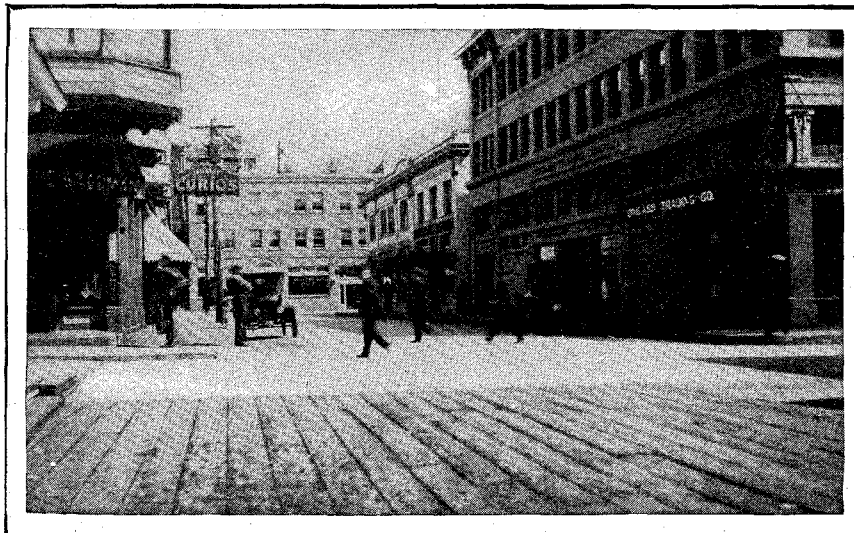


THE TREASURE-HOUSE OF SOUTHEASTERN ALASKA

BY SHERMAN ROGERS

INDUSTRIAL CORRESPONDENT OF THE OUTLOOK



A STREET IN KETCHIKAN

TAKE the Thousand Islands in the St. Lawrence, put a few mountains on them, and you have a southeastern Alaska setting. The landscape from Ketchikan to Cape Spencer, and, for that matter, to Resurrection Bay, has no equal in the world for scenic beauty. I have met several world-renowned globe-trotters who have assured me, in no uncertain terms, that the tourist can see more wonderful, matchless scenery of every description in Alaska in a three-week trip than could be seen in a year's world tour.

I want the reader to bear one thing in mind throughout this article, and that is the striking accessibility of the entire southeastern section to the markets of the world. Ketchikan, Alaska, is a trifle over six hundred miles north of Seattle, Washington, and enjoys practically the same climate. The steamships now plying the Alaskan route easily make the trip in two days. The fast Atlantic greyhounds would make it in twenty-four hours.

Southeastern Alaska is composed of numerous islands, heavily timbered with a very thick growth of spruce and hemlock, and in the extreme southern section considerable yellow cedar of excellent quality. This section of the Territory—an empire in itself—is endowed with wonderful harbors and conveniently located waterfalls, sufficient to guarantee cheap hydroelectric power for pulp and paper mills and other manufacturing.

I have, since I returned from Alaska, put the query to men in all walks of life from bank president down to newsboys, and I haven't as yet received an intelligent answer regarding the accessibility of the southeastern empire. The first man I spoke to was the president of one of the largest banks in New York.

When I told him that a thirteen-knot boat reached Ketchikan in two days from Seattle, he nearly fainted. "Why," he blurted out, "I thought Alaska was almost totally inaccessible, and that it was actually situated on top of the world!"

From Ketchikan north to Cape Spencer is about four hundred miles. The principal resources of the territory embraced are pulp timber, fish, and mines of various kinds. That doesn't mean that the resources are restricted to these three elements. Practically every natural resource of the North American Continent will be found in commercial quantities in this section. A large portion of the timber is ripe, and overripe, and the pressing necessity at this time is the establishment of pulp and paper mills to take advantage of the rapid growth. At the same time the number of mills must be restricted, and will be restricted to guarantee a perpetual supply of pulp timber. As near as has been figured out up to the present, the forests of Alaska will furnish two million cords of pulp wood a year for all time, which would amount to more than a third of the total amount of news print paper used in the United States.

