

TRIP TO EUROPE, 1905.

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Left Ithaca, N. Y., Thursday evening the 25th of May,  
11:13 P.M., Lehigh Valley.

Friday, May 26, 1905

New York - reached here 9:45 A.M., one and one-half hours late. Took cab (50 cents) to Astor House and engaged room for \$1.50. Attended to some business concerning ticket. (Had purchased outgoing ticket at Ithaca for \$90.00, room 147 on Kroonland, and blanket return for \$85.00. Had latter "vis " at Company's office in New York. Arranged for both at 7 A.M.

Visited Holt & Co., 29 West 23rd Street. Saw Roland Holt who had invited me a few days before to dinner at 7 P.M. for to-day and to go to concert. Called again in afternoon and talked with Vogelins a short time about books. Then returned to hotel and dressed for dinner. Reached 44 East 78th street at 7:05 P.M. where Roland Holt and his sisters live in a fine house given them by their father. It is right on the east, northeast of Central Park. Miss Holt is a charming young woman, tall, graceful, pretty, beautiful with a smiling and happy face, and a charming hostess. Roland Holt

soon came down. Then dinner was served, an informal dinner, we three the only ones. Their sister had sailed for England. Both the Misses Holt's have lived much in England and Europe. For wine had sherry and a scotch high ball.

After dinner Mr. Holt offered me some books to read en voyage Japan, an interpretation by Lofcodis, Hearn and Cheerful Americans. With these we sallied out for the evening. Walked through the park to the Casino. Here we had an orange "Curano"? Then took subway for the Hippodrome where we attended the play

After play walked through city club. Then took subway for Cafe Boulevard, an Hungarian restaurant. In meantime had had another Scotch soda. At Hungarian restaurant had a "Yorkshire buck", Scotch soda, three large glasses of Würzelberger beer, and finished with chocolate ice cream a la champagne. From here we went to subway, took leave of Mr. Holt, and train for Post Office. To bed at 1:20 A.M. Slept till 6:20 A.M., and then a few naps until Saturday, May 27th, '05, 8 A.M. when I rose and had breakfast. Paid porter fifty cents to carry my two heavy packages to steamer.

*Gager*

Aboard steamer. Dr. ~~Rogger~~ came to see me off. It was very kind of him and I appreciated it. He is thinking of giving up his place at Albany at least for another year.

Off at 10:45 A.M.. When we reached the channel we ran

into a heavy fog and were obliged to cast anchor for perhaps 20-30 minutes but were delayed perhaps two hours by showers, etc. Philadelphia was anchored just ahead of us.

I soon met a Mr. Wullschleger, a young man reared in Switzerland, who speaks German and French fluently. He is an agent in silk trade, rendezvous in New York et Lyons. He is a very agreeable young fellow and offers to teach me to speak French when he learns that I am desirous of improving in this respect. I find he is a great help to me. We walk arm in arm around the deck and converse in French, Nous marchons bras dessus bras dessous en faisant le tour du bateau. Mr. John Führer is my room mate. The third party (there were to have been three in the room) did not arrive, so Mr. Führer and I had the room to ourselves. I slept on bed made on couch (No 4 which was my berth) and much prefer it to the ordinary berth. During the day this is used as a couch. Mr. Führer sleeps in the upper and we use the lower for holding books, bags, coats, etc. Mr. Führer is a very nice man. Is a prominent agent in the Germania Life Insurance Co., New York, and came from Germany. His wife goes over to Germany nearly every summer. His daughter Bella is a bright girl, a graduate of the Girls High School of Brooklyn, and was fitting herself to teach Mathematics, so went to Bonn in Germany to study higher Mathematics. There she fell in love with a young

German, a civil engineer living at Cologne or Cöln, and wrote to know if she could marry him. The father and mother were very much disturbed not only on account of not knowing the fiance but also because of daughter being taken from America. So mother is dispatched to look into qualifications of the young man, and Mr. Führer is now going over to assist in determining his standing and settle the question as to whether his daughter shall marry the young engineer.

Sunday, May 28, '05.

Fog all day and night. Fog horn every minute. Not much motion for water almost calm, yet a slight feeling of uncomfortableness. Played shuffle board and made me a little dizzy. 340 miles at 12 noon from Sandy Hook.

Monday, May 29, '05.

Fog lifted toward morning with now very clear and more bracing. Still warm, warmer than yesterday. Over my dizziness. Read most of day, also talked with Wullschleger in French, etc., and some other 352 miles.

Tuesday, May 30, '05.

373 miles to-day. Fog late in the afternoon and early in night. All feeling of dizziness has gone.

Wednesday, May 31, '05.

375 miles from noon yesterday to noon to-day, cooler. White caps but very few swells. Continue French conversa-

tion practice with Mr. Wullschleger. In the evening I attended a third class concert in second class cabin. Also had singing and piano by Misses Goldman from St Louis and by Mr. Fries of New York City and the Parser.

I met Right Rev. L. H. Boeynaems, Bishop of Hawaiian Islands, who is on his way to Rome. He is a tall, stout, somewhat corpulent dutchman with a florid complexion and a full sandy beard. Some of the passengers made bold remarks on the uniqueness of a bearded Father. So I made bold to ask him some questions in reference to the custom of shaven priests. He said there were some exceptions to the custom. He had special permission to wear a beard. He had been troubled a great deal with toothache. Some one told him that if he would let his beard grow it would cure it. "That's cheap medicine, I'll try it" he said. Sure enough it cured him, and although many of his people were inclined to annoy him about his beard in humor and other ways he says he will never cut it off. I suggested that the protection the beard gave was due to protection from changes in temperature as from cold air. He said no it was a protection from the sun. When he rode or walked with the sun shining on the left side of his face he had toothache on that side. When he turned and went in the opposite direction, toothache on the right side. He told me of meeting on the Alameda from Hawaia to

San Francisco, a Swiss botanist by name beginning with Hoch - a long name. I looked in the Addressbuch and found it to be probably Hochrentiner, a systematic botanist. This botanist was collecting plants, etc., and was returning by way of United States to visit the petrified forest in Arizona ? also Montreal and New York Botanical Garden, and then sail for home in time to attend the International Botanical Congress at Vienna.

Bulletin Board.

"Wireless report by S. S. New York West bound passed yachts Womona and Ailsa Monday 580 miles from Lizord. Rumoured that Russians defeated in Naval battle."

Thursday, June 1, '05.

Cooler. Rather wind from northwest, white caps and swells, boat rolls considerably but I am all right. I had a fine walk in bracing air, and as one crosses deck at turns it is sometimes like climbing up hill.

I met General Thomas Barry, who is on his way to Manchuria as U. S. Military attache, with his aide Captain Cloman, and an interpreter, a linguist, graduate of the University of Moscow, who speaks several languages. In fact I had my walk around deck with General Barry. We walked and conversed for about an hour. I inquired if he knew Colonel Walter Schuyler.

He knew him well. We talked of the Russian-Japanese war and of war with Spain. First he told me of a private wireless

message obtained from a boat during the night to the effect that in naval battle the Japanese had sunk twelve Russian battleships and captured 2000 to 3000 officers and men, and that Rojestowerky went down with his ship ; also Atlantic won the yacht race.

Gen. Barry thinks the naval forces met in Korean straits, that Rojestowerky had orders to and the Japanese. Report of twelve battleships being sunk probably wrong, for they have only about eight. Report probably includes some of the cruisers. He thinks Japanese attacked Russians with torpedo boats, threw them into confusion and then plunged into them with battleships and sunk them, the 2000-3000 officers and men captured probably from ships not sunk, but captured. He spoke of the capture of Captain Harvard (U.S. Military attaché with Russians) at Mukden. Attachés were assured by the Russians that at the strong fortifications around Mukden the Russians would make a stand if they were driven in by the Japanese. Harvard went to bed one night in fortifications (probably after several days hard work) and awoke in morning to find himself surrounded. Russians had not attempted to stand at fortifications. They were driven in and practically routed.

In speaking of Spanish war I asked him if the Spanish had made more of a resistance in Cuba if our military forces would not have had a very hard problem to deal with. He said yes. That if the Spanish had not surrendered in a few days it would have been necessary to withdraw the army. It was General Schafter's plan to strike a quick and hard blow for he knew the army could not then stand a long campaign in Cuba. He thinks some day Schafter will get credit for this. I asked him if Dewey had any means of knowing whether or not the entrance to the harbor at Manilla was mined or not. He said Dewey knew it was not mined, it could not be mined because it was too deep and the living water tides would prevent mining. Island Corregidor stands in channel. Dewey took southern passage. Fires were banked but a few from the Boston out of the and one spot was fired from the forts. But as Boston did not reply the Spanish evidently thought it was not a man-of-war. At day break they attacked the fleet. They could see Spanish officers hastening from shore in their boats to their ships. They had attended a ball in Manilla the night before.

The Captain then gave me the facts in the "breakfast story". The Olympia led in the fight. As they circled past the Spanish fleet anchored in Cavite, Captain Eridle probably said to Dewey, "I am ready whenever you are" and



Dewey probably then gave the order to fire. The plan was for the flag ship to concentrate fire on the Spanish ship farthest to the left, and when it had passed this to concentrate on the next one and so on, the U. S. ship behind the Olympia taking it up on the ship which Olympia had passed and so on down the line, the Olympia trying again on the next time around, none of the ships firing on the return. After the fight had gone on for some time Dewey inquired of his Captain Ordinance captain how much ammunition he had left. He replied "fifteen rounds". He meant fifteen rounds for each gun, but Dewey thought he meant only fifteen rounds for all. He could not see by this time that any harm had been done to the Spanish fleet, and he thought the best thing to do was to return and take account of stock again. So he gave the signal to cease firing and withdrew. Then he signalled all the captains to come aboard his ship. He learned that there was still an abundance of ammunition, and that the Baltimore with Captain Wild had more than any. He then could see the effect of the shots on the Spanish ships. Some were on fire, others were exploding. Then he asked the captains what they had better do. No reply (as was proper). Then he asked Captain Wild who was next in command what his advice would be. Wild said, "I would go at them again." Dewey then gave the order, sending Wild first as the Baltimore had more

ammunition than any other of the ships.

I then asked General Barry for the real facts in the case with reference to "brush" with the German Admiral von Diederich. Immediately after the battle Dewey cut the cable and established a blockade to prevent communication between the city and ships. One evening they learned that several dispatch boats from the German vessel had visited the shore. The following night a dispatch boat was reported to be going ashore again. The Olympia fired a shot across her bow and threw search light on her. Dewey ordered to hold the search light on the "damn" boat. This was done for about half an hour. Then the boat was signalled to come along side. Dewey told them not to attempt to go ashore again, for he would not shoot across their bows but would put "a shot through the damn boat." The following day Dewey sent his Flag Lieutenant, Brumley, aboard Von Diederich's boat to inquire of the German Admiral what he meant. Dewey was not, however, at present very "cock" about it for none of his boats were armoured while the German Admiral's boat was armoured. He expected the monitor Monadnock in a few days. This monitor had two twelve inch grens, besides other batteries. When the Monadnock arrived Dewey sent Brumley again to the German Admiral and inquired what he meant, and informed him that if he meant fight he was ready for him and

that if he attempted to send ashore again he would put a shot through his "damn boat". Warships of various nations which were there and which came in later took up certain positions. The English all anchored on the side of the Bay where the American fleet was, but war vessels of all other nations anchored together on the other side of the Bay.

When arrangements were made for attacking the city of Manilla in conjunction with the military forces on land (General Barry was then aide to General Otis, and he and Flag Lieutenant Brumley made the arrangements) the American fleet steamed towards the city, and Admiral Chichester of the English fleet steamed down and anchored between the American fleet and the other foreign fleets as much as to say "If you fire on the American fleet you must shoot through us."

370 miles to-day.

Mr. Wullschleger treated a few friends to champagne in evening in honor of winning boat.

Friday, June 2, '05.

370 miles, mostly fair, clouds and sun, few showers in distance and at 6:30 P.M. slight sprinkle on board. Took few photographs, pitched "quoits", tossed ball, etc., and walked deck. Some singing in afternoon and evening by Miss Goldman, Miss Mc Ewen, the purser, A Father from Hawaii, and others. After singing Mr. Goldman served champagne in

smoker.

Kaiser Wilhelm der Zweite passed us some time during the day. Got a wireless message which confirmed rumors of naval battle and utter defeat of the Russians, battle in straits of Korea. Japanese sent in their torpedo boats first and they were said to swarm in like hornets. All the Russian battleships were sunk. Of twenty-three warships all were either sunk or captured, 8000 seamen sunk and 6000 captured, Rozestowerky seriously wounded and at Vladevostok.

Atlantic won yacht race.

Hamburg second.

I walk often with Wullschleger and Professor John Dewey from Columbia, sometimes alone with them, sometimes all three together. When three together Mr. Wullschleger is in the middle, hold of our arms. Professor Dewey goes bare-headed and Mr. Wullschleger smokes his pipe. Mr. Wullschleger says "Ze two American Professors and ze Dutch Swiss."

Saturday, June 3, '05.

Fine day - still some rolling of the ship from the swells of the Thursday storm. Cloudy with some sun, but clear air and bracing. 372 miles run or within a mile or two of this.

Sunday, June 4, '05.

Beautiful day, sun shining for large part of time,

especially in the afternoon. In morning still some of the swells but smaller. During the morning we passed the St-Louis of the American Line which left Southampton and Cherboure Saturday afternoon and evening respectively. We passed several other liners and toward night the Vaterland of the Red Star line. Passed also through the day the Atlantic transport out from London Saturday. Passed also many schooners and yachts, one of which said by Captain to be the Apache, last one in yacht race. I photographed again a group on bow of ship : Mrs. Klein, Cincinnati, left, Miss Fleischer, Goldmans on deck, also Dewey, Mrs. and Miss Mc Ewen, and others standing behind. We had a little lunch on bow in afternoon, Goldmans, Miss Fleischer, Mrs. Klein from Cincinnati, and others. After lunch some of them became rather reckless and passed by tossing a plate, and later a bottle was started around which finally came into collision with the plate and broke into several thousand pieces over the younger Miss Goldman but no injury occurred.

