Hall
1895-1
Alaska Coal fields
Bogoslof Volcano
Corral Hollow
Sunday June 2/95

U.S.S. Pinia, Sitka, Alaska.

About 9 A.M. take the launch for St John Baptist Bay about 15 miles north of Sitka oppo-
site Salisbury Sound. Coal has been reported here at var-
ious times but only in float pieces. A careful examination
of the material brought down by streams shows only granitic
and metamorphic rocks and occasional bands of graphitic
slates. The latter have some-
times the look of anthracite
and are probably what has
been mistaken for coal by
inexperienced persons. Return
about 3 P.M.

Coal at N. side Yakutat Bay near
the shore seen about five feet, was
taken to Sitka by Dr. Groff & Emmons.

Russell Camp No. 2 is at the site
of the mine.
Coal at Pt. Upright, several thousand dollars spent in development by Capt. Joe C. Beer and others but work ceased on account of fault, which cut off the vein.

Sunday, June 9, 1915

Kestynakes labor, southeast end Leppplagen mine. Shaft 8 ft. deep full of water, hoisting apparatus & small car. A few tons of coal taken out (meaning bag No. 115), about 2 years previous to our visit now reduced by backings to small flakes. Appear to have been a small pocket soon exhausted beam in friable sandstones and soft phylites dipping about 30° N.W. only a short distance from the waters edge.
Sunday June 4, 1882 — 115 a.m.

Arm of Monterey Bay.

White signs of coal were discovered by prospectors on a reef, crooked at high water. Shales & black slates, dipping about 35° N.W. The shales were friable with rotten fragments of leaves & stems, but no food plant remains. A few specimens (marked No.) were collected. The thickness of the coarse-grained but rather uniform soft sandstones appeared to be several hundred feet, with occasional concretionary nodules or masses of fine material. The strata showed waves in several places, with a general N.W. dip. The layers showed wave motion by cross-bedding very distinctly. The shales were variable in hardness, usually soft and in thin layers, very brittle.
with occasional lignitic nodules but are well defined and seams. The surface of the land covered with vegetation. The only exposure between the trees is low water mark.

At another point on a small istlet between two arms from Favorite Bay, Mr. Knight found points of a huge white mass of lignite much decomposed at the surface. This was traceable from low water mark to the base of the bluff. The sand stones appeared much broken up wave-like, and every where low, the topography appears with everywhere less than 150 feet. The arm (343°) in which these exposures are shown is the 2nd from the entrance, rocky and with many bays, only accessible at slack water. Alg. 30° 45" W. Mer.
Monday June 17th
At P. Sullivan a shaft 120 ft was made by McCleesky & others with poor results. The outcrop is about 8 inches thick of brown quartzite shallowly dipping in the position of the shaft according to Mr. McCleesky but are low values separated by quartz and mica schists. State Dept. make? Shale here. The coal boulders and opszd. stone was found to have been utilized except for the small amount to the north. (Comm. in the report) The adjacent shales being 100 to 200 ft thick.
Dear Eva,

I arrived here on Friday at about 5:00pm. I stayed there for two days and then returned to New York. I brought a few gifts for you and your family. I also had lunch at a great restaurant with some colleagues. It was wonderful. The food was delicious and the service was excellent.

I hope this finds you well. Please let me know if there is anything I can do for you.

Best regards,

[Signature]

P.S. I missed you very much.
Monday, June 10/95

Made J Mitchell's seams on arm of Mitchell Bay. 1st tunnel, where coal was taken out for the dajmano. Timbered but filled with water and crushed by landslides. (Specimen of coal in bag 117.) Visible seam averaging about a foot, near high water mark. Much contorted over 100 ft. West turns vertical and bifurcates, then runs out. Strike 25° E. Dip 38° flat. Much A second short tunnel in sun. Has coal a short distance further up the arm.

Rock and stones chiefly, above without moss, below shales, like the others. Continuing up the arm on a small point is a tunnel put in by Brightman, de Ross and others for 100 ft or less now abandoned. Seam of
Shaly limestone not over 1/4 inch thick, enclosed in shale on side of which is a hard grayish stone - (Specimen of coal in bag 115.)

Many leaves in the shale a few specimens (1/8") collected - Several thousand dollars spent on these quite worthless.

In a small cave at the head of the left hand stream is the only coal seam now worked on which Mr. McClanckey has done a good deal of work and taken out nearly 100 tons of coal. Dip 25 S.E. Strike 44 E.