There is no section of North America so practically situated for natural reforestation. The rainfall is sufficient to preclude all possibility of forest fires, and the annual growth is tremendous. The forestry laws of Alaska are regulated so as to prevent the cutting of small timber, and, as a natural result, about every fifty years the areas cut over will be entirely reforested. In fact, the cutting of large timber will enhance the growth of young trees.

The Alaskan Forestry Bureau up to May, 1920, was hopelessly tied up with red tape, when the Forestry Service

modified their Alaskan timber regulations, and on January 1, 1921, the Forestry Service established an Alaskan Division, with headquarters at Juneau. Prior to that time the Forestry Service was more or less stifled under endless red tape, due to the fact that the Forestry office in charge was situated in Portland, Oregon. At the present time fully ninety-eight per cent of forestry affairs are handled in Juneau by Charles H. Flory, Forester in charge. He has complete control of cruising, plotting, sales contracts, and is not hampered in his operations by the head office in Washington. Only major details of large contracts are referred to the Washington office, and even in that case the recommendations of the Chief Forester are adhered to. Mr. Flory is one of the most efficient timber men I have met in many a day. He knows his business, is intensely practical, cuts red tape to the bone, and his whole heart and soul are wrapped up in the securing of substantial pulp and paper mills near the great Alaskan water-power projects. There is nothing hazy about his ideas—nothing impractical about the timber development policies he advocates. He realizes, as every one familiar with Alaskan timber resources does, that the southeastern section of our northern empire is the coming Mecca of cheap paper manufacturing. He realizes, at the same time, that every year of delay in securing these mills means a heavy loss, not only to the progress and prosperity of Alaska, but also to the taxpayers of the United States, who would greatly benefit through stumpage sales.

I fully agree with Mr. Flory regarding the accessibility, quantity, and quality of pulp timber covering the islands from Ketchikan to Skagway. There is no place on the American Continent where logging operations can be carried on so cheaply, due to the remarkably short distances from timber to salt water and the proximity of all timbered areas to ample water power.

I spent ten days tramping over part of the timbered area of Admiralty Island, which doesn't contain the best Alaskan pulp timber, by any means. I was amazed at the size and quality of the spruce; trees sound as a bullet and six feet in diameter were not uncommon, and one of the main tracts I looked over contained a large area that would cruise better than one hundred thousand feet to the acre. I found the timber thicker and larger than that of the famous northern Idaho pine belt. One small tract of twelve hundred acres, situated directly on the shores of a natural harbor, contained between forty and fifty million feet of wonderful clean timber, averaging about fifty per cent spruce,