In the evening walking, talking and singing, very informal singing, and wound up by Mr. Wullschleger singing several "risque" French sings, Miss Goldman playing the accompaniment. But as no one could understand the French no harm was done. Mr. Wullschleger was very comical, mostly from the awkward way in which he acted out the song, by movements of body and by promenading and pantomime of hands and legs. Met a Miss Young who knows Miss Wagenschutz and Miss Fitzpatrick.

Saw land large part of day, passed Scilly Islands and in early evening the Lizard revolving light which with its powerful revolving lens shoots out the strong revolving flash.

Monday, June 5, '05.

In English Channel. Day is varied by fog and rain, very disagreeable. Only saw land in ~~gaze~~ toward middle of afternoon. Reached Dover at about 3 P.M. Small baggage and passengers transferred to one lighter and the heavy baggage to another. Good byes were said. Passengers gathered to see us off. Wavings of handkerchiefs until we passed out of sight behind the pier. Baggage lightly inspected, noon of mine opened. Secured compartment for Mr. and Mrs. Mc Ewan and Miss Mc Ewan, Wullschleger and self. Reached London at 7:30. Wullschleger and I try Hotel Cecil because he wanted to go there. Only room available 14 shillings. Then go to Grand Hotel. I secure room for 5 shillings and he one for 7 shillings. The Mc Ewans go to Hotel Cecil. I take Wullschleger to Monico's restaurant and give him a dinner. He enjoyed dinner much, so did I, This is a good restaurant. Then looked in at Café de l'Europe for a minute because Wullschleger wanted to see the life. Then returned to Monico's for a smoke and some Munich. Then to Grand Hotel for bed. Raining all day in London. Went to

Kew herbarium at noon. Photographed Masee at his desk at Jodrell laboratory. Also photographed Dr. Scott at his. Found he is going to Vienna by way of Passau on Danube and I am going to try and overtake him there at 4 P.M. Saturday. Looked up *Dothidea atramentarius*<sup>a</sup> and *pittulaeformis*<sup>ll</sup>. Returned to London and made some inquiries about ticket, etc. Had dinner at Monico's and retired. Met Cotton at restaurant and he helped me in herbarium where he is Masee's assistant. He is working chiefly on lichens and algae.

Wednesday, June 7, '05.

Returned to Kew Herbarium to photograph *Amanita ravenelii* and *Dothidea vorax* with large camera. Photographed also Masee at his desk in herbarium with large camera. Then I went over to Jodrell laboratory to see Salmon. He is a tall, slender, light complexioned man with face narrow, thin and slightly curved, eyes bright and face lights up with an interested smile when he talks about his work. I found him at work on his *Oidia* of *Erysipheae*. He is trying to get *E. graminis* to grow on an endogenous mycelium in hopes he may get conidiophores to emerge from stroma.

I met Boodle here also. Photographed Salmon at his desk. Returned to Grand Hotel, London. Now ready to go to Seville club to dine with Farmer. I received letter from him this morning inviting me to dine at 7:30,- informal. Telegraphed him I would accept. Met Farmer and Olivier at Seville club,

107 Picadilly street at 7:30 P.M. Table d'hote dinner with red wine and finished with fine old port. Then went to lounging and smoking room where we were joined by Walker, a member of Farmer's Cytology class. Had cigars, cigarettes and ginger ale. Conversed about Cytology and Ecology. Oliver showed some fine photographs taken with cyclocamera kodak, of vegetation at Enquery, France, where Oliver and Tansley are making a thorough study of the vegetative formation and changes. I found by talking with Farmer that he understands my view of reduction in Arisaema and believes it is correct, that chromosomes are found by splitting of spirem, and transverse division of spirem and then formation of tetrads, just as in Osmunda and some annuals, while in Lilium and some others they are formed by looping of spirem. This is a rational view that there is variation in formation of chromosomes but that ultimate result is same in all, a transverse and longitudinal division of chromosomes so that reduction occurs according to different methods in different organisms. Very pleasant evening. Farmer left at 11 o'clock to catch train, others left at 11:30, as I started for Grand Hotel. Retired at 11:45 P.M.

Thursday, June 8, '05.

Purchased ticket to Vienna of Thos. Cooke & Sons, 5th, 3 S. 8 d., via Harmich, Hook of Holland, Cöln, Beyen, Mainz, Nüremberg, Passau and from Passau down the Danube by boat.



Then took train to South Kensington and walked to Royal College of Science. Farmer had not arrived. Went to British Museum of Natural History and saw Vernon H. Blackman and Mr. Gibbs, who works on algae. Blackman showed me his preparations of Aecidium with nuclei migrating from hyphae cells into the subterminal cells of adjacent ones, also some migrating from hyphae cells of same thread (3rd cell from end) into subterminal cell. Preparations are fine and there can be no doubt that he is right so far as this form is concerned. He has found also a Caecoma which is of same type as that described by Christman in conjugation of adjacent subterminal cells of two different hyphae. Both are, therefore, right and there is this variation sometimes in the same aecidium. He also told me that he regarded the fusion of the nuclei of the teleutospores as the completion of the act of fertilization begun back in the aecidium.

Photographed Blackman at his desk. He is tall, heavily and squarely built, very pale sandy or faun colored hair, light complexion, nose prominent and very slightly convex. At Blackman's met Miss Fraser, his assistant, who is soon going to Holloway College as Assistant of Miss Benson. Then went to Royal College of Science again but learned that Farmer would not be over to-day since he met with a cab accident on leaving the Seville Club last night. I saw Walker and Dr. Moore. Walker is assistant in biology.

On arriving at Grand Hotel I found a telegram and letter from Farmer. He was knocked down and run over by cab in Picadilly street soon after leaving club house. He was kicked on leg by horse but wheels of cab did not run over him.

From Royal College of Science went to University College, walking nearly through Hyde Park, and taking cab (2 s.).

Oliver had just finished lunch. He showed me through rooms for elementary class, physiology room and research room.

In physiology room met Miss Robertson, who is his assistant.

Oliver showed me model in elevation of the ecological district he studied in Brittany. Different associations colored, very good. Also showed me sections of megaspores of fossil plants, especially Lagenostemma ? In one saw "nuclei" in seed coat. Photographed Oliver at his desk, also his assistant Fritsch, and as Mr. Wordsell came in I had an opportunity to photograph him also. He lectures here. He is tall, blond. Nose narrow, aquiline.

Took cab for Liverpool Street Station and train at 8:30 for Harwich. On board boat went to bed as soon as I was assigned berth. Put in room with six berths and several passengers, but succeeded in getting it changed for a somewhat smaller room with six berths where there was only one person besides myself and room opened into hall where there was a stairway. Sea was rough.

Friday, June 9, '05.

Rose at 4:45 by bugle call. Still rough. Felt a little dizzy until we reached port. Had cup of coffee. Got my gold pounds (4 1/2) changed for 4 1/2 20 mark pieces. Found train for Cöln all ready. Compartment in second class with two Englishmen and one German. Pleasant companions. Had a chance to talk some German. At Cöln (12:5 noon) in changing to other side of station for train to Wien met Mr. and the two Misses Goldman and Miss Fleischer just going to the train I had left. Just had time to shake hands. On train for Wien I found in good car one seat not "besetzt". French and German present. A French looking woman sitting next the window seemed almost overcome with the heat and closeness. I said, "Voulez vous qui je mis la bas le fenétre?" "Wie, wie, merci". So I lowered the window. I soon became acquainted with the German who was seated next me, a Dr. P. Kahnt, Philosopher Doctor, who is very nice and well educated. We took dinner together though we could not get into dining car until 3:30 P.M. He left train at Würzburg about 7 or 8 P.M. Meanwhile a young viennese woman had gotten at Frankfort where she had been. Soon became acquainted with her, Käthe Bondra. She is good looking, well educated and shows well the type of the hospitable people of Vienna. She speaks French and English fluently besides German of course. She has taught

French and German in London. Has a brother an office in the Austrian army. She starts Sunday morning early for Italy with friends. Expects to go to America before long and thinks from what she hears that she would rather live in America than in Europe. She told me much about Wien, the principal places to visit and said she was sorry she was to leave Vienna so soon or she would show me Vienna, and invite me to live at their home while in Vienna. At Nürnberg we got off to have a glass of beer and to get some sandwiches for myself. She was careful to see that the woman gave me back the correct change. She says you have to watch people in southern Germany and in Austria or they will always keep back some of the change. This woman had kept back 20 pfennig and then declared she had made a mistake in the calculation. I was now mortally sure that the porter on the train from the Hook had kept back 40 pfennig. I was told what I ordered would be 1.20. The one who made out the addition charged me 1.60. I tried to find some one and tip but soon concluded that they tipped themselves and so did not throw away any more pfennigs. The seats (the bottoms) in the car can be pulled forward so that opposite ones almost meet. This makes a fair couch on which one can lie and rest head on the upholstered arm for sleep. So we put ourselves to bed in this way.

Saturday, June 10, '05.

On Rhine saw Drachenfels, and other Siebengebirge, Lurleis,

Castle St Goar, Statue of Kaiser Wilhelm at Boblantz, National denkmal at Reubsheim, etc.

At Passau I said good-bye to Käthe Bondra, and left the train for the boat. Had to wait in "Wartesaal" until 3:30. Here I met a travelling man, Berthold Heschels, who was very pleasant and quite intelligent. In talking with him another gentleman in the room heard me give my name and that I was going to attend the International Botanical Congress at Vienna. He came forward to introduce himself for he said he remembered seeing my name in botanical publications. He was Dr. A. Y. Grevillius of Kempen, Holland (or Germany?). He is at the Versuchstationes here and has charge especially of inspection of seed, foods, etc., for their purity. I had a chance to talk with him in German. The "dienstmann" did not come at 3:30 A.M. as he agreed to carry my "gepäck" so I started off alone. I had not gotten far when he overtook me and I was delighted for I found that the boat was about half a mile away and their were devious paths. He charged me 80 pfennigs. One must change the cook's ticket for a boat card before going on board. On board boat I found Dr. H. Marchall-Ward and wife as well as Dr. Scott and wife. Dr. Ward is not well. He is suffering from a little indigestion and slight attack of nephritis and is quite weak. On trip from Passau to Linz I made about twenty exposures with kodak. Scene very fine, banks high and

steep and covered to waters edge with coniferous and deciduous forests or mixed. In places some cutting and often the "shoots" where wood is brought down to the waters edge. Villages small and architecture different from that on Rhine. I photographed some villages, castles, and the Narrows where the water is rapid and river Danube with sharp turns. Day fair, cold, sun occasionally out, mostly under clouds, and sometimes a shower.

At Linz we change to a somewhat larger boat. Go ashore to change tickets. Dr. & Mrs. Scott go to see town since our boat arrives at 8:80 and the new one leaves for Vienna at 9. After changing ticket I go and tell Dr. & Mrs. Marshall-Ward to change theirs. I learn from porter on boat that there are still ten minutes. After showing Mrs. Ward where to change tickets I go in search of Dr. & Mrs. Scott for fear they will be left. Porter at office tells me there are twenty minutes, so I go also to look at Linz. Occasionally I look at my watch and see that it is very near 9 o'clock, but twenty minutes not near up. Photograph boy and dog drawing cart, also markets on Franz Joseph Platz and elsewhere. When I start towards boat I think perhaps I may be left. I ran a short distance. As I get in sight of boat I see they are drawing in the gang plank, and the boat whistles, then starts, and I run but too late ! If I had run immediately to rear of boat I might have jumped on. When I thought to do this the boat was already three feet

from dock and by the time I got there it was four feet, and awning, etc., being in my way I did not risk the jump. Waved good-bye to the Wards and Scotts. Then went to office to see if they would refund money for ticket. They gave me 9 kroner and 50 heller. This is the second class fare from Linz to Wien on the Persoonlich bahnzug. On the Express it is 13 kroner, and on the Orient express it is 22 kroner and 20 heller with 20% extra on the train for the "Schlaffwagon". The Personlich Zug reached Vienna at 6 P.M. same hour as boat and dock is several miles from the west Bahnhof. The Orient express leaves Linz two hours later and arrives at Vienna at 5:20, just three hours from Linz. I decided to take this in order to have the experience of riding on this noted train from London to Constantinople but also because it would give me time to get over to boat at time it came in to claim my baggage. Ride on train is fine. I think only one stop between Linz and Vienna. Speed is not, however, so great as on some of our express trains, runs very smoothly and road bed must be fine.

When I reached Vienna I immediately took Electriche bahn for the Dampschaft hoff. Reached there just after the arrival of boat. The Wards had already left for their hotel, but the Scotts were still in the Wartesaal, waiting for a "Drosche". My baggage had been put in the "reclamation" room. I identified it with a check they had given me, paid 20 Heller for it (which

is an official charge for making out papers). I signed reclama-  
 tion paper (baggage had been inspected at Passau), then took  
 fiaker (one horse) to Hotel Höller on Burggasse, 4 kroner, en-  
 gaged room looking out on street for 5 kroner and 20 Heller  
 per day. The Scotts had engaged rooms at this hotel. Now made  
 toilet and went to supper. Roast beef good, 1 kroner and 10  
 Heller. I had glass beer, potatoes and 1 bread - total 1.65  
 cheap.

