in his garden, devoting himself with skill and enjoyment to the cultivation of plants. Unfortunately, his health latterly left much to be desired, and he passed away on April 4.

The charm of Vines's personality gained for him a large number of warm friends among his colleagues, and botanists of a younger generation will always be grateful to him for the kindliness

will always be grateful to him for the kindliness with which he treated them and the ever ready help he so willingly extended to them.

F. E. W.

DR. MARIA A. VAN HERWERDEN

THE cause of biological sciences as linked to the evolution of man has sustained a severe blow in the death of Dr. Maria Anna Van Herwerden on January 26 at Utrecht, where she had long taught in the University in the Department of Embryology, Cytology and Genetics. From its early days she was a leader in the International Federation of Eugenic Organisations, as well as being one of the first supporters of the International Union for the Scientific Study of Population Problems, and had a wide circle of friends in Great Britain. In Holland her foresight and untiring work contributed much to building up the Central Committee of societies working in the field of human genetics, which resulted in the foundation last year of the Netherlands Institute for Research in Human Genetics and Race-biology. Mensch en Maatschappij, No. 2, says of her: "She was a modest woman, never putting herself forward, without self-seeking, simply serving the cause for which she stood, with great enthusiasm and devotion; her strong will and sense of duty found her always ready with help and advice. Her counsels always carried the greatest weight, founded as they were on wide knowledge illumined by clear insight and judgment and presented sympathetically as the outcome of a benevolent spirit in clear-cut elegant form . . . the Sciences of Human Genetics and Eugenics have lost their most outstanding exponent in our country in the passing of this courageous and talented woman."

WE regret to announce the following deaths:

Prof. R. Chodat, since 1889 professor of botany in the University of Geneva, rector of the University in 1908–10, and first president, in 1901, of the Association Internationale des Botanistes, aged sixty-nine years.

Sir George Duckworth, C.B., secretary of the Royal Commission on Historical Monuments (England) in 1908–33, on April 27, aged sixty-six

years.

Prof. W. H. Welch, emeritus professor of the history of medicine and emeritus director of the School of Hygiene and Public Health at Johns Hopkins University, Baltimore, on April 30, aged eighty-four years.

Mr. W. G. Whiffen, manufacturer of drugs and fine chemicals, one of the original fellows of the Institute of Chemistry, on April 28, aged eighty-

two years.

News and Views

Prof. C. V. Boys, F.R.S.

PROF. C. V. Boys, who is delivering the Guthrie Lecture of the Physical Society on May 4, is the doyen of physicists of what may be called the classical age of experimental physics. In one of his earliest researches he succeeded in photographing rifle bullets in flight. To Boys we owe the production of quartz fibres, those almost invisible threads having remarkable elastic properties which are indispensable in many galvanometers, etc. Boys produced them very simply by shooting an arrow, to which a short piece of partially fused quartz was attached, across the room, the unfused part being held behind. Employing these fibres, Boys was able to eliminate most of the errors of the Cavendish experiment and succeeded in weighing the earth with an accuracy neither before nor since surpassed. His experiments with bubbles set out in his fascinating book "Soap Bubbles and the Forces that mould them" are still an unfailing source of interest to old and young. Telescope design, sun dials and a camera for following a lightning flash throughout its course, have also occupied his attention. With the passage of the Gas Regulation Act, 1920, the design and construction of a calorimeter for measuring and recording the calorific value of towns' gas became a matter of urgency. Boys had already invented a gas calorimeter, but the step

from a 'snap' test device to a recording instrument was a long one. Boys succeeded, however, in constructing such a recorder, and it has been in continuous use recording the calorific value of gas supplied in certain parts of the country. The instrument incorporates a very large number of most ingenious but typically 'Boysian' devices. To mention but one, a 'thinking machine' automatically corrects the volume of gas burnt in the calorimeter to normal temperature and pressure and continually records the correcting factor.

Research and Development Lectures

WITH the object of promoting attention to the importance of research—both purely scientific and technical—and the utilisation of its results in the service of mankind, the British Science Guild arranged last year for the delivery of a Research and Development Lecture by Sir Harold Carpenter on "Metals in Industry". It was originally intended that one such lecture should be delivered annually, but Lord Melchett, president of the Guild, has given the scheme much wider national significance by arranging several discourses in which the broad trend of scientific development of subjects will be illustrated by experiments and practical demonstrations. By kind permission of the managers, the lectures will be