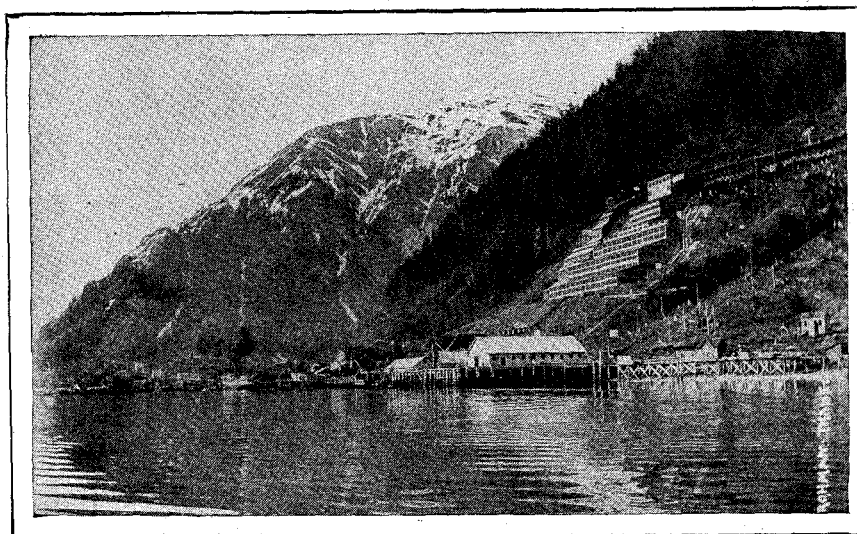
and the balance hemlock. Certainly few tracts in the famous northern Idaho timbered areas, or that of northern Wisconsin, Michigan, or Minnesota, originally contained so heavy a stand of timber. To be sure, the Great Lakes and Idaho timber carry "quality" that is not encountered in Alaska, yet for paper manufacturing I do not believe that southeastern Alaska timber can be duplicated, taking into consideration easy logging, a climate permitting all-year operations, extremely cheap stumpage, large quantity, and natural cheap water power. Any doubt as to the success of pulp and paper manufacture could be quickly dispelled by crossing the narrow straits to the British Columbia side, where several large pulp and paper concerns have made a signal success, not only of paper manufacture, but of successfully competing in the world markets. Seattle newspapers, and, in fact, nearly all Pacific coast dailies, are turned out on paper purchased from British Columbia manufacturers, whose supply is identical with southeastern Alaska pulp timber, and carries the same transportation rates. In fact, an official of a British Columbia paper mill assured me that southeastern Alaska was better situated than the district he drew his supply from, from every standpoint.

It is easy for the theorist to howl that transportation eliminates Alaska from the pulp field. Statements of that kind make good copy. The only trouble is that, like all other academic theories, they don't hold water. The success of the great pulp mills on the British Columbia coast silences every argument of pessimistic theorists regarding the practicability of paper manufacture in Alaska.

I don't blame any paper manufacturer for having refused to go into southeastern Alaska under the red tape conditions existing in the Alaska Forestry Bureau up to January 1, 1921. Since that date there has been a small pulp mill established in Alaska. At the present time several large companies are negotiating for substantial areas of timber, with the intention of erecting pulp and paper mills.

During the entire year the Forestry Service has expended every effort to cruise and allocate timber in accordance with requests it has already received for desirable timber tracts.

There is one clause in the timber contract, as stated in my first article, that has proved a stumbling-block, but this clause will, in all probability, be removed shortly. However, there are desirable features in the Forestry rules and regulations that are not only reasonable, but give the operator advantages that he would not have through private purchase. In the first place, when the intended purchaser applies for a tract of pulp timber the Forestry Service picks out a water-power project, and then allocates to the intended purchaser all timber adjacent to



A GOLD-MINING COMPANY'S PLANT AT JUNEAU

the power. He is given a contract for thirty years, with fifteen more years additional, if necessary, to carry out operations. The Government really carries the burden, as the timber does not have to be paid for until ready to cut, relieving operators of tremendous outlays of money for stumpage purposes. This eliminates payment of taxes, and, although the stumpage rates are adjusted every five years, in all probability the increased stumpage will not amount to more than, if as much as, accrued taxes on privately owned timber. It gives a company the opportunity of using all its money for manufacturing purposes instead of having millions tied up in stumpage.

We will take, for example, one of the large tracts that is now being surveyed and advertised. This tract contains two billion feet, and is directly adjacent to a wonderful water-power project, with a natural harbor and excellent mill site. To purchase this amount of timber on outside sale would necessitate an outlay of at least \$2,000,000. As only a nominal deposit is required, the tremendous saving to an operating company is patent, especially when the operator is relieved of the tax burden. No taxes and no stumpage outlay for uncut timber are certainly worthy of the careful consideration of any legitimate concern.