After supper took a short stroll. I found in the fiaker  
 Hotel Höller is very near (2 minutes walk) from the Natural  
 History Museum, Art Museum, and next these is the "Burg" or  
 Emperor's castle. In fact in driving to hotel we passed through  
 the Burg, and in the great court the driver pointed out to see  
 the rooms occupied by the Emperor. I strolled down to the  
 Museum and from here to Ringstrasse, as far down as the Opera.  
 I found it was much later than I had anticipated and after I  
 had been on the steps of the Opera a few minutes the Opera was  
 "vollendut" and the people came streaming out. I returned  
 to Hotel and retired at 10:15 P.M. (Opera out early).

Sunday, June 11, '05.

Rose at 9 A.M., bath, dressed and went for Frühstück.  
 Had zwei weiche eiser, 2 brod, butter, 1 glass beer - 1.89.  
 Cheap. Gives Kellner 11 Heller so that altogether it cost me  
 1 kroner = 20  $\frac{2}{5}$  cents. Egg shells were yellow ! Why ?



After breakfast with Dr. & Mrs. Scott took train to Schönbrunn the residence of the Emperor, where is the schloss Garden, etc. I discovered that the opening meeting of the Botanische Anstaltung was held in the "Orangerie". Here are exhibited living plants, alpine, etc., also preparations in liquid, photographs, drawings, photomicrographs, cultures, etc. Dr. Richter of Prag was exhibiting some beautiful pure cultures of diatoms. Really they are the most beautiful cultures on exhibition. Juel had enlarged photomicrographs of fertilization. Here I met Dr. Magnus and was introduced to several others. Also met Dr. Underwood, Mr. Shear and Mr. Woods of Washington. Introduced them to Dr. and Mrs. Scott.

We met a Mr. Wagner (Dr. Wagner, a young German botanist). He very kindly took us in charge and showed us many points of interest in the Schloss garten. Trees are pruned along some of the walks to form walls, in others along roads to form long arches. We saw the fountains for Emperor and for Maria Theresa. Visited the Gloriette, a stone structure highly ornamented, with wide stairs. I went to the top where one gets a glorious view of Vienna and the surrounding country. From here went through the Palmen häuser. In here are some fine palms, very tall and crowding the top of the tall house. Saw a palm liana, very long and slender, climbing nearly to top and over and down on other side, few leaves on hanging end and just below (above) the dead flower cluster.

From here went to garden of the Hiltineyer Hof at entrance to Schönbrun for dinner. Had beer (Nürnberg, a dark beer) and the Emperor's special dish, Kaiser omelette, or Kaiser schuame. Then Dr. & Mrs. Scott left us and Dr. Wagner insisted on our (Underwood, Shear and self) going with him. He took us into a Hungarian restaurant suburb, and into a typical Hungarian restaurant where all classes mingle. There was a band of three pieces, the artists playing mostly by ear, a violin, accordeon and a guitar with a double arm. This latter player, also played a peculiar cornet. For a change a Hungarian singer sung two songs accompanied by the band. We had a white wine and some rye bread and a peculiar Hungarian "frankfurter" of the Italian type called "Salami". The odor is no delicious but it tastes something like a Frankfurter but is harder. We had a jolly time. Wagner took several glasses and tried to get us to drink more. Finally we were obliged to leave him, and start back for Vienna. When we were aboard the train he had overtaken us and was rather unsteady. On the way back he fell asleep several times. I had to act as guide, to find stopping place and learn whether or not we changed. He clung to us tenaciously. Came to Hotel Höller and waited until we prepared for the reception and then took us to the reception which was held in Johannes-strasse 4. Here food, etc., was served, we paying only for wine or beer and cigars as the case might be. Wiesner made some speech and a Dame gave

information about an excursion at 4:30 P.M. on the following day to the Kahlenberg to see the sunset.

I met here Duggar, Gatin, von Höhnel, Campbell, Juel, Rosenberg, Dr. and Mrs. Scott, Marshall-Ward, C (with Balfour, Britton and Mrs. Britton, Arthur, Robinson and others). Retired about 10:30 P.M.

Monday, June 12, '05.

Rose about 7:30. When nearly dressed I heard some one knock on door entering to adjacent room, and on answering a voice said "Ich bin der Teufel von Hödlin." I recognized it as Underwood. Underwood, Shear and Woods had engaged at my recommendation the adjacent room with three beds, for which they pay altogether 9 kroner and some Heller. Underwood had moved early. Had breakfast with Underwood and then Shear and Woods come. Together we went to opening of Congress in the Grossfestsalle der Universität, I

Here I met Mrs. Barnes, Mrs. Arthur, Trelease, Barnes and others in addition to those I met before.

Congress opened by Wiesner by an address, followed by pleasant replies from Vienna officials, and then came Reinke's paper "Hypothesen, Voranssetzungen, Probleme in der Biologie. Recess.

Then occurred election of the Bureau and proposition for determination of place for next Congress. On motion of Fla-hault it was postponed until Saturday. Adjourned until afternoon.

At 4 P.M. met in Saale des Botanischen Gartens der Universität III, Rennweg 14. Wettstein opened it. Roll call of delegates was had and the number of votes assigned and ballots yes and no (pads) were given to each. White ones for those with one vote, red ones for those with two votes, green ones for those with three votes, blue for those with four votes and yellow for those with five votes. Burnot was elected temporary chairman. Flahault was elected president, although Wettstein had been elected first but declined because he would be away a large part of the time attending to other matters of Congress. Z. Flahault made an elegant impromptu speech and was applauded several times. Vice president Metz and Rendle were elected secretaries, Knoche of California for English, Horn of Berlin for Germany and for French. First passed set of rules to govern debate, etc. Then voted on question of admitting propositions received after the date set by the committee. Admitted one by Hochrentiener who was at Buitenzorg and was delayed. One by Haltier who was travelling through Berlin, botanists opposed it. Also admitted another? Did not admit one recent one by Otto Kunze relating to minor matters such as phraseology. Many voted for it as a matter of courtesy to bring it before the Congress and be voted down later, but there were so many Germans and French opposed it was lost.

Then proceeded to the questions in synoptic text. Voted by

raising hand for the first proposition under part II, rising word regles (rules) instead of lois (law ) unanomous in favor of it and Flahault congratulated the Congress on passing it by a unanimous vote ! applause and laughter ! Then took up Brunthaler proposition to have a commission appointed to consider rules of nomenclature relating to the cellularcryptogams. Motion of Perrot after discussion, we to explain cellular cryptogams to mean Muscineae and Thallophytes. Some of those who spoke for the question were Perrot, Wille, Atkinson and others; against, Magnus, Arthur and one other ? Vote by ballot. Considerable excitement during discussion and in voting. Carried by a large majority. Voted to begin to-morrow at 3 P.M. instead of 4 P.M. Adjourned.

For lunch Dr. Wagner took Woods, Shear, Underwood, Campbell, Trelease, Knoche and to the Rathskeller, where we had Gumpoldskirchner, a wine brewed within 20 kilometers of , a heavy white wine, rather good. Had venison with gravy and Vaccum bread and a "pankoche" with fruit. From here we went to Burg restaurant where we had excellent coffee. Then walked to the Congress for afternoon session.

For supper, Britton and Mrs. Britton, and Trelease came to Hotel Höller. They with Underwood, Shear, Woods and myself all had supper at one table. After supper sat at table for half an hour in pleasant conversation and then dispersed to

retire.

(Peptenzyme by Reed and

Tuesday, June 13, '06.

Met at Hall of the Ingenieur und Archelekten Verein, 1, Eschenbachgasse 9. Got invitation to Emperor's reception, also some on botanical excursions. A Count had died and so Emperor's reception was off. Later we got in of consolation prize a 8 kroner ticket to the opera, "Hohhman's Erzählung". Very fine singing and acting. I did not attend morning session of Congress because scientific lectures could not be well understood. Instead Woods and I visited the Botanische Aufstellung at the Orangeri in Schönbrun. Saw again Richter's diatom cultures (See Ber deutsch bot. Ges., 1903) and saw cultures of algae and fungi made by Botanische Institut, the Central Station für fungus culture. Try to get *Gymnoascus rusii*, *candidus*, *selonus*, *Wonascus purpureus*, *barkest*, *Endomyces magnusii*, *Pyronema confluens*, *Aspergillus fumigatus*. This last one is poisonous. Mr. Woods says that growing on oats and corn it was supposed to have killed 18 horses belonging to Department of Agriculture.

Returning we had lunch at Hotel Höller, and then spent an hour in art gallery musuem. Saw Rubens' Room, Van Dykes' and many old Dutch paintings. The Hall is very fine, dark spotted marble with gold trimmings.

From here attended nomenclature Congress 3-6:30. Then Opera. Then dinner, Campbell, Woods, Underwood, Shear and myself at Hötél Höller at 10 P.M. Retired at 11:15 P.M.

Wednesday, June 14, '05.

With Underwood went to the Postlage to stamp some packages. Then we visited the Stephanskirche, Graben, Pestsäule and Stack om Eisen., and finally spent about three-quarters of an hour in Art Museum, where we met Campbell, looking at Ruben's, Van Dyke's, Titian's, Durer's, etc., paintings, and then through the portion where large and beautiful vases, etc., carved from crystal, are preserved, also looked through the large collection of armor, said to be the finest in the world.

Attended nomenclature Congress 3-7:15 with pause at 5 o'clock. In the evening several of us, - Underwood, Shear and self, attended informal reception or entertainment in Prater, a suburban play and music hall, where poor meals are served. Several fine choruses in Tirol and other dialects rendered, also quartet of male voices, and some vorträge by funny men. Met Trelease and took table with him. Were soon joined by the two Misses Rumpold, and later by Dr. and Mrs. Duggar. Being tired I left them at 10:30 P.M., came to Hotel, had cup of chocolate and retired at 11:40 P.M.

Thursday, June 15, '05.

In morning attended Scientific meetings on Eschenbachgasse. Heard the last of Molisch's paper on Carbon assimilation in

chlorophyll. He is a fine looking man, a little more than medium height, strongly built, broad shoulders, black hair and moustache. He spoke without notes apparently and speaks very smoothly and easily. He was followed by Hueppe, a somewhat stouter man with somewhat sandy hair and full long beard, and wears glasses. He spoke from notes though was not confined closely to them. He took rather the other side showing that CO<sub>2</sub> assimilation took place in some organisms as sulfur bacteria, etc., without chlorophyll. His paper was interesting and long and once or twice Strasburger, who was chairman, showed uneasiness. He did finally call his attention to the fact that his time was up. Hueppe acknowledged it. Said he would be through soon, but hung on for some time. By vote of assembly Kossalowitz was allowed to address the assembly and it was very hard for Strasburger to shut him off. - Recess - Then Goebel read rapidly from printed pages a long but interesting article on Regeneration problems. Goebel is tall, blond, bald headed, with hair and side and back of his head, moustache and chin whiskers. I did not meet him but met Pfeffer and his wife.

Afternoon Nomenclature Congress continued its work and I telegraphed several botanists. In the evening sent to Venedig (Venice) a pleasure place in the Prater. There I met the two Misses Rumpold, and later Dr. and Mrs. Duggar. Most of the botanists were up here earlier and had a supper together.



The Hall where they were was hot, so Dr. Duggar and Mrs. Duggar, the Rumpold's and self left them in hall (after greeting a few as Underwood, Woods, Shear, etc.) and took a table out doors. Had refreshments, music on three sides by fine string bands, one of twelve or fifteen pieces. Returned about 11:30.

Friday, June 16, '05.

With Underwood and Shear I went to mail some printed matter for Shear, then went to a church and visited the sepulchres of Maria Theresa, Franz Josef II, etc., in vaults. Then went to Congress at Eschenbachgasse to get announcements. Here I found Otto Kunze. Introduced myself and had the gall to ask him to go into another room so that I might photograph him. He is hard of hearing and thought I wanted to talk with him. He readily consented and as I was trying to arrange a seat for him near a table, he would change it and try to arrange two seats. I soon found he thought I wanted to talk with him. I then shouted in his ear that I wished to photograph him. He was shocked, but pleased, and sat down with a wise look and bright smile. When it was over I thanked him heartily. He then wished to know if Dr. Flahault had read in English and French his protest after he left the room. I said no. He wanted to know why and why he was not permitted to speak longer. I explained that the Congress had at its opening meeting adopted a set of rules, one of which was that no one should speak more than five minutes or ten at the outside. He thought that in such a very important matter as

his an exception should be made !

Congress or Nomenclature in the afternoon. Although the day before the Germans and others had insisted that in case of mistakes in Geographical names like Asclepias syriaca which is only found in the United States, it should not be changed since a name was a name, they to-day declined to allow the use of a "double binomial" like "Linaria Linaria" although some of them pointed out that they did allow the use of similar names in other things as "Baden Baden". This together with the passage of a rule excepting over 400 genera from the application of the rules of priority was the most serious difference of opinion, as the votes stood nearly equal, the minority being only a few votes (7-10) below the majority or below one half. After Congress, Britton and Mrs. Britton, Trelease, Underwood, Shear and myself had dinner together on street café. Then went to Residenz Hotel where the first three named are stopping. Coville had joined us by this time, and while the others talked nomenclature Trelease and I went into café and had a glass of Wiener beer and a good talk. Then we joined the others and talk on nomenclature was continued. Britton, Underwood, Shear and Coville think the American botanists will not accept the action of the nomenclature Congress on the question cited above and a few others. They themselves are inclined not to. Trelease took the ground that the most important thing was to have uniformity of action and thought that as long as we had joined in the deliberations of the Congress we were bound to abide by it. But singularly he makes one exception

in his own case, i.e., he says he will continue to publish new species in English although the Congress passed a rule to-day that for a name to be valid the original description must be published in latin ! At 11:30 separated and Underwood, Shear and self returned to hotel.

Saturday, June 17, '05.

