

MARKING THE ALASKAN BOUNDARY

BY THOMAS RIGGS, JR.

THERE had been some dispute as to what constituted the boundary of the country bought from Russia by the United States in 1867, but until the real value of the territory was known, no one cared. The miners of the early days managed very well with an approximate boundary. They held miners' meetings and any decision reached by them constituted the law. For the opening up of Alaska we are indebted to the panic of 1893. Throughout the west the harder spirits preferred to brave the dangers of that almost unknown region than to accept the starvation wages then offered. They knew that grubstakes



and independence were to be found on the bars of the Forty Mile, the Stewart, and at Circle City.

With the increase of population came the representatives of the American and Canadian governments, custom-houses were established and court decisions took the place of the rude justice dispensed by miners' meetings. With the new order of things came also the necessity of a determined line between the two countries.

The United States claimed, under the old Russian treaty, a line running up Portland canal to the 56th parallel of north latitude, thence to follow the summit of the coast range to its intersection with the 141st meridian. In the absence of a definite mountain range near the coast, the line was to be not more than ten marine leagues distant from tide water.

Canada claimed that the line should follow the coast range paralleling the general contour of the coast, and cutting across all inlets and fjords. There were other contentions of minor importance, but the real trouble was that Canada thought she was entitled to a seaport which would allow of shipments through Canadian territory to the now valuable Klondike.

As to the 141st meridian being the rest of the boundary, there was no dispute. This line starts at a ridge of Mount Saint Elias and runs through to Demarcation Point on the Arctic ocean.

Maps showing a strip of land along the coast were made, archives were rummaged, every available bit of history and tradition were searched, and the whole mass submitted as evidence to a tribunal of three Americans, two Canadians, and one Englishman, which met in London in 1901. The sifting of the evidence required three months. The opposing counsel helped by the geographic experts put forth their best arguments, a vote was taken, and the result showed four to two for the United States, the lord chief justice of England, Lord Alverstone, casting his vote with the Americans.

Naturally the Canadian representatives felt greatly disappointed, but the evidence was too conclusive to allow of any other outcome.

Then came the question of what mountains constituted the coast range. In places a compromise was effected departing slightly from the claims of the United States.

It was decided that certain well-defined peaks on the mountains fringing the coast should constitute the main points on the boundary. Lord Alverstone, wielding a blue pencil, marked on the maps what appeared to the tribunal to be the proper mountains. The members of the tribunal were all eminent jurists, but this did not make them proficient in the intricacies of contour maps, and the advice of the experts was constantly requested.

The location of the boundary was left to two commissioners, Mr. O. H. Tittmann, superintendent of the coast and geodetic survey, for the United States, and Dr. W. F. King, chief Dominion astronomer, for Canada.

Wherever the blue-pencil mark appears on the map, this point without any recourse is a boundary point, even though a higher and better point may be but a short distance away.

To follow the sinuosities of the mountain ranges in this country would be hopeless, so the commissioners will probably decide that a straight line connecting the various blue-pencilled points shall constitute the boundary.

The actual demarcation of the boundary, to be satisfactory to both governments, must be done jointly. By this it is not meant that there is a di-

vision of labor in every party. There are American parties and Canadian parties, and with each locating party, or party which decides on the line, go representatives of the other government. There are line-cutting parties, leveling parties, topographic parties, triangulation parties, and monumenting parties, which work separately, their work being such that joint representation is not always necessary, as the line will be subject to inspection at some later date. These parties report yearly to the commissioner of their respective governments. The commissioners meet sometimes in Washington and sometimes in Ottawa, and either accept or reject the work done by the field parties. Their decision is final.

The magnitude of the task is little understood except by those closely connected with the work. There are 600 miles of boundary from Portland canal up the coast to Mount St. Elias, where it hooks around on the 141st meridian and shoots for another 600 miles straight north to the Arctic ocean.

All the land lying along the boundary must be mapped on an accurate scale, and a strip of topography four miles wide must be run the entire length of the 141st meridian; peaks which cannot be climbed, or rather those which would take too long and would be too expensive to scale, must be determined geodetically; vistas 20 feet in width must be cut through the timbered valleys, and monuments must be set up on the routes of travel and wherever a possible need for them may occur.

