

D 921

.B3

To and from Rome



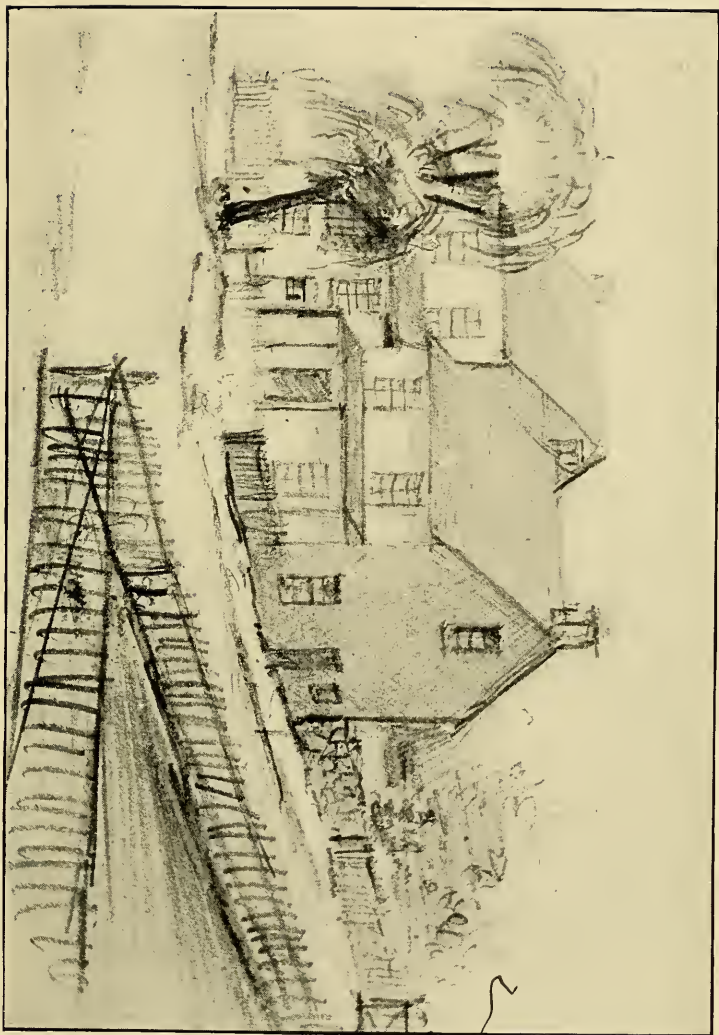
Class D 921

Book .B3

Copyright N^o _____

COPYRIGHT DEPOSIT.





Birth-place, on the right bank of the Brandywine, near Read's road, East Brandywine, Chester County, Pa.

TO AND FROM ROME

BY

JOHN MULLIN BATTEN, B. E., M. D.,
LATE ACTING ASSISTANT SURGEON IN THE UNITED
STATES NAVY.

Author of "Two Years in the United States Navy," 1881; "Random Thoughts," 1895; "Rhythmic Flashes," 1904; "Round and Round," 1906; and "Over the Waters to Edinburgh Town," 1910.

PUBLISHED FOR THE AUTHOR

1913

1921
.B3

Copyright by JOHN MULLIN BATTEN, B. E., M. D.,
Downingtown, Pa.

1

\$1.00

©Cl.A347818

no 1

Dedication.

TO MY SCHOOLMATES,
BENJAMIN C. KREADY,

AND

JOHN W. BICKEL,

FRIENDS OF

LONG AGO,

THIS VOLUME OF

TO AND FROM ROME

IS MOST RESPECTFULLY

DEDICATED.

PREFACE.

Previously to visiting Rome I often contemplated what sort of a place I would find. I had it all pictured in my mind the Appian Way and the Aqueduct of Claudius. These were the first I saw in entering Rome. The Appian Way, which I thought was built of solid masonry, with Julius Cæsar's and his contemporaries' tombs on either of the Way. Instead thereof I found Appian Way was only a macadamized road 25 feet wide, entering Rome, and was 180 miles long, and Claudius Aqueduct was built about 20 feet from the ground. Rome now is a modern city in all respects.

J. M. B.

*Downingtown, Pa.,
March 29, 1913.*

CONTENTS.

	PAGE.
Going Aboard the N. Prinzess Irene, Hoboken,	I
Azores,	13
Gibraltar,	18
Naples,	20
Vesuvius,	23
Pompeii,	23
Rome,	26
Florence,	33
Venice,	38
Milan,	41
Lucerne,	43
Interlaken,	60
Neuhaussen,	62
Munich,	64
Oberammergau,	65

	PAGE.
Heidelberg,	69
Mayence,	70
Cologne,	72
Hamburg,	73
Letters to Corelli,	81
Alcohol,	96
Syphilis,	102
Acute Intestinal Auto-Infection,	111
Smallpox,	117
Golden Wedding,	127
Record of My Maternal Grandfather's Enlistment Service in Revolutionary War,	129

ALL ROADS LEAD TO ROME.



SATURDAY, May 21, 1910.—I left Sallie A. Lockart's, 1804 Vineyard street, Philadelphia, at 3.30 A. M., in a rain storm, and arrived in Hoboken at 8.30 A. M. In going from Philadelphia to Hoboken I passed through Trenton, Elizabeth and Newark. From Jersey City to Hoboken through the tube, which is 96 feet below the surface of the water. I went aboard the N. Prinzess Irene, 600 feet long, 60 feet breadth, and 32 feet depth, at 8.30 A. M. I was a stranger to everybody, but soon after I went aboard, Dr. Eastman, of Uniontown, Pa., claimed that he knew me, and had met me at some place where the A. M. A. meet. Dr. Eastman, wife and daughter, were going on the Cook's tour the same as I was on. The Kaserin Auguste Victoria was lying alongside of the N. Prinzess Irene. The number of my stateroom was 265, and of my seat at the table, 136. I had none of that timidity that I had experienced on my last voyage across the ocean. I then was brooding over something dreadful that might occur; there was nothing occurred in the way of accidents. Now that I am hopeful there may be some accident. Things go by contraries. The N. Prinzess Irene left Hoboken about 2.00 P. M., and steamed out to sea. The evening

and night was foggy, so that there was fog whistles sounding. I went to bed at 9 P. M.

Sunday, May 22, 1910.—A beautiful May morning at sea. The waters are placid and everybody appears hopeful and happy. I was up at 7.00 A. M. I went to bed last night with a feeling of perfect security and slept well. I have a good deal of trouble to get the run of the Irene. The N. Prinzess Irene at 12.00 M., steamed 328 knots. After lunch there is a steamer named Berlin, steaming directly east and parallel to the N. Prinzess Irene, but the Prinzess Irene is steaming faster and soon left her behind. We have our breakfast at 8.00 A. M., lunch at 1.00 P. M., and dinner at 7.00 P. M. I met the doctor of Irene yesterday and suggested to him that if he would have any capital operations that I would gladly assist him with them; he courteously replied, "it was not necessary." I met him to-day and he was quite affable. I spent a pleasant time with the doctor. I met with a gentleman, John Donat, from New York, on deck to-day. He thought Roosevelt was man of destiny and would be candidate for President of the United States at the nomination. He was a Roman Catholic, but he said he would not support him. In reply, I said I would not support him; the objection that I gave, that he had been virtually President two terms, and for him to have it a third term would be in violation of the unwritten law in regard to serving more than two terms. No patriot would allow his name to go before the country as candidate for a third term, and patriotic people would not vote for a man for the third term. The N. Prinzess Irene rides middling smoothly.

There was nothing of interest took place, except I felt a little sick. Slept well last night; windy; I walked the deck before going to bed. I went to bed at 9.00 P. M.

Monday, May 23, 1910.—Up at 8.30 A. M., and breakfasted. Cloudy and cool. The N. Prinzess Irene steamed 362 knots from noon yesterday till noon today. I walked the deck some in the forenoon. I looked through the clouds at the sun. There are white caps visible to-day, and riding is rougher than usual. I took a nap since dinner. It is 3.00 P. M. The sun is peeping through the clouds. There are some white caps and the ship is riding them. I feel a little sick. There is a steamer north of us going in the same direction and parallel to us, but 4.15 P. M., we passed her.

A day on the N. Prinzess Irene.—The day has been cloudy, windy and cold. We find the passengers are sitting around on chairs, protected from the wind by canvas, reading. I suppose a great many who never read before are reading now. There are some in the smoking room playing cards and checkers. Some are on the deck playing shuffleboard. Everybody feels chilly. In spite of the wind, some are walking the deck. In the evening men and women gather in the smoking room, and ladies in the cabin, to play cards and checkers, and drink coffee.

Tuesday, May 24, 1910.—Up at 8.00 A. M., and breakfasted. I ate very little breakfast, although I feel better than I did yesterday evening. It is still cloudy, but some sunshine this morning. A Spanish sailboat passed close by us on our port going west,

about 9.00 A. M. About 11.00 A. M., another sailboat made her appearance, going west. From noon yesterday till noon to-day, the N. Prinzess Irene steamed 378 knots. We have had a head wind for 24 hours. I have been walking the deck (6.00 P. M.); I feel better. When one is seasick nothing seems to taste good; no matter how palatable it may be at any other time, the stomach rejects it. Even the sense of smell is perverted—everything smells bad. The sight fails to admire the beauty he once found in observation. After 6.00 P. M., the sun peeped through the clouds. I sat on the deck after dinner, till 10.45, conversing with Dr. Eastman, when I went to bed.

Wednesday, May 25, 1910.—Up at 7.00 A. M., and walked the deck till 8.00 A. M., when I breakfasted, and then walked the deck till 10.00 A. M. Cloudy, some sunshine, and milder. In the smoking room from 10.00 A. M. to 11.00 A. M. I walked the deck till 1.00 P. M., when I took lunch. I took a nap till 3.00 P. M. From noon yesterday till noon to-day, the N. Prinzess Irene steamed 350 knots. There has been clear sky and rain, and then clear sky. In the distance there have been successive showers went around this afternoon. 6.00 P. M., I was walking the deck since 3.00 P. M., and was interested in the steerage passengers and their children. A typical southern colored woman was taking care of the children of a first-class passenger. A linguist was going to Spain in order to make herself more proficient in the Spanish language. At 7.00 P. M. I had a very good dinner and enjoyed it. I was in the smoking room after dinner. At 9.00 P. M., there was a shower. Two

priests and a Roman Catholic bishop sit at the same table with me. There is a beautiful moon scene shown through the black clouds. I went to bed at 10.00 P. M.

Thursday, May 26, 1910.—Up at 7.00 A. M. A beautiful clear sky presented itself afterward, covered with flying clouds, presenting a regular Italian sky. I walked the deck till breakfast, when I breakfasted. I then was in the smoking room till 10.00 A. M. There has been no vessel in sight yesterday nor to-day. I walked the deck from 10.00 to 11.00 A. M. There are no white caps to-day. The wind is in the east and is strong. I sat in the smoking room from 11.00 to 12.00. From noon yesterday till noon to-day, the N. Prinzess Irene steamed 351 knots. They are playing cards in the smoking room. I took lunch at 1.00 P. M. After lunch I went to the smoking room. I left the smoking room at 4.30 P. M., and wandered about the ship, and down to 265. It is raining and windy. There was a yacht passed by the N. Prinzess Irene while we took lunch. It amused those of us who were at lunch. It is a dull day. I took dinner after I had walked the deck a half an hour. After dinner I was in the ladies' parlor writing. The ladies' saloon and smoking room, owing to the rain on deck, are pretty well filled to-night. There is not much comfort in them. I went to bed at 10 P. M.

Friday, May 27, 1910.—Up at 7.00 A. M. I walked the deck till I breakfasted. Cloudy and windy. I saw the Azore islands from N. Prinzess Irene. They are composed of the St. George, Pique and Fayal. The N. Prinzess Irene pass the St. George on our port and

the Pique and Fayal on our starboard. Pique is above the clouds. The islands belong to Portugal. There are about 500,000 Portuguese on the islands. The farms on the side of the mountain are ribbon-like in shape, and resemble a crazy quilt. The fences are built of lava stones. These islands are close together. The N. Prinzess Irene steamed along the southern shore of the St. George, and we have a good view of it. Mark Twain said the stone retention fences are to prevent the inhabitants from being blown into the sea by wind. We started to steam past the Azores at 8.00 A. M., and left them at 12.00 M. I saw porpoises at 1.00 P. M., and some sea gulls early in the day, the first I saw on the voyage. At town of St. George the mail was sent ashore. About 200 miles north of here, two years ago, a vessel was lost on the rocks. This vessel the N. Prinzess Irene rescued the passengers. It was very windy to-day. After lunch I went aboard the second-class passengers to see how they lived. I took a nap. We had some rain this morning. All the passengers were very much interested in the Azores. The currency of the Portuguese is denominated "Reis." It take 1,000 reis to make a dollar of our money. After we passed the Azores we had a clear afternoon. A bird flew on N. Prinzess Irene from the Azores as we passed them, and it left her at Gibraltar. A man has been sick since he came aboard at New York, and has been sick ever since, confined to his bed. I saw him on deck this morning for the first time. He looked like a patient just recovering from typhoid fever. He says his brothers all follow the sea for a livelihood, and he is the only one of his

family who can't stand the water. From noon yesterday till noon to-day the N. Prinzess Irene steamed 353 knots. It is now 4.00 P. M. I have been in the smoking room writing, since 3.00 P. M. I was walking the deck from 4.00 P. M. till 5.00 P. M. I was in the smoking room from 5.00 P. M. till 6.00 P. M. Yesterday afternoon the second-class deck was abandoned on account of rain. I took dinner. At 8.30 P. M., I saw the comet for about five minutes. I got a glimpse of it and then it was covered with a black cloud, and we had a shower. There was quite a stir on board as much as if a fire had occurred. There was a dance on the port side of the vessel, accompanied by excellent music, till I went to bed, at 10.00 P. M.

Saturday, May 28, 1910.—Up at 7.30 A. M. I walked the deck for a quarter of an hour and took breakfast. Nine-tenths of the people on board are German. Last night was very dark on the outside, on the water as black as ink when I went to bed. This morning is cloudy and calm. Between 9.30 A. M. and 10.00 A. M., I spent in the smoking room. I have seen no steamers nor sails since I saw the yacht. On the Azores there is everything raised in the way of vegetables, fruit and grain, and especially grapes.

I met a wonderful combination of intelligence this morning in the smoking room, from 10.00 till 12.00 M.: Mr. O'Connor, on history; John Condee Dean, on astronomy, from Indianapolis, Ind.; and John Donat, N. Y., on Geography. From 12.00 M. till 1.00, writing up what I have observed to-day. The captain gave me a ribbon with N. Prinzess Irene printed thereon, suitable for wearing around the cap. 1.45 P. M., I just had

lunch and came to the smoking room. Priest Daniel O'Conner said that the Roman religion prevailed in Japan in 1500. He disagrees with Andrew Carnegie in asserting that wars will cease. From noon yesterday till noon to-day, the N. Prinzess Irene steamed 367 knots. Flores, one of the islands of the Azores that I did not see, was the island on which the vessel ran upon the rocks and was lost, two years ago. A sail boat going east north of us we passed at 4.00 P. M. Sunshine this afternoon, and it is misty. I was in the smoking room from 4.00 P. M. till 5.00 P. M., when I walked the deck till 6.00 P. M. There was some rain, and fish jumped out of the water. There was a concert held in the dining room, many of the passengers attending it. From 6.00 P. M. to 7.00 P. M., I took a nap and prepared for dinner. It was windy and partly cloudy most of the day. I went to bed at 10.00 P. M.

Sunday, May 29, 1910.—Up at 8.00 A. M., and breakfasted. It is cloudy and windy. In the smoking room after breakfast till 10.00 A. M. In the ladies' saloon and smoking room till 11.00 A. M., then I walked the deck till 12.00 M. Wind in the northeast, sunshine. In the smoking room till 1.00 P. M., when I took lunch. The N. Prinzess Irene steamed 357 knots from noon yesterday till noon to-day. I was walking the deck till 12.00 M. Wind in the northeast, sunshine. In the smoking room till 1.00 P. M., when I took lunch. The N. Prinzess Irene steamed 357 knots from noon yesterday till noon to-day. From the proceeds of the concert they held last night they collected eighty dollars. Mrs. John C. Dean was lucky enough to draw the pool of ten dollars. Each day

there is a pool formed and the one in the pool who guesses the nearest the number of miles the N. Princess Irene has steamed in the last twenty-four hours, gets the pool. This prompted her husband to assert that the women of the United States are always wanting more money, and husbands are only machines to make money, and the women spend it. After lunch I took a nap and came to the smoking room at 3.00 P. M., and stayed in the smoking room till 4.30 P. M. It is hazy. The wind is blowing a strong breeze from the northeast, and it is chilly. I was in the smoking room till 6.30 P. M., when I prepared for dinner. I was one hour and twenty minutes eating my dinner. I was walking the deck and in the smoking room during the evening. This evening there is walking the deck, card playing and coffee drinking in the smoking room. I went to bed at 10.00 P. M.; milder.

Monday, May 30, 1910.—Up at 6.30 A. M. Misty and somewhat foggy. We are steaming over the battleground of Trafalgar. The porpoises are jumping out of water this morning. The man from Connecticut, who has been sick on the voyage, is better. There is an Italian doctor provided for the steerage by the government of Italy, and one by the N. Princess Irene, to care for the Italian passengers, to see that they get the proper food and sanitation. The Italian doctor is called the Medical Doctor Captain. All steamers that carry Italian emigrants have such a doctor aboard, appointed by the Italian government. The wind is in the southwest. I have had my breakfast and am in the smoking room writing. It is 9.30 A. M. I left the smoking room at 10.00 A. M., when I went on

deck. I saw Africa on the starboard and Spain on the port, the lighthouse Tariffa on the point of Spain. 10.45 A. M., the rocky shore of Spain. We are passing a steamer going west on the starboard. We see the mountains of Africa and the mountains of Spain at 11.00 A. M. Two steamers on our port going west. A steamer on our starboard going west. At 11.30 A. M., we see Gibraltar. At 1.00 P. M. we arrive in the harbor and took lunch, and then went ashore. A guide, carriage and driver, was furnished. The rock Gibraltar is 1,550 feet high. I saw the old Red Tavern, the neutral ground between the French and English. There is a multiplicity of humanity in Gibraltar. All nations are represented. Jackasses carry all sorts of loads. I saw a gun that would shoot fifteen miles; the old Moorish Castle, Victoria Park, palm trees, and magnolia trees. The street is straight and narrow and runs the whole length of the town. Gibraltar has 18,000 inhabitants and has 5,000 soldiers. They use rain water. There is all sorts of barracks and forts, the old and more modern. They fish and there are fish markets. It seems very dry. The N. Prinzess Irene steamed 374 knots from noon yesterday till noon to-day. In the harbor of Gibraltar all countries are represented with men of war. We arrived at Gibraltar at 12.00 M., and left there at 6.00 P. M. We saw the back side of the Rock of Gibraltar. We took dinner at 7.00 P. M. I saw the comet. I went to bed at 10.00 P. M.

Tuesday, June 1, 1910.—Up at 6.30 A. M. I walked the deck till breakfast, 8.00 A. M. In smoking room till 10.00 A. M., and conversed with John Donat and

J. C. Dean, about Switzerland, Naples and Rome and Romanist. It is clear, warm and sunshine. I left the smoking room for the deck at 10.30 A. M., and remained there till 12.30 P. M. I got ready for lunch. I came to the smoking room after lunch at 2.10 P. M. I left there at 2.30 P. M., for state-room and took a nap. This is a perfect day with Italian skies. From noon yesterday till noon to-day the N. Prinzess Irene steamed 285 knots. The N. Prinzess Irene is 560 feet long, 60 feet depth, and 60 feet breadth. I walked the deck till 6.30 P. M., and got ready for dinner. The band played American pieces while we took dinner. All stood up while the band played the "Star Spangled Banner." It was an affecting scene. I considered it a great honor to the Americans who were aboard. I viewed the comet. I came into the smoking room at 8.15 P. M. I went to bed at 10.00 P. M.

