out the preliminary work, and this Committee reported the results of its labors to an International Council which met last week in the rooms of the Royal Society.

At this meeting, which took place on December 12th and 13th, there were present: Professor B. Schwalbe, representing Dr. Milkau (Germany), Professor G. Darboux, representing Professor H. Poincaré, and Dr. J. Deniker (France), Professor A. W. Rücker, Sir M. Foster, Professor H. E. Armstrong and Dr. L. Mond (Great Britain), Professor J. H. Graf (Switzerland), Dr. E. W. Dahlgren (Sweden), Professor Korteweg (Holland), Dr. M. Knudsen (Denmark), Mr. Roland Trimen (Cape Coloný), Dr. W. T. Blanford (India), Señor del Paso y Troncoso (Mexico), and M. Metaxas (Greece). Dr. Ludwig Mond represented Italy in the absence of Profesor Nasini. Sir Michael Foster was elected chairman of the meeting.

It is proposed that the annual cost of a set of seventeen volumes shall be 17l, and on this basis it was announced that the number of sets subscribed for by the various countries was as follows:

United States of America	
Germany 45 France 35 Italy 27 Japan 15 Switzerland 7 Sweden $6\frac{1}{2}$ Denmark 6 Holland 6 Norway 5 Mexico 5 Canada $4\frac{1}{2}$ Hungary 4 Portugal 2 South Australia 2 Western Australia 1	United States of America
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South Australia2Western Australia1	
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One great difficulty in starting an enterprise of this magnitude is that a large amount of capital is needed to cover the preliminary expenses and to pay for the printing of the first set of volumes, and for other work which must be done before the grants from the various countries are received, and before any sales of the volumes to the public can be effected. This initial difficulty was met by the Royal Society, which generously offered to advance the necessary capital. This offer was accepted by the International Council, which expects to be in a position to repay the sum advanced during the next few years.

The Royal Society offered to act as the publishers of the catalogue, and to sign the necessary contracts with the printers and publishing agents. This offer was unanimously accepted by the International Council, which, after carefully examining the clauses of the proposed contracts, declared its approval of them.

The three principal countries which have not yet joined in the scheme are Russia, Belgium and Spain; and the Royal Society was asked by the International Council to address the Imperial Academy of Sciences of St. Petersburg on the subject, and also to take steps to induce the other countries to join in the catalogue.

A code of instructions for the use of all who are taking part in the preparation of the catalogue was considered, and, after some amendment, adopted.

In this connection the chief point discussed was whether it is desirable to publish complete lists of new botanical and zoological species. It was decided that lists of new species should be published, and that they should, as far as possible, contain all the additions to our knowledge in this direction made within the year.

It was also decided to include translations in the catalogue, but to indicate that they are translations. Schedules of classification for the subject indexes of the several sciences were adopted.

An executive committee was appointed, consisting of the four delegates of the Royal Society and the representatives of the four largest subscribers to the catalogue—France, Germany, Italy and the United States. Dr. H. Forster Morley was appointed director of the catalogue.

Finally, it was resolved to begin the work on January 1, 1901, and to include in the catalogue all literature published after that date.

SCIENTIFIC NOTES AND NEWS.

DR. H. C. BUMPUS, professor of comparative anatomy at Brown University and director of the Biological Laboratory of the U. S. Fish Commission at Woods Holl, has been appointed curator of invertebrate zoology and assistant to ural History, New York City. The office of assistant to the president, Mr. Morris K. Jesup, is an important executive position, as the Museum has no scientific director. It was created last year and was filled by Professor H. F. Osborn, who has resigned in order to devote himself more exclusively to research in vertebrate paleontology.

A FURTHER reorganization of the staff of the American Museum of Natural History has been made. A department of mineralogy has been formed, with Dr. L. P. Gratacap as curator, while R. P. Whitfield remains curator of geology, with Dr. E. O. Hovey as associate curator. Professor Franz Boas and Dr. Marshall H. Saville have been made curators, the former of ethnology and the latter of Mexican and Central American archeology, though Professor F. W. Putnam retains the head curatorship in the department of anthropology. In the department of mammalogy and ornithology, Mr. Frank M. Chapman has been made associate curator.

AT a meeting of the Paris Academy of Sciences on December 17th, announcement was made of the great number of prizes annually awarded. The Janssen gold medal was conferred on Professor E. E. Barnard for his discovery of the fifth satellite of Jupiter, and the Cuvier prize was awarded to Professor Anton von Fritsch, of the University of Prague.

M. PAINLEVÉ has been elected a member of the section of geometry of the Paris Academy of Sciences.

THE Elisha Kent Kane medal of the Geographical Society of Philadelphia, has been presented to Dr. A. Donaldson Smith, the African explorer.

