Andover, Mass. The program is divided into two parts—(1) Strategic materials and (2) Chemistry teaching in the war effort. Under this latter topic considerable attention will be devoted to the participation of the teacher of chemistry in civilian defense activities. It is also planned to offer lecture demonstrations to run throughout the conference. While the summer conferences are held primarily for the benefit of members of the association, any one interested will be welcome. Further details will be published in the May issue of the *Journal of Chemical Education* and the completed program will appear in the July issue. Communications concerning the conference should be addressed to the secretary, Amasa F. Williston, B.M.C. Durfee High School, Fall River, Mass.

A NATIONAL WARTIME CONFERENCE of the professions, arts, sciences and white-collar fields will be held in the Hotel Commodore on May 8 and 9 under the sponsorship of eighteen national organizations and two hundred individuals who are leaders in these four groups. Dr. Kirtley F. Mather, professor of geology at Harvard University and president of the American Association of Scientific Workers, is chairman of the conference. Miss Olive Van Horn, industrial secretary of the National Board, Young Women's Christian Associations, is the executive secretary. The purpose of the conference, according to the sponsors, is to find ways by which fuller use can be made of the available skill and talent which still lies untapped throughout the country. The keynote address of the opening session of the conference on the afternoon of May 8 will be delivered by Professor Mather. Dr. Leonard A. Carmichael, president of Tufts College and director of the National Roster of Scientific and Specialized Personnel, will speak on the present and potential contribution of trained personnel to the war effort, and Dean Wayne Morse, public member of the National War Labor Board, will speak on economic stabilization and the problems of salaried professionals. There will be six panel discussions on May 9, dealing with health and welfare services, education, arts and letters, white-collar fields, and science and technology.

THE Palo Alto Museum, California, according to *Museum News,* has made plans to open its new Science Wing to the public on Easter Sunday, April 25. At the dedication ceremony the building will be presented to the City of Palo Alto by Mrs. Don Hibner, president of the museum. Mayor Byron Blois will accept for the city. There will be a preview and reception for members and guests on April 24, when Robert C. Miller, director of the California Academy of Sciences, will be the guest speaker.

DISCUSSION

THE SCIENCE MOBILIZATION BILL

A PLAN FOR THE MAXIMUM WARTIME UTILIZATION AND COORDINATION OF SCIENCE AND TECHNOLOGY

IN an article in SCIENCE (December 25, 1942), Professor Theodor Rosebury mentioned a bill to set up an Office of Technological Mobilization which had been Introduced in the last Congress. The objectives of this bill had been studied and approved by the New York branch of the American Association of Scientific Workers, which also suggested certain modifications in the proposed legislation. The bill has now been reintroduced in modified form as the Science Mobilization Bill, which is being sponsored in the Senate by Senator Harley M. Kilgore (S. 702) and in the House by Representative Wright Patman (H.R. 2100).

The new bill begins with an important statement of policy which stresses the importance of science and technology in aiding the war effort. "The Congress hereby recognizes that the full development and application of the nation's scientific and technical resources are necessary for the effective prosecution of the war and for peacetime progress and prosperity . . ."

It then points out five "serious impediments thereto . . ."

(1) *Lack of information:* "the unassembled and uncoordinated state of information concerning existing scientific and technical resources";

(2) *Lack of planning:* "the lack of adequate appraisal, and the unplanned and improvident training, development, and use, of scientific and technical personnel, resources and facilities in relation to the national need";

(3) "the consequent *delay and ineffectiveness* (ital. ours) in meeting the urgent scientific and technical problems of the national defense and essential civilian need";

(4) "*the trend toward monopolized control* of scientific and technical data and other resources with lack of access thereto in the public interest; and"

(5) *Lack of coordination:* "the absence of an effective Federal organization to promote, coordinate, in the national interest, scientific and technical developments."

