At 8:30 found no life and made a position shall not rely but had to see water. Bridge inefficient at covered hydroxyl measuring across placed English.
The will of Miss Kate Lee Harman, daughter of Archer Harman, railroad builder, disposes of an estate of $506,193, mainly to Mrs. Mary Wertheimer of Mulford, Pa., her father’s widow, whom her parent cut off in his will.
Sandkey Light N.W. by W. 1/2 W.
about 15 miles in 170 fms.

Place of occurrence.
At 8.30 found in 110 fms
off Jacobs - + make
East #1. - Position sand
key light NW by NW key
down. The
wireless burned hard to see
up at nine. Dregs
overthrown + inefficent
as Dreg but covered
with heavy hydrogen.

Sphene, measuring
3½ feet across +
some Splendid
Astonishing -
Great Strong
Alex D.

Same position (110 yrs) - Sue

Considered here.

Feels healthy, good, run leggy,

Very leggy - after a short

time decide to take no

chances + start her up.

Up at 10. Great quantity

of term cases. Very

table.

Some free (some) - heavy

ceremonies. One from

sea anchor.
Jordal in 120 fl. C.

It's hard to determine,
but let it go at that.

Serve away at 10:00
up at 11:00. Bag beef clear
of marble bones. 2 tsp. of
Brandy. 1 pound Scapa.

A perfect meal
problem. A best of
make:

- A bewildering
array of restraints
one of our best having
less. Shiny soap

The.
Handed 4

Ceb 11 300  Erie it

Insect with home
Dund and not as good
as others - Antlers
Great plenty.
Have 5
at 17 1/2 - 11 8 1/4

Heavy creek pebbles
form banks. Many
small things - pine
feathers, feathers +
leaves of several
kinds.
Havelo.

Out of sight of everything — 135 feet.

Leave out while home coffee. Turn lamps off up. Start up at 2:00. breakfast perfect. Rock nearly all gone.

Tree of hands a rubble.

And no ride. But fumes stuff.

— H. Hume

Oct 23
Fog of the Foul's
beginning
March, 1912
11.30. Bemini Island been sighted - approaching we are met first off Louisiana by a broad load of pilots who board + take possession of us - charging $10 for pilot fee.
April 1902.

The Continental was commissioned about April first at Annapolis after having been laid up in the winter at the Navy Yard. The engine was found to be in bad condition and the driving mechanism taken off the entire engine.

Captain Diamond took command with Levi Senate, mate and cook.

Leaves Annapolis about Apr. 3 and proceeds South making port

at Norfolk, Pensacola, Charleston,

Florida Line, Liverpool, and William

arriving about May 16th. To await

arrival of party for Bahama trip.

June 13th - Monday.

Clapp and J. B. H. arrive at

3 A.M. and go aboard. The story is

spent shopping. Hot and steaming no

wind. Simpson reports around noon.

We ready by night to pull out.
Thursday, May 14th.

Left Pugno Palm alone at 5.30 a.m. and proceeded on through the night.

Getting up early in Biscaya Bay, we have seen the nearer coast in the moonlight very fine, gently E. E. wind. We have seen the course E. by N. 1/2 S. judging our speed would be about 7 knots toward the shore + the distance to Rimini about 42 leagues, and the average distance of the trip of the canoe from 2 1/2 to 3 knots. The prospects are fair & very fine covering the crew is Sidney, Beunard (skippers) and Beni Druide (mate). Clapp, C.T. Simpson & J.R. We took our course about 6 1/2 a.m.


9.30 Fine, very few clouds.

Many flying birds & various ships.

10.30 Still very fine, smooth sea.

11.30 - Begin to look out for land ahead. Perfect day.

10.40 The trees on Mount Rimini in plain sight. The head from the spot we believe to be the entrance between the islands to the harbor.

Just before reaching the spot a sail boat with many ladies comes along side and the crowd aboard are being piloted. This is our first of the marine school and friends in a lovely little harbor of perfectly clear water full of fish. The island (North B.) is covered with coconut trees, little houses + lemon bushes native white and black. The population come out in all kinds of small craft and climb aboard. One has something to see & learn to be most interested in our beautiful shipmates (chosen-men), ships boats, blue work, fish, community etc. The appears to be very poor and hungry for.
truly. The Island contains many trees called the "Governor" trees, abounding in black clothes and looking very bold and uncomfortable. The goats were always kept perfectly thoroughly. This seems a very sound and it seems to be a very nice sort.

Clapp & Simpson go ashore in a native dress - bird & fish in the boat. We find the beach rocky and quiet, with the Pacific tide up. The specimens are sufficiently fine. Polygonia, Potamotrygon and Carcharias, the Tetraodon etc. A few bower brush are near the shore. After returning around we are off in the boat to the South Island where we enjoy a fine day the hours of collecting two beautiful species of tentaculum and Carcharias which appears to be different from the one on the West Island. These three species live in at least 6,000 feet.
Wednesday May 15, 12.

All up at 4.20 and prepared to go dropping. The gear is overhauled carefully and we put out after "breakfast with a native" cook aboard who signs upon picking up free of charge. The conclusion probably bringing him in about 10 o'clock yesterday.

We proceed to a point off the little island at the north end of V. Riamini and return with the Tannier returning to 90 furlongs. The first attempt gets us badly hung up on the rocky bottom and requires much maneuvering to extricate ourselves. The hood is a complete failure. We then sound and have in 20, 35, 48, 72 for all being water depths but the 20 for our bottom being up a tight roll of coral sand having but little life.

The apparent reason for our failure seems to lie in the fact of so many cross currents running in all directions. The bottom shelves off very quickly into good depth and the bottom beyond the 50 or 60 furlongs is probably really lying undevised by the influence of the Gulf Stream. The bottom is not good for successful work with the dredge.

Before dinner we try a bit of collecting on the reef at south end of V. Riamini but find it poor. After a black dinner (Bevi Borgo himself a cook) we go to the big stone plates E. of the island but are not fed very much. With all the 5 o'clock go to S. Riamini & 2 round both. The variability of weather changing about our boat jets up in our leaves round to bad. However we are pulling up some goods shells from there. Cape Taylor music and a visit from the captain to "The Dora."
Thursday, May 16th

An early get up reveals but wretched outlook. Even before arising the natives are about lounging about a gentle hint—gentle first shot of the rise of an axe clears theChron.

The morning passes in a succession of squalls of considerable severity making it too rough out side for boats. After lunch all hands (except Beni) land on J. Barimini to go collecting. Did it for a chance to find black borax forming pencil lines to dance etc. They show us the near shore by the pictures in old maps from which we have a sketch of general contour, nothing certain. These lizards women have a wild expression being the true unadulterated savage type with the widely spread toes and curved thin bones long tails. They seem to us almost like true creatures of the island.

The south end of the island is of the sharply serrated sculpted limestone so common throughout the Bahamas. On these rocks are several species of mollusks in great abundance and the shore in many cases shows of fine coral showing the living presence probably among these rocks first became land tide but the surf is far too strong to get in and investigate. The coraline life on these rocks is very interesting, some of the crabs being of very rich color. Simpson & Chopp strike off into the interior to investigate a hammond where they discover a beautiful & a Thysanophora. The return would along the beach at the eat our point is very trying owing to the intense glare off the sea & the howling wind. Meeting at the launch we should take a states

& look up with bad sun
headache & lose to turn in at once. The night is cool enough fo
Friday, May 17th.

The day opens rainy with every prospect of more rain, but still as the wind, the hope that for a supply of fresh water and hang around watching the weather. We would like to try out some of the inside spots of one or two fathoms with the same head strong, but as we are under the prohibition of dredging in less than 10 fathoms, we are waiting against it. Our experience of yesterday outside indicates ready work outside, and we can only dredge with great caution.

Lindsey and Clapp go land fishing on S. Bimini remaining all morning, despite the rain & dense fogs. Appearing about 10c they return with an excellent bag including a fine cephalis of the hagfish type with a tooth in the lower lip. Also a dozen of small stuff including two stingrays.
two Puppies, Thyonephora, a Strophulus, three Heliceus and Chitonides.

In the afternoon, the weather clearing, Sid, Lew, & I, took the launch for some hard crabs fishing outside in shallow water. The mania six or eight hands or various kinds of bottom the results only can be imagined, but after seeing & eating the stuff, which appeared white as well as the twenty compact coral sand, the proceeds of S. Biminis & Leeds on an island which is typical of the Bahamas. Some of the tide pools there are wonderful abode of marine life unlike any I had seen for some of the common species. The extensive beach front is dotted with S. Biminis lovely yet good but the tide was rapidly coming in & covering the beachers ground! Returning we found Simpson at the harbor entrance awainting us after an afternoon

alone on S. Biminis. As he had been speculating an explanation is due. We are told a fine Burnt & Return to the Isle to dress in our very best in order to make our call upon the magnificent Capt. supper. We feel very queer in our "shone fig's," and in a manner apologetic as well for the absence of etiquette of the past four days being unaccustomed as we are to the apparel of vanity & civilization.

The weather conditions have changed (de Bim.) to a more settled state with a front N. W. blown.

Our call upon the Honorable Magnificence was a tame affair upon which the Chaplain, Simpson,

commented freely upon our return aboard. He dropped us off for a long lonely watch through the early night.
Saturday, May 1812.

In the middle of the night a great downpour of rain started in and continued until about noon. It fairly flooded the land & sea & as driving N.E. winds made shelter impossible except below. There we remained, raging mad up & down and trembling. The rain season is vexed of our clothes are soak and become the cloth hanging from every available rope. Service shoes are soaked about the shield. The whole is a scene of desolation & disorder.

In the afternoon the rain lessens but heavy appearance of more rain in a few minutes keeps us cabin bound except Sunday. The in baking heat entire gone & other hunting on the flats.

On the Saturday we consider the advisability of getting drunk & going aboard to hold and shoot up the town. Every off the woman & the real adventurers - but the woman are so unattracive we cannot think of leaving it aside by the results of so wholesome a rest for having acquired them how unhappy would we be with them. Of course we could cheap their hardboard bed that would hardly seem right after all.

About 4 P.M. some blacks came alongside in their canoe boat with them to sell the book them in town with the launch and berthed off for their settlement, Raleigh, where the natives carried in tobacco, pickyback. Simpson & L.B. wonder through the town cricket with the people here and there - among the heavy clouds & darkness photography was impossible. Some of the very old men have a very particular appearance & told quite interest.
There is no question but that the figures in Borneo. They are superior physicians to the whites and have far more energy & patience than previous local knowledge of how to get on. This village is interesting and probably typical of all Bornean villages. While being poor and being apparently barren to the outside, they are happy & care free. As usual they sought our aid as doctors but the community seemed to be a very healthy one, the age being the lowest disease. One ancient father claimed to be 90 years old - another, of remarkable appearance only claimed 80 years. They are very busy friendly & like our visits to their homes, often are entertained us.

In the evening, we went for a walk to attend service at the Church of England, forgot mind but find upon arriving nothing
January 21st 1912

The story opens with every indication of a continuation of the bad weather of the last few days. The sky is heaped overhead, & the cloud N. 2. gives the usual thrill of heavy rain with heavy squalls. Those are fully realized and appreciated this week. A good hunter and we are quite independent of weather conditions except for the psychological effect of it. On the morning we received Cobb's Guard Reading and electric while the wind howled without end and occasional downpours of rain sent us scattering to close doors and rescue shoes & clothing in the more exposed places.

Around 3 PM, we are for a while for a ramble to the north end of N. Bismarck and a scene of bare fields. This has been our usual solicitation to render clowns' service. The population of Bismarck town is at church service & the belfry seems quite deserted. The band playing is not very successful, conditions on the bismarck being far less favorable than upon the northern lindt. The band is also quite abroad of stiles.

The weather is setting upon our nerves. The sun does shine to remonstrate and cruel, especially when reflected back from the coral sand beaches. Our clothes have been more worn away than during 60 days of cloud and now we long to see him again. Although the weather conditions are atrocious in one respect we cannot complain it is soft & lovely as to temperature. Two Germans suffice a skirt & white trousers.

Very soon once we shall pierce out for Cut Cor & Dollar Harbor (we find the people in yesterday's log)
Monday, May 20, 12.

A light of head blew and occasional rain. The morning opens with the usual cloud formations sky and deep cutting wind and it seems as though we must have another day of these Watched weather conditions. Possibly the effect of the wind being more to the southeast compass better with the hope for a change. We have decided to obtain our clearance papers. Take aboard our alcohol tank and be ready to tow the wing at any time.

At 10 am the governor came aboard to invite us to the school to inspect the trip and hear the children recite, etc. According, Simpson Chitip of go down our best song - especially Chitip who comes out in a tip that fairly beggars and accompanying the flow, adores, proceeding at once to the school house where we are received in state by the school master and escorted to seats on the platform.

The children are an amazing bunch of fat beasts ramping through the colour varieties and quotations to a few white children who seemed out of place in their sturdy sitting - at least from our American point of view. The youngsters were put through a programme of songs, etc., and really were done with their reading exercises, spelling bees, marching evolutions, recitations etc. - Our surprisingly were done. We decided to some very lofty sentiments and nearly burst with emotions aroused by patriotic sentiments and heroic exhortations to duty and honor.

