In addition to his teaching and administrative duties, Dr. Conklin generously devoted considerable time to public lecturing. He was especially fond of presenting to psychological audiences the life and manners of his teacher Hall. In other than psychological groups he probably was most devoted to the discussion of religious topics, especially the comparison of the various forms of worship.

The essentially human interests of Dr. Conklin were revealed in his general literary reading. Samuel Johnson, the man, appealed to him inordinately. Upon occasion Dr. Conklin could spend an entire evening recounting various interesting items concerning Johnson, and evaluating the literature centering around this interesting figure. In him he found a subject which afforded scope for the expression of his own great fund of humor.

ROBERT H. SEASHORE
R. C. DAVIS
J. R. KANTOR

## RECENT DEATHS

DR. WILLIAM HENRY METZLER, formerly professor of mathematics and dean of the Graduate School of Syracuse University, later dean of the State Teachers College at Albany, N. Y., died on April 19. He was seventy-nine years old.

DR. RICHARD A. VON MUTTKOWSKI, since 1925 head of the department of biology of the University of Detroit, died on April 15 at the age of fifty-six years.

THE death at the age of sixty-seven years is announced of Dr. Frederick Barry, professor of the history of science at Columbia University.

CHARLES C. WILLOUGHBY, since 1928 director-emeritus of the Peabody Museum of Harvard University, died on April 21 at the age of eighty-five years.

DR. JOHN EDWARD WILLIAMS, professor of mathematics and dean of the faculty of the Virginia Polytechnic Institute, died on April 19. He was seventy-five years old.

LIEUTENANT COLONEL WALTER W. PLECHNER, assistant director of research of the Titanium Division of the National Lead Co., was killed in action in North Africa on March 4.

WILLIAM R. WEBB, assistant deputy chairman and director of Eastman Kodak, Ltd., England, died on April 16. He was fifty-four years old.

DEAN WILLIAM H. G. LOGAN, of the Dental School of Loyola University (Chicago College of Dental Surgery) since 1920, died of a heart attack on April 6 at the age of seventy years. Dr. Paul C. Kitchin, secretary of the dental subsection of the American Association for the Advancement of Science, writes: "Dr. Logan was an oral surgeon and educator of international reputation and the holder of honorary degrees from the University of Michigan, Loyola University and the National University of Ireland. During World War I Dr. Logan played a prominent part in the establishment of the Army Dental Corps. From 1917 to 1919 he was chief of the Dental Division of the Surgeon General's Office and held the rank of colonel. He was a past president of the American Dental Association (1917–1918) and of the American Association of Dental Schools (1928) and a fellow of the American College of Surgeons."

*Nature* reports the death of Sir Sidney Burrard, Bart., F.R.S., formerly Surveyor-General of India and superintendent of the Trigonometrical Survey of India, on March 16, aged eighty-two years; of H. G. Denham, dean and professor of chemistry, Canterbury University College, Christchurch, New Zealand, and chairman of the New Zealand Council of Scientific and Industrial Research, aged sixty-two years; of J. Eustice, emeritus professor of engineering at University College, Southampton, on February 24, aged seventy-eight years, and of Dr. F. G. Parsons, research fellow in anthropology at St. Thomas's Hospital, formerly professor of anatomy, University of London, on March 11.

# SCIENTIFIC EVENTS

## SWEDISH FOREST PRODUCTS

ACCORDING to the Swedish International Press Bureau, as reported in *Nature,* a survey of Sweden's production of forest products of a chemical nature was recently made by Otto Cyren, director of the Swedish Chemical Office. Speaking of chemical pulp, one of Sweden's most outstanding export products in normal times, he said that Sweden is in a very good position in respect of quality, as the slowly growing timber in northerly regions gives very long fibers, and consequently the strongest pulp and paper are obtained from it. The most important by-product of the sulphite pulp production is sulphite spirit, which up to most recent years was the only product recovered. Mixed with petrol, it was of importance as a motor fuel. The purity of the rectified spirit now surpasses that obtained from grain and potatoes, and it is therefore used also for human consumption. Researches on the possibility of using sulphite spirit as the basis of more highly developed products were not initiated until the present crisis made the matter urgent. As an instance he described the work carried on by the

Mo and Domsjo Company. In 1941 this company completed a factory for the production of sulphite spirit with a capacity for 10 million litres of 95 per cent. spirit a year. At this factory intensive research work is going on, with the view of producing various synthetic products from the spirit. From the black lye obtained in the sulphite pulp process there are produced *inter alia* certain crude acids, the first factory for using this raw product having been built at the Bergvik och Ala pulp mill. The sebacic acid produced here, called "pine fatty acid," is used to replace fat in washing mediums, as a substitute for linseed oil in paints, etc.