Evidence that such "serious impediments" to the full application of science in our war effort do in fact exist has come from many sources. Not the least important of these are the hearings of the various committees of the Senate, such as the Kilgore, Truman and Gillette committees. To overcome these "serious impediments" the Science Mobilization Bill proposes

to establish an Office of Scientific and Technical Mobilization. OSTM will receive wide powers. The sum of $200,000,000 is to be appropriated for the use of the Office. It will be empowered to conduct and to finance scientific and technical work, to acquire patents and industrial processes, and to establish a system of awards for outstanding scientific and technical contributions. OSTM is to survey facilities, personnel and requirements; to formulate programs for the development and use of facilities and personnel; and to provide and promote scientific and technical training. It is to assess scientific and technical developments in relation to their impact on the national welfare; to foster international scientific cooperation; to acquire information from other countries and to exchange information and personnel with such countries; and it is to engage in other suitable forms of international collaboration relating to science and technology.

The National Roster is to be transferred with all its powers, personnel, records and funds to the OSTM and the Selective Service Act is to be amended to enable the Administrator of OSTM to certify occupational deferments for scientific and technical personnel that are needed in the war effort.

During the war and for a period not exceeding six months thereafter, the Administrator of OSTM is empowered to put into use any scientific or technical facility, license or patent which is needed for the defense of the nation or for the prosecution of the war. This provision is subject to elaborate and appropriate safeguards and to a guarantee of adequate compensation. All inventions, discoveries and patents which result from the support of the OSTM are to be vested in the Office, which may give nonexclusive licenses for their use. Suitable monetary rewards are to be given to the individuals who made or contributed to the discoveries or inventions.

The Science Mobilization Bill provides an admirable illustration of the manner in which science and its fullest utilization both for war and for peace can be "planned" or coordinated for the benefit of the community without adversely affecting the research freedom of scientists. In fact, it seems to provide a mechanism whereby there can be achieved a great liberation of science from many of its present hindrances and whereby science can undergo great expansion in its work for the benefit of the nation. The bill thoroughly deserves to be read and carefully considered by all scientists who are interested in achieving the fullest utilization of science in the present struggle and in the future activity of a fruitful peace.

Also worth careful study are the three volumes of hearings which have already been published by the sub-committee on Technological Mobilization of the Senate Military Affairs Committee. These volumes contain illuminating discussions on the confusion which exists in regard to rubber, aluminum, sponge iron and other critical problems of our war production. Testimony exposes the failure to make full use of the National Roster. The hearings also show how special interests have often hindered the full application of rational scientific and technical procedures.

The hearings also include certain criticisms of the bill as it was introduced last year. These criticisms, too, should be carefully considered. Some of them have already been taken into account in the present Science Mobilization Bill. Recently, however, there seems to have been initiated a campaign of considerable proportions which attacks the bill on the grounds that it will lead to "regimentation" of science and technology. Study of the bill itself and of the testimony presented at the Senate hearings gives no support for this campaign. The evidence shows clearly that a reorganization of our scientific and technical establishment such as is contemplated in the bill will enhance the effective utilization of our scientific resources in the war effort and will make science a more potent force in the welfare of the nation. Coordination and support of scientific and technical work by a government agency need be no more "dictatorial" than is the administration of civil aeronautics, of communications, of the Public Health Service and of the many other valuable services performed by the Federal Government. The proposed Office of Scientific and Technical Mobilization will provide a mechanism which is sorely needed at present, for receiving and developing new ideas concerning the application of research and technology to the war effort. Through the scientific representatives on the Board of OSTM and through the Administrator of the Office, scientists and technologists for the first time will be given an opportunity to take part in the decision of national policies and will have a freer hand than at present in the support and conduct of scientific and technical activities.

The demands of the war effort are bringing forth in Great Britain also a vigorous campaign in favor of better organization and planning of science. The Association of Scientific Workers recently held an important two-day conference on "The Planning of Science" which received very wide support in British scientific and technical circles. *Nature* (February 6 and 20, 1943) has published lengthy summaries and an editorial approving the aims of the conference.

