

REMINISCENCES OF THE AGASSIZ ASSOCIATION
IN IOWA WITH SPECIAL REFERENCE TO
THE FAIRFIELD CHAPTER

Sixty years ago the young people of Iowa were taught very little about the animals and plants, rocks and fossils, of the Mississippi Valley. Only such creatures as were of economic value were given any study. The children in the public schools and colleges learned reading and writing, mathematics and history, Greek and Latin, but very little of biology or geology, chemistry or physics.

In one good small college, for example, there was a full professor of Greek, another for Latin, and one for mathematics; but only one teacher for all the "natural sciences" and he had no laboratories and very little equipment. A college freshman in early days knew that all Gaul was "divided into three parts" but few college seniors knew that every lily has six petals and every beetle has four wings.

Such conditions prevailed in Iowa in 1880, when, in November of that year there appeared in the magazine *St. Nicholas* an invitation from Professor Harlan H. Ballard of the Lenox Academy, Lenox, Massachusetts, for the young people of the United States to join his newly organized "Agassiz Association" for the study of nature.

In Switzerland there was already a nature study club named for Louis Agassiz. Professor Ballard had imitated this by founding a similar club in the Lenox Academy. This proved so successful and created such interest that he suggested, through the *St. Nicholas*, the organization of similar clubs throughout the world. The object was to teach children to use their eyes and to learn that the fields and woods were full of beauty and interest. The *St. Nicholas* was to be

the official organ of the Agassiz Association and was to carry bi-monthly reports from the local societies, or "Chapters" of the Association.

The time was ripe for Professor Ballard's suggestion. The response from the readers of the *St. Nicholas* was immediate. Within four months twenty-eight Chapters of the St. Nicholas Agassiz Association were organized in the United States. Two of these were in Iowa. The Chapters were numbered in the order of their organization. Some were formed in schools. Some were limited to the members of one family. Individuals could join the main Chapter in Massachusetts. The first Chapter in Iowa, No. 15, was founded by Will R. Lighton in Ottumwa; the second Iowa Chapter, No. 20, was located in Fairfield.

The Agassiz Association soon had to have a badge, and for this, appropriately (since Agassiz was born in Switzerland), the Swiss Cross was chosen. It could be purchased made either of gold or silver and was worn by the more affluent members of the Association.

Professor Ballard published a *Hand Book* which could be purchased for fifty cents. At this time few books were available for the specific identification of birds and insects and such identification was a difficult task for members of the Agassiz clubs. Professor Ballard persuaded a number of gentlemen in various colleges to offer their services to the Association. A considerable correspondence between these experts and the members of the Agassiz Association resulted, the only cost to the Agassiz members being the return postage for their letters. It is probable that the growing demand by the Agassiz Association for illustrated books had much to do with the publication of the fine manuals that are today available for nature study.

During the six years following the invitation which Mr. Ballard published in *St. Nicholas*, the Agassiz Association

grew rapidly. More than one thousand chapters were said to have been organized in the United States and in April, 1886, the Association reported 10,031 members. Chapters had been organized in Ireland, Scotland, France, Canada, and some South American countries.

Lists of the Chapters in Iowa are fragmentary, but it appears that by 1886 one or more Chapters had been established at Ottumwa, Fairfield, West Liberty, Cedar Rapids, Grand Junction, Marshalltown, Davenport (2), Sidney, Dubuque (2), Decorah, Clinton (2), Iowa City, Oskaloosa (2), Palo, Shellsburg, Osceola, Winterset, Greene, Mt. Pleasant, Council Bluffs, Cedar Falls, Meridan, Grinnell, Manchester, Des Moines, Burlington, Sigourney, and Bristow. There may have been others up to this time and a few may have been organized later.

There was from the beginning some criticism of the association of a learned society with a magazine, especially one of the juvenile type, but *St. Nicholas* continued as the sponsor for some six years. The last report of President Ballard appeared in the issue of January, 1887. He soon began the publication of a new magazine, *The Swiss Cross*, devoted entirely to the activities of the Agassiz Association. The separation of the Agassiz Association from *St. Nicholas* appears to have marked the end of the juvenile period.

THE FAIRFIELD AGASSIZ CLUB

Because the writer was a charter member of the Fairfield Chapter of the Agassiz Association and had first hand knowledge of its activities and because this club was probably typical of these Agassiz societies in Iowa, its history may illustrate the influence of this movement on the educational system of the State. Though short lived, the Agassiz Association was probably of considerable importance to our educational progress.

Virginia Slagle of Fairfield, later Mrs. James G. Berryhill of Des Moines, was responsible for the organization of Chapter 20 of the Agassiz Association in Fairfield, Iowa. After reading Professor Ballard's invitation in the *St. Nicholas*, she persuaded her younger brother, Walter S. Slagle, to call his young friends together and start a nature study club.

On Saturday evening, November 6, 1880, on the invitation of Walter Slagle, a group of young people met at the residence of Dr. Charles S. Clarke, 402 South Main Street, Fairfield, Iowa, and organized Chapter 20 of the Agassiz Association. These young people — Walter Slagle, Carrie Lamson, Florence Lamson, Kate Beck, Nellie Hughes, Kittie Voorhees, Fred Spielman, David Beck, John Spielman, and Fred Clarke — averaged fifteen years of age. Though but ten attended this first meeting, others were very soon elected to membership. The early date records are lost, but some of the following became active members of the club so early that they seem entitled to the honor of charter memberships. Cassius Cottle was always most active in the club work. Fred Gage, Myrtle Kirby, Sue Blair, Jim Wilson, Stella Sampson, Carrie Spielman, John Templeton, Anna White, Nellie Isreal, Beulah West, Edna West, Anna Symons, all of Fairfield, and Cora Scofield of Washington, Iowa, were at times active in the club's studies.

