

an adequate picture. It is possible that at that time the phenotype had an effect on the genotype and that, in accordance with the general sense of Lamarck's theory, if not in accordance with its formulation, an environment contributed to the modification of organisms which transformed themselves, moreover, to a great extent independently of the environment, in conformity with the correlations resulting from their intimate structure. It seems that at the present time we do not know whether stabilized nature and genetics will inform us of the modalities of this stability. Are these conclusions of genetics valid for the periods and the conditions during which each group became diversified? Or rather, as seems more probable to me, do the evolutionary transformations depend on

some other causes which still elude us? I am not concealing from myself the fact that it is very improper to imagine that the causes known at present are insufficient to explain the past and I ask pardon. But I still prefer to adopt such a supposition rather than to deny evolution or to confine myself to a statement of the contradictions between the results of our inadequate experimentation and the facts attested to by the past.

I ask your indulgence for having preempted your attention so long, only to end with such doubtful conclusions; but, as I said in the beginning, my intention was above all to emphasize the difficulties of the problem and to provoke reflections, suggestions and even contradictions among the experts present.

SCIENTIFIC EVENTS

THE INTERNATIONAL CONFERENCE ON BITUMINOUS COAL

THE Third International Conference on Bituminous Coal will be held at the Carnegie Institute of Technology from November 16 to 21, it is learned from Dr. Thomas S. Baker, organizer of the meeting and president of the Carnegie Institute of Technology.

Prospects for the third congress are excellent. "Because of the deep concern that is felt all over the world as a result of the great depression in the coal industry, it is felt that it is a particularly appropriate time to hold our conference," Dr. Baker said. "There has been some pressure to have the meeting postponed for another year. These suggestions have come principally from some of the European scientists, but it is thought that because of the condition of the industry it is very important that we go on with our plans."

One of the objections of the foreign scientists to coming to this country this year, apart from the difficulty of securing necessary funds, is the fact that so many industrial plants are shut down that they will be unable to study American methods of business. In spite of these conditions, there will be a larger number of European delegates than were present at the previous conferences.

"The conferences in the past have been devoted to the scientific aspects of coal utilization," Dr. Baker continued. "As this meeting is sponsored by a technological institution, the emphasis has been placed on new methods of utilizing and treating coal which are continually being developed. When the first meeting was organized in 1926, it was undertaken with the hope and expectation that it would be of service to the coal industry and the subsequent meetings have been planned with this in mind.

"Although in comparison with the previous meetings, the scientific program next November will be of

equal, perhaps greater, importance, it is impossible to discuss coal at the present time without reference to the economic aspects of the industry. Therefore the various processes that will be presented will deal very definitely with economics and less with theoretical questions. There will be a certain number of papers that will be solely economic in character."

The congress will unite scientific men from all over the world, who will bring to Pittsburgh the latest developments in soft coal utilization. Some of the foreign delegates will speak also on the coal industry as a business in their respective countries, and it is felt that suggestions will be made by them that will be helpful to American coal men.

The conference will be attended by representatives from Austria, Belgium, Canada, Czechoslovakia, England, France, Germany, Italy, The Netherlands, Poland, Roumania, Spain, Sweden, Switzerland, South Africa and U. S. S. R.

PAINTINGS OF PREHISTORIC LIFE AT THE FIELD MUSEUM OF NATURAL HISTORY

THE series of twenty-eight large mural paintings depicting life on the earth in successive prehistoric ages from about one and one half billion years ago down to the beginning of the modern era, which has been in the course of preparation for the Field Museum of Natural History during the past several years, has just been completed with the installation of the last three paintings, it has been recently announced by the director of the museum.

The paintings are a gift to the museum from Ernest R. Graham, an architect of Chicago, who provided a fund of \$125,000 for them and certain other material illustrating historical geology. The hall in which they are exhibited has been named in Mr. Graham's honor by the museum's board of trustees.

Charles R. Knight, of New York, known as a fore-