

government land or land donated for that purpose. The other lower agricultural schools may be established on private estates. The secondary schools are open to young men of all conditions who have completed the course in the primary public schools. The course of instruction covers four years, and includes in addition to the general studies the elements of the natural sciences, agricultural and rural economy, cattle raising, veterinary, agricultural law, horticulture, gardening, etc., together with carpentry and blacksmithing in their application to agricultural machinery. The primary agricultural schools are open to all who can read and write and have a knowledge of arithmetic as far as fractions. The courses last from one to three years. They include, aside from general studies, instruction in the elements of agriculture, with practical exercises. The classes in agriculture are intended for the instruction of young men of the peasant class. The course does not last longer than two years, and consists in the study of the rudimentary principles of agriculture and their application to the local conditions. The successful completion of the course in these three grades of the lower agricultural schools carries with it certain reductions in the military requirement, dependent upon the grade. The practical agricultural courses are designed to impart popular information in particular branches of agriculture. The instruction does not continue for more than a year, and consists in demonstrations, talks and practical exercises in different branches of agriculture in their application to local conditions, and especially to the conditions of the peasants. The diffusion of general agricultural information is to be provided for by: (1) the organization of public readings or lectures on agricultural questions for the benefit of different classes of the population; (2) instruction of the teachers in the public schools in agriculture, horticulture, gardening, apiculture, etc., and providing the public schools with small plats of land and means for cultivating the same; (3) the teaching of agriculture in the normal schools, and (4) the introduction of supplementary courses in agriculture in the village schools. There are now in Russia 3 schools for higher agricultural instruction, 9 agricultural high schools, 83 lower

schools and 59 special courses. Steps have already been taken for the establishment of about 50 additional agricultural schools.

---

THE INTERNATIONAL CATALOGUE OF SCIENTIFIC LITERATURE.

THROUGH the courtesy of the Secretaries of the Royal Society, we have received a copy of the *Acta* of the Second International Conference on a Catalogue of Scientific Literature, together with the report of the committee of the Royal Society, with schedules of classification, and hope to give full consideration to a subject which is probably the most important now before men of science. It is to be hoped that the verbatim report of the proceedings of the second conference will be printed promptly and freely distributed among men of science and scientific journals. This is especially important in view of the short time, now less than one year before the plans of the Conference are to be put into effect. In connection with this subject we quote the following editorial note from the last number of *Natural Science*:

"In our last number we gave a short account of the proceedings at the International Conference on Scientific Literature convened by the Royal Society. We did not think it necessary to say that we had abstracted this account from our highly valued contemporary *Nature*, since we assumed that the *procès-verbaux* were public property, and that copies would be distributed to the press, especially the scientific press, in due course. No copy has yet reached us, and we gather from *SCIENCE*, as well as from other sources, that no attempt has been made by the Royal Society to furnish the scientific public with any account of the work carried on by this Congress. We now recall the strange fact that the elaborate 'Report of the Committee of the Royal Society of London, with Schedules of Classification,' though bearing date March 30, 1898, was never heard of by many of those most interested until late on in the year (*vide* articles in *SCIENCE*, and by Professor Victor Carus in *Zoologischer Anzeiger*). It seems to us that the Royal Society does not realize its responsibilities. Why this shrinking from the public gaze? Are the members of the committees so afraid of criticism? This is a scheme

that appeals to the whole world of science ; it will have to be supported by money ; it will require the ardent cooperation of numerous individuals. To say the very least, it is not wise of the Royal Society to put on its usual airs of superiority and indifference in a matter of this kind. We have excellent reason for believing that the eminent and courteous Secretaries of the Royal Society are not responsible for this darkness where there should be light. Who, then, is the culprit?"

#### SCIENTIFIC NOTES AND NEWS.

MRS. ESTHER HERRMAN has given \$10,000 to the building fund of the Scientific Alliance of New York City. It will be remembered that about a year ago we gave an account of the plans for erecting a building for the different scientific societies of New York. Such a scientific center is greatly needed, and it is to be hoped that Mrs. Esther Herrman's generous gift will be followed by others.

MR. EDWARD E. AYER has resigned the presidency of the Field Columbian Museum, Chicago. A successor has not yet been elected.

PROFESSOR A. E. TÖRNEBOHM has been elected President of the Swedish Geological Society for 1899.

MR. W. ANDERSON, of the Geological Survey of India, has been appointed director of a survey of Natal about to be undertaken by the Colony.

THE Academy of Science of St. Petersburg has elected as honorary members the King of Sweden, the Queen of Roumania, Fridjof Nansen and M. Émile Sénart, member of the Institute of France.

M. A. LOREAU, President in 1898 of the French Society of Civil Engineers, and Count A. de Dax, Secretary of the Society, have been made by the Emperor of Russia a commander and a knight, respectively, of the order of St. Stanislas.

MR. R. T. BAKER has been made Curator of the Technological Museum of Sydney, N. S. W.

THE death is announced of Dr. Dumontpallier, an eminent Paris physician and an author of contributions to pathology, especially of the nervous system, at the age of 74 years ; and of

Lieut.-Col. Robert Pringle, M.D., of the British army, the author of numerous papers on the hygiene and diseases of India.

WE learn from the *Botanical Gazette* of the deaths of three foreign botanists, M. F. Gay, of the University of Montpellier, at the age of 40 years, a student of the green algæ, Pastor Christian Kaurin, of Sande Jarlsberg, Norway, at the age of 66, a well-known student of Scandinavian bryology, and Professor T. Carnel, professor of botany and director of the botanic garden at Florence.

THE *London Times* gives the following details concerning the Rev. Bartholomew Price, F.R.S., whose death we recently recorded : Born at Cole St. Dennis, Gloucestershire, in 1818, Mr. Price was educated privately and at Pembroke College, whence he obtained a first class in mathematics in 1840. He gained the University Mathematical Scholarship in 1842, and two years later was elected Fellow of his College. In 1844 he became tutor and ten years afterwards Sedleian professor of natural philosophy. In 1852 appeared the first volume of his elaborate work on the infinitesimal calculus ; the last of the four was not published till ten years later. This book obtained for him a considerable reputation in the mathematical world ; but his principal work in life was practical, and he will be remembered rather as the active Secretary of the University Press during the years of its first great activities after the death of Dean Gaisford, than as a mathematical professor. Bartholomew Price was a keen yet cautious man of business, and in his best days did much for the interests of the University both at the Press and as member of the Hebdomadal Council. Probably nobody of his time filled the latter post during so many years as he, or was so often called upon to be the spokesman of the Council in proposing new statutes and decrees to Congregation.

WE learn from *Natural Science* that at a meeting in Edinburgh, on November 8th, a committee was appointed to consider the feasibility of establishing a Scottish Zoological Garden. "The idea of a 'Zoological Society' was mooted, but did not, we are pleased to learn, find support. There are already three or four societies