interesting to mention that in a letter I received more than twenty-five years ago he discussed the down-faulting of a former extension of the Deccan in the area now occupied by the Indian Ocean, the area of the investigations of the "John Murray Expedition".

It is impossible to refer in any detail to the gigantic output of Davis in these thirty years. In his own continent he found every type of country, from completely desiccated to extreme moistness, almost tropical heat to perpetual cold, and he studied the phenomena in respect to each, thus gradually building up that study of the visible earth forms on which modern geography is so largely based. He claimed none of his conceptions as new, but he looked at every phenomenon through new glasses, and he codified all phenomena to form almost a new science. During all these years Davis was teaching not only in his own University, Harvard, but also lecturing almost everywhere he was asked. His exposition was clear and he used every possible device, particularly solid and composite sections, to make his views clear to his auditors and subsequent readers, dismissing all possible opposition, and sometimes ignoring the evidence on which it was based. His scientific opponents could not approve where, as in science, views are nicely weighed in the balance, but undoubtedly he gained an immense following in America and stimulated both teachers and the public to observe. By many he was regarded as an inspired teacher, but his methods were of more use in popularising science rather than in stimulating research. His popular works on geography deservedly secured an immense circulation, for the visible world was therein a connected system, made clear by pictorial methods largely original. Davis came at the right time.

Davis's third period commenced about 1912 when he began to feel a mighty interest in the coral reef problem, upon which he published more than forty papers, actively pursuing the subject until his death. He thoroughly enjoyed the subject, for it became necessary for him to travel extensively, and he saw many new faces and met many new types of mind. He visited the West Indies several times, with longer expeditions to Fiji and New Caledonia, with calls upon the Great Barrier Reef, Tahiti, and many other places. While he criticised Agassiz for the shortness of his visits, and his lack of detailed examination, his methods were much the same, and every locality had to fall into his line. He paid little attention to animals and plants and their dependence on the favourable conditions of their environment. He seemed to love to indite fierce letters in which he was entirely unsparing of his opponents' feelings, but, when, very occasionally, he wrote a letter in his own hand about himself, he revealed a personality happy in spite of great griefs, a man to be loved. Shaler he held in great affection and it gave him joy to write "The Coral Reef Problem", 1928, in the Shaler Memorial Series, a book of value for all time, with its full discussion

of embayed shores and unconformable contacts. He felt himself inspired. Did not he, Dana and Darwin all share the same natal day in different years—and must they not be right? What was the use of further expeditions when all seemed to Davis so clear? Why in his necessary travels did the present writer sit down for months on five occasions to look at separate reefs? "A waste of time!" Davis was very human; he deemed it his duty to fight here to gain a great peace hereafter.

J. S. G.

## PROF. R. CHODAT

GENEVA, which has always had a great name as a school of botany, has suffered a great loss by the death on April 29 of Prof. Robert Chodat at the age of sixty-nine years. A worthy follower of de Saussure and de Candolle, Chodat upheld the traditions of his predecessors by the wide outlook of his botanical studies, and the thoroughness of his investigations.

Appointed to the professorship in Geneva in 1891 after studying in Basle and Geneva, Chodat has been responsible during the past forty-three years for the development of a first-rate laboratory, herbarium and botanical library. The lack of university botanical gardens, which he frequently deplored, necessitated his researches being centred in the laboratory, and here he elaborated those methods of pure cultures of Algæ which led to such important results. His book on the polymorphism of the Algæ put him at once in the front rank of algologists and stimulated many workers to embark on this line of research. More recently he had taken up mycological investigations, and his sound knowledge of physiological chemistry enabled him to advance considerably our knowledge of fermentative processes.

Chodat did not, however, confine himself to investigations in the laboratory. A visit to Paraguay in 1914 enabled him to study the structure and habits of its plants and resulted in the publication of an important flora of that country. Repeated visits to Spain and Portugal and the Balearic Islands with his students gave him a comprehensive knowledge of the Mediterranean flora, of which he published some interesting accounts.

Chodat rescued from neglect the Alpine Garden at Bourg St. Pierre by attaching it to the University of Geneva, and the vacation courses he gave there every summer attracted many students from England and elsewhere; numerous investigations carried out there were published by the Botanical Society of Geneva. Chodat, like other Swiss botanists, was greatly impressed by the numerous Mediterranean plants found in the upper Rhone valley of Switzerland, and his careful observations led him to the conclusion that many, if not most, of them had been distributed from the south across the mountain passes and had not, as was formerly supposed, immigrated by way of the Lake of Geneva.

