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INTRODUCTORY NOTE.

I am confident that at some time, sooner or later, a medical officer of the Navy will undertake to write, in more detail than has been attempted, a biography of James Markham Ambler, Passed Assistant Surgeon, U.S. Navy, who perished with the 1st Cutter's party in the retreat from the Arctic Exploring Steamer Jeannette.

Acting under that belief, I have gathered copies of certain records that are not found in the various accounts of the voyage of the Jeannette.

Foremost among these records is the private journal kept by Dr. Ambler during the retreat. It is the diary of a naturally reserved and strong man, carried on day by day, even in the face of death.

There are also included copies of clippings from certain newspapers, and a photograph of Dr. Ambler, somewhat enlarged from one lent me by his sister, Miss Mary Ambler, from whom the originals of all the papers were received.

There are few naval medical officers on the active

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list of to-day who have even heard of Dr. Ambler and of the voyage of the steamer Jeannette, which was crushed by the ice on June 12, 1881. Yet, surely, a few days cannot be expended more profitably than in a study of the available literature relating to that ill-fated voyage.

The following references are suggested as sources of knowledge necessary to appreciate the most gallant struggle for life ever recorded in the history of Arctic expeditions:

1. Proceedings of a Court of Inquiry to Investigate the Loss of the Jeannette.
2. The Voyage of the Jeannette. The Ship and Ice Journals of George W. DeLong--Edited by his Wife, Emma DeLong.
3. In the Lena Delta.- By George W. Melville.
4. Lieutenant Danenhower's Narrative of the Jeannette.
(This is practically a defense).
5. James Markham Marshall Ambler.- By John C. Wise, M.D.
(Journal of the Association of Military Surgeons. Vol. XVIII, No. 5, May, 1906).
6. Medical Journal of the Jeannette. (In files of Bureau of Medicine and Surgery).
7. The Great White North.- By Wright.

III.

The Jeannette was caught in the Arctic ice on September 6, 1879, and remained in the pack, drifting until June 12, 1881, when she was crushed, sinking at 4 a.m., June 13, 1881 (date of geographical position), in latitude $77^{\circ}15'$ N; longitude $155^{\circ}0'$ E.

The officers and crew (33 souls in all) landed on the ice with sleds, boats, and supplies, and on June 17, began a retreat, making a southerly course over the ice to open water. They had 3 boats and 5 sleds to drag over the weary miles. The boats were on ship-made heavy oak runners, shod with whalebone. The first cutter with its runners weighed 3000 pounds; the second cutter 2300 pounds; and the whaleboat 2500 pounds. The five sleds loaded, weighed 6600 pounds. The snow was knee-deep at the start, the road very rough and the ice full of fissures. Each boat was too heavy to be dragged by its own crew, and consequently one boat had to be advanced at a time. Frequently 13 miles had to be traveled on foot to advance boats and sleds one mile. Certainly the situation was one requiring the pluck and endurance that rest upon a basis of cheerfulness even in the face of death itself.

The party traveled in this way with varying conditions of road and varying distances per day, over the

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frozen ocean until July 29--42 days of exceedingly frightful trials--when they landed on Bennett Island--new land discovered by the party--in latitude $76^{\circ} 38'$ N; longitude $148^{\circ} 20'$ E. All hands left the island on August 6, under conditions more favorable to progress, as there was sufficient open water to permit no little travel by boats. However, they had to drag sleds and boats across floes, and camped on floes--one such camp lasted 10 days, as weather and condition of ice did not permit any attempt at progress. The last ration of bread was served out on August 18, coffee gave out soon after, and tobacco a little later. The last ration of lime-juice was issued on August 30.

The party landed on Thaddeus Island on August 30; on Kotelnoi Island, September 4; and on Semenovski Island, September 10, where a deer was killed--quite an event as all hands had been on reduced allowance of food for about 20 days.

Leaving Semenovski Island at 7:30 a.m. of September 12, the party had entirely open water on the afternoon of that date, when the last floe seen was utilized by crew of whaleboat in making repairs to that boat, stove

in by the ice. But the wind and sea increasing, there was a gale from the northeast that night and between 9 and 10 p.m. the boats were out of sight of each other. The whaleboat (Melville) outsailing the others, soon was put on the port tack with wind and sea about four points on the quarter. She was then hove to at dark and passed the night riding to a drag made of tent-poles and canvas. It was much of the time a question whether the boat could survive the force and fury of wind and sea. The second cutter (Chipp) did not survive--evidently foundered, as neither boat nor crew was ever heard of again. The first cutter (DeLong and Ambler) kept on a south west course. The step of mast carried away and then, with lowered sail, she was hove to and made to ride out the night at a sea anchor or drag. But on September 13, in the forenoon, the boat shipping a good deal of water and keeping sea anchor abeam, attempt was made to ride under lee of sail. It was then that the sheet parted and sail and yard were lost. That accident dominated future events in relation to the fourteen occupants of that boat and was probably ultimately responsible for the death of twelve of them.

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The gale moderated about 6 p.m. of September 13, and about 8 p.m. the first cutter kept away to the westward under a jury sail made of a sled cover. On September 14, the wind settled to about south and the boat was making a west course of about one knot an hour. On September 15 to 17, the wind was light and at times the boat was becalmed. Oars were used on the 16th, and the boat pulled south, and at 9 a.m. of that date grounded in sight of low land running east and west. Then DeLong must have known that he was west of Cape Barkin which had been selected as the rendezvous for all three boats should they become separated. But, with no sail and with diminishing food, he could not hope to follow the coast to the eastward. He, therefore, struggled with the boat in the shallow water and finally worked her in to within one and one-half miles of the shore, when, on September 17, all hands wading ashore and carrying supplies, the boat was abandoned with the intention to proceed on foot to the south and reach a settlement on the Lena River, in the delta of which the party knew itself to be. At the time of landing there were only six days' provisions on hand, but there were arms and ammunition, and good hearts and hopes of game, and belief that the chances of getting through were good.

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And the chances would have been very good indeed, if the party had been in possession of reliable information. It was not known that, after three months of exposure and heart-breaking experiences, they were only about 25 miles from a village where succor could have been obtained. North Belun, that distance to the westward of where DeLong and Ambler landed, was not on any map, and, it is said, the existence of the village was not even known to the Russian government. So, instead of going to the westward the party went south, and all starved to death, except two, Nindemann and Noros, who, sent ahead for succor on October 9, managed to ward off death until they happened on October 22--13 days away from the party--to be found by a native when themselves too weak to travel.

From the records you can follow the party in its sad wanderings south in the Lena Delta. They struggled on as only brave and well disciplined men can. An occasional deer warded off starvation from time to time, but soon the chance of game vanished and then, on October 9, Nindemann and Noros were sent out ahead, when there was nothing left in the way of food except two ounces of alcohol per man.

Those left behind--DeLong, Ambler and nine others--for there had been one death following amputation of

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frozen feet--ate deerskin scraps, deerskin footnips, and old boots, and drank willow tea after horrible nights. And yet, they struggled on until--October 18, one death; October 21, two deaths; October 28, one death; October 29, one death; October 30, three deaths. There were left DeLong, Ambler and Ah Sam (cook), and they, leaving the bodies of the others, struggled along a few hundred yards further south and laid themselves down on the snow for the last time.

And there their bodies were found in the following spring (March 23, 1882)--found by Melville, who, with all the whaleboat's party had found succor by entering a river well south of Cape Barkin and falling in with natives.

The story of Melville's search for DeLong and his party is full of absorbing interest. You can find it all in Melville's book, and you can see why he thought that Ambler was the last survivor, although Ambler made no record after October 20--the day he wrote that wonderful letter to his brother.

Certainly that party never lost its trust in God. While perishing there was "Divine Service". Dying day by day, trembling lips uttered the Creed and the Lord's

IX.

Prayer. When you read the records, you read a pitiful story. But, you feel in the presence of strong men going down to death in body, yet dominated by the something in man that distinguishes him from all other created beings. There is seen throughout the records full recognition of the rights of each individual--not only official or naval rights, but also personal rights. The food was always evenly divided, the sick were always carefully considered, the strong always remained with and looked out for the weak. There was never a lack of order, there was never a lack of consideration, there was never even a disregard of the proprieties.

Everything done was done with a view to the good of the party as a whole. There was no selfishness anywhere in evidence. No man died alone or away from words of comfort and help, and the last man (Ambler) "kept his lone watch to the last, on duty, on guard, under arms".

In this connection the following interesting quotation is made from Dr. Ambler's diary:

"Sunday 9th, Oct. 1881. Yesterday without food, except the alcohol. The Capt. spoke of giving the men option to-day of making their way as best they could, that he could not keep up. This occurred in the morning when

we had made two miles that we had to retreat. I told him if he gave up I took command & that no one should leave him as long as I was alive. I then suggested that we send two men ahead to try to make the settlement, and that we make the best of our way with the rest of the party. This was done. Nindemann and Noros are ahead. God give them aid & we are getting along. The Capt. gave me the opportunity of going ahead myself, but I thought my duty required me with him & the main body for the present".

Such was ever the dominating spirit, and the incident given above has been perpetuated in bronze in a tablet erected by naval medical officers, in memory of Dr. Ambler. It is found on the wall of the library of the Naval Medical School. It shows Nindemann and Noros disappearing in the distance. It shows Ambler remaining behind with that starving main body--Ambler, the last survivor of that body, and living some days after Nindemann and Noros got through. It shows the medical man who wrote in the direst extremity: "I thought my duty required me with him & the main body for the present."--the present was until death. And that tablet bears the splendid inscription: "DUTY STRONGER THAN LOVE OF LIFE".

XI.

But aside from the splendid courage and lofty faith of the controlling spirit of those men, a medical man will find much of interest in the medical aspect of the cruise of the Jeannette, and the medical work of one in whom duty was stronger than love of life. In that connection the words of Melville spoken when a witness before the Court of Inquiry investigating the loss of the Jeannette are of interest: "I desire to state particularly of Doctor Ambler, during the whole of the time that he was attached to the ship, in addition to the ordinary duties of the surgeon, he was always careful of the sanitary condition of the ship and the ship's company, always trying to devise some means for the health and well-being of the people in regard to air, light, ventilation, and care of the drinking water, the Jeannette being the first ship that I ever knew that has passed through two winters in the Arctic Ocean free from scurvy. This was wholly due to the skill, care, and attention bestowed on the sanitary condition of the ship and her people by Dr. Ambler. Further, I will say that, in addition to his duties as surgeon in the care of the sick, he acted as road-master, working like

"some other cause" was made inoperative way back in a laborer on the road, and after his sick list became comparatively free he volunteered to work on the drag-ropes the same as the seamen under all circumstances and at all times. There can be no more worthy man and surgeon than Dr. Ambler".

It is very notable that there was not a single case of scurvy during the entire history of the crew of the Jeannette and not a death until that period of wandering in the Lena Delta.

The following taken from DeLong's diary are also interesting: "May 4th, Tuesday. (1880). Should we be so fortunate as to return without having had the scurvy break out among us, I think it will be because we had pure water to drink, for I do not think that our situation is thus far any less prejudicial to general health than that of Tegethoff's or DeHaven's Expedition, both of which wintered in the pack and were affected with scurvy to a considerable extent. But inasmuch as the Nares' Expedition were consuming water which was pure (according to the nitrate of silver test, as testified to by Dr. Moss), and yet broke down with scurvy, there may be some other cause to affect us which we have yet to learn (and avoid, for we do not want the proof by experience)." One naturally thinks that the

"some other cause" was made inoperative way back in December 1879, as the following is found under that date: " We have at times been troubled by not getting pure snow for drinking and cooking purposes, and as this may continue until we have a heavy snow fall (for our distiller is not perfect) I shall commence tomorrow the issue of a ration of one ounce of lime juice to every officer and man each day". As a matter of fact a satisfactory source of drinking water, other than the distiller, was rarely, if ever, available, and the issue of lime juice was continued. By April 17, 1880, one of the three barrels of lime juice carried had been consumed. Then, upon consultation with Ambler, the consumption was reduced to an issue of an ounce on Tuesdays, Thursdays and Saturdays. So important was that issue considered that it was carried even on the retreat from the Jeannette. Indeed, it was not until August 29, 1881, that the last ration of lime juice was issued.

The inability of the ship to obtain even a fair drinking water from ice and snow is quite interesting. Dr. Ambler made some noteworthy investigations from that point of view of ice found in the Arctic. (Appendix E of Voyage of the Jeannette, edited by Emma DeLong.) The

Jeannette never found a single piece of floe from which potable water could be obtained, and had so much difficulty in getting snow of proper purity that on November 28, 1879, a small boiler was rigged with a coil and distilling commenced. It continued with little interruption, for the following is found under date of April 27, 1880: "And yet we cannot find any snow fit to make drinking water. Try we ever so carefully, in our choice to take the newest fallen, to seek the crevices where snow may have lodged on other snow, escaping ice contact, the result is the same, with this exception, I almost believe, that the newest fallen is the saltiest. Using such snow for drinking or cooking is out of the question."

The distilling of water took 60 pounds of precious coal each day. In July 1880 the Jeannette did succeed in filling its tank with snow water that was considered sufficiently pure for drinking. Distillation was stopped and each day snow was selected with great care, placed in barrels and brought to the ship. Then a cup full from each barrel was melted and the water tested. But even snow in the same barrel varied greatly in saline content and thus it was found after a short experience that distillation was the only method of securing

satisfactory water. There was certainly a strong opinion on the Jeannette that excess salt in the intake greatly predisposed to scurvy. And on the retreat over the ice the question of securing drinking water comparatively free from salt was always uppermost. In that period the following is found: "The snow, or rather ice, is fresh to the taste, but the doctor, by a nitrate of silver test, finds it much too salty. However, we cannot help ourselves, and must with lime juice, which we take daily try to avert the danger". They selected the oldest and highest hummocks and scraped off the broken down crystals whenever they could find any. On the retreat, June 30, they found pools of water on top of the old ice, but the water contained much salt.

The nature of Danenhower's case will be apparent to any medical man. Under date of January 22, 1880, the following is found in DeLong's journal: "Danenhower's case has so far become worse that the doctor to-day informed me that unless an operation were performed he would in all probability lose the sight of his left eye. The circumstances of our surroundings, the poor accommodations for sick people, and the possible emergency of our having to abandon the ship and take to the floe, the desolation of the Lena Delta. It is a wonderful

make the performance of the necessary operation a risky affair for Danenhower. For, should he be exposed to hardships and privations incidental to a march over the ice, he would quite probably lose his eye. Under the circumstances I advised the doctor to give Danenhower a voice in deciding for or against the operation. After some consideration Danenhower decided to have it done, and it was beautifully performed by Dr. Ambler, and borne with heroic endurance by the patient. I hardly know which to admire the most, the skill and celerity of the surgeon, or the nerve and endurance of Danenhower."

It was in June 1881, a short time before the ship was crushed, that cases of lead poisoning began to appear. The cases were finally traced to consumption of canned tomatoes. In view of having to abandon the ship on June 12, these cases of lead poisoning were quite a calamity. Certainly one reads of their occurrence with much interest, especially in relation to the general question of canned food during long voyages.

This much has been written to stimulate interest in the voyage of the Jeannette, and in that wonderful retreat from the ship over the frozen ocean and on into the desolation of the Lena Delta. It is a wonderful

story--too extensive to be told in this note made to introduce the worn and water marked diary of Dr. Ambler, the last survivor of that gallant band lost on the Lena Delta.

And the original diary of which this note introduces a mere copy! It is a little note book with greatly damaged leather back. It is written in lead pencil and its leaves have been marked by melting snow and ice. It was found wrapped in a long woolen muffler, which to ease the gnawing pangs of hunger had been wedged under the waistband. It is truly a message from the dead--from one who "was ever cheerful and fearless of death, and I know he faced it calmly and manfully as he had done before on the field of battle. He came of a brave family, and if the world might read a single page of his private journal there would be no doubt of his unfailing courage and fortitude to the bitter end."