The field season is short, lasting only from June to the latter part of September, and along the coast operations are constantly hindered by rain, snow, and fog. Rivers abounding in rapids and quicksands have to be crossed or ascended. A man who has never had the loop of a tracking line around his shoulders little knows the dead monotony of lining a boat up a swift Alaskan river with nothing to think of but the dull ache in his tired muscles and the sharp digging of the rope into his chafed shoulders.

Vast glaciers are to be crossed, with their danger of hidden crevasses. More than one surveyor has had the snow sink suddenly beneath his feet, and has been saved only by the rope tying him to his comrades. Several have been saved by throwing their alpine stocks crosswise of the gap, and one, while crossing the Yakutat glacier with a pack on his back, caught only on his extended arms. High mountains must be climbed; if they are not the boundary peaks themselves, they must be high enough to see the boundary peaks over the intervening summits.

And these climbs are not the organized expeditions of an Alpine club, with but one mountain to conquer, but daily routine. Heavy theodolites and topographic cameras must be carried, and instead

of being able to throw himself down to rest and enjoy the glorious panorama, there is immediate work to be done, and a few clouds hovering over some distant mountain, instead of lending beauty to the view, may send the poor surveyor behind some sheltering rock to wait, shivering with cold, until morning will allow him to take up his stand by the theodolite and complete his observations.

On the 141st meridian an astronomical longitude was determined at a point on the Yukon river. American and Canadian astronomers worked together, bringing time over the wires both from Seattle and Vancouver. An azimuth was then observed and this azimuth is be-

ing prolonged in its straight shoot across the peninsula. This line has been accepted as the 141st meridian and consequently the boundary. It has been run into the mountains fringing the Pacific coast. Topography, triangulation, line-cutting, and monumenting are now being carried along the located line.

For the present the line will not run to Mount St. Elias. It would be possible, but not practical, to run it across the intervening 80 miles of snow and ice and towering mountain ranges. To complete this part of the boundary the use of an airship is contemplated.

In the interior the difficulties of the work are changed. Long wooded stretches, interrupted by barren ridges, take the place of glaciers and craggy mountains. In place of snow fields there are heart-breaking "slogger-becomes" swamps to be crossed, and the temper of man is tried to the breaking point. Supplies have to be ferried across the rivers on log rafts, while the horses swim.

There is no longer the guiding line of the coast to follow, and the surveyor must rely on his instinct for topography and on woodcraft to pilot him through an unbroken wilderness.

The inconveniences of transportation have to be overcome, and year by year they are becoming worse as the work carries us each year farther from the Yukon with its steamers. For the season of 1909 the American party of 30 men will have to walk 300 miles before they can even start work.

Then the topographer with his theodolite tries to make up for lost time. Regular hours for work are ignored. A day's work is reckoned as ten hours, if the work can be done in that time; if not—well, in midsummer the days are 24 hours long. Holidays and Sundays see the same old routine—even the Fourth of July.

Usually bases of supply are established at certain known points before the opening of the season. These are called "caches." Mistakes in the locating of a cache are sometimes made, and last season one surveyor in consequence of such a mistake was without food for two days, finally reaching another camp in rather disheveled condition. It so happened that this other party was moving south toward the same cache and was on short rations; so nothing remained to do but beat a hurried retreat 60 miles northward, arriving at another base with belts pulled in to the last notch.

Not Finished.
"Americans are so unfinished," has been the complaint of Europeans. We are and glad of it. Yankees are starting the world with their achievements and will, we believe, stick to the habit.

Physicians' Fees Fixed by Law.
A German antiquarian has found documents showing that in ancient Babylon, 4,150 years ago, the sums due to doctors for treatment were exactly prescribed by law. They varied according to the social position of the patients.

Uneasy Lies the Head, Etc.
"When you feel a hanker's foh great authority, son," said Uncle Eben, "do a little preliminary practice as a baseball umpire an' see whether you really enjoys it."

Social Museum in Barcelona

A Spanish Museo Social will be opened in Barcelona in November, 1909, supported by the provincial assembly and the municipality. The object of the Museo Social is to gather in a single exposition data of all sorts, instruments, apparatus, models, charts, statistics, etc., referring to social questions and problems and at the same time create a permanent organization for study and development.