Went to Post Office with Shear to mail some printed matter of Congress material. Had six packages myself. Then Shear and I attended to some business, met Dr. Trelease on the Graben. From here we went to morning session of Congress on Eschenbachgasse. At 11 A.M. met with "Cryptogamists" to nominate committees for nomenclature question of Muscineae, Thallophytes, etc. Briquet was made chairman. Took up fungi, algae, lichens, bacteria, flagellates, mosses, liverworts, etc., and nominated committee in each. Large committees were nominated since it was all very informal and no plan laid out at first limiting the number. The desire seemed to be to get men representing differences of opinion and from different countries. I could not or did not get full list, but in fungi most of them were as follows : Arthur, Atkinson, Magnus, Patouillard, Bresadola, Marshall-Ward, Masee, Jaczewski, Saccardo and others. Nomenclature Congress met in afternoon at Botanisches Garten, 3 P.M. I made a few more photographs as I also did on Friday.

The first effort was on part of Hochreutiner through petition which he circulated to get the Congress to reconsider some of the questions voted on yesterday, as to publication of first descriptions

in latin, the double binomial, etc. After some remonstrance by the president and pressure by Hochreutiner, the president adjourned the Congress fifteen minutes for a commission to talk over the matter and for exchanging of ideas by others. Then there was a careful debate for about fifteen minutes. When it came to vote for reconsideration, the motion was defeated by about two-thirds to three-fourths majority. After business had been attended to Dr. Engler in very appropriate remarks spoke of the enormous and excellent work of the rapporteur General Briquet in preparing the synoptic text, and praised the President Flahault for his effective and satisfactory work as chairman. Long applause. Then the President responded and praised in addition the work of Dr. Wettstein and Dr. Zahlbruckner and proposed that we vote "en bloc"! a vote of thanks to him which we did with a will. Others also spoke their appreciation for work of all the Robinson for the Americans. Then the President adjourned the Congress until its next meeting at Brussels in 1910. Good byes were said.

Saturday, June 18, '05.

Hotel bill 48 Kroner, 4 heller. Paid porter 2 kroner and hausdiener 2 kroner, Zimmer Mädchen 1 kroner. Ticket to Südbahn 2.20. Breakfast in Wartsaale 1 kr. Tip to porter for luggage 40 heller. Ticket Cook's for Niozza 104 francs and

Train started at 7 A.M.

in wagon for room.

Soon enter the Semmering Gebirge, beautiful mountain region, much Kalk, and there are gyps mühle. Pass Wartenstein's castle, the

ruins also of Schloss Klauim, Station here, and soon come to Semmering Station, where scattered over the mountain are many hotels. Just before coming to Semmering we pass the Botanischer Garten für A Gserpflanzen - where are the - auf der Raxalpe - 2009 metre (1800 m. hoch) botanische Gartens.

At Semmering I call for wasser, and a woman comes out of the station with a pitcher of water and two glasses. Good water and pay 4 heller for a glass. Next Station is Spital. Here peasant women have poles with boquets for sale on them, the boquets made in form of vases, fans, etc., grass forming rim of vase or margin of fan. This railroad is the oldest mountain railroad in the entire world, so a gentleman on car told me, being fifty years old. In morning follow along river Mur or Muhr. Near noon come in sight of mountains with snow and small glaciers. At Anenheim (3:45 P.M.) is a small lake and across the beautiful valley is a high peak with numerous glaciers running down the side. Nearer the town and just across the lake are ruins of a schloss on a promontory. First see glaciers very indistinct as we approach St Michael. The valley all along the Mur all day is very beautiful, sometimes mountains near and sometimes distant. From Anenheim to Villach glaciers are on the entire range to the left (south). Ruins at Arnoldstein. As we approach Tarvis the mountain stream is whitish which is from glacier milk. Large glaciers in distance on rugged peaks. Stop at Tarvis ten minutes. Have been on steep grade for some time. It is cold here. Glaciers near and we are on level with some.

People are wearing overcoats and wraps. A short distance beyond Tarvis on Roll 6 No 7 I snapped 'peak with glaciers' but it was cloudy and 5:20 P.M. Photograph was made just before coming to Uggowitz at which we did not stop. At Pontäfel (Ponteffa), the frontier of Italy, baggage was examined (Zoll Revision). Good restaurant here. Stopped a half hour.

Monday, June 19, '05.

Had a hard night, changed at Mestre, not far from Venice at 10:45 P.M. for train for Milano. Six of us in a compartment. Some are smoking. I was last one in and of course must take middle seat. Succeeded in getting dozes, or short naps. Reached Milano at about 7 A.M., June 19th. Changed here for Veilumingli, Italy. Had an interesting ride. Country flat, but mountains in distance, "Appenini". Country striking chiefly for the numbers of mulberry trees, now on lines separating fields or on roadsides, or as orchards in other crops. They are pollarded to short trunks. From the new shoots the leaves are stripped to feed the silk worms. New ones grow out on the shoots and the shoots are cut back, and the brush serves for fagots. Made several photographs with kodak while train was moving. Had compartment to self most of day. At Veilumingle we changed again. Here we come to the coast of the Mediterranean. Have compartment to self most of way to Nice. Beautiful country. See on left hand and on right the Maratime Alps, with beautiful gardens, and many olive orchards. At San Remo the

beautiful villas begin and it is a joy all way to Nice to see them. The principal ones are at and near San Remo, Menton, Monte Carlo, Wonoco and Nice, the country of the Riviera. The mountains descend here into the sea, on their precipitous slopes are the villas, one above the other with terraced gardens, in which are cultivated olives, peaches, apricots, citron fruits and oranges, neffe, grapes, palms and garden vegetables. Also roses, etc., the bright colors of roses and geraniums which are verdant on walls are very beautiful and give the brilliant colors. Cactus (prickly pear) is used also as ornament on steep slopes. Arrived at Nice 5:45 P.M., from "la I could see the Hotel Cecil. I carried my baggage there and engaged a room for 4 francs, a good room opening on a small court and more quiet than a 8 franc room opening on Avenue Thé

Tuesday, June 20, '05.

Visited the Musee d'histoire Naturelle, saw M. Olivier, who very kindly allowed me to photograph the paintings of Amanita lepio-  
toides. I also photographed M. Olivier in his study, the statue of M. Barlo, and the two tiers of cases containing the models of mushrooms in the Museum. M. Barlo was a rich man. He employed an artist to make paintings of the mushrooms of the environs de Nice. From these he had models, plaster of Paris, made, which occupy a large space in the Museum and form the largest collection of models of mushrooms in the world. Many models of the same species are represented, sometimes 25-50 specimens in a single model, and then 1-10 examples, making 20-50 examples of many species. M. Olivier

had the kindness to send the "concierger" with me to go to Berre--  
des-Alpes to find Amanita lepiotoides. First he gave me two  
of paintings of the Amanita lepiotoides to show as models to M.  
Geocolii Augustin at Berre-des-Alpes, so that he could find the  
specimens for me. But soon the Concierge told M. Barlo that M.  
Geocolii had been killed fifteen days ago. Then he arranged for  
the Concierge to accompany me. He went himself to show me the place  
on Baub

where the voiture started at 5:45 (six heures mois le quetre) for  
Berre-des-Alpes. Then he bid me good bye. In the afternoon I  
visited the Promenade d'Anglaise, and the Restaurant

Wednesday, June 21, '05.

Arose at 4:15 P.M. Had arranged with the Concierge to have  
me called at 4:30 A.M. They never came to call me. I carried my  
dress suit case to corner of Boulevard Mc Mahon and at the place  
where the voiture was to leave. Found the voiture and the  
cocheur at the restaurant on the at 5:30 A.M. I had two  
coffees and bread - 50 centimes. Then the Concierge arrived. I  
asked him to have some wine. He chose blanc. The two glasses cost  
30 centimes. At 5:45 (six heures mois le quatre) we started in a  
covered wagon of four seats and drawn by three horses, the two  
outer ones with a feather in their bridles. The Cocheur had a  
"Crau de beaute", a bit or tuft of whiskers on the side of his face.

The scenery is beautiful. We rise gradually, and when we come  
to the steeper parts a hired horse is placed in front. At about



8:30 we arrive at a point near the Berre-des-Alpes. We alight, and carry the dress suit case and camera for forty-five minutes until we come to the Berre-des-Alpes. On the way up I heard a noise like thunder. I asked the Concierge if we were going to have "un ovrage". He said no, le bruit etait un coup de physie. les manouvres militaire lan voutre coté de la Montagne. There are extensive fortifications there. It was a beautiful day, clear and bright, but rather warm for mountain climbing. But we rested now and then and I did not get very warm. As we came to higher elevation we could see to the east higher peaks covered with snow.

Soon we came in sight of Berre-des-Alpes, which from this point of view looks like a great castle. But as we reach it and look for Mr. Marc Duleuse, the maire du pays (the one who performs the marriage ceremonies), I find that the "Castle" is made up of many small dwellings, church, etc., built so closely together as to suggest a large castle. The streets are very narrow, vehicles cannot pass because of the narrowness and steepness. The passages are very irregular and only for foot use. Finally we came to the residence of the Maire-des-pays. He knows many of the champignons, not by name but by sight. Mr. Olivier had given me two paintings of Barlo's to show to Mr. Geocolii, but as he was dead I thought it not necessary to bring them. I left them at the hotel. The Concierge asked me for the "modeller" of the champignon I wanted. I was lost. I said I thought as Mr. Geocolii was dead it was not necessary to bring them. But it was to show Mr. le Maire-du-Pays,

so that he could lead us to the locality where the plant grows. He does not know the plant by the name but by sight. I was puzzled at first to know what to do. At first I thought we might search in good places for mushrooms, and if we did not find *Amanita lepiotoides* I would return to Nice, get the two paintings (models) and show them to the Maire du pays. But it occurred to me that I might make a sketch of the plant and explain the color. So I called for paper and made a sketch. Mr., le Maire du pays said he knew it. He gave us wine to drink and arranged to accompany us in the afternoon.

The Concierge and myself then started for a walk or "tour". He showed me some of his property. There was an orchard and chest-nuts which belonged to him and was cared for by his nephew. We found *Stropharia albo-cyanea* ? *Lactarius vellereus* and *fuliginosus*, *Russula* - - - - and *Clavaria flava*. Returned and photographed the *Stropharia* and then placed all on the tile roof in the sun to dry. We stopped at a restaurant kept by Mr. and Madame Laurent Rousset. They are very pleasant people. Madame was of higher birth and came from near Tarascon. She asked me what I would have for dinner. I could not understand the "viand" she proposed, so she took me into the yard to show me the animals, the zoological garden. She pointed to the rabbits, "les lapins". I said "Je pre-fere le poulet." But for some reason I discovered she did not wish to kill a chicken. So I said, "Je manger bien le lapin". That pleased her. The Concierge asked me if I was fond of eggs

"oeufs" - wie, wie. When dinner was served it was quite an elaborate affair on a small plain board table. Two quart bottles of wine, one for each myself and the concierge. I said I preferred a "demi", but they had none, and wine was of no account. They made it from their own vineyard. They drank a great deal themselves and served a great deal to tourists who visit the "Berre-des-Alpes". So we began dinner. Spring water was provided to mix with the red wine, and by the time dinner was over I had finished my quart!! We had first the "hors d'oeuvre" consisting of bread and cold pork and "sausissen", a kind like the "salini" I had in the Hungarian restaurant at Vienna, and which seems to be common throughout Southern Europe, as I had it in sandwiches in Italy. Then came the delicious lapin braissé. It was delicious and I was glad to have it in preference to the chicken. Then came omelette naturelle, and salad de saison, i.e., lettuce, the concierge preparing the dressing from vinegar and oil. The dessert was fruit. It consisted of fresh strawberries. Shortly before eating them red wine was poured over them and also some old rum; "<sup>Rh</sup>em vieux". This was allowed to soak into the strawberries for a time, when they were served. They were delicious !! Soon Mr. le Maire du pays arrived to accompany us on a tour to collect mushrooms. Before starting a glass of red wine was served to each. We then spent about two and one-half hours near in the chestnut orchard, terraces. Found Amanita baccata and Amanita verna, both good specimens which I photographed,

a poor specimen of *Amanita lepiotoides*, specimens of *Amanita vaginata*, *rubescens*, *Lactarius fuliginosus*, *vellereus*, *piperatus*, *Russula virescens*, *Boletus edulis* and *castaneus*, as well as *Cantharellus* and *Hypholoma appendiculatum*. Too dry here. Mr. Maire du pays said he must go to Nice this afternoon, and that another person would meet me at 5 o'clock in the morning to accompany me far away on the mountain to collect fungi. We returned to the restaurant. Had water. The concierge left for Nice (I gave him 5 francs). I photographed *Amanita baccata* and *Amanita verna*, put specimens to dry on the roof, completed my notes in journal and now at 6:20 P.M. am ready to rest. The people here among themselves talk mostly patvis and I cannot understand it. The concierge and Mr. Maire du pays during our tramp had an animated conversation in patvis, but when wishing to talk with me they spoke the real Franch which I find I am making progress in understanding and speaking now that I am cut off completely from English speaking people.

Thursday, June 22, '05.

Started at 5 A.M. with Antoine Deleuse to search for *Amanita lepiotoides*. Searched under chestnut trees for about three hours. Found none. I wished to search in the pine forests. He as well as his uncle, the Maire du pays, Marc Deleuse, said there were no fungi there now and would not be until autumn. To satisfy me we passed through a piece of the woods where there was an abundance of moss which grows in damp woods. It was now dry and here we found no

fungi whatever. Returned to "Bellvue" at about 10 o'clock. I then arranged with him to start for Mont Daour the following morning at 4 A.M. This name probably comes from the fact of the military manouveres on the mountain, "Mont d'ouvre". Spent the rest of the day in two "naps" and in talking with the peasants.

Friday, June 23, '05.