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Naval Medical School,
June 1914.

(This is the title page of Dr. Ambler's diary as it appears in the diary. The date was due to DeLong's decision not to make the change incident to crossing the 180th meridian. The ship was drifting and was considered liable to recross that meridian at any time. The geographical date was June 12, 1881, the ship having been deserted on that date. She sank on June 13th).

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ARCTIC STR. JEANNETTE, WRECKED

JUNE 11th, 1881.

Camp on Ice floe. Lat. N. 77°14'. Long. E. 155° .

June 12th, 1881. (Monday) The sick are no worse for their experience on the ice. Mr. Chipp got very little sleep, but his stomach is quiet. I have used whiskey oz.ii three times daily, his bowels were moved naturally.

Nindemann & the steward are about, attending to work. Mr. Danenhower's eye stands fairly well, he is attending to such duty for his sled party as is necessary, being cautious as possible about exposure.

Mr. Newcomb's (two lines not decipherable)

June 13th, 1881. In camp. Alexae and Kuehne both have gastralgia to-day. Mr. Chipp is improving. I gave him Iod. Pot. gr.v ter die. Continue the whiskey.

June 14th, 1881. In camp. Mr. Chipp improving. Kuehne pain continues. Alexae (blank)

Steward rather better. Busy all day arranging x
&c.

June 15th, 1881. In camp on floe. Mr. Chipp im-

proving, continue whiskey & Pot. Iod. Kuehne rather better to-day. Whiskey & Pot. Iod. cont. Alexae's stomach irritable and bowels constipated x whiskey & x x .

Steward improving. Pot. Iod. Busy packing x hauling stowing everything snug. Weather good. Sun very warm. Air thermometer marked only 23° F.

June 16th, 1881. Mr. Chipp improving. c.t. Kuehne better. c.t. Alexae better. Constipated. Less pain. Steward, pain this a.m., feels better to-night. Pain due to imprudent eating.

Saw provision list and ration for sled journey. No suggestions. Temp. 21° F.

Camp. No.2. June 18, 1881. 10 p.m. Started at 6 p.m. of 17th, worked until 6 a.m. of 18th-turned in. Melville, Danenhower and I worked with the cutter & our party of men carried her along well, we advanced her to the farthest flag and returned to bring up a sled. On my way back someone came up to me from the cutter saying that Lauterbach had fallen with cramps. I went back to him, sending Mr. Newcomb on to meet the Hospital sled and bring up my traveling case, which he did quickly.

I found the man suffering a good deal. Laid my

coat on the snow for him to lie on, kneaded his belly vigorously, made him jump on his legs, and when the case arrived gave him brandy and opium. I got him easier, left Mr. N. with him. On my way back met the hospital sled, & found the sick party, Mr. Chipp at their head, drawing it, they were much exhausted. The dogs would not work and they had upset several times.

I gave them all a drink of whiskey and made them rest, and advised Mr. C. to hold on at the place Lauterbach was left, where there were some provisions-- he however managed to push on to the cutter and pitched a tent. They had to come back to this point when the whole party camped down and were very much exhausted when they arrived. The steward lost his Pot. Iodine-- all that I had. After leaving the H.sled I proceeded on to camp No. 1, found a general smash up of sleds, the captain had advanced the whaleboat and 2nd cutter and four sled, two of the latter had broken down. Sled No. 5 was still in camp. On our way back to it, from not seeing well through my glasses, I stepped on some fresh ice in an open lead & went in up to my hips.

My sled when we commenced to haul it also broke down. To-night Mr. Chipp is pretty tired looking, says

he feels quite well, can eat, but looks worn & weak. I gave Quinine and whiskey ter in die. Kuehne, Alexae and steward are on the mend. Lauterbach is better.

Sunday 19th, 10 p.m. Camp No. 3. Hospital tent at 1st cutter. Brought forward the sick, Mr. Chipp, Mr. Danenhower, Lauterbach & Alexae, with hospital stores on dog sled, and a tent. Mr. Chipp is rather faint after exertion, but will lend a hand. Sent Kuehne and the steward to duty. Mr. Melville came up with 2nd cutter, and Mr. Collins came to the tent complaining of his chest & said he could not get back. Melville sled not with him. I had a little water melted and made some beef tea.

Monday 20th, 12 p.m. Sick improving. In camp. Rain and sleet. Setting up No. 5 sled again. Lauterbach not in so much pain. Gave cod liver oil as purgative.

Tuesday 21st, 9 p.m. In camp at cutter--all sleds started forward--Boats, Hospital stores, & navigation stores with all the sick. Remaining here for present, will advance in afternoon. Mr. Danenhower's eye has so far stood exposure well, fortunately there has been

very little sun. Quinine & counter irritation. Mr. Chipp had some pain last night & this morning vomited his brkfst. Pain not of same character as before. Takes 2 grains quinine daily & spt. as usual. Lauterbach had cramp again yesterday P.M. passed a good night tho & feels easier this A.M. Very small hard scybala last eve. Gave about 2 ounces of cod liver oil this A.M. to try its effect on bowels. Lee has cramp in legs after exertion. I have myself passed blood freely from bowels on one occasion & slightly this A.M.

Wednesday 8.30 A.M. Hard work ever since started. Carried sick forward, ferried over lead by Mr. Melville's party, got on small floe with boats. I pitched hospital tent with Mr. Danenhower's assistance. All hands had dinner. Boats moved forward. Ordered to remain until the last. Left on the floe alone with the sick and one well man attending line to bridge pieces got adrift. Captain came back, floes came together, he sent me forward with the sick & brought up tent & sled. I crossed to boat with sick on old floe, went back to edge and lent a hand in getting things over.

Wednesday 8.20 p.m. June 22nd. In camp with sick at the boats. Melville advancing sleds. Mr Chipp has

had return of pain, passed a bad night, due probably to the bad time we had yesterday, wet, cold, etc. Mr. Danenhower's eye holds its own. Lauterbach better this A.M., bowels blown out freely. Alexae still complaining. Runs to me about every trifle. Mr. Dunbar has diarrhoea for which I gave him some brandy & 10 drops of Tr. Opii this A.M. Resumed potash Iod. for Mr. Chipp.

Thursday 10 p.m. 23rd. At advance with the sick and hospital stores. Mr. Chipp somewhat better, no pain in bowels, was quite tired out when we reached this spot. Legs cramped. I shampooed them and they are easier. Mr. Danenhower's eye in same condition, so far the cloudy weather has been in his favor. Alexae still constipated but does not complain so much, he is much depressed and cried last night when I talked to him. His leg is improving. Lauterbach went to duty to-day. Lee's leg gave out after one or two trips & the glands in his groin are painful and swollen. Dressler had some pain from piles. Gave him some ointment.

In camp on old floe piece. Friday 24th 1881. 6.10 A.M. Made the best distance to-day (night) than ever before. Mr. Chipp a good deal exhausted and very weak.

Alexae is better but his morale is gone. Everyone else keeps up well. Travelling looks promising for tomorrow.

Friday 24th, 6.45 p.m.- All hands called at 6 o'clock. Find that Chipp has had a bad time of it. Great deal of pain & cramp & very restless. His pulse is 90, rapid for him. He is very thin and very weak.

Saturday morning 8.30 A.M. 25th. Alexae to whom I gave a suppository before turning in had a small movement from bowels, he is much brighter and feels better. Mr. Danenhower's eye was somewhat inflamed when we made our start 6.45 p.m., Friday, but he staid in the hospital tent a great deal to-day and this A.M. (bedtime) it looks better. When we started from our noon (midnight) stop Mr. Chipp was so much exhausted that he had to be assisted to dress himself & I brought him into camp on the Hospital sled. I had to give him small quantities of brandy at short intervals beside his regular two ounces ter die. He does not like beef tea & takes but little of it. We have nothing else now but pemmican, bread & cheese. The circumstances are all against him and unless he can eat more his

case will be serious. I gave him lime juice in his brandy to-day, before it has effected his stomach. Mr. Chipp, Mr. Danenhower & Alexae form Co. Q. The two latter work.

Saturday 10.40 P.M. 25th 1881. Mr. Chipp had quite a good sleep since turning in and feels better. Gave brandy 2 oz. before brkfst. He took beef tea & coffee, one hardtack. Mr. Danenhower's eye looks fairly well. Alexae feels quite well to-day, had movement from bowels. We will not move until after our dinner to-day 12 midnight. The Captain got an observation in last 24 hrs. Lat. $77^{\circ}41'$ N. Long. $152^{\circ}15'$ E. We have gone 24 miles to the northwest from where the ship went down. Our course will be altered to the S.W. to-day so as to slant across the floe to the most northern land.

on the Sunday morning 9 A.M. bedtime 26th, 1881. In camp. 3-4 miles advance since dinner. Road better than usual. Chipp stood it very well, has eaten more to-day. No pain in either bowels or legs & was not very tired when we reached camp. Had one bad place to cross on floating piece, but had assistance and got over without trouble.

eye red Sunday 8.45 P.M. June 26th, 1881. Up at 6 P.M.

issued alcohol for breakfast--was called off & did not carry Chipp his spirit. Chipp passed a very good night, eat his brkfst, and says he feels quite well. He was feeling so well that he did not think he would send for his brandy as he knew I was busy. Danenhower's eye holds its own, sometimes flushes up but quiets down when he can get inside the tent. Alexae is doing well, his leg is improving. Last night found it so warm in my bag that I crawled out and slept on top of it, covering my feet and my legs with my coat. Outside temperature 28^o F. We are still on about a S. course. The wind to-day is a little S.& W. The Captain and Melville are worried a good deal with their hands burnt and swollen by the sun. Some pf the men have their noses and lips burnt. Lee gets on fairly well at bridge making. His legs still give him trouble. I use a liniment on them every night.

Monday June 27th, 1881. 9.20 A.M. Made about a mile x . Terrible in getting over leads. Chipp got along very well. Danenhower's eye inflamed tonight.

Monday 9 P.M. June 27, 1881. Breakfasted and sleds advancing. Chipp a good deal better. Bowels moved last evening and this A.M., and feels stronger. Danenhower's eye rather clearer than when we turned in. Directed

him to keep in tent as much as possible. Alexae, dressed sore with lint & sealed up with collodion tonight.

Tuesday 7.30 A.M. June 28. Made about 3/4 mile good to-day. Chipp came through very well, his appetite keeps up and his strength is improving, has had no pain or cramps for the last two days. Danenhower's eye a little engorged this A.M., not so much as last bed time; so far the rest in sleep has restored it by the time we get on the march. The road to-day was easier. Had two bad leads, one very troublesome, & delayed us some time. The other we got everything on a small cake & ferried over together. I then got ahead with the hospital sled and pitched the tent before the boats came up. The men appear to stand it pretty well, but the work is very difficult and they have to go over the ground very often.

Lee complains of not being able to eat and some uneasiness about stomach. Gave him some pills. His legs are somewhat better. He works at road making and does not pull on the sled.

In camp. Tuesday 9 P.M. June 28th, 1881. Chipp doing well. Danenhower same. Alexae improving. Cold this P.M. Did not sleep well. Wind S.E. We are

probably making more northing by the drift than we are southing by hauling. Going west however all the time.

Wednesday June 29th, 1881. 9.20 A.M. About turning in. Much annoyed to-day by my two sick friends, both seem to think I should make such recommendations as they would like, & that I shd be guided by their wishes. I do not think a man was ever cursed with two such patients before and under such circumstances.

Wednesday 8.20 P.M. Thursday 30, 9 A.M. Chipp doing well, strength improving. Danenhower's eye looks rather worse tonight. Alexae doing well.

Was put in charge of the road party & worked hard all day with pick & notwithstanding the Captain's conclusion this morning, I was sent back at dinner time to bring up the sick and the sled. I had told him that I thought they did not require my attention the whole day. So I was over the whole road three times, once pulling and hauling a sled, & over a great part of it five times, working with pick, digging a road, & when I got to camp at night sent back to bring up sick & sled, to receive the sneers of our blessed invalids. They heard some pretty plain talk.

Friday July 1st, 1881. 9 A.M. Chipp improving. Danenhower same. Alexae at work to-day, but dress leg & bandage. Worked hard all day cutting hummocks and bridging. Got knocked overboard by the "Walrus" and had to swim around from one piece of ice to another, got out all right & went to the whaleboat for my knapsack. Found it at the bottom, of course, and then had to strip and dress in a wind with rain & sleet.

Friday 8.40 P.M. July 1, 1881. Chipp doing tolerably well. Danenhower's eye looks better to-day. Alexae. Leg about same. Slept rather better but as I slept in two pair of wet drawers and a wet vest, without sleeves to my shirt and with only half of a blanket over me, it was not the most cheerful bed I ever had, but "Comme Je Trouve" & I feel pretty well this morning and ready for work. Rain & mist prevailing.

Sunday 8.30 A.M. July 3rd, 1881. Chipp doing well. Tr. Zing.(?) gtt? v. Danenhower's eye quiet. Alexae's leg has not been injured by work so far. I myself, Mr. Melville, Star & one or two others have had slight diarrhoea, due I think to the grease (tallow) in the pemmican. Made a good leg to-day--2 miles at least -- and not a very bad road. I did not get overboard to-

day, & except from the soreness of my muscles am pretty well. I worked hard all day yesterday with a pick and very tough work it was. I suppose I cut more than a ton from one cake that was in the way & by the time the boats came up the ice had shifted & I had to come back and cut as much more. Making bridges and cutting roadways on the face of a lump, prying(?) &c. bevelling a face into a road & all that, gives a pretty lively time. Then sleeping in wet clothes in a wet bag on wet ice makes every bone & separate muscle ache in the morning. To-day I have not been able to draw a breath without pain. I feel better tonight and "Comme Je Trouve" I hope to get in training by and by.

Monday, July 4th, 1881. 7 A.M. Have made about two miles to-day on our course. Chipp when we started considered himself all right and wanted to go to duty. I stopped his whiskey and let him keep on without it in easy stages. Tonight he does not feel well and has had some pain. Danenhower's eye is in the same condition. He takes quinine & I use counter-irritation over the brow. Alexae, leg improving altho he does a great deal of running all day. Not much road cutting to-day. Lee told me how to prepare clams. I find the thoughts of a good many are running on eating. We

could eat more bread and sugar if we had it.

Tuesday, July 5th, 1881. 8 A.M. Chipp--renewed whiskey to-day and tonight, he is in better condition than last night. He is pale & his pulse is weak. His bowels were moved out this A.M. He does not sleep well. Danenhower--Eye rather more inflamed than usual, probably due to the fall of snow to-day giving more glare. Alexae--Leg is doing well. He has had a return of pain to his stomach. Gave him 3 C.C.p. I am myself in a good deal of pain in my right lung, lower lobe, of a pleuritic character. I lose my wind quickly when I work with the pick, & I have a very severe pain.