Wednesday, June 1, 1910.—Up at 8.00 A. M. A beautiful morning, the waters are blue and placid, the sky is blue, some wind from the east. I have had my breakfast. It is 9.00 A. M. We have traveled well unto 4,000 miles from New York, and we are about a day's travel from Naples. I have had an enjoyable time on board of the N. Prinzess Irene, and the trip across the ocean has been a pleasant one. I made the acquaintance of John Donat, John C. Dean, Clark Fitzmaurice, and Mr. O'Conner. I left the smoking room at 10.00 A. M. At 11.00 A. M. we got the first glimpse of the coast of Sardinia. About 12.00 M., we steamed abreast of southern coast of Sardinia, and at 3.15 P. M., we had steamed the whole length of the southern coast of Sardinia. There were some sea

gulls flying after us since we neared Sardinia. Two steamers steamed west on the north of us, or between us and the shore of Sardinia. The island is sterile and made up of igneous rocks. Goats are raised in numbers. It is quite misty. The N. Prinzess Irene steamed from noon yesterday till noon to-day, 372 knots. It is misty in the neighborhood of Sardinia. There was a paper signed by passengers giving great praise to the captain and officers of the N. Prinzess Irene, for their attention and kindness during the voyage. After we left southwest Sardinia we steamed past Callery Bay, which we don't leave till we come to Covoli light-house, which is situated at the southeastern part of Sardinia island, at 5.00 P. M. The island is 75 miles wide. The N. Prinzess Irene gets her supply of water from New York city to come over, and from Naples to return to New York city. I left the deck at 5.00 P. M., for the smoking room, till 6.30 P. M., when I got ready for dinner. We spent from 7.00 till 9.00 P. M., in the dining room. The dining room was decorated with American and German flags, and the tables were likewise decorated with flags. It was the captain's dinner. During dinner we had band music. At the latter end of the time in the dining room, the dining room was darkened, and the waiters marched and countermarched through the dining room with torch lights. It was very pretty. The balance of the evening we had music and dancing on deck. I went to bed at 10.00 P. M.

Thursday, June 2, 1910.—Hazy and warm. Up at 6.00 A. M., and breakfasted at 7.30 A. M. At 6.45 A. M., I first got a glimpse of the mountains outside

of Naples. The N. Prinzess Irene arrived at the harbor of Naples at 9.00 A. M. The streets have no regularity. The streets are narrow and paved with square stone blocks, and also the pavements. The street cars run on one side of the street and return on the other side of the street. Before I landed I was amused at boys diving for pennies out of small boats. On shore we met all sorts of beggars. Boys and girls selling everything imaginable. There are great many donkeys used in the shafts of large carts held up by a high saddle on their backs. The carts are loaded heaviest on their rear part so that the donkey bears little weight on its back. Sometimes two horses or two mules are hitched to the cart ahead of the cart and donkey. Sometimes instead of the mules, it is an ox and mule. Naples has a quarter of a million inhabitants. The architecture of Naples is Roman. The houses are built on the side of the hills. We are stopping at the Hotel Victoria, I in room 101. The weather is balmy and foggy. There are automobiles in Naples. The N. Prinzess Irene steamed 323 knots from noon yesterday to Naples.

I saw friars walking on the streets of Naples. I visited a square or park in which palm trees and magnolia trees were among the shade trees. I saw an ox to a cart with a little horse. I saw an ox to shafts of the cart. The cart was held up by a yoke to his neck. In the park I saw about 500 school children with the teachers, sprinting through the park for an hour. There are fine horses and carriages driven along the main thoroughfare, via Partenopi. I imagine they are owned by foreigners. The town fronts

on the bay, in shape of a horse-shoe, and back on the hill. It extends around the Bay of Naples four or five miles. The houses on the hill are built zig-zag to the top of the hill. The day is warm, misty and cloudy. The Hotel Victoria is a nice hotel. We took lunch and dinner at the hotel. The cooking is different from ours in the United States of America. I saw an Italian blacksmith shop. The street merchants are very persistent in making a sale. The Bay of Naples is very pretty.

Friday, June 3, 1910.—In looking out from the window of room 101 of Victoria, I see a great many small boats on surface of the waters; soldiers are passing by in front of the Victoria.

We visited the Naples Museum. We saw gold chains and such gold ornaments as ladies wore in that day taken from the lost city of Pompeii, and doctors' instruments in use then; pottery; a bull cut out of a large marble cube. I saw the sexual art of Greece. In Pompeii the custom of the people was to use a bottle at funerals to bottle tears shed and buried with him. Roman Catholic cathedral by Charles I, (1200) built on the ground of the Temple of Jupiter; Venus; two Venuses by artists, in museum; a statue of Homer, Cæsar, and a Grecian horse. I was in the Aquarium. On top of and west of mountain and historic hills is situated Vesuvius and Pompeii; I saw wire taken from Pompeii. At Naples the soldiers go out for long runs in the mornings. The Hotel Victoria is lighted by electricity, and is six stories high. The clothes press differs in this regard: A rod runs lengthwise across the top of clothes press. The clothes are hung on a

hook on the rod. The bedstead is iron. The main business street is a busy one. There were six two-horse carriages took us around to-day. The bedstead is partly cushioned, with mattress on top, and narrow Brussels carpet in the room, washstand, chamber case, sofa, two cushioned chairs, two tables.

Saturday, June 4, 1910.—The military are practising on the street in front of the hotel. We started on our journey to visit Vesuvius and Pompeii, at 9.00 A. M.; six two-horse carriages took us to depot. We then take the cars which run to the foot of mountain, through a very fertile part of the country, composed of vegetables, natural growth of trees, grapes, and fruits of all kinds. These are grown on lava that has flowed from Vesuvius at different times. We reach Cook's railroad, a cog-wheel railroad, and ascend the mountain to nearly the top. We passed the Observatory, where lava of 1906 divided; one part of the lava runs to one side of the observatory, and the other part to the other side, thus miraculously saving the Observatory. The different periods of the eruptions, 1872, 1895, and 1896, did miraculous work in running down the sides of mountains. Pompeii was destroyed by pumice and ashes in 79. A new Pompeii was commenced in 472, and again destroyed. The excavation of Pompeii was commenced in 1448. Gates Annul at the entrance. A fountain built of granite, worn by the hands in two different places by the people in leaning over to take a drink from the fountain. We saw several such fountains, wine shops, baker shops. Seric water supplied Pompeii then, the same that supplies Naples now. The

second, called Mercuric fountain. We saw the Public Baths. We saw the machine with which olive oil was made, the machine with which they made flour, the baker's shop, a private house in which they had all the modern convenience, in which there was a room set apart for immoral and lewd purposes. Houses of ill fame put conspicuous signs on the front walls to indicate the nature of the houses. The streets worn by wagons, could be seen along the narrow streets. The streets were paved with heavy square stone, a foot square. The pavements, with curb stones two feet wide, used the same sort of stone for paving. The pavement stood ten inches above the streets. I saw in a house petrified bodies of those who died in the destruction of Pompeii. Palace of Justice, Forum Triangular, Fourth Century B. C. Larger Theatre. Temple d' Aside, Fourth Century B. C. The walls of the houses are artistically painted, although 2,000 years have elapsed since the destruction of Pompeii; the paintings are well preserved. The houses are built of brick, two stories high. There are no roofs on the houses now, although they were covered by clay tile originally. We saw three theatres or forums that would seat 5,000 people. There is a banqueting hall. Pompeii is in straight line south of Vesuvius; is five miles distant. We took dinner at one of Cook's stations descending Vesuvius. In the morning en route coming from Vesuvius outside of Naples, we saw gardens, cedars, thatched roofs, natural forests, Royal Palace, poor quarters.

Sunday, June 5, 1910.—Up at 7.00 A. M. Wrote till 9.00 A. M., and took breakfast. This is the first Sun-

day in June, and Italians always celebrate this day, consequently there is quite a stir in the military, composed of footmen, cavalry, and bicycle riders, marching and countermarching, in front of the Hotel Victoria, with music. The weather is cloudy and windy, some rain. A thunder shower passed over at 11.00 A. M., and lasted till 5.00 P. M. There is a banqueting hall of large dimensions in the Hotel Victoria, with mirrors on one side. The curb-stones in Naples are fifteen inches wide. Naples has half a million inhabitants. A funeral I saw pass the Hotel Victoria with six horses to the hearse, two carriages, each drawn by two horses. Flowers were placed on the hearse and on the carriages. Above the Observatory retention walls were built by the government to prevent hot lava from running down the hill in time of an eruption. Greater than a semi-circle was a Grecian Forum, and a semi-circle, or less than a semi-circle, was a Roman Forum or Opera. Vesuvius is thirty miles from Naples. Excavation of Pompeii is going on now. A miniature car runs up opened street and loads, then returns, drawn by horses, or pushed by men, to next opened street, to a turn-table, when it turns down the opened street to place for deposit.

Room 101, 14x21, with one window in front, on the fourth floor, overlooking the Bay of Naples; one shutter or blinds, and one door window with balcony outside, on which you can stand to observe the Bay of Naples and part of the town skirting the Bay of Naples on the right, mountains on the left skirting the Bay of Naples. I went to bed at 10.00 P. M.

Monday, June 6, 1910.—Up at 7.00 A. M. Cloudy.

The distance from Naples to Rome is 150 miles. I took a walk and was caught in a shower, sought shelter in doorway, where I saw them milking goats. I saw a beautiful scene over Naples Bay, black overhead and beautiful green on the bay. We left Naples at 2.00 P. M. We are running through a delightful agricultural and horticultural country, then through a valley, now running through mountainous country more productive. Mountainous, irregular surface after we had traveled 75 miles. Natural timber, castles, then mountains and valleys, through a pass, then a valley, through tunnel 1; surface irregular, then through tunnel 2; surface irregular, through a pass, castle on the hill, then through tunnel 3; castle, then through a more productive and expansive country surrounded by hills. An agricultural and horticultural, and very productive country, presents itself as we approach Rome. We pass through tunnel 4. We pass the old Roman Aqueduct and Appian Way as we near Rome. We arrived at Rome at 6.00 P. M. We stop at the Continental Hotel, an up-to-date hotel, with all the modern conveniences and comforts. I was assigned to room 29, second floor. The hotel is six stories high, with an elevator. My room has iron bedsteads, narrow, painted black, with cushion under a hair mattress, bureau, chamber case, two mirrors, washstand, three cushioned chairs, clothes press with rod through the top after the style of clothes presses there; wooden table, with checker-board on top; mats, electric lights and candle, lace curtains, window with four lights in it, door like shutters, blinds which open on hinges, so does the window open inside, with

wooden doors on hinges inside of the window, which are on the window. Room 9x24, mirror in the door of the clothes press. The hotel is heated by steam. The pavements that I have observed is composed of marble curb, twelve inches wide, a yard square stones for the pavement. The street is paved with block stone, 4 in. by 4 in. There are public lanterns on the streets and public places, for men. They are built at right angles to the wall, so that the men's backs only are exposed to public view. There is a lantern on the other side of the street from my room in the hotel.

Tuesday, June 7, 1910.—Up at 6.30 A. M. I wrote till breakfast time, 8.30 A. M. We commenced our drive around Rome in two two-horse carriages, at 9.00 A. M., and visited the Forum, a destroyed place where Julius Cæsar, St. Paul and others, frequented. We saw and heard much of interest. I saw mosaic pavement. We saw the Altar of the Unknown God, went along Villa Nova, stones were lava used in paving the streets of ancient Rome. The ruins of the Forum is of wonderful interest. The Appian Way is 180 miles long. The old walks, the painted walls that have lasted from the early Christian era. St. Peter's Cathedral makes an imposing sight both outside and inside. It is 615 feet long and 95 feet high. There are figures of 70 in number on each side of the entrance. The Obelisk means silent witness. The Vatican is on the right of St. Peter's Cathedral. The Pope lives in the Vatican on the right. The bronze doors in front of St. Peter's Cathedral were made in the thirteenth century. The mosaic work is quite an interest. The monuments of Victor Emanuel and

Raphael are situated in separate niches. The stone made of lava and placed in the floor, formed the place on which prisoners stood on the floor.

In the afternoon we visited the Pantheon, built in 30 B. C. The front part of the building was erected 400 years after the original building was finished. In the afternoon we visited the Coliseum, 1,900 feet around, 157 feet high, built A. D. 42. It has 80 arches, used in emptying it of its audience of 87,000 ; 1,087 would go through each arch ; a monument was erected on an elephant. There were elevators in the Coliseum. The people said why the people come up out of the ground. Gladiators and animals fought in the arena. The spectators were composed of the Emperor, patricians and plebeians. Cicero made speeches in the Forum. Napoleon ordered a part of the Coliseum to be excavated. Some of the great orators of the day made speeches in the Forum. Nero had a circus on the ground on which St. Peter's now stands. The inside architecture of St. Peter's is wonderful. The Pope insisted upon Michael Angelo painting with his own hand the ceiling of the Sistine Chapel, and although unwillingly he began in 1508 and completed within less than twenty-two months, his colossal task proved one of the most marvellous of his works. It deceives the eye. The rotunda appears wider and larger after you have stood in the rotunda awhile. It has a wonderful effect. A tree, the leaves of which were used in a crown, stands in the Forum. There is a fountain in the Forum of the sixteenth century. We crossed over the Tiber on the bridge Harriden.

There are five bridges in Rome that span the Tiber. The day is beautiful.

Wednesday, June 8, 1910.—Up at 6 A. M. Clear, sunshine, warm. I took a walk to the park nearby the Continental Hotel, which is a unique place with palm trees and cypress trees. I saw women carrying baskets of vegetables on their heads. There are electric cars in Rome. Via Cavour is a street on which is situated the Continental Hotel. The party left the Hotel Continental at 9.30 A. M., to go to the Vatican, in six two-horse carriages. We drove to the left, around St. Peter's, to the Vatican. The Vatican and Papal Garden are on the right of St. Peter's Cathedral. We enter the Vatican, which contains 1,000 rooms, by Raphael Hall, Hall of Constantine, Loggio and Raphael. We had a panoramic view of Rome out of a window in the Vatican; Musee, Vatican, Pope's residence and garden, Hall of Tapestry, done with a needle, Map's Hall, by Raphael, Rego Hall, 7 years, Omedo, 400 B. C., Hercules, Hall of the Muses, Socrates, Court of Belvidere, Siege of Troy, 390 B. C., Torro Belvidere, 300 B. C., Cicero, by Byron in Childe Harold, Diana, Demosthenes statue, Minerva, Nilo, 400 B. C., Venus, Meda.

Via dei Ivinestone, New Road, 1870, Nero Aqueduct. In the afternoon, Obelisk, 1500 B. C., 115 feet high, Mosaic Work Floor, sat in. View down the Mother's Church, St. Paul, late Pope's Monument, Cloister, twelfth century, very large bronze doors at the entrance of church, fourteenth century. There was a marble stone in the shape of a mantelpiece built in the wall, imported from Jerusalem. It is said Jesus

stood under this stone ; tomb of Sebastian, Great Basilico, Church Festona, St. Paul, Catacomb in the Hollow. The Catacombs was the first burying place of the Christians, A. D. 70 ; Bath of the Cola Cola, Appian Way, Hall of Cola Cola, Public Place. Three gates on the Appian Way, it is said, St. Paul went through on foot when he was traveling to Rome ; Tomb, 78 B. C. Byron speaks of this tomb in Childe Harold ; Tomb of Pope, fourteenth century, bronze doors, Musee, seventeenth century, Holy Stairs ; Pope worshipped in the Mother Cathedral the last time the Pope was in the Cathedral. The party went through the Catacombs ; each of us carried a lighted candle and passed by the actual tomb of St. Paul, in a subterranean passage. The body of St. Peter was interred with St. Paul, but the body of St. Peter has been translated. There are three tiers under ground, and St. Paul's body is interred in the second tier. The Catacombs occupy 160 acres. We were through the subterraneous passage-ways of the Catacombs about two hours. I was glad to get outside where I could see light. The stone to which I refer was imported from Jerusalem, A. D. 149. Christ walked under it. He was six feet tall ; I walked under it, and I am six feet tall. I could just touch the top of my head against the marble ; the marble stone stood in the wall like a mantelpiece. The water of Rome was conveyed from Sabine hills in lead pipes about 70 A. D., and modern Rome has been getting her water from the same place since 1870. The country around Rome is undulating, and productive in agricultural and horticultural products. There are mountains and hills ad-

jacent to Rome. In ancient times there was a wall built around Rome. That wall still exists in broken fragments. We left for the Catacombs, five miles south of Rome, along the Appian Way, at 2.30 P. M., in six two-horse carriages. The Appian Way is 180 miles long and 25 feet wide. It appears to be macadamized.

Ladies wore their Pompadour style 600 B. C., as a picture in the Vatican testifies to. In passing through the Vatican, Generals Grant, Sheridan and Sherman, the former was standing near a statue of an Italian military man. Generals Sherman and Sheridan applauded. When General Grant noticed the statue by his side he was surprised, as it resembled him (Grant) so much. The same guide that took us through the Vatican, took the generals through, and told the story to us.

Thursday, June 9, 1910.—Up at 6.00 A. M.—A clear, sunshiny morning. Breakfasted and took a walk about the Eternal City. The Romans have been absorbed by other nations since the downfall of Rome, so that they have disappeared, and Rome mostly is inhabited by Italians. Rome has a half-million of inhabitants to-day. The town is built up of blocks of houses, six stories high. The streets are wide and narrow. In some parts of the town the streets are irregular, in other parts of the town they are regular. There are some donkeys used in Rome, but mostly horses. Men and women are well developed. I see soldiers drilling on the streets and walking a fast gait. I did not go out much to-day. It is too hot.

Friday, June 10, 1910.—Up at 6.00 A. M.—A shower

this morning. I walked around by the Cathedral near by. There are no seats in the Cathedral here ; I looked into it. The name of our guide is Knupker. Guide at Naples, D'Omforio ; guide at Rome S. R. Forbes. I saw a pair of oxen pulling a wagon.

Rome is governed by Mayor Nathan, and a Council elected by the people and endorsed by the King of Italy. Candidates for office must be freeholders and twelve year residents of Rome. A man by the name of Nathan, a Jew, is Mayor of Rome now. I was at the King's Palace, on the Via Nazionale. The latter is the most beautiful street I have yet been on.

A square, sycamore trees, palm trees, cypress trees, fountain, marble benches and wooden benches in the square. Piles of rocks in the square, lanterns around the square, a wooden building at the entrance.

Via Dei Quirinale.

We left Naples Monday, at 2.00 P. M. Tuesday, the following day, June 6, 1910, the inhabitants of Naples were aroused from their beds at 3.00 A. M., by an earthquake. The earthquake was felt most a few miles east of Vesuvius. Sardinia was partly devastated by a cyclone. Paris and Cologne have been visited by thunder storms. There was a rain storm about 2.00 P. M. I took a walk south of the Hotel Continental, to a wall, and retraced my steps back to the hotel and down to Cook's office, and via Nazionale, on which I bought a map of Rome.

Rome is the most complete city in the world. Everything is finished in the most superb style ; streets, pavements and buildings, are clean. Rome is a model city. The temperature is even throughout

the whole year, yet it has been very hot since I have been here. The Hotel Continental is heated by steam. Loquet is the name of a table fruit.

Naples, breakfast, 8.30 A. M., dinner, 1.30 P. M., supper, 7.30 P. M.

Rome, breakfast, 8.30 A. M., dinner, 1 P. M., supper, 7.30 P. M.

In the Mother Cathedral the statue of St. Peter has the toes all kissed away, and instep of same foot rubbed away by the tops of heads.

