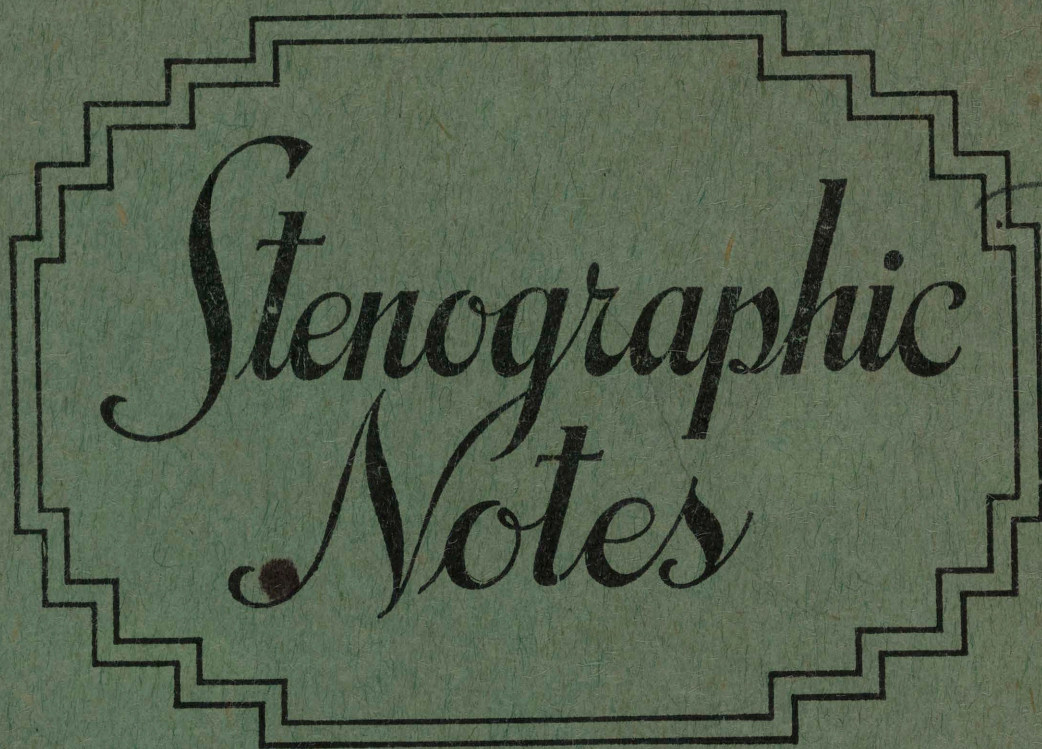


— Europe —  
Lippala to Riga

# Li-Rite

PATENTS PENDING

No. 2



TEN CENTS

No. 101

LI-RITE LICENSE NO. 1

No. 2. \_\_\_\_\_

From Stockholm July 22 1936

To Riga, Aug. 7 1936



July 22. Uppsala - An hour's travel these days but as in the old a journey through forests and meadows. A quaint town but mainly in its arts and treasures.

A great Gothic church - largest church in Scandinavia - desecrated in Scandinavian manner. Byzantine, medieval figures. Crudeness predominates. The overflow of Russian-oriental spirit into Scandinavia as plain as waves in the soil. The wave failed to reach Denmark.

Statuary excessively crude and stilted. The ends of the gowns and protruding feet on recumbent figures look like the cross section of an onion. One figure in armor is lying on his side with legs crossed and head supported on his hand. However, he has discarded helmet and metal gloves, which are being held by two cherubs. In this respect he looks easy, tho he is too fat for his posture.

In one tomb, cherubs are holding skulls. Life's destiny drove hard in those days. Slabs in the floor contained heavy

List of Specialists at See" and "From my  
porthole at night" in folder 1



rings at the corners for lifting from the crypts below. Strength - overabundant - rather than proportion prevailed. Here we find the ancestor of the Teutonic "safety first."

The silver vessels and the vestments also were medieval. Richness and crudeness were combined. The music of the pipe organ cast a fitting atmosphere of reverence about it all.

The university is <sup>modern</sup> Germanic but bears a sense of learning in its council hall and its courts. The hands have been removed from the faces of the clocks to emphasize vocation. The documents still hang in profusion from the bulletin boards. Statuary lines the halls and stairs, but the classical they are not of the best. A Lagoon is an odd arrangement of three men being traversed by one snake. Fright rather than tragedy seems stalking about. What a lack of unity and power after seeing the Greek masterpiece. Learning and mastery are not always mates.

However, the library was a mausoleum



of MSS and books — of a craft that showed enthusiasm and utmost patience and masterly skill. The value of books in those days was emblemized by a fragment of a chain still attached to a tiny book. The Silver Codex will be a masterpiece in any age.

Here modern Botany was born and Oxygen was discovered. Men's imaginations were in ferment. Oxford is a philosophers' cloister in comparison.

The Castle towers as a plain palace structure above the town and bears a broad park of trees on its flank. An immense "Trink-horn" is there that prizes and others rival in draining. Such the story at Melin's. As we departed, the castle long dominated the plain.

In the afternoon, Melin's guided me to the Skansen Open Air Museum. Here we found not the medieval learning but rather the life of the soil. Farm houses of early times with the implements of toil and sustenance — not in imitation but genuine — transplanted to a setting like their own.



Saga mainly and massive tables and benches. Roofs made tight with under-layer of birch bark with planks above held firm as in Switzerland with stones. Sometimes sod roofs rather than thatch of reeds as a "Fano".


The church walls and ceiling bore paintings less rich but almost as natural as the medieval work at Uppsala. Quaint tombstones rose from the grass in the church-yard. Except for primitiveness, one felt as if again at Penn's church at Stoke Poges where Gray wrote his "Elegy in a Country Church-yard".

In the later houses French influence in the portraits appeared. A Frenchman might even have painted them. They seemed offensive in the substantial house - a mark of "newly rich".

Paralleling all was the Lapps culture of open-top teepee built of turf with tiny circle of stones for fire, and storage chambers on stilts to keep food above the wolves. A notched log made an inclined entrance for the owner. Tuberculosis would seem to be the destiny of the race except



that they live <sup>in</sup> much in the open. <sup>spirit</sup>

Nearby was a modernized tepee or igloo made of wood  like the modernization of the eskimo houses of the coal mines <sup>near</sup> Disco.

*M. 2302*  
The Lapps themselves had gone home for the summer but the reindeer were still in their yard moulted badly but contentedly chewing the dry mistletoe-like moss such as I had once seen on Naxajanga. Possibly they are more comfortable here, for they are free from the ipanget, that mosquito pest of the Arctic.

The Old Town. Stockholm consists of an archipelago several hours from the open sea. However, from the old fort adjoining our museum, we could look down up the broad channel up which the large sea-vessels came to their moorings. Across this channel on a wooded terrace stood what in Canada would be a Canadian Pacific Scenic Hotel, like Hotel Frontenac at Ottawa. It should have been a King's summer palace, but it was a "poor house" privately endowed. Like Townsend, it placed the poor man in the sun. Settling. Ushy.



Cityward in humbler state on a small island were the staterooms and king's palace crowded amid tenements in the original town and fortress. Once it was not worth your life to traverse these streets in the dark. Even the inner courtyard of the palace was granded for it was used as a ~~therefore~~. The garden lay on the water-front of the palace. The old cathedral was nearby, rather grim and venerated as the mausoleum of Gustavus Adolphus. We entered this island by a ferry but left it by a bridge - so interwoven are islands and shores.

Linens. Gulamae wanted linen from Stockholm. I was fulfilling her wish in the letter but nearly lost its spirit. When the package was ready, I ask my guide Dr. Melin to enquire whether it was Swedish and was told that it was Belgian - an importation. "Yes, they had Swedish linen but it cost almost double. So I paid double for the coarser fabric, ~~for~~ They Always Do - An Italian may kiss you an affectionate Goodbye but my Scandinavian friends and others continue to wave at intervals as long as they are in sight



of each other. Thus parted Dr Melin and I  
with plans for skiing some winter in Lapland  
and meeting at the next International in Canada.  
But Sally Belknap, Southern bred, left us  
abruptly at the door of her apartment tho  
the elevator was near. Was her emotion deeper?

Weary. Am I ageing or running down hills  
too fast or tramping the pavements too far  
or sleeping too little? Or can it be the horror  
of sitting on a "III Klasse" seat covered with  
a Brussels carpet? I shall obtain a cushion  
and more sleep providing I can keep this  
Journal up. Here is the rub - and hospitality.  
"The schedule must be maintained".

July 23. Morn. It never gets right. At least when  
I attempted to arise at 3:30, it was broad  
daylight. and the sun rose above a high  
building at 5:00. Some readers went home  
at 4:00 or were they going to work? We are  
near the Arctic Circle.

Language. If only I could have talked.  
But little maid conveyed to me the  
knowledge that she came from from Iceland  
from the famous old town of Visby and  
we worked out the understanding that



3 fingers meant that I had used the room three nights instead of two as shown on the bill and not that I expected to pay only 3 Kroner instead of 3.5 Kroner the figure in the bill. But in her Goodbye she showed me her keys and shook the pockets of my coat on the bed. We both had to give up. I was too dumb.

But she joyfully jingled the tips in her pocket.

Exchange. Not so bad yet. Danish 1 Kr = 23 ¢; Swedish 1 Kr = 27 ¢; Norwegian 1 Kr = 26 ¢.

Color Views. a collection of art views of Stockholm from its lanes. An artist's study.

Fortunate to have seen it even at the last moment.

A Buret. I lived there as others. I can not look at myself and may suddenly lose my hat in some gust.

Goodbye to Stockholm — to bridges and islands and gulls. Suddenly a Tunnel and we were in the open country once more. I shall devote the day to reading my "Story of Sweden" & fill out my mission.

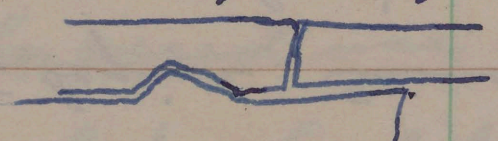
Companions. One a German. a scar on his cheek. In his Berliner Tagblatt the following title: "Auf dem Hochrad zum Sieg".



(On the Highway to Victory). Is it the Hitler comeback from the war?

The Soil Problem Again. Even fairly steep slopes require drain tiles. Small but apparently necessary. About 2 feet deep. Is it clay?

The soil is plainly overwet. Sweden needs more grinding down; more alluvial soil.

Tentative Evidence of Economy? The heavy retaining walls often resemble the Inca in the irregularity of their ~~forming~~ straight lines . Their paving stones, however, are symmetrical, but Melin says that the cleavage assists.

Bananas. I bought one from a lad.

Bananas, oranges, apples are station offerings. 10 öre did not satisfy. He wanted 20 öre or 5¢ and the banana was tiny. Is the cost due

to importation? Ours also are imported but the haul is shorter. Perhaps the ever present label "Fyffes" explains. Only one brand or dealer.

Industries. We are now turning west thru Sweden. The farms are more extensive perhaps but fully one-half is still forest. The soil, however, is yielding clay and

FYFFES



brick and tile works are recurrent. All roofs seem to be tile of a pleasant yellow-red color. This industry seems to have taken the place of the stone paving block industry which did an international trade.

The power lines are still over the tracks tho the smell of coalsmoke finally became conclusive evidence that a locomotive had been attached.

Occasionally cuttings in peat bogs were seen where the peat blocks were being removed for fuel. At least roots occur in the North even if shallow. They are also luxuriant.

But at Kristinehaven, <sup>the</sup> timber shipping country begins. Some freight cars are even larger and heavier than the 4-wheel variety of Europe. Round timbers of 8 ft length were being loaded in them. Why? The forests are being thinned. No tree is thicker than one foot and scarcely could be. No forest fires. At least no traces. Seedling areas are frequent.

Lunch. The Restaurant car is quite American and even excels the American in its time and of meals. Only the Pennsylvania line competes. I saw that Table d'Hôte was 2.75 Kr. max.



but my bill was 3.40 Kr when I took all the waiter offered. There was cold lunch, then hot course, milk, coffee, and raspberries. Should I have refused?

When does Table d'Hôte become a la Carte? a 40-öre fee brought hearty thanks, "I showed him I had only 3 öre left". He laughed overheard behind me. "You are having a good meal? Nothing but plates to me. . . . That's better (as evidently cheese was brought on)". The accent was English.

English. English, German, Swedish had been the speech of the day. I had stuck to gesticulation, when a seat-mate who had slept in her corner or spoken Swedish smiled at me and enquired: "How does it seem to you to hear English?" I started up at the name of 'salted peanuts'. She was a Norwegian-Swedish-American art teacher in the grades at Rosyford, Illinois. grownup and educated thru the high school in Europe before going to America. I assured her that I too was English-French-German-American. So she had no apologies. Her parents still loved Europe and might



return. But could they agree. He was an ardent Norwegian and she was a Swede. The only solution would be to live on the border.

She speaks Norwegian, Swedish and Danish well. The distinction between Norwegian and Danish is in utterance rather than writing. The Norwegians speak with their entire face and with full effort.

Expressions they might be called. The Danes' speech is more musical and effortless. Is this why Kasia's face and eyes seemed expressionless? The Danes understood better when her words were chopped-off and slid.

From her passport, I copied the name: Malin Gertrude Bakkelund. The view of her was the prettiest I had ever seen in a passport. How did she get by the authorities? It was a sideview too. She merited the picture.

Drinking Cups. A sack full of glass ones and a woman comes aboard at the halfway station to replace them with clean ones and replenish the water bottles and tidy up a bit. Roller towels too; Not



individual ones. Neither paper towels nor cups have yet reached the railroad. Paper napkins, however, are here.

Toilets for both and each. a "Belgian toilet" at Arvika station. One's head shows thru the grill work.

Qats are frequent. "Yes, eaten".

Lakes. Everywhere, but now larger and more intimate.

Lake Vanern. Logs, mills, ships for America. A log snare in the river towed by a steamer-tug. The last one I had seen in 1899 on the River N<sup>3</sup>ävar, steered at the prow around river curves by a lone man. There is also a canal, but in the lake the ever present reeds. This is the largest lake in Europe outside of Russia.

The Götha-Canal entered the lake far south. I had caught a glimpse of it near Stockholm but had not realized its identity. 2 1/2 days by it from Götterberg to Stockholm thru lakes and forests and countryside. Romantic as the route by boat from Oxford to Windsor.

Mountains! Beyond Kil the mountains



begin, but are mild.

across lakes by a fill and bridge - Possibly 1 mile. Water is brown. It must be soil tho the shores are rocky.

a long lake; Forests, islands, logs, small resort, rock shores. Salmon fishing is its sport.

Lake Glavaffjorden. Sail boats and logs. Two use lake. Logs 1ft<sup>+</sup> at butt.

Boundary Inspection. "Tourist?" "No".

Then Malin explained: "Traveling thru".

This I accepted. But I was not a tourist.

We were inspected at Charlottenburg:

"Til Norge 15.47 KM" and "432 KM FRÅN

Stockholm". So we had full 15 KM yet to journey before reaching the border.

Malin found a postcard of the Peace Monument between Sweden and Norway.

→ a shaft with men on top clasping hands.

This is the first time Norway ever has been independent. A monument with similar purpose is the "Christ" on the Chilean - Argentine border.

Coupling Cars. Taking out the Restaurant Car was like taking out the appendix.



It was really a surgical operation, and joining the vestibules was like putting up a tent. The vestibules were nearly as flimsy. There was a gangplank of iron, a tiny dog might fall thru the holes at the flaps of the canvas.

Norway. The mountains at the boundary suggest Vermont.

Peat excavations appear, and blocks of peat are stacked near by. The ditches are water covered at bottom. Sweden also has peat in abundance.

There are cars of paper <sup>from</sup> pulp. It is an export article.

Pines now appear rather than birch and pines. The pines have been thinned, the crowns are high. Plesning.

"Kangsvinger, Høide over havet (Elevation above sea) 148.09 M., i.e. about 500 feet.

Malin says that this cross-section of Scandinavia is merely rolling.

River Glommen, Norway's largest river. Some rapids. Almost the first on today's trip, all the way down as in the Sierra the glaciers have cut



furnaces. There is drainage here.

The vegetation is healthy. The landscape with hillside farms looks like Vermont or Connecticut. It suggests the hills approaching Carling Straits.

at Lillestrom are a series of log booms to keep the logs from continuing down into the fiord.

Oslo -

The Station Master. Why? He looks nice in light suit and fine cap. He carries a staff with a flag and colored disk to tell the engineer where to stop and when to start. Why not train the engineer and conductor?

Kindness is becoming<sup>a</sup> commonplace.

The Reiss Bureau saved my schedule by close figuring and aiding me on phone to determine that Professor Merenschild was on vacation. A foreigner is helpless with a phone. He simply neither is understood nor understands. It insisted also on phoning to Bergen for a berth and obtained the last one. I must leave at 10 in the morning (Friday) to catch my boat Saturday night.



Then I took the train also at their suggestion  
to find a room at \_\_\_\_\_ in the suburbs.  
But I failed to have street and number of  
the hotel. The motorman lingered to help  
me and a young man, who suggested  
that I find a phone book, himself found  
the place and followed me a half  
block to direct me. So I am finding  
Kaias all along the route.

Sample Form in  
Folder 1

That Declaration of Citizenship, Hansen,  
kindly the country, I must sign it.  
I know it now by heart; where I was  
born, where I was born, why I was  
here, where I was leaving, to what place  
I was going. It sounds German, it  
feels German. Here is the sheet. My  
landlady gave me a copy. Now I shake  
my fist at it to the clerk's amusement.  
Curtailed Plans. Only an hour to make  
calls in the morning. It will be well to  
consult Prof. Sverdrup regarding appointments  
from the Hydrological Service. Hansen, I  
shall upon Dr. Hesselberg, Director of the  
Meteorological Institute, who was recommended  
by Commander Speerschnieder for Sea Ice.



July 24 - Drove into city.  
Fixed mild but beautiful  
with its wooded islands.  
Boats snug at Railway  
quay

Tips. Finally a part of  
the bill, 10%. I gave  
an extra before reading  
the account.

More Kindness. The State-  
banerens reisemontor urged  
me to order the Bergen-  
Narvik ticket beforehand.  
I did and obtained the  
last berth available.