Wednesday July 6th, 1881. 7.30 P.M. Made I suppose about two miles yesterday (Tuesday P.M. & Wednesday A.M.), Crossed several leads by ferrying. I think a good deal of time is lost uselessly. I did a good deal of work that proved to be unnecessary or was rendered useless by changes in the ice before the train could come up. If I had four good men and allowed to manage the business I could make a much better road & be of more use & the men would save by levelling, with a few blows of the pick, more lifting than they can possibly do. As it is I have one man who can hardly get over the ground on account of his

legs. He cannot trust to them & in a ticklish place he is of no account at all. On solid ground he can pick well. He cannot get over a crack 3 ft. wide. The other is possibly the smallest and weakest man in the party. He has not the force to work nor has he much idea of working beyond piddling; this latter is the Naturalist so called, & has lived in the officer's mess. He has not yet learned to obey without speaking. Mr. Chipp stood the tramp yesterday very well & slept well last night. Treatment continued. Mr. Danenhower's eye did very well yesterday and looked rather better last night. Alexae's stomach is very irritable. He cannot eat anything we have without vomiting & it is apparently useless to try to move his bowels with C.C.p. His leg is doing well & I have ceased to bandage it. It is rather depressing to our two friends of the "Line" that they are in the vocative (?) & they have probably plenty of food for reflection. I should think that both of them would feel great mortification. They are an incumbrance by their own wilful acts. One man came from home knowing that he was diseased, and that he was liable to be laid up, & concealed it as long as possible. The other

when warned and advised by me of his condition set himself in opposition & showed so much obstinacy and want of sense that nothing could be done for him, and he refused to obey my direction when on the sick list and acted directly contrary to it.

Thursday July 7th, 7 A.M. Staid in camp all day. Rain sleet & snow. Putting 1st cutter on sled to be ready for start in morning. Men have had a chance to fix their foot gear. Going to bed in a few minutes.

Friday July 8th, 1881. 8 A.M. Bad luck to-day. Lost at least 2 hrs. ferrying, when we could have made the distance in twenty minutes by going around. The worst road has never delayed us as much as a short ferry. I am convinced that the Captain cannot see with the glasses he uses. To-day a long line was passed by a boat just before dinner and fastened to the side we stopped. Later on we had occasion for line & there were only short pieces in the dingy which were in use. The captain asked for more line. I asked if he had had the long line brought up, he said "no". I then asked if I should have the word passed for someone to get it. He again said "no". He would have it that to get it we would have to send the dingy back. I reminded

him that it was on the same side as we were. He said he "knew it, but that it could not be got at without the dingy", as it was fast to loose pieces. Now I was sure that this was not the case & as one of my men whom I knew to be very thoughtful had passed the line, I still had hopes of seeing it & accordingly later in the evening I found it in the dingy. Manson had gone back after dinner & after the sleds had been advanced & got the line. So we still have it & it is like to prove very useful in many ways, either as lashing or for ferrying, some of it being walrus hide.

Mr. Chipp is improving. Mr. Danenhower. Cont. same. Alexae complains and does not eat I believe, yet to-day says he feels better, his bowels moved slightly to-day.

Saturday July 9th, 1881. 8.15 A.M. Chipp--Condition same. Danenhower--No change. Alexae-- Doing well. Struck an old floe piece to-day & think we have made 3 miles good which means 21 travelled. Very much aggravated this A.M. by Mr. N. He will get himself hurt if he dont desist. I have been a mile beyond the camp working the road for tomorrow. Had some heavy picking. A huge block that I was moving struck my

right knee & caused intense pain for a time, it was my lame knee, of course. My lung does not trouble me so much now, but I feel some pain all the time from it. We have a W.N.W. wind & I hope it may give us some southing.

Sunday July 10th, 1881. 8 A.M. Chipp improving slowly. Does not gain strength very fast though he has gained a good deal in the last 10 days. I do not consider him fit to do the duty to which he would be ordered. Mr. Danenhower's eye holds its own as well as I expected. It flushes up, but a little rest in the tent at night generally restores it.

Monday July 11th, 1881. 7.30 P.M. Chipp did very well yesterday. Improving. Danenhower's condition same. Was very tired this morning and turned in, in a good deal of pain from my chest. I have the poorest help I ever saw. Miserable sled and boat, broken down dogs. One man who can't walk & the other who cannot pick, only one pick of any account & some useless oars rigged as chisels. Both men slow, one from nature the other because he does not intend to do anything & pretends not to understand.

Wednesday July 13th, 1881. 7.5 A.M. Chipp doing

pretty well. Got another can of tongue for him this (our) morning. Danenhower, no change. Had some rough leads to cross to-day. Cold work hauling line and one is sure to get wet. When the 2nd cutter came in I was standing near where she stopped, looking after my medical stores. My attention was attracted by Mr. Melville giving an order to Star to pick up some covers for the soles of boots. Instead of obeying the order Star said something about their, the covers, being on a sleeping bag. Mr. Melville again ordered him to pick them up, saying that they were his. Star did not obey but went on talking in rather a grumbling tone, I do not remember the words. The captain was standing near, who then ordered Star to stop talking and to pick up the covers. The man still continued to speak, and the captain repeated his order. He (Star) then started towards the covers still talking, when the captain again repeated the order for him to stop talking & to do as he was told.

Thursday July 14th, 1881. 8.30 A.M. Chipp, improving. Danenhower, holding his own. Had some tough picking to-day, cutting causeways & making roads over hummocks, bridging leads, &c. Two men were overboard to-day. I do not work as much with the pick as I did day

before yesterday. I dismissed Mr. Newcomb by the Captain's order & got Johnston in his place, a very happy exchange for me in every respect. The best of the two remaining picks was lost on the same day. Mr. N. had a line fast in solid ice with the pick as an anchor, & he had properly secured it, but it was dragged overboard and the line by which it was tied on parted, & it disappeared much to my regret. The general health of the party is good and we get on as well as could be expected under the circumstances. There is some complaint about the rations being rather short in some of the messes, but so far in my tent everybody is satisfied. I think I have the best lot of men in every respect--no grumbling and no talkers. My side gives me less trouble now, but at night I find it pretty painful, and I have a good deal of trouble turning over. I drive the dingy on the tumble cart with a broken down lot of dogs, & I find it as disagreeable work as I ever did. The knots and tangles they can get in are surprising & to pass the dog at the end of a line thro the bight of knot, is about as soul provoking and cause for profound and deep swearing as a man could wish. I generally get wet every day and more or less of the skin taken off from some part of me. My hands are cut

and skinned and corns on all the fingers & besides they sometimes get the cramps & are powerless.

Friday July 15th, 1881. 7.42 A.M. Chipp doing well. Danenhower cond. same. Seal shot this afternoon by Mr. Collins at our dinner camp. We ate him tonight for supper. Made a stew, put a little pemmican and beef tea with it and some water. It tasted very well for a change. I ate a good allowance, but at the last did not fancy it as much as when I started.

36th day. Sat. July 16th, 1.30 P.M. Chipp doing well. Danenhower no change. 6 cans of pemmican lost overboard to-day by Erickson. A little sense would have saved them. Not 15 feet away was a perfectly safe passage. $\frac{2}{C.C.}$ came up & I pointed it out & said I thought the other sled had better go that way; but "no, this was the way". In a few minutes the man sled came up and it & one man were effectually landed overboard, no necessity for it at all. A little later $\frac{2}{C.C.}$ himself got overboard, up to his neck, for which visitation of Providence I was thoroughly resigned.

Sunday July 17, 1881. 1 A.M. Chipp returned to duty. Treatment will be cont. for the present. Danenhower cond. same. Mr. Chipp relieves Mr. M. in charge of boats and sleds & Mr. M. relieves me in road-making.

I fall back to my legitimate duty as medical officer & do nothing special in any other way, but look out for serving alcohol. 8.40 A.M. Short day, the time long in passing, lounged along from one place to the other. Island much plainer and open water visible. Chipp seemed to stand the work all right. To-day (18th really land time) is the Little Lady's birth day. She must be twenty-one to-day if I remember rightly. We had a pleasant time 3 yrs. ago to-day. I drank her health in the best I had, a tin cup of tea at supper. I have taken a rifle and will keep ahead hereafter in hopes of a shot at a seal. I cannot stand around doing nothing when other people are at work, & altho there is nothing for me to do now unless I hitch on the drag-rope, I do not think the time has come yet, tho I am ready for it at any time.

Monday July 18th, 1881. 8 A.M. Danenhower's eye remains in same condition. Have just turned in. Had a tramp of 5 hrs. this P.M. Started as soon as I had eaten dinner with Mr. Dunbar to proceed as far as possible toward the island, and supposed open water to the west. We went about four(4) miles I think. The water faded and what at noon looked like open water

close at hand, looked at our furthest point like land a long way off, the ice extending to the horizon. We had a good glass and Mr. D. agreed that there was no water, altho he had been positive when we started, and I also.

Thursday July 19th, 1881. 8.30 A.M. Have just stopped for supper at the farthest point reached by Mr. Dunbar and myself yesterday. It is variously estimated from our camp of last night i.e. from 3 - 5 miles. I think it more than three. The island is plainly visible to-day & everyone agrees we were right in our report of last night. The captain thinks he can see open water, but I am not sure of it. He wishes to cross the lead tonight, so we will not camp here. It will be a rough passage & I will be glad to see everything over safely. Old rotten ice with pools of water on every side. I have been over, but had some lively jumping.

Wednesday July 20th, 1881. 9 A.M. Worked our passage until 3 A.M. of Tuesday. Very rough & hard work. Got to a large piece at last & camped until 1 A.M. to-day, then got through to this place on edge of solid ice. Foxie found drowned this A.M. Killed a walrus,

my first. Collins got the first shot into him as we were crossing the lead. I followed him up and found him, & shot him five times, every time in the skull. The last bullet shot him right through the spinal marrow where it forms the brain, shattering the condyle. Mr. Dunbar was very active, got a line through his flipper before he was dead.

Thursday July 21st, 1881. 4.30 A.M. Mr. Danenhower, cond. same. Eat walrus stew for supper & for brkfst -- not bad. Advanced a mile this P.M. Came to moving ice in extensive lead. Cold, rain & fog. Wind strong from northward and loose ice moving quite rapidly. We have camped for the night. Mr. N. has got himself salted at last, he richly deserves it.

Friday July 22nd, 1881. 9 A.M. Mr. Danenhower, no change. Mile and half made to-day toward the island. We drifted quite rapidly last night I think. Fog lifted a little this morning & we could see it plainly. Since 12 P.M. have not been able to see it.

Saturday July 23rd, 1881. 8.30 A.M. Mr. Danenhower's cond. same. Mile & half made good to-day. We have neared the island very much. When the fog lifted as we camped we looked right on it. Black precipitous cliffs

of a dark almost blue color, with a table land running back to a high whaleback covered with snow. The island is deeply indented on this face. Quite a large deep bay & several smaller ones. Water is 20 fathoms where we are. Distance from island roughly estimated from 3 to 12 miles.

Sunday. July 24th, 1881. 7.30 A.M. Danenhower. Eye same. Made about two miles & half. Island seems to recede as we approach; the last 1/4 mile over flying bridges, very tedious. Mr. Collins shot a seal & he was secured; too late for supper tonight, but we will eat him tomorrow.

Monday July 25th, (3.30 P.M.) Later. Danenhower's condition same. It is now 24 hrs. since we commenced work this or rather yesterday night. The island has again eluded us. Ice moving, breaking, opening, closing, heaving up & again depressed, the whole mass alive. Such work by men could never have been done before & I hope may never be done again. Provisions sleds with all our grub carried over breaking cakes of ice too light to float them. The men going like the rush of a whirlwind, & in some cases actually jumping the sled over several feet from block to block of rolling & sinking ice. I have seen something of men in trying

times, but I have yet to see men who will equal these. For 40 days we have been under way, with all kinds of what are considered by the world as hardships; but not a murmur & tonight after 19 hours of work, many of the men having been overboard, they are cheerful and come up smiling. We have had damnable luck to-day. Mr. Dunbar & myself got within 1/4 of a mile of the shore, saw excellent sledding the rest of the way, went back to report, found the last lead all adrift and the devil to pay generally, and so it has been the whole 24 hrs, mist, rain, & fog coming down and shutting out everything, fog lifts and you have been cartwheeled into some other position. I have myself done no work but moving on my feet & jumping from block to block and if the other men's legs are as much done up in proportion as mine I am sorry for them. By the way, I find my old boyhood habit of taking long jumps stands me in good stead these days. I find I can go where Mr. Dunbar does without the aid of a pike, and jump too with a Remington rifle on my back & a weight of clothing that is rather unusual.

Tuesday, July 25th, 1881. Mr. Danenhower's condition same. On ice floe reached last night. Island impracticable tonight. Cold, fog, rain and high wind.

We are spinning round & round slowly drifting down the lead. High precipitous cliffs, glacier just off us.

Wednesday. July 27th, 1881. 12 M. Mr. Danenhower's cond. same. Still on floe piece. Island not visible on account of fog. Think we are drifting before the wind in moveable pack, as wind holds in same quarter, blowing on the tent.

Thursday, July 28th, 1881. 9 P.M. Reached island this P.M. between 5 & 6 o'clock. Had to jump for it as there was a lively motion in the pack. We had some very bad leads to cross. At one time we were all together with all of our stuff on a small cake of ice when the fog lifted and showed the cliff just above us apparently. We made a large piece, then another, & then a lively break over moving small pieces to the land-ice. It was quick work done successfully. Two or three men overboard. After supper crew mustered, marched ashore & the Capt took possession of it, named it Bennett island & American soil.

Saturday. July 30th, 1881. 5.30 P.M. Date changed to-day to proper time for eastern longitude. Mr. Danenhower's eye C.S. Found good deal of trap-rock, injected pieces, tufa &c. The cliff formed of igneous rock, strata

of the face almost horizontal. Between the strata of trap is & extending at intervals or rather between six definite strata of the face is a looser mass of various thickness made up of smaller pieces of rotten and feldspatic rock. Numerous pieces of lava found, and trap with silica stuck in like plumpudding. The lava is of various colors, some yellowish-green, other pieces red. A peculiar white stone, presenting to me very much the appearance of gypsum is found. Mr. Melville says that it is cryolite, and Iverson, who worked in the Greenland mines, also says so. I hardly think it is. I am inclined to think it carbonate of lime in some form. It effervesces when touched with NO_5 . I found embedded in a piece of trap, a regular stalactite formation. I also found an amethyst of a decided purple tinge but not deep at all; red & white clay almost stone, but leaving a red mark when drawn on the surface of a dark rock, easily cut. The so called creolite can be cut or scraped with a knife. A piece of petrified wood was also found by Johnson, who found likewise an antler of a reindeer high up on the mountain, various mosses with red & white flowers, scurvy-grass, two species of grass & a yellow flower with peculiar ovary found. Coal

has been found in large quantities inside of cliff below here. Nine dozen murre(?) killed & driftwood found to cook at least two meals. Birds killed with stones. There are rookeries in the cliffs above us, a continuous noise going on ever since we have been here. I found two nests in the rock and tried very hard on a bird but he got out of another hole & escaped. Found my bottle of turpentine broken and all the turpentine wasted. On Wednesday 27th, one bottle of brandy was also broken and the entire contents lost.

Sunday July 31st, 1881. 8 P.M. Mr. Danenhower, C.S. No sun since we have been here, fog nearly all the time, occasional rain. Bird diet--old ones tough, young tender. Coal burns fairly well. The cliffs would be no end of richness to a geologist. I found some very peculiar stones. Broke, Broke down about 1/2 ton of trap-rock, found it studded with crystals white & red quartz with some yellow, topaz, I think in the seams where the cliff has separated in places I worked out sheets of lime 1/8 inch thick. Breaking into the mass of trap, white, red & yellow quartz, sometimes in perfect crystals and groups of same, are found, they can be easily enucleated leaving a smooth mold. The white

stone spoken of yesterday is probably carbonate of lime. The masses of crystals enucleated generally very easily, due probably to frost.

August 1st, 1881. 9 P.M. Mr. Danenhower doing well. I had very severe diarrhoea last night and this morning, out very often, very profuse. Good deal of pain--took some opium Tr. & brandy, took tonight Tr. Opii. Found on the cliff to-day some white & yellow crystals stuck in basalt, stone very soft, breaks down easily leaving sand between fingers, in some places around the crystals saw a fine grained bright red clay. Not much of it. I found also in some of the lower trap in the cavity between masses of small yellow & white crystals, some very fine, beautiful specimens, they are I think a silicate of lime. Looked at by a glass they showed perfectly clear & transparent, they had some elasticity and would bend from line when gently touched.