Saturday, June 11, 1910.—Up at 6.00 A. M. Beautiful morning. The party left Rome at 9.00 A. M. We passed by the Temple of Venus and the Wall, and ran along the Tiber some distance. It is 196 miles from Rome to Florence. Passed by embankments and sycamore trees. The country through which we pass is an agricultural one, and is irregular. Mountainous, interspersed with eucalyptic trees. Farmers are harvesting along the route. We see numerous olive groves on the hills as we pass along. We cross under twenty-two tunnels. We run in valley of the Tiber. Some places the valley is wide, some places narrow. We cross the Tiber three times. The mountains run parallel, and either side of railroad. We pass a lake named Purged. The latter part of our journey is mountainous and hilly. The scenery along the route is very beautiful. The thrifty farmers and their wives are taking in their crops. We are running through a valley which is very productive and beautiful. Olive groves, palm trees, mulberry trees, pine trees, and poplar, abounds. The Arno river runs through Florence. We ran

through towns and villages, a number of which were on hills. We arrived at Florence at 2.30 P. M., and stopped in Hotel New York, I in room 7. The streets are paved with large stone and pavements with very large stone blocks, extending the whole width of the pavement, and about 16 feet wide. There are no curb stones. The streets mostly are narrow, some are wide. There is no regularity in their direction, a few of the streets are asphalt. There are donkeys, and donkeys and carts, used. The horses are fine, the saddles on the donkeys are high, and carry the shafts of the cart high. My room is heated by steam. The furniture consists of Brussels carpet, two mirrors, five cushioned chairs, one arm chair, washstand, writing table, wide iron bedsteads, high posts, with wide fringe around the top, chamber case, sofa, clothes rack to hang clothes on, bureau, window, two doors opening inward, with iron balcony on the outside, three lights in each door, with shutters hung on each door, on hinges over glass and swinging inwards; lace curtains. The hotel was at one time a palace—Palace de Medici. I walked along Arno river and along some streets, where are sculpture, stores and picture stores on the hotel side of the Arno river. Galileo, Michael Angelo and Dante, were born in Florence.

Sunday, June 12, 1910.—Up at 6.00 A. M. Breakfasted at 7.00 A. M. The church bells are ringing; cloudy, hazy. After breakfast I walked along the Argo river to the dam and falls of the Argo river, and back along another street, via Curatoue, via Palatini, via Malagnano, Plazzi Marie, via Maggio, Strucci Olo Petti, Raphaella Mosaic. Pic-

tures of the sixteenth century—Reuben, Modena, Family of Nero. Sculpture taken from Pompeii, Reuben School, French paintings painted by the English Vandyke, Venus Petti, Art Gallery, Tribune. There are 250,000 inhabitants in Florence. A shower in the afternoon. Lunch at 12.30 P. M.

The people speak the Italian language in Florence, and are much like the people of Rome. They are well developed, fine looking, and educated. The men are fine looking and the woman are pretty. Painting and sculpture are the chief occupation of the people. The people drink wine, but are a busy people, and seem not to be affected by drink. Florence is governed by Mayor and Council, with the sanction of the King. Florence is supplied with water from the Apennine Hills. The water is considered to be good. The front doors of the hotel are metal, six inches wide, and swing in and out. The washboard of my room is stone. There are fine horses in Florence, but donkeys with high saddles are seen. The people are well behaved.

Monday, June 13, 1910.—Up at 6.00 A. M., and breakfasted. Thunder shower early this morning. I took a walk to the celebrated bridge, and over it, on which are kept stores. I bought some pictures and a map of Rome. We saw the Struggi. Rings in the walls of the house was a sign that he who lived in the house belonged to the nobility. Struggi means home. Built in the sixteenth century, Cathedral of St. Laurentz.

Chapel, fifteenth century. Chapel of sixteenth century. The Tomb of Christ, Michael Angelo archi-

ecture, main Chapel, Garden of main Chapel, John the Baptist, eleventh century, mosaic work of the twelfth century, doors of the thirteenth century, bronze doors called Paradise, bronze, very pretty. Lunch at 12.30 P. M. Afternoon drive we passed by the house where Dante was born, 1255. Cathedral Roman Catholic, the third edifice in the world built in the fifteenth century. Michael Angelo was the architect. The dome of the Cathedral is 350 feet high. The tower is very pretty. Museum: I saw cannon made in the fifteenth century. Mantel and terra cotta by Michael Angelo. There are four bridges that span the Arno river, and two bridges for horses. We passed by the house where Elizabeth Barrett Browning died. We continued our drive on the other side of Arno river, where there were pretty villas and parks, in which grew sycamore trees, palm trees, magnolia trees, cedar and other trees. Among them was the aspen. We finally reached a high point of ground in our drive, from whence a most beautiful view of Florence and its surrounding country was presented. In the distance we could see the Appenine mountains. Behind one of the ranges Milton wrote the famous "Paradise Lost." We saw parts of the old wall that surrounded Florence. A part of it is torn away now. Water running out of the side of the hill along which we passed. We passed St. Crozzi. The name of the church, Dante, the poet, Michael Angelo and Gallileo, were interred. We saw the tomb of each. We saw a memorial to Americus Vespucci. We then continued our drive to the suburbs of the western part of Florence, through parks, along hedge fences, natural tim-

ber and magnolia trees, and past some squares, back to the hotel, where we arrived at 5.30 P. M. The scenes we saw in our drive were delightful. We visited a place where mosaic work was done. The headstone was sawed by a wire saw and smoothed by another hard stone rubbed over it. The workmen consisted of men and boys, twelve in all. We also visited a place where waists and all linen garments were made by young ladies. The point from which we observed the town and surroundings of Florence is named Michael Angelo Square, in honor of, and a memorial to Michael Angelo. Few men made such an impression on the hearts of the Italian people by his life work, as Michael Angelo. Dante and Galileo were men, too, who were celebrated in their day and generation. Dante for his writings, and Galileo for his astronomical works. A shower after we returned from our sight seeing. The temperature is about 80 degrees. There were six two-horse carriages on the drive. Via Della Vicnanuova.

Tuesday, June 14, 1910.—Up at 6.00 A. M. Cloudy. It has been raining. Breakfasted and took a walk: On a monument, Cosmvs Med. Magn. Dux Etrvrrial, A. D. M D L, X X. Yesterday we passed a wall that had the mark of a house of ill-fame emblazoned on it. There are numerous automobiles in Florence. Men and women all work in Florence, which accounts for their fine physical condition, notwithstanding they are wine bibbers. In my walk this morning I passed a shoemaker's shop, a saddlery and harness shop, carpenter's shop, sculpture and furniture maker. We lunched at 12.30 P. M., and started in six two-horse

carriages to the depot at 2.00 P. M., and left dear old Florence behind. We left the depot at 2.30 P. M. There was a shower immediately after leaving Florence. On the way we passed through a country which presented scenery that is beautiful surpassing anything I have ever seen in my travels before. The country on the route abounds with vineyards of grape, olive groves and agricultural products. Florence is surrounded by mountains, a part of the Appenine system. We passed Victoria Galileo Cemetery. We finally came to the end of the valley by passing under a tunnel, then a valley opened up, and then a tunnel, till we had passed 48 tunnels with an intermission of valleys between tunnels. The intermissions between tunnels were short and long. We ran a long distance before we passed under the last of the 48 tunnels. After we left Bologna we passed through a very level and productive plain that reminded me of our Western prairies, and this scenery continued till darkness overtook us. The last scene were the foothills of the Appenines. We arrived at Venice at 10.30 P. M. The train ran between bodies of waters for some distance before we arrived at the depot. When we reached Venice gondolas conveyed us to the Grand Hotel, and I went to my room, 242. We took dinner on the train. We crossed the Po river in our journey. The distance from Florence to Venice is about 240 miles.

My room is covered with a Brussels carpet, and is 8 feet by 15 feet, with two windows with shutter windows opening inward, three lights in one shutter and six lights in both shutters, lace curtains, outside

blinds to be raised and lowered, bureau with mirror, washstand, two cushioned chairs, one larger than the other, chamber case, towel rack, a small table, temporary arrangement to hang clothes on, don't belong to the room, single narrow bed, wooden bedstead, a heating apparatus made of stone which burns coal.

Wednesday, June 15, 1910.—Up at 6.00 A. M. Breakfasted and then writing. Venice is in the Adriatic sea, and one can only see the city by being conveyed about in gondolas. We visited the Bridge of Sighs. We went through the dungeon. I saw the place of execution and the cell that Lord Byron spent twenty-four hours in to get himself in proper condition before he wrote the "Childe Harold;" the senate chamber of fifteenth century. I saw an old building that was built in 95 A. D. Our hotel has an annex to it. We take our meals in the main building and sleep in the annex. The annex is connected with the main building by a bridge. In St. Mark's Square there are 2,000 pigeons in it now, whose ancestors were imported from Constantinople in the thirteenth century. The Doge in the sixth century, Napoleon in the seventeenth century. There are in Venice, 172 islands connected, and 122 islands disconnected, and 450 bridges. St. Mark's Cathedral is a beautiful work of architecture, by Michael Angelo, A. D. 1492. Vestry rooms, fifteenth century, St. Mark's Place, sixteenth century, Doge, ninth century. I saw the portico on which the Doge was crowned. Bridge of Sighs, 1450-1605; Venice is supplied with water from hills, in lead pipes 45 miles away, since the sixteenth century. I saw a

picture entitled "Glory of Paradise." I saw in the palace in which the Doge was crowned. Golden, or room where wise men of the sixteenth century assembled. I saw the room in which Robert Browning died, and house in which Lord Byron lived, St. Thomas Cathedral, Frari Church, 1450, Monument to Canova, Wagener. The house in which Shiloh lived, the Market, Court of Justice, Bridge of Rialti. Plague commenced in 1255. This afternoon we took a gondola ride. The roofs of the houses, which are five or six stories high, are covered with clay tile. Venice is more than a thousand years old. The town was built in the Adriatic Sea to protect themselves from their enemies. My own opinion of it is that it is a great disease producer, and for this reason alone it should be destroyed. Thunder shower when I went to bed at 9.00 P. M.

Thursday, June 16, 1910.—Up at 5.00 A. M. Took a cup of tea at breakfast. I ate no dinner. After dinner I went out with the party to the watering place, in a steamboat that plied between Venice and watering place. A five minutes' walk between where the landing of the steamboat brought me to the watering place. Some of our party went in to bathe. The watering place was a nice place on the Adriatic Sea. It was quite a beer drinking place. I walked back to the boat that conveyed me to Venice. I walked to the hotel. I ate very little dinner. I saw a picture to-day, the largest one in the world—75 feet by 37 feet. Mr. and Mrs. Watson left the party.

Friday, June 17, 1910.—Up at 5.00 A. M. Cloudy. Shower this morning. Left Hotel le Grand at

8.00 A. M., and depot at 9.00 A. M., and arrived at Milan at 1.00 P. M., a distance of 140 miles from Venice. We ran through a dead level agricultural country, mountains on the south. Running between the Apennine mountains on the south, and the Alps mountains on the north. Country abounds with grape vineyards, trees in rows. Alps disappearing. Mountains disappearance. Wide scope of agricultural country on either side. We passed Garga lake. The country through which we passed was beautiful and productive. Rows of trees or rows of grapevines seemed to separate the fields from one another. Oats, wheat, corn, vegetables and produce of all kinds, grow in this part of the country. We passed Brescia. St. Dellegraph Cathedral, Milan, built in the fourteenth century, celebrated for its many columns inside. I saw a picture that was painted in A. D. 1494. I walked up a steeple 190 feet high. A priest jumped from this steeple to-day. The architecture of the cathedral is unique and pretty. There are pictures in the windows by Bertelle, who was four years in painting them. Doors only four years old. Doors of St. Ambrose, A. D. 380, St. Ambrose Church, 350 A. D., Pope Pius in ninth century, old fort repaired four years ago, Arch Triumph Napoleon III. We drove through the city in six two-horse carriages. There are many parks. There is a boulevard twenty miles around the city. The city of Milan contains 625,000 inhabitants. The streets are paved with square blocks of all sizes, and also the pavements; no curbstones. The buildings are six stories high. The city is governed by the King.

There are cobble-stone streets. They have electric cars. The carriages are modern, and so are the automobiles. I have seen only two carts and no donkeys here. Milan is a clean city. We stop at the Hotel Continental; my room is 168, 12x24 feet, one window, two door windows, three lights in each door, inside shutters, bureau with mirror, three cushioned chairs, one larger than the other two, narrow iron bedstead, head and foot-boards handsomely painted, writing table, washstand with mirror, clothes hanger, floor covered with Brussels carpet, hotel heated with steam, electric light, elevator in hotel. The town is well laid out. The streets are wide. A clothes-press with a mirror in the door, a stand for grip, an iron railing three feet high outside the window. The Cathedral in Milan cost in labor alone \$150,000,000. There is \$150,000,000 of gold deposited in vaults.

Beautiful dining room in Grand Hotel Continental, and beautiful, expensive painted ceiling. Outside blinds slide in the wall. Breakfast, 7.00 A. M.; lunch, 1.00 P. M.; dinner, 7.00 P. M. Cloudy.

Saturday, June 18, 1910.—Up at 5.00 A. M. Cloudy. Took a walk to a square that has a monument erected in memory of Leonardo M D C C C L X X. Milan gets her water from Tacino. The doors entering this hotel were very large, six inches thick. I could hardly swing them. We left the hotel at 12.00 M., in an automobile and a two-horse carriage. The party went to the hotel at Milan in automobiles, and enjoyed trip to the hotel. The party left the depot at 12.40 P. M. For about twenty miles passed through an agricultural and productive country.

About 2.00 P. M. we crossed into Switzerland. We passed in our journey from Milan to the Lucerne under 67 tunnels, one tunnel 20 miles long. We were sixteen minutes passing through it. We took dinner on the train. I was nearly perished on the train for a drink of water. After 20 miles run we ran into a very productive valley between the snow-clad Alps, where many villages were clustered along the foot of the Alps. There was a river running between two mountains and river was enlarged by streams of snow water rushing down the mountains on either side, the sides of which were nearly perpendicular. Each stream had a waterfall. We saw clouds on mountains below their summits. We arrived at Grand Hotel du Lac, at Lucerne, at 7.00 P. M. From the window of Grand Hotel du Lac, I see a light on the top of the high mountain, that with the beautiful silvery moon shining near the lighted snow-clad mountain with a clear sky, is a view one don't have the opportunity to witness many times in a lifetime. The snow-clad Alps, the many valleys beneath, the river, the rivulets rushing down the sides of the snow-clad mountains, with their cataracts, into the river, the productive valley certainly presents a beautiful scene.

A flood in this valley occurred about a week ago, which destroyed a section of the railroad over which we traveled. The waters of lake Lucerne were raised by the flood so that many of the buildings in Lucerne were flooded. Grand Hotel de Lac was flooded. Near Altdorf, in lake Lucerne, is where William Tell shot the apple off his son's head. The fences in

Switzerland are wooden and stone. The roofs are gravel, slate and shingle. A Swiss house has large eaves to them. My room, 104, 12x24 feet, narrow wooden bedstead, feather bed for covering, chamber case, stand for grip, writing table, two cane chairs, sofa like my own, floor, wood tile with mats, washstand—it is really a bureau, pitcher and bowl, clothes press with hooks to hang clothes on, a mirror in the door and one over the washstand, door, windows, with one large light in each window, lace curtains, outside blinds that slide up.

Sunday, June 19, 1910.—Up at 6.30 A. M., and wrote till 8.00 A. M., when I took breakfast. At 9.00 A. M. we took a trip by boat to Rigi Kulm. At 11.00 A. M. we took the inclined plane, and arrived at the summit of Regi, 5,600 feet high, at 12.00 M. The party then took lunch. We had a fine view of surrounding scenery. The most interesting feature to me was its geological lessons. All rocks along the inclined plane and at its summit, were composed of conglomerated pebbles, which had been united together a long time ago under water, and then by internal upheaval, when the Alps mountains were formed, were placed where they are now. The Alps are formed by many high peaks, some higher than another. It is quite cool since we came to Lucerne. It is a very pretty scene to look down on Lake Lucerne from the summit, Rigi Kulm. One hundred other snow-clad mountain peaks can be seen. We left the top of Regi Kulm at 3.00 P. M., and arrived at the bottom of the inclined plane at 4.00 P. M. There we took a boat that landed us in

Lucerne at 5.30 P. M. From Milan to Lucerne is 156 miles. The number of my room is 104. Lucerne has 50,000 inhabitants. The people of Lucerne are church going people. This morning at 9 o'clock the streets were full of people going to church. They were well dressed, thrifty people. There is a balcony outside the window. The streets are paved with block stones and asphalt. Curb-stones are a foot wide. I went to bed at 9.00 P. M.

Monday, June 20, 1910.—I met two gentlemen from York, Pennsylvania. One was a Lutheran clergyman. We walked to see the lion carved in the rock, or Glacier Garden, Lucerne.

ATTESTATION.

In the autumn of 1872, Mr. Amrein-Troller was having a cellar in proximity of the monument of the Lion, at Lucerne. After having removed a stratum of arable earth, several feet in thickness, and another layer of shingles, the workman struck upon the firm gray rock of the country, in which were sunk many deep excavations, cauldron shaped, at the bottom of which lay large round blocks of Alpine rock. I was called in to examine the nature of the surface, which was so soon to be destroyed by further digging and blasting. Along the sides of this first Glacier Mill several more were discovered. Encouraged by competent men, the owner determined not to destroy the rock, but rather to embellish it by plantations, and so to render it accessible to such as felt an interest in these wonderful natural phenomena.

There can be no doubt that these cauldron-looking

excavations owe their origin to the action of erosions at the foot of cascades. The round boulders, seen at the bottom of the mills have been whirled about water and have polished the mills by friction. It is in vain we look for the cliffs from which the water must have fallen in a torrent upon the surface of the rock ; but what we do notice is, that this surface is furrowed and scratched between the mills, as only glaciers can belabor their rocky beds. The boulders that lay in the mills are erratic, *i. e.*, have been dragged to this place by the glaciers of an epoch long past, from the innermost parts of the Alps. Many of them, which were before the excavations, covered with layers of detritus and arable land, show the characteristic furrows and scratches of the stone blocks which are caught between glacier and rock, and have been polished by the slow, forward progress of the former. The holes of Lucerne have, incontestably, been hollowed out by the torrents of melted snow that rushed down the steep end of the formerly mighty glacier, or rushed through the ice crevices down to the ground, and the now disappeared cliff was glacier ice. It was in those long bygone days, when the glaciers were descending from the Alps, and had extended as far, even, as the Jura mountains, that mills of the Glacier Garden were formed. The Grant Pots were filled by the moraines from a glacier giving way under the effect of a warmer climate, and the debris brought down by the torrent, and remained thus hidden till they were exposed to view in the autumn of 1872.

Like discoveries have been made, as is well known, in Scandinavia, and other parts of Switzerland, but

the glacier mills in Lucerne surpass any of those by the perfection of their forms and the distinctness of the phenomenon. To meet the doubts expressed by some visitors, whether man's hand had not assisted nature, I hereby testify, both as a geologist and as an eye witness of the first unexpected discovery, as also of the subsequent careful excavations of this so wonderful phenomenon, that the hand of man had nothing whatever to do with the formation of these glacier mills and polished surface of the glacier, nor with the erratic boulders that lie about, or in those mills, but that we have here to deal with a marvelous operation of free organic nature, a relic of a time when these countries were not yet inhabited by man.

ALBERT HEIM,

Professor of Geology in the Federal Polytechnic
School and University of Zurich.

Zurich, 1876.

GLACIER GARDEN, LUCERNE—GLETCHERGARTEN.

A.

*Explanation of the Geological Past of the Glacier Garden,
by Dr. Albert Heim, Professor of Geology at the Univer-
sity and Polytechnic School of Zurich.*

I-II. These are remains dating from the period of the glaciers, a period in the history of our globe which takes us back far beyond the oldest traditions and historical records. In those days almost the whole of Switzerland, and indeed the greatest part of the northern hemisphere, were buried under immense masses of ice, as geologists can now prove with the greatest certainty, with here and there an oasis inhabited by animals long ago extinct. Before that time we have

a period when ocean covered the land, and an age when half-tropical heat produced tropical forests in Switzerland.

Up to the year 1872 these marvels of nature lay still hidden under the detritus (moraines) carried along, centuries ago, by the moving Reuss glacier, and under the humus (soil) of a green meadow.

