Greenland
1905

H. H. King

Field Book

Record of Photographs
E. O. Hovey,
New York.
1915
August - November
Holsteinborg

Telephoto -
Number 7.5 -

Other roles are numbered without a letter.
3 August - 1915

Driggs Island - Sighted early this morning - Stood in toward it till 10 o'clock (my watch) Then veered into our course again -

Telephoto 1 + 2 - from SW showing high mountain with glacier near field

In southern slope -

[Red checkmark]

Rell 3A - 1, 2 + 3 as we approach

[Red checkmark]

re island -

Noted for grasses (20'3" mean high)

and flowers - more than

south -

North
Hog back ridges run
down to western coast.
Stratified rocks dipping high
Toward north — more probable
volcanic rocks.
Beautiful scenery.

Captain Comer called me
at 6 this morning to look
at coastline. Profile in
peculiar steep face to north
& gentle slopes to south,
giving strongly serrate ap-
pearance — thus —

21-6. Capt George Comer at the wheel.
Southern end of Disko is the higher part of the island. No general ice cap on the island, which looks very attractive for geologizing.

The high mountain shown in the photo seems to have a lava cone & flow in near side below me. I field.

Another photo & telephoto of this mountain.

Don't see any glacier reaching down from the meadow field.

Tangon is Holsteinborg not Disko!
Teleph 9. 2cm. 15 to 20 miles north of Holstenborg, looking E

43 - 9. 2cm. north of no 4.3 looking E by N

5 - 2cm. 7 Mountain mass as in 3 showing two eighes filled with water, looking E

6 2cm. 7 - 15 Large mountain mass near north of the big valley looking E

3a - 5 - 16 - 02 - Looking E of S at Kangek + N. Stream 7 yard

4 Aug. 22 - Iceberg grounded off Disko Bay
Whalefish Island in Biscoe Bay are apparently of volcanic rock. Made our good basaltic column in the low cliff. 5.6+6cm 7.0cm. 2-6cm 6-9cm are of enormous icelberg. Whalefish b.-9 oct pm.

A second lower berg shows behind the high one.
22-1 - S.W. side gotham harbor, showing wreck "Fox"
22-2 - 80.
22-2a - SS "Fox" near New Torken by H. C. Pickels 6 Aug

23-1 - 16-04 Entrance to Gotham harbor looking west -
clenched harbor
23-2 - Windows inspector home from S (near)

Bistaup

Fire station

23-4 - Girls' at school
23-5 - Tidal
23-6 - Two women

24 - View from hill south.
surroundings of Godthavn are entirely massive feldspathic gneiss well rounded & glacial strié and grooves

On the gneiss lie horizontal sand-bergs 20-25 cm high rising perhaps 150-500 feet above the gneiss - mt. 2200 ft

24-1-04
24-2-16

Pete Brown, Strandings hill
inside a bush (a rein)
which has been gathered & bundled to dry for fuel

Shea 5% - Commercial Coal
P.M. - Inspector Lindsay

Governor Bising, Capt. Nichols,

Frederickson, chief 6 my
self in motor boat about
30 miles along coast
to Onjak M. (Ujifak)

Nordenskiold got iron
and jam at low tide
in the shallow bay under
the mountains.

I found above

25 - In Osbhara

26 - Blue "Mr."

Onjak Mr.

27 En route back to "Cluett"
Countless sea birds nest in cliffs. Cries student—
17525 flocks came
nest mt. ½ birds.

Najat = name of mountain (fine governor) +
Ovifak (ó-ví-fák) is name
applied to coast below this
mh. (= Uifikak on map)

Collected specimens
of basalt from talus
and from beside cliff
200 meter = above sea

[See 702. See 1.10]

Interesting to note the
forming up of debris on
each side of cliff too.
Neutral water coast
Nagak Mr. Hunter
sent a cliff front
of 2000-2500 feet to
the sea.

Was a good cliff a
knot makes an
speckled Giant,

Cannonary - Basalt

Spec. No. 702 - Basalt

Collected at Nagak by
Greenlander & given to Dr. L'Insow
who gave it to me on 30 May, 1917.
6 Aug.
left in motor boat at 10 A.M.
for trip to eastward

√28-1 to 4 - veins of iron ore
near entrance to harbor - area of moraine material

28-5- Beacon on point
Beacon is made of granite
If Whales or a wooden frame
all rock or granite with
a few pegmatite veins
apparently a basalt dike
and hornblendite (?) schists
inclusions.
Court 1 mile east of Godtham

is of basaltic appearance

(cake) for 1/4 mile

(on Margate peninsula

Here are tree trunks standing

inaved in the coal measure

the Inspector's window

The ash bed is much

got through at sea level

Bed is 30-50 feet thick or

more

Next mile beautifully

small. Columnar basalt

flow comes in beneath

ash bed. Columns curvet & sheaf like
some natural arches. Many small primaces.

28-6 - Columnar bed and waterfall.

Then a strictly vertical section of ash beds and flows. The flows show the small curved columnar beautifully developed. Cliffs some 200 ft high. Picturesque glimpses of high cliffs through clefs in the shows cliffs. Magnifying some fine grey ash looks like sandstone.
29-1-6. Eastward along coast.

The lower basalt weathers to greenish black brown. The upper basalt weathers as red as reddish brown. These beds of lava are noticeable in the basin.

\( 10^2 \)

Near Black Shares, course interbedded with columnar basalt.

15 miles, white bands with black bands - Coal? (Prob. ok)
Sand like 11 miles in straight line from Gotham

and examined section

Black band 3-4 feet thick containing coal occurs in the sand, which is a yellowish green when dug into. The sand below the coal band contains many coal bands. A fraction of an inch thick several coal bearing seams lie in the yellow sand. Sand is 50-75 feet thick as exposed; say 70

The sand is unconsolidated quartz sand.
The sands seem to occupy an embayment in the basin. Some of the coal is more like charcoal than real coal. Like the charcoal at Martinique and St. Vincent.

Spec. 563-4-J-6 single like coal

At least 100 bong were in view in Drake Bay from top of cliffs above coal sands 150 to 200 ft. above sea.
Plum color plateau at top of cliffs 200 ft above sea - bush belonging to Savin hollow family. 2 ft + with plants, forming a turf carpet pleasant to walk upon. Looking eastward from here the second peak still to east shows much yellowish white sand extending 1/4 way up the mountain. Apparently the base and the older 1/4 the sands were formed at the
coal plants grew in embayments of the lava nets while they were depressed below present position.

Boulders of grass are on this flat as evidence of Glacial Period ice.

Ice cap comes almost to edge of the great cliffs. See photo—

At 14 miles the sands are exposed lying on a bed of basalt.
The bed green-black basalts
are of older and upper.
Perhaps

M.P. Possil

Mr. Possil (spelling?) resident manager of the Arctic station here called this evening.
He says that the iron bearing basalt is beneath the hill basalt and that it was exposed at Uifak (Ovifak) only at low tide, its upper portion being covered by the talus slope. Of late years very few iron boulders have been found. For two or three years none has one large + two small ones.
I have known Wilson, the scholar. And enough of other men in public life—Representatives, Governors, Mayors, and their subordinates—to know that while some politicians are unscrupulous self-seekers in America as in other countries, America has her share of public men as true, as pure, as self-denying, as are to be found anywhere in the world. My faith in my fellow-men has been strengthened by my lifelong study of our National life. The evils from which we have suffered have been caused, not by too great a trust, but by too great a distrust of the people; and I repeat again, as my well-considered conclusion from such life study, what I have often repeated in public speech: The remedy for the ills of democracy is more democracy.