To appreciate the problems facing these young people as they met on that Saturday evening in November, 1880, to begin the study of nature, one must visualize the background of the picture. As has been said, the schools did not then teach the natural sciences. There were no boy and girl scout troops for drill and study. There were no movies to attend, no automobiles in which to ride. The leisure of childhood was hard to fill in a profitable way. Here, through the *St. Nicholas*, a teacher in far-off Massachusetts invited

the children of America to open their eyes and look at the animals and plants, the rocks and stones, about them. It was a new and appealing thought. Here was a chance to fill the between school hours and the evenings with interest. These fifteen-year-olds knew there were birds in the air, flowers and toadstools in the woods, butterflies and moths in the air, but that there were hundreds of kinds of these living things, that flies and beetles had the same number of legs, that bats, though they flew, were not birds, these thousands of obvious facts were unknown to them. There began on that evening an inquiry that has continued throughout the lives of all—a search for the truths of nature.

Like charter members of every club, they had to begin by adopting a constitution and by-laws and electing officers. The constitution, at first simple, was later elaborated. The final completed document read as follows:

Constitution and By Laws of the Fairfield Chapter No. 20 of the Agassiz Association.

Article I. Name and Object.

Section 1. This Society shall be known as Fairfield Chapter A of the Agassiz Association.

Section 2. Object. The object of this Society shall be to study Nature and the encouragement of Scientific Education.

Article II. Membership.

Section 1. Active Members. Any person interested in Natural Science and evincing an aptitude for this study may be elected to active membership by ballot after one weeks notice in writing. Three black balls reject a candidate.

Section 2. The number of active members residing in Fairfield shall be limited to twenty-five.

Section 3. Five members shall constitute a quorum for the transaction of business.

Article III. Officers.

Section 1. The officers of the Chapter shall be a President, Vice-President, Curator, Recording Secretary, Corresponding Secretary

and Treasurer, who shall be elected at the first regular meetings of June and December.

Section 2. The President in addition to the ordinary duties of his office, shall have charge of the scientific program of each meeting.

Section 3. The Vice President shall assume the duties of the Chair in the absence of the President and make the official reports to the President of the Agassiz Association.

Section 4. The Curator shall have charge of and be responsible for, all specimens and furniture, books and papers of the Chapter.

Section 5. The Recording Secretary shall keep a full record of all the proceedings of the Chapter.

Section 6. The Corresponding Secretary shall send programs and notices and reports to each section at least once each month and carry on all other correspondence of the Chapter.

Section 7. The Treasurer shall care for all funds of the Chapter and pay out monies only on written order from the President and Recording Secretary.

Section 8. Each officer at the close of his term shall make a full written report of his work.

Article IV. Sections.

Section 1. Any two or more members may organize a Section of the Chapter which Section shall be named from the township in which it is organized or from the subject of its study.

Section 2. Each section may elect officers and adopt By Laws for its own government, providing these in no way conflict with the Constitution and By Laws of the Chapter.

Section 3. Each Section shall make a monthly written report to the Corresponding Secretary of the Chapter and send representatives, when possible, to the extraordinary meetings.

Article V. Meetings.

Section 1. Ordinary Meetings of the Chapter shall be held every Monday evening at 7:30 o'clock, except on the days of the extraordinary meetings.

Section 2. Extraordinary Meetings, at which Township Sections are expected to be present, shall be held on the day and at the time and place of the first ordinary meeting of January, April, July and October.

Section 3. Special Meetings shall be held on May 28th. and November 6th. each year to commemorate Agassiz's Birthday and the organization of this Chapter.

Article VI. Amendments.

The Constitution may be amended after one weeks notice in writing, by a three fourths majority vote by ballot.

By Laws

No. 1. For Fairfield members the initiation fee shall be one dollar. The monthly dues shall be ten cents.

No. 2. Order of Business.

1. Call to order.
2. Lecture or Essay.
3. Discussion.
4. Reports of Work and Correspondence.
5. Recess five minutes.
6. Laboratory Work.
7. Reading of Minutes.
8. Miscellaneous Business.
9. Adjournment.

No. 3. Neglect of Work.

Any member who is absent without excuse or who, in the opinion of the President and Curator and Recording Secretary, neglects the Scientific work of the Chapter for three successive weeks, shall, by the order of these officers, be dropped from the rolls. A reinstatement shall require the payment of all dues and a ballot with the same requirements as the election of a new member.

No. 4. Robert's Rules of Order shall be authority.

No. 5. The President shall impose fines on members or Committees subject to appeal to the Chapter.

No. 6. No member shall use the microscope or other apparatus of the Society except by permission or under the direction of the President or Curator. All such apparatus must be left in its proper place and in good condition.

No. 7. Called meetings may be held for a stated purpose if two-thirds of the members are notified.

No. 8. Amendments to the By Laws may be made at a regular meeting by a two-thirds majority vote.

The plan for the organization of "sections" of the club, in the county outside of Fairfield never materialized. There were at times "sections" in the Fairfield Chapter which attempted specialized studies but even these made little

progress. All the members were interested in every subject. The novelty of this nature study, the wonders found in every group of plants and animals, the lack of adequate literature in special fields, the lack of guidance in scientific work, all led these young disciples of Agassiz to strive for a general, superficial view of animal life, rather than an intensive study of any small portion of it.

