

"Methodology in Learning": Walter S. Hunter, Brown University.

THE PITTSBURGH MEETING OF THE AMERICAN CHEMICAL SOCIETY

THE Pittsburgh meeting of the American Chemical Society will be held from September 7 to 11. Dr. Edward Bartow, of the State University of Iowa, is the retiring president, and Dr. Edward Ray Weidlein, director of the Mellon Institute for Industrial Research, Pittsburgh, is president-elect.

On Wednesday, September 9, the "Central Day" of the meeting, the following program has been arranged:

- 9:00 A. M.—Open House in Oakland. Inspection of Carnegie Institute, Carnegie Institute of Technology, Cathedral of Learning and the University of Pittsburgh, Mellon Institute of Industrial Research and the U. S. Bureau of Mines. Members are requested to visit these institutions only on Wednesday morning.
- 12:00 M.—Group Luncheons in Oakland.
- 2:00 P. M.—General Meeting, Carnegie Music Hall, Oakland.
- Pittsburgh Award, followed by three general papers: E. F. Armstrong, president, Association of British Chemical Manufacturers, "Whither." Friedrich Bergius, Nobel Laureate, general director, Deutsche Bergin, A.-G., Heidelberg, "Problems of Industrial Pioneer Work." John Johnston, director of research, United States

Steel Corporation, "Some Aspects of the Chemistry of Steel."

7:00 P. M.—Subscription Banquet (\$3.00), Ballroom and Urban Room, William Penn Hotel.

9:00 P. M.—Following the banquet the American Chemical Society Award in Pure Chemistry (initiated by A. C. Langmuir) of \$1,000 will be presented to John Gamble Kirkwood.

President's Address, Edward Bartow, "Progress in Sanitation."

10:00 P. M.—Dancing, Music and Bridge.

A large number of technical papers will be read before the seventeen divisions of the society, which are as follows: Agricultural and Food Chemistry, Biological Chemistry, Cellulose Chemistry, Chemical Education, Colloid Chemistry, Fertilizer Chemistry, Gas and Fuel Chemistry, History of Chemistry, Industrial and Engineering Chemistry, Medicinal Chemistry, Organic Chemistry, Paint and Varnish Chemistry, Petroleum Chemistry, Physical and Inorganic Chemistry, Rubber Chemistry, Sugar Chemistry and Water, Sewage and Sanitation Chemistry.

A special luncheon to celebrate the thirtieth anniversary of *Chemical Abstracts* will be given on Tuesday, at which President Edward Bartow, for twenty-six years assistant editor of *Chemical Abstracts*; President-elect E. R. Weidlein; Secretary Charles L. Parsons, and W. A. Noyes, the first editor of *Chemical Abstracts*, are expected to be present.

SCIENTIFIC NOTES AND NEWS

KING VICTOR EMMANUEL of Italy has conferred on Professor Sir Aldo Castellani, surgeon-general of the Italian forces in East Africa, the hereditary title of Count of Kisymaio for his work during the Ethiopian campaign, "in successfully keeping the troops in excellent health." Dr. Castellani has been professor of tropical medicine at the School of Medicine of the Louisiana State University, professor of tropical medicine in the Royal University of Rome, lecturer in the London School of Tropical Medicine and director of the Ross Institute, London.

THE German Bunsen Society for applied physical chemistry has awarded the Bunsen Medal to Professor Max Bodenstein, of the University of Berlin.

THE council of the British Medical Association has awarded the gold medal of the association to Dr. Harry Guy Dain, of Birmingham, "in recognition of his distinguished work in connection with the administration of the medical benefit of the National Health Insurance Acts and of the outstanding services he has rendered to the British Medical Association."

THE Royal Photographic Society of Great Britain

has awarded the Progress Medal to Arthur Samuel Newman "in recognition of his researches and inventions which have resulted in important advances in photography."

FELLOWS of the French Academy of Surgery have been elected as follows: Professor d'Arsonval, of the College of France; M. Leclainche, vice-president of the Paris Academy of Sciences; the roentgenologist, Antoine Bèclère, and Dr. Claude Regaud, professor at the Pasteur Institute.

THE Paris Academy of Sciences has elected as correspondent in the section of botany Dr. A. Maige, professor of botany in the University of Lille, to fill the place of the late H. Jumelle, professor of botany in the University of Marseilles.

A DINNER in honor of Dr. Dexter S. Kimball, who recently retired as dean of the College of Engineering of Cornell University, was given on August 28 by the Cornell Clubs in the San Francisco district.

