Geology of the Tampico Region, Mexico

By John M. Muir. Pp. xix + 280 + 16 plates. (Tulsa, Okla.: American Association of Petroleum Geologists; London: Thomas Murby and Co., 1936.) 19s. 6d.

K NOWLEDGE of the geology of the Tampico region of Mexico has been gradually amassed over a period of years by geologists and others interested in the development of its oil resources. In 1928, an attempt was begun to collect and correlate information from various fields and this work proceeded intermittently until 1934, when it was decided by the Executive Committee of the American Association of Petroleum Geologists that the results should be published in a separate volume. When it is realized that hitherto no attempt had been made to assemble and present in book form existing knowledge of the geology of that region, it will not be difficult to assess the value of this work, particularly to future workers in the oilfields.

The first half of the book is concerned with stratigraphy and palæogeography of the region. Rocks outcropping in the Tampico Embayment range in age from Middle Cretaceous to Miocene, while beyond its northern and southern limits Palæozoic and Jurassic rocks are found. Descriptions of all the formations encountered are given in considerable detail. The latter half of the book is devoted to an account of structural features of the northern oilfields situated on the southern prolongation of the Sierra Tamaulipas anticline and the Southern Oilfields which extend from about 43 to 90 miles south of Tampico. Main occurrences of oil are described and attention directed to particular characteristics of individual pools caused not only by structural differences but also in most cases by slight facies-changes in the sediments. Throughout the major period of exploitation the southern fields were considered economically to be of far greater importance than the northern fields, but since 1933 this assessment has been reversed. In the appendixes valuable data are given on oilfield temperatures, well pressures, their stripping, shooting and acid treatment. Finally, there is an excellent bibliography of Mexican oilfield geology which, together with the text of the book, forms a useful record of the advancement of geological knowledge in this region during recent years.

The History of the Telephone in the United Kingdom By F. G. C. Baldwin. Cheaper edition. Pp. xxvi+ 728+75 plates. (London : Chapman and Hall, Ltd., 1938). 15s. net.

THE reprint of this history is the same as the first edition of 1925, but it may usefully be recalled that the author brings together representative material relevant to the development of the telephone service in Great Britain from the invention of the telephone more than sixty years ago until 1912, when the main body of the telephone system was brought under the unified control of the State, with details of machine-switching and long-distance telephony up to 1922, which preceded the inauguration of unified control of international telephony by a consultative committee. The author, sponsored by

Mr. Frank Gill, chief engineer of the National Telephone Company between 1902 and 1913, modestly claims that he has prevented historical material from straying, but he has certainly anticipated what he expects a later writer to do, critically to describe the problems of exploitation of an invention in many respects still similar in essentials to its original form, and draw lessons from a balanced view of the past.

Telephony in Great Britain was from the first parochially conceived, harshly restricted by legislation, and hidebound by patents; can we or can we not blame the powers that were for not realizing that telephony was to become a powerful public service and treating it accordingly ? A parallel history could be written around the supply and distribution of electric power, which is yet to be straightened out. The present rapid increase, as compared with other countries, in both the use of telephony and the consumption of electric power, can be traced to our backwardness following early restriction. That history can teach lessons to authorities is illustrated by the fact that the present radio-relay services are to be taken out of the hands of private companies in the next year or so, before their development gets out of control. L. E. C. H.

## Adventures with Living Things:

a General Biology. By Elsbeth Kroeber and Walter H. Wolff. Pp. xiii+798. (Boston, New York and Chicago: D. C. Heath and Co.; London: George G. Harrap and Co., Ltd., 1938.) 1.96 dollars.

'HE teaching of biology is still in the experimental stage in Great Britain; and, as shown by the large number of good American texts on the subject, there is much to be learned from the methods adopted in other countries, especially the United States. The book under review is a case in point. For in it, a wide, though general, survey of the plant and animal kingdoms is made, the 'type system' is disregarded, and there is no suspicion of dividing the subject into the two sections, botany and zoology. Most authoritative surveys and reports on the teaching of biology, including the recently issued report of the Spens Committee, are agreed that the best approach to the subject is through natural history: and this is the method adopted in this book. The authors have shown breadth of vision, and their text is supported by nearly five hundred excellent illustrations, mostly photographs-which are desirable in the early stages of teaching.

Part 1 approaches the subject through natural history, and is a descriptive account of living things. Part 2 is the functional approach, and deals with the way organisms live and reproduce. Part 3 considers the great generalizations of biology, such as unity in organisms, heredity, evolution and human betterment through biology.

The scientific attitude is inculcated and the scientific method adopted throughout by periodic insertions of practical work, problems for class discussion, supplementary activities for the biological novice and bibliography.

The book can be recommended as a guide to the teaching of biology in Great Britain.