D. Scudder, also well known as a writer, is a daughter of David C. Scudder.

T. D. A. COCKERELL

## SCIENTIFIC NOTES AND NEWS

Dr. E. A. Schafer, professor of physiology at Edinburgh, has been elected president of the British Association, for the meeting to be held next year at Dundee, beginning on September 4. The meeting of 1913 will be held at Birmingham.

As part of the celebration of the centenary of the University of Christiania a number of honorary degrees were conferred upon the following American men of science: William Morris Davis, of Cambridge, geographer and geologist; William Lewis Elkin, of New Haven, astronomer; Albert Abraham Michelson, of Chicago, physicist; Henry Fairfield Osborn, of New York, paleontologist; Theodore William Richards, of Cambridge, chemist; Charles Doolittle Walcott, of Washington, geologist, and Ludvig Hektoen, of Chicago, pathologist.

THE Prussian gold medal for science has been conferred on Dr. Wilhelm Waldeyer, professor of anatomy in the University of Berlin.

Dr. S. J. Meltzer, head of the department of physiology and pharmacology at the Rockefeller Institute for Medical Research, has been elected a member of the Imperial Leopoldina Carolina Academy of Naturalists, at Krakau.

We regret to learn that Dr. Thomas Dwight, professor of anatomy at Harvard University, is seriously ill at his summer home at Nahant.

Dr. Charles L. Parsons, professor of chemistry in New Hampshire College since 1892, has accepted the position of chief mineral chemist in the Bureau of Mines, Washington, in charge of miscellaneous mineral technology. In the same bureau, Professor F. G. Cottrell, of the University of California, has been appointed chief physical chemist, in charge of the western metallurgical field.

THE Rockefeller Institute for Medical Re-

search announces the election of Dr. Theodore C. Janeway as a member of its board of scientific directors, to fill the vacancy caused by the death of Dr. C. A. Herter. This board has the entire control of the scientific work done by the institute. Its other members are Dr. William H. Welch, of Baltimore, Dr. Theobald Smith, of Boston, and Drs. L. Emmett Holt, Herman M. Biggs, T. Mitchell Prudden and Simon Flexner, of New York.

Professor Gies, Columbia University, was recently elected a scientific director of the New York Botanical Garden to succeed Professor Charles F. Chandler.

The Journal of the American Medical Association states that a committee has been organized to do honor to the one who has been so largely responsible for the progress realized in the knowledge of diseases of tropical countries, Sir Patrick Manson, the movement for the international manifestation having been started in France. It is proposed to present him with a portrait medal, in gold, the work of Dr. Paul Richer, professor of anatomy at the Beaux-Arts in Paris. The forty-five members of the committee represent the leading countries of the globe; the list includes Drs. W. H. Welch, G. N. Calkins, F. G. Novy, C. W. Stiles and H. B. Ward of this country.

A DELEGATION named by Professor Alexander Smith, head of the department of chemistry of Columbia University, to represent the American Chemical Society at the National Conservation Congress in Kansas City the last of the month has been announced. It is composed of Professor E. H. Keiser, Washington University, St. Louis; Chancellor Samuel Avery, University of Nebraska; Professor Herman Schlundt, University of Missouri; Professor H. S. Bailey, University of Kansas, and Dr. H. E. Barnard, State Laboratory of Hygiene, Indianapolis.

THE president of the British Board of Education has appointed Dr. Francis Grant Ogilvie to the post of director of the Science Museum, which he will hold in addition to his present office of secretary for the Science Museum and Geological Survey and Museum.

CAPTAIN LYONS, F.R.S., has resigned from the lectureship in geography at University of Glasgow.

Admiral Herz has retired from the directorship of the German Nautical Observatory at Hamburg.

Mr. T. Sheppard, of the Hull Municipal Museums, has been appointed expert adviser to the new public museum at Scunthorpe.

MR. WILLIAM MARCONI has been at St. Johns, N. F., conducting experiments with the object of ascertaining the advisability of installing a more powerful station on the spot where his first wireless telegraph tests were made.

MR. ARTHUR ALLEN, to whose expedition to Colombia attention was recently called in Science, goes as a representative of the Department of Birds and Mammals of the American Museum of Natural History.

Professor Junius Henderson, of the University of Colorado, has spent the greater part of the summer in North Park and Middle Park with one of the State Geological Survey parties. He has been working out the stratigraphic positions of the various sedimentary formations. Large collections of fossils were obtained, as well as living land and freshwater mollusks.

