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 whole-souledly 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-