

radioactivity. In addition, synthetic organic chemistry is making an ever-increasing and significant contribution to remedial medicine.

The single objective of this mobilization of science against disease is to prevent suffering and save human lives, irrespective of color or creed. The results which are certain to accrue may ultimately outweigh by many times even the staggering losses of the world-wide conflagration.

Taking an over-all look at the current press of events, one notes that, perhaps, the most important of all the signs pointing to better days is the fact that the emergency of war has dissipated innumerable inertias, each an interruptant of progress. Normally, the new is received with suspicion. People cling to the old and tried, are loath to experiment, slow to change. With peace, however, the usual slow developmental process will have been reversed. War shortages of conventional materials will have resulted in eager trials of every new material science and industry could offer. And countless of the "substitutes" will have proved their superiority. Thus, an experience with and an acceptance of the new will have been gained that ordinarily might have taken many years to achieve.

No doubt, some will become alarmed over the possible displacement of old materials and old industries. Changes of a drastic nature are inevitable, but they seldom result in the hardships that the timid predict. More wrought iron is being used in the world to-day than when wrought iron occupied the province now held by steel. The horse and buggy vanished, but the buggy manufacturers who were alert rose to new affluence with the motor car. The coal-tar colors ended the centuries-long reign of natural dyestuffs, but the dyestuffs industry has grown to many times its former size, and spawned a dozen new industries in addition.

Progress means going forward. It must build more

than is destroyed or it does not merit its name. Not only should it be of a tangible, material character, but it should contain the elements of greater spiritual growth for the individual and community alike. It should lift the chin and put a new spring into humanity's step.

The President of the United States has said that we are fighting for four freedoms—freedom from want and freedom from fear, freedom of speech and freedom of religion. A former President of the United States, Herbert Hoover, has added that a fifth freedom is also mandatory in the victory—freedom of economic enterprise.

The scientist accepts these freedoms unreservedly. To their attainment he is glad to give life itself, if that is the price. But the scientist is fighting just as wholeheartedly for five hundred, yes, for five thousand other freedoms.

The freedom to work, to expand the intellect, to worry through with a theory until it is validated or disproved; the freedom to banish the wasteful and enthrone the efficient; the freedom to improve, if he can, everything that exists under the sun, and beyond that to create things upon which the sun has never before shone—these, too, are freedoms for which the true scientist fights.

As a man, he fights for the freedom to better his lot and for the rewards that ability merits. As an incurable altruist—and the true scientist is one—he fights even harder for the freedom to better the lot of mankind, that each generation may rise to heights loftier than any won by its predecessor.

A soldier of peace, he fights for the freedom to mold a better destiny, both for the individual and for the race.

These freedoms have always been America's. We fight to keep them America's. Let our swords be mighty, and mighty indeed will be our plowshares.

## SCIENTIFIC EVENTS

### RECENT DEATHS

DR. THOMAS MILTON PUTNAM, professor of mathematics at the University of California, died on September 22 at the age of sixty-seven years.

DR. HOMER CLYDE SNOOK, consulting engineer of Summit, N. J., known for his work on electronics, died on September 22 at the age of sixty-four years.

DR. EDWARD FAWCETT, since 1934 emeritus professor of anatomy, previously from 1909 to 1934 dean of the faculty of medicine at the University of Bristol, died on September 22 at the age of seventy-five years.

DR. DAVID WATERSTON, since 1914 Bute professor

of anatomy at St. Andrews University, died on September 4 at the age of seventy-one years.

### TECHNOCHEMICAL LECTURES, 1942-1943, OF THE MELLON INSTITUTE

A SERIES of lectures on recent advances and current trends in the American chemical industry will be presented by technologic specialists of Mellon Institute of Industrial Research during 1942-1943. These discourses, which will be delivered on alternate Wednesdays, in the fourth period (11:30 A.M.-12:30 P.M.), throughout both semesters, in the auditorium of the institute, will be open to all students in the profes-

sional courses in chemical engineering and chemistry in the University of Pittsburgh, as well as to the institute's members.

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October 7. War Problems of the Chemical Industries, Dr. E. R. Weidlein.

October 21. Recent Changes in the Manufacture of Heavy Chemicals, Dr. F. W. Adams.

