

CHEMISTRY

# New Dehydrating Process

Retains qualities of fresh food. Quick-drying "anhydrated" food will be put on the market next fall, Clarence Birdseye says.

➤ ANHYDRATED foods, produced by a new quick-drying method, will be tested on the market this fall, according to the inventor of the process, Clarence Birdseye, Gloucester, Mass., who revealed details of the new system of dehydrating foods to the spring meeting of the American Society of Mechanical Engineers in Chattanooga, Tenn.

Declaring that fruits and vegetables treated by anhydration are "in every way as acceptable as if quick-frozen or freshly harvested," Mr. Birdseye said that preliminary experiments have shown that the process may be used for a wide variety of products such as grains, synthetic rubber and resins, soap flakes and certain wood products, in addition to fruits and vegetables.

He reported that the damage done to food in present tunnel dehydration is caused by the relatively long periods of heating. While the final drying process in the present method may require as much as 18 hours, Mr. Birdseye said that his new apparatus will reduce the moisture content of shredded cabbage from 94% to 3% in one hour and 25 minutes.

Anhydrated foods may be rehydrated and cooked in from 7 to 20 minutes, he reported.

During the war, Mr. Birdseye, a pioneer in the development of concentrated foods, said that U. S. production of dehydrated food increased from 20,000,000 pounds annually to 200,000,000 pounds in 1944, most of the latter going to the Armed Forces.

The processed food for the services was produced by tunnel drying using hot air currents as the sole method of dehydration. In anhydrating, radiators serve to both shed infra-red energy on the product and transmit heat to the current of dehydrating gas passing through the new tunnel in which the food is treated.

Carried through the tunnel on a belt, the food is also dried by heat from radiators on the floor, while the belt itself is made of a heat-conductive material.

Food in the anhydrating tunnel is stirred by tedders over the belt, and hot air currents are played on the food at a high enough velocity to help stir the food being dried.

Anhydrators now under construction will have a capacity from 2,000 to 3,000 pounds of water evaporation per hour, Mr. Birdseye said, while simple changes will permit use of direct combustion gases instead of steam for heating.

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TECHNOLOGY

## Industries Asked to Probe German Technology

➤ IF ANY INDUSTRY or scientific group wishes to investigate German industrial methods, Uncle Sam will make the necessary arrangements for a mission to go to Germany.

There is one proviso: The investigation must promise to be of value to U. S. industry as a whole, in the opinion of the Department of Com-

merce's Office of the Publication Board.

Teams of experts drawn from industry went into Germany not far behind the troops, and as a result tons of technical documents were amassed. Many of the reports of these numerous expert teams are now being issued by the Department of Commerce in both full-size and micro-film forms.

The Commerce and War Departments are now about to begin selecting from this accumulation what more is worth making available to American industry.

The Department of Commerce statement declares that these documents contain "priceless information." Investigators have already found many new formulas, products and processes which, it is declared, American industry is already beginning to use.

Industry's help in recruiting qualified technicians to search the captured German files is being requested. Technical men with a knowledge of technical German are needed who are familiar with chemicals, aeronautics, automotive industry, machine tools, industrial equipment, fuels and lubricants, metals and minerals, communications equipment, scientific instruments, shipbuilding and textiles.

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**RARE COMBINATION**—Only one birth in three million in the United States is of albino identical twins, state Dr. David C. Rife, M.D., Schonfeld and Marilyn Hunstead of Ohio State University. They base this estimate on the fact that only one person in ten thousand is an albino, and about one birth in three hundred is of identical twins. These two men are strikingly similar in voice, mannerisms and observed personality traits. Like other albinos their vision is poor. They have three brothers and three sisters. Two of the brothers are also albinos, but the other brother and all of the sisters have normal coloring. The parents also have normal pigmentation, the geneticists state in the *Journal of Heredity*.