Simpson later said he wished he knew what was done to the plane when it was seas to be uplifted at once, and forged to the head - thinking the youngsters are left to buy some shells from Roberts the pilot & go aboard for
Tuesday, May 21/12.

An out an out gale blew through the night but although the wind was high in the morning, the clouds had cleared and the sun appeared again for the first time in several days. This period of swirling conditions is unusual for this time of year and when the breeze does come we can here some fine weather. The sea outside has been rough & any idea of camping out of the question.

Simpson heads off for S. Blie, E6d. and for with the camera go ashore for a photographic ramble through Bailey. We can never pictures here at lunch announced with the setting. Some of the roars to be here while some appear to have a peculiarities around of the camera. We wind up our expedition by taking the school children bunched together in front of the school house for our blue film including the Governor, etc.
Martin and his wife -

After lunch Simpson and Clapp go land shading on Mount Pulaski.

Having been excited over a long slender Gemini 3 picked up two

hours yesterday & one in two other specimens of the same found by

Clapp inlets on this island.

Late in the afternoon I go ashore again to visit the camera parties by

Wilton Kemp to take some medicine to a patient and to photograph the

Baptist church congregation. It is

too dark for the latter feat & the

idea is abandoned. Returning to the

shore many of the white children

of the town are on land eager for

on land or ride & a visit to the

 hologram which they get. All the

crew enjoy a fine swim. Our

Swimming place is more too soft

owing to the friendship strong tide

which sweeps past the beach &

out to sea - the waters in the

manner enter move quite olds it is

moreover free of sharks, barn cats

and string rays. One would have the

little shore of being getting out of

such a place.

In the evening the Governor & the

school master come aboard for a

rather two long chat.

The weather conditions remain freely

improved. At last. In the night

rain squalls - as usual, come by with

lightening but their do not count as

against the already hard blow of the

last few days and the lake present

threat of a change of rain.
Wednesday, May 22, 17.

A bright clear day of good prospects. At eight o'clock we started in making towards the thing first & getting all in ship shape for sea & at nine we got anchor and sheered out slowly over the bar and headed off South for Doloril Harbor back of S. Cat Cay. The sea is quite choppy although there is very little wind (S.W.). We ran past S. Biminini - the line of Rocks known - Glen Cay. N.Cat. & then we rounded the South End of S. Cat Cay. Here we find the so called harbor which looks very little harbor like - shelter in about 8 to 10 feet of water on the inside or E. side of South Cat. To the east is open water across the S. Bahama Sound. If being open on one side except to the West. Should with all charters outside the harbor.

S. Cat Cay is very rocky & covered with a dense scrub. One little patch of dying coconuts near the sound and one old tree.

We hoisted anchor to find a carin suspiciously like the one of S. Biminini. Some emoji characters.

Said, 180 to 190 feet in the launch to try out the shells where dredging was made. Many hours in the channel, near the rocks shore, out of the breeze in 4 or 5 but.

It would seem that we cannot locate the habitat of the living shells unless we can find some thing in the very shallow water. A fine breeze off a rocky point. When the water pauses off sleeping there was but a shadow coming into our midst. Rain drops over our heads for buklip. The water here is full of fish. A delightful evening. Almost calm and a swift tide. Sunken light flashes red to the north. One hand, tired and sleepy.
Thursday May 23rd.

The day opens fine with light Easterly air. Simpson Clapp and I set off in the launch to explore North Cat Cay. The moon was some difficulty caused by the shallowness of the water but reaching the cay finally we spend the entire evening and fishing.

The cay obtained appears to be the same as on South Cat but the shot raises the suspicion of S, Patee. Simpson turns up through Spanish, some fine stuff of the Perch. I suppose someone thinks it also turns up.

Judges get peculiarly sun burned causing them much discomfort.

For breakfast morning going over the shallows with shadings of the day before and looking - as the morning is hot.

After luncheon we head for a sail in deck reading Shakespeare's Two years in the W.S.

This is, for reads aloud while the others smoke in various keys.

About three we land at Simpson, Clapp & I proceed down the harbor in the launch prepared to try out some shallows. Watts dragging outside on the way we put out a trolling hook and very promptly get a second of a blue. In has the line and proceeds in 10 or a little, the launch being stopped, then the fish makes off & the line slipping through my hands burns like a red hot wire & I let go but bid catches the line and blisters his hands in the same way but he keeps on. The fish breaks water and makes for the rocks at the end of the island but providentially he is pulled in with about a hundred others following along. Feeling him along side we found him over the head & finally land him - He turns out to be a barracouta about 3½ feet long.
We wore a number of hands in depth varying from one to three fathoms or varying depths of bottom. The results are somewhat better than heretofore but, upon the whole, not up to Banon's expectations. We do however get herring things but not many of them. The game made among the rocks. Moso's about Wedge Rock is absolutely me good. A good roll outside makes the herring fairly fly coming in - and put out the trolling line again and very soon a little pulls the line - our lost fisher boat gone.

After supper bid + for fishing near bowes and yet a few grunts - a beautiful fish with bright blue longitudinal streaks. Car might we about the start hook + hark if our board - in about an hour our is hooked + gets away - Reels & so on. Several big receiver begin to hang around us + one gets the hook escaping the book, \[\text{Blond boy}^{4}\] are might.

Friday. May 26, 1852

Weather appearances being good we go out in the Edith to dredge betting for a spot about two miles out in 14 fathoms marked "The Coal." The spot reached we made several times - in many of his failures, the dredge tripping on the hard bottom. Now of this spot brought up in the red species. Turning out we sound where the bottom is quite clear in 72 fath and big again but no fish. About 200 yards out we sound in 75 fath but decide not to try it. Turning back into shallower water off the island we made two hooks successively in about 3% fathoms. Bringing up almost every trip good monadnock - one Thurboville Sometimes. Stiff rain squares these on various sides but can not much use. Return to anchorage at noon.

After dinner: Claypole, Simpson & J. S.
take the launch for New Caney running up the inside route over the shoals. They return about four o'clock with a mass of grizzle and some Cleopatra cling on from deep down among the vessels. They repeat the title repeatedly sitting in the New Caney passage and landing on the island themselves.

About nine o'clock the small mixture found its fragments back on the river to take rights and were flown to suspense whatever. The decision immediately permitting the boys for Mabini tomorrow.

Stones finally hardening the night on usual. The colors of the water are very wonderful under the moonlight. Especially the shades of green seen over the banks. As seen the blues & violets are especially wonderful. An heart's tried out yet to be had by God.

Saturday. May 25/12

At 4 30 a.m. the wind is steady moderate from S.E. with appearance of good weather. We were ready for sea deciding to take out very the heavy and if the sea is not good to return to Paramata route - that return being this place is a quiet depressing. the collecting being tolerable expectations.

6 30 a.m. Started have a fine passage.

Sea smooth - only a gentle breeze from S.E. About 11 a.m. pick up fancy & head for the Bicarapo Bay entrance having to break into the stream pretty heart. It is too wide for not we drop anchor off the Stanford one block in the Moini River. Here we anchor in said stream to avoid the coming of the port doctor who arrives in an hour or so while we fairly broke in the boat men skilled from the wind - the examination by the port doctor is very preliminary.
Sunday May 7th 1912

A busy day spent in reading and letter writing. Plying Simpson stays aboard. Clepp and Mr. Black Briskes down with the figs and bring a fine lot of very dark ones. An exceptionally fine catch along with the biggest clapper and Englishman roses minor - all living on the tree.

In the evening Mr. Clepp goes moving pictures which flourish here Sunday nights - another mosquito fight in the evening.

and we took the old position at the Royal Palm dock and are loaded and visited by some old friends along the coast who seem to pass their existence under the coconut palms and upon their house boats round about.

A visit up town to the mail & telegraph offices & the blackmail & newspaper stores - the leaving of the moving picture show & a final fight with mosquitoes before going to sleep.

Our little Simpson leaves us this

launch ship losing our chauffeur and being, as it were, to go it alone hereafter, so far as the delivery is concerned.
Monday May 7th 12

We make early preparations to

climb outside getting the travel in

commission. Ken Simpson comes

about early, set off for Caswell

House to make proper entry etc.

About 9.30 am, we head off for

the new cut. The weather conditions

being exceptionally fine for outside

work. Suddenly, being at the

vortex, we land upon a shrew &

shyly watch, for this side to

three in. About 3 pm, we reach

in getting off that particular branch

in the bottom but only to get

upon another where we start

quite so fast. About 3.30 am we are

free but with the cost of a slightly

been, (propan and a spring shaft

of the key which throws the

hoisting gear and keeps it running.

We proceed out through the melt out

against a rushing tide and sounding

gang decide to try the trench at so fine

bottom a curv cut. We make from

heads - three being successful - and

bring up a quantity of interesting

material. Some fine bale packing

(b) Carriotype, Terbra, etc. and a

good lot of Stones, Deer horns, and

general lot of curiosities and for Mrs

Dowben. This successful hunting

cheers us greatly and we rejoice at

the turn in fortune which restores to

us the good old conditions of day before.

Entering the Bay first at dusk we

beat our way cautiously along the

secure illuminated channels to our

post at the Royal Palm Dock. The

night is imperceptibly over and cool.

 Cooling breeze and we taste such

announcements above according to this

weather.
Thursday March 28th

Up early. Dined goes at 6 A.M. to
repair the damages of yesterday.

Pick up collected material collected.
While at work the "Lobin" appears &
our hands down and salute. She
proceeds up river to pass the port
regulations and we follow in the
steam to greet the boys aboard. There
are Dr. Payer, Vaughan, Barlow & others
all very meals some burned and dusty.

From their report of conditions at Andros
we fear the Retail widely in not going
over.

About 10 o'clock proceed out into
woods cut for a days work remaining
outside until almost dark. Hands
are drawn in 24 furs (grass & sand),
47 furs (Sand), 60 furs (pear sand),
30 + 35 furs. All hands are
successful through some prove very
rich in material (shells) as except the
less fur when two hands are extant

for remote stuff. Wishing fine +
smooth here.
Wednesday, March 29/12

We set out for Stanley about 10.30 stopping for lunch in the channel and to examine some rocks being exposed by the low tide. These rocks are covered and free of life though not especially rich in molluscs. While Clepp & Jo. were cleaning the boats the crew were in good心态 of various kinds of fish which were added to the lunch.

Proceeding out to near Stanley but encountered to heavy a swell and found dredging too difficult. Only our hand is made in 24 fathoms.

Pretty successful. When we decided to give it up the boat rolls deeply & the strain on the shrimping gear is very great. The brow is raised & lowered along side the shrimper in the lighter anchorages.

Weyans & Reddick come aboard in the Velsheda and are here to go.

A scene by boat for a dinner. After this, shore in our and clothes we sit about the bonfire.

Weyans has very bad that might shut the anchorages but the night is simply gorgeous with this moon.
Thursday May 30th.

Up at six. Breakfast. Clappp & Brighten. Start off for Brancash. Start having fur figures - the sun into the Royal Palm Hotel. Slight & easy. Can shift and avoid Clappp to go ahead just again. They not retuning until nearly one o'clock. We decide not to go out and the bottom of the bay is spread with things in brand shape. From the late afternoon we take the big charges and the trek up to Simpsoins for storage returning after dinner.

In the evening we headed for a dance at the Fair breckhead near by which is somewhat town function. Clappp for dinner at the hotel.

Friday May 31st.

We make an early start out through the narrow fur some dredging outside. The sea is very calm but the current runs with unusual force south. It being full moon with exceptionally high and low tides. We attempt to anchor in with over 20 fathoms but several unsuccessful tacks are made upon good bottom in 30 fathoms. When spot was worked the finesteasy end. It is considerably to the Southeast of the big black & red striped buoy on the last coral patch. Opp. the reef end. Our tacks in 20 fathoms are also successful though not rich. Returning after taking a series of photographs of the Colde from the little ticker he then in through the reef end against a peaceful religious tide making a rippling sea which breaks 370.
The 19th Cruise lasting here it would appear that our collecting was not as good as the past year - & the year before - The Biminis were disappointing as far as dredging went but we secured many exceptionally fine Specimens of the larger Species. Such as Caris, Strombus etc. The beaches yielded some finely colored material but the living coke has been far below expectations. The dredging off the deep cut is hardly as rich as off Key West, however, we have not given it nearly as thorough a tryout as at Key West.

The Zote will hang out at Miami to examine the bottom and put on the old propeller and then proceed as quickly as possible up the coast.
Eolis proceeded west soon after leaving out arriving in
Bar Harbor July 14 spending the
summer in Frenchman Bay.
Left there Sept. 13 in command
of Greenlow with Edgar Robbins
as 2nd Mate. Arrived Miami
Nov. 3rd 1912.

In December 1912 F.B. spent
7 weeks aboard but no cruising
was done. The new furnace (the
Seda) was used entirely.