The Agassiz Association for a time met every Monday evening at the homes of its members. Then a fortunate event occurred. Dr. Charles S. Clarke had for some time owned a small brick house on a five-acre tract of land just on the southern edge of Fairfield. Always alive to human interests and eternal values, the doctor dismissed his renters and gave the use of this property to the Agassiz Chapter. Perhaps no other one thing contributed so much to the success of this society and the development of its members as did this "Agassiz House". It became an institution of note in the county and from it radiated educational influences which, Dr. Clarke felt, paid him far greater dividends than the small rental he sacrificed.

The families of the Agassiz Association members gave wall paper, carpets, chairs, tables, kerosene lamps, and wood stoves, with which to furnish this club house. The members of the Chapter cleaned the rooms, papered the walls, put down the carpets over soft straw cushions, built cabinets for the display of "specimens", and thus established Agassiz House.

Cassius Cottle constructed the most unique and valuable piece of the furniture. It was a large round table with a revolving top. Twelve or more people could sit about this table and the one microscope owned by the club could travel from one to another by turning the table top, until all had seen the blood circulation in the web of a frog's foot, or the regularly shingled scales on the butterfly's wing, or the

microscopic eyelets of the fly's eye, or the hundreds of other wonders which before had been unknown to these students. Of all the acquisitions of this Agassiz club in its early days, two stand out in the writer's memory as most notable. One was a very fine insect cabinet of walnut which cost seventy-five dollars. Each of the many drawers was covered with a glassed frame fitted on rubber. How this large amount of purchase money was acquired is not recorded. The second outstanding exhibit in the Agassiz House was the complete skeleton of a large Norman horse, wired together and mounted on a rolling platform. The whitened bones of this horse were found undisturbed in a distant pasture and Cassius Cottle led the work of fitting the skeleton together. For a time it seemed more than complete, but finally a place was found for all of the bones.

Each Agassiz Association member had an insect net made of mosquito-bar on a hoop fastened to the end of a broomstick. Each one had a jelly glass with potassium cyanide buried in plaster of Paris in the bottom and a tight fitting lid. Imprisoned in this glass the butterflies were quickly poisoned. Some members, however, preferred putting a few drops of chloroform on the insect's abdomen to kill it and these carried a chloroform bottle in place of the cyanide glass in their field equipment. All were proud of the knowledge (which ignorant outsiders lacked) that an insect's mouth had nothing to do with its breathing and that no amount of chloroform on its head would put it to sleep.

At the regular Monday evening meetings of the Agassiz Association, each member had a question to answer and one member had a formally prepared essay to read. Many had specimens to exhibit which had been collected during the week or had been presented by some friend who had been to Colorado or other distant point.

The first question at the first meeting the writer remem-

bers was, "Is a bat a bird?" This is illuminating as to the ignorance of these young people. They learned that the ability to fly was not sufficient ground for classification, although a flying mammal was an unusual phenomenon. Years later they learned of the flying reptiles of another geologic age.

Some of the questions proposed at the early Association meetings give a general impression of the variety of the subjects discussed:

Do fish live on other fish or on vegetable food?

What fact first brought Agassiz before the world?

Is the blue jay beneficial?

How is the "moss" in a moss agate formed?

Why are crinoid stems broken and scattered through the rocks?

Does the flower of the blue gentian ever open?

How does the angleworm dig a hole?

What causes the "fire" in a firefly's body?

Give the composition of chalk.

Have fish the sense of hearing?

These questions plainly show that the Agassiz clubs were not societies of original research, but groups of young people learning to open their eyes and see all of the world. Later in life some few of the members went further in original scientific investigation. The great majority merely made a casual acquaintance with the living creatures about them. Habits of observation were established. Their lives were made more interesting. The influence of these clubs probably had much to do with changing the trends of public school education.

The Fairfield Agassiz Association was not, however, merely a Monday evening club. Few days passed that some members were not in the fields and woods "collecting specimens"; few evenings passed that some members of the

Chapter were not at Agassiz House discussing the specimens collected during these excursions. Saturdays and Sundays meant longer journeys, usually to the rivers that were from ten to twenty miles away. With so much to see in the "Great Outdoors" how could people stay in churches on Sundays? As has been said, there were no automobiles or movie theatres or radios to claim their time. That Golden Age, with time to see and think, is gone forever!

Each member of the Agassiz Association was expected to choose a special subject for study. The majority chose "Insects", probably because of their infinite variety and the sport of hunting them in the fields near at hand. All learned that the thousands of varied insects could be grouped into several great "Orders" and that of these groups those of but one could rightly be called "bugs". When an Ohio carriage salesman presented his card with the word Columbus, the picture of a beetle, a Y, and the word Company printed on it (it was to be read Columbus Buggy Company) the Agassiz disciples gloated in their superior knowledge; to them the card read, "Columbus Beetley Company". A beetle was not a bug.

Because of the lack of good reference literature at that time the genera and species of most of the insects were not determined, but hundreds of specimens were arranged in the Agassiz club's cabinets in family groups. The world was found to be inhabited by uncounted thousands of insects, all having six legs and all, excepting the flies, having four wings. One of the world's famous paintings has on the canvas a representation of a swarm of bees with, wrongly, but two wings each. No Agassizian would have painted that.

Some members of the Agassiz Association began to hunt birds with a field glass instead of a gun. They learned that hundreds of birds came and went in orderly migration,

visiting Fairfield in the spring and again in the fall, that many birds stayed with us throughout the year. This bird study by the Agassiz clubs is probably the most persistent of the nature study impulses begun at this time. Bird clubs have become State-wide — nation-wide, and are active everywhere. Local interest in bird study began in the Agassiz club, but whether its general popularity originated there is uncertain.