The rocks here are a low bluffs of coarse sandstone under which, dipping north, at the angle of the beach.
and suitable from 1 to somewhat above high water mark about level with the surface of the beach is a seam of shale & coal (18 inches) and which has been dug out for a distance (along its face) of about 100 feet to a depth of a couple of feet. In the beaches and intermurally common in the sands are several thin seams of coal separated by variable thick beds of shale & shale sandstone. The upper specimen of coal (in bag No. 7115) is the best & clearest and not over a foot thick. Coal from this seam tried in the Barnum steam boiler 18 cts tubular boiler, burned well and developed about \( \frac{3}{4} \) the steam raising value of
Wellington (B.C.) coal usually used, was decided by tests than Connex coal. Below this seam is a yard or two of shale and ten a parallel seam of brown lignite mixed with bright coal and thin leaves of shale. This contains many particles of forest resin and impressions resembling wood fibre. Going to the wash over it the full extent and uniformity of this seam could not be distinctly defined but it appeared to include about three feet with the central portion somewhat more shaly than these. Whether this mass was a local thickening of a seam elsewhere or part of a uniform bed can only be determined.
by more extensive exploration.

The rocks about the mine are less disturbed than at other localities visited, and the prospect of continuity in the deposits corresponds very well.
July 11/75

On the shore of the island facing Chiniak Bay there are numerous beds of blackish slate, the schistose nearly vertical and in large part cobblering with the bedding. The dip and strike are multifarious even in the extent of a few rods. These slates alternate with thin sandy layers and form very thin leads in many places, but are faulted and broken up in a remarkable manner with numerous dykes of grayish hard diorite intersecting them and often greatly dislocated with small cracks which are mostly filled with quartz-feldspar. fossils are very scarce in these slates but careful search reveals a few (no. 197). The average strike - N. of E. magnetic, the dip 80°-90° E. of E. The beds...
I found in the notebook which I had written in in the morning some passages which I had cut out from some book. The passages were about the temperature of the planet and its atmosphere. I cut them from a book I had read, and wrote them down in the notebook. The passages were quite interesting and made me wonder about the temperature on other planets. The notebook was a good place to keep such thoughts.
As we leave Chincak Bay and make NW, through the Strait between Kabnek & Afgornak, & Spence Isls, the back leveling of the lowlands is seen to be lessless elevated and no base levelled bench is visible on the NW slopes of Kabnek or Afgornak.

Bright Work Cape Douglas Inlet July 21, 1895.

This Cape has much age in 3-5 fms. secure against waves & ice except from W.N.W.
The cape is low with brook about it and the E and S parts of the bay appear to be flat, the west shore is bold and should be kept ahead in entering.
The East Peninsula is composed of andesite flows mostly horizontal and more or less interstratified with ash beds containing carbonaceous matter and remains of plants.
They are somewhat faulted and the surface is often broken up, and sometimes contain pebbly boulders. The plains are mostly sandy, grassed over, and the deposit was a moraine field. To the south, three glaciers are visible on the range. Two come down south of Cape Douglas and take up in a stream discharging into the sea. The southernmost is the largest. The penultimate moraine of the glacier is composed of a very level, large, and columnar undershell. It is black with a flat top, and mutual material of the same, and indications of glacial action. The top of this bed has been moderately glaciated (as also the eastern plains) and shows a few moraines. The agency might have been an extension of the glacier whose shires now discharge into the sea at the grooves points towards it, the beds are a good deal de-
composed on the surface, but the glaciometer was rather a smoothness off them scoring.

Leaving the Cape and making

a course N.W. by W. for August

hine Bay, the height on the northern side of the Douglas Massif is well seen, snow covered and
with three very large snow

plains descripting to the

vicinity of the sea. That
to the east appears to be the
largest and show an even

snowy surface without lat
tinal irregularities. Northwest

the group of mountains is a
space of comparatively low land
behind the shallot Radushake

Bay, this eastern are reported
pleasant.

On the way to Augustine Bay, we

6 or 8 miles from it are the few

other rocks (— —) which

are used to see SE way, from

the peak of Augustine. We saw
them in one with a high bluff on east side of inlet. Harbour Pt. Beds bearing N 2 by E while the peaks bore from us W W 4 by W. Six miles. They bore N 58° E and the peak N 58° W. At low water there were low flat rocks and a smaller pointed one visible two miles off. They are said to be Avast at ½ tide.