Dr. Hesselberg. also on  
vacation. "The season  
is short." But he is nearby]

→ Nrita  
Dr. Th. Hesselberg,  
Meteorologic  
Oslo, N  
[Sea

x logs also higher up.

some boxes, holes, a large  
\* The dull smell of the dry alnet  
suggests the redwood, but also

Note to Prof. W. Weren Skjold in folder 1



Professor Werenstjöld is interested in Geography, Meteorology and especially in Hydrological problems. Does not answer half his letters. Is this a real professor. . . .

Please write an invitation to director Herselberg and send your European address. I'll forward it. . . .

The sky is overcast today. You can see up only 1500 metres. Mountain tops will be covered. But a "Lute Reise". Thus my host at the Meteorological Institute.

He gave me the following addresses:

\* Logs also higher up.

\* The dull smell of the dry forest suggests the redwood, but also

Power Co, unagent name not known.  
Chief Weather Bureau of Bergen.

→ Write  
Dr. Th. Herselberg,  
Meteorological  
Oslo, N  
[See

Note to Prof. W. Werenstjöld in folder 1



It is now raining but  
I hope for a Scotland Fined  
day.

To Bergen. What a view  
on Oslo and harbor. We  
are on a mountain climb  
and are already above the  
city. We see in the Sierr,  
heavy forests of fir and birch.  
Hurting streams. Rock cuts  
and tunnels. Views into  
mountain valleys, set with  
villages and farms.

Logs in the larger river  
where we entered the hills.  
Nature is everywhere present.  
Tents and walls furnish  
relief notes of color.

\* Logs also higher up.

My W.A. T. U. friends.  
Copenhagen Stock holding Oslo  
was on vacation.

→ Write  
Dr. Th. Hasselberg,  
Meteorologic  
Oslo, N  
[Sea

some notes, notes, a large  
\* The dull smell of the dry forest  
suggests the redwood, but the

Note to Prof. W. Weren Skjold in folder 1



\* But most of the cars are  
old style.

Cars and Classes. We have  
passed from the side aisle  
and closed compartments to  
the car with central aisle  
and divisions into Smoking  
and Non-smoking halves of the  
car. A seat also is reserved.  
The windows are large.\*

The common Toilet has  
become a "W.C." (Dutch) on  
one side of the aisle and  
a "Toilette" on the other  
with washbasin, mirror  
and roller towel. Is this  
an improvement or is  
it merely progressive? \*

Every seat or group of seats  
has a basket on meals,  
time-tables, hotels, a large

\* The dull smell of the dry closet  
suggests the railway, but also

→ Write

Dr. Th. Hasselberg,

Metamorphic

Oslo, N

[See

Note to Prof. W. Wærnisköld in Golder 1



separate map of Norway  
with eating-car routes  
and location of hotels.  
controlled by the railways.

Map of each with elevations  
and the classes? for  
the upholstery only.

Kalle III (mine) has a fabric rail  
leather seat and back with  
quarter-softness. Klasse I has  
furn-quarter softness the mat  
quite overstuffed.

riding trousers, Oestromes  
& equip. of travelers, sleeping  
Switz. islander shoes, microscopes

"Roa", the forest lies  
above us, the wide valley  
below covered with farms.  
On a stone-walled terrace

→ Write  
Dr. Th. Hasselberg,  
Meteorologic  
Oslo, N  
[See

Note to Prof. W. Weren Skiold in Golder I



are large clumps of  
fire-weed, one friend  
of Greenland. The rain is  
gently falling. This is truly  
~~over~~ the Sierra except  
for the farms.

Lanes. The lanes are long  
and narrow, so are the river  
valleys.

Honeyfoss (96.8 M.O. Havet) -  
Falls and Rapids in  
the large river. The most  
spectacular yet. "Fish-ladders"  
on either side for logs and  
traffic directions for them.  
There seem to be mills here.

Hay-Fields. One might almost  
call them ~~hay~~ climate symbols.

→ Write

Dr. Th. Hesselberg,

Meteorologic


Oslo, N

[See

Note to Prof. W. Weren Skjold in folder 1



or symbols of rain. Here every field has its lines of posts supporting high thin windrows of hay seeking a chance to get dry and cure between the frequent rains. It would moulder on the ground.

Power lines - One sturdy towers  it seems to rise above the forest and stride across the mountains like a modern successor of the Great Chinese Wall. The towers of Norway are not so large as those of Sweden but their snow reserves melt last longer, Scotch Highlands. This could

→ Write  
Dr. Th. Hasselberg,  
Meteorologic  
Oslo, N  
[See

Note to Prof. W. WerenSKIöld in Solder 1



*[Faint, illegible handwriting on a piece of paper pasted onto the notebook page.]*

→ Write

Dr. Th. Hasselberg, Director

Metereological Office

Oslo, Norway

[See also].

Note to Prof. W. Wærniskiold in Solder 1



readily be the Scottish Highlands  
Valleys, lakes, ferns and  
forests carpeted with green.  
This should be true for the  
countries and ~~not~~ topographic  
and climatic neighbors.

and sudden surprise!

At Orgeriva, a Domes lake,  
Loch Lomond, and Lake  
Lucerne in one, with  
mountain shores cloud-capped  
and rugged wooded islands.  
From high up we approached  
it and descended to its  
shores only to ascend a  
broad stream spanned  
with bridges. Cloud veils  
still trail the mountain  
faces. Like Gannet and  
vicar was constantly  
interrupted by Tunnel blackness.

Batona  
Hot above,  
cold below

willows, tundra,  
birch scrub. Greenland  
landscape. a few houses

Bergen. The quaintest town I have seen. The old town  
is narrow-streeted and tall. The houses seem  
compressed upward - 5 and even 6 storeys. Windows  
are in the tiled roofs and gables are in  
the windward, upturned toward the sun.

The residences cling to the mountain wall  
far upward. Is this Hong Kong? An outlook



High Switzerland now  
or Lake Tenaya. Bald  
glaciated knobs, thinly  
forested. Gateways for  
the broad river. Chalets.  
Peasants raising hay, a  
wisp of cascade from the height.

"Reserved." Have tried twice  
for dinner and been told twice  
to come at "Halfpast Two". There  
seemed to be seats at the second  
call. So I enquired why.

"You must make reservation  
at Oslo" or come last. I apolo-  
gized the waiter that I should  
not at Bergen but he said "No",  
and gave me a ticket for  
Third sitting. Is this again  
the Norwegian sense of decorum  
or their tiny eating car. It can  
not be a-la-carte price attractions  
for orders may not be placed for

line patches of green to the  
crest, like nests of mud-

Bergen. The quaintest town I have seen. The old town  
is narrow-streeted and tall. The houses seem  
compressed upward - 5 and even 6 storeys. Windows  
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the windward, upturned toward the sun.

The residences cling to the mountain wall  
far upward. Is this Hongkong? An outlook



the former while table-d'hôte" is served.

Some similar challenge was given me in Swedish yesterday but was not enforced.

I went the third time at call. Soup, roast pork, vegetables, milk, raspberries and cream - all in abundance for 3.05 Kr. Now a fourth call has sounded.

Women are cooks. The service is rough and ready. You compete with crates in the aisle by the galley, but the food is worth it.

Ål. Via Bergen 264.02 Km.

Via Oslo 228.21 Km.

a resort? We are ascending a long river basin. Crofts or farms cover the hillsides like patches of green to the crest, like nests of mud-

manap.

Bergen. The quaintest town I have seen. The old town is narrow-streeted and tall. The houses seem compressed upward - 5 and even 6 storeys. Windows are in the tiled roofs and gables are in the windows, upturned toward the sun.

The residences cling to the mountain wall far upward. Is this Hong Kong? An outlook



swallows on a bluff.  
Of course the Norwegians must  
love their land to hug it so  
tightly. It is in reality  
another Switzerland. How  
topographically different from  
Denmark.

Seilo. In broadening Summit  
Valley, the cradle of the glacier  
that bore out the gorge and  
basin below.

To summit three snow sheds  
and snow fences. Above  
timberline or near it. A  
great storage lake. Snow  
fences at its edge to hold-  
back snow on the ice in  
winter. Willows, tundra,  
birch scrub. Greenland  
landscape. a few houses

Stops many. a spur train:

Bergen. The quaintest town I have seen. The old town  
is narrow-streeted and tall. The houses seem  
compressed upward - 5 and even 6 storeys. Windows  
are in the tiled roofs and gables are in  
the windows upturned toward the sun.

The residences cling to the mountain wall  
far upward. Is this Hongkong? An outlook



of snow.

Snow fences 15 or more feet high. Shallow tunnels ending in snowsheds. Lone buildings for employees, hires, and skiers. An elevated precipitation gage with ripper screen. It looks tiny.

The storm is breaking but still touch the summit ridges.

Greenland "colombats or tufts" such as we saw at Lake Louise. The soil is wet with rain. Ribbon cascades run down the rocky slopes. Everywhere marks of glacial polishing. Old lines of crumbling snowsheds are

But 2 1/2 hrs get to travel.  
Stops many a spur train!

Bergen. The quaintest town I have seen. The old town is narrow-streeted and tall. The houses seem compressed upward - 5 and even 6 storeys. Windows are in the tiled roofs and gables are in the windows, upturned toward the sun.

The residences cling to the mountain wall far upward. Is this Hong Kong? An outlook



<sup>young</sup>  
Snow drifts are more  
numerous.

Finse. Here the answer to the  
continuing pools and lakes.  
The summit ridge is  
encased in glaciers that  
still bear considerable  
patches of last winter's  
snow.

a Murk landscape and  
air is here. A helper  
engine is being coupled on.

The chunds have broken  
away. Our Scottish Highlander  
has been given us. What  
payment shall we render?

Soon over the base  
summit with snow  
drifts around us and

The birches are here, at <sup>appearing</sup>

But 2 1/2 hrs get to travel.  
Stops many. a spur train!

Bergen. The quaintest town I have seen. The old town  
is narrow-streeted and tall. The houses seem  
compressed upward - 5 and even 6 storeys. Windows  
are in the tiled roofs and gables are in  
the wind ~~is~~ upturned toward the sun.

The residences cling to the mountain wall  
far upward. Is this Hong Kong? An outlook



spreading with the waters  
dominated toward Bergen.  
This is Summit Station but  
with more snowfields.  
The S.P. must yield the  
palm.

Mydel. (966.8m.) Bluffs  
measured 2000ft higher.  
Cascades down ~~their~~ their  
faces. a slit-line gorge  
near by. Then a long  
tunnel and down into  
kindlier landscape.  
The pines are reappearing  
but the snow and glaciers,  
dotted summits still  
appear prominently in the  
distance. The waters below  
are green. The summer  
mountain-resorts are appearing.  
The birches are here, at

But 2 1/2 hrs get to travel.  
Stops many a spur train:

Bergen. The quaintest town I have seen. The old town  
is narrow-streeted and tall. The houses seem  
compressed upward - 5 and even 6 storeys. Windows  
are in the tiled roofs and gables are in  
the windows, upturned toward the sun.

The residences cling to the mountain wall  
far upward. Is this Hong Kong? An outlook



Mjølffjell.  
at <sup>Reimsgrind</sup> ~~Voss~~, the forests are  
continuous and the hay grows  
normally where foothold is found.  
Only 129.57 Km. to Bergen:

Ygre. We seem finally to be  
out of the gorges. Valley farms  
are becoming extensive.  
This should be called a  
tunnel railroad. Why was  
it built? For tourists  
or freight? Or to unite  
the country together? At  
least the ship will traverse  
no tunnels. (106.7 m. Stations)

Voss. 7:10 p.m. 99 km to Bergen.  
But 2 1/2 hrs get to travel.  
Stops many. a spur train!

Bergen. The quaintest town I have seen. The old town  
is narrow-streeted and tall. The houses seem  
compressed upward - 5 and even 6 storeys. Windows  
are in the tiled roofs and gables are in  
the wind ~~is~~ upturned toward the sun.

The residences cling to the mountain wall  
far upward. Is this Hong Kong? An outlook



"Frische Fische aus Norwegen"  
Fresh fish from Lamsvik for  
export? Only the freight car  
and electric coach.

Tranquil lanes regress,  
Dalagan. If only we did  
not pitfall so precipitately  
into cliffs, but we ~~could~~  
would require a ferry to  
traverse these 400 meter  
lanes. We pass often these  
portals like a street  
between skyscraper mountains  
and now ripe cherries on  
the trees.

after today's experience I  
am sure that a railway

Bergen. The quaintest town I have seen. The old town  
is narrow-streeted and tall. The houses seem  
compressed upward - 5 and even 6 storeys. Windows  
are in the tiled roofs and balconies are in  
the wind ~~is~~ upturned toward the sun.

The residences cling to the mountain wall  
far upward. Is this Hongkong? An outlook



could be built in Greenland  
but it would be too high  
& price in mutilated beauty  
to pay. Only a corpse could  
remain indifferent here.  
The boat, the sled and  
the open trail for me.

Villas, fishing boats.  
We are on a fiord.  
The sea is near, the  
setting sun illumines the  
gates.

Bergen. The quaintest town I have seen. The old town  
is narrow-streeted and tall. The houses seem  
compressed upward - 5 and even 6 storeys. Windows  
are in the tiled roofs and gables are in  
the windward, upturned toward the sun.

The residences cling to the mountain wall  
far upward. Is this Hong Kong? An outlook



still farther up is reached by a cable road. I wondered how the residences were supported until I realized that the slope was a series of ledgewise terraces - again as in Greenland - affording opportunity for <sup>gentle</sup> ascending roads. Fjords led to the heart of the town.

The streets furnished 1 1/2 way traffic; likewise the sidewalks. A fat man would be thrust out over the curb. Stone tiles on edge furnished an enduring pavement but lame ankles and sore feet. The stones are as smooth as the rock on the hillsides. Man has <sup>worn</sup> smoothed the first, ice has worn the other. How many generations have been here?

Mail Out. Secretary Diment has requested the final copy of the Program, evidently for printing. This will save time for us and arrange our program into related groups, not shown in Diment's first printing. Several topics are being added - one unsolicited and assigned by Diment to us. So this task is over. Sending with it request that next mail be sent to Prague in care of President Smetana.

Receipts sent home. A bunch of them, but the amounts are surprisingly small. Fares are Third Class. I can travel all day for \$5.00 or less.



The trip from Bergen to Narvik (Saturday night to Wednesday)  
is costing only Kroner ( ) for the ride and a bed,  
Meals on ship will not exceed 2 Kroner each.  
My highest cost for a hotel room was last night - 4.50 Kr.  
(\$1.20) and no tax or service charge was added. I had  
expected a 3 Kr.-room but the single rooms were all  
taken. The cost of going to North Cape will be nearly  
the time consumed and my schedule is tight. One  
week and one month to London.

Disappointment and Surprises. at Stockholm I had  
missed Director Stettinman, Dr. Sandstrom, and  
Mr. Angstrom but seen the more essential Dr. Melin.  
at Oslo I had lost both Prof. Werenskiold and  
Dr. Hesselberg and Jacob Haal, of course, but received  
hopeful news of them.

at Bergen, I found that Dr. Sverdrup had left last  
Sunday for America. I had missed him by a  
week as I had Lange Koch, but in his stead  
I found Dr. H. Mosby ("the small") who had been  
a member of Prof. Ahlmann's Expedition in 1931  
and whose brother ("the great") was now collaborating  
with Commander Smith on his book on the Labrador Sea.  
He was attracted at once by the Program and  
gave me suggestions of researchers. "Norway was  
decidedly interested in stream-flow forecasting."

Note with names & addresses for  
Dr. O. Davik and Dr. Knud Faegri  
in folder 1



Note about  
Dr. Thomas  
in folder #2

Mr. Teng (pronounced ting), a Chinese student at Glasgow  
was present and offered the name of Dr. Thomas,  
Geography Department of Glasgow University, was an  
English scientist who was studying lag  
in runoff in various media. "He  
had found a lag of one-half year in clay".

At tea, mention was made of  
Professor Ahlman. "He was home. Had  
made a great discovery in Iceland. At  
least someone on the Iceland steamer  
had been called 'doctor'. However, he must  
inevitably have called at the Institut on  
his way to Stockholm. But his mother-  
in-law lived in Bergen. He would  
enquire from her". The enthusiastic greeting  
given on the phone showed that he had  
arrived and was even in Bergen. I was  
to be sent to him.

Vacations. Vacations and week-ends  
seem to prevail even in Bergen. "It is  
a sea climate" explained Mossby, "so we  
seek the mountains — and a change  
of course". To me from the desert, the  
change from humid, cool coast to humid,  
cool mountains did not seem sufficient.



Both were equally attractive to me. But of course I am having continual change. Director Bjerknes, founder of the cult of the Polar-Front Theory, was consequently also away on his week-end. As I <sup>was</sup> entering the taxi, he appeared gladly returning for a foreign appointment. Young, possibly forty, with an upturned face and swinging hair that denotes vision and enthusiasm. Bjerknes and Sverdrup are Norway's giants in science, as were Nansen and Amundsen in exploration.

Professor Ahlmann and Mrs Ahlmann came from gate to receive me. They had been waiting in the garden for my tardy arrival. Young both - thirty-five or younger - and the mother a pal of "Hans" and his guests from the mid-world. Her arms surrounded us all but she laughingly withdrew when we started to talk shop. A wealthy home - almost a villa.

"The Iceland trip had been very dangerous because of the storms. Two observers would remain until October. ... 4000 mm. of water fall in rain and snow during



the year on Vatnajökull, Iceland's icecap.  
On the crest there is a season of accumulation  
followed by ablation. On the edge accumulation  
and ablation are occurring at the same time.  
He had dug thru new snow into firn  
and thence into glacial ice and had  
discovered the process of change. His earlier  
→ theory was wrong. He would write a  
preliminary report for the meeting of the  
Commission of Snow at Edinburgh.

He would be unable to come himself. The  
university opened Sep. 1 and he would be  
unable to be absent after Sep. 10. The  
university authorities would not permit it.  
Too bad, for he had an invitation to ride  
over on a scientist's boat.

Sverdrup should remain Chairman of  
the Norwegian Group even during his  
absence in America. He heartily approved  
of Hesselberg and Haal particularly.

He had met Sandstrom (he said with a  
smile) at Reykjavik in his small boat.  
Sandstrom wanted to be at Bergen by the  
end of the month. (Evidently he hesitates at  
his theory of the Gulf Stream).

\* He was planning to have one of his students work up  
the results of the Vassdrags- og Elektrisitetsundersøkelser  
at Oslo and make a map or chart of them.

\*



He had not met Dabrowski, but the various countries were backing at too many Commissions to whose support they are asked to contribute.

I must stand "fair" to the Commission of Glaciers, but it must ultimately be absorbed by the Commission of Snow and Ice. 'It must be smashed'. He had refused to join it. It was too limited. The fellows would work for its annulment.