DR. WARREN H. COLE, who recently resigned as assistant professor of clinical surgery at the Washington University School of Medicine, St. Louis, to

become professor and head of the department of surgery at the University of Illinois College of Medicine, Chicago, was the guest of honor on July 10 at a farewell dinner given in St. Louis by his friends and colleagues.

Nature reports that a volume of anthropological essays by friends and former pupils, entitled "Custom is King," has been presented to Dr. R. R. Marett, reader in social anthropology and rector of Exeter College, Oxford, to mark the occasion of his seventieth birthday. The presentation was made in the College Hall by an undergraduate, and was attended by the vice-chancellor, a number of heads of houses and professors. The chair was taken by Sir Charles Harper, a former pupil.

THE *Journal* of the American Mathematical Society states that Dr. Henry Seeley White, professor emeritus of mathematics at Vassar College and past president of the society, has been honored by a dinner given by members of the Vassar faculty. About ninety guests were present. Professor White had been chairman of the department of mathematics since 1905, and became professor emeritus in 1933. For the last three years until his final retirement last June he has held the title of senior lecturer. President H. N. MacCracken as toastmaster introduced the after dinner speakers. These were: Dr. Grace Macurdy, of the department of Greek; Dr. H. E. Mills, professor emeritus of economics; Dr. T. S. Fiske, professor emeritus of mathematics at Columbia University and chairman of the College Entrance Examination Board; Dr. H. S. Taylor, professor of chemistry at Princeton University, and Dr. M. E. Wells, professor of mathematics at Vassar.

CHANGES in the staff at the recently established Institute of Technology of the University of Minnesota, of which Dr. Samuel C. Lind is director, include the following: Professor Peter Christianson, retiring as professor of ferrous metallurgy, has been made emeritus professor and will be replaced by T. L. Joseph, supervising engineer of the North Central Experiment Station of the U. S. Bureau of Mines, University of Minnesota. Frank W. Scott, of the Inland Steel Company of Chicago, has been appointed instructor in metallurgy. Professors L. I. Smith and L. G. Straub have been made administrative assistants in chemistry and engineering, respectively. Dr. George Glockler and Dr. R. E. Montonna have been promoted to full professorships in chemistry and chemical engineering. Dr. D. E. Hull, National Research Council fellow, has been appointed instructor in physical chemistry to take charge of the work in radioactivity. Miss Isabella Webster has been appointed instructor in organic chemistry.

DR. HOBART A. REIMANN, associate professor of medicine at the University of Minnesota and at the Graduate School of Medicine, Minneapolis-Rochester, has been appointed Magee professor of the practice of medicine and clinical medicine at Jefferson Medical College, Philadelphia.

DR. HANS JENNY, assistant professor of soils at the University of Missouri, will join the faculty of the University of California.

DR. E. J. ALLEN, who has been director of the Marine Biological Station at Plymouth, England, for forty-two years, will retire on September 30. In his place the council of the Marine Biological Association has elected Dr. Stanley Kemp, who directed the researches of the *Discovery* on the habits and life histories of the southern whales.

DR. J. BASIL BUXTON, professor of animal pathology in the University of Cambridge and director of the Institute of Animal Pathology and of the University Field Laboratories, has been appointed by the governors of the Royal Veterinary College acting principal and acting dean of the college from September 25, to succeed Sir Frederick Hobday as principal and dean on the latter's retirement. This will not, however, take place until the opening of the main block of the new college buildings.

THE Royal Academy, London, has appointed Dr. H. J. Plenderleith, of the British Museum Research Laboratory, to be professor of chemistry in succession to Dr. A. P. Laurie, whose term of office has expired. The professor of chemistry gives six lectures at the Royal Academy in October and November. They are primarily intended for students of the Royal Academy, but they are open to students of other art schools and Royal Academy exhibitors of the year who may wish to attend.

DR. W. H. TAYLOR, assistant lecturer in physics at the University of Manchester, has been appointed head of the department of pure and applied physics at Manchester Municipal College of Technology.

ACCORDING to the *Journal* of the American Medical Association a division of industrial hygiene in the State Department of Health, Springfield, Ill., has been established to study health hazards under which employees work and make recommendations for preventive measures. Headquarters for the new division will be at the University of Illinois College of Medicine, Chicago, with Dr. Milton H. Kronenberg in charge.