July 22nd 1875
Augustin Jd. Volcana.

Anchor in ½ fow. Sandy with the S. Pt. bearing S E by E the west Pt. W W, the peak N E by E 4½ E about a mile from the beach. The S. Pt. is sandy and low but the boat landing is best here. The beach running off very steep north of it. The west point is composed of ashes and volcanic stones forming low bluff banks.
North, the south edge of the volcanic crater being highest and apparently overhanging to the north. Steam issues from fissured black rocks at the edge of the crater in intermittent puffs. On the south slope are pitches beds of ejected natural cinders on the upper third of the mountains. The south slope from the crest is about 42°, the northern slope about 35°. The upper two thirds of the peak are largely snow covered, below much is bare ashes and scattered lava blocks, then more or less herbage with stunted spruce sparsely scattered and low creeping alders. The borders of the island to the S. West are bare hummocky and with bogs and small woods. The South shore has cliffs of variable height, some very high. The two is indistinct.
About 5 P.M. leave anchor age and start northward for Chichik 1st anchorage

July 23rd. 1898. About six A.M. run into Chichik Bay. Harbor is anchor under the island which, Bank Highlands light at anchor, waiting for salmon from Kasitoff cannery. We anchor and consult charts. Approaches to the locality. He is anchored in 15 fons. Lowest spring tide in June was 3 feet above 24 ft. of average tides. To 10 P.M. at NW head of North entrance. Blocket by foul ground about 57 ft. high. Reddish sand...
market side isn’t encountered both times, which might lead to the supposition that obstructions exist. On the island side the water is bold, on the main, shallow near the head of the harbor for a long distance from the beach. This seemed to be no hidden dangers and the holding ground is good, the wind is often stronger inside the harbor than out in the inlet at the same time owing to the high land and funnel-shaped inlets. The harbor opens to the S.E. But the entrance is so narrow that the winders probably do not blow home with severity enough to endanger vessels at anchor. There is probably a narrow channel out at the NW end of the harbor, but this ground is too foul to render any attempt to use it advisable.
antecedent to a survey.

Left the harbor about 3 P.M., and started a little before the flood tide for West and North Foreland. Will joggy with a fresh breeze and tendency to rain. Touch the shoal east of Kalpin 2d, while at supper, but with no bad results.

July 24/95. Anchor off West Foreland about 4 A.M., to wait for the flood tide. A small village of Kootenai Indians here, some of them come off to ship. Bluffs about 50 ft. high of gravel and sand, wooded above, with some high mountains in the interior. Leave at the slack about 10 A.M., for North Foreland. There is a wide bay between the two with shoal water and foul ground in much of it. The land behind it is partly very slow, all wooded and a river...
V. Vi

**S**mSiM^

\[4-4'\]AA

\[513x501\]

\[498x1105\]

\[105x693\]

\[169x330\]

\[247x328\]

\[284x328\]

\[394x327\]

\[408x340\]

\[435x328\]

\[0x0\].
session is a flat or shoal not shown in the charts and of considerable extent forming a serious danger. Point H is nearer Pt Campbell and more southerly than on the chart and this is one channel south of it between it and the 'point' named, the shoal in Turnagain Bay is more elongated than shown on the chart. There is an inlet near the point east of Pt Possession north of which anchorage may be had. East of this, the Bay is almost dry at low water. Around the Peninsula to the north and about two miles distant is Sadi's fishery & trading post. Anchored here about 4 P.M., and landed. The water was 3/4 fathom deep at a mile off the beach at 3/4 flood, and 25 to 28 ft. The formation is gravel &
a small river comes in. The ground is low here, for a short distance from here, are elevations on either side. About 1½ miles from here, is the high peak near the Shoshone River. The lands on both sides of the river are low. From here 1½ miles, the country is hilly.