There was feeling between Lutschy and Mercanton. Mercanton had forced Lutschy from the Meteorological Service and was trying to drive him from the Technical High School. Lutschy was wholly admirable. He was delighted when I told him that I was nominating Lutschy for Second Vice President and preferred to be my own Secretary, and thus a President-manager.

Yes, Paulcke was a very difficult man. He was hard even on the young German Scientists. He could hardly believe that he was so old.

Regarding publication, he fully approved of the American method of planographing.



at least a page report of each paper should be published. He approved also of an Annual Report containing an annotated bibliography of the year's publications and regional reports of progress.

He would mail his report on *Vatnajökull* Studies by Aug. 25 to Paris.

Russia was peculiar. The scientists plan but the government decides. He had been an exchange professor in Leningrad and had made full arrangements for the Russian to lecture at Stockholm. But the Russian never came. The government has told of the paucity of the Western peoples and fears the effect of the West upon its younger men, who might refuse to return. However, Somailovich could come. He was a big man and an ardent supporter.

He was delighted with the pictures in Seligman's book and the microphotographs by Seligman. He had been Seligman's guest. Seligman must be wealthy. What did I think of his book? I thought it standard for many years. His face fell, but I explained that it was for *Ski-Men*. Yes,



his experience had been wholly confined to the Alps. He also was not a trained scientist, but he appreciated of him for his work in organizing the British Group mainly from Oxford and Cambridge men.

Lauge Koch also knew little about glaciers and was hated in Iceland (he must have meant Greenland) as well as in Denmark. But I explained that I wanted him for his general knowledge of Greenland.

~~Knut~~ Wegener and Hans Sorge could not be left in the same room. Knud Wegener charges Sorge with Alfred Wegener's death, for he sent word that Eismitte must be abandoned if more supplies were not brought in. No man could return in November as Wegener attempted. The Koch-Wegener Expedition thru West Greenland achieved greater success than any other.

Would I see Laeune at Cambridge?

Would his international plan of an expedition to Greenland succeed? He probably never could return to Germany." Thus we talked.

Mr. Teng had meanwhile called and we all had tea. Two teas and no Monday meal.



Today, James and tree-rings were mentioned. I had planned to visit the "vare-man" at Bergen. He was at Stockholm. I had misunderstood or forgotten Stone's details. → Ahlmann immediately recalled Stone with pleasure and desired me to convey his regards. The "vare-man" was now nearly 80 but his daughter was trying to establish parallels between European cycles and American by tree-rings.

The tea party was in doubt of its success.

The Mother heartily approved of my giving Dr. Paulcke and all others their chance.

In dramatic way she held her hands at different levels indicating the medium and the high, each assured of his merited place. We all hated war and injustice.

Mrs Ahlman noted how Iceland, where the Norwegian language should have remained relatively pure, was not understandable and only by intuition or obvious situation could her guide understand her needs. Much influx of foreign words had made the confusion worse.

There were auto roads in the west,

Bergen also dry in summer like Denmark in June. Wells dry. Dependence upon wells only. Denmark etc dry in June. Depend on rain only.



Yes, tobacco was a drawback on expeditions. They had a clever Icelandic who took snuff. But when the snuff got out, the Icelanders fled for more.

but because of shifting streams, bridges were impossible in the east. The Iceland fumes, however, were fine.

Expeditioning was not comfortable for the natives knew of dress-occasions in the South and wanted the expeditioners to dress for social occasions. Only once - and then only at the women's wedding - had the men dress European at Holstensborg.

→ Thus passed the afternoon. My host bygone learned that I was to take the "Midnatsol" and wrote directions on my ticket for the taximan.

They may come to America some day to be my guests.

Four-o'clock Closing. I had left Oslo too early and was now too late at Bergen to obtain an English Guide Book for Norway or certain views I saw in a window. I must depend wholly on a map. Some post cards of Norway and stamps were fortunately purchased. One of "North Cape".

Possibly Thea would live the crowning glory of her native land, but I should place its twilight first.

→ To redeem my loss, I am taking the address of some things I might have had:



Kr. Madsen  
Bokhandel  
Tyskebyggen  
Bergen, Norway.

1. ~~Two~~ Colored Views - about 1 meter long.

① "Lofoten" ② "Olderand".

Reproductions from paintings. In the upper part of the show window.

2. Photos of Norway in a Set. 25 for 1 Kr.

3. "This is Norway"  
"An Illustrated Handbook".

4. "Norway" by S.C. Hammer ~~for~~ 5.50 Kr.

Along the Norway Coast.

Our "Midnatsol" is really touring the islands of Norway from Bergen to Kirkenes, on the far northeastern end of Norway. <sup>The voyage</sup> It is to and far beyond the North Cape and will last from Saturday night until next Friday. Shall I stop at Narvik or Tromsø or Hammerfest or go to the end of the voyage and take a bus to the railway in Sweden. Can I someday combine a trip to Iceland with one to North Cape? Time is now the only problem. I must set my "Farthest North" in Norway.

Oslo Retreating. The Scandinavians are punctual. At 7 evening we started.



The view of Arlo is progressive and attends us several miles. The old quaint city has spread up the hills and like fingers out every shore of the spreading fiord. A tramway and highway extends to the farthest stretch. We are soon among islands. This is Greenland except that the lonely houses are more numerous but the rocks are as desolate. There are more fishingboats and the hungry gulls are pumping vigorously to keep up. At Malinø they glided, here they flap. Can they glide only on a strong wind? Here the wind is light.

There is a crescent moon. I think of Ruth and Tahoe.

Nearing Open Sea. A long island with tall light house. Fishing boats few. Points of bursting surf against rocks inland. The ship rolls slightly.

at 9:30 a mellow sunset - pastel on heliotrope clouds.

Beacons, lighthouses projecting at every vantage point like columns against the sky.

Threading the islands, half-curves around beacons. One narrow spot. A fast



Semi-hidden reefs near the fairway are marked by a metal vase. When the tide is high the vase still protrudes.

blinker on one side, a slow blinker on the other. The fast one looks like a "spanner". Mountain ranges ahead in pearl-grey veils. Slopes snow-spotted. This is truly the Greenland coast except for the trimmings.

At 10:30 yet light. Bay scouts are preparing to sleep on the upper deck. They are improvising a tent. I should have my sleeping bag.

Another gauntlet. A tiny opening between two lights. "Steer straight and midway". Our boat draws 12 ft. The islands are now dark silhouettes below lighter sky.

An English woman finds Third Class always good - to Iceland too. Could not go to America, for when fare has been paid no money would be left for expenses there.

She prefers Scandinavia. No self-seeking there. Contented on little and eager to share. In this lies the way to peace.

Berths. As good as the Tree House and as awkward. Five of us men over one side of the propeller, five women evidently over the other half. Three bunks rise like



terraces up the curve of the hull. Mine is the highest. You climb over the lower bunk to get into your ~~bin~~ bin. But I have the porthole and more of the hull to stack my suitcases on. The <sup>W.C.</sup> HERREN are on deck behind iron, clanking iron doors.

When the propeller turns the room throbs like the inside of a bass drum. I josh the Steward to stop the propeller while I sleep.

Nightmare. Someone with hard heels kept tramping on the floor. The electric light had been left turned-on. A hammer was pounding the head of my bed. I must protest. Then silence, and I awake.

Twilight. Only at night is the vision revealed. Tahoe again in blues penetrated with harbor lights. The boat has paused at Florö. Wearily but happily I thrust my head from the porthole and sense rather than see the vision. The iron Casemate is harsh but I tarry.

Again the boat rests - at Mälöy (note the music marks on the vowels). A soft morn. Fishing boats along the



wharves. One drawn up like a Viking ship.  
Bald, smoothed mountains and sugar  
loaves. The open sea, a far ship on the  
horizon. Rolling once more, a long sleep.

July 26-

Again in a landlocked sound, as  
smooth as glass and bathed with soft,  
dispensed light.

at 10:30 Alesund, three inlets dotted  
with houses and green on their lower  
slopes. A Gibraltar overlooks the town and  
beams on its height a pavilion reached by  
zigzag stairs. Norway is a land of outlooks.  
a church beams a bulbous dome with spires.

The "Dronning Maud" is at the quay.  
Another boat is coming in - a Russian  
from the Baltic bound very light for the  
White Sea. She is sending out repeated  
calls for a pilot to guide her to  
anchorage. She loads unskempt and the  
water-line is so high that the propeller  
tip shows. A red flag (all red except the  
emblem in the corner). Still another boat  
is coming and both the Dronning Maud  
and the Midnatsol are ringing warning  
bells for departure. We have been here



two hours. It's an active spot. There are fishing boats and lighters and the smell of fish.

A ship's officer has painstakingly marked the route on my map and circled our stopping places. We can now plan ahead and anticipate. He urges me to traverse the Lofoten Islands to Tromsø and traverse the "Grand Gorge" of the Norwegian coast. I feel now impelled to do so.

The larger tourist ships send their passengers thru this gorge in motorboats. Our boat of 16 ft. draft and waistline to match makes the Gorge a section of its route.

We pass a ship laden to the stack with lumber from the White Sea. It looks topheavy but a Norwegian declares that such ships sail the North Sea even to England → Molde. I hadn't expected such a spot.

A wooded basin like Tahoe, summer-resort hotels, a modern pier of concrete timber protected, a regatta basin, trim yachts sailing by, a trail up the ridge with flagstaff and resting spots enroute. An Atlantic City in Southern environment. But far across

Woods on islands north of Ålesund (Ally-sond)



the strait were three great fiords leading like the rays of a jagged star into a wild snow strewn range with peaks 1500 meters above the waters. Cloud wreaths made them even more impressive and one high saddle was a Titan's own, if so symmetrical a saddle could be ridden.

As we turned back from this magic inlet a great steamer silent and trim passed us going it. It was the Veendam of Rotterdam in the Tourist Service. It was so large that it merely nosed to the pier, <sup>probably to swing around.</sup> This must have been one of the display points on its cruise.

Kristiansund. Summer resorts or fishing towns do not matter to our ship for <sup>it</sup> bears the "POST" flag at its stern and senses all alive.

A run along the open coast capped in spots with clouds led to a Sunkertoppen village secreted in a natural haven but revealed by a church spire projecting above.



a cantilever bridge, <sup>in construction</sup> over the gorge at the far end of the harbor will make the two sides of the harbor one. Near our landing is a column supporting a sea-mine and dedicated to Norwegians who had lost their lives in 1914-18.

Then the North Sea Barrage? It is expressive even if not idealistic.

Warehouses line the water front. One firm caught and held my attention:

Hoem and Hoel. Pronounce it as "Home and Hale", except that the "e" should be slightly prolonged. Try it? You'll soon succeed.

Here my English table-mate went on shore bearing a rucksack and suit case and weather coat. We tried to learn the name of the cheapest hotel. "Her money is getting low".

She goes by Trondheim or such to Trondheim and back to Bergen. We wished me luck

on my longer venture. About 200 leave-takers or mishers at the quay.

From 8 to 9:30 - The steamer is maintaining an accurate schedule and yet grants broad leisure. The sign at the gangway announces our departure at 9:30 and by 9:35 we are under way up a broad



sailed toward Trondheim, fully twelve hours distant.

A Last Journey. When did the casket come on? It is oaken, with metal feet and rests in front of an cabin beneath a canvas. Gladiolas or other impressive flowers in abundance protrude. To Trondheim? On the forward deck under a protection of canvas and in its crate is riding a horse proudly munching from its bale of hay. Its first journey doubtless, <sup>a mountain climber, they tell me, so feels the urge.</sup> Thus life.

At the Rail. If only I could speak the language. I was watching a long island pass by and the silhouettes against the sky, when a young man spoke to me in Norwegian but without a pause shifted to English. "I was looking at the largest island in Norway.

Some of the light houses had not yet been lighted <sup>this summer</sup> because of the long Northern day.

Yes, it was also twilight in the winter after the earth was covered with snow, but the nights in the autumn were dark.

There were bleak spots and mild in North Norway. Both Molde and Trondjém



had forests. Some tourist ships come north only to Trondjem and return.

The cruising ships go farther.

To see the mountains the coast trip is good, but to understand the people the inland trip from Oslo to Trondjem should be taken. Trondjem is Norway's Liverpool.

It is the shipping point for fish to Sweden.

The foreign port is Bergen for England, and Spain. Narvik is the shipping port for Swedish iron.

Yes, Hammerfest is the most northerly town on earth. Even Narvik is above the Arctic Circle. Some English on board are going to Kirkenes and will take bus all the way to Helsingfors. Four days probably with stops at night.

After all I could have sailed from Bergen Sunday — by a Dutch boat to Trondjem and then have caught a postboat from Trondjem direct to Narvik. But this fine point could easily escape the Travel Bureau. However, I'll put my time savings into the extra trip thru the Lofoten islands to Tromsø. "You must excuse me," he said in parting.



July 27. Tromsø. We awoke at the pier. The Midnatsol had arrived at 5:30 and was being given a clean up and bath. We lay until 10:30.

Has Been to America. When some persisted in leaving the door open while he was dressing, he remarked: "I don't give a damn." His genial companion who had never been there suddenly burst in English like a Century Plant. It was astounding. He had been attempting to converse with me for two days.

Tromsø is only semi-quaint, but is fairly large. It is 40 min. deep, <sup>at</sup> fast walking and 70 min. long around the corner of the fiord-head. At least it required 20 min. at my best walk to return from the Domekirche to the ship. Hence the Norwegian Kings are crowned. I could have preferred a square-lined massive church near by for such service. It has primitiveness and austerity and a crown over the door. The cathedral is Gothic in preponderating Southern spirit, but the music heard thru the door was worthy of any. A dignified avenue led to the cathedral yard. At its beginning where was the city square and

\* Near the harbor a sea-mine, relic of the war. They say that one night during the war, an English warship stole into the harbor to escape pursuing submarines. Of course under international rules it was detained.



market stood an octagonal column supporting  
a King Arthur Crusader - not a brassy Viking.

The crusader seems to me to represent more nearly  
the people. \*



- a book "Norway on Ten Pounds".

It is quite English  
and Rain. Such is the climate  
in Scandinavia and also  
in Denmark. This morning  
ing, this afternoon the sun is  
the sky is overcast or has <sup>a</sup> dark  
immediately rains.

But not so last June. Then all three  
countries suffered from drought.  
The soil of Fano was white as the sand,  
the crops of Denmark matured too soon,  
and Bergen in the mountains suffered  
badly. Bergen could develop irrigation,  
but the general climate does not require it.  
Our Boy Scouts <sup>camped</sup> on the upper deck left at  
Trondjem. They are from near North Cape  
and were returning from the International  
Boy Scout gathering at Oslo.

Trondjem Fjord seems much like the  
Clyde for width and length. The trees and



market stood an octagonal column supporting  
a King Arthur Crusader - not a branny Viking.  
The crusader seems to me to represent more nearly  
the spirit of the people.\*

Purchased a book "Norway on Ten Pounds"  
by Sydney A. Clark. It is quite English  
Sunshine and Rain. Such is the climate  
or weather in Scandinavia and also  
from my experience in Denmark. This morning  
it was raining, this afternoon the sun is  
shining. If the sky is overcast or has a dark  
cloud, it immediately rains.

But not so last June. Then all three  
countries suffered from drought.

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hillside farms are slowly giving way to the bolder more desolate islands usually fronting the sea.

How Do They Do It? Are captains acrobats? Do they make precision turns at full speed? We no longer need to go to the Inner Passage of Alaska. We drove straight into a cluster of islands that furnished natural harbors for fishing boats and made a hairpin turn at full speed and then a broader reverse turn before straightening out for the open sea. The gate was so narrow that I could have thrown a stone ashore. The beacons seemed all too few. <sup>The turns on the open sea seem better marked.</sup> This may work in the land of the midnight sun, but how in the darkness of winter? The folded strata and broken down faults into clefts made me feel that I was on the Hvalrossen in Greenland waters.

Yet I am assured by one of my Tromsø friends that this route is traveled in winter as in summer except in fog and snow.

Medicine. The first time since Reno.



\* I loaned my steamer rug to a  
traveler who remained all afternoon  
on deck. Beside her coat she had  
only a tiny sweater over her knees.  
A most heavy handkerchief and  
expensive Norwegian accompanied  
the return of the rug.

\*\* It is now explained that  
they may spend only one  
mark extra at each town  
above base maintenance.  
This still doesn't satisfy.

Throat and burnings. But the recovery  
has been prompt. \*

A Little Casket. The big casket is gone.  
In its place a tiny one - and gasoline  
Later a child's tricycle was added.  
barrels and hose. After all, all things

are human, even gas barrels. The baby  
is snug in a steamer rug,  
rosent mind. The tricycle may comfort.

The Open Sea. Not an island beyond.

Too many hanging, listless heads. But we  
were soon among islands again.

Five Germans on board. We don't quite  
mix - I mean the Norwegians. They don't  
seem quite to accept them. The story  
goes that the German tourist are  
permitted to expend a maximum of only  
25 marks. Does that mean daily? It can't  
apply to an entire trip. Probably a canard. \*\*

The Lofoten Trip Arranged. My ticket reads  
Narvik via Svalbaer. We reach Svalbaer  
tomorrow (Tuesday) at 7 p.m. I am to continue  
thru the Lofoten Islands to Trondheim, where  
we arrive Wednesday noon. A bus for  
Narvik connects with the boat. I may lose  
my ticket from Svalbaer to Narvik and  
must pay 13 Kr. on the bus. But I shall



see the finest scenery on the North Cape route. I must trust the future far farther north.

Rörvik. The bottle neck of the voyage? A tiny town, a radio mast for reporting vessels, a church. Fishing boats. Beyond is a hole scarcely two ships wide. At scarcely more than headway we go thru, then quickly full speed again. These ships should be called weasels. At the wharf two ships and we met two more when approaching.

Farther south we passed a whaler scarcely larger than a fishing motorboat. It had a harpoon gun at the bow.

Its game were small whales, like the 12-footer we shot on the Greenland coast.

Silent Traffic. No warning sounds from autos or bicycles are longer permitted in Denmark - Sweden - Norway.


Pedestrians and drivers are expected to keep alert. The results have satisfied. So I was startled when our steamer whistles when entering harbor. In fact, I do not recall hearing the whistle until



tonight at Rörvik. The steamer never whistles  
when passing another.\*  
Why? An artist on board. At the "genial  
stage" <sup>and more on hand.</sup> "Too much." Wants to draw my  
face for 2 Kr. How do I like Norway? "Enough,  
or I wouldn't be here." He drew a fair  
portrait of someone else. He left a  
trail of amused interest. Is "C. K. SPECIAL"  
patent?

