has, except in Alaska, been brought substantially to completion. The existing forests are approaching stability.

Hand in hand with the cutting down of the forests, a movement in the opposite direction has taken place, which has the same basic purposes—to provide for the highest use of the land; and this movement, the report states, is growing stronger. This is due primarily to the demonstration of the public advantages realized through government ownership and administration. A memorial of the state of Idaho is cited, asking Congress to include in the National Forests an area of over one million acres in that state which is now contributing little or nothing to the wealth of the state but is undergoing deterioration. This addition, says the report, should unquestionably be made.

The report deals fully with the numerous and important investigations made for the benefit of war activities. Practically the entire research organization was placed on special war investigations and was increased in size more than five times to meet the demand for information. Among the most urgent problems were those connected with the construction of aircraft, and a vast amount of information applicable in airplane construction was obtained.

Practically all the war work branches of the government having to do with the purchase of wood materials were added, including in the Army the General Staff, the Bureau of Aircraft Production, the Ordnance Department, the Signal Corps, the Quartermaster Department, the Engineer Corps the Gas Warfare Department and the Surgeon General's Office; in the Navy the Bureaus of Construction and Repair, Steam Engineering, Yards and Docks, and the Navy Yards; the Shipping Board; the Emergency Fleet Corporation; the Director General of Railroads; the War Industries Board; the War Trade Board, housing organizations; the Fuel Administration, and the Food Administration. In addition, cooperation and assistance was given the Allied Governments and to the industries furnishing war materials.

Mention is made of many other special studies concerning such matters as containers and crates for overseas shipments, for which designs were developed insuring the required strength while calling for a minimum shipping space, questions relating to the rapid drying of woods for gun stocks, artillery carriages, escort wagons and other vehicles, and investigations in connection with wood distillation products for various military uses. Much attention was given also to locating supplies of timber of various kinds and to stimulating production.

DEATHS FROM INFLUENZA AND PNEUMONIA

The Bureau of Census has issued the following figures of deaths from influenza and pneumonia in large cities of the United States from September 14, 1918, to January 25, 1919.

	Influenza	Pneumonia
Albany	527	150
Atlanta	59	610
Baltimore	1,773	2,652
Birmingham	839	228
Boston	4,480	1,291
Buffalo	2,007	790
Cambridge	485	179
Chicago	7,329	5,071
Cincinnati	1,721	275
Cleveland	2,828	1,113
Columbus	666	180
Dayton	495	196
Denver	1,294	404
Fall River	714	109
Grand Rapids	94	228
Indianapolis	156	856
Jersey City	303	592
Kansas City	1,342	635
Los Angeles	2,482	517
Louisville	141	936
Lowell	165	477
Memphis	115	548
Milwaukee	339	1,172
Minneapolis	978	159
Nashville	580	224
Newark	1,418	930
New Haven	882	206
New Orleans	2,022	985
New York	13,641	13,795
Oakland	931	230
Omaha	930	141
Philadelphia	8,367	5,959

Pittsburgh	2,224	2,760
Portland	1,185	146
Providence	1,022	475
Richmond	657	285
Rochester	969	236
St. Louis	2,084	1,192
St. Paul	855	171
San Francisco	3,088	538
Seattle	1,160	157
Spokane	449	39
Syracuse	821	168
Toledo	538	280
Washington, D. C.	2,217	694
Worcester	866	286
Total	78,238	49,265

SALT REQUIREMENTS OF REPRESENTATIVE AGRICULTURAL PLANTS

THE Division of Biology of the National Research Council has organized a nation-wide cooperation among plant physiologists and agricultural chemists, concerning the general problem of the physiological requirements of certain representative agricultural plants. This project is in charge of a special committee consisting of B. E. Livingston (Johns Hopkins University), K. F. Kellerman (U. S. Department of Agriculture), and A. F. Woods (Maryland Agricultural College).

It is planned that the cooperation will carry out experimental work, by water and sand cultures, on wheat and soy bean, for a beginning. The first problem is to determine the best total concentrations and the best sets of salt proportions with 3-salt mixtures, each plant studied being considered in several phase of its development. For wheat these phases are: (1) the germination phase (till plantlets are 4 cm. high), (2) the seedling phase (for 4 weeks following the germination phase), (3) the vegetative phase (from end of seedling phase to appearance of flowers), and (4) the reproductive phase (from end of vegetative phase to the ripening of grain). Each phase is to be treated separately, the plants having been grown with the best 3-salt solutions for the preceding phases, respectively. Twenty-one different sets of salt proportions are to be tested with each of the six types of possible 3-salt solutions.

It is hoped that these tests may be made by a large number of experimenters in different places, all using the same methods so that the results may be comparable, and that many different climatic complexes and seasons of the year may be thus included. The general problem falls naturally into convenient portions, so that any worker or group of workers may confine attention to a certain more or less restricted field. All seeds will be supplied from the same source. Of course each worker will publish his results as he may desire, with whatever interpretation may seem warranted. It is hoped that out of this cooperation may result a clear and definite advance in our knowledge of this aspect of nutritional physiology, which not only may be valuable in a scientific way but also may furnish valuable suggestions to those who are experimenting with the fertilizer treatment of crop plants in the field. It is suggested that the results of this correlated set of researches may become a definite national contribution to knowledge about one of the most important and fundamental of all physiological problems. The cooperation was planned in war-time, but is is as much needed in time of peace as in time of war, and it is being pushed forward with all reasonable haste.

The Special Committee on Salt Requirements of Representative Agricultural Plants has prepared a comprehensive plan for the project, which may be obtained on request, and has made arrangements for special lots of chemicals for this work, also for the special cork supports needed in water cultures. Correspondence regarding this project is earnestly requested, and all experimenters in this field are asked to join in this national undertaking in one way or another. Correspondence should be addressed to the chairman of the special committee, at the laboratory of plant physiology of the Johns Hopkins University, Baltimore, Md.

MEETING OF THE AMERICAN INSTITUTE OF MINING ENGINEERS

LESSONS learned from the war by the American mining world will be applied toward