of collecting and transmitting statistics on crops and livestock and livestock products by cable, and providing for promoting the use of standard methods in collecting statistics in the various countries, and for the development of standard index numbers of prices, production, factors of expenses and net income.

A PRELIMINARY statement by the British Ministry of Agriculture relating to the World Poultry Congress in 1930 has been issued. The Crystal Palace has been made headquarters of the congress. The Ministers of Agriculture for England and Wales and Northern Ireland, and the Secretary of State for Scotland will be presidents of the congress; Mr. F. C. Elford (Canada), president of the International Association of Poultry Instructors and Investigators, will be first vice-president, with Lord Dewar and Dr. Edward Brown, vice-presidents. Invitations have been sent to the National Farmers' Union and to the National Poultry Council for their respective presidents to become vice-presidents of the congress. The congress will open on July 22 and close on July 30, 1930, following which a series of tours will be arranged, covering the whole of the British Isles. The Crystal Palace will accommodate the international display of live stock, and practically the whole of the lecture sessions and business meetings will be held there during the congress. The Ministry of Agriculture recognizes that the success of the congress depends to a large extent upon the whole-hearted cooperation of all sections of the poultry industry, and a gratifying response has already been made by the enrolment of a large number of voluntary workers upon the following committees and sub-committees: General purposes, congress building, live stock, education, papers and sessions, press and propaganda, trade exhibits, transports and entertainment and visitors' accommodation and reception, while a woman's committee will subsequently be formed. The director of the congress will be Mr. P. A. Francis, and the secretary Dr. V. E. Wilkins, of the Ministry of Agriculture.

THE Department of Scientific and Industrial Research has published the thirteenth report on the investigation of atmospheric pollution; this is in continuation of the series of reports of the Advisory Committee on Atmospheric Pollution, hitherto issued by the Meteorological Office, the change following upon the transfer to the Department of Scientific and Industrial Research of responsibility for the government's share in the work. The *British Medical Journal* states that the Advisory Committee will become a standing conference of cooperating bodies. In the report the deposit of impurity at 80 different stations in the United Kingdom is considered; a classification is made according to standards of increasing quantity of deposits, this being denoted by the letters A to D in order of quantity of pollution. It is satisfactory to note that there has been a substantial improvement in atmospheric purity in the areas covered; in 1914–1915 the number of stations ranking as A and B was 54 per cent. of the total; in the year under review the number was 87 per cent. of the total. A steady decrease in the quantity of sulphates deposited in London and Glasgow has been observed, and it is stated that this is, as least in part, due to the increasing use of coal gas, this having presumably replaced raw coal. The tables included in the report give details month by month of the deposits collected at the various stations, showing wide variations in their composition. A section dealing with suspended smoky matter in the air illustrates the effect of the coal stoppage of 1926, while the obstruction of ultra-violet radiation by smoke is brought out by a curve which indicates that nearly the whole of the ultra-violet rays is cut off by a comparatively small amount of smoke in the air. Much of the matter contained in this slim volume—it contains less than sixty pages—is of considerable scientific interest, and should be of some practical value to those engaged in public-health work, but its publication at the net price of 6s. 6d. will not encourage a wide circulation.

UNIVERSITY AND EDUCATIONAL NOTES

A GIFT of $100,000 has been made to St. Lawrence University from S. L. Carlisle and Company of New York City. A letter from the company, made public by Dr. Sykes, stipulated that the gift was to be payable at the rate of $20,000 a year for five years and was to be used by the university to promote the teaching of forestry, although its use was not restricted to the formal teaching of that subject in the school.

THE Institute of Mathematics and Applied Mathematics of the University of Paris, dedicated to the memory of Henri Poincaré, was opened on November 1, with ceremonies presided over by Premier Poincaré. The money for building the new institute was provided by Baron Edmond de Rothschild and the International Education Board, which also subscribed $18,000 for the founding of a chair of applied mathematics. The new building contains two lecture halls capable of seating 200, and also 100 students' offices and studies on the ground floor, a library on the second floor and display rooms for astronomical and geometrical models on the third floor.

