

technical schools, whilst the Germans in Czechoslovakia were the only minority to possess a university of their own. Indeed, in some ways the minority was more fortunate than the Czechs, for at the German University there was one professor for every forty students, whereas at the Czech University the ratio is one to forty-eight.

Altogether, the republic possessed some twenty-eight institutions of university rank. Advanced science teaching and original work is carried on at the universities, the polytechnics and at various special schools, such as that for mining at Příbram, the Brno veterinary college, and at forestry schools and institutes for glass technology. All have hitherto enjoyed generous support from the State. Moreover, a number of industrial undertakings have fostered specialized research work. Among these must be included the Radium Institutes of Prague and Jáchymov, the research laboratories of the Chemical Union, and those of the sugar industry, the leather trade, the forestry commission, the agricultural society and even much of the horticulture at Blatná is work of a scientific character.

As has been said before (see NATURE, Oct. 8, p. 637), various scientific and cultural institutions at Jáchymov (St. Joachimsthal), Usti (Aussig), Liberec (Reichenberg) and Opava (Troppau), to mention some of the more important ones, go with lost territory. These may still be utilized for local needs, but they are lost to Czechoslovak culture and science. More serious than this loss will be

the curtailment of revenue without any compensating reduction of State liabilities, and it is obvious that the mutilated republic cannot continue to support its scientific and other educational institutions on the same scale as hitherto. A forty per cent 'cut' is to be made in the budget of the ministries, and it is to be feared that research and science will feel the full force of this necessity. The outlook for university staffs and the research workers is anything but reassuring. Amalgamations and the closing of minor institutions seem inevitable, and indeed this has already commenced.

The outlook for Czech scientific societies and publications is also serious. With diminished scope and reduced resources, many societies and their journals will find it difficult to continue unless they are able to secure assistance from abroad. Meanwhile, throughout the anxious weeks of uncertainty and national disaster, the university staffs, school-teachers and public officials have shown a remarkable courage, self-denial and discipline although for them, each and all, the future holds no security. A nation that has survived previous cultural and national disasters, coupled with persecution, will not lightly give up the struggle for a better future. First efforts must be directed towards economic survival. When this is vouchsafed, it will again be possible for men of science to continue in the traditions of their distinguished predecessors.

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## Obituary Notices

### Miss Clotilde von Wyss

BY the death on November 7 of Miss Clotilde von Wyss, the world of education has lost an outstanding teacher of natural history, distinguished by her philosophical outlook and by her sympathetic attitude towards living things.

Clotilde von Wyss was born in Switzerland in 1871, and received the earlier part of her education at a school in Zurich, but from 1884 until 1891, she was a pupil at the North London Collegiate School. She was trained as a teacher at the Maria Grey College, Brondesbury, and after her course there gained distinction in the Cambridge Teachers' Certificate. From 1894 until 1897, she taught at St. George's High School, Edinburgh, and during that time she was an external student at the Heriot-Watt College, coming under the influence of the distinguished naturalist, J. A. Thomson, then a lecturer in the University. Miss von Wyss valued this experience extremely highly and always spoke of the late Sir Arthur Thomson with the greatest affection and

esteem. From 1897 until 1900 she taught biology at the North London Collegiate School, after which she was a lecturer at the Cambridge Training College for Secondary Teachers. In 1903, she joined the staff of the London Day Training College, and here for thirty-three years she was a successful and stimulating lecturer in natural history and hygiene and a highly valued colleague.

Miss von Wyss was a brilliant and inspiring teacher. She had a wide knowledge of natural history and an infectious enthusiasm for the educational principles which she upheld. She never lost sight of the interdependence of theory and practice, and after the free and friendly discussion of school problems that prevailed in her classes, her students went out to teach with a feeling of power and confidence. She had a delightful personality, a lightness of touch and a sense of humour which helped her in surmounting difficulties and affected even the most unpromising students. Teachers of many years standing still remember her with affection and

gratitude, and one of them writes, "even now her advice and criticism form the sheet anchor of my everyday teaching practice". Her ideals and personality have influenced many generations of students and she herself once said, "My family must number some thousands". These are to be found, not only among old students of the London Day Training College, latterly the Institute of Education (University of London) but also amongst the many London teachers who attended her evening classes organized by the London County Council.