May 3, 1913 (Saturday)

Geo. Clopp and F.B. arrived
Miami for 4th Annual Cruise. The
Eolis put up with fife along side
at the Biscayne Royal Palm Dock.
Greetings with Capt. Ross and the
usual bays and comers about that
general gathering place. The "Hanse II"
and the "Oviedo" each 100 footers
lying near by and looking very
handsome.

Sunday May 4/13. All hands
go to Simpson's on the field spending
the whole day - going to the boating
beach for a swim - Bif join at
10 30 P.M. just up the river.
The wind has been very strong
from N.E. for a fortnight +
still continues with discouraging
persistency. We hope to get
away tomorrow.
Monday May 5/13

About noon Simpson turned up to join our party. We hauled shopping and making final arrange-
ments for departure - about 10 o'clock with difficulty - as the barge is bound against at the dock.
We may succeed in working off
by using the ferry as a tug -
Process first up river to Standard
Olive dock and take on booms & 30 feet
gas in the day - then shall close
Disconque Bay turning the launch.
Weather fine, N.E. wind blowing light
on board Simpson, Clapp, J.P.B. Scio &
Edgar. Keeping inside the Keys we
made harbor just inside the Ragg's
Keys in about 9 feet clear water
about 3:30 a.m. - Immediately
there several boats with the
hand dredge with fair success
but nothing wonderful to seen
in the wet loor.

It is our purpose on this trip to
work the harbor channel quite thoroughly
looking every possible harbor to
collect the keys for land shells. We
shall watch traps with traps &
deepen outside dredging whenever
possible. In this, and we are
well provided with traps and hope
this trip to have the success with
these few hours never yet had.

The "Passer" is in his usual quiet form. Our harbor excellent in
this particular direction of wind as
we are well surrounded by shallow
shallows - The bottom hereabouts
is spongy with immense marine
creatures in soft pools - here the
Ragg's Keys it becomes hard on
inside & rocky on outside. We have
big hopes for tomorrow.
Tuesday May 6, 13

Perfect day. Early we landed here the ladders for the Boggs Keys. Clapp and Simpson go ashore on Key No. 2 (from here) and explore for kelp, others here built for traps and some secured homes. White hand dredge outside. Pile on Keys, and 2 is a deep rocky hole of about 1/2 acre called the aquarium which appears to be filled with fish of all sorts but which we're not touch a book - Spence a mess of crayfish that live in the holes and crevices of the rock. The swift tide makes the operation difficult. Clapp & S. discovered the Corrie colony planted by Bartes (车厢扁) last year but otherwise results are limited to a few Poly. carpenterian.

Return to Bolio for lunch at 12, afterwards return to Keys to

work the flats outside of low tide. These are of being more with battles exposed of caves. Even now - the place seems ideal but beyond a good place of several species of crabs for their Rather the catch is small, this is strange for a more likely looking locality would be near to imagine - the long, Esoxdrum, & Thistled and a few of the most common species of mollusks only are taken. As are other forms of Abalos. With the reef is very rich. A few Eupora beetherea turn up.

Return to Bolio with difficulty before low water to exposed banks. At 5 or 6 or 7 or 8 or rather indeed almost perfect calm - we in bed at eleven o'clock.
Wednesday May 7, 1813.

5 A.M. ate up - Fine - wind shifted to north very light.
6 A.M. started for Spanish Channel by cap Florida to get outside of horse and broke shins - Some food shore stuff showed up - with one dead turtle. A final attempt made close to them in about 10 to 12 fogs resulted in hanging up and giving up.

Arrived back at place of entry picked up and headed in to our apparent excellent anchorage on south side of Caress Creek bank and sails ready for night.

Weather threatened a change to the east in the afternoon but improved toward evening. A gentle wind NE at seven PM with food prospects far tomorrow.

While rolling in the outside since the chine closed opened and our entire supply of plastic etc fell out and smashed.
Thursday May 8/13.

At six AM a vigorous thunder
storm passed leaving the sky
clean and fine with a S.E wind
light. About 8 Clapp & Simpson
prepared to go ashore on Old Rhodes
Key & Sidney & J.B H. made a
few hours with the hand dredge
from the launch using the tobac
coons to work out the mass.

While adapting the pumping
apparatus for the hand pump
in their tender immediately
left the sea cock open and before
was noticed it the water filled to
the floor causing our fresh
water tank and spouting our
water. Open a general
concentration we decided to try
the tender as liver in a barrel
for water near by but there
seemed to be a running on sound
that fresh water could be obtained
on Old Rhodes Key. It requires a lot
of pumping to dry the boat. Then
our boys but J.B H. proceeds
with the launch and finds on a
rock bottom. The hand dredge
lanes were very poor - quite a
contrast to the famous hard fish on
the other (W) side of the Shoals.

Bag 1 (3/13) Off Turtle Harbor, Fla. 20 fms.

Bag 2. (5/13)

3

4

5

About noon were unable to
return without
water. A good eel was found but
in it a small raccoon - During this
absence the boys were packed over of
yesterday's dredgings & the above
bags put up. When dry this material
showed up quite nice in small stuff.

At 10C we up anchor the flot:
a barrel on N. side of the bank as
the water has come up from S. to
seek water on Ellioto Key.
The catch hunt proves successful and the boys take the tender ashore and laboriously fill her with eggs from the eelnet. Some way back they lower her out and as laboriously empty her into the tunkt which holds just about the catch full. Meanwhile this item drops Edgar's gold watch overboard and an hour's effort brings it dredging follows to recover it. Truly this has been a chain of accidents and we have been collecting the scraps of details the weather is simply ideal - good wind and reasonable temperature.

Bag 8. Off Turtle Harbor 50 mins.

7 " " " " " "

No watch - gone forever - Edgar replaced to wear a picture inside. Probably no one is without sentiment. Shift to an anchorage just north of C. Creek Banks for night.

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Friday May 9 113.

6.00 A.M. - We were greeted upon arising by a perfect calm, the water like glass. We jump overboard for a perfect swim. After breakfast all but Edgar, who is not feeling well, take the launch, with three traps and our stock of well-repaired crazy fish for bait, and set out for Ajo reef.

On the way out we pass over many living reefs which in the perfectly clear still water show up to our fascinated gaze a secret to be forgotten sight. Between those patches of reef are stretches of deeper water in reality about 20 to 30 feet but seeming much deeper - the bottom of clear white sand or covered over by vegetation. Upon this bottom are great starfish, holothurians and schools of remarkably beautiful fish of all sizes - the sight of this submarine world
thus opened to our gaze seems in a way, uncanny. We seem as though gifted suddenly by some in natural sight power of vision which enables us to peer into a world forbidden to us. We are held elated and lives interested, as wonders and beauties appeared to us as we steamed along. The coral reefs are particularly wonderful and startling. The richness of color and form and the peculiar pace of movement of the swaying forms etc. actually seemed to exist as into showing to each other to look here and there and not to miss this or that coral head or tropical anther. Like branches or to see that splendid fish or that school of brightly painted ones.

Aying reef comes near the surface at the squadron and just at the falling off place on the outside we planted the two of our troops. The third one we dropped by the side of a high coral head 50 or 100 yards from (N) of the squadron. Therefore our efforts with troops have been very unsuccessful but we permit ourselves the hope that a change of luck long overdue is now about to arrive.

While exploring the reef for suitable places for the troops we found out a sponge bank and at once took sounder.

Returning to the boat about 12 be

took aboard a quick lunch and put off again in the launch for Pumpkin Key. Crossing the break by bungling over it we entered Cascadia Creek. I steamed up between troughs and down channels into Card Sound. There through shallow water to the coral bottom, hammock, Pumpkin - a reef of some 10 miles or so - this densely wooded Key is frite of figured of the pine colonnade trees (Van. rosea) and is also rich in
Helping and Small Stuff - Possibly the wind, despite Bil. thunder, may turn up in the lot of rubbish & leaf, would carried away - The mosquitoes here were simply impossible. Some very large spongers came along to gather up the climbing sponges left on the shore and which seemed to threaten one sponger had just caught a large loggerhead turtle.

Figures are astonishingly abundant. Leaving pumpkin we stopped a few minutes on the inner side of Largo to walk amid the swarm of mosquitoes. Some were figures & rubbish containing unnecessarily 2 mosquito's.

Returned through channel between Largo and Old wooded - a deep passage between mountains & made the Eolis by rounding outer end of Caesar's Creek - first 5 P.m.

Some mosquitoes at inlet - there is an appearance of their approach of the rains. Each afternoon heavy clouds move up in the west & threaten a cloude but beyond some lightning it there is nothing happens. So far it has been very pleasantly cool and the wind beyond an appearance breeze.

Edgar claims to feel better.

The bone cove on a Shark hook that has been overboard all day seems to have started nothing.

The inlet was made fast by mosquitoes. All boats stopped to smoke until almost morning except possibly, clapp who saved several cords of wood ripping up Kunks & rails occasionally put up however to push up in cincinnus.
Saturday May 10, 1913.

5 A.M. Almost perfect calm. One boat looking a little fuggy from the right with the mosquitoes. Elbridge remains aboard to clean up fish and catch while we others take Search for Old Trench to recon trees. Again we enjoy the glorious sensation of balloon travel over the earth for the water is apparently immense as one looks down. The trees exhibit nothing of interest. A grandson sits in one of them being the most conspicuous feature. He has put some fishing line about a section of a broken iron stanchion. The iron is ordinary but of fish can be seen swimming about as it passes beneath but they seem to be indifferent to the bait offered them and even the usually fierce Lorene's can only

Play with the spoon hook. Returning we anchor over one of the isolated coral pinnacles where we find a

11 A.M. Start for Towne In. wind

picks up from South. About 3 P.M. appearances of rain squalls

one with one from the North

strike us. Drop anchor N.

Side of Towne In. Bank of four octers near old town of wreck

ting a familiar old land mark.

Go ashore to look over the bow wave which exposed at low tide. A large piece of wreckage is disappointing it not being full of shells & the crayfish think are two were hidden away to Secure.

Some Cypress Exophyes are all captured a few crayfish.

The mosquitoes and a good

night's sleep. Friday strong W.W.

wind are right.
Sunday May 11th 1913

The hands up early. finest possible weather. Simpson, chopp
and Edgar go ashore in sargo
for land shrimping & to post letters. Wind NE moderate. Those party
return with modest success only reporting very dry conditions on
the Island. On the way back they
stop to pick up kegs left last
night near the upwarpes of
Tamarin. One large Pegasus in
a Finger prays the only catch.
9.15 A.M. up anchor for Indian
Key to make harbor and explore
the West cape Keys & Keywine
Lidade & if possible that Key.

It is regrettable that we have not
covered ourselves more of this almost
ideal weather for shrimping purposes.
but our choice to try our
livestock locations & work the land
these ends of the hands these times

time. At they brest we shrimmers
with the big dredges & we pray
for continuation of these ideal
weather conditions.

The hands work with the hand
dredge about the Ajar reef prove
hopelessly bad. Right then it seems
seen exist every possible condition
favorable for inshore life. If not
there where do they live? It is
most evident that over the great
expanses of bottom real life is thinly
spread but that there are certain favored
places. Patches of richness where life
must be very abundant. For the
western part the material dredges is
dead with one or two living species
only - where does the great masses
of dead material come from?

At 8 A.M. dropped anchor close in to Indian
Key and at once set out krops men by
and breakfasted. All hands but Edgar
were launched for a land shriming
expedition our first efforts to be on
Figueroa, but we find it to our great annoyance that the passage goes through the R.K. treacle is closed permanently.

Query — has the R.K. the right to do this? This is a disappointment for Figueria was one of our objectives points — the land on Upper Mutumbe and by hard work in a fearful thicket of cadusa and Spiny things we take some very finely colored Heliconius Varnos but no figueroa. The excessive dryness is not very good for land work. It is very certain that this country south of Mutumbe gets much less rain. The attempts to set up rain fail every day despite the threatening overcast afternoons. The first appearance comes at about 11 a.m. in the form of cloud in the N.W. which moves higher steadily. At 3 or 4 P.M. it would seem that there would

soon break loose and the wind shifts to N. with some violence there is lightning etc. but nothing doing as the real rain. By night the stars shine brightly and the wind halves to almost a calm.

We return to Entic about 5 P.M. and have a thorough bath & change of clothes for hour of red bugs.

Wind strong from South W. and boat having been & forth to be all ready with second anchor. By night wind shifts to N.W. & becomes strong through gradualy diminishing & the lie comfortably enough.

Boys go ashore on Indian Key to inspect Bartch's Caiman plans colony but fail to locate it. Much music and bed.
Monday May 17/13.

6.30 A.M. Start for Knights Key with fresh NNE breeze & following sea - cool, practically nothing in the heaps but some herring & a few Phoebecetes. This last is interesting. It is certain that the heaps must remain longer than merely over night. At Key West we must give them a second day's rest in our berth.

10.30 A.M. Anchored tow up in dredge harbor at Knights Key at about some position once before occupied. Wind NW fresh - a following but not bad sea from Spanish Key.

Clapp, Simpson and Edgar lone cannot for栏通 to post letters & send some telegrams. Simpson receiving a vast quantity of letters which subjects him to some anxiety. Explorers visit Key Largo but find it so airy there is nothing doing.

in the headshelling line beyond some dead stuff. They return at 2.30.