8 Aug. Discs 7.40. Disco Ridge 10 a.m. Entered by motor boat from ship which was becalmed.

Apten extending and forms southern point so composed of one (or more) flows of the grayish black basalt.

Made landing at little group tent on small core east side fiord.

Photos 9x2 Maligiaq.

Went out to rocky point at entrance.

Basalt weathering very red in places.

Specimen 6g — Massive basalt from near point.
North side of northern point or
bunch there airs a bit 0 3,000 ft.
Feel wh. looks as if it might
possibly have been an old
center depression
√76-3 - cliffs above entrance to
Disko Fjord

√76-4 Entrance to Disko Fjord

Prob. OK

9 Aug. - Mm 1 - 4/25

+ Mm 2 w/25 - northern end of Disko Island from
the northwest. Heavy
clouds burn light on the
land
10 Aug.

√30-1- wo of Sverre Hunk (from sw) Poor

with the western promontory of Sverrehunks Peninsula.

√16.5 - 6cm 6 - Sverrehunks hulk (from N.W. - South Point)

The top of this bold promontory i

cave flour (lava dikes) which gently toward the northeast is a plateau rising a mile or two back into a high peak now hidden by cloud = Sverrehunk.

The plateau promontory soon merges toward the north in still higher (2000 ft) bluffs whose top blends into the peak without intervening plateau. Apparently no beaches - some drift of the sand drop directly into the sea, while others show debris cones at their bases.
Midnight last night passed through great field of bergs off Lemanak Fjord. This is a great feeder of bergs on account of the number and size of the various discharging into the heads of its branches.

9x3.1

31 July 1905, Iceberg at surf, Light very dull.

Entrance to Fjord not far south of Sarsdusas Hope is a gateway strongly resembling that to Yellowstone & Yosemite Park (Sunlight Rocke on left & Bridge Hill on right). The cliffs here are 2,000 ft.
fear high - fanatic

sq 3.2
\[ \text{\text{sail 2 w o 50 - Eiswurm} to base fort from W NW Rounded}
\]

light yellowish brown

island in foreground

Glaciar ice full thru

within fjord on its

South side

Sandicors Hope

shore good anchoring

in its western
face like the Acres
Washington Aches

in Yosemite

30-7 Sandelson Hope 60 W N
30-3 Iceberg Camp

B61 - W0 25 Shk

Profile of Bluff of Sandelson Hope from SW (Kaensonnak)

9x3-4

Ref W0 + Prof spoiled

Church of Sandelson Hope

9x3-5

Col W0 25 Nathan

Profile of Sandelson Hope
Cur fires northeastly
Channel mouth of Sandersons
Hope

The granite of the point shows fine rounded
surfaces, due to flaking.

3 x 9 = 27
4 x 3 = 12
5 x 2 = 10
7 x 3 = 21

11 Aug - Upernivik - 31 - Kyker to

132 - 32-6 - 31's home and tents
133 - Danish Harbor. Old priest house in town.

11 Aug -

135 - Town of Upernivik on route
11 + 19 - VIII
12 Aug \( \sqrt{2} 6^2 - 6^2, \) 4 cm 6 \( \sqrt{2} \) Mts.

North of Upernivik

To 1 A + 13 - 4 cm 6 7 12 5 - Island

Still farther north

7. 7 1 B 2, 4 cm 6 - 12 5 + 18 -

Table topped Mountain

Island showing between 2

Island by North of Upernivik

\[ \sqrt{6} \]

7 - 2 A + 13 4 cm 6 7 18 - Sanderson's

Hope for NW + mts west of it.

36 - 1 8 9 - Iceberg with vertical

cliffs 200 - 250 ft. high facing the

north.

Sighted Ice pack about 2:30 P.M.

36 - 3 - W.N.W. 04 - 9 15 P.M. - Large

Berg with nearly vertical faces
and an enormous snow drift on its northern face.

15 Aug: 10:45 a.m.

36 4° + 5° icy bay

8/295 - Sun

in northern sky

26 1 - 4/295 - Do

4/295 - Do at 11 a.m.

37-1 - 1/3 east of Duck Island

37-2 - 3° icy bay north of Duck Island

16 Aug: Between 9 - 10 a.m.

About 9 a.m. - Heavy clouds with light background.

Devils Thumb x Milex

Head from W.

Devils Thumb 4/295 - Do

The 3° 7 1/2, 4 cm 6 Devils Thumb from W.

Ice front north of Devils Thumb

Milex 7 10, 4 cm 6 Devils Thumb 7

South coast line Milex 10
The last two prof. spoiled through allowing curtain to catch.

29.1

5.7 7/10 573 7/18 at 4 cm + 600 feed

6'A7/12 5/2 6 3/18 at 6 cm + 600 feed

all on Devils Thumb 24 midist.

Devils Thumb is a lone pillar of rock standing on a small island. The Danish map gives its altitude as 2675 feet. It looks to be less than 1/3 as wide as it is high. The Arctic Pilot vol III p 166 quotes Lieut Ryder P.D.N. as saying that there is no such pillar here and that what has been described as a pillar is the south snow free side of a field 1631 feet high seen in profile, the snow covered northern side being merged in the snow of the inland ice cap and therefore invisible to the distant observer from the west. Ryder's statement seems not to be borne out by the Danish chart and the
object certainly looked this morning to be an isolated pillar of rock. The mate, studying it from the masthead with glasses, made it out to be a lone pillar of rock. Capt. Conner and Pickels considered it the same. It is a remarkable object if it is a lone pillar so high and narrow; and a remarkable exposure if Lieut. Ryder is correctly quoted (Meddelelser om Grønland VIII, 253, is the ref. given in the Arctic Pilot).

18 July 1, 1200 25 - 9:15 p.m. Near view of large berg of old ice (phaleanetric?)

5 Aug. 17: ship stopped by ice floe about 5 a.m. and made fast to edge. Flat calm.

5 Aug. 2 - 11/20 - Overcast. Making fast the ship (change from first "move off")

5 Aug. 3 - 10
5:00 - M.O. 25 - "Claret" moored to ice
side view. Capt. George Comer & Mate Michael Davis.

5:49 - M.O. 25 - Do. quartering view.
2:00 P.M. - Capt. Comer & Davis

0:01 - M.O. 25 - E.O. 20.

All with stay heavily overcast
+ almost raining.

Capt. Comer, The Merman (old will), and I took a walk
out on the ice. At first it seemed strange and insecure to be upon ice
thirty miles from shore, the mainland
and ten miles from the nearest land
(Brownes Island) and with ice
water very near. Though more in
any direction to do us any good.

Afternoon all day.

18 August. Still at mooring
All morning. Cash loose and
started engine shortly after dinner.
Run an hour or so and then lay still on ice for a time.  Ran again it moved.  5 p.m. tried again but got only the ship's length ahead before we were stuck fast.

Beautifully clear day, no wind.
Clouded over during part of afternoon.

6. 9 p.m. 8/35 Northward from "Chuitte" forecast at first ice moving.
6. 4th 1, 8/35 Eastward, including Brownes Isl. (largest one)
6. 4th 2 8/90 Sabine Island from S'SW

5. 5th 1 8/90 Brownes Island (largest) from ship's deck
5. 6th 2 8/110 Red Head and ice - looking southeasternd from ship.
Dec 14/35 - Captain Corner washing clothes.