DR. ANITA NEWCOMB MCGEE has resigned her position as acting assistant-surgeon, U.S. A., after having organized 'The Army Nurse Corps.' In accepting the resignation Surgeon-General Sternberg writes:

"I desire to express to you my high appreciation of the valuable services you have rendered during the past two and one-half years in selecting trained female nurses for duty at our field and general hospitals wherever their assistance has been necessary, and

in organizing the 'Army Nurse Corps' upon a satisfactory basis. You have shown excellent judgment and executive ability and have labored zealously both in the interest of the nurses and of the Government."

It is proposed to erect a monument in memory of the late Professor Camara Pestana, who fell a victim to his devotion to scientific research in the recent epidemic of plague at Oporto.

MONEY is being collected for a heroic bust of the late Professor Thomas Egleston, 'Founder of the School of Mines' of Columbia University, in 1864. The work of modeling has been intrusted to the sculptor, William Couper.

THROUGH the courtesy of Mrs. Joseph Leidy, Jr., of Philadelphia, a life-size oil painting of the late Dr. Joseph Leidy, fellow of the College of Physicians, president of the Academy of Natural Sciences and professor of comparative anatomy and biology at the University of Pennsylvania, has been presented to the College of Physicians.

THE death is announced, on December 25th, at Vineland, N. J., of Professor N. B. Webster, founder and for many years head of the Military Institute at Norfolk, Va. He was also a lecturer on scientific and educational topics. Professor Webster was a fellow of the American Association for the Advancement of Science, having been elected a member in 1853 and a fellow in 1874.

LORD WILLIAM GEORGE ARMSTRONG, inventor of the gun that bears his name and of hydraulic machinery, and the author of numerous scientific articles, died on December 27th. He was born in 1810, was elected a fellow of the Royal Society in 1843 and was president of the British Association in 1863. Lord Armstrong was knighted in 1858 and raised to the peerage in 1887.

THE death is announced of Dr. William King, for thirteen years connected with the Geological Survey of India, and for seven years its director.

MICHEL-EDMOND BARON DE SELYS-LONG-CHAMPS, an eminent entomologist and a high authority on Odonata, died at Liège on December 11th, in his eighty-seventh year.

SIR JOHN CONROY, F.R.S., formerly lecturer in physics and chemistry in Keble College, Oxford, died at Rome on December 15th.

THE Honorable David Carnegie, assistant resident commissioner for the British Government in West Africa, known for his explorations in Central Australia, has died from a wound made by a poisoned arrow.

THE death is announced of the Portuguese explorer, Major Serpa Pinto, at Lisbon, at the age of fifty-four years. Beginning in 1877, he crossed Africa from Benguella to Durban and published a book on his expedition.

WE regret also to record the following deaths among men of science abroad: Dr. S. J. Korschinski, the botanist, of St. Petersburg; Dr. Richard Altmann, assistant professor of histology in the University of Leipzig; Dr. E. Ketteler, professor of physics in the Münster Academy; Dr. Walter von Funke, formerly professor of agriculture in the University at Breslau, and Dr. Hermann Stechmanns, director of the zoological gardens in Breslau.

THE meeting of naturalists at Chicago during the Christmas holidays was very successful. Besides the discussion on 'State Natural History Surveys : Methods, Results, Cooperation,' in which Professors Birge, Nachtrieb, Smith, Eigenmann, Conway MacMillan, Cowles and others took part, about forty papers were read. A zoological and a botanical section were formed to receive the papers of more special interest. Over one hundred persons were in attendance. There were forty-one at the dinner. No permanent organization was effected. The following were appointed a committee on a meeting for next year: Professor S. A. Forbes, University of Illinois, President; Professors D. M. Mottier, University of Indiana; W. A. Locy, Northwestern University; Conway MacMillan, University of Minnesota, and C. B. Davenport, Secretary,

THE Association of American College Physical Directors held its annual meeting at Columbia University, New York, on December 29th and 30th. A number of papers relating to physical training and anthropometry were presented and discussed. Dr. R. Tait McKenzie, of McGill University, was elected president for the ensuing year.

THE Duke of the Abruzzi proposes to start from Buenos Ayres in 1902 on a voyage to explore the South Polar Seas. A ship is to be built in Italy for the purpose.

DR. F. A. $Coo\kappa$, who, it will be remembered, was a member of the Belgian South Polar expedition, has sailed for Europe to cooperate in the preparation of the account of the expedition which will be published in ten volumes.

MR. E. B. BALDWIN has purchased for his proposed Arctic expedition the *Esquimaux*, said to be the largest and staunchest of the British whaling fleet.

