in the laboratories, where much was going on. Half a dozen alert young students, some of whom have since become distinguished, were at work; here they were hands and feet under the control of the master mind, trying one device and then another to overcome difficulties in the performance of instruments later perfected. I sat by and watched how the mind of the original investigator works. His luminous face was an interesting study. Later he explained the evolution of his quadrant electrometer and siphon recorder, showed early models of cable devices and told dramatic experiences on his three Atlantic cable-laying voyages.

He told of Maxwell's great works—said he had not mastered all his equations yet—"I took a pull at them after returning from the reception the night before" he added. Lady Thomson showed the note-books he always kept about to catch new ideas or develop old ones; sometimes these were called to service in the night, which reminds one of Emerson, who used to wake up his wife because he had a thought. Sir William took me to his lecture room; showed his shoemaker's-wax experiment, in which the lead bullets from above and the wooden cubes from below were working their way through, as he conceived the earth ploughs through the ether. He showed his "secular experiment," as he called it, which he said was to go on for a hundred years to show the rate of travel of molecules. One wonders if that long tube is still on the wall of the Glasgow laboratory.

Going to the house for tea, the African parrot was introduced—"Dr. Red-tail, alias Parnell or Donnelly, because he is an obstructionist, and if he can not have his way makes it impossible for others to have theirs."

Sir William talked of Scotch history, of Prince Charlie and Jacobite music, of Highland legends, of American politics.

In contrast to many other English and German scientists, Sir William seemed neither surprised nor alarmed that a woman should devote herself to mathematics and physics. This was thirty-five years ago.

Some months later the meeting of the British Association of Science was at Bath. It was an epochal meeting, for the work of Hertz, showing the identity of light and electricity, thus verifying the prediction of Maxwell, was just being discussed and "Section A" was full of excitement. The American stranger was taken under the kind care of Lady Thomson, who was always at her husband's elbow, correcting his proof or amending his absent-mindedness, saying, "Sir William, here is so and so, you must meet him."

Through their kindness a dinner at the beautiful home of their host, a nephew of John Bright, was enjoyed. It was worth while to listen to the brilliant conversation between Sir William and Jannsen, the distinguished French astronomer, Oliver Lodge, Glazebrook and other like guests.

After ten years it was again my good fortune to be at another notable meeting of the British Association at Liverpool. The x-rays had just been discovered, and Lenard, who did the pioneer work, was a guest of honor. It was here a sidelight on the personality of Lord Kelvin, for he had now been elevated to the peerage, to see how all the Englishmen of science not only revered but loved him.

To hear the veterans, Kelvin and Stokes, in high debate with other giants of science as to the "particular go" of the half dozen new kinds of radiation lately discovered was something to remember.

Lord Kelvin asked me to a private séance with Lenard and his tubes. His child-like ingenuousness was delightful. While every one was hanging on his words, his attitude was always that of the questioner and learner.

This was deeply impressed in the final experience I had with Lord Kelvin. He was to lecture in Faraday's Theater in the Royal Institution in London. Professor Dewar sent tickets and an invitation to a reception given at his house after the lecture. It had became a rare thing for Lord Kelvin to lecture, and a notable audience was gathered from all the universities to honor the occasion. Every one was in full dress, as is the wont at these famous Friday evening lectures. The semi-circle of men fronting the lecturer was remarkable, every man of international reputation—Lord Rayleigh, who discovered argon, Ramsay, of helium fame, Crookes, of the cathode rays, Huggins, "father of the new astronomy," and a score of others almost as noted. Lord Kelvin spoke slowly, with singular unconsciousness of his audience. He seemed to be rather thinking aloud and watching his experiment with intent look and uplifted finger, looking for the result as if to learn something new himself.

Lord Kelvin was great enough to lead the mathematical physicists of his day and kind enough to give the inspiration of his talk, and answer patiently the questions of eager young students.

SARAH FRANCES WHITING

SCIENTIFIC EVENTS

THOMAS CORWIN MENDENHALL

A MEMORIAL to Dr. Thomas Corwin Mendenhall, prepared by the committee on necrology, was presented at the meeting of the Ohio Academy of Science at Columbus on April 19, by Professor Herbert Osborn. The memorial reviews Dr. Mendenhall's life and services to science, which were the subject of a special article by Mr. G. R. Putnam

printed in the issue of SCIENCE for July 11, 1924. The concluding part of the memorial of the Ohio Academy is as follows:

Dr. Mendenhall's active connection with our Ohio Academy of Science began shortly after his return to Ohio in 1912 and he has been a devoted and helpful member interested in promoting its every interest. Almost as soon as he had acquired membership he was elected president, a quite unusual proceeding. This occurred at Oberlin meeting, 1913, and he served for the year 1914 with such skill and enthusiasm as to give us all renewed courage and confidence in the mission of the academy.