August 3rd, 1881. 8 P.M. Have been sick and in my bag for last 24 hrs--yesterday had a very painful day. Mr. Danenhower doing well. Mr. Chipp returned this A.M.

August 4th, 1881. 8 P.M. Mr. Danenhower. Eye little inflamed. Stopped Mr. Chipp's whiskey to-day. I am all right again. No start made to-day on account of bad weather.

August 5th, 1881. 9 P.M. Mr. Danenhower, cond. same. Shot 10 dogs to-day. I am billeted in 1st cutter, a change from the whaleboat. Weather continues bad.

Saturday, August 6th, 1881. Mr. Danenhower, eye inflamed. Removed an eyelash from lower lid, which had caused the trouble.

Left the island in boats this A.M. made rather more than 2 miles over the water to large floe piece. Boats made two trips each, dinner at 3 P.M. After noon, sleds drawn across the floe, & boats came around in a lead. Helped to work 1st cutter. Young ice making in lead tonight, bad show for us.

Sunday August 7th, 1881. Mr. Danenhower. Cond. same. Boating again, my tent broken up, & men sent to mess with their boats. I am in the Capt. tent. Had a good lead this morning, probably more than three miles, boating and sledding we have made at least four.

Monday August 8th, 1881. Mr. Danenhower--eye inflamed to-day. Had a bad day of it, loading boats, crossing leads, hauling out, loading sleds, carrying over ice, sometimes portaging. Wet work and not much made. My boots gave out at dinner time & I had to take

a pair I had laid up in ordinary in my knapsack, feet are wet all the time & the comfort of my own tent is missed.

Tuesday August 9th, 10 P.M. 1881. Mr. Danenhower-- Eye not so much inflamed, treat. cont. Made at least 8 miles to-day, struck a rich lead & had comparatively an easy time, only a little cold & wet; only two dogs left, the rest lost, except Prince & Pill Garlic--shot.

Wednesday, August 10th, 1881. Mr. Danenhower's eye still congested this morning but not so much. Wilson had a cramp in stomach. Tr. Opii. Made about 12 miles to-day to S.W. Ice much slacker only hauled out once, promises well for open water. Snow storm, cramped in boats, wet and toes very cold, however one gets used to it & it is not so bad as one would have thought. Will go on after supper.

Thursday August 11th; 1881. Mr. Danenhower. Eye not so much congested. Made 17 miles yesterday & 20 to-day at 10 P.M.; fine leads all the morning, a little devious this P.M.

Friday August 12th, 1881. Mr. Danenhower--Eye a little congested, he thinks he can see better & that his sight is improving, but I am not sure of it. Made about 4 miles this A.M. & hauled up, working a packed

lead. Sun came out & we dried clothing, worked tonight about a mile to the westward, wind is coming and may help us.

Sunday August 14th, 1881. Mr. Danenhower--Conjunction of lower lid flared up, the eys so far has done very well, we have had little or no suj and it has not been exposed to light to any great extent. He is very anxious to get to duty, & from his very peculiar mind he has I think gotten the idea in his head that he is being unjustly treated. It is true that he is able to get along quite well & that he has not broken down; before we started he thought that his chances were nil tho I told him I thought he would pull through all right, and was always anxious for me to take the eye out. Now that it has turned out as I predicted, he takes the other tack, considers himself a sound man & has given any amount of annoyance in his repeated attempts to get himself placed on duty. I do not consider any man who has the affection that he has & whom I know to be liable to break down at any time, that his eye is exposed to a strong light, a fit man to be put in charge of a boat & party of men under any circumstances, & that it would be wholly unwarrantable in our condition. This, I believe he has so far failed to see & has, I have no doubt, a

fixed idea that there is a combination to keep him out of what he considers to be his right. I am led to this conclusion by my knowledge of the man after two years experience & after having had frequent opportunities of witnessing the idiosyncrasies of his mind in matters connected with himself.

Did not make much headway to-day, leads jammed and covered with young ice.

Monday August 15th, 1881. Mr. Danenhower, eye looks quite well this P.M., treat continued.

Had hard time this forenoon, hauled over an old ice floe more than a mile to make a 1/4, then got into a lead full of young ice and snow, extremely tough. Stopped for dinner. The sun came out & we have found more open leads. Our course has been very devious, but I think we have made five miles southing. Mr. Dunbar shot a seal at dinner time & we will eat him now for supper, cooked by & in his own blubber. I got a fall to-day, but caught myself before I got more than one leg in.

Tuesday August 16th, 1881. Mr. Danenhower--Condition same. Bad day to-day, very little made, hard work, packed lead & snow stom, hauled out at 4 p.m.

& will camp down here for the night. A North Wester would help us but the Fates seem to be against us.

Wednesday August 17, 1881. Mr. Danenhower -- Condition same, removed lash from eye. Struck good leads to-day and made some progress, probably ten miles. Plenty of seal and some oogook seen. 31 shots fired but nothing obtained, tho several hits.

Thursday. August 18th, 1881. Mr. Danenhower, eye a good deal inflamed tonight had a cold head wind most of the afternoon which probably caused it.

Had bad luck with the leads this A.M. Worked to the N.W. and had to haul up at 10 A.M.; got dinner by 12 M., had a seal--then got through into open water & had a lively wind from the N.W. that we had to run into for a while, but made about 6 miles on our course to the S.W. for the day's work & have hauled out for the night, the wind still continues & the ice is moving quite fast. The sleds are a great nuisance towing astern, hold us back and interfere with the steering. Will dismiss the Walrus tonight.

Friday August 19th, 1881. Mr. Danenhower. Eye doing better to-day.

Struck it fat to-day, with leads & running right;

the 2nd cutter met with an accident, stove a hole in her bow and delayed us for 3 hrs. We have made about 16 miles southing & have probably struck an open pack. Erickson excused from duty to-day, very uncomfortable from a bad cold, chilly & shivering the whole time. Gave brandy during the day, oz. iii, & a Dover's powder tonight.

Saturday August 20, 1881. Mr. Danenhower.--Eye doing quite well to-day. T.C. Island of New Siberia lies to south west of us, about 12 miles off. Long. by assumed latitude put us $148^{\circ}50'$ E.; drifting to the westward. Erickson & Drässler both under the weather with colds, faces swollen. They are rather better tonight. Bread given out to-day; 1 1/4 lb. of pemmican per diem.

Sunday August 21st, 1881. 8 A.M. Danenhower-- Eye-lid red & congested, vessels showing on sclerotic. I had to report him this morning to the captain for causing unnecessary delay & using disrespectful and unbecoming language to me as a Medical Officer in the presence of an enlisted man. Mr. D. has made some difficulty about coming to the tent, does not like to, in fact, and I have tried to make it as little disagreeable to him, as possible, until recently going to him,

until one occasion about 3 days ago I went to him & he made some objection to my examining his eye at the time saying that he was busy. Since then the hour of sick call was changed at my request and I have made a point of waiting for him at the tent. This morning he was out & I saw him standing around, he also saw me, I think (I had told him I would always be ready to see him as soon as I was dressed & as soon thereafter as he might be so) after some time he spoke remarking that there was good light(?) where he was. I told him there was an excellent one in the tent. He came in, & remarked that his breakfast was waiting for him. I then said that I also had been waiting for him, & reminded him that yesterday after I had notified him that I was ready I had to wait some time, & when he did come he said that he was busy at the time tying up something (his bag probably) & had waited until he finished. (He had made no answer to the message I had sent him by the steward.) He then said that he did not wish his eye to be examined & had asked to be taken off the list 6 weeks ago. I told him that he was not fit to be taken off the list (meaning that his eye was not in a fit condition for him to do duty). He remarked with some asperity that he was

fit to do duty, thus flatly contradicting me & implying that I was keeping him on the list improperly. His manner at the time & during the whole conversation was exasperated in tone, & under the circumstances, being in presence of others I considered disrespectful & unbecoming.

Erickson & Dressler are improving. Mr. Newcomb has taken a cold and this morning is very uncomfortable and feverish.

Monday. August 22nd, 1881. Mr. Danenhower's eye doing quite well, secretes mucus rather freely from lids. Dressler & Erickson returned to duty this A.M. Mr. Newcomb has not been out to-day but is very much better.

Tuesday. August 23rd, 1881. Mr. Danenhower doing tolerably well, pinkish under lower part of cornea. Mr. Newcomb well.

Still in camp. No water, ice jammed by wind on the island.

Wednesday. August 24th, 1881. Mr. Danenhower.-- Eye & lid inflamed rather more than usual, tho there is no pain or uneasy feeling. Treat. continued.

Still in camp ice jammed on us. D. loquitur to M.-- his policy was not to make war on anyone unless he was attacked but that he had some "political influence" &

if necessary would rake over something or other-- probably his idea of a defense of himself. Seal.-- Brkfat & supper.

Thursday. Aug. 25th, 1881. Mr. Danenhower. Eye looked quite well this A.M., tonight it is flushed up again. Still on the floe--ice tighter than hell, all day-- opening a little tonight but I believe will jam in again unless we have a wind.

Friday. August 26th, 1881. Mr. Danenhower. Eye less congested tonight. T.C.

Ice still jammed on us, wind light, drifting to S.E.

Saturday. August 27th, 1881. Mr. Danenhower. Eye doing quite well to-day.

Still no opening. Have been without sugar for two days, & have had my last smoke tonight.

Sunday. August 28th, 1881. Mr. Danenhower. Eye a little inflamed to-day, fresh fall of snow. C.T.

Wilson excused from duty to-day, pemmican gives him the bellyache--had some diarrhoea. Land seen bearing E.x N. this A.M. Supposed to be water at first, but was land beyond a doubt when I saw it, probably New Siberia, & the previous picked up Faddejewskoi.

Monday. August 29th, 1881. Mr. Danenhower, left eye muddy and congested--it has been quite cold in

boat. Left the camp about 1 P.M. & have made about 10 miles southing. I think we are well through the cut between the two islands having drifted last night rapidly.

Tuesday. August 30th, 1881. Mr. Danenhower. Left eye muddy & congested, noticed him using R. eye a good deal writing to-day, apparently. Landed on Thaddeus island this evening, took a walk, fresh tracks of deer, horns which I think recent are in the velvet. Track made since melting. x found in summer water courses.

Aug. 30th, 1881. Wednesday. Mr. Danenhower-- Eye congested & muddy this morning. Right eye also a little complained of. Some pain in shin bones. Ordered Iodide of Pot. Left Faddi' this A.M., sailed around S. cape and are on our way for small island, all night job. Hope to reach it by morning & may make Kotelnoi tomorrow night, could not land on S.W. end of Faddi, water too shoal--16 inches, 500 yards from shore. Saw winter huts &c.

September 1st, 1881. Thursday. Mr. Danenhower-- Eye same. For last 36 hours under way. Up all last night, miserable time in boat, struck the shoal & pounded around for hours, finally got away about 3 A.M. & again this morning fell in with it. Got the boat

pretty full of water, after we got under way made good running, probable more than five knots per hr., but very wet & cold, taking in water continuously, boat crowded. Temperature somewhere about 20° F. for the last two days. Tonight I am wet from my waist down, all my underclothing, — my top coat is frozen. I have been so stiff & numb from cramp & cold that at times, except for my brain working, I should not know of my very existence. Last night was very trying on everyone & everybody is probably in as bad a condition as myself, if not worse, but they all stand it without complaint. The 2nd cutter is behind again. Mem. Arch^{tr}.

Friday. Sept. 2nd, 1881. Mr. Danenhower--Right eye clearing, left eye still congested, no pain in shins. Stopped the Iodide, & renewed the Quin. Still on the floe piece of last night. Land sighted about 4 P.M. to-day, S. end of Kotelnoi probably. We have been all turned in almost the whole day since brkfst.; took dinner in bag & went to sleep again. Ice pack around us again & nothing seen of second cutter up to this time, a signal flag hoisted about 5 - 6 P.M. Wind still continues, but is in puffs. Snowstorm. Everything wet & everyone more or less uncomfortable.

Before leaving our camp on August 29th I divided the whiskey & brandy between the boats--2 qts. to the 2nd cutter & whaleboat each, 3 qts. & some ounces I kept with myself in the 1st cutter.

Saturday. Sept. 3rd, 1881. Mr. Danenhower--Eye looks rather better, treatment continued. 2nd cutter came down the edge of the pack to the northward of us. She had laid up a little before us on account of heavy weather she was making. Chipp & Kuehne came over to our camp about supper time. They hauled over floe this A.M. at 10, got into lead along the sand spit & had beautiful running all day. We are still jammed in the ice & the wind continues.

Sunday Sept. 4th, 1881. Mr. Danenhower--Eye doing quite well. Still an angry look to the lower half. We moved over the edge of the pack by Mr. Chipp & got under way by two P.M. Ran until between 5 & 6, struck a sand spit on eastern side of Kotelnoi not laid down on the chart. I got three seas plump into my lap, wetting me from the hips down, very uncomfortable. In crossing the floe yesterday I noticed Mr. Danenhower especially & I did not think that he got over the ice as well as he supposes & had occasion to call Mr. Melville's attention to him. The water used tonight

is from a pool in the sand bank & is salty from surf breaking, but not any more so than the snow we have been using lately. This A.M. I recommended that the snow freshly fallen during the night should be used. Our "executive" imagined probably that he was the only man of sufficient acumen to discover it I suppose, for he felt it necessary to inform the Capt. of the fact & to recommend the use of snow.

Sept. 5th, 1881. Monday. Mr. Danenhower-- Eye remains quiet: Mr. Chipp & myself took a walk of five miles or so over the spit & across the beach to the main land. Found entrance of river. Came back about 4 1/2 P.M. Found Lee in front of the tent and from his manner & utterance was convinced that he had been at the alcohol or medical stores. He was a little more unsteady on his legs than usual.

Sept. 6th, 1881. Tuesday. Mr. Danenhower--Eye inflamed. C.T. Started, walking till 10 P.M. Disgusted. Mr. Dunbar to-day had to be excused from all heavy work, he had an attack of giddiness, wanting breath & felt great weakness. He has, I find, had one fainting spell once before. His appetite is fair but he cannot eat his whole ration of pemmican. He

has some heart trouble & has had some uneasiness from it on the ship; palpitation.

Sept. 8th, Thursday 1881. Mr. Danenhower--Have not seen his eye since yesterday. To-day 12 - 1 P.M. passed in x x x x x Says that he feels all right.

Left Kotelnoi S. end 9 A.M., ran all night, boat very wet & quite a heavy sea for the boats. We all became thoroughly wet, took in water everywhere, bow, beam, stern. I was as usual in a particularly forward spot, sea after sea taking me from the shoulders down. I am now wet & cold & have been so for 12 hrs. & will be so until in under the Lena.

Sept. 9th, Friday. 5 A.M. Mr. Danenhower--Eye last night congested but not so much as the day before. He thinks that he can see better than before & I think it probable as the cornea is clearing up rather well. I shall only examine his eye once a day hereafter. I have very little quinine left. We hauled up on a small cake of ice yesterday at 4 P.M. & camped. I am and every one else nearly done up. I think that I really am the wettest in my tent at any rate.

Saturday 10th, Sept. Mr. Danenhower. Eye yesterday same. Mr. Dunbar still continues to feel weak & has attacks of faintness. I have supplied him with a

Phial of brandy, oz. ii; directed him to ask Mr. Chipp for more when that is gone, to be supplied from the bottle given his boat.

