

Wednesday, September 12

Morning.—Conferences of Divisions.

Afternoon.—Divisional Meetings.

Evening.—President's address, Huntington Hall, Rogers Building, Massachusetts Institute of Technology, Boylston Street.

Thursday, September 13

Morning and Afternoon.—Divisional Meetings.

The usual meetings, including the annual election of officers, will be held by all the Divisions, and by the Rubber Chemistry Section, with the following special program:

Physical and Inorganic and Organic Divisions may hold a joint conference on Wednesday morning, September 12.

Division of Industrial Chemists and Chemical Engineers, Wednesday, September 12. Conference on "The industrial chemist in war time."

Division of Organic Chemistry will hear and discuss the report of the committee on "The supply of organic chemicals for research during the war," by the chairman, C. S. Hudson.

Division of Pharmaceutical Chemistry.—Conference on "Pharmaceutical chemistry and the future," opened by L. F. Kebler. The secretary of the Division wishes to call the attention of the members to the fact that papers on the composition of plant drugs or any of their constituents, the composition of volatile oils, etc., are appropriate to the program of this division. Papers on pharmacological testing should also be presented to this division.

The Fertilizer Division will have papers of unusual interest dealing with the fertilizer situation of to-day in relation to the chemical methods employed in the analysis of fertilizers, sampling of fertilizers, etc. A conference where the papers previously read will be freely discussed and general conditions affecting the fertilizer business from a chemical standpoint will close the meeting.

Division of Biological Chemistry. The sessions of the Biochemical Division include for Wednesday a special program concerning "Enzymes and their action."

Division of Water, Sewage and Sanitation will hold a conference on "Sanitation in warfare."

All titles for papers should be in the secretary's hands on or before August 27; or in the hands of the secretaries of divisions on or before August 25, with the exception that titles of papers should reach the secretary of the Division of Industrial Chemists and Chemical Engineers on or before August 21. In order

that the meeting may receive due and correct notice in the public press, every member presenting a paper is requested to send an abstract to Professor Allen Rogers, Pratt Institute, Brooklyn, N. Y., chairman of the society's press and publicity committee. The amount of publicity given to the meeting and to the individual papers will entirely depend upon the degree to which members cooperate in observing this request. A copy of the abstract should be retained by the member and handed to the secretary of the special division before which the paper is to be presented in Boston or, better, sent in advance of the meeting to R. W. Neff, 22 India Square, Boston, Mass. Short abstracts will be printed in *SCIENCE*.

The final program will be sent to all members signifying their intention of attending the meeting, to the secretaries of sections, to the council, and to all members making special request therefor.

CHARLES L. PARSONS,
Secretary

SCIENTIFIC NOTES AND NEWS

PROFESSOR LIONEL S. MARKS, head of the combined departments of mechanical engineering of Harvard University and the Massachusetts Institute of Technology, has been appointed to take charge of investigations relating to airplane engine design being conducted by the national advisory committee for aeronautics at the Bureau of Standards.

PROFESSOR WILLIAM D. HURD, director of the extension service of the Massachusetts Agricultural College, has been called to Washington to act as assistant to the Secretary of Agriculture.

A COMMITTEE on industrial fatigue has been organized under the advisory commission of the Council of National Defense with the following membership: Dr. Thomas Darlington, New York, chairman; Professor Frederic S. Lee, Columbia University, executive secretary; Professor Robert E. Chadcock, Columbia University; Professor Raymond Dodge, Wesleyan University; Dr. David L. Edsall, Harvard Medical School; Mr. P. Sargent Florence, Columbia University; Miss Josephine Goldmark, National Consumers

League; Professor Ernest G. Martin, Leland Stanford University; Dr. J. W. Schereschewsky, Public Health Service; Dr. Ernest L. Scott, Columbia University. The committee is investigating munition factories and other industrial establishments that are manufacturing war supplies, with the view of showing how avoidable fatigue may be eliminated and how the greatest output of the necessities of war may be secured compatible with the maintenance of the working-power of the workers.

DR. HORACE D. ARNOLD, of Boston, has been elected chairman of the Council on Medical Education of the American Medical Association, succeeding Dr. Arthur Dean Bevan, of Chicago.

DR. LEVERETT D. BRISTOL has been appointed state health commissioner of Maine.

DR. J. EHRLICH has been appointed chief chemist of the Verona Chemical Company, North Newark, N. J.

SIR GEORGE NEWMAN, chief medical officer of the British Board of Education, has joined the committee appointed by the president of the Board of Agriculture to investigate the production and distribution of milk.

SIR MALCOLM MORRIS has been elected president of the Institute of Hygiene, London, in succession to Sir William Bennett, who has held the post for the past ten years, and will continue his association with the institute as vice-president.

THE Harben gold medal of the Royal Institute of Public Health of Great Britain, given every third year for eminent services rendered to the public health, has been awarded this year to Surgeon-General Sir Alfred Keogh, G.C.B., director-general of the Army Medical Service, and the gold medal for conspicuous services rendered to the cause of preventive medicine to Dr. E. W. Hope, M.O.H. for the city and port of Liverpool, and professor of public health in the university.