Signor Calissano, Italian Minister of Posts and Telegraphs, accompanied by telegraphists who had assembled at Como from all parts of the world, went on September 1 to Camnago to pay a visit to the grave of Alessandro Volta, the inventor of the electric battery which bears his name. The minister and delegates placed wreaths on the tomb, and Signor Calissano, Signor Battelli, a member of the Italian Chamber, M. Buels, director of the Belgian Telegraphs, and Signor Pietro Volta, a nephew of the inventor, made speeches. A memorial stone was unveiled bearing an inscription recording the esteem in which Volta is held by telegraphists all over the world.

Dr. Francis A. March, professor emeritus of comparative philology and English literature at Lafayette College, and eminent for his contributions to the scientific study of language, died on September 9, aged eightysix years.

Dr. Albert Ladenburg, professor of chemistry at Breslau, and distinguished for his researches in organic chemistry, died on August 15, aged sixty-nine years.

Dr. Louis C. de Coppet, known for his work in physical chemistry, has died at Nice, at the age of seventy years.

REVEREND F. J. JERVIS-SMITH, F.R.S., late university lecturer in mechanics at Oxford, died on August 23, aged sixty-three years.

MASUCHIKA SHIMOSE, a Japanese chemist who gave his name to the Shimose powder, died on September 6, aged fifty-two years.

Or the seventy-five doctorates in philosophy conferred by Columbia University this year, nine were in chemistry and one in physics. In the report published in SCIENCE on August 18, those who presented theses on the weight of a falling drop were attributed to physics instead of to chemistry.

The fourth annual meeting of the American Institute of Chemical Engineers will be held in Washington, D. C., Wednesday to Friday, December 20 to 22. A number of papers will be presented on the general subject of patents, and the manufacture and testing of explosives as well as of a number of other chemical engineering subjects. One day will probably be devoted to visits to the technical chemical engineering plants in Baltimore and vicinity. Visits to laboratories and other points of interest in Washington will also be arranged for.

THE seventh International Congress for Criminal Anthropology will meet at Cologne, from October 9 to 13.

Mrs. E. H. Harriman has given \$50,000 for the establishing of a bacteriologic and pathologic laboratory to be attached to the present Southern Pacific General Hospital, San Francisco. It is to be known as the Harriman Memorial Laboratory.

WE learn from the *Journal* of the American Medical Association that the second field commission for the investigation of pel-

lagra has left London for the continent. It is composed of Dr. Louis Sambon, lecturer, London School of Tropical Medicine and parasitologist to the Wellcome Physiological Research Laboratories, and Dr. Albert T. Chalmers, lecturer on pathology and animal parasitology, Ceylon Medical College. These two members of the commission will be joined en route by Professor Haase, of Memphis, U. S. A., Dr. Cole, of Atlanta, U. S. A., and Dr. Martinez, of Yucatan, Mexico. The commission will proceed to the study of the epidemiology and etiology of pellagra in Hungary, the Austrian Tyrol, Spain, and the south of France. The governments of Austria-Hungary and of Spain have shown interest in the work and have granted every facility for prosecution of the study. Mr. H. S. Wellcome has defrayed the expenses of the present field commission. The work in Italy in the spring of 1910, by Dr. Louis Sambon, has gained many converts to the belief that pellagra is not due to eating damaged maize, but to a parasitic disease conveyed by the bite of a fly.

In constructing the huge topographic and geologic maps of the United States every detail of the work is done by the survey, from the work of the topographers who make the maps in the field down through the various stages of drafting, lettering, editing, engraving and lithographic printing in many colored inks. There is practically no compilation about the survey maps; they are based on surveys made on the ground, and the office work consists simply in putting them into form for issuance to the public. They depict most faithfully the characteristics of the areas surveyed. Every year with the coming of the open field season numerous survey parties hurry away from the Washington office to the four quarters of the United States as well as to Alaska, and the result of their season's work is the topographic and geologic mapping of tens of thousands of square miles of all sorts of country ranging from the most forbidding swamps and morasses to the loftiest of the glacier-covered mountains of the Rockies and the high Sierra, and including the most valuable mineral deposits of the nation. While these parties are thus traversing untrodden fields, the survey's engraving and printing plant throughout the summer, as in fact through all the year, is turning out hundreds of thousands of copies of the results of the previous year's field work. In a single midsummer month this year the survey plant printed 102,404 topographic maps, 5,345 geologic folios, each containing many maps, and 111,170 copies of other geologic maps, charts, etc. Besides its own maps a great number of maps are also printed by the survey engraving division for other branches and departments of the government. Stephen J. Kübel, chief engraver, has run this extensive engraving and printing plant under the director of the Geological Survey for the past 22 years. Years ago he instituted an almost exact costkeeping system which has enabled him to enter into close competitive bidding on some of the government contract work and to run the engraving plant on thoroughly up-to-date business lines. Most of the maps are printed in colors and for the total number of 218,919 maps and charts printed during the month mentioned the number of separate printings or impressions was 1,287,609. The geologic map of North America, which is now being printed in four sheets, shows 42 different color and pattern distinctions. Each sheet requires 20 separate printings, and the 13,700 copies of the southwest sheet of this map printed during the month necessitated 274,000 printings. The total edition of 13,700 copies of the complete map has required 1,096,000 printings.