P.M. Mr. Danenhower's eye was a good deal inflamed to-day. Landed on Semenovski for dinner. Party walked down toward the end of island & found two reindeer. Shot the doe. We came into a bay on the west side of the island & camped, cut up the deer and had a meal at once, although we had just finished dinner about two miles above; it was excellent. I went up the island after lunch to our dinner camp, but did not see the fawn. He had evidently gone up to the other end of the island. The island is a mere strip of earth varying in places from an hundred feet high to the level of high water. Where it has been brushed by the sea in places the breadth runs from a very narrow strip, wide enough for a roadway, to at least a 1/4 of a mile. It will probably disappear in course of a few years and be only a chain of islets. I found the portion of the tooth of a mastodon in one of the tumuli & a tusk was also found. Ptarmigan in several flocks.

Sunday Sept. 11th, 1881. Mr. Danenhower--~~Eye~~ looks rather clearer to-day but still congested.

Ostrowa. Sept. 18th, Sunday. 1881. Left Semenovs-ki on Monday morning last, had good wind and by 6 o'clock had probably made 40 miles on our course. Wind increased to a gale shortly after & the whaleboat passed us on our port side, then apparently making tolerably good weather. Keeping ahead of the seas. The second cutter on our port quarter doing as well as ourselves. We were doubly reefed at the time & commenced to take in seas over stern & quarter, two right after each other nearly swamping the boat. We got her partially baled out before she caught another. Part of one reef was shaken out, attempting to run ahead. It did no good. Seas caught us all the time blowing a gale. Whaleboat out of sight on port bow. 2nd cutter lost astern. This about 8 P.M. From that time gale increased, carried away our mast at the foot & we became a wreck, taking in water, wollowing in the trough of the sea the whole night, next day and until morning of Tuesday. Sail & mast secured to an anchor made of sail & alcohol breaker, did no good, boat would not steer & we lay in trough of sea taking water, baling, baling all the time. Sail & boat cover were bagged and both lost. Mast & oars, with pick axe, were then used

& did a little better; at night wind went down & we rigged jury sail. God knows where we went during the night. There was no sleep for 36 hrs. 2nd night baling continually. On Wednesday it was calm & we drifted along. Sometime in the afternoon of Wednesday the Capt. complained of cold feet & hands & had a nervous chuckle in his throat. I gave him two drinks of brandy during the P.M. He got into his bag & staid there until we got within half mile of the shore on Saturday evening the 17th. His feet were a little swollen and his hands quite sore. The cold at times was intense & we had a hard time of it generally with the wet & snow. On Friday morning we found ourselves in 6 ft. of water & young ice near at hand. Shortly after we made land to the southward & tried to get to it but grounded a couple of miles off, in foot & half of water. On Sat. we pulled in as close as possible, the men all, with exception of the Capt. myself, Erickson & Boyd, got out of the boat and tried to pull her in. By wading ashore several times they lightened her so as to get her in where we all came ashore, wading & carrying all we could. Erickson, Sam, and Boyd are suffering a good deal. Erickson's feet swollen & blistered, oedematous, & toes blue, legs swollen & hard. Sam not so bad & Boyd still better.

September 19th, 1881. Monday. Erickson legs & feet improving. Under surface of left foot blistered, opened it and let out watery serum bloody. Renewed dressing of vaseline, cotton batting & bandage. Boyd improving, Sam improving, one foot still painful.

Thursday 20th, Sept. 1881. Erickson, Sam, & Boyd are in about the same condition this morning, not improved by the short walk of yesterday P.M. when we made a start. We have been under way this A.M. for an hour. Erickson & Boyd are making slow progress & are suffering a good deal of pain. Our outlook at this rate is a poor one. We must move on & get to the river.

5 P.M. In camp on river. Had hard time getting Erickson along, he laid down on the roadside and asked to be left, that he could not go on. This was in 200 yds. of dinner camp. Capt. & I went back & got him up & brought him up to the rest of the party. Whilst we were going a herd of deer were seen & Nindemann & Alexae went in pursuit. We waited their return, they had followed them to this point. We then got underway, Capt & I bringing up the rear with Erickson. The latter did pretty well, made an effort & made the mile to this place better than I expected. Nindemann, Collins,

& Alexae are out hunting. God grant they may kill a deer, we are sadly in need, tho not yet in absolute want.

Thursday. Sept. 22nd, 1881. Indian Lodge. We made about 4 miles yesterday & have come to the river we expected. Found two huts in tolerable repair. Capt. determined to halt & on consulting I found he had determined to remain here & send two men ahead, to get through if they could & get assistance if possible. Nindemann was to go with me. I thought it the only chance and was willing to try it, & less compunction about leaving as I thought the chances of surviving the winter here was as good as making a hundred miles over unknown country without sufficient food for the journey or shelter at this season of the year. I think there was a chance & I thought it should be done if possible.

Last night Alexae who had gone out in the P.M. came back & brought the haunch of a deer; he had shot two, thank God. We had turned in for the night after our "frugal", but it did not take us long to start a fire & fry pan. We ate heartily & slept tolerably well afterwards. To-day Erickson's legs are in a better condition, he has feeling in his toes & the swelling has

gone out of his legs to some extent, no more bullae form. The feet look red except the toes which are still purplish white. He will probably loose the skin from the front of both feet, but a rest here of a couple of days may improve him, so we can work the whole party out of the delta, where the chances of living through will be better. Boyd is doing well & I hope will be all right. Sam has improved, but just now is in pain.

Friday. Sept. 23rd, 1881. Erickson has improved, he has less pain, the swelling & hardness have diminished, the leg is still a little boggy above the ankle (both), sensation is restored to the feet under the old dead skin. Skin, from forward part under surface both feet, loose, & serum beneath that drains away on upper surface. Skin dead back to metatarso-phalangeal joint. Punctured upper surface to let out bloody serum, toes feel warmer & more natural. He is more cheerful & tho ordinarily a man in his condition should lay up, yet if he can move our circumstances are such that we must go on, & he with us. Boyd's feet are very much improved & I think that he can keep up. Sam also. The rest of the party have more or less of aches & pains, but that is to be expected.

Saturday. Sept. 24th, 1881. All of sick are improved, we start to the south at once.

Sunday. Sept. 25th, 1881. Sick doing as well as could be expected. Kept up well yesterday. Erickson is improving. Made only about 5 miles yesterday, as more than 1/2 of the day was lost in an attempt to construct a raft that I did not think would carry the party if it could have been properly made. I broke through the ice in crossing a creek & got wet up to my thighs. Froze as soon as came out of water. Camp made late & a miserable night passed by all hands. *Δ λ ο ρ γ ο*
α κ τ ε ρ γ φ ω λ α σ υ σ υ α λ.

Monday. Sept. 26th, 1881. Made 12 miles yesterday about. Hard work, very hard. Had a god send in the way of a hut at night, held us all quite well. Deer meat gone, short dinner yesterday, short supper & brkfst of pemmican to-day. Pemmican will eke out until tomorrow noon. Sick, except Erickson are nearly well. Found the skin gone from palmar surface right foot inner side, about size of a silver \$. He walked better & feels no pain. The ulcer looks healthy. The feet & legs generally have improved. This A.M. examined foot find muscular sheath exposed & parts running serum quite freely. There is no bad smell & the sore looks healthy

& gives no pain when he stands upon it. I have dressed it with carbolized vaseline, applied lint & cotton batting & a bandage. I think he can move to-day better than he will be able to later. We are on a promontory, & God knows whether the raft about to be built will convey us or whether we have a long march around ahead of us.

Tuesday. Sept. 27th, 1881. Crossed on the raft yesterday, answered the purpose quite well, but it took us until 3.30 P.M. We made 3-4 miles up the river, camped on the bank & slept by a fire. Erickson's feet look very bad, they have sloughed more than I thought, & are certainly in poor condition, but we must move on as every mile brings us nearer striking distance of a settlement. We cannot offer to carry him as all the men are loaded to their full strength, & as long as he can walk he will have to do so. We have but one ration of pemmican left between $1/4$ - $1/3$ of a pound & we have been living on that for a day & half. Temp. 22° F. 10 A.M. As we were about to start deer were seen & Nindemann & Alexae started. Alexae killed a deer (buck), thank God.

Wednesday. Sept. 28th, 1881. 3.35 P.M. The buck was a god send, a large fellow & gave us a grand feed &

about 90 lbs. to carry. We made about 4 miles & slept on the bank of the river again by a fire. Had a bad time of it myself, the half raw meat disagrees with me. Erickson's foot is very bad. The skin has sloughed extensively from plantar surface under metatarsal bones & also some of the muscular tissue of right foot. I am afraid that the same thing will occur on left foot. We are obliged to move on & so far he has been able to keep up, but God knows how long this will continue & the man must finally break down. If we can find a settlement soon I am in hopes of saving his feet but, if not, his feet & possibly his life & that of the whole party would be sacrificed for no man will be left alone. Boyd & Sam are nearly as well as the rest of us. All of us are more or less used up. Iverson has chill blains in his toes that are very painful, & I do not think any of us have our strength. It was very heavy walking yesterday & to-day we have come to at an old hut on promontory which we have repaired & will spend the rest of the day & night. The branch of the river making to the North is very large & the captain thinks we have come to the main river where it breaks up. I hope it is so &

that we may find some means of crossing. Yesterday we found the track of a man on the beach & this A.M. two were seen. God grant that our smoke or fire may be seen by some party who can give us assistance.

Thursday. Sept. 29th, 1881. Still in old hut living on deer 1 1/2 lbs. per diem. Sam & Boyd off the list. Erickson is in a bad way, both feet sloughing badly, exposing tendons & muscles. He has complained of stiffness in his jaw & loss of power in right side. I keep him free from pain at night & give him sleep; dress foot with lint & carbolic acid. The result will probably be death from lock jaw. Alexae killed a gull and we are trying to catch fish.

Friday. Sept. 30th, 1881. Removed four toes from right foot & one from left foot sawing near the tarso-metatarsal junction.

(Note. Then follow two pages of which very little can be read. The whole diary is in lead pencil and the two pages appear as though something hard had been carried between them, rubbing the pencilad words until they are now decipherable only as a few words here and there.

He seems to close the entry of Sept. 30th with statement, that if the party moves Erickson will have to be dragged.

It appears that on Saturday, Oct. 1st, there was additional operative work on Erickson, removing all but one toe. All hands then crossed the river, dragging

Erickson on a sled made by Nindemann. Little more than one day's ration left.

On Sunday, Oct. 2nd, all were out and before the fire by 4.30 a.m., having had little sleep since midnight, on account of the cold and Erickson's talking in his sleep. The day ended with almost no food on hand and the party had traveled about 10 miles, camping near wood for fire.

On Oct. 3rd, Monday, tea was served out at midnight, as it was so cold and wretched. That day ate all deer meat remaining, and had nothing left except 4/14 lb. of pemmican each and a half starved dog. Erickson failing and delirious at times. Party made five miles in forenoon, crossed river on ice, then did some useless walking to a supposed hut, then made camp, killed dog, made fire, ate dog meat and had 27 lbs. left. Erickson delirious all night.

Oct. 4th. "Had a horrible night on the river bank." Erickson got his gloves off and hands were frozen. He was unconscious and was lashed on sled. Made a hut. Erickson sinking. 1/2 lb. of dog meat for each one and a cup of tea.

Wednesday, Oct. 5th. (There is a description of Erickson's condition but it cannot be made out.) No breakfast. At 6 p.m. 1/2 lb. of dog meat per man--tea from old tea leaves. Still in hut.

"Thursday Oct. 6, 1881. Erickson died at 8.45 A.M. Peace to his soul.")

"Friday, Oct. 7th, 1881. Left hut this A.M. Ate our last meat at hut. Alcohol oz. i for dinner with water boiled in tea leaves. We have struck the main river I think, the mountains are visible. We stopped here 3 P.M. to build a fire, several of our people having fallen in the river attempting to cross. Alexae is out hunting. God in his mercy grant that he may succeed in getting some game. Later he shot one grouse.

Sunday. 9th, Oct. 1881. Yesterday without food except the alcohol, the Capt. spoke of giving the men option to-day of making their way as best they could, that he could not keep up. This occurred in the morning when we had made two miles that we had to retreat. I told him if he gave up I took command & that no one should leave him as long as I was alive. I then suggested that we send two men ahead to try to make the settlement, and that we make the best of our way with the rest of the party. This was done. Nindemann & Noros are ahead, God give them aid & we are getting along. The Capt. gave me the option of going ahead myself, but I thought my duty required me with him & the main body for the present. Lee is about broken down. Alexae has shot 3 grouse by God's aid, & we will now have something to eat.

Wednesday. Oct. 12th, 1881. We have been without food since Sunday except one oz. of alcohol, dram 1 of glycerine yesterday & to-day, we have made no progress since Monday up to 3 o'clock. Wind & snow against us, we have been lying in hollow in river bank.

October 18th, 1881. Alexae died last night of exhaustion from hunger & exposure.

Note: The above is the last entry in the diary as such. Turning over a number of blank pages, one comes to the letter below, which is of a later and the last date.

To Edward Ambler, Esqr.
 Markham P.O.
 Fankuir, Co.
 Va.

On the Lena,
 Thursday, Oct. 20th, 1881.

My dear Brother:

I write these lines in the faint hope that by God's merciful Providence they may reach you all at home. I have myself now very little hope of surviving. We have been without food for nearly 2 weeks, with the exception of 4 ptarmigans amongst 11 of us. We are growing weaker, and for more than a week have had no food. We can barely manage to get wood enough now to keep warm & in a day or two that will be passed. I write my brother to you all, my Mother, Sister, Brother Cary & his wife & family, to assure you of the deep love I now & have always borne you. If it had been God's will for me to have seen you all again I had hoped to have enjoyed the peace of home living once more. My mother knows how my heart has been bound to hers since my earliest years. God bless her on earth & prolong her life in peace & comfort. May his blessing rest upon you all. As for myself, I am

resigned & bow my head in submission to the Divine Will. My love to my Sister & Brother Cary. God's blessing on them & you. To all my friends & relations a long farewell. Let the Howards know I thought of them to the last & let Mrs. Pegram also know that she & her nieces were constantly in my thoughts.

God in his infinite mercy grant that these lines may reach you. I write them in full faith & confidence in help of our Lord Jesus Christ.

Your loving brother,

J.M.Ambler.

Note: In the back of the little leather bound, water-marked and delapidated book is a rough sketch of the geological formation of Bennett Island. This is followed by a menu or diet while on the ice as follows:

Diet while on the ice.

Breakfast.

4 oz.	Pemmican	24 oz.
1 "	Ham	6 "
1/6 lb.	Bread	1 lb.
2 oz.	Coffee	12 oz.
2/3 oz.	Sugar	4 "

Dinner.

8 oz.	Pemmican.	3 lbs.
1 oz.	Liebig's Ext.	6 oz.
1/2 oz.	Tea.	3 oz.
2/3 oz.	Sugar.	4 oz.
1/6 lb.	Bread.	1 lb.

Supper.

4 oz.	Pemmican	24 oz.
1 "	Tongue	8 oz.
1/2 "	Tea	3 "
2/3 "	Sugar	4 "
1/6 lb.	Bread.	1 lb.

Then follows a list of those in the 1st cutter.

First Cutter's Crew, Landed on the Lena Delta.

Geo. W. DeLong.	U.S.N. Lieut.
J.M.Ambler	U.S.N.P.A.Surgeon.
J.J.Collins	Reporter.
Nindemann	Seaman
Dressler	Seaman
Erickson	Seaman
Boyd	2nd C. Fireman.
Iverson	Coal Heaver.
Lee	Machinist.
Goertz	Seaman
Kaack	Seaman
Noros	Seaman
Ah Sam	Cook
Alexae	Indian Hunter.

The last leaf of the little book contains the following:

ZEUS ΣΩΤΗΡ ΚΑΙ ΥΙΟΥ.