Quite true, there is one clause that does not appeal to American pulp manufacturers. I have talked to many of them. They have frankly assured me that they were greatly interested in Alaska forest products. They were quite satisfied with the Government contract—up to the clause I described in my last article, namely, that the Chief Forester has the sole power to name the new stumpage rate every five years. Quite true, he must base the new price on sales that have actually been made during the five years of other Alaskan timber. This undoubtedly is a protection, but large operators have pointed out that it leaves ground for irritating discrimination, especially if the operating company should have in the meantime in-

curred the prejudice of the Chief Forester for either real or fancied reasons.

Proof of the pudding is generally in the eating. The radical changes in the Forestry policy in Alaska are brought to light when interviewing sawmillers and loggers engaged in the manufacture of lumber in various parts of southeastern Alaska. While the sawmills are small, they have taken care of Alaskan needs, and this year have exported several million feet of timber to foreign markets.

The remarks of the managers and owners of the mills are interesting. They assured me that under the old system, before the Forestry office was established in Juneau, the delays and red tape tied around practically every business transaction were very discouraging. I was assured, however, by every actual operator I talked with in Alaska that under the present system they could ask for no better treatment, and that they really fared as well as if they owned the timber outright. They received co-operation from the Forestry Service that was worth a great deal to them. The red tape had been almost entirely eliminated, and of course from the standpoint of small business, where thousands were invested instead of millions, they were not so deeply concerned over the arbitration clause. The lumbermen frankly declared unstinted admiration for the caliber of the men in the Alaskan Forestry Bureau from a standpoint of judgment, efficiency, promptness, and genuine friendly attitude. However, the most prominent sawmill operator in the Territory told me that if it were possible to arbitrate before a competent board real or fancied discrimination on readjustment stumpage rates there would be a dozen operators in Alaska where there is one now. "So far as I am concerned," he added, "with the present Forester, I would as soon take his judgment as that of any board, but that may not be the case with his successors."

I have talked to several operators since the plan outlined in my first arti-

cle went to press. They have assured me that if there was a cabinet established in Alaska that would act as an arbitration board, where the Chief Forrester's adjustment prices could be appealed for adjudication, Alaska in a remarkably short time would find pulp mills on available tracts.

An Alaskan cabinet would act as a board of review, and would guarantee adequate protection against any possible discrimination on the part of a Bureau official. In other words, as I have already pointed out, the cry of autocratic Bureau control would be stilled forever.

Let me again impress the reader with the fact that there will be a perpetual supply of timber in southeastern Alaska, which is not alone due to the heavy rainfall, but to the peculiar nature of the soil where timber is found. "It rains here some, and then some," a prospector assured me, when I inquired about weather conditions; then the grizzled old-timer related the following story, which, in my opinion, was outrageously overdrawn.

A missionary had rounded up the natives around Ketchikan, in the early days, and, after opening up the Sunday meeting, informed his Indian congregation that he would use as his text the story of Noah and the ark. After assuring his hearers that after forty days and nights of rain the earth was flooded, the missionary was interrupted by an old wrinkled Siwash. "Did you say that it rained for forty days and nights, and the whole world was flooded?" inquired the Indian. "That's true," replied the missionary. "Heap big lie," grunted the disgruntled redskin. "It's rained here both day and night for forty years and no flood yet."

Southeastern Alaska was first made famous by the Treadwell Gold Mine, which quickly established the reputation of the greatest low-grade gold producer in the world—an enviable reputation held until 1917, when a great cave-in on the shore line of Gastineau Channel flooded the principal operating unit. It is questionable if this mine will ever be pumped out because of the tremendous expense involved in erecting a coffer dam. The flooded mine, although worked for nearly thirty years, still contained enough ore for fifteen years' operations. The Treadwell Company, however, are working several other smaller properties on Gastineau Channel.