A mere chance (see page 3) led to the discovery of a glazier-hole. Researches were then continued till the year 1875 and, after the moraine or detritus had all been removed, wonderful erosions made by nature were discovered, as well as petrifications of tropical animals and plants, which the visitor will best inspect in the following order :

No. 1 is one of the gigantic Pots or Glacier Holes, with erosions caused by the glacier. They owe their existence to the whirling of the stones driven round and round by force of the melted ice. In geology these holes or pots are known by the name of glacier mills. The stones whirled around by the water, ground the rock, and at the same time polished themselves, as the two samples of mill-stones lying in this mill amply proves.

No. 2 is a Glazier Mill with grinders left ; most of them have been removed in order not to impede the inspection of the mill. The spiral windings, worn by the immense force of the water, falling from a great height of the glacier and whirling round from east to west, are clearly visible.

No. 3 is the Mill that was first discovered of all, and had the sad fate of being almost destroyed, the

value of the interesting discovery not being yet known.

No. 4 is a layer of Rocks abounding with fossils of sea shells, showing that the whole country situated at the foot of the Alps was covered by the sea.

No. 5 shows the petrification of palm-leaf discovered by the breaking of a stone near the garden.

On this small spot of ground you have, therefore, before your eyes different pages of the history of our earth; for the country where we are now, once presented various aspects: No. 4 dates from the period when the ocean covered the land. No. 5 represents the period when tropical heat produced tropical forests. In the Glacier Mills we have the debris left by the ice that once covered all the Northern Hemisphere. Thus the aspect of earth was changed in the course of millions of years.

No. 6 is another Glacier Mill, the top of which has been slightly injured. Its spiral windings, however, are very distinct. There are two mill-stones, one of which appears to have formed a complete circle, and the other a half circle.

No. 7. A mighty mill-stone (110 cwt.), that was excavated in year 1875, out of the depths of No. 11, the largest glacier pot.

No. 8 shows an area of full grindings, furrows and scratches, made by the Glacier of the Reuss, under which the rocks were, as it moved along. The indentations displayed were caused by the sharp edges of the boulders which the glacier dragged along in its course.

No. 9. Various smaller and larger beginnings of such mills.

No. 10 is a Glacier Mill, with a mill-stone of granite from the Gotthard.

No. 11 is the finest and largest glazier mill that has ever been found. The mound covering it was removed in 1875-1876. The diameter of the Mill is 26 feet 25 inches, its depth 29 feet 53 inches. At the bottom several holes of Mills between the crevasses of the rock will be perceived. Leaving this grand workshop of nature we enter into the Relief Gallery.

No. 12. The old model of the Muota Valley, near Brunnen, on the Lake of IV Cantons, representing the battles which took place there between the Russians and the French, on October 1, 1799.

Though not belonging to the scientific part of the natural history, this model interests all the visitors to the Glacier Garden, thanks to its faithful reproduction of the romantic Muota Valley, and the positions occupied by the Russian and French armies on the 1st of October, 1799.

The following is a short account of this memorable day :

General Souvoroff's victorious army having crossed the St. Gotthard, arrived in Fluelen to find that the enemy had done away with all the boats, thus compelling them to take once more to the mountains ; thus they were obliged to cross the Kensigkalm Pass, the oxen road along the lake not being at time yet constructed. The passage over the Alps lasted three days and three nights. Early on September 28th Souvoroff arrived in Muoto Valley, and was informed

by the Abbess of the Cloister, of the fall of Zurich, and of the Austrians' hasty retreat from Switzerland. Most unwillingly did Souvoroff resolve to make his troops retreat over the Progel. His rear-guard arrived in the night of the 29th of September, into valley. Meanwhile some French troops occupying the entrance to the valley, attacked the Russians at day-break on the 1st of October. The Russians resisted for a long time, but General Lecourbe's army appeared suddenly in direction of Brunnen, and threatened to cut off the Russians. They were obliged to withdraw behind the bridge. In the Grossmatt, before coming to the church and the cloister, Rosenberg placed his starving troops for the decisive battle. At the risk of their lives the Cossacks ventured into the waves of the high-swollen Muota, and cavalry of both sides charged each other with terrible violence. A frightful slaughter followed, but the impetuosity of the Russians, that bordered on despair, conquered in the end. Our model illustrates this part of the battle, step by step the French were obliged to yield. In vain do the officers attempt to restore order, and renew the fray. Disorder sets in among the ranks of the French, and all flee in the utmost confusion toward the end of the valley. Resistance against the war-like courage of the Russians was no longer possible. The warmly contested stronghold was at last taken and the Russian flag planted thereon. With this Russian feat of arms the after defeat of the French was completed. Henceforth their impetuous flight took a terrible form. A powder wagon stopped the small entrance of the bridge. The fleeing masses

pressed ever harder and harder on the partly repaired bridge, which the Russians had burnt after the retreat in the morning. On this shaky bridge the fugitives and the fresh reinforcements from Messena met. The shock was terrible. Cannons, wagons full of wounded men, and horses, were hurled in great numbers into the roaring waves of the Muota, down into the dreadful abyss. Already a half brigade had thrown their weapons, when, with the approaching night, General Lecourbe came from Brunnen with a second division of his brigade, and the Russians withdrew into the ravines of the mountain-valley. Lacourbe, after learning the fate of the French army, gave up all further pursuit of the Russians. On this bloody field the French lost over one thousand men in killed and wounded, besides all those who were taken prisoners.

For the convenience of visitors of the Glacier-Garden, is here found an entrance to the

Labyrinth: This is a Moorish palace built after the celebrated Alhambra in Grenada. Through the magnificent galleries and palm corridors, with their interesting groups, we wend our way to the lion courtyard, where we find the entrance to the kaleidoscope with its wonderful illuminations and reflections.

A visit to the Labyrinth is very amusing and should not be missed.

No. 13. Scientific Model of a normal glacier with its erratic phenomena. Scale 1 : 18,000 ; constructed by Dr. A. Heim, Professor of Geology at the Federal Polytechnic and at the University of Zurich.

Glaciers are ice streams which have their origin in

the old snowfields, and move slowly down towards the valley. These snowfields are formed in the region of eternal snow, by the successive falls of snow or rain, in the highest valleys of the Alps, as well as in the large northern and southern latitudes in the interior of the polar continent. By the sinking of the old layers, and the pressure of fresh falls of snow spreading over the old ones, the snow that was at first loose, granulates (that is what is called *nevi*), and real fields of snow can only be formed where these masses accumulate in the cauldron-shaped valleys of the high Alps. In process of time, this granulated snow congeals more and more in the deepish layers (*strata*) of the snowfields, escapes like a stream of ice from the nethermost part of it, and flows then downward in close connection with the configuration of the road leading down to the valley, getting broader and narrower with it and leaping over every obstacle it meets in its way.

Our model represents a so-called composed glacier that offers the sundry essential and characteristic phenomenon of such a one. The collecting ground consists of a larger and a smaller cavity. In some places small detached glaciers join themselves to the main glacier in its downward course.

We see that it is out of the cavity that the ice tongue actually arises, and the nature of a glacier is thus most evident. Here the motion is much more rapid than it was in the cavity. The reflection from the rocks on each side produces a stronger melting of the snow on the edges of the glacier, which is the reason why the surface, that was concave (hollow) above,

becomes convex (arched). On both edges we see the numerous crevices pointing slantingly towards the middle, which indicates a stronger movement in the centre. On the steep side of the valley are formed transverse clefts which, joining themselves with those on the edges, form a system of arched crevices, curved towards the centre. The glacier terminates in a thin, blueish, half transparent slip of ice, over some old moraine ground.

In the places where the old snow no longer covers the glacier, we see numerous meandering brooks have arisen out of the melting snow, flowing away and disappearing in a broad chimney-shaped crevice. At the lower end of the tongue of the glacier the muddy torrent escapes out of the large vault of blue melted ice.

The debris that rolled down the slope of the glacier, has accumulated in lines of detritus which have been carried down into the valley. These different moraines have, according to the rocks from which they originate, different colors are ranged on the glacier, from left to right, in moraine zones, in the same order as in their starting point above in the cavities. They do not amalgamate on the glacier.

The perfect polishing of the surface of the rock on the edges and at the end of the lower part of the glacier, is an evident proof that our glacier was formerly much more powerful. The glacier torrent has ploughed its winding furrow, composed of erosive caldrons, deep into the scratched, furrowed rocks of the polished stone of the glacier. As much as the scale allowed the contrast of forms between the torrent

erosion and the glacier erosion has been carefully rendered. The different phenomena are all represented in their right and mutual proportions of size, and have been exaggerated either as to color or form. The position is natural and therefore possible.

Those who have roamed among the glaciers will fancy they recognize everywhere well known spots. We strongly recommend to the visitor to examine the relief at a distance through a telescope or an opera-glass, and to look at it from every point of view.

No. 14. Lake Dwellings, after Dr. Ferd. Keller.

The traces (vestiges) of the first men in Europe reach, as the astounding discoveries of modern times prove, to the last great period of the formation of the world before the present state of nature, and at all events many thousands of years before our era. Already in those times Switzerland was inhabited by men who made their dwellings in the caves of the earth. These aborigines were not skilled in agriculture or the rearing of cattle, neither were they acquainted with metals.

Though we do not know anything about the fate of these aborigines, yet we may, from the proofs in hand, assume with certainty that, at times which lie far beyond any written records, the ground and population of Switzerland, as well as those of Europe, underwent many transformations. The objects that have been discovered take us back to an epoch, when the climate became gradually mild and pleasant as it is now-a-days. Our plants, corn and fruits, spring up, whilst the reindeer, mammoth, rhinoceros, vanish. After the men of the caves, belonging to the hunting

period, come the inhabitants of the huts, who cultivate the land.

The men of those remote times did not, however, live like those of the present time. Their habitations were mostly constructed above the water, on the lakes. These are lake dwellings and give their name to the whole time previous to the age of civilization. Those lake dwellings have not been known to us very long. It was while digging at low water, in the lake of Zurich, in the winter of 1853-1854, that the unexpected light was thrown on the science of these dwellings. In two different places at Obermeilen, to the great astonishment of the workmen, there appeared the tops of stakes and a great number of stag horns (of *Cervus elephas*), and of various tools in stone, horn, &c. Dr. Ferd. Keller, of Zurich, who has been for the last twenty years making researches, and studying the pre-historical time with the help of antiquities, went to Meiliu, and at once felt convinced that the discovered objects were the work of that people who had lived in the country centuries before the beginning of our era, and even before the time of the Roman domination: the Celts. In a short time there were, not only in the lakes of Switzerland, but also in Italy, France, the south of Germany, and Austria, lake dwellings discovered. The supposition of Keller as to the manner of living and origin of the people, were confirmed in every direction and in a marvelous manner. There have been found in Switzerland about 250 such lake villages differing as much in size as the village of the present day. Thus the strange history of remote times lies pretty clear and unveiled before us. The

model before our eyes of a lacustrian settlement has been constructed after the researches and discoveries of Keller, the father of Swiss modern researches of antiquities. At some distance from the shore of the lake we observe, above the water, some square, low huts, with gabled roofs made of plaited work, clay and straw, built on an extensive wooden structure. A long narrow path connects this wooden island with the main land. The necessity of protecting their own persons against their enemies, or wild animals, may have been the principal cause of this way of building. It offered also great advantages for fishing. A number of fish, drawn hither by the refuse, collected no doubt around their habitations, and were easily caught. The lakes offered also much better means of communication than the large primitive forests that covered the country and rendered settlements and traffic so much more difficult. What a busy life reigns on these lake dwellings! There we see fishermen standing with their nets and rods angling for fish, or rowing about in their canoes made out of hollowed-out trunks and watching for their prey. Some are spinning and weaving before the house, while others are hammering and making all sorts of tools and implements. The children are playing, and some men, returning from hunting, carry on a strong pole, the game they have killed.

Arranged around our model may be seen some genuine flint or horn tools, such as hatchets, chisels, with fragments of their handles, together with pins, and charcoaled remnants of fishing nets, plaitings, thread and cords, all of them articles of such per-

fection and finish, that no one could take them to be the products of such remote ages, if they had not really been found among the remains of these dwellings.

We find in cabinet against the wall a fine collection, being part of that belonging to the late Mr. C. C. Amrein Buhler, Professor in St. Gallen († 1898) and consisting of about 140 instruments of stone, 6 of wood, 66 bone, moreover about 190 objects, or rather characteristic fragments of earthenware, divers fruits, leather, and a number of teeth, bones, antlers of horns of animals. Most of these objects were found by Professor Amrein himself during the autumn and winter of 1872-1873, at the northern extremity of the lake of Baldegg. The spot where these lacustrian remains were found, from two to three acres in size, is situated on the tongue of land, stretching a good way into the lake; it was formerly entirely, and is even now-a-days partly, under water. It is bordered in the east and north by the hillocks formed by the moraines of that glacier to which we owe the origin of the mill-pots of this garden.

B.

The Lion Monument.—This famous masterpiece is dedicated to memory of the Swiss guard of Lewis XVI. It represents in a touching manner their fidelity and bravery, when, during the French Revolution in 1872, they laid down their arms by order of the King, and fell a prey to the fury of the populace, as they retreated unarmed into the Tuilleries. The model was made by the renowned Dauish sculp-

tor, Thorwaldsen, and was executed from 1819-1821, by L. Ahorn, from Constance. The monument measures with the grotto 13 metres, the lion itself 9 metres. A large grotto is hewn into the natural sandstone and here rests carved out of the rock a dying lion of mighty forms and a most beautiful and touching expression. His body is pierced by a spear. Full of pain the noble animal has broken down, still protecting while dying, the scutcheon of the Bourbons. Above the monument can be read carved in the rock, the words, "To the fidelity and bravery of the Swiss, beneath it the names of the twenty-six officers who fell on this terrible day. That, with about eleven basins I have enumerated, that were worn there by the gyrations of the running water in the years gone, and the crystal masses, was truly an interesting work of nature,

An old wooden foot-bridge over the Luzerne lake, 600 years old, that has stood through all the revolutions of Switzerland. We were in the Maze of Mirrors. Luzerne is a great watering-place.

Tuesday, June 21, 1910.—Up at 6.00 A. M. Clear. Left Lucerne at 10.00 A. M. After leaving Lucerne we traveled through a well cultivated agricultural district. There are wire and hedge fences. The mountains are cultivated. There are an abundance of fruit trees in the country. I see women working in the harvest field. I saw one mowing machine. We are passing through a mountainous district, pine timber on either side of railroad. We passed by a pile of stones, as if carried from the top of the mountain.

The roads are fine, with wood fences along either side of the road. We have a mountain climbing locomotive, which goes up one side of the mountain to the summit, and down the other side. There are villages clustered at the bottom of the mountains. The mountains and the valley are well cultivated, and houses abound to the very summit of the mountains. Mountain streams are running down the sides of the mountain every here and there. There is one stream named the Gneiss-rack, that is remarkable for its size. We passed Brienz. The country before we come to Brienz, has checkered scenery, with plots of ground and buildings. We take a steamboat from Brienz, over the Brienz lake to Interlaken, and arrived at Interlaken, via Meringen, at 4 P. M. The scenery from Luzerne to Interlaken was picturesque. The distance of Luzerne to Interlaken is 120 miles. We took lunch on the mountain. The houses along the route were roofed with tile and shingle. One house was roofed with stone. The buildings of Luzerne were six-stories, and covered with clay tile and gravel roofs. The hotels Metropole and Monopole, Interlaken, and room 113 is 9 feet by 15 feet, floor wooden blocks, covered with mat, narrow bedstead covered with feather bed, a sofa, two cane-seated chairs, grip stand, chamber case, washstand, table mirror, clothes press, window with two doors, a light in each door, blinds outside, lace curtains, a transom over the incoming door. There are mountains all around Interlaken. At sunset one of the mountains appeared very pretty when lighted up by the sun.

Wednesday, June 22, 1910.—Up at 6.00 A. M. Cloudy. We left the hotel in two omnibuses at 8.30 A. M., and the depot at 9.00 A. M., for Lauterbrunnen, Wengern and Jungfrau. We ascended to the top of Jungfrau by a cog-wheel railroad. We took lunch before we got to Jungfrau. We went through a tunnel three and a-half miles long, chiseled out of solid rock, and at the finished end of the tunnel, where we took a peep out of the opening in the solid rock guarded by iron banister, over the glaciers. At this place I gathered up a handful of snow and threw a snow-ball. Dr. Brennemen put his head in my way and I knocked his hat off, and it rolled down the snow-clad mountain, about 1,000 feet above the level of the sea. We had all sorts of views of valleys and mountain-sides, cultivated by the Swiss, who are a very thrifty and a hard working class of people. There is an abundance of fruit trees of all kinds. Fir trees that are tall and slender, abound. Agricultural and horticultural products of all kinds, are raised. Many streams run down over the sides of the snow-clad mountains. The houses are covered with clay tiles and slate. All houses have wide eaves. I saw women in numbers working in the harvest field. I saw a woman mowing with a scythe. Interlaken has a population of 5,000. Two two-horse omnibuses brought us to the hotel. The place is very picturesque, with mountains all around. Rain in the afternoon. Returned to the hotel at 7.30 P. M. Pavements of the streets stone and asphalt, with a narrow curb. Buildings are six-stories high.

Thursday, June 23, 1910.—Up at 5.00 A. M. Rain.

The party left the hotel for the depot in two two-horse omnibuses at 7.30 A. M., and the depot at 8.00 A. M. We saw lake Thuu. On the way we passed through eight tunnels and over so many valleys. We passed Spiez, a town of some size, and a beautiful country. Scherzligon, a town at the end of lake Thun. Towns all along the route. The Alps mountains diminish as we proceed on our journey. The fences are wire and hedge. We pass through broad valleys which are very fertile. We stopped an hour at Perron. The party visited the town. The party went out to see Perron, which is a very pretty town. We had a very bad lunch on the train. While we were at lunch the train ran through a level and a very productive part of the country. Farmers are now harvesting. We passed through Acron this afternoon. We are running through a very beautiful part of the country. We passed through Baden. There are mountains near Baden. A great many Germans from Baden and its vicinity, emigrated to Pittsburg, Pa., during the last century. We arrived at Zurich at 1.20 P. M. I walked with Dent along the streets of Zurich, till 2.00 P. M. It is quite a large, clean city. We saw some very fine cows as we ran along Aar river to Zurich. We passed through Aerlikon, Glattbrugg and Bulach. We left Aar river at Zurich. We passed through Glattfelden, Egliscan, Jesletter and Altenburg. We arrived at Neuhausen at 4.00 P. M., 130 miles from Interlaken, and went to Bains et Grand Hotel Schweizerhof, overlooking the Falls of the Rhine, presenting the finest view I ever saw. My room, 63, has a blocked wooden floor, covered with mats. It is 20 feet by 12 feet.

The furniture consists of narrow Swiss bedstead, with a comfort for covering, instead of a feather bed, chamber case, three chairs, one a cushioned one, and two cane-bottomed ones, sofa, washstand, small mirror hanging over it, clothes press, with looking glass in the door, one picture, table and second table, with a very small mirror on it, a still smaller mirror on the stand; window made door-like, with three lights of glass in each door, open inwards, lace curtains, window blinds, open on the outside. I can walk out on the roof from room of the Bains et Grand Hotel Schweizerhof and see the Falls of the Rhine, a beautiful view, indeed. This is the only hotel at which we stopped we had female waiters. The hotel is situated on a mountain high above the level of the surrounding country. Besides the Falls of the Rhine, I can see Neuhausen, with its 2,500 inhabitants, and general scope of country in the distance; electric light, and elevator. We were brought to this hotel in two two-horse omnibuses and a one-horse carriage. Showers. I went to bed at 9 P. M.