Arctic light. It is 10:45 p.m. Yet there  
is good visibility on the sea despite  
the fact that clouds continuous and  
some have settled into the mountains.  
No, the sky is clear overhead. Visibility westward  
extends to the horizon.

July 28 - (Thoughts of Tahoe)

Six in a Room. Not bad when the  
porthole is open except on a baldheaded  
man whose head intercepted the draft  
and the rain. Twice he closed the  
porthole, finally using bath bolts. I then  
preferred to rise early for the only ventilation  
was thru a 6 inch  in the door. Why  
could not the baldman have covered his  
head? One man slept "hard" on a terrace

\* Tuesday morning, the steamer whistled again on entering  
harbor. Evidently to summon officials and coming passengers.



with a rug. A suggestion for Russia.  
At least he did not need to undress.

"Swartisen!" (1599m.). The Ice Cap of Northern  
Norway. It has been a rainy morning.  
Clouds have capped the mountains.  
The rocks and verdure glisten in  
the rain.

I wondered why the steamer heeled  
far over so often. It was not the  
half-gale and surging waters. We  
were making 2 turns to look at the  
Swartisen glaciers, <sup>and thread the islands.</sup> These Norwegian  
vikings have but continued their  
steamers.

\*  
at breakfast we turned sharply  
into a forested fiord with fisher homes,  
hillside hay meadows and farms. Suddenly  
two glaciers ahead framed in fresh green  
and vapor. Below the first a white stream  
entered the fiord thru a forested notch  
where a homestead decked the hillside.

a remarkable harmony of the ice-age  
and the present.

We were in an Emerald Bay in its  
glacier stage and our ship was the "Tahoe",  
following the curve of the shore. At its head



with a rug. A suggestion for Russia.  
At least he did not need to undress.

"Swartisen!" (1599 m.). The Ice Cap of Northern  
Norway. It has been a rainy morning.  
Clouds have capped the mountains.  
The rocks and verdure glisten in  
the rain.

I wondered why the steamer heeled  
far over so often. It was not the  
half-gale and surging waters. We  
were making 2 turns to look at the  
Swartisen glaciers, <sup>and thread the islands,</sup> These Norwegian  
vikings have but continued their  
ancient calling in <sup>steamers.</sup> modern ~~steamers~~.

\*  
at "Frost" (Breakfast) two glaciers  
ahead. framed in fresh green <sup>forests and glades</sup> below  
and vapor above. Houses in <sup>the</sup>  
openings - some <sup>have</sup> meadows -  
~~dotted~~ <sup>at intervals.</sup> the hillsides. A white stream  
entered the fiord thru a forested notch.  
A remarkable harmony of the ice-age  
and the present.

We were in an Emerald Bay in its  
glacier stage and one ship was the "Tahoe",  
following the curve of the shore. At its head



The great ice reached to the mountain tops - deep fissures appeared at the curves. A ~~large~~ abandoned boulder ~~as large as a cabin~~ stood solitary at the beach. A hut with line-turf roof bore its distant company. Rain was falling. Ribbon falls like bits of lace work covered the cliffs.

Now we are in the broad strait once more. High overhead is a Yosemite wall or Böcklin's Isle of Death in a gauze of vapor and cloud-touched. A southbound steamer is passing, sinking its bows to the throat in the waves. The smoke of our ship travels far before us.

Bodö at noon. They seem to pronounce it Buddha. Quite a town protected by a seawall built out into the channel against south winds. The rain continues falling, but at 2 p.m. the mailplane passed at a float in the harbor & mail up and by a series of curves took off southward in the mist. I'd rather see Norway from the sea than the air. The landscape will flatten too much.



Cheaper when you understand. My meals with a large glass of milk added have cost about 6.<sup>20</sup> Kroner a day or about \$1.60. The stewardess is trying to save me money by letting me pay for the meals in one bill.

The rule seems to be that if you take all three meals daily, you can save 30 öre a meal. The passenger may sign a ticket and pay at the close of the voyage. There seems to be no fear of skipping the bill.

So finally this morning she refused payment tho I had signed no ticket and wants me to pay all later. This will decrease my food expense to \$1.38 daily. She took Sunday-Monday computer my orbit.

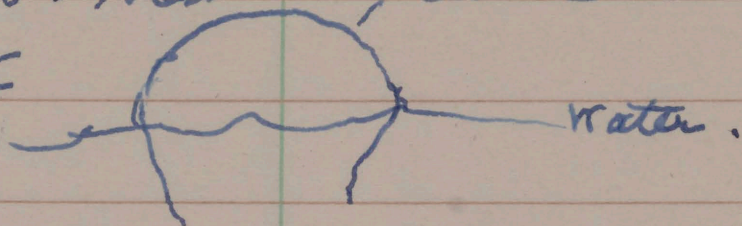
Vestfjorden. We now have a rough stretch of 4 hours across the West Fjord to the Lofoten Islands. Then we enter in. We are anticipating the experience.

The Hans Egede. We must be on her. We are rolling as badly. Why did I fill up on chocolate at Bodö? <sup>Promptly</sup> Traugott.



on the table, passengers on their backs,  
a few more seaworthy on deck.

a Rainbow. Not the bow alone in the  
sky, but the lower ends flatten out  
on the sea and converge toward  
the ship. However, the circle is not  
complete



The colors? I never can separate them  
fully. But orange, yellow, green and blue  
blended, indigo? or is it blue purple?

This roll takes the spirit out of writing,  
Zest has even turned back on itself,  
I'll stop till later. This has become  
rocking chair writing with a full stomach.  
Try it.

lightened. I gave and she  
traded in return,  
gave. Never lightened more  
swiftly and in the face of  
the gale. That's more  
disastrous.

a buoyant ride, and  
exciting and wet. Finally  
refuge in the cabin. One  
falls immediately droopy  
and asleep with his knees  
clamping a table leg to keep  
him from the floor.

Suddenly the engine stopped. Pours  
on either side! But the  
harbor gate received  
us from a crest into  
a quiet harbor. How  
sudden the transition.



Sagaelsen. Three vessels, <sup>entirely</sup>  
immediately behind us  
and then two more. Large  
Traffic at the Arctic Circle  
and a French light cruiser.  
A high range before us  
partly veiled. Here waits  
my steamer for Narvik.  
But the clouds are lifting.  
We sail at 9:30 - My own  
night up.

Out. The Bröy ahead,  
to her bows in ~~front~~  
Need waves for her south.

Black Cairns, narrow buoys  
" on every submerged rock. The  
islets are a labyrinth.

The NRA must have been seeing  
emergency marks here, but only  
these can ships safely venture.

Down in evening. So to bed,

Black  
Cairns  
on the  
islands  
are more  
visible <sup>when</sup>  
against  
the sky

Finnesa



Raftound is a Seylla and  
Charybdis. Rocks on one  
side, a craggy mountain  
mass on the other. But  
emerald green covers the  
mountain face in velvet except  
where knobs and ribs protrude.  
Sheet rain is carried on  
a whistling gust. The  
coast is a line of leaping  
foam. Rocks rise like  
eggs from the waters.

The open sea, then, &  
turn into another fiord  
round shoulders of roset  
gold <sup>tipped with</sup> Tomera and clustering  
spires. The rope veils  
are translucent and at outlines  
and background color appear  
Thus the magic of the <sup>secret</sup> ~~secret~~  
will grow in ~~wooden~~

Black  
caves  
on the  
islands  
are more  
visible against  
the sky

Finnes

Down to Lussery. So to bed.



Then a warning from  
my room mate, Noy. He was  
taking the northern passage  
instead of the southern known  
as Trallfiord. I should  
speak at once to the mate.

So forward to First Class.  
The mate declared the  
weather against it and said  
that Trallfiord was taken  
on the southern trip, but  
that I could look into it  
as we passed by. "He  
hadn't seen me before," he  
said when I assured  
him that I had traveled  
all the way from Bergen  
and was continuing to Finsterne  
merely to see the Lofoten Islands.

Black  
cairns  
on the  
islands  
are more  
visible against  
the sky

Finsterne

Down in evening. So to bed.



I told him that I was  
traveling Third Class because  
I had thousands of miles  
to go, and he heartily  
approved since I was  
traveling alone. He doesn't  
approve of Third Class  
for women yet - American  
women.

I had the promised view.  
He returned to my deck  
to show me. A truly  
narrow gate - a narrow  
canyon in fact that tilted  
apart to form the walls  
of precipitous peaks,  
bearing glaciers in  
their laps. The fiord  
led circuitously through  
the mountain mass.

Down to breakfast. So to bed.

Black  
cairns  
on the  
islands  
are more  
visible against  
the sky.

Finnesa



Our north fiord was  
little less wild. The  
towering peaks stood only  
a little farther remote.  
Braided streams poured  
down the walls. From  
one fall the gusts of  
wind were catching the  
water and throwing it  
upward. One fall was a  
miniature Bridal Veil.

Entire slopes were russet  
gold like Greenland and  
the landscape in general  
was as emerald green  
as I had seen in Ireland.

\* No black slopes here as  
in the low islands  
facing the sea. The  
northern exposure seems

Black  
cairns  
on the  
islands  
are more  
visible against  
the sky

When

Finnes

Down to busking. So to busk,



the most verdant.  
Meadows in spots large  
enough for windrows  
of hanging hay. Ground  
sufficient for a cow or two  
and goats. Water fishing  
beats on the shore.  
Thus the farm and the  
sea together afforded a  
living. One homestead  
looked American in its  
style save for a Norwegian  
Church-chapel with spire,  
seemingly attached to the house.

Thus gradually the  
fiord became more  
domestic but the  
Trollfiord mass still  
towered overhead.

It was now midnight.

Down to breakfast. So to bed.

Black  
cairns  
on the  
islands  
are more  
visible against  
the sky.

Finnes



The details of our map  
were still visible at  
hand's length, but the  
mass of castle towers  
and spires had now  
become a silhouette  
veiled in gray beneath  
the lighter sky still filled  
with speeding clouds.

To right as we looked  
back was a grim bold  
U-shaped gorge leading  
dim and sinister into  
alpine depths. Is this  
the other end of Trollfjord?

Wilden shores lay ahead.  
My night was quickly done.  
Norway with Scotland  
and Greenland has become  
to me a dream.

Down is beseeching. So to bed.

Black  
cairns  
on the  
islands  
are more  
visible against  
the sky.

where

Finnes



July 29. Harstad. Queenstown? 4000 people.

On the slope at the head of its bay.

Three stops in the night. The intercom traffic seemed heavy. The Cabin was full of people imbedded and some on the backs of the wall seats raised as benches. Of course it was daylight but one, especially children, must sleep. On the roof at the first port was "Brux Nordkaps Sapor". What did it mean? At Harstad my chocolate and my friend must have disembarked. I did not see her again. "Ships that pass in the night".

We were both on the upper deck last night. Our baby in the rug too has gone. Was it here? landscape. Sharp peaks this morning with glaciers. A "Dent du Midi" at the end of the lengthening fjord. Purple atmosphere on the slopes as our west. Foliage again. The Scotland fjords with farms and a boat bringing a passenger to the steamer. There is a road winding up the road toward Harvix. "How do you like it?"

Norway can brag.

Singing. Our new passengers brought a picnic spirit. One song was in melody "Johns Brown's Body etc."



shortened a word each verse until  
all that remained was "Tolue (- - -)"  
but the final verse "Phsst - - -".

However, after the equivalent lapse of time  
for singing the entire verse, the chorus  
followed: "Glory, glory, hellalujah - - -".

Prices. I should keep account of rates.  
They are interesting. My Norwegian Kroner  
is still 26 f.

For 15 hrs. extra ride Solvang to Finnes 2.<sup>65</sup> Kr.  
this included the berth.

From Bergen to Harstad 3 1/2 days . 35.<sup>55</sup> Kr.

From Bergen to North Cape . . . 41.<sup>30</sup> "

From Bergen to Kirkenes (farthest north) 45.<sup>00</sup> "

Divide these by 4 and get the dollars.

It is stunning. Meals are only approx. 2.<sup>00</sup> Kr.  
milk included. Here one can wear

the wanderlust out of his bones without  
wrecking his purse. Read Clark's "Norway  
on Ten Pounds". I can expand it to the  
entire length of Norway. "Third Class" is  
the key.

Steamer ticket  
in folder 1

a Wrenched Stomach. It must have  
slipped at the coil yesterday. Sudden  
spills are too straining. Muscles, like  
machinery, have their limits.



Nearing Finnes. Lower lies the country near Oslo. Yet it is far above the Arctic Circle - 3° above. Forests climb halfway up the mountains. Beautiful, wellkept farms and houses. It might be Ireland. It seems shelter - "Nest du Midi" and the coasts to the south are bleaker. a home! hay and crops. The Dunveley Hills.

On Shore. Four to see me to the bus. All my roommates. One had made \$50 a week in America in 1927 as model maker. He has now been in Norway at home six years.

Said another: "Mein Bruder, Wellington". Where? "New Zealand". and earnestly shook my hand. He also waved me Goodbye. It was his nearest tie to that far country. Longing showed in every gesture.

The "Midnatsol" is as pretty as the "Tahoe" as it sails up the waterway leaving me to land-travel once more. My vacation is over. This is "Lech forward", I must head for the "Trossachs".

My 25-Languages Book is of little avail.



It contains not the word yes nor the word bus. Of course "fresh" has not been overlooked. "Third Class" can be compounded.

I must depend upon some understanding bystander. My friends have placed me on the right bus. So I am tranquil at present.

Finsnes to Narvik. This entire trip could be filmed at Janner and Glenbrook in the days of dirt roads provided the shots were made in aspens instead of pines, for the visual distinction between aspen and birch is slight. A touch of Swiss hillsides and Iceland ponies could at times be interpolated to increase accuracy.

Särvisa - Hay on rope trellises, ponies - one each - on hay carts. The road a single track but smooth. The autobus horses at every turn and the road is mostly winding. "Hawk!" Creak of doom to wagons. There are no autos.

The front half of a boat returned in the lat as sleeping quarters for pigs. a good haven for worn out craft.

Yes, and auto. Then ponies with carts of rock for road building; an old man on



a hay cart; and old women with wheelbarrow and milk cans. Then a Ford on a curve. It escaped not so well as the others, and ran its fender on a protruding ledge. Bus stops, all confer. Laughter. Move off. The bridges are filled full by the bus. We carry the mail, so stop everywhere.

Then higher to pine uplands. The pines are small, otherwise Hobart Mills country in appearance. Here is a "Cafe" - a resort country. Two peaks in the background. Lakes. A glacier on one peak. The higher is "Isind" 1490 meters. Not bad so close to the sea. The general aspect is that of New England approaching the White Mountains. The lakes here and the broad river have good banks.

<sup>change buses here.</sup>  
Setermoen. "First filling station", "Standard" and "Eissolube" on the sign. Three or four cars in one and a half hours. Bicycles also and more usual.

There is a camp of boy soldiers in training. To use up my Norwegian stamps, I use my time writing cards home. There was no leisure time at all on the boat. I leave Norway tomorrow.

lunch of milk and 3 pastry only 20 öre or 6 cents.

New bus looks almost Tourist. It has an sliding-back roof, and rests for your heads if you can stand the bumping. yet the price



for the day's trip of 5 hours is only 10 <sup>65</sup> kroner.  
about \$2.75.

The road now climbs into the mountains  
and birches to pass over the ribs between  
fjords. The Narvik fjord is the second  
→ south. Even in the aspens are snow  
fences to guard the highway from drifts.  
Plainly the wind is strong and the snow  
not easily controlled. The drift problem is  
major in the uplands of Scandinavia in  
measuring snow.

But pasture is abundant. Cows, calves,  
goats. They understand the rules of passing  
on the road.

Narvik - Dunes sharp, narrow curves to Narvik  
fjord. Only 6 inches clearance on each side  
of bus on the ferry. The bus is a ferryful.  
50 are each for the passengers. A newly made  
pleasant city before us. A railway line  
ascends the fjord wall. Electric lines  
are entering. The railway is electrified. Iron  
ore from Sweden is behind it all. There  
is a steep skijump high up the slope.

Royal Hotel. A dangerous name but  
really a house-hotel with outlook upon a



garden and fiord. The boy assured me of the price. Room, dinner, long portage cost only 7.98 Kr. or \$2.00. The cost of the room alone without State Tax and Services was 3.00 Kr. The dinner was 2.25 Kr. Will these rates continue beyond Russia?

The <sup>first</sup> train for Abisko, <sup>in Lapland</sup> leaves in the morning at 6. July 30. To Abisko. We climb the side of the fiord steadily. A power line spans it like a suspension bridge. The water is blue-green. The sky is overcast. Cloud strata lie against the mountain faces. A storm is brewing as happened on Mt Washington.

Our fiord has now become a Caledonian Canal until it terminates in a narrow valley.

The elevation steadily increases to 500 meters at the Swedish boundary, then falls toward Abisko, where Lake Tornetrask is only 345 meters high.

The climb to the summit is almost a duplicate of that above Jomner. Rock knobs, tunnels, snow fences, snow sheds, view down upon fiord and near by upon rock pools. Cotton balls appear.



But at Björn fjell 513.<sup>67</sup> M. large  
petaled flowers were set out at the  
base of the station house.

Riksgränsen (the Royal Boundary) appeared  
to be a ski-resort. Here were summit  
→ lakes, snowfences and sheds. An  
anemometer on the roof. Must ask for  
the record. Here may be a power site and  
forecasting. 1541 kilometers to Stockholm —  
a thousand miles!

Vassjåure 514 M is a large brick building:  
hotel, station, power transformer, all  
concentrated in one. It is economical,  
for a snowfence 18 ft. high surrounds  
the building on two sides. Here the  
Norwegian conductor leaves and the  
Swedish takes his place.

Slate shingles seem to be used for  
the roof on section houses. Stone is  
Sweden's staple.

Mountains are now <sup>very</sup> rolling, but all  
have been glaciated. One glacier remnant  
appears.

Then a labyrinth of lakes appears,  
with grass lands and short birch.



This is Greenland in reality.

An Immense Lake! Birch are now 30 feet high. One red clover. Later white clover in abundance. Fire weed in large clusters along the track.

Abisko Tourist Station is merely a hotel upon our lake, and Abisko itself is merely headquarters for railway employees. But Melin's letter indicating Abisko was correct.