Jan 2/35 - Yankee Nathan the cook.

Mar 1 4/50 - Rear view of Captain Corner washing the cook at galley.

Nov 1 4/35 - Captain Pickells using artificial horizon (of molasses).

2/35 - Captain Pickells taking own run in usual way.

5.2.1 7.12 1/2, 4 cm 6 speed.

Red Head Nunatak and ice cap. Should show the crevasses and prominent irregularities of surface of the enormous glaciers.
2, 3 - Spooked by curtain.

4, 5 - 12 1/2, 4, 6. Sabine Island.

These were taken while the ship was in motion and I took a new set after she stopped.

ried Keaton camera. Motor refused absolutely to work. Ran machine by hand, showing passage through ice and operation of wheel by two men.

72, 3 - 12 1/2, 4, 6 - Red Head and ice cap, from N.W.

6 - 12 1/2, 4, 6. Northern and largest of Brownie Islands.
island ice cap in background.
8. 12½, 4, 6. Sabine Island from S.W.

3 A-37, 5. 11/2 Largerr Brownes
seasonds from west.

6. 8/2 Sabine Island fr. S.W.

19 - VIII
3 a 38-1. two or more cutting
bunch in ice in front
of Cluett

20 - VIII 38-5 ice began the
move

32 VIII 38-6 1/2 Old seal hole
in the ice - 38-6 - Thun Island
3. VIII. J. 8.3. Melville Monument

3. VIII. J. 8.4 A.M. From "Cluett"
75° 38' N. 60° 30' W. looking eastward
at inland ice cap showing high
snow-covered pointed peak.
J. 8.6 A.M. Do. Do. Great antic paleocryp-
tic iceberg & ice cap beyond.

2.5 - VIII. 9:30 to 10:30 A.M.
7-1-A.M. 16/35. Eastward from Cluett
in 75° 56' N. 61° 24' W. Melchaven
Island, with large berg in foreground
and the inland ice cap in the background.
An enlargement might show the cre-
tasses in the ice cap.

2. A.M. 16/90. Northward from vessel at
same point. The snow-covered corn
which may show to Mt. Haffner.

1. 16/90. N.N.E. - Infields & Islands

4. 16/90 W.S.E. - N. G.
[Handwritten text begins and continues as follows:]

Will sharing the cock. (Posed -)

J. 9. 18V 4 inches. N. 5 from vessel at 050.
N. 61° 24' W. to show floe ice, bergs, islands, and ice cap.

10. Do Northward from ship. Snow covered
cones in Mr. Haffner.

11. Do N. half. Wellhaven Island
12. Do S. half. From the west.

19. 15. 18V 1/6. Mr. Haffner + moun-
tain east of it. 2:15 p.m.


26. 7. 9. 3. (Do 6.6 x y = 2) Mr. Haffner
4. Mr. west of Haffner 12 3/6. 6.

5. 16/6. Granite island or headland
leaving N. 40° from which (Mr. Haffner)
W. 20°. Corrected N 162 + N 46.5.

6. 16/6. Crevasses (ice fall) in ice
edge, looking N 3.
(Is what I have been calling
Welhaven to really Cape Walker?)

26

1 Ce 1 (mi) + 2. 4/90 Mt. Haffner
men + neighbors.

The mountain next west of Haffner
shows a wonderful V shaped
cleft cutting down half away
from its flat top to its base + con-
tinued as a narrow gorge to
the base.

\[ \text{Snow covered} \]

\[ \text{Haffner} \]

\[ \text{Ranefra} \]

\[ \sqrt{10.1'} \]

\[ 12^{1\prime}/4/6 \]

\[ \text{Road granite tower} \]

2. \[ 12^{1\prime}/4/6 \]

Mt. east of Mr. Haffner
like a mansard roof in
appearance

\[ \text{Sheep, lower sides,} \]
\[ \text{rain} \text{ed} \]
\[ \text{and a} \]
smooth low-angled top covered with snow.

3 - 10/4/8 Mr. Haffner + Mr. west of it (Hutch Mnt.)

Plate 7. 3d 4/90 Northeastward from vessel centering on Plunduff Island. (Which is Thelphson Island?)

Great

5. Roll 10 - 4/10/4/8 Headland at N.E. angle of Melville Bay and ice cap behind beyond its breaking down as an ice fall around a
large nunatak.

Grafex 7 x 4/90 Belhaven Island from the west. (dd 2)
Today have had a wonderfully fine view of Melville Bay coast, ice cap and islands from [Kothmann Island (Cape Walker)] to Melville Cape. Rocks look and weather like granite. Bold, massive, moily and mountainous country. Perhaps Plumaduff Island is Sevren or Bolgani. Are these the round dome covered bare islands that look like sentinels? Port Davis led call them the Devil’s Teeth.
30-VIII 7-9+10 Chief marooned on ice cap & being ferried to ship in little case by 2nd mate Norman.

31-VIII 7-7f 1+2 (=11812) 4/90

11. Northward from "Clark" at 5:45 P.M. The black headland is Cape Melville.

12. Northeastward view from the Clark across the ice at 5:45 P.M.

Near Cape Melville there is a beautiful Half-dome (granite?) like that in the Yosemite Valley.

The precipice faces the east or southeast. The rounded portion of the mountain is covered with snow.
2 Sept. Thursday. In the ice off Bushman Island.

The south-facing precipice of Cape Melville presents a rusty yellowish brown appearance which contrasts strongly with the almost black (brownish black) sides and top in good sunlight.

11-1 18/4/6 10 a.m. Centered on Cape Melville.

2 Do into west of Cape Melville with a large iceberg in front of them.

3 Do Cape York from the east and 25 mi distant.

4 Do Headlands (3) east of Cape York from southeast.

5 12½ 4/6 Bushman Island from the south – 3 p.m.
3 Sept. off Cape York Bay entrance. Cliffs stand up brown but I cannot determine their nature, except that they are not composed of basalt.

7th-6th 10/4/36 9 a.m. Headland on east of Cape York Bay -

9th. 8th. 16/35. New view of icebag as entrance to Cape York Bay. Deep clefts in this bay give the blue color - hate an edge, intense for within -

18th. 31st of all 8/35. Eastern middle & western of three headlands just east of C.Y. Bay. These are dull brown in color, streaked with snow also topped with snow with snow capped height - behind. glaciers come down to the sea.
7/12-1-18/4/6 Entrance to Cape York Bay. Surface of ice berg to show wind ripples.

9/8-5 1/6/90 Ice cap east of Cape York Bay - including George Island and eastward.

9/6-16/90 Cape York from E.S.E.

Cape York Bay seems to be filled solid with ice, both sea and glacier.

9/7 ν Spoiled N 30° Eastward six hours before at 9 1/6. 8.

8 4% 35 - Eastward from George Island (i.e. N.S. marinokit) and including meteorsite and Bushman marker.

4 Sept - Off Cape York. Thicker weather.

3 Sept - Clear, beautiful day but no wind.

9-8-9 4% 90 Glacier in “Crimson cliffs” west of Cape York.

10 - 4% 90 Cape York from the S.W.

11 - 1% 90 “Crimson cliffs” west of the large glacier shown in No. 9.

The cliffs are warm enough in color to present a pleasing contrast.
to the white of the ice cap. glaciers and sea flocs. Color is dark blackish iron oxide red brown with an occasional strong tone blend in it. "Crimson" is a rather strong term to apply to it. Here is a greenish hint to some of the talus slopes after if vegetation. we went there.

\[4^\circ C\] Cook beside galley door. Ice on hatch.

\[6^\circ F\] Cloudy & slight fog.