Ship lost 12th June - 77°15' N. 155° E.

Bennett Island. 76°38' N. 150°30' E.

FINDING THE BODIES.

(The following is taken from Melville's "In the Lean Delta.")

" x x x x x DeLong had crawled off to the northward and about ten feet from Ah Sam, while Doctor Ambler was stretched out between,--his feet nearly touching the latter, and his head resting on a line with DeLong's knees. He lay almost prone on his face with his right arm extended under him, and his left hand raised to his mouth. In the agony of death he had bitten deep into the flesh between his thumb and forefinger, and around his head the snow was stained with blood. None of the three had boots or mittens on, their legs and feet being covered with strips of woolen blanket and pieces of the tent-cloth, bound around to the knees with bits of rope and the waistbelts of their comrades. Ah Sam had on a pair of red knit San Francisco socks, the heels and toes of which were entirely worn away.

When Nindemann joined me I showed him the three bodies as yet undisturbed, and the articles I had gathered together, including the journal, from which DeLong had torn away three quarters of a page; but as

the opposite one on which the last entry had been made was not filled out, it was plain that no record was missing. I then told Nindemann to thoroughly search the bodies, directing him to cut the clothing in the vicinity of the pockets, and all of the many small things he found, I tied up in separate packages and marked, so that no scrap of paper or article of any kind might be lost. I did not then take an inventory of these things, because of the intense cold. In all the pockets were scraps of old sealskin clothing, boots, and trousers, which had been crisped in the fire, some of it with the hair on the hide. DeLong's pistol was missing. I knew he had one, and that he had carried it from the time the ship was crushed until we parted company. It was originally the property of Mr. Danenhower, who, while we were encamped on the ice preparing for our long march, had thrown it, together with some ammunition, into the sea--as he then supposed. But a thin sheet of ice covered the lead, which shortly before had been open water, and over this, instead of sinking, the pistol went skimming. So afterwards, when DeLong found himself without a pistol, he directed one of the men to secure Danenhower's for him; and now failing to see it on his person I thought no more at the time than that he had thrown it away because of its weight. Chipp had

given his pistol to Ah Sam, who clung to it until death.

The three bodies were all frozen in the snow, so that it was necessary to pry them loose with a stick of timber. In turning over Dr. Ambler, I was surprised to find DeLong's pistol in his right hand, and then, observing the blood stained mouth, beard, and snow, I at first thought that he had put a violent end to his misery. A careful examination, however, of the mouth and head revealed no wound, and, releasing the pistol from its tenacious death-grip, I saw that only three of its chambers contained cartridges, which were all loaded, and then knew, of course, that he could not have harmed himself else one or more of the capsules would be empty.

(I am particular in noting this fact, because of a painful story which has gone the rounds of the press, to the effect that Dr. Ambler took his own life. This is utterly false. The doctor was ever cheerful and fearless of death, and I know he faced it calmly and manfully as he had done before on the field of battle. He came of a brave family, and if the world might read

a single page of his private journal there would be no doubt of his unfaltering courage and fortitude to the bitter end.

I believe him to have been the last of the unfortunate party to perish. When AH Sam had been stretched out and his hands crossed upon his breast, DeLong apparently crawled away and died. Then, solitary and famishing, in that desolate scene of death, Dr. Ambler seems to have taken the pistol from the corps of DeLong, doubtless in the hope that some bird or beast might come to prey upon the bodies and afford him food,--perhaps alone to protect his dead comrades from molestation--in either case, or both, there he kept his lone watch to the last, on duty, on guard, under arms.)"

The following are clippings of newspapers which appeared at about the time of the arrival into the United States and the burial of the bodies of the Jeanette victims.

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DR. AMBLER'S HEROISM.

The Manhood of the Surgeon of the Jeannette Expedition.

A friend writes to the New York Herald an eloquent tribute to the late James M. Ambler, surgeon of the ill-fated Jeanette Polar expedition. The tribute says:

"While in Norfolk he received a telegram from the Navy Department asking if he would volunteer for duty on the Jeannette, which was to be sent in search of a passage to the North Pole. Up to that time the idea of seeking fame among the frozen seas of the north had not been entertained by him; but, not wishing to have his name coupled with a refusal where hardship and probable danger were involved, he promptly accepted. This he certainly would not have done had he known, as he soon afterwards learned, that the same offer or request had been declined by others. It presented, however, an opportunity for a display of that manly stuff of which he was made. He did not, for this reason, recede from the responsibility he had assumed, but unremittently bent every energy to secure success to the enterprise so far as in his power lay, and to his painstaking examination as to the physical qualifications of the personnel of the Jeannette's crew, to his zeal and forethought in providing the necessities of life under the peculiar conditions to which the ship's company were to be subjected, and to his wise hygienic and sanitary suggestions may be ascribed for the most part the vigorous health of the officers and men, enabling them finally to encounter unprecedented labor and exposure. The immunity from that terrific scourge of polar travellers, scurvy, in which the Jeannette expedition stands prominently alone, were there nothing else, should be a lasting memorial to his professional capacity and foresight. But the mouths of the survivors of that ill-fated expedition have opened to testify how grandly he arose to all emergencies. They portray him as the genial companion, the skillful surgeon, the accomplished physician and sturdy officer. Melville, when asked by the Court whom of the expedition he would specially commend for his behavior promptly replied, "Dr. Ambler" and he was unstinted in his praise of him. During the famous retreat over the ice Ambler was one of the leading spirits. He harnessed two half-starved Esquimaux dogs to a sled of his own contriving, on which were lashed the surgical instruments, medical stores and scientific records; and leaving them to follow in the rear with the sick, the Doctor took his place in advance, day after day, as chief of the road-makers.

He wielded a heavy sledgehammer like a Hercules, breaking down ice hummocks to level a road for the boats. It was related of him that he invariably, when the day's work began, took up the heaviest of the sledges, thus setting an encouraging example to the men. We see him laying this down for a moment to perform an iridectomy, one of the most delicate operations in eye surgery. After DeLong's boats had reached the Lena Delta, and failing to find succor for three weeks or longer, the commander decided to send two of the strongest of his party in advance to seek aid. The main body traveled very slowly, most of them being scarcely able to walk at all, and having to transport the sick. De Long was able to walk only for five minutes at a time. Ambler was the strongest of the party, and the commanding officer selected him and Nindemann to go ahead for succor and to save their own lives, if possible, both of them being able for a long march. When this was communicated to the doctor he told his commander that he thought he ought not to leave his sick, as he preferred to share their fortunes to the end, and his going away would look like abandoning them. This doubtless touched the gallant De Long, whose first thought seems ever to have been his high duty to those under his command. Norros was then sent in Ambler's stead and his life was saved. Ambler remained with his sick comrades to the last and died with them. It is doubtful if the medical profession affords anywhere a finer example of heroism than this. Imprisonment on board an ice-bound ship for twenty-two months, a painful retreat over weary miles of rough ice, with half-frozen hands and feet, and then wandering about on an unknown shore for three weeks, reduced to a mere struggle for existence; yet not for a moment was blunted his keen sense of professional duty. Melville, who found the bodies, is of the opinion that Ambler was the last one to die. His frozen body was found in a sitting attitude, clothed in many suits of extra clothing, seizing in his right hand De Long's pistol, taken from his commander's pocket; in solemn and faithful guard over his dead comrades. None will ever know the dreadful extent of his sufferings during those last hours, or possibly days, of his life, alone with his dead, starving, exhausted and hopeless. Faithful messengers sent by his country have brought home the mortal remains of this noble son of an aged mother to lie at rest in his own village churchyard in Fauquier county, Va. Peace to him and her, and honor to the memory of this noble surgeon whose life was given to his country and his duty.

Dr. Ambler at Rest.

The Last Journey to the Home of His Kindred-- Services at His Grave.

A Washington telegram of Thursday to the Herald says: As soon as the train bearing Dr. Ambler's remains and escort left Jersey City depot on Saturday night the officers adopted a system of watch and relief by which two remained with the body all the time.

At Baltimore Professor L. M. Tiffany and Dr. G. Guy Holiday, Dr. Ambler's former associates in practice; Dr. James McHenry Howard, Dr. Ridgely Howard, and Mr. Henry Howard, representing the medico-surgical faculty of Maryland, the faculty of the University of Maryland, and the Clinical Society of Baltimore, bringing handsome floral tributes, were added to the escort.

Soon after leaving Baltimore an accident to the locomotive occurred which delayed the arrival at Washington about an hour.

No official reception or ceremony took place, but Acting Surgeon-General Van Reypen, Medical Directors J. M. Browne, and A. L. Gihon, Surgeon C. H. White and Passed Assistant Surgeons T. H. Streets, E. H. Green, and Francis Nash, joined the escorting party; also Mr. John Ambler and Edward C. Ambler, cousins of the doctor, and Mr. C.S. Taylor, a classmate.

The casket was taken out of the case and conveyed by the escort to the special train that was in waiting. A catafalque was improvised in the baggage-car, upon which the casket was placed and covered with garlands and flowers.

At Manassas a large crowd had collected. There and at several other stations the doors of the van were opened and the casket exposed to the view of respectful witnesses.

The train arrived at Markham at 1 P.M. Upon approaching the station, where several hundred people, white and colored, were gathered together, the train was slowed down and the bell tolled.

The Last Tribute.

Mr. Cary Ambler, an older brother of the Doctor, and many relations received the escort. The remains were at once put in a hearse and driven to Leeds church, five miles distant, and midway between Markham and Ambler's home--The Dell. Behind the hearse Ambler's two brothers drove, then followed the escort in eight carriages, and after them several other carriages containing relations. Behind these about one hundred and fifty horsemen.

A large concourse was assembled at the church--among them Ambler's brave sister, who bore her grief in a manner worthy her relationship to the heroic dead. His mother, now seventy-

two years old, borne down by sorrow and age, could not attend.

The remains were borne to the altar and grave by Acting Surgeon-General Van Reypen, Medical Directors Brown and Gihon, Surgeon White, Chief Engineer Melville, Lieutenants Jacques, Danenhower, and Scheutze. At the grave the impressive ceremony of the Episcopal Church was read by Rev. H. M. Lee.

Interview with Miss Ambler.

After the burial, the escort was presented to Miss Ambler in the vestry-roon of the church. Lieutenant Jacques delivered messages of condolence from the Secretary of the Navy and Mrs. De Long. During a brief interview between Chief-Engineer Melville and Miss Ambler every eye was wet with tears, Melville himself showing great emotion.

After the grave was filled and wreaths and other offerings which had accumulated along the journey from Siberia were piled upon it, completely hiding it under a floral mound.

Dr. Hannon made a hasty sketch of the surroundings of the grave, it being the intention of Dr. Ambler's confreres in the medical corps to mark the site by an appropriate monument.

The party returned to Washington at a late hour last night, Chief-Engineer Melville and Lieutenants Jacques and Danenhower continuing to Philadelphia, where the remains of the seaman, Boyd were interred to-day.

SURGEON AMBLER'S FUNERAL.

Another victim of the Jeannette Expedition
Laid to Rest.

Washington, February 25.-- The remains of the late Passed Assistant Surgeon James M. Ambler, United States Navy were conveyed from New York Saturday under the escort of Chief Engineer Melville, Surgeon Gravatt, Lieuts. Jacques, Danenhower and Schuetze, and Passed Assistant Surgeons Harmon, Rixey, Gaines, and McClurg, and accompanied by his brother, Edward Ambler. They were joined at Baltimore Sunday morning by representatives of the Medico-Chirurgical Faculty of the State of Maryland, of the Faculty of the State of Maryland, and of the Clinical Society of Baltimore. The remains arrived in Washington yesterday morning and were met at the depot by Medical Directors Browne and Gihon, Surgeons Van Reypen and White, and passed Assistant Surgeons Streets, Green, and Nash, and transferred to the special train which had been tendered by Mr. John S. Barbour, president of the Virginia Midland railroad. The party left here at 9 o'clock and was joined at Alexandria

by Mr. John Ambler of Virginia; Mr. Ed. C. Marshall, of Alexandria, cousins, and C. S. Taylor, Jr., of Alexandria, a classmate of Dr. Ambler. The funeral train was received with demonstrations of respect along the route, and reached Markham about 12:30, where the body was placed in a hearse, covered with a Union Jack and the floral wreaths which had been accumulating all the way from Siberia.

The pall-bearers were: Medical Directors J. M. Browne and Albert L. Gihon, Surgeon William K. Van Reypen, acting chief Bureau of Medicine & Surgery; Surgeon Charles White and Chief Engineer George W. Melville and Lieutenant John W. Danenhower, Ambler's surviving comrades of the Jeannette; Lieut. William H. Scheutze, who brought his remains from Siberia, and Lieut. William H. Jaques, representing the Secretary of the Navy. The funeral procession was very long the carriages being followed by several hundred mounted residents of Fauquier county, many of them Dr. Ambler's former comrades in the confederate army.

The ceremony took place at Leeds Episcopal Church about 3 P.M., the services being performed by Rev. H. B. Lee, classmate of Ambler at Washington and Lee University. Dr. Ambler's sister and brothers received the remains, his mother being too old and feeble.

Dr. Ambler's confreres in the medical corps purpose erecting a monument at the cemetery. Dr. Ambler was a former assistant at Quarantine Hospital in Baltimore, under Dr. Conrad, and lived in Baltimore about four years.

HOME TO THEIR GRAVES.

Arrival of the Remains of the Arctic Explorers.

How the Bodies were Coffined and Brought Home over Thousands of Miles--Preparation for a Grand Funeral Procession.

Twice buried, twice disinterred, after 11,000 miles of strange wanderings, the bodies of the ten heroes of the lost Jeannette have once more reached the land from which they went forth to death.

It was nearly 5 o'clock, Wednesday afternoon before the steamer Frisia swung into her pier at Hoboken and Lieuts. G. B. Harber and W. Schuetze smiled a greeting to the little knot of friends upon the pier. The Frisia was met down the bay by the tug Nina, bearing Lieut. Ward, aid-de-camp to Commodore Upshur. Accompanying him were Chief Engineer Melville,

Commodore Perry, B. M. and Dr. Collins, relative of Jerome J. Collins, one of the dead, and W.R.T. Johnson. Greetings between Lieuts. Harber and Scheutze, in charge of the remains, and the welcoming party were extremely cordial. The Nina followed the Frisia to the pier, where Lieut. Harber was welcomed by a delegation of fellow-townsmen from Youngstown, O.

Just underneath the red, white and black of the German flag that floated at half-mast on the forward deck, ten rough-looking crates were piled. They were about six feet long, four feet broad and three feet deep, and were such as are used in transporting perishable vegetables. Through the spaces between the boards the ends of coarse sack-cloth and burlaps fluttered. Upon the cross pieces of each of the crates or coops the name and destination was scrawled in rude black letters with a marking brush thus:

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:.....:
:           G. W. De Long,           :
:           Navy Yard, New York,     :
:           United States, North America.:
:.....:

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So each of the martyrs slept in his rude box, the commander and his cook, the officer and the seaman faring alike in the selection of coffins, as they had before shared a common grave. Next to De Long rested Jerome Collins, and adjoining his remains were those of Ah Sam, the cook. A little group hung about the boxes. Some were curiously pulling at the sackcloth and others climbed from box to box, reverently wiping the dust from the rough boards to spell out the name of him who rested within. There were a few ladies among those present. Two boxes of flowers and evergreens, placed beside the coffins when the vessel sailed, looked black and withered in contrast with a cross and wreath of blossoms sent from the Navy Yard. Blue violets spelled out the inscription.

"The Navy Honors Its Martyrs".

Lieut. G.B. Harber, commander of the Jeannette relief expedition left at once for the Navy Yard to make his official report to Commodore Upshur. He is above the medium height, strongly built, has piercing gray eyes and a complexion which tells of his winter in the Arctic. Lieut. W. Schuertze his brother officer, is more strongly built, and seems capable of withstanding any hardship.