Arose at 3:30 A.M. After dejeuner I learned that the Mairie du pays (Marc Duleuse and his brother (father of Antoine) were going with me to Mont Daour. The Mairie had been to Nice on Thursday, had called at the Museum to see the models of Amanita lepiotoides. We started at 4 A.M. by trail and road. There was some steep climbing and the road was rough except where we had the use of the well graded road, on part of the mountain a military road. These are very good. But after we took short cuts across, thus saving distance but having a steep climb. <sup>da</sup>Cobnitta, the place recorded for the Amanita lepiotoides is one of the military camps. At this height we are above the chestnut trees, and in a forest of mostly fir (sapin) and pine. In some places it is moist enough for fungi and we found plenty of Boletus (near granulatus but stem white and pores not granulate) and a number of other species. My two guides were very companionable. I was getting by this time so that I could understand more of their French. Between themselves they talked palvis. They asked me the name of a number of words in English. The pronunciation of the peasants in French is very dif-

ferent from that in the north of France and it will apply also to many, perhaps the greater number, of people in the cities of South France (midi de France). For example for maintenant they say "man-te-naw" also "Il marche viti" accenting or pronouncing the last letter, so they say "Bung jour". They give the g sound to most words ending in n, as "Prenung le semeng pour le mangtaing" for Prenons le chemin pour la montagne. Often in words beginning with ch they give for ch the sound of s as in "semeng" for chemin, "so" for chaud. "Le coleil commence a faire so" said Antoine Deuleuse to me. It was some time before I could understand what he meant by "so". We returned by 3 o'clock. Rested a short time and then packed up. Paid my bill 15 francs for two days and extra lunch. Asked my guides what I was to pay them. They said whatever I wished. They would make no charge since they went with me for "connaissance". I gave Marc Deuleuse 10 francs since he had been with me twice and was Maire du pays. I gave his brother 10 francs for self and for his son Antoine the morning before. They offered to collect the Amanita lepiotoides for me in the future when the season was good, even offering to go again to Mont Daour. I arranged with them to do this. Take the fungus to M. Olivier at the Musée for identification, photograph and dry it. Mr. Rousset then carried my two pieces of baggage down to the road where we get the "voiture" for Nice. Reached Nice about 7:30 P.M., very tired. Retired soon.

Saturday, June 24, '05.

Visited M. Olivier again to return paintings. Photographed a fine specimen of *Batarrea* preserved dry under a bell glass cover in the Museum and said good bye. There are no specimens of *Amanita lepiotoides* in the Musée or Mr. Olivier would have given me one. He was very kind. Offered to get the fungus for me next year and send. I told him the Deuleuse's had promised to collect it and bring it to him. He said he would be glad to have it photographed and sent to me. He is a rather old man, only a little or not at stooped, small eyes, gray hair and moustache, talks in a quiet way, without opening his mouth much, the words seeming to come from between his teeth. It is difficult to understand him. The first day I could hardly understand a word, but after my experience with the peasants at Berre-des-Alpes I could understand him quite well, though of course he does not talk like them. He often holds out his left hand to shake. If I came into the museum, or upon him three or four times in a half day, out would come his left hand. Bade him good bye, photographed the Pont Barla, Pont Garibaldi, statue of Garibaldi on Place Garibaldi, and some scenes on the market.

One singular thing about this country is that the women do their washing in the rivers and in streams along the road. In Nice the bed of the river (the water is low now and confined to a small channel leaving the gravel bed of a large part exposed) is

like a great washing place. The women washing the clothes, some of them hanging them on lines, others spreading them on the rocks or coarse gravel to dry, weighting them down with small stones so that the wind will not blow them away.

Took a stroll upon the Promenade des Anglaise, made a few photographs. In evening talked a short time in French with the concierge.

Sunday, June 25, '05.

In forenoon had a note from the "Director" of Hotel Cecil to the concierge (Mr. Raymond) of the large and beautiful garden in the Quartier asking permission to photograph some "Néffe" fruit trees. This is a beautiful garden with many rare trees and plants, many pines, cedars and spruce from distant parts of the world, and large trees of Podocarpus. In an open greensward is a fine cluster of bamboos, some of the trunks being 3-4 inches in diameter. A thunder storm was approaching and the conditions were not the best for taking photographs. But I snapped the kodak several times at Néffe trees in fruit, and the concierge very kindly gathered several fine branches with clusters of fruit on them. Some of these I photographed on returning to hotel with the large camera.

At 2:50 P.M. took train for Paris. First class to Marseilles and second class to Paris. Reached Marseilles at 7:15 P.M. after a fine ride with beautiful scenes, though not so fine as that from



Menton to Nice. Cannes is a beautiful city. Could not see much of Toulon, but made quite a long stay there. At Marseilles had supper (or dinner) in a hotel connection with station, (Table d'hote, wine included, white or red, but coffee extra. Dinner 4 francs. Soup, three or four meat courses, salad and ice cream. Took train at 8:30 P.M., second class for Paris, a fast train but miserable accommodations and a hard ride for the night.

Monday, June 26, '05.

Some time during the night passed near Tarascon, and one gentleman on train from Nice and Marseilles was going to Tarascon. I almost envied him, that I might see the place made famous through the exploits of Tartarin de Tarascon, by Alphonse Daudet. In the morning passed Bourgayne, a beautiful country for rolling and level as is all this region near Paris at this season. Reached Paris at 10:30.

Paris.

Drove to Hotel Castile, rue Cambon 37. Engaged room here for 4 francs. A pleasant little hotel centrally located near rue de Rivoli, the Boulevard, etc. Hotel quite well kept, quiet and has a cool court onto which my room opens.

During day looked at several other hotels and found rooms for 4 francs also, some larger and better furnished, but somewhat dark and court not so pleasant. Obtained mail at American Express Co. Wrote several letters. In evening at 8:30 visited Madame Vernon at

194 Rue de Rivoli. Had pleasant conversation in French. She was surprised at the progress I had made alone since I was here in October, 1903, and first learned to pronounce the French. Arranged for lessons in conversation, one hour per day. Shortly before I left "Odette" awakened, Madame Vernon brought her out for me to see. She is the same charming little Odette but older and not quite so naive.

Tuesday, June 27, '05.

At 8:30 A.M. had my first lesson with Madame Vernon. In the afternoon I visited the Jardin du Tuilleries for a little rest, and there met a Madame, a teacher of little children, with a crowd of boys and girls in age from four years to twelve. I had some interesting conversation with her and one or two of the four year olds. Madame has them all day, for teaching writing, reading, etc., and out door work. Here some of the boys were playing "horse", with a strap which Madame carried for the purpose. Two or three boys took hold of the ends and advanced as the "chevaux" while one as the driver took hold of the middle for the lines and Madame put one in between the lines for the "voiture". Most of the boys and all of the girls played in the gravel scraping it up with small shovels making heaps, and carrying it in little pails to fill holes or make other heaps, the good natured Madame giving directions and overseeing all.

Wednesday, June 28, '05.

In afternoon had ride on bus along Boulevards, from Place de la Madelein to Place Bastile and from there by train along Boulevard St. Germain to                      and took the bateua on the Seine at Pont                      Rode to some point above Chatelet and returned to Place Concorde. Had dinner at Duvals and then went to Madame Vernon's at 8 P.M. for my second lesson.

Thursday, June 29, '05.

Read carefully a portion of "Le Matin" during the morning. Afternoon did some writing in American Express and had third lesson at 9:30 P.M.

Friday, June 30, '05.

In afternoon took the Metropolitan for Pont Maillot, and had a walk in Bois de Boulogne, finishing by the "Cascade", a small waterfall, partly artificial, that is, racks partly artificial. This is near one of the entrances. Here I took the steam tramway for Pont Maillot, returned by Metropolitan. After dinner had my lesson at 8:30 P.M.

Saturday, July 1, '05.

In the morning called at the Herbarium of the Museum of Paris to see Hariot. They are house cleaning, and painting in the laboratory and herbarium. I met Hariot. He told me the work would be finished in five to eight days. He took my address so that he could inform me by note when the herbarium would be in a condition

to receive workers and visitors. I walked for some distance with him in the direction of Boulevard San Michel, and had a pleasant chat in French. Bade him good bye. Then called at Sorbonne to see Gatin. He was not in, so I left my card with hotel address. Then made my way upon Boulevard St. Germain to Pont Sully and across to Rue Saint Paul 5<sup>bis</sup> where Jacques Bayur lives. I found him in. He is a writer on general science for various journals, writes popular articles. He showed me proof of another article he is writing on mushrooms and in which he will use some of the photographs I sent him. He showed me the place where he gives me credit for them. I asked him why he did not write an article on the cultivation, harvesting and preparation of truffles for market. He said he was preparing such an article and showed me seven fine photographs, one of a pig ready to root up a truffle, one a radiograph of truffles showing roundish pieces of lead or some similar substance which the collectors put in the truffles to make them weigh more ! Also other photographs showing manufactories where they clean, can, sort, etc., the truffles for market. He agreed to get me a set of the photographs at cost (\$1.00 each) and send to me after his article appears, which will be in about two or three months. He is a little below medium height, stoutly built, light complexion and sandy hair, square jaws and lower part of face. He is agreeable and very pleasant and I enjoyed my visit. I did not have my camera.

In the afternoon I called upon Patouillard at 105 Avenue de

Roule in Neuilly, but Patouillard had gone out with Rolland at 11 o'clock to collect fungi. I had a short conversation with the gentleman in charge of the pharmacy, left my card and said I would call on the morrow (Sunday) about 9 or 10 A.M., as I found this was a suitable hour. Lesson at 8:30.

Sunday, July 2, '05.

In the afternoon I visited the exposition of the Société d'Artistes Français at Grand Palais des beaux Arts. Lesson at 9:30, and just as my hour was up another pupil (Mr. Ayur?) came in. We all conversed in French. Soon a Mr. Marton (English) came in, also a pupil. He is a lively, rattle-headed fellow, and insists about one-half the time in talking English which provokes Madame Vernon. She laughingly calls him "un fou"! She serves tea. At 12:10 A.M. we depart.

Monday, July 3, '05.

While reading Gatin called on me at the hotel, and offered to show me things of interest in Paris, especially Institutes, laboratories, etc. So soon we started for the Sorbonne to see the botanical rooms. First he took me to see Mr. Molliard, who has charge of cultures of fungi and lectures on this and other subjects. He has made pure cultures of the Morel (*M. esculenta*) from the ascospores. He gets the conidial stage in about six weeks time, but the perfect form of the Morel does not appear in the culture dishes. He grows it on apples! These he prepares, leaves in a bed of

earth on bench in coal house and covering the apple media with about three inches of earth. The mycelium is planted next the apple. In about a year he gets the perfect stage. The mycelium grows best at a temperature of about  $40^{\circ}$ - $50^{\circ}$  C. I saw one fine specimen of a morel grown from pure culture of ascospores. His cultures in beds were not in progress now but he showed me the mycelium cultures in the flasks. He also showed me his cultures of radishes in a gelatinous medium with nutrient solution and (glycogen?) added. These are pure cultures. In this way he obtains tubers which have the carbohydrate reserve in the form of starch instead of sugar as in the normal tuber. I saw sections of the tubers and the cells were full of starch. He sterilizes the seed in bichloride of mercury solution, with seed coats on. Then places them in test tubes with cotton and water sterilized. Here they germinate and if not contaminated they are transplanted to a large tube or flask of a special design containing the sterilized medium. Gatin then showed me the various rooms. I saw and he explained the working of Bonnier's apparatus for determination of percentages of gases from plants. I understand it now, and never did before. I think I will have one ordered for the laboratory. He also gave me a set of the papers outlining the work of the students in botany, and this piece of apparatus is there illustrated and described. Then

he showed me some of his sections of embryos of palms and some other monocotyledonous plants. His work on palms, including study of over eighty species, will be published as his Doctor's thesis. He has obtained some interesting results and adds some important contributions to the subject. Then we had dinner together at Duval's on Bild St Michel. Before I observed it he had paid for the dinner. After some discussion about this matter it was compromised by my saying "Je vous rendrai la pareille mercredi" as I had arranged to return on Wednesday to take some photographs and visit the Institute Pasteur.

Lesson at 9:30 P.M.

Tuesday, July 4, '05.

Arrived at Patouillard's pharmacy on time and in a few minutes we were off to Roland's. Roland lives on the fourth or fifth etage of an apartment house. His "chambre à travailler" has a northern outlook. It is a good sized room perhaps 12 x 18 feet. There are shelves with specimens of Polyporei, etc., and his tables besides other things holds plates and boxes of course with fungi of different kinds, some dry, some fresh, some attacked with "pourridie"! He enters, a robust, rather stout, almost corpulent, short man, full beard, but making an "open formation", not very long, sandy, face full, ruddy or florid, nose stout roman, hair sandy, eyes rather small, and he wears glasses. He does not speak very distinctly and it is very difficult for me to understand him. But he can frame a

few good English sentences which he pronounces well, but with a siffling character of the breath. We walk for a short distance to the tram station. Roland is short of wind as his build would indicate, is not an easy walker, and soon began panting. The tramp worried him a good deal and before we returned he had perspired so that his coat sleeves were wringing wet and also his coat where the strap of his botany can pressed against it. We went to the Forest which is the shooting ground of the President of the Republic, "Marly-le-roi", a beautiful forest, some portions with fine groves of Scotch pine planted but the larger part of hard woods, with roads cut in all directions for the chase. The ground was getting dry after the rains of three or four days ago, and we do not find much, but get some interesting things for me to photograph, - *Amanita spissa*, *pantherina*, *porphyria*, *solitaria*, and some other things, while *Amanita rubescens* was very abundant. Returned at 6:30 P.M. and reached hotel at about 7. Patouillard said he would be at the Museum Saturday afternoon. Had lesson as usual at 9:30.

Wednesday, July 5, '05.