Wind is strong with sky appearance of squalls & rain. Our berth in the dredge channel is very secure.

All hands write letters in anticipation of Key West tomorrow and the supper is renowned than usual with a blueberry pie contributed by Sidney as a sort of celebration of our approaches to our destination.

6.30 The appearance of bad weather was justified by a storm of great severity with plentiful gusts of wind and brilliantly window lightning. The anchor dropped with considerable quiet dispensing of another and we realized the comforts of a good harbor. As we had contemplated running out to avoid the dangers of mosquitoes we feel particularly good for having been here long and do so. We should certainly have caught the death in an exposed place. Rainy very hard - first here in many weeks.
Tuesday, May 13, 1913.

5:30 A.M. Start for Sankey in the hope of getting conditions right for some reef collecting there. Weather appearance is not very good. To the east great banks of purplish clouds forbode heavy doings later in the day. Sankey is the scene of some very fine collecting three years ago but that was a quite dry wet tide were out. The run from Knights past Bahia Honda heavy chop catching us a little quaking asthma & making us quite considerably ease up. Some beyond Bahia Honda to Mosquito Harbor Keys the wind getting more southerly and giving a fresh sea that is quite disagreeable. We are apted to cut out Sankey Key much to our disappointment as any work there would be altogether impossible even if we could move a helping.

After the week of almost ideal weather we have entered upon a season of bad conditions which we hope will not last long. The sky is empty and heavy storm clouds falling in various directions and all seems reportable.

8:30 Approaching red sun just W of last Mosquito Harbor Key. By calculation of distance we find 7 1/2 knots speed which without the heavy cargo we are bowing would mean about 8 knots.

12:15 Dropped anchor in Key West waiting many changes in the harbor since two years ago when we were last here. Particularly the big F.E.C. pier. All seem anxious for railroad trains while Dick loosens up to go ashore.

Dinsmore not feeling well remains aboard while we others go ashore for barber shop, laundry, fruit stands & possible bread atillustrated books. The latter however, not being found at a cheaper search. Key West is quite
the same tired looking place, dirty and unkempt almost wholly devoid of any interest to the tourist.

The ship lay royally on yellow tails of Cuban seaborne bought ashore. Sid and Elga so ashore in the evening to seek amusement in this hopeless place - a few such advertised picture shows being the outside limit.

Blowing hard from East & Clouds not very promising of good. How that we are on the spot it would be wicked to have bad weather continue long. Time is short and our collecting needs long. Dedging would be out of the question with this sturdy wind.

Wednesday May 14/13

Morning opens with rain Squalls and stamp showers. At nine or the change but no appearances of a continuous rainy windy bad day.

All quartering and chafing under the enforced idleness. If there is any opening at all during the day will take it to do any sort of collecting. There is a decided leaning on board towards a trip to Cuba.

The wind and rain continue all day - we go ashore for mail receiving a huge pile of it forwarded from Miami. This plunges everyone into a frenzy of litigation effort and a pile of almost equal amount is soon ready for posting. In the afternoon Chapp and Simpson disgusted with inaction head off for the trolley cars and the Eastern end of the Key for local shelling - They return about dark with a fine catch of several species
Thursday May 15, 1913.

5 A.M. All stirring - at 6:30 Clapp goes ashore to invest in an old shirt. Wind has moderated & sky looks all right. As soon as Clapp returns we start put out for whatever sort of conditions will permit. We hope that we can do Sand Key Reef any time.

7:30 Start out having left the beds at our mooring place. Almost at once we run into a land sea which increases as we run out further. At 8:30 becomes very certain that any attempt at dropping or even landing on Sand Key would be foolish. After joining a make or two and thrashing about in a most sensational manner we come about and head for home - anchoring again at 8:40 again a pretty lovely home. We have never seen it so...
rough in the Harow Channel the
waves were the outside look to it.
We sat around chistes and
shouted and try the figure out some
kind of work. After getting the wind
we shore take the launch for some
while banking along the edge of the
H.M. Channel

Spent two hours in the H.M. Channel
and on the westing bank bank chisting
with very poor results. The bottom in
the channel is hard - on the bank
also with soft places.

After lunch Clapp and Simpson
went another foray into the Eastern
End of the Island for land shells.

At 10 A.M. again take the launch
for the channel due north and
were 15 to 20 hours chisting banks.
The land material looks very
promising but after all it is only
shore water stuff - The wind
continues to blow hard & sea
ruff - It is very discouraging.

Clapp & Simpson turn up about 5:30
with reports of poor picking in the
H.M. - Some boms of C. reas being
the total.

At 8:00 it still blows. Our old
pilot Bill Saunders of our first
trip to H.M. Shows up. He has been
sponging again these having returned
to a frist love. It is not certain
that he would not exchange for a
beach with us as he spoke of
sponging without much favor. We
began to go ashore at night as usual.
Friday, May 16, 1913.

Morning opened with less wind but still too strong for any attempt at dredging outside. Therefore we cuss and frame about writing a few letters and then Steepen ClappFig. 9. Go to the garage and for some time. Drymane, multitudes of which we find an ample supply for all time. It is hot ashore and apparently no wind yet the flags on the vessels snap. After a bit dinner on yellow tails bought at the clock and Clapp go off on the launch for some hand dredging. He pulls out with the Hawkhound finding much less sea than when last attempted yet quite enough. Our catch is not as remarkable except for its variety although the bottom seems perfect for mussels. The captain has most remarkable limits.

Fishing still seems to show no limits.

While dredging we see the Swayne coming in and late mars up alongside with Capt. Lumley, Doctor the Bird man and Clifford Pinchot who has been fishing in the Tortugas.

In the morning Clapp & Hill run ashore for guarana soda ice cream and the picture shows.

The "Parson" Simpson decides he has had enough and announces he will leave in the evening by train.

Continued to below.
Saturday May 17, 1913.

The first thing by the aeroplane was up in the air which arrived by a German pilot. He circles over our heads and then comes down. People seem to be quite excited. His flight to the south soon disappears a dot in the sky.

Our pastor, the Official Soul Saver, and Chaplain of the fleet, the Parsoness Simpson were out in this $1000 suit of clothes. Took his launch, and went about shooting food-type birds off for dinner and home. His disheart Science is only natural and is to precede them over ours.

Six still blows - possible a little more than usual this morning.

All go ashore for mail finding.

much excitement over the aeroplane flight. The aeroplane reached Havana in 1 hour and 40 minutes and his opponent (Pares) not being able to follow his course by same plane and overcome with grief and excitement, tried to commit suicide. We saw him in a cot surrounded by a crowd - Mr. Vaughan on the dock who is full of republic for not having joined us at Miami. He also met Mr. Monroe. The fish man from Boston it appears to be a very nice chap. We beat him out to the dock to inspect our welcomed fish, but he takes them if of interest to him. The boats then returned to the boat. Says they are better than ours. The fish varies. We got empty cans and lumbering a barrel of bananas at auction (.75) - some yellow tails at fish auction and return to boat. Blowing harder than ever.

After lunch Chop + fish... Rig up in
Bag 9. Key West - Inside 3 to 20 ft
Bag 10
Bag 11 " Hawk Ch. 25 ft.

Shelling tops (after a bath in Bicchurro) and pick up a likely looking end + drive out to the extreme E. end of the isdl. - Time to cross over the trestle to Stock Island when we find excellent hammer. - We have a fine two hours with oyster

noses & a charmingly pretty form of bighorn with yellow hands. - Also Drymansus multidentatus and some very interesting Stroes Stuff. - Reaching by way of the guana beds on an ice cream ship we have a serious bath followed by an alcoholic rub & complete change of clothes - in red dress.

Visit the Cuba in the evening & have a phosphated shot with Vampfer. - Weather looks fine for tomorrow.

Sunday May 18/13

6:30 Breakfast - 6:30 Time Moung
aboard and head off for Sand Key.
Little wind, smooth sea. Arrive ashore but find tide too high to do any reef work. The Captain promises a very low tide about noon
so we decide to make a few tunes.

Run out the donut & make a water hand
in 23 fms - a failure in 33 and a successful one in 40 though nothing
Starrling in the bag - a deep sea form
of living coral saved for Vampfer - also
bottlenose Samplers - another brand in
50 fms is excellent showing up many
Species of Suse Stuff belonging to
corals. Water - brack middle, glasses,
Anchorsqute etc. also a piece of
Volosita cubani - Being nearly eleven
Believ we decide to return to the
reef to take advantage of the
unseen morning low tide & weather in very
close to fight. All hands pile ashore...
and plunge in.

The reef is not as rich as of old. Monsieur proposals himself to be a splendid collector. His six years experience on the reefs of BERMUDA standing him in well. He seems free of resources and knows how to capture fish and many of the quizzing moving creatures. The sponges of the reef work were fine specimens - though very poor - of Milroy Ferguson's fly. Where does this species live - reefs or deep water? The vessels Fine Specimens in all Collections.

1 on Force Key, 1 Toffin (Shark) & then on Sand Key - all dead & worn. But no frequent ever has been dredged. One of the best portions of reef on Sand Key has been washed away & the most previous changed.

The big bag of material collected for Miss Palfrey being a long time to find up.

Arrive at Anchorage about 8 P.M.
Monday May 19, 1963.

5 A.M. Looks fine - About 60^
Monobrain comes aboard and we
at once were away for the checking
grounds passing out by Sand Key.
At the reef by 7 1/2 mile out we
stop to make a study of it. We
got an excellent view of the bottom
with the hard stones (30 feet deep) +
finds it to be a flourishing living
reef. Monobrain recognizes two
living species of coral and see
the usual corals. The reef is
in patches with clear sand in
between. We made two hours of
the depth right onto the coral
and succeed in beating off some
charcoal from Vap line. The corals
are very few belonging to the
carbon format - some large masses
berichium being the chief resident.

The bottom drops seaward very
abruptly. It drops the line of
great blue water being very distinct.
A hand in 20 fms is largely dead
corals - debris + some sand &
nothing living. There seems to be
no doubt of the presence of a
living reef outside of the "Florida
Reef" - this connected, patchy +Table in a well enough recognizable from
about 3 1/2 mile out. The depth is
about 25 to 50 fms but it is separated
from the Florida Reef by a channel
of 80 to 120 feet deep. This channel
is rough coral debris near the
Florida Reef passing into coarse sand
its coral sand in the deeper part.
It seems quite devoid of life and
may be called dead ground. The
sand is also line of the bottom
sounded through the slope that way
is steepen (2).

Our next hand in 52 fms is not
very good - West in 70 fms brings
up but little but in the mass an
there dead & clothing + the balance
of the ship's Seems good in Small Stuff - another tank in 70 ftms Seams good but no large species.

The next two tanks in 82 ftms are upon hard pinnite the clams bringing up a lot of stones - this is undoubtedly the edge of the Pinnite Pleatone. This is not rich in scleractins but what is found is extremely interesting. A number of fairly good Pinnite - one Pinnate apparently used to our collecting & one fine specimen of the seam - a lot of stuff for Miss Ruthven & some good corals for Hargreaves.

There has been little wind but a

Swells that make us row very uncomfortable when bow wind on - which seems to be most of the time. Upon the whole we feel very pleased with the mornings work. The sea & the waters pretty good - there were no bottom fouling & a large proportion of bowls were successful.

About 1 o'clock we put in to catch a very slow tide on the "Eastern Dry Rocks". It took a curious place to approach from the sea side. The anchor as near the spindles as we can & row in with dress and phonograph for reef work. There is no actual dry land but many rocks project above. The bottom is swimming with Diadema's walking walking risky - the life here is about the same as upon Sans Vey - we take the usual kind of reef material - Aid captivates many Crayfish & Moray Eels as known tricks of the collector. It shows us the little propeller crabs on the sea floor etc. Animal food cover numerous, little fish & snails and especially, fine little crabs are conspicuous. Two remain in the water about two hours -

Anchorage at 5. Mail & crayfish supper. Hope to send telegrams.

Bag, 12 - 40 ftms. of Sans Vey, Fla.
Thursday, May 20, 1933

Hard blow to Clapp and I decide upon another round upon the figures and our style with other lips on board a few boats down on the go line and in the permissive - too expensive. For once the bowmen are we had before and at one. Put off for St. Louis then arrived we boarded the train pretty thoroughly and secured an extensive bag of dry roses and the finest white and yellow lips.

Return to boat about one o'clock to find it blowing too hard for any thought of outside work. Upon consultation we decide to go home. The probabilities of calm days are not encouraging and we decide to wait around the long train waiting for the high times going on in Havana over the inauguration of President Madero. It seems unnecessary to go to Cuba - Clapp & I
Wednesday May 26 '13

Visit Simpson in the early morning - lunching there. After
we all proceeded to Birchett's Harbor for figs. Big catch - visit to
Bryan place and how a pleasant chat with Miss Bryan.

The Eel's know they lack
early & fight a strong head wind
I rode to Tamarindo for the start
meaning inside the old boat's
wreck.

Thursday May 22 '13

Chapp & J.B. again to collect
the Bryan place for small stuff.
Eel's arrives Royal Palm dock
at 2:30 P.M.
Friday May 23/13.