November 4. Present Importance of the Synthetic Organic Chemical Industry, Dr. B. G. Wilkes.

November 18. Opportunities in Fuel Conservation, Dr. H. J. Rose.

December 2. Chemical Technology of Petroleum in Wartime, Dr. W. A. Gruse.

December 16. Advances in Manufactured Gas Production, J. A. Shaw.

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January 6. Synthetic Resins To-day and To-morrow, Dr. R. L. Wakeman.

February 17. Our New Synthetic Rubber Industry, Dr. Claire LeClaire.

March 3. Vitreous Enameled Products as Engineering Materials, Dr. E. E. Marbaker.

March 17. War Problems in Building Materials Technology, Dr. H. E. Simpson.

April 7. Economic Status of Heat-Insulating Materials, R. H. Heilman.

April 21. Solving Corrosion Problems in the Chemical Industries, Dr. G. H. Young.

May 5. Progress in Sanitary Engineering, R. D. Hoak.

May 19. Health Conservation in the Chemical Industries, Dr. F. R. Holden.

### STUDENTS IN THE ARMY ENLISTED RESERVE

THE HONORABLE HENRY L. STIMSON, Secretary of War, issued on September 17 the following statement:

Last week I announced that college students who are members of the Army Enlisted Reserve will all or for the most part be called to active duty at the end of the term now beginning, and thereafter, as they reach Selective Service age. This action had been foreseen as a possibility, and in every presentation of the Enlisted Reserve plan to college students and college authorities it was clearly stated that enlisted reservists were subject to call at any time when, in the opinion of the Secretary of War, the exigencies of war demanded it. This statement was made by me personally in the original announcement of the plan on May 14.

In public addresses by War Department officials on the subject of the Enlisted Reserves, the fact that the members were subject to call at any time has been emphasized and repeated. For example, last July 4, Mr. Harvey H. Bundy, Special Assistant to the Secretary of War, addressing a freshman class, said: "There is no commitment that any man may complete his college education." This address containing that statement was distributed to the colleges.

In view of admonitions of this nature, which have been a consistent part of the War Department's Enlisted Reserve policy from the first, and the increased seriousness of the war, the notice that the call to duty would come early in 1943 should not have occasioned great surprise.

However, my statement, together with other recent press reports, has been interpreted in some quarters to mean the end of all higher education for the duration of the war. This is a misapprehension that should be corrected.

The Army is greatly in need of men of specialized training, particularly in physics, chemistry, engineering and medicine. We are equally interested in having adequate numbers of men of such training available to war production industries and the civilian research agencies of the government. Plans are now being worked out for the method of training of those inducted into the Army, but in any event it is hoped that the colleges will maintain their training of students in engineering, medicine and other sciences. In some cases, it will be necessary to expand this training. Occupational Bulletins of the Selective Service System have been issued from time to time which relate to college students in these fields essential to the war effort. I now re-emphasize the fact that where students in these fields and their teachers fall within the classifications for deferment by the provisions of these bulletins they are doing the job their country wants them to do and are performing their full duty in the war effort.

Young men who have joined the Army Enlisted Reserve or who now enlist in it should proceed with their studies until they are called to active duty. When they are called, the Army will utilize for their further training such facilities of its own as it may have or of the colleges as it deems best to meet military requirements as they then exist. The intervening time will afford a period of adjustment and for the formulation of plans for such additional specific training as seems indicated.

These plans, which will probably include a modification of the college ROTC courses, are now under study. When they are completed, the committee of educators appointed by the American Council on Education will be fully informed, and consulted as to the details of their application.

### STANDARDS DIVISION OF THE OFFICE OF PRICE ADMINISTRATION

THE newly created Standards Division of the Office of Price Administration, of which Dexter M. Keezer is deputy administrator and acting director, was organized for the purpose of incorporating quality definitions in price, rent and rationing regulations. The new division will have seven sections as follows: Food and Drugs (which also will handle paints and chemicals for the present); Textiles, Leather and Apparel; Consumer Durable Goods; Home Furnishings; Lumber and Building Materials; Agricultural and Industrial Machinery; and Rubber and Rubber Products. Sections to handle fuel and petroleum products; chemicals and paints; transportation equip-