Adjacent to this property is the Alaska-Juneau, a mine containing tremendous ore bodies, but, unfortunately, of such low grade that profitable operations have only recently been effected. In bringing this great property into the profit column, a new star has been added to the firmament of the world's great mining engineers, the new star being P. R. Bradley, General Manager of the Alaska-Juneau Mine. Mr. Bradley, during the month of June, 1922, brought the total cost of mining and milling the free milling gold-ore product to a fraction over 41 cents per ton. After care-

ful calculations, 3 cents per ton was added to cover all overhead, making a total cost of only 44 cents per ton. This remarkable feat practically cuts in half the cheapest methods of mining formerly known. When I was informed of the June cost sheet of the Alaska-Juneau, I pooh-poohed, as every one else was doing at the time. I had to be shown, and told Mr. Bradley so. "All right," he said; "we will go through the mine tomorrow."

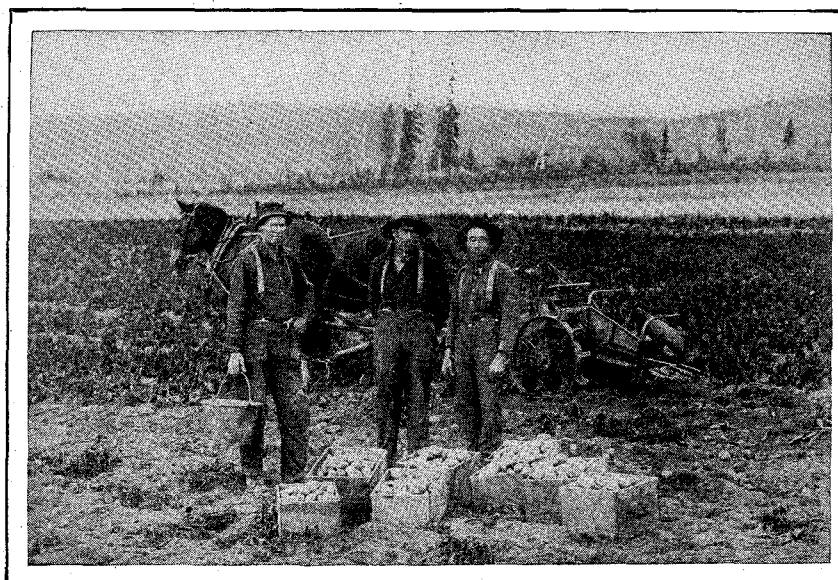
We went through a great tunnel many thousand feet long to the point where the Bradley cave-in stoping system was in operation. We viewed the wonderful electrically operated car system where forty ten-ton-capacity cars were pulled by an eighteen-ton electric locomotive; then back to the mill, where the most modern mining machinery in the world was in operation. As we started through the mill I told Mr. Bradley that his system of operation was wonderful, but it didn't explain a 41-cent mining and milling achievement. "Don't get excited," he replied. "Keep your eyes open." A few minutes later I stood on a platform overlooking a great sorting belt where four men were picking off gold-bearing quartz, and the slate went over into conveyors, and thence to Gastineau Channel. I realized in a flash that I was viewing the "reason" of 41-cent operations. The great Alaska-Gastineau mill had been compelled to close down because the cost of operation exceeded by a few cents a ton the total gold recovery. This failure was attributed to the fact that the Gastineau ran three tons of barren slate through the mill to every ton of gold-bearing quartz. This heavy percentage of slate going through the mill caused a prohibitive cost of operation, and the mill—the largest and most modern in the world—closed down and is now being dismantled. Mr. Bradley's Alaska-Juneau had the same trouble. Due to the stoping systems used, about three-fourths of the rock brought to the mill from the mine was pure slate. For

several months every effort was made to invent a system that would permit a cheap segregation of the slate and quartz. Bradley solved the problem by installing great conveyor belts by which, at a trifling cost, a few men easily sort out one ton of quartz and let three tons of slate go into the channel without going through the crusher. The success achieved by this new method of cheap milling will mean much to the future of low-grade mining in Alaska.