In the morning photographed the fungi, and just had time to get to the Sorbonne by 11:15 A.M. according to appointment with Gatin. Photographed Molliard at his work desk with his cultures of radish and mycelium of *Morchella*. Molliard is tall, medium, well built, has a black moustache and hair, black eyes, a quiet intelligent good face. He gave me a large number of separates.



Photographed Gatin in the research room seated at the Bonnier and Mangin apparatus for determination of gases. Then Gatin accompanied me to the Pasteur Institute after we had dinner at Duval's where I fulfilled my promise to "Je vous rendrai la pareille mercredi". There are now three buildings of the Pasteur Institute. The original one is used for bacteriology, etc. Here Metchinkoff works. Just as we were going to this building we met one of the investigators or assistants who knew Metchinkoff, a Mr. Lanzunberg, who offered to take us in and introduce us as Gatin did not know him. Metchinkoff is a medium sized man, robust, stout, florid, with thin scattered sandy beard, and long rather thin sandy hair. His face is full, strong, jaws square, forehead somewhat receding, eyes small (blue?) and wears glasses, and now shows age. He is not so careful about his dress as the other frenchmen I have seen here. I should not say the "other frenchmen" for Metchinkoff is a Russian, banished years ago for political reasons. He is energetic, quick in movements and speech and hard at work. When we entered I was introduced, also Gatin. Then after a few words between Lanzenberg and Metchinkoff, he, Metchinkoff took it for granted we would be off so that he could go to work again. Lanzenberg and Gatin began to withdraw from the room although they knew that I wished to photograph Metchinkoff. I could not lose the opportunity, so I summed up all my courage and my best french, and said that perhaps he knew the name of one of our friends, Dr. Moore the bacteriologist

at Cornell University. He said he did. I then told him how much interested I was several years ago in an organism studied by him which was circular and multiplied by fusion. He said, yes, the name was Pasteuria. Then after a few more words, I said "Voulez vous ne permettre de vous photographier dans votre chambre de travailler"? "Wie, wie, si vous voulez", and he at once began to prepare himself at his table with microscope, etc. Lanzenberg and Gatin were struck dumb !! After I had made the first exposure I was about to take down the camera when Metchinkoff said "encore". I said "wie s'il vous plais", and took another exposure! Then farewell and thanks. Next we visited the library, where I induced Gatin to ask if I could turn a bust of Pasteur around so that I could photograph it side view and not rear as I took a general view of long room. Permission was granted when I showed the librarian definitely what I wanted to do, and as I began to turn it he said "attention"! which to me sounded like a military call for the bust of Pasteur to show "attention", but it is the french for "look out"! Next we visited the tomb of Pasteur, first getting permission and the key from the domestic of Mrs. Pasteur, as she keeps the key at her house. The domestic came with it, opened the iron doors, and lo ! a magnificent tomb which far exceeded all my expectations for its grandeur and beauty. A room (with steps leading down to the main part) with marble sides, stone tile floor, and vaulted ceiling in mosaic and c with designs of plants and animals that Pasteur had worked on, a dog with the "

sheep, chickens, the grape vine and grapes, etc., in gold and other colors, and some of the mosaic in gold. The sarcophagus was in the middle of the room and was in plain black marble, while at the end opposite from the entrance is a small altar where there are fresh flowers and palm leaves. There are electric lights which are "turned on" when one is to enter. On opposite sides of the sarcophagus, and on the walls are bas reliefs of designs of large leaves, etc., in iron or some metal presented to Pasteur or to his tomb, one by the "students of France". The hospital is the second building but I did not visit this. The last building to be erected is the building for "Chimie Biologie". Dr. Roux is the Director now of all the Institute. Dr. Bertrand is the chief of the Chimie Biologie Building. He is of medium build, dark complexion, thin beard, dark as well as hair, wears glasses, a very pleasant face, and he has a very happy, cheery, pleasant manner, and is quick in movement and speech, a lively man and very pleasant and agreeable, almost boiling over with interest in his surroundings and those who call on him. He has a private office, and opening off from this is a large private laboratory for himself. Here he has carried on his soon to be celebrated investigations on strychnine. He finds that it is present practically in all plants and animals, and his work will have a very important bearing on testimony in criminal cases in the future for it is possible to find arsenic in any one's stomach. I photographed him in his laboratory seated at his apparatus for investigating arsenic.

I photographed the research room for chemical biology with Gatin at his desk and Lanzenberg at his farther along. Lanzenberg turned around and showed his back before the exposure was finished. The tables in the research room are about 10 feet long and 2 feet wide with a rack between for holding reagents, etc. Each student has one of these tables. They have autoclav, nitrogen apparatus, stills, etc. Then around the room are hoods, with pieces of apparatus permanently set up for general use of the students, a different kind of apparatus for each. In an adjoining hall are other hoods and apparatus where the more dangerous experiments are conducted. Next to this is the machinery room. There is a large dynamo which gets its current from below. This is used to run the machinery by belt connection with an axis having wheels and band connection for the different pieces of apparatus, as mortars for crushing plants, and there are three different kinds of machines for making powder. A separate dynamo runs a centrifuge. Then there is a large still, also a large still for alcohol, large hand presses, and a powerful hydraulic press, also several autoclavs. I made two photographs of this room. In the basement are other rooms. On the third floor are several large rooms given up to the monkeys of which there are about one hundred. We went up to see these. Before we reached the floor we could hear the chatter, barking, snarling, laughing and shrieking of the monkeys. The room was filled with a peculiar odor which Gatin said was that of the monkeys. Some of them were inoculated with the sleep disease."

"la maladie du sommeil". This disease affects the monkeys in a peculiar way. On some of them the skin becomes very red. In some the face was very red, body also, some almost a fiery red. Others were rendered blue. In the first room nearly all the monkeys were small and many young. They are in cages. Now we passed into another room. Here the room is partitioned off into larger cages with a hall between. One Chimpanzee had escaped from his cage and was roaming around in the hall, and scrambling up and down the sides of the cages. The keeper called him down. He came walloping down to the floor and sat at my feet with a meek sorrowful face, half intelligent, half brute expression, as if intelligence had just failed to dawn on him and as if he wished for some help to free him from his condition. Soon the keeper said that it would be wise not to touch him since he was easily enraged and might bite. This would be all the more dangerous since the keeper said the chimpanzee had "la varie" (syphilis!) from an inoculation by Metchinkoff who is studying this disease. Imagine my feelings with this syphilis chimpanzee at my feet who was easily enraged !! I was glad when the keeper had him locked in his cage !

Before leaving the Institute I photographed the front of both the two buildings. In front of the old building is a monument to the first man treated in the Institute for the "ragii". He was bitten by a mad dog while killing it to protect his two little brothers. The monument is of metal and of life size and shows him

in the act of killing the dog. This man is still living and is now the concierge of the building ! I sent into his room to know if he would not come out and let me photograph him along with the building. He was not in. He is said to be the only concierge in Paris for whom a monument was ever erected !! Took leave of Gatin after thanking him for his kindness. It began to rain, so after I reached Place de Chatelet by train I took fiacre as no train goes near Hotel Castile. Had lesson at 9:30 P.M.

Thursday, July 6, '05.

I accomplished very little to-day. I wrote some American letters in the morning. Read New York Herald at American Express Office. I had a letter from Blakeslee who is going to try for a Carnegie grant for another year as he has not yet obtained a place. In the afternoon I was writing some French letters in "Femater" of Hotel Castille when a gentleman came in to write letters also. I recognized him as an American. After a while one of us dropped a casual remark. Then we got into conversation and learned each others business. He is from New York City and is connected with several companies. His name is Adams. His father was a prominent member of the Gorham Silver Co., and was a personal friend of President Andrew D. White. Mr. Adams thinks Dr. White a great man. One of the companies with which Mr. Adams is connected "siz " for fine papers. They obtain the raw product, casein, prepare it and sell it. They are looking for a better casein.

Mr. Adams thinks one ought to be found in some plant for a vegetable casein is better if the right kind can be found. There is a good one in peas and beans called "legumin". They obtain it from Spain but only in quantities of about 200 to 300 pounds per day which is too small an amount to figure in the business. They cannot supply enough of the animal casein for the market and are obliged to turn down orders constantly. He says there is a fortune for the one who will discover a plant containing it which can be cultivated in large quantities. They have tried the starch in Cassava roots, but it is not so good as the animal casein. They do, however, put about 15% cassava in with their animal casein but he says they do not tell this to all their customers.

I remarked that John Rockefeller according to the papers had given fifty million francs (\$10,000,000) to Yale University. He said with emphasis that it was time for Rockefeller to do something with his money. He had obtained it by grinding down other people and he ought to do something with it before he dies. He says Lawson in his frenzied finance has told the truth, though Lawson was just as bad as any one, though he admits it. Mr. Adams also spoke of the United Steel Corporation and if how it was organized. He put considerable money in it and lost a great deal by the falling of the stock. He says years ago he believes J. P. Morgan was a good man but now he is as bad as any of the financiers. When the United Steel Corporation was formed Schwab, who had been a

stenographer to Carnegie, and who was a bright man, was placed in as president or a "dummy". The directors, most of them were dummies also, men not having much but put in so that certain ones could control them, and also if anything happened the dummies, not J. P. Morgan and others, would have to go to prison. Well Schwab soon went to Monte Carlo to play the game and have a good time. The papers said his health was bad. That was a story put out by Morgan and others to cover up the real reason of Schwab's going for his going away at this time was harmful to the business.

Schwab was in perfect health. Only a short time before he sailed a dinner was given by Schwab, which Mr. Adams attended, and he says Schwab was in perfect health. Well when it was learned that Schwab was playing the game it hurt the company and Morgan telegraphed Schwab to come home, for his actions were damaging the company greatly. Finally Schwab was asked to resign, but the men of influence gave other reasons in order to screen the company for if it had been known at that time that Schwab was asked to resign it would have been <sup>a</sup> still more serious blow for the company.

Paul Jones remains removed to-day.

Lesson at 9:30 P.M.

Friday, July 7, '05.

At 9:30 A.M. took Metropolitan for Pont Maillot, and the train for Marly-le-roi, where I went over the same ground alone that we went over Tuesday. I found a number of interesting fungi



and photographed several specimens of *Amanita solitaria*, *Marasmius peronatus*, an *Agaricus* something like *Agaricus agustus*, *Hypholoma appendiculatum*, an *Amanita* like *rubescens* but volva quite yellow. Also some other things. Returned to Marly at 3:30 P.M. after passing through while collecting in the beautiful foret, Route Rusée at Place Etoile danteuse, also Etoile bizzorre, Route de bête à 7 têtes, etc. Had lunch at a small restaurant at Marly by station, and at 4:12 took train for Pont Maillot and Métropolitain for Place Concorde, Hotel at 6 o'clock. Had nap, wrote, and then had dinner and took lesson at 9:30 P.M.

Saturday, July 8, '05.

I photographed the fungi collected yesterday, and then in the afternoon took some of them to Herbarium of Museum of Paris since Patouillard said he would be there. But in the meantime Hariot had written Patouillard that he was away and that the Museum was being cleaned, consequently Patouillard was not there. So I went to Neuilly to his Pharmacy. He had gone out for the afternoon to return at 6 o'clock. It was now 4 P.M. I left my fungi at the Pharmacy and went over to the Boid de Boulogne to rest in the shade. Here I composed a "poem" of three verses, on "La vie et le foi" in French. At 6 returned to Pharmacy and after getting suggestions on names from Patouillard, returned to Hotel. After dinner had my lesson. Madame Vernon made a few corrections in my poem and said "très bien, mais je ne suis pas convaincu"! We had had

the night before some discussion as to the importance of some faith in future for nation and individuals. The poem was suggested by this topic and also because on my return from Marly-le-roi yesterday I had told her my impressions and feelings that day in the forest. Had told them in french since it is forbidden to speak English in her salon. My thoughts were in poetic prose, at least she said I was poetical. She said she loved poetry and hoped I would next time compose a "real poem", "poesie vrai".

Sunday, July 9, '05.

Nothing of consequence. Read nearly all day.

Monday, July 10, '05.

Read and studied french, and attended to a little business.

Tuesday, July 11, '05.

Rose early and took train at Pont Maillot soon after 8 o'clock for Marly-le-roi for<sup>ê</sup>t. Collected some fungi finding some interesting ones though it is rather dry. Returned about 6 o'clock and was photographing them when Mr. Eugene Schaettel representing Vilmorin, Andrieux & Co., Seedsmen, 4 Quai de la Megisserie, Paris, called. I had written Philipp Vilmorin a few days ago to get permission to visit his laboratory and see the methods by which they get pure cultures of the mushrooms from the spores. The methods were shown some years ago to Dr. Duggar so he says, also he took Dr. Duggar down in the Carriers and showed him the methods of cultivation. Mr. Vilmorin and his Firm have been greatly irri-

tated by the claims of certain American seedsmen advertising mushroom spawn, who advertise that Dr. Duggar discovered the method of cultivating pure spawn, or the method of pure culture of mushroom spawn. Mr. Schaettel showed me one of these circulars. He thinks it is a great injustice to them after they have been so courteous in showing all their secrets to the scientific agents of the Bureau of Plant Industry, that since they were the first by two years to put on the market a pure culture spawn. It has been the means of their losing much money since some of the seedsmen of America think that Vilmorin's claim of a pure culture spawn is not true. They have had many inquiries concerning this from America.

Of course Dr. Duggar does not claim he was the first to discover a method of pure culture of spawn. He discovered a method. The unthinking or perhaps unscrupulous companies in America advertise merely that he has discovered the method. To be fair to Vilmorin they should say a method. But American or other companies are not given to that. I explained this to Mr. Schaettel, but still it did not seem to have any effect on him for they feel it sorely, and he says that Mr. Vilmorin had decided to exclude even scientific men in the future. The conversation was continued for some time. Finally he said he would present my side of the case to Mr. Vilmorin. He also very kindly offered to arrange for and conduct me through the quarries to see the mushroom culture.

