beach, will generally be able to haul a boat or canoe, such as I have described, 25 or 30 miles per day, and at the end not feel nearly so fatigued as paddling or poling would make them. A greater number, of course, will have an easier time, and less a harder time, but two men can do a good day's work in this way. Myself and a man have made 24 miles up stream in a day in this way, and made a survey while doing it. The line should be light and very strong. To haul an 18 or 19 foot canoe of 45 or 48 inch beam, with 10 or 12 hundredweight and two men, the line should not be more than one-eighth of an inch in thickness. Of course, its quality should be first-class. There are lines made which suit this purpose admirably, known as cod-lines. I cannot give the numbers of the various sizes, but simply say a line one-eighth of an inch thick is sufficient to haul a boat of that size with a load anywhere that a boat can be taken. Of course, a heavier boat requires a somewhat heavier line, but I have seen boats 40 to 45 feet long and 9 feet beam, loaded with 8 or 10 tons, drawing two feet of water, hauled up strong currents by a line not more than one-fourth of an inch in thickness. The objection to a heavier line is that its weight sags it, and unless