The Weather Station was close by in the birch forest on the brow of the hill overlooking the lake. My knock was unheard but Professor Åkerblom's wife saw me wandering in the rain and had the intuition that it was not an early tourist but my expected self. So I was hailed from the window by the Professor himself while in the process of shaving.

"Could I speak German?" "I could understand ein wenig." So he immediately felt at ease. Mrs Åkerblom could handle English quite well but thought that I said that America had a thousand peaks higher than 6000 ft, the height of their mountain in the distance,



when I said that America had such a mountain - Mt Washington - of 6000 ft. She had apparently accepted this Americanism in good faith but fortunately later retracted my supposed statement.

Dr. Melin had at least sent me to a silver, if not a gold, mine. Many were the essential things I learned.

The Swedish Academy of Science had established a Natural Science Station here because of the unusual climatic location. Weather and magnetic observations were being made and Arctic botany was being studied. Thus the Arctic stations in magnetism and botany at Godhavn, Greenland were being repeated eastward in Scandinavia. Both formed links in the circle of stations making observations during the Polar year. Magnetism is Professor Åkerblom's specialty.

He was a member of the Swedish Expedition to East Greenland, where he spent the winter. Mrs Åkerblom is from Southern Sweden but feels that the trees there are too high. Frankly she loves



This northern land of stunted growth,

Most elaborate records of earthquakes are being obtained on three large cylinders of Russian make. Sweden is intensely interesting in the changing elevations of her coast line.

He would like to study the Aurora  
He has already used neighboring stations to determine their heights.  
but needs more aid. Students are received here for research. Several are studying botany.

This was once the chief <sup>weather</sup> station for Northern Sweden. but instruments have now been set up at Riksgränsen because it is slightly higher and mountain stations have become popular again.

The distance between them is only 35 kilometers, yet strangely Abisko is practically the point of lowest precipitation in Sweden (300 mm?) and Riksgränsen the highest. Such is the effect of a coast range on precipitation.

→ What is the precipitation at Narvik? at Iceland 4000 mm (Abisko?).

The barometer today was steadily falling. Therefore, the steady rain seemed natural. However, this afternoon the sun was shining tho tonight the sky is again overcast.



Rain seems even intermittent in Northern Europe. You must even carry your raincoat on your arm. The residents seem to dress in them or in raintight parkas especially when hiking. They seem as essential as handkerchiefs.

→ Snow is measured here merely by a staff. The rain gauge is wide - more than a foot by looks - and has the funnel sunk several inches to avoid the effects of splashing. There is a spout on the can for drawing off the water for measuring. A Nipher screen, open at the bottom and level with the top of the can - is used. The screen has a circular instead of octagonal contour. of straight slope. The top of the can is head-high above the ground.

Also the large instrument shelter is bottomless and painted black inside. A step ladder leads upward into its center.

The precipitation is normally light, the humidity is relatively high, due to the mild temperature and the moisture in



the soil from the winter snow. The drainage also is weak.

He showed me the writings of Axel Hamberg, Professor of Geography, student of snow cover and weather in Swedish Lappland, <sup>a whole degree to the south.</sup> Sixe Lovell at Flagstaff, he

put his life and resources into this work.

Tho a Docent at Stockholm, he became a professor at Uppsala, <sup>He is now dead!</sup> a K nigliche Commission is publishing the results. Professor Axelblom is the only surviving member.

He let me copy the following titles of published works. Perhaps I can obtain them. There are other titles in botany and biology.

Notes "Die Eigenschaften" in Solder 1



→ We must send him our general articles  
on Snow in return.

PROFESSOR FILIP ÅKERBLOM  
Naturvetenskapliga Stationen  
Abisko  
Sweden

The great lake before us was Torneträsk  
easily 4 miles wide and 60 long. A tourist  
boat is at the near Touriststation planned  
originally for skiers and some fishing  
boats are in service. The lake is very  
deep - 150 meters (?). The ice becomes  
over a meter thick at times. Skis  
are used at the Station until April.

Today the lake was framed in cloud  
veils. It possesses the atmospheric and  
color qualities of Tahoe when conditions are  
favorable.

This lake is not used for power.  
The great power installations are farther  
southeast at Porjus on the Lulevatten, but  
provide the power on the Narvik road and  
the great iron mines at Kiruna and



Gallivare, I could go but must rest and write today. So Kiruna, the station of the mountain of iron (a Bingham, Utah) and midway point of Lapps, <sup>near by</sup> has been chosen.

→ A student enthusiast in snow and skiing has given me the following name of a helper for Sweden:

Note with name of "Specialist in Swedish Glaciers" in folder #1

He also classified the native Lapps somewhat:

1. The Tarxisten Lapps are display.
2. The Fishing Lapps who have permanent homes and depend on fishing.
3. The Reindeer Lapps who follow their herds who keep moving in search of food.

They are situated both to the north and the south and are closer to the mountains.

These always live in movable houses of skin.

Professor Axelblom told me that the



Regarding people with rebellious  
Norway, Mrs Axelblom said:  
"The King was unpopular, but can  
live too soon". But one can feel  
assured of the gratitude & posterity.

reindeer are eager for grass and  
when the snow is deep come over his  
fence to forage. Thus the dry moss  
is eaten because it is the only thing  
available. They eat birch stems only  
sparingly.

With the Axelbloms help my schedule  
was arranged: Tonight Kiruna, Tomorrow  
night Uleåborg in Finland. Then a  
daylight ride to Helsingfors, That means  
an idle Sunday, for I can not meet  
Intarvist and Finnish officials until  
Monday, But I want to ride only days  
until I reach Russia.

They helped most with my suitcase,  
for in the confusion at Narvik I  
received no ticket for it. Their word  
at Abisko released the suitcase at the  
baggage office. Anywhere else I might  
have been mistreated.\*

To Kiruna.

Stordalen, next station only 383 M.

Torneträsk 393 M

Rensjön 489 M

Rautas 467 M

Kroavik 463 M.

\* Mrs Axelblom also warned me of the  
danger of being quarantined for smallpox  
in case I planned to return to Sweden from  
Finland. Sweden is becoming nervous.  
Russia will probably not care for small  
pox starts there. I hesitate to be vaccinated.



The country is rolling but is evidently sloping down.

The snowfences are possibly less frequent, at least they are lower.

Now only 8 feet in height. The precipitation is less.

Kiruna. Another new town radiating up a birch hillside from the station, with a neat park under construction and a Sapp-Byzantine church on the crest of the hill. The slanting timbers possibly suggest the ribs of a tent. The upper structure is a variant in gables of the Greek square church. The Campanile also resembles a tent below ingrown into vertical supports of a Byzantine dome.

In the valley before the town is a lake crossed by roads. Rising high on one side is a mountain now built into terraces. Someday the top will be leveled and a later age will come here to wander — and surmise a Titanic Aztec temple with its pyramid peak somehow gone. Here is Sweden's great mountain of nearly pure iron being carried



over the cliffs to Narvik and the sea.  
The one farther east descends more readily to the Gulf of Bothnia and directly south. This scene could belong to Bingham, Utah as readily as to Arctic Lappland. The power stations at Porjus is far underground to avoid ice and cold. A simple device of tunnels, Alaska in pioneer days froze a ceiling over their intake in order to have an ice-free conduit beneath.

Lapps. The natives, not residents.

Then in America, the Indians, not the Americans.

I had been shy of them because of their bright colors and light faces. But both come from themselves, not from the tourists.

The clothing here is sailcloth or ramble for it is warm and fairly dry. Really parkas like the Sunday ones I wore in Greenland, but stripes of red and yellow deck their clothing in profusion. The cap might resemble a Hussar's for its large tassel-like pompon. The wide visor on the cap looks like a jockey's.

Sometimes boots like the Eskimo's to the



ankle or slightly higher. But mainly rubber  
socks - rubber below, leather legs above -  
the women often wore heavy, hiving shoes.  
Most had sashes <sup>-in colors-</sup> at the ankle to bind  
the trousers tightly to the boots. The  
trousers tapered from hip to ankles  
for a closer fit.

In looks and complexion they varied  
from Noah Johnson to J.C. Marr, except  
that there was a slight slant to the eyes -  
the one evidence of Mongolian ancestry. The  
turned up toes of the boots might be another -  
but the Finns have these too. They also  
are said to be Mongolian.

Active, cheerful, prompt at decisions -  
if you don't like their berries. These must  
have been a Burbank development from  
the raspberry. They must be native, for  
the Japps have brought them in back-boxes  
on the train to sell in town. The tang  
is slightly sharper than of raspberries.

I saw no reindeer but only their evidences  
at Abisko. They have gone to the range  
for summer.

Across the hall of my hotel was a Persian  
Professor, but I did not meet him.



## Essential Clothing.

1 change of underclothing and socks.

1 extra cap and a \_\_\_\_\_ in case

the cap is blown away.

Pipes loaded Bunch.

Soap for the Tames do not provide it.

Rubbers, raincoat, anorak, scarf.

A pocket book to carry receipts etc.

My Bank. I now realize what the curve in the back is good for. It's the fit place to hang the wallet around your neck. I tried it on the chest, then on the ribs, then in the hollow of my back. Only I can't keep my eye on it. So it has its glory with the Grand Canyon, the place to throw razor blades.

To Boden. A boy in shorts and pack became my seat mate. He is a Swedish student, working halfdays on the newspaper. He speaks English and lives in Stockholm.

He has traveled To Oslo, by road to Trondheim, then by steamer to Narvik. We can make comparisons

The slope is descending, the trees are growing higher, I am studying snowfaces.



Kalixfors. 367 M. (?) Evidently trail for Sweden's highest mountain.

"KEBNEKAISE. 2123 M. Ö.H. Sveriges Högsta Fjäll."

The willow is about knee high in the lower flats. Birch 8-10 ft. high. Cotton-balls in water spots. Shallow ponds. Semitundra.

The Swedish Hiver: 3 Viking Ships in Oslo. 18 m. or more long. One went to America in 1000. "Yes, one also to Chicago in 1893.

But unfortunately they had no newspaper."

Lappberg. Water bog abundant.

Snow fences now only 6 ft. high but very frequent. No power development here.

Power depends upon topography.

A fair river and full. Joins a large stream at the head of the Gulf of Bothnia. Rivers now appearing - but thin.

Fjällåsen. 507 M.

Haura 537 M. Hills rolling but high. Drainage is better here. White flowers in profusion on tiny streams.

Risböck 482 M. Trees higher, especially pines. Max. diameter 12-18 in.



Jinaälö 448 M. a 12-ft fence even  
in birches on lee of very large meadow.  
However, fences <sup>occur</sup> only occasionally even in  
the open and semi-open flats.

Pines are now medium & large. a  
mountain ash.

Sixtrösk 394 M. a snowfence on shore  
of lake.

Gällivare. One train. a factory. Lake  
with motorboats. The mines do not show.  
Here is the detour to Pajus and the power  
station.

→ Is this the boundary line in snowdrifting?  
Where the pines begin? Or the birch too if  
the birch is of reasonable height?

But in large open flats, there are  
still fences 8 ft. high. Evidently the wind is  
still strong. However, on another flat  
there is no fence.

Now 8-ft. fences on each side of track  
but only for a short space, the flat extends  
for a mile or more.

→ There is also hay - cut only with  
scythes bound to the handle by thongs. Women  
do much of the raking. "Maud Muller"?

Mauritians 354 M. Sawmill site.  
abandoned.



Nattavara\* 321 M. Occasional farms.  
Haylands. No snow fences. Open pines.  
Some birch.\* "Coldest place in Sweden".

Cut-over land, meadows, but no  
snow fences. But the cut-over land is  
→ regrowing. Only two traces so far of  
burning. Wetness prevents. Compare heavy  
snow seasons in Montana.

yes, another snow fence but very short.  
\*\* → Palarciroeln 306 M. Cut-over land, but  
not badly cut. Regrowing.

We are at Halstensborg in latitude  
but the landscape is wholly different,  
except the presence of the cottonball or flax.

Murjex. 241 M.

Lunch for Two - Coffee my only meal this  
morning. I planned a full meal at noon.

The hiker could not eat until Luleå because  
his money was gone. He too had had only  
coffee. So I gave him a Kroner and  
we set out for lunch. He was guide.  
In the diner, he obtained 2 sandwiches,  
2 milks, and 1 egg for 1.<sup>55</sup> Kr. for us  
both and turned in his Kroner toward  
the bill. It felt good but was all I was



The Swedish problem! One chiefly for Melin.  
 (1) To determine the boundary line of drifting  
 in terms of forest cover and mind.  
 (2) To estimate the percentage of swan cover in  
 mountains and forested land. Will not the forest  
 be an index of the mountain? Has Switzer Melin.

The hay bams are tiny and  
 slope in at the bottom  
 probably to protect the  
 walls from rain. It is a custom  
 of North Sweden only.

destined to have until next forenoon.  
Sandträsk 168M. A large state hospital  
 for North Sweden across large lake.  
 Sand beach. Trees have been lumbered.  
 More mountain ash.

Farther on the lumbering is recent.  
 → Boden. One hour to wait. It almost became  
 a day. It would have been except for  
 the interest of a one-armed official and  
 friend. This is one of the reasons I am  
 inevitably an Internationalist.

Autos and buses on rails are normal  
 at Boden, but were merely curiosities to me.  
 They evidently are used to run to the  
 boundary to which only few travel. The  
 Swedish traffic to Finland would be mainly  
 by sea.

I was shown the track and the direction  
 from which my train should come and  
 then placed myself in a position to intercept  
 it. I wrote postcards meanwhile, keeping  
 my eye on the track and a comfortable  
 man spread on a seat. When he finally  
 moved down the platform, I took his  
 seat and hastened my writing. An auto



bus on my track but at the far end of the station was loading.

Suddenly, I was hurriedly snatched from my seat. "I wanted to go to <sup>Haparanda</sup> ~~Tornea~~, did I not?" Luckily he spoke English.

He grabbed part of my baggage and ran - I too explaining that I was looking for a train. We were then 20 minutes late.

I was thrust into the rear compartment with the general baggage, while my friend and I saluted each other - and our bus started for Finland. The "comfortable occupant of the seat" was on board. He was nice - spoke Swedish.

Hereafter, if I see even a tricycle on rails, I shall immediately go on board To Ulsåberg (Finland). The Finns call it "Oulu".

Helsinki 39 M. We are plainly at sea level and on the Baltic plain. The natives call the Baltic the East Sea.

There is a saw mill here of small type. The trees are too small for larger mills. An auto car - 2 seater - is on the siding. I have high respect for it now,

Also I shall not forget the bicycles and boxes hanging from the ceiling of the baggage train - there are many. Also was once such. Also I saw the photographs of Rauhala and Rauhala in the gallery at Stockholm which I had failed to visit.



These are all gas cars. The motorman takes the tickets, a boy unloads the packages.

Here are meadows and the slanting hay barns, and a pony drawing hay on a sled. Haying is a family matter. Life is frugal.

Niemisel 23 M. Marshes, and reeds and pools and waterlilies, all hay here seems mild. The region might be Michigan and Ann Arbor in 1840. Thickets and farms intermingle.

A great river. Stakes to mark the channel for boat traffic. The water of North Sweden is beginning to converge.

Vitrattner. Passed mixed trains south. a skeleton bicycle on rails.

More small streams.

Then firs, pines, sand. The sand seems essential. Then thickets, black soil, drain ditches. Birch and willow grow wet.

Lappträsk 51 M. Broad tundra.

No snow fences. Crossings are rare\*.

We are nearing Sibelius. Buildings are mostly red.

Yes, one fence on the south. Wind strong from the Baltic. A cow! Of course,

\* One missed the crossings because of the bare ground with faint red and yellow. Before I could not understand a Scandinavian picture in an appreciation collection. A boy is haying as his stowed cow one.



why otherwise the hay? For the pony only that pulls the hay sled?

Karungi 28 M. Large town. Wide farm-area.

Lomkärn 28 M. The tundra has been broken into agricultural land, all roots are shallow tho they are thick.

Mattila 12 M. Currants, raspberries, cow. Some willows, fir, birch, - clearings with stumps.

Are imposing towns in the distance.

2 towns. Auto busch. It is Happaxanda.

The Boundary. A 4-span railway bridge, followed by a 3-span bridge. A natural boundary. Motor boats - yes, also a small steamer and a tug boat.

Torneå. The Finns call it Torneå.

Inspection seemed easy until the brief-case (Sally's) was ordered opened. The papers meant arrangement. The inspector clutched them and looked at his superior as a pointer dog may pore at game. Urgently I was queried. Did I speak German? "Ein wenig". Then who was I. Then at the height of my wrath and impressiveness, I uttered:



"I am president of the International Commission of Snow and am visiting Western Europe". He would permit me to harangue no longer and the papers subsided to rise as quickly as they had risen. Query: Why did he take my word for it? Are they afraid of Communists? They had great respect for "learning."

In a Strange Land - I did not understand the Scandinavian languages but found myself at home in their sound. The Finnish (they call it Suomi) grates on my ear and nerves. It seems harsher and the people more crude.

The brakeman tried to aid me by showing me the time table, I thought he was trying to collect more fare. Then I tried to ask him if there were another train to Helsingfors (their name Helsinki). That I wanted to get off the train to sleep at Oulu and go tomorrow. By his watch he showed me that it would take the train a night and a day to go there, but he could not understand about changing trains. Indeed, his book seemed to show only



one train. We both laughed at our predicament. It made us friends. Later the conductor, who spoke German, made the matter clear. There would be two other trains early in the afternoon - at 13 and 16 o'clock - but only the earlier and slower train carried Third Class passengers.

But my 25-Languages Book regained some prestige. A fruit girl accepted a 25-Swedish Öre coin for an orange and a fruit boy showed me a "Mark", which he evidently was receiving for tiny packages of chocolate. My book showed me that I was crossing a gulf in coinage.

The Krone equalled a shilling which equally "two bits". That was easy. But now  $100 \text{ pesuni} = 1 \text{ Markka}$  which equalled only  $\frac{3}{4} \text{ d} = \frac{1}{2} \text{ cents}$ . (at the Bank, I received 2.24). This I finally saved a badly needed night's rest at Oulu, when the landlady offered me a room for 25 Marks. We both laughed at the big number. The German Mark had caused trouble before.

However, I still shudder at a bill



of 49.<sup>50</sup> Markka for a bunch of postcards.