Some of the Agassizians pressed wild flowers and ferns and mosses. These varied plants pushed away the snow in the spring and marched in close ranks through the summer. Each season there was the pleasure of meeting the common, familiar flower friends and the great joy of finding and coming to know some of the rarer blossoms, or perhaps a puzzling mutant that was full of wonder. One of the outstanding golden moments in the writer's memory was when he first saw the antherozoids from a moss cup swarm across the field of his microscope, active beyond the dreams of his imagination, wonderful to contemplate in their minuteness as are the spreading galaxies of the heavens in their vastness.

Some of these young students collected fungi — toadstools and puffballs and slime moulds. They cooked and ate many varieties of mushrooms and became authority for the residents of the county as to what kinds of fungi were poison and to be avoided. Perhaps in no other field of their studies were the marvels of discovery so great as among the fungi. To the majority of people the fungi are little known. Because of the danger in the genus *Amanita*, this whole order of plants has a bad reputation and its beauties and vast varieties are little appreciated. One fact the writer learned in teaching yet younger children plants' names; the "harder" the long names were, the more easily were they remembered. *Strobilomyces strobil-*

aceus, a cone-like toadstool, once identified was never forgotten by the youngsters.

Many were the happy evenings when all the members of the Agassiz Association who could met at their club house and discussed their discoveries of the day. These disciples of Agassiz had learned that their dooryards and the fields and woods about their home town were filled with a marvelous variety of creatures. In place of a few "bugs" they knew dozens of insects. Instead of a few "toadstools", mostly "poison", they found many fungi, sixty-two varieties of which they later learned to eat with impunity. Where had their eyes been before, that they had been blind to this endless variety in nature?

Friends far and wide gave to the Agassiz Association "specimens" of all kinds — minerals from Colorado, fossil sharks' teeth from the phosphate beds of the South, stuffed birds, butterflies from Brazil, ferns from the tropics, shells and corals from the seashores — until finally a collection of some value and great interest was assembled in this little Agassiz House. Visitors to Fairfield almost daily asked permission to view these wonders and the club members took great pride in acting as hosts. For most of these casual visitors to this town at that date, the simple bits of nature collected in this little brick house were marvelous. Today this is hard to realize. We, who were members of the Agassiz Association, wonder if ever again in this troubled world any group of young people will enjoy the discovery of nature as we did.

Less time was given to astronomy and anthropology by the Fairfield Agassiz Association than to the study of biology and geology. On many clear evenings, however, the members of the Association learned to trace the constellations and note the movements of the planets and learn the names of the first magnitude stars. Blessings on the man

(whose name the writer does not recall) who invented the lantern lighted by candles inside and with replaceable blue print charts of the stars held over a ground glass front. With this we charted the heavens. Our primitive ignorance of the universe was illustrated by a remark by one of the Agassiz Association members after the light of a meteor had vanished — "I did not notice which star it was that shot away".

In their collecting expeditions and study excursions the Fairfield Agassizians found along the streams and on the hilltops Indian mounds. Fired with laudable curiosity, but uninstructed in the study of anthropology or archaeology, they made special excursions and opened several of these mounds. Charcoal, pottery, and human bones of great age were found and preserved in the Agassiz House cabinets. The lack of scientific care in the excavation and in writing notes made the knowledge of the primitive people derived from these investigations much less than it should have been. But the work done awakened an interest in the prehistoric so that the much finer collections seen later at Davenport, Iowa, were better appreciated. A very slight glimpse into each branch of knowledge may give us an awareness of the vast fields that may be explored.

It was the custom in Iowa at the time of the Agassiz club's existence for the county superintendent of the rural schools to hold a summer "Normal" course of study or institute in each county seat. All the rural school teachers were required to attend these institutes. The Fairfield Agassiz Association determined to entertain and enlighten these Jefferson County teachers; so one evening those attending the institute session were invited to a reception at the Agassiz House. From just after supper until late in the night, the Agassiz Association members exhibited to the teachers their collection of specimens and their methods

of study. The president of the Agassiz club gave an address of welcome to the three hundred guests. The other members of the Association were stationed about the rooms to describe the collections. They announced the scientific names of the birds and insects in the most impressive manner. One of the youngest girls (not over eight years of age) in showing the fungi told just where she had found the fine specimen of *Clitocybe illudens* and how it glowed phosphorescent in the dark. The greatest center of interest was, of course, the microscope on the big revolving table, under which the blood circulated in the web of the frog's foot.

It is hard to realize today that among all these teachers who knew about split infinitives and into how many parts Gaul was divided, very few indeed knew that a bat was not a bird and that snow crystals all have six sides, points, or angles. It seems possible to the writer, thinking in retrospect, that this was the beginning of the movement that put nature study in the public schools. It was certainly anomalous at these receptions to see the children of the Agassiz Association teaching the many teachers that stagnant water was full of beautiful forms of microscopic life and that if the leaves of a plant had parallel veins the flower parts were always in multiple of threes. For several years these Agassiz receptions were a feature of the county "Normal Institutes". And the Fairfield Agassiz Association was but one of many similar clubs in Iowa; but one of several hundred in the United States.

A regular and typical meeting of the Fairfield Agassiz Association was held on August 10, 1882, with the following program:

- Correspondence — The Curator
- How Agricultural Products Compare with Other Sources of Wealth in the United States — Florence Lamson

The Most Valuable Fruits of the United States — Nellie Hughes

How Long Will the Coal and Wood of the United States Last? — Fred Clarke

What Is the Difference Between the Fruit of the Apple and That of the Hickory Tree? — Sue Blair

Why Is There not Likely To Be a Famine in the United States? — Jim Wilson

How Long Does It Take Fossils to Form in the River Ooze? — Carrie Lamson

What Two Classes of Animals are Raised to the Most Advantage? — Anna White

State Its Formation (presumably some "specimen") — Kittie Voorhees

On What Principle are Birds Classified? — Carrie Spielman

Paper by Cassius Cottle

Debate: Which of the Three Kingdoms Furnishes the Most Useful and Interesting Field for Study?

