## PALAEONTOLOGY IN INDIA\*

## ROMAN KOZLOWSKI

University of Warsaw, Poland

ABSTRACT—This note gives a brief appraisal of Indian palaeontology, palaeobotany and of the Palaeontological Society of India and its Journal. It originally appeared in greater detail in Polish (Cosmos, 1957).

A LTHOUGH of recent date, India's recovery of her independence has already made its influence felt on the development of the



sciences in this country. This manifests itself in the organisation, in the last few years, of scienticonferences and fic congresses, as well as the establishment in scientific Societies of and initiation of periodicals devoted the various specialised branches.

To the sciences which are witnessing a new

resurgence in India belongs, among others, palaeontology. India (with Pakistan) is a country whose geological structure is widely differentiated. The principal formations of the stratigraphic scale are represented there, and most of them furnish abundant animal and plant fossils. Since the beginning of the 19th century, the English took an active interest in the geology and palaeontology of this country, and in India they were among the most important research workers in this domain. Large collections of fossils found by explorers and travellers were sent to Europe, particularly to Great Britain, and the results of studies made on them were, in general, published in the scientific journals of Europe.

The Geological Survey of India was organised as early as the middle of the 19th century (1851), and in 1861 began the publication of a monumental series of palaeontological monographs under the general

title "Palaeontologia Indica", several volumes of which have appeared up-to-date. The authors of these monographs were almost exclusively Europeans, particularly Englishmen.

It is only during the first quarter of this century that palaeontological work by Indian authors begins to appear. One must specially mention the investigations of the brothers Birbal Sahni and M. R. Sahni in this domain, the first of them being a palaeobotanist and the second a palaeontologist. Students of English Universities, they became the real pioneers of palaeontological research in India.

Birbal Sahni, student of the eminent English palaeobotanist A. C. Seward, carried out intensive studies of the palaeobotanical materials of India. He has contributed to the elucidation of a number of important problems, especially concerning the structure and evolution of the Gymnosperms, as well as the history of Gondwana flora. He is the author of more than a hundred scientific publications. To the great merit of this savant, who died prematurely, goes the foundation of a modern Palaeobotanical Institute at Lucknow, which bears his name and is in the process of becoming an important world centre of Palaeobotanical studies.

The important scientific work of the palaeontologist, M. R. Sahni, is concerned with different domains of palaeontology, Pre-Cambrian floras, as well as of prehistoric archaeology. Besides, he has largely contributed to the reorganisation of science and centres of higher education. It is also due to

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his farsighted initiative that in 1950 the *Palaeontological Society of India* was founded, and then was created the "Journal of the Palaeontological Society of India", the Inaugural Number of which appeared in 1956.

The Palaeontological Society proposes to fulfil a very ambitious programme. It proposes to initiate and aid research workers in the domains of palaeontology, palaeobotany and prehistoric archaeology.

Although the Society was founded in the Indian state with its seat at Lucknow, it strives at embracing by its activity Pakistan, Burma and Ceylon, and, as a more distant perspective, the countries of south-east Asia.

The first important step taken by the Society was the publication of a Journal. The first issue, Volume I, which has been published is in the form of an Inaugural Number. It is very praiseworthy both in its form and its content. It is in double demy format, printed on excellent paper, and the text is abundantly illustrated. It opens with a preface from the pen of Prime Minister Jawaharlal Nehru who took a lively interest in geological sciences and particularly in palaeontology. He would remain under the charm of fossils and, following his words, "some part of this fascination has continued, and looking through these pages, the long years have passed by, and I have almost felt as if I was a student again in that dim past before world wars came to plague mankind."

The form of the first number, which comprises more than two hundred and fifty pages, reflects in a large measure its inaugural character. In the first article the Founder-President, Dr. M. R. Sahni, describes the objectives of the Society. The same author has written a very interesting article, dealing with the history of palaeontological, palaeobotanical and prehistoric research in India and its neighbouring countries, i.e., Pakistan, Burma and Ceylon, during the first half of the 20th century.

The major part of this number is constituted by articles both of a special, as well as of a general, nature. There are about thirty articles, of which nearly half have been written by Indian authors, and about as many by European and North American authors.

From the statement made by Dr. M. R. Sahni it appears that his desire is not to confine the Journal to the work of Indian workers and to problems of Indian Palaeontology, but to make it largely into one of international character where workers from all countries could express themselves.

We wish that the new Society and its beautiful Journal should find their best development because, certainly, they can contribute in a large measure, to the best understanding of the history of the Earth, above all of its particularly interesting regions which comprise the Indian peninsula and the neighbouring countries.