Clapp & Edgar go in the launch to Simpsons for trunks & coats.
Sned & J. B. start packing up clothes to get among the crowd.

So ends the first annual cruise with results far below the standard set by our first one.

It is uncertain is the word that our recent aberration all hope of precision and accept what comes as plausible as possible. Our chief difficulty is that the clothing is too small & cheap for their purpose. Our twice-as-large would really be too small.

Sept on Eagle May 23/13.

Several pairs socks.
1 Long Stockings.
1 suit underwear - 3 pcm drawers.
3 white jackets - 3 white blouses of some.
1 Pr. Khaki boxers washable.
1 One ancient pair Khaki trousers does best.
1 suit blue pajamas
1 Panama Hat.
2 Pr. Leggings.
1 Ancient white hat. 1 Shirt
1 knicks washable
3 white trousers
7 white coats.
Condensed Resume of 1913 Log.

At length, at last, once more again indeed. We find ourselves embarked, our barge to float on Ocean breeze, salty spray and chop.

Had we three boys and found the anchor fast upon the roof up front - and up the breast, there’s no one dead — run colors to the top.

We hope the ladies are free up to their gills.

The flowers quick and full the love things done. Hoist up the tender too, we must not drown Coupee up this entry with a rope.

Tell with our flaxen raincoat pump & these our thongs and darker pants - one reg. time, oh! Let Vanity drop out - take down her sign. Freedom and air is our Dalvonic creed.

As we stand here we bid the only need, To hide from public view our Prussian face.

As close the Channel's shoulders every grove we hide, and sight Rodriguez' magnificent gates.

Do we stop and anchor here, oh ladies dear? Bell, bell, bell, weiss nicht, kimme, machten will aus!

Do boote und blitzen, wonen, mit ihm hieraus.

Just queens again, sweet ladies dear, not here.

And when we're off Lœzille's stately height.

We see — what do we see? Oh such a sight.

Such chimes and spires, such tapering minarets.

Do we — a da house, stay sleep, big chair, big room.

Do we — a da crowd, lunch prep, old folk, young folk.

Move a da pick, ice cream and cabinets.

Oh George, Oh George, quit kidding, you've tricked us.

Left to stand alone, come on, I wish to see this home of architecture. — City blessed.

Past when we push the rear door down Kämpfchen. We suddenly came to - we know that stuff.

We're in Biel, damn this town — just old rag weas.
In May and June 1914 the annual spring cruise was made in the schooner "Tomas Barrera" from Honolulu to Cape San Antonio. The Eolis was being used. The log of this expedition was kept in two other books. The Eolis was laid up for the season.

During the winter of 1914-15, I did some experiments with the sounding machine wire and reel in dredging from the dredge. This success was great enough to warrant a complete new dredging equipment with wire rope and reels for both boats. The new installation being made in the spring of 1915. Preliminary trials in May were most satisfactory.

The 1915 cruise was planned to begin about May 10th - Clapp being released by illness in his family. F.H. proceeded on to Cuba for some land work until Clapp should arrive. On May 21, F.H. and the Eolis in Key West. Clapp still being ill.
*Friday May 21, 1915*

The Evita having arrived the day before from Buenos Aires ready for work, Sid & John as usual aboard. J.P. left from Buenos Aires in the afternoon and proceeds aboard. Unfortunately Chippy is still delayed by ship's illness and it is doubtful if he can come at all.

We have high expectations of success with our new dredging outfit of steel wires ropes and drums. New drums much larger than the old ones are in place and several new dredges are aboard. One is of new dredges very large and light in weight to be tried in soft bottoms.

Sid went Montrouge (of the U.S. Consul) aboard to be with us tomorrow. Had to leave him alone.

Weather has been still & hot. Quite breezy at 9 p.m.

*Saturday May 22, 1915*

At five a.m. it is hazy - the send anchor for Montrouge but he fails to appear. Send lines and bag to station to change same for safe keeping. At about 7 we leave the story and head off for bank by finding rough water in channel. Posting land they on port we continue 50 to 58 feet (sounding). The stream is entered at 40 fms showing a sharp line of green and blue water + strong E. current. At 58 fms we try a bateau although the sea runs too high for any very successful work. The heavy dredge is used and the wire rope is passed our clout lines to a guy line mustered back forward which brings the boat level on to the current. The handling of the boat is very easy by merely turning the rudder, the stream then will end on
being comparatively little but greatly increased by altering both 
its shape off sideways. Owing to the 
shaking up of the land the sediment 
collects up the feed pipe & stops the 
engine & some time is taken in 
blowing out the supply pipe during which 
time the boat rolls and pitches 
terribly in this deepseas sea.

In running in the rope the strain 
upon the anchor causes much trouble. 
Owing to the forward direction & considerable delay results from 
twisting with it. All else works 
admirably. The anchor is free of 
fine sand and shells. Some fine 
fish came be noticed.

Owing to the roughest of the 
sea. Album there is little wind was 
decide to attempt no more boats 
and turn in to anchor under the 
lee of South Key when we go 
adhere equipped for reef work. The 
light keeper fruits us eventually

As the tide is fairly high & the 
chop breaking over the reef very 
annoying we must wait for success 
and return some of the species 
especially sought, although we mostly 
expect the warm water. It is quite 
possible to swim with the head 
in the water bucket thus observing 
clearly the bottom. As most of the 
desirable material lives under threes 
little of value is so secured. At this 
season of the year there is no reason 
why these Key anchorage would not 
be a perfectly good one as it is 
sheltered from the prevailing E. & S. 
Winds.

Upon returning to K. W. about 4 P.M. 
we take in water & receive Browdry's 
who comes aboard. He tells us of 
a fine harbor at DeSquire Key 
son fore some mosquitoes.

Our dine ashore as first of 
Browdry at Dunels Rock. Tell & face 
remain ashore to meet customs.
Sunday May 23rd 1916

Ready at five to start out with five weather approaches. We went nearly two hours for Montrey but as he failed to materialize we start first before seven. Pass out through ship channel finding quite smooth sea. Continue out helped by line of stream but at once the line is crossed the sea is bad through less so than yesterday. We decide it is too rough however to run back again just across the line into the back west and sound in 60 fms. While a successful haul in land but only getting buntle stuff - this point about S. E. of Key West. We find a strong S. set right up to the stream which is not strong enough to hold the boat against the E. wind however light it is, so dredging is difficult—this apparatus works admirably however but we have another kind of engine owing to bad gas - a second line in 58 fms is a failure.

We then run out quite a distance into the stream finding less sea than before. Sound & dredge in 70 fms this time the strong current holding as tight against the wind and sea. Reservoir is coarse sand & few shells. Run out to 80 fms & sound & try again but this time it is more and we hope strongly while the dredge is out - Result coarse sand with little good material.

While dredging the Senator ice st倾ers seen yesterday in tow & on fire is still being blown up and down passing quite near us.

We have decided to run out to 90 fms but a breaching N. E. wind and rising sea with heavy appearance to the north decide us to abandon further work so far out. While running in towards buoy #2 (E. one)
We note to our surprise two barrels of sand along the reef line. These must be the Rainbow & will certainly want investigation. We continued directly to S.W. receiving a very severe rain just before reaching our anchorage. Little wind, low wind, and rain at noon and since.

How a headache as yesterday - is this a sort of sea sickness, is it breaking possibly too much or is it the result of internal strain of deep drinking - or the cold stream for more than 10 days of rain?

While running through the standard oil streams pouring out volumes of water - probably her last groan.

Both yesterday and today the reef stream & the blow stream was very strong and definitely far more so than usually observed - The seaweed were coming out in great quantities. No wind.

Current conditions were as follows:

\[ W < N \rightarrow E \]

\[ \times \times \text{line of flat reef} \]

\[ \text{line of flat stream} \]

The stream line is fairly strong near the flat stream line and there seems less confusion of currents right at the junction than is usually noticed. Possibly this may be owing to the fact that a strong outgoing tide was operating at the time - the wind N.E. - the point of contact was more positively shown by the color of the water.

Measurements of wine rope on reel showed: 50 lines:

1. At beginning 4 feet 7 in.
2. " 50 " line 4 " 2 in.
3. " 80 " line 4 " 3 in.

An average for 80 lines of 4' 4".
The varying line of the stream is very noticeable at this point but perhaps even more so here than at any other time we have so far witnessed. A demonstration last December while working from the launch, this was made subject of a letter to Douglas.

Some drizzle around. The annoyance of mosquitoes below water in some way be overcome. A kerosene screen seems to keep it in the pipe although this would hardly seem possible in such oily water. At all events the fish shelter from the rain's below and appear to thrive - they attack our ankles in the most annoying way.

The high temperature in the cabin makes life below more or less out of the question - the temp. ranges from 82 to 90. The higher readings following the engine running. For a long time after stopping the engine is quite hot & eats like a stove.

A light letter from Chopp puts the first question upon our hopes that he will join us and we are all greatly disappointed as our annual spring cruise without him does not seem quite right. Both his wife & daughter are having appendicitis removed.

A wonderfully beautiful night with gentle wind and a greatly cool time sleeping in deck.
WEDNESDAY MAY 24 1865.

Breakfast at 6 o'clock. Cabin temp. 84°.

Although the weather prospect was fine for outside work, we remembered decide to go in the launch to the sand island observed yesterday on the Wallis Sandbar Reef. We started fully equipped for reef work and dredging—leaves about 7 1/2 nemesis giving—while our course off the reef being close in for eddies aborning in tides. The sand is very coarse and mixed with coral fragments of all sizes and has an elevation of about to first in the centre. It shows well the process of island building on a reef and is probably never altered by storms but has always a tendency to increase in size. It is surrounded by living coral reef and patches of dead coral which extend back in a shelf showing rock above the water. Here is the formation of another island going on—the upbuilding being active at the inside (not outside) of the reef where the spent waves deposit their burden of loose coral detritus, the sand reaching the highest points. The portions of living reef present a most beautiful sight as we wander about in some 4 feet of water observing the bottom with water glasses. A great quantity of algae cover the rocks and many coralline anemones and worms with purple tentacles of color add to the beauty. By holding the water glass first right with hand inverted it is possible to support oneself by the buoyancy of the glass using the feet to push along the bottom or even in drawing motion and all the time observe with perfect cleanness the bottom floor within a radius of 10 or 15 feet. By moving slowly the fish of which there are many of many species move but little; bright and numerous.
until we is quite among them.
But is very successful with the
species in catching a number of
elephant fish but barring a few
trifly small fellows and the small
purple species from the 25 rods
we yet practically no mollusks at
call. Why they should not exist in
great quantity in so favorable a
locality seems strange. It may be
that there is one off year for cultural
species from causes that we can
explain. This would seem to be
confirmed by our poor success upon
Sand Key this year, a locality we
know to have been very rich in past
years. We were probably in the
water two hours and I should
judge the temperature at least 85°
while the air temp in the baggage
box must have been well over
100°. At the end of 2 hours we
felt we could withstand.

We then run out to try a few
hands. The first in about 10 furs
in soft clay mud is of no value. We
made several hands in deeper water
without taking anything of value. Finally
we made a big run out finding the
edge of the stream at least a mile
further out than the day before. Before
reaching the edge we find the current
W. & S. after which we see a flowing
side quite that on the reef made a
fairly strong Nothing set. Thus:

The rise = x x x Reef x x x Reef x x x Reef

W.

Lump of reef or reef stream

Strong current

S.

At a point seemingly very far off
Ahone - 17 1/2 out of 10 off hours
Two times - Sand Key & American Bank
Large school of fish - we made a
turn in estimated 80-90 furs - a fine
Thursday May 25/15.

At 4:30 had another 30 minutes' sleep; it is time to start and we haven't reluctantly crawled out of our hammocks, where we slept under mats for the mosquitoes were bad. Started having breakfast en route. Day fine with gentle E. wind. Pass Small Key and turn S.W. to 76 fms (beam). As yesterday the current seems to be from S.W. Our first bend in 76 fms is dangerously crooked. Can approach working perfectly and be definitively met. Sand & weed with very few shells. Bovee aboard V. chub. The current was 3-4 strong as usual. The breeze began at 7:30 A.M. - Then went to 85 fms & began 250 by 350 at 8 A.M. Perfect weather and very slight swell. Here are lots many more V. chub & one fine living Whaler, making. Not the absence of medium size Whiff is remarkable. This is sand + some
some fine line and wind. Then out to 95 fathoms each over at 9 a.m. for 30' long, bringing up a little but
remained here boring slight roll
which is only felt thin lying in
marsh. The current is strong and
the great amount of line out causes
tension pressure but nothing like upon
the old manilla rope. The feel of
the bottom here in excellent & our
hopes arise to highest notice for we
must be on the edge of the plateau.
The modern operatives of dredging is
quite different from old style of work.
The rope passes over the top of the
drum & then through a sheave attached
at a log fixed to the bow; by pulling
this forward it draws the same as
through dredging directly from over
the boat. The hook is first drawn
out or bow or by a chain of the
which it draws the strain upon
the rope made maximum or
minimum at will. Many when
dredging in the stream the boat is
shoved off enough to give a pretty
strong push which keeps the dredge
moving along. When nearly to bight
we let bow or & the effect of winding
in is first simply to pull the boat
ger over the dredge & then to left it
off bottom. The moment this happens
is known by the drift of the boat
with the current - the current causing
the rush by. The line works
perfectly and despite the heavy load
and we appear more effect upon the
effect of the strain is seen when
the change is point - an apex in case
of the arrow. This we brace
and gun strongly - the result of
this change (strain & current) is
many, chub, or & cast but the
very fine fine- U. chub. Catfish,
birds - a large Dentatus
Coralia fish, etc but apparently
no severe shift or any other life.
This is clearly platean materials.
We then ran out to 100 ftrs our position by drift being due S.E. of light (S.R.) - wanted conditions perfect. 