The story of the search for members of the lost Jeannette, the securing of the bodies, and the journey half way round the world with the remains will be briefly told.

"Just two years ago this month, on Feb. 4, 1882," said Lieut. Schuertze, "I left New York, joined Lieut. Harber at London and together we proceeded by way of St. Petersburg to

Moscow. There we bought most of our winter outfit--fur stockings, fur boots, cloaks, coats, moose skins and great fur bags, in which we slept, each man having his own bag. At Orenburg, 900 miles north of Moscow, we left the railroad and by sleds drawn by horses made our way to Irkutsk, a village on the banks of the Lena. Though it was late in the spring the ice had not yet broken up. We tried to secure a vessel to go down the Lena, but failing in this set to work to build one. There were only nine men in our party then, five seamen, a Cossack, an interpreter, Lieut. Harber and myself. With the aid of the natives we completed a schooner-rigged vessel by the time the ice had broken up. She was 51 feet long, with 9 feet breadth of beam, and we called her the Search.

In the Search we proceeded over 2,000 miles down the river to Yuktusk. On the way we passed Melville, Hunt, and Morris at night, not knowing of course, that they were near. But word had been left along the line of travel, and at Oleknaar, a rude settlement, Melville learned of our expedition from a note left by Lieut. Harber. He had already found and buried De Long's party. Melville at once sent Lieut. Hunt and a seaman to join our party. From Yakutsk we went on to the mouth of the Lena, reaching there July 8, 1882. Here we remained until September, scouring the surrounding country with dog sledges, on foot and in boats, but finding no trace of Lieut. Chippis or others of the Jeannette. A tea-spoon and a jack knife were all we found. The river began to freeze and not wishing to lose our boat, we tracked her 150 miles to Bulun.

"What do you mean by track", was asked.

"Well, there was no wind and so we had to tie ropes to the vessel and tow her up stream, scrambling over the rough rocks and ice that lined the banks. We worked in alternate gangs, first the officers tracking for four hours and then the men taking their turn. The sharp rocks cut our shoes to pieces and the ropes cut into our flesh. Yes, it was hard work," and the officer wiped his brow as though the mere reference to the labor worried him.

At Bulun the boat was beached, and leaving Lieut. Hunt in charge, Lieuts. Harber and Scheutze went to Sagistyr, a deserted village where a Russian meteorological station had been established.

"We remained there until the roads froze up and then Harber started back to Bolun, across the Delta via Zemouerloch, and I set out on a search through the Eastern delta and conveyed by means of dog sleds, I got to Barkin. At every village it was our custom to inquire of the principal citizens if any trace of our friends had been found. Our trips were made principally in dog sleds.

"Next month, in November, 1882, we gave up the search and returned to Yakutsk, homeward bound. Here we were met by a telegram ordering us to return with the remains of DeLong party, which were buried at the mouth of the Lena. The telegram had taken from August to November to reach Yurtusk. So back again we started. The journey from Bolun to the grave had to be made in dog sledges. Reindeer could not be used as there are no trees to tie them to and they would stampede. We had 150 dogs and used 15 to a sled. March 4, Inauguration Day, we reached the tomb.

On the only hill in that region within sight of the spot where they had died, buried not below but above the ground, we found the ten bodies which we have since accompanied for a year and a half. The remains had all been placed in a rough box. This was covered with brush and stones, and above all was planted a cross. The bodies were blackened and appeared like mummies. We could recognize them in spite of the changes. Four days were spent at the grave, prying out the bodies with picks and strapping them to the sledges. Then we retraced our way to Yaktusk, reaching there the last day of March. Here the bodies were enclosed in one large coffin and buried again in ground that is always frozen. Harber went to Irkutsk to buy coffins, was unsuccessful, and we made our own coffins.

Six months after the bodies had been buried the second time we took them up, thawed them out, straightened the limbs which had been bent by freezing, removed the half dozen suits of clothes which each wore, and wrapped the bodies in linen and felt and placed them in metallic coffins. Then, on Nov. 28th, the homeward journey was recommenced. For nineteen days we travelled day and night in sledges drawn by horses to Irkutsk, 2,000 miles distant, where the remains were placed on a public catafalque. Orenburg, the nearest railway station was reached Jan. 17, and there were found the coffins that had been sent by the United States Government a year before. They were too heavy to be transported over the snow. Once more the remains changed coffins and the remainder of the journey was made by civilized modes of travel."

Some delay was experienced between Orenburg and Moscow in getting the consent of the Russian Government to the removal of the bodies, but of this Lieut. Scheutze declined to speak. Through Moscow, Berlin to Hamburg the remains passed, where they were placed with simple ceremonies on board the Frisia, Feb. 6. Lieut. Schuetze expressed his pleasure at being again able to meet face to face "a good square American meal", "I have lived on reindeer meat and fish so long that I am glad of a change".

The only sickness encountered was the case of Anequin, a hunter of the Jeannette party, who died of small-pox.

The following is a list of the dead: Lieutenant Commander George W. De Long; Jerome J. Collins, meteorologist of the expedition; Dr. James M. Ambler, surgeon; Walter Lee, seaman; George Washington Boyd, seaman; Henry Hansen Kaack, seaman; Carl Augustus Gortz, seaman; Adolf Dressler, seaman, Nelse Ivorson, seaman; Ah Sam, cook.

The remains of Collins will be sent to Cork, Ireland, Saturday, those of Boyd to Alexandria, Va., and those of Dr. Ambler to Philadelphia.

The remains of the others will be buried at Woodlawn.

This morning a Navy Yard tug will convey the bodies to the Battery where they will be placed in hearses, and at noon the hearses will leave pier 1, and the route of the procession will be up Broadway to City Hall Park, across the park to the Brooklyn Bridge, over the bridge and through Sands, Washington and Nassau streets and Flushing avenue to the east gate of the Navy Yard in Brooklyn. Thence up Morris avenue to Main street, where the procession will be disbanded. The Sixty-ninth regiment will proceed down Main street to embark for New York with the remains of the late Jerome J. Collins followed by the New York Herald Club and the relatives and friends of the late Mr. Collins.

The remains will lie in state in the Pavillion at the Navy Yard. The room has been becomingly decorated with crape and floral designs.

Commodore Upshur has been besieged with visitors all day. Chief among them was Secretary Chandler, who became the Commodore's guest. The Secretary inspected the vessel Bear, which has been purchased to go to the relief of Lieut. Greely and party. He thought the vessel well suited to the work, as did Lieut. Harber, who said there could be little doubt of the success of the expedition. Among the visitors at the Navy Yard were Engineer Melville; Charles De Struve, the Russian minister; Carl English, Chief of the Equipment and Recruiting Bureau; Mr. Wilson, Chief of the Bureau of Construction; and Mr. Loring, Chief of the Bureau of Engineering.

The funeral services of De Long and party will be held to-morrow morning at the Church of the Holy Trinity and those of Jerome J. Collins at the Cathedral at the same hour.

The following is a copy of Dr. Ambler's parole, he having been taken a prisoner of war while a member of the Confederate cavalry.

Headquarters Army of the Shenandoah,
Office Provost Marshal General.
Winchester, Va., April 26, 1865.

I, James M. Ambler of Co. E. 12th Va. Cavly, C.S. Army, do hereby give this my parole of Honor, that I will not take up arms against the United States Government until I am regularly exchanged. And that if I am permitted to remain at my home I will conduct myself as a good and peaceable citizen, do nothing to the detriment of, or in opposition to the United States Government.

(signed) James M. Ambler.

Description.

Age, 16. Height, 5-9. Complexion, Light.
Hair, Brown. Eyes, Brown.

Sworn to and subscribed before me, this 26th day of April, 1865.

(sgd). (Undecipherable)
Provost Marshal General.

ADDENDA.

By

J.D.GATEWOOD, U.S.NAVY.

During the many weary months the Jeannette was drifting in the pack, it can be believed that at almost any hour some one of her complement was debating with himself the question of judgment involved in placing the ship in

the ice. That would have been very, very, natural, especially as the drift was for much of the time altogether indefinite, the ship frequently returning to former positions even after long intervals. (See the wonderful track chart of the Jeannette.) The aimlessness of it all when contrasted with the object of the expedition certainly tended to create doubt of the propriety of being in the pack. And it may be accepted that not only the personnel of the expedition frequently, though silently, questioned the judgment of DeLong in that relation, but also that others have openly asked the same question whenever the history of the ill-fated expedition was under discussion. And it is a phase of the subject well worthy of discussion.

Yet, it was a voyage of discovery and a polar expedition. Melville says: "The absurd question has often been asked, 'Why did the Jeannette enter the ice-pack?' The answer is this: she was an Arctic ship bound on a polar voyage, and could not be expected to attain the Pole without encountering ice." All that is true enough in a sense, but, nevertheless, there is an element of "bluff" in such a reply unless it can be shown that De Long had at least some expectation of attaining the Pole by drifting in the pack.

In that connection it is quite evident that the primary cause of the loss of the Jeannette was the fact that she was beset in the Polar pack, and there is some evidence to show that DeLong himself regarded such a situation as the worst possible, even from the point of view of a Polar expedition. Danenhower in his testimony before the Court of Inquiry stated that during the voyage of the Jeannette from France to Mare Island, California, DeLong remarked "that putting a ship in the pack was the last thing to do". Danenhower also stated at that time the following: "He told me he had something more definite and tangible in view than reaching the North Pole, and that was to explore Wrangle Land and the Siberian Ocean. The prospects for reaching a high latitude depended on the continuity of the coast line to the northward, for having land as a basis was considered one of the first principles of Polar navigation".

In view of the above, the conclusion seems to be inevitable that it was never DeLong's intention to pass the winter in the pack. Then, why did the Jeannette enter the ice pack? That question was characterized by Melville as absurd, yet the evidence seems to indicate that there is a reply that differs in many essential ways from that given by him.

DeLong thoroughly recognized the importance of having land as a basis. He undoubtedly expected to travel from the ship, and not in the ship, to a high latitude. He expected to reach the coast of Wrangle Land, put the ship in winter quarters in some harbor on that coast, and utilizing dogs and sleds to explore that Land during the first winter. He hoped during the next summer to work the ship still further north along the coast of Wrangle Land and then with dogs and sleds to at least attain a farthest-north and perhaps, if circumstances warranted, even the Pole itself. But, the last idea was undoubtedly more or less remote.

It seems that to understand DeLong's object in going into the ice at the time and place he did go, it is necessary to realize that he with others of that date supposed what is now called Wrangle Island, and then called Wrangle Land, to be a very extensive land, another continent, reaching even to the Pole. It was the very cruise of the Jeannette that demonstrated the fallacy of such an assumption, and that fallacy was demonstrated when the Jeannette drifted to the north of the so-called Wrangle Land. DeLong expected to drift into a coast line but instead he drifted north of an island. He thus found

the ship in the pack for an indefinite period and without the slightest intention on his part to put the ship in such a position. He was there in spite of his expressed opinion "that putting a ship in the pack was the last thing to do". Yet, in spite of all such considerations, Danenhower makes the following statement in his book: "Captain DeLong, in my opinion, entered the ice boldly and deliberately, with the intention of trying the most hazardous route to the Pole that has ever been contemplated. When spoken to on the subject within a few days after we found ourselves imprisoned, I stated that to be my opinion, and that he had undertaken the most daring and magnificent venture on record."

Why, the ship was put in the pack to the north east of what was then known as Wrangel Land, and DeLong at the time he put the ship in the ice had evidence of a north-west drift. Surely he did not expect to drift over Wrangel Land, but upon it. There seems to be no doubt but that when the Jeannette entered the ice it was with the view of forcing her through to the supposed coast of Wrangel Land. Certainly one can readily believe that when the Jeannette drifted by to the north of Wrangel Island, DeLong was surprised and generally disappointed.

He had thus made an important discovery--the discovery that Wrangel Land was in reality Wrangel Island--but he undoubtedly felt that he had paid very dearly for information that so adversely dominated the cruise and caused all of his plans to be as naught. He utilized the best available information, but when a man goes on a voyage of discovery he never knows what is ahead of him. Certainly he should not be judged by result--condemned because well-conceived plans came to grief. He expected to explore Wrangel Land and found there was no land to explore. He secured sleds and 40 dogs to carry him on that land to the farthest north. Instead, he found his ship held relentlessly by the ice and carried month after month as though it were the plaything of some monster awaiting the dictate of whim to destroy. It was a slow moving tragedy on a wonderfully magnificent stage and amid agencies of destruction that were constantly threatening, constantly muttering like the thunder of the approaching storm. It was not a daring and magnificent venture, but it was a magnificent misfortune, culminating in a grand display of destruction - a pitiful display of heroism and suffering and death in

the great white way on which many men have struggled in the cold light of the aurora, apparently to die as uselessly as the moth dies in the flame of its desire. It is all a grand picture of man's ambitious restlessness and unceasing struggles. Yet: "Sacrifice is nobler than ease, unselfish life is consummated in lonely death, and the world is richer by the gift of suffering".

Yet, the question is whether in this case there was deliberate choice of the conditions that culminated in lonely death and noble sacrifice. Some additional light can be brought to bear in that direction from study of records made by DeLong himself. He kept a very extensive journal--each day he put down in writing the happenings of the voyage and, in a degree, his own thoughts and aspirations. What did he himself write in relation to his object in navigating the Jeannette into the ice about Herald Island and Wrangel or Kellett Land?

In that connection, it is advisable in the first place to recognize his state of mind, induced by the Navy Department's order to "make diligent inquiry at such points where you deem it likely that information can be obtained concerning the fate of Professor Nordenskjold, as the Department has been unable to have positive confirmation of the reports of his safety. If you have

good and sufficient reasons for believing that he is safe, you will proceed on your voyage toward the North Pole. If otherwise, you will pursue such course as, in your judgment, is necessary for his aid and relief."

Thus it is quite evident the Navy Department made the primary duty of the Jeannette one of search for information of the Vega, and even imposed upon DeLong the duties of a relief expedition should circumstances indicate that Nordenskjold might be in need of aid. It was a grave imposition.

It was that situation which caused the Court of Inquiry into the loss of the Jeannette to report as follows: "The lateness of the season when the Jeannette sailed from San Francisco, her want of speed, and the delay occasioned by her search along the Siberian coast, under orders from the Navy Department, for the Swedish exploring steamer Vega, placed the commander at a great disadvantage on his meeting with the pack ice early in September in the vicinity of Herald Island".

In direct relation to the inquiry into the real intent of DeLong in navigating the Jeannette into the ice, it is interesting to note that the report of the Court continues as follows: "Either he had to return to some

port to the southward, and pass the winter there in idleness, thus sacrificing all chance of pushing his researches to the northward until the following summer, or else he must endeavor to force the vessel through to Wrangel Land, then erroneously supposed to be a large continent, to winter there, and prosecute his explorations by sledge. The chances of accomplishing this latter alternative were sufficiently good at the time to justify him in choosing it; and, indeed, had he done otherwise, he might fairly have been thought wanting in the high qualities necessary for an explorer."

The report of the Court is a presentation of the facts established by all the evidence obtainable, and forces one to the conclusion that DeLong did not enter the ice "boldly and deliberately with the intention of trying the most hazardous route to the Pole that has ever been contemplated". On the contrary he did not desire at all to have the vessel beset in the ice pack. He endeavored to force the vessel through to Wrangel Land and the "attempt unfortunately resulted in the vessel's becoming beset in the ice pack within less than two months after her departure from San Francisco, from which she was never released until her destruction, more

than twenty-one months later". That is also part of the opinion of the Court.