The lack of coordination which is observable in the field of science and technology is also found in other fields of our war effort. These defects have been made clear through a notable series of investigations by the Tolan Committee of the House and by the Truman, Murray, Gillette, Pepper and Kilgore Committees of the Senate. A large group of Senators has therefore introduced jointly a bill (S. 607) to

set up an Office of War Mobilization. All existing war agencies, including the Office of Scientific and Technical Mobilization, are to be brought under the coordination and guidance of the Office of War Mobilization.

Widespread individual information is the basis of an intelligent democracy. Scientists, academic and applied, would have a more direct interest than most other groups of our citizens in the proposed Office of Scientific and Technical Mobilization and a very great interest in the proposed Office of War Mobilization. They would do well to obtain copies of the bills and hearings to acquaint themselves with the terms and ideas embodied in them.

K. A. C. ELLIOTT,
Chairman, Philadelphia branch, American Association of Scientific Workers
HARRY GRUNDFEST,
National Secretary, American Association of Scientific Workers

CARIBOU AND THE MEAT SHORTAGE

MANY of our people seem concerned about the shortage in meats, which have been strictly rationed since March 29. As regards our home population it is not likely that this shortage will be serious; and it may even be an advantage, for at least the sedentary section now overeats and especially of proteins. If this were not sufficiently indicated by the tubby figure and especially by the protruding paunch of the average business man in middle life, it is confirmed by the unexpected, but considerably improved health of the British people since rationing was instituted there.

However, it is essential that our armed forces and our manual working population be supplied with an adequate protein diet, and it is pertinent to draw attention to a considerable supply of meat available in Alaska.

Since the beginning of the century there have been domesticated caribou (reindeer) herds in Alaska. Ten years ago estimated to number two hundred thousand to half a million, they have been now reduced to from fifty thousand to one hundred thousand. The wild caribou herds are estimated as between one and two millions of individuals, with other millions in Canada.

All those who have been privileged to eat caribou meat in the North will, I think, agree with me that it surpasses in its palatable qualities the best beef or the best venison. Caribou meat has something of the gamy flavor of venison, but in its juiciness it is more like beef. Already for a good many years caribou steaks have been obtainable in certain restaurants in this country, but the sale has never been large, partly because of the difficulty of overcoming inertia which favors the continued use of beef, mutton and pork, but mainly because of the opposition of the United States cattle and sheep men.

As the domesticated herds are largely in northwestern Alaska near the Bering Sea, it would be possible to ship the refrigerated meat by sea to our bases in the Southwest Pacific and to our own Pacific ports.

WM. H. HOBBS
UNIVERSITY OF MICHIGAN

SCIENTIFIC BOOKS

ORGANIC CHEMISTRY

Organic Chemistry. By G. ALBERT HILL and LOUISE KELLEY. viii + 919 pp. 6 × 9 in. Bound in dark blue cloth. Philadelphia: The Blakiston Company. 1943. $4.00.

THE authors of this new text are both leading professors of organic chemistry, one at Wesleyan University and the other at Goucher College, the former with considerable experience in the teaching of the subject to men, and the latter's teaching experience having been with women students. A collaboration of this kind should be mutually stimulating and helpful.

The result is a well-balanced presentation of the subject in its manifold and diversified aspects, theoretical and practical; including the purely descriptive side of preparation, properties and applications; the theoretical considerations underlying the behavior of certain molecules and the immensely important role of organic chemistry in the maintenance and progress of our present civilization and industries.

The volume contains 46 chapters, a glossary (mainly of medical terms), an explanation of symbols and Greek letters used and a good subject index. If it is intended to serve as a reference book, as well as a text, as its authors state in their preface, its lack of citations of the original literature and of pertinent bibliographies to supplement the necessarily restricted information given in so vast a field is regrettable.

The introductory chapter discusses the nature of atoms and of atomic linkages, including types and strength of bonds, bond angles, rotation about bonds, distances between atoms and anomalous valences; molecules, dipole moments, resonance, hydrogen bridges; the mechanism of organic reactions and the primary divisions of organic compounds into aliphatic, aromatic and heterocyclic.

The succeeding chapters present the various groups of organic compounds in the usual order, beginning with the hydrocarbons, then the alcohols and ethers, halogen derivatives, aldehydes and ketones, etc.