Animal — John Templeton

Vegetable — Walter Slagle

Mineral — John Spielman

Any one of these subjects being enough for months of study and discussion, how this small club touched all in one evening is a marvel that memory, after all the intervening years, fails to answer. Faced by an infinity of questions, all so full of interest, how could these children limit their inquiry. Life was going to be too short to learn all they wanted to know.

But there were winter evening meetings at the Agassiz House quite in contrast to that described above. Each member brought a cup of sugar. The elaborate top of the heating stove was removed and a kettle was put in its place. The sugar was made into "taffy" that was "pulled" and

later eaten. Many such delightful social meetings were experienced in the little Agassiz House. All outdoors was covered with drifting snow—deeper in those days, it seems, than in modern years. The rail fences were covered in many places by the piles of white, over which we could walk. Only a few birds remained in the leafless trees, eating the red and black berries from the abundant shrubs. No flowers or butterflies could be found. It was too cold to trace the constellations of the stars. While eating taffy, to the accompaniment of the crackle of the wood fire in the cosy cabin stove, the club members discussed the adventures of the past summer and made plans for the coming spring when again nature was to awaken. One knew just where Mr. McKnight told him a “lady’s slipper” could be found and another could hardly wait to see if truffles really grew on the banks of Cedar Creek. It would be wonderful to find truffles here in Iowa.

During the years of its existence the influence of the Fairfield Agassiz Association extended throughout Jefferson County, seemingly out of proportion to the size of the group. When citizens of Fairfield had visitors from afar, the little brick Agassiz House was one of the sights to be shown them. Frequently Agassiz club members were asked to unlock the cabin doors and show “our visiting cousins” the shark’s eggs and trap door spider’s nest and all the wonders collected there. The fame of the Agassiz House spread to other communities. Probably because the mid-west was ready for the new idea of nature study, rather than that there was any special excellence in the Fairfield Agassiz club, it obtained wide recognition. Many other Iowa Agassiz societies became widely known. Some of these did much more important work than was done at Fairfield, but at this late date the writer, after an active correspondence, finds it impossible to collect the data that should be

recorded to give a true picture of this interesting movement in other Iowa communities.

The Fairfield Agassiz Association always held two annual celebrations — one on May twenty-eighth to commemorate the birth of Louis Agassiz and one on November sixth, celebrating the founding of the Fairfield Chapter. Weather conditions in May were watched with great anxiety by the Agassizians lest their picnic of the twenty-eighth should be interfered with; but to the best memory of all, no weather, however bad, was able to spoil this celebration. One May twenty-eighth is remembered when the group huddled about a field fire, in a heavy snow, using their checkered tablecloths to keep off the storm, and eating their lunch in this frail shelter. On another twenty-eighth of May, rain poured through the cracks in the floor of a bridge under which the picnickers had taken shelter, destroying a magnificent pie that was to have satisfied their hunger: the pie flopped in the mud — a tragedy never forgotten. The November sixth celebrations were usually candy pulls in the warmth of the Agassiz House. Of course, in concession to the seriousness of the occasion, this followed some “scientific” program.

The bi-monthly reports sent to *St. Nicholas* did not mention the social meetings of the club. They told of the receptions to the teachers, of collecting geodes at Bentonsport where the Keokuk geode bed is exposed, of the fossil corals — “Bird’s-Eye” (*Acervularia davidsoni*) and “Fish-Egg” (*Favosites alpenensis*) — that had so interested Agassiz on his visit to Iowa, of the club’s new seventy-five dollar cabinet for insects, and many other important matters. But in the memory of the members of this little club the taffy pulls and picnic lunches were as one in importance with the insect classification and chemical analyses of the more studious hours. Like the Belgian banker ca-

noers met by Robert Louis Stevenson on his "Inland Journey", we often cannot determine which of the activities of life are the most important.

THE IOWA ASSEMBLY OF THE AGASSIZ ASSOCIATION

During the summers of 1883 and 1884, the Agassiz Chapters of Fairfield, Mt. Pleasant, and Washington held joint field meetings and found them very enjoyable. They met in the woods somewhere between the homes of the participating clubs, always with picnic baskets for supper and the contents of these baskets rivaled the collected butterflies and flowers in interest. It became known to the Agassizians through the *St. Nicholas*, that several Philadelphia Chapters of the Association had organized an "Assembly" and held occasional conventions. Following this Philadelphia example and because of the enjoyment of their inter-city picnics, on the invitation of the Fairfield Chapter, an Iowa Assembly of the Agassiz Association was organized at Fairfield in August, 1884. Delegates from at least six Chapters of the Association were present. Because of inexperience in such matters and a failure to recognize the importance of the preservation of records, details of this meeting have apparently been lost. All that is now known is that the Fairfield Microscopical Club held a reception for this Assembly and that Fred Clarke of Fairfield was elected the first president of the Iowa Assembly of the Agassiz Association and that Cedar Rapids was chosen as the next place of meeting. Fairfield had added another to its list of "firsts" in civic activities.