Rolle 39.1-95 A.M. 11/04 off Cape York one arctic and two reindeer

(Wrong dated the 7^2 instead 16^\circ)

\[9^\circ F\] Fr. 9-1.4y/90. A large, simple ice berg. Off Cape York.


Clean beautiful day with strong N.W. wind which fortunately has been driving lots of ice parts us while we have been protected by a big berg which grounded last night near us. We can do nothing in the ice under this head wind.

Up sail at 5 a.m., but got gain in ice about 6 o'clock, then held fast there till ten.

Photos about 9 o'clock.

Ctrl 9 - 8 4/35; 9, 7 4/90; 9.5 4/90; 9-6 4/35. Two slightly different views on four plates. "Cleveill" jammed in the fan ice off Cape York. Large iceberg in the background.

Drifted W.N.W. under sail a few miles till noon. Then wind died out and a few minutes later came from the north. Head wind for us.

Side turned and we moored to big grounded berg.

10. TX - Clear + fine. No wind except for occasional light puffs from south or southeast. Left big berg about 5 a.m. and tied up to another at about 10 o'clock.

Photo - The 3.1.18/4/6/1 Crimson
cliffs, Cape York. Glacier with
runatak in Jr. Halfway to Contice Island
Parker Snow Point.

3/6/3 2 12 1/4/6 Crimson cliffs Cape
York. Glacier two thirds way to Contice
Island. Parker Snow Point.

3. Gr. 9. 7 and 8. 4/10 Captains Corner
Pickels on ice berg.


11 III. 3. Gr. 9-10 - 4/60 Iceberg off Crimson
cliffs.

Weather fine but no wind blowing
Crimson cliffs. Well named near point.

3. Gr. 9-11 - 4/50. Contice Rk + Parker Snow
Point from S. S. E.

9/12 - 4/35. Two Crimson Cliffs. First
Glacier southeast of Parker Snow Point.

3. 6/3. 3. 12 1/2/4/6. Parker Snow Point from
S. S. E.

3. 4-18/4/6 Crimson cliffs. First glacier
southeast of Parker Snow Point.

Gr. 10, 11- 4/35 Glacier southeast of
Parker Snow Point.

Oct. 2 4 9/16 Ditts near view.

Parker Snow Point and Corded Rock look to be some massive, basic igneous rock in the archaean.

7 Sept. Sunday

Oct. 3 4 9 35 Wostenholme Island from the south. 6 a.m. Strongly colored red + white sandstone dipping N.W. resting on granite (?) and gneiss.

10.4 9/35 Cape Athol from the coast about 6 a.m. Looks like limestone & may be gray + black quartzite + shale.

Saunders Island lying north of Wostenholme Is. is a broad flat-topped mass of horizontally banded red + white sandstone. — [Not so but hard dip of 15° toward north — what I saw first was southern cross section giving the horizontal lines —]

9.10.5 4 90 Peter Frenckens’ bow approaching the “Cluett” ?
at 3.30 p.m. Left "Elmer" with P.

13 Seft. Monday. Arrived N.umberland Island at 3.30 am. after a wonderful night of calm and freedom from ice.

Pr. 10.7. Otahis tufis & group about the viotroke. Before sunrise.

v10, 8. Otah beside viotroke, do.


10-10. Two women (Otahis) mother & missionary's wife Pidhoca.
10, 11. Fine glacier with its strongly margined moraines of Potash or Medina sandstone.

All foregoing taken before sunrise.

10, 12. Grave + group of houses.

Motor boat grounded on rocks by recession of tide. Examined shore line east side of island for 1/2 mile.

Got 3 a.m. and made 4 or 5 photos of beach + the shore cliffs.

Landed on basaltic columnar pavement of old diabase or diorite.

Spec. 568 + 569 are from basement rock of east cliffs near Octahedron tops.

Spec. 571. Compares contact between this old igneous and the a sheet of the newer basic gneis (diabase?)
Spec. 572. Diabase (3) at contact with the underlying stratified rock. (This is a quartzitic shale.)

Spec. 573. Massive diabase (3) from about 3 feet above lower contact (with the underlying shale).

Spec. 574. Four fragments making one hand specimen from quartzite band in contact with overlying diabase.

The quartzite + quartzite shale overlies the old diorite + underlies the newer diabase (or basalt).

39-23 - Beach with grounded boat proud, shore + background of glacier + mountain.

39-4 - Motto in quartzite.
Cliff section showing contact between shale and overlying diabase or basalt. Frenclen as scale.

Fault zone in shales - Frenclen as scale.

Fet boat free & started at 11 A.M.

Northumberland Island is large, thick & presents some interesting geology. Saw one great slide cutting from bottom to top of sea slope from boat. Necessitated entrance to tide.
field Gulf - Very attractive looking
region with its beaches - Glaciers gaples.

Kemp sea today -

Coast north of islandfield presents more
of the fine glaciers filling bays at sea
level

cliffs present horizontal lines
of bedding - sandstones & shales,
with black bands (are there carbon
from "with coal")

Retraceivk - Typhoons dive from
freshen half of face of bluff

Heavy snow-

Motor broke down about 6 p.m.
just after Freeman said that
another four hours, wild land again
"Etchi" Nothing doing OVER she &
Active Eskimos got over & towed
into the small boat & towed
the big boat absolutely hard work
when the swell made harder, and
fortunatley there was no wind.
I steered. At about 12:30 we reached
the little cove at east end of Cape
Alexander promontory where Turkish
found Skeleton in August 1944.
We cast anchor in poor holding
ground and put a long time about
which was made fast around a column
of basalt. = Sarfaliik (or Sarfalik)
on Sounding Bay. Two (perhaps 3)
glaciers discharge into this bay and
they kept us guessing what the bergs
from them would do to us.

14.11 Got a very little sleep during rest of
night but a strong N or N.E. came
down on us about three a.m.
and gave us plenty to do to keep out
of trouble. Hendrik got the engine
fixed up, but we could not leave,
because wind was too high. He +
Sligden went ashore to adjust-
our mooring. They had not put the
toys, oranges, guns + walrus gun
aboard the large boat + they had
to leave them on shore in order to
get out again. Much vertically
columnar basalt along this
part of the shore. Deep, narrow
canyon discharges just beside
our moorage. Old igloo here.
Also caches of walrus meat
and canned goods belonging
to our Eskimo people. Peter +
Sigrid went ashore about 10 o'clock.
The little boat (the Clutts work
boat) was almost wrecked in
the surf by the chunks of ice
We pulled the tender out by means
of the power boat + at high tide 2 p.m.
Hendrik went ashore by swimming a-
long the mooring rope and got the
men but left the boxes.
At about 3 o'clock Peter went
as nearly ashore as he could and cut the rope and we started.

Photos - June 11, 1 - 4/35 - 1:30 p.m. Front view of glaciers in SOUNDAG BAY.

4/12 4/35 - Sandalik. Landing place, basaltic columns, one igloo should show.

Southeast of where the landing was made there is a bouldery beach - formed by the stream issuing from the canyon.

The columnar basaltic lava forms the shore for half a mile at Sandalik and westward.

The mass of Cape Alexander is made up of Hornblender (?) quartzites with interbedded lavas and sills. Great feeding dikes are seen in some places.

