

The turn of the century marked the well-known triple rediscovery of Mendel's principle of segregation in hybrids, which de Vries had confirmed in several plants before publishing his account in 1900. In the meantime, in searching for mutable plants in accordance with his theoretical views, he had begun so early as 1886 the cultivation of *Oenothera Lamarckiana* and the investigation of its variability. His first paper on *Oenothera* appears to have been in 1895, on the introduction of *O. Lamarckiana* into the Low Countries. The "Mutation Theory", first published in 1901-3, and afterwards translated into English, will remain a classic as the earliest example of the pedigree method applied to evolutionary problems, and as a statement of the broad biological distinction between mutations and fluctuations which has gained general acceptance in modern biology. It may safely be said that no work since the "Origin of Species" has had so profound an effect on evolutionary thought. The early years of this century were epoch-making, and progress has gone on with increasing rapidity since de Vries and Bateson led the way with the conception of discontinuity, or better, definiteness in variation.

Oenothera became classical material for the investigation of the more complicated problems of genetics and cytology. No other genus of plants has been subjected to such prolonged and extensive genetical investigations. By 1915 the mutations had been analysed in terms of change in chromosome numbers. The succeeding twenty years has disclosed new conditions in the genus, many species have been recognised as heterozygous, with two complexes yet breeding true owing to balanced lethals and fixed chromosome catenations. While the mass of evidence has necessitated many developments and re-orientations in points of view, yet the general conception of mutation which de Vries founded has remained the basis of genetical work, although views still differ as to the value to be attached to mutations as the raw materials of evolution.

De Vries continued his breeding work with evening primroses until the end. In 1909 was published "Species and Varieties: their Origin by Mutation", as a result of an American lecture tour, and in 1913 "Gruppenweise Artbildung", which is entirely devoted to analytical breeding experiments with *Oenothera*. In 1918-20 six volumes of his collected early papers were published, a seventh volume, of *Oenothera* papers (1915-25), being added in 1927.

De Vries was born in Haarlem on February 16, 1848, the son of a former Prime Minister of Holland. After study in various German universities, he occupied the chair of botany at Amsterdam from about 1878 to 1918, and was not tempted away by flattering offers from Berlin, Columbia and other universities. In Holland his name became a household word and in scientific circles his fame spread throughout the world. When he retired at seventy years of age, he went to live in the village of Lunteren. Here he continued his experiments with evening primroses in a private garden and laboratory attached

to his residence. Among the numerous scientific honours conferred upon him was the foreign membership of the Royal Society (1905), the Darwin Medal of the Royal Society (1906), and the gold medal of the Linnean Society (1929).

The genius of Hugo de Vries resulted from the combination of an acute, sagacious and clear-reasoning mind with a power of accurate observation which is rarely equalled. Every biologist would gain from a re-reading of "Intracellular Pangenesis", which was translated into English in 1910. It shows how unerringly his reasoning from the few known facts guided him to views which require extraordinarily little alteration in the light of modern detailed knowledge.

R. RUGGLES GATES.

Miss Ida M. Roper

MISS I. M. ROPER, who died at a nursing home in Bristol on June 8, in her seventieth year, was known widely for her devoted work as a field botanist, and as a contributor of well selected dried specimens to both the British Botanical Exchange Clubs. She had been honorary secretary and librarian of the Bristol Naturalists' Society for nineteen years, and was the only woman to become president (1913-16); also the first woman to serve on the Council of the Bristol and Gloucestershire Archæological Society. Her presidential address on mistletoe showed wide research on the host trees of that parasite; and her second annual address was appropriately entitled "Some Historical Associations of Flowers". Her power of organisation was remarkable. In 1920 she joined the Somersetshire Archæological and Natural History Society, and was also a useful committee member of the Botanical Section.

Miss Roper gave great help to the late J. W. White in the compilation of his excellent "Flora of Bristol", 1912, "not only for field work, but for assistance in literary research and in revision and correction for the press". More remarkable is the fact that for thirteen years she made the collecting and exhibition of local wild plants at the Bristol Museum and Art Gallery a labour of love, both in summer and winter. Her own herbarium of British Phanerogams and ferns, good and beautifully arranged, was recently given to the University of Leeds.

Miss Roper had a particularly good knowledge of British violets. Mosses also interested her, and the British Bryological Society excursions were among the numerous scientific or antiquarian meetings which she enjoyed attending. These included many British Association meetings; hence her cheerful and energetic personality was known to many.