JULIUS ROSENWALD has pledged a contribution not to exceed $5,000 for a period of five years for the purchase of books, periodicals and other scientific publications for the medical library at the University of Chicago, the yearly contributions to match what-

ever sums are contributed from other sources up to the amount of the pledge.

DR. TORALD SOLLMANN, professor of pharmacology at Western Reserve University, has been appointed dean of the school of medicine. He succeeds Dr. Carl A. Hamann, whose request that he be permitted to resign was regretfully acceded to by the trustees.

THORNE FITZ RANDOLPH has resigned his position as assistant principal and instructor in chemistry in the Franklin High School to accept a position as professor of chemistry in charge of the chemistry department of the Indianapolis College of Pharmacy, Indianapolis.

DR. HAROLD B. FRIEDMAN, instructor at the University of Maine during the past year, has been appointed research assistant in chemistry at Columbia University for the coming year.

C. A. HOPPERT, research chemist for the Soft Wheat Millers Association, has become associate professor of biological chemistry at the Michigan State College.

ERNEST VICTOR JONES, formerly science adviser and professor of inorganic and physical chemistry at the University of Nanking, China, after spending a sabbatical year at the University of California, has accepted the position of head of the department of chemistry at Birmingham-Southern College, Birmingham, Alabama.

DISCUSSION AND CORRESPONDENCE

PHYSIOLOGY AND MEDICINE

THE address of Professor C. A. Lovatt Evans on the "Relation of Physiology to other Sciences,"[1] delivered before the section on physiology of the British Association for the Advancement of Science this summer at Glasgow, presents questions of very great interest, especially to me, from the point of view of the relation of physiology to medicine, that is to say, to the study of disease. Professor Evans has in general adopted very liberal and on the whole just views of the relations of physiology and medicine. His address was concerned with this particular relation as one only of the many intellectual contacts of physiology with the world of science. But it is a relation which has occasioned much discussion in times past, and still continues to do so; one furthermore about which there is yet no unanimity of opinion, either in the United States or elsewhere. In England, especially, traditional views have regarded the position of medicine in a scheme of knowledge to be somewhat different from the one which is now held by the Medical Units in London and elsewhere in the United Kingdom at least in part, and certainly by three university clinics in the United States, at Harvard, Chicago and Cornell, and at the Rockefeller Institute in New York. If I single out this subject for discussion from among the many interesting ones about which Professor Evans spoke, I do so because I believe this issue is still unsettled and important and because I think something is to be gained in the interests of the general understanding of the problem by directing attention to it again.

The prevalent view in the United States is that one of the great functions of the university clinic is the effort to get on with enlarging and deepening knowledge of disease. We believe that the person most likely to do this is the person who has elected this to be the great interest of his life and work. The meaning of what has been so badly labeled the full-time position exists, in the view at least of three of the institutions just mentioned, for the purpose of affording opportunity to devote themselves to this end on the part of those professors of medicine who accept their posts with the awareness that this is at least one of the great purposes of their calling. Those professors who adopt this interpretation of their posts must necessarily adopt also, perhaps not always consciously, a definition of medicine, meaning by medicine in this particular instance the study of disease.[2] They wish to be so trained and so to train those students who elect to follow in their scientific footsteps as to master whatever technique, whether physical, chemical, physiological or immunological, is necessary in order to advance their pursuit. They are in no other situation in this regard than professors of biology or physiology or of any other scientific discipline. Nor are they under any illusion concerning the difficulty of their undertaking.

Their attitude toward the study of disease is, it seems, different from that which Professor Evans assumes or at all events discusses. I believe that in his remarks there is failure to distinguish between persons and disciplines. A discipline, conceptually, is a unit conditioned by its subject-matter; its unity does not depend on what the training and antecedent interest are of the person who cultivates it. It may very well be that an anatomist or a physiologist may work at disease or that for reasons of his own a physician may study anatomy or physiology. That is his own affair and does not concern the logical structure of the sciences. Some of us in America have appre-

[1] SCIENCE, 1928, 68: 259–264 and 284–291.

[2] This definition is discussed at length in my paper, "Medicine and Science," *Journal of Philosophy*, 1928, XXV: 403, and need not be elaborated here.