In August, 1885, the Iowa Assembly of the Agassiz Association met in Cedar Rapids. The delegates from the several Iowa Chapters were entertained in the homes of the members of the Cedar Rapids Agassiz club. The records of this meeting are lost. The president made a formal

address on "The Unity of Nature". He cited the definiteness of the series in the atomic weights of material atoms. He spoke of the probability that the elements lacking (to complete the series) would soon be discovered, and that finally all elements would be shown to be one. He spoke of the conservation of energy and the transformation of one form of energy into another, as heat into light. He concluded that all energy is one. He then proposed the thesis that energy and matter would be shown to be one — the Universe was one.

Such has now come to be the common belief, but no credit is due to the president of the Iowa Assembly of the Agassiz Association, for he was, at the time, a student under Dr. Gustavus D. Hinrichs of the Iowa State University. To Dr. Hinrichs, far ahead of his time in thought, is due all credit. His students did not at that time realize the rare privilege of being in his classes.

The members of the Cedar Rapids Chapter of the Agassiz Association so royally entertained the visiting Chapters that the following year a National Association meeting in Iowa became a possibility. E. P. Boynton of Cedar Rapids was elected president of the Iowa Assembly of the Agassiz Association and Davenport was chosen as the next place of meeting. It was decided at this Cedar Rapids meeting to award three diplomas each year to the Chapters of the Association in Iowa doing the best work for the year.

Because the Iowa Assembly of the Agassiz clubs furnished the best nucleus for a national convention of the Agassiz Association, President Ballard accepted an invitation from Iowa to hold a national meeting in Davenport in 1886, in conjunction with the third meeting of the Iowa Assembly, on August 24-27, 1886. That August the Agassiz Association reported twelve thousand members.

The following committees responsible for the Davenport

meeting included, perhaps, the most active members of the Iowa Assembly at that date:

Invitation and Printing — E. P. Boynton, Cedar Rapids, Chairman; Will Clute, Iowa City; Edward K. Putnam, Davenport

Hotels and Transportation — Edward K. Putnam, Davenport, Chairman; Fred W. Gage, Fairfield; E. P. Boynton, Cedar Rapids

Program — J. Fred Clarke, Fairfield, Chairman; E. B. Sanders, Davenport; C. Carper, Burlington; Gustav Finger, Davenport

Entertainment — Edward K. Putnam, Davenport, Chairman; Glen A. Gordon, Muscatine; Gustav Finger, Davenport

Banquet — Charles S. Williston, Edith Ross, and George B. Little, Davenport

Toasts — J. G. Spielman and Carrie Lamson, Fairfield

Decorations — Louis Block, Edith Ross, and Gustav Finger, all of Davenport

Finances — E. P. Boynton, Cedar Rapids, Chairman; Will Clute, Iowa City; J. G. Spielman, Fairfield; Lollie Crane, Mt. Pleasant

Reception — E. B. Sanders, Davenport, Chairman; Cassius C. Cottle, Fairfield; Glen Averill, Cedar Rapids; Fanny Belt, Cedar Rapids; Nell Cox, Iowa City; Lollie Crane, Mt. Pleasant; Edith Ross, Cora Bollinger, Charles Williston, John Ballard, Edward K. Putnam, and George B. Little, Davenport

The reception committee and the State officers were to wear white badges. President Ballard came from Massachusetts for this second national convention of the Agassiz Association. The first convention of this kind had been held in Philadelphia. Some thirty Agassiz clubs were represented by delegates at the Davenport meeting. Those

present were mostly from Iowa. Some came from Illinois, a few from Philadelphia, and one Minnesota Chapter was represented. E. P. Boynton, president of the Iowa Assembly, presided at the Assembly sessions which met before the national convention was opened by President Ballard. In his address President Boynton discussed the best methods of study. He said that at Cedar Rapids the Chapter first studied all biology, but later each member selected a few subjects and devoted all his time to these, with much more profit and pleasure. He contrasted life before and after the Agassiz Association had stimulated observation.

After the address the committee previously appointed to decide which Chapter had done the best work in the past year, gave first place to Chapter 20 of Fairfield. The second award was given to Chapter 514 of Iowa City and the third to Chapter 64 of Cedar Rapids, while honorable mention was made of Chapters 158 and 813 of Davenport, 424 of Decorah, and 887 of Grinnell.

Charles E. Putnam, president of the Davenport Academy of Science, gave the welcoming address to the National Agassiz Association and President Ballard responded. Scientific papers were read. There was a formal reception and a banquet was held at the Kimball Hotel on Wednesday, August 25, 1886, with a postprandial program of toasts and responses as follows:

Professor T. H. McBride [Macbride], University of Iowa, Toast Master

Louis Agassiz — Professor H. H. Ballard, Lenox, Mass.

The Scientists Who Help Us — Frank Wentworth, Chicago

Fossils — W. R. Lighton, Leavenworth, Kansas, read by Miss Helen L. Clark, Cedar Rapids

The Agassiz Association in the Home — Rev. O. Clute, Iowa City

Our Girls — Glen Gordon, Muscatine

Our Visitors — President of Waseka (Minn.) Chapter

Our Boys — Edith Ross, Davenport

The Iowa Assembly of the Agassiz Association — E. P. Boynton, Cedar Rapids

The Agassiz Association in the School — (name not recorded)

Our Future — John Shallcross, Philadelphia

One could wish now that John Shallcross's speech had been preserved. He probably did not, at this high water mark of the Agassiz Association, visualize the passing of the movement so soon. He probably did not realize the influence these Agassiz clubs were to have on the educational system of the country, an influence that made the continued existence of the Agassiz Association unnecessary. The meeting on August 26th was spent in a visit to the government Arsenal on Rock Island and later in the discussion of questions from the "Question Box" previously prepared. At an afternoon session President Ballard gave an address and representatives from the various Chapters demonstrated their methods of study. In the evening Professor Thomas H. McBride [Macbride] gave a lecture on Bernard Palissy, the French potter and naturalist — a lecture so delightful that the writer thirty-two years later, while serving in France with the American Expeditionary Forces, searched (though in vain) for some specimen of that wonderful pottery Palissy had made.