Friday, June 24, 1910.—Up at 6.00 A. M. Cloudy. The party left the hotel in two two-horse omnibuses, at 8.30 A. M., and the depot at 9.30 A. M. We went through two tunnels. We followed the Rhine and Lake Constance till we took a steamboat to Laudau, which was twenty miles away. We took lunch aboard the boat. At Laudau we came into Germany. Our baggage was inspected on the boat. We passed the town of Constance. We observed on the journey today hedge fences, wire fences and wooden fences. We passed a great deal of fir timber. In one place there

were a great many rocks on top of ground. The farmers are harvesting. Females were in majority in the harvest field. There was a shower this afternoon. This afternoon we ran in a valley between mountains, a part of the way. The country through which we traveled was rolling, fertile, and the farmers had large crops. We passed through Guttingen. Before we came to Munich, we came through a level and low part of the country. Most of the country is pretty. We left Switzerland when we came to Laudau. The buildings—barns and houses along the route, were large. Munich is 200 miles from Newhausen. We arrived at Munich, Bavaria, at 6.00 P. M., and were conveyed to the Hotel Bellevue in two two-horse omnibuses. My room, 28, is 12 feet by 25 feet, narrow, iron bedsteads, covered with feather bed, chamber case, two cushioned chairs, one small chair, grip stand, table, two mirrors, one washstand, a clothes press, Brussels carpet, one window, composed of two window doors swinging inward on hinges, with four lights of glass in each door. One picture hung on the wall. Munich has 580,000 inhabitants.

Saturday, June 25, 1910.—Up at 6.00 A. M. Cloudy. I bought a ticket home on Pennsylvania, Hamburg-American line, state room 48, lower berth 4. I took a walk around Munich.

“Wave, Munich, wave? thy banner wave,
And charge with dreadful chivalry.
Few, few shall part where many meet,
The snow shall be their winding sheet,
And every turf beneath their feet,
Shall be a soldier's sepulchre.”

Iser river runs through the town of Munich. We had lunch at 11.30 A. M., and left the hotel at 1.00 P. M., in two two-horse omnibuses, for depot, to take the train for Oberammergau. We had a great time crowding through gates to take train. We ran through great forests of fir trees on the journey of 60 miles to Oberammergau. The fences were hedge and wood. The country is mountainous, interspersed with valleys. On the route we passed one lake along the latter part of journey to-day; the country was very much broken. Farmers were harvesting. As usual we see a goodly number of females working in the harvest fields. The women keep the streets clean in Munich. We arrived at Oberammergau at 4.30 P. M. We are stopping at an ordinary private house (Ludwig's) in the place. The people, with their long hair, for the most part, look like wild men and women, especially the boys. My room, 14, a snug little room on the first floor, is furnished with narrow bedsteads, covered with feather bed, washstand, mirror, two chairs, one a caned arm chair, table, chamber case, the other a small leather seat and leather back wooden chair, window, 4 lights of glass, 2 in each door, open inward, shutters on the outside. The window on the inside of the room was adorned with clean linen curtains. The room is 8 feet by 9 feet, painted floor, with mats. They have a rule in Oberammergau not to cut their hair for a year before the Passion Play begins, so everybody may have long hair. Showers to-day. We walked from depot. Oberammergau has 1,700 inhabitants. The name of the town of Oberammergau comes from *ober*, mean-

ing over-ammer, the name of the river running through the place, and *gau* meaning district. Oberammergau is 60 miles from Munich, in the mountains, 3,000 feet above the level of the sea. I went to bed at 9.00 P. M.

Sunday, June 26, 1910.—Up at 6.00 A. M. Cloudy. Rain. At the Passion Play. I sat eight hours to listen to the Passion Play, from 8.00 A. M. till 12.00 M., and from 2.00 P. M. till 6.00 P. M. I sat in seat 402. There were 4,000 of an audience present. Breakfast, 7.00 A. M., dinner, 12.00 M., supper, 7.00 P. M. There were forty-one actors and actresses on the main platform, whose acting and singing was good. The play consisted of the persecution and defence of Christ. He was found guilty and sentenced to death on the Cross. The acting and singing was good. There are 700 actors and actresses who perform on the stage, and they are all home talent. A most remarkable thing that a town of 1,700 inhabitants, should furnish 700 performers. The inhabitants of Oberammergau are a good people. They teach by example. They indicate godness in their countenances and in their actions. A girl, one of the actresses, helped me on with my collar, on Sunday morning. In the afternoon, coming from the Passion Play, I got my feet wet. In the evening I changed my shoes and stockings and put on dry stockings and slippers. I went to bed at 9 00 P. M.

Monday, June 27, 1910.—Up at 6.00 A. M. Cloudy. When I arose I found my wet shoes on the outside of my chamber door, dried, cleaned and polished, by the same girl that helped with my collar. We said god-

bye to our host and hostess, and left in two two-horse carriages for the depot. The party left the depot at 9.00 A. M., for Munich, where we arrived at 11.30 A. M., and went back to the Hotel Bellevue, I in the same room, No. 28. We passed a town by the name of Munchen, and also a lake. There are hedge fences and wood fences. The roofs are clay, tile and shingle. The houses are remarkably large in the country. Sometimes the farm-house and barn are combined. There are in Munich, also in Oberammergau, a two-horse carriage with only one horse in it. I saw some fine cows at a station we passed this morning. There are fine horses in Germany. In Munich the trolley cars are painted blue and trimmed with white.

Tuesday, June 28, 1910.—Up at 6.00 A. M. The streets of Munich are paved with block stones, the curbs about the size of those we have in the United States. The pavements are block stones and asphalt. The roofs are clay tile. The party was taken out today in six two-horse carriages. We started at 9.00 A. M. Great man died in 1408. We visited the Gallery of the Great Masters, Reuben Hall, Reuben's wife, No. 1, and Reubens' wife, No. 2, Reubens' paintings, Vandyke paintings, and the paintings by Raphael; Colbeaugh chandelier; a military guard occupies four squares. Ex-Queen of Naples is stopping at the hotel. She stops here ten months in the year. We visited the Royal Palace. No intoxicating liquors are allowed to be sold on the grounds. We saw the Ball Room and Beauty Hall, and all pictures of a certain period, among the Royal families and plebeians,

ordered to be hung on the walls. Reception room for royalty and reception room for plebeians, Chinese room, Japanese room, Polish room, dining room, Napoleon I room, Maximilian room, Bible room, Richard Place, Chandelier that cost 90,000 marks, Pope Pius VI room, Joys and Sorrows of Life room, Needle-work and Mosaic-work room.

Afternoon, the party visited, in six two-horse carriages, the Bavarian Museum, which had on exhibition their furniture and cooking implements, their wearing apparel, their war implements, and how they were punished in wrong doing, their instruments of torture, the old ships, old flint-lock muskets, flint-lock revolvers. We saw Jerusalem, and everything that was interesting in the place.

Maximilian Museum, Maximilian Monument.

Academy of Painting and Sculpture.

The water supply of Munich comes from springs in the mountains, thirty miles away. The party passed a plat of ground the King gave the city for playground for children.

Wednesday, June 29, 1910.—Up at 6.00 A. M. Cloudy. Showers after dinner. We left the Hotel Belleview at 12.15 P. M., the depot at 12.45 P. M. We traveled 220 miles to Heidelberg. I saw a pair of oxen in a wagon, and also a dog and woman to a wagon, in Munich. There are rests on the streets. There are urinals and aborts on the streets of Munich. There are fine horses in Munich. In the first part of our journey to-day, there were no fences in the country. In villages there were pale fences. I see some brick houses and some thatched roofs. The

roofs are generally clay tile. The farmers are harvesting hay. The country through which we are passing now is rolling, with fir trees. We passed under eight tunnels. We passed by the towns of Ulm and Stuttgart. Stone fences, wire fences, wooden fences and hedge fences, abound. We are now passing through a mountainous country which broadens out. We passed Donau river. We are now passing through an agricultural country. Farmers live in villages. Passed hop groves, and near Black Forest. Houses in the country are large. Men and women work in the harvest field. The part of the country we passed through after leaving Munich, was a fine level country, then passed a rolling country, then it narrowed down, with fir trees growing on either side, then the country was stony, till we passed through a tunnel, then we passed by hop groves. Saw the Black Forest in the distance. Arrived at Heidelberg at 6.30 P. M., and went to the Hotel Grand. The Duke of Baden passed by the hotel while we were at dinner, 7.30 P. M. Breakfast, 8.30 A. M., lunch, 12.00 M. My room, 48, is 10 feet by 20 feet, narrow wooden bedsteads, and the usual feather bed for covering, Brussels carpet, sofa, chamber case, clothes press, hooks inside, washstand, satchel stand, heated with steam, chairs, one cane-bottom chair, window with doors, open inward, three lights of glass in each door, lace curtains, iron railing on the outside of window. Heidelberg is celebrated for its University. It is a city of 30,000 inhabitants. The streets and pavements are block stone and asphalt, with curb stone. The Holy Ghost Church, in which both the Roman

Catholics and Protestants worship. Went to bed at 9.00 P. M.

Thursday, June 30, 1910.—Up at 7.00 A. M. At 9.00 A. M. the party took a ride around the city in six two-horse carriages. We rode up the mountain overlooking Heidelberg. There are three mountains east of Heidelberg. We saw a building that was used as a club house for the students of the University of Heidelberg. It is here where the students of the University fight their duels. We visited the University of Heidelberg, and chapel of the University. Saw the prison of it. In this prison the students are punished for misbehaviour. The side walls and ceiling of the prison were covered with portraits of the prisoners, which were painted by themselves. Each prisoner painted his portrait and exposed it to view on the wall. There was a prisoner in the prison to-day when we visited the prison. He said he was put in for six days for thrashing a policeman, and that the first few days spent there was a novelty, but it had become irksome. His time will expire to-morrow morning. In our visit to the old castle I saw two bins, one held 10,000 gallons of beer, and the other 40,000 gallons. The baker house was built in 1524; it is 90 feet high. The powder tower was built in 1469; there are 65 steps to the top of the tower. The chemical was built in 1556. Emperor Hall, Glass Hall, Bell's Tower, and Manheim. We left the hotel at 2.00 P. M., and walked to the depot. We left the depot after 2.00 P. M., and arrived at Mayence at 4.00 P. M., and went to the Hotel de Hollande, where we arrived in carriages at 4.30 P. M. My room is

127, covered with Brussels carpet, sofa, chamber case, narrow, wooden bedsteads, no-feather bed for a covering, but comforts instead, one small cushioned chair, table, washstand, mirror, satchel stand, window, composed of two doors, one large light of glass in each door that open inward, lace curtains, old-fashioned hanging blinds on the outside. From Heidelberg to Mayence is 60 miles. We passed through two tunnels from Heidelberg to Mayence, and agricultural country. Mayence is on the Rhine. The streets are paved with stone block, wooden block, macadamized and asphalt. The pavements are paved with stone block and asphalt. The roofs are covered with clay tile and slate. Mayence is a very pretty town, with 80,000 inhabitants. The people are well dressed, fine looking class of people. Last evening I walked to Joannem Genefleisch de Gutenberg's Monument. Monument erected in 1837. There were two thundershowers to-day. I went to bed at 9.00 P. M.

Friday, July 1, 1910.—Up at 6.00 A. M. Shower. Last day of my journey with the party. I took a walk after breakfast. I observed children going lazily to school with a knapsack containing their school-books, over their shoulders, soldier-like, eating a crust of bread. The streets are both wide and narrow. The party left the Hotel de Hollande at 9.00 A. M., by the boat Borussia, to go down the Rhine river to Cologne, 120 miles. The scenery along the Rhine river is picturesque and unique. O'Lorch, where Blucher with his army passed the Rhine, in 1814, is marked with a monument. Coblenz, where we commenced eating our dinner, was the beginning

of the fine mountain scenery on either side of the Rhine. The mountain sides along the Rhine are cultivated, and grapes, with other fruit, vegetables and agricultural products, are raised, so that the sides of the mountains along the Rhine resemble a crazy quilt. Bonn, on the Rhine, is celebrated as the birth-place of the musician, Beethoven. The scenery to Coblenz is fine. The valley of the Rhine at Coblenz widens out, then narrows. There were eight bridges crossing the Rhine from Mayence to Cologne. We arrived at Cologne at 5.00 P. M., and were taken to the Hotel Fisch in two two-horse omnibuses. I occupied room 31 in this hotel. In evening after dinner, I went with Dr. and Mrs. Brennan to see the celebrated Cathedral of Cologne. My room was furnished with the following articles of furniture: chamber case, sofa, one small cane chair, table, washstand with large mirror over it, narrow, iron bedstead, with feather bed, Brussels carpet, two door windows, with three large lights in each door, opening inward, old-fashioned drop blinds and lace curtains. After dinner I set in the reading room till 10.30 P. M., when the guide accompanied me to the depot, and I departed from them at 11.17 P. M., on the train for Hamburg, Germany. I was real sorry to take leave of the guide at the depot in Cologne, when he said, "You are all right, now for Hamburg," and bid me good-bye. I had been traveling with a guide to direct me, now I was to have a new experience of traveling without a guide in a strange country, without a familiarity with the language. In the car I sat in department No. 11. During the night I went out of my

department, and returning to it, I met the conductor, who disputed the number of my department. When he found he was wrong he went into my department, No. 11, and fixed the seat so I could lie down and take a sleep. The train passed through Bremen at 5.00 A. M., and arrived at Hamburg at 7.00 A. M., on Saturday, July 2, 1910; 240 miles from Cologne. I found my way out of the depot and procured a man who spoke English, who carried my grip and directed the way to the Hotel Streit, when I went to my room 92. I afterwards took breakfast, then I made sure I could find the depot again. After I arrived at the depot I went to the office of the Hamburg-American line and arranged with them my ticket to sail the following day, Sunday, July 3, 1910, at 11 00 A. M. My room, 92, was supplied with the following articles of furniture: hat rack, chamber case, washstand, grip rest, narrow, iron bedstead, with feather bed for covering, table, cushioned chair, Brussels carpet, window, two doors, each of which had one light of glass opening inward, lace curtains. Hamburg is a pretty place. The river Elbe runs through Hamburg and river Wesser runs through Bremen; 1,000,000 inhabitants. Arstel Lake is in the interior of the city. The curb-stones are fifteen inches wide. Stone block and asphalt pavements. I went to bed after lunch and slept till 7.00 P. M., when I arose to see whether it was still Saturday or Sunday. Finding out it was still Saturday, I went to bed, instructing the chambermaid to call me at 6.00 A. M., Sunday, July 3, 1910. When I arose I made my toilet and walked to the depot in the

rain. I took the train for Cux Haven, 60 miles distant, where I arrived and went aboard the S. S. Pennsylvania, at 11.15 A. M. From Hamburg to Cux Haven we passed an agricultural country that was productive, with wooden fences and hedge fences. Cows and horses abound along the route, and the buildings generally are covered with clay tile roofs. Noticed a thatched roof and fir trees along the route. On board the S. S. Pennsylvania there was a band of music that was discoursing music when I came aboard. I went to stateroom 47, birth 4 lower, seat at table 402. I got my lunch and diuner aboard the S. S. Pennsylvania, which is 600 feet long, 60 feet width and 60 feet depth. She drew about 30 feet of water. The S. S. Pennsylvania steamed out to the Atlantic Ocean through the North Sea and the English Channel. Sea gulls fly after the S. S. Pennsylvania to-day. I went to bed at 9.00 P. M.

Monday, July 4, 1910.—Up at 6.00 A. M. Walked the deck. Breakfasted at 8.00 A. M. Showers this morning. The band played patriotic music at various times. The steerage had a good time dancing and attracted the attention of the second-class passengers. We had a Fourth of July dinner to-day, at which speeches were made. The band played "Star Spangled Banner," and other familiar American patriotic songs. At dinner the waiters, with false faces and other disfigurements, and lighted candles in lanterns, marched through the darkened dining room, while the band discoursed patriotic music. Some speeches were made in German. I had two flags, one an American, one a German, and a paper of fire

crackers. The whole affair was very humorous and amusing. The band played and there was dancing till late in night. The sea gulls are flying with the S. S. Pennsylvania.

From noon yesterday till noon to-day the S. S. Pennsylvania steamed 308 knots. The steerage passengers enjoyed themselves dancing. We passed through the English Channel to-day. I saw a high, rocky embankment on the English coast. Cold to-day. The S. S. Pennsylvania steamed in off the southern coast of England. We saw Land's End Light-house. The steerage passengers danced in the afternoon. Cold.

Tuesday, July 5, 1910.—Up at 6.00 A. M. Rain. Cold. The sea gulls are flying after the S. S. Pennsylvania. There are 250 second-class passengers and 500 steerage passengers aboard the S. S. Pennsylvania. Since noon yesterday till noon to-day S. S. Pennsylvania steamed 324 knots. There have been fog whistles sounding, 10.30 A. M. till 5.00 P. M. It stopped raining at 10.30 A. M. It is cold and windy. There was a concert held in the dining-room this evening. I went to bed at 9.00 P. M.

Wednesday, July 6, 1910.—Up at 7.00 A. M. Cloudy. The passengers are mostly German and speak German. I am the only American aboard. I have made no friends aboard. The German people are cold and unsympathetic even among themselves, and rough in their manners. From noon yesterday till noon to-day the S. S. Pennsylvania steamed 310 knots. I heard while eating dinner that Johnson had defeated Jeffries on July 4, 1910. Porpoises are jumping out

of the water. The usual music and dancing is going on on the steerage deck in afternoon. The babies only cry in English. Cloudy and sunshine. I went to bed at 9.00 P. M.

Thursday, July 7, 1910.—Up at 6.00 A. M. Rain and foggy. The fog whistles are blowing in early morning. Since noon yesterday till noon to-day the S. S. Pennsylvania steamed 313 knots. About 9.00 A. M. cleared up and we had middling sailing weather during the rest of the day. We had the usual amount of music by the band. No sea gulls follow us to-day. Fog whistles from 8.00 to 10.00 P. M. Hazy all day. Went to bed at 9.30 P. M.

Friday, July 8, 1910.—Up at 6.00 A. M. Windy, cloudy and rough. From yesterday at noon till noon to-day the S. S. Pennsylvania steamed 307 knots. Partly clear and windy. Some rain in the evening. The Germans complain that their visit to their old homes did not come up to their expectations and that they were disappointed.

Saturday, July 9, 1910.—Up at 6.00 A. M. Cloudy. The S. S. Pennsylvania since noon yesterday till noon to-day steamed 295 knots. There are many white caps on the water to-day. The wind has been in our head all day. Rain this morning. About 9.00 A. M., partly cleared; windy. At noon to-day we are in mid-ocean. In evening cloudy. We had the usual music by the band.

Sunday, July 10, 1910.—Up at 6.00 A. M. Cloudy. Since noon yesterday till noon to-day the S. S. Pennsylvania steamed 279 knots. Rain this morning at 8 o'clock, when we breakfasted. Remained cloudy

and windy all day. Wind in our head. There were numerous white caps. Commenced to rain at 2.00 P. M., and rained till 4.00 P. M., then cloudy and windy. The third-class passengers were dancing on the steerage deck to keep warm, and at dinner time they danced. There was the usual amount of music by the band. I went to bed at 9.00 A. M.

Monday, July 11, 1910.—Up at 6.00 P. M. Cloudy. I walked the deck till 8.00 A. M., when we breakfasted. Since noon yesterday till noon to-day the S. S. Pennsylvania steamed 291 knots. The fog whistles were sounding from 8.00 till 9.00 A. M., then it brightened up and was warmer and less windy. No white caps. Fog whistles were sounding from 5.00 till 6.00 P. M. The third-class passengers were dancing on the steerage deck. Band played in the morning. In the evening music by the band and dancing. Went to bed at 9.00 P. M.

Tuesday, July 12, 1910.—Up at 5.00 A. M. Fog whistles sounded from 2.00 till 4.00 A. M. The S. S. Pennsylvania steamed from noon yesterday till noon to-day, 326 knots. Rain this morning. Shower of rain at 11.00 A. M. Music by the band. Breakfast at 8.00 A. M. Lunch at 12.00 M., and dinner at 6.00 P. M. After lunch no white caps, sunshine. Usual music by the band. Dancing on the deck this afternoon by the steerage passengers. In the evening dancing by the second-class passengers on the deck. I went to bed at 9.00 P. M.