HORACE N. LEE, who for the past three years has been carrying on a special investigation on fibers under the direction of Professor Oakes Ames, under a

research appointment at Harvard University, has joined the staff of Arthur D. Little, Inc., Cambridge.

DR. ALBERT K. KURTZ, who was formerly with the Procter and Gamble Company, has accepted a position in the research department of the Life Insurance Sales Research Bureau at Hartford, Conn., where he will be engaged in psychological and statistical research problems connected with the selling of life insurance.

DR. JOSEPH J. THOMAS, instructor in agricultural and biological chemistry at the Pennsylvania State College, has become associated with the Rohm and Haas Company, of Philadelphia.

PROFESSOR EARL D. HAY, head of the department of mechanical and industrial engineering at the University of Kansas, has been appointed official representative to the third World Power Conference, which will be held in Washington, D. C., from September 7 to 12, to fill the vacancy in the Kansas delegation caused by the death of Dr. George C. Shaad.

DR. HERBERT FRIEDMANN, curator of birds at the U. S. National Museum, Washington, D. C., sailed on August 1 for work in and observation of museums in Italy and in Spain, should conditions warrant, after which he plans to make a collecting expedition in Algeria. He expects to return to Washington by November 20.

A GROUP of American members of the International Union of Geodesy and Geophysics, which meets at Edinburgh from September 15 to 27, sailed from Baltimore on August 20. Among them were: Dr. John A. Fleming, head of the Department of Terrestrial Magnetism of the Carnegie Institution, who is chairman of the International Committee of the Commission on Terrestrial Magnetism and Atmospheric Electricity and of the International Association of Terrestrial Magnetism and Electricity; L. Z. Berkner, physicist in charge of ionospheric research under Dr. Fleming; Dr. R. M. Field, of Princeton University; H. D. Haradon, of the Carnegie Institution; Captain Nicholas H. Heck, chief of the Division of Terrestrial Magnetism and Seismology of the U. S. Coast and Geodetic Survey; W. D. Lambert, mathematician of the survey, and Dr. O. E. Meinzer, geologist in charge of the Division of Ground Water of the U. S. Geological Survey.

THE eleventh congress of the International Society of the History of Medicine will be held in September, 1938, at Athens, Stamboul, Sofia and Zagreb.

THE second International Congress on Gastro-enterology will be held in Paris from September 13 to 15, 1937, under the presidency of Professor Pierre Duval.

THE *Journal* of the American Medical Association

reports that a cruise planned for this month by the Latin-American Congress of Physical Therapy, X-ray and Radium, has been postponed to March, 1937. Sessions of the congress will be held in the National University of Medicine at Guatemala City. Dr. Norman E. Titus, New York, is president of the congress; Dr. Madge C. L. McGuinness, 1211 Madison Avenue, secretary, and Dr. Cassius L. De Victoria, 1013 Lexington Avenue, executive director.

THE Smithsonian Institution on August 9 received "birthday" greetings from President Roosevelt and Secretary Ickes, marking the ninetieth anniversary of its establishment, which occurred on August 10. Mr. Roosevelt, writing from Hyde Park, N. Y., to Dr. Charles G. Abbot, secretary of the institution, said: "I can not allow this anniversary to pass without assuring you, and through you, your devoted associates, of my sincere appreciation of the work which you and they are doing. The Smithsonian Institution through nine decades has abundantly justified the hopes and expectations of its founder, James Smithsonian, who in his will provided for an 'establishment for the increase and diffusion of knowledge among men.'" Secretary Ickes said: "It is significant to me that the institution, with all this panorama of the past, has prepared an exhibit on power for the benefit of the third world power conference. To me this is proof that the contributions of the Smithsonian to-day are as vital as they were in that distant day ninety years ago."

The British Medical Journal reports that the Scientific Association of Pediatricists of Leningrad recently celebrated the fiftieth anniversary of its foundation in 1885, when there were only sixty-three pediatricists in the whole of Russia. Leningrad has now six children's hospitals, seven clinics for children's diseases, twenty-six consultation centers and two institutes for the training of pediatricists.

THE department of forestry of Yale University will receive on the death of Mrs. Oastler the residue of the estate of the late Dr. Frank Oastler, surgeon, vice-president of the Explorers' Club, New York City. The income of the bequest is "to be used for the conservation of wild life, both birds and mammals."