Turned way for 4 P.M. and 10 am- At this time we are very alert for we must be on the plateau a few minutes by our becoming fog. Several times but pulling loose each time without further fishing. The bottom is evidently rough and good — giving about 15 minutes we found in 15 yards to find that the Silk of the 

bridge had found and very little material was raised. This is a find some one contains of more 

some 600 pounds. Microiga fellows - a 

most acceptable find. However our 

disappointment is plain in missing 

the enemy good things we receive 

from such crepits -

Being somewhat tired we ran 
is to go anchor age at hand they 

and home dinner to a delicious
Wednesday May 10th 15

Started from anchorage a little after five A.M. with fair weather indications though probably not to perfect as yesterday -due hope to begin at about 90 furs at a point where we left off yesterday and drift along the stream.

Sounded 92 furs (K.W. due N) line end. Fair - tower away at 7:30 A.M. after some preliminary thinning with you.

Norwegian streamer passes us close to wing bow with his flag painted on his side and we noticeably in large water. There is a sign of the European war brought right home to us.

Bay comes up full of coarse sand and some stones - many crabs, crabs and few mussels - a fine living environment.

Ice and broken ice - no mobility - the first we ever took. Some very good catches.

Second hand in 100 furs, dredge in at 8:30 A.M. but contains nothing save though it looks as long very heavy for some time running on service. From ebb with some little note but are quite ideal for dredging. Reserved some buckets that went overboard and each one again for 30 hand in 100 furs.

The bottom finds rough but we are not hung - the entire arrangement is admirable and little technique is perfect. Sea wonderful, 40 to 50 furs.

Dug quite in at 9:06 empty down for two dohans - one very large and fine. As the dredge limited bottom so here it is certain that the bottom here is of stone so lying that the dredge can piece up nothing - We run in a short way + sound in 98 furs + 80 Foss for fourth hour at 9:20 A.M.

Cabin temp 89°- something fierce.

We have now drifted so that the wireless towers in K.W. Care that is visited near N.W. and American Flug.
is in sight. Drop up on 4th head to our deepest with skirts covering opening and had a immense amount of sand behind. We must devise some plan to obviate this business for opportunity to work out here is too rare to permit such loss of time and energy. We have a slight current - sound in 95 fms and cast over for 5th head, up with nothing at all. This is very discouraging for the bottom feels fine and the dredge appeared to be doing well. American Shoal 68 2 2.

We shift to 75 fms and cast the dredge. We are beginning to think there is some breakers around for our hounds have all but our central bolder and this despite perfect weather & perfectly working year. At the depth we have worked the bottom is evidently sound & hard. Up dredge with absolutely nothing in it. There is now no question left as to the breakers. Dredges two disconnected the 3rd & put the Key West (11 30 AM) - American Shoal and far away - cross the bar at Red Bay, #7 and arrive at anchorage in Key West at 1:45 PM.

In Key West harbor the heat is very great - in the cabin it is appalling. 94° about the record on the Elias.

The cool air doubtless means that there is a decided diminution in malaria or life in the vicinity about Key this year. This would be quite in line with our known experiences of others who have commented upon this life cycles. Herefore Key West has always been our sure place for good collecting. If we continue to have it here we shall have to move on to fresh fields. We are hoping Simpson will join us tonight.

During the last still afternoon we spent (day) out all the things of digging our meals & bopp'd some
Thursday May 27 1865

During the night the wind blew fresh from the E. and morning dawned with too much breeze to warrant a trial of the new stream. Pending a change or final determination of what the day would likely be we decide to obtain boxes, pack up our bags & ships them north. It was strange for boxes and other things - Harry is suffering from indigestion and is badly off the horses - too ill to do anything. We study the charts to discover if possible some good place along the Boston channel to make a base for outside work. The best looking for harbor vicinity & good ground without seems to be State Key. Here the reef is very open and easy to negotiate with the 150 ft line just ten miles from the Key. The chart shows very bottom at 117 fms which turned

We now have in all 16 bags ready for shipment and several bays of material too next to bag. Letter writing and a fine service of the boat. We would enjoy much more fishing in this water of high temp. and salinity were it not for the little discomforts about shucks. All the vessels here including some children swim all over the harbor and anchors there is the deeper water & those of years and experience say there is not a case on record in the harbor. The water here is not clear and we cannot see bottom in 12 feet a fact that adds to some apprehension. It is certain that there are sharks in the harbor. So great is the following of the water one can actually feel vibrations upon ones stomach.
indicate a continuation of the
Portolets that for it hence probably
Good.

The last of the lamps are burned
out and dropped and their boxes
for shipment by freight. They go
today in two boxes.

A theory advanced by a native
for the elimination of life in reef
waters - a point so to has especially
noticed in regard to fish - is that
the extensive dredging operations of
the F.E.C. R.R. has removed an
innumerable amount of the choosy
sticky mud throughout the waters
and covered the bottom with a
film of the brown stuff it made
bottom life impossible. The theory
is tenable within a restricted area
but would hardly apply throughout
the reef especially in the stream.
A letter from Simpson saying
he will arrive tonight.

At 12:30 P.M. and bid start off
in the launch to inspect the breakwater
at the outer end of the N.W. channel
and to try out a few hooks. This
breakwater is about one mile long
and in some 10 feet of water which
is perfectly clear showing the large
granite blocks from the very
bottom. These are strictly covered with
several algae but there appeared to
be no innumerable life whatever. As
this rock mass has been there many
years it seems not a little strange.

We ran out past the bell buoy to
a point about 1/4 mile E. E. S. from
the Whistling Buoy - a distance of
some 4 miles. This is called Smith's
Reef and is very rocky - our several
attempts to dredge always resulted
in bumping up and catching nothing.
The rocky bottom extends another
at a mile S. of the buoy and stipid
our efforts - hence in to the Bell
in hard smooth sand with many
sea-cucumbers and no living shells.
after being the usual strawberry
profiles of high and colored lips.
Great quantities of shore plants and
flora were up in the sand. All our
efforts to find grassy bottoms
failed. Our recollection of the
region several years ago called for
grass everywhere and many
living shells.

Returning to avoid a strong
envelope tide we took another route
and went difficulty in the going in
depth enough water - Arriving we
find Berry much improved - Swam
and go to Station the next Simpson
but find there is no train due at
the hour he wrote of arriving - the
ruins promise rise up in the
morning - Swam ashore at
the Deed - It was quite
pretty poor on
the way up to a starting point.

Friday, May 28th

Expecting Simpson on the train
due at 8:30, there is no need for early
appearance so it is almost time
to go to meet him. We arrive
on time. - This goes easier for me,
about 11 o'clock we head off for Sandtyn
to take advantage of a fresh more low
tide on the reef. Having been blowing
pretty hard all night & still fairly
strong from the north we drew chugging
outside to be impossible unless later in
the day this wind might abate. We
find it rough in the channel when
the running out going line meets the
S. wind and we are obliged to proceed
at half speed for a while or so.
Anchored in our little shelter just under
the lee of the island finding it
very comfortable. Have a bit
of cold lunch and put aboard all
freely equipped for reef collecting as
extremely hot but favored us greatly.
It being quite a foot below normal low tide level and the outer portion of the reef which we had never before been able to visit was well exposed and easily attainable especially as there was but little sea. We made a most thorough exploration of the whole place and although we obtained more than the last time, yet it is apparent the reef is not nearly so rich as a few years ago. Two large newcomers are the best. We worked clear around the island and even the outer edge in water over head deep. As surmised in such places the fish life is very interesting many of them being of wonderful color. A Phylacia floating past with its colony of little fish was drawn into the water basket and closely examined. The persistence with which these little fish keep under the protection of the slip rays is most striking. They could hardly be driven from under it if forced to leave they would dart about wildly, and at the first chance get under again.

The great number of Diodonches were all hove upon the reef most riesly and the greatest caution is required to avoid contact with them. Here the species is jet black and very large only the very young showing the spotted spines.

We try out the diving apparatus in about 15 feet of water (from the Colis or anchor) going down the wire rope lowers away for the purpose. All went well enough except for the pressure in the ears which was too painful to stand. This shows he has been driven so fast without feeling this at all and is at a loss to account for it. The sensation of breathing about the bottom is hard to describe. It would be wonderful astonishing were it not for the pressure in the ears. One well in 15 f. at 6 P.M. Al 6 P.M. - Diving ended. Several squares at 6 P.M.
Saturday May 7 1915

During the past week much squalls
and thunder storms wandering about
and flashes lightning from all quarters
of the horizon - aware to find conditions
looking bad. Working to do food stock
and watch. At 8.0 the appraoachers
began to threaten our drift. From
can an attempt to a bed alongside
the ship one or two making fast to
the piling. While here we are greatly
amused by the antics of 4 crew of
lumber boys in swimming, they have
been in all the fun and expect
to remain in all day - possibly
coming out for launch - they absolutely
have to be amphibious - it might be a
good idea to tote a bunch of
these boys out to the reef with us
and have them look among the
sea-fans.

But we boast up on gas & provisions
hoping to get away early in the
morning for Bevan Sound &
WharnsBro when we should remain
if we find a good haven.

More reading and letter writing.

In the late afternoon we shifted to
are meeting bound to us just off the
headlands, watch and partial to the
anticipation of the lumber squalls
which now seem to be expected as a
reprise performance in the rainy season.

We enjoy a brief turnout & go ashore
the crew working exceptionally fine.
Toilet in view of a party they are
expecting to attend - somewhere in the
woods afraid to upset the crowds
that line up the main street on Saturday
nights - the people here have a warm
and deep love for the excessive heat
the bay waters who are an old
Brahman "cooler" with an
infusion of Indian bean blood are
not like the more progressive
and energetic Missionaries who are a recent emigration from Northern States and still retain their color & pep. The range of industries in Hill is very limited & the per capita wealth is probably small.

Swimming 1/2 hr. Return to boat about 10 0'c. The sky is a mass of heavy storm clouds shot with lightning & glowing under a fine rain over all the edges. The thunder rumble strongly in a sort of thunder roar but the air is still & oppressive. Bob, we are obedient to get into the water & think sit about in deck chairs until further for an hour. Fortunately there are no mosquitoes. This is a more typical tropic night in the rainy season.

Finally the storms hit us but we have no worry this time for our motor is a good one. About 10 30 P.M. the rain began & was steady with a steady increase in
Sunday May 30th.

Crew come out about 6 am. & we proceed at once to the port & check to fill up water tanks remaining at Wharf & get breakfast. A strong flood tide rushes in. Sky heavily overcast & east signs of moderate gales. Start out about 8 3/4 heading down the channel & reaching within heavy chop from port E, wind against the tide just beginning to ebb. Take course SW. to follow line of keys & break - both rocks breaking in heavy sea & all our shots are returned. At this same point we paid a heavy bill in revenge three years ago - attempt to show clear an account of copy which came badly & hanging up without fruit. Opinion upon turning off was - "Round Bow on North Key giving much better & shall upper on N" - sentence obviously wrong. The land
Sand beaches or surfwashing over the boats. They greeted us cordially, but our course was disturbed by our coming, but quite knowing our intentions. It seems that there is much rivalry between them and the Key West Spongers and we tried the feeling on the part of the latter. They eyed us curiously at first but our explanations of new and purpose elaborately made by hangman did not fully understand but realized just them at ease. We landed on the beach and made the entire circuit of the island.

Boca Grande Key is the last to the S. on the large bank W. of the work - it is a hard pile driven up upon the remains of an old reef which appears at the W. end under water in the form of layers flat slabs of stone formed by coral wheels + sand - this old reef rock extends a mile or more to the W. & some living coral in isolated pieces in a mound scattered about. Over all however is the film of cherry shell & the characteristics of the lower Keys & which I believe is increasing + destroying the shallow water life. Among these blocks are some corals, some calcareous algae, some hydrozoan, some crusts + worms and not a few reef fish were observed. We finished our work the next day.

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Monday, May 29/15.