Wednesday, July 13, 1910.—Up at 5.30 A. M. Sunshine. I walked the deck till 8.00 A. M., when I breakfasted. The S. S. Pennsylvania steamed since

noon yesterday till noon to-day, 323 knots. No white caps. The day is balmy. Warm and no wind. At noon we passed a steamer going the same way, on our port. Fog whistles sounding between 3.00 and 4.00 P. M. The captain gave us a farewell extra dinner. The dining-room was decorated with American and German flags. The help dressed with false faces and carried torches and lanterns, and marched and countermarched in the darkened dining-room, to our great amusement. Speeches were made in German. The whole affair was enjoyed by all in the dining-room. The captain was very much respected by all the passengers on board. I went to bed at 9.00 P. M.

Thursday, July 14, 1910.—Up at 5.00 A. M. Fog whistles were sounding from midnight till 4.00 A. M. In the forenoon we saw in the distance, east, smoke that appeared to be smoke from a steamer that seemed to be gaining on us. The steamer turned out to be the fast steamer *Lusitania* going the same way. She passed us two miles to the south, about 5.00 P. M. At 12.00 M. we passed the U. S. Light ship. It was a very affecting scene. The band of S. S. *Pennsylvania* played the "Star Spangled Banner," as our ship approached the United States Light-ship. The S. S. *Pennsylvania* since noon yesterday till noon to-day, steamed 304 knots and leaves a distance to New York of 189 knots. Hazy, no white caps. The weather is very warm, the first warm weather we have had since we left Hamburg, Germany. An amusing game among the steerage passengers played on the steerage deck: One person was blindfolded and stooped, while another would smack his posterior. When the

blindfold was taken off and he would straighten up and look around among the crowd for his assailant. If he pointed him out then the assailant took his place. If the wrong man was pointed out, then the blindfolded man would have to be blindfolded again till he would point out the right man, then the right man would take his place. The second-class and steerage passengers were dancing on their respective decks. Sunset red.

A woman about sixty years old, amused herself during the whole voyage from Hamburg, Germany, by playing cards in the ladies' cabin. I had been watching her all the way over, as I sat in the ladies' cabin a good deal of time of the voyage over. I thought her a superior woman and a leader of women. In the evening she asked me my name. I told her, John M. Batten. Then she asked me if I was a doctor. I answered affirmatively. Then she said she had heard her cousin speaking about a Doctor Batten in Pittsburgh. I told her I was the man and the family physician of her cousin, John Lengenfelder, of Pittsburgh. She then introduced me to her lady friends. She said she and her husband were physicians and practiced in the state of New York. Her husband was now dead, and she had retired from the practice of medicine. I had another talk with her Friday morning before leaving the ship.

Friday, July 15, 1910.—Up at 4.00 A. M. The S. S. Pennsylvania arrived in New York harbor at 2.00 A. M., and anchored alongside of the Lusitania, which had anchored there the evening before, at 10 o'clock. The Lusitania has four smoke stacks, and is one of the

fastest vessels on the ocean. She steams from Liverpool to New York in less than five days. Passengers were busy this morning packing up and saying good-bye. We had breakfast early and got into the dock about 9.00 A. M. My baggage was inspected and I went ashore at Hoboken, from there through the tunnel to Jersey City. Then I took the train via Trenton, to Philadelphia, where I arrived at 12.00 M., and home in Downingtown the next morning.

Saturday, July 16, 1910.—I had a very enjoyable trip to Azores, Gibraltar, Naples, Rome, Florence, Venice, Milan, Luzerne, Interlaken, and Neuhausen, on the Falls of the Rhine.

In entering to the pier at Hoboken the S. S. Pennsylvania approached very slowly, the band was discoursing some patriotic music that exhilarated the hearts of those on board, and also those of their friends on the pier who came to meet them. Their friends on the pier were waving their handkerchiefs from the time S. S. Pennsylvania hove in sight on her way to the pier till she came alongside of the pier. Then it was friend meeting friend, father meeting children, mother meeting husband, brother meeting brother or sister, and sister meeting sister or brother. It was a joyful meeting, and a pathetic scene, a scene that is enough to stir the heart of any one whose heart is not steeled; relatives who have never met and are meeting for the first time in their lives. Perhaps it is a lover meeting his fiancee, ready to lead her to the nuptial altar.

N. Prinzess Irene,
In the middle of the Ocean,
May 24, 1910.

CORELLI:—I just had my lunch. The wind has been in our bow the last twenty-four hours. We have steamed 378 knots the last twenty-four hours. I am reasonably well. I was a little sick this morning and yesterday afternoon. It is very windy. It pretty near blows one off the deck. The sea is very rough, and the big ship is rolled on the sea's surface. I met Dr. Eastman, from Uniontown, Pa. I knew him before I came aboard. I just had a talk with two gentlemen from Memphis, Tenn. A lady from Indianapolis won ten dollars by guessing the number of knots the steamer steamed in twenty-four hours. It has been cloudy and windy ever since we left Hoboken, N. Y. We had a concert aboard last night, at which eighty dollars was collected. Nine-tenths of the passengers are German and speak German. The meals are excellent. We get to Gibraltar to-morrow morning at 3.00 P. M. We take carriage there. Good-bye.

J. M. B.

Grand Hotel Victoria, Naples,

June 6, 1910.

CORELLI:—Arrived here Thursday. We left for Rome to-day. We were twelve days coming here from Hoboken, N. Y. I have seen Naples, been at Mt. Vesuvius and Pompeii. Naples is a pretty city. I am well. A number of Americans are visiting here. The climate is warm and pleasant. A thunder storm

passed over Naples yesterday, and I was caught in one this morning while I was taking a walk before breakfast. I sought shelter. The dark clouds above, and the rain, produced a beautiful scene on the bay, a dark green, which lasted for some time. There is lots of sight-seeing at Rome. Rome is 160 miles from Naples. Naples has 250,000 inhabitants. There are a great many beggars. They follow you in the streets. The Hotel Victoria is a modern one, and it is up to date in service and not extravagant in its prices. The parlor is on the same floor with the dining-room. The parlor is composed of four connecting rooms, with mirrors. There is an elevator connects the six stories of the hotel. My room is 101 on the fourth floor. Leave for Rome at 2.00 P. M. It is now 11.30 A. M.

Yours,
JOHN M. BATTEN.

Rome, Sunday, June 9, 1910.

CORELLI :—I am in the Eternal City. I have been at St. Peter's, the Vatican, the Coliseum, the Pantheon and Catacombs. We drove five miles south of Rome on the Appian Way, to the Catacombs. I stood in the same place that Christ stood, under a stone, a mantel-piece-like in its form, six feet high. I could just stand under it, so I am the same size as Christ. We went into the Catacombs under ground. Each one of the party carried a lighted candle through a narrow subterraneous passage, and passed and saw the tomb of St. Paul. I crossed over the Tiber river on a bridge. There are five bridges over the Tiber in

Rome. We drove along the Appian Way five miles, to the Catacombs, which occupy one hundred and sixty acres. The Appian Way is 180 miles long and has a stone fence on each side of it. St. Paul walked along the Way in coming to Rome, and passed under three stone arches that we passed under yesterday.

Rome is a very bright city, and warm, beautifully and substantially built. Rome is supplied with good water. It had a wall built around it. The wall is going into decay now.

The Forum was destroyed by war and is older than the Christian era. It was frequented by all the great men that lived in the time of Julius Cæsar.

The Coliseum is a partly destroyed place. It seated 87,000 people. St. Peter's is the largest edifice in the world, and is of beautiful architecture, and a good deal of it was planned by Michael Angelo, a sculptor, architect and painter. The Vatican has 1,000 rooms, and contains beautiful works of art. The garden is outside of the Vatican. The Pope's residence is a part of the Vatican. I have been at Naples, Mt. Vesuvius and the destroyed city, Pompeii, in 79 A. D.: All these places are intensely interesting. I am well. The party go from here to Florence.

JOHN M. BATTEN.

Grand Hotel New York.

Florence, Sunday, June 12, 1910.

CORELLI:—I am in Florence. We arrived here yesterday at 2.30 P. M., 196 miles from Rome. We left Rome at 9.00 A. M. We have been visiting the Art

Gallery of Petti this morning. The Argo river flows through Florence. It is noted for sculpture and painting. That is all you can say of Florence. The streets are narrow and paved with stone. The houses are five and six stories high, built of stone, and are of Roman architecture. We see no frame houses nor colored people. There are 255,000 inhabitants in the town. We might call it a white city. The people are Italians and are a well developed people. The ladies are pretty and the men are fine looking and dress well. I saw a Washington hotel here in my walks. There is a lady in our crowd from Crafton, Pittsburgh, Pa. Rome is a more interesting place than Florence. Rome was burnt by Nero and destroyed, and is partly rebuilt now. The places of interest now are, St. Peter's, Coliseum, Appian Way, Claudius Aqueduct, and the Catacombs. Rome and Naples have each a population of half a million inhabitants. There was an earthquake in the reign of Nero. Left there on Monday, and on Tuesday last at 3.00 A. M., the people of Naples ran out of their houses to streets and parks, scared. There were forty killed in the neighborhood of Vesuvius.

Yours,

JOHN M. BATTEN.

Le Grand Hotel,

Venice, Wednesday, June 15, 1910.

CORELLI :—We left Florence yesterday at 2.00 P. M., and over a mountainous country, for 200 miles. We crossed under 48 tunnels. We crossed the celebrated Po river. After passing through the tunnels, we

passed the town of Bologne, and a beautiful level country similar to our Western prairies. The mountain scenery cannot be excelled for beauty. We arrived at Venice last night at 10.30. To-day we saw St. Mark's Cathedral, St. Mark's Square, in which are 2,000 pigeons flying about, whose ancestors were imported from Constantinople in the thirteenth century. In the Palace, in the dungeon room in which Byron imprisoned himself twenty-four hours, preparatory to writing the "Childe Harold." I saw the place where executions took place, the Bridge of Sighs. This afternoon we went around the town in gondolas and visited where Shylock lived. In Florence we visited the place where they make mosaic work, and the place where the girls make lace. To-day we visited the Rialta and two cathedrals; one was called the Plague Church. Venice is laid out like any other town, with streets and alleys of water, but gondolas glide along its streets and alleys of water. The city was built in the Adriatic 1,000 years ago, and its citizens go around in gondolas. I see no carriages nor automobiles. There are 450 bridges and 200,000 inhabitants. It is a great city. Farmers bring their produce to Venice in gondolas. We leave Friday morning. Good-bye.

JOHN M. BATTEN.

Grand Hotel Continental,
Milan, Saturday, June 18, 1910.

CORELLI:—We came from Venice to Milan, 140 miles, and arrived at 1.00 P. M., and had our lunch.

We traveled about the city in the afternoon, and visited the Cathedral of Milan, St. Ambrosia Church, Napoleon III's Triumphal Arch. We went in six carriages. There is a boulevard of twenty miles around the city, which has 625,000 inhabitants. The city is well laid out ; the streets are paved with stone block, cobble stones and asphalt. The curb-stones are two feet wide. The streets are wide and clean. Milan is noted for its commerce. The people are clean and well to do. Italian is spoken here. I arose at 5.00 A. M., and took a walk around the city. I saw in the public square a monument to Leonardo. The clerks of the hotel all speak Italian. I asked what time will breakfast be ready, and they walked away from me. Two of our company left us at Venice, Mr. and Mrs. Watson. We leave here to-day after dinner. There is nobody up yet, and it is nearly 7.00 A. M. There are large double doors at the entrance to the hotel, twenty feet high, and six inches thick. I could hardly swing them. There was no rain yesterday except early in the morning, when we had a shower. We have Dr. Eastman, of Uniontown, Pa., Dr. Breneman, Iowa, Dr. O'Brian, Maine, Mr. Collins, Indiana, Mr. Dent, California, Mr. Hallack and Mr. Harper, Memphis, Tenn., Mr. and Mrs. Benjamin, St. Louis, Mo., and Mr. and Mrs. Watson, New York, who left us at Venice. Good-bye.

JOHN M. BATTEN.

Grand Hotel, Lac Lucerne,

Sunday, June 19, 1910.

CORELLI :—We arrived here yesterday at 6.30 P. M., from Milan, Italy, after passing through 67 tunnels, including the long tunnel you have read about. It took sixteen minutes to run through it. We run between the Alps in the valley, with villages clustered at the foot of snow-capped Alps and streams of water running down their sides. A river runs along the valley. We pass several lakes, including Lake Lucerne, before we come to Lucerne. It is 156 miles from Milan to Lucerne. The scenery was pretty all the way along. I slept well last night. To-day, Sunday, we go to Rigi Kulm, a high mountain. We traveled one hour in a boat on Lake Lucerne, and one hour in ascending the inclined plane to Rigi Kulm. We tramped around the Rigi Kulm. We took lunch on Rigi Kulm and then returned to the hotel by the same route. Good-bye.

JOHN M. BATTEN.

Leiler's Grand Hotel Metropole,

Interlaken, Tuesday, June 21, 1910.

CORELLI :—I arrived here to-day, Tuesday, June 21, 1910. It is beautiful to-day, as clear as crystal. The sun made pretty pictures on surrounding scenery. Our travels to-day were over and around picturesque mountains, with cultivated valleys beneath us. The valleys were pretty and large, and cultivation of the valleys extended to almost the tops of the mountains. The villages that clustered at the feet of the mountains were pretty. I could not look in any direction

but what a beautiful scene was presented. Our train had an engine suitable for climbing steep mountains. We passed over 60 miles with such an engine to-day. A part of these 60 miles was traveled on a boat, with mountain scenery around us. Lucerne has a figure of a lion cut in solid rock, and we visited it yesterday. There are all sorts of amusing things there. Many of them are the works of nature and some of them the works of art. For instance, there the giddy maze, composed of mirrors, and when a dozen people enter it the reflection of the mirrors make a number appear much larger than original number. There are geological wonders that nature has wrought out in the history of the world, that are intensely interesting. I have been traveling all day, and it is dinner time at 7.00 P. M., and must go to dinner. Good-bye.

JOHN M. BATTEN.

—

Bains et Grand Hotel Schweizerhof,

Neuhausen, Thursday, June 23, 1910.

CORELLI :—Arrived this afternoon at 3 o'clock. Left Interlaken at 8 00 this morning. Yesterday went to the very top of Jungfrau, 10,000 feet above the level of the ocean. The view from there was picturesque. To go to such a dizzy height, cars creeping in and around mountains, makes one's head swim. We went through a tunnel at the top of the mountain that was three and one-half miles long. To-day we passed Baden and Zurich. There are a great number of Germans in Pittsburgh from the neighborhood of Baden. Zurich is a nice large town. I left the car there for

an hour and walked through the town. It is 130 miles from Interlaken to this place, or Neuhausen. The Alps, as one gets farther north, diminish in height very much, so that they become mere hills. We traveled along the Aar river till we came to Zurich. We took our lunch to-day on the cars. It is a beautiful country through which we traveled. Swiss farmers are good farmers; the women as well as the men work. I saw a woman mowing with a scythe yesterday. Good-bye. JOHN M. BATTEN.

Hotel Bellevue,

Munchen, Friday, June 24, 1910.

CORELLI:—We arrived here from Neuhausen this evening at 6.00 P. M. We ran along the Rhine till we took a boat on Lake Constance. We crossed the lake from Switzerland to Germany, on a boat, where we took lunch. The distance from Neuhausen to Munich is 200 miles. After we got off the boat at Lidau, it is 138 miles to Munich; on the way passed villages and towns. The country through which we passed was an agricultural country, and the people were busy with their work of getting in their harvesting. Munich is an old town, one thousand or more years old, and has 580,000 inhabitants. The houses are five and six stories high. The streets are paved with block stones and asphalt, and so are the pavements. I am tired and am going to bed pretty soon, so I will say good night. A kiss and

pleasant dreams. Don't forget to clean your teeth after each meal and before going to bed.

JOHN M. BATTEN.

Hotel Bellevue,

Munchen, Monday, June 27, 1910.

CORELLI :—I went on Saturday over to Oberammergau, and to the Passion Play yesterday. I sat eight hours listening to the Passion Play. The actors and actresses are all home talent. Oberammergau is a town of 1,700 inhabitants. There are 700 performers, and what is remarkable, is that all these performers came from the inhabitants of Oberammergau. *Ober* means over, *ammer* is the name of the river that flows through the place, and *gau* means district.

The party all stopped at the little house at which lived the Ludwigs, a German family, and took our meals there. They are German people and speak German. One of the girls helped me put on a new collar yesterday morning. It rained all day yesterday, though there were 4,000 people at the Passion Play. I got my feet wet, and that was where my slippers came in good. My shoes and stockings were wet. The girl—the same girl that helped me on with the collar—took my shoes and cleaned and blackened them, and this morning they were outside my door. Oberammergau is 60 miles from Munich. We have returned to Munich on the Iser. We will leave Munich on Wednesday and go to Heidelberg.

JOHN M. BATTEN.

Grand Hotel Heidelberg,

Wednesday, June 29, 1910.

CORELLI:—We arrived here at 6.30 P. M., after traveling 220 miles from Munich. Heidelberg is an educational town of 3,000 inhabitants, with fine buildings, wide streets, and fine looking people. So far as I have been able to observe, I have seen no business houses here. This is before breakfast. We traveled through a very pretty section of farming country. Farmers taking in their hay. Men and women work in the harvest field. The weather is wet. Farmers seem to live in villages or towns. I don't see as many farm houses here as we have at home. I do see one occasionally, but it is a big house, much larger than our houses. The houses in villages or towns are large, and I suspect more than one family lives in it. Sometimes I see farmers have stock. The most of them are in towns or villages. Sometimes the barns and houses are combined in one building. Such a building is usually in the country. We came through Stuttgart, the capital of Wurtemberg, Germany. We start for Mayence to-day, from thence to Cologne to-morrow, from thence to Hamburg, and sail thence in the S. S. Pennsylvania to New York, on Sunday, July 3, 1910. One of our party got into trouble in Munich, by setting the room on fire with a wood alcohol lamp. The lace curtains and carpets were burned, and room damaged. The fire department was called out. Good-bye.

JOHN M. BATTEN.

Hotel de Hollande,

Mayence, Thursday, June 30, 1910.

CORELLI :—I arrived at the above named place to-day at 4.00 P. M. We went around Heidelberg in six two-horse carriages in a dreadful thunder storm and downpour of rain. Rode over a mountain overlooking Heidelberg. Passed a club-house, where the students of the University of Heidelberg fight duels. Saw the Holy Ghost Church. The Roman Catholics and Protestants worship in the same church. Visited the University of Heidelberg, the Chapel, and the Prison, where they put students for misbehavior. One student was in prison while we visited it to-day. He said he was put in for six days for thrashing a policeman. He thought the first two days in prison was a novelty, but now it is getting to be monotonous. To-morrow he expects to get out of prison. There has been a prison in the University of Heidelberg for two hundred years. Every one who has been imprisoned there in that time has painted his portrait with his own hands and hung it on the walls, so that the walls and ceilings of the rooms are full of portraits of students who were afterward distinguished people. There is also at the University of Heidelberg a prison used in the seventeenth century. We visited what is known as the Old Castle, that is very old, and was nearly destroyed by fire in the thirteenth century. It was all destroyed but one house, which is standing to-day. We saw that house to-day. It is a very pretty place. Mayence is situated on the Rhine river, and contains 80,000 inhabitants. We go to Cologne to-morrow, and

from thence to Hamburg Friday night, and sail Sunday, July 3, 1910.

JOHN M. BATTEN.

Hotel Disch,
Cologne, Friday, July 1, 1910.

CORELLI :—I came from Mayence to Cologne in the boat *Borussia*, 116 miles, down the Rhine. It took us eight hours. The river Rhine is very serpentine and the scenery is very pretty. There are mountains on each side of the Rhine for the greater part of the distance. The Rhine is a large river and seven bridges span it from Mayence to Cologne—two at Mayence. There are good sized towns on the river, and the people live from the produce on the sides of the mountains. We took dinner on the boat, and it was a good one. We passed by Coblenz and Bonn, two celebrated places.

I start for home to-night at 11 o'clock, and go to Hamburg. I sail on the S. S. *Pennsylvania*. Dinner is ready and I must get ready for it.

JOHN M. BATTEN.

On board the S. S. *Pennsylvania*,
Wednesday, July 13, 1910.

CORELLI :—Two days from New York, N. Y., and ten days from Hamburg, Germany, or 3,000 miles from Hamburg and 600 miles from New York.