July 23 98

Left about 9 A.M., with mine box in tow, picked up off the 19th about 9 A.M. and went about 20 miles. Passed through the shore at ½ miles distant to a small rocky point with a lump of the sand, worked on with a small flat rock off its end. Anchored here (in three fathoms) at high water about 8 A.M. The point forms the strength of the hill a little below.
7.15 A.M. Log put over 100 miles
10.14 " Overboard 103.5 "
11.14 " 166.5 "
14.14 " 110 "
1.14 P.M. 112.54 "
2.14 " 114 "
2.50 " 114.54 "
3.33 Slack water
About 4.34 A.M. P.B. & P. H. Reached
in small boat for the placer
mines on Reservation & Bear Creek
At 8.30 A.M. 41 ft water = side
3.38 P.M. 27 ft = 37 ft
Mt. Sutcliff now bears N.W. 1/4 M. N.W.
Heard rifle shots from bears, and at first near 6 ft in 10
minutes.
July 27, 1895

J. B. Mining Transportation Co.,
J. T. Rosewell, 19 Montgomery, (M.F.),
Agent in San Francisco.

Explorations begun in 1894 Dec.,
near Eastman Creek, Racholke.

J. T. Rosewell, 19 Montgomery,

23½ oz. above tide, 2 1/4 lb. vein dump
sulphides, alternate veins of coal
and sulphides " total 6½ oz., estimated
total length about 200 feet. 300 foot
deal to S. In 1895 was another 200
feet of coal late in the season.

Specimen (218), vein seen in place
with bag weights 13 0z. and weighing
Specimen (219), main vein dump
with bag 13 3/4 lbs. (24 lbs)
Specimen (220), main vein mapping
with bag 13 1/4 oz. (24 lbs)

State: 1 ib. sandstone, whiteish
dark clay containing large water
worn boulders, shales and
lignite, the upper part cove
ched by some 100 feet of
dark gravel. Bluffs 600 feet
land rising behind 1000 ft.
Mr. Curtis is employing only a few men and the work he is doing is of the nature of exploration; the development of the property will depend on the results of the experiments with the coal.

The Alaska Coal Co. which owns all the other claims within the spit on the bay, they have put in two tunnels which are reported covered in and the shaft is not now occupied. A Mr. Cooper living at Ninilchik is the agent but only occasionally visits the buildings here. The Central Pacific Co. sent out Expedition under Lieut. Schwemer U.S.N. to explore this coal for locomotive purposes (in 1891?) but did not find it advisable for such use. Their coal was taken from Morencio's and next to the Collinwood's (not below Boston).
The coal does not want to be too frequently stirred in firing, has little smoke and light ash.

Pull, or wash, a little south of Metolius station, and examine seams of coal that, which has been prospected with two adit tunnels by Mr. Curtis. One seam, about 40 ft. above the beach is 4 ft. 7 inches thick slate coal, with about six inches of slimy sandstone above and a thick gray clay below. Above this are three seams separated by thick beds of clay or sandstone, one of which, bottom, is nearly 1 ft. 4 in. the others thinner. The coal fairly compact, with a dull fracture, occasional thin layers of sand or shale and is tendency to break up cubically, lay along side the Marion and might.
Monday July 29, 1895

Run over to Glacier Point and go ashore in the boat with Mr. Curtis while the boat goes after seals. Go up to the Treating place where the vessels which has remained since 1888 about 300 ft. leaving a maximum of water and mud about 15-20 ft. High, the ground was bare in front much torn up by tourists. Come off about 2 pm and go aboard the Marion at 3 pm. Have some supper here but the Kootenay has been cooling and filling water does not come up till 7 pm.

Tuesday July 30

Morning western, wind fair. Tour the Marion to a new anchorage then proceed to the cooling place which is on the beach a little south of a small river which empties into Coal Bay north of the spit. This is said to be the same ledge upon
which the Alaska Coal Co.
ye was founded, and a tunnel (now lined in) run by
Mr. Bradley, there are several seams close to one another of
which the lower is the thicker
and better coal and about
15 in thick. This is nearly
the lowest seam in the
sorrost series visible above
the masts and is more
compact, glossy in fracture
and disposed to calcined
fracture than the beds more
north on the same side of
the bay and higher in the
series. (Specimen bag No. 12)
Buy a bear's shell from the
mate of the Mariner, pay $5,
shipped not by $3.
About 4 PM took the skiff
back to the Mariner & took off the
lighter, at 6 PM. sail for
Seldovia Harbor arriving 3
11th, 1893.
Wednesday, July 31, 35
Morning cold, partly rainy, sleet cleared. Reached out into New Block (C.C.C.) and Smith (C.C.C.) lake or some water. Examined the rocks which are shale and and most considere. In course of the party between the position of points NW and SE of the harbor are pitches of gneiss which appear to be a hard, hard, which the main horizontally abutting much. Formally upon the rocks. One such pitch SE from the entrance to the harbor shows a dark streak like coal. Above the harbor a coal screen is reported about five inches thick and a piece of coal, supposed to be from this screen, picked up by the brush is compact, glossy, broken smooth, daily for the bluff at SE head of the.
harbor is composed of two small rocky bluffs, while united by a low spit of continuous high sand on the beach. The entrance has rocky bottom edge across with breakers in 3 ft. batters, most of it is clear. But there is a round bulrush offshore the near small white bluff. S.N. visible at low water. There are also rocks above & below water around the S.E. bend. Thus there are 3 or 4 fms. water sandy bottom. Off the village in mid-harbour. Protection in the outer harbor upon all but N.W. winds and at the head of the bay from N.W. Said about 10m for Fakhli Ed. Sheldoff. Sandy, weather received with light airs.
Thursday, August 1875