4/90 Walrus group in the water - near Sandalik (Sicuan)
11/4 4/90 Cliff of red and yellow quartzite with old interbedded lava, rising east of second glacier from the point. Lava very green in color. Faulted with the quartzite. Feeding dike at south end of cliff.

11/5 4/90 Distant view of faulted cliff.

11/6 4/90 We came to anchor for a short time in a cove at the foot of this glacier, on account of the wind, which was strong. "Hayes Harbor"

11/6 4/90 Glacier hanging on to the south side of Cape Alexander between its two great glaciers.

Cape Alexander glacier, i.e. the one nearest the point on the south side of the monitory, presents an abrupt cliff edge in which the lines of sand show. Old surfaces are very prominent. They run at many
angles with reference to the present surface. In places the debris has accumulated enough to amount to small lateral moraines, now rounded or buried in the ice.

\[ \text{\textbf{Fig. 11, 7 8/35}} \]
\[ \text{near view of the front of Cape Alexander} \]
\[ \text{glacier to show its make up} \]

\[ \text{\textbf{Fig. 11, 9 8/20}} \]
\[ \text{Cape Alexander glacier - general view of front.} \]

\[ \text{\textbf{Fig. 11, 10 8/20}} \]
\[ \text{Cape Alexander glacier - western edge and bordering land.} \]

\[ \text{\textbf{Fig. 11, 11 8/20}} \]
\[ \text{Cape Alexander glacier, general view of front.} \]

The heavy wind prevented our rounding the point and we retreated to a place where a small bit of the shelving quartzite had a bouldery bottom gave holding ground.
from anchor and the shore gave a
moving. Here we lay till 3:40 the next
morning.

15 September. 6:45 a.m. Am. Etah.
House built on a stack debris
cone formed by stream coming the
near high land.

Provision Point, half a mile
west of the house, is where the
ship landed her cargo in 1913 and
where Peary made headquarters.
It is composed of columnar
basalt. Ship can moor alongside.
Rocky-domed mounds.

9x 11 1/2 x 9x 12 1/2 to 12. All
at Etah, gx. 13 1/2 to 12. At Etah and
on board the Ethan in North Star
Bay near K. Umenak. 9-12 to 19 Sept.

16 September. Stopped at Nelse
to see Macmillan
and Small, who were hunting walrus
for food. Left at 6 a.m.

Great glaciers characteristic on
side of Northumberland Island.
Photos in Gx. No. 13 - Side mo-
nares -
Cape Parry is a bold promontory of basalt (?). Columnar basalt along sea level. Some small grottoes are in this.

High S. E. wind forced us to anchor for night.

17 September - South Western point of Saunders Island presents strikingly vertical cliffs which are very beautiful with their inclined banding of red, purple and white quartzite (Huronian).

About 3 p.m. reached "Cluenet" at anchor in North Star Bay. Went for from Urania.

19 September - Sunday 5 a.m. 13°

Dundas mountain to at east end of North Star Bay and the "Inger Lis" leaving the "Cluenet" with her tender + Mac's canoe in tow.

[14.3+4 showed in development Dundas]
9x. 14. 576 4 7/25 E ast. in full winter costume. Snowshoe given me by Peter Funchen. Bear skin pants, rainmiks and mittens belonging to Eskman.

20 September.
9x. 14. 7. 4 7/25. Petowick Glacier from the south at 8 a.m.
9x. 14. 8. 4 7/25. Cape Dudley Diggles from the south west.

9x. 14. 9. 4 7/25. Conical Rock from S. E.

9x. 14. 10. 4 7/25. Conical Rock from S. E.

9x. 14. 11. 4 7/25. Crimson Cliffs opposite Conical Rock looking S. E.


Roll. 40. 1 11/02 Conical Rock and Crimson Cliffs from the south.

24 September 1915.
Roll 40. 2 11/04 Parker Snow Bay. Glacier and nunatak east of head.
40,3 11/04 Parker Snow Bay - cliffs forming north shore from southeast. quartzite shore show.

Considerable flat at head of bay below the two glaciers which discharge here. Curving beach of pebbles and sand, behind which there is a pond of fresh water from the glaciers. Beach rises toward north and its top is ridged more or less parallel to the beach. Presence of ice foot at high tide.

Spec. 575 Mica schist from beach at head of Parker Snow Bay.

Roll 40,4 & 11/04 "Cluett" moored to cliff near Parker Snow Point from northeast.

40,5 11/04 "Cluett" ditto from north west.

Spec. 576 to 575 mce granodiorite gneiss and dike diabase from foot of cliff to which "Cluett" was moored.
25 September. In the morning Ekblaw and I climbed to top of cliff above iglos at northeast turn of the bay, Harisson quartzite and granite schists and gneiss.

In the afternoon he and I visited the northern of the two glaciers - this bears a considerable terminal moraine of mixed coarse gneiss (gray) boulders and sand. Water still flowing copiously. Must be a lot flowing during the summer.

26 September. Walked with Ekblaw across the grass slope at the foot of the northern hills east of the bay. Polygonal solifluction forms well developed. Ekblaw says that they are still better at Urania. Due to shrinkage and aggravated by freezing. They are like the shrinkage polygons of a drying mud flat but are on a much larger scale. All sizes of polygons - many 5, 6, 7 sided. Major cracks are one ft. to two feet or more wide and deep.
29 September
Spec. 586, 587, +588 Intrusive Granite collected by Captain H.C. Pickels on Conical Rock off Parker Snow Point. The specimens are duplicates broken from one fragment.

3 October. "Ipsuisuk"
Ashore this morning with Ekblaw, Groen and Capt. Pickels.
There is a strong copper stain (malachite?) coloring a three or four foot band of the schist, ca 200 feet above the sea at the northeast turn of the bay. Seems to be due to alteration of chalcopyrite.
The high grass covered talus shows many vertical crevices due to downward creep.

On 7 October - Sore.
On shore with Ekblaw, climbing to top of mountain overlooking
Cape Dudley Diggings and surrounding region. Gentle slopes where the mountain mass above the shore is covered with angular loose fragments of the country rock. Rarely does a bit of ledge project through the coating. The angular blocks are of all sizes. They speak eloquently of the effects of the extensive and practically continuous frost work that has broken up the rocks. It seems probable that the prevailing winds across these ridges are easterly, coming from the ice cap. The sandy or rather gravelly detritus is arranged in long windrows which extend irregularly in a general north-south direction. Apparently the fine material has been blown out from among the coarse blocks and assembled itself in these windrows. The rock is all quartzite and it dips northerly or westerly. Old intrusives and quartzite also occur. (cf. 58A, note)
8 October. VX 15.1 ½/0 Parker Snow Bay. Wrapping the "Cluett" back through the ice.

15.2 ½/20 Ditto.

10 October. Roll 40.6 ½ Parker Snow Bay. North side of entrance at 4/1.2 m from inner bay.

19 October. VX 15.3 ½ ¾/25 Panorama of head of Parker Snow Bay.

9x. 15.5 ¾/25 Head of Parker Snow Bay.

18 October. VX 15.6. Stowing "Cluett" into E-W position from N-W.

9x 15.7 ¾/25 Do. from S-W.

9x 15.8 ¾/25 Do. from S-E. Men pulling on stern rope and pushing against side of vessel.

19 October. Roll 41.1 ¾/10 ½ ¼/2 8/½ "Cluett" prepared for beginning winter. Berth is 150 yds from shore.

4/3 22 October. Clear + bright.