The committee in charge will reserve space for each nation, grouping its entire exhibit. The opening exhibit will comprise the following sections: Education, living conditions, working conditions, social contracts and conflicts, action of public authorities, philanthropic and moral action. The committee calls special attention to the section of appliances for the prevention of industrial accidents. While

many exhibits will be removed after the close of the opening exhibition, it is hoped that as many as possible will be left for the permanent Museo Social.

For the Hostess

Chat on Interesting Topics of Many Kinds, by a Recognized Authority

FREED AT LAST
From the Awful Tortures of Kidney Disease.
Mrs. Rachel Irvie, Elmrietta, Texas, says: "I would be ungrateful if I did not tell what Doan's Kidney Pills have done for me. Fifteen years kidney trouble clung to me, my existence was one of misery and for two whole years I was unable to go out of the house. My back ached all the time and I was utterly weak, unable at times to walk without assistance. The kidney secretions were very irregular. Doan's Kidney Pills restored me to good health, and I am able to do as much work as the average woman, though nearly eighty years old."
Remember the name—Doan's. Sold by all dealers. 50 cents a box. Foster-Milburn Co., Buffalo, N. Y.

"Maud Muller" Party.
During these golden October days, outdoor and indoor parties combined are quite the thing. A hostess noted for her originality invited her friends to a "Maud Muller" party. The invitations said: "Informal, please come in country costumes." As she lived in a suburb, time tables were included with the train marked that she wished them to take. The hour was five, and a merry throng took the four o'clock train. An immense hay wagon was at the station, with the splendid big horses gayly decorated and driven by the regular farm men instead of the liveried coach and footman. There were horns for the men, and the hostess awaited them on the steps of the port cochere. Big straw hats were given to the men with red ribbons and the girls had blue ones. Rakes with gilt handles were given the girls, who were thus attired as "Maud Mullers," and went forth to rake the hay on this charming summer day which had gotten by mistake into the fall calendar.

She also had the art of always assembling just the right people together, and always remembered who hated "bridge," who didn't like golf and who loathed to dress for a formal dinner party. On the quiet, I think she keeps a book with the peculiarities of each one of her friends carefully jotted down, just when she entertained them, and just what she served on each occasion. At least that is the way one of the best entertainers I ever knew does, and it is worth considering.