Chodat was a good systematist, as is shown by his monograph of the Polygalaceæ; but the wideness of his interests is attested by his publications on fossil plants and genetics as well. His wide and philosophic outlook is mirrored in his excellent "Principes de Botanique", which is in every way an admirable textbook. A stimulating teacher, Chodat trained many first-rate botanists whose researches do credit to their master. So eminent a botanist was sure to receive due recognition abroad, and Chodat was awarded honorary degrees by the universities both of Manchester and of Cambridge, and last year he was awarded the Linnean Medal of the Linnean Society of London, of which he had been a foreign member since 1914. Unfortunately, during the last few years, partly due to systematic overwork, he suffered from ill-health, and shortly after his return from a visit to Egypt and Palestine he died after a short illness. He will be greatly

missed in England, as well as Switzerland, for he was a frequent and welcome visitor to this country, where he had many friends. F. E. W.

WE regret to announce the following deaths:

Dr. M. G. Foster, son of Sir Michael Foster and author of numerous papers on balneology and climatology, on June 16, aged sixty-nine years.

Dr. C. E. Grunsky, consulting engineer, president of the California Academy of Science, president in 1924 of the American Society of Civil Engineers, an authority on water engineering and supply, on June 9, aged seventy-nine years.

Prof. Thomas H. Macbride, emeritus president of Iowa State University, professor of botany in the University in 1884–1914, an authority on Myxomycetes, on March 27, aged eighty-six years.

## News and Views

## Sir Robert Mond

The honorary degree of LL.D. was conferred by the University of Toronto, on June 6, at the time of the annual Convocation, on Sir Robert Mond. Sir Robert, who was knighted in 1932, is the eldest son of the late Dr. Ludwig Mond, F.R.S., and has inherited his distinguished father's scientific tastes, as is shown by his association with many learned societies, including the Faraday Society, of which he is a past president. Another side of his scientific activity is shown by his interest in archæological studies, and he is president of the Egypt Exploration Society. Sir Robert was one of those chosen to receive an honorary degree at the opening of the new wing of the Royal Ontario Museum in the autumn of 1933, but was unable to visit Toronto until the recent The Royal Ontario Museum owes Convocation. Sir Robert a great debt of gratitude, not only for actual gifts of great value, but also for his constant advice during the development of the Museum from very small beginnings. His most recent gift is in sharing with Dr. Sigmund Samuel, of Toronto, and Bishop White, formerly of Honan, China, now professor of Chinese literature in the University of Toronto, in the donation of a very valuable library of Chinese books, now known as the Chinese Library of the University of Toronto, and containing more than forty thousand volumes.

## Excavations at Tell el Duweir, 1933-34

An exhibition of the material discovered by the Wellcome Archæological Research Expedition to the Near East in the second season's excavation at Tell Duweir, 25 miles south-west of Jerusalem, under the direction of Mr. J. L. Starkey, will be held at the rooms of the Palestine Exploration Fund, 2 Hinde St., W.1, on July 2–21. The work of the Expedition during the past season has now established the extent of the Early Copper Age

site as covering at least 150 acres. It includes the remains of a large dolmen. The upper terrace of a limestone ridge flanking the Tell across the western valley was found to be honeycombed with caverns which had been artificially enlarged and adapted as dwellings in the Early Copper Age, and re-used at a later date as burial places. Metal here occurred rarely, but unique for this early period was a heavy gold bead, contemporary with proto-early dynastic age in Egypt. Rough castings from moulds were found on the surface. Pottery was hand-made; and small pottery bowls showing a sharp impress afforded evidence of textiles. A large necropolis lower down the side of the ridge yielded contracted burials in small oval chamber-tombs with a shallow shaft. In these were daggers or darts, food vessels, etc. This cemetery is equated with the Egyptian Old Kingdom. At the north-west corner of the Tell, the Hyksos fosse and revetment were uncovered; and the later system of defence was traced in its entirety. The Persian residency superimposed on the Jewish palace-fort destroyed in the sixth century B.C. was cleared.

Among other discoveries, by far the most interesting and important was that of a small temple found in clearing the fosse. This consisted of a square sanctuary containing an altar and shrine, with two small store chambers. Free-standing benches were arranged on three sides of the sanctuary. This building had been destroyed by fire and its contents were thus found complete, although damaged by the flames. They consisted of a large number of ceremonial vessels and utensils, toilet articles, etc. The most important is the painted pot, of which the inscription has already given rise to much discussion among experts, as to the affinities of the script and its translation. Other exhibits from the temple include a number of scarabs bearing the name of Amenhotep III, notably one recording the killing of 102 lions