News of Science

International Atomic Energy Agency

Formal requirements for the establishment of the International Atomic Energy Agency were met on 29 July when the United Kingdom, the United States, France, Canada, Australia, and Brazil deposited ratification papers. Twenty other nations, including the Soviet Union, had previously ratified the agency's statute.

The first general conference of the agency will open in Vienna, Austria, on 1 Oct. This conference will bring the agency into operation by completing the selection of the board of governors. The two principal organs of the agency, the general conference and the board of governors, will decide on the budget, staff structure, and program of the agency as well as on its relationship with the United Nations and with other international organizations. They will also appoint a director general of the agency and determine its permanent seat, for which Vienna was recommended by the conference on the statute.

The Preparatory Commission of the agency, composed of representatives of 18 countries, which has been meeting in New York since October 1956, has prepared recommendations on the substantive issues to be considered by the first general conference and the first board of governors.

Although the United States has ratified the agreement, legislation authorizing monies for, and the appointment of, a representative to, the agency have been discussed extensively in committee, where an amendment proposed by Senator John W. Bricker of Ohio was considered and reconsidered. This amendment specified that the President must obtain the consent of Congress each time he wishes to make nuclear materials available to the agency. The amendment was adopted by the Joint Congressional Committee on 19 July and readopted by a smaller majority on 30 July. However, both Republican and Democratic members of the committee teamed up against it on the House floor, and on 8 Aug. the House voted to strike the restriction out by a vote of 298 to 99.

Oregon Museum of Science and Industry

Tomorrow, on a site in the Portland (Ore.) Zoological Gardens, an effort will be made to erect, in one day, the walls of a new building to house the Oregon Museum of Science and Industry. Several hundred members of the Unit Masonry Association will attempt to lay 100,000 units of masonry, including brick and block, in the "barn-raising bee." Members of Bricklayers Local No. 1, AFL-CIO, are contributing their time; the Mason Contractors Association is donating time and equipment; and the manufacturing and distributing members of the Unit Masonry Association are contributing material and equipment, in some cases at no cost to the museum.

Construction of the museum building follows a campaign, conducted for the past several months as "project science," to provide a new museum of science and industry for the state of Oregon.

Smoking and Cancer in Britain

The following excerpts are drawn from the British Medical Research Council's statement on "Tobacco smoking and cancer of the lung":

"In their annual report for 1948–50 the Council drew attention to the very great increase that had taken place in the death-rate from lung cancer over the previous twenty-five years. Since that time the death-rate has continued to rise, and in 1955 it reached a level more than double that recorded only ten years earlier (388 deaths per million of the population in 1955 compared with 188 in 1945). Among males the disease is now responsible for approximately 1 in 18 of all deaths. Although the death-rate for females is still comparatively low, it also has shown a considerable increase in recent years and the disease is now responsible for 1 in 103 of all female deaths.

"Three comments may be made on these figures. In the first place, the trend over the last few years indicates that the incidence has not yet reached its peak. Secondly, the figures are not to be explained as a mere reflection of the introduction and increasing use of improved methods of diagnosis but must be accepted as representing, in the main, a real rise in the incidence of the disease, to an extent which has occurred with no other form of cancer. Thirdly, only a small part of the rise can be attributed to the larger numbers of older persons now living in the population; in the last ten years the lung-cancer death-rates among both men and women have risen at all ages from early middle-life onwards. . . .

"From the nature of the disease attention has focused on two main environmental factors: (1) the smoking of tobacco, and (2) atmospheric pollution—whether from homes, factories, or the internal combustion engine. . . .

"The evidence that heavy and prolonged smoking of tobacco, particularly in the form of cigarettes, is associated with an increased risk of lung cancer is not based on the observation that the substantial increase in the national mortality followed an increase in the national consumption of cigarettes. It is derived from two types of special inquiry. In the first, patients with lung cancer have been interviewed and their previous histories in relation to smoking and other factors that might be relevant have been compared with those similarly obtained from patients without lung cancer. The results of nineteen such inquiries (in this country, the U.S.A., Finland, Germany, Holland, Norway, and Switzerland) have been published. They agree in showing more smokers and fewer non-smokers among the patients with lung cancer, and a steadily rising mortality as the amount of smoking increases. In the second type of inquiry, information has been obtained about the smoking habits of each member of a defined group in the population and the causes of the deaths occurring subsequently in the group have been ascertained. There have been two such investigations, one in the U.S.A. covering 190,000 men aged 50–69, and the other in this country covering over 40,000 men and women whose names appeared on the Medical Register of 1951. In both, the results have been essentially the same. The investigation in this country, which has now been in progress for more than five years, has shown with regard to lung cancer in men: (1) A higher mortality in smokers than in non-smokers. (2) A higher mortality in heavy smokers than in light smokers. (3) A higher mortality in cigarette smokers than in pipe smokers. (4) A higher mortality in those who continued to smoke than in those who gave it up. It follows that the highest mortalities were found among men who were continuing to smoke cigarettes, heavy smokers in this group having a death-