This is a warm, sunshiny morning, the first sunshiny, warm day I have seen except yesterday, which

was clear, after a foggy morning. Twelve days is a long time to be on board a boat, and seems longer, when you are with a German crowd that speak German altogether. I wrote to you from Cologne, Germany, last. I got your letter before leaving Cologne, Friday night at 11 o'clock, for Hamburg, Germany. I traveled all night and arrived at Hamburg, Germany, the next morning, Saturday, July 2, 1910, at 7.00 A. M. In Hamburg I arranged with the Hamburg-American line for my passage to New York. I sailed on the S. S. Pennsylvania, Sunday, July 3, 1910, at noon. I went to the hotel, and not having much sleep Friday, or last night, I went to bed in the afternoon of Saturday, and when I awakened in the twilight of the evening, I thought it was Sunday morning, July 3, 1910. I made inquiry and found it was Saturday evening, and I went to bed and slept till 6 o'clock, Sunday morning, July 3, 1910, when I went to the S. S. Pennsylvania, and sailed at noon.

Thursday, July 14, 1910.—Up at 5.00 A. M. Fog whistles sounding since midnight. We had a farewell dinner last evening. The dining-room was decorated with American flags and German flags. We had an extra dinner and a royal good time. Electric lights in the dining-room were turned out, and there was marching and countermarching by the employees of the dining-room, with torch lights and with all sorts of false faces. There was speaking in the German language. We get to New York to-morrow, Friday, July 15, 1910, twelve days from Hamburg, 3,600 knots. It is a long time to be aboard a ship. Yesterday was the most pleasant day we had since we

left Hamburg. Between 3.00 and 4.00 P. M., and from midnight till 4.00 A. M., fog whistles were sounding. This is a pleasant morning. In the afternoon it is beautiful and warm. The S. S. Pennsylvania will be in New York to-morrow at 4.00 A. M. We just had our coffee. It is very hot on the boat. It is the first hot weather I have experienced this year. Good-bye.

JOHN M. BATTEN.

Home at 1.00 P. M., Friday, July 15, 1910.

Monday, April 19, 1911.—I have lived to the 74th birthday. I am glad to be alive. Many of my contemporaries are dead. I miss them. My father and mother and sisters and brothers, are all dead. I feel lonely without them. Since last birthday I have been in Naples, Rome, Florence, Venice, Milan, Heidelberg, Cologne, Mayence and Hamburg.

[From Pennsylvania Medical Journal, June, 1898.]

ALCOHOL.

By JOHN M. BATTEN, M. D., of Pittsburg.

Alcohol in some form has possibly been used as early as times immemorial, and there has not been a nation on the face of the earth that did not use a stimulant or a narcotic. The stimulant has usually been alcohol in some form. Tobacco, opium, or hemp in a few instances, have been used in its stead. Alcoholic beverages, however, when opportunity presented, were easily introduced. An example of this fact is given in the account of Henry Hudson's famous voyage in 1609, when he discovered the Hudson River. The Indian chief and warriors waited for him on the shore of Manhattan Island, prepared to sacrifice the great Manito in Red. Hudson landed with a few of his crew and poured out some rum into a tumbler and drank to their healths, then passed a cupful to the Indians, but they refused to drink, thinking it was deadly poison. One, bolder than the rest, however, was induced to drink, and he drank, then reeled, staggered, and finally fell. He soon recovered from its intoxicating effects and described the effects of the

rum in such glowing terms that the rest of the Indians begged to have their share.

There seems to be a natural craving of man for something "that will drive away dull care," and alcoholic beverages seem to satisfy that craving. This is not only so among the savages, but it is actually true among the civilized nations, and they have a greater or less disregard of the evil of over-indulgence in the use of alcoholic beverages.

We find the earliest historic records of alcoholic beverages are passed down to us from the sacred classics of China, India, Judea and Persia, all giving full details of their use and abuse. The Chinese used wine made from rice, something like saki, which at present is used by the Japanese.

The sacred books of the Brahmans speak of a beer known as sura, made from rice, barley and honey, and other ingredients. This was a cheap wine, and was in disrepute by the priesthood. Soma, a sacred wine made from certain plants after fermentation, was offered as libations to their favorite gods, Indra Vishnu, and others. This wine was drunk freely by the deities, and they were highly gratified at the resultant intoxication. In their worship they did not pour all the wine on the altar, but in their devotion they drank a part of it, and the exhilarating effect of it was credited to divine favor.

The Bible in places speaks of wine as, "Wine maketh glad the heart of man," "Thou hast put gladness into their hearts since the time that their corn and wine and oil increased," and so on. It is claimed by well-intentioned moralists that the good ef-

fect of wine, as spoken of in the Bible, was from unfermented wine; and they have some reason for making such an assertion, as in the Hebrew Bible appear two words, *yayin* and *tirosh*, and each is translated wine. The use of *tirosh* is approved, while that of *yayin* is condemned. There is another Hebrew word, *debish*, which, translated, means honey. It is claimed that in making this honey that the fresh grape juice was boiled down to thick syrup before it was fermented. In Syria at present such a honey, called *debs*, is used for sweetening purposes.

The Greek word, *oinos*, meaning wine, that is used in both the Old and the New Testament, there is no reason to doubt but that it refers to the fermented wine, and the use of it was approved, while its abuse was condemned.

The ancient Egyptians, at a very early date, discovered the art of making barley wine, or true beer, and also grape wine. They drank these beverages in the presence of their families. We read of them drinking like beasts and being carried home from suppers on the backs of slaves. The women also became intoxicated.

The writings of the ancient Persians, the Zend Avesta, dating back 4,000 to 6,000 years B. C., contain many reference to *homa* and *nura*: the former, a sacred drink, and the latter a popular one. Wine was a later discovery.

The Greeks knew best how to drink alcoholic beverages without getting drunk. They drank them very much diluted. It is, however, not to be inferred that

they did not get drunk, but it was very uncommon among the people in Greece's Golden Age.

In the early age of Rome, the Roman people were an exceedingly temperate race, but as they grew in wealth and power the drinking habit increased with them till Rome fell.

We gather by the history of both Greece and Rome that as long as they practiced temperance in alcoholic beverages, that these nations increased in power and wealth, but as soon as they became intemperate, their power and wealth were dissipated. As with nations, so with individuals; in order to be healthful, progressive and successful, they must be temperate.

It is a remarkable fact, however, that alcohol itself was not discovered till after the downfall of the Roman Empire, and after the discovery it was not used for intoxicating purposes for many hundred years. Pliny, *Natural History*, written about 50 A. D., speaks of extracting oil of turpentine by boiling, from crude pitch and gathering the vapors on fleeces from which the condensed oil could be pressed. This likely marked the first beginning of the art of distilling, which slowly progressed for two hundred years later.

The art of distillation would have developed further, but the Emperor Diocletian, about A. D. 287, ordered the books of a flourishing school of alchemists to be destroyed at Alexandria, and prohibited further studies in that line, fearing that the discovery of the philosopher's stone might be a menace to the Roman rule. The year A. D. 984, the famous Alexandrian Library was destroyed by the Mohammedan General Amru, at the orders of Caliph Abu Bekr. These oc-

currences no doubt helped to stop the progress of civilization some hundreds of years, and gave literature, science, and medicine, a blow from which they have not yet recovered. It is interesting to speculate what would have been the condition at present, if the discovery of galvanic electricity and the germ theory of disease had been discovered a hundred years earlier.

The fact of the matter is, that owing to the events just mentioned having occurred, the study of science had to be commenced over again by the Arabians, under a more enlightened rule. We read of the famous Geber mentioning the term distillation about the close of the eighth century, but it is likely he knew little more about it than separating, by heat, two metals at different melting points. Albucasis speaks of the process of distillation in the eleventh century in less doubtful terms. It remained for two European alchemists, Raymond Tully and Armand de Villeneuve, in the thirteenth century, to clearly describe the method of distillation and the preparation, properties, and the uses of alcohol.

In view of the great amount of deserved abuse that has been heaped upon liquors, it is interesting to note that after the discovery of alcohol, for some hundreds of years it was considered the most valuable product of chemistry. The old alchemists went wild over it. They admired the clear, smokeless and colorless flame with which it burned ; they wondered at its power to dissolve resins, balsams and oils ; they used it as a preservative ; they used it in the preparation of chemicals ; and, above all, they used it as a medicine.

Aqua vitæ, alcohol, or water of life, as it was called,

played a very important part as a remedy in the treatment of disease. It was one of the most important medicines in the pharmacopœia of the day. It was used as a basis of all cordials and elixirs that was prescribed to the sick and feeble. These cordials and elixirs were considered a sort of cure-all. Each physician, each alchemist, prepared cordials and elixirs according to his own fancy, and claimed miraculous cures for his own particular nostrums. The basis of them all was alcohol. The monks, too, gave them out to the sick and feeble at their convent doors.

It seems singular that *acqua vitæ* was only used as a medicine, and used as a medicine exclusively. Its intoxicating effects were little, if at all known. Nowhere in the writings of Shakespeare is alcohol mentioned, except in *Romeo and Juliet*, where the old nurse sighs, "Oh, for some strong waters from Venice."

[From The Medical Fortnightly, November, 1898.]

SYPHILIS.

By JOHN M. BATTEN, M. D., Pittsburg, Pa.

Read before the Mississippi Valley Medical Association, Nashville,
Tenn., October 13, 1898.

Let us remember the old maxim, "That art is long, experience deceptive, and judgment difficult."

Some questions which are not clear to my mind in the light of my present knowledge :

(1) Is syphilis a curable disease? Or is it possible to eradicate all the syphilitic germs from a syphilitic?

(2) Is not a person once a syphilitic always a syphilitic?

(3) Is the germ of tertiary syphilis, the same at that of secondary syphilis, and also the same germ that causes the chancre? Or is its virulence modified by removal from the chancre?

(4) Is it possible to inoculate a non-syphilitic by the serum, or secretions from a tertiary syphilitic and produce a syphilitic chancre? Should syphilitics marry? and when?

In the light of my present knowledge I believe syphilis is not entirely a curable disease. Whilst it may

be modified by specific and timely treatment, yet I believe it impossible to eradicate completely all the germs of a syphilitic, so that I think a person once a syphilitic is always a syphilitic. A syphilitic may seem to all intents and purposes cured of the malady, yet it is apt to make its imprint manifest on some of his or her children.

I believe that the germ that produces the chancre is the same, and has the same virulence as that which circulates in the system during the secondary and tertiary syphilis, and so long as there is a single syphilitic germ in the system, such a person is a syphilitic, and may convey the disease to others in various ways. For this reason I would say, a syphilitic should never marry. It would be better for the State that he never marry. It has been my experience that a syphilitic, no matter in what stage, or how completely cured he seems to be, is liable to inoculate his wife (or her husband) with the disease, or some of his (or her) children may inherit it.

From what I have said, I am induced to produce the following cases of the many that have come under my observation :

P. Q. contracted syphilis when he was 25 years of age. He married at the age of 34 years, a perfectly healthy blonde of 21 years of age. When married he had not undergone a regular course of treatment, but was in every way, so far as appearance indicated, a perfectly healthy man, except a leaden appearance that he presented. His kidneys and liver often became torpid. He is strictly a temperate man, and takes exceedingly good care of himself. The wife now has one child by

him, a boy nearly five years of age. The child is apparently healthy, well nourished, and large of his age. Whilst carrying this child, the mother presented the characteristic symptoms of secondary syphilis, which was either transmitted to her from the father through the child, or conveyed by the semen of the father. Mrs. P. Q. weighed 125 pounds when she was married, but was afterward by the effects of the disease, reduced in weight to 105 pounds. The child has not (even at this date, September 7, 1898) as yet presented any indications of having inherited the disease. (A younger child has all the indications of the disease by inheritance.)

B. R., a young man of scrofulous diathesis, inherited from his father, contracted syphilis, after he had had a very bad ulcerated leg, when he was 20 years old. I treated him specifically for two years. He then contracted it a second time, and underwent treatment as before. He married at the age of 25 years, and now has two children, who are apparently healthy (at this date, September 7, 1898, the two children are dead, but one has been born since, which is now living). The wife so far has apparently escaped the disease.

A. B., a young woman aet. 21 years, contracted syphilis and underwent a mercurial course of treatment for one year, after which she married and had two children, a boy and a girl, now respectively 16 and 18 years of age. They appear to be entirely healthy, although in childhood they presented the characteristic symptoms of inherited syphilis, and were so treated.

The mother has since died of syphilitic disease of the liver.

A. R., a young man aet. 25 years, contracted syphilis, and was treated with mercury, for a period of two years. He then married, and the first child was still-born, having died in utero, and became macerated before birth. Whilst carrying the second child Mrs. A. R. was treated with mercury, and the second child was born alive, and is still living. She has had several children born alive since; all are now living and apparently well. The mother never contracted the disease from the husband.

J. P., a young man aet. 21 years, contracted syphilis. He was treated with mercury for a period of two years. He married at the age of 25 years. His wife bore him three children; one died soon after birth, of imperfect development of the heart, and the second died during the second summer, of inherited syphilis, but the third is still living and apparently healthy. The mother does not show any symptoms of the disease.

A young man contracted syphilis when he was 18 years old, and was treated with mercury for a period of two years. He then married and had one child. The child has symptoms of having inherited the disease, although the father and mother are apparently healthy.

A man married a woman with tertiary syphilis. The husband contracted the disease from the secretions of his wife in the form primarily of urethritis, if not a concealed chancre. The husband never had any

buboes, but suffered all the symptoms of the dread disease.

I have said that syphilitics ought not to marry. As far as the disease in my opinion is a curable one, I would adhere to my stated opinion. If it could be cured in such a way that there could be no possible chance of transmission, I would say marry, but my experience and observation have taught me that syphilis is not a curable disease, and is oftener, than otherwise, transmitted to posterity, even when it has received a scientific and prolonged treatment. If with the view of final eradication of the effects of the disease from the posterity of the syphilitic by proper selection, I would say marry, for I believe that it is, only through proper selection, and for a long time that the effects of syphilis can be finally eradicated from the posterity of a syphilitic.—John M. Batten, M. D., Pittsburg, Pa., January 12, 1889, *American Medical Association Journal*, Vol. 12, 139.

Dr. M. O. Jones, an observing and careful practitioner of Pittsburg, Pa., relates to me two cases of syphilis that came under his observation, in which the disease was communicated to their wives. Case 1. A young man contracted syphilis in 1864. He was treated two years by Dr. Jones, then the young man married a healthy woman, but she bore him no children. The wife soon after marriage was inoculated with syphilis by her husband. Case 2. A man contracted syphilis, for which he was treated two years by Dr. Jones. He then married and soon after inoculated his wife.

Dr. Blank relates to me a case, as follows: N., a

male, aet. 30 years, in May, 1880, contracted syphilis in the usual way, and for which he was treated, or was under Dr. Blank's care for ten years. At the end of this period he married a perfectly healthy woman. In a year after marriage she (his wife) became pregnant by her husband, and in three months she had a miscarriage. Shortly after the doctor noticed she was suffering all the symptoms of syphilis. The husband afterward died of syphilitic paresis.

Dr. Geo. Duffield reports a case of syphilis in the *Medical News*, September 15, 1894, page 65, No. 12, where a man married nine years after the inception of the disease, and communicated it to his wife and a child that was born to him.

Of course many physicians claim that syphilis is a curable disease, and will utter an opinion about as follows: "But recently I heard a gentleman make the statement to a medical society, that he had treated a patient for syphilis ten years before the patient's marriage, and after the marriage the patient infected his young wife. To me the statement was absurd. I did not deny the contagion, but did the source. The belief by some that the contagious character of syphilis persists for decades is an error, due to faulty observation or lack of observation. Without entering any further into the polemics, I make the assertion more forcible than elegant, that patients may be rotten with sequela lesions of syphilis, and at the same time indulge in intercourse and procreate offspring without conveying the disease to the one, nor transmitting it to the other."—*American Medical Association Journal*, Vol. 23, p. 107.

The above is about a fair example of the teaching of those who claim that syphilis is a curable disease. Those who believe thus, advocate two years' treatment of syphilis after the infection, then marry and procreate children, and all will be well. How dangerous and doubly absurd a doctrine. Why does fissure in ano occurring twenty years after the infection of the disease, and ninety per centum of all skin diseases respond so promptly to mercury or iodide of potash? Why do so many scrofulous and weakly children spring from syphilis?

The way of the syphilitic microbe (though it has been claimed that the syphilitic microbe has recently been discovered by Van Niesen) hitherto has been past finding out. Its effects depend much upon the soil in which it operates, the number of microbes operating and the power of the leucocytes to prevent their ruthless ravages. I believe a blonde suffers with syphilis more than a brunette. I have never seen a syphilitic microbe, and it is doubtful whether many have seen one. We know little of its history, how it acts, or how long it remains in the system. We do know its deleterious effects on humanity when it once gains admission into the blood. The microbe of many other germ diseases, such as measles, scarlet fever, etc., does its work quickly, either to the death of the patient, or surrender to the generalship of the mighty host of leucocytes. After convalescence, as a general rule, in all these cases there seems to be no trace of the microbe remaining. It is not so with the syphilitic microbe. Its effects on a syphilitic case

may be seen many years after its first inception, and for many generations in his posterity.

It must be admitted that the type of syphilis of the present is of a milder form than formerly. If so, it is because the people have been either directly or hereditarily well syphilized. Still there are yet different types of the malady, or acting differently on different constitutions. I have seen and treated cases where as yet the effects of the disease have been controlled, or they lie dormant, for there have been no traces of the disease, either in the parents or in their children. Yet in other families I have observed traces of it still existing, both in the parents and in their children. I have never treated a case of syphilis in which the vitality of the person so affected was not lowered, and it is doubtful whether there has been a case in which the person so affected did not have to take a retrogressive step to a lower plane of development intellectually, morally and physically. It is probable that such a person would never rise to the plane he occupied before being inoculated with the disease. Just what time the syphilitic microbe departs from the body, or the form it assumes in injuring the constitution many years after the inception of the disease has not been indicated. Is not the disease after it affects the body liable at any moment during the life-time of the patient, to break out like a volcano? What condition of the blood causes diseases of the mucous membranes and of the nervous system many years after the inception of the disease? These are pertinent questions that must be answered before such sweeping assertions truthfully can be made, "that

patients can be rotten with the sequelar lesions of the disease, and yet no harm can come from them, for the microbe has departed, and there is no danger of imparting the disease to others. What made the patient rotten? Does not a patient recover when the cause of the disease is removed? This has been my education by experience, which is the best teacher.

Again, will not these conditions of the blood in tertiary syphilis, which causes such destructive constitutional changes to take place, if transfused to a non-syphilitic produce the same destructive condition in him? Is not the offspring of the parent or parents a very good register of the health of the parent or parents? Could we expect to breed a strong nation from syphilitics? When the gonococci may linger in the genito-urinary tracts for so many years, is it reasonable to expect that the syphilitic microbe, which has a more extended territory in which to exist, will relinquish its possession sooner? Why is it that syphilitic women are constantly syphilizing men and *vice versa*?

[From The Southern Medical Journal, October, 1901.]

Acute Intestinal Auto-Infection.

By JOHN M. BATTEN, M. D., Downingtown, Pa.

I was called on February 21, 1898, to see professionally, W. F. B., aged 56 years, weight 220 pounds. During his sickness he lost 40 pounds. He had been ailing for some time, and meeting him casually on the street previous to my being called to see him professionally, I had noticed a gray, leaden complexion. Indeed, his complexion presented the appearance of one suffering from malignant disease of the liver, but when I first saw him there was no disturbance of the circulation or temperature. Both were normal. His tongue was clean. He was complaining of great prostration. I ordered him to lie down in bed for a day or two, hoping that rest would be beneficial to him. I did not, during this period, prescribe any drugs, but about two days afterward, on his own account, he took a dose of calomel, which made him deathly sick, and the consequent evacuations of the bowels still further prostrated him, so that he had to be assisted to bed from the chamber. From this time his tongue coated, white thick fur and red around the edges.