As has been noted in SCIENCE the annual meeting of the British Association has been given up. We learn from *Nature* that meetings of the organizing committees of the various sections, the delegates of correspond-

ing societies, the committee of recommendations, and the general committee have now been held. It has been decided to continue Sir Arthur Evans in the presidency for another year, while the Hon. Sir C. A. Parsons, who would have presided over this year's meeting, will do so at the meeting which it is hoped will take place as arranged at Cardiff next year. The meeting this year would have been at Bournemouth, and that borough has repeated its invitation, which has been accepted, for 1919. Grants amounting to £286 were made in aid of such researches as were regarded as essential to carry on, having regard to present conditions. The new members of the council of the Association are Dr. E. F. Armstrong, Mr. J. H. Jeans, Professor A. Keith, Professor W. H. Perkin, and Mr. W. Whitaker.

WE learn from *The British Medical Journal* that at a recent meeting of the administrative council of the Pasteur Institute, Paris, Dr. Albert Calmette, director of the Pasteur Institute at Lille, and Dr. Louis Martin, director of the Pasteur Hospital, were unanimously appointed subdirectors in the room of Dr. Chamberland and Professor Metchnikoff. Dr. Chamberland, who died in 1908, has had no successor till now. Dr. Calmette, who founded the Pasteur Institute at Saigon, has taken a leading part in the campaign against tuberculosis in France, and Dr. Martin, who has been associated with the Paris Institute since 1902, has made researches on the bacteriology of diphtheria, the prophylaxis of contagious diseases, tuberculous meningitis, tetanus, anthrax, and sleeping sickness. At the same meeting M. Vallery-Radot, Pasteur's son-in-law and biographer, was elected president of the administrative council.

DR. HAROLD C. BRADLEY, professor of physiological chemistry in the University of Wisconsin, recently delivered an address on "Autolysis and the mechanism governing atrophy and hypertrophy of tissues" before the faculty and students of the graduate summer quarter in medicine of the University of Illinois.

PROFESSOR G. A. MILLER, of the University of Illinois, will contribute the article on mathematics for the 1917 edition of the

"American Year Book," succeeding Professor E. B. Wilson, who was recently appointed head of the department of physics in the Massachusetts Institute of Technology.

DAVID WENDELL SPENCE, for twenty-seven years a professor of civil engineering, and for the past ten years dean of the school of engineering and professor of civil engineering in the Texas College, died at Galveston on June 28.

DR. CHARLES BASKERVILLE, professor of chemistry in the College of the City of New York, has been appointed by the Ramsay Memorial Committee to organize a committee in the United States for receiving subscriptions to the fund from Americans.

UNIVERSITY AND EDUCATIONAL NEWS

ANNOUNCEMENT is made that a gift of \$50,000 from George W. Brackenridge of San Antonio, Tex., will enable Columbia University to open its doors to women students this autumn. Work will be begun at once on the addition to the present building to provide extra laboratory facilities in the departments of chemistry, pharmacology, pathology and bacteriology.

PROFESSOR BENJAMIN T. MARSHALL, of Dartmouth College, has been appointed president of Connecticut College for Women at New London, to succeed President Frederick Sykes.

DEAN W. G. RAYMOND, head of the College of Engineering of the State University of Iowa, has declined the presidency of the Colorado school of mines situated at Golden, Colo.

DR. HUGH MCGUIGAN, professor of pharmacology in the Northwestern University, has accepted the position of professor and head of the department of pharmacology, materia medica and therapeutics in the college of medicine of the University of Illinois.

DR. H. R. CROSLAND of the department of psychology of the University of Minnesota, has been elected assistant professor of psychology in the University of Arkansas.

LORD CREWE has accepted the invitation to become chancellor of the University of Sheffield, in succession to the late Duke of Norfolk.

DISCUSSION AND CORRESPONDENCE

REPLY TO DR. ERLANGER

ON p. 384 et seq., Vol. XLV, of this journal Dr. Erlanger criticizes an abstract of my paper which he did not stop to hear and which is not yet published.

Dr. Erlanger completely misses the point of my paper and somewhat radically changes some statements in his own paper.¹

Dr. Erlanger stated that the pressure oscillations are in direct numerical ratio to the *manometer* pressures in the compression chamber; I showed that the ratio is determined by the barometric plus the manometric pressure —i. e., Boyle's Law.

He says:²

Inasmuch as the volume of incompressible fluid entering the artery is practically the same through-

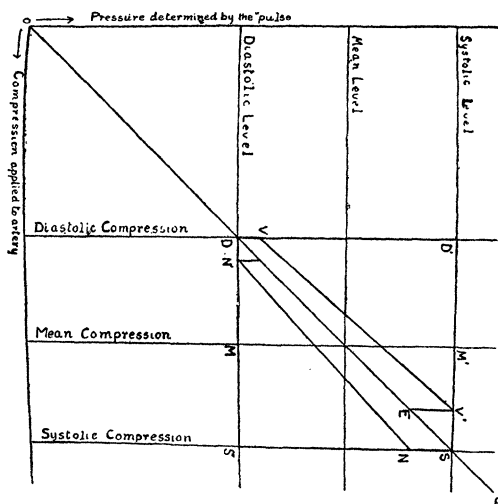


FIG. 1.

out the diastolic-systolic range of compression and since at this time, as premised above, the compression pressure is nearly twice that which obtained at *D*, the pressure in the compression chamber will be raised almost twice as high by the

¹ Erlanger, *Am. Jour. Physiol.*, 1916, XXXIX., 401.

² *Loc. cit.*, 409.