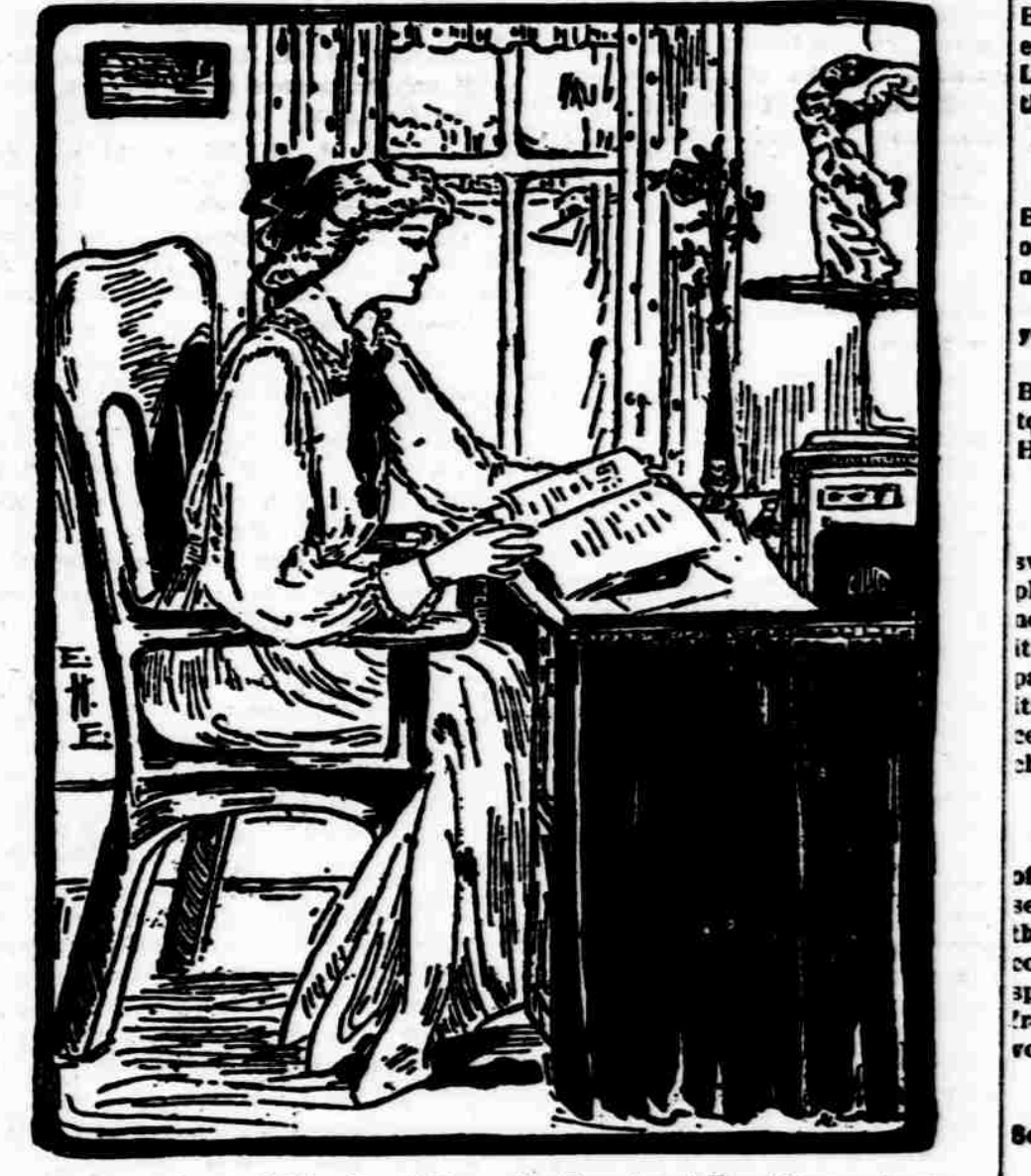
Souvenirs for a Party.
An autumnal party given for children from eight to ten years of age, the souvenirs were made by the guests from corn husks which they transformed into dolls. A face was penciled on the green stub of corn, the husks made the dress and the still carefully braided made the hair; bonnets were also made from the husks. These dolls were really charming, and the prize awarded for the best was a delightful little booklet in which corn husk dolls was the heroine; it was written by a clever woman musician. This idea is just as applicable for a "grown-ups" party as for children, for I never saw a woman yet, whether she admitted it or not, who didn't like a chance to play dolls.

Announcing an Engagement.
"Polly" declared she must have some unusual way of announcing her engagement, so after much careful thought this was evolved: The 20 special friends were asked for a thimble party, and there was nothing doing until refreshments were served. Then each guest found a little envelope on the plate and the hostess explained that inside there would be found a jumbled lot of letters, that the letters of each color would spell one word, and there was just one word in each envelope and all were the same color in each envelope, so each one made their word, and the light gradually dawned as the story was told by the guests putting their words together. It was great fun and ended the afternoon in a most happy manner, as the little bride-elect was a great favorite, and she was fairly beaming when all began to offer good wishes and wanted to know "all about it."

Colored embroidery enters into much of the new neckwear.
Wraps are growing more decorative.

Madame Merril.
Colored embroidery enters into much of the new neckwear. Wraps are growing more decorative.

Easily Made Table



Home-Made Study Table, Consisting of a Board and Two Orange Boxes.

THE STUDY TABLE in the sketch is possible, even in homes where economy must be observed, for the cost is a mere trifle—two five-cent orange or lemon boxes, obtained from the grocer, a can of wood filler and mission stain and paint brush being all that is required. The large flat board that serves as a table top may be purchased from a carpenter for very little—or often a wooden board may be found, scrubbed and painted and pressed into excellent service. The top of the board must be perfectly smooth.

