

Southerners was more amusing than anything else. It appeared incredible that any body of mature citizens of the United States could seriously dispute the scientific explanation of the origin of species. But the matter has gone, like the Ku Klux Klan, far beyond a joke. There are communities and states in this country which have not caught up with the England of 1875 in their thinking.

It is, of course, no crime to hold evolution to be an invention of the devil for corrupting souls. It is no crime to believe the earth flat, a belief long held in much the same positive manner. There was a famous Negro preacher who made his stand for righteousness on the assertion that "the sun do move and the earth am square," proving his faith by Biblical quotation. It is only regrettable that the children who must get their schooling in backward communities must absorb so much darkness along with their A B C's.—*New York World*.

DISCUSSION AND CORRESPONDENCE

EDWARD HITCHCOCK AND THE ORIGIN OF THE ASSOCIATION OF AMERICAN GEOLOGISTS

PROFESSOR FAIRCHILD, in his historical sketch of the American Association for the Advancement of Science, in *SCIENCE* for April 25, 1924, mentions the various conflicting views in the early accounts touching the priority of suggestion for calling a conference of American geologists.

In a paper on Edward Hitchcock, read at a meeting of the Science Club of Amherst College a few years since,¹ the present writer expressed the following opinion:

To Hitchcock, more than to any other man, is due the title of founder of the Association of American Geologists—the forerunner and parent of the American Association for the Advancement of Science. The first written suggestion in regard to the formation of this association came from him. At a meeting held at the rooms of the Franklin Institute in Philadelphia, on April 2, 1840, the association was organized, and he was chosen president, being the first of a long line of American savants to receive this distinction.²

As early as 1837, and possibly earlier, Professor Hitchcock had approached the leading American geologists and a few other scientists in regard to his "hobby," namely, "a meeting of our geologists." The letters and passages cited below, relative to the genesis

of the parent society, show this and are also in accord with the suggestion in Mather's letter to Emmons, respecting a conference, "but saying that he had received the idea from Edward Hitchcock."

Professor Hitchcock, Dear Sir: I received, a few days since, the Proceedings of the American Association for the Advancement of Science, first meeting, held in Philadelphia, September, 1848; and in it, page 91, I found a letter from Professor Hall, and observed with some surprise the latter part of the sentence of the second paragraph, (relating to Professor Vanuxem), viz.: "and to whom is due, above all others, the honor of being the first man to propose such an organization." Now I do not wish to detract at all from the merit due to Professor Vanuxem; and perhaps Professor Hall made the representation from memory only, or from hearsay, on the spur of the occasion; but that which belongs to the history of the Association of American Geologists ought, if stated where it will be referred to, to be stated accurately. You know that he was not the first to propose such an organization in 1838.

In 1837 I received a letter from you on this subject. . . . On the 12th of October, 1838, you wrote me at Albany, . . . in which you say: "And I had also hoped that ere this a meeting of American Geologists would be brought about in New York or Philadelphia; but I feel that I am to be disappointed in this also." It gives me much pleasure to see you express a wish to compare notes with others in relation to geological observations. I think it is much to be regretted that there is not greater harmony of feeling, unity of action and interchange of opinions and observations among our geologists. You, so far as I know, first suggested the matter of such an association. I laid the matter before the Board of Geologists of New York, specifying some of the advantages that might be expected to result; and Professor Vanuxem probably made the motion before the Board in regard to it, which may have been all that Professor Hall knew about it. We can each of us well dispense with the honor that might be awarded for originating the matter in one case, and putting in train for execution in the other: still, where the origin of an important society and association of scientific men for the advancement of science is recorded in its memoirs as historical fact, it ought to be stated *correctly*.³

In a letter of Edward Hitchcock⁴ to Henry D. Rogers, at that time in charge of the geological survey of Pennsylvania and New Jersey, dated Amherst, Mass., April 4, 1838, Professor Hitchcock says:

I want that you, with such other geologists as you choose to associate with you in Philadelphia and New York, should forthwith appoint a time and place and issue a circular summoning a meeting of our geologists. And it seems to me important that this should be done

¹ *The Amherst Graduates' Quarterly*, Vol. X, 1920, p. 1.

² Hitchcock's address as retiring president, "on the most important points in American geology," was first printed in full in the *Amer. Journ. Sci.* Vol. 41, 1841, pp. 232-275.

³ Letters of William W. Mather to Edward Hitchcock.