41.3 ¾/25 Parker Snow Bay.
Northeast quarter showing "Cluett" between two peaks on iceberg.

41.4 - 8/25. Parker Snow Bay - North west quarter from slightly different standpoint.

41.5 - 8/25. Parker Snow Bay - Section of small tongue glaciers at sea level, middle of southern side of inner bay. This is a snow-drift glacier. Big cracks in the near-shore ice prevented one going to the glacier.

41.6 - 8/25. Parker Snow Bay - North west coast from Dudley Digges Point to Soapstone Valley. From the south east from near the tongue glacier.

24. X - 10:30 a.m. Clear.

9 X 15, 9 + 16 4/25. Staff group on ice astern of "Cluett".

25. X 10:30 a.m. Cloudy and dull.

42.1. W. 60 1/2. Egingworth, Erice, Pullar, and a sledge and Team B drops.
28th - 10:30 am - Clear - Sun below 2 mi.

Roll 42, 2. 11/10.

Pudlak, Inlet, and their baby in its mother's back. On board "Chuett."

Roll 42, 3. 11/10. Do.

11 a.m.

Roll 42, 4. 11/15.

Crew of "Chuett." Unloading coal ash in bags on Pudlak's kammatik.

42, 5. 11/15.

Evitk with kammatik and dogs left to start for Cape York.

42, 6. 11/15.

Evitk + Egingvik on route for Cape York. Just after the start.

(Capt. Pickels on one of the kammatiks.)

29th October.

Etklaw and I ascended southern glacier at head of bay and walked a mile or more south-southeastward on the ice cap. Hard or impossible to say where glacier ends and ice cap begins, since there is no cirque at head of this glacier. Stohn Glacier.
Call this the George B. Chleet Glacier
(1 the big ice glacier of the basin—glacier)
(1 perhaps better the Eleckan Glacier
uses nth, gradual slope from the
alluvial plain. Seems to be no cliff
at foot of ice, this may be so low
that it is hidden by the snow. Some
portion of glacier looks concave but
may not be so, as if its profile were
like this:  [No terminal moraine]

We crossed no crevasses and saw
none. Most of the surface is
covered with snow, and this was
its appearance when I first saw it
from the " Chleet" passing the entrance
to the bay at a distance of six miles
on 11 September. Also when I saw
it from the shore at the head of the
bay a half-mile distant on 24 Sep-
tember. In this feature the contrast
with a neighboring glacier 1/4 mile
to the north is marked. That is most-
ly bare, bluish green ice, and is further-
more steep or precipitous at its
lower end, is deeply crevassed and
has a strong terminal moraine
along part of its lower end.

The prominent nunatak of the south-
ern glacier is a lenticular boss of
granite or strongly granit.
Slopes are covered with angular blocks, 6 to 10 inches across and larger.  I was particularly interested in the crevasses developed everywhere almost over the surface of the glacier and on the ice cap.  Those of the glacier were more varied in form and more characteristic perhaps than those of the ice cap, the snow left on the glacier being hard and more closely compacted than that of the cap—through greater force of the wind perhaps.  The crevasses of the glacier were in two layers or at least, the lower pointing east and the upper southeast.  Noted concave-like little cirques, concave toward the wind and bounded by vertical walls one to two inches high.  Much erosion of the packed snow by the sand blast action of the driving hardened snow particles.  In many places saw little cliffs 2-3 inches high, vertical to the wind, with slopes at bottom like the talus of slopes of a rock cliff but with growth in opposite direction—that is, they were caused by snow-laden snow driven against the vertical walls.  Layering action of the wind on the snow evident.
Some sastrugi had a shape like the head of a turtle, with overhanging front and break under which a moat had been cut by erosion - thus; in profile.

After leaving the ridge of the present beach we counted eight more and higher but less well developed, essentially parallel beaches. The ridge seems to be due to the scouring action of the ice foot. The inner beaches had been cut off and even more forcibly worn away toward the south by the scouring action of the summer streams coming from the glacier.

The front of the narrow fan south of the moraine is much steeper than the northern part of the face.
Note on the freezing of the sea ice. Over and over again I observed that the surface water to a depth of two or three inches froze in plates or blades forming a velvety network of ice with water between the blades or plates. The light reflected from these gave a beautiful sheen to the surface. As we lay at anchor being frozen in, I noticed that the sea ice when two or three inches thick was still mushy and flexible and not strong enough to walk on and stand upon, very different from fresh water pond or lake ice after it was even six inches thick. The upper surface was wet and unfrozen on account of the salt snipped with it. The surface became dry and frozen when the temperature of the air remained at & 15° or lower. The freezing of the salt water forces much of the contained salts to the surface which accounts for this mushiness at temperatures much below the freezing point of ordinary sea water.
With Sanguinary
Visit to St. Glacies

30x - 2000 acres across fan
to head. Bar 700
+1000 acres foot of glacier
+1100 " to base of moraine
Bar 1100 ft.

Highest point of moraine 1275 ft
+600 feet from mora -

Highest part of ridge shows
much ledge in place. See
several loose blocks of quartz.

No. elsewhere (1873) are on the ridge shown.
form of covering by the
Glacies Hamblenide stimulation

About W - S corns middle
top of ridge. Another was observed pari
to each in ridge. Both seem to have
suffered from stress with the qneiss

Almost the whole crest of the ridge
is formed of the jointed and frac-
tured ledge in place.

Specimens 590 - 594 qneiss; 595 - 7 dike
with patches seen in snow.
After coming down to the glacier we passed around the western end of the Nunatak, visited the foot of the southern arm of the glacier and then returning -and piedmont glacier near the latter and returned to ship.

Base of northern arm of Nunatak 875 ft. making Nunatak 500 feet high above plain.

At western end of Nunatak a long narrow snow drift descends to the plain from about 14 way up the rock slope of the Nunatak. This drift seems to have been formed principally by the snow driving down from the southern branch of the glacier under the southeast storms and then to have had its northern part deeply eroded by the hard snow driven against it by the northeast winds. The lower two thirds or three quarters of the drift is composed of ice or icy snow. This ice evidently has been formed by the snow drift melting and settling under the influence of the summer sun. Blobs of ice have fallen from the mass on the north side and are now surrounded by remnants in the snow of the plain.
What was the ice to be a hanging glacier.

The southern branch of the Chief glacier is much steeper in front than its northern branch. Its surface now is hardened snow. The frontal decreases in height from the nunatak to the cliff, apparently on account of the scouring action of the northeast wind and the drifting of the snow against the nunatak. Furthermore it seems likely that the swirling of the N. E. wind over the nunatak and against the cliff is the cause of the steepness of the front, and then back to west due to foot of the little piedmont glacier.
what was thought to be a hanging glacier coming down from the southern cliffs 200 yds west of the south branch of the Cluett glacier has a broad high foot projecting on the plain and is therefore a piedmont glacier. the east side of this foot has been eroded by the wind driven snow from the Cluett glacier so as to show at its base a vertical cliff face 15 to 20 feet high. this face shows a rich sand, mingled with angular bits of rock, for six feet above the ground (the plain) on which it rests. above the sandy ice the glacier shows many scattered angular blocks stones six to twelve inches and more across, projecting from the ice. the vertical face furthermore has been scooped out in shallow, wavy depressions which are polished and oily in appearance. upon this mass of rounded and polished + ground - shows thin well marked thin layers of sand above the lower big one.
31 - Oct.