The people are trafficking in low values but this has thrown their numbers high. Bills of 50 and 100 Markka are usual and these are as large <sup>to my eyes</sup> at first as small handbills. Plenty of paper - as overlarge as the Swedish 10 öre silver piece had been tiny. But a 10 Markka bill soon goes for a breakfast.

a friend in need. No "breakfast" served at the hotel. I neglected to say "Coffee" <sup>otherwise I might have had it.</sup> So I wandered uptown looking for signs. "L'ice" looked attractive but it proved to be an indenting parlor with flourishes on the caskets. I had seen them before only on flowers and cake. Some places looked more inviting but I could not look inside. It looked like a non-eating town.

This time my "25 Languages" aided. The compiler must sometime have been hungry as well as thirsty. Café was "kahvila" and Restaurant was "ravintola". I might have known. It sounded and looked so much like raviola. Has Mussolini been here?

If you wanted a Laboratory, you wouldnt be so fortunate. It is Käymälä. But the



Tourist hotels are more considerate. They mark it "OO" or "W.C.". I shudder at going to Estonia. There it is "väljakäigukoht". Pronounce it. The Estonians tried to and invented "V-koha".

Finally, I drifted into an eating-drinking place and held up a Swedish 5 Kroner bill. It did not satisfy. I had no Finnish money. A rough-looking man immediately fastened to me, spoke in German, and offered to trade money, I had to venture. So, as if in the business, he handed me 52 Markka for my 5-Kroner paper, and translated the menu. "No tips ("Trinngeld") required in Finland or expected.

Then I tried a business office next door to cash \$10 Express Order and was carefully directed in German to a nearby bank. The paying clerk was a "whizz". She was keeping the line moving and with a jerk of her head and elbow directed me to go back and try all over again at the Cashier or President himself. He most courteously figured my exchange and gave me a paper for the astounding



sum of 449 Markka in gave me a duplicate "if you will have it". Then down the line again, only to be put one side until I attached my signature. She looked plainly indifferent, even bored. But no customer was kept waiting an instant. If he hesitated, he hand was thrust out of the hole for his paper. At least, she grasped for mine. What a Terror to children she would be as a teacher.

And to think that I tried to do business at this bank with my hat in hand. Others had hung their hats and canes on a rack. I didn't dare lose mine. But finally I threw it on a seat as I traversed that line again. I was becoming too crude.

But Finland, My readjustment has made me overlook my purpose in coming. So I must start again with the border.

The big stream Tornio forming the boundary seemed to repeat itself at each considerable town. Thus the country was appreciably different.

Kemi. a big river more than twice the size of the boundary river, I find that




it bears the name of the town, the name Ravintola is prominent, In the town thru the trees I can see "Touristi Hatelli." I would have dodged it once. I love it better now, for I am hungry. The Baltic! Shipping.

Birch cordwood, piled with  $\Delta \Delta \Delta$  at intervals to help it dry.

Simo. Pretty, parklike station. No figures for distance for Helsingfors and elevation above the sea.

The roofs now seem to overhang much more. Farms very neat. Level country. Wild hay only. Highways. The bars at the crossings are now painted red and black.

Where land is higher, grain and potatoes. The  barn occurs as in North Sweden, a Three Span Bridge. Keivaniemi<sup>town</sup> or probably the Lijoki River. I am ceasing to take names. It is full 22 o'clock.

Soon land higher and ditched. Grain and hay. Broad fields; oats and potatoes. Still another Wide River. Logs in it. Numerous and fairly large.

The train is going south, yet the full



And you hang your doorway on a nail  
by the door. Why bother the clerk - on any  
Thursday?

moon on the horizon is an arc right.  
Oulaborg but I had long since called it Oulu.  
And another large river. A crowd at the  
station.

Neither Swedes nor Finns pester you to  
carry your luggage. Across the station  
square set with adamantine cobble stones  
I found two hotels and took the illuminated  
one. No longer should I emphasize that I  
want a room "ohne Bad". Washbowls and  
pitchers are standard where I seek shelter.  
It's merely Grandmother and Tabac.

August 1. So today after discovering my friend  
in need and a breakfast, I tried the  
station and discovered that there was  
really a sleeping car III Class on the fast  
train to Helsinki, leaving at 16:15 o'clock.

The price was 30 Markka or 66¢. Finland's  
problem seemed simple and I could therefore  
travel at night. I needed the rest and  
chance to write on my Journal.

Oulu was a large town and mostly  
passed my window. I had visited the  
river harbor and saw a steamer.

We are an or close to the Baltic. The



people seem more stolid and heavier than the Swedes. Boots with accandian tops are frequent and some <sup>boots</sup> have upturned toes, typical of the Mongolian or Russian. Some call the Japps Mongolian Gipsys. They have the semi-swagger.

Carts with thills as heavy as timbers seem the only luggage vehicle. Fortunately they possess a pair of heavy springs. There was one tiny drosky and pony, almost as small as a richsha. The two suitcases seemed to crowd the driver and woman passenger out.

Rain still falls here and ceases. It must be the style of Scandinavian and Finnish weather.

To Helsinki. The Finns call themselves Suomi and their capital Helsinki. Only the Swedes use the other names.

Dinner. I planned to eat at leisure on the dining car. Luckily I looked at once while the cars were on the siding. The porter (she is a woman) wared me to the railway Ravintola. My finger to my mouth made her understand my need.



In I hastened and pointed my finger at the train. Only 15 minutes. The cover of a pot was lifted. Pea soup! a dish full. Bread, butter, milk and cakes 8.<sup>25</sup> Markka 18¢. Yesterday's hunger would not be repeated. Plainly the line depends upon station restaurants as in "our good old days".

The Sleeper. In compartments with three shelves for III Klasse and two shelves for II Klasse. You climb up opposite the higher shelves by a ladder fixed on the wall. There is a washbasin and mirror but no place to stand before it, if the middle shelf is up. During the day it is down forming the back of the lower shelf, now become our seat. There are ventilators in the roof and a cloth hood over the lamps to soften its glare during sleep. If you care not to go to bed early, you can stand or sit on a wall seat in the corridor.

The portress insisted on making the beds by 19 o'clock. I preferred to walk the gangplank between cars and sit in the day coach where visibility was better. Fortunately, I had been given a



ticket to the middle shelf which would give me a direct view out the window during the night.

As a roommate I had a Swedish-Finn teacher of Chemistry in a folkschool, who was just returning home by my route from Narvik and the iron mines at Kiruna. He could speak a bit of German and commented on his country.

Suomi. not a station but Finland itself,

Population 3,500,000.

Swedes 400,000.

"Paavo Nurmi had been at Berlin, but Tokyo, not Helsinki, had been given the honor of giving the Olympic Games in 1940."

Why, I asked. "He did not know."

Finland seemed to be a repetition of Sweden, but here drain ditches seemed universal.

Pines large but scattering. Birch occurs as thickets.

Paavola. Here the Siikkaoki River — a log stream with basin full.

The round sticks — 6 in. diameter — are for manufacturing cellulose. Large piles along the station tracks. Most trees are



this size. All are peeled. Some task.

a gasoline car on the track. Not a bus but a large car. Our engine is a wood-burner. Hence the piles of birch wood?

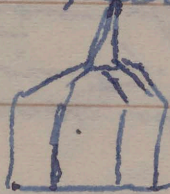
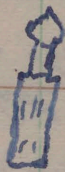
The country might well be a burner of wood.

One stack of hay being built. Usually stored in the tiny barns or piled up against one end.

Oulainen. a large farm. 10 men harvesting grain. Sheaves set in clusters. Drain ditches about 30 ft. apart, a river with diversion wall. Trees being thinned out. Large ones retained. New trees growing below.

The land makes good farms when drained.

Church like one in Kiruna but not so fantastic.



The Kiruna church is Byzantine in spirit, like this. The fantasy may be Lapp.

Ylivieska. Here a fair stream. 10 minutes for refreshments - sitting, standing, speeding. Most took coffee, some tried meat.

The Ravintola was II Klasse and III Klasse.

but the first was not open. I wanted to



see the difference, Possibly only in furnishings.

Daniel Boone country in spots where clearings were being made in the continuous forest. Some, yes many, of the little barns have thatch roof. The thatch is kept in place by stakes and logs.

→ Query: Are the streams due to the abundance of lakes in Finland? The land seems to be level enough to permit lakes to have outlets to the sea. Pockets not so pronounced as in Sweden.

The multiplicity of haybarns shows ownership of small tracts but not corresponding to the tracts made by drainage ditches. The ownership tract is larger.

Rocks appear in places.

Kannus. Another small river. Some logs in it.

Some stones from glacial drift. How deep is the soil? We are on a coastal plain.

Mass! Heather in blossom. Moss thick and soft as tundra. Cotton flags.

Hay staves occasionally. But hay cured mostly on the ground. Less rain than in Sweden?



First mowing machine! Haystacks here too.

Another medium river. Rocks come to the surface in knobs.

Gamla Karleby. 19:40 p.m. "On the Baltic" but the sea not visible, tho sand shows in the cuts.

Tundra and heather.

Farm areas are wide about the towns but thickets lie between.

→ A river with logs. One use for their streams.

Night. We arrive at Helsinki at 8 o'clock. So to bed early to awake early to see if the landscape has changed. We are traveling rapidly southward. The nights are darker than at Narvik. I shall waken at times to look out.

The train is laboring. Evidently the land is ascending. Saxes are seen thru and over the trees.

A glorious dawn - red and gold on a lake. Mass russet gold. Trees in autumn colors. Could my eyes deceive me? The night creates romance.

Could it have been to my tired eyes merely the alternation of the universal red buildings along the railway with <sup>the</sup> green



of the trees.

Then a man standing in a boat fishing.  
Fields with symmetrical drainage ditches.

August 2. At full daylight, the normal landscape of yesterday except that the bed rock has come near and above the surface.

generally as we draw near Helsinki.

Data

My companion gave me the following data: Finland is a land of 16000 lakes.

These lakes are 300-400 meters above the sea.

Jvaskela is 400 meters high. They provide <sup>electric</sup> power. Tampere, thru which we passed in the night, is Finland's Manchester. It is 200 or 300 meters in elevation.

Finland's highest peak is Haltio-tunturi (= "High Peak") in the far northwest (1350 m.), half that of Sweden's. The Finnish Niagara is Imatra in the far southeast near the Russian border, (25-30 m. high).

Only manufacturing there.

Finland is a land of birch, fir and pine and drainable soil; and building stone resembling colored granite. It has power and fisheries. It has wood to burn if power should be insufficient.

→ Could Finland support a larger population by increasing its farm area or will the



pulp industry require the present timber area?  
Is the northern area tillable as at  
Narnvik? What is the difference in climate  
between Norway and Finland?

### The Snow-Ice Problem.

1. Finland has too much water for agriculture. Does it have all it can store for power? Does it have seasons of shortage? Must it forecast winter flow?
2. No difficulty in making accurate snow surveys with few courses. The double windows indicate low temperatures and entire absence of snow fences indicates little drifting of snow.
3. What is the tundra problem? Drainage is one solution. What is the problem of highways?
4. What is the Baltic Problem?
5. Will the study of snow be worthwhile as a scientific problem?

Helsinki - 285,000 people, a tenth of the population of the country. Saarinen and Sibelius live in the suburbs only 13 kilometers distant. "Have I a hotel?" No.  
So the N.M.K.Y. Hospiz at Vuorikatu 17



was commended. "No alcohol". Evidently the  
Y.M.C.A. He drew me a map. Not 300 m  
from the station. Rooms about 30 Markka.

Thus I left him, known to each other as  
teachers - otherwise nameless.

At Home - at the N.M.K.Y. English spoken.

Flags of several nations at the door.

I have a large bay window looking toward  
a park and an easy chair. Running  
water outside the door. 38 Markka. Meals -  
all you can eat 12 Markka. Am I Goldie Locks  
or Pallyanna?

Church Service. at 12 at the great church  
at Suurtorin Startorget - a dome church  
with powerful chimes in a low campanile.  
Architecture classic, the church is square.  
As few and old as at St John the Divine.  
Lutheran service. A younger assistant to  
do the altar service, the mature pastor  
who delivered the sermon from the high  
pulpit. In place of the Venger with crozier  
was an usher who suggested Burke of  
Ross. Burke in precision, yes in looks.  
He must open the door or gate to the altar  
to permit the celebrant to enter and must

Map (hand-drawn) to  
folder 1.



return at the right moment to reopen it  
to permit him to depart. The pastor was  
less attended to the pulpit, but left the  
door open that the vergen might close it.  
And when the sermon was over, he  
returned to stand at easy attention behind  
the pastor to hand him sundry books  
required and then ostentatiously close them.  
I grant that I prefer the venerable vergen  
both at St. John and at Liverpool where the  
act seems spontaneous. I fear that Martin  
Suther was too abrupt.

The assistant closed the service - when  
the congregation rose and the pastor left  
the back door promptly with coat, hat and  
cane. I shall recall the Danish service  
at Copenhagen Fransviche in 1927 with  
the greater pleasure.

The Ateneum. Helsingfors is new. So her  
art is disappointing. Some good work by  
Anders Zorn of Sweden, one good piece by  
Ruysdael. Some early Italian but poor.  
One fair piece by Rembrandt.

One piece of statuary powerful. A father  
and a reef clasping his youngest child to his



sides while waving and screaming for aid. Between his legs a child looking up half smothered with a breaking wave. The mother behind lying and desperately clinging to the reef. The strength and frenzy of manhood, the frailty and desperation of womanhood, the inexperience and uncertainty of childhood blended with belief in a father's power are blended in one tragedy. There is nothing too much.

In Others' Eyes. I misused my butter knife at Melins, was told to take a seat at Oslo when I attempted self-service. This morning I walked into the Matsal (dining room) and served myself like others but was invited in the midst of it to pay before I ate.

Tonight I paid first, tried the cold dishes, found the hot ones, then wound up with fruit soup for desert (which in Scandinavia is plain soup), when the girl brought me some icecream. Will I learn like our pup if the manners are not changed too often?

In Scandinavia it is rare to have desert at all. And in Sweden, they want you to fill



up on cold dishes - self-served from a central table. Then when you can eat no more the waiter brings you a final hot dish. Here you serve yourself to everything - buffet manner - and walk up or back as often as you think of another item. In this it differs from the Cafeteria. The price of the meal varies if at all in the character of the hot dish or extras.

Taxidrivars. There is a line opposite my window. The first car in line takes the call. While waiting the men read papers or sit on the running board together. One was carefully dusting his wheels, another was cleaning his window. One was so patient that I wanted to go down and give him a fare. Only one horse-driven vehicle, among distant trees.

These taxidrivars are proud of their cars,

↳ as is it Finnish cleanliness?

August 3.

Intourist - My first visit must be to Intourist, for I was changing my route into the Soviet and was a week behind time, but our "Y.M.C.A." director made the route easy by a map.

On the way, I noted an inscription

later: I have seen Taxidrivars do this also south of the Baltic.



in Latin on the corner of a building  
to the hero of my student days, Nordenskiöld  
who first sailed northeastward from  
the Atlantic to the Pacific. "The discoverer  
of the Northeast Passage" we called him.  
Amundsen was to traverse the Northwest  
Passage later. The inscription read:

ADOLPHUS · ERICUS · NORDENSKIÖLD

EURASIAE · CIRCUMNAVIGATOR

IN · DOMO · HIC · OLIM · SITA

A · D · MDCCCXXXII · NATUS · EST

"Adolphus Eric Nordenskiöld, circumnavigator  
of Eurasia in the house once located here  
was born 1832."

This location is at the corner of  
Bullovardi and Amaratu Streets opposite  
a large burying ground.

Intendant was just beyond. Here another  
experience in humanity's rise. A colored  
girl was called in to aid me in English.  
African strongly in contour of face but  
perfect in her mastery of English and  
education. She saw at once the import  
of my purpose and was enthusiastic because  
of the "contacts" it would give me to



up an cold dishes - self-served from a central  
understand Europe. She entered as beautifully  
into the art side as well. "There would  
be no difficulty whatever about place of  
entrance or date, for my visa gave me  
until October 1 to make the trip. If I would  
go to the Finland Tourist Bureau, they  
would gladly place me quickly in touch  
with all Finnish scientists I desired to meet."

→ There was an abundance of Intourist  
material on the shelves, especially on  
winter mountaineering but in German.  
She persuaded me to wait until Leningrad  
and obtain these in English. [later: This  
was my one failure. Because of heavy Intourist  
travel, practically all pamphlets had been  
exhausted.]

As a tribute to her and her race I  
shook her hand warmly.

The Finland Tourist Bureau. In some  
ways our Sierra Club, for outdoor  
travel seemed its specialty. Eager indeed  
to aid me and I as well to be aided,  
for it was raining again. For a half-hour  
apparently she phoned and arranged  
my entire schedule at merely the phone.



cost of 1.50 Markka.

"Dr. Witting was on leave from the Oceanographic Institute and Acting Director Grandquist was on vacation, but

Dr. Palmir will come in 10 minutes <sup>of the Hydrological Institute</sup>"

"Director Raunquist is also away on vacation but Mr. Fabricius can probably be seen after 2 o'clock."

"Professor Keränen awaits you at 1 o'clock. Mr. Kachonen is a member of his staff."

Meanwhile I had selected a host of picture cards from their display. I almost feel at times that my expense for cards is outweighing all others.

Ahlmann's Hand - Dr. Palmir was soon present and the happy deliverer of letters sent to Bergen in care of Prof. Sverdrup but not requested in the excitement of finding Ahlmann. Ahlmann had discovered them at the Institute and given them to Dr. Palmir, <sup>then studying there</sup> who might intercept me at Helsingfors. Luckily Dr. Witting was on my Provisional List and I was admitting none.

"Yes, Dr. Witting had resigned to accept

Notes with names of people  
and organizations to folder!



a Bank Directorship but might return.

So keep his name, but add also

→ write

Acting Director G. Grandquist

Thalassological Institute  
Helsinki, Suomi.

He himself had other speciality.

Doctor Kenänen - hand by my hotel was awaiting me at 1. "No, I must take the arm chair. I was his guest." He too like the others could speak English and understood most of what I said. "Yes, yes", would be his quick ejaculation when he failed to comprehend.

He had a keen sense of humor and had my correspondences on the table before us. "Yes, too big program. Altogether too big." So I explained the how and why. "He would accept membership and would also come to Edinburgh. He was Secretary of the Finland Committee in the International Union."

He himself was greatly interested in temperature in snow cover and soil, and had earlier conducted a research at Finland's Geophysical Observatory at Sodankylä in Finnish Lapland.

→ He approved the plan type method of publication.  
→ but Finland is evidently publishing all research papers.

→



and gave me the following three papers.

[See Cover Page Vol. 3.]

