

Do You Know?

As oranges ripen, the juice volume and sugar content increase, while acidity decreases.

Truck traffic is increasing more rapidly than any other type of highway transportation.

Heated trucks for snow removal are being considered; the snow would be melted in them and emptied into nearby drainage openings.

The number of persons admitted to American mental institutions each year is nearly as large as the number who are graduated from colleges.

GENERAL SCIENCE

Criticize Attacks Made on Loyalty of Scientists

► FIVE member-societies of the Federation of American Societies for Experimental Biology passed resolutions criticizing charges against the loyalty of scientists. The resolutions were passed at the Federation meeting in Atlantic City.

The American Physiological Society warned that "the effect of such attacks is to discourage loyal scientists and other citizens from entering government service," and to "distract and intimidate" many now in the government.

Science News Letter, March 27, 1948

TECHNOLOGY

Assembly-Line Eating Is Invention of English Trio

► EATING in restaurants is put on an assembly-line basis by a highly mechanized beanery, the invention of a trio of Englishmen, T. M. Lewis, E. G. Rounce, and C. G. H. F. Dunham. Their design shows all the earmarks of the exasperation born of standing endlessly in line waiting for a table to be vacated by a group of lingerers over coffee and cigarettes who show no inclination whatever to give some one else his turn to get a meal.

In the new-type eating-place, seats are side by side on a slowly moving conveyor belt. In front of the diner is another conveyor belt which is the table. There may also be a traveling footrest so that the patron's toes won't drag.

You sit down on an empty seat at the head of the line, as it pops up from beneath. A waitress sets before you the

first course, which comes up on a dumb-waiter. You eat the first course as you are moved along. By the time you come opposite a second dumb-waiter, the second course appears in it; the waitress sets it before you and whisks away your empty dishes. Again you eat against time until you come opposite the third dumb-waiter, bringing up your dessert.

At the end of the run you vacate your seat. Or else.

It isn't wholly heartless and mechanical, at that. The inventors provide a lounge, where you may have your coffee and cigarette. But the next fellow does get a seat at the table.

U. S. patent 2,435,044 has been granted on this device.

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METEOROLOGY

Forecast Wave Conditions

Swell Forecasting Section had job of predicting sea conditions for amphibious landings during the war. They did "swell" job, Navy official indicates.

► THE story of a pioneering group of scientists who played an important but little-known role in the invasion of Normandy and in other amphibious landings in World War II was disclosed at a conference in New York on ocean surface waves held by the New York Academy of Sciences.

The group was known as the Swell Forecasting Section. These scientists had the task of predicting sea conditions for amphibious landings. They did a "swell" job, it was indicated in a report to the conference by Charles C. Bates of the U. S. Navy Hydrographic Office, Washington, D. C.

Early in the war, crude methods of forecasting wave conditions were developed. In 1943, military meteorologists were trained, and early in 1944, a joint Swell Forecasting Section was set up at the British Admiralty to make predictions of conditions in the English Channel as a part of the preparation for D-Day.

After the invasion of Normandy, wave forecasting continued and improved as an aid in the landing of troops and supplies. Mr. Bates said that relationships were worked out between the height of the waves and the tonnage of supplies unloaded and landing craft casualties.

Later the Swell forecasters were transferred to serve the British East Indies Fleet and the Southeast Asia Command. When the war ended, the scientists were completing plans for wave forecasting for the planned invasion of Kyushu, Japan.

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Wave Recorder Developed

► A new set of instruments which can record and analyze ocean waves at a point several miles offshore were de-

scribed at the conference by Arthur A. Klebb of the Woods Hole Oceanographic Institution, Woods Hole, Mass.

Developed under contract with the Navy's Bureau of Ships, the equipment is portable and boasts minimum power requirements. Wave studies of seaplane landing areas and harbors may be important uses for the wave recorder, the scientist suggested.

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CHEMISTRY

Ethyl Alcohol Could Help In Gasoline Shortage

► ONE WAY to save gasoline in coming shortages is to use ethyl alcohol with it, Dr. G. E. Hilbert of the U. S. Department of Agriculture told the National Farm Chemurgic Council meeting in Omaha, Neb.

Blending one gallon of ethyl alcohol and nine gallons of low-grade gasoline will make 10 gallons of premium grade anti-knock motor fuel, he said. Or using a small gadget that automatically injects a mixture of alcohol and water into the engine when it is under heavy load will let a truck driver take the hills in high instead of at five miles an hour.

The use of alcohol as a motor fuel is not new. However, it depends upon price. At present prices of grain, alcohol is too expensive, he stated. But alcohol can be made from farm wastes such as corncobs, and progress is being made in the development of a process to yield a cheap product. He cited work at the department's Northern Regional Research Laboratory, Peoria, Ill., of which he is director, in developing a fungal amylase that is produced by a mold that can be grown on distillers' stillage.