ministration. The wax is furnished in small pieces packed in boxes which will cost the consumer five cents for a season's supply and is to be distributed to the retail dealers through the jobbers. The directions are very simple and explicit, for one has only to place some wax upon a piece of paper on top of the cereal and heat until the piece of wax melts to a grease spot which will be 85° C. Then it is recommended that the cereal be mixed and left in the oven for forty-five minutes as stated above.

Warnings with regard to the proper storage of the cereal after it has been heated make it clear that the cereal will remain free from insects only when stored where no insects can get at it.

The cereals used in the heating experiments have been submitted to various cooking processes by the department of domestic science at the University of Minnesota and no injury was apparent even when the cereals were heated to a temperature of 95° C.

This work has been undertaken in anticipation of a condition which seems very certain to develop. With the cooperation of the millers in "sterilizing" and rapidly handling the cereals, of the dealers in increased sanitation and in furnishing consumers with "heat-testing wax," and finally of the consumer in heating the cereal when it reaches him, it is hoped that our country may be aided in its effort to conserve the food needed to win this war. Similar campaigns in other states might aid in reducing a loss which seems inevitable if no unusual measures are taken.

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SCIENTIFIC EVENTS

THE PROGRESS OF BİRTH AND DEATH REGISTRATION IN THE UNITED STATES

The recent inclusion of Hawaii has extended beyond the limits of Continental United States the area for which the Census Bureau annually collects and publishes death statistics. Within this area now reside about 73 per cent. of the total population of Con-

tinental United States and Hawaii. It comprises, in all, 27 states, 43 cities in other states, the District of Columbia and the territory of Hawaii. East of the Mississippi the only states not included are Alabama, Delaware, Florida, Georgia, Illinois, Mississippi and West Virginia, while west of the Mississippi the only states included are California, Colorado, Kansas, Minnesota, Missouri, Montana, Utah and Washington.

The annual collection of death statistics from states and cities maintaining adequate registration systems was begun by the Census Bureau in 1902, the first report covering the calendar years 1900 to 1904, inclusive, and for each succeeding year a separate report has been published. The original registration area contained 40 per cent. of the total population of the country. It remained unchanged until 1906, since which year it has shown an almost uninterrupted increase in geographical extent and in proportion of total population, until at present it contains nearly three fourths of the country's inhabitants.

In birth registration highly satisfactory progress has been made during the past two years, although there are still a number of states in which adequate death registration prevails but in which the registration of births has not yet reached a sufficiently close approximation to completeness to justify the acceptance of the local records by the Census Bureau. The birth-registration area, as at present constituted, comprises 19 states—the six New England states, New York, Pennsylvania, Maryland, Virginia, North Carolina, Kentucky, Ohio, Indiana, Michigan, Wisconsin, Minnesota, Utah and Washington-and the District of Columbia. This area is estimated to contain about 51 per cent. of the total population of the country, as against about 31 per cent. when the collection of birth statistics was begun, a little more than two years ago. from an area comprising the six New England states, New York, Pennsylvania, Michigan, Minnesota and the District of Columbia.

This growth, in so short a time, is gratifying. It is, however, unfortunate that in the United States the registration of vital phenomena has thus far depended, first, upon adequate state or municipal legislation, and, second, upon the adequate enforcement of that legislation. As a result, some states and municipalities maintain efficient registration systems while others do not. Until the matter is placed under federal control or supervision it is not likely that reliable birth and death records, approximating completeness, will come into existence throughout the entire United States. Since the military registration of June 5, 1917, the desirability of maintaining such records has become apparent to all.

THE INTERNATIONAL CATALOGUE OF SCIENTIFIC LITERATURE

SIR HENRY E. ARMSTRONG, chairman of the executive committee of the International Council of the Central Bureau of the International Catalogue, writes in *Nature*:

The Conjoint Board of Scientific Societies, some time last year, appointed—by what mandate is not clear—an International Catalogue Subcommittee "to obtain information regarding the extent of the use made by scientific men of the present International Catalogue of Scientific Literature, and to obtain recommendations for possible improvement." The subcommittee consisted of Dr. Chalmers Mitchell, Mr. C. V. Boys and Mr. E. B. Knobel, in addition to the official members. The subcommittee appears to have gone outside the terms of reference and to have reported "that it was advisable to consider suggestions for an alternative scheme." . . .

The history of the International Catalogue is briefly as follows. In 1893 the Royal Society was memorialized to take into consideration the preparation of complete author and subject catalogues, by international cooperation, in continuation of the society's Catalogue of Scientific Papers, which the society did not propose to continue beyond the century. The proposal being viewed with favor, the Royal Society solicited the opinion of scientific workers all over the world. There was practically but one reply—that such catalogues were essential, and almost universal agreement that the only way of carrying the work into execution was by international cooperation. Repre-

sentative committees were appointed, and after two years of very hard work a scheme was prepared which was forwarded abroad, together with the invitation to attend the first international conference on the subject. This was held in July, 1896. Two subsequent international conferences were held in London in October, 1898, and June, 1900. All three were highly representative. Ultimately it was decided, at the third conference, to establish the catalogue as an international enterprise. Work was begun in 1901, and has been continued up to the present time. The organization has grown steadily in weight and efficiency, and at the beginning of the war there were thirty-four regional bureaus in operation. The harmony which has prevailed throughout among the nations is one of the most remarkable features of the enterprise; notwithstanding the complexity of the work, there has not been the slightest friction. I believe no other international enterprise of like magnitude has been called into existence or worked more smoothly....

As war went on, it became necessary for the society to evaluate its responsibilities towards the catalogue. It was decided that the society could not guarantee the publication of the catalogue beyond the fourteenth issue. An issue consists of seventeen volumes, each dealing with a separate science. The fourteenth issue is now being published, and it is noteworthy that special contributions in aid of publication have been made by the Carnegie Foundation of New York, by the Department of Scientific and Industrial Research, and by certain private donors.

The Royal Society has also undertaken the direct control of the enterprise during the period of the war. Early last year it was intimated to workers abroad that the future of the catalogue must be left for the decision of an international council to be called as soon as possible after the conclusion of peace.

Why the Conjoint Board has intervened is not clear. It certainly has no right to give the catalogue its quietus. That it should have taken the action it has without ever consulting the international organization passes belief.