THE collection of minerals and meteorites, made by Mr. Clarence S. Bement of Philadelphia, has been acquired by the American Museum of Natural History, New York. This is a collection of much importance and will be described in a subsequent issue of this JOURNAL.

DR. EDWARD EVERETT HALE has recently given the Semitic Museum at Harvard University a collection of Egyptian antiquities, consisting of bronze, stone and terra cotta statuettes, vases and lamps, collected by Dr. Hale's brother, Charles Hale, while a United States Consul in Egypt.

MR. THEODORE MARBURG, of Baltimore, a well-known art collector, has presented to Johns Hopkins University a collection of antiques from the Island of Cyprus.

WE learn from *Nature* that the Botanical Department of the British Museum has recently acquired M. Bescherelle's herbarium of exotic Musci and Hepaticæ, consisting of 14,800 specimens of the former and 3,500 of the latter family. It contains a very large number of type-specimens.

THE sum of 10,000 crowns has been given by the King of Sweden and Norway to assist the archeological researches of Dr. L. Kjellberg in Asia Minor and the island of Lesbos.

SENATOR HANSBROUGH introduced on January 4th a bill creating a department of education, the head of which is to have a place in the cabinet.

THE daily papers report that Governor-Gen-

eral Wood has, in view of the probability that mosquitoes are concerned in the spread of yellow fever, issued orders for the use of mosquito netting in barracks and hospitals and on the field where possible, for the use of petroleum on temporary pools and for filling up permanent pools.

THE British Medical Journal reports that Professor Celli, who is a member of the Italian Parliament, will introduce drastic measures for the suppression of malaria in Italy. He would make punishable by law the neglect of landowners and all employers of labor to provide in malarial districts every means of fighting the the fever. Bosselli and Sonnino have proposed that the Minister of Finance purchase pure quinine and sell it to the public at a slight advance over cost. The profit could be applied to the extermination of malaria.

UNIVERSITY AND EDUCATIONAL NEWS.

An influential meeting was neld at San Francisco, on December 22d, to advocate the passage of an inheritance tax law in aid of the State University.

THE late Chief Justice Faircloth, of North Carolina, bequeathed \$20,000 to the Baptist Female University of Raleigh.

WE regret to learn that the will of the late George V. Clayton, giving about two and ahalf million dollars to the city of Denver for the establishment of a college for poor boys, is being contested by a brother.

THE great Hydraulic Laboratory of Cornell University is nearing completion and will be ready for work early in the spring. In its incomplete condition it has been used for experiments in connection with U. S. Deep Water Ways Commission, also in experiments for the New York State Canals. Investigations have also been made in reference to the water supplies of the City of New York and for the Lake Superior Power Company. Corporations and individuals wishing to make investigations for the benefit of Hydraulic Science or Public Improvements are invited to communicate with the Director of the College of Civil Engineering of Cornell University, Ithaca, N. Y. GROUND has been broken for the new Hall of Mechanical Engineering, for Syracuse University, and work is being pushed forward in order that it may be in readiness for occupancy by the spring of the next college year. The building will be of stone, four stories above the basement, 133 feet in length, by 60 feet in depth. Its equipment will be thoroughly modern in every detail.

THE report telegraphed from California to the daily papers that President Benjamin Ide Wheeler would this year succeed President Eliot, of Harvard University, is entirely without foundation.

CHANCELLOR WILLIAM H. PAYNE, PH.D., LL.D., of the University of Nashville, Tenn., has been elected to the professorship of the science and the art of teaching in the University of Michigan, vacant by the death of Dr. B. A. Hinsdale. Dr. Payne was Dr. Hinsdale's predecessor in this chair.

H. WADE HIBBARD, A.B., A.M., M.E, formerly connected with the Rhode Island Locomotive Works, Pennsylvania and Lehigh Valley Railroads, has been elected Professor of Mechanical Engineering of Railways, having for the past two years been assistant professor and Principal of the Railway School of Sibley College, Cornell University. This railway course is the latest addition to the several specialized finishing schools which are available for the 670 students in mechanical engineering now registered at Cornell.

DR. ARTHUR ROBINSON, lecturer on anatomy in the Middlesex Hospital Medical School, has been appointed professor of anatomy in King's College, London, in the vacancy caused by the death of Professor Hughes.

DR. FREDERICK GOLTZ, who has occupied the chair of physiology of the University of Strasburg for twenty-nine years, has retired.

AT Trinity College, Cambridge, the Coutts-Trotter studentship for the promotion of original research in natural science, especially for physiology and experimental Physics, has been divided between Charles Francis Mott, B.A., and Owen Williams Richardson, B.A., both scholars of the college. The tenure is until September 29, 1902.