His pulse became increased and his temperature higher. His bowels constipated. There were eructations of malodorous gas from his stomach. There was gurgling in the right iliac region, which condition continued for a period of ten days. His urine then became loaded with urates, together with the constituents of the bile, and this condition continued throughout the remainder of the ailment, or until convalescence was established. Also about this period, or about the eleventh day of the disease, his stomach became irritable, and he often vomited, and he suffered exceedingly with gas on the stomach. After this time we were able to make a differential diagnosis of acute intestinal auto-infection from malignant disease of the liver, as there was a thickening or congestion of the lower end of the stomach and upper end of the duodenum.

The infection was treated with antiseptics, and afterwards the congestion of the lower end of the stomach and upper end of the duodenum were treated with nitrate of silver. After cessation of these symptoms he had extreme pain in the right knee, which was succeeded by great tenderness along the right thigh, in the region of the femoral vein. This condition may have been caused by being bathed in alcohol each morning by the nurse, which she did on her own account. When I saw the patient at this state of the disease I could not account for the subnormal temperature each morning which I for a time had noticed. I finally discovered that the nurse had been bathing the patient with alcohol, and when the bathing was stopped the temperature resumed the

normal in the mornings. In this we may be taught a lesson—that is, never bathe a convalescent with alcohol when the bathing causes a subnormal temperature. In convalescing the patient's legs swelled. He was in bed about five months. At this time he commenced to sit up in his room. Indeed, he went down into the dining-room, and dined with his family, but did not venture to do so again for some time. The swelling in his legs, and the urates in his urine, continued for some time, but no albumen was found at any time. About at the end of two and a-half months, his ailment, he concluded (although swelling of his legs had not disappeared, nor the urine cleared up) to go to Mount Clemens, Michigan, where he subjected himself to a course of hot bathing, under the direction of the doctor of that institution. The doctor, then on his first examination, thought it a case of Bright's disease of the kidneys, but in this he was mistaken. The patient rapidly gained his strength there, and to-day (October 14, 1898) he is enjoying good health.

The cause of the ailment in this patient was, no doubt due to carelessness on his part in securing daily evacuations of the bowels. This is another lesson the case teaches, and that is, to always secure a daily evacuation of the bowels. We should "eat to live," and not "live to eat." If more food is taken into the stomach than is actually demanded for the nourishment of the body, then the surplus must be carried out of the system by way of the excretory channels, or absorbed into the system to poison the blood. Sickness, many times, is caused by our own neglect or ignorance, or the neglect or ignorance of

somebody else in obeying the laws which govern health.

In the case of this patient he had neglected the proper precaution of attending to having regularity in the movements of his bowels for months, hence the infection from pent-up feces in the colon, cecum and rectum, day by day. The alimentary canal includes the mouth, esophagus, duodenum, jejunum, ileum, cecum, colon and rectum. These preside over mastication, assimilation, nutrition, together with secretion and excretion of the waste material of the body. The intestinal canal is that part of the alimentary tract extending from the stomach to the anus. The cecum, colon and rectum, are a reservoir and excreting canal. The regional anatomy of the intestines, as well as the blood vessels and nerves, should be well studied, as they are included in the anatomy of the intestinal canal. Besides neglect in daily movement of the bowels, heat, cold, toxic influences of internal and external origin, the use of unwholesome food, sudden changes of temperature, typhoid fever, together with diseases of the heart, consumption, and all diseases of a lingering nature, in which the organs of nutrition and elimination become very much debilitated, may be the cause of intestinal auto-infection. In disease of any character whatever, the effete matter is not eliminated, but allowed to accumulate in the system, it consequently becomes reabsorbed, and thus we may have auto-infection.

The symptoms of intestinal auto-infection, subjective and objective, come on so insidiously and deceptively that the general observer may overlook the true

condition of the ailment and be thereby misled.

The diagnosis of the ailment is difficult, indeed. To make a differential diagnosis between stomach indigestion and intestinal indigestion is not always so easily done, as indigestion is always claimed to be from causes existing in the stomach and not in the intestinal canal. In connection with intestinal intoxication we usually find the gray or cachetic appearance of the skin with alteration of the glandular excretion of the skin.

It is difficult to localize any pathological conditions, and they are thereby overlooked very often. The medication of the disease should be well considered.

The disease may be slow in developing. At first there may be a loss of appetite, and headache in the morning. The abdomen may be pendulous. There may be languor or general depression of the nervous system. Eructation of malodorous gas and bad taste in the mouth, and besides the morning headache, there may be a headache throughout the day, drowsiness with disturbed sleep and unpleasant dreams. There is often palpitation of the heart from pressure of the abdominal organs against the diaphragm. There are borborigmi, which are indicative of fermentation of the contents of the intestinal canal with generation of gas. At times there may be melancholia, with irritable disposition. The breath may be foul. The tongue is coated with white thick fur, red around the edges, similar to a typhoid moist tongue. Night sweats in the latter part of the disease may be frequent and alarming. Women who lace

tightly may be affected oftener than men. Those in the habit of eating pastry and unwholesome food are easy subjects for the disease. Those who inordinately drink spirituous liquors as a daily beverage are more likely to suffer from the disease than others. The daily use of the syringe or cathartics should be decried, as this habit in the end may be the cause of intestinal auto-infection. A habit should be established of having the bowels moved each day at a certain time, and after the breakfast meal is a good time for that duty. The bowels may be kept soluble by partaking of the proper food for that purpose, and hence a regularity in their movement rather than resorting to laxatives in the shape of cathartics or the syringe. It is plainly evident therefore that the daily habit of using cathartics or the syringe to keep the bowels open should be condemned. The food should be well and wholesomely prepared, and taken into the stomach at set periods. Three times a day for the adult is the common prescribed custom in this country. The Indian maize, much used as a diet in this country when I was a boy, is much preferred as a regular diet than oatmeal.

In the beginning of an acute attack of intestinal auto-infection, calomel should be given in a single large dose, to be repeated the next day if necessary, or until the flow of bile is well established. Then anti-septics with or without small doses of mercury may be continued for some time, or until there is an amelioration in the symptoms. If ptyalism occur the mercury should be omitted. When there is an atonic condition of the bowels or a debilitated heart, strychnine acts well. In the latter stage of the disease some of

the mineral waters are very agreeable and beneficial. In convalescence vegetable tonics may be prescribed. If the kidneys are torpid and legs dropsical, hot baths in combination with vegetable tonics may be administered.

[From The Medical Fortnightly, October, 1902.]

SMALLPOX.

By JOHN MULLIN BATTEN, M. D., Downingtown, Pa.

Read before the Mississippi Valley Medical Association,
Kansas City, October 15, 1902.

In the endemic or epidemic of smallpox at Pittsburg, Pa., in 1871, I had an opportunity of observing it in all its phases. In certain families there was immunity from the disease, while in other families there was extreme predisposition to take the disease. There seems to be an heredity of immunity in some families from all diseases, while other families seem to be predisposed to take all diseases, and smallpox is no exception to this rule. In making observation of those immune from smallpox I found that they had been made immune from the disease either by heredity ; by having variola or varioloid, or by vaccination of themselves, or either one or both of their parents. This

immunity in some cases was perfect, while in other cases it was only partial. The latter was attacked with mild smallpox or varioloid. The most cases of confluent smallpox I witnessed occurred among those who had not themselves been vaccinated nor either of their parents. While a perfect vaccination or an attack of variola or varioloid is generally a protection against all the varieties of smallpox, yet not in all cases, as I witnessed in 1871 in the case of Mrs. W., a married woman, mother of several children, who suffered with a second attack of confluent smallpox. It is my opinion that a perfect vaccination in youth is a perfect protection to the individual so vaccinated through the remainder of his life to all the varieties of smallpox.

Variola is derived from the Latin *varus*, a blotch or pimple, while *pox* is of Saxon origin, meaning a bag or pouch ; the prefix *small* was added in the 15th century. The first appearance of smallpox occurred A. D. 569, about the date of the birth of Mohammed ; it seems then to have commenced in Arabia and the raising of the siege of Mecca by the Abyssinian army is attributed to ravages made by smallpox among the troops. The new part which Arabia under Mohammed and his followers was made to play in history contributed to the rapid spread of smallpox, throughout the world. Rhazes, an Arabian physician who practiced at Bagdad about the beginning of the 10th century, is the first medical author of whom we read whose writings have come down to us who treats expressly of the disease ; it is known, however, that he quotes several of his predecessors, one of whom flourished in the year Hegira 622. Measles and scarlet fever were first con-

founded with smallpox, but Sydenham was the first to point out the essential differences between the diseases. Boerhaave was the first to proclaim that smallpox was propagated by contagion. The stage of incubation is the period that elapses from the time the contagion is taken into the system till it manifests itself in the initiatory fever, and this period is about fourteen days, although the time may be longer or shorter. During this period the patient usually remains in his accustomed health. The first symptoms of the disease are headache, chills, fever, accompanied with pains in the back, particularly in the loins. There is also nausea and vomiting. If there be severe pain in the back accompanied with high fever we may expect a severe form of the disease. Convulsions often usher in the disease in children. About the third or fourth day, more generally the fourth day of the disease, the rash makes its appearance on the face, then on the neck and wrists, then on the trunk and finally on the extremities. On the fifth day the eruption is usually complete. It first consists of minute papules or pimples; these papules are converted into vesicles filled with thin lymph about the fourth day of the eruption, having a depression in their center, when they are termed umbilicated. These vesicles now become surrounded with an areola, which become a dark cinnamon color. The lymph is finally converted into pus which extends their walls until they become hemispherical. A dark spot makes its appearance about the eighth day of the eruption at the center of the pustule and is converted into a dry scab. When the scab falls it leaves either an indelicate cicatrix or a purplish mark, which fades

very slowly, and when exposed to a cool atmosphere for a long time is rendered very distinct. In disappearing the scabs take the same order as the appearance of the eruption, first they fall off the face, then they fall off the neck and wrists, then off the trunk, and lastly off the extremities. When the pustules are far apart and few in number the disease is known as discrete smallpox ; but when they are so numerous as to touch one another or run together the disease is known as confluent smallpox ; between these two grades of smallpox is an intermediate grade or variety named semi-confluent smallpox ; or coherent is often spoken of. In the discrete form the fever subsides on the appearance of the eruption, and if the pustules are few the fever does not re-appear, but in the confluent form the maturation of the pustules is attended with more or less fever. The throat is sore and red with some pustules scattered on the fauces, roof of the mouth, and inside of the cheeks ; these conditions of the throat and mouth occur when the eruption makes its appearance on the surface of the body ; the patient is more or less affected with salivation at the same time. The cellular tissue is involved in confluent small pox, the swelling is great and the patient unable to open his eyes. The eruption on his face coalesces and makes one huge sore. The itching is intense and the fever is of typhoid kind. The patient is delirious, sleepless and restless, while the pulse are small, feeble and frequent. In these cases the inflammation of the mouth, nasal passages, larynx and pharynx adds much to the distress of the patient. This condition sometimes produces suffocation. The

odor of the confluent form of the disease is very unpleasant.

In an epidemic or endemic of smallpox when the disease has become well established the diagnosis is not difficult, as all cases of sickness beginning with fever, headache and backache accompanied with nausea and vomiting is likely to terminate in smallpox. It is only in the first cases of an endemic, or epidemic, or isolated or sporadic cases that the diagnosis of the disease might become difficult.

To make a correct diagnosis of variola at the first inception of the disease in a locality or neighborhood or community is very important, as such a diagnosis may be the means of checking the disease from spreading and growing into an endemic or epidemic. Besides a correct diagnosis of smallpox by a physician tends to establish the confidence of the people in the physician who makes a correct diagnosis of the disease and may prevent him from the danger of defending himself in a suit of malpractice.

Variola may be distinguished from measles by the following differential symptoms. In variola, as we have seen, the eruption comes out on the face, then on the neck and wrists, then on the trunk, and lastly on the extremities. In measles the eruption comes out first on the face and trunk, and also there is a catarrh of the mucous membrane of the air passages and of the eyes. In smallpox the fever abates on the appearance of the eruption to be resumed to a greater or less degree at the maturation of the pustular stage, whereas in rubeola, the fever continues throughout the eruptive period. The papules even in the confluent forms are

remarkably discrete and exhibit not the slightest tendency to grouping, while the maculo-papules of rubella are developed simultaneously on the face and trunk, while those of variola commonly appear first on the face, then on the neck and wrists, then on the trunk, and lastly on the extremities, the older and larger, therefore, in the site of the earliest appearance. The eruption of measles is made to disappear or pale on pressure beneath the fingers, while there is greater persistence of color in the variolous papules. In measles in passing the flat of the hand over the surface of the body the pimples are less distinct than in smallpox. Even with all the differential symptoms in mind it may be difficult to make a differential diagnosis in certain stages of the disease between smallpox and measles, but by waiting twenty-four hours the difficulty may be cleared up.

With scarlet fever we could scarcely make a mistake in the diagnosis of variola. The rash of scarlet fever is entirely different and makes its appearance on the second day of the fever, while in variola the eruption comes out on the fourth day of the disease, and the fever in scarlet fever is continuous throughout the eruptive period. The distinguishing features of scarlet fever is the strawberry tongue, the anginose condition of the throat, the boiled lobster color of the skin and the fine appearance of the rash.

The postular stage of variola may be confounded with the pustular stage of syphilis, but the history of the disease, the chancre, the six weeks' to three months' incubation and the chronic form of the

disease would go far in differentiating smallpox from syphilis.

J. C. Sullivan, Cairo, Illinois, emphasized the point that when the patient complains of persistent backache followed by fever and pustular eruption affecting the palms of the hands and soles of the feet protruding beneath the outer skin, we have a case of smallpox to deal with, no matter how mild or insignificant it may appear and confluent or hemorrhagic smallpox may be contracted from it.

Variola and varioloid may be distinguished from varicella by the fact that there is existing in the locality in which the suspected case of varicella appears an endemic or epidemic of smallpox ; by a greater rise in the fever in the febrile stage ; by the typical papular stage of the eruption at the outset and by the typical pustular stage before desiccation takes place ; by the confluent lesions in confluent cases ; and by the marked stadium of the disease. Varicella is usually a disease of children and is of mild character, the fever, papules and pustules are not as marked as in smallpox and varioloid, though in the latter it may be extremely difficult, if not impossible, to make a differential diagnosis. The sooner it is known, not only by the profession, but by the laity, that intermediate forms do occur that cannot be distinguished one from the other, the better it will be for both. Scattered papulo-vesicular and vesico-pustular lesions appearing after high fever and continuing to mature for over forty-eight hours, must always be viewed with suspicion. Superficial vesicles on the third day of the disease, or commingled

with very minute and superficial pustules should be looked upon as characteristic of varicella.

In an editorial on the "The Early Recognition of Smallpox," in the *American Medical Association Journal*, Vol. XXXIX, No. 2, page 83, the editor speaks of the great importance and value of an early recognition of smallpox, so that by proper methods and means the spread of smallpox could be prevented. He quotes an article on the diagnosis of eruptive fevers, by Professor Courmont of Lyons, who claims that a diagnosis of smallpox can be made at a distance after an examination of a single drop of the patient's blood.

The prognosis of variola vera is very fatal, as at least fifteen to fifty per centum die of the disease. It is most fatal among pregnant women, new-born babies, the aged, and among those with their systems saturated with alcohol. The hemorrhagic and purpuric symptoms are highly portentous and indicate a fatal result.

I believe a perfect vaccination is usually a perfect immunity during life from the disease. In 1871 I used humanized vaccine and inserted the vaccine into the arm of the unprotected in three different places, sometimes one, two or three of these took perfectly, with very little ulceration, and were without any bad results, as far as my observation was extended. These vaccinations were often made in a family of children where there was existing at the time a case of smallpox in the same house; in this way I often caused an immunity to these children thus exposed. It is my opinion that the humanized vaccine—barring the

danger of the spread of disease—is the best and most protective.

Dr. Robert N. Wilson, Philadelphia, Pa., says: "It seems that glycerinated virus, as well as the vicious influence of the shield was disposed to present a more extensive ulcerative surface and a greater tendency to sloughing than the dried virus or arm to arm method." But he says the latter method is out of the question on account of the rapid spread of syphilis among the masses, and if it eventually proves true that glycerinated virus opens up a broader avenue to the tetanic germ into the system than the less cleanly and safer dried point, we will have to beat a retreat till we discover a substitute for glycerin that does not carry with it its disadvantages (Vol. xxxviii, No. 19, A. M. A. Journal).

The very greatest care should be taken to prevent sepsis, or diseased germs from entering the vaccine in the preparation of it, then we could have pure vaccine to begin with, and then the operation of vaccination should be done aseptically and antiseptically. There would then be very little danger of having anything but a healthy, pure and perfect vaccination. To test the perfection of the vaccination the individual thus vaccinated may have the operation repeated in the same aseptic and antiseptic way at short intervals until it is found that the individual is immune.

Hauenstein argues that humanized vaccine is preferable to bovine vaccine, and says the claim of some practitioners against the latter is absurd, and hints that the epidemic of smallpox all over the world at

this time is due to the adoption of bovine vaccine. He thinks the humanized vaccine will gain in favor.

The treatment of smallpox is largely expectant. Ointments and baths of mercury are used, and Fin-
sen's phototherapy are recommended and highly satisfactory in the maturation period. The great object to be aimed at in the treatment of smallpox is cleanliness, fresh air, proper nourishment, and make the patient as comfortable as possible.

Dr. E. W. Ridings in a paper before the Tennessee State Medical Society, states that he believes he has lessened the mortality in smallpox very considerably by subjecting them to bichlorid of mercury baths.

GOLDEN WEDDING.

TO JOHN STANFORD MULLIN

AND

SARAH POWELL AYARS,

With our congratulations on your having reached the Fiftieth Anniversary of your wedding, together with the hope you may enjoy many more years of health and strength and life.

JOHN MULLIN BATTEN,

MARY BATTEN,

CORELLI BATTEN,

Downingtown, Pa.

Wednesday, Jan. 3, 1906.

1856.

JOHN STANFORD MULLIN.

1906.

SARAH POWELL AYARS.

Wednesday, January 3d, 1906.

GOLDEN WEDDING.

A Golden Wedding is a measure

Of fifty years of wedded life.

Oh! what a great pleasure

When there hasn't been any strife.

How few there are, celebrate it,
How thankful this couple should be ;
Who preserved themselves as years flt,
So the celebration they can see.

They have seen their children grown
To be men and women stout ;
To-night among them there's not a frown,
As they hold on to their parents taut.

To-night they meet in a family unbroken,
After fifty years of Time's flight ;
And the pleasures of life they betoken
In their beaming faces in sight.

Their children gathered here to-night,
On this occasion should be proud,
To look upon their parents in their might ;
And in their horizon there's not a cloud.

They might say, " How pleasant to live life
over,"
Inestimable pleasures 'twould be ;
To have one's friends 'round us hover,
And at all times them able to see.

JOHN MULLIN BATTEN,
Downingtown, Pa.

December 16, 1905.

Record of My Maternal Grandfather's Enlistment Service in Revolutionary War.

PENNSYLVANIA STATE LIBRARY, DIVISION OF PUBLIC RECORDS.

HON. JOHN K. TENER,
President.

HON. THOMAS L. MONTGOMERY,
Secretary and Treasurer.

LUTHER R. KELKER,
Custodian.

ADVISORY COMMISSION.

John W. Jordan, LL. D.,
Ethan Allen Weaver,
Frank R. Diffenderfer,
Herman B. Ames,
Boyd Crumrine,
Julius F. Sachse,
Charles Tubbs.

HARRISBURG, PENNSYLVANIA, U. S. A.,
December 9, 1912.

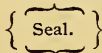
To Whom it may Concern :

I hereby certify that one DUNCAN MCMULLEN was a private in Captain James McClasky's Company, Chester County Militia, 1782. Battalion and Battalion not stated.

See p. 787, Volume Five, Pennsylvania Archives, Fifth Series.

LUTHER R. KELKER,
Custodian of the Public Records.

In testimony whereof I hereby affix the
Seal of this Department.



JUN 17 1913

LIBRARY OF CONGRESS



0 020 678 958 A