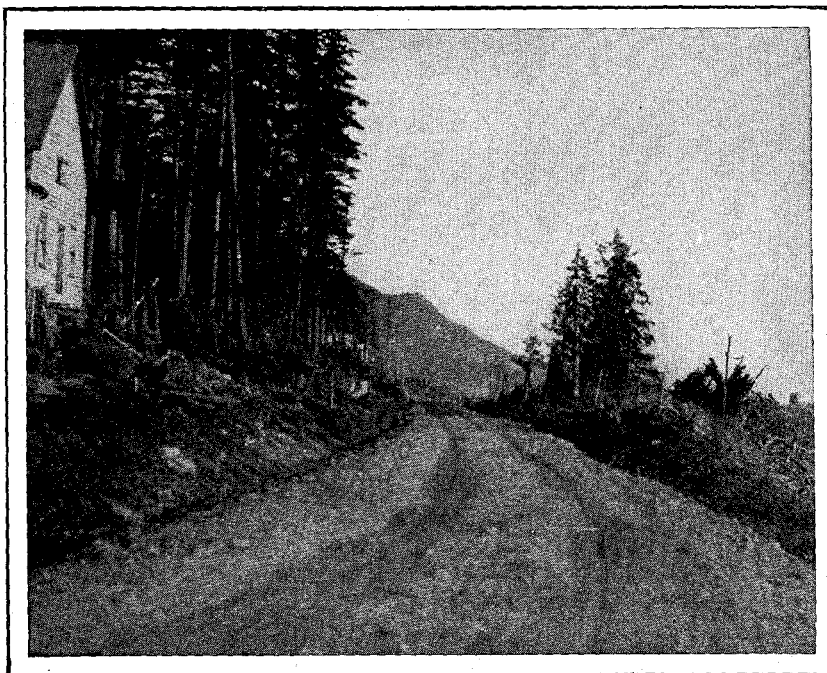
There are several promising mines in the immediate vicinity of Juneau; especially the Ebner Mine, which lies directly northeast of the Alaska-Juneau.

Funter Bay, located on upper Admiralty Island, has every indication of becoming one of the great camps of southeastern Alaska. There are two large properties being developed close to the bay, and these, if proved, will enjoy harbor and cheap milling facilities second to none in Alaska. The Pekovich claims cover an area of twelve hundred acres, containing several large veins of low-grade free milling gold ore, with one small vein of high-grade that is now being shipped. Back on Mount Robert Barron, on the Pekovich, is located an immense vein of copper-nickel-gold ore of fair value. The owner of this property has carried on development work for many years under great difficulty, but at the present time the main tunnel, which is nearly two thousand feet long, is credited with being less than a thousand feet from two large ore bodies. If these ore bodies are tapped, showing equal values of surface ledges, Funter Bay will become a second Gastineau Channel.

Directly opposite the Pekovich mine is a group of claims known as the Nowell-Otteson group. Work has progressed in the development of these claims for the past twenty years. However, it seems that a lifetime effort of the owners will be rewarded in a short time. Recent encouraging developments tend to justify the hope that this property will soon



AN ALASKAN POTATO RANCH



THIS IS THE KIND OF ROAD THAT ALASKA NEEDS—A SAMPLE FROM THE KETCHIKAN DISTRICT

take its place among the gold producers of Alaska.

On the opposite side of Mount Robert Barron lie the Williams and Brown claims, where high-grade prospects are being developed. The greatest high-grade gold mine in Alaska is located on Chichagof Island. This mine, known as the Chichagof, located on Klag Bay, works a crew of 175 men, operates two mills, and is one of the highest dividend payers of the North. Near this wonderful property several other high-grade prospects are being developed. They include the Hirst-Chichagof, the Falcon properties, the Apex group, the Elnide, Brown Bear Gold and Copper group, and the Stag Bay claims. The Pacific Coast Gypsum Company operates a large gypsum mine near Iyoukeen Cove. Large quantities of high-grade gypsum are produced and shipped to Tacoma in barges.

