in the air. The process is the same as when earth is concerned.

F. S. Dellenbaugh 226 W. 78th St., New York, March 29, 1912

REPORTED DISCOVERY OF RADIUM IN NORTHERN ARKANSAS

In this day, new results of scientific work make such rapid appearance that the public in general are very credulous about reported discoveries however unreasonable they may appear, and even scientists are cautious about expressing adverse opinions concerning such, without having carefully investigated them. Apropos of this, a short article that some weeks ago appeared in a St. Louis paper, reporting an alleged discovery of radium in northern Arkansas and naming the writer as authority for its existence, has been somewhat widely copied by the press, and has brought numerous letters to the writer from different parts of the country from New York to California. Among these have been letters from scientists and those engaged in commercial The foundation for the report is as work. follows:

In the latter part of February there came to the writer's office, then at the University of Arkansas, a Mr. Leib, of Bentonville, that state, who brought a cigar box of earthy material which he said came from a cave near his home. It was just such material as might come from any limestone cave. With the box was a photograph which Mr. Leib said had been made by exposing the box containing the material before a camera, for several heurs, in an absolutely dark room. The picture was of about the distinctness of an ordinary X-ray photograph. It plainly showed the box, the string about it and the knots in the string.

Mr. Leib was told by both Professor A. A. Steel, of the University of Arkansas, and myself that while the photograph was interesting, careful investigation was necessary before it could be stated that the substance contains any radium or other radio-active material. For this purpose he was advised to send some of it to Professor B. B. Boltwood, of Yale University.

Such is the basis of a newspaper story that seems to have attracted a good deal of attention.

A. H. PURDUE

STATE GEOLOGICAL SURVEY, NASHVILLE, TENN., April 17, 1912

THE AMERICAN ASSOCIATION FOR THE ADVANCE-MENT OF SCIENCE

To THE EDITOR OF SCIENCE: It is generally agreed that the recent Washington meeting of the American Association for the Advancement of Science and its affiliated societies was one of the most enjoyable, helpful and inspiring meetings ever held in this country. The attendance was large, the programs well filled, the discussions earnest and the efforts of the local committees fully successful in providing ample means for social intercourse without too much distraction from the work of the meeting.

Nevertheless, that meeting probably marks the parting of the ways, and it behooves all of us who have been and still are loyal to the American Association for the Advancement of Science to give earnest consideration to the question of the future policy of that union of scientific workers which has in the past done so much to deserve its title.

Two of the fundamental principles of the association are: first, by means of migratory meetings to arouse interest in scientific matters in different sections of the country; second, to bring together workers in all branches of science, for mutual acquaintance and for the development of broader view-points than is possible from too close absorption in one's own special line.

These ideals could be and have been well realized in the past when the average attendance on such meetings was not too large for the hotel accommodations of most of our cities and when it was usually possible to have meetings of various sections in one building, thus enabling closely related sections to meet in adjacent rooms. But that day has passed. Organization among scientific workers has increased at a tremendous pace during the past few years, largely through the energy of the officers of the organizations of special branches of science. The growth from two thousand to almost six thousand in the membership of the American Chemical Society within the past four years is only typical of the relative activity in other societies.

With such an increase in organization membership it has now become a physical impossibility to longer realize the old ideals of the American Association for the Advancement of Science, and so we hear more and more of withdrawal movements. The example of the zoologists, naturalists and anatomists, during the last convocation week is going to be more and more followed by other societies.

Does this mean the dismemberment of the American Association for the Advancement of Science, the giving up of the opportunity to come in touch with fellow workers in allied sciences, the loss of a national association of organized science? Truly this would be a calamity.

Can such a calamity be avoided?

In the hope of at least provoking discussion, the following suggestions are submitted, in full realization of their imperfections, but nevertheless, as based upon an honest effort to look the situation squarely in the face.

First. Let the American Association for the Advancement of Science lend all of its aid and sympathy to the development of the affiliated societies.

Second. Let the American Association for the Advancement of Science give up its present annual meetings and instead hold triennial or quadrennial meetings.

Third. Let the affiliated societies in turn give up their regular meetings at the time of the American Association for the Advancement of Science meetings and lend all of their influence towards making these meetings great national gatherings of scientists.

Fourth. Let the migratory meetings of the affiliated societies serve the purpose of arousing local public interest in scientific work. Fifth. Let the meetings of the American Association for the Advancement of Science be held in the national capital, at a time when Congress is not in session and hotel accommodations consequently ample.

If such a policy could be agreed upon by all, the American Association for the Advancement of Science could well afford to give up its charge of an initiation fee from all who are members of affiliated societies. Further, in view of the decreased administrative expense and largely increased membership the present annual dues might possibly be still further reduced.

Such truly national gatherings of scientific workers would be inspiring to all of us, and would make a national impress, as the best conditions would there prevail for the formulation of scientific policies of nation-wide importance.

To carry out the above plan no very great practical difficulties would have to be overcome. The changes are not radical, but evolutionary in character. It is hoped that the suggestions may be of some service.

CHAS. H. HERTY

UNIVERSITY OF NORTH CAROLINA

SCIENTIFIC BOOKS

Bacteria in Relation to Plant Diseases. By ERWIN F. SMITH, in charge of laboratory of plant pathology, Bureau of Plant Industry, U. S. Department of Agriculture. Volume II., History, General Considerations, Vascular Diseases, Washington, D. C. Published by the Carnegie Institution of Washington. 1911. Pp. viii + 368. Quarto. Publication No. 27, Vol. two.

Somewhat more than six years ago the writer of this notice had the pleasure of publishing a note (SCIENCE, Nov. 24, 1905) in regard to the first volume of this work, and there expressed the hope that the publication of the second volume would "not be long delayed." But good and sufficient reasons for the delay are given in the introduction to this volume, where we are told that it is "based in great part on data obtained as the result of **a**