Reach Ishnate. Water behind Vaklelta about 5 30 A.M. Find the creek well sheltered from all winds, anchored in 16 fms. See 1.

The rocks are chiefly coarse sandstones (de' strike) resting conformably on an artificial conglomerate, one containing detritus pebbles. Thickness about 25 ft or more, strata of stream-bedded sand, gravel in layers five feet thick or more. About these pebbles about 18 in. thick of impure sand of which about 1 in. inches are pure coal of a glossy texture, looking like the hard coal for the blacksmith. Cork (Feet then 214). These beds are broken off by a granite.
dyke weathering and 6 miles to the east this area probably once covered by a more recent basalt which forms the mass of the adjacent hills and is interbedded into the sandstone in 3 places enclosing basalt in small pools. The sandstone then contains a pit of liquefied and disintegrated pebbles and stones much like those of Capo Pugh in that the edge for Cold Bay about 1130 was rain before an increasing NE gale untill 8 PM when we entered the bay which has sand extending nearly halfway across the entrance of the southern entrance, anchoring ever well.
Footnote 3

(Specimen No. 124)

We went off to a point near the mouth and

found some small trees and a stream of

water.

I shall return to the subject of

problems...
Vegetable impressions from slates below conglomerate below granite & W p.t. of harbor
Cold Bay (tag 141)
Sandstone from above crumbling basalt Takili Ed Harbor (146)

In this limestone we found a small seam of carbonaceous shale with occasional thin laminæ of clear coal, the whole only a few inches thick, above the limestones was a moderate thickness of crumbling shale without fossils much mixed
cooked, in shaly streaks of the limestones were impressions of weed-like plants, like those seen at Cape Douglas. Now of these low bluffs, which rise behind be a squashike hill, the beds descend gradually toward a small stream off which we anchored. Here a considerable
bed of conglomerate of small pebbles was superposed on the limestones. [Aug 2/93]—
West of the stream the limestones and shales are again seen forming a low arch, which they are surrounded by a regular series of beds which have a purplish or reddish gray tint. A distance east by the varying hardness rise in a series of terraces to a summit about 2000 ft. high. The harder beds are limestone without fossils, the softer ones a calcareous shale which crumbles into small angular fragments making long uniform taluses slopes. The limestones contain many mostly lenticular or ovoidal whitish concretions which affect per
ticular horizons more than others, there are also thin variable beds of conglomerate. About the middle of the series NW from the anchizynite was a bed of conglomerate of small rounded pebbles in a limestone matrix which also contained fragments of organic remnants, among which were ammonites Belenmites, Asterias, Tamarix, etc., and one or two at the northern side of the first high bench of the same mountain mass dipping 30° NW. Among these remains, ammonites, a brachiopod like Rhynchonella, Belenmites, and a bivalve or two. The dip of the strata became more steep near the valley of the stream. In the shady slopes of the limestone...
Pounded pieces of fossil and late carbonized wood and obscure stems or noodlike impressions of plants.

Later in the morning we crossed to the light of the NE part of the harbor at the head of which is a flat with a large lawn bathed in the sun which a stream runs. Proceeded here a gully or cataract to the rocks forming barren shales and limestone like those of the eastern side of the bay. Well up is found a calcareous shale with a few plant impressions above which was a heavy bed of conglomerate above which was a hard perhaps andesite volcanic rock which from fragments fallen from above seems to be more coarse granular and friable higher up. The
beds of this rock seemed to lie conformably on the other rocks. The southern end of the point was relatively low and the beds very massive and horizontal, a fault concealed by a scree at the junction probably separates these beds from those to the north of them which dips more steeply to the Northward. The face of the cliff much scored into crevices gave nicely places to thousands of sea-birds, mostly auks and fulmars. In the limestone near the point fossils were and numerous nests were found, the latter often car- onized.