In the Lynn Canal District, across Chatham Strait from Funter Bay, several ledges carrying silver and lead are being prospected on Howard Bay and William Henry Bay. The Alaska-Endicott property has a tunnel of sixteen hundred feet completed, and a mill is now being erected.

In the Hyder District, at the head of Portland Canal, many silver claims are being developed. Activity in this section has been given a tremendous impetus since the discovery of the Premier Mine, a property that is shipping large quantities of very rich silver ore to the Tacoma smelter. Mining experts declare that this is one of the richest silver properties in the world. This mine was developed after having been turned down by several noted mining engineers. Engineers had driven a tunnel to a point where discovery of ore seemed improbable. A hard-rock miner who was not an expert got a chance to carry out his theory, which conflicted with the opin-

ions of mining engineers. He drove a cross-cut only a few feet when he discovered the largest and richest silver-ore body in the North.

The new Alaska group, Riverside group, Hovland claims, Lucky Boy group, and many others are now carrying on extensive prospecting, and, according to mining men, give promise of permanence. There is probably more excitement in this district than in any other part of southeastern Alaska.

From all reports emanating from the Hyder District, this camp is rapidly taking its place as one of the greatest silver producers on the continent.

There is a remarkable story about this district of a visit of two very well known mining engineers, many years ago. In their reports they stated that the Portland Canal section would never develop paying mines. This story was very similar to that of the engineers who investigated the coal deposits in the State of Washington in the early '90s, declaring, in the first place, that the coal had little value, and, second, that there would never be enough of it found for successful operation. To-day Washington has gained National fame for both the grade of its coal and the size of its deposits.

There has been more development in the Hyder District in the last six months

SHERMAN ROGERS'
third article
on Alaska
will be published
in next week's
issue of
The Outlook

than there had been in many years before.

The marble deposits of southeastern Alaska are being developed; especially the Tonkeen quarries, although an excellent grade of marble can be found on many of the numerous islands that make up the Alexander Archipelago.

Large nickel deposits have been uncovered on Yacobi Island. There is, however, still some question as to whether the metal can be profitably mined, owing to the conflicting mineral elements the ore contains.

The mines and prospects on Prince of Wales Island known as the Ketchikan District are being developed with promise of successful operation, especially the Rush and Brown Mine, which has already produced a fair tonnage of copper ore. A large amount of development has taken place on this property, which is equipped with modern machinery and a narrow-gauge railway.

Summing up the mining possibilities of southeastern Alaska, I will quote a conservative, successful business man of Ketchikan. He said: "Every one of the myriad of islands of southeastern Alaska contains surface indications of valuable minerals—gold, copper, silver, lead, gypsum, marble, or nickel. Many promising prospects are being opened up, and several heavy producing mines in operation, which should prove to any one with common sense that this part of the Territory will always be a permanent mining country. The possible prospecting ground has scarcely been scratched over yet, and the future will undoubtedly witness the discovery of many paying properties. I have been in mining camps all my life, all over the world, but have never seen a section that can beat this. But it takes men who are willing to risk, who can afford to risk, both time and money. There will be many fortunes made. At the same time, there will be many thousands of dollars lost, as in all mining countries. I want to impress on your mind that you should not buy a single share of Alaska mining stock until after careful investigation, but if purchasers will investigate before they buy and eliminate the gold from the dross they have as good a chance of good returns here as any place on earth. But it isn't a tenderfoot country. For strong-willed, determined men southeastern Alaska ranks with the best."

From an agricultural standpoint the southeastern section of the Territory has a wonderful climate for all kinds of berries, small fruits, vegetables, and dairying. I saw as fine a herd of Holsteins near Juneau as could be found anywhere in the States. Farming will develop into a stable industry when paper mills and mining enterprises develop a local market.

Southeastern Alaska, with its fine climate, its great varied resources, and its easy accessibility, will be the great commercial center when faith and confidence in Governmental policies are firmly established by administration of Alaskan affairs on Alaskan soil.