In 1928 Miss Roper rediscovered *Erodium Ballii* in Ireland. Jordan had named it in 1852 from Irish specimens gathered by John Ball, F.R.S. In 1920 she found *Euphorbia platyphyllos* at Keynsham, near Bristol, Ray having noticed it in 1670 as a first record for Britain. Other notes and short articles on British flowering plants appeared in the *Journal of Botany* and in the *Proceedings of the Bristol Naturalists' Society*.

During most of her life, Miss Roper had been interested in monumental effigies, and had visited nearly every church in Gloucestershire and Bristol and many in Somerset to collect information. This culminated in 1930 in the publication of a handsome volume on "Monumental Effigies of Gloucestershire and Bristol".

H. S. T.

WE regret to announce the following deaths:

Dr. Arthur Bramley, head of the Department of Pure and Applied Science at Loughborough College, on July 19, aged fifty-six years.

Sir John MacFarland, Chancellor of the University

of Melbourne since 1918, a member of the Royal Commission (1899) on Technical Education, Victoria, and of the Government Board (1908) for the Protection of Aborigines, on July 22, aged eighty-four years.

Mr. L. M. Nesbitt, who was awarded the Murchison Grant in 1931 of the Royal Geographical Society for "his difficult journey through the Danakil country of Abyssinia", on July 20, as the result of an aeroplane disaster near the San Bernino Pass, Switzerland.

Sir James Watt, a well-known stock-breeder and forester, formerly chairman of the Forest Tree Growers under the Forestry Commission, on July 1, aged ninety-three years.

News and Views

International Folk Dance Conference

IN another column of this issue of NATURE (see p. 154) there appears a brief account of the conference, which formed part of the International Folk Dance Festival held in London last week. Lack of space for fuller reference does less than justice to a kaleidoscopic spectacle, of which the interest to students of the development of social custom and religious belief, more particularly in Europe, was profound. In its general results, the conference on the scientific aspect of the folk dance has made a very appreciable contribution to the advancement of this branch of the study of the art and life of the 'primitive' element in European populations, both of to-day and in the past. In its effect on future development, it should stimulate the application of that study to the revival and extension of the practice of folk dancing, as well as, possibly, lead to restoration of forgotten or neglected elements where traditional dances and customs are still a living factor in peasant life, as has already happened in certain of the dances which appeared at the festival. On the other hand, the references of many speakers to the obsolescence of traditional customs and dances among the folk and the contrast in the spirit of such dances as those of eastern Europe—for example, the hobby horse dance of the Calușari from Rumania—when the dance is a living functioning element, integral in rural life, argues that the folk dance as a revived art can become a factor in communal life once more only as an attenuated and, to a considerable degree, sophisticated form of expression. Its essential meaning vanishes with the fading away of its economic and magical background.

African Problems

SIR MALCOLM HAILEY, lately Governor of the United Provinces, India, and now director of the African Research Survey, accompanied by Mr. Donald Malcolm, formerly of East Africa, will leave England on August 15 for the purpose of a prolonged

journey of investigation on the African continent. During an absence which is expected to extend over a period of eight or nine months, Sir Malcolm Hailey will be engaged in testing and amplifying material which has been collected for a survey of African problems in a report to be published, if possible, in 1937. The survey has been undertaken by a Committee, of which Lord Lothian is chairman, as the result of a suggestion, made by General Smuts in his Rhodes lecture at Oxford in 1929, that it was time to consider how far the resources of modern knowledge were being applied to the problems of Africa, and how far it was possible to co-ordinate the experience of the different territories. The scope of the survey has been limited to Africa south of the Sahara. It will deal with the problems of each territory in the administrative, economic and scientific fields, and will estimate the character and amount of the material available for their study, as well as suggest the lines on which further research and extended study might prove profitable. The aim of the report will be to state facts rather than to criticise methods and results. Dr. E. B. Worthington, of the Department of Zoology, University of Cambridge, has been engaged for some time in digesting the facts relating to research bearing on Africa in all the physical sciences, and a similar digest is being prepared in the economic field. Funds for the cost of the survey have been provided by the Carnegie Corporation of New York.

Academic Assistance Council

THE second annual report of the Academic Assistance Council, published on July 20, contains a statistical summary of the present position of the 1,300 German university teachers dismissed as 'non-Aryans' or for political reasons. Approximately 650 emigrated from Germany; of these, 287 are already re-established in permanent positions and 336 of the others are being temporarily assisted to continue their research. The importance of organised academic