SOHTSU G. KING, the Chinese conchologist and banker, has given his collection on conchological literature to the Science Society of China Library, Shanghai. The collection was started some twenty years ago, while Mr. King was studying Chinese mollusca with Professor A. W. Grabau, of the University of Peking. Under their joint authorship a book entitled "Shells of Peitaiho" was published, besides other scientific papers. The collection includes rare volumes and

not a few complete sets of journals. The total value of the whole collection is estimated at approximately £3,000. The council of the society has passed a resolution to the effect that a special room shall be used to house the collection and shall be labeled "Sohtsu G. King Library of Conchology." A complete catalogue

of the library is under preparation and will be printed and circulated to related institutions and learned societies. In addition to the collection Mr. King has provided an endowment, the income of which will be used to continue subscriptions to the journals of which the library possesses back volumes.

DISCUSSION

THE PREGLACIAL PHYSIOGRAPHY OF WESTERN OHIO

LITTLE has been known of the surface which lies buried beneath the glacial drift in western Ohio. The writer examined approximately 20,000 well records, and from these about 6,000 of the most significant were selected and plotted on a base map of western Ohio. The well records were obtained from the Ohio State Water Conservation Commission and the Ohio State Geological Survey. In 1934, geologists and engineers, working on a CWA project, collected 148,000 well records from every county in Ohio. Approximately one half of the state was covered when the project was abandoned. Less than one fourth of the records in western Ohio show the depth of the drift to bed-rock. It was found that because of the limited space on the base map, not all the records could be plotted, and hence only the more significant ones were used. Nearly 10,000 oil-well records from the Ohio Oil Company were furnished by the Ohio Geological Survey. The majority of these are from Wood and Hancock counties, the others coming from Allen, Sandusky, Auglaize, Lucas, Putnam and Hardin counties.

The work of plotting the elevations of the bed-rock on the base map has been completed and a contour map drawn of the buried surface. The following facts have been uncovered. A valley, the continuation of the preglacial Lake Erie lowland, extended in a southwesterly direction. The axis of this valley extends through Lucas, Fulton, Defiance and Henry counties. The stream which occupied this valley the writer calls the preglacial Maumee. It flowed eastward through the depression now occupied by Maumee Bay and probably was a tributary of a large stream which occupied the Lake Erie depression. Another river, the preglacial Sandusky, flowed in a northeasterly direction through what is now Sandusky Bay, into the Lake Erie lowland, where it joined the trunk stream which probably flowed eastward, receiving other large tributaries from the south which drained northern Ohio. The axis of the preglacial Sandusky valley extends through the middle of Sandusky Bay, eastern Sandusky County, Seneca and Wyandot counties. A broad, low divide separated the preglacial Maumee and preglacial Sandusky valleys. To the east of the preglacial Sandusky lies the preglacial

Huron Valley, the axis of which extends through Erie, Huron and Crawford counties.

A major divide, a prominent physiographic feature in preglacial time, extended in an east-west direction through Holmes, Knox and Richland counties, continuing beneath the glacial drift in a southwesterly direction through Morrow, Marion and Union counties, where it connects with the buried upland in Logan County, where the highest point in Ohio is located. To the south and west of this buried upland in Logan County is a broad, buried valley once occupied by a preglacial river called the Teays. To the southwest of the Teays valley, in Darke, Miami, Preble and Montgomery counties, the divide widens out into a broad upland which separated the pre-glacial Miami from the Teays drainage. The preglacial or interglacial Miami and Little Miami drainage was to the southwest, as at present. The Teays River has been traced from the south as far as Chillicothe, where it disappears beneath the glacial drift. This stream flowed northward into Pickaway County, where it curved in a northwesterly direction, flowing through Madison, Clark and Champaign counties, where it again curved to the north, around the broad upland in Logan County, through Shelby County, extending in a westerly direction through Auglaize County, continuing through the depression now occupied by Lake St. Mary. From here it extended in a northwesterly direction through Mercer County into Indiana, where it can be traced eastward as a buried depression.

The Teays could not have flowed northward to the Lake Erie depression through Franklin and Delaware counties, as it would have been necessary for the waters to flow over a preglacial divide which stands more than 200 feet higher than the Teays valley, where it disappears beneath the glacial drift at Chillicothe. Nor is it probable that the Teays drained southwestward into the preglacial Miami, since that valley appears to be too narrow in Clark County for so large a stream as the Teays to have flowed through it. Furthermore, it would have been necessary for the Teays to have flowed over a high divide which stood from 980 to 1,000 feet above tide, between the preglacial Miami and Teays valleys.

In preglacial time there were four large drainage basins in western Ohio, as revealed by well records,