IN cooperation with the Federal Office of Education, the Smithsonian Institution on Sunday, June 7, will inaugurate a series of radio broadcasts in the form of dramatic sketches dealing with its current scientific investigations and with the natural history, historical and other material in its collections.

THE first number of the new *Journal of Symbolic Logic* has recently appeared. The editors are Professors A. Church, of the department of mathematics at Princeton University, and C. H. Langford, of the department of philosophy at the University of Michigan. The journal is published by the Association for Symbolic Logic, whose secretary is Professor C. A. Baylis, of Brown University, and provides a means of contact between mathematicians and philosophers working in the field of symbolic logic.

The St. Louis Post-Dispatch states that a federal grant of about $12,000 a year to St. Louis County, in connection with the proposed reorganization of the County Health Department, has been approved by the United States Public Health Service. First steps under the plan will be appointment by the County Court of a new county health officer, who will supersede the present health commissioner, Dr. Edwin L. Sheahan; a director of sanitation and a superintendent of public health nurses, all of whom must be approved by the state and federal health services. Their salaries, paid from the grant, will be about $5,000 a year for the health officer; $3,200 for the director of sanitation and $2,400 for the superintendent of nurses. Each will receive also $600 a year for transportation expenses. On appointment, the three new officers will undertake the reorganization of the department according to standards fixed by the federal service. It is also reported that an additional $8,000 to $10,000 probably will be made available to the county by Washington University, which plans to open a department of public health in the medical school, probably next September, which would use the reorganized County Health Department as a training ground for students.

IT is reported in the daily press that the Swedish government plans to erect in Stockholm a medical center the cost of which is estimated at $10,000,000. It is stated that the main building will be H-shaped, with a roof for sun bathing, and will be seven stories high. It will contain operating theaters, lecture halls, wards and laboratories. In addition there will be a children's hospital, a building for psychiatry, rheumatism and cancer clinics, a swimming pool, football grounds, tennis courts, a church, concert halls, and home for staff doctors, students and nurses. The plans were originated in 1931 and work on roads and excavations started in 1932.

DISCUSSION

IS GEOLOGY A SCIENCE?

THE position of geology in relation to the sciences is an anomalous one. The so-called physical and biological sciences can be readily arranged in linear fashion passing from mathematics through astronomy, astro-physics, physics, chemistry and biology to anthropology, with the various branches of each clustered around a central position. Where, in this family of sciences, does geology logically belong? It is considered by some to belong in the physical science division, but its precise position is not obvious. In truth, by its use of facts and techniques from other sciences, geology is related, along part of its common boundary, to each of the fundamental sciences, and might, because of its dedication to learning the history of the earth, be placed in a central position, with the others around it. On the contrary, it may be judged by some as not strictly a member of the true family line, but merely a sort of peripatetic relative, going the rounds of more respectable abodes.

The writer has been led to wonder if the latter figure does not really represent a too common conception. He has seen a number of substantial histories of science in which geology is scarcely mentioned or, if mentioned at all, is named only in discussing some special theory, such as organic evolution, isostasy or the use of radioactive substances in determining the age of the earth. If there is a good history of science which deals with the growth of methods and understanding in geology at a length comparable to that bestowed on the other sciences, a reference to it would be appreciated. Of course there are several good histories of geology itself or of one or more of its branches.

Geology is primarily a field science, and despite its borrowing of methods from other sciences, its main reliance for learning the history of the earth is the collection, classification and logical interpretation of terrestrial facts, these mostly simple unembellished facts about kinds and relationships of rocks. Growth of science in the last few decades has involved an increasing precision and scope of laboratory measurements made on the greatly increased variety of materials and objects available for study. Compared to the swift change of some of the stunts of one decade into the standard procedures of the next in many of the sciences, the progress of geology is a plodding one, both figuratively and literally.