Miss von Wyss was not only a successful lecturer but like all true teachers she was also continually a learner. Her observations and practical knowledge of wood-ants (*Formica rufa*) were used in 1936 by the Gaumont British Film Corporation in constructing a film, which not only in the spoken commentary but also in the details of the ant-life shown is both artistic and educational.

Convinced as she was of the value in education of the study of Nature along sound lines, Miss von Wyss helped in 1903 to found the School Nature Study Union, which stands for the sympathetic and first-hand study by the child of its natural environment, particularly of plants and animals. From 1906 until 1936, she was editor of the quarterly journal brought out by the Union, and the diversity and usefulness of the articles that have appeared during that time may be realized from the list of leaflets published by the Union, about seventy of which are reprints from *School Nature Study*. As a colleague on the executive committee of the Union, Miss von Wyss was invariably tactful and courteous; her opinions were always appreciated because they showed careful thought and sound judgment and on many occasions it was her intervention which cut the Gordian knot of a seemingly hopeless tangle.

Miss von Wyss has also played an important part in the wider sphere of influence which comes under the auspices of the B.B.C., and her gift of the power of presenting knowledge in a simple and interesting manner has enabled her to carry her message into schools untouched in any other way. She spoke and wrote with ease and clarity, and her views are to be found in many articles in educational publications and notably in her books, "Living Creatures", "The Teaching of Nature Study" and "The Elements of Biology".

Miss von Wyss will long be remembered as an inspiring teacher, an able and courteous colleague and a great pioneer in the school teaching of elementary biology.

R. F. S.

#### Prof. Leonard S. Dudgeon, C.M.G., C.B.E.

PROF. LEONARD S. DUDGEON, who died on October 22, aged sixty-two years, was educated at University College School, London, and entered St. Thomas's Hospital Medical School in 1894. After qualifying, he decided to devote himself to pathology, and was appointed clinical pathologist to St. Thomas's Hospital in 1903. Here he gained an extensive knowledge of morbid histology under the late S. G.

Shattock, with whom he collaborated in several investigations, and whom he succeeded as lecturer in pathology to the Medical School.

During the Great War, Dudgeon served as temporary colonel, A.M.S., in the Near East, and was consulting pathologist to the Expeditionary Force in the Balkans, being mentioned three times in dispatches. At the conclusion of the War, he returned to St. Thomas's, continued his pathological work, and on the retirement of Sir Cuthbert Wallace in 1928 became dean of the St. Thomas's Hospital Medical School, and later chairman of the Hospitals Deans' Committee and a senator of the University of London.

Although he contributed a number of investigations, Dudgeon was first and foremost a practising pathologist, and was never so happy as when applying his pathological knowledge in the elucidation of problems of diagnosis and treatment of obscure morbid conditions. One of Dudgeon's earliest investigations, published in 1906 in collaboration with P. W. G. Sargent, was on the bacteriology of aseptic wounds, which showed that microbes of the *Staphylococcus* group are of frequent occurrence in wounds that heal without suppuration. This subject was expanded in the Horace Dobell Lecture delivered to the Royal College of Physicians in 1908. Two or three other papers upon the staphylococci were published jointly with workers in his laboratory, dealing with the classification of members of this group of microbes by means of cultural, agglutination and other tests. Another subject upon which he published several papers was that of *Bacillus coli* infections of the urinary tract. He showed that two types of *B. coli* occurred in these conditions, one hæmolytic the other not, and tested the value of vaccine and other treatment upon them. He was also interested in infections of the intestinal tract, derived doubtless from his experience in the Balkans, and he made a considerable study of the bacterial flora of the human intestine under normal and abnormal conditions.

Various studies upon problems of immunity were also carried out by Dudgeon. With Shattock, he investigated the phenomena of phagocytosis in human blood-serum when this was mixed with horse-serum, and later on phagocytosis carried out with melanin particles, in which they showed that phagocytic cells vary as well as the serum. Dudgeon also investigated the presence of hæm-agglutinins, hæmoponins and hæmolysins in the blood obtained from cases of infectious and non-infectious diseases in man, and he brought together his studies on immunity in the Croonian Lectures delivered to the Royal College of Physicians in 1912. Blackwater fever, pathological changes in the tissues in acute diphtheritic toxæmia, the action of bile and bile-salts on animal red blood-corpules, and the reactions of the tissues and cells of the rabbit to injection of *Staphylococcus aureus*, a pathogenic agent, as compared with inert particles such as indian ink and colloidal silver, were other subjects investigated by Dudgeon, either alone or jointly with others.

R. T. H.