First a coat of wood filler is put on the boxes and board. When dry, a second coat is applied if the wood seems at all rough. Then apply the mission stain or any other wood stain desired. Place the boxes the width of the board apart, with the front edge of the boxes against the front edge of the board, and nail the board on the boxes in each corner, being careful that the points of the nails are not long enough to project through the under side of the top of the boxes.

Little silk or print curtains may be hung around the ends and across the open front of the boxes if one wishes and they give a dainty touch.

Batiste Jackets Dainty.
The terrifying popularity of the lace coat has very nearly killed it, as the awful results which have been achieved in midsummer costumes by the use of it is enough to prejudice the most unbiased against the garment.

Worn over an ankle-length frock of bright purple or green, with a large black hat heavily fringed with 98-cent "plumes," they make a picture which must cause the gods to weep.

The lovely little batiste jackets, however, worn with wonderful gowns of the same fairy-like fabrics, are quite another story. It would be hard to resist the appeal of one of these cut in a short-waisted fashion and generously embroidered and inserted with baby Irish. This is slashed in deep points at the bottom which are outlined with the lace. Another one is formed of bands of shell pink baste, tucked horizontally and having insertions of baby Irish and Valenciennes lace.

Cleaning Plumes.
A woman who has success in cleaning ostrich and other feathers puts a cupful of Indian meal, half a cupful of flour and three level tablespoonfuls of borax into a paper bag, and with it one large or two or three small feathers. These she shakes about until the soil has disappeared from the feathers, and then she shakes them free from the mixture. Fine knitted wool articles and laces are sometimes cleaned in this way.

A Blochy Face.
Many women are mortified by a red, blotchy skin that refuses to yield to

Food Question Settled with Perfect Satisfaction by a Dyspeptic.
It's not an easy matter to satisfy all the members of the family at meal time as every housewife knows. And when the husband has dyspepsia and can't eat the simplest ordinary food without causing trouble, the food question becomes doubly annoying. An Illinois woman writes: "My husband's health was poor, he had no appetite for anything I could get for him, it seemed." "He was hardly able to work, was taking medicine continually, and as soon as he would feel better would go to work again only to give up in a few weeks. He suffered severely with stomach trouble." "Tired of everything I had been able to get for him to eat, one day seeing an advertisement about Grape-Nuts, I got some and tried it for breakfast the next morning." "We all thought it was pretty good although we had no idea of using it regularly. But when my husband came home at night he asked for Grape-Nuts." "It was the same next day and I had to get it right along, because when we would get to the table the question, 'Have you any Grape-Nuts?' was a regular thing. So I began to buy it by the dozen pkgs."

Poverty and Consumption.
That poverty is a friend to consumption is demonstrated by some recent German statistics, which show that of 10,000 well-to-do persons 40 annually die of consumption; of the same number only moderately well-to-do, 65; and of paupers, 97. According to John Burns, the famous English labor leader, 90 per cent. of the consumptives in London receive charitable relief in their homes.

A Steady Thing.
Something had gone amiss with Bobbie and he had sought the comfort of tears. Noticing his wet cheeks, his mother said in a consolatory tone: "Come here, dear, and let me wipe your eyes." "I ain't no use, mawver," returned Bobbie with a little choke. "It's doin' to cry again in a minute!"—"Woman's Home Companion."

The American Cat-Tail.
The cat-tail of the American swamps is almost exactly the same plant as the Egyptian bulrush. It is so longer used for making paper, as it once was, but from its root is prepared an astringent medicine, while its stems, when prepared dry, are excellent for the manufacture of mats, chair-bottoms and the like.

Against Pretences.
Away with all those vain pretences of making ourselves happy within our selves, of feasting on our own thoughts, of being satisfied with the consciousness of well-doing, and of despising all assistance and all supplies from external objects. This is the voice of pride, not of nature.—Hume.

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"My husband's health began to improve right along. I sometimes felt offended when I'd make something I thought he would like for a change, and still hear the same old question, 'Have you any Grape-Nuts?'" "He got so well that for the last two years he has hardly lost a day from his work, and we are still using Grape-Nuts." Read the book, "The Road to Wellville," in pkgs. "There's a reason."

Ever read the above letter? A new one appears from time to time. They are genuine, true, and full of human interest.