The following day (August 27th) was spent on the Mississippi River. This was a collecting excursion and a basket picnic. In the evening the visitors were guests at a meeting of the Davenport Academy of Sciences which at that time was one of the prominent academies of the United States, noted for its anthropological studies.

Attendance at this Davenport meeting of the Iowa As-

sembly of the Agassiz Association was a notable event in the lives of the young people who were present. Its influences were far reaching. It must have been a great satisfaction to Professor Ballard to know that he had accomplished a great work by awakening in the young people of the United States a desire for the study of natural science and an awareness of the creatures that inhabit the earth and of the changing world in which they live.

There were never any fees or dues paid into the general Agassiz Association from the local societies. Aside from a possible compensation from the *St. Nicholas*, Professor Harlan H. Ballard's work for this movement must have been a labor of love.

The papers read at the Agassiz Assembly at Davenport and at the other Agassiz Association meetings added little to the knowledge of science but they mirrored the awakening of the young people of Iowa to the wonders of nature. The field glass was replacing the gun as an instrument for the hunting of birds. The eyes and ears of children were becoming more useful. The abundant life was becoming more common in Iowa. A few, out of the many Agassizians, were finding a career in the realm of natural science.

Edith Ross of Davenport was elected the third president of the Iowa Assembly of the Agassiz Association and Iowa City was chosen as the next place of meeting.

The fourth convention of the Iowa Assembly of the Agassiz Association was held in Iowa City on August 23-27, 1887. Miss Ross appointed Louis Block of Davenport, chairman of a committee of arrangements, and in this as in all things he was active and proficient in his work. There were, in 1887, 980 Chapters of the Agassiz Association in the United States, with a total membership of twelve thousand. The host Chapter of the Iowa Assembly at Iowa City had twenty-six members and held its meetings in the

basement of the Unitarian Church at the corner of Iowa Avenue and Clinton Street.

The delegates assembled on Thursday, August 23rd, and were assigned as guests in the homes of the local members. There was, at the first session, an address of welcome by Arthur J. Cox of Iowa City, responded to by Miss Ross, the president. The feature of the first day was a lecture by Dr. A. E. Rockey on "Microscopical Pond Life". This was illustrated by the use of a projection microscope. On August 24th the different Chapters gave reports and scientific papers were read. Later the delegates visited the Museum of the State University of Iowa. In the evening a reception was held at the home of T. J. Cox. At this reception, Professor T. S. Parvin, a friend of Louis Agassiz, addressed the Assembly, relating personal anecdotes of the great naturalist for whom the Association was named.

Some years before this meeting, Louis Agassiz had visited Iowa City. A group of several University people took him up the Iowa River to Coralville. Agassiz became very enthusiastic on this collecting expedition and did not want to pass a single fossil coral. His guides put in piles all they could find and later brought several barrels, filled them with these specimens of corals, and sent them by freight to Professor Agassiz's laboratory at Harvard University.

The annual banquet of the Agassiz Assembly was held the next evening in the parlors of the Unitarian Church, Fred Clarke of Fairfield acting as toast master. The after dinner program was as follows:

Victuals and Drink — Louis Block, Chapter 158, Davenport

Our Ascidian Ancestors — Will M. Clute, Chapter 514, Iowa City

The Rodents — John N. Houghton, Chapter 887, Grinnell
Pandora — Lollie Crane, Chapter 700, Mt. Pleasant

The Inhabitants of the Mounds — Helen Cattell, Chapter 150, Davenport

Aladdin and his Lamp — Arthur Beavis, Chapter 514, Iowa City

Potato Bugs — Olive Cole, Chapter 700, Mt. Pleasant

Mars and Venus — Ella Hoffman, Chapter 20, Fairfield

The Geodes — Frank E. Wetherell, Chapter 540, Oska-
loosa

1880-1887-1987—Lynds Jones, Chapter 887, Grinnell

A pleasant surprise after the banquet was a serenade, by the very fine band of the University of Iowa.

At the formal session of this Iowa Assembly, Miss Ross, the president, gave an address that, unfortunately, is not preserved in available records. A "Question Box" was opened and the questions discussed. From the few secretarial notes preserved one finds that C. C. Trine, of Marshalltown, talked on honey bees; Lynds Jones, of Grinnell, discussed the causes of bird migrations; and H. J. Brown, of Davenport, read a paper entitled "Fossil Birds". At a final session Arthur J. Cox of Iowa City was elected president of the Assembly for the coming year and Mt. Pleasant was selected as the next place of meeting. It was apparent to all of us visitors to Iowa City that Reverend O. Clute was the mainstay of the local Agassiz Chapter.

On August 20, 1888, the Iowa Assembly of the Agassiz Association met in the city library at Mt. Pleasant. Thirteen of the twenty-eight Iowa Chapters of the Association were represented by more than sixty delegates. There was a reception at the home of Miss Lollie Crane. One session was devoted to a visit to the State Hospital for the Insane, where the superintendent entertained the visitors in his laboratory with a most interesting lecture.