 Went aboard the steamer crossed the bay to pick up Pennington & dined and then went to the S.W. head where
we searched in vain for the ammonites mentioned by Fisher. The rocks were the same as those described for the NE part of the bay, and the only fossils found were silicious wood and crinoid plant remains, with fossil seeds. The bed containing the ammonites may exist here about but at all events is not conspicuous. Rained most of the P.M., with fresh winds from the eastward, and got off return to anchorage.

Aug. 3, 1875.

Drove about 4 m. W. of Bialogravt Bay, entered for fresh breezes. Arrived about 11 a.m. A kielvaska stopped us, but the pilot 15 behind the steamer. About 11 a.m., north east of the river, which entered in John the Portage, Ugishik.

The bank is less than 100 ft. high and mostly gravelly. Some small exposures of chum slate and coarse shale afford plenty of cover for many other delacouria. The chart of this locality is poor. The bay leading to the Betcheroff village is deep except near the point entrance where the sand point extends west off the upper part of the bay. It is about a couple of miles off the beach. Near it is a conspicuous mountain recognizable as the top of the island, near the village. The mountains appear to be
be formed, rocks similar to those near Cape Moly. The entrance to the inner bay is rather close to the outer inlet with land just over a bar within it. Plenty of water and labour there is a small entrance west of the first branch of inlet with deep water in it. There are various visible rocks on the bar but no hidden dangers. Mr. Blair is at the western end of the bay near as on the chart, north of it. There is a large glacier on its north and on the eastern face two others descend from the same massif. Leave the bay at about 11 p.m. for Eilgyske Bay where we arrive in the morning.
Sunday Aug 4/35.

Dry fair with moderate wind. Alive in Chegnek Bay about 6 A.M., and enter the haven and run up to the country which is on the S.W. where 2 fms. least water on the bar and 22 ft. at high water within the channel is moderately wide, with 3 to 4 fms. water sandy bottom up to the country, beyond which it shoals.

Capt. Mullett & Capt. Smith of the canoes came again. We go ashore inspect the canoerying done with Mr. M. Smith, and about 2 p.m. go in a small skiff about up to the head of the bay and about a mile up the river to the coal mine. The river is not very deep and runs between perpendicular high bluffs of stony rock to
a lake 2-3 miles further up which is 6-8 miles long then connects by 8-8 miles to another lake which is to be as long as the first.

The coal was discovered by one Newboren about 1873 but he did not maintain his rights and a Mr. Robert See who did some exploration during same years and took out several hundred tons of coal. He sold his rights to the Alaska Packers Association for $6,500 and they proceeded 1913 to develop the mine in a very systematic manner using the coal for the country. During the summer three men are employed who take out about two and a half tons per day at a cost of $3.00 per ton. About 350 tons a year or 1000 tons in all have been mined here.
During the winter two men are employed and paid at the rate of 25 c. an hour, working as much or as little as they please. There is no machinery and the work is done by blasting the rock and coal out in wheel barrels. There are two tunnels about 40 ft. apart, both 40 ft. high and 24 ft. feet long. The only timbers are uprights which have been put in to support the roof which is good but shows signs of weakness in spots. The upper tunnel has been robbed to a width of 42 ft. in some places with a single cross cut to the lower tunnel. The strike N. 25° E. and the dip N. 15°-20° W. The bedding is very regular in the whole with a few small
The coal consists of a seam about 16 inches in average thickness, of which one inch is a streak of sandstone, more or less regular. Above this 11 inches above and about six inches of coal—about two feet above is another small seam 6-8 inches in thickness, very adhesive to the roof which is of a firm sandstone.

There are few fossils, all stems or reeds, with an exceptional leaf, Sequoia in was noticed among them (Fig. 44). The coal is solid, bright, clean, with little visible slate, and no sulphur (Fig. 141). Experiments in burning at the connected give an average of 118.60 equal to 107.4 of Middlesex coal. It does not chink.
Monday, May 5th.

Morning, see Cape Pugeon, about 1 A.M., day clear, with moderate sea. Heave off, sail No. of Rooms and anchor at Grand Point, off the buildings about 2 P.M. Go ashore for news. I find everybody free to behave. Lott in about the steamer Portland, has just arrived with CC and me. I arrive at the steamer John Thomas, anchor in the outer bar by 3 P.M. After dinner go ashore, see Mr. and Mrs. Thomas, Miss and Mr. Allnutt, Mr. Hughes and others, and put some late papers. Then aboard for the night, a 50 a.m. storm setting in.