Firn of hanging glaciers. Glacier located at 1150 feet above
along plain 650 feet, eastern
which is terminal
moraine or marked by it.

Glacier debouches 125 feet
out onto the plain as measured
for me by Dr. Langton.

From southern branch
Cluett Glacier about 1500 ft long
by my pacing (same had 650 feet).
The Glacier shows solid ice
below thin snow and has ground
moraine in it abundantly.

Bar 600' Sea level 500'
Note. 31 October - Captain Pickels locates the "Harriet" in lat. 76° 21' N. by observation.
Nov. 43-2

Sign foot tide mark on point 1/2 mi from ship
(form to back, 12:50 km)

43-3 16 1/2 View SE from grotto
1/2 mi from ship to shore into South Bay. After sunset

Specimens 598, 599, and 600 are from the area strongly banner, hornblendeic, gneiss forming this grotto. No. 600 shows sigmoid flexure of a feldsparthic lamella. Other parts of the rock are as strongly feldsparthic in composition as 598 and 599 are hornblendeic. The gneiss of this region evidently would repay careful study.

2 Nov.

43-4 45/01 12:20 P.M. Sunset here.

Parker Snow Point & Conical Rocking

43-5 11/10 seconds (after sunset cloudy)

Point showing sigmoid flexures and other in the gneiss. (Shutter failed to work properly) n.g.
3 Nov. Bold bluff extending for a mile or more westward from Soapstone Valley, 900-1000 feet high, by estimation Steblin and myself, generally red gneiss with predominance of hornblende bands near bottom. Spreads trap dike 200 ft wide descends diagonally across face from valley to point and then rises again with abrupt front, from sea level, forming a broad which lies upon its side. Many tent-shaped grottos at sea level and above. A line of their 50-70 feet above the sea seems to indicate the locus of a former sea level (corresponding in height to the raised beaches at the head of the bay). Higher ones are to be seen, especially along a steeply inclined (70°) surface zone.

Approaching the second point, two miles from the valley and four miles from the head of the bay, one sees particularly beautiful banded red gneiss, while near the point, sigmoid flexures are pronounced.
4 Nov. Out along southeast shore bay with Captain Cook in a snowstorm. Went upon and examined as well as I could the drum light - a mass of glaciers associated with a lobe-like feature, which projects into the bay, forming a promontory 100 yards wide, 30 ft high, and 100 yards out in the water. Flat top. Saw no signs of any encampments on top. Went along to the drift glacial feature west. This mass is very loose but ice is dense and blue. Formed apparently by a snow drift in a small gullet. Old surfaces are marked by curved lines of sand which were blown upon them as mass was formed.

8 Nov. 11 a.m. - clean no sun.
8 x 15. 11 + 19. 42. Men hauling kamatch load of ice from berg to ship for water supply.
Nov. 9th, 13° (min) 2 h 10

8 Nov. Cloudless, brilliant day. Went with Jansquay toward glaciers. We crossed on the plain at the head of the bay, he going to the Cluett Glacier, while I went up the ridge between the Cluett and Comer glaciers and finally to the top of the mountain separating them. Ridge is covered with or consists of large and small angular fragments and in the gravel size of gneissoid rock with here and there an erratic block on the surface. The disintegration material is hummocky and morainal in character. Apparently these two glaciers have receded from a more advanced position. In contrast with the Cluett glacier, which is snow-covered with here and there a patch of ice, the Comer glacier presents a surface of glacial ice rotining egg blue in color and its front is steep, rounding (convex) and precipitous. Front section shows flume of ice layers beautifully marked by ground moraine material. Little two-moraines come around on north and south sides to form, when deposited, terminal moraines nearly as high as the front of the glacier.
12 Nov. Friday. Clear day overhead.

Thick fog bank came in from sea and enveloped ship for an hour or so after noon but did not reach more than half way up the cliffs. Calm practically all day. Light wind on glaciers for a short time. Went with ship toward upper northern arm of Chuit Glacier nearly to uppermost of Nunatak then turned northeastward and went on up to lateral moraine extending along northern side of glacier for a mile and a half or two miles. Turns as it leaves western end and appears to form short terminal moraine which is nearly buried in snow. Decided that the real glacier probably ends near line drawn from western end of moraine southwestward to upper end of Nunatak (alt. 400 ft. above sea, see p. 73) and that the snow slope stretching from this line to the plain is the surface of an enormous drift. The moraine consists of angular fragments of breccia. Descended the snow drift bordered up on the north side of the moraine into the valley separating moraine with branches in detached ridges with eastward to the ice caps.
it from the ridge rising between the Cleft
and Corner glaciers. Crossed the hum-
moeaty lower middle portion of this, whe-
estsuch agrees with me in thinking to
show ice action. Then we went down
into the valley separating this ridge
from the southern lateral moraine of
the Corner glacier and up onto that
moraine. Saw nothing but granite.
while we crossed the shallow depression be-
tween the upper part of the moraine
and the ice down to the western end
of the glacier. Ice shows beautiful
overturned folds and thrustfaults
near its front, and therefore is to
be considered an active glacier.
There I met Captain George Cornen, the ice pilot provided by the Museum and accepted by the Grenfell Association of America, owners of the vessel for the proposed voyage. He had been in waiting for some days.
President W. J. Osborn

Dear Sir:

I beg to submit the following report of the voyage of the auxiliary schooner "George B. Cluett" under charter to the American Museum of Natural History for the relief of the Crocker Fund expedition party to bring back the members of the party and their collections and other property from Svalbard, North Greenland.

Acting under your instructions to take charge of this relief expedition, I left New York on 1 July and proceeded to Sydney, Nova Scotia, landing Tuesday, 6 July, with Admiral Peary at Eagle Island. He gave me several suggestions regarding plans. That evening I received word that the "Cluett" would not leave St. Anthony, N.F., until 10 July, but I wired the captain to hasten his departure and I went on to Sydney, where I arrived on the 8th. The "Cluett" did not leave St. Anthony until noon of the 10th, this being delayed to us nine days later than was after the date specified in her
charter party. On account of delays due to adverse weather, according to Captain Pickels's statement to me, she did not reach Sydney until noon of the 16th. Some repairs were then made on windlass and engine, our cargo was taken on board, a new crew was shipped and the vessel left Sydney for Etah at 6 p.m., 19 July, under engine power. Soon after 8 p.m. the engine refused to work, but the wind was fair and good and we proceeded without anxiety on my part. The engine was cooled to run several hours during the night of 20-21 July, but on the 21st it was reported to be entirely out of commission with a crack in the hub of the fly wheel.