I am to meet him next Tuesday, the 18th, at 2 9.M. I finished photographing the fungi. Then took some of them to the Herbarium of the Museum of Paris, where Patouillard said he would be, to get his opinion of some of the species. Patouillard had just gone. So I took the fungi to his office or pharmacy in Neuilly, and after I had waited some time he came in, gave his opinions, showed me some of his illustrations and gave me a *Gyrophragmium delistei* and *Monteg candollei* both from North Africa. Also he loaned me a fine specimen of *Gyrophragmium delistei* to photograph.

Wednesday, July 12, '05.

Photographed *Gyrophragmium delistei*. Attended to some small business matters, and in the afternoon took the *Gyrophragmium* back to Neuilly. Met Patouillard just as I was entering Neuilly from Pont Maillot. He took the plant and I returned with him to Paris. Boudier had several days ago invited me to visit him Thursday, the 13th. Patouillard told me he had just had an invitation. In fact, Boudier had told me that he was inviting Patouillard and Roland to meet me at his home for dejeuner and for the tramp in the forêt afterward. Patouillard was not sure that he could go as he is now very busy getting ready to leave Saturday, the 15th, for his vacation.

Thursday, July 13, '05.

Took train at Gare du Nord at 9:30 A.M. for Montmorency. Arrived there at 10 A.M. and soon afterward at Mr. Boudier's. I

found him the same kind, genial and hospitable man he was two years ago and the same smiling "bonne" came to meet me at the door, Mr. Boudier this time coming himself to the gate to meet me. In a few minutes Roland arrived, but Patouillard was not able to come. After some general conversation we looked over some of Boudier's recent illustrations showing among other things some new species. Boudier also said he thought the *Amanita caesaria* from America was a different species from the European one. He thinks the form of the young plant, the pileus and striae mark it as different. He pointed out the conic form of the young pileus as shown in my photographs and the almost globose form of the young pileus as shown in most illustrations.

For dejeuner we had three kinds of wine (Maderia, Bordeaux and ) also to finish a cognac. The dejeuner was delicious,- soupe, chicken, a "Vol au vent", a sort of a meat and mushroom pie, with crust below and on the sides, salad (chicken) and two sorts of cakes,- the "maracon" (our "macaroon") and a "Massopain" which is delicious. Then we took a tour of the Chestnut forêt and found some interesting fungi but not many since it was quite dry. It was warm also, and M. Boudier and M. Roland both suffered some because both are stout and short winded. I found *Amanita aspera*. Mr. Boudier by scratching under *Leucobryum glaucum* found *Elaphomyces variegatus*, *cyanosperus* and *asperula* for me. *Coprinus deliquescens*, *Inocybe cookei*, *Russula lutea* and others were picked up. We

finally came to a restaurant and Mr. Boudier furnished the cognac and an effervescent spring water. After this refreshment and rest we returned home. I photographed Boudier and Roland on way. Then Roland and I took leave of Mr. Boudier. Mr. Boudier presented me with two "tirage a port", separates of some recent works which he kept to give me on this occasion as souvenirs of this visit. On one is written -

"A Monsieur le Professor Atkinson  
souvenir affectueuse  
Boudier"

on the other -

"A Monsieur le Professor Atkinson  
souvenir de son passage à Montmorency et hommage bien cordial  
Boudier".

In a few minutes our train came along and we returned to Paris where I took leave of Mr. Roland. I could understand Mr. Roland much better to-day, and also understood Mr. Boudier. I came also to like Mr. Roland.

Friday, July 14, '05.

It required nearly all day to photograph the fungi and take notes on them. This is the "Quatorze Juillet" for France. The city was after the parade of the morning, rather deserted, since many people leave Paris on this day, the commemoration of the fall of the Bastille. At night there was dancing in some of the streets

and Boulevards where they were decorated and marked "Bal" the dancers occupying the entire width of the street. At 12 o'clock Mr. Davis asked me since it was the "Quatorze" to go out (i.e., midnight). We took seats at a restaurant (Tourtel) on Boulevard de la Madelein, on side-walk, watched the crowd and talked. He told me the plot of a new opera comedy which he purchased about a year ago and hopes to get on the road by December of this year. It is called "Four-leaved-Clover". He expects to have an American young woman take the leading part "Clover". It is in four acts and from his description it will be entertaining. He says it will be put on the road first and will be played in Ithaca. He promised to give me a box or two if necessary for my friends ! We returned at 3 A.M. Saturday !

Saturday, July 15, '05.

Rose at 9:30 A.M. Read and wrote all day.

Sunday, July 16, '05.

Read and studied french all day.

Monday, July 17, '05.

Read and studied french all day.

Tuesday, July 18, '05.

In the afternoon according to appointment called to see Mr. Schaettel who represents Vilmorin, Andrieux & Co. at 4 Quai de la Megisserie by Seine, to go to visit one of the Champignoniers in the vicinity of Paris. Mr. Matthieu accompanied me. We took

the steam train from some Place in the Latin quarter to Molineaux near Issy on steam route Paris to Versailles. The manure is piled in large beds about three feet deep and forty by one hundred feet. Several of these beds cover about half an acre. They were just changing the manure and it was an interesting sight. Two wagons with tanks of water, some workmen watering the manure and others turning it. The manure is piled up in this way with no cover. I was very sorry not to have my camera, for they finished this to-day. The manure from one horse cases 13 centimes per day.

The large part of the quarries which Mr. Sauvegeat cultivates are in the chalk or craie, which is very soft as one can easily stick a pocket knife into it and dig out the chalk. In quarrying this it is therefore necessary to leave very large pillars, and the passages are not very wide, perhaps ten to twelve feet. The roof is arched also as this is necessary to prevent caving in. At this place there were two tiers of quarries, one above the other. The moules (moule = mould, a sillon or ridge) here are made up in pairs for the autumn, winter and spring months, leaving a narrow passage between every two or every pair. The moules are "double" that is, the bases of two adjacent ones are joined. This economizes space and gives greater surface for the mushroom. In the summer the beds are all single since the double moule gives too much heat at this season.

The moules are made up by the "toise" (= 2 metres). The men



are paid 25 francs for one hundred toise in length in these "high" quarries, while they are paid 28 francs for one hundred toise in the "low" quarries. The low quarries are in hard rock where the stratum of rock desired is thinner. It is necessary to stoop in these mines, and hence the men are paid more since the work is more fatiguing.

This man Sauvegeat has during the year about 40,000 kilometers in length of moules, and picks on an average about 300 kilos mushrooms per day. They search through the country for spawn.

Je voudrais photographier la cour du fumier pendant le là travail avec tous les hommes, les voitures portant l'eau, et quand les hommes tournent le crottin de cheval et mouillent le fumier ou il est trop sec.

Pourriez vous m'indiquer le jour quand vous exécuterez (au ferez) ces opérations ? C'est impossible de savoir exactement le jour a l'avance poice qui a la dépend entiereement sur l'état du fumier.

Ou paye 25 francs pour faire 100 toise en longueur de moule avec le fumier. Ou paye denouveua 28 francs pour conurire les moules avec le terre.

Les carriers du pierre dure sont plus bosses que les carriers de craie. Elles sont mieux pour la cultur du champignon que les hautes carrieres parceque l'air en circulation court pres des moules dans les carrieres basses yandés que dans les hautes carrieres elle

court presque entièrement par le plafond. Les carrières basses sont aussi plus chères à louer que les carrières hautes. Il faut payer les hommes plus cher qui travaillent dans les carrières basses que les hommes qui travaillent dans les autres.

Le fumier c'est très cher. Il faut payer treize centimes pour le fumier d'un cheval par jour.

(own)

Nous prodierisons notre propre blanc. Nous cherchons le blanc dans la campagne dans les piles de fumier qui sont restées deux au trois mois. Souvent, mais pas toujours, le blanc vient spontanément.

Nous cueillons ce blanc là et le (au ce?) plantons en lardant dans les moules. Quand le blanc s'étend ou se répand à travers les

moules. Nous les cassons dans des morceaux d'em grandeur pour le convenable

lardage. Nous vendons aussi le blanc à la Cie de Vilmorin, Andrieux

et Cie, 4 Quai de Megisserie qui le vend à d'autres cie dans tant le monde.

Nous déterminons la sorte du champignon quand le blanc dans les

moules a poussé à travers la terre qui couvre le fumier du moule

et ,arque sur la surface de la couche couvercle de terre. Le

grandeur et la forme les petits champignons indiquent la sorte du champignon.

Mr. Sauvegeat himself accompanied us through one portion of the quarry. Then he left us and sent his son with us. As we were to leave I asked permission to return on the morrow and photograph the yard where the manure is. He gave permission, and said that a

few years ago a man from America took some flashlight photographs, but that later his trunk was stolen, opened, and these exposures taken. I wonder if this was Duggar ! This led me to think that he would give me permission to take some pictures in the quarries of the different stages of the work. So I asked him and without any hesitation he granted me permission. I returned to Paris with Mr. Matthew and took leave of him in the Quartier Latin.

Wednesday, July 19, '05

Took camera and some packages of a new magnesium preparation which I bought in Paris by steam R. R. to Issy and from here walked the short distance to Mr. Sauvegeat's home. His son accompanied me and was very kind in showing me everything and in having the men perform the different operations. The men altogether I gave ten francs, and young Mr. Sauvegeat five francs. I photographed one of the chimney's for ventilation both in the quarry and outside.

Returned to Paris about 6:30 P.M.

Thursday, July 20, '05.

Went to Herbarium of the Museum of Paris at Jardin de Plants to see Mr. Hariot and look up some plants. I photographed *Agaricus xylogenus* Mont and *Agaricus foederatus* Mont. arranged with Mr. Hariot to return to-morrow afternoon to see some literature which he was to bring over from the library and also to see Dr. Mangin, who has recently been appointed in charge of a new laboratory which is being installed under his direction for culture of fungi.

Friday, July 21, '05.

I had at 1 o'clock a pleasant talk with Hariot. Met Dr. Mangin at 1:30 P.M. through M. Hariot who accompanied me and introduced me. Dr. Mangin is a very cordial and enthusiastic man. Short, robust, florid face and dull blond hair or dull chestnut, with beard not very heavy. He talks with enthusiasm of his work, and he is having a fine research laboratory fitted up here. He has an elegant and sumptuous private office, library and laboratory. Opening off from this on the north is a photograph and developing room. All the doors are on one side of a court and face the south, Dr. Mangin's room being at the west end. Next to his room on the east is a large room for chemicals and balances, next this is a culture room, and on the north side is built a double decked large incubator room, the lower one has a heater, and the upper room none. There will be shelves around the side of these rooms for holding the cultures. The heater is a cylindrical metal apparatus, hollow and the top perforated, with a small flue coming from the bottom leading outside to carry off the fumes from the burner below which heats up this sort of storage heater which in turn radiates heat to the chamber. Next this room on east is the long room for research students, with tables for eight on south side. The center large table extending lengthwise is for general work of these eight students, and on the south side is a table built the entire length with a hood where will be apparatus for generating light degree of heat, autoclavs, etc.

The rest of the table will be for general use also for different operations. Here and there is a water faucet and below it a small basin in the tiled table. Rubber tubing here can be used to turn the water where desired, and cultures of algae will also be made here. The extreme east end is divided into two rooms, one on south for store room of glass, etc., and one on north for a general cleaning room, and a long slate tank for washing various things. Shelves also for holding large bottles, etc. Outside and east of this is a glass sloping roof, and a table, where work will be carried on in which fumes are generated which they do not wish in the laboratory. The court is given up to a garden. A portion of this garden will be used for plant physiology by others, and a portion of the fungi work by Dr. Mangin. There is also a small "serre" for growing fungi. I did not have films enough with me to photograph all this because I did not anticipate any such laboratory, so I made arrangements to return to-morrow and take some photographs. But I had two films left and photographed Dr. Mangin in his private laboratory, also M. Hariot in his office in the Museum.

I had a cablegram to-day from Chester, Newark, Delaware. It took me some time to find out the code so that I could translate it. He offered position to Jackson and wanted to know if I would give my assent. I cabled back "assent".

Saturday, July 22, '05.

Reached Museum about 10:45. M. Hariot went immediately with me and I photographed all the rooms in the new laboratory for cultivating fungi, the garden, the south exposure of the laboratory (with M. Hariot in door) and the "serre". Then I photographed the herbarium room with Dr. Camus at his mosses and M. Hariot seated at one of the tables. Dr. Camus is a rather oldish man, somewhat stooped, quite bald, and dark hair and dark thin beard.

Then M. Hariot accompanied me to the Jardin de Plantes as I wished to photograph the *Celrus lebani* which Jussien carried as a seedling in his hat from Syria years ago, since it was necessary to get permission from the Direction. The Director was not in so Mr. Hariot himself remained with me to protect me in case an officer should come along. I took two photographs, one of this near by to show trunk and the card on the tree which explains that the tree as a seedling was transported by Jussien. In this one I had Hariot on the bench.

Sunday, July 23, '05.

Spent day reading. It has been very warm for the three past days. Last night was cooler. This evening at 7:30 we had heavy shower. At 9 o'clock I called on Dr. L. O. Howard, who is stopping at the Hotel St James and Albany. He was not in. I met him several days ago at the American Express office, also at same time I met Mr. Alden from Chicago, the Alden family great friends of the

Packard's and Clara in Covert. I had seen him once before but should not have recognized him if he had not spoken to me of him. Clara had probably written him that he might perhaps find me at Express office.

Monday, July 24, '05.