A series of rain squares beat us all night and continues on in the morning with heavy puffs of wind. The prospect is not the good for work of any sort. As the morning advances the puffs of wind from the south become more and more frequent and by noon seem to have a regular steady gale with occasional rain. Although we have very little wind we are nevertheless very protected by the bow. All about us the rain is not admit of large waves forming so we lie quite easily towards on to the wind - the tide taking us out to the US. The land of Spongers is far out this morning to the barrier as sought harbor again on the land. This is probably not a mere local affair but a regular blow of large area.
are hands spent the time looking about round, reading or sleeping or covering
the weather. About 4 P.M. the
wind moderated to almost a calm
and lowering tide manifests the
extensive flats are about us so we
decide to lower away the tender to
explore them. Three flats of low
tide are exposed a few inches above
water. The surface is a liming
of calcareous mud covered with
a thin growth of coralline &
calcareous algae with patches of
Helleurra testudinaria. The latter
were in less success with white
molds. Occasional topknot sponges
and pieces of living coral are
scattered about. BY this time of
growth are some encrustations &
vivacean, a few star fish & boturines
but very few mollusks. The
in the Fascicularia tubulosa, Stomatis
signs & two Astreoleum species were
subsequent. Notions of Siphonica

Tiphina - becoming foetid & some for
of the common pelagic kinds all dead,
were about. It seems very strange
that so promising a looking station
should be so poor in mollusks but
such conditions are to be expected
there days. While wondering about
we notice the bottom of the lagoon &
proceed to give chase as they are
considered poor eating - the capture too
of one of them - large big fellows. We
only stop in account of darkness.
The physical features of the flats
give an excellent idea of the mode of
growth of these banks & their first
evolution into Keys & dry land. It is
clearly an up. building region - we
are most anxious to visit the
Quarantine to study this example
of an atoll reef that is older than
this & is more comparable with
the Turtles & than with any other
keys in the entire series.
Tuesday June 17th

Although it blew pretty hard all night and the wind came from the same direction and overcast sky, some of us are beginning to hope that conditions are changing & that the storm is ready passed. The sky looks better & there is little cloud seen to show the vicious squall it of yesterday. It does blow rather too hard for any collecting operations. Fact is this is getting a bit tiresome.

About 10 oc the wind suddenly shifts to the west and blows with great fury. As soon as we drop both anchors and pitch upon upon the bank to the N.W. of us & it taking much effort learned poner to shift the launch as a tug to pull us off and regain a good position in the middle of the bank with the current of the wind it besides one the boat

weather conditions are to the contrary again - it blows great gale & rains & working is left up to read & sleep & waste away the dreamy hours.

After a while conditions improve and we decide upon a rounding point upon the Boca Grande Channel with the launch. We find a good stiff sea running out of the current & can easily imagine what it means the doing outside.

We locate several crabs that always in Rocky or very rough ground with the sandal rocks. After searching about a good deal the locate some sandy bottom with weeds and chase several crabs upon it but getting scarce return. The sandy patches born fine way to fields of sea urchins & Irish growths & we keep a harvest of sea urchins including some 

Piedema - Some with muscles are
the only reward of value.

Return to the Eolis before dark & the boys start for the
boards to get another piece of
shark crobs which proved to
just a fishermen lost weigh for
shupper alt's Simpson & found
both complainer of feeling green
after eating them. Caught none.

Judging by the character of the bottom
in the Boca Grande Channel which we
explored it would seem that the strong
tidal currents sweeping through have
stripped out the positects very clean
leaving no trace of the carbonate muds
so well distributed over the bottom. The
channel is well adapted to providing
animal life and is probably, full of
coral patches that arise eventually
narrow the passage & the banks
will develop into low keys - the
ever increasing bedding up process is
rapidly going on. At the rate it
does not look any too promising
for the morrow.

Wednesday, June 27th:

During the night we had howling
S.W. winds and rain & the morning
clouds were with appearance of a
continuation of the wetlands conditions
that have held us prisoners within
our little live aboard harbor for
four days. The tides is shifting by
so regularly that we cannot wait
any longer. About 9 am prepared to
nail every thing down and smoke ready
for a handy run to K.W. Start at 9:30
taking the route N. of the booms & via
the M.W. Channel - Pass through the
front part of sponges operating in
northern part of Boca Grande Channel.
They look about like corals on the surface.
Our reach of this route the bottom
is indistinguishable. Arrived at
mooring at 12:30. All kinds of bad
weather going on outside it good stiff
breeze from west here. Here ends
the cruise for today.
Saturday, May 20, 1916

After many delays and repairs we finally got started from our ship above the 17th St Bridge at 9:45 a.m., stopping along the way for the duty crews to etc. On board the shrimper

Fred, Sidney & Dick. Jake the mate, Westin fine crew and prospects good.

Destination: New York with various stops en route depending upon the weather. We expect to meet the Dolsen with Borch & Meyer aboard in Newfound Harbor. Charles expects to

join us in New York, being delayed by business in Philadelphia. It is quite ten-thirty before we finally expect from the river and with the launch

in tow start down the channel. A vigorous shrimper stirs up the

water current but only reaches us with its tail - wind light South.
Pass stream aground at the beech and enter Button Channel going by compass on account of strong currents. Pass Caesar's Creek and lying next buoy beyond at which point we run into a shelter on north side of Cypress Creek hoping to remain there unmolested by mosquitoes. Anchor in 10' feet low tide flood bottom overboard for sewer. After dark crew go to flats with light and appear for cypress - one time in the mines first and tied on creek. Still fine sight of bright stars the Southern Cross shining very plainly - a very slight breeze.

Sunday, May 24

Arrive at 5 a.m. Weather prospect excellent. A continuing run no stop. To Knights Key where we anchor for night. Weather perfect, light South wind. We easily find dredge channel and anchor peacefully near the mosquitoes in the hopes they will be gone. At breakfast wishes to explore Steering Key & Casa for fish. Rush was plan to run back to sound and look him there. All night brilliant stars and wind brings from south - a very snug harbor. Quiet & free from the little roll one always seems to get in the more open places along the Heart Channel - the only danger being mosquitoes. We shall probably leave the lances and do our outside dredging very early & returning to see Simpson in the lances to his spots along the keys. The water has not clear - like west coast. Returned this same mile back. All trim in early.
Monday, May 23rd

A good strong breeze from S.E. also might make it difficult to keep an even keel for sleeping. At 4 A.M. Simpson awoke the crew, still half-dressed, thus proceeding to outside work. At 5 A.M. and 6 A.M. Simpson and I distributed the crew and proceed to clear the inside. Simpson spends a little time in clearing the key, then returns to a point on land where Ed leaves him to walk back along the R.R. line. The day is spent in resting and letter writing while a strong wind at 7 A.M. blows making too rough a sea to dredge. Simpson returns about 4 P.M. - Sib 

3 1/2, go in launch to plantation to put beards. What a dream like the inhabitants must have in the sun bleached places where we are about the white sand reflects back the sun's rays as from a mirror - at 6 1/2, wind diminishing, we made to Key West tomorrow.

Tuesday, May 24th

At 5 A.M. the outlook for reaching an exit from our very snug little harbor was not encouraging. The wind was strong, first in anticipation of a long run to Key West. We waited for the incoming tide to lessen the seas without it at 8 A.M. with the long attached to the end of a 50 foot hawser we put out into the rough. We met a good stiff breeze and roiled along past the long distant point Botoo Heads & where found Harbor Keys (seeing the base of the Doheny), the wind having become less strong and the seas less violent we ran out to Key West in hopes of being able to go ashore and repeat our fine collection experiences of six years ago. At getting close we found the waves breaking entirely over the little Key & any collecting there out of the question - we reached Key West about 3 o'clock finding the Doheny just in
Going out to A.O. + Tel. office
we get a tel from Chapl saying he
cannot come at all - It is a great
disappointment. This is the 1st year
he has failed.

Dine on the Dobro with Mr. Galt,
Bartoech & the Mission Agency's expert
Mrs. Christie.

Night quiet & good prospects for
Tomorrow.

Wednesday, May 14th

Start out at 6:30 hearing church +
picking up Bartoech from the Dobro as
we pass. We continue out ship channel
and come one hour to go first where
we lower away for first haul. A little
some time to get all in order for
preparations have not been very complete.
Strangely enough there seems to be no
current whatever even though there
has been 48 hours of hard south wind.
The Arches lie idly upon bottom the
boat drifting about in the dead calms.
This is a novel experience at such
distances out. They tend being still
slow. We are obliged to use power.
The result is fair - one fine tumbler
beard which we present to Simpson.
The 2nd cast is made in 100 furs
(N.W. over North). The bottom feels
rough but the Arches comes up
free of sound of poor quality - We
then stop our own East a mile or so
t 110 fps (17.14, bearing NW) working east #3. No current here! The channel came up heavy with coarse sand. The feature of the bank is some heaves of gums by haparums but not the same species as found in the large indenture of Fowey. Some other interesting crabs occur—many flatrods. Fm. microsora, a fair I hatched (write event). It is very rough and the wind just starting up from W. We head off for midden banks. Keep hoping to explore that interesting patch banks just one year ago today. Anchoring the Eelie as near as seems safe with process astern in wearing & tacking easterly with increasing W. breeze has, however, by this time created so heavy a chop with the tide quite high all work is impossible. The only reward is a number of echinodermata of a genus allied to Clio or Cylia, but quite small. The following color notes are given: Ground color pale olive flanked with irregular spots and blotches of pale gray. The latter color marking the flakty projections. The sole is deep green with fine dots of pale gray. In large specimen a black stripe extends from the middle of the ventral edge where it covers the gills obliquely across the side of about 1/4 length of animal.

---

Return to Fowey about 5.30. Din ashore at Dawes. The Cohin is heavily loaded, has deck packed with bales etc. to the evening. They propose starting for Turinpas tomorrow.

Wind blows quite hard from W. Poor.

Not over good for turinpas.
Thursday, May 25th.

We receive an early call from Dr. Bartlett & Wayer to say good-by, they having decided to set out for Tortuga despite a pretty stiff breeze from the NW. — Drifting seems impossible and as I'd wished an opportunity to complete the last section of the earning & whale bags etc. Simpson & I set out for a hand steering expedition to the E. part of the island and for a look-in in the lagoon of Stock Island. We are bound upon the R. coast & to aboard the Belleisle to fine Capt. Phillips a copy of the Barbacoa Quirie as promised him some time ago. Taking an auto, we run to the E. end slopping in a few places for Simpson to look for fish. The finds some fragments of gold & silver. Crossing the Belleisle to Black Island Simpson secures the woods with good success.

Returning we take a fine dinner in the channel under the trestle driving at the Dutch restaurant and go a-drawling about 1 P.M. — The wind gradually increases blowing hard enough from the NW. at dark to warrant a second anchor.

Our mate — Dick — is a good man about a boat being a sailor by profession, but like most sailors he drinks — as we are forced by the small size of our boat into such close association we cannot very long tolerate his intemperance although it is most rustic & well deserving. He calls S. the "decan" & me the "commander".

If it were earlier in the season we would call this a luncheon. It is not so cool but that one can go without any clothes whatever.
Friday, May 7th 1810

A day of tedious iteration by reason of too much wind in the morning & late to start out when the wind subsided. Simpson spent most of the day landshelving in the remains of an old harbour on Key West island. He brought back some boxes of solid ice (fig. fac. 9) & solilders from Stock 10.

We made bogs and trips, & read and read from Chapman's Birds of E. North Am. & Camps of an ornithologist's trip: two fine books.

A schooner spent. While II, anchored near by was the scene of a very gay party which we watched with much interest and amusement - How a fine dinner from the boat. All but Simpson olive active. S/4 1 5/10 at the door 10 am p.m. that we Dick — then we must fire him.

Prospects good for tomorrow when we hope to end this iteration.

Saturday, May 7th 1810

At 5 a.m. the "papoose" (Simpson) arose everyone with the cry of food breakfast & by 6 we were in our way out via Cane Bay - our first cast was made in 25 fms due South of Western Dry Rocks Beacon in a spot marked 'Haul upon the chart' - the dredge brought up a few baskets of stones with agreeableobotrope presenting what we could consider to be the first ever below that it seems to be almost devoid of animal life. Some few dead shells & a very few seaweeds. The lead bend was made in 65 ft couple bottom off West Dry Rock Rocks.