Tuesday, May 6th.

Morning, rainy, cloudy. Go ashore after breakfast and
The main coal seam has (Bag 131 coal from the Lower Jacobsville level, Bag 143 coal from layer over 181) an 18 inch seam of dull coal fairly free from slate, above this half a dozen small seams of 4-5 inches thick of more coal, partly dark and partly dull. The fissures much filled by manganese and with a thin white sandy or chalky laminae, in spots even patches of very abundant. These seams are separated by wide bands of metamorphic aluminous shale or gray sandy basalt.

The tunnel from which this coal was obtained is about 25 feet by eight or ten and runs in about 30 feet of
seems about 200 ft above the bay, 100 ft higher was a hill similar of about the same size, partly covered with small pine trees, with which the coal in very numerous small seams varying from 1 ft to 2 ft wide. The banks of coal seams are so numerous that the whole of the place is covered with coal. The quality of the coal is poor and the tunnel has not been worked at. The spelling of these opening has made it more to the southwest than the old diggings of 1864-72. Leave the bay about 11 and visit the volcano rock at the N.W. head of Godolphin Bay. Then move down to Red Cove and examine the rocks, then back to Juan Point, where we tie up at the wharf.
Swell and sideships in Situate Pass and arrive at Dutch Harbor about 6 P.M. Go ashore. Fare cordially met by Capt. Baldwin and Capt. Rice. Go aboard the cutter Rush and see Capt. Hopper who wishes to withdraw his offer of a cutter to Nereus. Body, as me, of his vessels has been detained at Sitka. St. Becker decides to give up that trip and go to J. L. on the Bth. The which is expected back in about a week. Return to the shore and sleep at the C's house.

Sunday, May 11th

Morning calms, ditto, ditto, the sun trying to set out. Write letters and post up notes.
Coral Hollow coal
Tag 142
Aug. 13, 1895—off Bosphoroff &
Greeingk, only

Sail round the islets, 

The distances & taking the bearings,
Bosphoroff bearing north the 
log reads 0.2 mile.

The two islets on one south 55°
East—log 0.93 mile.

Off middle NE end of Greeningk
log reads 1 mile.

Bosphoroff comes out west of
Greeningk, west edge 5.55° S.

Log reads 0.30 mile.
Bosphoroff clears Greeingk, log
miles 1.85 mile.

North edge of Greeingk bearing
N.E., log reads 1.8 mile.

South edge of Greeingk cliff
bearing N.E., log read 2 miles.

North edge of Bosphoroff bearing
N.E., log reads 3 miles.

South hills N.E. log reads 2.25
East edge Greeingk in one with
West edge Bophobia Log reads 8.05 whole island cove 3.65 East edge Bovingkt and East edge Bosphat in one Log reads 3.45 miles

Bosphat is wedge like Bovingkt flat bed top with a little storm fore squared with three sharp northern projections

The spit projects past Bosphat and curves to the eastward under water there appears to be a channel between the two such a

seven fathoms East of the spits
Aug 11, shells like Spinifex
from Cape Thompson, B.S.
Alaska, Cal., Coast, etc.,
also marine fossils from
Ramistark Bay and Valley
from August 21, Fisher
ammunition in U.S. C. S. museum
from Sukunin, Id.

Nootka Bay coal 1886
log 217

126 coal cobbles in clay bank
on the beach near Portlock, Id.
Specimen obtained by F. J. B.
July 16, 1897
North Pacific Mining & Trans. Co. Capital $300,000. Paid in $150,000.
J.E. Rosenthal, Pres.,
J.A. Bradley, Vice Pres.

Commenced Oct. 1895, under the
law of Cuba, commenced operations immediately.
650 tons brought from Coal Point
Expenditure of $1,500.

E. W. Wood testing coal for Co.
2. Hannall & Co. Portland
Founders, used none of the
March, not ready, work coal
and report it a very poor
shanning coal. When a
good fire was kept up. They used 1600 lbs in a given time, during which they would have used 2200 lbs of Comyn coal. With a low fire and small pressure of steam the amount used was 2240 lbs 1/350 of Comyn.
It:

[Image of handwritten text]