The president of the Assembly, Arthur J. Cox of Iowa City, gave an address at one session and several papers

were read. One by T. A. Bereman, an honorary member of the Mt. Pleasant Chapter, was entitled "A Visit to the Plutonian Regions". Florence Lamson of Fairfield read a paper, as did Fred B. Palmer, Ralph W. Cram, H. F. Hednar, Elva McElroy, Clara Tallman, and Willis E. Brooks. It was for this Assembly that Bertha M. Horack (later Mrs. Benj. F. Shambaugh) of Chapter 514, Iowa City, prepared an illustrated paper on "Lepidoptera", a report of which in the *Swiss Cross* led to a request for an exchange of specimens from a naturalist in Japan.

At the final session, John G. Spielman of Fairfield was elected president of the Assembly; Fred B. Palmer of Oskaloosa and Fred M. Irish of Dubuque, vice presidents; Olive Cole of Mt. Pleasant, secretary; and Belmont Goan, treasurer. Oskaloosa was selected as the next place of meeting.

This meagre record of the fifth Agassiz Assembly is entirely inadequate. Mt. Pleasant is a small city of homes occupied by most delightful people. For more than a century now this community has had a way of charming visitors. Even had the Agassiz Assembly records been preserved, they would not have expressed the intangible things which made this meeting a most delightful event in Iowa history.

These Agassizians had spent several years associated in intensely interesting studies. Most of them were about to graduate into more serious life vocations. They did not appreciate the fact that, perhaps, never again in the world would there be a group privileged to open doors such as they had opened and to pioneer in the realms of nature. Such knowledge as they had acquired was to become common knowledge and the wonder of it was to be no more.

On August 20, 1889, the Iowa Assembly of the Agassiz Association met in Oskaloosa. The sessions were held in

the Grand Army Hall in the courthouse and in the Presbyterian Church. A. W. Swalm, of the *Oskaloosa Herald*, called the meeting to order, delivered an address of welcome, and introduced the president of the Assembly, John G. Spielman, of Fairfield. Committees reported and a nominating committee was appointed. At 8 o'clock in the evening, President Spielman delivered the annual presidential address. His subject was "Vision" and showed an elaborate study of the refraction of light. The address was printed in full in the *Oskaloosa Herald*. At 9 o'clock the Oskaloosa Chapters (No. 540 and No. 653) gave a reception to the visiting delegates at the home of the Misses Anne and Gertie Spencer. This was a delightful social affair.

At the following sessions papers were read, one from each of the nine visiting Chapters and music numbers were presented at each meeting. One evening a Microscopical Soiree was given to the Assembly members by the citizens of Oskaloosa. Thursday, August 22nd, was "Field Day". All met at the courthouse and then made excursions to the woods. In the evening Professor Erasmus Haworth of Penn College gave a lecture on "Original Investigation". On Friday, August 23rd, the meetings of the Assembly were held in the Presbyterian Church. Papers were read on "Bird Migration", "Spiders", "The Conquest of Perfection", and other subjects. These were interspersed with music. Professor Scott of Penn College, a member of the Oskaloosa Chapter, was present and spoke of the "Lessons Learned from the Life of Agassiz". He strongly urged each student to undertake a single line of definite study, after a thorough preparation. A debate was then held on the question: "Resolved that the Interior of the Earth is a Molten Mass". This was affirmed by Lynds Jones of Grinnell and Louis Block of Davenport and was denied by

Arthur J. Cox of Iowa City and Fred M. Irish of Dubuque. The Assembly diplomas were awarded, but to whom is not recorded in any published account of the meeting. In the evening of this day there was a reception and a banquet at the residence of Mrs. Tracey, 418 High Avenue East. A band concert enlivened the program.

At the final meeting officers for the coming year were elected: president, Frank E. Wetherell of Oskaloosa; vice presidents, George Messenger of Des Moines and Mollie Green of Oskaloosa; secretary, Bertha Harvey of Fairfield; and treasurer, Lynds Jones of Grinnell. The visiting delegates of the ten Chapters all spoke in high praise of the work of the Oskaloosa Chapters in the preparation for the delightful convention.

So far as the writer knows, this Oskaloosa session was the last meeting of the Iowa Assembly of the Agassiz Association. The writer graduated in medicine in that year and began his internship in Philadelphia. Many other active members of the Agassiz Association began their life work and of necessity found it necessary to neglect their club activities. The purposes for which these groups had been created had been accomplished. The schools took up the work and nature study became general. In retrospect the end of this activity seems sudden but could one know of the many Agassiz Chapters throughout Iowa, it is probable he would find that the interest gradually lessened as more and more of the members had to devote their time to some life work.

The writer well remembers a long talk with Edna West, in which plans were made for a large permanent home for the Agassiz Association which, in our opinion then, was never to die. Senator James F. Wilson, in 1888, persuaded his friend, Andrew Carnegie, to build in Fairfield, Iowa, the first, outside of Pittsburgh, of his many libraries. In

this library Senator Wilson set aside one room for the Agassiz Association and this room today is known as the Agassiz Room. By the time this room was ready, however, the interest in the Agassiz Association was waning and the new quarters never became important. Later Edna West married, moved to the West, and the duties of domestic life stopped her studies of butterflies, ferns, and mosses.

So it has been with a large proportion of the young people who were Iowa disciples of Louis Agassiz. The problems of bread and butter, of raising their own children, of stopping the leak in the home roof — so many of these unimportant worries shut out from their lives the really serious work with the butterfly net and the bird glass. But the visions of the flowers and the birds and the stars were not all lost in their later life. All were happier and better because as Agassizians they had learned to see what was about them and to hear the music of animate nature. Many of us whose childhood was in the decade of the 1880's think that Professor Harlan H. Ballard of Lenox, Massachusetts, did an important educational work in the United States.

J. FRED CLARKE