In the course of his speech in the British parliament on the Indian Budget, the under secretary for India said: "The most urgent need is the education of the masses in the principles of hygiene. There is a limitless field, indeed, for private enterprise here. Tolerable though archaic habits and practises may be in the open country, when transferred to the crowded town they become unsupportable. If there were less ignorance and less perversity, plague would never find in the country the lodgment that it has. It is an established fact that persons living under proper sanitary

conditions are virtually exempt from the disease. Plague does not attack the gaol population or the native army; it attacks the ordinary civil population, because they live in houses which are not rat-proof, because they treat the rat almost as a domestic animal, because large numbers of them refuse to trap or kill it, and because they will not adopt the sanitary precautions which are pressed upon them. Plague has now been present in India for fifteen years, and the appalling total of nearly 7,500,000 deaths from it has been re-Of this the Punjab accounts for nearly two and a half million deaths-almost a third of the total. The tale of deaths in the last ten years represents 1 per cent. of the population of that province. When I think of the sensation that was caused in this country a short time ago by what was by comparison a minor outbreak in Manchuria, resulting in only 50,000 deaths, I fear that people in this country do not realize the awful ravages that this scourge is daily making among the Indian Scientific research has established people. that it is conveyed by rat fleas to human The two effective remedies are inbeings. oculation and house evacuation. Professor Haffkine has discovered a vaccine by which comparative though not absolute immunity can be temporarily secured. But by an unhappy accident at Mulkowal several villagers died of tetanus after inoculation. tion in India has never recovered from this disaster. It is hated by the people and avoided by them except when the disease is in their midst. House evacuation is easier in villages than in towns. Administrative arrangements by which plague is now fought include the provision of special plague medical officers and subordinates, and they and the district staff are on the lookout for the occurrence of plague, and when it occurs they visit the locality, offer inoculation, give assistance to persons to vacate their houses, advise rat destruction, and so on. To the prevention of plague there would seem to be no royal road. The case is one in which lavish expenditure of money is not called for, and would be useless. But the provincial governments have spent,

and are spending, a good deal. The United Provinces have expended some £600,000 up to date. The Punjab government is spending The improvement of about £40,000 a year. the general sanitary conditions under which the population lives is more and more clearly seen to be essential, and to improve them the local governments are devoting all the money they can spare. They have been helped to do so by the grants for sanitation made by the government of India. The scientific difficulties are enhanced by the difficulty of overcoming prejudice and ignorance, habit and apathy. In some districts there is actually religious objection to rat-killing and inoculation. No better work can be done for India than to offer example and instruction in principles of life that appear to us elementary, and to strive to exorcise the foes of progresssuperstition and resistance to prophylactics. There are, I am glad to say, signs that the sanitary conscience is beginning to awake among the people."

## UNIVERSITY AND EDUCATIONAL NEWS

Professor Wilbur J. Fraser has resigned as head of the department of dairy husbandry of the University of Illinois to devote his entire time to a professorship which he will retain within the department. Professor Fraser has been head of this department since its organization some fifteen years ago, during which time it has grown until it now numbers twelve members and its resources amount to over fifty thousand dollars annually exclusive of receipts.

W. C. Ruediger has recently been advanced from assistant professor to professor of educational psychology in the Teachers College of the George Washington University.

The following new appointments have been made at the University of Colorado: Max M. Ellis, Ph.D. (Indiana), instructor in biology; Arthur G. Vestal, B.A. (Illinois), instructor in biology; Paul M. Dean, M.A. (Colorado), instructor in chemistry; Harold E. Robbins, M.A. (Yale), instructor in physics; Whitney C. Huntington, B.S. (C. E.) (Colorado), for the past year assistant, instructor in civil