→ Mr. Kachonen would prepare a report for Edinburgh on "The Snow Cover and Ice Cover of the Lakes in Finland".

Dr. Ranguist is in far southwestern Finland on a farm and desired to be reached by phone when I arrived, but is too far away. He is much interested and is also Chairman of the Finnish Committee. <sup>Dr. Keranen</sup> He arranged to take me to Fabricius at 2.

Dr. Witting was too big a man for the Thalassological Institute. He had been Finance Minister in the Government and had now been offered 50,000 markka instead of 6,000 in the bank. He was a strong scientist on Sea Ice but had great interest in public life also.

→ But he would nominate a young man Mr. Risto Turva in the Thalassological Institute, who was

iel  
"Don't write him. He would be too busy to answer. Leave him as Chairman for the present."



→ about to publish a book <sup>of unusual merit</sup> on Baltic Ice.

Finnland is fundamentally interested  
→ in snow cover, and frost in the soil  
and in ice on lakes and the Baltic.  
She has fewer interests and problems,  
as has Sweden. The Hydrological Institute  
has made some measurements of  
snow cover. Korhonen has made  
many and is interested in snow as  
a science.

<sup>Boys</sup> Fabricius could speak only German and  
seemed fussed by Keränen's acting as  
interpreter in English. He also had been  
having a fierce conversation on the phone  
long after our arrival. In size and  
bearing he reminded me of Robert Allen.

He gave me some publications, but I  
seemed to be asking for too much - in  
maps on the wall and heavy reports.

"The measurements of snow cover had been  
→ only slight". It was agreed that I should  
write a letter to Director Rengquist containing  
a list of my wants and send it to Dr. Keränen  
for delivery.

Wiring ahead. Our friends of the Baltic

Note "Mr. Risto Furva"  
to folder



na executives. I was left at the Rire  
Buro to lay out my trip thru the lands  
across the Gulf of Finland and was  
urged to send word on ahead to the  
people I desired to meet. I would be more  
certain to find them. Happy advice for my  
schedule would be tight and brief.

A woman whose accent of Tallinn and  
Tartu was delicious attempted to phone  
but Central in Riga did not know the  
Lettish for Marine Department nor could  
we translate our English title in Lettish.  
As a result, we sent a telegram at a  
cost of 189<sup>50</sup> Markka or practically \$2.<sup>00</sup>?

Distances were great even in Europe,  
a Drancher. The heaviest I have experienced  
since leaving home. I might well tarry  
at the Buro for the streets were running  
water and the square and harbor  
looked equally wet.

The Finnish Islands. Finland was a  
land of red granite and knobs  
timber-covered extended well out to sea.  
Dr. Kenanon was not a host by halves  
and his family was on their summer farm

Text of telegram to  
Peter Starke, Aug 3,  
1936 to folder 1

Small box? Only in Finnish Lapland  
among the Finns - not the Finns.  
His family was there, but Kenanon was  
not married.







We were lucky. An island steamer sailed only Monday and Tuesday for its 2-hour voyage. and this was Monday. 10 Markka each for the trip. So we sailed as if on a Tahoe by country houses, and wharves, and under bridges where waters were shallow and reeds lined the shores. Then thru rock gateways where the boat had to be lean and slim in order to get thru. Acrehead and around us was the dense verdure. Islands schooners like the Howissey sailed by thru bays and inlets with utmost tranquility. Signal masts at the wharves could summon us if lowered cables banded the islands together for phone service.

"One of our few passengers was a Jew." There are few Jews in Finland. Possibly 5,000 total (?).

The islands can be used only for summer homes. They are too remote from the city for commuting and might become marooned by ice in the winter.

Having threaded our course, we sped back past the outer islands and light houses to bed.



a slow day.  
August 4 - An extra day here in preparation  
for the trip to our southern Baltic countries.  
I needed it all.

The Reise Büro had a answer for me  
from Stokholm. He was waiting; had called Prof.  
Kolupaila. Please wire time of arrival.

In the early morning (the Post opens at 7:30), I  
had sent air-mail letters to Velner at Tallinn  
and Professor Kinde at Tartu (Dorpat). There  
was no airmail service to the Soviet but  
a letter might possibly be sent thus from  
Tallinn.

So a ticket was built up to Tallinn,  
Tartu, Riga, Leningrad on the following  
schedule, with a schedule for Kaunas  
if I decided to go there. Bless friends  
along the way for their books of schedules.  
Every state has one for seemingly every  
citizen from Kaia in Denmark to the  
Årebloms at Åbisko in Lapland. But  
the Reise Büro has them all. Price  
was 700 / or \$15.<sup>00</sup> until arrival  
at Leningrad on the 8<sup>th</sup>. The sheet became  
my sailing chart for I was in effect a  
navigator on a strange sea.



On our way we passed large operational  
leaving buildings in paved streets.  
An airplane dived overhead. "3 hours from  
Stockholm. Sometimes 2." 8-344136  
2 telegrams to + from Starke, and  
Schedule to folder #

But I enjoyed my last view of the dining room  
of the station. He stole but we did not see leather  
The ribs and metal strong, yet neatful.  
Kjellman says the Swain is but in exterior. He has  
an outside to plan the interior.

Customs. The only annoyance was the  
absence of the customs inspector. I  
preferred to send the satchel forward  
in bond. But when after an hour the  
inspector arrived, he could not transfer  
it thru other states. So a long noon  
wait for someone with power to  
inspect the contents and deliver the parcel  
to me. The only suspicion again was  
toward the receipt blanks. They looked  
like system. Propaganda and money were  
the two things on mind.

<sup>to go</sup>  
To the Beaches. The day seemed spoiled  
but evening renewed confidence. "Where  
should we walk?" said Kenönon. To the  
beaches, he decided, where he and his  
wife often walked for their daily outing  
and exercise.

The beach had been made by bringing sand  
<sup>panes</sup> there and boats and ships were kept away  
from the swimmers by a line of small buoys.  
Adjoining was an immense cemetery with  
church built up into a terrace by a wall  
of rough granite blocks suggesting the effort  
of the Incas. We visited the base on a

air mail  
2 hrs - 3



path that wound over the sea rocks until we could scale the wall, a Finnish icebreaker was spending the summer in a lagoon below.

The cemetery was masterful in its trees and massive, well-proportioned granite monuments, polished to lustre. Here was the tomb of Topelius, writer of children's stories, built by the "women and bairns" of Finland, <sup>'a grateful angel stood alone.'</sup> Also a grim monument encircled by hammers leaning as if for action. Above a great helmet in stone resting upon sword and trappings of one of Finland's warrior generals.

Then rain and train back into the heart of the city. Ticket 83 1/2 pennies or about 2f. The government considered the investment worth while.

→ Finland's Hero. I saw the name Kolehmainen (?) on a building and remarked that it was another gleaming from the Finnish epic Kalevala. Kerönen insisted not. "It was merely Finland's 'greatest hero' the predecessor of Paavo Nurmi, the runner." He smiled grimly at the standard of choice.

Saarijärvi again in the National Museum building. So different from the classical parliament building near by. At the museum entrance was a stone basin "with a sense of humor" I suggested that it should sit in front of the Parliament House.

Tales Kerönen and Jane alive in Irtti. "Johanna. Live to walk with you and live here." But to face the winters dyanthly.

on 2008  
who  
in  
happy  
Will you?  
Nurmi  
Nurmi  
Nurmi  
Nurmi



→ The Baltic Conference. He was glad I was going to Russia but doubted whether the Russians could be depended on for the meeting at Edinburgh. They had failed at Helsingfors.

Dobrowalski had not come. He had been ill. He was in private life, not at the head of the Meteorological Institute as I thought. "He was indeed the poet of ice". Italy also would not be present, <sup>at Edinburgh</sup> according to Seligman's letter.

→ I forgot to ask about the proceedings that Dient wrote had been sent from Helsingfors to Paris for me.

He feared both for my documents and my health in Russia. Third Class would be impossible. Better write on postcards. Inspection could be more rapid. All mail was sent first to Moscow for inspection before delivery.  
→ Please write him how I fared if I ever came out.

→ Acceptances. We had a visit with Kärhonen his assistant in German supplemented by Keränen's comments. Kärhonen has done an unusual amount of work on the snow cover and written many articles.



Notes about Dr. K. Orbonen  
to folder #1  
→

"In early spring the snow cover attains without loss in the north but with some loss in the south". The winters are not bitterly cold, for the southwest wind prevails. He gave me many references to his published works and a paper presented at the Baltic Conference in June.

He gladly accepts membership in the Commission. Kekäinen reported that Turva also accepted. Kochonien will also prepare the report on snow cover for Edinburgh.

→ Thus ended the trip which seemed to have no purpose, for no answer had ever been made to our letters. As I assured them, Finland is the equal of Sweden in the interest it has taken in snow cover and its need for forecasts. Its research work on surface temperatures leads the others in pioneering. Geophysical Observatory at Sodankylä.

Greetings were sent by Kekäinen to Prof. Liakinty and Prof. Niess. He would see me soon at Edinburgh and in five years was coming to America to the International Conference of State Directors of Meteorological Services, <sup>called</sup> at the joint invitation of Mr. Gregg and Mr. Patterson. Thus they would meet in both the United States and Canada. We might see each other then.



August 5. Behind my Schedule? Possibly not, since I am going to Estonia, Latvia and Lithuania now. The date of arrival at Leningrad had been set on my papers of sustenance at Aug. 1 following, I shall now arrive Aug. 8. Only two messes from Warsaw to London.

A Cold. Not cold but sweat at least provocation. Damp weather. My throat. Possibly the aspirin causes the warmth. I'll consult a doctor at Tallinn (Reval) if necessary.

→ "Recommended" Mail. Doctor Keränen has offered to send my Journal. Vol. I to Director Jaten. Owing to tariff inspection of express, we have decided to omit postcards and books and mail it First Class Registered. So the "25 Languages" was invoked by us both and "Recommended" was selected. But I forgot to leave money, 500 Marka approx., for the postage. I ran over later but he had gone after bidding me "Goodbye until Edinburgh." So I left word that I would pay in Edinburgh.

→ Letters were sent to Seligman regarding final copy of Program and probable use of the three languages only by the northern delegates; and to Professor Siakhtunty regarding my



arrival at Leningrad about August 8 and asking a conference with him and Professor Wiese.

Taxi - To the harbor for only 7 Marka or 15¢. The porter to the steamer received 1<sup>50</sup> Marka and gave a salute in return. He had even turned to go without payment tho this was his living.

Upturned Faces, when few, are a study of individuals and fascinate by their variations. Yet similar emotions were behind them: Eagerness, intensity, pleasure. Two sisters offered a study in mouths, a lone girl to her friend on board a study in eager eyes. One tiny child in sailor's waded ashore. A group, led by a buoyant woman, challenged in a collage yell. Bouquets were everywhere. Rainshower drove the wharf to shelter. A woman five stories up down the street waved her towel earnestly. Finnish and German were intermingled.

The Rügen. I even understood. Our boat was today special and faster - a German steamer making triangular trips to Helsinki - Tallinn - Stettin.

Among the Islands. Old fort, old protruding guns, Slicker buoy. Pilot on board



but soon leaps to a broadbeamed boat  
pounding the sea and is landed in the  
lee of a light house where is the outstation  
of pilots.

Out where the snells reach their best.  
Cumulus clouds below the stratus. Sun-streamed  
waters. Lightship with steam up. One  
chain only - Both boats up.

A silver active sea. One ship - Pitching.  
Propellor races. A restful delight if you stay  
in your chair, but some insist on going  
to the rail. Went below for a postcard.

Immediately preferred not to eat tho the  
tomtom was beaten loudly.

Four ships now. More as we draw in-  
shore. The coast a succession of  
indentations - wooded.

(Reval)  
Tallinn, An impressive city in protected  
bay - Factory chimneys. Met by August Verner's  
assistant who identified me by looking over  
the shoulder of the passport official.

Suitcase sent only to Riga. Could not  
be sent further on such a switchback to  
Leningrad. Must recheck it there. Cost of  
baggage check 6 Krona - highest yet

8 Months for a card! Prices are rising.  
The Russian summer intensely interested  
in my long trip. Dismayed to find  
China in distance. Reviews?



Estonian population 1,500,000.  
Tallinn's 180,000. Intrans from 1250 on  
by the Danes and Swedes.

unless in Norway. No free carriage whatever  
in Estonia for Third Class tickets. Possibly none  
for others.

Only 1 hour left of my planned 2 hours  
at Tallinn but I was taken to the Burg  
which towered in the center of the city  
and gave it its being and character. Here  
great medieval buildings, <sup>with a dungeon</sup> and a park <sup>lake</sup> where  
the moat had been - a Ringstrasse as in  
Vienna. On the Burg was the parliament house.  
The old tower is a splendid example of medieval work.

Begin

Uelner met us at the office and went with  
us to the train. "A little English but preferred  
→ German". He was anxious to know about  
the program: "Who is going?" "Who would be there. Money  
was his problem. He feared he could not  
afford it."

→ The engraving problem was the effect  
on runoff caused by freezing of the soil.  
"Nothing might come from his paper, but the  
truth must be sought." Estonia had one  
large river, <sup>the Narva</sup> from a great lake shared  
with the Soviet Republic. "To make proper  
use of snow surveying, the frost-effect must  
first be determined"

Some data he gave me but referred me



"Willing was a splendid scientist. He was Chairman at Helsingfors. Bengtson presided as well as Secretary. He himself had been in attendance."

Sent regards to Starke. Was a fine host. Assisted in paying both porter and taxi. "Dobromaleni" - a fact of ice, but Velten does not seem to favor the Conguere idea.

Pink ticket to folder 1

for verification of Professor Kenda at Tartu.

Long term <sup>mean</sup> precip. 560 mm.

Snow far less than half of this. - under 180 mm.

Mean temp. +5.5° Celsius.

Snow lasts from Dec. to March, but melts at times.

Average depth March 1 - 30 cm. Density 35%.

Narva River from Lake Peipus (?) Area 3600 sq. kms.

River Basin area 57000 sq. kms. One

half of this in Russia. Runoff 410 cu. m. per sec.

Other streams are smaller. Area as great as

10,000 sq. kms

Area of Estonia 47,000<sup>sq.</sup> kms.

Both agreed that the snow cover might deliver  $\frac{2}{3}$  net in runoff, while the rain would furnish only  $\frac{1}{3}$ . But we all approved of settling the question of the frost factor.

Prof. Shaffernak of Wien did not seem to Velten to be primarily interested in frost in soils. He had seen no publications by him.

To Tartu (Dorpat) As Kalupaila said later, one needs to superimpose an old map upon the new or vice versa to determine where you are going. Racial rebirth is obliterating



names everywhere.


The countries on the south of the Gulf of Finland seem mainly continuations of the countries north. And the Estonians and possibly Lithuanians are kindred races with the Finns.

I had no map. Consequently my locations are indefinite except that they lie on lines between the towns where I stopped.

Aegridu - Fair town. Pulp wood? More rolling now. Tiny farms more frequent.


a mountain ash. The country more like Indiana. Some drainage ditches but rare. Cattle. Woman driving wagon of manure. a wooden bow over horse's neck.


An impressive farm this, but tundra or peat and pine near by.

Country level. Peat being dug. Hay on roof-like fences . Birches in scrub growth where given a chance to come back. In Helsingfors' park the mature birch was as large as ours at home - 18 in. diameter. Lagedi. Suggestion of snow fences. Forest -  $\frac{1}{10}$  of area. Some stones of Burg in Tallinn. Reeds in ponds. Grain (oats also), potatoes.



→ hay, cabbages. No drainage.

Ground looks damp. Stone fences. Rail fences also as in Sweden , always with rails on a slant.

Country rolls slightly. A roof on a haystack  in place of the harrus. Later became frequent.

3 1/2 ft. snow fences stacked at spots in panels. Fences look stoney. Barley.

Living hedges of pine along east side of track with snow fences at the holes. Possibly 1/10 of the track so protected. Hedges and fences together possibly 1/10. But the pines the beheaded refused to grow limbs near the ground.

Pine forest 50 ft. tall. A bit of thatch.

Railway Crossing Houses numbered. Is this the reason for the persistent red color in Finland? Later found not always to be at crossings.

→ Snow Fences.

1. Only where there are cuts.
2. Only where the land is open i.e. not protected by forests.
3. Forests need not be high or thick.
4. Live hedges very frequently. Fences at the holes. Hedges of trimmed pines. esp. beheaded. About 8 ft high.

Strength of wind or depth of snow the major factor?



ditches in one spot. Much pulpwood  
Redja. Brown fuel and locomotives,  
Coal, peat(?), wood(?). Later Starke told me  
that it was oil-shale, usable but 60% ash.

Lakes very scanty tho reedy. A mowing machine.  
Fields as extensive as in Michigan or Ohio.  
We are nearing Tartu. Some winding  
drainage ditches.

The Estonian speech! How well the natives  
have mastered it.

Tartu (Dorpat). "60000". I had thought 10000.

Courtesy unseeking, Prof. Kirde had come  
early to the train. In large crowd he had  
missed me and went at once to the  
Meteorological Observatory at the University to wait  
for me. Meantime, thru the phone book  
a station telegraph official had obtained the  
phone number of the University Secretary and  
thus learned the house number. The Kirdes  
had no phone. I had meager Estonian  
cash but an alert old man decided that  
was amply sufficient and arranged details  
with a taxi boy. The taxi boy rang the  
doorbell.

"Maar Muller". To the door came a  
"Directions to locate Prof. Kirde" in folder 1



woman in bare brass feet with work dress. She was hesitant. "Prof. Kinde had been nervous (with expectation) and had gone to the train early. Perhaps he would soon be back. Finally she invited me in." Professor Kinde had not planned to bring me here. The house was torn up and being painted. He had built it himself. She brought me a chair from a stack in another room and we sat — I on the chair, she on the window sill enjoying the garden and the humor of it all.

Her English was <sup>very happy</sup> pleasing. "She had lived on a farm near Tallinn and been educated there but preferred Tartu. She had recently returned from vacation on the farm because her son wanted to swim and the river was at Tartu. Prof. Kinde may have stopped to chat or gone to a coffee house — or possibly to the Observatory." Thus 2 or 4 hours vanished.

Finally she decided to go with me on a search and had dressed for the street, when a quiet little figure entered — with disappointment deeply marked in his face,



"This was pitiful," he said (he meant "a pity":  
How slight the difference). He could not entertain  
me in his house. He could see no humor  
in the assumption that he had so easily  
forgot me as to go to a coffee house.  
"It was pitiful."