I met Dr. Howard on Avenue de l'opéra. We conversed for a few minutes. He talks french quite well. He told me that a few evenings ago he attended a meeting of the Biological Society. One of the papers was by one of the engineers who aided in the discovery of the body of Paul Jones, giving the details of search and identification. During the paper the chairman, M. Giard, observed a stranger in the room and sent some one to learn who it was. Dr. Howard sent up his card. When the engineer finished his paper Giard said that they had with them a prominent American, Dr. Howard of Washington and that "Dr. Howard now has the word". So Howard got up and made a little speech in french.

Went to Express Office (American) to get my mail. There were several letters. Some of these I replied to, and left others for a day or two.

Tuesday, July 25, '05.

Nothing of importance to-day except that it was hot. But I remained quiet and did not suffer.

Wednesday, July 26, '05.

How again, very hot but I remained quiet as yesterday. In evening Mr. Adams (perhaps I have spoken of him as Davis before but

his name is Adams and he is a descendant of John Quincy Adams) invited me to go with him to dine at Restaurant Dayen, on Champs Elysee near Place de la Concorde. We took a carriage and soon were there. We passed through the building and out into the garden where were many tables and much of the "world". The place for the tables was graveled and all around us was a beautiful greensward with shrubs, trees and flowers, doves and sparrows. Mr. and Mrs. Adams sat on one side of a table and Miss Adams and myself on the other. Had hors d'oeuvres, soup, bread, wine, mineral water, roast beef, etc., a fine dinner and a beautiful evening. It cost me 7 francs. We left this place at 8:30. I went to converse with Madame Vernon as usual in the evening, while the Adams I suppose went to the Tavern Tourlet on Boulevard de la Madeleine.

Thursday, July 27, '05.

Cooler to-day. I went to Duval's to dinner in the evening and when I was partly through the Adams came in and sat at my table, which made it very pleasant.

Friday, July 28, '05.

Heavy rain during night and some heavy rains during the day. Arranged with the Adams to go to Brasserie Universalle on Avenue de l'opéra for dinner at 7:30 P.M. It was raining hard and we took carriage. Had hors d'oeuvres which are excellent at this place and almost a meal in itself, and costing per person only 60 centimes. Also had Munich beer and a cocktail, soup, roast beef. At 8:50 I



left them to go to Madame Vernon's, taking Rue St Roch on Cevrus of which is the Brasserie, and which leads directly to 194 Rue de Rivoli where Madame Vernon lives.

Saturday, July 29, '05.

In evening went along to Brasserie Universalle to dinner. Ate too much ! In the morning met by chance two Americans at Duval Restaurant. I do not know their names. But as I gave order in french the gentleman remarked "you can get along a little better than we can". After some conversation he said, that in some place in Italy, I have forgotten the city, at some office there was a sign, "English spoken, American understood". This remark was called forth by our conversation which had been on the difference in voice, etc., of English and Americans. It seems that according to most Enropeans, A mericans have a high nazal twang in their voice which is considered very disagreeable and which certain Americans attribute to the prevalence of catarrh in America. This gentleman at first thought I was an Englishman because he said my voice was lower keyed than that of most Americans.

Day cool and comfortable.

Sunday, July 30, '05.

Quiet day reading. Day cool, cloudy in morning, sun coming out about 12 o'clock.

Monday, July 31, '05.

Reading and writing all day. Lesson at Madame Vernon's at night.

Tuesday, Aug. 1, '05.

Called at Vilmorin, Andrieux & Co., 4 Quai de Megisserie, to arrange to visit their warehouses on the morrow. I saw Mr. Schaettel and rendezvous arranged at 10 o'clock A.M.

Wednesday, Aug. 2, '05.

Visited warehouses near Place de la Nation.

Une visite au magasin de grènetiers.

Hier J'ai visité le magasin du grènetier Vilmorin, Andrieux & Cie de Paris. Ils ont un magasin ou maison pour vendre les grains en détail sur le Quai de la Mégissérie, et aussi quelques beaureaus où fait attention à leurs affaires en général. Il y a un autre magasin où ils amassent de grandes quantités de grains, et aussi où on éprouve la vitalité des grains et leur puissance pour germer. Ce magasin est situé près de la place de la Nation. Dans le chambre ou on fait éprouver la puissance de la germination des grains il y a quelques appareils qui ont été particulièrement construits dans ce but. Chaque appareil a un mètre de la hauteur, une largeur un peu mirus et une epaisseur de quarante centimetres. Il a une porte de verre, ainsi que l'on peut voir dans l'intérieur. Dans l'intérieur il y a quelques tiroirs à une uniforme distance l'un au dessus de l'autre. Sur chaque tiroir on met quelques paquets de papier qui coutient les grains qu'on va eprouver. Ces paquets sont fait d'un papier particulier c'est à dire papier fiitre. Un morceau du papier est plié une fais pour rapprocher les deux bants. Ce pli du papier fournet un lagement pour les grains et

aussi une couverture, afin de fournir l'humidité nécessaire pour faire germer les grains ou arrose "les paquets de papier" tous les jours assez pour les mouiller. Il est nécessaire de conserver une température uniforme dans l'intérieur de l'incubateur. La chaleur est fournie par quelques flammes du gaz qui sont sous l'incubateur, et le degré de température est contrôlé par un appareil particulier qui s'appelle un régulateur. Ce régulateur se compose de quelques morceaux de métal qui sont plats et minces et chaque pièce de métal a une puissance d'expansion et de contraction qui est différente aux autres. Ces morceaux de métal sont très sensibles à de petits changements de chaleur ou de température. Quand la chaleur tend à être trop haute l'expansion différente des pièces de métal les fait tourner qui ferme un peu le tube où le gaz sort, et la flamme se baisse. Au contraire quand la chaleur tend à être trop basse l'appareil par la contraction des morceaux de métal tourne dans la direction opposée qui fait ouvrir un peu le tube où le gaz sort, et la flamme s'élève. Ordinairement après deux à cinq jours les grains commencent à germer s'ils sont bons et s'ils ont une vitalité assez forte pour cette fonction. S'ils germent bien ils sont bons à vendre, mais s'ils ne germent pas ils commencent bientôt à pourrir. Il y a quelques sortes de bactéries et de champignons qui croissent sur les grains mauvais et qui les font pourrir.

Il y a un jardin à côté du magasin où on fait une autre épreuve des grains quelques grains de chaque sorte sont plantés dans la

terre. Quand ils germent et sortent au dessus de la surface de la terre on leur permet de croître jusqu'à l'époque où l'on peut déterminer s'ils sont les espèces qu'on les appelle. Aussi dans le même jardin on cultive beaucoup de plantes utiles ou décoratives pour obtenir les grains à vendre. Plusieurs de ceux-c'sont petite avec de jolies fleurs et de petits grains. Les oiseaux aiment ces grains là et il est nécessaire de les faire effrayer, autrement on ne pourrait pas avoir les grains à vendre. On a trouvé une devise curieuse dans ce hut. Il y a de nombreux miroirs petits et ronds qui sont suspendus au dessus les fleurs par une ficelle, à tant les toises, d'une corde qui étend la longueur de la couche où les fleurs se trouvent. Chaque miroir a deux surfaces et la surface n'est pas exactement égale. Il y a plusieurs petites parties de la surface et chaque petite partie est légèrement inegale aux autres qui la rejoignent. Chaque partie renvoie un different rayon de lumière. Le plus faible mouvement d'air fait tourner les miroirs et les renvois de la lumière de toutes ces petites parties de surface font une grande agitation de lumière qui effrayè les oiseaux effectivement.

Dinner at night near Gare St Lazare with Adams family.

Thursday, Aug. 3, '06.

Reading and writing. Lesson in evening as usual.

Friday, Aug. 4, '05.

Packed up to go to Pontarlier on morrow. Visited Madame Vernon to settle. Gave Odette a present of 10 francs. Bought a number of

"postal cards" and learned of "La maladie, nouvelle, 'Postalgie',  
Tous les voyageurs en sont atteints."

Saturday, Aug. 5, '05.

Took cab for Gare de Lyon. I should have engaged seat the day before. It required a long time to get a porteur to take charge of baggage and by time I had weighed up baggage, purchased ticket, registered and paid for baggage, the train was entirely taken. However, another train was made up but it was not so comfortable because there were no corridor cars. The day was a pleasant one, however, and we arrived at Pontarlier a little after 5 o'clock P.M. This is a grand junction for different routes in Switzerland and there are crowds of people on the platform at some trains. There were so many this time and no porteurs, I had difficulty in finding my way to the Hotel. I knew of no hotel in advance. I carried my two heavy pieces of baggage and started for town. Part way down the village I met an "ouvrier" or a person of "some sort" and asked him for the best Hotel. He said Hotel Perard, but that it was the hotel of the rich, as much as to warn me not to go there. He then pointed to several other hotels, one in the near neighborhood, as much as to say that they were about "my size and quality". I did not like their looks. So I searched for "Hotel Perard". After some trouble and indeed after passing the hotel I learned that Mr. Perard was proprietor of the "Hotel de la Poste". So I engaged rooms here. The rooms are all the same price, 3 francs per

bed. So I simply had my choice of two or three which contained but one bed. This is on north side and opens on the "Grand Rue", where one hears often the "toot" or "siren" of passing automobiles for the Grand Rue is continuation of or part of a fine macadamized route such as pass through this country and are much used for touring. I take meals at a table where meals are served "table d'hote" and cost three francs for dejeuner, 3.50 francs for dinner, wine (poor red and white) compris, while the petit dejeuner is served in another room, consists of coffee au lait, pain and milk for 1.50. I took a short walk in direction of La Cluse et Frambourg and inspected a young forest of spruce but there was nothing here. It had commenced raining the day before (Friday) and was raining some to-day. It has been very dry here and this rain perhaps is breaking the season and will give us mushrooms in abundance.

Sunday, Aug. 6, '05.

It rained during the morning. In the afternoon I took a walk to the north of the village past the military camp, on another grand route, and reached the large spruce for<sup>^</sup>et on the hills in this direction where I was told there were many mushrooms. I found a few. There are many Russulas of several varieties and they are nearly always devoured or badly eaten by snails. It began to sprinkle and I turned back. When I reached the hotel it rained harder and kept it up for a good portion of the night.

Monday, Aug. 7, '05.

I made another trip to the same for<sup>^</sup>et and came back by a new

route. Just as I was entering the forêt from the grand route I met a young fellow from Paris who is spending a couple of weeks here, and I had a chance to talk some french with him.

In the afternoon Mr. Giroud (a coiffeur to whom Mr. Perard had sent me, and I called at his shop and saw his son on Sunday) called to take a promenade with me, for he is a "connaisseur" of mushrooms. He led me by a new route near the one by which I returned this morning, but west of the military camp and over the hill soon taking a foot path or "sentier". He knows well the places where mushrooms grow. I secured a rather good collection, but he always became very impatient when I stopped to gather small species which he called "pas grand chose". One of the places he showed me was a small swampy place at foot of hillside spruce forest and near open meadow places. This is a rich region but I did not see how I could find it again.

Tuesday, Aug. 8, '05.

I photographed the interesting plants, took notes on them and set up my "demo table" four for drying mushrooms. It works excellently. I use an alcohol lamp and burn an alcohol made especially for the purpose of burning and is cheaper than the usual alcohol. In the afternoon I made a trip alone. I did not find many things, but on returning I overtook a stout man whom I found had been in search of mushrooms. I had an interesting conversation with him. He told me where to go to find a good collecting ground.

Wednesday, Aug. 9, '05.

Followed the directions given me by this old gentleman and found the very place to which Mr. Giroud had conducted me Monday afternoon. This is a good collecting ground and I returned with about ten or twelve species which I had not yet seen. The forest is getting dry, however.

Thursday, Aug. 10, '05.

It rained some during the night and most of the day so that I did not go collecting.

Friday, Aug. 11, '05.

I collected again in forest of Frambourg to-day, found few things except in a swamp in open field under few spruce trees.

Saturday, Aug. 12, '05.

Photographed specimens in the morning and in the afternoon went to photograph some plants in the forest. Claire Camille a young lad fourteen years of age accompanied me to carry the camera. He is rather small for this but he seemed to bear up well and declared always that it was not heavy. I photographed a fairy ring of *Polyporus ovinus*. The boy seemed somewhat "fagged" by the return. I paid him 1.50 francs, price agreed upon, and he said he would like to go again any time I wanted him. I did not take his place of residence for I supposed Mr. Perard who engaged him for me knew it.

Sunday, Aug. 13, '05.

I started early on a new route to the east climbing up the hill



in the direction of the "Fort" and found a small and steep valley which leads to the north to the route where is the "Douanes Francaises". I traversed the beech and spruce forest just below the Fort. There was almost nothing here and I made my way down again to follow the rivulet in this little valley. I soon found a steep slope where there was considerable humidity. Here I picked up several interesting things, among them the Ganoderma "tsugae" on a rotting stump of spruce.

Monday, Aug. 14, '05.

I collected again in the small swampy place at foot of spruce hillside, near the spruce plantation belonging to the village. In the evening I met by accident a young boy "de passage" with his "grandmère" as I came out of the dining room. He invited me to promenade with him. I found he was from Brittony. He was only thirteen years old. He was a fine bright fellow and we had a long conversation in french.

Tuesday, Aug. 15, '05.

Took train to-day for the station Frasne, a small villa about twenty kilometers from Pontarlier, to collect in a forest where there is quite a large swamp with sphagnum and other mosses. Mr. Perard had told me of this. It did not prove to be such good collecting ground as I had anticipated, but still I found eleven species which I had not found at Pontarlier, and some other things in greater quantity, among them several fine specimens of Ganoderma

ATKINSON

DIARIES

EUROPE

1903

1905

George Francis Atkinson  
Diaries found by R.P. Kof 1953  
of two trips to Europe  
1903 (complete)  
1905 (incomplete)

Presented by RPKof to the  
Cornell University Archives  
June 1953.