⁴ "Life and Letters of William Barton Rogers," Vol. I, p. 154.

this spring, before the state geologists take the field for another campaign. Let each man be invited to bring with him any specimens he may wish to be examined, and let it be understood that several days will be spent together, and if you think proper, that an association will be formed. Perhaps one or two public lectures might be given during the meeting, or some of the discussions be made public. I feel so strong a hope that you will listen to these suggestions that I will venture to name the individuals in New England whom I think it would be desirable to invite; some of them I have seen within a few days past, and they express a deep interest in such a plan: Professor Silliman, Professor Shepard, Dr. Percival, New Haven; Dr. C. T. Jackson, George B. Emerson, President of the Natural History Society, Professor Charles B. Adams, Boston; Dr. Samuel L. Dana, Lowell, Mass.; Professor Cleveland, Brunswick, Maine; Professor Hubbard, Dartmouth College, Hanover, N. H. I suppose that New York or Philadelphia would be the proper place of meeting.

Five months later, on September 26, 1838, Henry D. Rogers⁵ writes his brother William as follows:

The chief part of to-day I have spent in company with Professor Hitchcock, who, making a brief visit to the city, called on me. . . . He is very impatient to witness a summoning of the geologists into an association, and says those of New England will obey the call most cordially. He thinks we should commence it here or in New York. What say you to our trying it for next spring and in Philadelphia? Take this into grave consideration, and give me your suggestions as to whether it were better to delay the movement until a general association for all the sciences can be brought about, or to make it now for geology merely.

There is also before me a letter of Benjamin Silliman to Edward Hitchcock, dated August 18, 1838, to whom the latter had written urging the formation of a geological society. "I am not courageous enough to convoke the geologists," writes Professor Silliman—"like the bachelor who said he admired exceedingly the courage of those who dared venture on matrimony—but he was himself too timid. I am informed from very good authority that so far from coming at my call there is a spirit in Phila. to call the other way and that a journal is projected to supersede mine—*Nous verrons.*"

Edward Hitchcock was also an original member of the earlier organization, the American Geological Society, which held its first meeting on September 6, 1819, in the Philosophical Room of Yale College. At that meeting William Maclure was chosen president, and Edward Hitchcock one of three corresponding secretaries. He was subsequently, 1824–26, a vice-president of the society.

FREDERICK TUCKERMAN

AMHERST, MASSACHUSETTS

⁵ *Op cit.*, p. 155.

BALL LIGHTNING

I AM trying to learn something about ball lightning. In fact, I have just read a whole book about it, but, like Faust, am almost as wise as when I began. Please, therefore, you who have seen this strangest of meteors, tell me all about it: By whom seen; whether others also saw it; when (date) and where (geographic location); stage (beginning, middle or close) of storm; indoors or out; if indoors, how it came in and how it departed; single or many; duration; color; size; shape; nature of outline (sharp or blurry); noise; odor; fixed in position or moving; if moving, whether with or independent of wind; direction of motion (vertical, inclined or horizontal); velocity; kind of motion (smooth or jumpy); and effects produced; also anything else that was observed in connection with it.

Most cases of ball lightning aren't, but some are; and we want to understand the cause and nature of this rare phenomenon. But that understanding can be had only from a collection of accurate descriptions of the appearance and behavior of the thing to be explained. Hence this appeal, to which early and full responses are earnestly requested.

W. J. HUMPHREYS

U. S. WEATHER BUREAU
WASHINGTON, D. C.

SCIENCE AND INDUSTRY

THE distinguished industrial chemist who writes in your issue of July 4 (page 16) on the relative worthiness of pure and applied science may find himself not out of sympathy with the Napoleonic officer who was discussing with a Prussian colleague the merits of their respective nationalities. It was a time when things were not going very well for the Prussian's cause, and he compensated for this by claiming that the Prussians fought for honor and glory, while the French fought only for money. "True enough," replied the veteran of Marengo and Jena, "each one of us fights for what he needs the most."

Less superficially, is it not the chief rationale of pure science that it is the underpinning of technology? Where would man's so-called mastery of nature be if we took away the results of fundamental research? The land of Erewhon would be soon o'erpassed. Pure science is to technology as root is to blossom, and one might as well ask which of these two is the more important or "respectable." Fundamentally, the sincere worshipper at either shrine is not there because of its greater venerability, but because he is so constituted as to get his satisfaction from that particular kind of mental activity. Each one works for what he wants the most—*de gustibus.*

F. L. WELLS

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