DeLong states the following under the different dates indicated: "August 12, 1877. x x x Then we must go to St. Lawrence Bay for one more effort to learn something of Nordenskjold, and, should we learn nothing of him, poke along the northern coast of Siberia until we are frozen in for the winter. Meanwhile our fine season is slipping away, when we might reach Kellett Land and push on to the northward." "August 27, 1879. x x x Now Cape Serdze Kamen is one hundred and thirty miles from here, and there is a settlement on the Cape. I have decided to go there and make an inquiry, and if I find the Swedes were there and have left, I shall push for Wrangel Land at once." "August 29, 1879. x x x The officers and men under my command are all well, and we expect to sail tonight for Wrangel Land by Koliutchin Bay." "September 2, 1879. On our course from eight last night until seven this morning, - N.W. (at which time we were about one hundred miles from the southeast cape of Wrangel Land)." "September 5, 1879. x x x At four A.M. spread all fires and got a full head of steam, and entered the pack through the best looking lead in the gen-

eral direction of Herald Island. For the first two hours we had but little trouble in making our way, but at six A.M. we commenced to meet young ice ranging from one to two inches in thickness in the leads, and seemingly growing tougher as we proceeded. We ground along, however, scratching, and in places scaring and cutting our doubling, until 8.40 A.M., when we came to pack ice from ten to fifteen feet in thickness, which of course brought us up. Anchored to the floe to wait for an opening. During the forenoon there were several occasions when we distinctly saw land beyond and above Herald Island, as well as to the south west of and beyond it." "September 6, 1879. This is a glorious country to learn patience in. I am hoping and praying to be able to get the ship into Herald Island to make winter quarters (Not italicised by DeLong) x x x At one P.M. the fog lifted, and we saw a chance of making about a mile toward the island. Spread fires again and commenced forcing our way, ramming wherever we were opposed, and with good effect. x x At 4.20, however, we had come to solid floes again, x x." "September 9, 1879. x x x x At 7.30 P.M., with a sunset entirely free from clouds, made out land distinctly between S.W. and W. and

S.S.W. The land furthest to the westward was a kind of table land, with a range of peaks to the southward, terminating in a low, flat strip just behind Herald Island. And this is the land which two months ago yesterday, we sailed for from San Francisco, hoping to explore this winter. Man proposes but God disposes. Here we are not even able to get to Herald Island." (Not italicised by DeLong.) September 12, 1879. " x x x x This inaction is most disagreeable, and it is even more disagreeable to see no chance for a change. The only hope of the pack breaking up is the occurrence of a gale of wind; x x x . Meanwhile, we are getting no nearer Herald Island, x x x . It is unpleasant to realize that our exploration for a whole year should come to a stop on the 6th September, and that at a point which a sailing ship, the Vincennes, reached in 1855 without any difficulty. And here we are in a steamer, and beset in the pack before we are two months out of San Francisco. My disappointment is great, how great no one else will probably ever know." (Not italicised by DeLong). September 14, 1879. " x x x There seems to be but one way out of our situation. A heavy gale is wanted to break up this field of ice we are in, and to give us a chance to make

our way toward the land we saw beyond Herald Island. Failing this we must winter in the pack." September 15, 1879. "x x We were at noon in latitude $71^{\circ} 46'$ N. Longitude $175^{\circ} 36'$ W., and comparing this position with that of the 9th, inst., we have changed fifteen miles to N. 40° W. or at the rate of two and a half miles a day. Even at this rate, if we continue, we may reach Kellett Land or its continuation before spring." (Not italicised by DeLong.) October 28, 1879. "x x x The sun rose at nine, and immediately thereafter land was sighted to the S.S.W. (true) the extremes bearing respectively S. $16^{\circ} 30'$ W., and S. 36° W., -- the highest peak bearing S. 32° W. The whole land seems to be about fifty miles distant. I believe this to be the north side of the land seen by Captain Long in 1867 (Wrangel Land), but I no longer believe it to be a continent. It is either one large island or an archipelago." November 8, 1879. "Aid from above is all that can prevail when drifting in an ice-floe." November 30, 1879. "x x x x My sensations of being in critical situations are too keen to allow me to write in cold blood about the beauties of ice scenery. I will simply remark that the pack is no place for a ship, and however beautiful it may be from an aesthetic point

of view, I wish with all my heart that we were out of it!"

It seems to be useless to increase the number of such quotations or, indeed, to prolong the inquiry into DeLong's reasons for navigating the Jeannette into the ice. He was a brave man of fine character, of deep religious convictions, and with full knowledge of the value of discipline and example. He wrote of himself: "I am doing all I can to make myself trusted and respected, and I think I succeed. I try to be gentle but firm in correcting anything I see wrong, and always calm and self-possessed. I feel my responsibility and care, and I hope I appreciate the delicate position I am placed in of leading and directing so many people of my own age. I hope God will aid me in what I have undertaken and bring me through it in safety and with credit."

And there are many indications that he did have the respect of every one. There may be indications here and there, as in Ambler's diary, that there was tendency at times to doubt the infallibility of his judgment and to question somewhat, as rather dogmatic, his leading and directing at times. But, he had an exceedingly difficult place to fill--a place that probably could not have been filled by any ~~fixing~~ man in a way satisfactory to all.

Melville testified as follows before the Court of Inquiry: "He was as good a man as was possible to undertake any duty that might be assigned to him at any time or place; that seemed equal to any emergency that arose at all times. I think whatever he did he did with his whole soul and to the best of his lights". Surely he conducted an expedition in such manner that even the most intimate history but excites the admiration of mankind. The conduct of those starving people in the Lena Delta was but a last exhibition of the moral influence that permeated the expedition from the beginning. De Long may not have been loved by his officers and men. But the downright sincerity of the man and his brave view of life under all circumstances, and his full sense of discipline and honor were the influences that dominated.

Of course one is inclined to regard the crushing of the Jeannette on June 12, 1881, as a great calamity. But, considering the time, place, and other circumstances, it should not be so regarded. The ship deserted her crew and officers by sinking on June 13, but it is quite evident that in a short time the officers and crew would have had to desert the ship. All hands had been in the ice

pack for 21 months and nearly two years had elapsed since the ship sailed from San Francisco. On June 12, 1881, there were only 15 1/2 tons of coal on board and it is quite certain that it would not have been practicable to have remained in the pack another winter. Doubtless considerable thought had already been given to necessity for abandoning the ship at a time not far distant--certainly by the early fall and probably either in June or July. Such a retreat would have to be completed before the onset of winter. And as it was, the party did not leave Bennett Island any too early as even then young ice was becoming troublesome.

The ship had about 115 tons of coal at the time she entered the pack. As on June 12, 1881, when she had been in the pack about 21 months, only 15 1/2 tons remained, the average consumption of coal had been about 5 tons per month. On that basis, the supply on hand at the time the ship was crushed would have lasted only about 3 months, or until late in September. But the consumption of coal was less in summer than in winter and, therefore, probably the coal would have lasted till late in October. Melville states in his book as follows: "But now we devoted our time to the consideration of the serious circumstances which so thickly beset us. We were

all persuaded that the chances of the ship's holding together, in the present state of the ice, were not one in a thousand. Yet, she might; but what then? This was the supreme question which constantly presented itself to the minds of all: whether it would not be wiser to abandon the ship at once, and make for the nearest land (New Siberian Islands), instead of tarrying for the fall travel. DeLong naturally wished to stay by the ship until the end, ~~or~~ so long as the provisions lasted, proposing that we remain until they had dwindled down to an allowance of ninety days for our retreat. Had a vote been taken of those who gave the matter their undivided thought, there is scarcely any doubt in my mind but that a majority would have decided to abandon the vessel about the middle of June. However, we had no discretion whatever in the matter, she left us, after sheltering us for so many dreary months; delivering us, Caesar-like, upon the floe, amid the crashing of her poor old ribs".

It thus appears that the ship sank at just about the time the majority had considered it the wisest plan to abandon her. Certainly under such circumstances, her loss cannot be considered a calamity.

Had the Jeannette remained afloat four months longer she would probably have attained the 80th parallel and touched the 136th east meridian. But that would have been in October, too late in the year for the retreat to have been made except under very great additional disadvantages and hardships. Besides, the situation of the ship further north would have lengthened the retreat which would also have been made during the return of cold and darkness. Care and anxiety would have been increased and less vigor would have been exhibited. The sun would not have shown above the horizon after about Nov. 1, and continued darkness is a terrible enemy--even more terrible than cold itself. The cloudless Arctic night with moonlight and stars and lunar halo is doubtless magnificent, but there is also another picture with sky overcast, wind blowing a gale, snow as blinding dust, and temperature anywhere below zero. Certainly the crushing of the Jeannette in June 1881, all things considered, seems a beneficent act of Providence.

The physical condition of officers and crew a relatively short time before the ship was crushed is described as follows by Wright in her book "The Great White North": "The approach of spring had revealed to Dr. Ambler a pale and stricken crew. Danenhower had long been a

sufferer; Lieutenant Chipp was ill; Mr. Collins was recuperating slowly from a severe illness; Alexia, the Alaskan, was suffering from ulcers, and others of the crew showed incipient signs of scurvy".

Surely such an exaggeration should not be allowed to go along through the ages without adjustment. On March 1, 1881, Dr. Ambler reported all the crew in good condition except Alexey. And that continued to be the case until there were a number of cases of lead poisoning in June, 1881. It is quite true that such a situation was something of a calamity such a short time before the ship was crushed and the retreat began. Yet, surely no one could attribute the condition of those men to the influence of their general situation. The whole thing was caused by consumption of canned tomatoes, the acid acting upon the lead in solder carelessly used in sealing the tins. Officers and crew had had tomatoes for dinner every day since May 4, 1881, and some of them succumbed to the repeated dosing with a salt of lead. Such a thing might have occurred anywhere. Lieutenant Chipp was one of those affected.

Cases similar to those of Danenhower and Alexey can be found anywhere, and the cause had nothing to do with Arctic life. Alexey's leg ulcers had no relation to

scurvy. He had such ulcers before he ever saw the Jeannette. He was treated at St. Michaels with mercury.

No "pale and stricken crew" could have put forth the exertion necessary for that remarkable retreat from the Jeannette, and certainly not a man on board that ship exhibited "incipient signs of scurvy". The remarkably good health enjoyed by the personnel of the Jeannette not only during 21 months in the ice pack, but also even during the exhausting labors when traveling on the ice to open water must ever be a prominent factor in causing the memory of Dr. Ambler to be perpetuated. Certainly nothing like it had ever been known before in Arctic expeditions. It was the wonder of the times, and as stated by the Court of Inquiry: "The fact of the ship's having passed a second winter in the pack without any appearance of scurvy on board sufficiently attests the excellence of the sanitary arrangements adopted, and reflects great credit upon her medical officer, Passed Assistant Surgeon James M. Ambler, who throughout the expedition was indefatigable in the performance of his duties".

It may be advisable to note that the Jeannette was not a prohibition ship in relation to either officers

or crew. It was a very temperate ship and during most of the time there was total abstinence. It has long been known that alcohol, even in moderation, is very inadvisable as a part of the intake of Arctic explorers. The habitual use of alcohol, even in relatively small quantities, has been considered by many to unfit a man for Arctic work. All that was doubtless very well known to the guiding minds of the Jeannette expedition. However, there was appreciation on that ship of certain psychological phases of the subject which assumed increased importance in view of the peculiar situation of the ship --the terrible monotony and dreary existence incident to drifting in the ice-pack month after month, especially during the darkness of winter--the darkness of the second winter in the pack.

In "The Voyage of the Jeannette" there is a chapter entitled "The Return of Cold and Darkness". It was the cold and darkness of the second winter. Under date of October 14, 1880, there is recorded the following by DeLong: "Beginning on September 1st, I have instituted the practice of serving out two ounces of rum once a week, generally Wednesday night, to all hands. This I consider a good thing, not only because it conduces to sociability,

but because it breaks the monotony, and gives something to look forward to. This, and two glasses of sherry at dinner on Sunday constitute the extent of our tipp-ling. What a country this is, and how monotonous a life we lead, may be inferred from the fact that two ounces of rum every Wednesday are looked forward to as a change and excitement." And then again: "Christmas, December 25th, Saturday--The day was made as acceptable as possible fore and aft, by the providing of a good dinner from our resources. and I think we may refer to our bills of fare with pardonable pride. Our mince pies were a work of art; though they were made from pemmican and flavored by a bottle of brandy, they were as delicate to the taste as if compounded from beef fresh from market. Hot whiskey punch in the evening fore and aft brought an agreeable close to our second Christmas in the pack."

In the supplies at the beginning of the retreat (June 1881) were 200 gallons of alcohol (40 gallons on each sled). That was the fuel. It had to be utilized in preparing each meal. The stove was placed in a hole in the snow to prevent loss of heat and a passage way was cut to supply air for the flames. Alcohol remained after all other supplies had been utilized--and it was at last utilized to take the place of food. Under date of October

8, 1881, the day after all food had been consumed, the following is found in DeLong's journal: "One hundred and eighteenth day. Called all hands at 5.30. Breakfast, one ounce of alcohol and a pint of hot water. Doctor's note: Alcohol proves of great advantage; keeps off craving for food, preventing gnawing at stomach, and has kept up the strength of the men as given,--three ounces per day as estimated, and in accordance with Dr. Anstie's experiments."

Ambler's diary shows the use of alcohol in the same way. Under date of October 12, 1881, there is found the following: "We have been without food since Sunday (Oct. 9) except one oz. of alcohol, dram 1 of glycerine yesterday and to-day." Alcohol is also mentioned under earlier dates. And it appears that when Nindemann and Noros started ahead on October 9, they carried their blankets, one rifle, forty rounds ammunition, and two ounces of alcohol --their share of all the alcohol left. It was on October 10 that deerskin scraps and deerskin footnips became articles of food. And one is just as likely to criticise the use of footnips as food, under the circumstances, as the use of alcohol. Yet, the last alcohol was consumed on October 10; and both DeLong and Ambler were alive on October 30.

There are a number of interesting comments found here and there in references indicated in the Introductory Note to these papers, relating to ventilation of quarters on the Jeannette. Constructive changes were made on the ship after she became the plaything of the ice-pack, and such changes were made as the result of carbon-dioxide observations. Anemometer records were also made, and interesting computations of air space per man in quarters. Certainly the value of ventilation and the necessity for dryness were very fully realized by the medical officer and were carefully considered by the commanding officer. Both of these men seem to have been fully alive to the importance of such subjects, especially under the remarkable conditions to which the ship was subjected. It was also a situation in which a sick man on the ship might be at any time a sick man on the ice--a drag and incumbrance to the whole party making a long and fearful retreat to open water. In fact, there are indications throughout the records of this remarkable expedition that there was always the fear of a crew either generally crippled by scurvy, or impotent from deterioration of general health. The maintenance of good health under such adverse circumstances will always reflect the greatest credit upon

Ambler and also, it must be said, upon DeLong who, influenced by good advice, did have an abiding sense of the importance of all sanitary measures. Surely to the medical mind nothing relating to the Heannette expedition would be of more interest than a study of the special problems in sanitation that confronted Dr. Ambler. Much of the struggle and anxiety from that point of view is reflected in the journal of DeLong, where difficulties are repeatedly expressed in relation to air, food, water, and exercise that would to-day furnish material for lively debate in medical circles. But Dr. Ambler's private diary relates solely to conditions during the retreat and was kept by a medical man who, carrying a little note book, naturally did not care to utilize a limited space in making notes on medical problems. It was a time of action--a time of dreary exhausting struggle. And he had no idea until the very last that other eyes might scan the waterstained pages written under such supreme difficulties and containing the pitiful story of a strong and reserved man, who had the only true claim to nobility--nobility of character.

And even now, after the lapse of a generation, one can pause to think of the loneliness of that death in the Lena Delta.