Some set out after I had persuaded  
Miss Kinde to accompany. She was too good  
a gal to lose. I would have missed her  
entirely if I had not made this blunder of  
coming to the home rather than the Observatory.

Spacious was the trip, yet precise based  
on the watch and my train departure.

¶ We climbed the "mountain" along winding  
paths thru continuous park to the fortress  
and ruins of a great medieval church on  
its top. <sup>It had been shot to pieces in 1780(?)</sup> The rear of the ruins had been  
repaired into the University library. Near  
by was a large dormitory of earlier times  
that had been diverted to office and  
lecture rooms.

→ Here was the Estonian Central Weather  
Bureau under Prof. Kinde's charge.  
a large library. Two weather maps daily.  
Rainfall maps in color. Will gladly



exchange publications. Was a student of Alfred Wegener's at Hamburg.

Is studying climate. The continental climate is giving way to the maritime at present. Will soon publish results.

→ Gladly accepts membership on the Commission.

"Wants to stay in". Can not afford to come to Edinburgh. Heartily approves of Kelvin's project on effect of frost on runoff. It will not require much apparatus or expense. Will share in it. Has already taken temperature in soils for some years.

→ A view in the night from the rooftop over the spreading city. Then a descent into the old town under memorial bridges made in 1913 in honor of 300 years of Russian occupation. Then the Great War!

The university was old and had been continuous except for a lapse of a century in 1800(?). No nearer view, "There isn't time".

"We must have tea". So before a large play house in the garden by moonlight with beautiful music. I have heard so little this summer. Taxis seem to be handy and I am the guest.

We arrived at the station as the train

will purchase Seligson's book on Snow.



Starks or Kalupaila told me that Kurde had adopted his name, which means Northern Wind, from his love of meteorology.

pulled in. But he knew my program of fireweed stand and sleeping car ticket and kept me moving. "No time. We must hasten". So no receipt. They stayed by to visit - he earnest, she exhilarating, a splendid helpmate for an overserious professor. He had chosen his countrygirl wisely and she had shared his interests. A lucky, happy visit.

The Schlafwagen, the "International" seemed run down. The porter, loaded as the price was \$3.00. "Too high," said Prof. Kurde. "Cheaper on Estonian car."

August 6

Frontier. The porter tried to save me by taking my ticket and passport, but money now entered into the inspection.

Latvian. The official was kindly and apologetic. "How much money on hand?" Not Travelers Cheques but bank paper, currency, etc.

He was surprised when he learned that I was on my way to Leningrad. However, my immediate destination was Riga.

Latvia. Good fields, rolling like Michigan. White, <sup>dry?</sup> moss and purple heather. Sand underneath. Pines. Clean below. Some wood or timber at tracks.

Snowboards piled up before forest. No more, fields being made from the forest.



Paved roads here.

[ Presidential Address should contain:

Story of each country. The combined experience and effort becomes the fabric of the Commission - with specialities in Ice, Frost in Sail, etc.

Aim: Standards the same, methods

[ the same, benefits for all.

A very large lake. Bus going one way.

Snow boards. Where there are snowboards there is also usually a teepee-like pile of long stakes, evidently to hold the boards up like fenceposts.

Riga. Starke (Stak-Klukh) and Kolupaila were at the station to meet me. Starke was massive with heavy drooping mustache. Kolupaila looked debonair French. He had come all the way from Kaunas to meet me.

They had argued that I must be young because such unusual energy must be by a young man. They will not believe that I am 67, nor will I. Somehow my European colleagues consider me a "Superman".



Starke is methodical and prompt.  
There is latent power in him. No wonder  
that the little country of Latvia has become  
the guiding center of the Baltic States.

First to breakfast. Then about the city.  
Peter the Great conquered Riga for its harbor  
- 16 kms of river mouth - and built a  
palace to look down on the river. The  
river harbor is 16 kms from the sea and  
21 feet deep. A pontoon bridge rebuilt solidly  
of iron pontoons - a survival of the war -  
and an "Island Bridge" with movable spans  
cross the river.

No ice flood in 60? years because of icebreakers  
in river below town. Kamas, however, has  
recently suffered severely. Power installation  
15? kms above Riga is broad and has a  
fall of 15? meters. This will serve as an  
additional flood barricade. Oil shale now  
being used in locomotives. "When power development  
is accomplished, there should be a law against  
the importation of coal. This would save  
money to the country, for practically all  
coal is imported."



Baltic Conference. Starke desires an invitation from Prof. Chapman to attend the International Union. He will come but belongs to a non-member country. The Baltic Conference considers the interest of the Baltic States too narrow for a Committee of Snow. All apparently are willing to join.

No dependence on the attendance of the Russians, <sup>tho they sent a large program of papers.</sup> No, Lisakhrutsky was Secretary only for the meeting at Leningrad. Dr. Witting was president at Helsingfors and Dr. Renquist was secretary. Renquist did well indeed. There will be other officers for Berlin.

The Baltic plan includes a curator for each country. But we desire the double plan of a chairman and aiding committee for each.

The date of the Baltic Conference has been set two years hence to avoid meeting in the same year as the International Union.

Commission of Snow. "The Commission of Snow and Ice by fact, not theory is under Hydrology. Dobronal'sky was not present at Helsingfors, <sup>because of long illness.</sup>"

as part of the agenda should be included the following:  
"Ice in Seas". Thermite is not powerful enough.  
<sup>i.e. Starke</sup>  
He approves of exchange of publications; snow maps;



forecasting floods. With this should be included  
→ Ice jams on Rivers and their avoidance; also  
avoidance of Frazil Ice at Power Stations,  
where it was a menace to power wheels.

"Jobrowski is not in charge of meteorology  
→ in Poland and has little weight. Is very enthusiastic  
if not a poet. Zubrigiri is a fine man,  
but Alfred Pando is most effective."

Lunch. "Alcohol?" "Could not do my work."  
Agreed. "Kieranow also does not approve  
of women's smoking."

Old Town. Should be a museum. Old fortress.  
Immense churches. Clock. Color. Copper

overlay used much as in Denmark.

Wagons drawn Russian fashion by collar lashed to wooden bar on wheels.  
Soldier Field. Summer garden with Opferstein.  
Flowers. "Freiheit". Massive reliefs. Heroes as  
of Middle Ages, on horse. Painful, modern  
but recognizable.

Market - a tiny town in itself "the city's  
stomach". By railroad, canal, and river.

Wholesale to retail - carcasses of beef to meat stalls.

University created from a technical high school.


→ Kaunas <sup>(Kovno)</sup>, Kalupails had traveled all  
night to meet me. Bad feeling between  
Lithuania and Poland over Vilna and  
district and boundary closed. He feared



4  
that I would try to make Warsaw thru  
Kaukas. and learning of the blockade  
would turn back from Riga. He had  
arrived only a half hour before I had.  
"Would I not go back with him?" I replied:  
"I wanted to see Kolupaila rather than Kaukas  
but he has deserved it." So we took train at 2 p.m.

Kolupaila is Lithuanian - Polish. Was  
a teacher at Moscow. Served under  
Dobrowski and Liachwitzky. He speaks all  
languages except English. This he understands  
eight-tenths but finds it hard to speak.  
So we spoke German. Starke spoke English.

Land. Only minor drainage necessary.  
Broad fields. Grain now in shock. Hay and  
potatoes. Red clover left standing in patches  
for bees. Soil better in east. A cold summer.

Pine + beech, birch.  
alluvial soil - deep - Glacial.  
Some 

*Beech*

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MEMO

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Will I not go back with him?  
"Wanted to see Kolupaila  
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Kaukas but he


same method  
calling. So



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Pine + beech, birch.  
alluvial soil - deep - Glacial.  
Some   
residue from river beds as  
in Sweden.

Less hand cutting. More  
machines. Thatch. Red tile  
old. Giving way.

Snow ~~boards~~ fences.  
occasionally on ry.

Hill of crosses. from  
Uz - christliche Zeit. 400  
auffingel.

Roofs on hay stacks,

Railways not direct,  
but parallel for military  
purposes by Russians!  
Double but reduced to  
one because of need of



forecasting floods. But this should be avoided

rails for single track even.

Long stops but precise. There is a Lithuanian? saying "Better lose a minute than arrive in Heaven a minute early."

We are traveling Second Class in an old Russian car turned over in settlement of war claims. It is "bequem" but still not roomy. Like an old mansion or mortuary parlor. The Representative of the Pope to Lithuania had taken the compartment first in hope of traveling alone. He now sits with fingers in his ears trying to read a book against our interminable German conversation. Later he withdrew and I saw him hanging at the railings of the corridor window in the cool evening breeze.

Kaluþaila's Writings. They are many. One on Memelstrom is <sup>a</sup> very detailed and complete treatise on the main stream of Lithuania.

→ "Can a paper on Runoff Beneath the Ice be published in America? It was written for the Lisbon meeting. I suggested

1. Eng. News-Record
2. Amer. Geophysical Union Proceedings.
- \* 3. International Commission of Snow and Ice  
On present program "By title". Then publish with others.



Boundary. Gold and money. Report necessary. "But the country is better because of it". He had been awarressed four times in coming to Riga for me.

Feels nearly an exile. Can send letters to Poland only thru Stank. Attended a Congress in Poland and was active - but not as the representative of his country.

He is seeking a Government hydrographic office but probably without success. However, at the University he has two very heavy teaching days but in return has five days free for writing. So he is contented. He pays his own travel, but travels much.

Interpreters' Jokes. born at international meetings.

1. One interpreter when asked to interpret into Russian said to the speaker "Do it yourself, you can do better". And he previously had.

2. One speaker learned his speech in the language of the country acting as patron. Remarked the chairman, a native of the patron country "I didn't realize that our languages were so much alike. I could almost understand it myself."



America. "Will America be difficult to travel  
there?" He is visiting the great dams and  
will make the complete circuit. His  
quotations are Rooms \$3<sup>00</sup> and with meals  
\$5<sup>00</sup>. He was familiar with air sleeping  
cars, but was interested in "Air Conditioning"  
and was quite contented. He doubts my venture  
in Third Class in Russia.

Lithuania is almost entirely agricultural.  
Saw mills. a pulp mill by a Swedish  
monopoly. Prices too high for peasants.  
Some woods unured and unusable.

Home. in the suburbs of Kaunas. Told  
the story of the "Greenland Christmas". Then  
sleep. Nine hours of heavy sleep. My cold was  
heavy.

August 7. Remain? First their Guest Book.

Then music from Berlin and Warsaw.

Three girls - home raised. Delicately invited  
to remain longer. Such good German.

"Cold. I wanted rest, and I'd like to  
'am besten hier'. But calendar will  
face me inexorably."

A Perfect and Precise Guide. Trouble was  
that you had too little time to think it all out  
and absorb. An impeccable guide may become



an insubus

Lines of fortification from  
i. Russian Lap. Fortresses of  
First Class.

Cobble roads. Baby carriage  
on one. + baby in it "Rattle his  
bones over the stones".

Auto taxi - very many droskys.  
Wagons by one horse. Breast  
tugs. Very fast by Russian  
collar + yoke.

Market by river - Hay, veg, fella,  
pattens, harness, shoes - - -

No ruins. All rebuilt. Guerrilla  
warfare here.

University. Young. New buildings. The elevation  
was planned. The tower and 7 other descent  
(spiral, open) stairs for pendulum, falling bodies  
experiments.

In the Hydrological laboratory were measuring

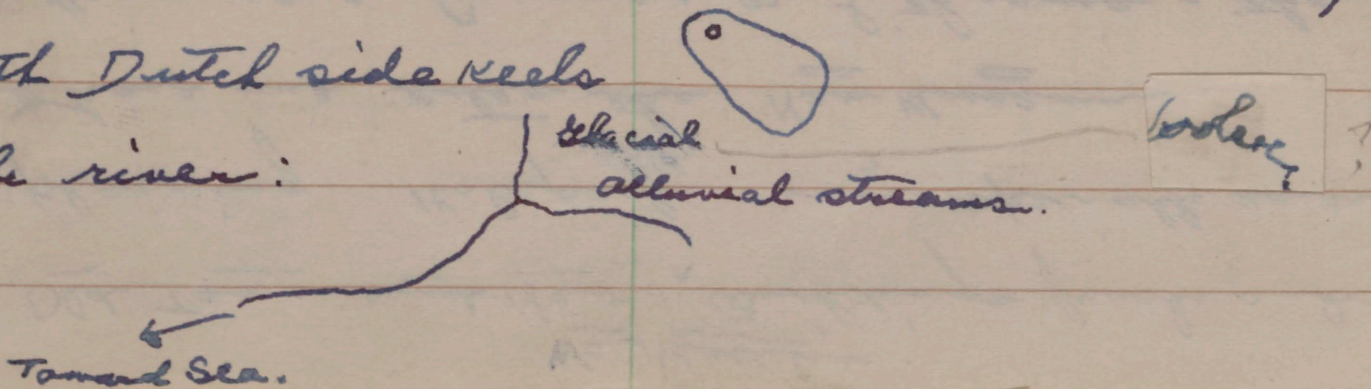
devices of all kinds American too.  
"One professor - on the road ahead of us - comes in auto"

→ Kolopaula is interested in forecasting floods. The  
river (Kamnetstrom) has flooded Kaunas badly.  
An ice jam did it.

On the river below is a concrete erosion wall.

Long narrow steamers - sidewheelers. Barges  
with Dutch side keels

The river:



Lithuanian originator of triangulation  
method in Europe (?)



Old Town and New <sup>War Museum</sup> Buildings fresh and pleasing. Kolupaila was specially eager to have me enter the War Museum.

Here were Crosses of Lithuania - the evolution and the dialect were legion. at their base the tomb of the unknown soldier and the inscription

RENDE  
QUOD  
DEBES.

"Pay what you owe".

A tiny modern Hercules sending a rock from which gushes water.

Too early to enter the building, but Kolupaila started things moving. Saw a hunchback can run. He is all legs. Because I was from America, I was permitted to enter

Here in a special room were "The Fallen Heroes" sent on a flight from America to Lithuania by American Lithuanians. Here was a map of their long flight and their wrecked plane as it had fallen on the edge of home.

The entire spirit of the Memorial was "Freiheit". There can be no doubt of the <sup>Country and the</sup> craving of the liberated European states for liberty. They feel the menace of self-seeking nations and have



7  
 their army. "Must do their best. Abyssinia left to its fate. And Hitler? Scientists most interested of all. Pilsudski the taker of Vilna from Lithuania for Poland was Lithuanian born. Such the anomaly; Exchange Divergence. "2 Klasse Riga to Kaunas much less than 3 Klasse Kaunas to Riga". Kolupaila, I think, prefers second class. He dresses that way.

I had to show my passport to cash an Express Cheque. Kolupaila had paid all my expenses from Riga. Ticket to Kaunas 22.85? (I've forgotten the name of the coin). He figured out the entire account and told me to accept it. I had to accept. The minutes

59.20 / 10.00 = 16.6  
 59.20 / 5.92 = 10.00  
 40.800  
 35.220  
 5.580 = 5.97  
 42.800  
 1.00 = 16.74 (Toll)  
 1.00 = 14.54? (Toll)

of meeting.  
 → He would like letters to Director, U.S.G.S.,



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 figured out the entire account and told me  
 to accept it. I had to accept. The minutes  
 were too few and I seemed too dumb in  
 contrast to his quick assurance and smiling  
 insistence. I still felt that he was giving  
 me the edge. Here is the slip:

13.05 } Lats  
 9.50 }  
 -----  
 22.55 Lats  
 x 1.35  
 -----  
 30.50 Lit  
 17.70  
 -----  
 48.20 Lit.

10\$ = 59.20  
 11. - Lit

2nd class Riga to Kaunas 2.54  
 3rd Class Kaunas to Riga 2.96

[Over]



particularly Chief of Water Resources Branch,  
I suggested Montrose W. Hayes, Floods, U.S.W.B.,  
Sampald & Volpel and John C. Stevens, Portland  
James E. Jones, Los Angeles Aqueduct.  
He might perhaps go to Canada.

As we left the taxi I gave at Kolupaila's  
whisper 2 Lists. The driver tipped his hat  
in return.

Starke - Kolupaila. Starke is Clyde, Kolupaila  
is almost tall French. Quick, detailed, precise.  
"Scant times - but always time <sup>enough</sup> to eat".

Evelyn with long braids came with us  
this morning. She eats honey on cottage  
cheese. So did it. "It was a Swedish but  
not German custom". But she did.

She has learned to say the English "Goodbye".

Railways were originally military and  
double track. Now one track has been  
used to repair the other. Originally there  
was only one train daily, now there  
are three.

The Klasse compartments crowded today.  
I was greatly interested in a little child  
and mother who got off soon at a small  
town.



8  
Sea murr in the sky over Memel.

Riga is on meridian with Kaunas but Kaunas' time is 1 hour later. So Riga 7 am, Kaunas 8 am. Should be the reverse (?). The difference is political and not topographical.

Memoranda. The following addresses were given me of professors at Kiev and Leningrad.

"Know practically all personally even Pardi. Please bear greetings. Good to visit Russia and push a bit".

Lithuania somewhat larger than Latvia. Double windows here too. So cold.

Is rain persistent?

Again Riga and Stakle.

Stakle waiting at the train. Aided me thru much confusion regarding baggage rooms and baggage. In baggage room a woman's trunk was being carefully searched for communistic literature because she had several paperbound works of fiction.

Stakle did not desire an office, but was glad to advise me.

1. The North is assured. But get energetic men for vicepresidents: "Sannilovitch, Litsch, Sverdrup. Dobrowalov has failed. Also his book on Snow is pure compilation. He has done no research in it."



2. "Alfred Rondo has more drive than Lubrigyari"

3. "Find out why the Russians did not come to Helsingfors. Try to learn the inside of the difficulty."

4. Disent interested regarding second offer of Baltic conference publications. Where are mine?

The English Trade Group had not gone to a seaside resort over Sunday. They needed one day for recovery from so much eating and drinking. He had shown them the harbor as planned and had obtained a booklet on Latvia for me from the set specially published for the Trade Group.

"Leningrad" Note  
in folder 1

Stankle paid all my bills and made me retain the repayment for food at the Boarding. I had no Russian money and there was no eating car on the train. I must care for myself. Thus waving, he merged in the crowd as the train pulled out.

A Rival Invention. Yes, to the "Reversible Goggles" of McEwan, Greenland. Both toilet seats ever open, ever flying up. Can sit only when you make a wedge of yourself between the two lids. No paper.

Snow hedges and panels. Night.