ETCHED IN ACID

BY LESLIE NELSON JENNINGS

"DRINK without meat." . . . You could not draw
A truer portrait if you tried.
She lives, and though I never saw
The lady, still I'm satisfied.

Red wine undoubtedly is good,
Well racked, warm garnet in the glass;
But what is claret, lacking food?
Not thus *in vino veritas*!

Meat without salt insults the guest,
But there's no madness on the plate;
And many a table has been blest
By men who missed the salt, yet ate.

No; I'll go thirsty if I must!
Ditch water's not so mean a draught
When the contracted throat's adust,
And not so difficultly quaffed!

"Drink without meat." . . . Your sketch, complete
To the last shadow, makes me wish
For fools who bolt their liquor neat
No better than an empty dish!

"EVEN THE DOGS"—

THE FIRST OF A SERIES OF ARTICLES ON THE MACKENZIE RIVER COUNTRY

BY FULLERTON WALDO

THE bank of the Slave River at Fort Smith is steep as a house roof, and your shoes are filled with sand as you slide to the bottom toward the steamer, with a suit-case in each hand. If your hands were free, you would be flailing the mosquitoes and the bulldog flies beclouding you. The bulldog flies are half again as big as bumblebees; fat and greasy as they are, they do more buzzing than biting among human beings, but they drive the horses frantic and they pester the dogs.

Fort Smith is the "capital" of the Northwest Territories, and the starting-point of the Mackenzie River steamers. When you land at the bottom of the sandslide, at the gang-plank (which is all the wharf there is), the view is bounded north, south, east, and west by dogs, hungry dogs. There really isn't so very much more to be seen on the river-bank at Fort Smith, if you except Mrs. Conibear and her store, the Roman Catholic mission with its farm and hospital, and the spruce-tree gallows with an open grave at the foot. The gallows was used in 1921 for the first murderer, but he was given sepulture in the tiny cemetery, and the grave is left open to save trouble next time.

There was a wait of eleven days before the Hudson Bay Company's steamer started—twelve days later than advertised in the season's schedule. There was plenty of time to study the dogs, and the interest was reciprocal. There they stood, a score at a time, knee-deep in the muddy water, their eyes fixed on the door of the cook's galley. Their

Indian masters, whom they served so faithfully all winter, had turned them off to fend and find for themselves all summer long, on the beautiful Bolshevik theory that if you are not at work you do not need to eat. There is an abundance of fish in the river at the foot of the rapids; but the fish are in the river, not ashore, and the Indian does



MY FAVORITE, "MINK"—THE MOST PATIENT WAITER AND THE GENTLEST SPIRIT OF THE LOT

not propose to go fishing for a dog. So the dog starves or depends on what is thrown from the steamboat; for the forest in the summer season has very little that he can catch by hunting. The bush is so thick that the advantage is all on the side of the rabbits and the squirrels, if any are there.

I can see Mink now, filling up the whole breadth of the gang-plank, waiting for me to appear. He was white, like a polar bear, except where he had come in contact with tar used for the boat-seams. He was only two years old, but the struggle to get enough to eat had aged him. It was hard to take his picture "close up," for he always wanted to eat the camera. He watched every motion of my hand, and hope sprang eternal. Hungry as he was, he had to learn to eat dog-biscuit from my baggage. The "husky" is accustomed to three dried whitefish a day—when he can get them—on the trail in winter; one gulp per fish, and his supper is over. Dog-biscuit makes him chew, and he fears that while he is chewing another dog may get his rightful portion.

Mink and his rivals caught flung scraps from the deck almost unerringly. They knew that if they missed there was scarcely the ghost of a second chance. One big black brute was a fiend for pouncing on the rest, and more than once the red blood showed on the white coat of the gentler Mink ere the ruffian could be driven off. I have seen the bully repeatedly drop what he was eating to snatch at another dog's meal.

There were three puppies, like young