As trustee and for a number of years chairman of the research fund of the academy, serving from 1916 to his death, he was greatly interested in the use of the academy funds for research and used rare discrimination in the assignment of its limited income to secure the largest benefits in the encouragement of research.

He was particularly interested in the securing of larger support for the academy, and served most faithfully on the legislative committee which sought state support for the academy activities, especially for publication of the results of scientific studies. He expressed the hope, and it was one of his cherished projects, that the academy might be provided with a suitable building for its permanent home and as a center of its activities and that it might serve in some very vital way for the promotion of the scientific functions of the state. His recommendations and suggestions are matters of recent record and may serve us in our future efforts for the development of scientific activities in the state.

With all these relations the thing we feel most deeply to-day is the friendly nature of his work among us. With the most unusual experience in scientific development of more than half a century, a remarkable acquaintance with scientific work and workers he possessed such a broad appreciation of the work and accomplishments of others and such a friendly attitude toward even the most humble worker in the field of science that his presence and interest were a constant source of encouragement. With a multitude of honors and distinctions he was still one of the most democratic and unassuming of men. With a wealth of achievement, seldom equalled, to his credit he was ever modest in reference to the importance of his own contributions to science. He was a man whom we could admire and love, whose friendly greetings will be missed but whose memory will be cherished as representing the finest spirit of scientific devotion, achievement and fellowship. We have recorded our esteem and appreciation of his worth in such honors as it was in our power to give. We have now to place on record, as our lasting recognition, this declaration of our high regard for his service, our great indebtedness for his many activities in the academy and our tribute to his memory as a friend and fellow worker. His fine accomplishments and inspiring personality will long remain with us as a beautiful memory.

HERBERT OSBORN, *Chairman*,
A. D. COLE,
WM. MCPHERSON

MINNESOTA EXPEDITION TO THE HAWAIIAN ISLANDS

THERE has been organized at the University of Minnesota an expedition to the Hawaiian Islands to make a survey of the marine fauna and flora along the coast, with special reference to the algae and the food of fish. Members of the expedition include: Dr. Josephine Tilden, professor of botany; Dr. W. A. Riley, chief divisions of entomology and economic zoology; Dr. Henry A. Erikson, chairman, department of physics; Dr. R. A. Gortner, professor of plant physiology; Dr. J. Arthur Harris, professor of botany; Dr. Shirley P. Miller, instructor of anatomy, and Dr. Royal N. Chapman and Dr. William E. Hoffman, of the department of zoology.

The occasion of the trip is the First Pan-Pacific Food Conservation Conference. Members of the Minnesota group are among the delegates representing the United States. Following the termination of the conference the group will remain for the rest of the summer in the Hawaiian Islands where they will begin their research investigations which are closely related to the purposes of the conferences. This work will be a cooperative study of the plants and animals inhabiting the waters bordering on the islands with especial emphasis upon their relations to the production of human food.

THE PRIZE ESSAY AWARDS OF THE AMERICAN CHEMICAL SOCIETY

ACCORDING to *Industrial and Engineering Chemistry*, Secretary of Commerce Herbert Hoover, chairman of the National Awards of the American Chemical Society, has announced that six four-year scholarships to Yale University, consisting of tuition fees and $500 a year in cash, have been awarded to the following students:

DONALD VIVIAN, Phoenix, Ariz., "The relation of chemistry to health and disease."

JAMES C. REID, Dallas, Texas, "The relation of chemistry to the enrichment of life."

OLIVER C. PITTMAN, Commerce, Ga., "The relation of chemistry to agriculture and forestry."

ELTON R. ALLISON, Centralia, Wash., "The relation of chemistry to national defense."

BENJAMIN NASSAU, Hartford, Conn., "The relation of chemistry to the home."

EUGENE R. BROWNSCOMBE, Santa Rosa, Calif., "The relation of chemistry to the industries and resources of California."

Over 500,000 students all over the United States competed, and six prizes of $20 in gold and certificates of honorable mention have been awarded in each state and in the District of Columbia. The state winners entered the national contest, and it is from their essays that the six winners were selected.