The output of charcoal in Sweden has trebled in the last couple of years, mainly due to the extensive producer-gas traction of motor-cars, and the by-products from the carbonization are now being recovered more carefully than before. The charring of old tree stumps, with their high content of rosin, alone gives about 20,000 tons of tar a year. Wood tar is now used as motor fuel for fishing boats in place of crude oil, and has probably saved the Swedish high-sea fisheries from total stoppage. It is also used for the production of lubricants. In summing up the situation for the Swedish forest products industry, Mr. Cyren stated that in 1941 the Swedish exports of woodstuffs had declined by about one third, and the pulp and paper by two thirds, compared with the pre-war level. But in compensation the forests, by supplying cattle feed, wood fuel, motor fuel, lubricants, textile material, fatty oils and a good many other useful products, have saved the country from catastrophe.

## INDUSTRIAL RESEARCH LABORATORY OF THE UNIVERSITY OF ROCHESTER

AN industrial x-ray laboratory equipped with a million-volt unit, one of the most powerful in the world, has been established at the University of Rochester. The laboratory is the joint enterprise of the university and eight industries. It was formally opened on April 19 with an inspection visit by industrial leaders, educators, scientific men and Army and Navy ordnance department representatives.

Dr. E. E. Charlton, of the General Electric Research Laboratories, who designed the apparatus, said in an address at a dinner in connection with the "open house" that the project represents "a novel and most useful cooperation in the joining of hands of university and industry in the developing of the full use of x-ray in the industrial field."

With the development of million-volt x-ray machines, minute inspection of heavy steel parts is possible in a matter of seconds and minutes, as compared with the hours or days required under the quarter-million volt apparatus used until recently. He continued: "Industry is waking to the potential value of this powerful new development, but this installation in Rochester will most usefully facilitate the exploring of its applicability to many diverse products at the same time that new problems are presented in devising the most efficient means for using this new tool. For instance, it seems most unlikely that the photographic film and the intensifying screen developed for use in industrial x-ray laboratories to-day are the optimum for million-volt radiography."

John H. Clough, president of the General Electric X-Ray Corporation of Chicago and an alumnus of the university, welcomed the enterprise as "recognizing a type and degree of cooperation between industry and an educational institution that I believe is unique in its conception. Certainly the university is to be congratulated upon its recognition and enthusiastic acceptance of a war-time responsibility to assist American industry in the production of materials that will spell victory for the cause of liberty, and the industries of the Rochester area that have participated in the establishment of the new laboratory are to be complimented upon their generous cooperation with an institution that can be the source of much assistance during this period of tremendous pressure on the country's manufacturing abilities and facilities."

He added, "the powerful x-ray apparatus thus made possible studies that provided a guide to manufacturing procedures that are faster and better than anything we have heretofore enjoyed." Beyond the practical value of the new laboratory, in his opinion, is the significant relationship between education and industry "that can lead to advances beneficial not only to themselves, but to all mankind."

The immediate use of the unit at the University of Rochester is to speed production of war materials in local industries by rapid tests of castings, making it possible to detect flaws in pilot castings to determine if the casting technique is correct before starting mass production.

The undertaking was financed by eight Rochester industries, among them Eastman Kodak Company, Rochester Products and Delco Appliance divisions of General Motors; the Pfaudler Company, the Rochester Gas and Electric Corporation, Consolidated Machine Tool Corporation, Symington-Gould Company and the Rochester Brewing Company.

The university supplies the scientific staff to make the tests and is free to use the equipment for research in metallurgy, medicine and engineering. Part of a second million-volt unit is installed in another part of the laboratory for medical research on cancer. The remainder will not be available until after the war.

Dr. Alan Valentine, president of the university, expressed its deep appreciation of the vision and generosity of the industrial heads who made the proj-