The doctoral candidate in physics works in an institutionally provided laboratory, often capably or bril-

liantly carrying on studies which are a part of the amazing advance of modern physics. The doctoral candidate in geology frequently ranges the same plains and mountains first viewed by the pioneers, not yet all traversed by automobile roads, and frequently is obliged to defer completion of his thesis for some years after completing residence requirements because of his difficulty in singlehandedly carrying on operations in a remote field. A few of our universities have helped to meet these primitive difficulties of geologic investigation by providing organized camps and the like. Many others, while freely providing the instruments and laboratories of physics and making research in this branch "physically" easy, have not only failed to sponsor field work in geology adequately, but have refused to accept as dissertation material work done under those competent national or state agencies which are giving institutional support to research in geology!

Such policies have diverted groups of able students to other universities having a more liberal policy in this regard. The ground has been taken by some universities and other fellowship agencies that "expeditions" should not be sponsored, while money for the purchase of laboratory equipment in other branches was freely offered and considered better spent. It appears that the glamor and news value and tangibility of laboratory or instrumental research has operated in some degree to the relative detriment of such prosaic work as deciphering the history of the earth.

It has been charged that benefactors of universities have been prone to build buildings which could be seen, but have rarely provided the means to maintain and operate them for the purpose stipulated. It is equally true that universities, foundations, and the like, have often been victims of the tendency to favor tangible and newsworthy, rather than necessarily fundamental, support and facilities for research. Thus a million dollars spent to learn more about the occurrence and origin of the ores of certain metals might result in a few books on ore deposits; a million dollars spent on an astronomical observatory would result not only in an equal number of books, but also in a magnificent telescope and an imposing building bearing the name of the donor.

Is it not quite obvious that the offering of some of our outstanding prizes for research tend to an overemphasis in spectacular fields? Science Service no doubt has some estimate of the relative newsworthiness of advances in various sciences, but even without such estimate we know that a fact can be the better "sold" if it has been captured by means of some instrument that is larger or smaller or more refined or more costly than its predecessors, or if its learning has involved the counting of a million or ten to any other n^{th} flies or atoms or the like. The writer knows dozens of geologists who have individually cracked off the outcrop enough rock specimens to build and fill a geological museum, but somehow, though we believe geologic information has value, few of us have been successful in making news capital out of the length, width, height and style of architecture of said museum.

Recently there has appeared the review of another book set forth as an ably compiled résumé of science. It was compiled by visiting outstanding laboratories, and it is the fear of the writer, though he has not seen the book and may be agreeably surprised, that the largest laboratory of all, that in which both geologic evolution and its understanding by man are worked out, was not included in the itinerary. Neither its processes nor the current methods for their interpretation, excepting perhaps the modern divining rods of geophysics, have the gadget appeal which seems so all-important to the public, and which we fear is not without its influence in circles closer to science.

And so we return with no real answer to the question as to whether geology is a science. But until we have an answer, might we not have "A New History of Science," including (or excluding) geology, which would at least not raise false hopes on the part of a perennially hopeful digger for terrestrial lore.

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A PLEA TO PUBLISHERS OF SCIENTIFIC BOOKS

EVERY scientist receives advertisements of many more forthcoming books than he can afford to purchase. My own recent practice has been to make a bibliographic card for each work in which I am interested and to file it so that it will be at least listed in my bibliography until finances permit, or necessity compels, the purchase of the volume. Frequently in making these cards I have been annoyed by the failure of the publisher to give the date of publication, the number of pages and other necessary details, even when the advertising brochure is elaborately printed and illustrated. Let us presume that several such incomplete cards, representing a given subject, are on file and that you wish to select from the titles available. On what basis can selection be made? The book can not be chosen on the basis of modernity, size or illustrative matter, for none of these facts is known. The alternative, of course, is to make a trip to the nearest library whenever a sufficient number of cards has accumulated and to fill in the missing data from the Library of Congress cards. Many of us naturally object to this expenditure of time in the search for the very information which the publisher should have supplied.

To satisfy my own curiosity as to the extent of this