

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. Rogers<sup>5</sup> 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

<sup>5</sup> *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

BOSTON PSYCHOPATHIC HOSPITAL