

Prominent among his correspondents are Rood, Louis M. Rutherford, Joseph Henry, C. S. Sargent, B. A. Gould, S. Newcomb, A. D. Bache, Waldron Shapleigh, James Dana, E. D. Cope, S. P. Langley, A. A. Michelson, Charles Walcott and Ira Remsen.

Rood wrote in 1863, "I owe my sudden elevation [at Columbia] to you," and two years later, on receipt of knowledge of his election to the National Academy of Sciences, he continued: "This high honor comes from the same source to which I owe all my advancement, namely, from yourself. . . ."

Fortunately for the historian, some of the Gibbs correspondence during the Civil War adds much to our knowledge of the working of the Sanitary Commission and the office of Surgeon General. In 1899, we are reminded by Remsen that American science is spreading her influence, and therefore, it is vital that America should be represented at the Wiesbaden meeting of the International Scientific Congress.

Nor can we pass by without mentioning that there is recorded in these manuscripts some interesting episodes in the career of the National Academy and the Washington Academy. In this connection, it is worth while to quote from a letter written by C. S. Sargent to Gibbs in 1900:

I will do what I can to stop [Gifford] Pinchot's election, although I do not feel sure that we can do much against the weight of the Washington influence. Pinchot is subservient to Walcott. . . . It seems to me that there should be some sort of organization or understanding among the members who do not live in Washington and who are not in Government employ. Unless this is done there is great danger that the Academy will be turned into a political machine used chiefly in obtaining appropriations for the Geological Survey, the National Museum and other Washington affairs. This certainly ought to be resisted.

But the discordant notes in these volumes are few. And it is with pleasure that we leave the reading of them, the pleasure that comes from watching a great mind unfold.

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ORDOVICIAN FOSSILS FROM LABRADOR

DURING the summer of 1934 a party of students and professors from Bowdoin College and Clark University accompanied Captain Donald Macmillan on his summer trip to the Arctic. Some of the group remained in Labrador to collect plants. On August 5 they chanced to be near the southeast end of Grenfell Tickle. There¹ one of the students, William B.

¹ It is hoped to obtain from Captain Macmillan the exact latitude and longitude of the *Bowdoin's* stop. Mr. Brierly's notes are not sufficient to locate the area closely.

Brierly, who had studied geology under me and was on the watch for specimens to bring back to the laboratory, collected a sack of fossils. Some of these were from talus; others, he is sure, he collected from ledge. Through Wyatt Malcolm, acting director of the National Museum of Canada, I am informed that "so far as we are aware fossils have not previously been found near the Atlantic end" of McLellan Strait. According to Dr. Wilson the fossils described constitute "only the second 'find' of rocks of Collingwood age in the whole of Labrador and in the Arctic Islands region, the Baffinland find being the other."

Assistance in identifying the fossils has been given by Messrs. Percy Raymond, August Foerste, Rudolph Ruedemann and Dr. Alice Wilson. The best of the material was sent to Dr. Wilson at Ottawa. Quotations from her letter of acknowledgment follow:

The material seems to be typical Collingwood, with *Climacograptus typicalis*, *Leptobolus insignis* and *Ogygites canadensis*. . . . I have compared your specimens with what we have from Baffinland. They are similar, as is also the matrix. . . . Your specimens are exactly similar to anything found in many excavations right here in Ottawa.

In the material were also specimens of straight cephalopods. Their genus has not been determined. One fossil appears to represent part of the head and appendage of Eurypterus. Dr. Ruedemann has agreed with the writer in this identification. Apparently this occurrence is the first recorded of Eurypterus from the Collingwood.

The rock containing the fossils is a limestone. When struck by the hammer a strong bituminous odor is noticeable. On this account the writer requested our chemistry department to analyze the rock and Professor Jesse Bullock kindly carried out the work. No large amount of "oil" was present. The analysis is nevertheless appended, together with some of Dr. Bullock's comments.

ANALYSIS OF ROCK

CaO	39.6	per cent.
MgO	1.3	" "
FeO	0.2	" "
Al ₂ O ₃	1.6	" "
SiO ₂	16.6	" "
CO ₂	32.6	" "
H ₂ O	7.3	" "
Oil	0.8	" "
	100.00	" "

The oil may be completely removed from a ground portion by means of carbon tetrachloride or other fat solvent. . . . A large portion of the silica may be rendered soluble by means of hot concentrated hydrochloric acid.