It seems not be called a very profitable hand through the bottom seems excellent. Could observe (deep before) the 3rd house is in 70 fms. Fire Dick & Thosi, a perfect specimen of Tusco, excavated which I gave to Simpson. A fragment of Shells, perambles. The 4th house is in 90 fms somewhat rocky bottom (Pouthe 82).
Although this book is disappointing the results not a good many good things. The best of all these were obtained by us and a short & penetrable & many small things of considerable interest. This would indicate the Pointables further in the Hong Kong than to the east. All of these objects appear to be more rocky & more than to the case as when there along the Kepp that are Pointables. During these four days we encountered a strong misty, at & did not see the Gulf Stream at all. This current was strong enough to cause us to drift without being pierced by the finish of the last land our drift was close to the west of the W. Key Rocks Reserve. At about 10°C the water broke and proceeded to our old times anchorages under the Point on Great Key. My second visit to Great Key is a further without which my return to Cayo Largo would be considered complete. As we have
Sunday, May 28th

3 o'clock are up to be greeted by a
furious rain squall which is
preceded by a series of following
cold waves an another. About 3:45 during
a lull we decide to start for the
thesauruses which Simpson wrote to
expect for coal stakes and geological,
the morning before there came an
anchorage when we set the face of
proceedings and put back to another
anchor, notably - some a furious
rip in arms of a wind, paint
thousands of miles - a refuge. Cape the
Atlantic's echoes goes sounding past
and it appears to settle down for a
day of bad weather. We here to
employ the time as best we may
on board - Sid's wife is due on an
excursion train from Miami the
morning about 10 o'clock to meet us.
The days of enforced idleness by
pressure of weather are particular,

inquire in a small boat. In the
afternoon Simpson and Mr. Lee a
walk along the RR track simply for
exercise but have to hurry back to
avoid a deluge. The bad weather
continues all day. It brings lots
all right, but is mending, where with his
wife. It is days of this sort
when repeated lots often discovers the
man with a boat
Monday, May 29th

Simpson wishing to visit the
Marcoseses and it appearing to be too
dwindly for outside work, we made an
early start by the direct route for
Marcoseses, arriving there about 10 on
the wind fresh from E2, with quite a
sea running and especially so in the
cross channels as in Boca Grande.
Simpson is pleased by finding the pea
Force reported from since the
island is very interesting from any
but the geologist point of view. It's
flora is very poor and its fauna still
the beach is absolutely devoid
of edible sea life of any sort and the
dead stuff upon the beach a humming
is forming island but is very young
having but very few species of
trees and plants. A water snake
in a pool is the only life observed
besides some crabs & dragon flies.
Following by the W. coast we
meet with less sea as we come a bit
of the land and flay, pass the before
yacht Sunny entering the NW passage
with汇报 the shore then abroad (?)
Dine ashore. Simpson decides to
will return to Miami tomorrow. Taking
the 6:30 AM train to Andros Key, spending
the day collecting in the basin area &
then taking the express as it goes by
in the evening. He accordingly
arrives and we turn in early.
Tuesday, May 1906

Put Ewing into ashore at 5:30 and after breakfast, though the weather does not look very good we continue forth to get what shrimping we can. The current and ship channel + Rand S. to 75 fms & cast the dredge at 9:00 am. The bottom seemed rough & the dredge doing well, but comes up (9:33) simply. The ship stream in the current is in any direction. We also cast for a second time in some depth (9:34) (Sand Key NW & N. and N.W. N/E) Bottom is quite soft and coarse almost devoid of life. The 30 fms in 87 fms (10° to 11°), the current is a slighly warm set Sand - poor result. Our 4th bend in 99 fms (11° to 12° more) proves a failure. It appears, in the absence of this strong stream, is any other current, difficult to

measure. The boat in such a way as to insure good results. It also seems very positive we cast the bottom is much poorer than formerly. Comparing with records of several years ago in similar depth & places shows a very marked falling off in the bottom life. The zone down to the Porocytes never was in general a rich one but some strips of bottom were excellent. The return in the afternoon mountain several bands first without the reef in 10-20 fms Soft white sand and an enormous upon seizing to find quite a bit of stuff - the very large living Porocentrum alinity is a most acceptable catch.

We visit the Wellness Schooner "Lois E" in our building suits - have a fine dinner - ashore ashore.

The day has been a perfect calm - hot - & right - still & warm.
Wednesday, May 21/16

The day opened with such promise we did not wait for breakfast but put out about 8 30 going west of Sand Key and continuing in the same course until by sounding we found 95 fathoms and more. We first cast at 9 30 AM. - Sand Key bearing NE by N W. The bottom felt rough and upon pulling in the anchor a very bad kink in the rope which required much patience and worry to untangle. Fortunately the rope seemed blown away before the accident. Drove in at 8 30 feet of course 12 and with little or no lead the first shore but a slight 10° drift. We ran out to 110 fathoms east (8 40) + up 19 40 and a water sound - absolutely nothing. Our chances so far has been very disappointing and we hope to up in to what is an extent - the perfect weather (Slight 10° west) and unusually off shore position of the stream decides us to make a run for the Plateau. We might just as well lose the depth and have done with it. We ran out some distance to a point sounding 120 fathoms. Sand Key, Light & Andamiro Towers in R & L in line. Here we cast the anchor (10 AM) up 16 40. We have worked diligently in keeping bottom being obliged to give a very long lead also from one 3 lead or weights. Slight E. set but hardly the stream. Bottom rough but mostly coarse sand with many crabs and almost no fish. This won't do yet! Again we have run out in same line to sounding of 144 fathoms and more cast at 11 30 (up 14 40). This time this is in doubt about the Pointers at being under us. The wind and airpage tone catching, holding, making these and running a general fuss of wind. Finally holding fast. Upon bringing up there is but little
Material in the wet but little in the life—real corals
living things and are so different
from within that depths give. First
we are pleased with our
first approach to Ceylon in many
countless clinging to the masses of
the wet—these some large fine
branchy pods. Two species of sea
urchins, including the lemon yellow
edible one, many sponges of prettiest
form, a swarm of crinoids & fine
hydroids, worms, ophiuroids etc. of
wonders—there are not so many but
there are all excellent of the deeper
water aspect—no large ones at all.
We make another haul in some
places with about the same result—
not a large amount of material
but that all living things.

We stop at proceed for
some lunch—finishing this book
the draft—after a short rest
we steamed NE about a mile
and sound in 120 fms. and at one
more a cast—The bottom alternates
sandy sand & rocks. The results
simply fine—quantities of the
crustaceans, and several large
ophiuroids of a spread of quite
18 inches—were branchy pods, a
perfect Y. abdry & a shower of small
urchins. Besides this is a
bewildering lot of bizarre looking
Crustaceans, Ophiuroids, Crinoid in quantity
all living material, a wonderfully
rich assortment of most interesting
stuff. As it is 2pm and we are
quite 10 miles out beyond the reef &
quite tired we run for home, arriving
at our mooring about 5pm. —Take
dinner and dive ashore.

This has been our first successful
day but of all successes the most
important is this discovery that we
can use the crinoid in the Foulah
Pl. — we may get our confident
and meet with disaster, but we
We have actually made 3 successful points running among the rocks & stuck it easily. The weather conditions have been ideal and the lack of strong current we desired was to our benefit. We may not soon get the right combination again, but Pleasure Work has spoiled us for lesser objects in safer fields. We were anxious to try out the Omniball bed off the bow &c in 120 feet as described and plotted by hunting.

The day's work has resulted in a formidable array of alcoholics.

At 10 PM, the wind is increasing and the outlook for tomorrow is not so good.

Thursday, June 1; 16

The wind blew strongly from the NW all night and continued throughout the morning, and the sky appearance is not good. The day is spent in doing many needed tasks about the boat - bopping the dredgers that later the deck. Scrubbing up & cleaning, handing out laundry, putting alcohol & fires etc. from there, & finally little writing - a much neglected art. The day's work is interspersed with jumping overboard. Dick asks for shore leave "to see a friend" and we have some fears lest he get off the hooks again.

He is an excellent man upon a boat and a most willing & capable man, and we relish can apparently be placed upon him in account of drink. If he turns up steamed he will have to go. - In the afternoon the wind dies out and we regret not being out. Rain appearance in evening.
Friday, June 27th.

Blow a hard gale from W to NE night driving us out of our quarters at 3am. - All day the wind continued strong coming into NE and centering the barrow with white caps. The work possible. The day spent in newspaper reading and laboratory idling - In afternoon took a long walk - went to Duesal restaurant and called upon Captain Commandant of the Hay Yard and accepted his invitation to dinner Sunday at 7. The working gane is very trying and we hope for good weather tomorrow to end our exhausting existence.

Saturday, June 28th.

A day wholly lost by reason of too much wind for surf stream work and a headache. Spent the whole day dozing and reading and cursing the place. Did not go ashore. Wind dies out at night and good promise for tomorrow.
Sunday, June 4, 16.

All indications being good we hoist our anchors about 6 a.m. and head off about S.E. passing the Squirrel to the east of the ship channel and continuing to a point in the range of chartings called Point No. 3 given in his report as "120 fns. South 50 East. True course 120, about 15 miles." We get the bearing in 110 fns. East and make our first cast at 8:30 a.m. The area are the days sails "whales" as we are about 3 of that reef 10, the heaviest is only visible by her rambling towers behind very point. Sailing up at nine 90. It is caught by the wire under the handle in such a way as to be wholly ineffective as a drag, and quite efficient as a tentacle. It is covered with long brown hair, and what seems appears to be pleuran or the same round-scale ophiurans of last Wednesday but there were string 42 inches across. There were other ophiurans most in our collecting and some very fine Astrophytins - the first seen were in duty. Our 2nd cast immediately made in same place (110 fns.) turned to E. fairly strong - same result. Very enriched Bottom - we make a short haul finishing to lose the dredge. Up at 10 40 - Contains a great quantity of warm cases. Very fresh but broken scale - probable. Some food and abour, many annelids and one green sciaenae. We then proceed out 11 fns 120 fns but the depth seems hard to determine with positiveness - inner away for our 32 at 10 45 and up at 11 00. By of beef - full of rounded pebbles or fish about size of large mussels - there is a perfect scale, perlemor, many fine specimens of 2 ty. of Broachopods, some hanging in elution looking food enough to eat. A host of small mollusks including several quinque, Brittle, Sower folioseous limaces, very large.
Crichtoppis etc. Many crustaceans, hydrodoids etc. This is one of the
best beaches we have ever made.

Swell stream strong.

Haul #4 is made in 115 fms
(Cast at 11:35) - an excellent one for
hurricane stuff, but not so profuse food
as the last one before. Three sand +
rocks, a few Antedons.

Haul 5 - 118 fms (Cast at 12:15)
Very heavy with pebbles being the
dominant. Same gun as #3 with quite
similar results. Many small things
including the little tobacco snails and
3 sp. of Brachiopods - possible, 4 sp.

Run out from haul #6 to 135 fms
leaving drudge down while we take
can of fresh bread served in the
table service. It very soon ancles
us, the current becoming by.
Start
up at 2:15 - free of sand and rubble
and not apparently to pick but upon
washing out the residue is seen to
be very free of small stuff.

...

The doubtful appearance of the weather determines us to go to Havana and on our mountain trip as planned leaving the boats to work the position in our absence. We set away upon the Atlantic without starting very late.

During our stay in Cuba to June 23 the tide makes a number of days cogging & lengthy attempts prevented from securing an account of both weather.

The conditions of Gulf Stream change, the current coming in close and flowing with great strength making all deep work doubly difficult & a series of woodings over the area. On one day in 110 fathoms becoming finally the bay of the C. H. C. when the boats & current were last within the part of the deep draw to which the gaff for the dragon was attached, pulled out leaving a hole. The final search came later when the dredge found in 120 fathoms bottom firm, fixed beyond any disturbance and the heavy current & rough seas are necessary very difficult.

The sight from way of the bridge would not hold the wire which jumped out in 10 to 15 feet deeps. It became finally necessary to secure the wire with the ship by lowering about 120 fathoms of wire and the dredge. A day of work on June 23 in 85 to 110 fathoms with the light but very large clods brought in a remarkable list of Volutes, big Scallops & Myriads with many other desirable shells (7 fine large Clams).

Barque and I arrive the afternoon of the 23d and take possession.
Saturday, June 24/16.

The last day on board gives us packing up - a superb morning.
Paul de lettre the 6 o’clock for
Illinois to make a bird list on
route.
Supply and other addresses:

Joseph Barne & Co. - Marine electric supplies
26 Fulton St. N.Y. - Marine lamps etc.

W.A. Augar - Nets & Twine - Clamps &
33 Fulton St. N.Y. - Osphu Yipping devices.
Wages for W. paid:
  C.B. B. up to June 11
   Sidney - Jan, Feb & March 1911
     Expenses - £100
   Sidney & Sore - Feb to May 11

May 12/12. Mrs. S. 9. £25 "Supplies".
               It is repay exp. use of previous wages OK.

May 31/12
  Mrs. Greenwood 75. £50 helped
  S.W. Hennies 25
  Semi Durée 10.  £30
  S.W. Hennies 100 - Expenses.

Mrs. 14 -
  C.B. B. (Wages) 50
  " (Exp.) 50
  Mrs. C. B. B. (Wages) 100 5 Feb.

Apr. 1
  Mrs. Manchester 175  Feb
  T.E. E.  25  March
  S.W.  10  Exp.

(Apr. 4) Semi Durée 60  Wars

Apr. 19. C.B. B. 207.50 in full

March 4th for Exp. 300

Cash 30.
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Amount: 300.00
Cash: 30.00
Wages & Exp. paid:
C. B. 1/2r. in Feb. to June 11/2.

Sidney - Jan, Feb & March 11/2
Expenses April 11/2 - 100

Sidney & Son. 1/2 to May 11/2.

May 12/2. Mrs. Wells 9. £25 "expenses"
To repay exp. un of previous wages etc.

May 31/12
Mrs. Davidson 7s. 6d. May wages
S. W. Davidson 25
Levi Davidson less. May wages
S. W. Davidson 100 - Expenses.
Carmen Martinez

Amistad B. entre Bernal y Animas
Mademoiselle

Lili Champagne

ECONOMIA 54 BAJOS
Mademoiselle

Lili Champagne

ECONOMIA 54 BAJOS