We reached Bantul Harbor at 6 p.m., 25 July, just six days from Sydney, instead of the three or three and one-half that the journey would have taken with the calm weather that we had, if the engine had been in good order when we started from Sydney and if the engineer had been competent. I understand now that it can be proved that the engine was overhauled radically out of order before the vessel reached St. Anthony. If this be true, the
owners violated the charter party in
advance of the beginning of the voyage.
Other violations will be mentioned later.
Cruice repairs to the flywheel were made
by Captain Pickels and the engineer
of the blacksmith shop at Battle
Harbor, and we sailed for Greenland
at 4 p.m., 26 July.
We averaged a fair run under
sail as far as Godhavn, Disco Island,
where we came to anchor at 11:30 a.m.
5 August, in a light calm, having
used the engine for several hours
in gasoline to cross Disco Sound. It
will not run on kerosene and but a
small supply of gasoline was procured
at Sydney. Then ensued four days
of light calm, two of which we spent
in Godhavn Harbor. Had the engine
been in good order, we should have
left there on the day of our arrival and
proceeded under power up the coast.
As it was, delayed by calm weather and
light winds and having only one good
breeze, we did not reach Upernavik
till 7 p.m., 10 August. We stopped
there for news of the Crocker Land
Party and information about the
ice in Melville Bay. We could not go ashore that evening on account of the wind, but the next day was calm, we got our information early in the morning and should have gotten away before noon had the engine been available for any proper use. We left Upernavik under power at 6:10 a.m., 12 August, but changed to sails a half-hour later, or as soon as we were clear of the islands. That afternoon we sighted the great ice pack. We skirted along its north-northeastward for four days till we were off Devil's Thumb, which is considered the southern limit of Melville Bay. At about 6 a.m. the following day, 17 August, the vessel was moved to a sheet of ice in the pack and we began our drift across the Bay. Eighteen days later (4 September) we passed Cape York, the northern limit of Melville Bay, about 150 miles from Devil's Thumb. It then took us seven days to advance to Conical Rock. The following morning, 12 September, we rounded Cape Adelaide to go into North Star Bay and two days later the "climett" came to anchor.
As may be seen by Captain Comer's report as ice-pilot, the original of which will be handed to you when I reach New York, Captain Pickels lacked competence and energy in contending with severe ice-conditions in Melville Bay and between Cape York and Conical Rock. Captain Comer states that Captain Pickels made no adequate preparation for a voyage of the kind that was reasonably to be expected in visiting Etah; also that Captain Pickels showed his lack of knowledge, skill and energy in working the vessel through the ice of Melville Bay and off Cape York; furthermore for Captain Pickels never called upon him (Captain Comer), the recognized ice pilot of great experience with sailing vessels in Arctic ice, for any advice or assistance when his own vessel would or might have been of use, but on the contrary refused and rejected all suggestions that Captain Comer ventured to make. This lack of proper tools and the failure to utilize the ice pilot seem to con-
stitute violations of the contract.

Off Cape Athol we met Peter Funchen, Danish manager at Umenak of Rasmussens Knud Rasmussen's Committee with which the Museum has most cordial relations, in his kerosene power-boat the "Ingelis", towing Rasmussen's chartered schooner the "Cape York" out of North Star Bay to start on her way southward. Mr. Funchen offered to take me on to Etah to get those of the Crocker Land party who were to return and bring back a supply of gasoline for the "George B. Cluett". The supply of that material having been entirely inadequate to begin with and being now almost exhausted, I accepted his offer, put the Crocker Land mail and a few other things on board the "Ingelis" and we started northward at 3:30 p.m. in calm weather. The "George B. Cluett" was to follow us, if the wind should be favorable in season, but four days of calm weather and light winds intervened and all that she could do was to work her way to the head of North Star Bay, where she anchored off Umenak on 14 September and she
was not able to proceed farther north.

On our way to Etah, Mr. Frenchen and I stopped at the Kiatte on the southeastern side of Northumberland to leave a distress which Admiral Peary asked me to deliver to Oolah one of his North Polar companions. The stop should not have delayed us more than an hour, since the place was directly on our route but proper care of our boat was not taken and we were left on the rocks by the receding tide and we lost another seven hours before we could get off and go on with our journey. The 13th, however, was a calm, beautiful day like the 12th and we made good progress until about 8 p.m., when our engine broke down, five or six hours run from our destination. Mr. Frenchen and his two Eskimo assistants then towed the heavy launch by means of the dinghy, rowing five hours or more to reach a safe anchorage in Somntag Bay. During the night, a northeasterly gale descended upon us and raged for 24 hours, keeping us at anchor most of the time and preventing our rounding Cape Alexander till about 4:30 o'clock of the morning of the 15th. We dropped anchor
off the Expedition Headquarters at Etah at 6:45 o'clock the same morning.

I found Messrs. Escliar, Tanquay, Queen and Allen at the house. Messrs. MacMillan and Small were at Nerke, forty miles south of Etah, hunting walrus for dog food. Dr. Hunt had left 24 hours before my arrival for a two or three week absence hunting caribou in the country east of Etah.

All hope of the arrival of a ship this year had been given up two or three weeks before my arrival, and preparations were being made by the party for a third winter in the arctic. A messenger was despatched immediately for Dr. Stuart, in the hope that he might be overtaken at his first camp, but the mission was unsuccessful.

The Expedition Headquarters is a commodious house and there was a reasonable supply of provisions on hand to enable the men to remain over with conservative use of the food, in connection with the fresh meat which had been and could be secured by hunting. There was plenty of fuel and oil for all purposes.
for an attempt at Melville Bay, and that one should be made in spite of the lighter wind and our broken engine. The efforts that were made were not made at the right time or pushed as they should have been, and other opportunities were allowed to slip by unimproved.

One of the worst features of the whole enterprise and the one that now seems most liable to lead to serious consequences is the shortage of food supplies on board the 'Cluny'. When Captain Rickels was questioned in New York, Boston and North Sydney regarding supplies, he said that he had plenty on board for a two year voyage. Having heard of this statement I did not inquire into the matter particularly, supposing everything to be all right.
I have faith in my fellow-men. I believe in their honesty of purpose and their competency of judgment. I have seen them take up great questions of National policy, one after another, and decide them aright, sometimes overriding their leaders in so doing. They have endured four years of terrible self-sacrifice in order to preserve the Nation intact and set it free from bondage; they have given away millions of acres of their lands to foreign immigrants who promised to dwell upon and cultivate them, recognizing the truth that the wealth of a nation consists not in its soil but in its people; they have denied themselves the right to purchase their goods in the cheapest market that they might make America an industrially independent Nation; they have voted to pay the Nation’s debts in gold when, without breaking the letter of their bond, they could have saved millions of dollars by paying them in silver; they have taxed themselves year after year for an expensive system of public education, because they recognize the value to the Nation of brain power in its humblest and lowliest citizens; they have voted to carry on a war for the succor of a feeble neighbor, and have brushed aside impatiently the protests alike of materialists, who argued that it did not pay, and of timid idealists, who feared that it would convert the Republic into an empire; they have perceived the perils of the country in a growing plutocracy, and have entered on the task of bringing the aristocracy of wealth under the control of the democracy of industry. I have been personally, though not intimately, acquainted with eight Presidents—Grant, the soldier; Hayes, the peacemaker; Garfield, the orator; Cleveland, the administrator; McKinley, the cautious; Roosevelt, the courageous; Taft, the lawyer.
Wilson, the scholar. And I have known enough of other men in public life—Senators, Representatives, Governors, Mayors, and their subordinates—to know that while some politicians are unscrupulous self-seekers in America as in other countries, America has her share of public men as true, as pure, as self-denying, as are to be found anywhere in the world. My faith in my fellow-men has been strengthened by my lifelong study of our National life. The evils from which we have suffered have been caused, not by too great a trust, but by too great a distrust of the people; and I repeat again, as my well-considered conclusion from such life study, what I have often repeated in public speech: The remedy for the ills of democracy is more democracy.
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\[ \frac{9}{28} = \frac{3}{7} \]

\[ 1 + 6 + 4 + 4 = 15 \]

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\[ \frac{415}{425} \]

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\[ \frac{16}{25} \]

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\[ \frac{434}{180} \]

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\[ \frac{274}{22} \]

\[ \frac{80}{94} \]

\[ \frac{80}{50} \]