The writer extends his thanks to all who have made this note possible, particularly to Mr. Brierly for taking the trouble to get the fossils to Worcester.

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THE ANNUAL SCIENCE EXHIBITION

THE Annual Science Exhibition of the American Association for the Advancement of Science will be held this year in the Atlantic City Auditorium, from December 28 to January 1. Already there is assured the most successful performance held thus far. This is the first time that practically all the exhibit space has been taken so far in advance.

Fundamentally the exhibition is a cooperative affair between the scientific workers of the country and those self-supporting organizations that recognize the importance of the science workers to economic betterment.

While the scientists of the country spend nearly a billion dollars a year for personal expenditures and for laboratories and equipment, probably no other class of society has such a diversity of influence on the purchases of the average citizen.

Schuster, in commenting on the influence of the Kelvin galvanometer on the development of modern electrical theory, stated that the progress of science seemed to follow the development of instruments. Certainly laboratories and equipment are vital to scientific progress. The firms and individuals spend much money and effort on the Annual Science Exhibition, and are entitled to the great interest given by the scientists at the annual meetings. This year there will be exhibits from the laboratories of Arthur Compton, Irving Langmuir, Robert A. Millikan, W. F. G. Swann and Harold Urey, among many others. From the instrument firms, industrial establishments and publishers the exhibits will be numerous and better than ever before.

Some individuals of well-established corporations have expressed the desire to keep pertinent knowledge within the corporation. It seems to me that those firms that are willing to exchange knowledge with the scientists have much to gain. Cooperation might enhance the value of promotion methods.

As an example of the interest of the exhibits one of them may be described in detail. The original gondola of the National Geographic Society-U. S. Army Air Corps stratosphere balloon *Explorer II*, a noteworthy collection of scientific instruments and other equipment and a series of eight enlarged photographs depicting the landing of the balloon after its record-breaking flight of November 11, 1935, will be the principal features of the exhibit of the National Geographic Society in Booths 4 and 5.

Due to the size of the Dowmetal gondola, which is nine feet in diameter and the largest of its kind ever built, this part of the exhibit will be placed in the center of the main lounge, opposite the society's booths. All electrical connections, manholes, port-holes, landing bumper and primary rigging have been preserved exactly as they were on the day of the flight, when the big globe carried Major Albert W. Stevens and Captain Orvil A. Anderson to a new world's altitude height of 72,395 feet above sea level.

Attached to the side of the gondola will be one of the battery boxes, with its accompanying parachute, and several ballast bags, whose lead shot dust could be released by means of dynamite caps fired from within.

Among the unusual and interesting instruments in the society's booths will be the official meteorograph, which hung inside the big balloon envelope during the flight; the electrical resistance thermometer unit; the official spectrograph, with its wicker basket and parachute; the oblique and vertical cameras, and the compass.

The valve in the top of the balloon, which was operated by compressed dry gas through 400 feet of small rubber hose, will also be shown, as well as the special electrically heated gloves taken into the stratosphere by the two flyers.

In addition to the series of eight enlarged photographs of the landing of the huge balloon near White Lake, South Dakota, there will be an enlargement of a vertical photograph taken from the gondola at the highest altitude (72,395 feet) while over Parmelee, South Dakota.

A scale model of the gondola, with miniature representations of the instruments and equipment, will reveal the appearance of the interior of the floating laboratory on the day of the flight. Appropriate legends will give facts about the purpose, size, weight or construction of each item, as well as information about the balloon, gondola and rigging.

Singularly appropriate is the addition of the flag of the National Geographic Society, whose three colored bars, blue, brown and green, represent the sky, the earth and the sea. The society's flag has been carried by expeditions under the society's auspices to the greatest altitude reached by man, to the North and the South Poles, as well as the greatest depth under the sea.

The affiliated societies have very generously offered to print items of interest about the next exhibition at Atlantic City. It is hoped that the spread of advance information will increase the attendance and enhance the color of the meetings and extend the usefulness of the association. It is hoped that advantages of registration will be so apparent that members